

Version  
12

# TIFF Image Printer

User Guide

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**PEERNET Inc.**

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## Welcome to TIFF Image Printer

Thank you for choosing TIFF Image Printer 12.

The TIFF Image Printer is installed on your computer in the same manner as a hardware printer that creates paper copies. TIFF Image Printer is based on the Microsoft® universal printer core, which is included with Windows. This ensures that TIFF Image Printer will work with any Windows application that provides a print function.

Printing to the TIFF Image Printer is the same as printing to any other printer driver. The difference is that TIFF Image Printer creates serialized and multipaged TIFF images (\*.tif) and stores them on your computer instead of creating a paper copy. This makes TIFF Image Printer ideal for document imaging and electronic document delivery because you do not have to first print and scan hard copies. It also allows you to distribute your documents on a truly universal scale; virtually any imaging program, document management solution, or fax file viewer can read multi-page TIFF image files.

## Legal Notices

TIFF Image Printer 12

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Some of the tools and utilities associated with this application use OpenSource components. You can find the source code of their open source projects along with their respective license information in the links below. We acknowledge these developers and are grateful for their contributions to open source.

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**WPFLocalizeExtension**

Project Code: [WPFLocalizationExtension](#)

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## Supported Operating Systems

Both 32-bit and 64-bit operating systems are supported where applicable.

- Microsoft® Windows 11
- Microsoft® Windows Server 2022
- Microsoft® Windows Server 2019
- Microsoft® Windows 10
- Microsoft® Windows Server 2016
- Microsoft® Windows 8.1
- Microsoft® Windows Server 2012 R2
- Microsoft® Windows Server 2012
- Microsoft® Windows 7
- Microsoft® Windows Server 2008 R2

## Getting Help

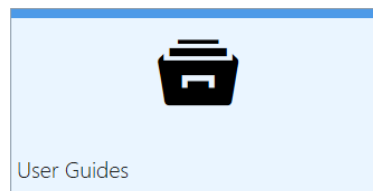
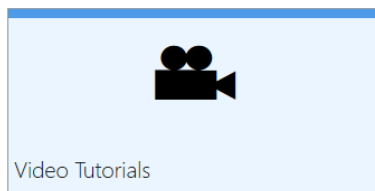
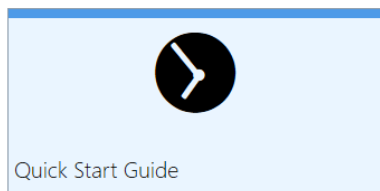
PEERNET offers a number of different help resources for TIFF Image Printer. In addition to this user guide, you can also access video tutorials, how-to posts, FAQs, and the PEERNET support team.

This user guide contains information on all aspect of TIFF Image Printer including:

- [Activating, re-use and renewing your Subscription License](#)
- [Activating a One-Time License](#)
- [Instructions to Save and Restore Settings](#)
- [Tutorials for Basic Conversions](#)
- [Step-by-step instructions for working with TIFF Image Printer](#)
- [Technical information on using Printer Management](#)
- [Technical information on using Profile Manager](#)
- [TIFF Image Printer Advanced Concepts](#)

### ▼ Accessing help resources

- Find quick links to help resources from the TIFF Image Printer **Dashboard**. Select either Quick Start Guide, Video Tutorials, or User Guide to launch whichever format of help resource best meets your needs.



- Alternatively, access help resources directly from the PEERNET website. Visit the TIFF Image Printer Help Center for links the relevant *Tutorials*, *Guides*, *How-Tos*, and *FAQs*:  
<https://www.peernet.com/conversion-software/pdf-to-tiff-converter/help/>
- If you ever need help while using any part of the TIFF Image Printer user interface, simply select the **question mark icon** from the menu bar to be taken directly to the section of the user guide that covers the part of the user interface that you working with.

### ▼ Video Tutorials

On the PEERNET website you will find a range of video tutorials covering topics like:

- getting started with TIFF Image Printer,
- what's new to TIFF Image Printer 12,
- step-by-step instructions for basic conversions,
- and tutorials on using **Profile Manager** to create personal profiles that enable and configure specific settings offered by TIFF Image Printer.

### ▼ How-Tos

On the PEERNET website you will find a variety of how-to articles with step-by-step instructions on how to print to TIFF Image Printer from a variety of common applications.

<https://www.peernet.com/conversion-software/pdf-to-tiff-converter/how-tos/>

### ▼ FAQs

On the PEERNET website you will find a list of frequently asked questions covering all aspects of working with TIFF Image Printer including installation, licensing, and operation.

Some of the most frequently asked questions for TIFF Image Printer are:

- [How can I avoid being prompted every time I print with the Save As dialog?](#)
- [How do I Save and Restore settings?](#)
- [Why can I not see my AutoCAD paper sizes or why is the paper size incorrect?](#)
- [How to print a long page \(oil well logs\) as one continuous image?](#)
- [What version of the product is installed on my computer?](#)

## ▼ **Contacting PEERNET Support Team**

Should you ever require any assistance with your TIFF Image Printer do not hesitate to contact the PEERNET Support Team.

- Email the team directly at [support@peernet.com](mailto:support@peernet.com)
- Complete the contact form on our website:  
<https://www.peernet.com/contact-inquiry/>
- Call the PEERNET offices at 1-800-883-7980 (North America) or 1-613-224-6894

The PEERNET support team is available from Monday to Friday from 8:00 AM EST to 5:00 PM excluding statutory holidays.

## What's New in Version 12

PEERNET has sold a version of TIFF Image Printer for the last 20 years, yet the release of TIFF Image Printer 12 marks one of the most dramatic overhauls to how the virtual printer operates behind the scenes and to how the user interact with the virtual printer. TIFF Image Printer 12 includes a wide range of major improvements and new features. Some that users have been asking for, and others that we've been planning for awhile and we hope will be a welcomed surprise.

TIFF Image Printer now includes a user interface that is modern, clean and easy-to-use. There is a **Dashboard**, which is the hub for TIFF Image Printer where users can edit their conversion settings, manage their printers and access licensing tools. In addition, the Dashboard provides quick access help and resources.

With TIFF Image Printer 12 we've introduced the concept of Profiles, which are a group of settings used to create the output file you want. These can be created and edited through our brand new [Profile Manager](#) interface. When created or editing a Profile within **Profile Manager**, users will have access to all output settings available in previous versions of TIFF Image Printer as well as newly added features such as filename creation, stamping, and document information. Another brand new utility with TIFF Image Printer 12 is [Printer Management](#), which allows users to copy, create, delete, and rename instances of TIFF Image Printer without having to work with the Devices and Printers menu.

In addition to all of these front end additions, TIFF Image Printer 12 includes major driver improvements chiefly TIFF quality improvements to produce clearer text in output files.

New for TIFF Image Printer 12.0.020 is the ability to perform **OCR** or [Optical Character Recognition](#) when creating TIFF images. OCR attempts to recognize the text on scanned pages or on images and extract it as digital text. You can save the recognized text as **hOCR**, **Text**, and **ALTO** OCR files.

### Existing TIFF Image Printer users

If you are upgrading from an earlier version of TIFF Image Printer this chapter will help you to understand the new features and changes that have been made to TIFF Image Printer. These changes will make working with TIFF Image Printer more accessible and efficient, but if you need assistance re-creating your printer settings once you upgrade to TIFF Image Printer 12

do not hesitate to reach out to the PEERNET team. We hope you enjoy the new version and we are here to answer any questions about the changes that you may have.

## **New TIFF Image Printer users**

If you are a new TIFF Image Printer user, we recommend getting started with our [Basic Conversions](#) chapter. The tutorials in that chapter will walk you through the basic instructions on how to create a Color TIFF, Black and White TIFF, or Faxable TIFF using the system profiles that we provide with TIFF Image Printer. Subsequently, we recommend reviewing our [Working with TIFF Image Printer](#) chapter for step-by-step instructions on how to create personal profiles that enable and configure specific settings offered by TIFF Image Printer.

## Licensing

### New Subscription License

Since our software company began in 1997, PEERNET has been using the same traditional software licensing system for TIFF Image Printer, based on the old world of software distribution. With TIFF Image Printer 12, PEERNET is entering the new world of software sales and will now be offering the software as a service system (Saas).

Much like your music or televisions streaming service subscription, a subscription license of TIFF Image Printer gives your complete access to all features of the software for the period that your subscription is active.

With a subscription license, users can:

- activate and use TIFF Image Printer up to the limit of number of licenses purchased
- move the software to a new computer or re-load the software after a computer crash or operating system upgrade, either through your PEERNET online account or by contacting PEERNET
- access all updates and upgrades released for TIFF Image Printer free of charge
- rely on priority technical support from the PEERNET team

### Existing TIFF Image Printer users

Existing TIFF Image Printer users with an **active On-Going Licensing and Support subscription** will have access to their upgrade to TIFF Image Printer 12 free of charge, and will automatically be switched to a subscription license. As part of this transition, PEERNET will carry over your current On-Going Licensing and Support subscription annual renewal rate to your new TIFF Image Printer 12 license.

### Not interested in a subscription license? Prefer traditional software licensing?

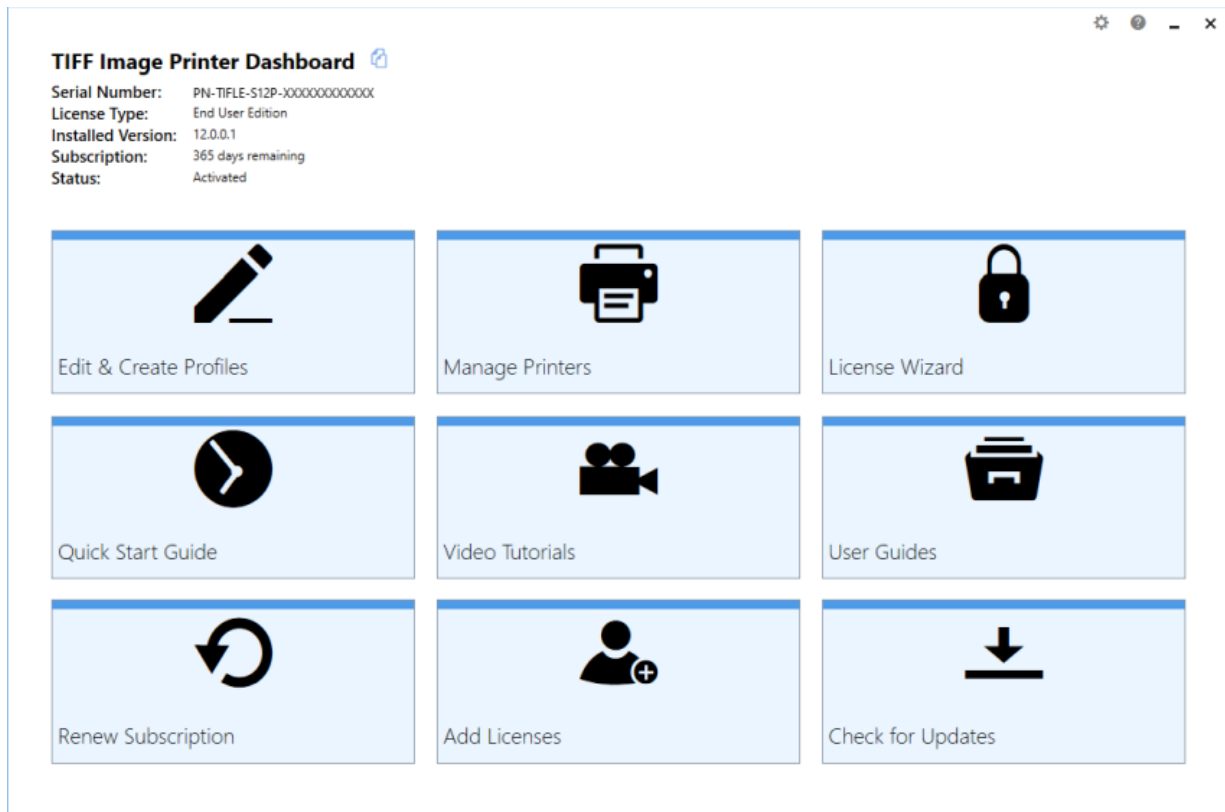
For those user who prefer traditional software licensing, PEERNET will still be selling a one-time license of TIFF Image Printer 12 which is designed to run like a classic software license. A one-time license gives users access to a perpetual activation of TIFF Image Printer 12 up to the limit of number of



licenses purchased. This is a classic software license meaning that you can go on using any license you purchase for as long as you like, but once a license is consumed it can never be moved/transferred to a new computer or re-used after an operating system upgrade, computer crash or reformatting (any action that would change the computer identity).

### Dashboard

The **Dashboard** is a hub for all things TIFF Image Printer with links to edit and create profiles, manage printers, activate the product, help resources, and more. The purpose of the **Dashboard** is to bring all tools and resources related to TIFF Image Printer into one place. This will make it easier for users to find and change their output settings, edit their printer name, and access our many forms of help resources.



The available tools and resources that can be launched from the **Dashboard** are:

- **Profile Manager** - Select "Edit & Create Profiles" to launch the **Profile Manager** utility. This is where you can review and change all output settings available with TIFF Image Printer.
- **Printer Management** - Select "Manage Printers" to launch the **Printer Management** utility. This is where you can duplicate the printer, rename the printer, and/or assign a specific profile to the printer.

- **License Wizard** - Depending on the **Status** of your license the text on this tile will vary, but regardless select this tile to launch the **License Wizard**. This is where you can do things like activate your product, change your serial number, or manage your licenses.
- **Quick Start Guide** - Select this tile to launch our TIFF Image Printer quick start guide, which will walk you through your first print to TIFF Image Printer.
- **Video Tutorials** - Select this tile to launch the TIFF Image Printer video tutorial page on the PEERNET website, which offers a range of tutorial videos from basic to advanced on using TIFF Image Printer.
- **User Guides** - Select this tile to launch the TIFF Image Printer user guide.
- **Renew Subscription** - Select this tile to log into your PEERNET online account where you can renew your annual subscription.
- **Add Licenses** - Select this tile to log into your PEERNET online account where you can purchase additional licenses of TIFF Image Printer on the same serial number.
- **Check for Updates** - This tile will notify you when there is an update pending for download and install.

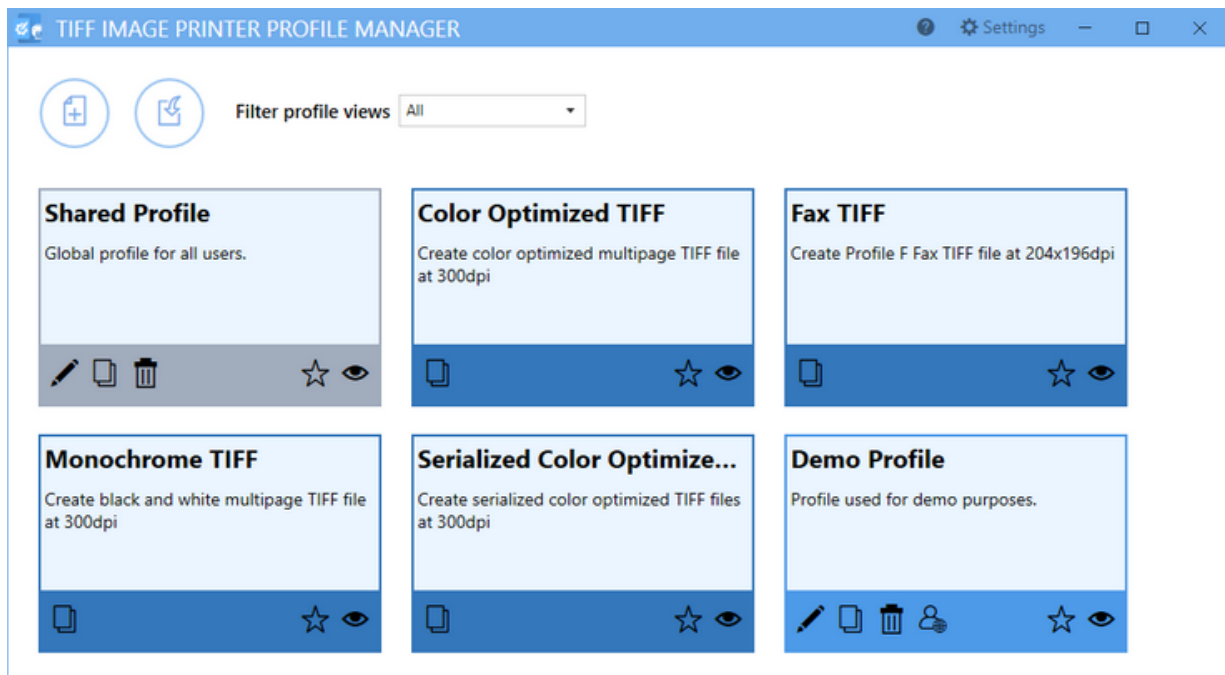
The **Dashboard** is also used to store all the status information about your license. Once you have activated your purchased copy of the software, you will find the following information in the top left-hand corner of the **Dashboard**:

- **Serial Number**
- **License Type** - ex. End User Edition
- **Installed Version**
- **Subscription** - number of days remaining in your current subscription
- **Status** - the status of your license on this computer

*\*Note the Dashboard may look different if you are running a one-time license as you do not have access to all TIFF Image Printer features.*

## Profile Manager

**Profile Manager** is a user friendly interface for editing and creating profiles. With TIFF Image Printer 12 we've introduced the concept of Profiles, which are a group of settings used to create the output file you want. The purpose of Profile Manager is to provide an interface through which users can review all available settings and features, and easily disable/enable and configure output settings as desired. This will make it easier for users to find and change their output settings, utilize more than one profile (group of settings), and share their settings with colleagues.



Launch **Profile Manager** from the **Dashboard** by selecting "Edit & Create Profiles". On launch, you will see all of the existing profiles. If TIFF Image Printer has just been installed, only the system profiles that come with the printer will be visible. System profiles are a darker color and cannot be edited. Profiles you create are called personal profiles, are a lighter color and are yours to edit as you wish. A shared profile is gray and is created by sharing a personal profile. A shared profile can also be edited.

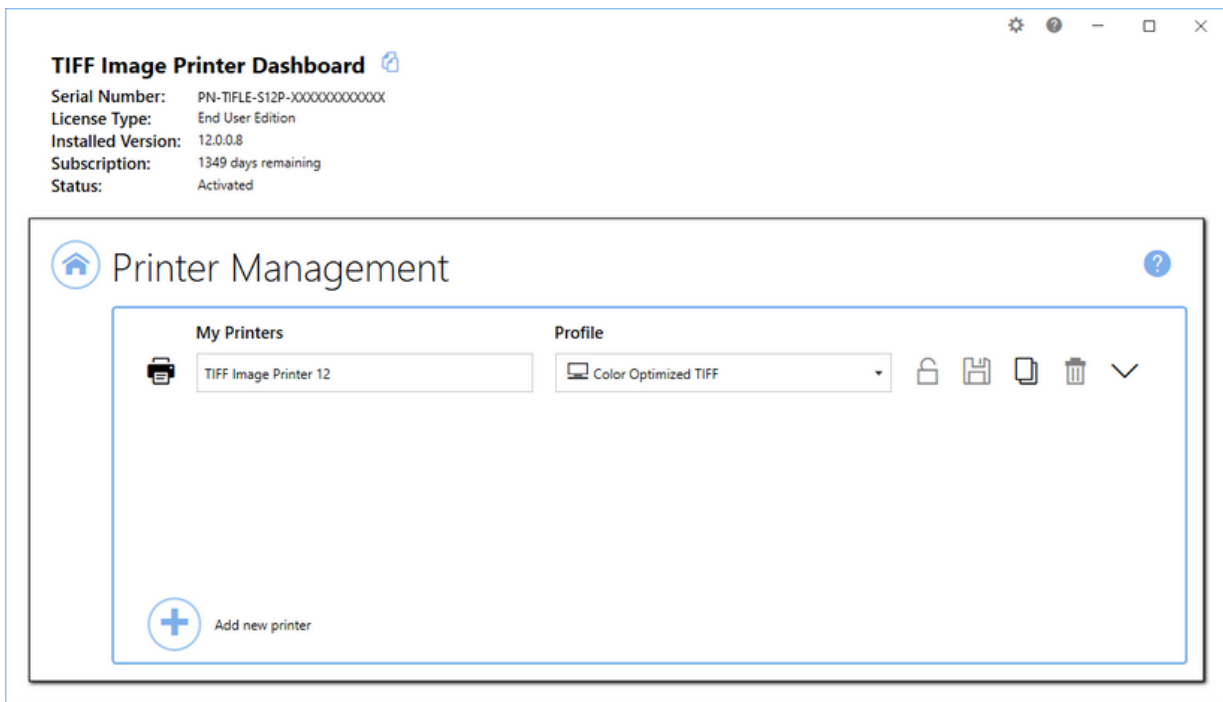
- Select **Add a profile** to create a new personal profile,
- Select the **pencil icon** to edit an existing personal profile, or
- Select the **copy icon** to create a new personal profile starting with the settings in the system default profile.

Within the editing profile view you will have access to all settings and features available with TIFF Image Printer organized into a series of tabs accessible on the left side of the window.

To learn more about the settings found on each of the individual tabs, see our [Profile Manager](#) chapter. Alternatively, for step-by-step instruction on how to enable the most common settings/features using Profile Manager, see our [Working with TIFF Image Printer](#) chapter.

### Printer Management

**Printer Management** is a quick and easy tool that allows users to copy, create, delete, and rename their TIFF Image Printer. While it was possible to create copies of the printer and rename the printer through the Devices and Printer menu with previous versions, users are now able to carry out these activities directly through a TIFF Image Printer interface. The purpose of **Printer Management** is to streamline the printing process. By allowing users to set the default profile used by TIFF Image Printer, the need to select the desired profile during each print job is eliminated.



Launch **Printer Management** from the **Dashboard** by selecting "Manage Printers". On launch, **Printer Management** will show you all of the existing printer(s), the name of the printer(s), and the default profile currently assigned to each printer. If TIFF Image Printer has just been installed, there will only be one printer listed with the name TIFF Image Printer 12, and the default profile will be set to Color Optimized TIFF.

- Edit the **printer name**,
- Change the **default profile**,
- **Lock** the printer to a shared profile,
- **Duplicate** the printer, or

- **Delete** any unwanted printer(s).

To learn more about how to use Printer Management, see our [Printer Management](#) chapter.

### Driver Improvements

TIFF Image Printer 12 features a completely revamped graphic core, which allows for the creation of higher quality images and the addition of many new settings that are only possible with the new vector core.

All graphic operations have been transformed into **vector graphic operation**. This means that the TIFF Image Printer printer driver is now resolution independent, which gives us the freedom to scale your pages at the best quality possible.

The new graphic core adds anti-aliasing to all drawn object (ex. fonts and shapes), which makes the text and shapes look smoother and clearer in your output files.



## OCR (Optical Character Recognition)

**Optical Character Recognition**, or **OCR** for short, searches for and recognizes text (characters) on scanned pages or images and extracts it as digital text. When creating your TIFF images, the OCR process saves the recognized text as your choice of **hOCR**, **Text**, and **ALTO** OCR files.

When recognizing text, the OCR engine has to know which languages to look for on the page. OCR works by analyzing the patterns, shapes, and curves of the text characters on the page and matching them to predefined information for different characters in each language. It assigns a confidence score for each language, with the highest score determining the language chosen.

Outside factors such as image quality, the font used, and any image background on the pages will all affect the validity of the OCR results.

TIFF Image Printer includes the following languages. If you need additional languages, you can download them by following the instructions on the [OCR settings tab](#).

- Arabic
- English
- French
- German
- Hebrew
- Hindi
- Italian
- Spanish

To learn more about the new OCR features see the section [Optical Character Recognition \(OCR\) with TIFF Image Printer](#).

### New Settings

TIFF Image Printer 12 features several new settings. Some of these new settings are made possible by the transformation to vector graphic operations (ex. stamping), while others are enhancements to existing settings to streamline and simplify their application.

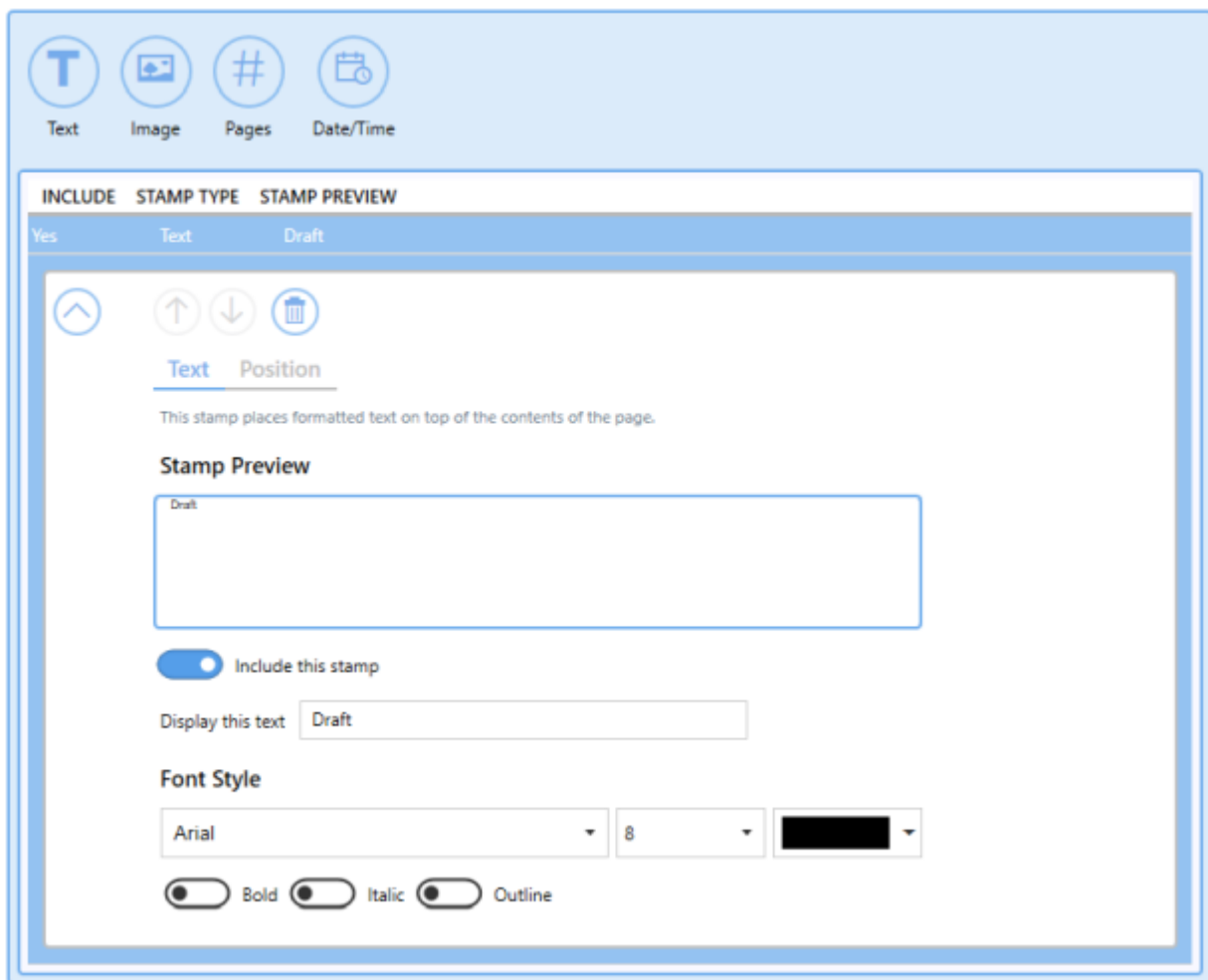
- [Stamping](#)
- [Add Borders](#)
- [Filename Creator](#)
- [Adjusting Page Brightness](#)
- [Document Information](#)
- [Sending Email](#)
- [ZIP Created Files](#)
- [SMS Notifications](#)
- [Dynamically Control Filename and Output Location](#)
- [Run Commands](#)
- [Cleanup Options](#)

All settings, including the new settings listed below, can be enabled/disabled and configured through the **profile**, via [Profile Manager](#).

### Stamping

The change to vector graphic operations has allowed us to add [Stamping](#) to TIFF Image Printer 12. The vector graphics ensure that your stamps can be scaled up and down as required. Existing users of TIFF Image Printer may be familiar with the endorsements setting that was offered in previous versions. Endorsements have been replaced by the far more comprehensive Stamping.

The Stamping tool allows users to add text, images, page numbering or date/time information as a watermark stamp onto a page. The watermark will overlay the page content. You can adjust the size of the stamp, the transparency of the stamp, positioning of the stamp on the page, and the pages on which the stamp will appear in a multipaged document.



## Add Borders

As with Stamping, the ability to [Add Borders](#) is made possible because of the change to vector graphics. Adding a border requires TIFF Image Printer to shrink your current page to fit within your desired border size, which requires scaling. This setting allows you to add a custom-colored margin around the page. This setting can be used in conjunction with Stamping if you are looking to add space to the header or footer to accommodate a watermark stamp, for example.

## Add Borders to Page

Add a custom-colored margin around the page. This will shrink the page contents to fit inside the bordered area.

☒ Add a custom border to the page

Left	<input type="text" value="2.0000"/>	in	↔	Right	<input type="text" value="2.0000"/>	in	↔
Top	<input type="text" value="2.0000"/>	in	↕	Bottom	<input type="text" value="2.0000"/>	in	↕
Color	<div><div></div><div></div></div>						

## Filename Creator

The [Filename Creator](#) tool was added to create a unified way of configuring filenaming. There is now one place you can go to change the way you would like your files named. It also provides helpful previews of the filename you will generate under different conditions based on your current filename configurations.

↔

Separator

✎

Text

#

Unique ID

📅

Date

⌚

Time

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\

⬆

⬆

⬆

🗑

### Edit the Output Location

This is the directory where your output file will be created. Adding additional file path parts allow you to build dynamic output folders.

Output folder

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

Yes	Output File Name	document
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif


## Adjust Page Brightness


[Page Brightness](#) settings have been enhanced to allow the user to select the range of colors that want to be adjusted. You can now set the starting intensity and ending intensity that you want impacted by your darkening or lightening operation. This means that you can brighten the background of an image without brightening the black text, for example.

### Adjust Page Brightness

Lighten or darken the images and text on your pages to improve readability. Select the range of color intensity that the brightness adjustment affects.

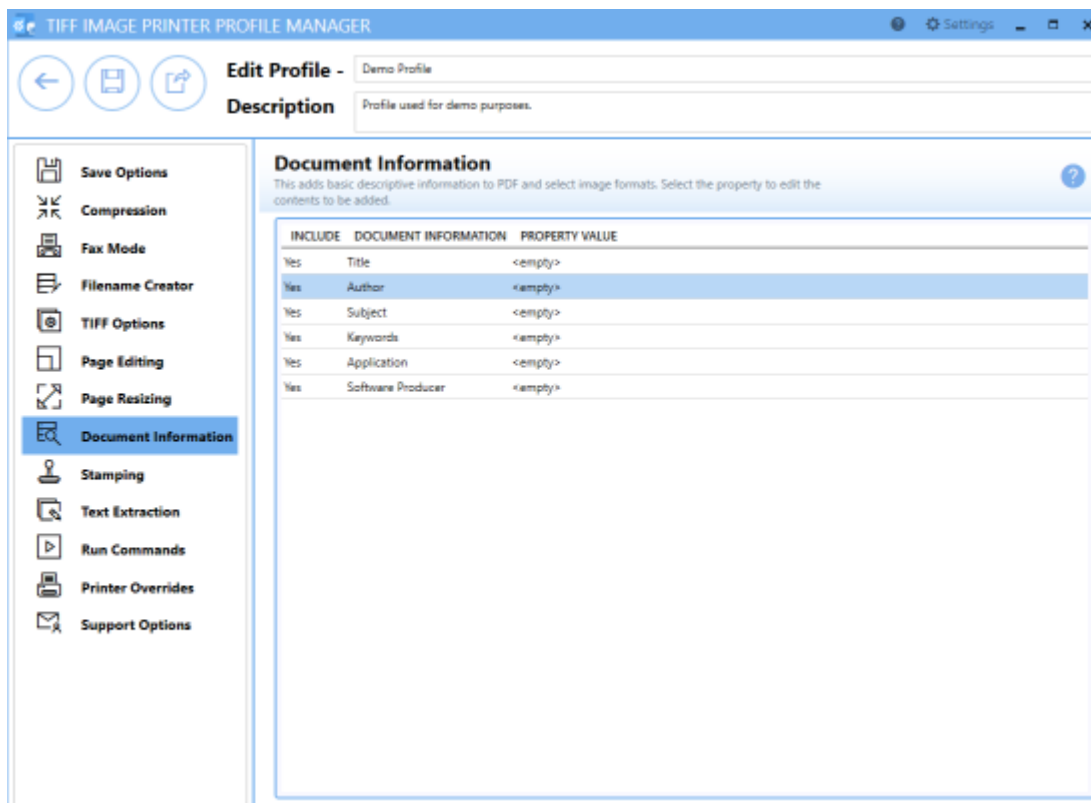
☒ Lighten or darken each page with the following settings

Change page brightness    Darken  Lighten

Applies to this intensity range    Black  White

## Document Information

[Document Information](#) settings are used to add basic descriptive information to your output file. Only the title, author, and software producer (program name) descriptive information is stored in TIFF images.



## Sending Email

The [Email](#) feature will automatically send an email with the attached files after they have been created. You can also send an email if the file fails to convert to notify the appropriate person to take action. Emails are sent using Outlook or an SMTP (*Simple Mail Transfer Protocol*) server. Other options for zipping and attaching files, and setting email size limits are provided.

The screenshot shows the 'TIFF IMAGE PRINTER PROFILE MANAGER' window. The 'Edit Profile' section is active for 'Demo Profile'. The 'Description' field contains 'Profile used for demo purposes.' The left sidebar lists various settings, with 'Email' selected. The 'Email' settings panel includes a description: 'Send the created files as email attachments, or notify people in error conditions.' Below this, there's a dropdown for 'Use this mail service' set to 'SMTP' and a 'SETTINGS' button. A section for 'On Success' and 'On Failure' has a toggle for 'Send email when conversion succeeds' which is turned on. The 'Message Details' section includes fields for 'From' (user1@domain.com), 'To' (user2@domain.com;user3@domain.com), 'CC', and 'BCC'.

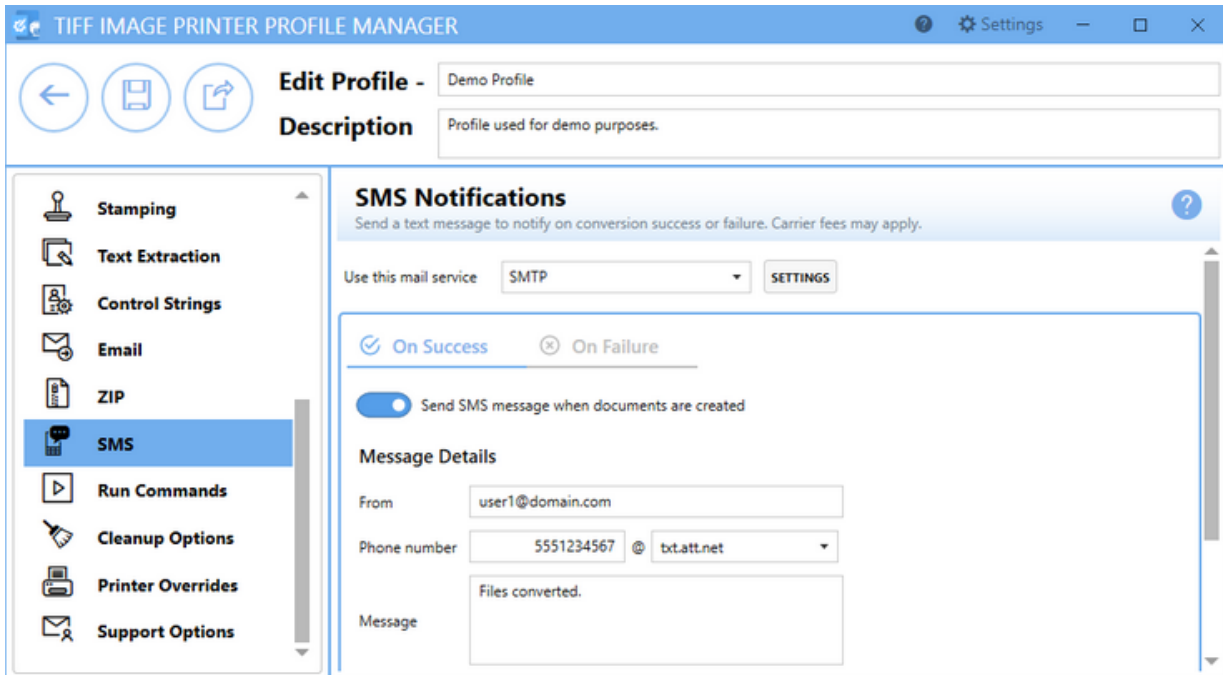
## ZIP created Files

[ZIP settings](#) are available to compress the created output files into a single ZIP, 7z or TAR file.

The screenshot shows the 'TIFF IMAGE PRINTER PROFILE MANAGER' window. The 'Edit Profile' section is active for 'Demo Profile'. The 'Description' field contains 'Profile used for demo purposes.' The left sidebar lists various settings, with 'ZIP' selected. The 'ZIP' settings panel includes a description: 'After successful conversion, compress all output files into a single ZIP, 7z or other compressed file format.' Below this, there's a toggle for 'ZIP created documents into a single file or a sequence of files' which is turned on. The 'ZIP Location' section includes a note: 'Leave the path or name empty to use the same folder and name as the output files.' It has fields for 'Path to ZIP file' and 'ZIP file base name'. The 'ZIP Options and Folder Structure' section includes dropdowns for 'ZIP type' (set to 'ZIP'), 'ZIP action' (set to 'Create new'), and 'ZIP folder options' (set to 'Place files under a specified folder path').

## SMS Notifications

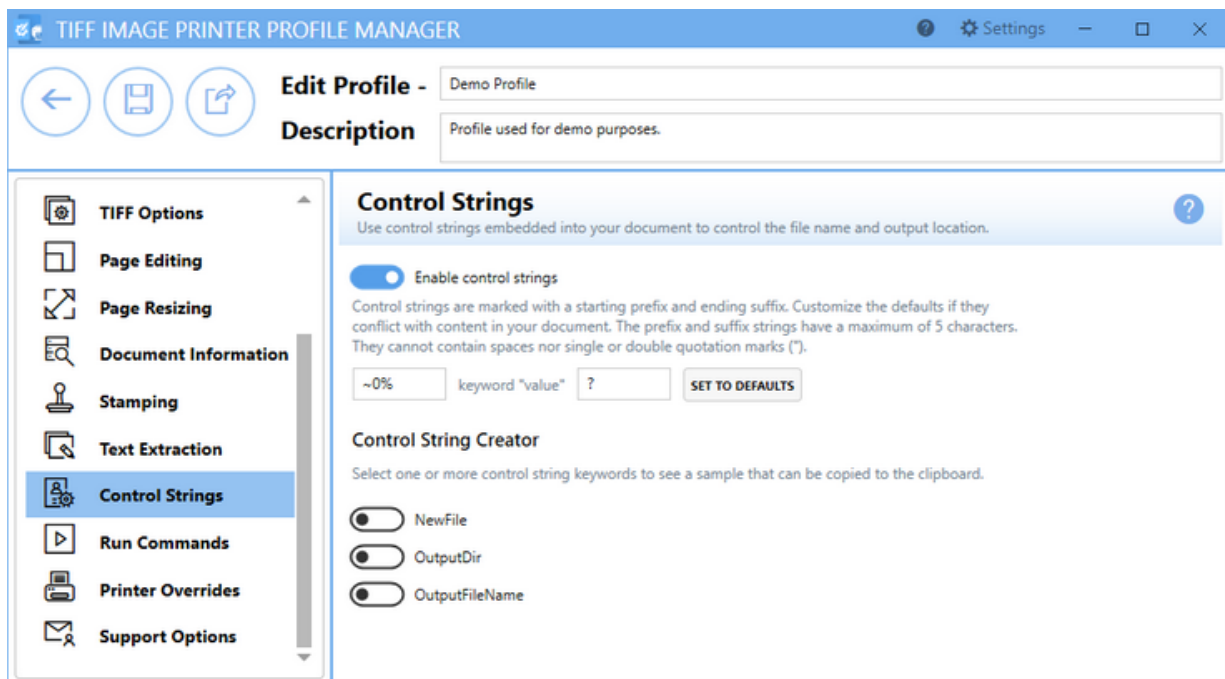
Our new [SMS notifications](#) can be used to send a text message when a conversion succeeds and/or fails.



## Dynamically Control the Filename and Output Location

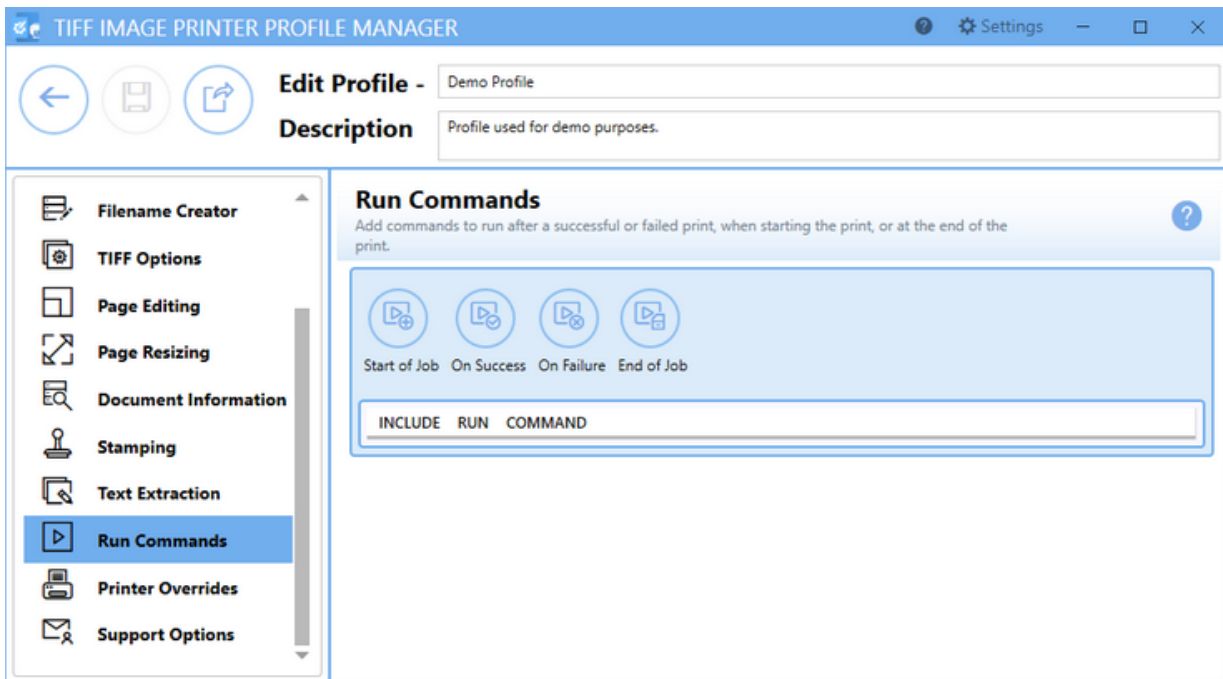
[Control strings](#) are text strings embedded in your documents that can be used to change the settings dynamically during a print job. Used with reporting tools such as Crystal Reports and PowerBuilder, and mail merge documents from Word or similar, it can be used to dynamically set the output folder and output file name information from data fields on the report.





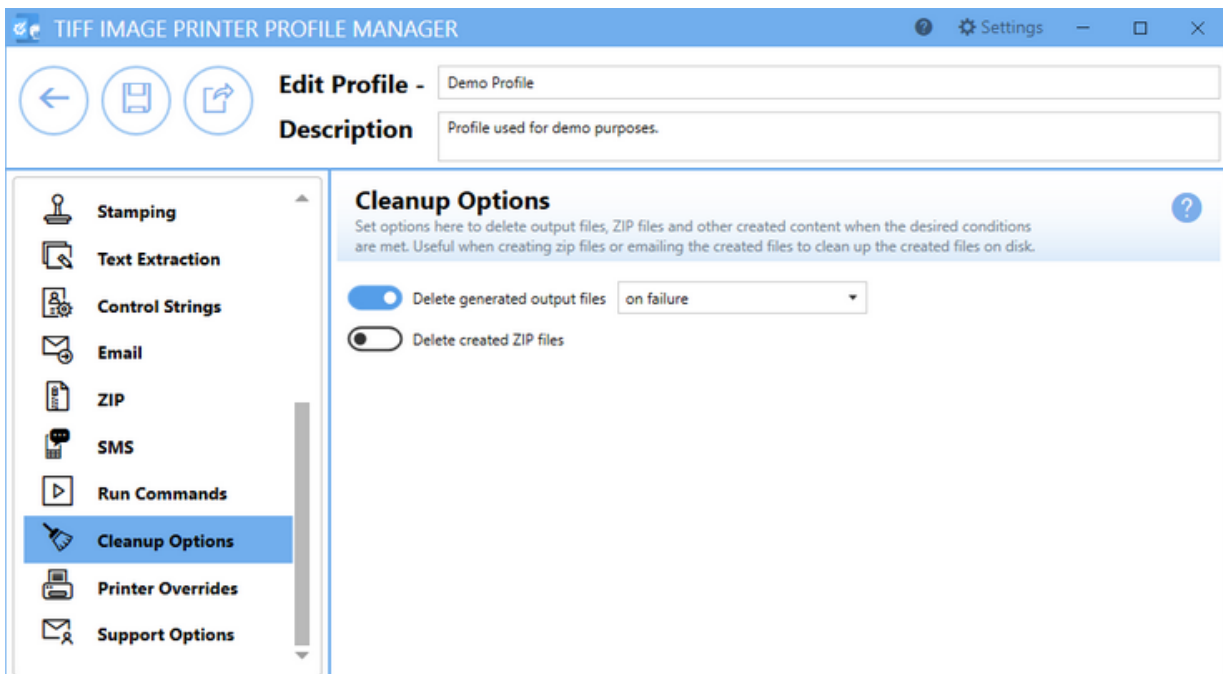
## Run Commands

[Run Commands](#) settings can be used to run different actions after a successful print and/or a failed print. The ability to configure run commands did exist in previous versions, but with TIFF Image Printer 12 we have streamlined the available options. Now the last parameter is always a path to a text file that contains a list of the file(s) created by the conversion process (one per row). This allows the user to easily operate on those files in any way they need.



### Cleanup Options

Used in conjunction with the ZIP, Email or Run Commands, these [cleanup options](#) allow you to cleanup (as needed) the created files after they have been zipped, emailed or otherwise processed using any Run Commands that have been configured.



## Subscription License

TIFF Image Printer 12 licenses are sold as either subscription licenses or one-time licenses. This chapter is for users with a subscription license and explains how to:

- [Activate TIFF Image Printer](#)
- [View](#) and [Change](#) your Activation Status
- [Renew your Annual Subscription](#)
- [Edit Activation Details](#)

The ability to view and edit your activation details is only available with a subscription license, and is not an option for one-time licenses.

### What is a subscription license?

A subscription license gives users complete access to all features of TIFF Image Printer 12 for the term that the annual subscription is valid. Much like your music or television streaming service subscription, when your annual subscription is valid, you have complete access to TIFF Image Printer up to the limit of licenses purchased.

With a subscription license, users can:

- activate and use TIFF Image Printer up to the limit of number of licenses purchased
- move the software to a new computer or re-load the software after a computer crash or operating system upgrade, either through your PEERNET online account or by contacting PEERNET
- access all updates and upgrades released for TIFF Image Printer free of charge
- rely on priority technical support from the PEERNET team

### Benefits of a subscription license

All of the benefits of a subscription really come down to security and peace of mind.

A subscription license gives you the confidence to switch computers, upgrade your operating system or reformat your computer without worrying about your TIFF Image Printer. Furthermore, a subscription license provides the security that should your computer crash unexpectedly you know that you have not lost access to your TIFF Image Printer. In all of these situations, you can simply [edit your activation details](#) through your PEERNET online account or contact PEERNET to adjust your license so that you are able to re-load your license and continue using TIFF Image Printer.

In addition, with a subscription license you can rely on the PEERNET team to release minor updates as required and major upgrades with new features, all of which you can access free of charge. With TIFF Image Printer 12 you will even be notified when a new version is available for download by the TIFF Image Printer Dashboard. Lastly, should you run into an issue, a subscription license ensures that you will receive priority technical support from the PEERNET team via email, phone or web meeting depending on what best meets your needs.

### **Renewing a subscription license**

A subscription license is sold for a term of one year, and can subsequently be renewed annually. With a subscription license, the operation of TIFF Image Printer does require an active subscription, therefore you will be required to renew the subscription in year 2 in order to continue using the TIFF Image Printer software. Another benefit of a subscription license is that should you decide not to renew your annual subscription at some point, you can also come back to the subscription should the need arise again in the future and re-instate your subscription license.

## Activating TIFF Image Printer

The first step to activating TIFF Image Printer is installing your purchased copy of the software which is available through your online account.

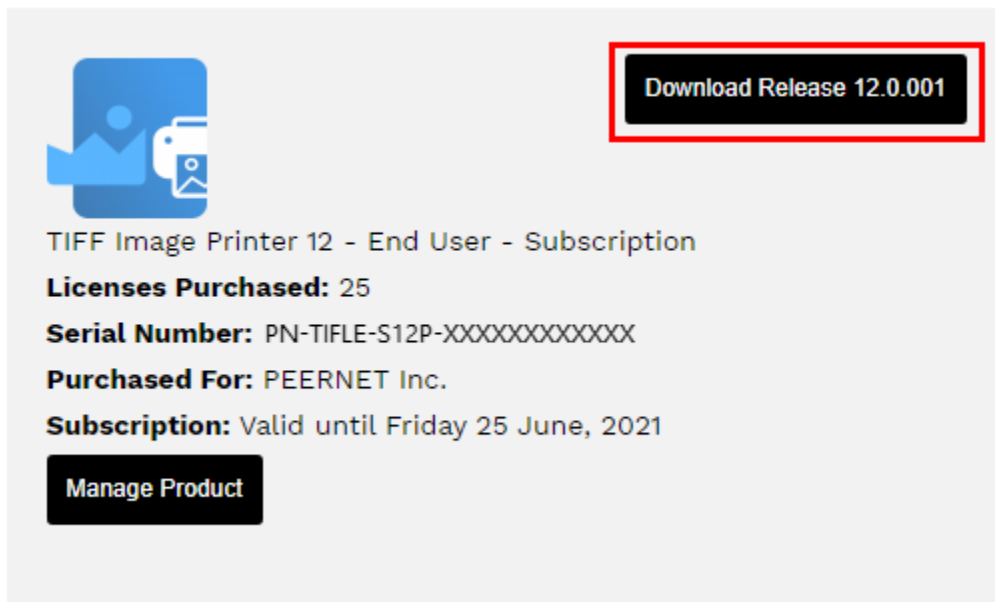
If you installed the trial version of TIFF Image Printer before purchasing, you still need to install your purchased copy of the software.



*Click the image above to watch the video tutorial.*

## Installing TIFF Image Printer:

1. Log into your [PEERNET online account](#).
2. Find the desired software in your **My Products** list, and select the **Download Release** button to download the latest release of the software.



3. In most cases, the EXE file is located in the Downloads folder. Open File Explorer and browse to C:\Users\YOUR USERNAME\Downloads\.
4. Double-click the EXE file to run the TIFF Image Printer install.

If you installed the trial version of TIFF Image Printer before purchasing, when you run the install for the purchased copy, the previously installed trial version will prompt you to uninstall it. Select "next" to remove the trial version and replace it with your purchased copy.

At the end of the installation process, you are given the option to launch the TIFF Image Printer **Dashboard**. Leave "Open the TIFF Image Printer 12 Dashboard now" checked in order to open the TIFF Image Printer **Dashboard** directly. This is the fastest way to proceed to activating your software.

## Launching the License Wizard

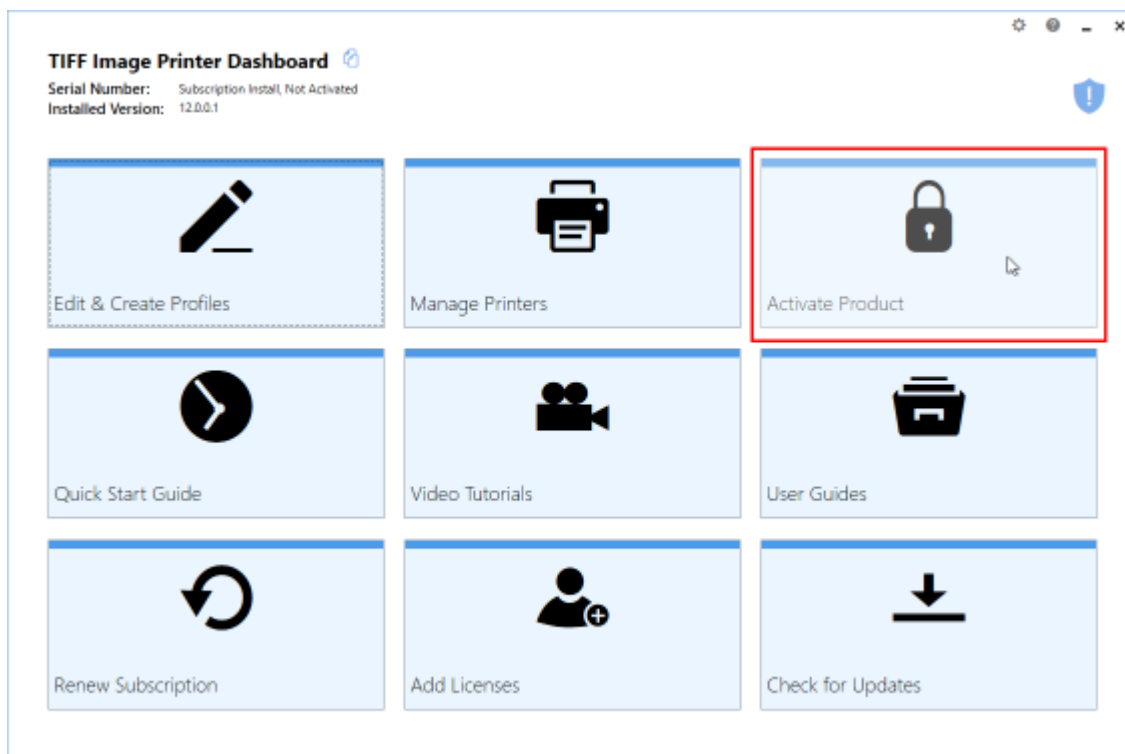
The **License Wizard** is accessible from the TIFF Image Printer **Dashboard**.

To launch the **License Wizard**:

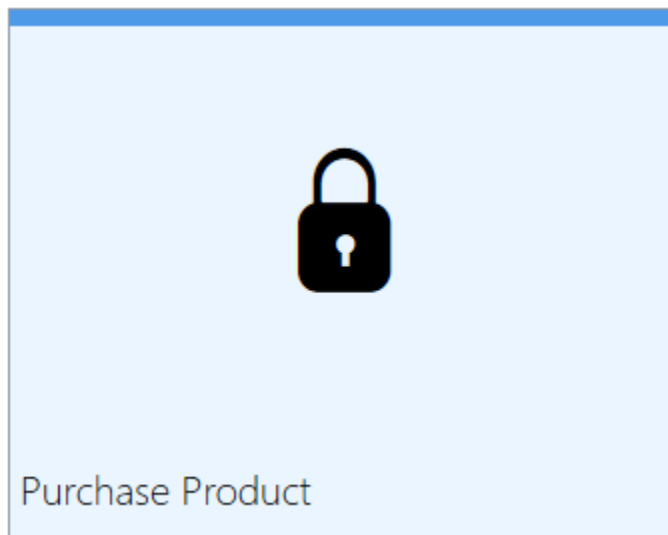
1. Begin by opening the **Dashboard** (double-click the TIFF Image Printer icon on your desktop or select TIFF Image Printer 12 from the Start menu).



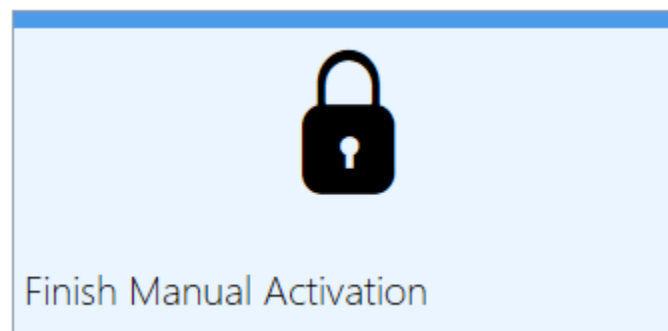
2. Select "Activate Product" to open the **License Wizard**.



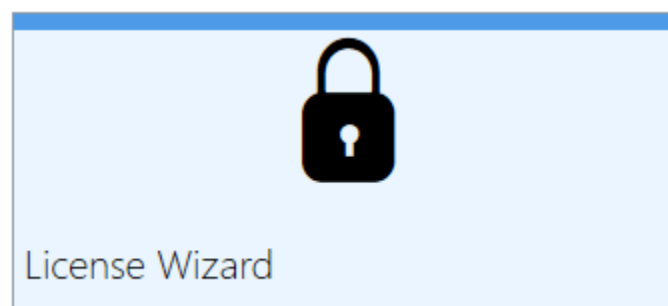
- If you have the trial version of TIFF Image Printer installed instead of your purchased copy, this tile will say "Purchase Product". Please return to [Activating TIFF Image Printer](#) for instruction on installing your purchased copy of the software.



- If you are in the middle of a manual activation process, the tile will say "Finish Manual Activation".



- If the software is already licensed, this tile will say "License Wizard".





## Entering Your Serial Number

To activate your product you need to enter in the serial number that was included with your order confirmation email and your user information. You can also find your serial number through your [PEERNET online account](#).

### Entering your serial number

Enter the serial number into the box on the screen. If you copy your entire serial number from your email and then return to this dialog it will automatically be filled into the box.

The serial number is case sensitive and it is important to type the serial number exactly as it is received. Be sure not to leave any spaces before or after the serial number when typing or pasting, and note that the serial number ends with a series of hexadecimal characters (0-9,A-F).

### Entering your user information

If possible, your Name and Company information is automatically picked up from your system settings. The information in these fields can be change if required.

You cannot continue if either the Name or the Email Address field is left blank. Email addresses entered here are only used by PEERNET to identify users during license adjustments. We will never rent or sell our customer's and client's information to third parties.

**TIFF Image Printer Dashboard**

Serial Number: Subscription Install, Not Activated  
Installed Version: 12.0.0.1

### License Wizard

**Serial Number**  
PN-TIFLE-S12P-X000000000000X  
Your serial number can be found in your order confirmation email or in your online account.

**Name**  
PEERNET

**Company**  
PEERNET

**Email**  
peernet@peernet.com

☐ I don't have an internet connection.

Click Next.

## Activating without an internet connection

If you are having difficulty connecting to the internet, or do not want to activate over the internet, you can choose to manually activate the product by checking "**I don't have an internet connection**".

License Wizard

Serial Number  
PN-TIFLE-S12P-XXXXXXX0000000

Your serial number can be found in your order confirmation email or in your online account.

Name  
PEERNET

Company  
PEERNET

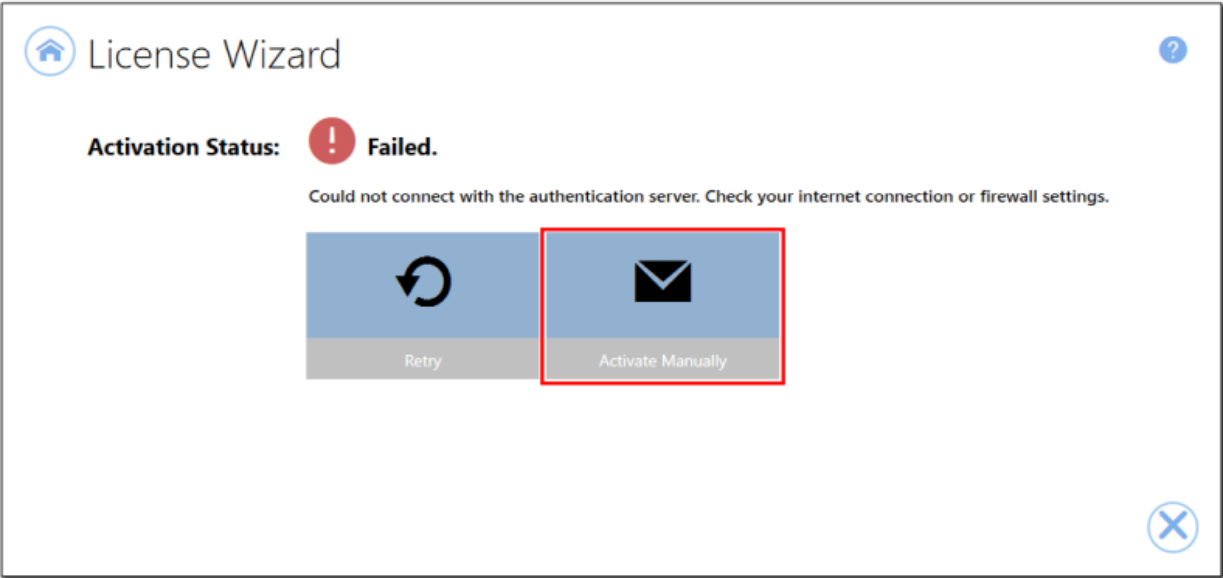
Email  
peernet@peernet.com

☒ I don't have an internet connection.

Click Next.

Manual activation does not require an internet connection on the computer the software is installed on, but it does require that you have the ability to email an encrypted file to PEERNET for authentication. We will return the authenticated file to you, which you then import using the License Wizard to complete the activation process. These files are processed by PEERNET's technical staff from 09h00 to 17h00, Monday to Friday, Eastern Standard Time.

When activating over the internet, the License Wizard will attempt to validate an internet connection, and will prompt with the choice to license manually if it cannot connect. Activating over the internet may also fail if you have a firewall or anti-virus software blocking the connection. Click **Activate Manually** to begin the manual activation process, or click **Retry** to try activating online again.



## Manually Activating TIFF Image Printer

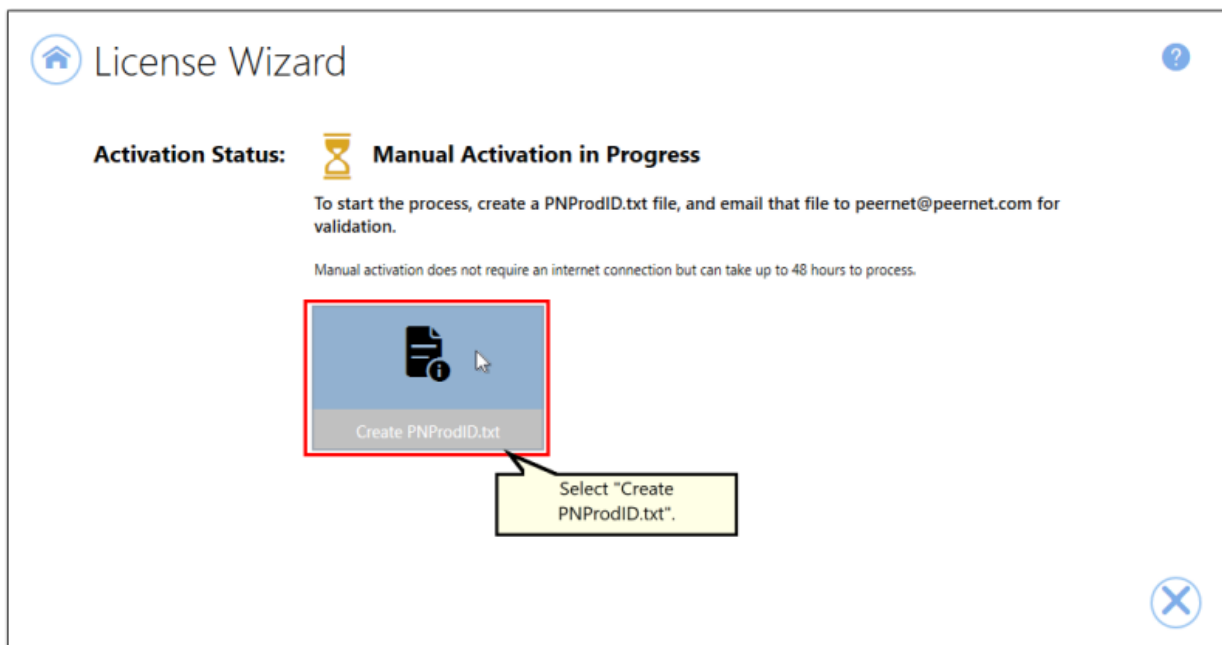
In most cases, you will not have to activate your product manually. This only happens when TIFF Image Printer is installed on a computer that has no access to the internet, or the computer is configured such that the user cannot access the internet. This can also happen if a firewall program or anti-virus software blocks our attempt to connect with our license server.

If you do have to activate manually, you will need to follow the steps below. Please note that these files (PNProdID files) are only authorized during business hours, which are 09h00 to 17h00, Monday through Friday, Eastern Standard Time (excluding statutory holidays).

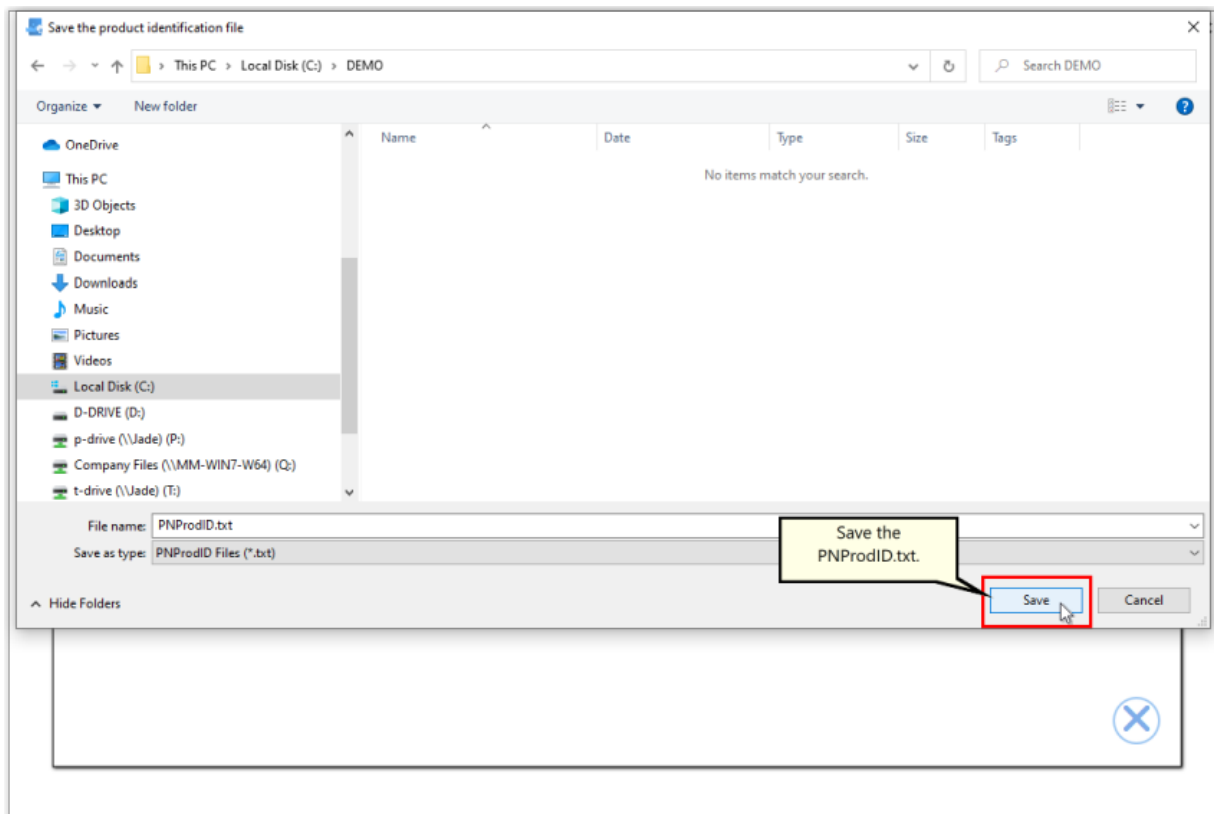
1. Use the **License Wizard** to create the encrypted file, **PNProdID.txt**.
2. Email the file to [peernet@peernet.com](mailto:peernet@peernet.com) for manual activation. For computers with no email capability, you can save the file to a shared network drive, or use an external storage device such as a USB flash drive (also known as thumb drives), or a MicroSD storage card to copy the file to a computer with email capabilities.
3. A file named **PNProdAU.txt** will be emailed back to you. Copy this file back to the computer where TIFF Image Printer is installed and restart the **License Wizard** to complete the license activation.

## Exporting the PNProdID.txt file

To create the file click **Create PNProdID.txt**.



A save dialog box will appear prompting you to choose where to save the **PNProdID.txt** product identification file. This dialog may look slightly different depending on which version of Windows you are running. Save this file in an easy to remember location, like your Desktop or your Documents folder.

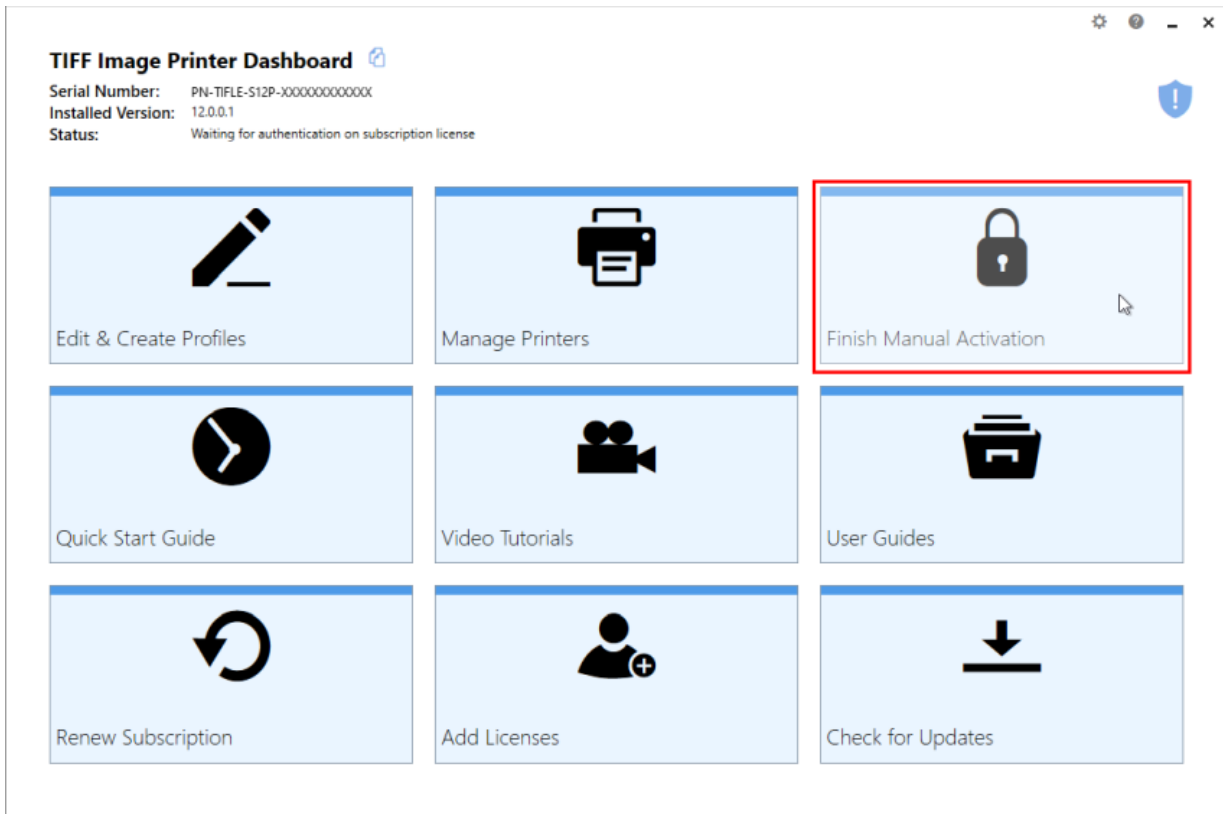


You need to email this file to [peernet@peernet.com](mailto:peernet@peernet.com). For computers with no email capability, you can save the file to a shared network drive, or use an external storage device such as a USB flash drive or a MicroSD storage card to copy the file to another computer.

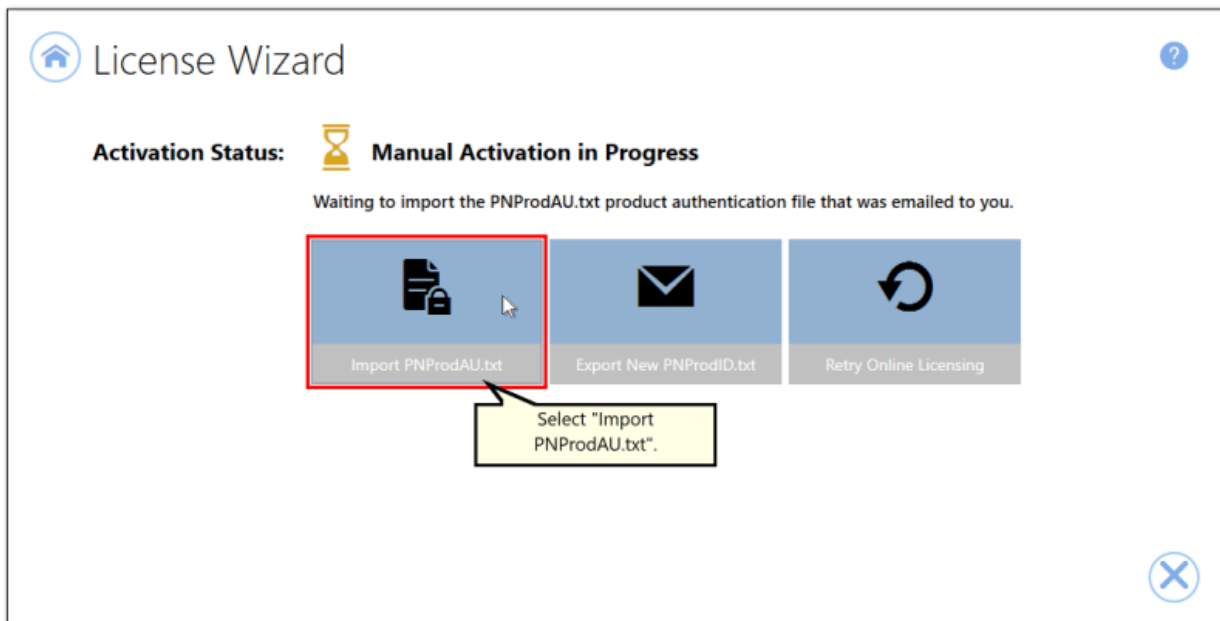
## Importing the PNProdAU.txt file

When you have received the product authentication file **PNProdAU.txt** from PEERNET, you will need save the file in an easy to remember location, like your Desktop or your Documents folder. If you need to move the authentication file back to the computer where TIFF Image Printer is installed, do so now.

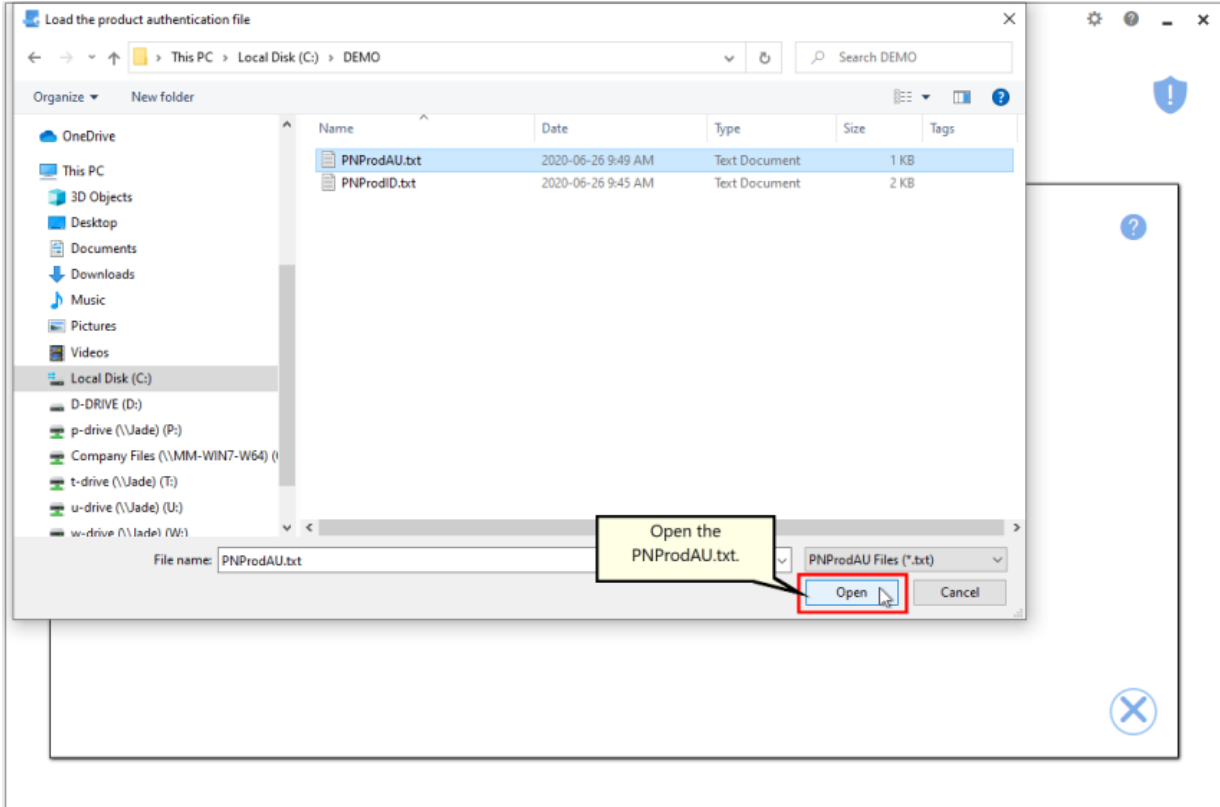
On the computer where TIFF Image Printer is installed, restart the License Wizard by following the steps outlined in [Launching the License Wizard](#). The License Wizard will automatically start at the import screen.



Click **Import PNProdAU.txt**. If you did not receive a PNProdAu.text file, you can restart the manual licensing process. You also have the option to retry online activation if you now have an internet connection or have resolved an issue with your firewall settings.



A browse dialog box will appear. This dialog may look slightly different depending on which version of Windows you are running. Locate where you saved the **PNProdAU.txt** file you received from PEERNET and click the Open button to import the file.



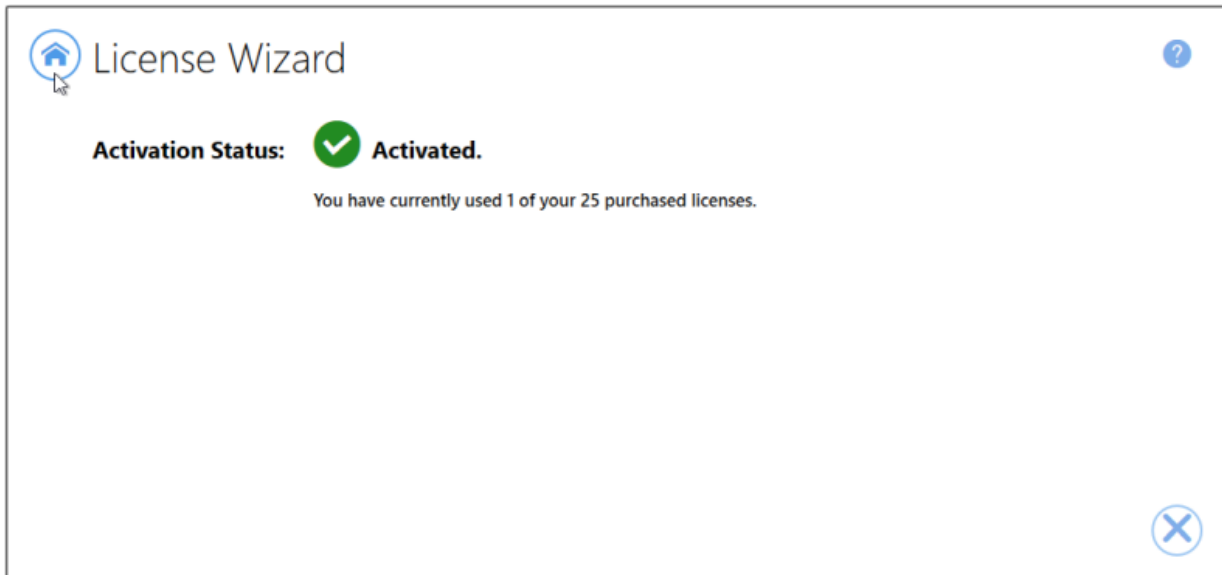


The authentication file is verified and you are automatically moved to the [Activation Status Results](#) screen.

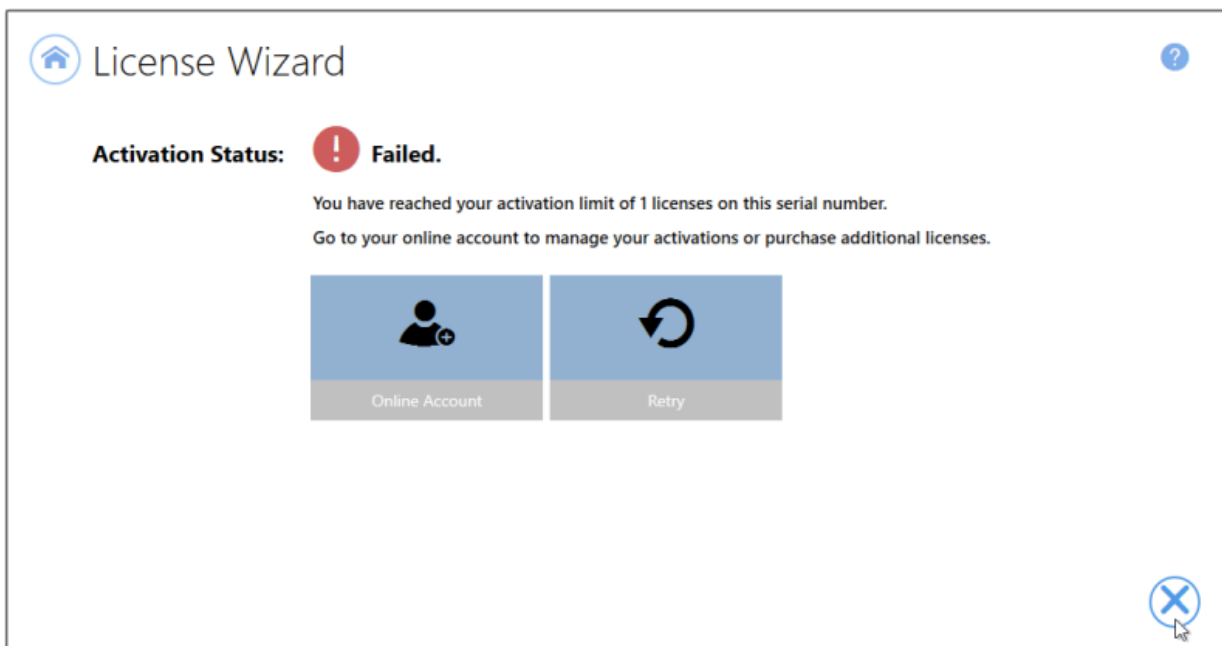
### Activation Status Results

This screen displays your activation status.

If the product is successfully activated, the Activation Status will display your status as **Activated**.



If an error occurred during activation, the Activation Status will display your status as **Failed** with an explanation of the error that occurred. The most common error message that occurs is that you have consumed all of your licenses.



When you have used all your licenses, you will not be able to use the product on this computer until:

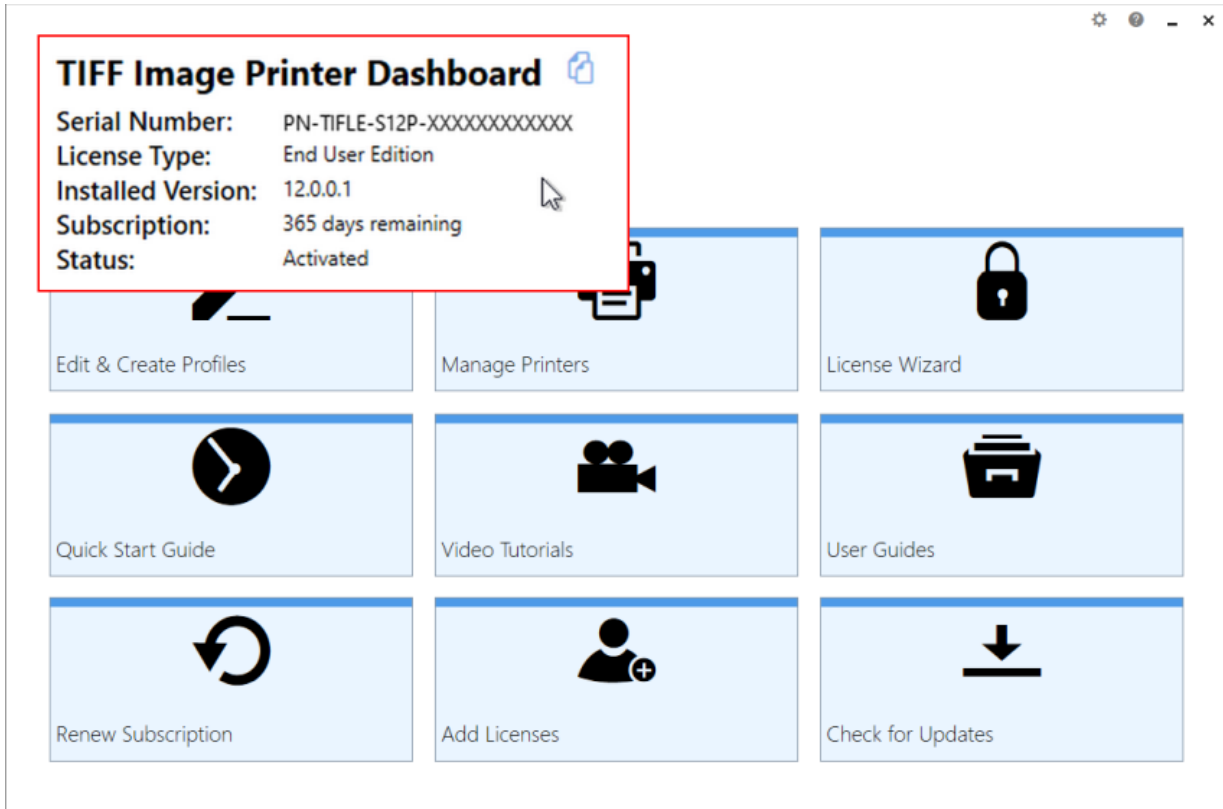
1. you purchase additional licenses, or
2. you adjust your serial number to deactivate a license on an old computer that is no longer in use.

In either case, abort the activation process by clicking the **Close icon** in the bottom right-hand corner. Once you have either purchased additional licenses or deactivated a license that is no longer in use, re-start the activation process by [Launching the License Wizard](#).

For instructions on how to manage your licenses through your [PEERNET online account](#), please see the topic [Edit Activation Details](#).

### Viewing Your Activation Status

Your activation status is always readily available in the top left-hand corner of the TIFF Image Printer **Dashboard**.



The **Dashboard** always shows the following information:

1. **Serial Number** - The serial numbers used to activate TIFF Image Printer on this computer.
2. **Installed Version** - The version number of TIFF Image Printer currently installed on this computer.
3. **Subscription** - The number of days remaining in your current subscription period.
4. **Activation Status** - The status of the product activation on this computer.
  - *Not Activated* - TIFF Image Printer has been installed but had not yet been activated using your serial number.
  - *Activated* - TIFF Image Printer has been activated using your serial number.

- *Deactivated* - The activation for this computer has been deactivated either by the user by [editing their activation details](#) or by PEERNET at the request of the user.
- *Expired* - Your annual subscription has expired. Once the annual renewal is purchase through your [PEERNET online account](#), the status will automatically switch back to Activated.
- *Error* - An event has occurred that has impacted the validity of your activation status.

Select the **copy icon** to quickly save your license information to your clipboard.

### TIFF Image Printer Dashboard



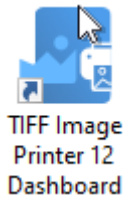
Serial Number:	PN-TIFLE-S12P-XXXXXXXXXXXX
License Type:	End User Edition
Installed Version:	12.0.0.1
Subscription:	339 days remaining
Status:	Activated

### Changing Your Activation Status

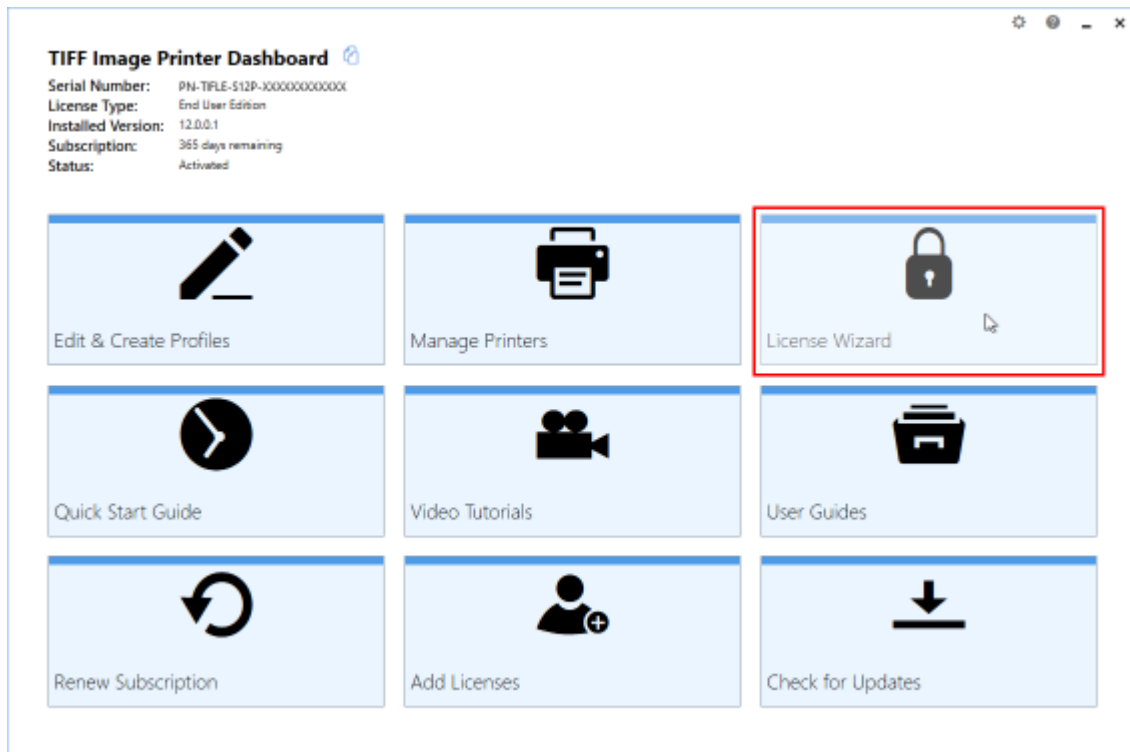
Any changes you need to make to your activation status are available through the **License Wizard**.

To launch the **License Wizard**:

1. Begin by opening the **Dashboard** (double-click the TIFF Image Printer icon on your desktop or select TIFF Image Printer 12 from the Start menu).



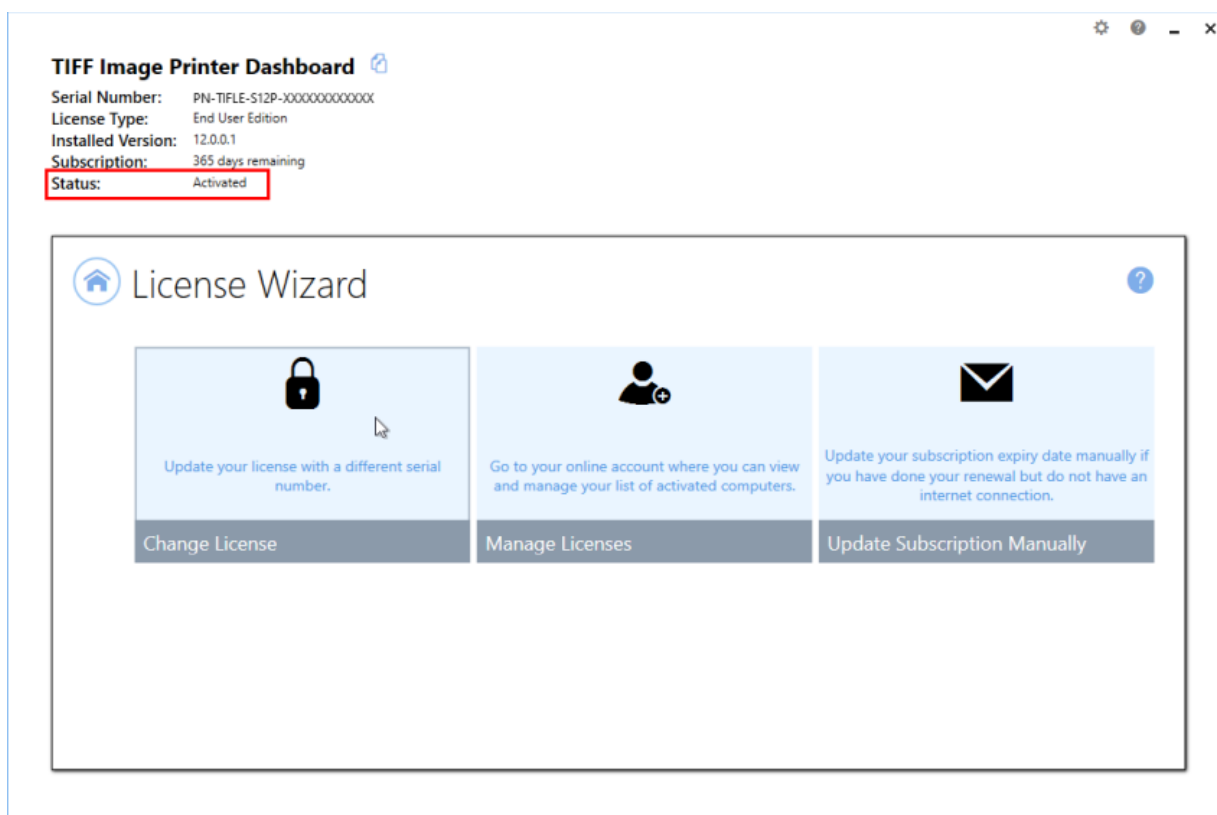
2. Select "License Wizard" to open the **License Wizard**.



## Activated

If your current activation status is Activated, there are three options available for changing your activation status:

1. **Change License** - This will allow you to enter a new serial number. This would be applicable if you have merged multiple serial numbers to one serial number, or if you have upgraded to a higher license level and receive a new serial number.
2. **Manage Licenses** - This will take you to your [PEERNET online account](#) where you can [edit your activation details](#). This would be applicable if you are looking to deactivate a license on an old computer that is no longer in use.
3. **Update Subscription Manually** - *\*Only applicable to user that do not have an internet connect.* After purchasing your annual renewal, this will allow you to update the expiry date of your subscription manually if you do not have an internet connect. If you have an internet connect, the expiry date will be updated automatically.



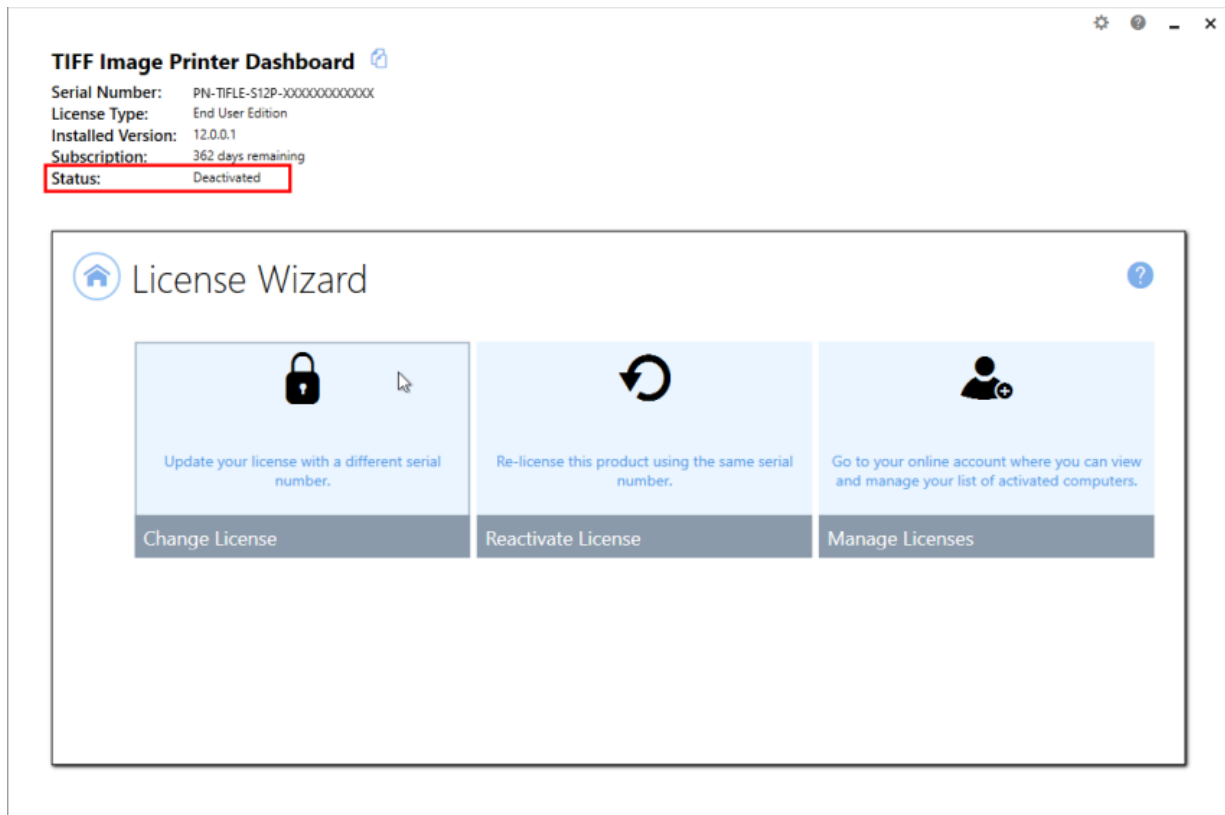
**Note:** If you are trying to deactivate TIFF Image Printer on a computer so that the activation can be used on a new computer, you can also simply uninstall TIFF Image Printer from the computer that is no longer in use. During the uninstall process, you will be prompted with whether or not you would like to deactivate TIFF Image Printer as well.

### Deactivated

Deactivated means that the license for this computer has been deactivated either by the user through the [License Manager](#) or by PEERNET at the request of the user. If your current activation status is Deactivated, there are three options available for changing your activation status:

1. **Change License** - This will allow you to enter a new serial number. This would be applicable if you have merged multiple serial numbers to one serial number, or if you have upgraded to a higher license level and receive a new serial number.
2. **Reactivate License** - This will try to activate TIFF Image Printer again using the same serial number that was previously used to activate the product. This would be applicable if you have [edit your activation details](#) to deactivate a license on an old computer that is no longer in use, or have purchased more licenses.
3. **Manage Licenses** - This will take you to your [PEERNET online account](#) where you can [edit your activation details](#). This would be applicable if you are looking to deactivate a license on an old computer that is no longer in use, so that you can reactivate the deactivated computer.



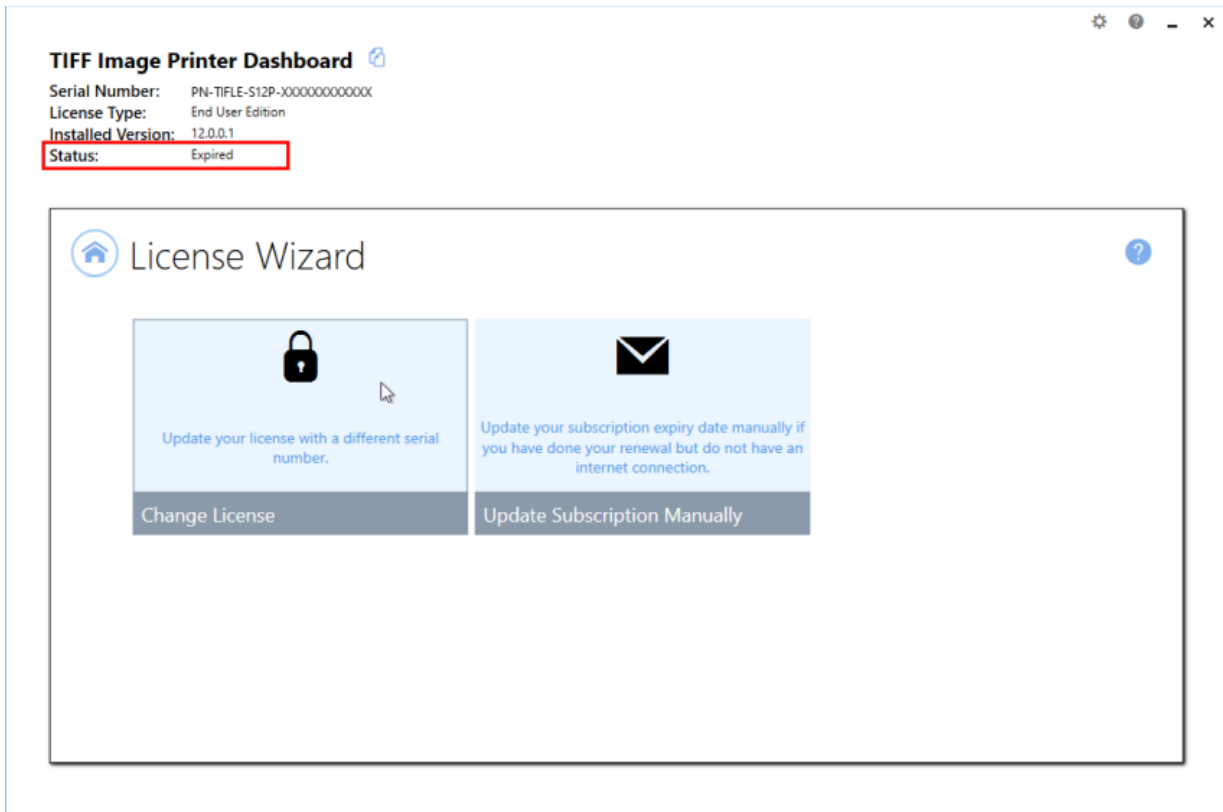


## Expired

Expired means that your annual subscription has expired. If your annual subscription has expired, you need to renew your annual subscription through your [PEERNET online account](#). Once the annual renewal is purchased, the status will automatically switch back to Activated. If your current activation status is Expired, there are two options available for changing your activation status:

1. **Change License** - This will allow you to enter a new serial number. This would be applicable if you have merged multiple serial numbers to one serial number, or if you have upgraded to a higher license level and receive a new serial number.
2. **Update Subscription Manually** - *\*Only applicable to user that do not have an internet connection.* After purchasing your annual renewal, this will allow you to update the expiry date of your subscription

manually if you do not have an internet connect. If you have an internet connect, the expiry date will be updated automatically.



## Error

Error means that something on the computer has changed so that TIFF Image Printer believes it is no longer activated correctly. Examples of items that effect the license validity are: change of domain or workgroup, change in the network, change in the computer name, reformatting and reloading the computer, or system has virus. If your current activation status is Error, there are three options available for changing your activation status:

1. **Change License** - This will allow you to enter a new serial number. This would be applicable if you have merged multiple serial numbers to one serial number, or if you have upgraded to a higher license level and receive a new serial number.
2. **Reactivate License** - This will try to activate TIFF Image Printer again using the same serial number that was previously used to activate the product. This would be applicable if you have made no changes to the



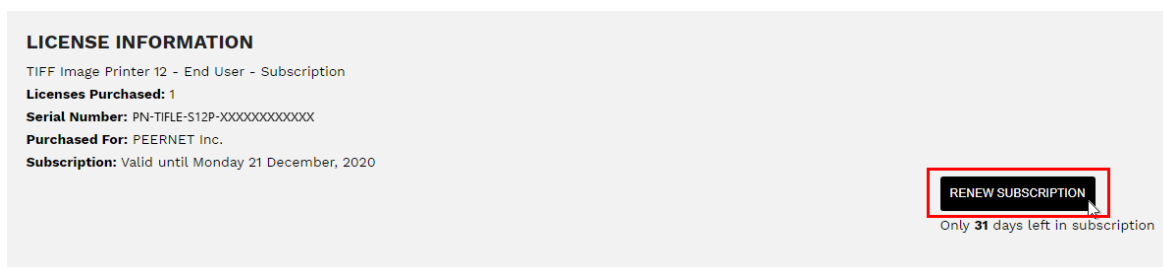
## Renewing Your Annual Subscription

A subscription license of TIFF Image Printer must be renewed annually in order to continue using the product. When your annual renewal is approaching, you will begin to receive notifications of the upcoming renewing both via email and via notification messages when you use TIFF Image Printer.

You can always see how many days are remaining in your current subscription through the TIFF Image Printer **Dashboard** and through your [PEERNET online account](#).

### Renewing TIFF Image Printer:

1. Log into your [PEERNET online account](#).
2. Find the listing for the relevant serial number in your **My Products** list and select "Manage Product".
3. Select "Renew Annual Subscription".



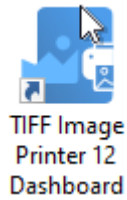
4. Select "Checkout".

As long as the computer(s) activated with the renewed serial number have an internet connection, the annual renewal will be automatically recognized. The TIFF Image Printer **Dashboard** will automatically update to show the new expiry date.

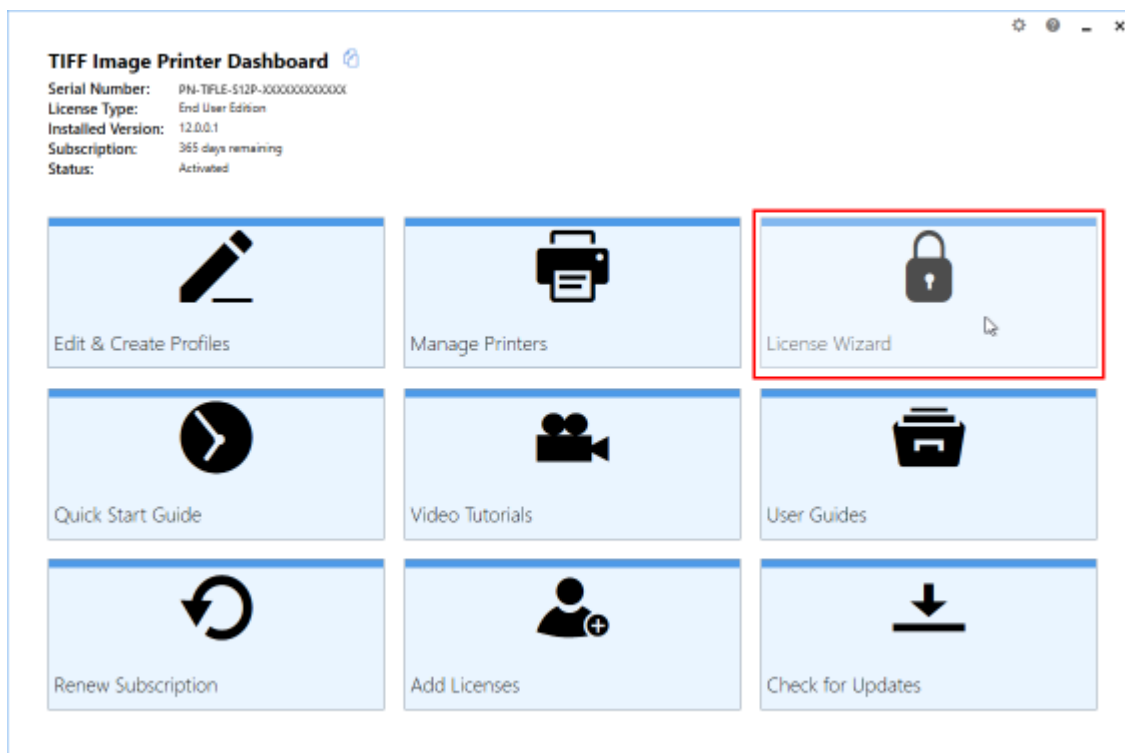
### Renewing without an internet connection

If the computer(s) activated with renewed serial number do not have an internet connect, you will need to manually update the expiry date by following the instructions below. These steps must be taken after the annual renewal has been purchased through your [PEERNET online account](#).

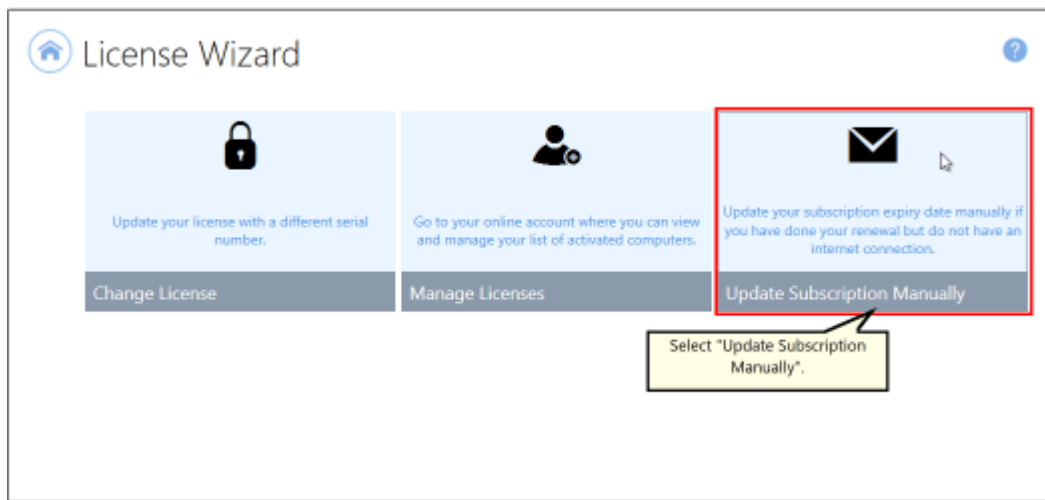
1. Begin by opening the **Dashboard** (double-click the TIFF Image Printer icon on your desktop or select TIFF Image Printer 12 from the Start menu).



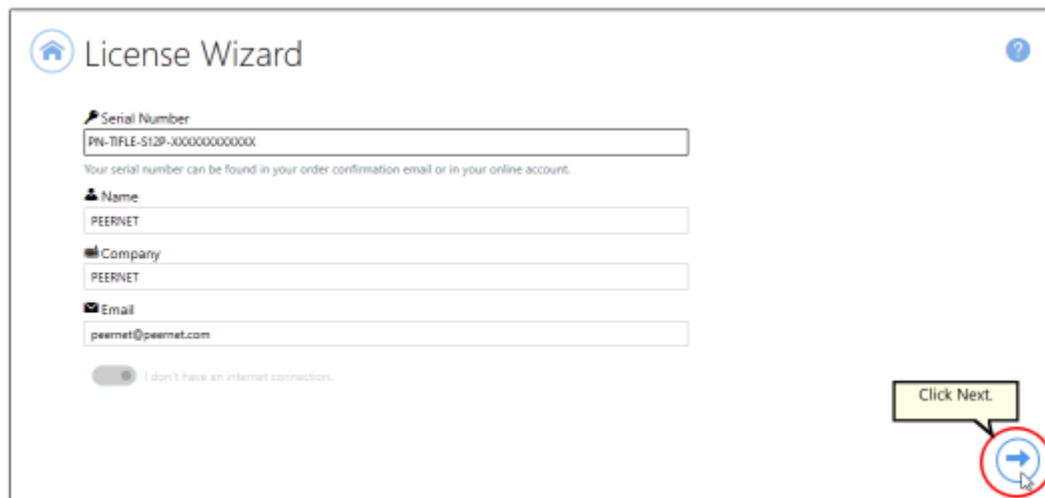
2. Select "License Wizard" to open the **License Wizard**.



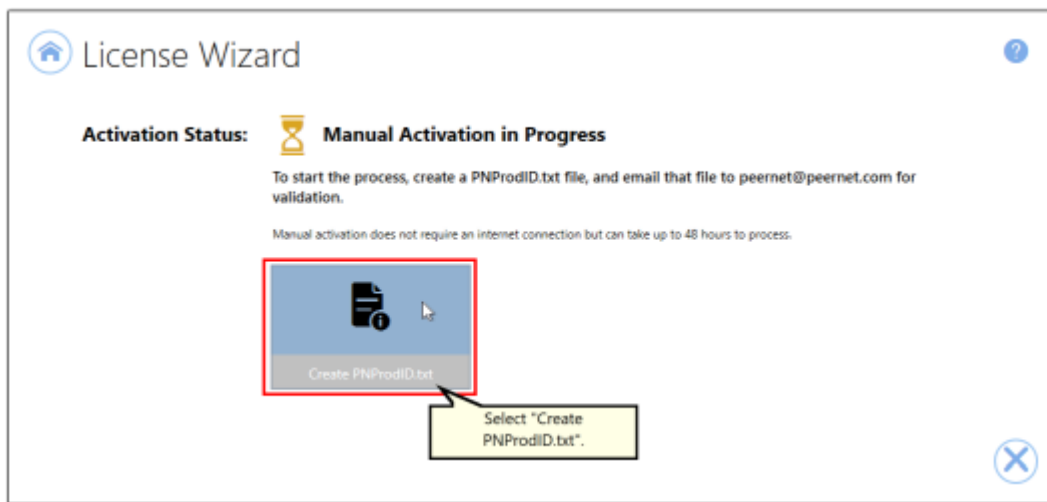
3. Select **Update Subscription Manually**.



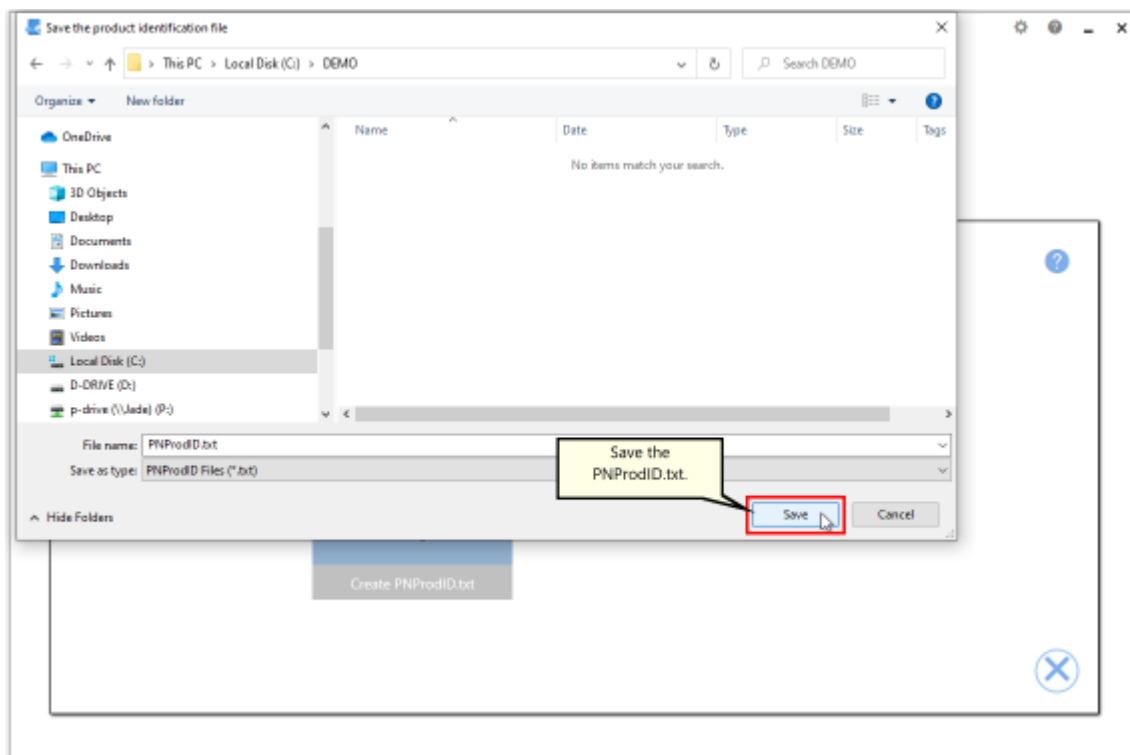
4. The serial number, name, company, and email address entered previously will be automatically populated. Click the next arrow to continue.



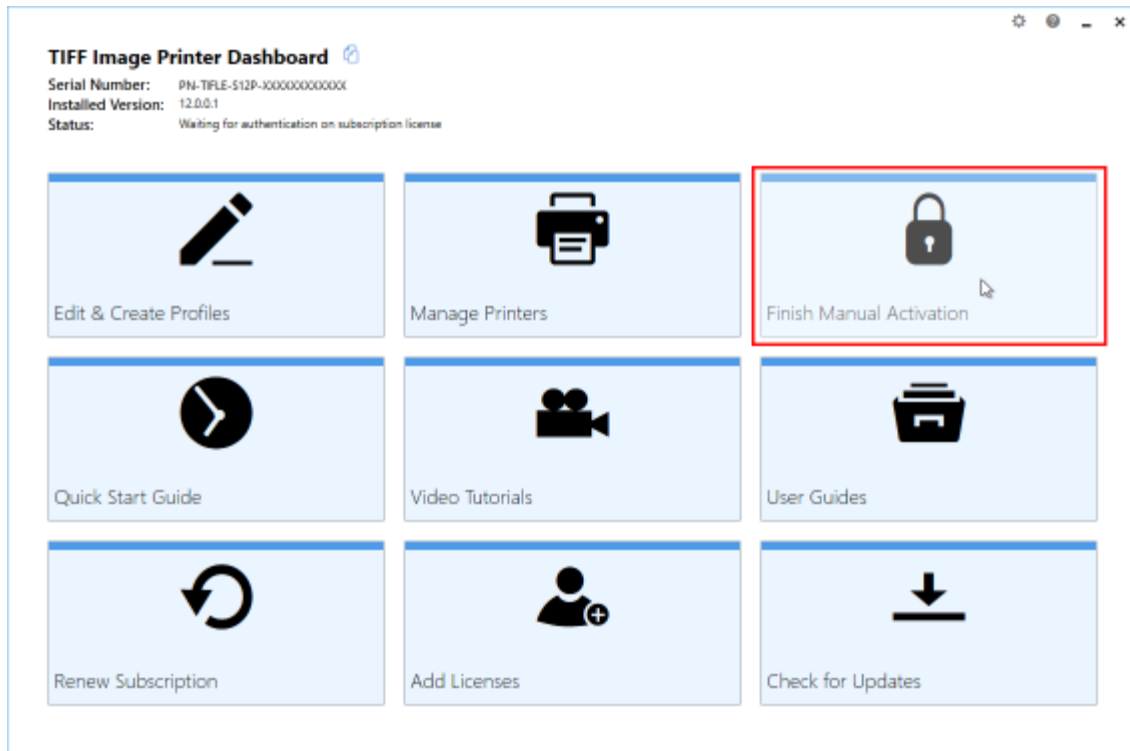
5. Click **Create PNProdID.txt**.



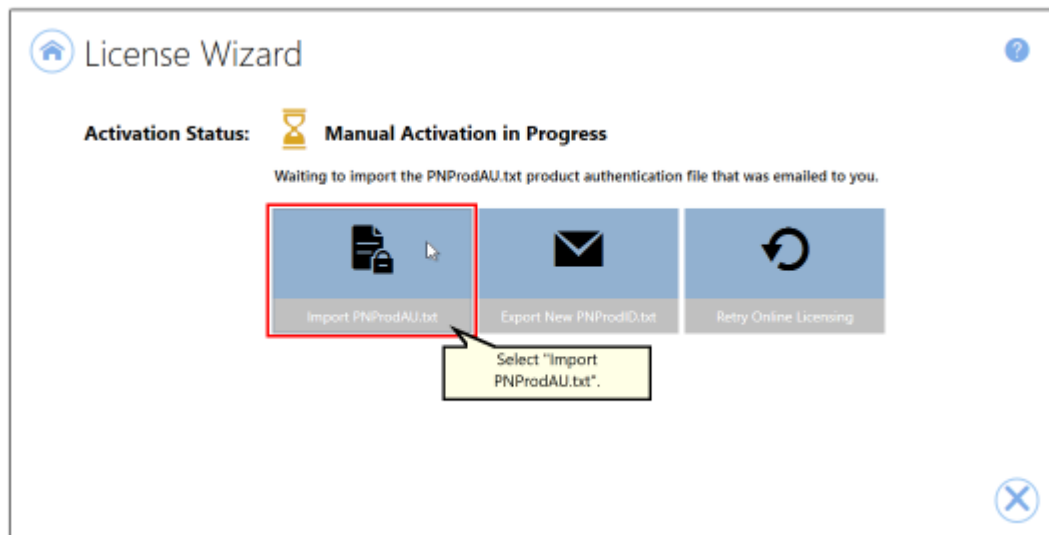
6. Save the **PNProdID.txt** product identification file and email the file to [peernet@peernet.com](mailto:peernet@peernet.com) for manual activation. Please note that these files (PNProdID files) are only authorized during business hours, which are 09h00 to 17h00, Monday through Friday, Eastern Standard Time (excluding statutory holidays).



- When you have received the product authentication file **PNProdAU.txt** from PEERNET, restart the **License Wizard**.



- Click **Import PNProdAU.txt** and complete the activation.



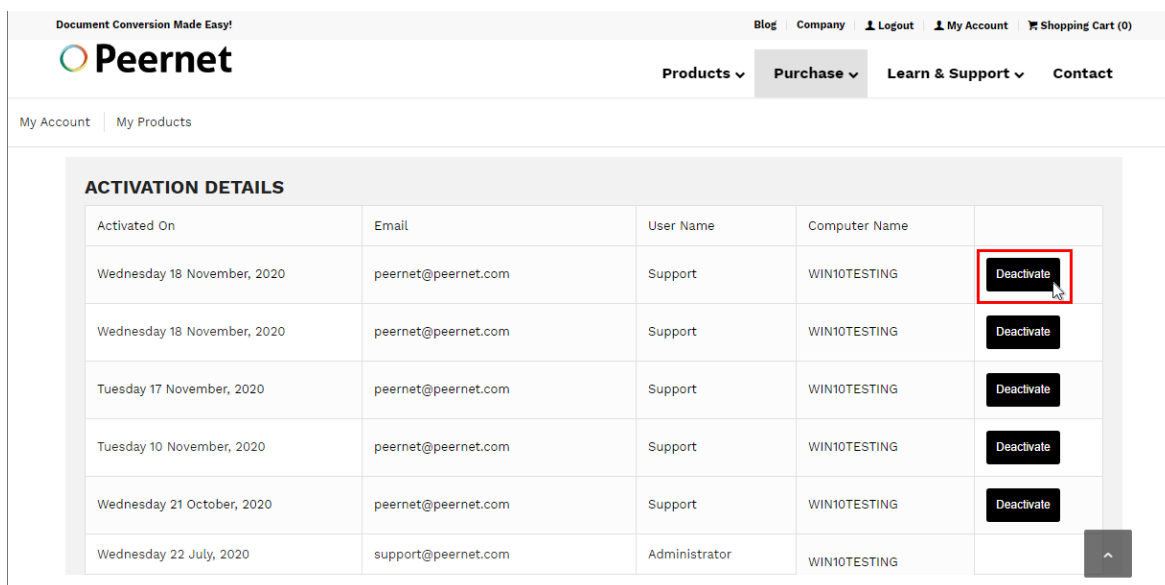


## Edit Activation Details

With the release of TIFF Image Printer 12 the associated PEERNET online account updates now allow users to view the activation details for their serial number(s) directly through their PEERNET online account. For users of TIFF Image Printer 12 you are also able to edit your activation details directly through your PEERNET online account.

### Edit Activation Details:

1. Log into your [PEERNET online account](#).
2. Find the listing for the relevant serial number in your **My Products** list.
3. Select **Manage Product** and scroll down to the **Activation Details** section. Here you will see a list of all computers currently activated with the serial number.
4. If you are no longer using TIFF Image Printer on any of the listed computer, select the **Deactivate** button to deactivate TIFF Image Printer on that computer. This will allow you to activate TIFF Image Printer on a new computer.



ACTIVATION DETAILS				
Activated On	Email	User Name	Computer Name	
Wednesday 18 November, 2020	peernet@peernet.com	Support	WIN10TESTING	Deactivate
Wednesday 18 November, 2020	peernet@peernet.com	Support	WIN10TESTING	Deactivate
Tuesday 17 November, 2020	peernet@peernet.com	Support	WIN10TESTING	Deactivate
Tuesday 10 November, 2020	peernet@peernet.com	Support	WIN10TESTING	Deactivate
Wednesday 21 October, 2020	peernet@peernet.com	Support	WIN10TESTING	Deactivate
Wednesday 22 July, 2020	support@peernet.com	Administrator	WIN10TESTING	

If you are running TIFF Image Printer 12 on a server that is being decommissioned, and need to install and activate your license on a new server prior to the decommissioning date, please contact [PEERNET](#) with your serial number, old computer name(s), and decommissioning date.

## One-Time License

TIFF Image Printer 12 licenses are sold as either subscription licenses or one-time licenses. This chapter is for users with a one-time license and explains how to:

- [Activate TIFF Image Printer](#)
- [View](#) and [Change](#) your Activation Status

The ability to re-use/transfer licenses and [edit your activation details](#) is only available with a subscription license, and is not an option for one-time licenses.

### What is a one-time license?

A one-time license gives users access to a perpetual activation of TIFF Image Printer 12 up to the limit of number of licenses purchased. This is a classic software license meaning that you can go on using any license(s) you purchase for as long as you like, but once a license is consumed it can never be moved/transferred to a new computer or re-used after an operating system upgrade, computer crash or reformatting (any action that would change the computer identity).

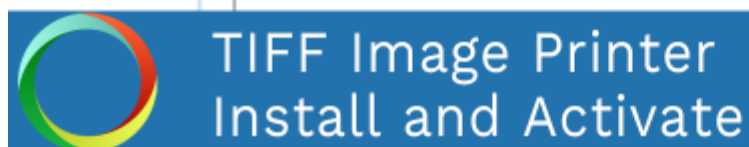
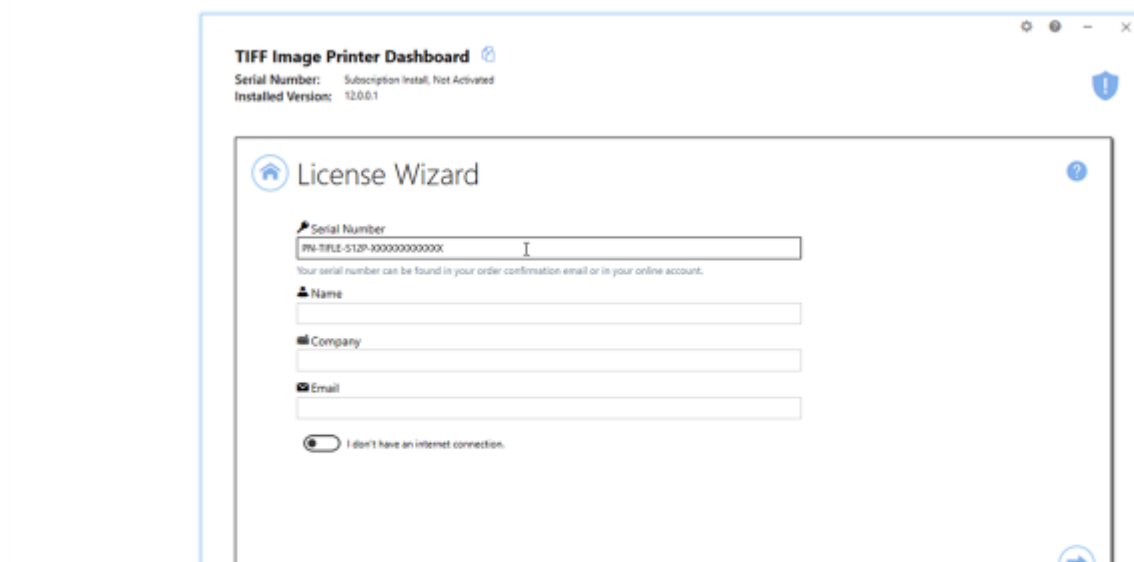
With a one-time license, you are not entitled to request license adjustments from PEERNET or [edit your activation details](#) through your PEERNET online account. In addition, you will not receive any update or upgrades that are released for TIFF Image Printer. Lastly, you are only entitled to the most basic technical support.

For the ability to request license adjustments, edit your activation details, access updates and upgrades, and receive priority technical support, please see our [subscription license](#).

## Activating TIFF Image Printer

The first step to activating TIFF Image Printer is installing your purchase copy of the software which is available through your online account.

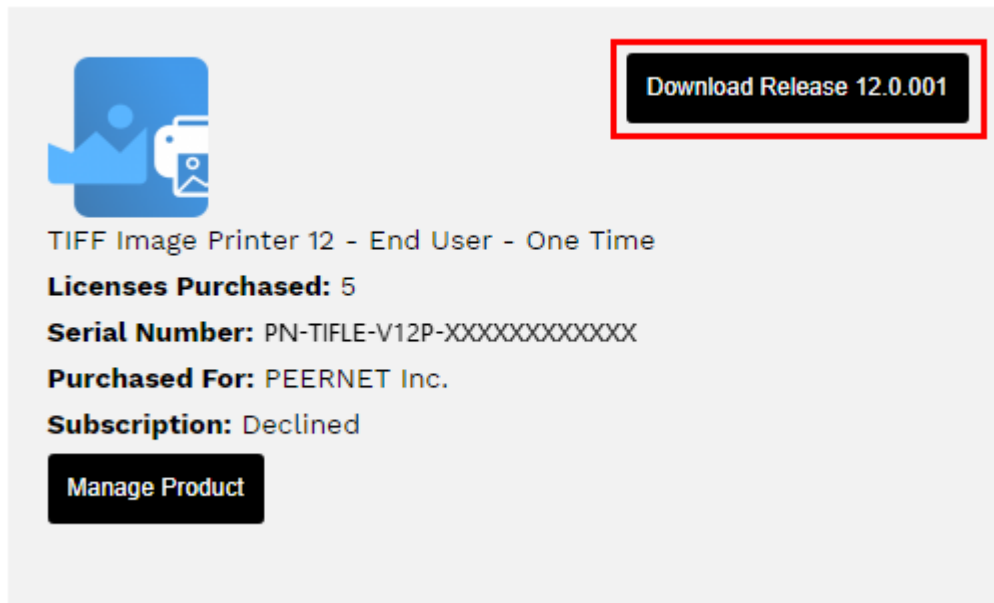
If you installed the trial version of TIFF Image Printer before purchasing, you still need to install your purchased copy of the software.



*Click the image above to watch the video tutorial.*

## Installing TIFF Image Printer:

1. Log into your [PEERNET online account](#).
2. Find the desired software in your **My Products** list, and select the **Download Release** button to download the latest release of the software.



3. In most cases, the EXE file is located in the Downloads folder. Open File Explorer and browse to C:\Users\YOUR USERNAME\Downloads\
4. Double-click the EXE file to run the TIFF Image Printer install.

If you installed the trial version of TIFF Image Printer before purchasing, when you run the install for the purchased copy, the previously installed trial version will prompt you to uninstall it. Select "next" to remove the trial version and replace it with your purchased copy.

At the end of the installation process, you are given the option to launch the TIFF Image Printer **Dashboard**. Leave "Open the TIFF Image Printer 12 Dashboard now" checked in order to open the TIFF Image Printer **Dashboard** directly. This is the fastest way to proceed to activating your software.

## Launching the License Wizard

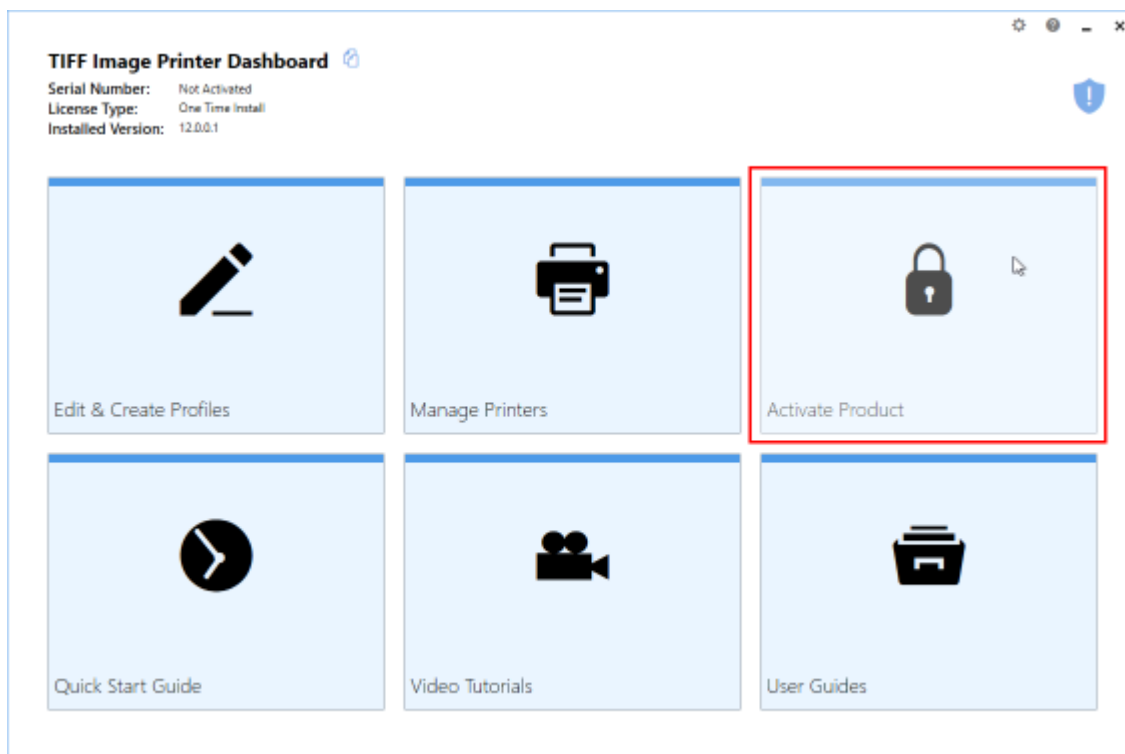
The **License Wizard** is accessible from the TIFF Image Printer **Dashboard**.

To launch the **License Wizard**:

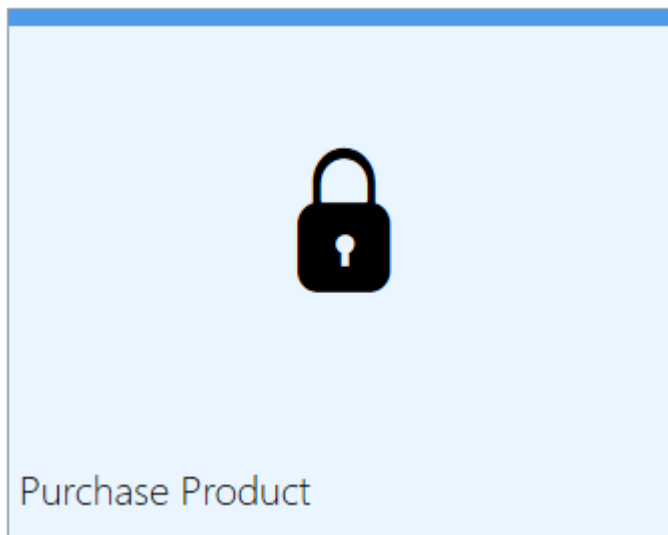
1. Begin by opening the **Dashboard** (double-click the TIFF Image Printer icon on your desktop or select TIFF Image Printer 12 from the Start menu).



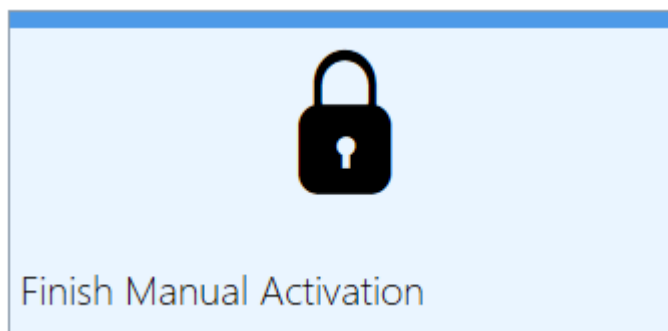
2. Select "Activate Product" to open the License Wizard.



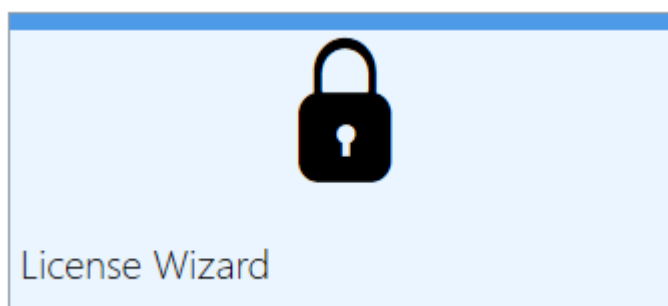
- If you have the trial version of TIFF Image Printer installed instead of your purchased copy, this tile will say "Purchase Product". Please return to [Activating TIFF Image Printer](#) for instruction on installing your purchase copy of the software.



- If you are in the middle of a manual activation process, the tile will say "Finish Manual Activation".



- If the software is already licensed, this title will say "License Wizard".



## Entering Your Serial Number

To activate your product you need to enter in the serial number that was included with your order confirmation email and your user information. You can also find your serial number in through your [PEERNET online account](#).

### Entering your serial number

Enter the serial number into the box on the screen. If you copy your entire serial number from your email and then return to this dialog it will automatically be filled into the box.

The serial number is case sensitive and it is important to type the serial number exactly as it is received. Be sure not to leave any spaces before or after the serial number when typing or pasting, and note that the serial number ends with a series of hexadecimal characters (0-9,A-F).

### Entering your user information

If possible, your Name and Company information is automatically picked up from your system settings. The information in these fields can be change if required.

You cannot continue if either the Name or the Email Address field is left blank. Email addresses entered here are only used by PEERNET to identify users. We will never rent or sell our customer's and client's information to third parties.

**TIFF Image Printer Dashboard**

Serial Number: Not Activated  
License Type: One Time Install  
Installed Version: 12.0.0.1

### License Wizard

**Serial Number**  
PN-TIFLE-V12P-XXXXXXXXXXXX  
Your serial number can be found in your order confirmation email or in your online account.

**Name**  
PEERNET

**Company**  
PEERNET

**Email**  
peernet@peernet.com

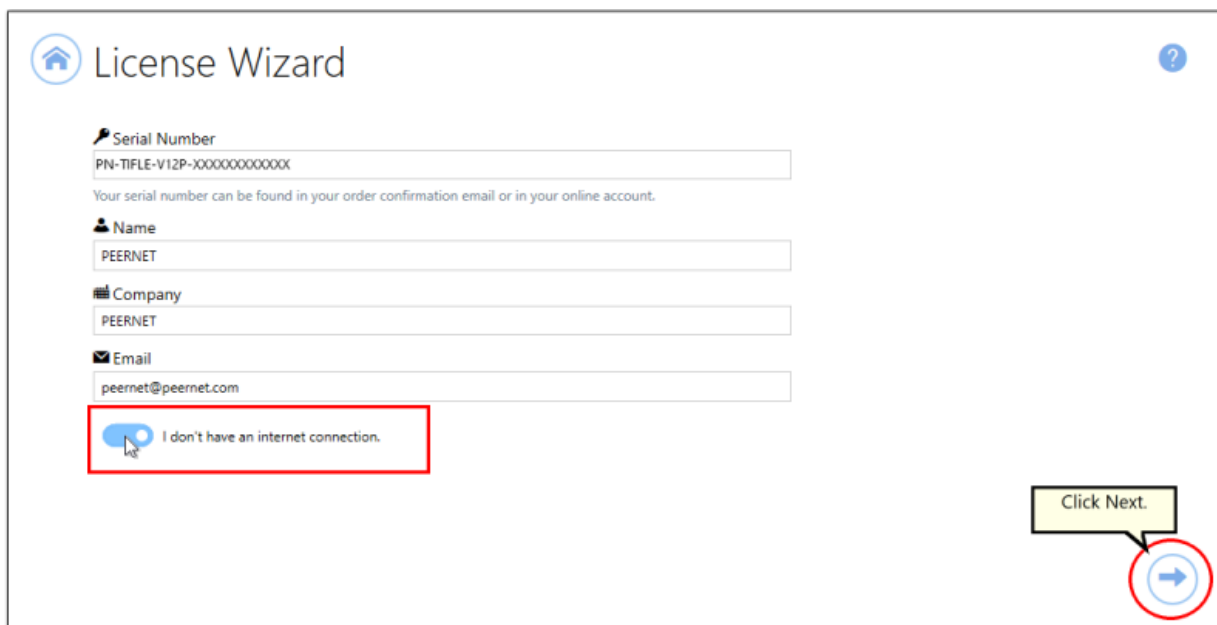
☐ I don't have an internet connection.

Click Next.

## Activating without an internet connection

If you are having difficulty connecting to the internet, or do not want to activate over the internet, you can choose to manually activate the product by checking "I don't have an internet connection".



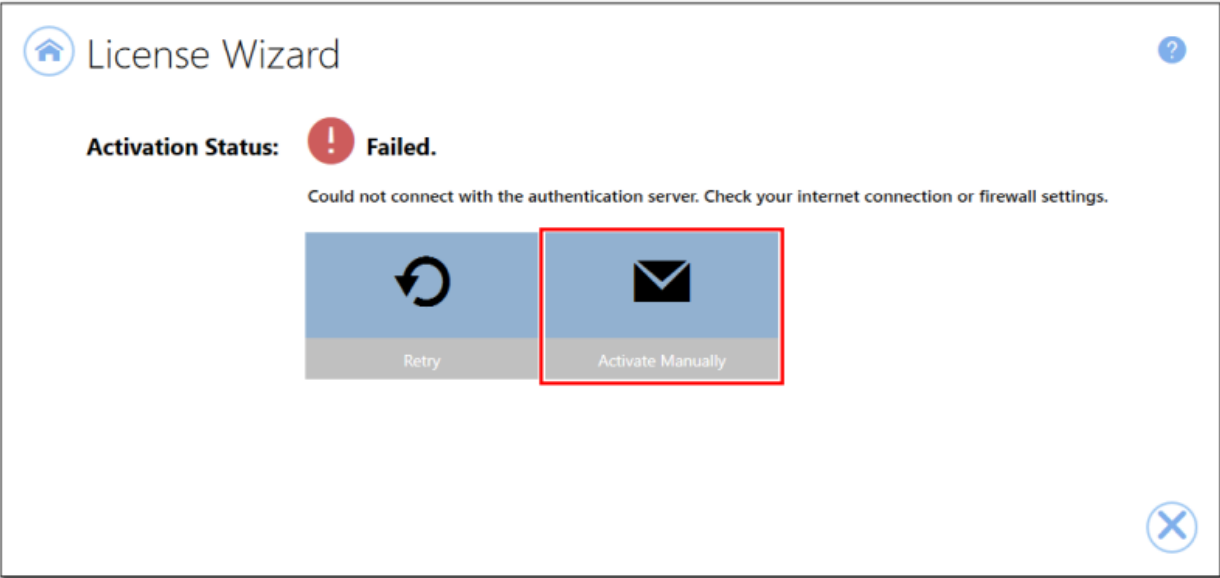


The License Wizard dialog box is shown with the following fields and options:

- Serial Number:** PN-TIFLE-V12P-XXXXXX00000000X
- Name:** PEERNET
- Company:** PEERNET
- Email:** peernet@peernet.com
- Options:** A radio button labeled "I don't have an internet connection." is selected and highlighted with a red box.
- Next Button:** A blue circular button with a right-pointing arrow, highlighted with a red circle and a yellow callout bubble that says "Click Next."

Manual activation does not require an internet connection on the computer the software is installed on, but it does require that you have the ability to email an encrypted file to PEERNET for authentication. We will return the authenticated file to you, which you then import using the License Wizard to complete the activation process. These files are processed by PEERNET's technical staff from 09h00 to 17h00, Monday to Friday, Eastern Standard Time.

When activating over the internet, the License Wizard will attempt to validate an internet connection, and will prompt with the choice to license manually if it cannot connect. Activating over the internet may also fail if you have a firewall or anti-virus software blocking the connection. Click **Activate Manually** to begin the manual activation process, or click **Retry** to try activating online again.



## Manually Activating TIFF Image Printer

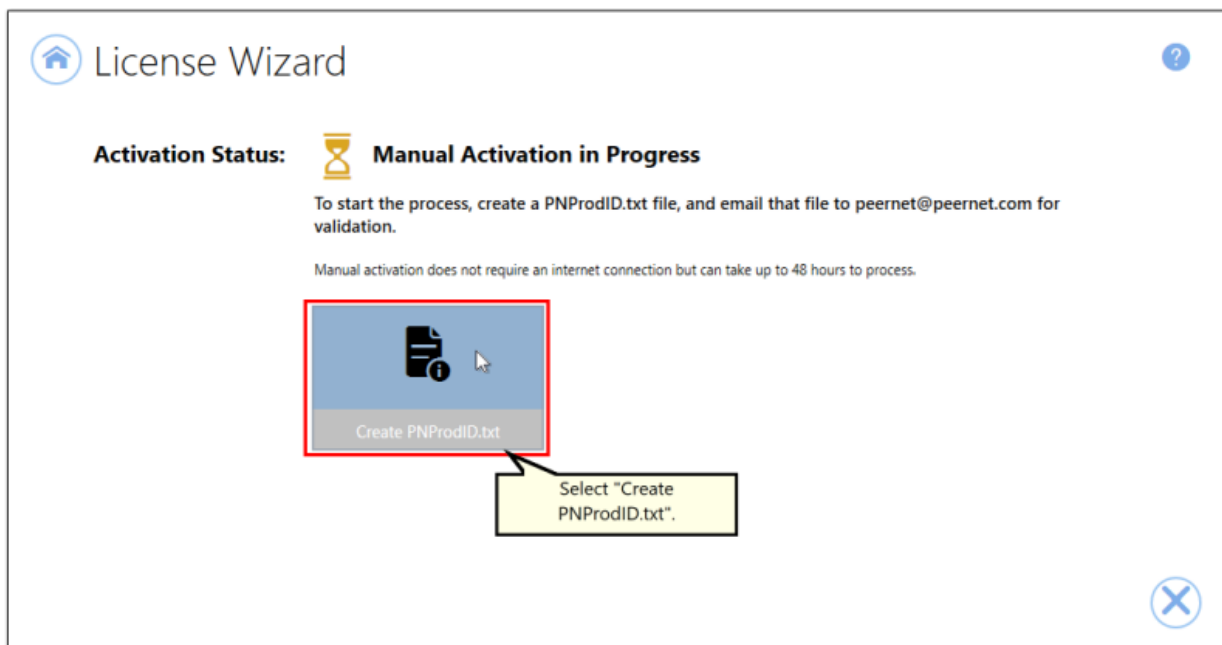
In most cases, you will not have to activate your product manually. This only happens when TIFF Image Printer is installed on a computer that has no access to the internet, or the computer is configured such that the user cannot access the internet. This can also happen if a firewall program or anti-virus software blocks our attempt to connect with our license server.

If you do have to activate manually, you will need to follow the steps below. Please note that these files (PNProdID files) are only authorized during business hours, which are 09h00 to 17h00, Monday through Friday, Eastern Standard Time (excluding statutory holidays).

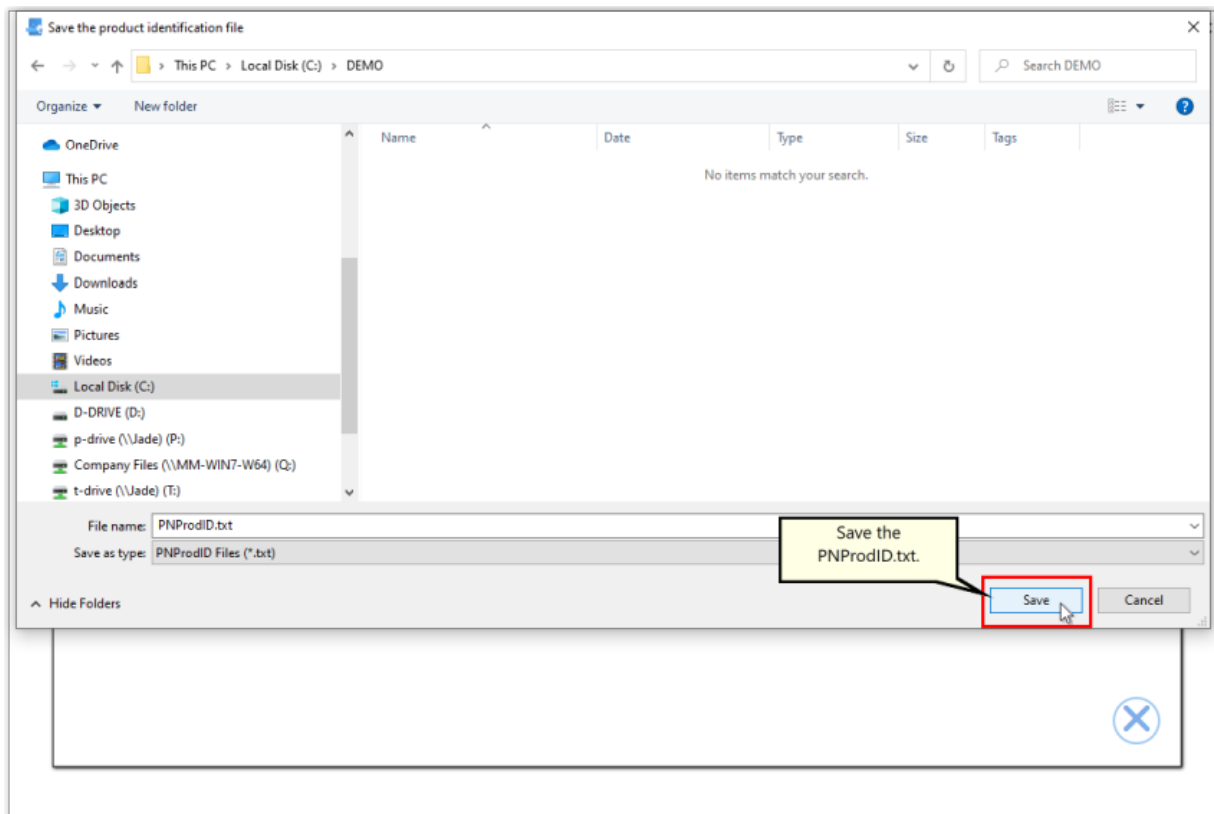
1. Use the **License Wizard** to create the encrypted file, **PNProdID.txt**.
2. Email the file to [peernet@peernet.com](mailto:peernet@peernet.com) for manual activation. For computers with no email capability, you can save the file to a shared network drive, or use an external storage device such as a USB flash drive (also known as thumb drives), or a MicroSD storage card to copy the file to a computer with email capabilities.
3. A file named **PNProdAU.txt** will be emailed back to you. Copy this file back to the computer where TIFF Image Printer is installed and restart the **License Wizard** to complete the license activation.

## Exporting the PNProdID.txt file

To create the file click **Create PNProdID.txt**.



A save dialog box will appear prompting you to choose where to save the **PNProdID.txt** product identification file. This dialog may look slightly different depending on which version of Windows you are running. Save this file in an easy to remember location, like your Desktop or your Documents folder.

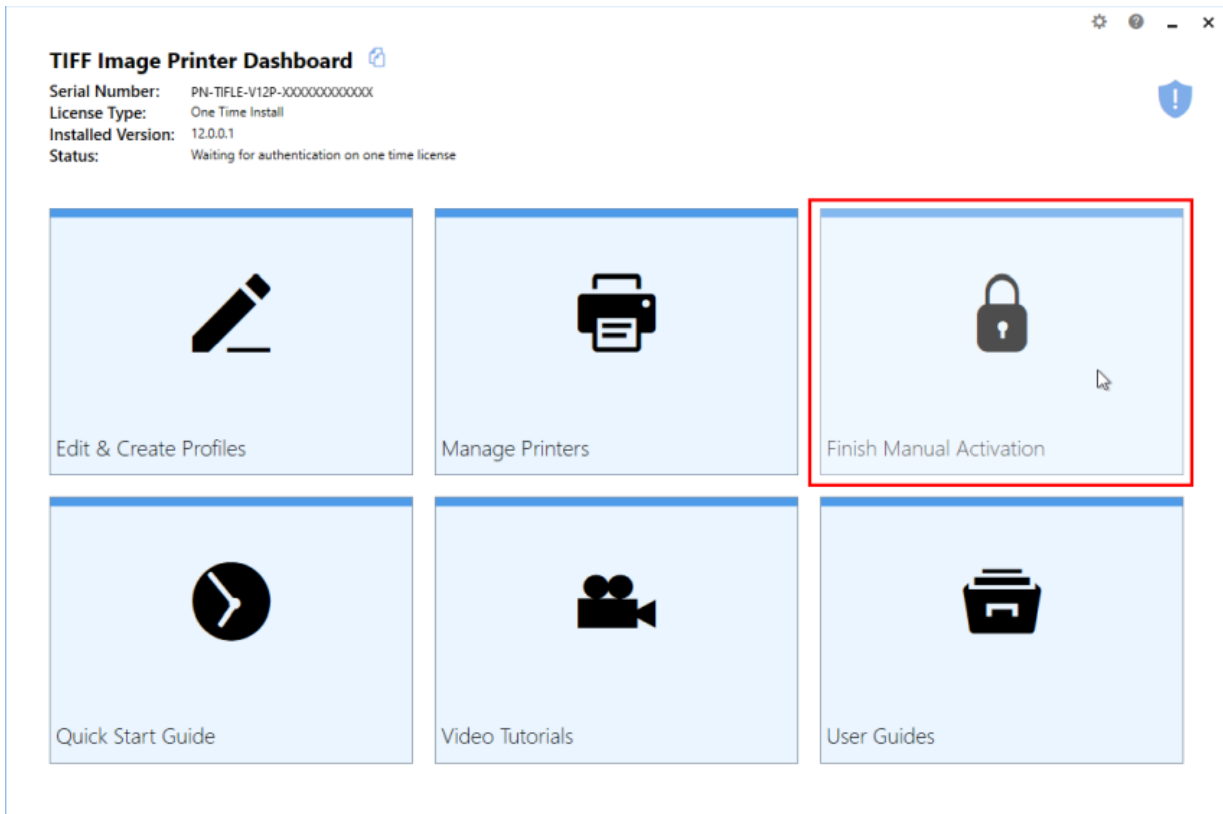


You need to email this file to [peernet@peernet.com](mailto:peernet@peernet.com). For computers with no email capability, you can save the file to a shared network drive, or use an external storage device such as a USB flash drive or a MicroSD storage card to copy the file to another computer.

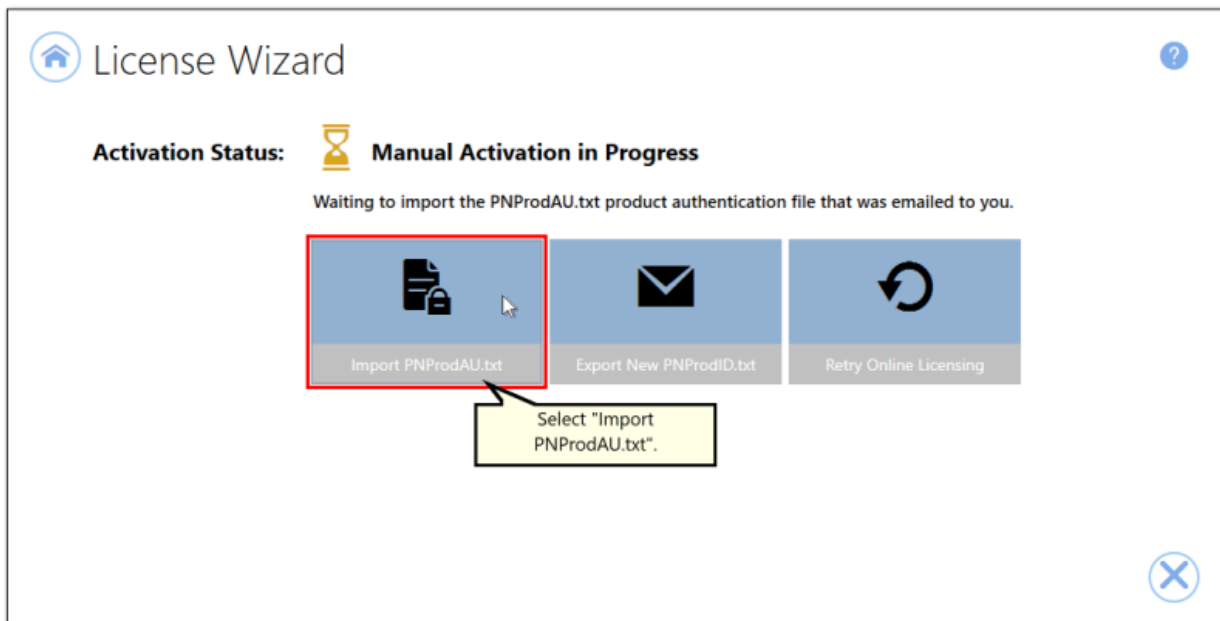
## Importing the PNProdAU.txt file

When you have received the product authentication file **PNProdAU.txt** from PEERNET Inc., you will need save the file in an easy to remember location, like your Desktop or your Documents folder. If you need to move the authentication file back to the computer where TIFF Image Printer is installed, do so now.

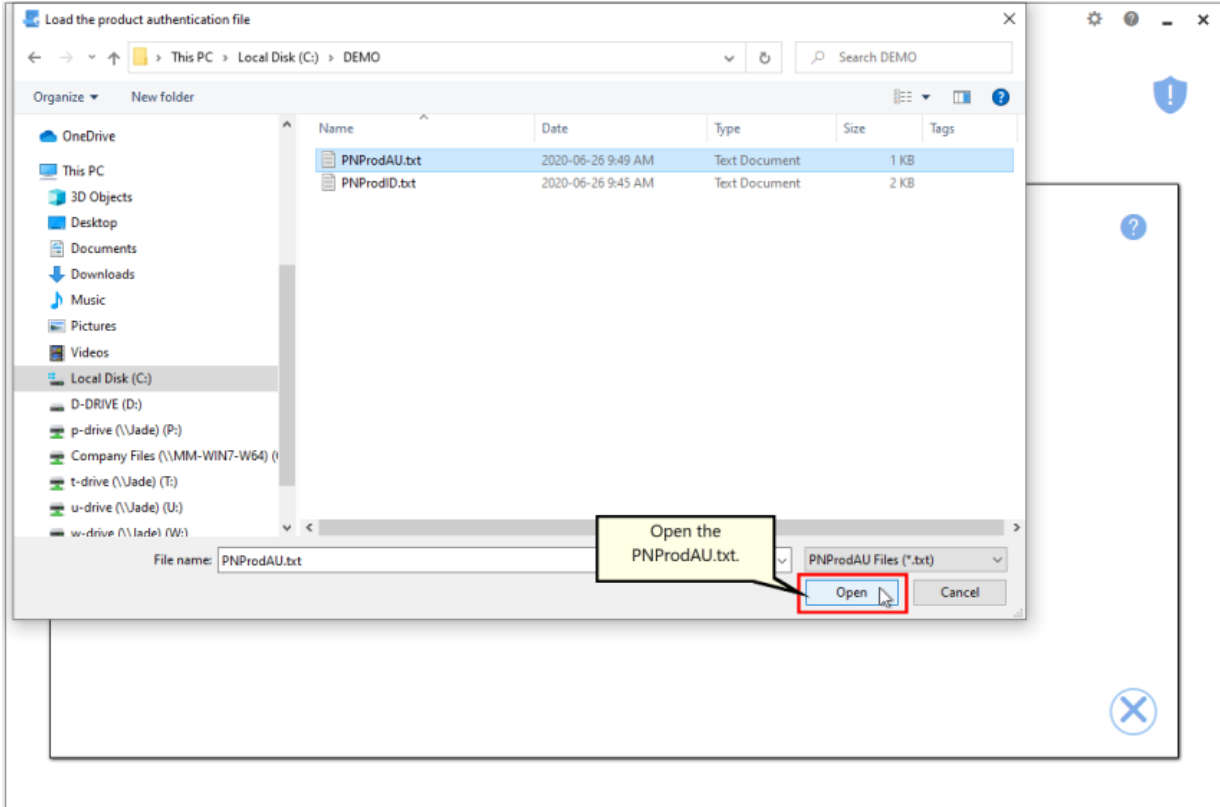
On the computer where TIFF Image Printer is installed, restart the License Wizard by following the steps outlined in [Launching the License Wizard](#). The License Wizard will automatically start at the import screen.



Click **Import PNProdAU.txt**. If you did not receive a PNProdAu.text file, you can restart the manual licensing process. You also have the option to retry online activation if you now have an internet connection or have resolved an issue with your firewall settings.



A browse dialog box will appear. This dialog may look slightly different depending on which version of Windows you are running. Locate where you saved the **PNPProdAU.txt** file you received from PEERNET and click the Open button to import the file.

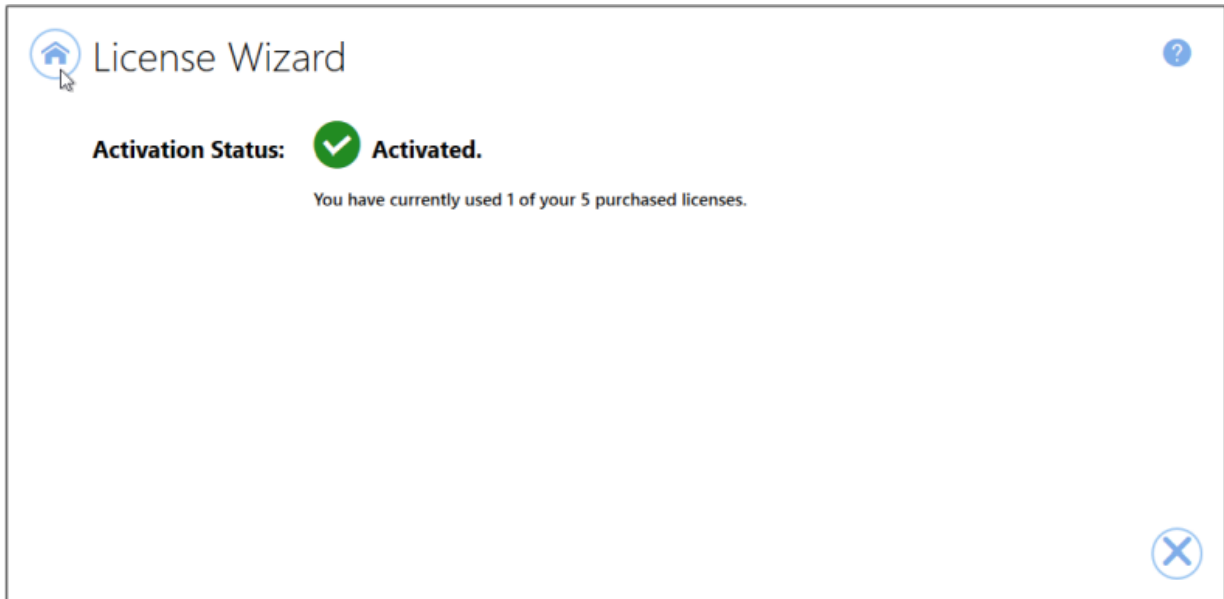


The authentication file is verified and you are automatically moved to the [Activation Status Results](#) screen.

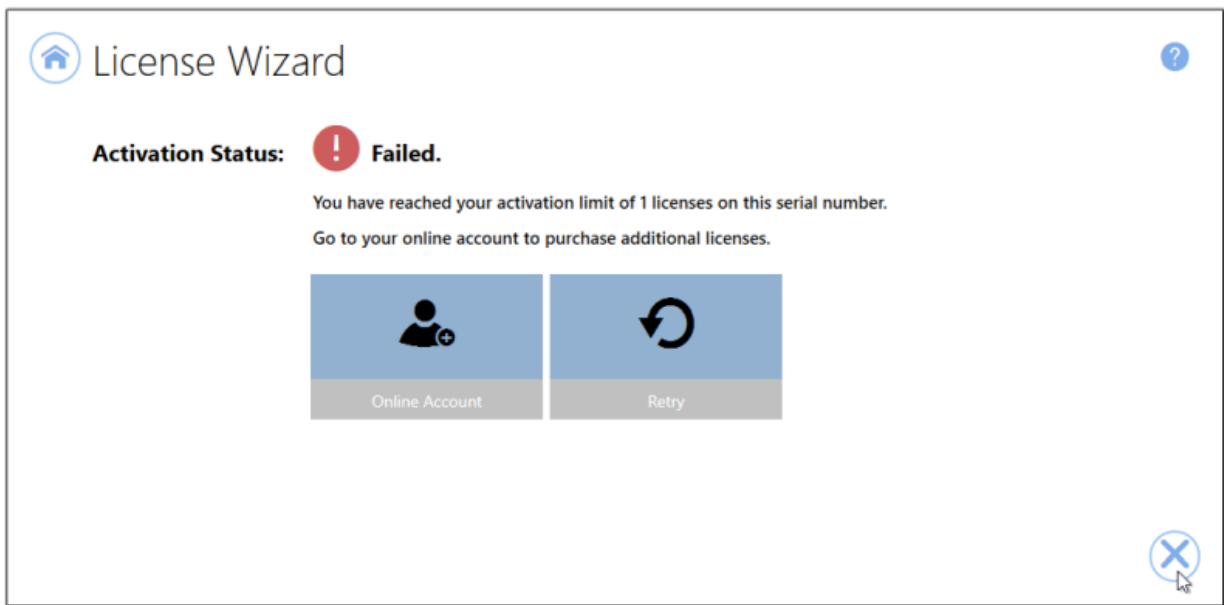
### Activation Status Results

This screen displays your activation status.

If the product is successfully activated, the Activation Status will display your status as **Activated**.



If an error occurred during activation, the Activation Status will display your status as **Failed** with an explanation of the error that occurred. The most common error message that occurs is that you have consumed all of your licenses.





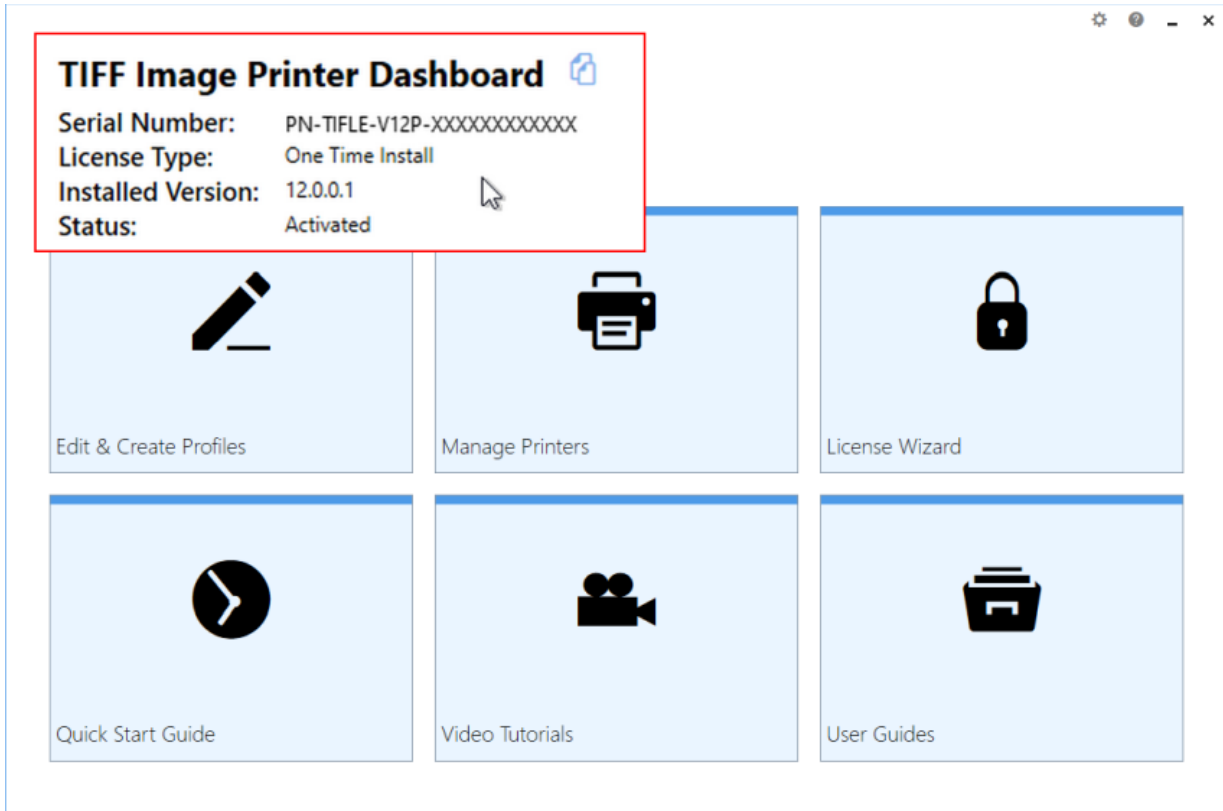
When you have used all your licenses, you will not be able to use the product on this computer until you purchase additional licenses. Since you purchased a one-time license of TIFF Image Printer you do not have the option to re-use any licenses that are no longer use, or re-license a computer after a computer crash or operating system upgrade. Once they have been consumed to activate a computer, one-time licenses can never be reused. Therefore, if you need to license a new computer or re-license a reformatted computer, you will need to purchase a new license.

If you want the option to re-use licenses in the future, consider purchasing a new subscription license of TIFF Image Printer instead of another one-time license. A subscription license entitles you to license adjustments, software updates/upgrades, and priority support.

Abort the activation process by clicking the **Close icon** in the bottom right-hand corner. Once you have purchased additional licenses, re-start the activation process by [Launching the License Wizard](#).

## Viewing Your Activation Status

Your activation status is always readily available in the top left-hand corner of the TIFF Image Printer **Dashboard**.



The **Dashboard** always shows the following information:

1. **Serial Number** - The serial numbers used to activate TIFF Image Printer on this computer.
2. **Installed Version** - The version number of TIFF Image Printer currently installed on this computer.
3. **Activation Status** - The status of the product activation on this computer.
  - *Not Activated* - TIFF Image Printer has been installed but had not yet been activated using your serial number.
  - *Activated* - TIFF Image Printer has been activated using your serial number.
  - *Error* - An event has occurred that has impacted the validity of your activation status.

Select the **copy icon** to quickly save your license information to your clipboard.

### TIFF Image Printer Dashboard



Serial Number: PN-TIFLE-V12P-XXXXXXXXXXXX

License Type: One Time Install

Installed Version: 12.0.0.1

Status: Activated

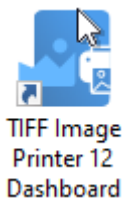
## Changing Your Activations Status

Since you purchased a one-time license of TIFF Image Printer you do not have the option to re-use any licenses that are no longer use, or reactivate a computer after a computer crash or operating system upgrade. Therefore, there are no changes that you can make to the activation status of your one-time license. Once a computer has been activated, that license has been consumed and cannot be re-used.

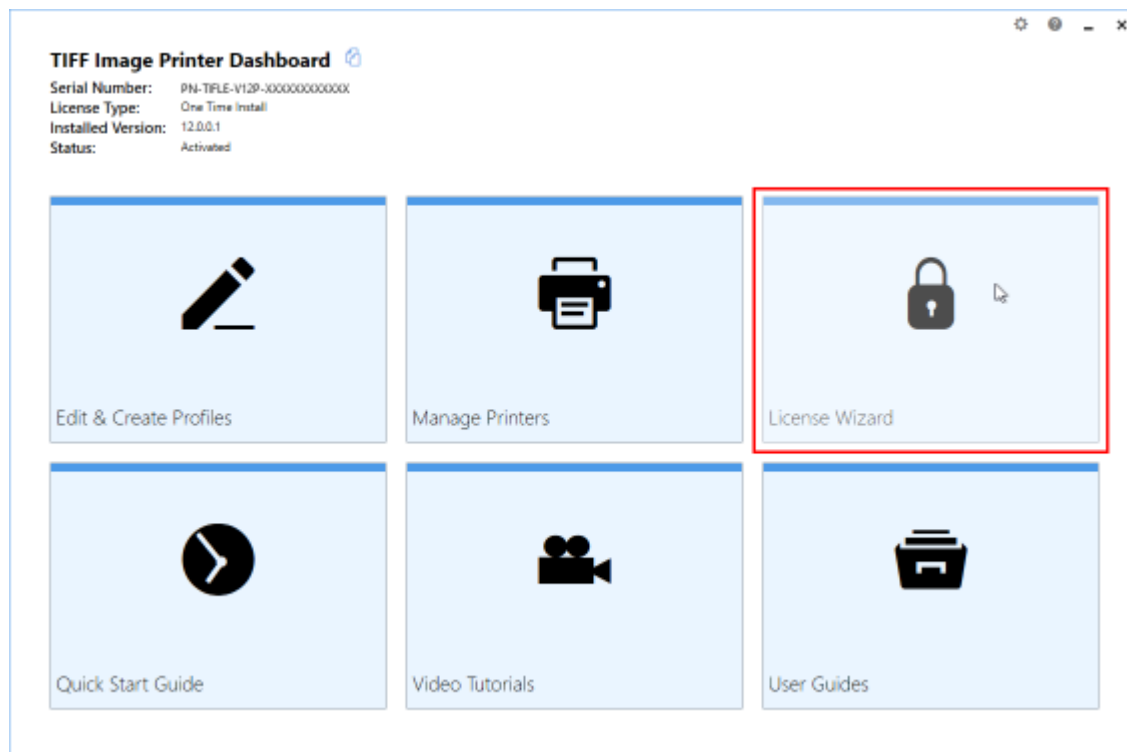
Once TIFF Image Printer is **Activated**, if you launch the License Wizard again, you will see this notice about the one-time license as well as links to purchase a subscription license of TIFF Image Printer or another one-time license of TIFF Image Printer.

To launch the **License Wizard**:

1. Begin by opening the **Dashboard** (double-click the TIFF Image Printer icon on your desktop or select TIFF Image Printer 12 from the Start menu).



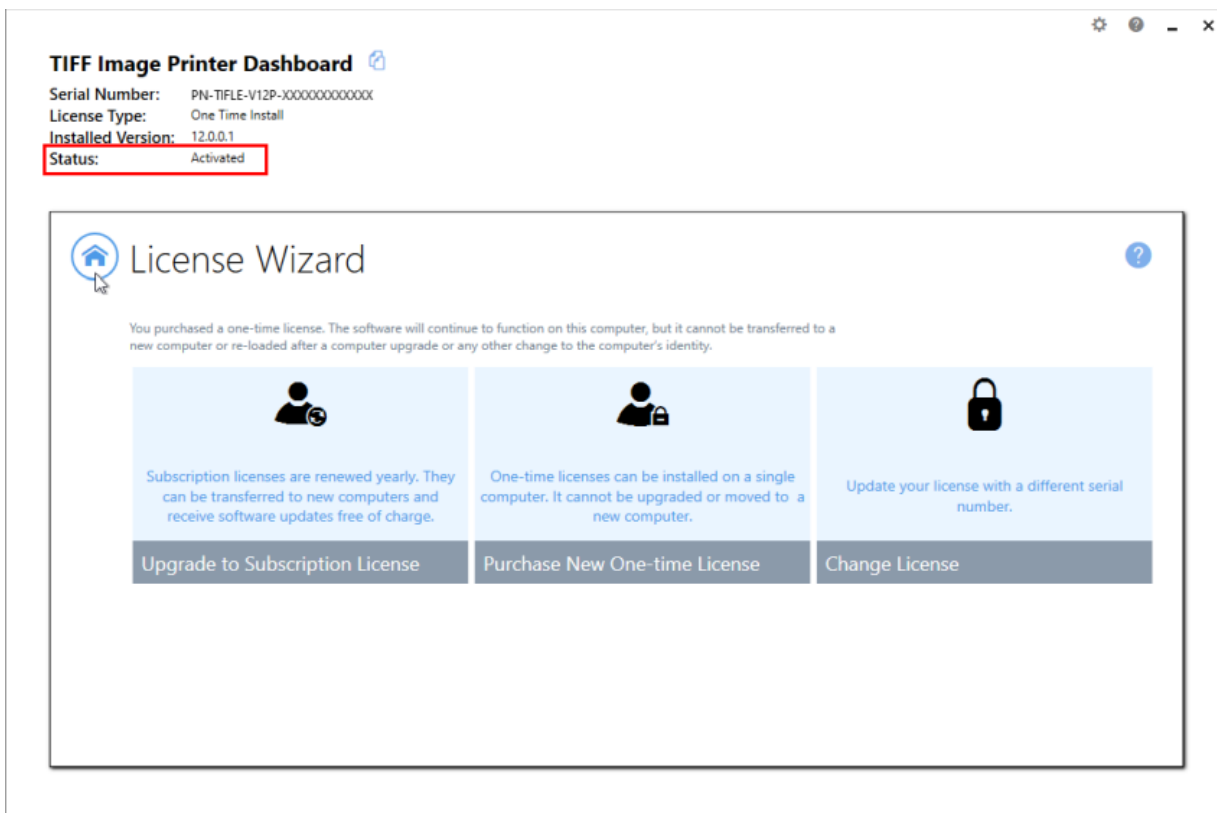
2. Select "License Wizard" to open the **License Wizard**.



## Activated

If your current activation status is Activated, there are three options available through the License Wizard:

1. **Upgrade to Subscription** - This will take you to your [PEERNET online account](#) where you can purchase a new subscription license. You may be interested in switching to a subscription license if you need to move the software to a new computer or want to access the latest version of TIFF Image Printer.
2. **Purchase New One-Time** - This will take you to your [PEERNET online account](#) where you can purchase a new subscription one-time. You will need to buy a new one-time license if you need to move the software to a new computer.
3. **Change License** - This will allow you to enter a new serial number. This would be applicable if you have merged multiple serial numbers to one serial number, or if you have receive a new serial number. Note: If you have switched to a subscription license, you will need to uninstall the one-time install and install the purchased subscription install. You cannot just do a change license.



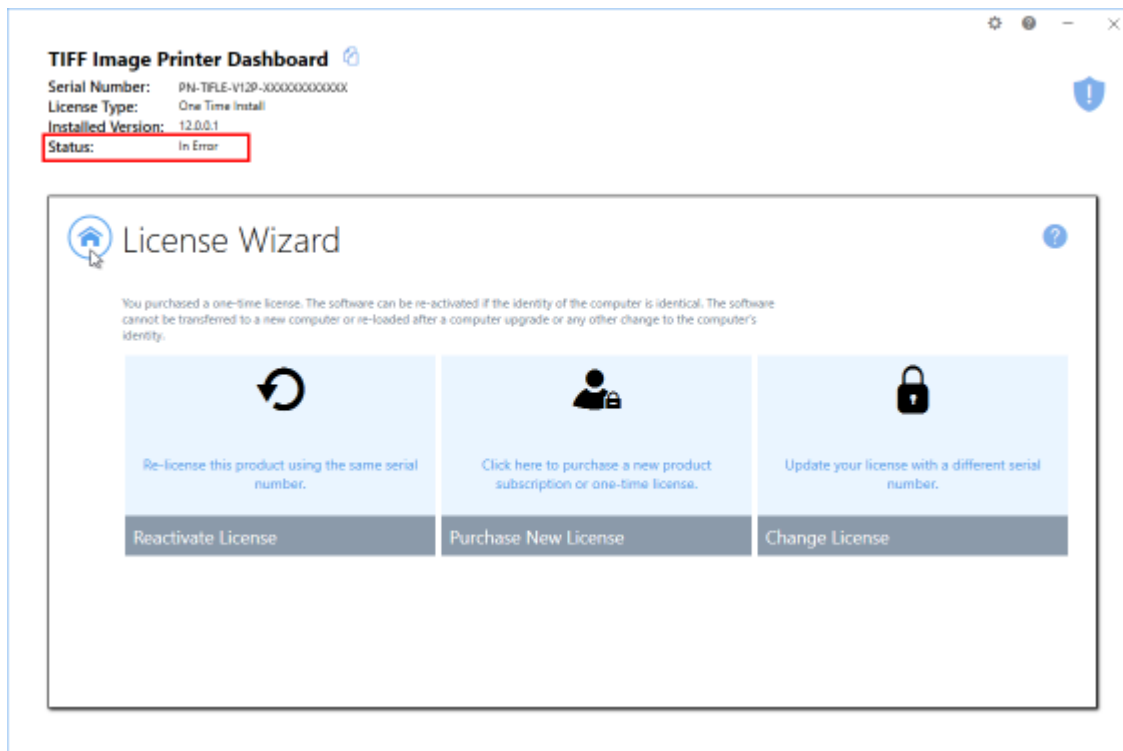
### Error

Error means that something on the computer has changed so that TIFF Image Printer believes it is no longer activated correctly. Examples of items that effect the license validity are: change of domain or workgroup, change in the network, change in the computer name, reformatting and reloading the computer, or system has virus. If your current activation status is Error, there are three options available through the **License Wizard**:

1. **Reactivate License** - This will try to activate TIFF Image Printer again using the same serial number that was previously used to activate the product. This would be applicable if you have made no changes to the computer identity and the license file simply needs to be reset, or you have purchased more licenses.
2. **Purchase New License** - This will take you to your [PEERNET online account](#) where you can purchase either a new one-time license or a subscription license. This would be applicable if you have made a change to the computer identity. A one-time license cannot be reactivated if any change has been made to the identity of the

computer. Therefore, you will need to purchase a new license in order to continue using TIFF Image Printer on the computer. You may be interested in switching to a subscription license to avoid this problem in the future.

3. **Change License** - This will allow you to enter a new serial number. This would be applicable if you have merged multiple serial numbers to one serial number, or if you have receive a new serial number. Note: If you have switched to a subscription license, you will need to uninstall the one-time install and install the purchased subscription install. You cannot just do a change license.



## Save and Restore Settings

TIFF Image Printer offers the ability to save and restore your product settings perfect for if you are moving to a new computer or want to share your settings with a colleague. If you are moving your TIFF Image Printer to a new computer, or you plan to upgrade your computer operating system or reformat your computer, you may wish to save your TIFF Image Printer settings so you can restore them later. Alternatively, if you have configured your TIFF Image Printer to best meet the needs of your company, you may wish to save your settings so they can be easily shared with the rest of your team.

There are two options to saving and restoring settings:

1. [Export and Import Personal Profile](#) - If you have created a personal profile with your custom settings, you can simply export your personal profile so that it can be imported on another computer.
2. [Backup and Restore All Settings](#) - If you have made significant customizations to your TIFF Image Printer settings, such as creating several personal profiles and/or creating multiple copies of TIFF Image Printer with custom names and default profiles, you may prefer to save all of your TIFF Image Printer settings by running a back up and then restoring these settings.

**Note:** The ability to re-use / transfer TIFF Image Printer licenses is only available for **active subscription licenses**. If your subscription license has expired, you are required to renew your annual subscription before you will be able to move / reactivate a license. If you own a one-time license of TIFF Image Printer, you do not have the ability to move / reactivate your license. In this situation you will either need to purchase a new one-time license or a new subscription license to activate TIFF Image Printer on a new / reformatted computer.



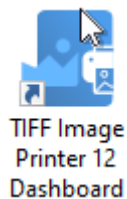
## Export and Import Profiles

If you have created a personal profile with your custom settings, you can simply export your personal profile so that it can be imported on another computer.

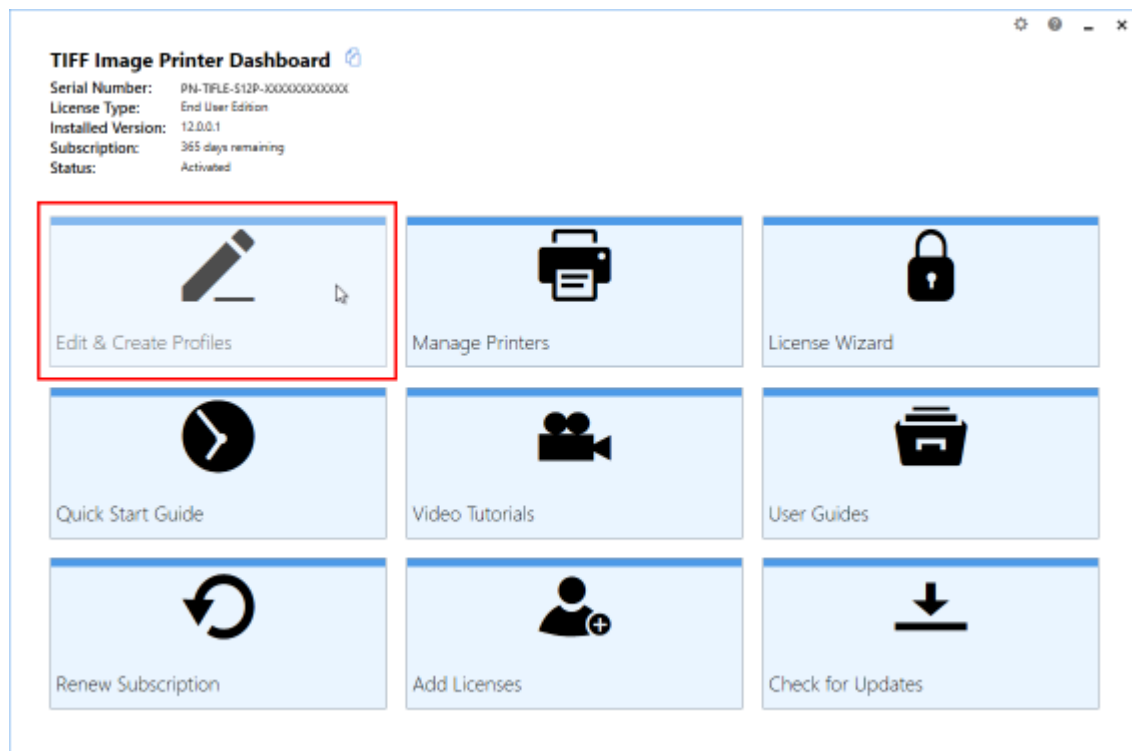
### Step by Step Instructions

#### Export

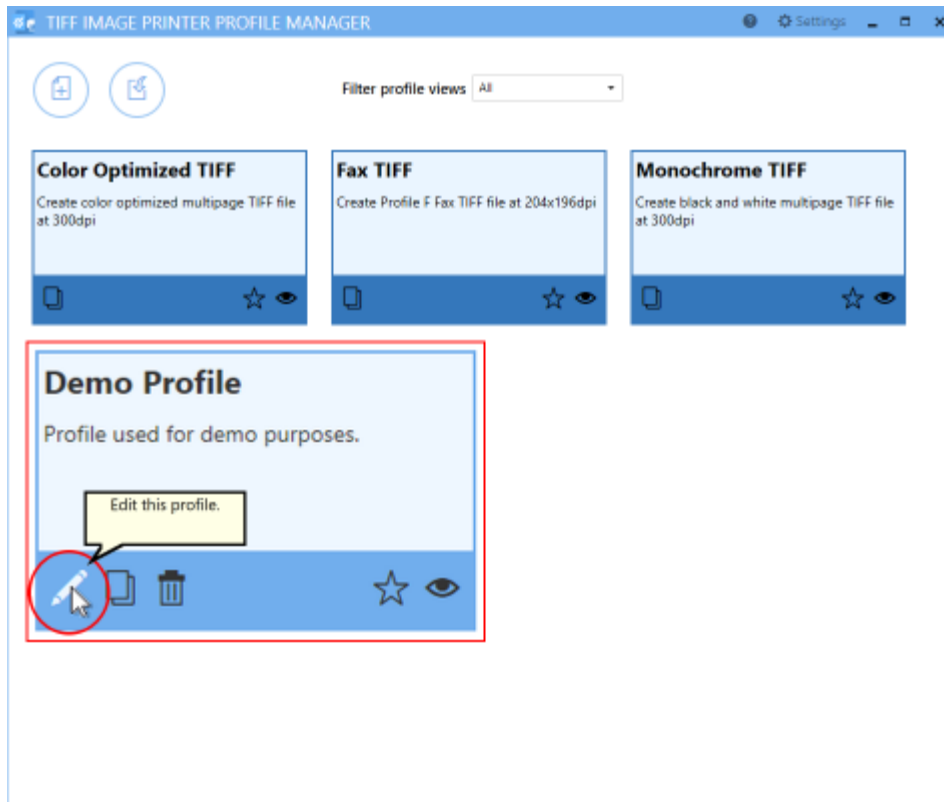
1. Launch the TIFF Image Printer **Dashboard**.



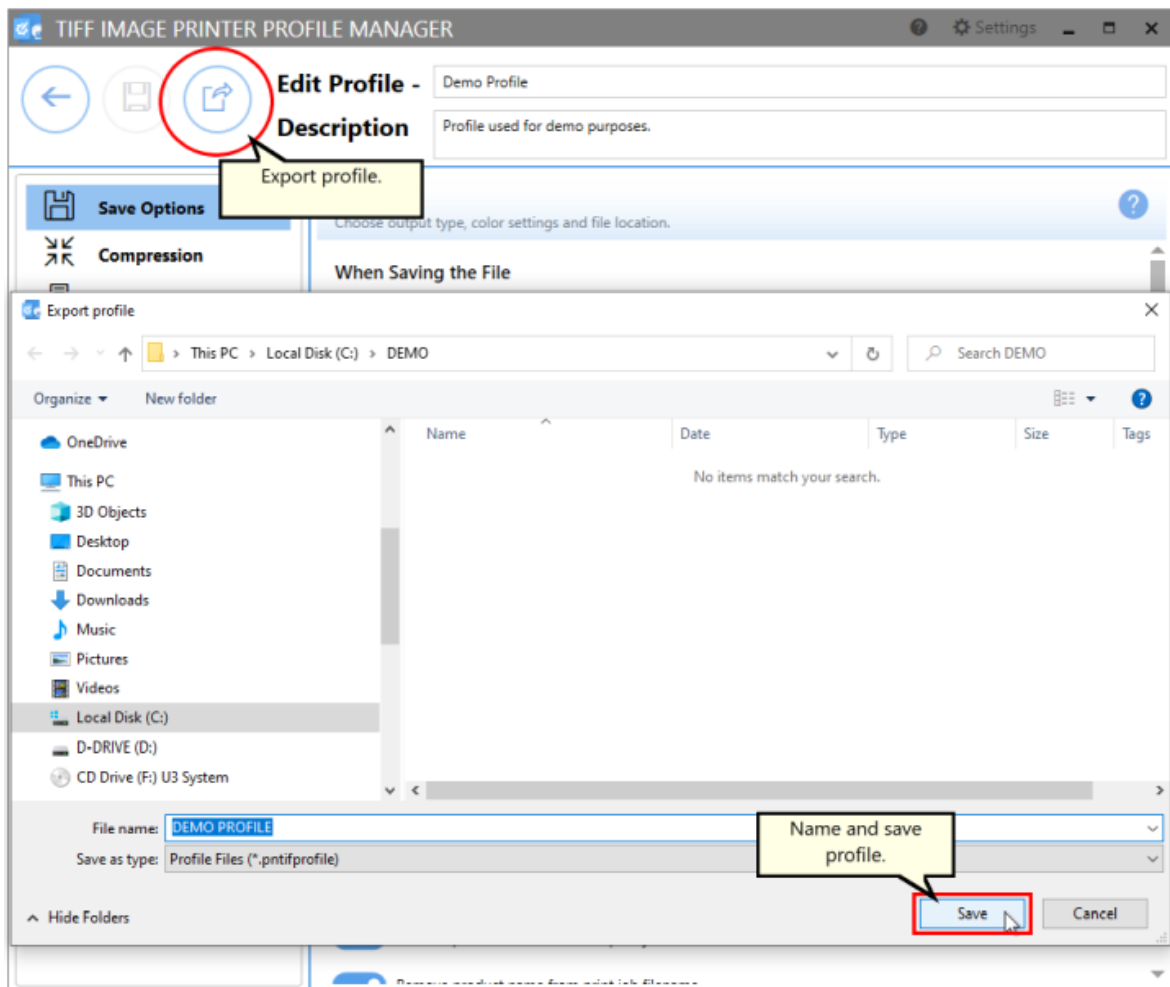
2. Select "Edit & Create Profiles" to open **Profile Manager**.



3. Select “Edit this profile” to open the personal profile that you want to save.

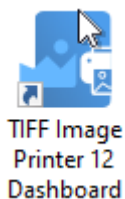


4. Select “Export profile”, and name and save the file.

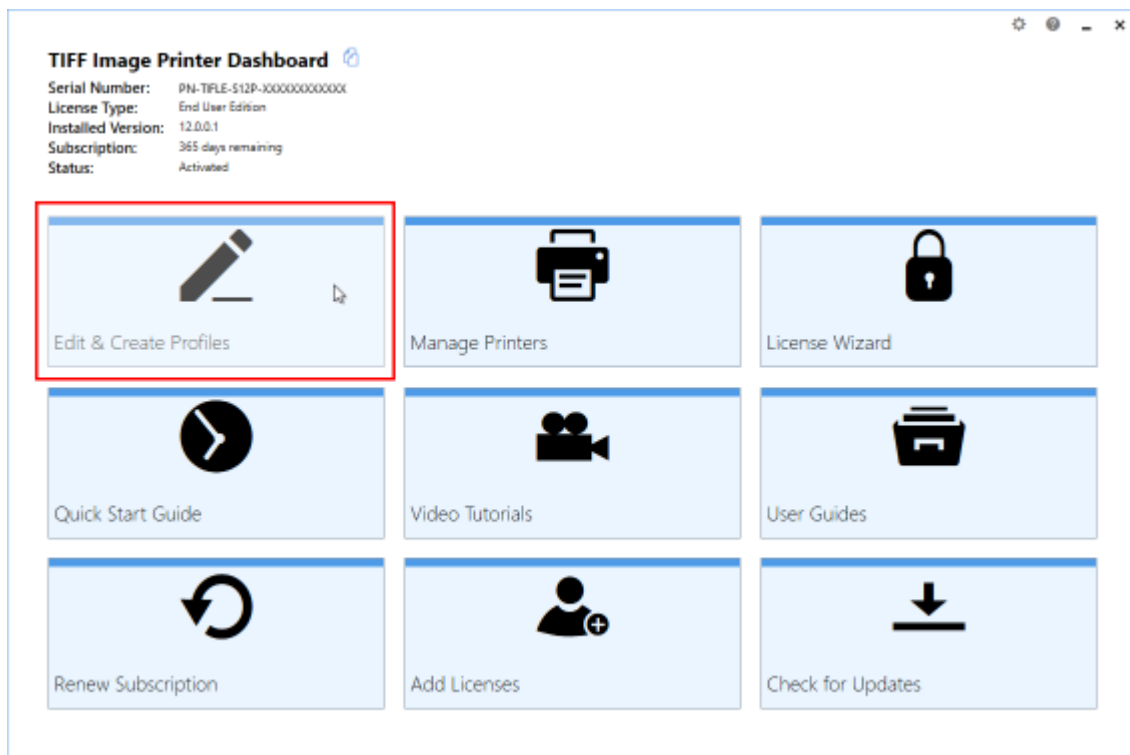


## Import

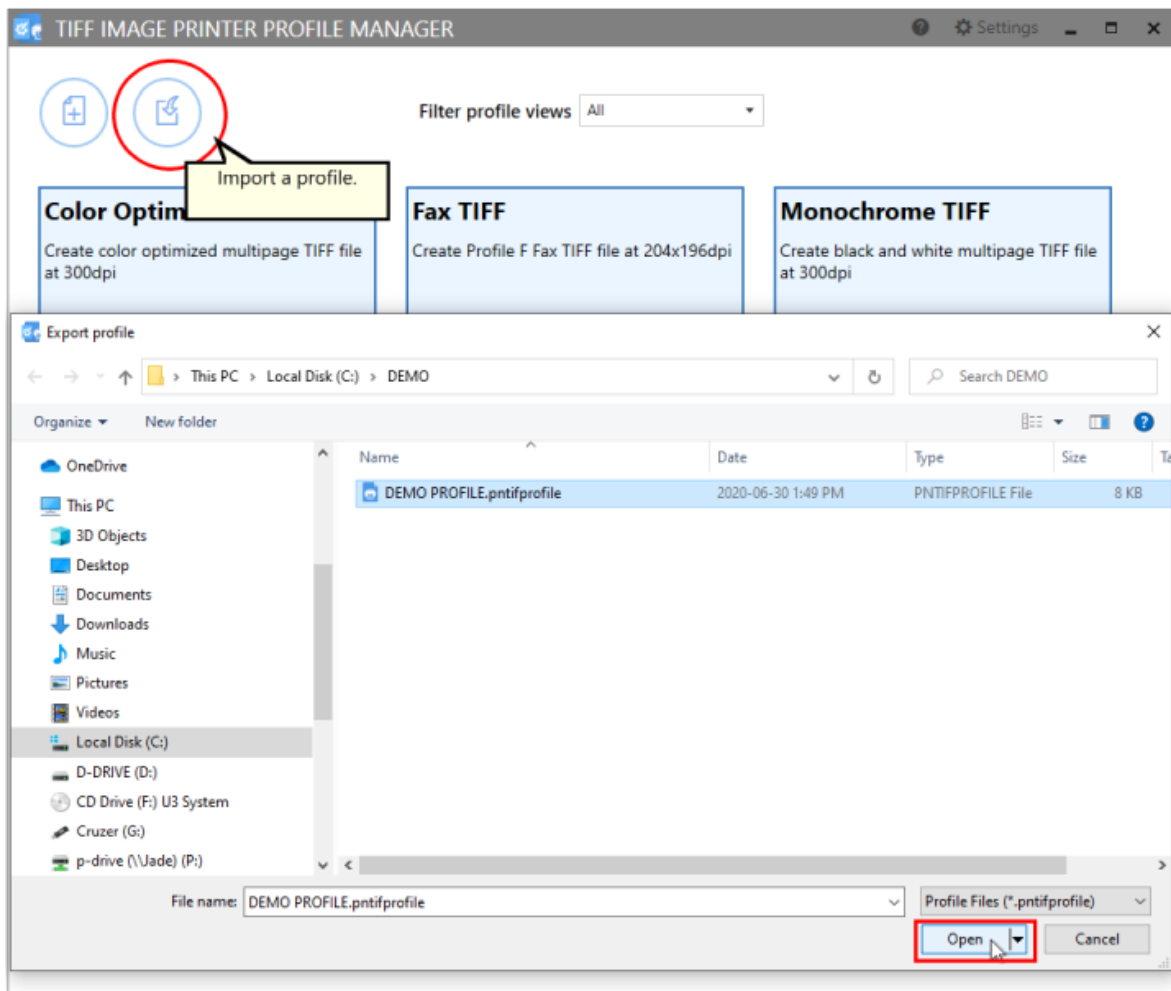
1. Install and activate TIFF Image Printer on the new computer.
2. Launch the TIFF Image Printer **Dashboard**.



3. Select "Edit & Create Profiles" to open **Profile Manager**.



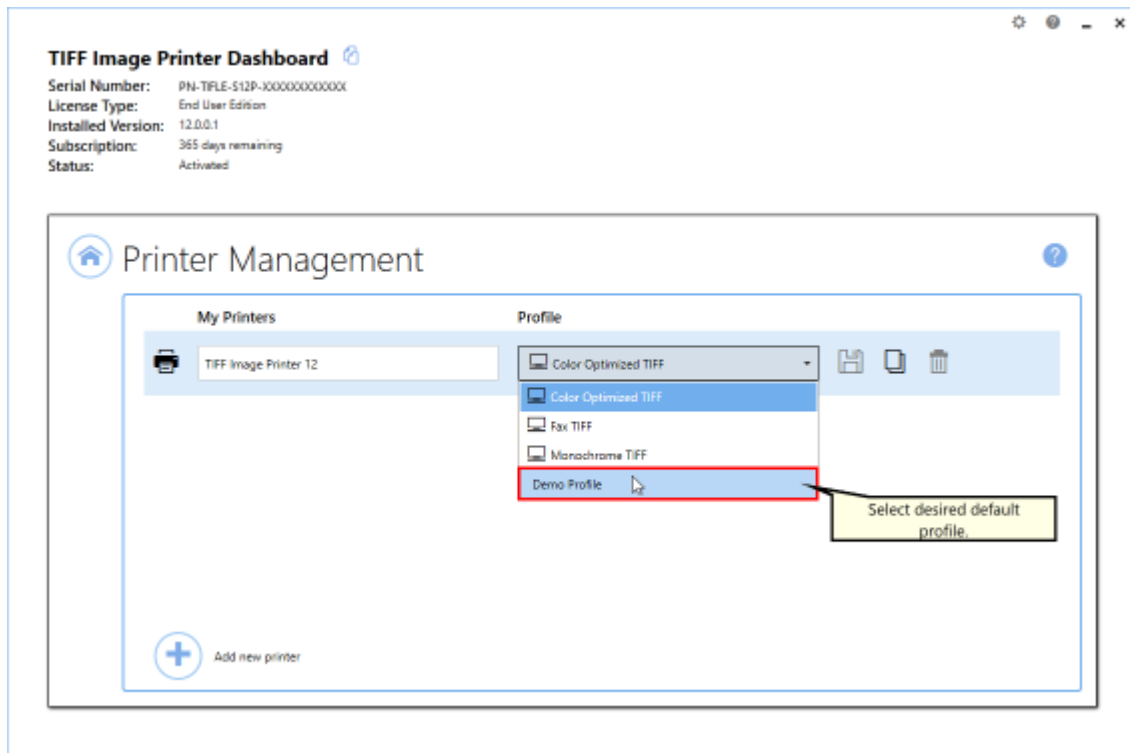
4. Select "Import a Profile" and browse to the file that you want to restore.



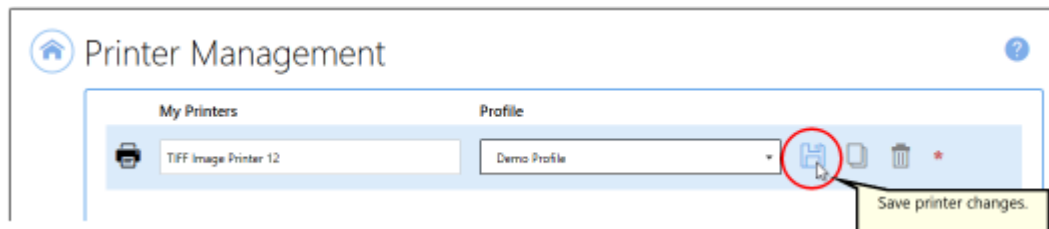
## 5. Close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this imported profile the [default profile](#) used by TIFF Image Printer.*

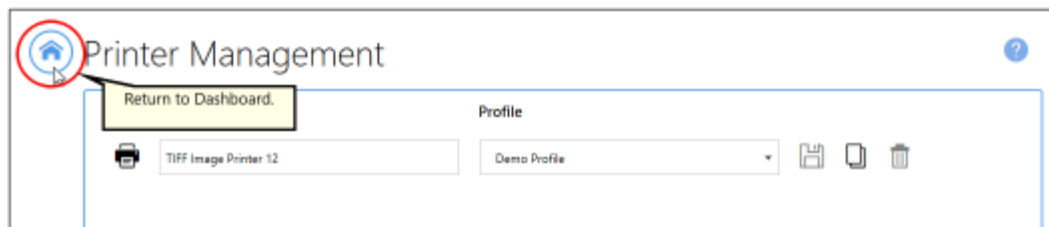
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



6. Close the **Dashboard**. Now when you print a document to TIFF Image Printer, the custom settings in the restored personal profile will be applied to the created file.

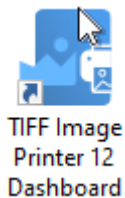
## Backup and Restore All Settings

If you have made significant customizations to your TIFF Image Printer settings, such as creating several personal profiles and/or creating multiple copies of TIFF Image Printer with custom names and default profiles, or locked shared profiles to a printer, you may prefer to save all of your TIFF Image Printer settings by running a back up and then restoring these settings.

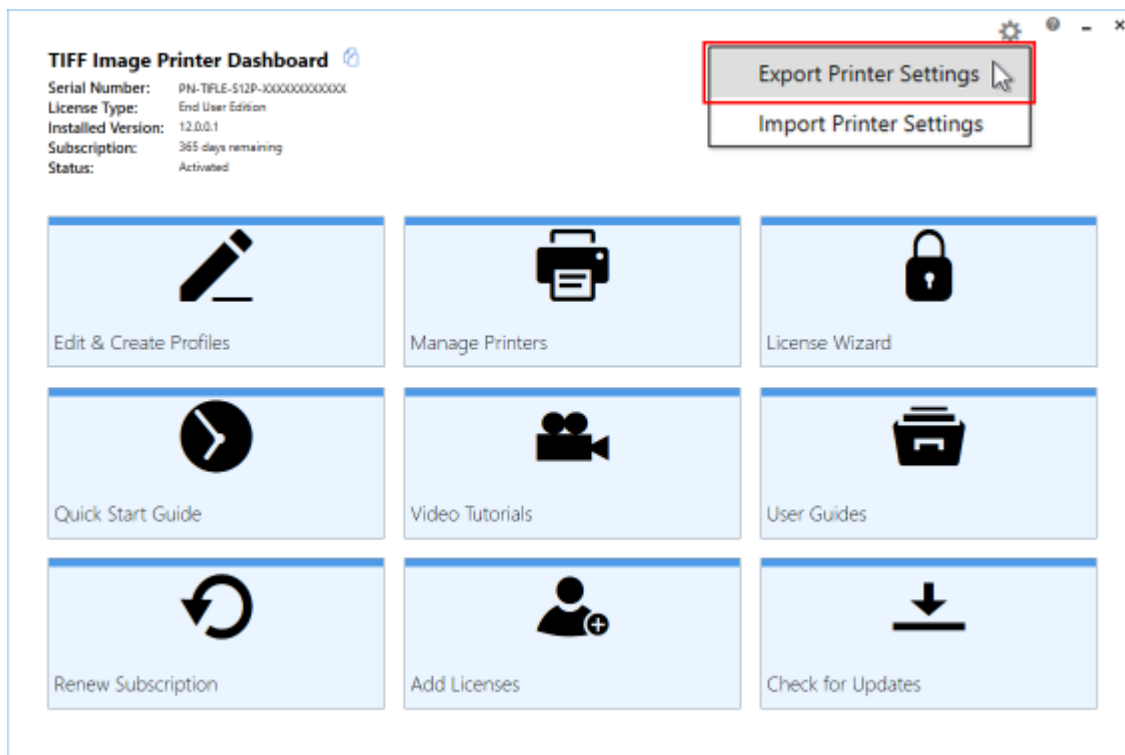
### **Step by Step Instructions**

#### **Export**

1. Launch the TIFF Image Printer **Dashboard**.

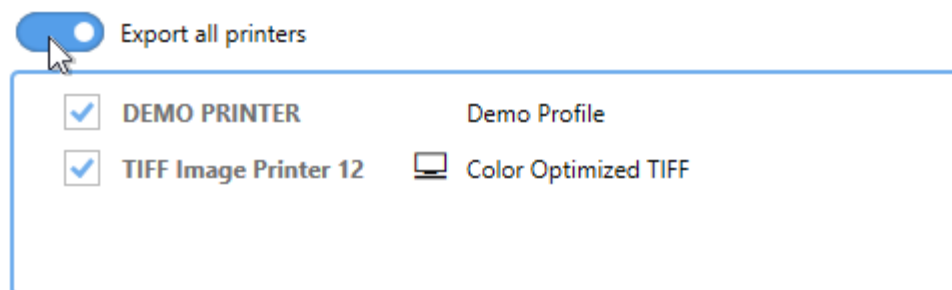


2. Click the gear icon from the top right hand corner of the **Dashboard** window, and select "Export Printer Settings".



- Under **Choose Printers**, choose if you want to export all printers, or disable "Export all printers" and check the printers you want to export. Exporting printers is helpful if you have changed the default profile for TIFF Image Printer 12, or if you have created a custom printer. If you do not have permissions to export any printers, this area will be empty.

### Choose Printers



- Under **Choose Profiles**, choose here what *personal* and *shared* profiles you want to export.



5. For your personal profiles you can export all of them, or disable "Export all personal profiles" and check only the personal profiles you want to export. Profiles in use by a printer being exported cannot be unselected. If you have no personal profiles, this section will be empty.

#### Choose Profiles


☒ Export all personal profiles

Profiles in use by a printer being exported cannot be unselected.

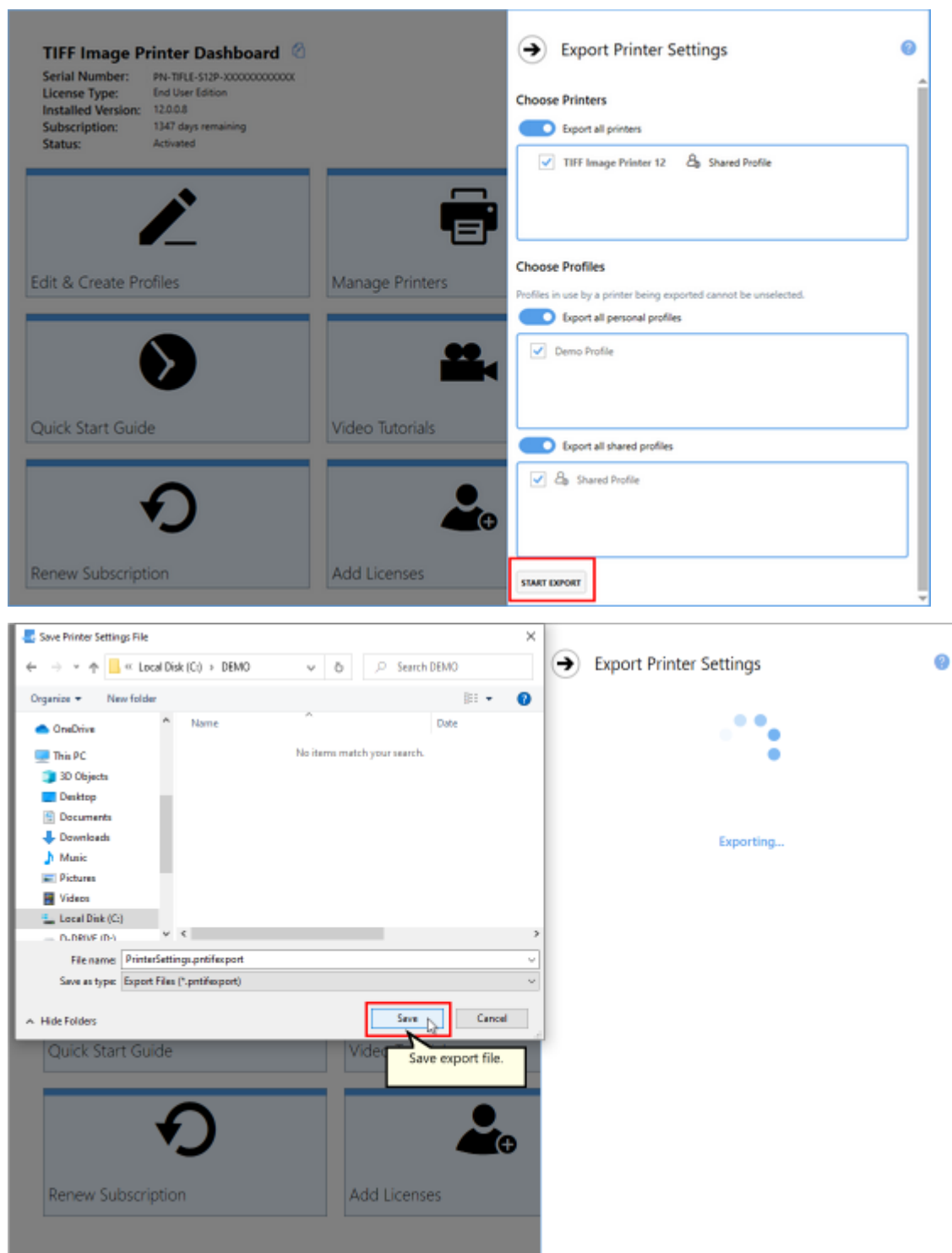
<input checked="" type="checkbox"/> Demo Profile
--

6. For any shared profiles, again you can export all of them, or disable "Export all shared profiles" and check only the shared profiles you want to export. If a shared profiles is in use by a printer being exported it cannot be unselected. If you have no shared profiles, this section will be empty.

☒ Export all shared profiles

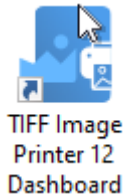
<input checked="" type="checkbox"/>  Shared Profile
--

7. Select **Start Export**, and save the export file.

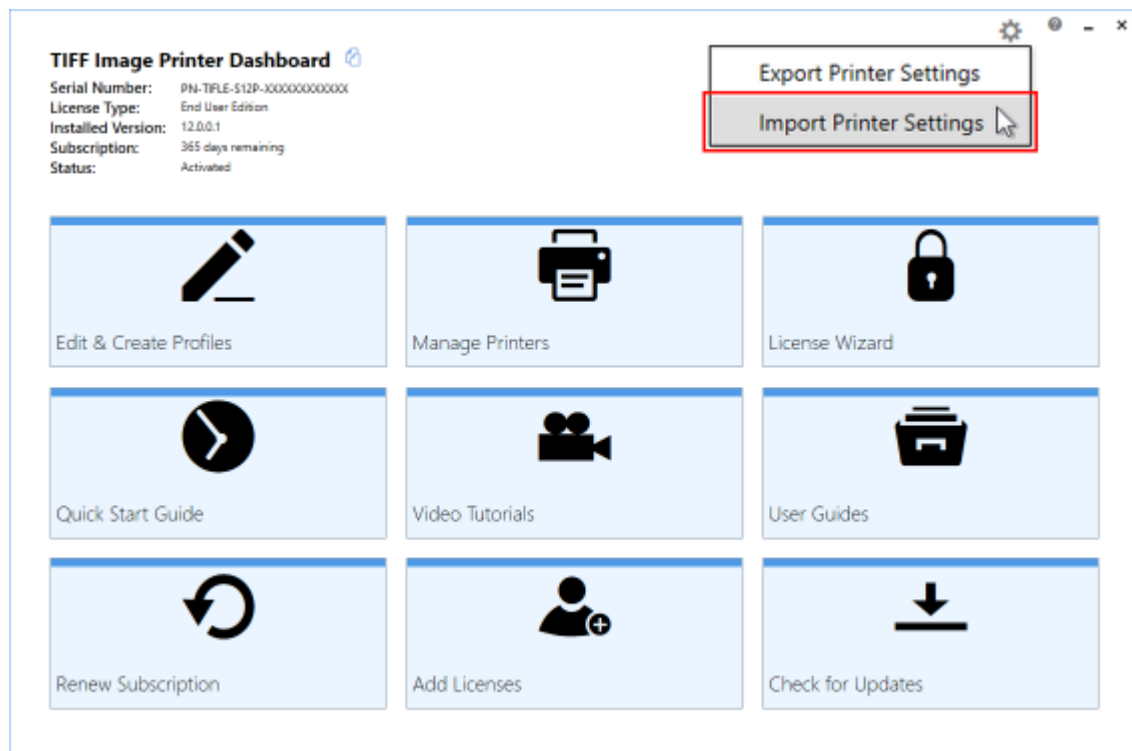


## Import

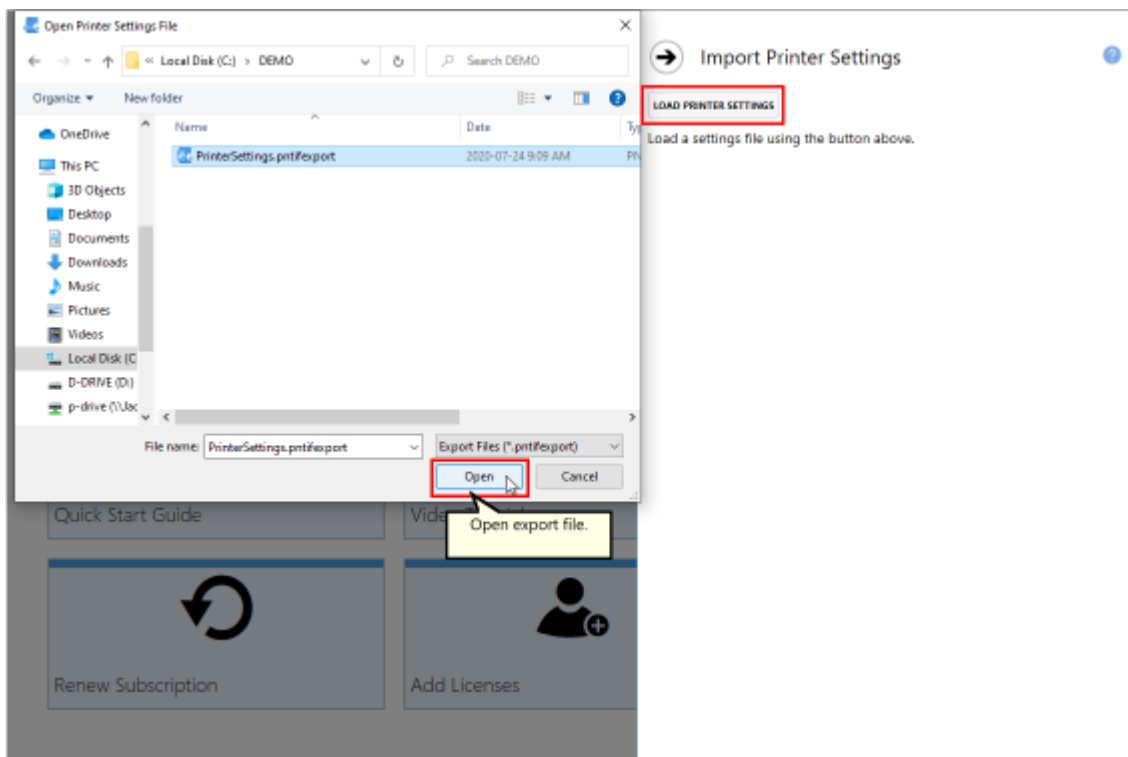
1. Install and activate TIFF Image Printer on the new computer.
2. Launch the TIFF Image Printer **Dashboard**.



3. Click the gear icon from the top right hand corner of the **Dashboard** window, and select "Import Printer Settings".

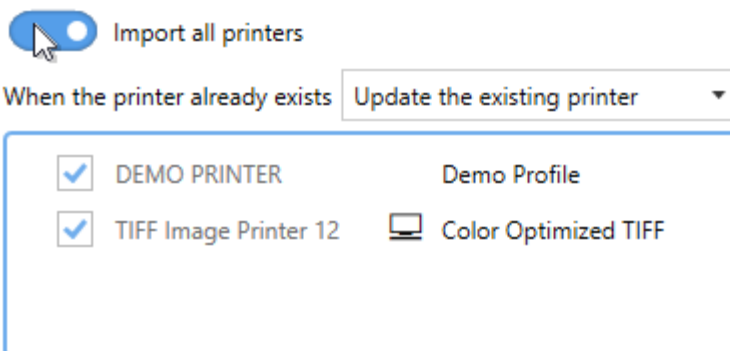


4. Select **Load Printer Settings** and browse to where you saved the settings file.



5. Under **Choose Printers**, choose if you want to import all printers, or disable "Import all printers" and check the printers you want to import. By default, when the printer already exists, the import function will "Update the existing printer". You can change this to "Create a copy of the imported printer" instead.

### Choose Printers



6. Under **Choose Profiles**, choose here what *personal* and *shared* profiles you want to import.

7. For your personal profiles you can import all of them, or disable "Import saved personal profiles" and check the personal profiles you want to import. By default, when the profile already exists, the import function will "Create a copy of the imported profile". You can change this to "Update the existing profile" instead. Profiles in use by a printer being imported cannot be unselected. If no personal profiles are included in the exported settings, this section will be empty.

### Choose Profiles

☒ Import saved personal profiles

When the profile already exists Create a copy of the imported profile ▼

Profiles in use by a printer being imported cannot be unselected.

☒ Demo Profile

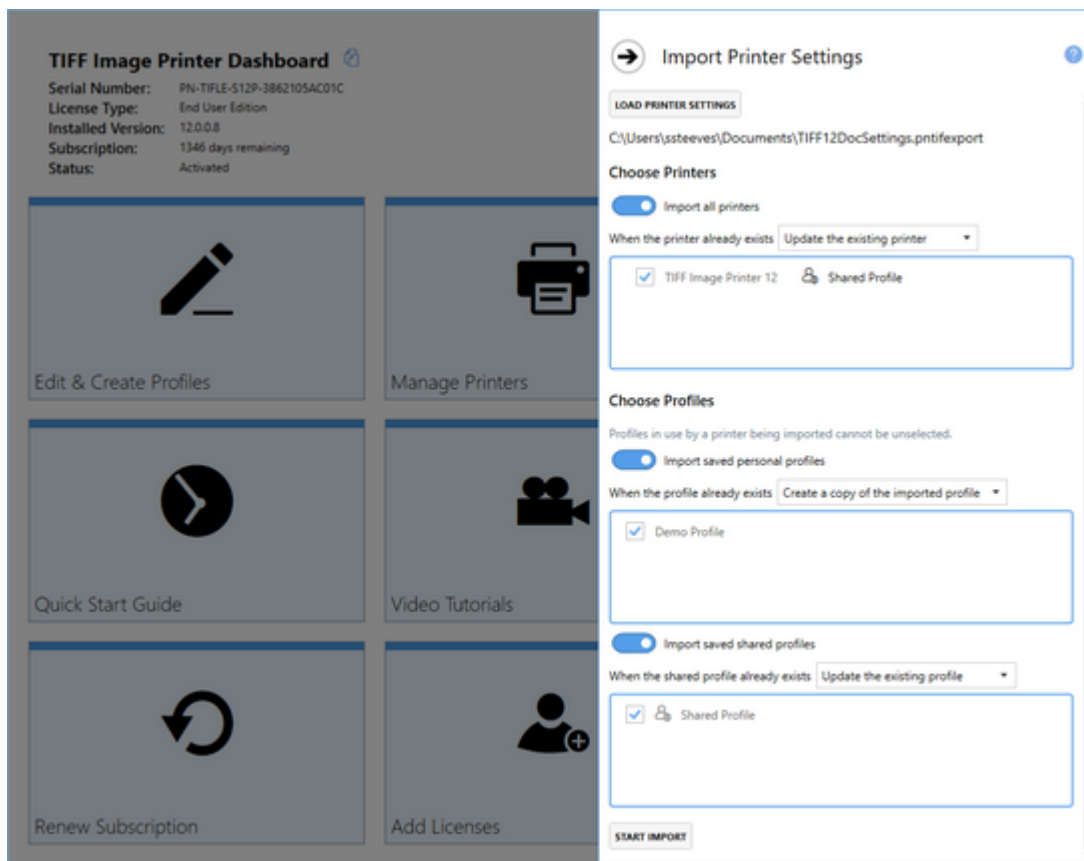
8. Next, for any shared profiles, choose if you want to import all of them or disable "Import saved shared profiles" and check the shared profiles you want to import. By default, when the profile already exists, the import function will "Update the existing profile". You can change this to "Create a copy of the imported profile" instead. Profiles in use by a printer being imported cannot be unselected. If no shared profiles are included in the exported settings, this section will be empty.

☒ Import saved shared profiles

When the shared profile already exists Update the existing profile ▼

☒  Shared Profile

9. Select **Start Import**.



10. When complete, the results, of the import actions are listed. If any errors occur during the import, they will be shown here as well.

### Import Complete.



Imported profile Demo Profile as Import of Demo Profile.  
Updated shared profile Shared Profile with saved settings.  
Updated printer TIFF Image Printer 12 with saved settings.

11. Close the **Dashboard**. Now when you print a document to TIFF Image Printer, the custom settings you restored will be available.

## Basic Conversions

This section contained basic tutorials on how to open and print a document to TIFF Image Printer in order to create the most common file formats using the system profiles that come with TIFF Image Printer.

TIFF Image Printer comes with system profiles: Color Optimized TIFF, Monochrome TIFF, Fax TIFF, and Serialized Color Optimized TIFF. These system profiles contain the most frequently used settings when creating basic TIFF images. The basic tutorials in this section will demonstrate how to select one of the system profiles during conversion.

To learn more about Optical Character Recognition (OCR) features in TIFF Image Printer, see the section [Optical Character Recognition \(OCR\) with TIFF Image Printer](#).

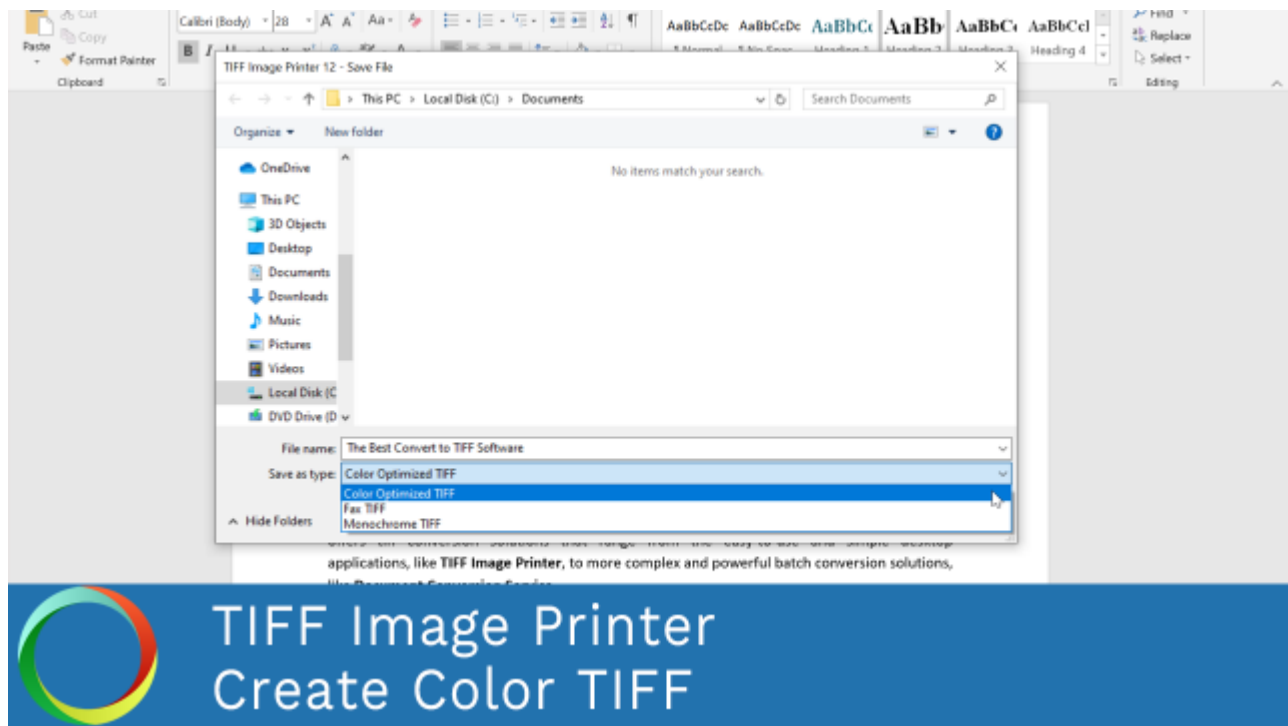
For step-by-step instructions demonstrating how to use these properties tabs to enable and configure specific settings offered by TIFF Image Printer, see the [Working with TIFF Image Printer](#) section. For technical documentation for each of the property tabs found in the Profile Manager utility, see the [Profile Manager](#) section. You can jump directly to a topic by selecting a link below, or you can refer to the table of contents.

- [Create Color TIFF Images](#)
- [Create Black and White TIFF Images](#)
- [Create Faxable TIFF Images](#)
- [Create Serialized TIFF Images](#)

### Create Color TIFF Images

You need to be able to open and print your original document in order to create a TIFF image. For example, to create a TIFF image from a PDF file, you would need to have Adobe Reader or another PDF viewer that has printing capabilities, installed on your computer.

TIFF Image Printer 12 uses Profiles, which are a group of settings, to create the output image you want. TIFF Image Printer comes with a few system profiles including: Color Optimized TIFF, Monochrome TIFF, Fax TIFF, and Serialized Color Optimized TIFF. To create multipaged color TIFF images, simply set the profile “Color Optimized TIFF” as TIFF Image Printer’s default profile.



*Click the image above to watch the video tutorial.*

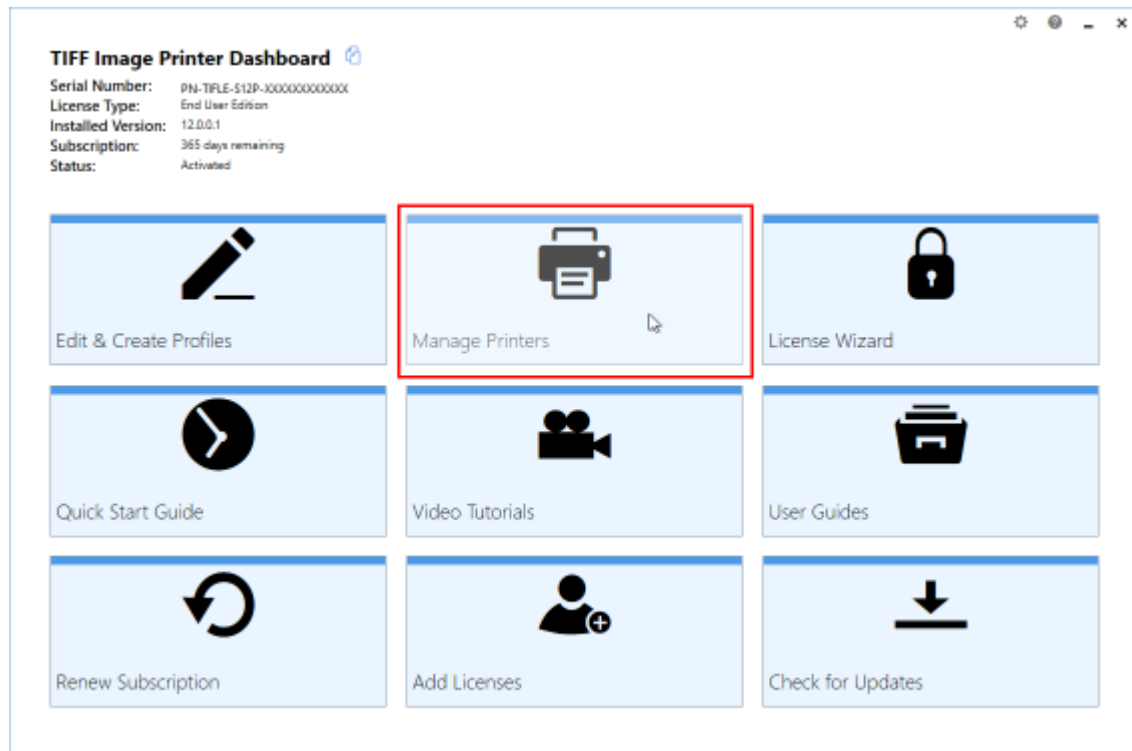
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.

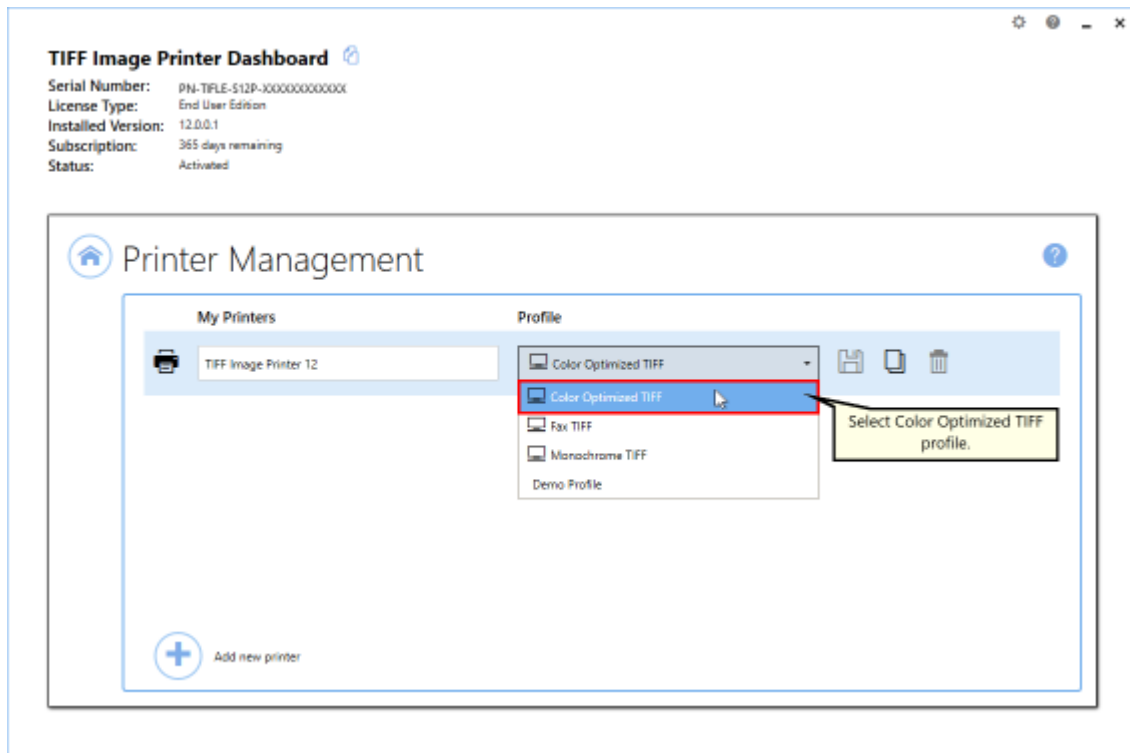




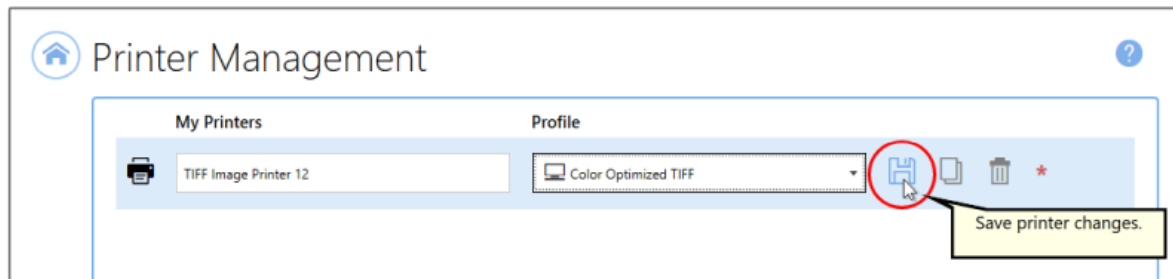
2. Select "Manage Printer" to open **Printer Management**.



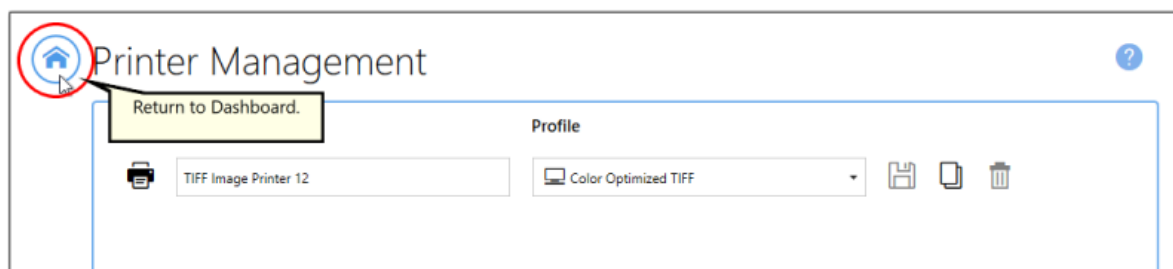
3. Beside TIFF Image Printer, use the drop box to set the default profile as "Color Optimized TIFF". This profile is configured to create multipaged TIFF images at 300 dpi with colors reduced to optimal palette.



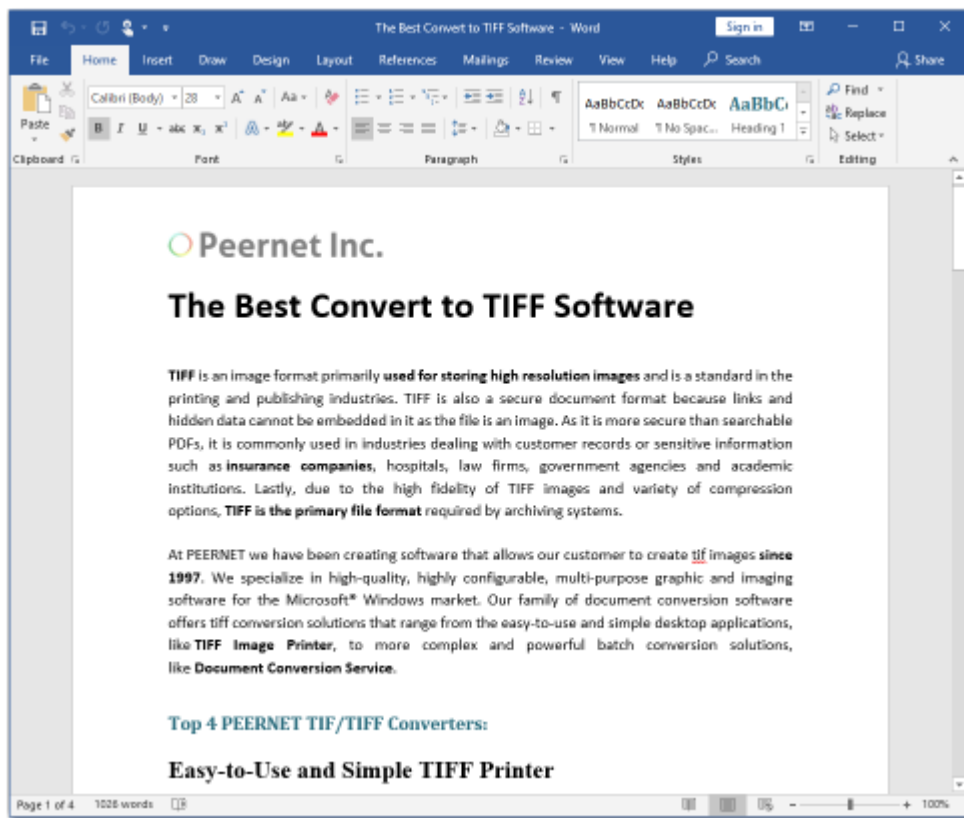
4. Select the **Save icon** to save changes.



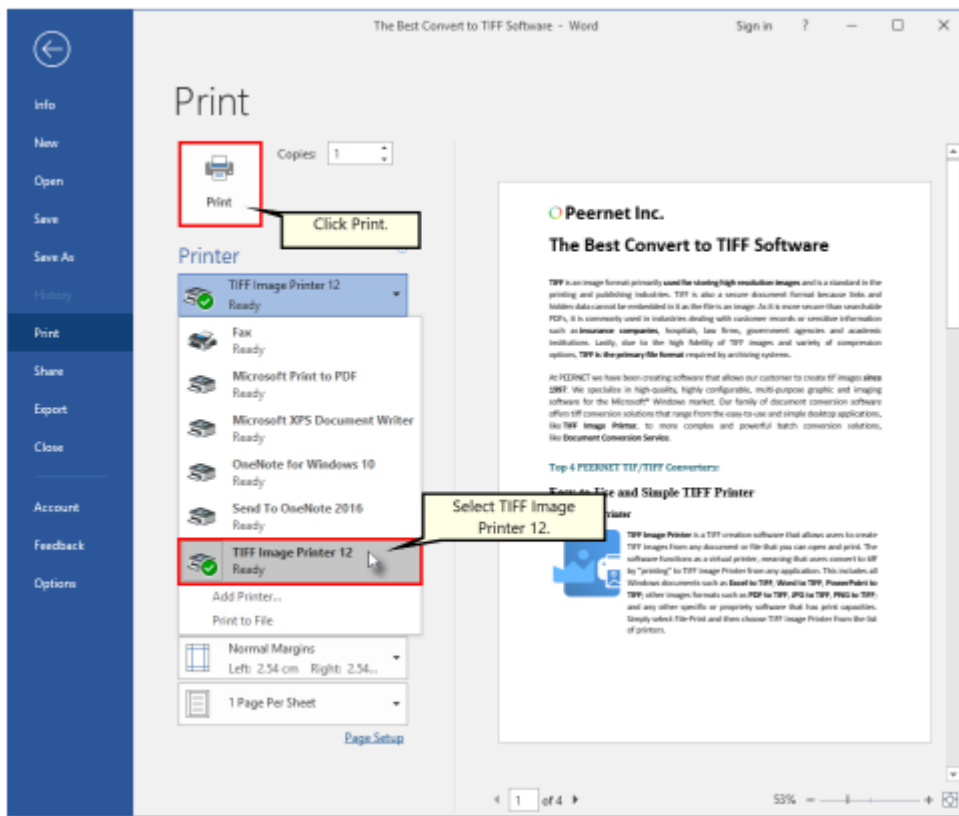
5. Close **Printer Management** and **Dashboard**.



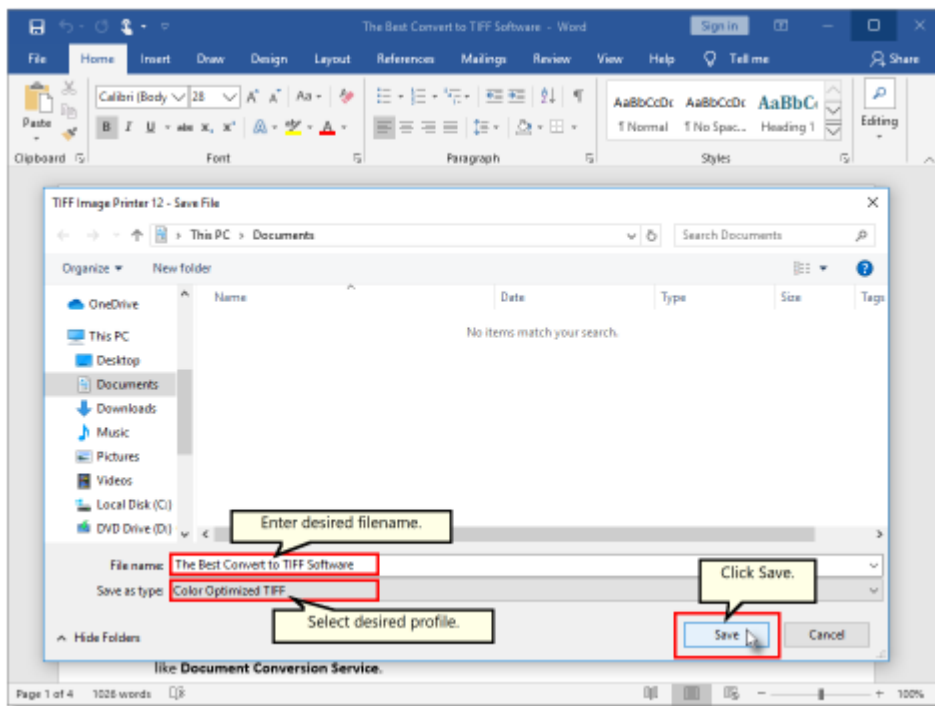
6. Open the document you want to convert into a TIFF image.



7. Select **File - Print** from your application, and select TIFF Image Printer 12 from the list of printers.



8. Print and then set the name and save location of your new color TIFF image.

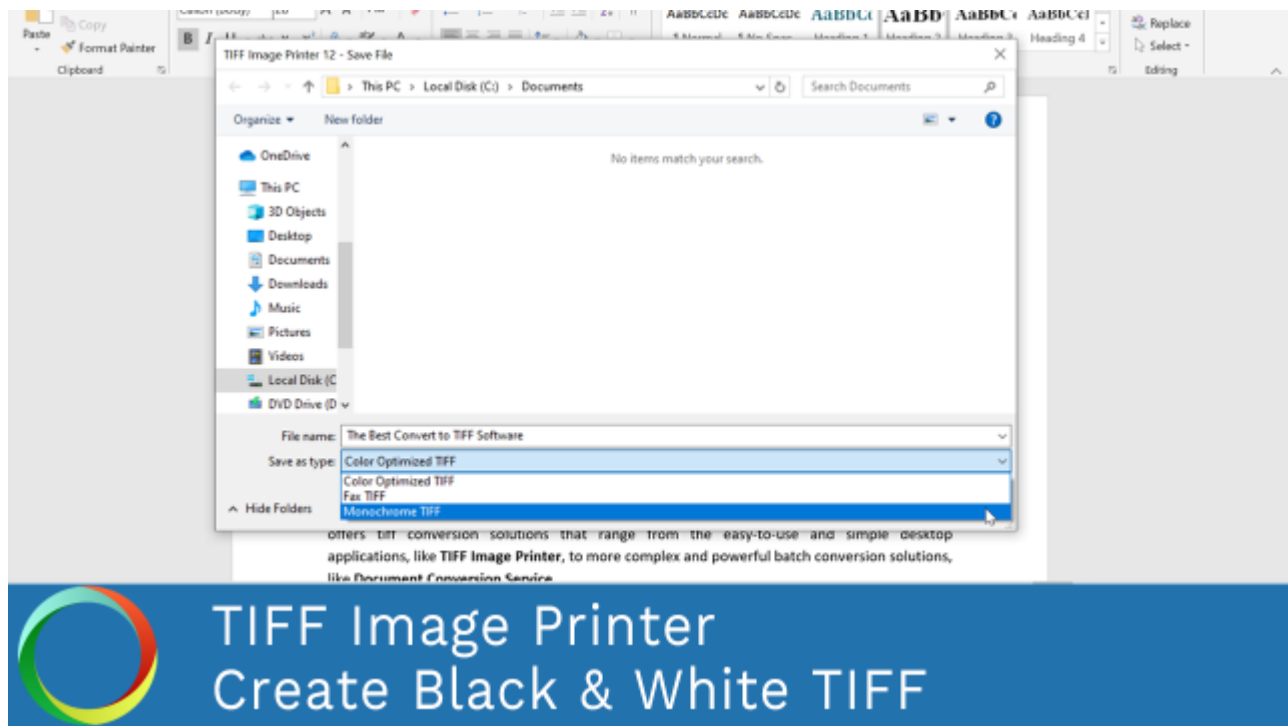


- Navigate to the folder where you wish to store your TIFF image. Your **Documents** folder will be selected for you by default.
- In the *File name* field, enter a name for your TIFF image. A default name for your image has been filled in based on the file name of the document you printed to TIFF Image Printer.
- In the *Save as type* field, you can change the profile that will be applied to your TIFF image on the fly.
- Click **Save** to create the TIFF image. The image will be created in the chosen folder with the name specified.

### Create Black and White TIFF Images

You need to be able to open and print your original document in order to create a TIFF image. For example, to create a TIFF image from a PDF file, you would need to have Adobe Reader or another PDF viewer that has printing capabilities, installed on your computer.

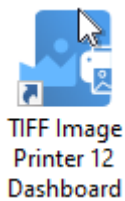
TIFF Image Printer 12 uses Profiles, which are a group of settings, to create the output image you want. TIFF Image Printer comes with a few system profiles including: Color Optimized TIFF, Monochrome TIFF, Fax TIFF, and Serialized Color Optimized TIFF. To create multipaged black and white TIFF images, simply set the profile "Monochrome TIFF" as TIFF Image Printer's default profile.



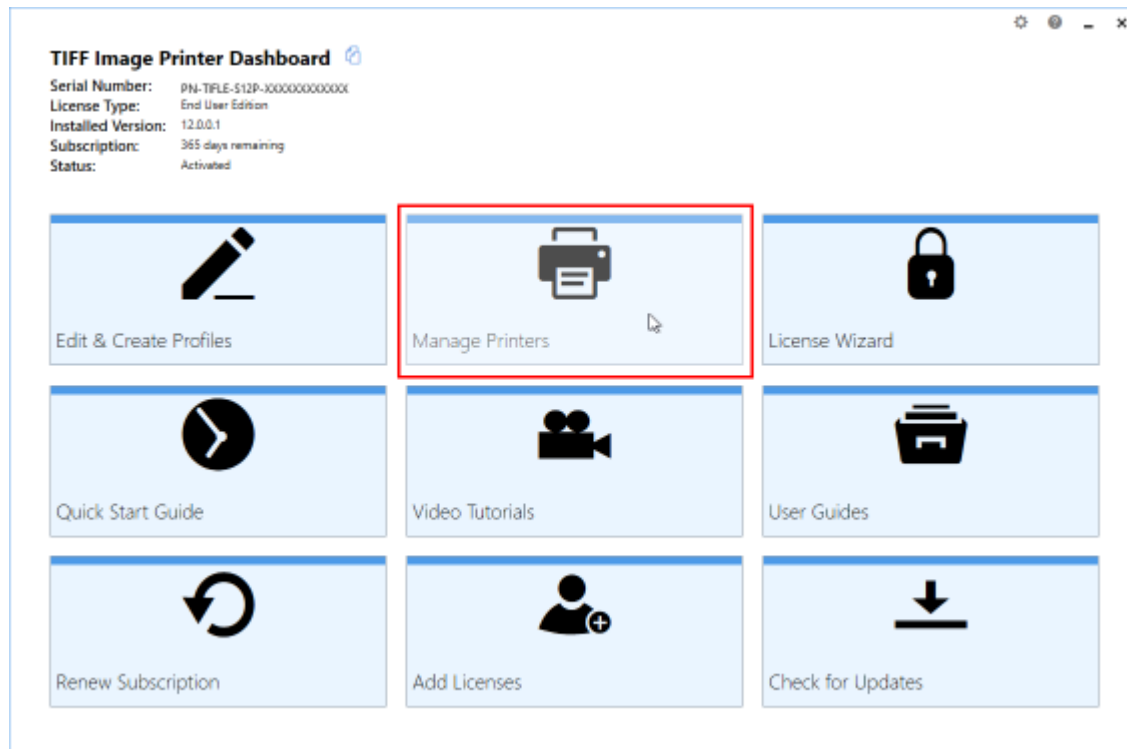
*Click the image above to watch the video tutorial.*

### Step by Step Instructions

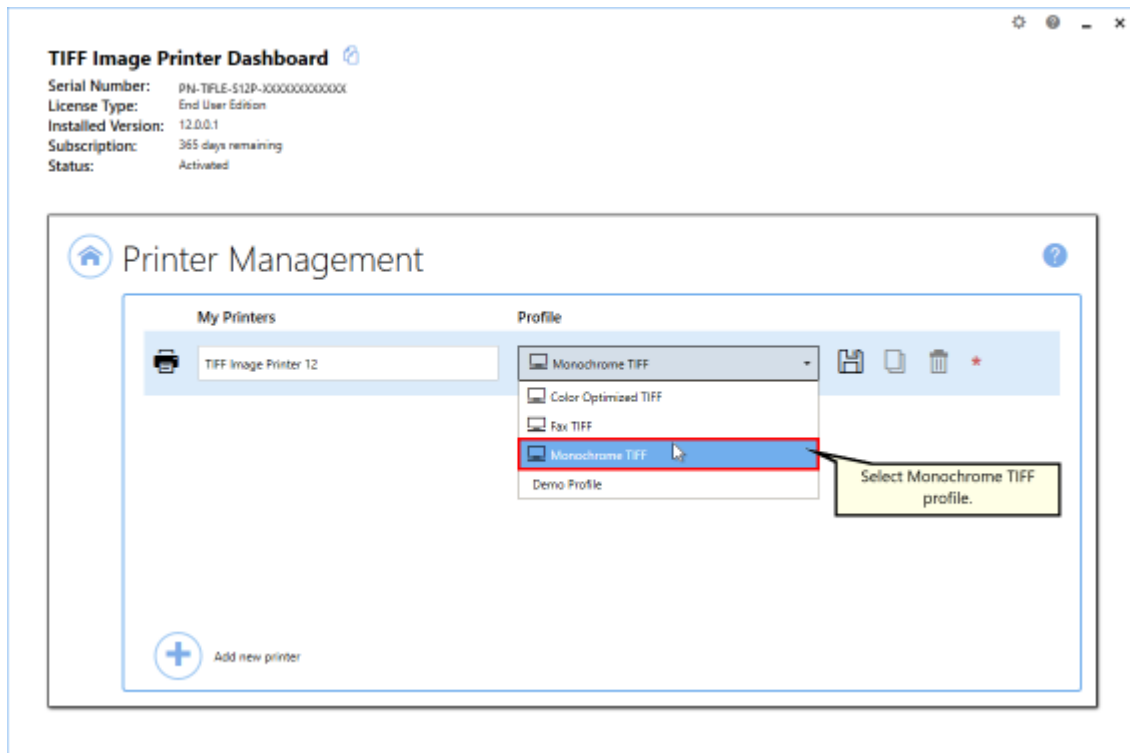
1. Launch the TIFF Image Printer **Dashboard**.



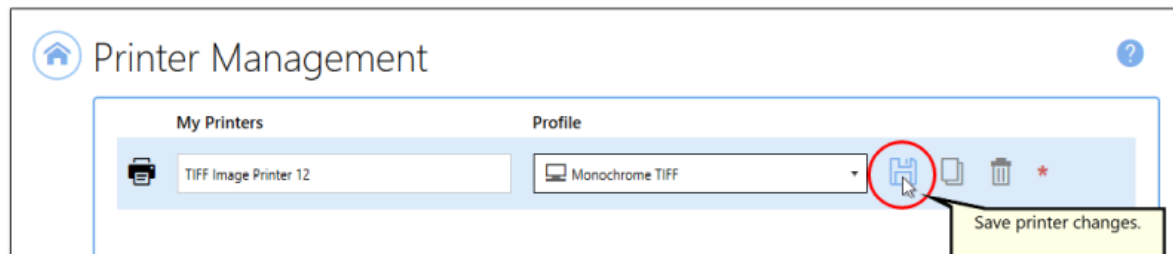
2. Select "Manage Printer" open **Printer Management**.



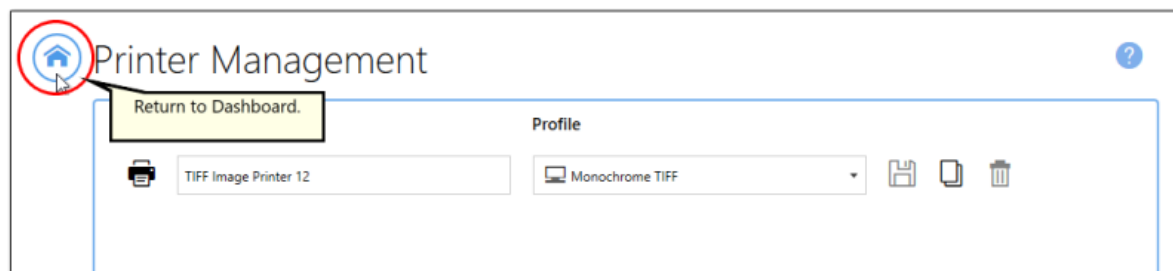
3. Beside TIFF Image Printer, use the drop box to set the default profile as "Monochrome TIFF". This profile is configured to create multipaged TIFF images at 300 dpi with colors reduced to black and white.



4. Select the **Save icon** to save changes.

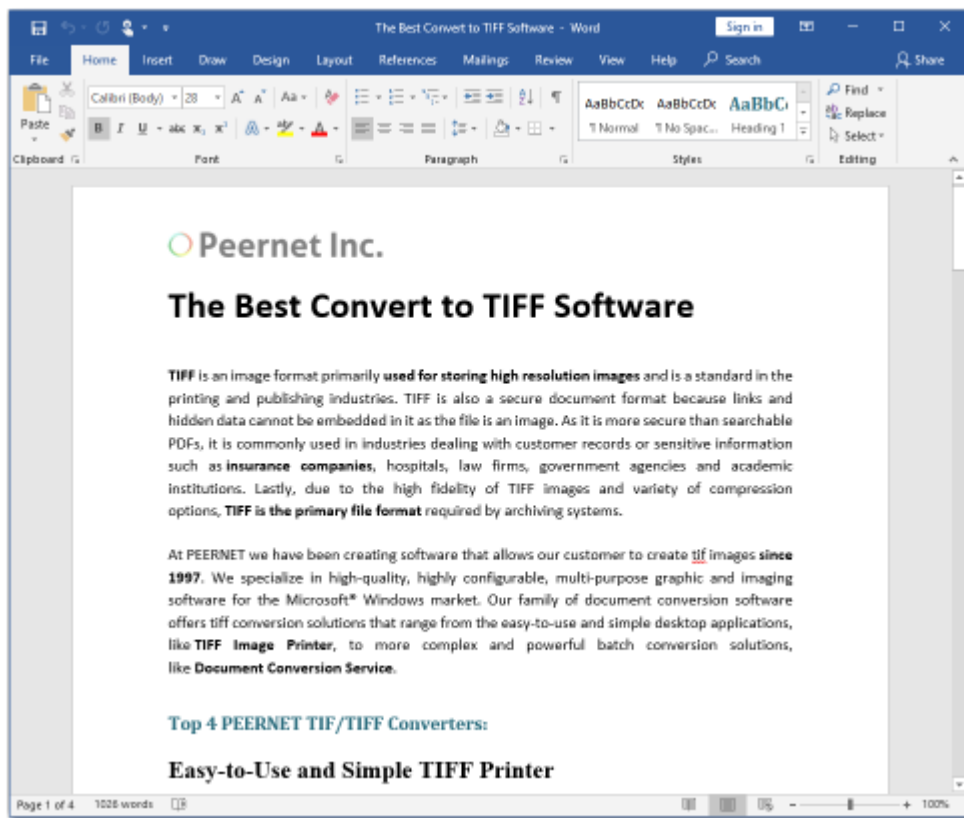


5. Close **Printer Management** and **Dashboard**.

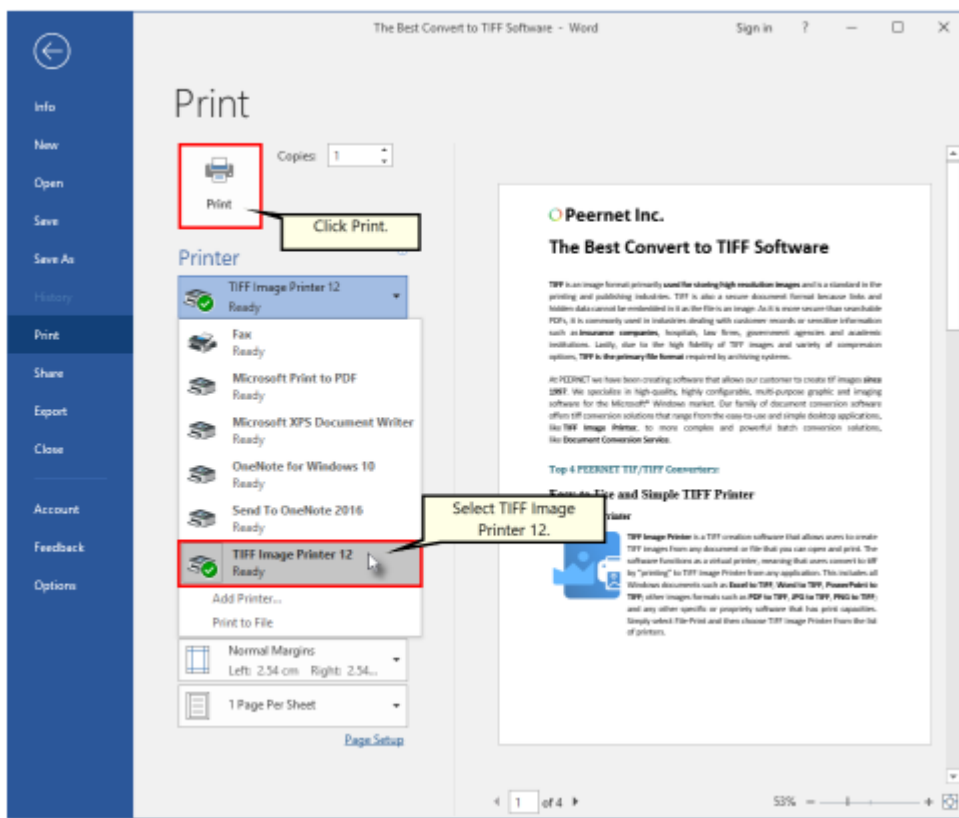


6. Open the document you want to convert to a TIFF image.

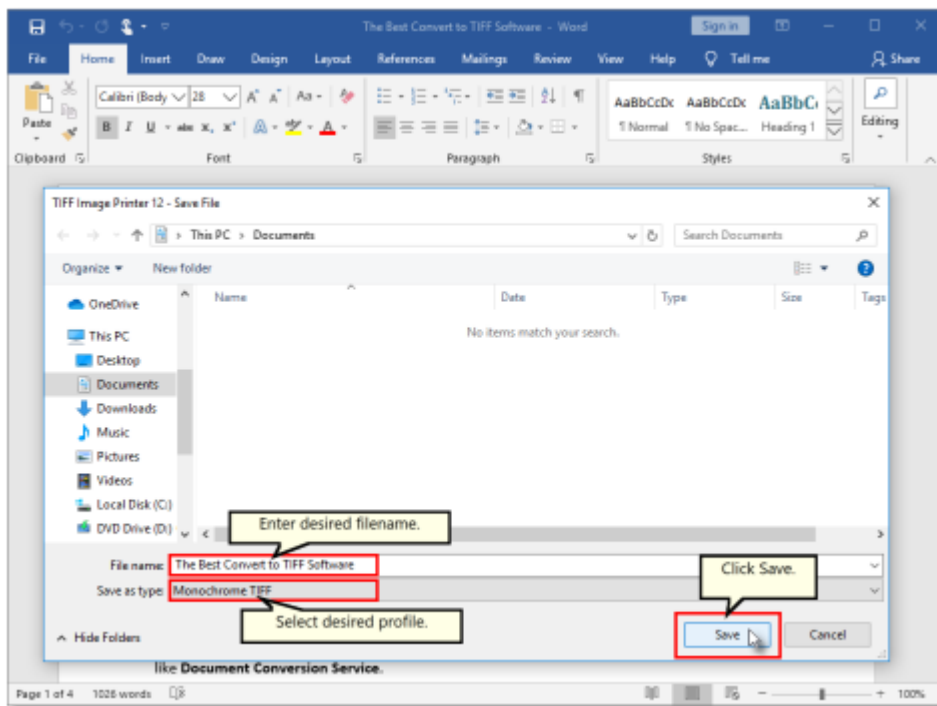




7. Select **File - Print** from your application, and select TIFF Image Printer 12 from the list of printers.



8. Print and then set the name and save location of your new black and white TIFF image.

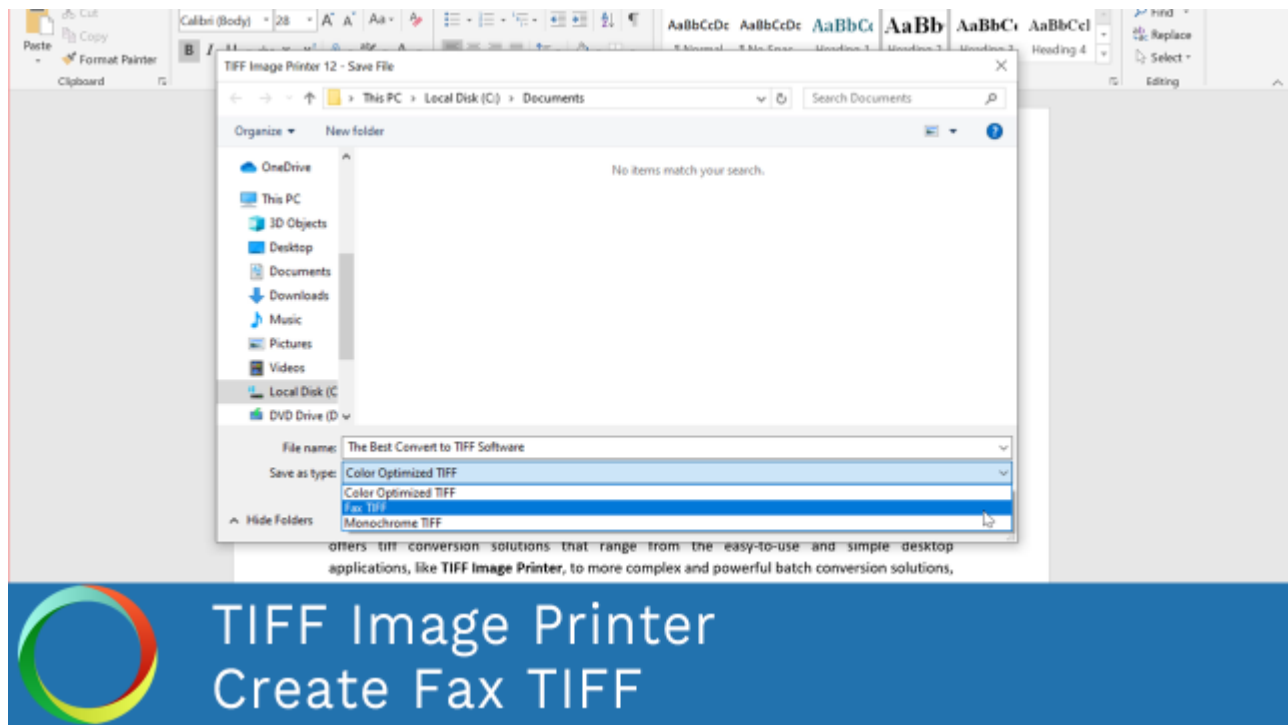


- Navigate to the folder where you wish to store your TIFF image. Your **Documents** folder will be selected for you by default.
- In the *File name* field, enter a name for your TIFF image. A default name for your image has been filled in based on the file name of the document you printed to TIFF Image Printer.
- In the *Save as type* field, you can change the profile that will be applied to your TIFF image on the fly.
- Click **Save** to create the TIFF image. The image will be created in the chosen folder with the name specified.

### Create Faxable TIFF Images

You need to be able to open and print your original document in order to create a TIFF image. For example, to create a TIFF image from a PDF file, you would need to have Adobe Reader or another PDF viewer that has printing capabilities, installed on your computer.

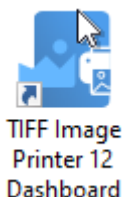
TIFF Image Printer 12 uses Profiles, which are a group of settings, to create the output image you want. TIFF Image Printer comes with a few system profiles including: Color Optimized TIFF, Monochrome TIFF, Fax TIFF, and Serialized Color Optimized TIFF. To create faxable TIFF images, simply set the profile "Fax TIFF" as TIFF Image Printer's default profile.



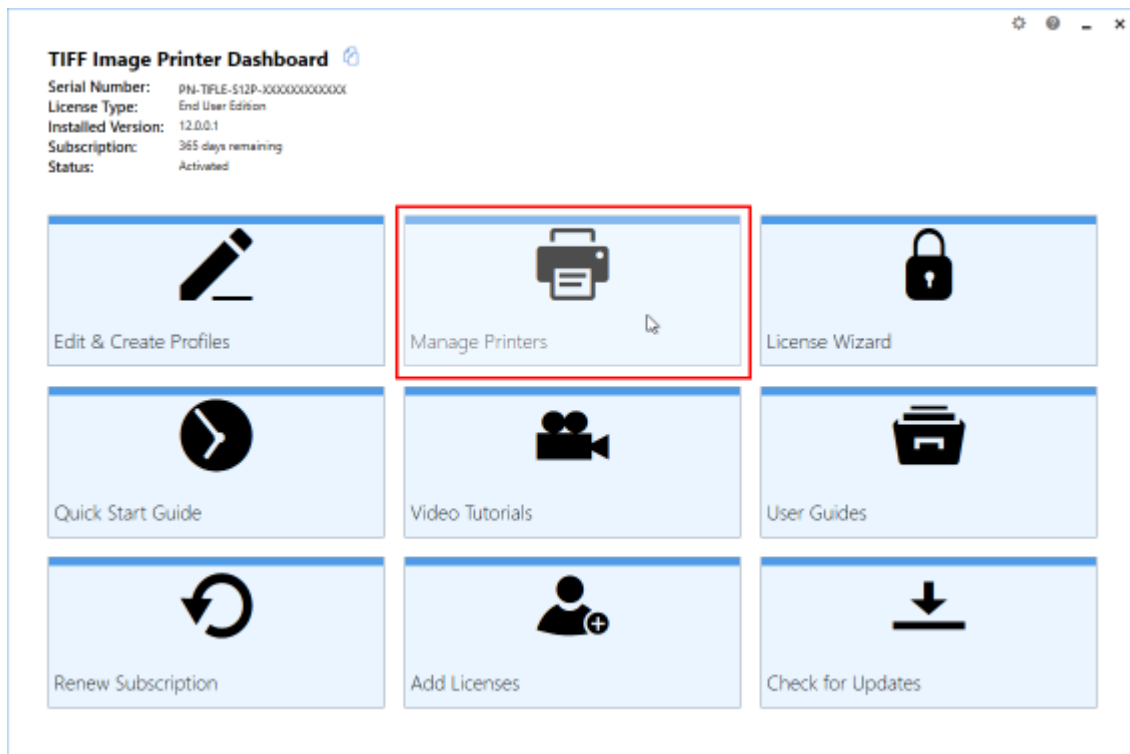
*Click the image above to watch the video tutorial.*

### Step by Step Instructions

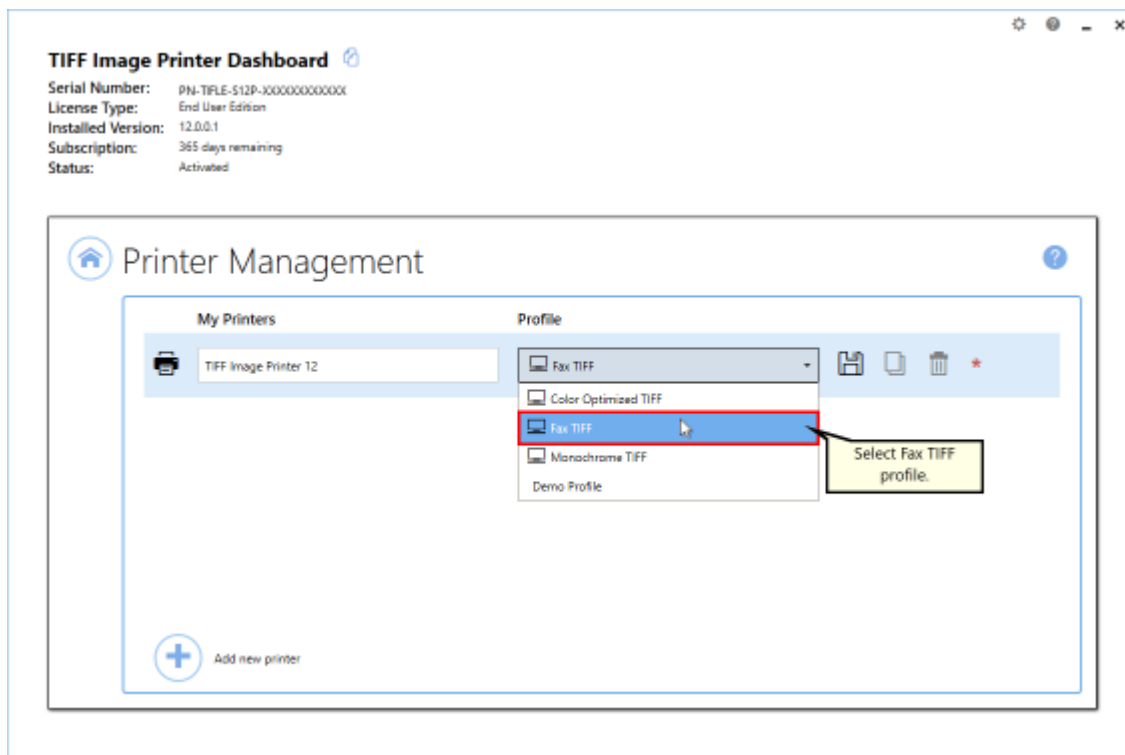
1. Launch the TIFF Image Printer **Dashboard**.



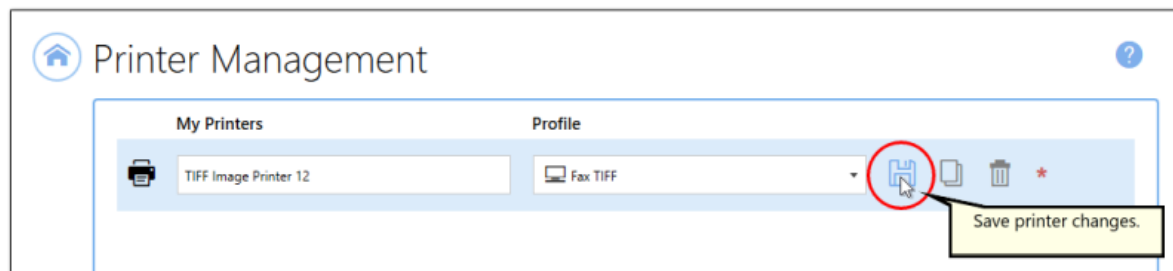
2. Select "Manage Printer" open **Printer Management**.



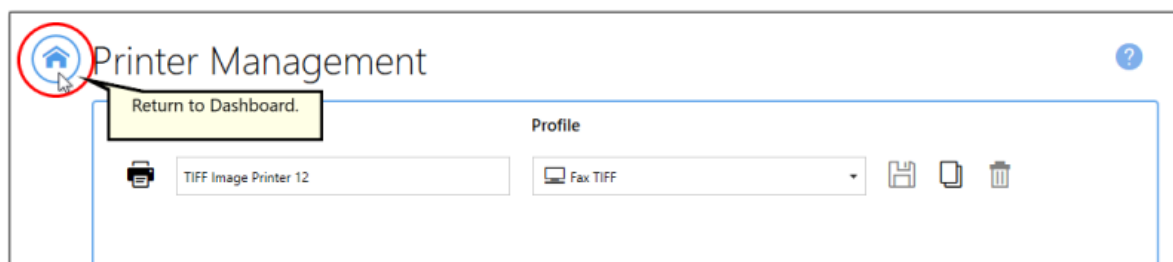
3. Beside TIFF Image Printer, use the drop box to set the default profile as "Fax TIFF". This profile is configured to create serialized TIFF images at 204x196 dpi with a fax Profile F.



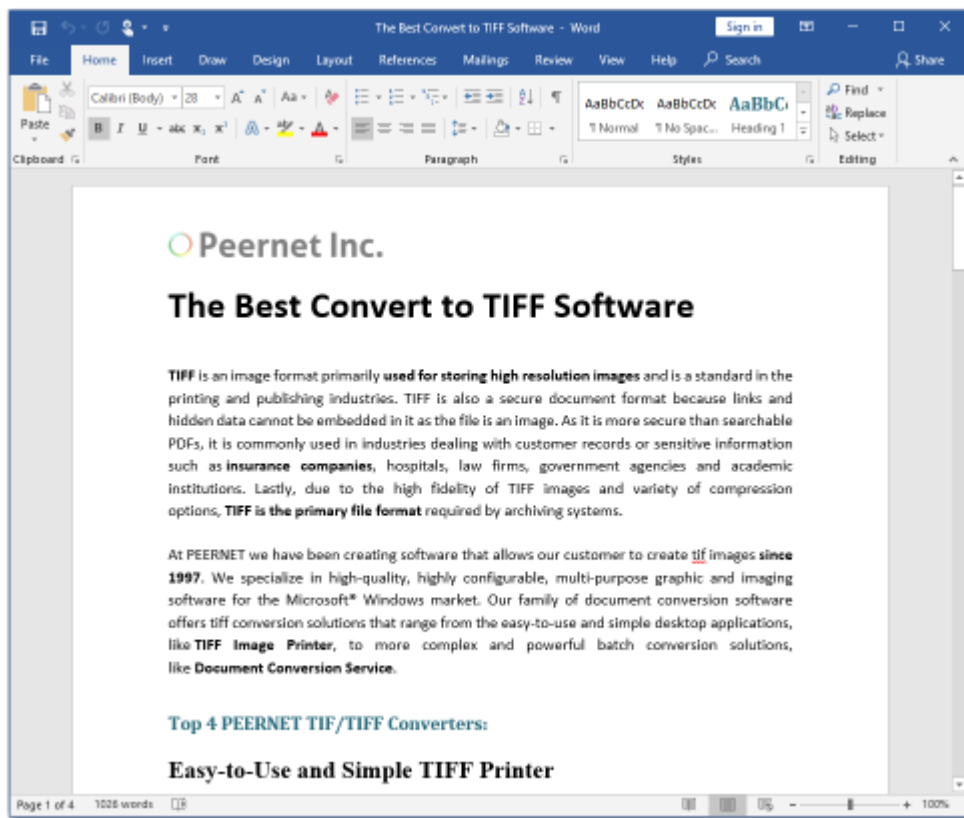
4. Select the **Save icon** to save changes.



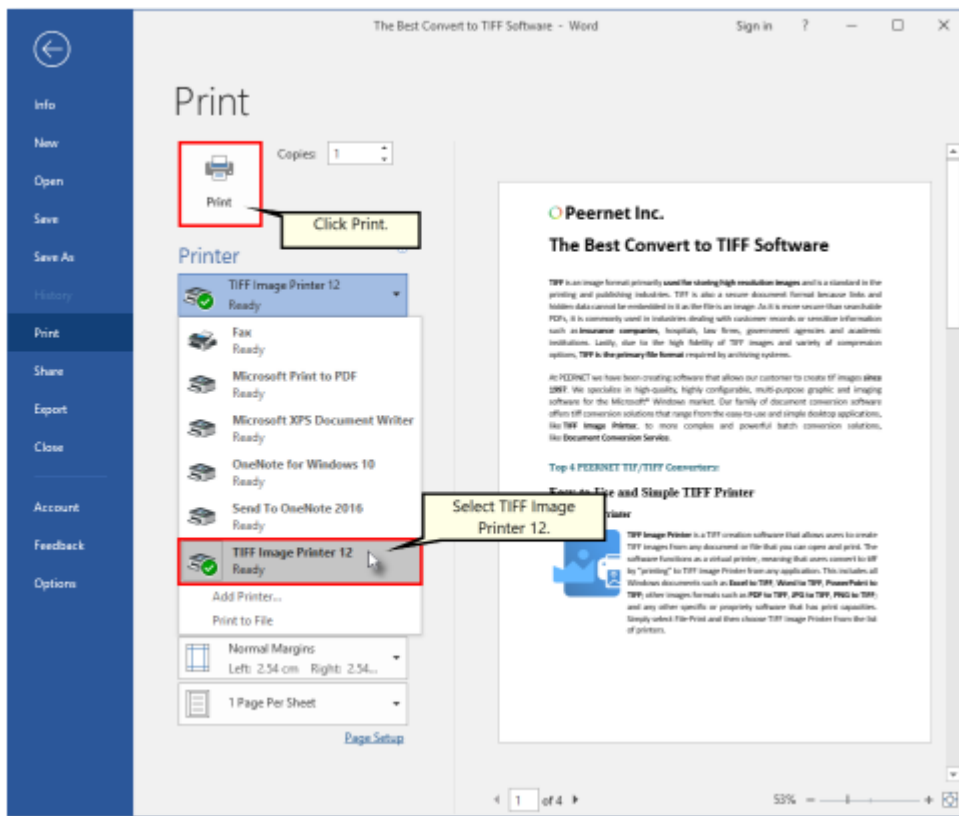
5. Close **Printer Management** and **Dashboard**.



6. Open the document you want to convert into a TIFF image.

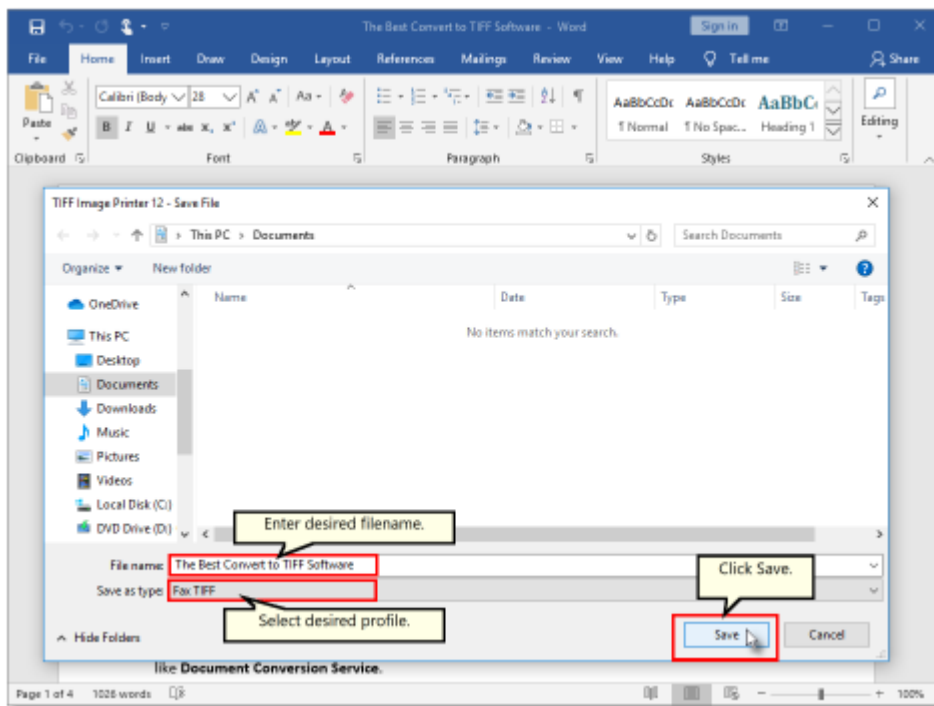


7. Select **File - Print** from your application, and select TIFF Image Printer 12 from the list of printers.



8. Print and then set the name and save location of your new faxable TIFF image.



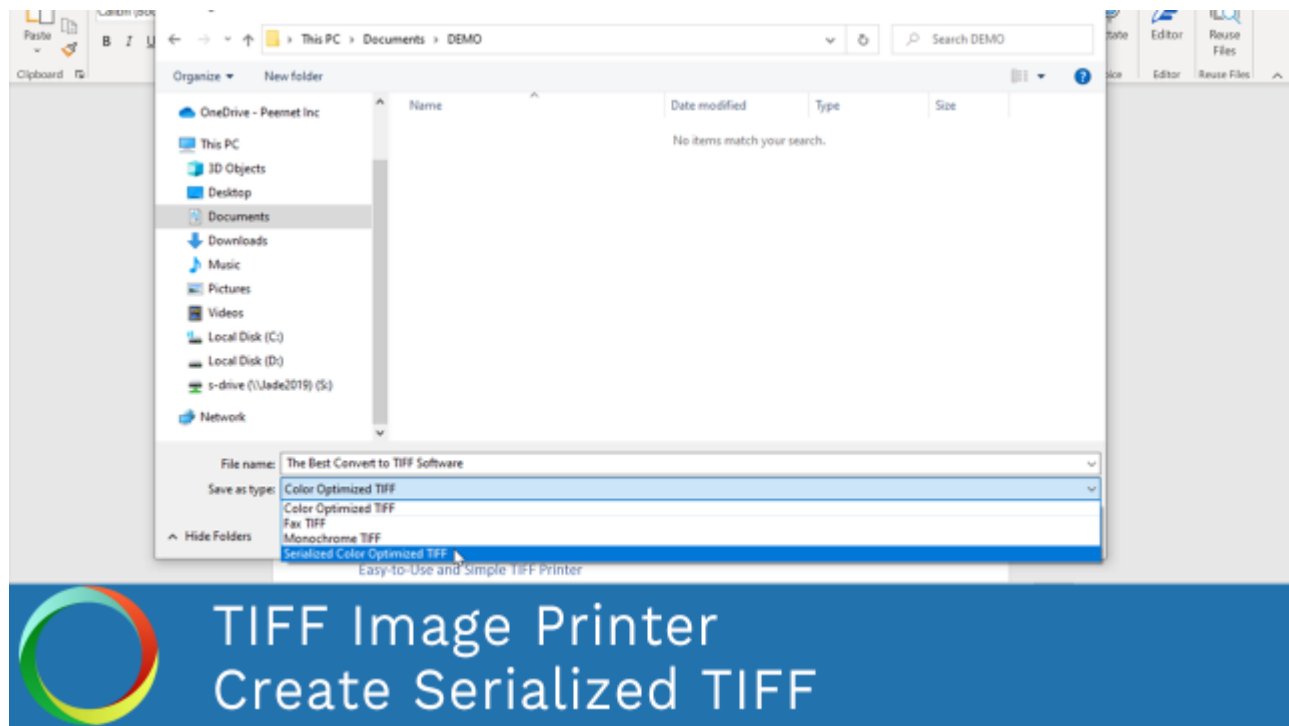


- Navigate to the folder where you wish to store your TIFF image. Your **Documents** folder will be selected for you by default.
- In the *File name* field, enter a name for your TIFF image. A default name for your image has been filled in based on the file name of the document you printed to TIFF Image Printer.
- In the *Save as type* field, you can change the profile that will be applied to your TIFF image on the fly.
- Click **Save** to create the TIFF image. The image will be created in the chosen folder with the name specified.

### Create Serialized TIFF Images

You need to be able to open and print your original document in order to create a TIFF image. For example, to create a TIFF image from a PDF file, you would need to have Adobe Reader or another PDF viewer that has printing capabilities, installed on your computer.

TIFF Image Printer 12 uses Profiles, which are a group of settings, to create the output image you want. TIFF Image Printer comes with a few system profiles including: Color Optimized TIFF, Monochrome TIFF, Fax TIFF, and Serialized Color Optimized TIFF. To create serialized TIFF images, simply set the profile “Serialized Color Optimized TIFF” as TIFF Image Printer’s default profile.



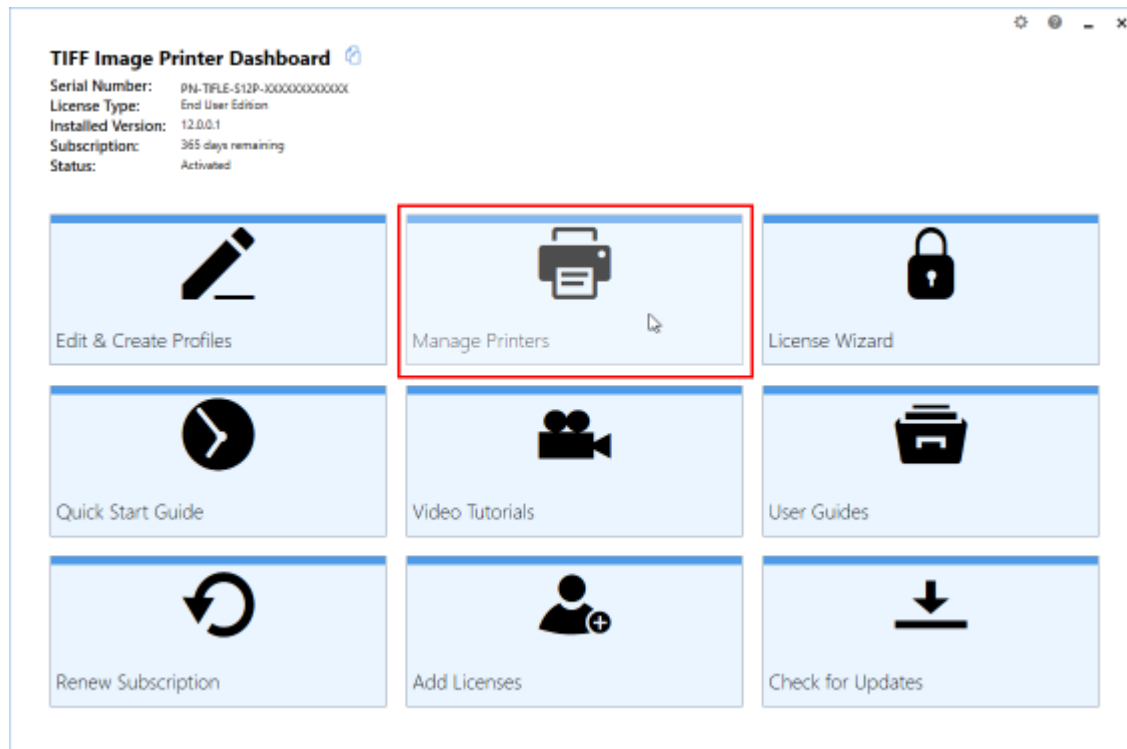
*Click the image above to watch the video tutorial.*

### **Step by Step Instructions**

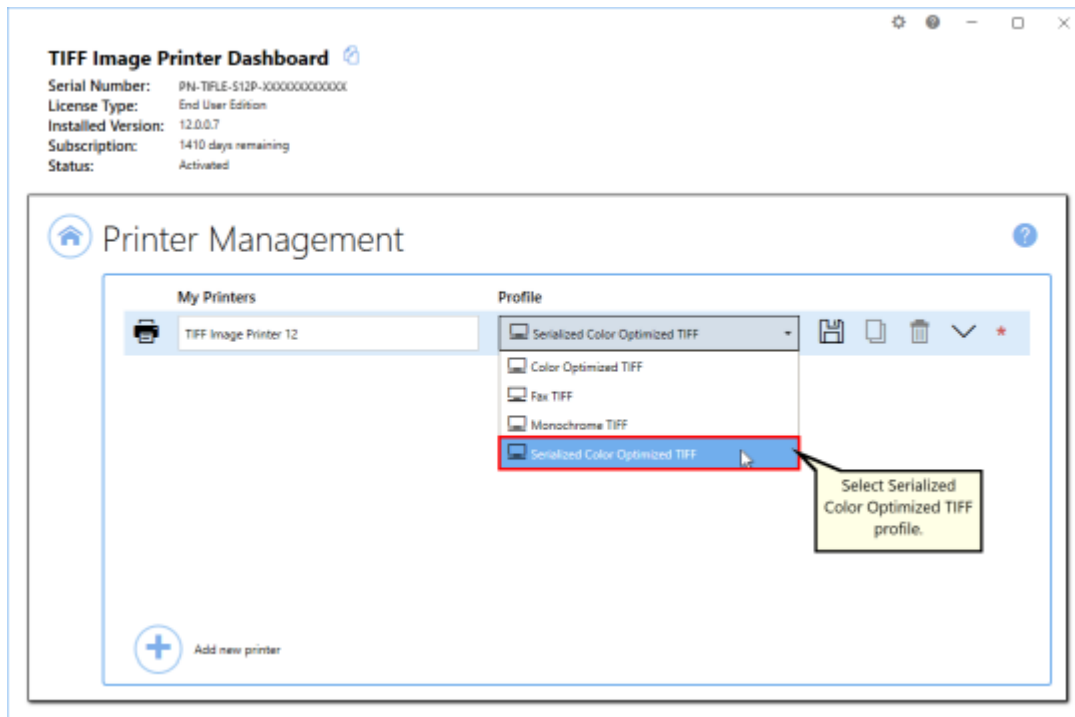
1. Launch the TIFF Image Printer **Dashboard**.



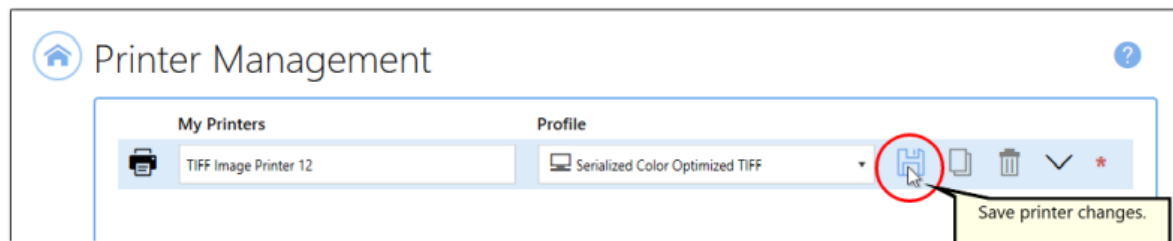
2. Select "Manage Printer" open **Printer Management**.



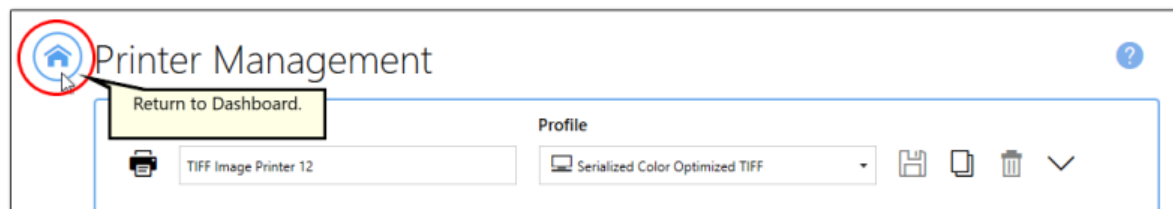
3. Beside TIFF Image Printer, use the drop box to set the default profile as "Serialized Color Optimized TIFF". This profile is configured to create a sequence of single-paged TIFF images at 300 dpi with colors reduced to optimal palette.



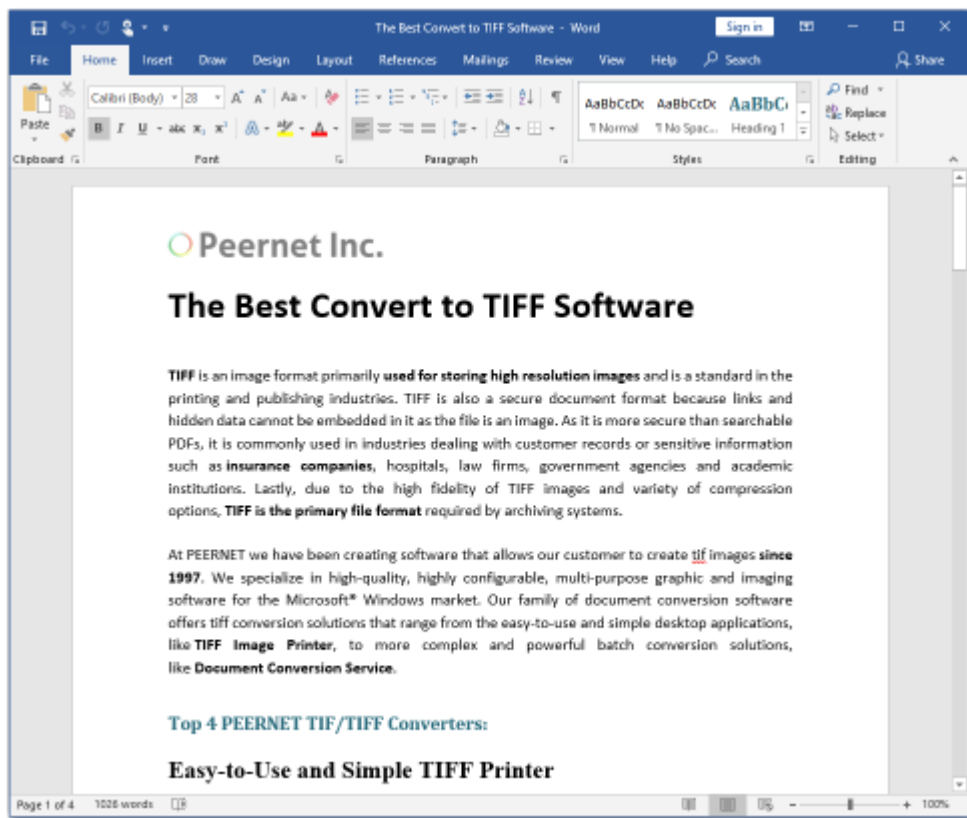
4. Select the **Save icon** to save changes.



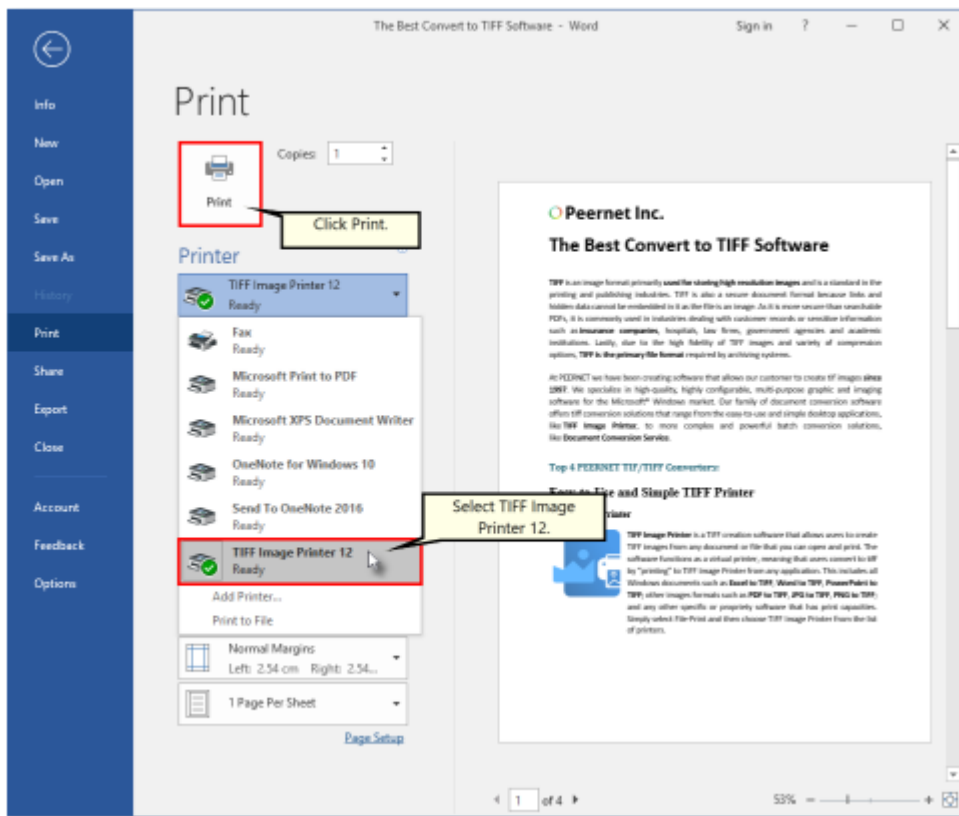
5. Close **Printer Management** and **Dashboard**.



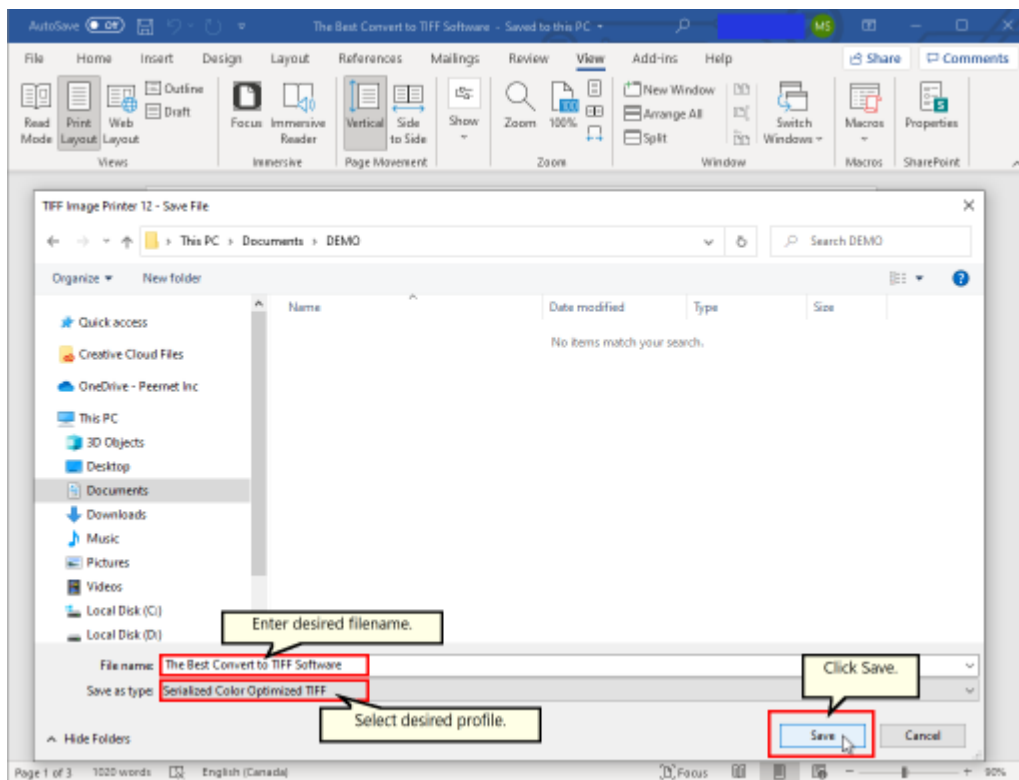
6. Open the document you want to convert into a TIFF image.



7. Select **File - Print** from your application, and select TIFF Image Printer 12 from the list of printers.



8. Print and then set the name and save location of your new serialized TIFF images.



- Navigate to the folder where you wish to store your TIFF images. Your **Documents** folder will be selected for you by default.
- In the *File name* field, enter a name for your TIFF images. A default name for your image has been filled in based on the file name of the document you printed to TIFF Image Printer.
- In the *Save as type* field, you can change the profile that will be applied to your TIFF images on the fly.
- Click **Save** to create the TIFF images. The images will be created in the chosen folder with the name specified.

## Optical Character Recognition (OCR) with TIFF Image Printer

**Optical Character Recognition**, or **OCR** for short, searches for and recognizes text (characters) on scanned pages or images and extracts it as digital text. When creating your TIFF images, the OCR process saves the recognized text as your choice of **hOCR**, **Text**, and **ALTO** OCR files.

When recognizing text, the OCR engine has to know which languages to look for on the page. OCR works by analyzing the patterns, shapes, and curves of the text characters on the page and matching them to predefined information for different characters in each language. It assigns a confidence score for each language, with the highest score determining the language chosen.

Outside factors such as image quality, the font used, and any image background on the pages will all affect the validity of the OCR results.

You can jump directly to a topic by selecting a link below, or you can refer to the table of contents.

- [Use OCR to Extract Text When Creating TIFF Images](#)



## Use OCR to Extract Text When Creating TIFF Images

**OCR** (*Optical Character Recognition*) searches for and recognizes text (characters) on scanned pages or images and extracts it as digital text. Outside factors such as image quality, the font used, and any image background on the pages will all affect the validity of the OCR results.

Using TIFF Image Printer, you can create TIFF images and OCR the pages during creation to save the extracted text as hOCR, Text, or ALTO files. You can choose which type of extracted text file to create from the options in the [OCR tab](#). You can even generate all of them at once if you want. The OCR process saves the extracted text files with the same base name and location as the new image.

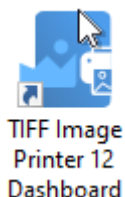
You need to be able to open and print your original document to create a TIFF image and the OCR-extracted text files. For example, to create a TIFF image from a PDF file, you would need Adobe Reader or another PDF viewer to print the file to TIFF Image Printer.

TIFF Image Printer 12 uses **Profiles**. Profiles are a group of settings used to create your output image. TIFF Image Printer comes with the following system profiles: Color Optimized TIFF, Monochrome TIFF, Fax TIFF, and Serialized Color Optimized TIFF.

To create multipaged color TIFF images and extract the text to separate files, we will first make a copy of the system profile *Color Optimized TIFF*. Next, we will enable OCR in our new profile and save it. Lastly, we set it as our default profile that TIFF Image Printer uses when we print. This tutorial uses TIFF images but the steps are similar when creating PNG, JPEG, and other image formats.

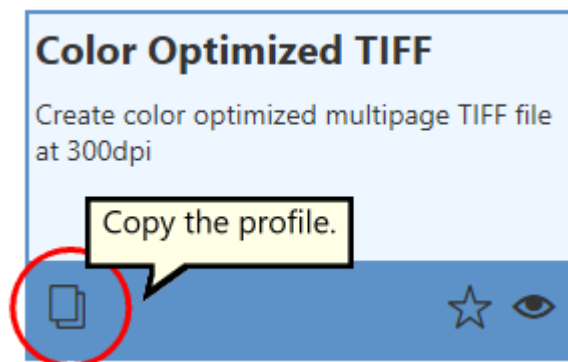
### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.

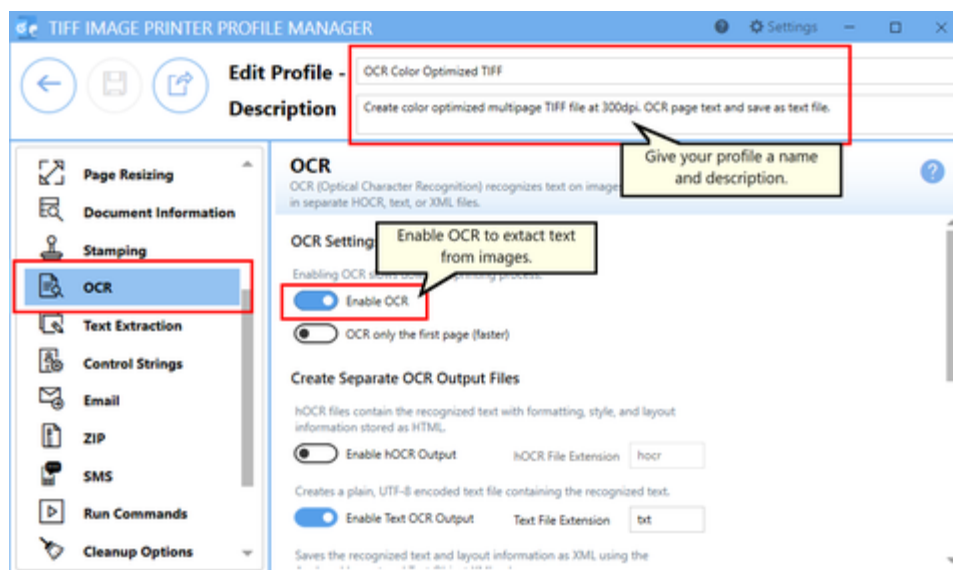


2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Find the system profile named ***Color Optimized TIFF***. Create a copy

of it using the **copy icon** in the lower left. The same steps we are doing here apply to any system profile. You can also create custom profiles through the **Add a profile** button in the upper left corner of the Profile Manager.



4. Give your new profile a name and a description, and click **Save**.
5. Now go to the [OCR tab](#) to turn on **OCR (Optical Character Recognition)**. Running OCR on each page can be a time-consuming step. For this reason, it is disabled to start.



6. Next, choose which types of OCR text files to create. There are three to choose from:
  - a. **hOCR** is an XHTML file containing the text extracted from the page. It also stores format and layout information and a score for how confident the OCR engine is on its match.

- b. **Text** creates a UTF-8 text file containing only the extracted text.
- c. **ALTO** is similar to hOCR but stores the information as XML following the Analyzed Layout and Text Object specification.

For our example, we chose Text OCR as we only want to extract the text from the page and don't care about the layout or positioning on the page.

### Create Separate OCR Output Files

hOCR files contain the recognized text with formatting information stored as HTML.

☐ Enable hOCR Output

Creates a plain, UTF-8 encoded text file containing the recognized text.

☒ Enable Text OCR Output      Text File Extension

Saves the recognized text and layout information as XML using the Analyzed Layout and Text Object XML schema.

☐ Enable Alto OCR Output      Alto File Extension

Create text-based file containing recognized text.

7. Lastly, choose which languages to look for on the page. The OCR engine works by looking for and matching the characters' curves and shapes. For this to happen, it has to know what languages to look for. *You must select at least one language.* The more languages to match against, the longer the OCR process will take. If you have documents with mixed languages, select all languages used.

TIFF Image Printer can recognize Arabic, English, French, German, Hebrew, Hindi, Italian, and Spanish languages. See the OCR tab for instructions to [download additional languages](#).

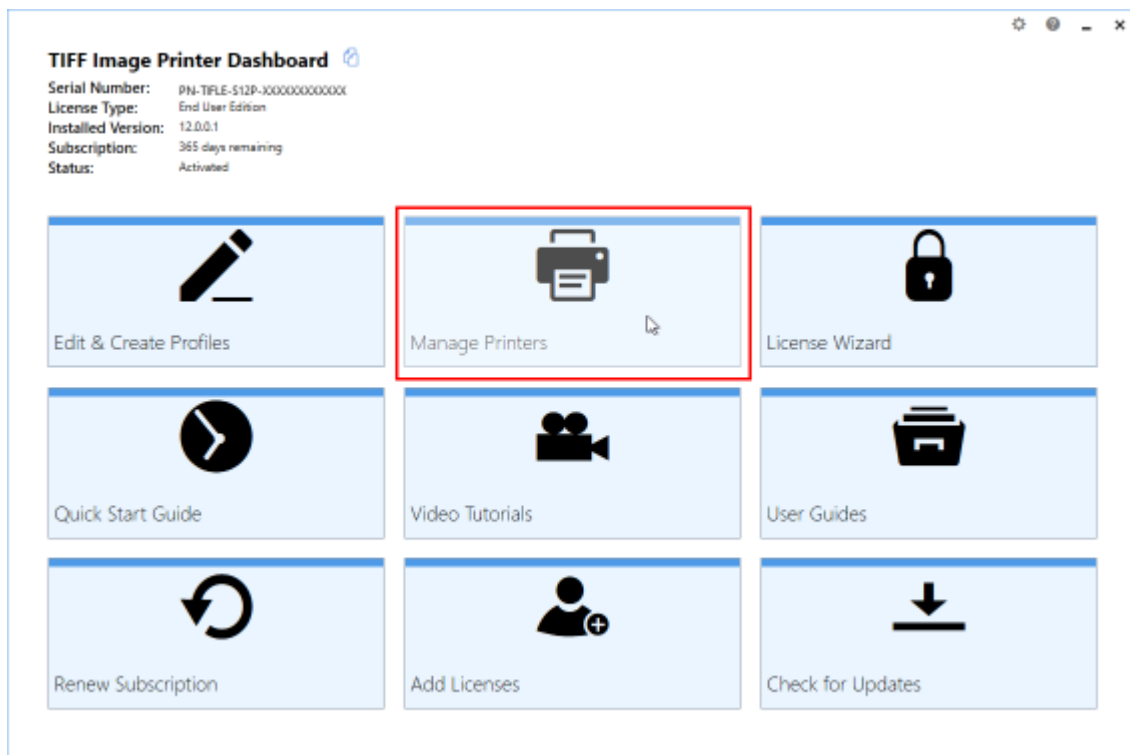
### Choose Languages to Recognize

Check each language to look for and perform recognition of text on your images. Each additional language you select for character recognition will increase the processing time.

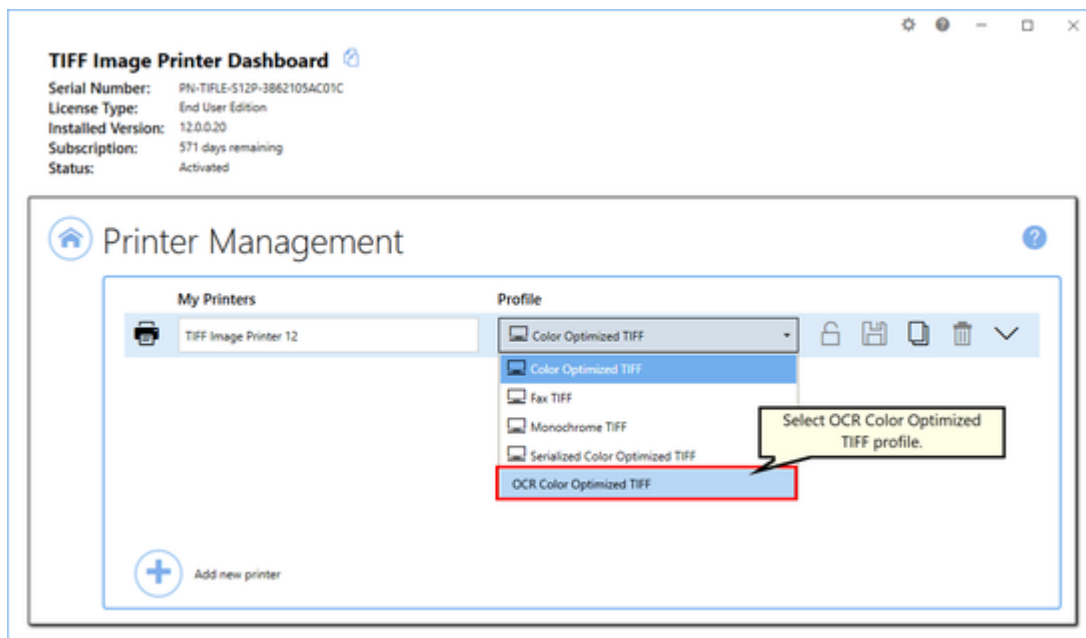


<input checked="" type="checkbox"/>	English
<input checked="" type="checkbox"/>	French
<input type="checkbox"/>	German
<input type="checkbox"/>	Hebrew
<input type="checkbox"/>	Hindi
<input type="checkbox"/>	Italian
<input checked="" type="checkbox"/>	Spanish; Castilian

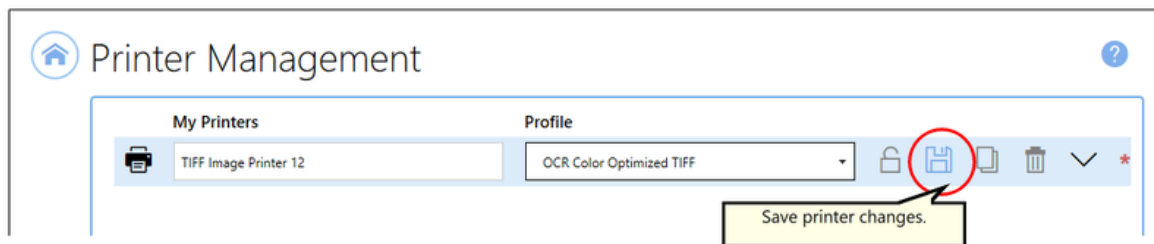
8. With your OCR settings configured, you can now **Save** the changes to your new profile, then click the **Back** arrow to return to the main screen of the Profile Manager.
9. We have our new profile. Let's set it as the default profile TIFF Image Printer uses when printing. To do this, open the **TIFF Image Printer Dashboard** again and select "Manage Printers" to open Printer Management.



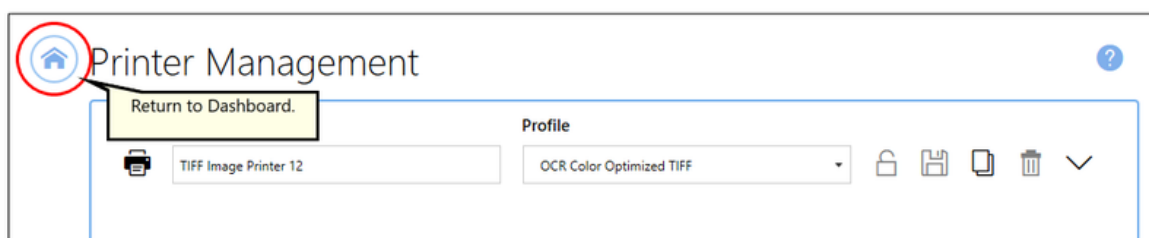
10. Next to TIFF Image Printer, use the drop box to set your new OCR profile as the default profile. Here, we created the new profile **OCR Color Optimized TIFF** and we will select that profile. This profile creates *multipaged TIFF images*. We will use OCR to scan the pages and save the text as a separate text file along with the TIFF image.



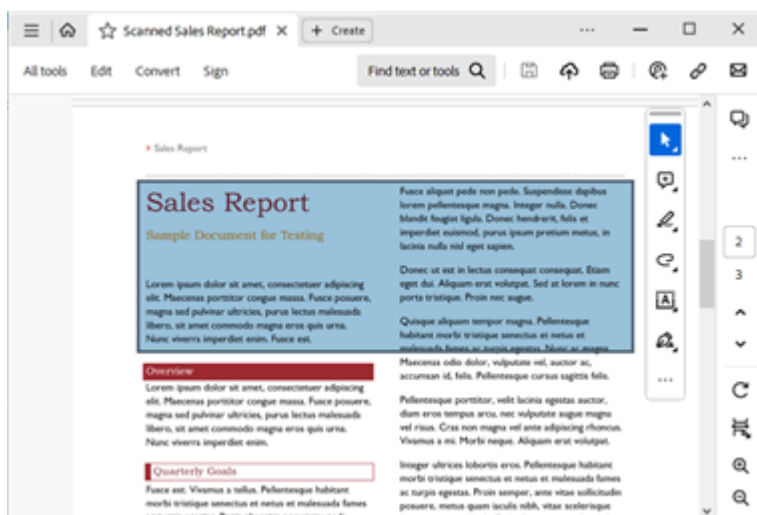
11. Select the **Save icon** to save your changes to the printer settings.



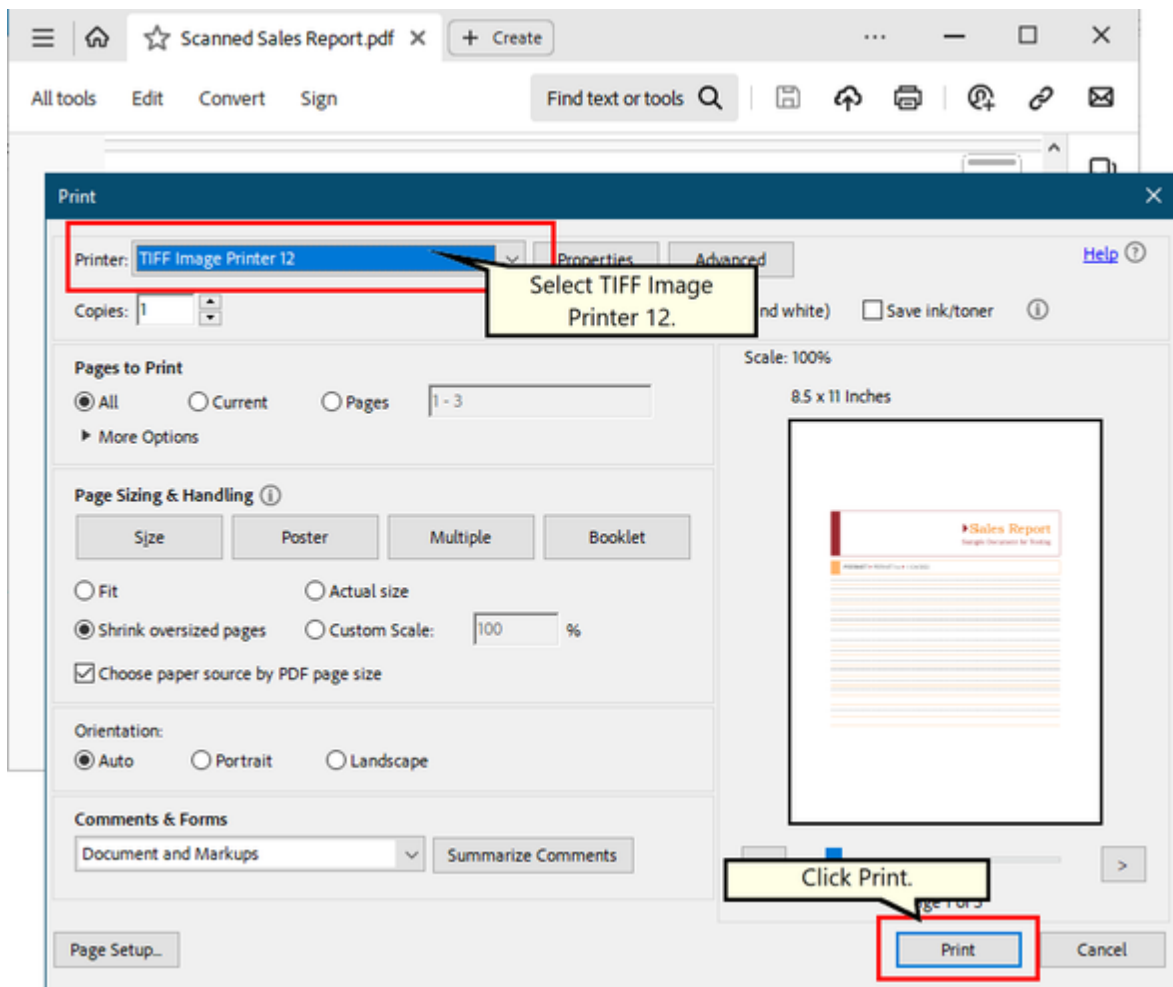
12. Close **Printer Management** and **Dashboard**.



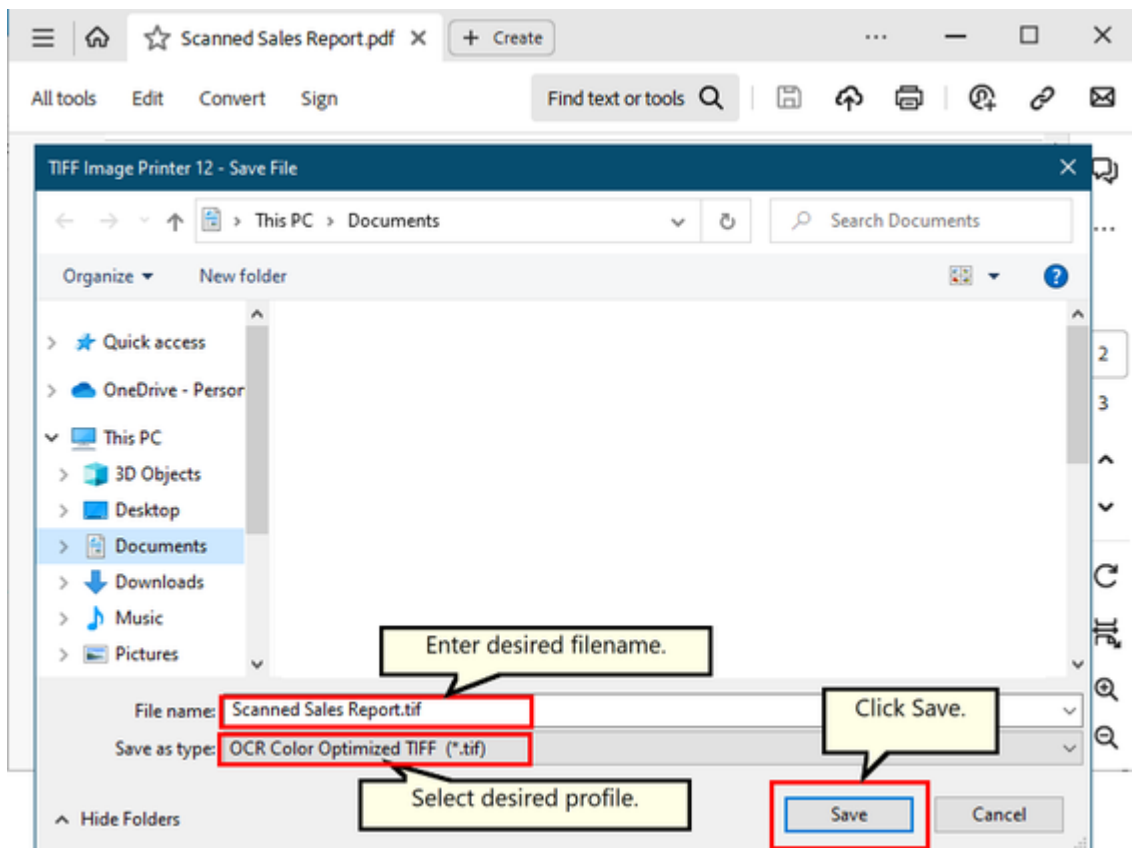
13. Open the document you want to convert to TIFF. This step will also save the extracted text. Here, we have opened a scanned PDF in Adobe Reader. Each page in our document is an image, and we want to recognize and save the text in this file as we create the TIFF images. You can tell if a page is a scanned image as you cannot select any text on the page, only an area of the page, as shown below.



14. Select **File - Print** from your application, and select TIFF Image Printer 12 from the list of printers.



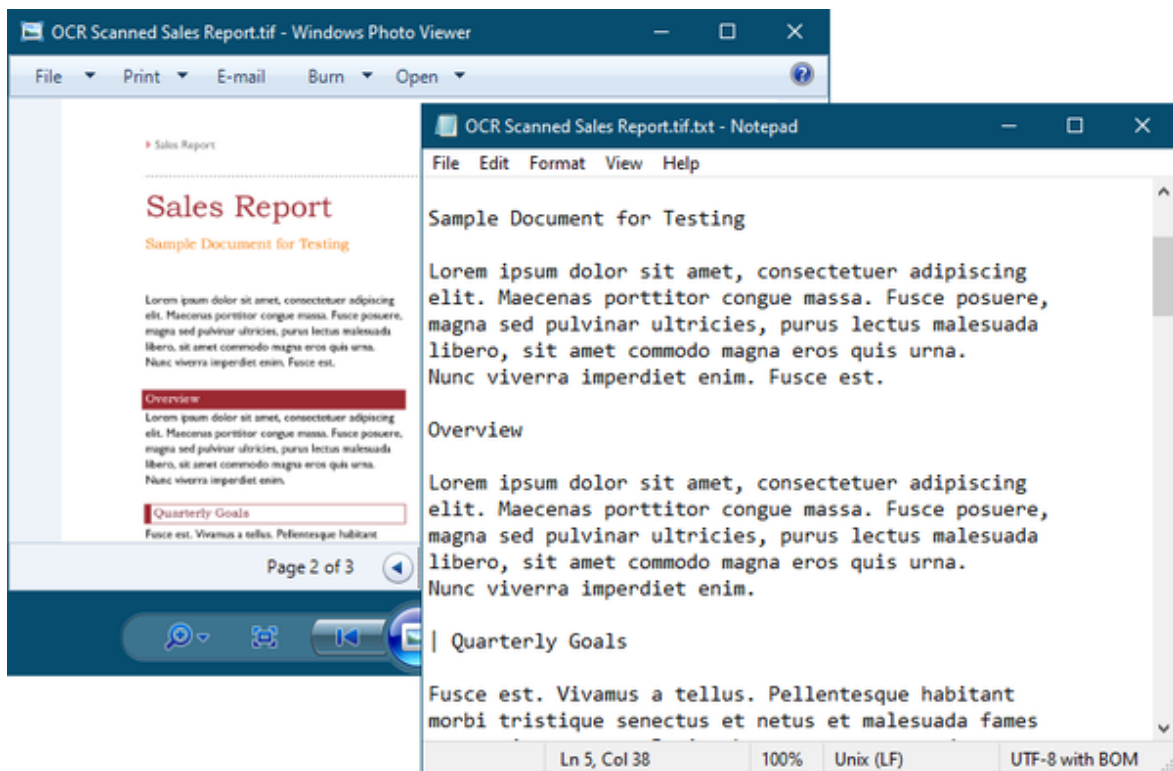
15. Printing your document will prompt you to choose the name and location of your new TIFF image and OCR text file.



- Navigate to the folder where you wish to store your TIFF image and OCR text file. Your **Documents** folder will be selected for you by default.
- In the *File name* field, enter a name for your TIFF image. A default name for your file has been filled in based on the file name of the document you printed to TIFF Image Printer.
- In the *Save as type* field, the profile **OCR Color Optimized TIFF** is already selected for you. Changing the profile option selected here will change the type of file created.
- Click **Save** to create your new TIFF image and OCR text file in the chosen folder with the name specified.

16. When you open your new TIFF image and the OCR text file, you can see the text file contains the text from the scanned document.





## Working with TIFF Image Printer

This section contained step-by-step instructions demonstrating how to enable and configure the features available in TIFF Image Printer and give a brief overview of how each feature works.

For basic tutorials on how to convert files using TIFF Image Printer and create the most common file formats, see the [Basic Conversions](#) section. For technical documentation for each of the property tabs found in the Profile Manager utility, see the [Profile Manager](#) section.

You can jump directly to a tutorial by selecting a link below, or you can refer to the table of contents for a complete list of step-by-step instructions.

### How to get started

- [Create a New Profile Settings File](#)
- [View Your Images](#)

### Save Options

- [Append Multiple Files Into a Single File](#)
- [Save Files Without Prompting](#)
- [Change Output Type](#)
- [Create a Serializing Sequence of Files](#)
- [Change Where Files are Saved](#)
- [Automatically Split Files](#)
- [Reduce TIFF File Size](#)

### Fax Mode

- [Create Fax Format Files](#)

### Filename Creator

- [Create a Custom Filename with Text](#)
- [Create a Custom Filename with Unique File ID](#)

- [Create a Custom Filename with Date and Time](#)
- [Create a Custom Filename with Dynamic Output Folders](#)

## **Page Editing**

- [Rotate Pages](#)
- [Crop Page Margins or Area](#)
- [Trim Existing Margins](#)
- [Adjust Page Brightness](#)

## **Page Resizing**

- [Copy Page Margins or Areas](#)
- [Resize Images Using Resampling](#)
- [Add Borders to Page](#)

## **Document Information**

- [Set Document Information](#)

## **Stamping**

- [Add Text Watermark Stamp](#)
- [Add Image Watermark Stamp](#)
- [Add Page Numbering Watermark Stamp](#)
- [Add Date and Time Watermark Stamp](#)

## **Text Extraction**

- [Extract Text From the Created File](#)

## **Control Strings**

- [Dynamically Set Filename and Output Location](#)

## **Email and SMS**

- [Email the Created File](#)
- [Sending SMS Text Messages](#)

## **Creating ZIP Files**

- [ZIP the Created File](#)
- [Sending SMS Text Messages](#)

## **Run Commands**

- [Automatically View the Created File](#)
- [Send Email when File Created](#)
- [Compress Created File into ZIP](#)

## **Working with Large Paper Size**

- [Add a Custom Paper Form](#)
- [Configure TIFF Image Printer to Use a Custom Paper Size](#)
- [Print Well Logs as One Continuous Image](#)

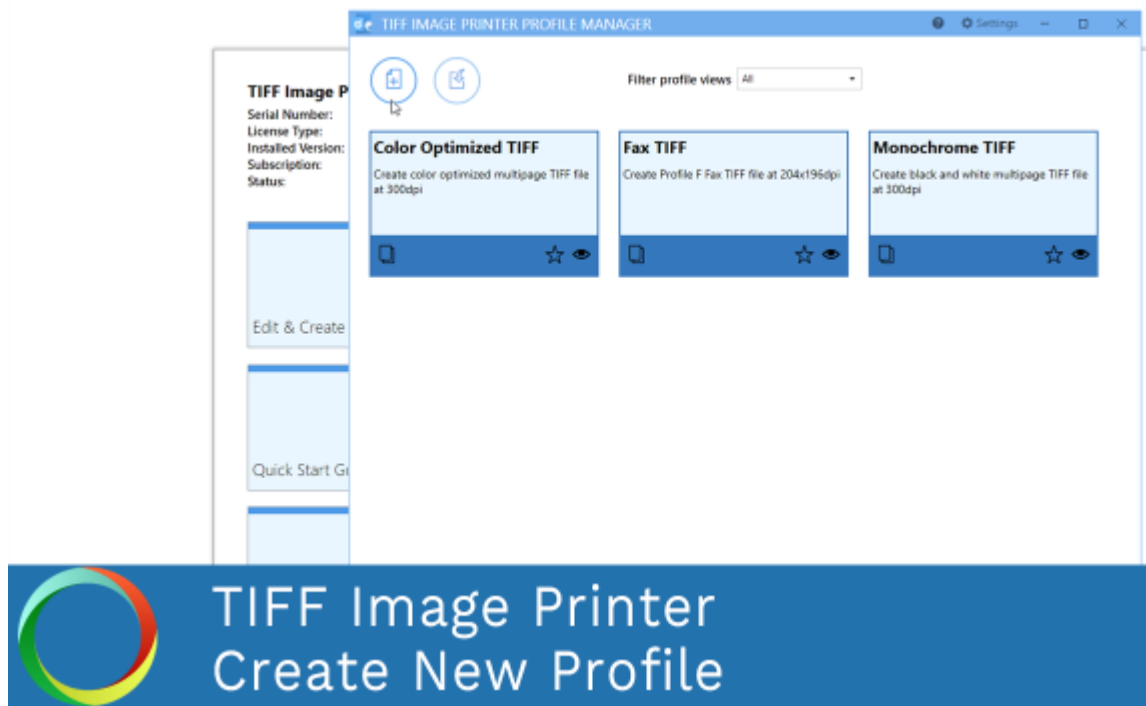
## **Shared Profiles**

- [Create a Shared Profile](#)

## Create a New Profile Settings File

TIFF Image Printer 12 uses Profiles, which are a group of settings, to create the output file you want. TIFF Image Printer comes with a few system profiles including: Color Optimized TIFF, Monochrome TIFF, and Fax TIFF.

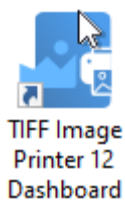
You can also create your own personal Profile(s) with the settings you require.



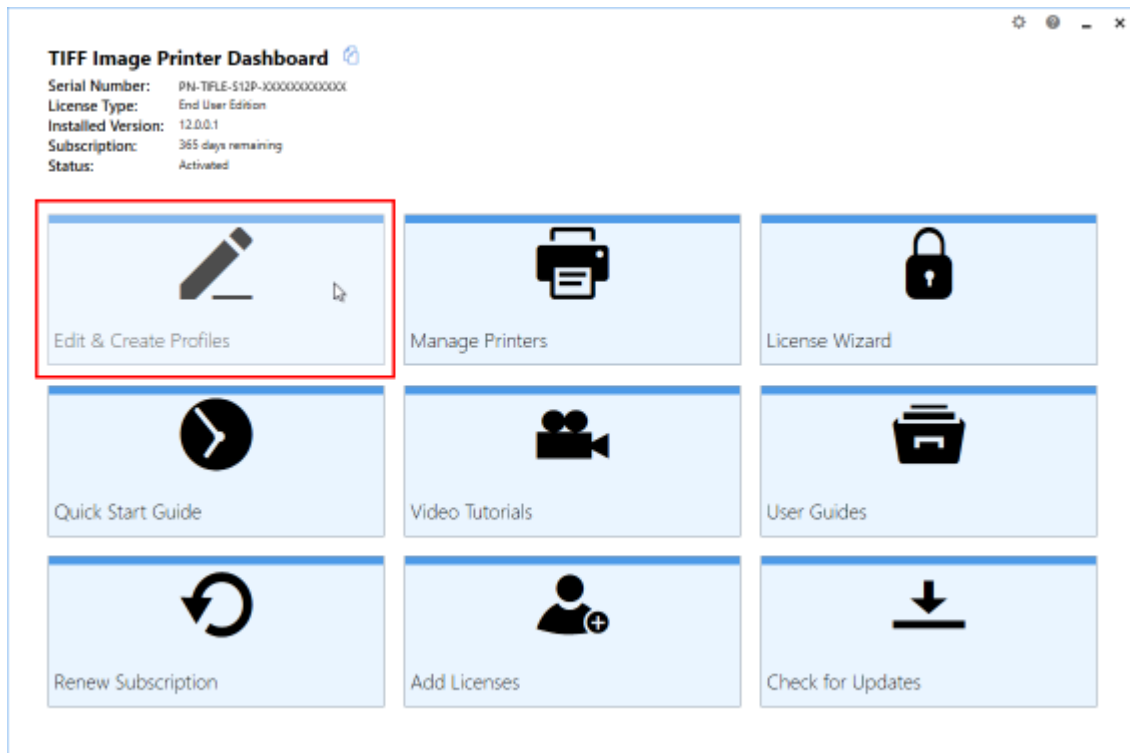
*Click the image above to watch the video tutorial.*

### Step by Step Instructions

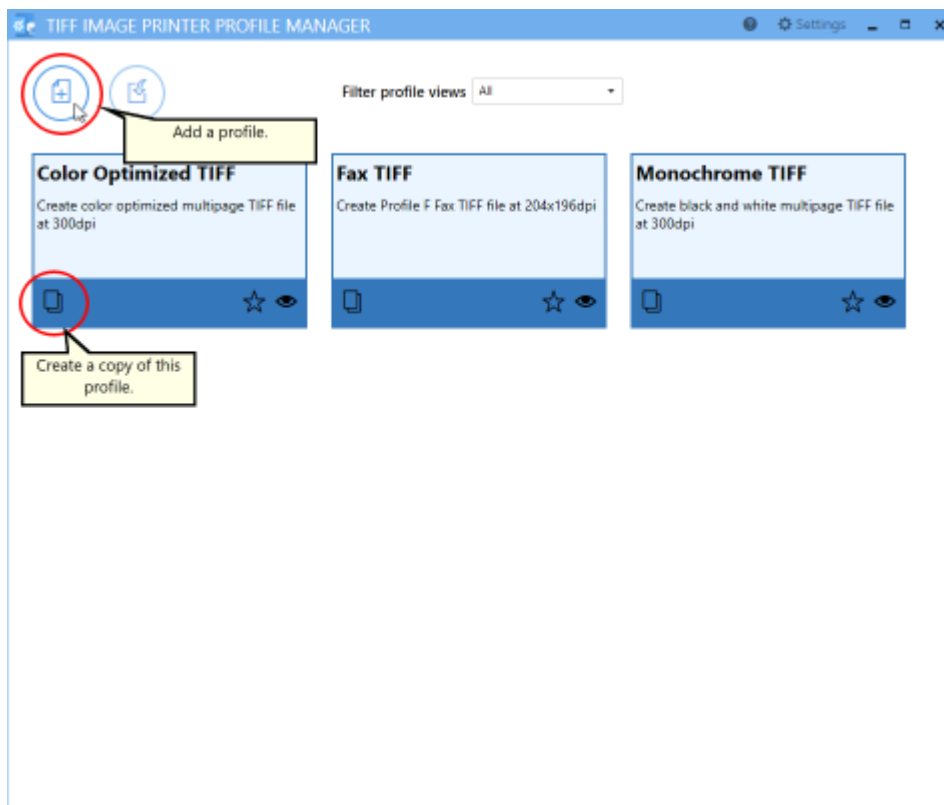
1. Launch the TIFF Image Printer **Dashboard**.



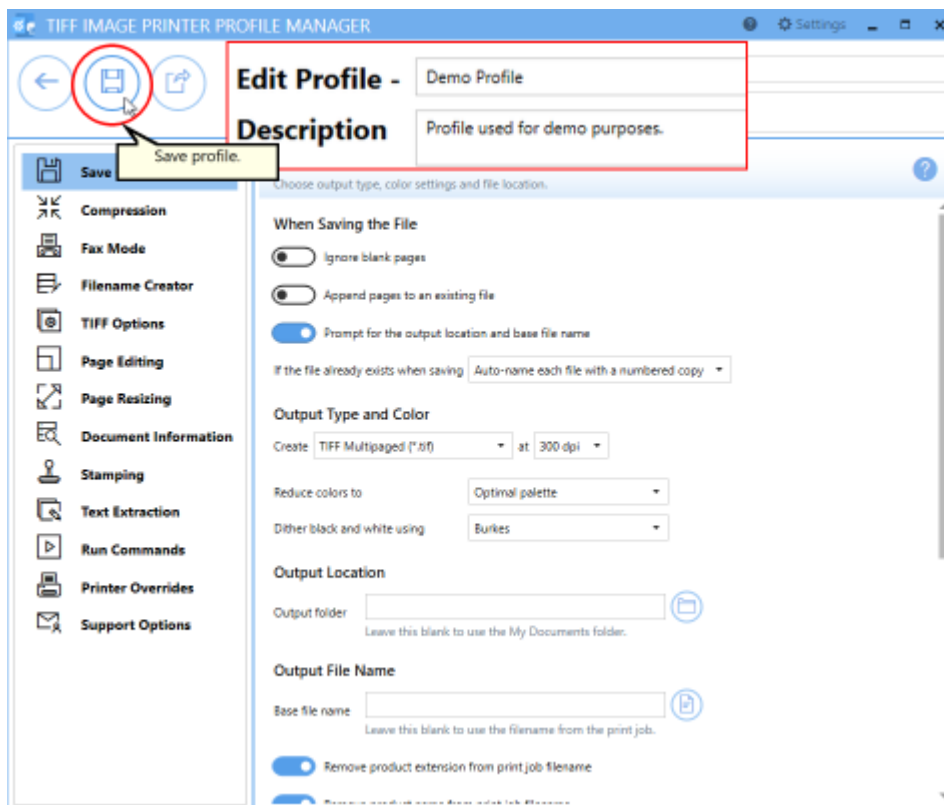
2. Select "Edit & Create Profiles" to open **Profile Manager**.



3. You can either create a copy of a system profile, if it has similar settings to what you require, by selecting "Create a copy of this profile", or create a personal profile by selecting "Add a profile".



4. Name the profile, add a description, and click **Save**.

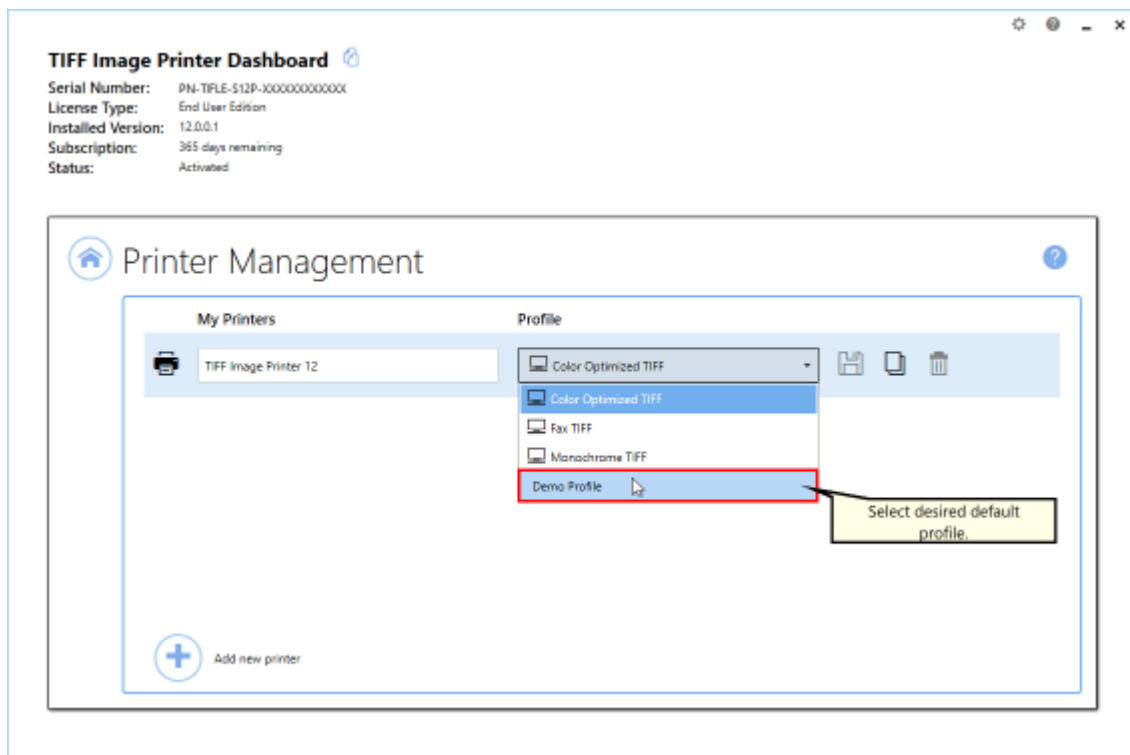


5. Go through the tabs and adjust the settings as desired. The subsequent topics in the [Working with TIFF Image Printer](#) section provide detailed instructions on how to adjust the settings in your personal profile to create different types of images/files.
6. Click **Save-Back**, and close **Profile Manager**.

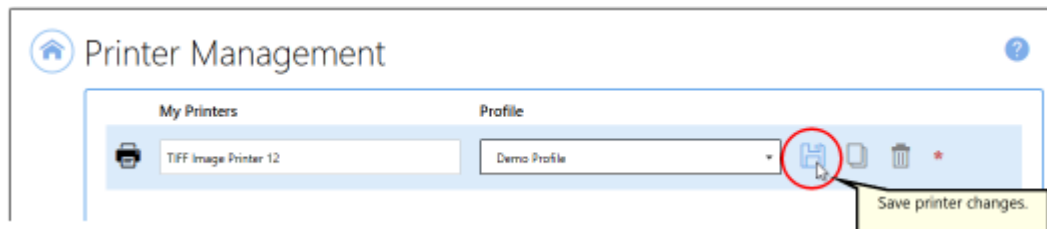
*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.

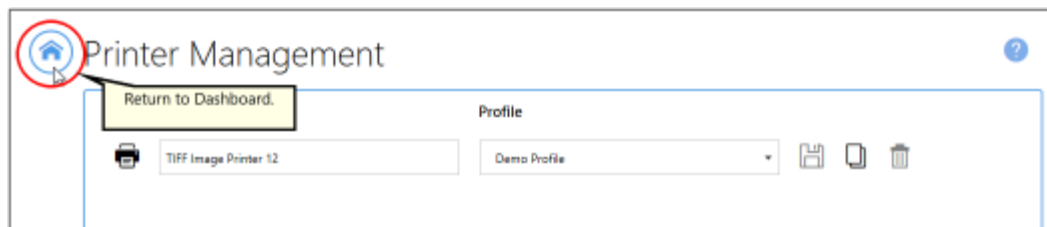




iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.

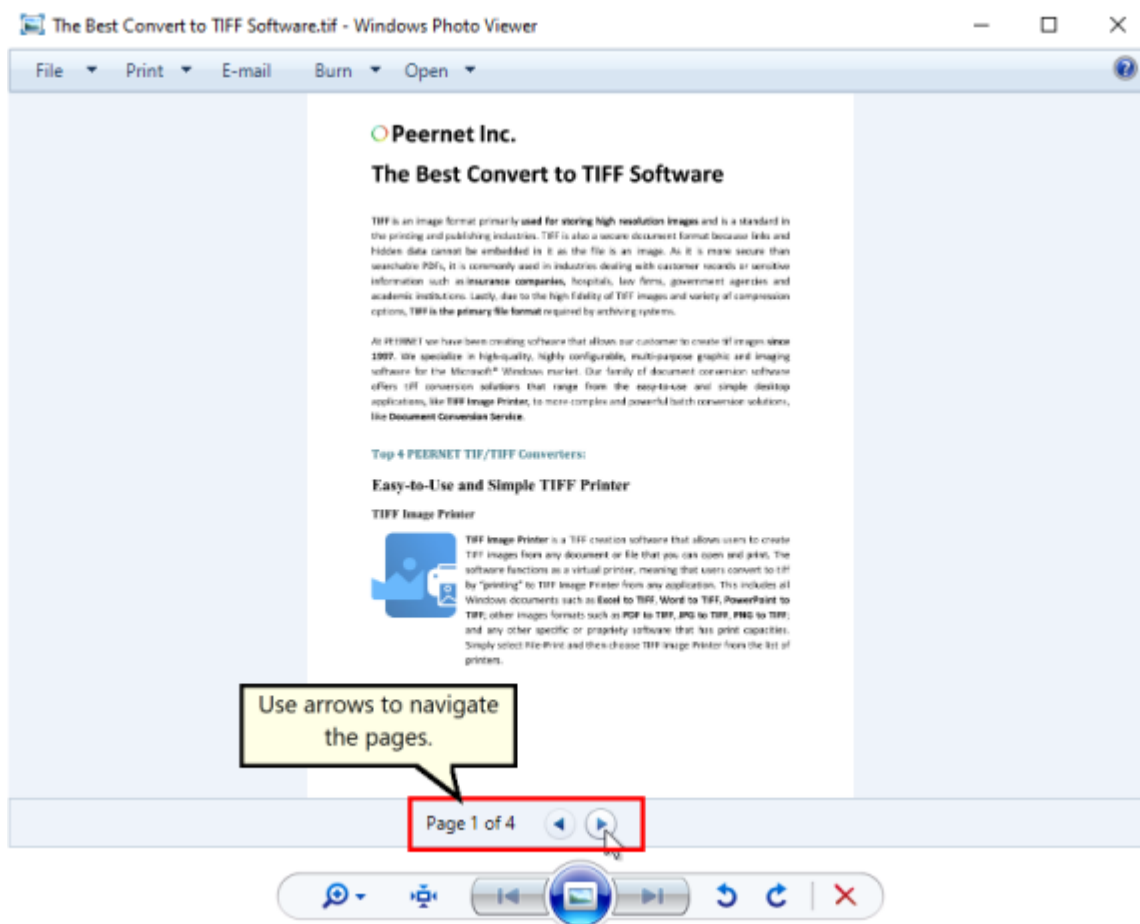


7. Close the **Dashboard**. Now when you print your document to TIFF Image Printer the settings saved in this profile will be applied to the output file.

### View Your Images

As most newer operating systems already include the Windows Photo Viewer, viewing an image is as simple as double-clicking the new image file in a File Explorer (Windows Explorer on older operating systems).

Windows Photo Viewer is normally included on Windows operating systems starting with Windows 7. If you are viewing an image that has more than one page, you will see a page navigation control just below the image that allows you to move from page to page. When viewing a serialized image, the page navigation control is not shown as there is only one page.



**Are you having trouble viewing your multipage TIFF Image? Can you only view the first page of your multipage TIFF image?**

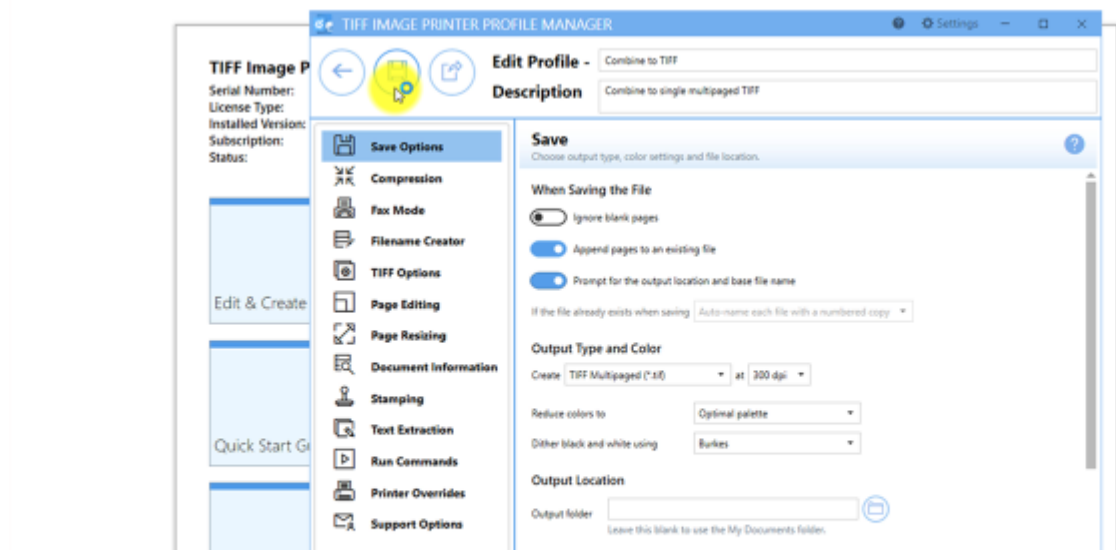
**The issue is likely your image viewer!**

If you are opening your TIFF image in the Windows Photos app, Paint or Microsoft Picture Manager, you will only be able to see the first page of a multipage TIFF image. We recommend viewing your TIFF image in either Windows Photo Viewer (discussed above) or IrfanView. [IrfanView](#) is freeware image editor that you can download from their website.

### Append Multiple Files Into a Single File

Creating a single multipaged TIFF image from several different documents is an easy task with TIFF Image Printer. Once append mode is turned on, and the name and location of the output file is set, simply print the files to TIFF Image Printer in the order in which you want the pages to appear in your output TIFF image.

The [append options](#) are controlled through the profile.



*Click the image above to watch the video tutorial.*

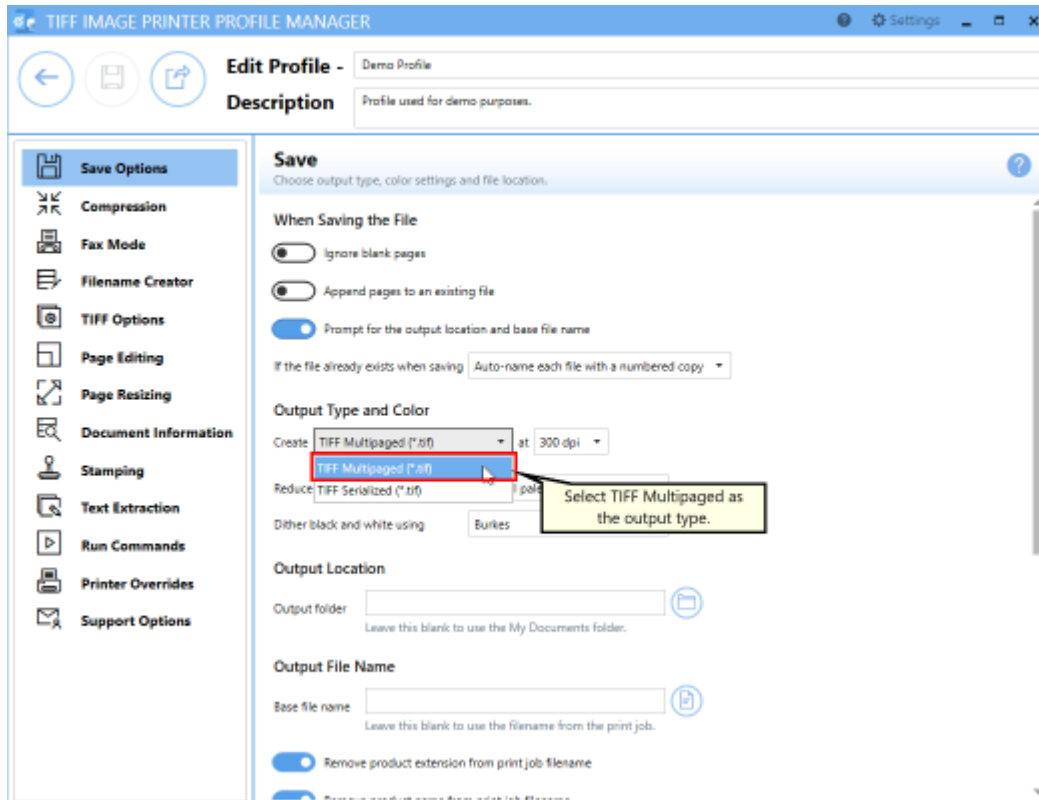
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.

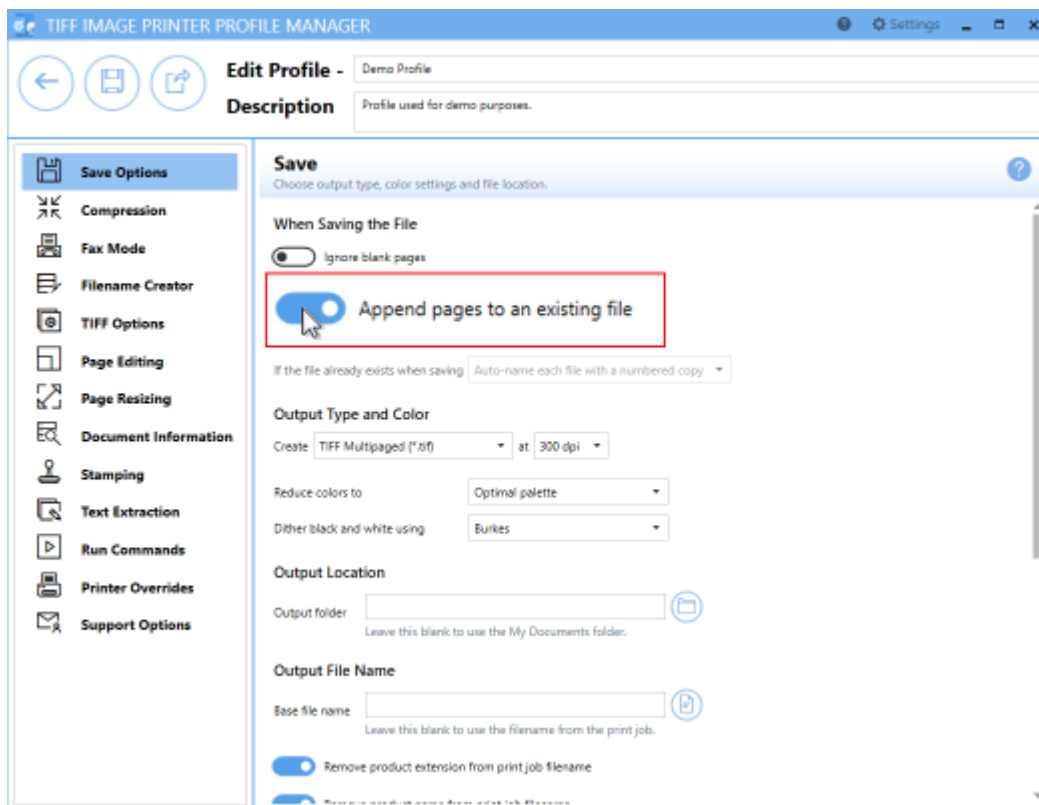


2. Select "Edit & Create Profiles" to open **Profile Manager**.

3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Save Options** tab, ensure the Output Type is set as **TIFF Multipaged**.




6. Enable **Append pages to an existing file**.



*In order to append multiple files into a single file, all of the documents that you want combined must be saved to the same location with the same filename. You can either do this manually after each print, or you can [set the desired Output Location and Output File Name](#) in the profile.*


- i. To set the Output Location, select the file icon to browse to your desired location. If you leave this field blank, TIFF Image Printer will default to the last used folder when prompting is enabled and the printer is using the [last used folder option](#). If there is no last used folder, or prompting is disabled, the My Documents folder is used.
- ii. To set the Output File Name, enter your desired base file name. If you leave this field blank, TIFF Image Printer will use the filename from the print job.

**Output Location**

Output folder   Browse for folder.

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.


**Output File Name**

Base file name  

Leave this blank to use the filename from the print job.

If you choose to set the Output Location and/or Output File Name, you may also want to [disable prompting by the Save As dialog](#) each time you print.

- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.

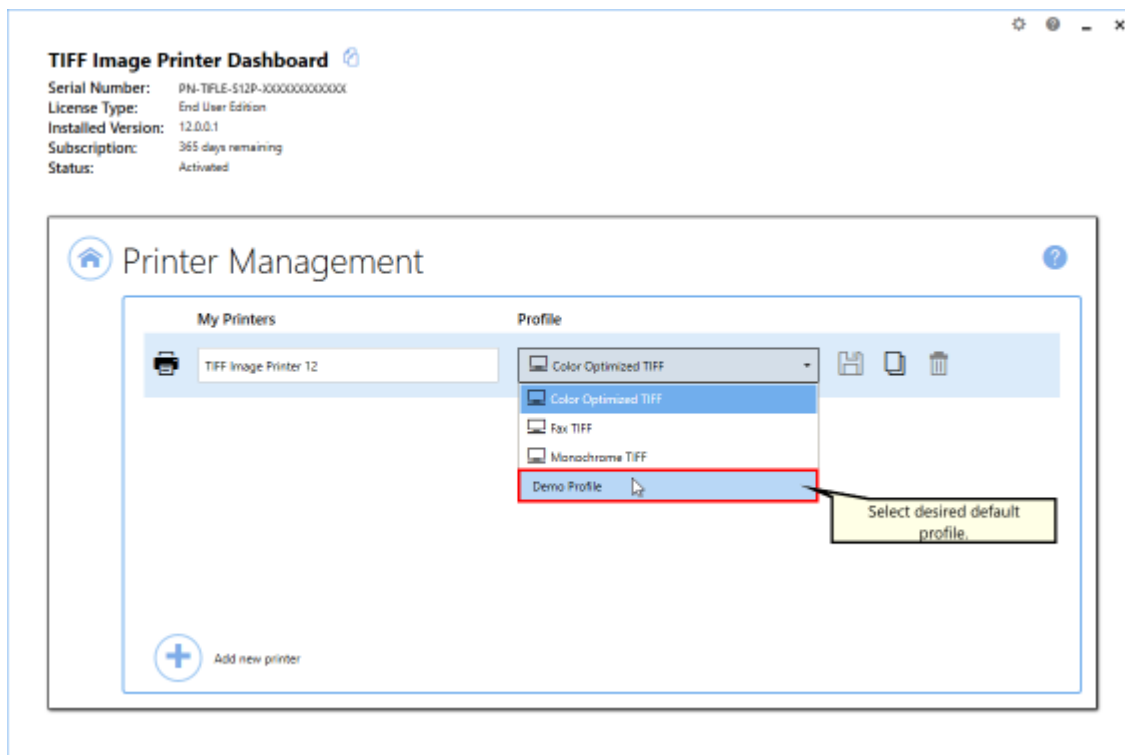
 Prompt for the output location and base file name

If the file already exists when saving

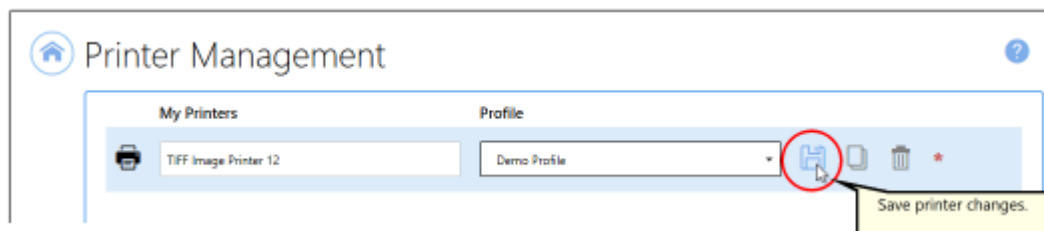
7. Click **Save-Back**, and close **Profile Manager**.

If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

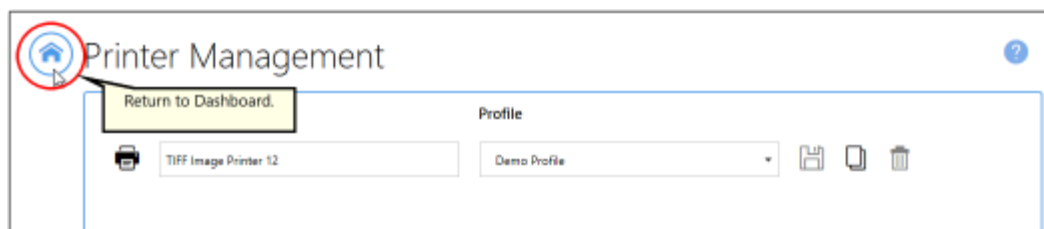
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



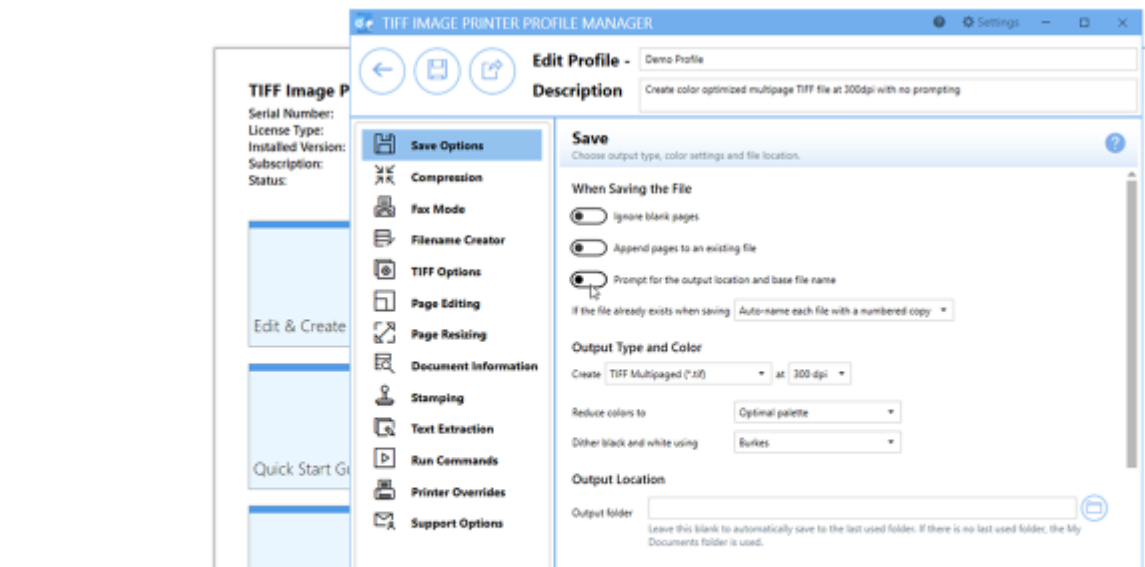
8. Close the **Dashboard**. Now when you print your documents to TIFF Image Printer, they will be appended together into a single multipaged TIFF image.



## Save Files Without Prompting

Each time you print, TIFF Image Printer will prompt you with a Save As dialog to choose where you want save the output file. You can change this so that the output file is always saved in the same location without showing the dialog.

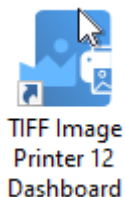
The [prompting options](#) are controlled through the profile.



*Click the image above to watch the video tutorial.*

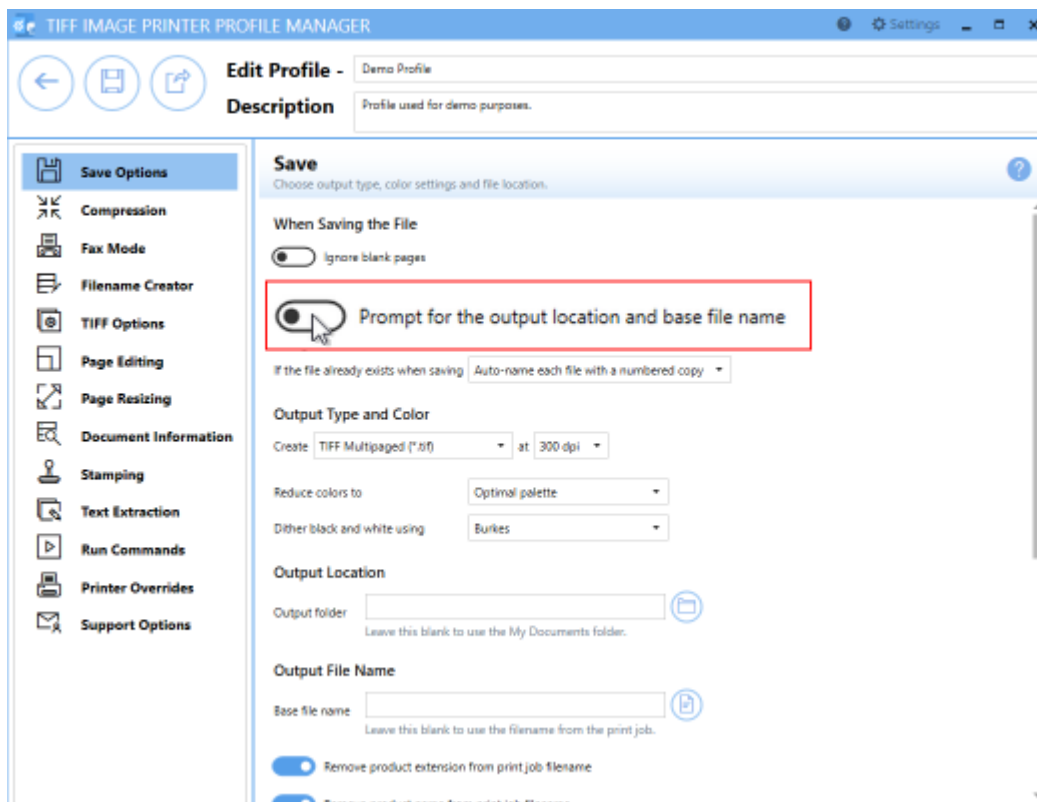
## Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.

3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Save Options** tab, disable **Prompt for the output location and base file name**.

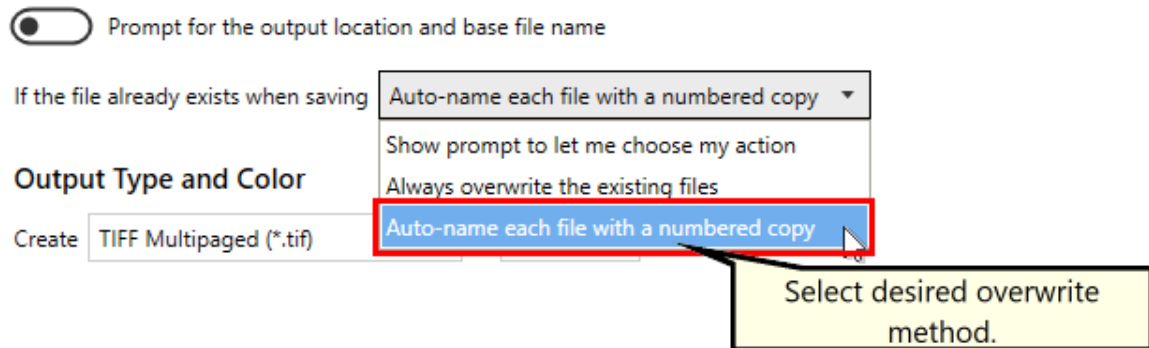


When you turn off prompting, it is important to consider how TIFF Image Printer will handle overwrite situations. There are three options for how TIFF Image Printer will handle overwrite situations:

- i. The default setting, **Auto-name each file with a numbered copy**, will add a copy number to the new file if the file name already exists in the output folder.
- ii. **Show prompt to let me choose my action**, will prompt if the file name already exists in the output folder allowing you to choose whether to overwrite, create a copy, append to existing file, or cancel print.

iii. **Always overwrite the existing file**, will replace the old file with the new file if the file name already exists in the output folder. No warning dialog will be shown.

6. Change the overwrite method if you wish or leave it as the default, **Auto-name each file with a numbered copy**.




7. On the **Filename Creator tab**, you can see the naming convention that will be used when auto-naming a numbered copy. By default, TIFF Image Printer adds "\_copy1" to the filename from the print job when creating a numbered copy. If desired, you can add or remove prefix/suffix text or increase/decrease the number of padding zeros.

*By turning off the prompting each time you print, that means you will no longer be able to set the output location and output file name during each print. You can [set the desired Output Location and Output File Name](#) in the profile.*


- i. To set the Output Location, select the file icon to browse to your desired location. If you leave this field blank, TIFF Image Printer will default to the last used folder when prompting is enabled and the printer is using the [last used folder option](#). If there is no last used folder, or prompting is disabled, the My Documents folder is used.
- ii. To set the Output File Name, enter your desired base file name. If you leave this field blank, TIFF Image Printer will use the filename from the print job.

**Output Location**

Output folder   Browse for folder.

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

**Output File Name**

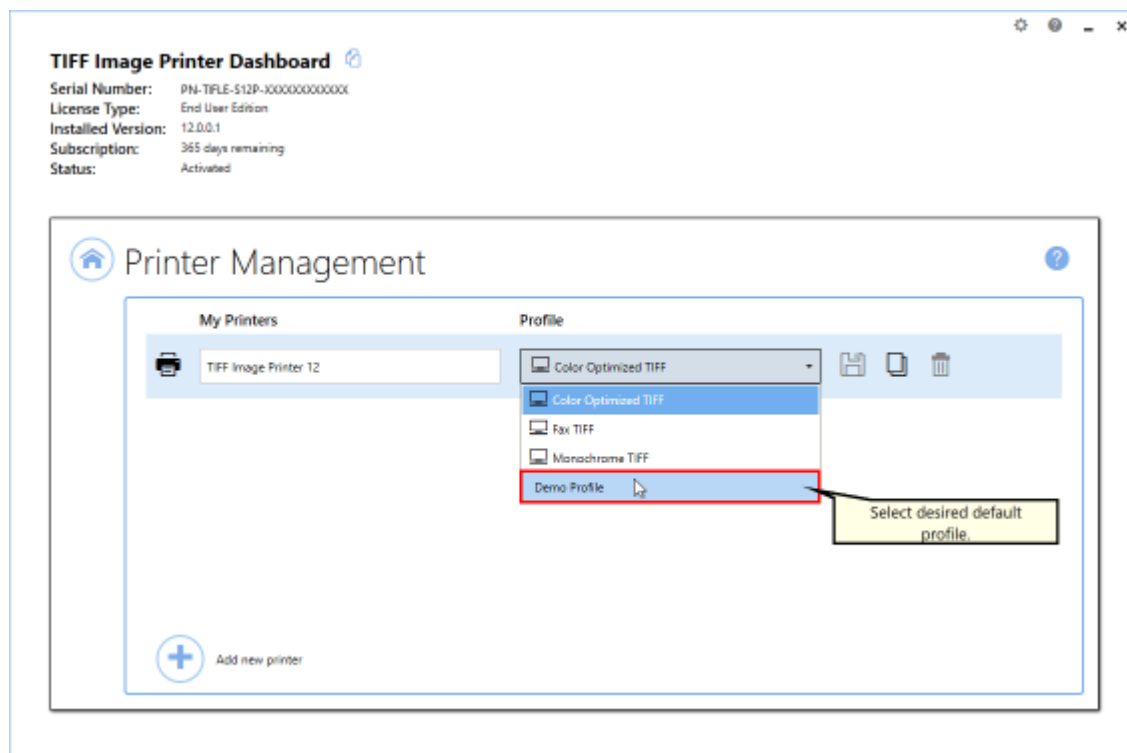
Base file name  

Leave this blank to use the filename from the print job.

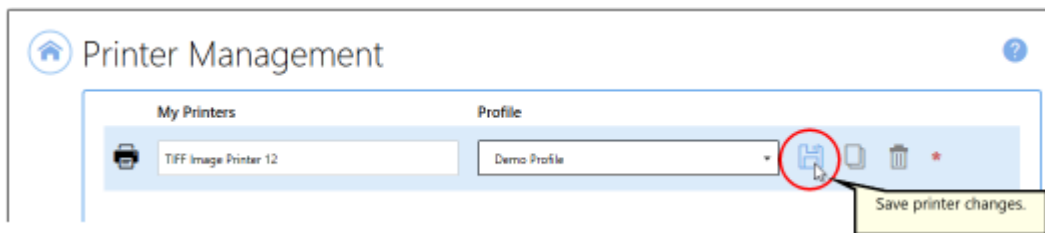
8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

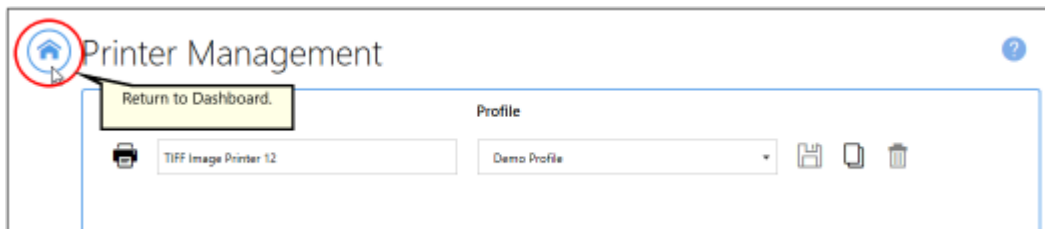
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will not be prompted by the Save As dialog.

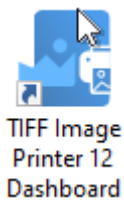
## Change Output Type

TIFF Image Printer can create two output types: TIFF Multipaged (\*.tif) and TIFF Serialized (\*.tif).

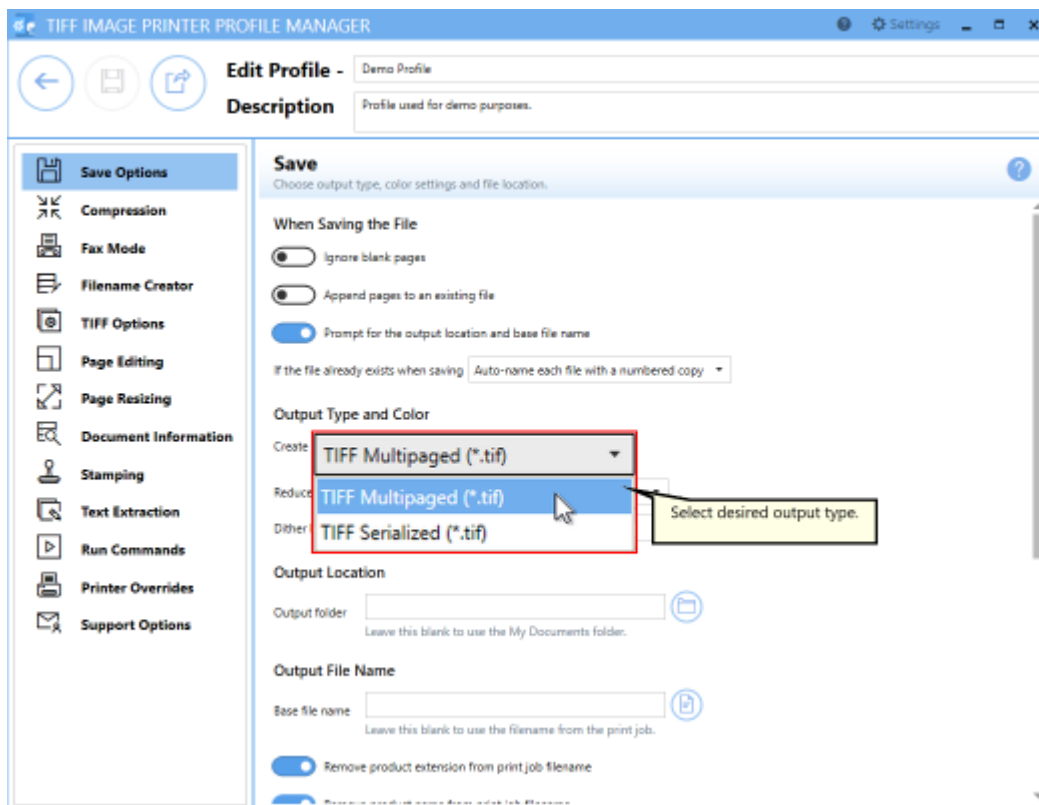
The [output type](#) is controlled through the profile.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



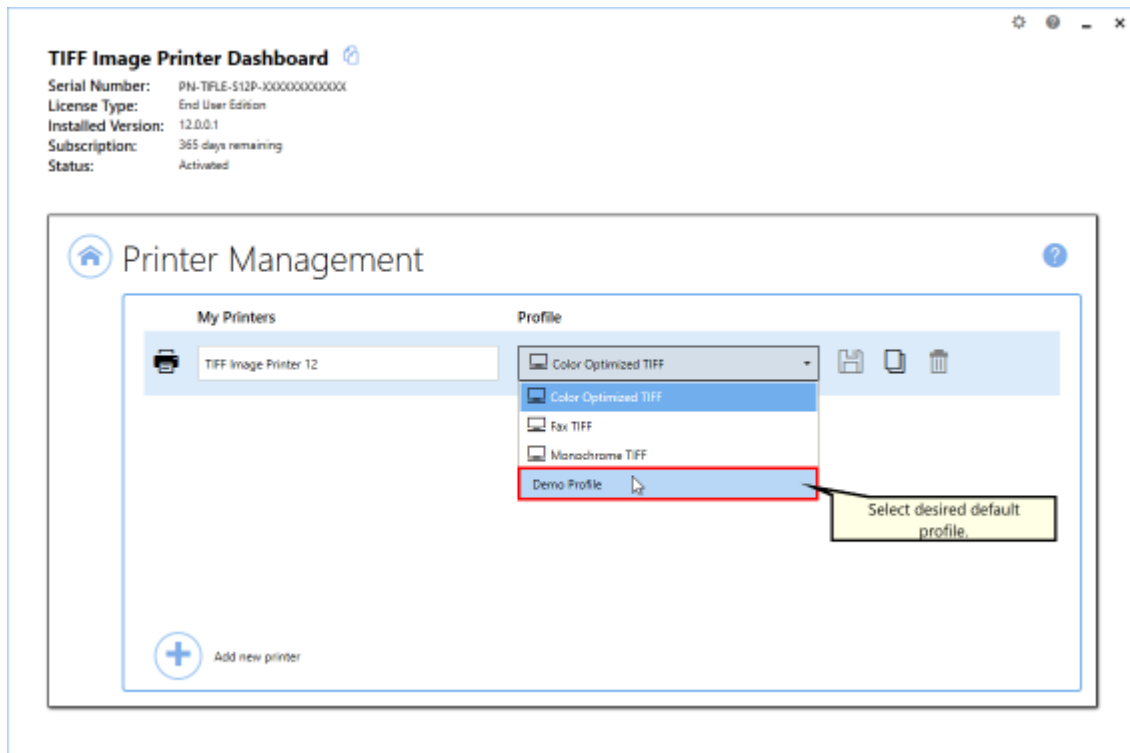
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Save Options tab**, under **Output Type and Color**, drop the box to select your desired output type.



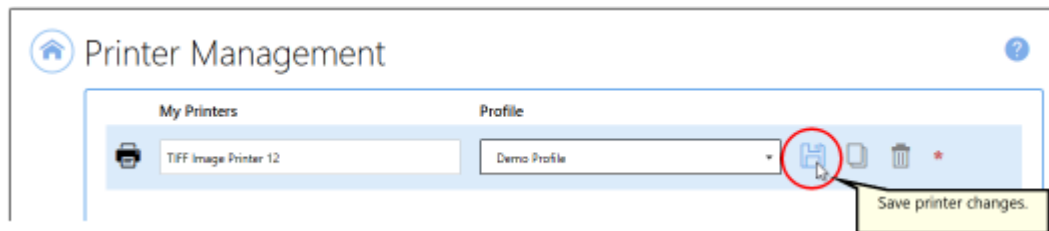
6. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

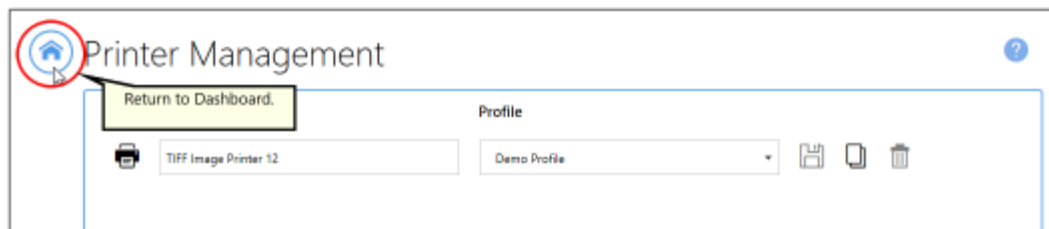
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



7. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will create your chosen output type.



## Create a Serialized Sequence of Files

In certain instances, such as a database report of invoices where each invoice is on a separate page, you may want to create a single file for each page of your document. This is called a serialized sequence, and can be created from a single input document, or combined with the append feature, created from a series of documents. Each file is named uniquely based on its page number, or its place on the sequence if you are appending sequences together.

For example, a three page report from an invoice database, created as TIFF images, would create the following three files:

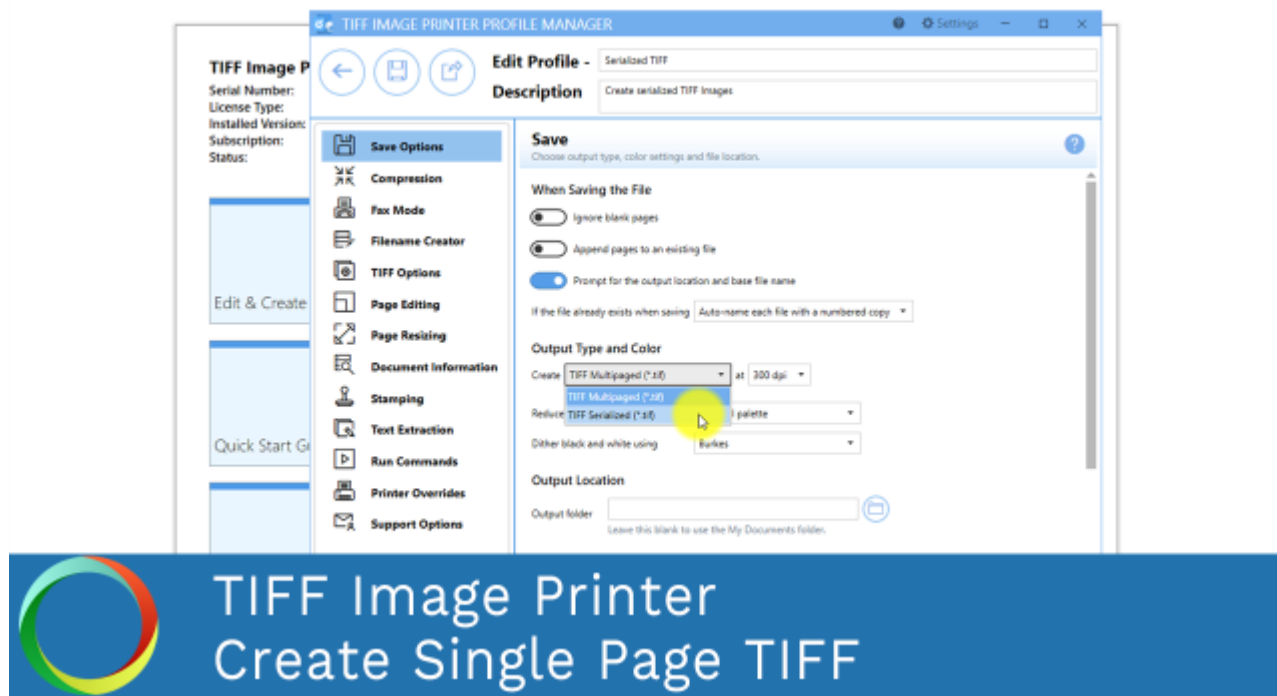
- Invoice\_001.tif
- Invoice\_002.tif
- Invoice\_003.tif

Printing another database report of 4 pages and appending it to the same sequence would add the following four files:

- Invoice\_004.tif
- Invoice\_005.tif
- Invoice\_006.tif
- Invoice\_007.tif

TIFF Image Printer comes with a system profile to create a serialized sequence of TIFF images. Use the system profile, [Serialized Color Optimized TIFF](#) to create a sequence of single-paged TIFF images at 300 dpi with colors reduced to optimal palette.

The [serialized and append options](#) are controlled through the profile.



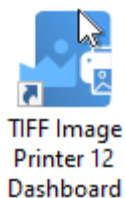
*Click the image above to watch the video tutorial.*

## Creating Serialized Files From a Single File

The following steps show how to create a series of TIFF images, one page per file, from a multipaged document.

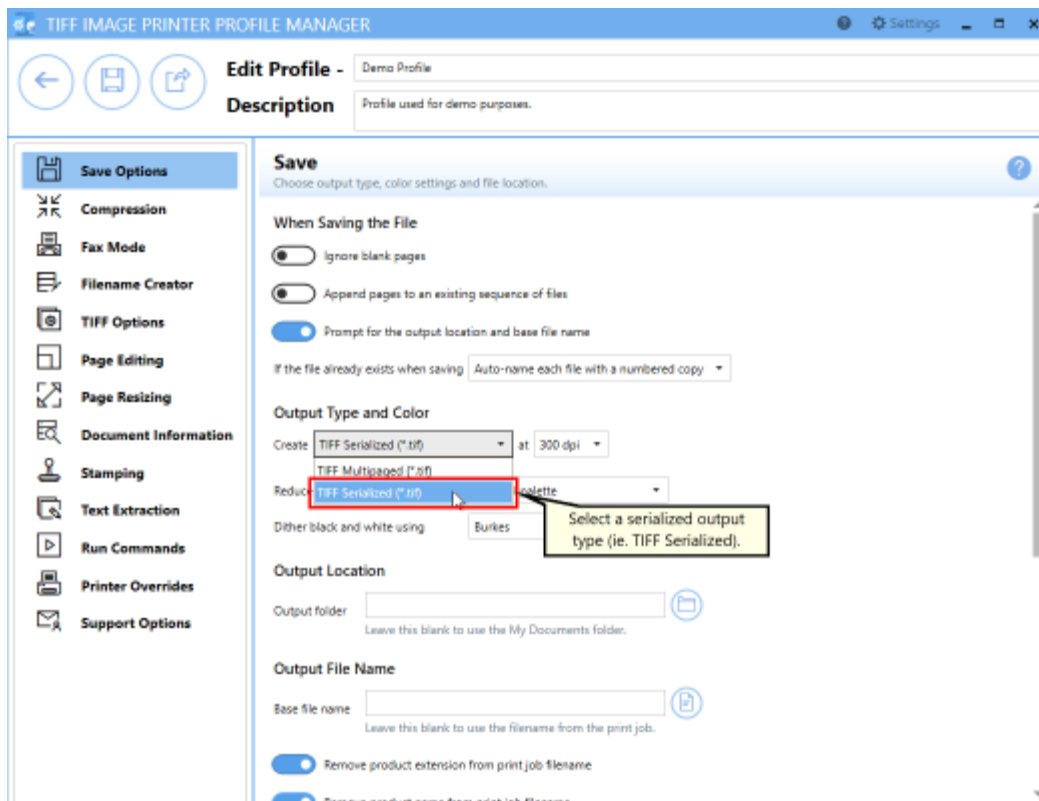
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.


5. On the **Save Options** tab, under **Output Type and Color**, drop the box to select TIFF Serialized



When creating a serialized sequence of files, you may be interested in setting the Output Location and Output File Name within the profile.


- i. To set the Output Location, select the file icon to browse to your desired location. If you leave this field blank, TIFF Image Printer will default to the last used folder when prompting is enabled and the printer is using the [last used folder option](#). If there is no last used folder, or prompting is disabled, the My Documents folder is used.
- ii. To set the Output File Name, enter your desired base file name. If you leave this field blank, TIFF Image Printer will use the filename from the print job.

**Output Location**

Output folder  

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

**Output File Name**

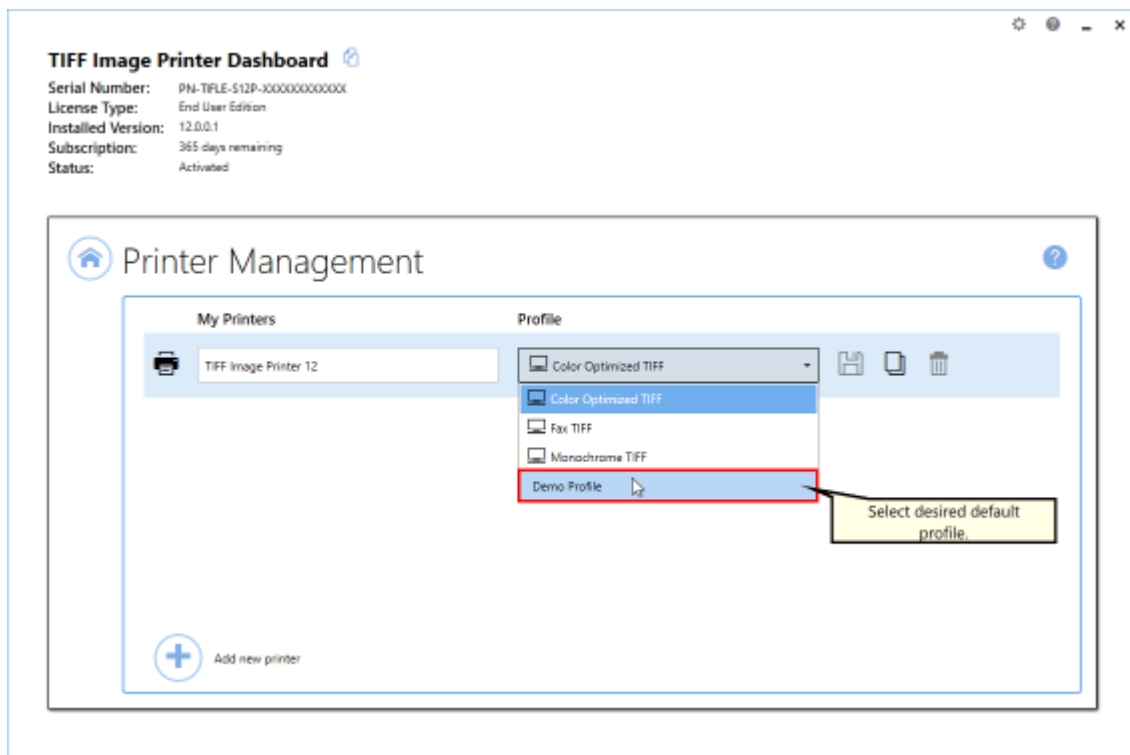
Base file name  

Leave this blank to use the filename from the print job.

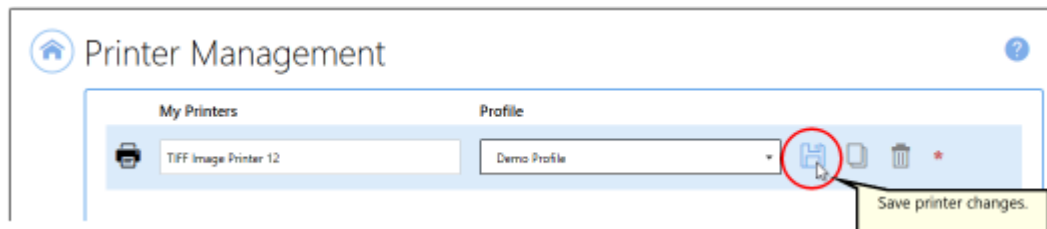
6. On the **Filename Creator tab**, you can see the naming convention that will be used when naming each file in your created sequence. By default, TIFF Image Printer adds "\_001" to the filename from the print job when creating serialized output. If desired, you can add or remove prefix/suffix text or increase/decrease the number of padding zeros.
7. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

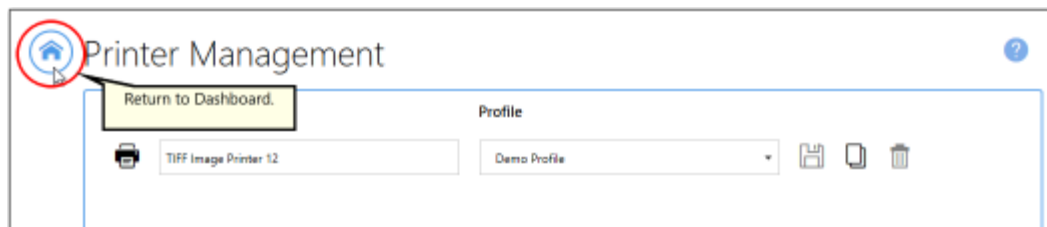
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



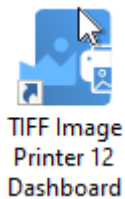
8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will create a single file for each page of your document.

## Adding to an Existing Sequence of Files

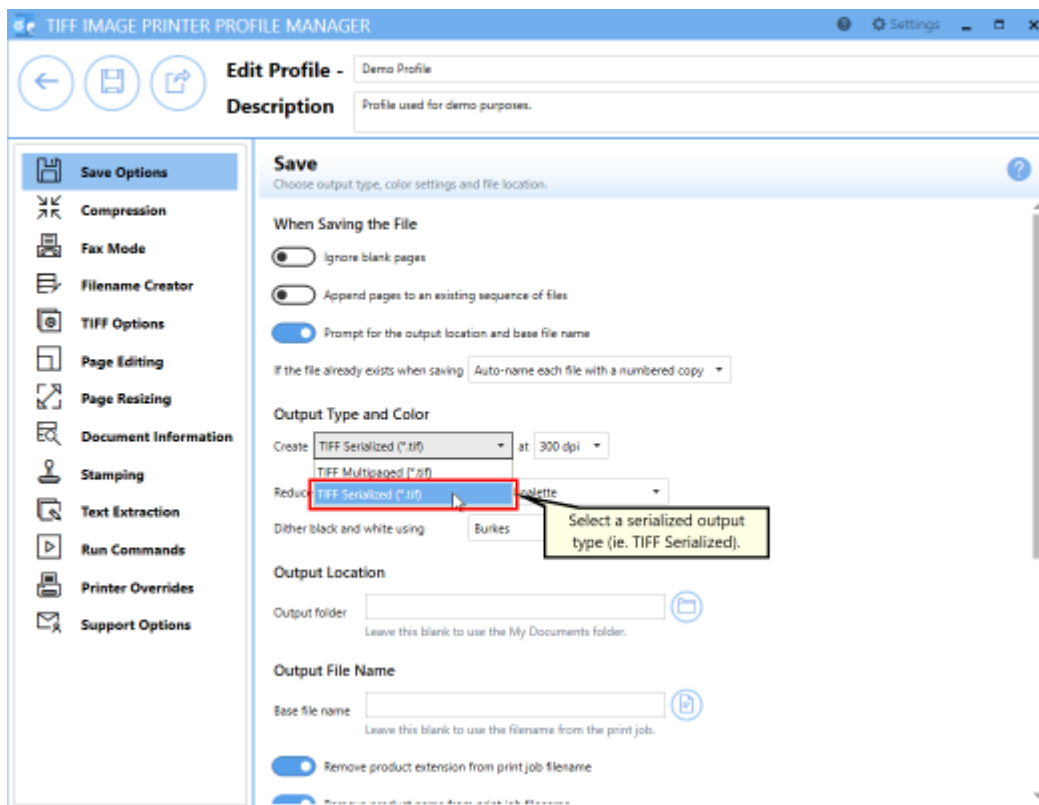
The following steps show you can add files to an existing sequence of files by simply carrying out the additional step of enabling appending in the profile.

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Save Options tab**, under **Output Type and Color**, drop the box to select TIFF Serialized



## 6. Enable **Append pages to an existing file**.

### When Saving the File

☐ Ignore blank pages

☒ Append pages to an existing file

☒ Prompt for the output location and base file name

If the file already exists when saving

### Output Type and Color


Create  at

*When adding to an existing sequence of files, you may be interested in setting the Output Location and Output File Name within the profile. The*

Output Location and Output File Name need to match that of the original sequence.


- i. To set the Output Location, select the file icon to browse to your desired location. If you leave this field blank, TIFF Image Printer will default to the last used folder when prompting is enabled and the printer is using the [last used folder option](#). If there is no last used folder, or prompting is disabled, the My Documents folder is used.
- ii. To set the Output File Name, enter your desired base file name. If you leave this field blank, TIFF Image Printer will use the filename from the print job.

**Output Location**

Output folder  

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

**Output File Name**

Base file name  

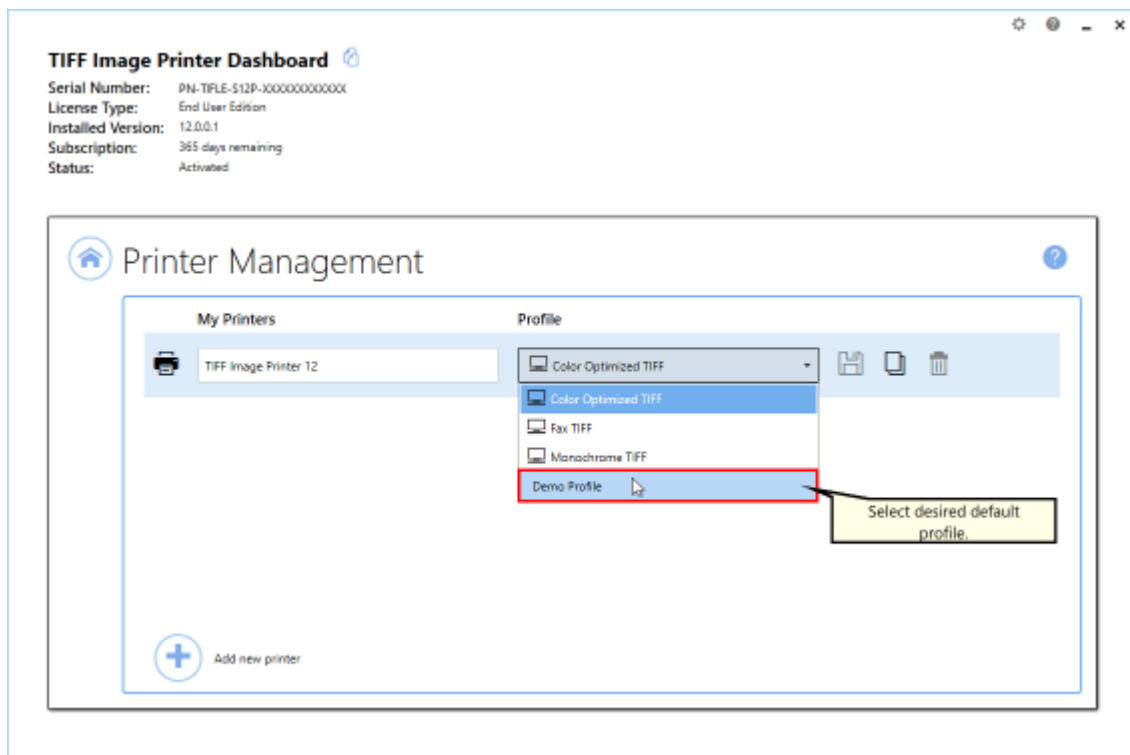
Leave this blank to use the filename from the print job.

7. On the **Filename Creator tab**, you can see the naming convention that will be used when naming each file in your sequence. By default, TIFF Image Printer adds "\_001" to the filename from the print job when creating serialized output or when adding to an existing sequence. If desired, you can add or remove prefix/suffix text or increase/decrease the number of padding zeros.
8. Click **Save-Back**, and close **Profile Manager**.

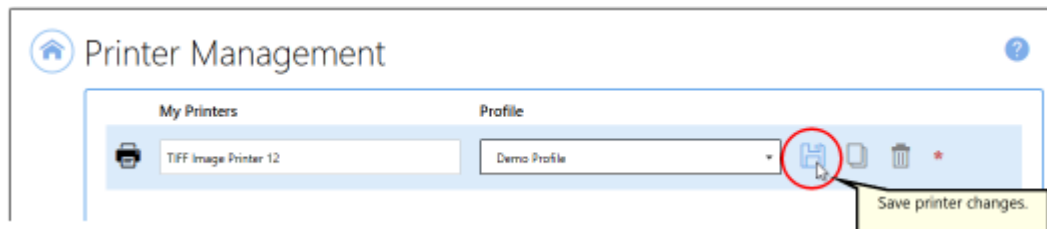
*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.

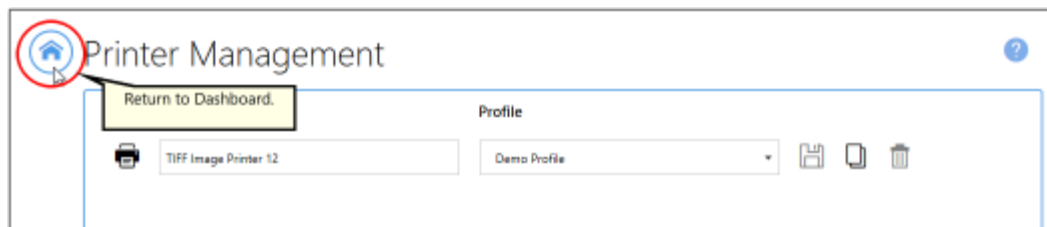




iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.

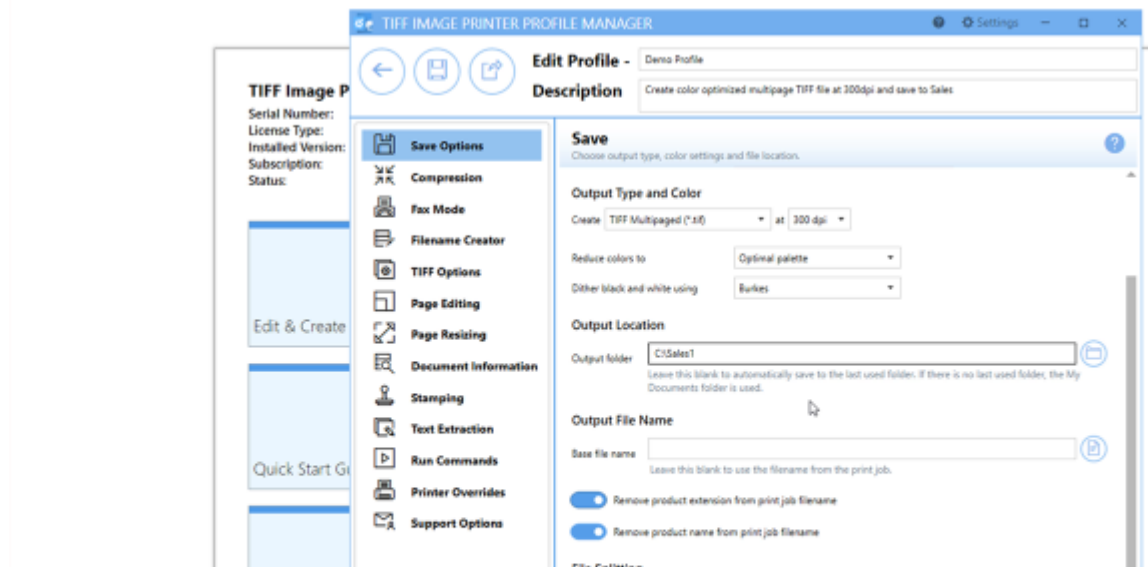


9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will create a single file for each page of your document, which will be added to an existing sequence.

### Change Where Files are Saved

TIFF Image Printer will save all output files to the My Documents folder by default. You can either change this to any desired folder on your desktop.

All [file output options](#) are controlled through the profile.

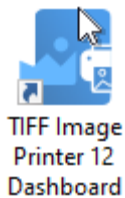


## TIFF Image Printer Change Where Files Are Saved

*Click the image above to watch the video tutorial.*

### Step by Step Instructions

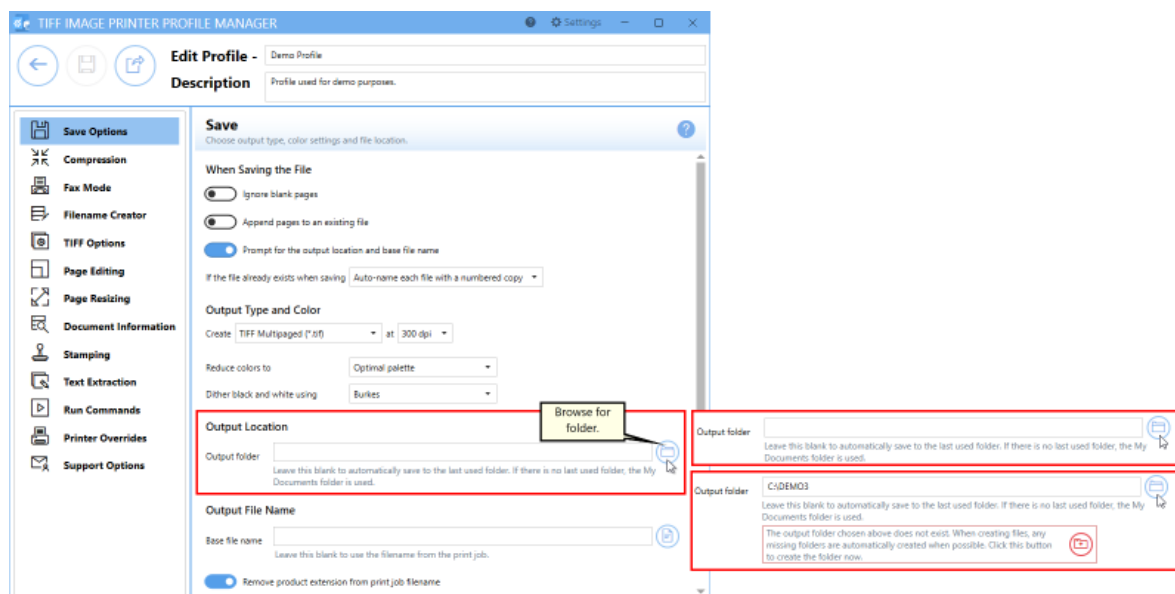
1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.


4. Name the profile, add a description, and click Save.
5. On the **Save Options** tab, under **Output Location**, select the file icon to browse to your desired location. When prompting is enabled, and this field blank, TIFF Image Printer will default to the last used folder, if this is set in the [printer options](#). If there is no last used folder, the My Documents folder is used. When prompting is disabled, the My Documents folder is always used.

You can also type directly into the Output folder field. If the folder location you enter does not exist, you will see a warning message explaining that this folder location does not exist and that when a new file is created TIFF Image Printer will automatically try to create the missing folder if possible. Alternatively, you can click the red folder icon to create the new folder now.



6. If you are setting the output location, you may be interested in setting the output file name. To set the output file name, enter your desired base file name. If you leave this field blank, TIFF Image Printer will use the filename from the print job.

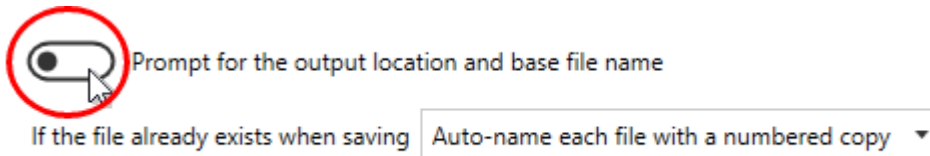
### Output File Name

Base file name  

Leave this blank to use the filename from the print job.

If you choose to set the Output Location and/or Output File Name, you may also want to [disable prompting by the Save As dialog](#) each time you print.

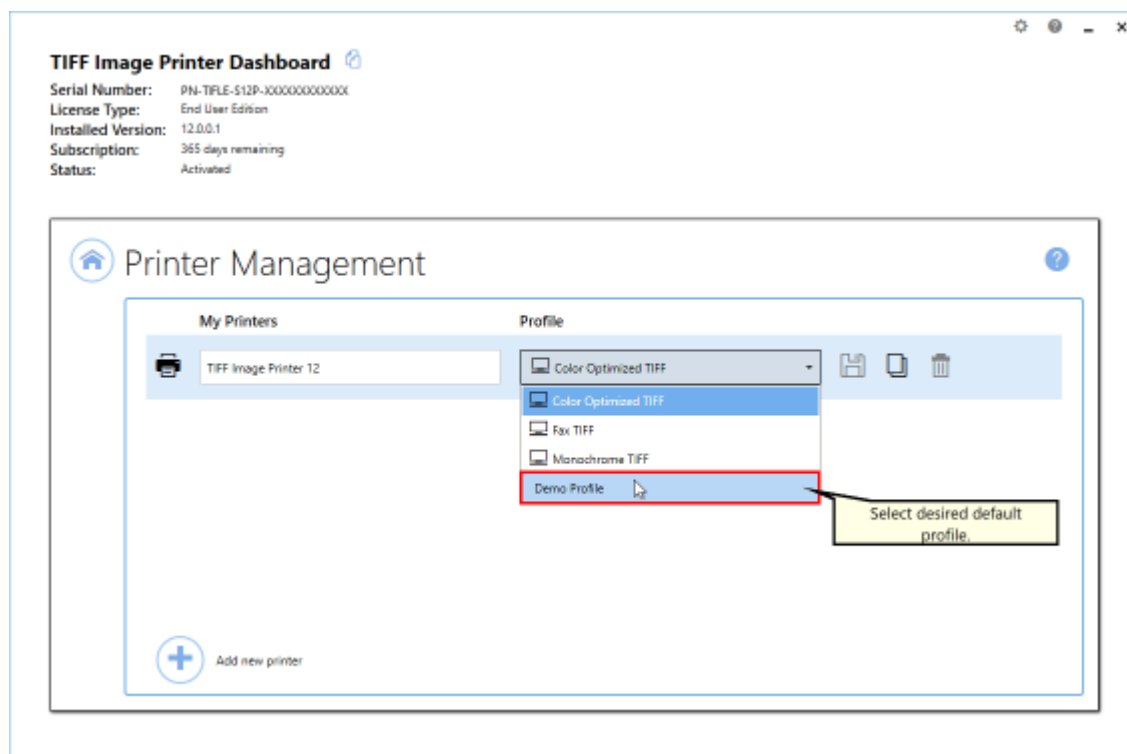
- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.



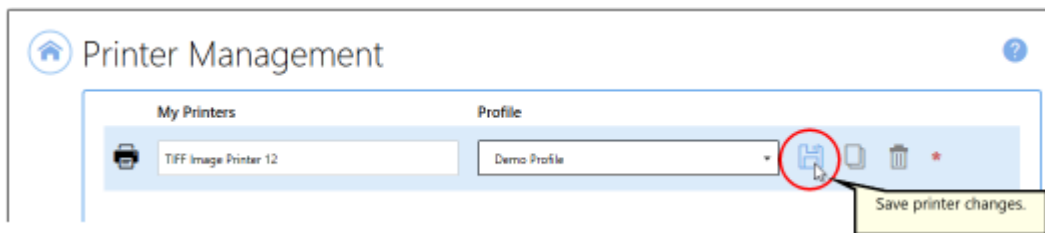
7. Click **Save-Back**, and close **Profile Manager**.

If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

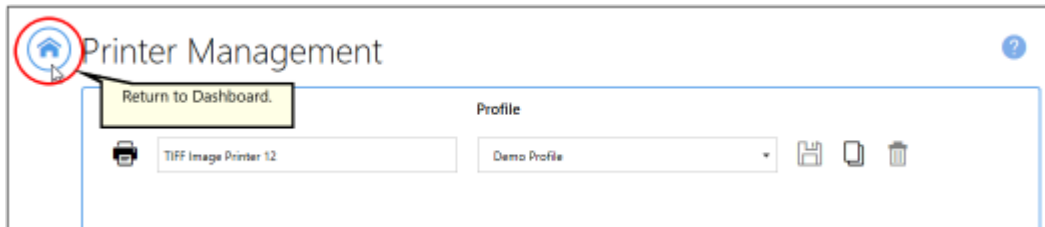
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output file will be saved to your desired output location.

### Automatically Split Files

When creating multipaged output the files created can be automatically split into a sequence of smaller files using one or both of the following criteria:

- split the file as soon as it exceeds a size threshold
- split the file based on a page count

If both file splitting options are enabled, the file will be split at the first condition that is met. File splitting only applies to the following multipaged file formats:

- TIFF Multipaged (\*.tif)

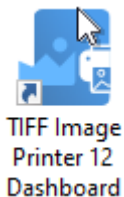
When file splitting is enabled the serialized naming profile is always used to name each file in the sequence. For example, printing a 15 page report from an invoice database to a multipaged TIFF image and setting the file splitting page count to 5 pages will result in 3 output files, each with 5 pages, named as follows:

- Invoice\_part001.tif
- Invoice\_part002.tif
- Invoice\_part003.tif

[Automatic file splitting](#) is controlled through the profile.

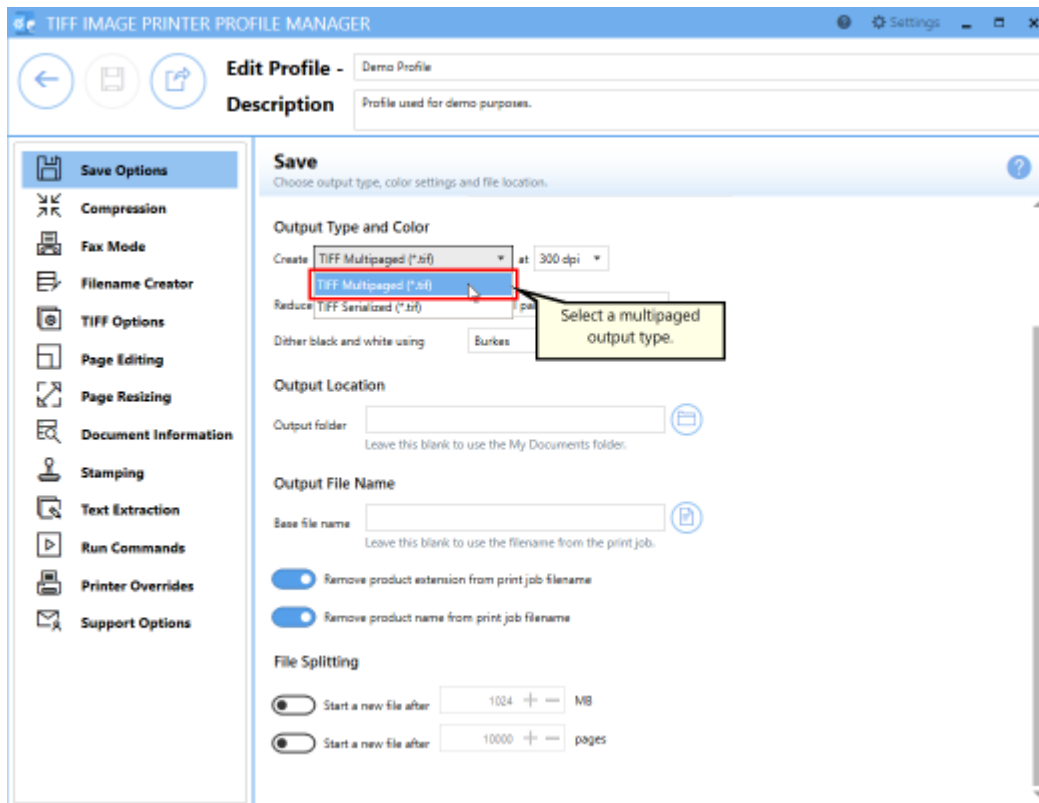
### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.

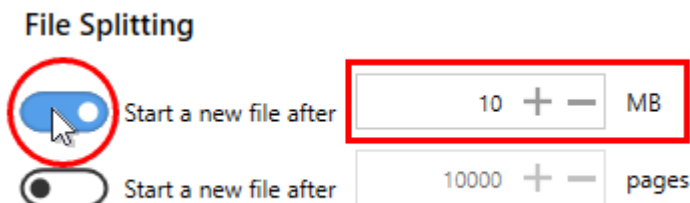


2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.

4. Name the profile, add a description, and click Save.
5. On the **Save Options** tab, under **Output Type and Color**, drop the box to select TIFF Multipaged

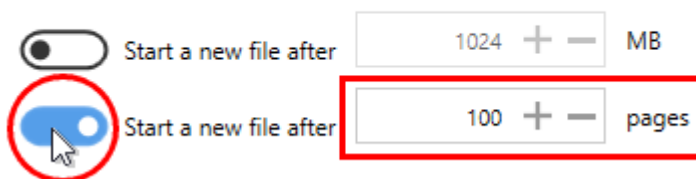


6. Under **File Splitting**,
  - a. to split the file based on a size threshold, enable the first criteria and set "Start a new file after" to your desired size value (ex. 10MB).



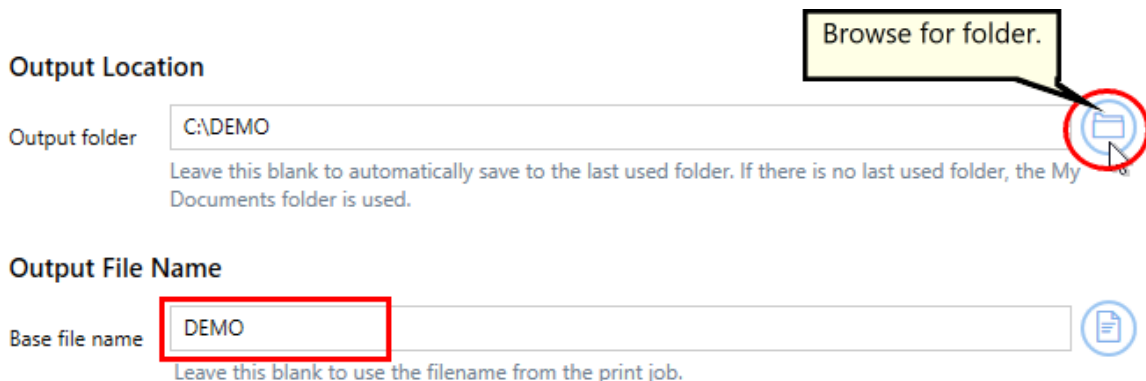
- b. to split the file based on a page count, enable the second criteria and set "Start a new file after" to your desired page count (ex. 100 pages).

## File Splitting



When splitting files into a sequence of smaller files, you may be interested in setting the Output Location and Output File Name within the profile.

- i. To set the Output Location, select the file icon to browse to your desired location. If you leave this field blank, TIFF Image Printer will default to the last used folder when prompting is enabled and the printer is using the [last used folder option](#). If there is no last used folder, or prompting is disabled, the My Documents folder is used.
- ii. To set the Output File Name, enter your desired base file name. If you leave this field blank, TIFF Image Printer will use the filename from the print job.

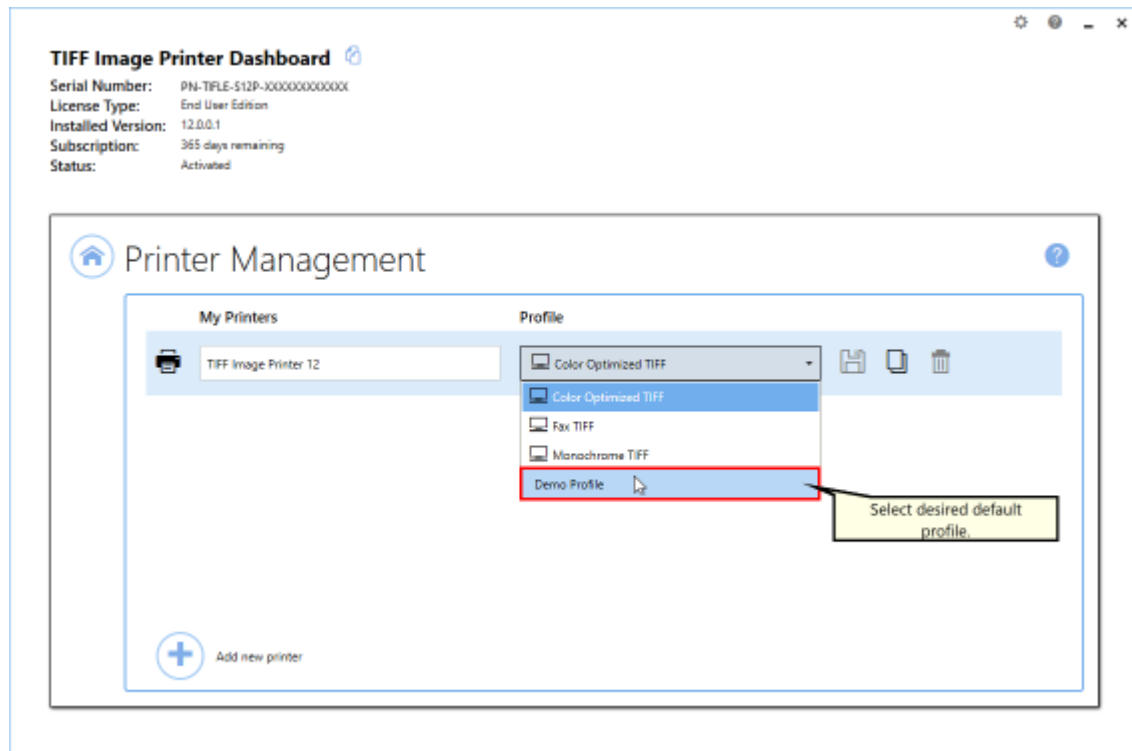


7. On the **Filename Creator tab**, you can see the naming convention that will be used when naming each file in your created sequence of smaller files. By default, TIFF Image Printer adds "\_part0001" to the filename from the print job when creating a sequence. If desired, you can add or remove prefix/suffix text or increase/decrease the number of padding zeros.
8. Click **Save-Back**, and close **Profile Manager**.

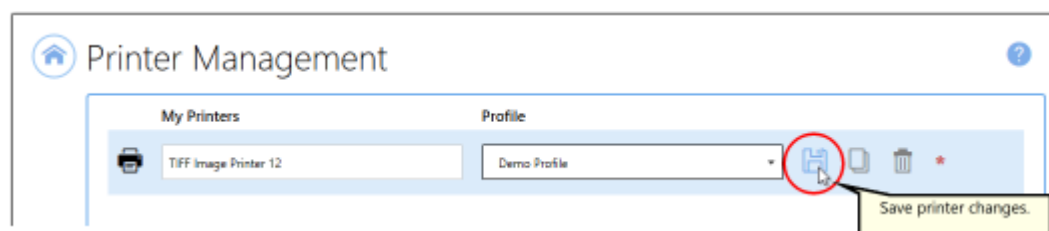
If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.



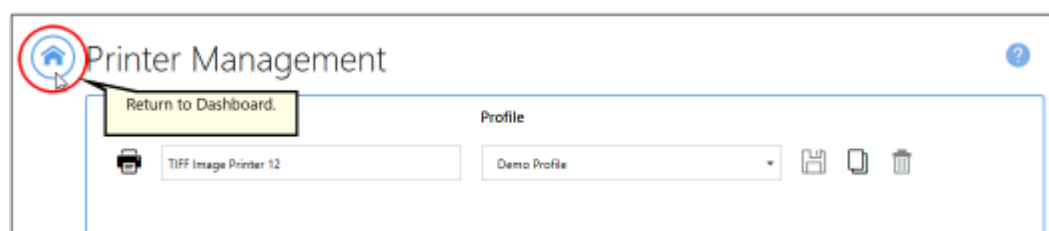
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.

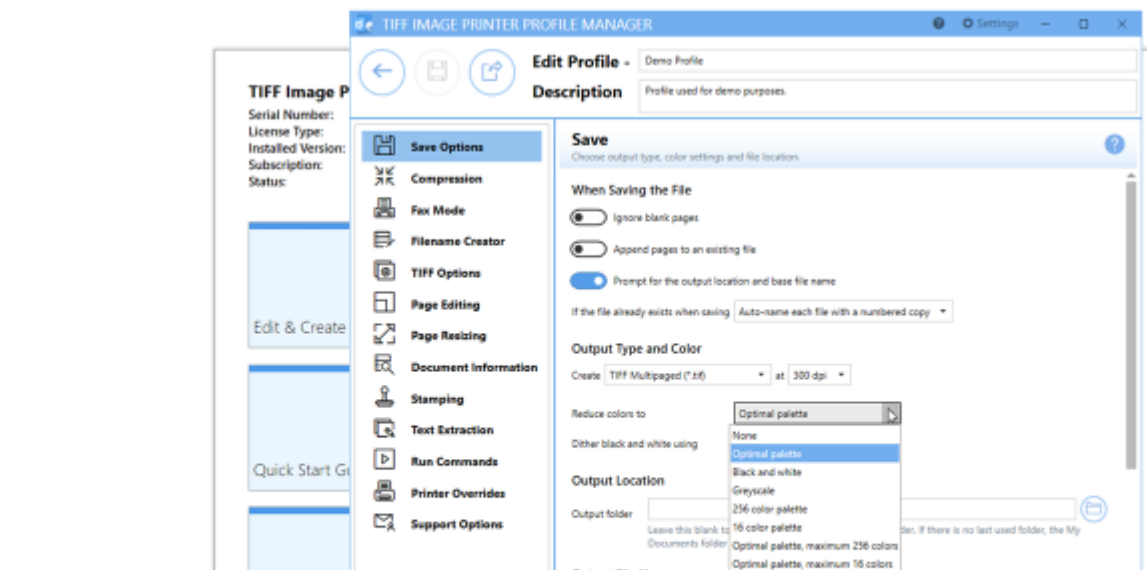


9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output will be automatically split into a sequence of smaller files using your desired criteria.

## Reduce TIFF File Size

The file size of your output TIFF images can be reduced by adjusting the **color reduction** and **compression options**. [Color reduction](#) and [Compression](#) are controlled through the profile. The default color reduction and compression options selected for the system profiles provided with TIFF Image Printer will often give a good balance between file size and quality.

Reducing the file size of your TIFF images is largely dependent upon the input documents you are converting. An issue you may encounter is balancing file size with image quality. If you require assistance reducing your file size, please contact PEERNET support.



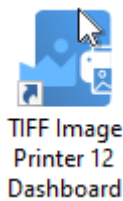
## TIFF Image Printer Ways to Reduce TIFF File Size

*Click the image above to watch the video tutorial.*

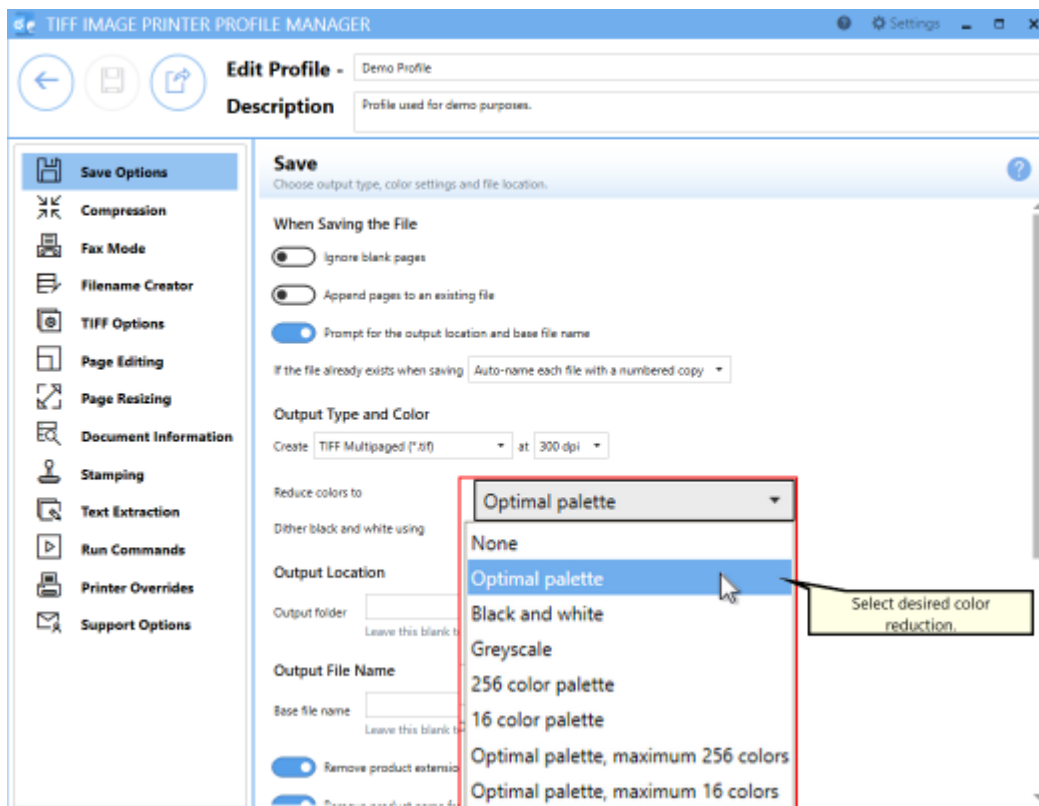
## Color Reduction

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Save Options** tab, under **Output Type and Color**, drop the box next to "Reduce colors to" and select your desired color reduction.



Color Reduction refers to the number of colors that are saved in the output TIFF image. The default setting is **reduce colors to optimal palette** which means that TIFF Image Printer will reduce each page down to the smallest number of colors required to represent that

page. Therefore all colors present in the original file will be maintained in the output TIFF image.

*Other color reduction options include:*

- *Reduce to black and white*
- *Reduce to greyscale*
- *Reduce colors to 256 color palette*
- *Reduce colors to 16 color palette*
- *Reduce colors to Optimal color, maximum 256 colors*
- *Reduce colors to Optimal color, maximum 16 colors*
- *None*

All of these other options will limit the number of colors saved in the output TIFF image to different degrees.

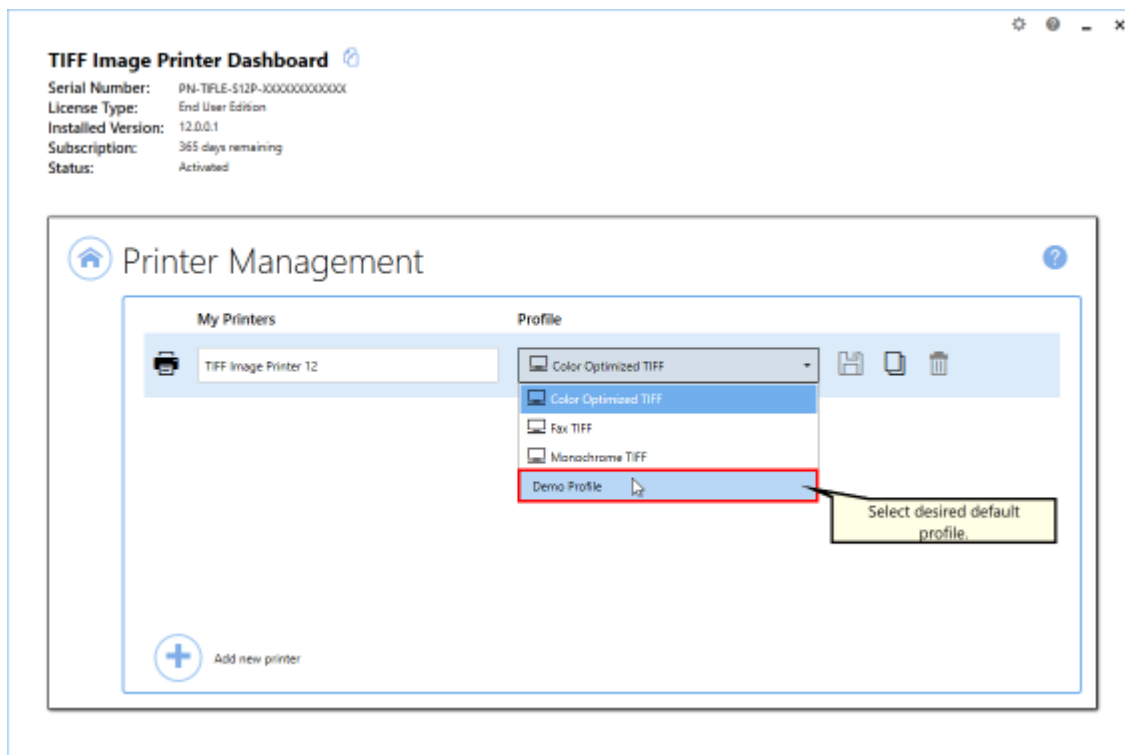
***Reduce to black and white*** may work to reduce the file size of a text only document, but keep in mind that this color reduction option will only keep two colors - black and white - in the output TIFF image, which may interrupt anti-aliasing technique used to smooth the appearance of letters.

***Reduce to greyscale*** will effectively reduce the file size of a document with colored images by converting the colored images to greyscale images. We would not recommend using reduce to black and white when converting documents with images. If you must use *reduce to black and white*, we do offer a few dithering methods that you can experiment with.

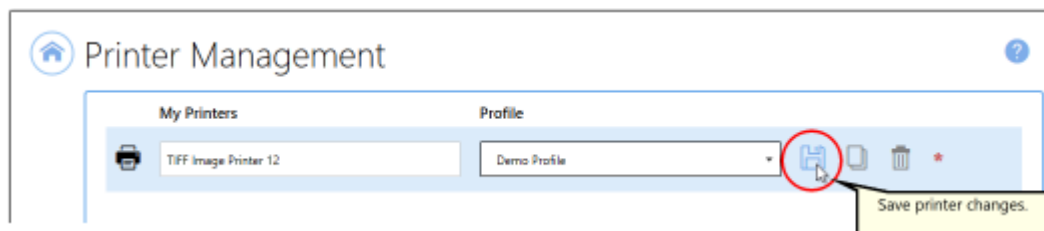
6. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

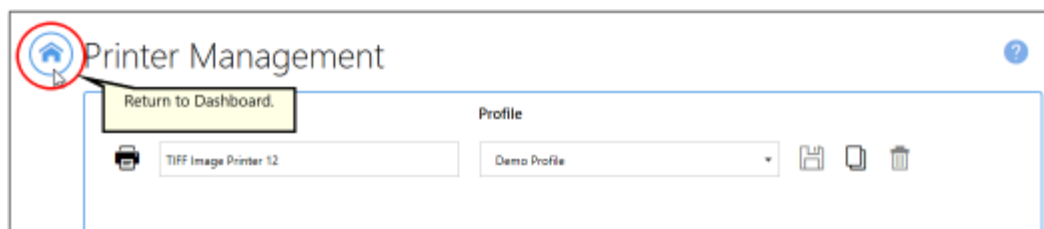
- Select "Manage Printers" to open **Printer Management**.
- Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.

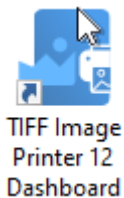


7. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the color reduction option you selected will be applied to the output TIFF image.

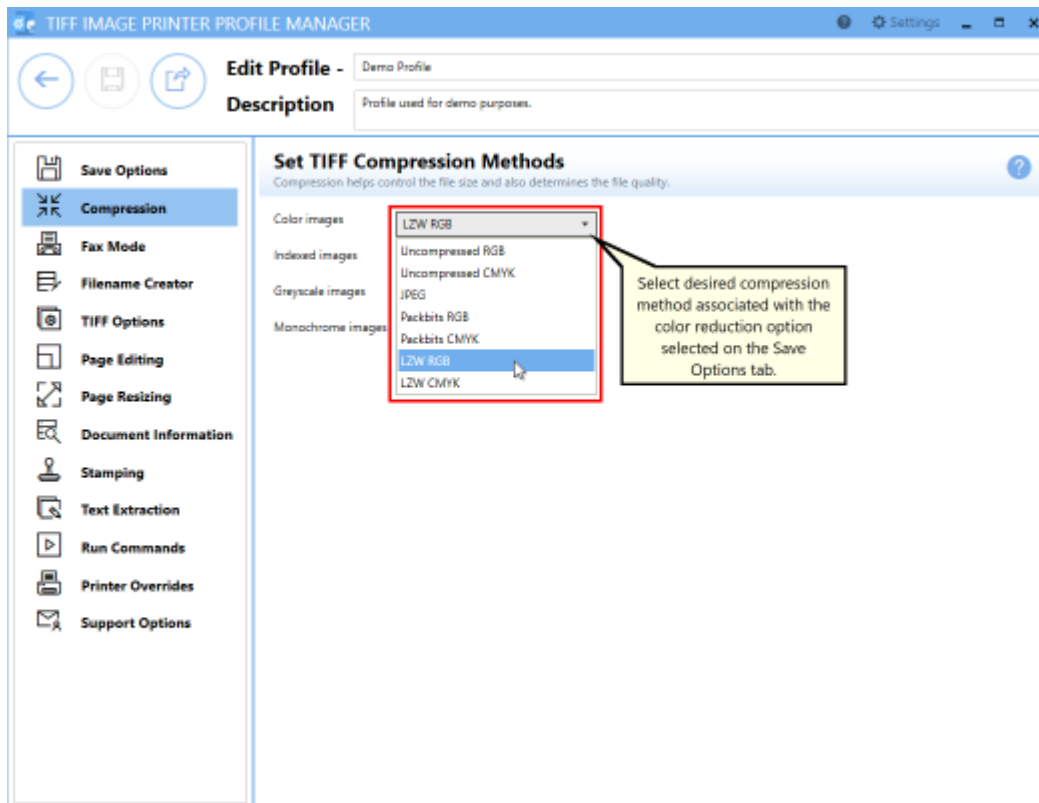
## Compression

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Compression tab**, you can change the compression method used based on the color reduction option selected on the Save Options tab. Be sure that you are changing the correct compression field in relation to the color reduction option selected. If you are using the default color reduction option, *reduce colors to optimal palette*, then you should be working with the *Color images* compression field. Typically you will only need to change the compression method if you have been instructed to do so by a publisher or archiving software. For example, CCITT Group 4 Fax compression for monochrome images is a standard compression required by archiving systems.

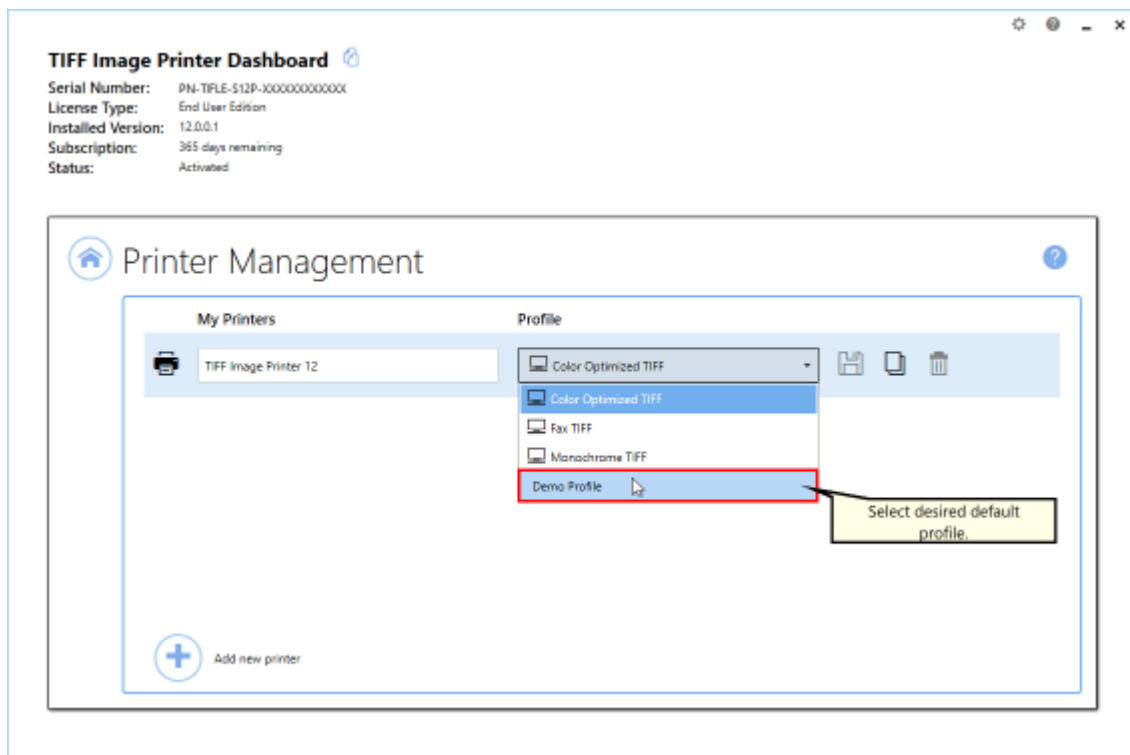


6. Click **Save-Back**, and close **Profile Manager**.

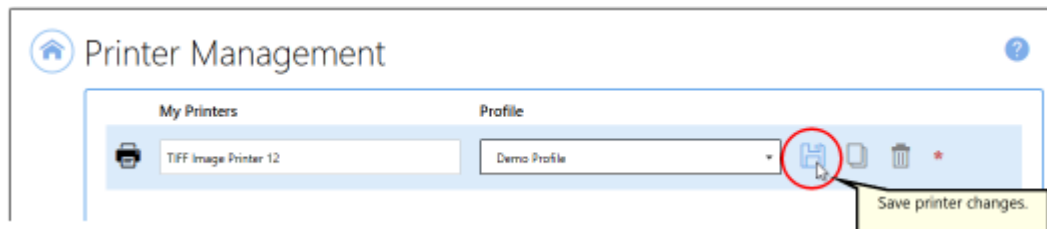
*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.

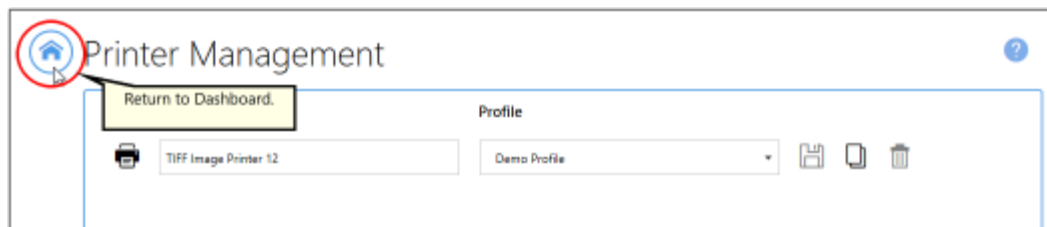




iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



7. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the compression option you selected will be applied to the output TIFF image.

## Create Fax Format Files

TIFF Image Printer can create images that can be used by fax software or a hardware fax board on your computer.

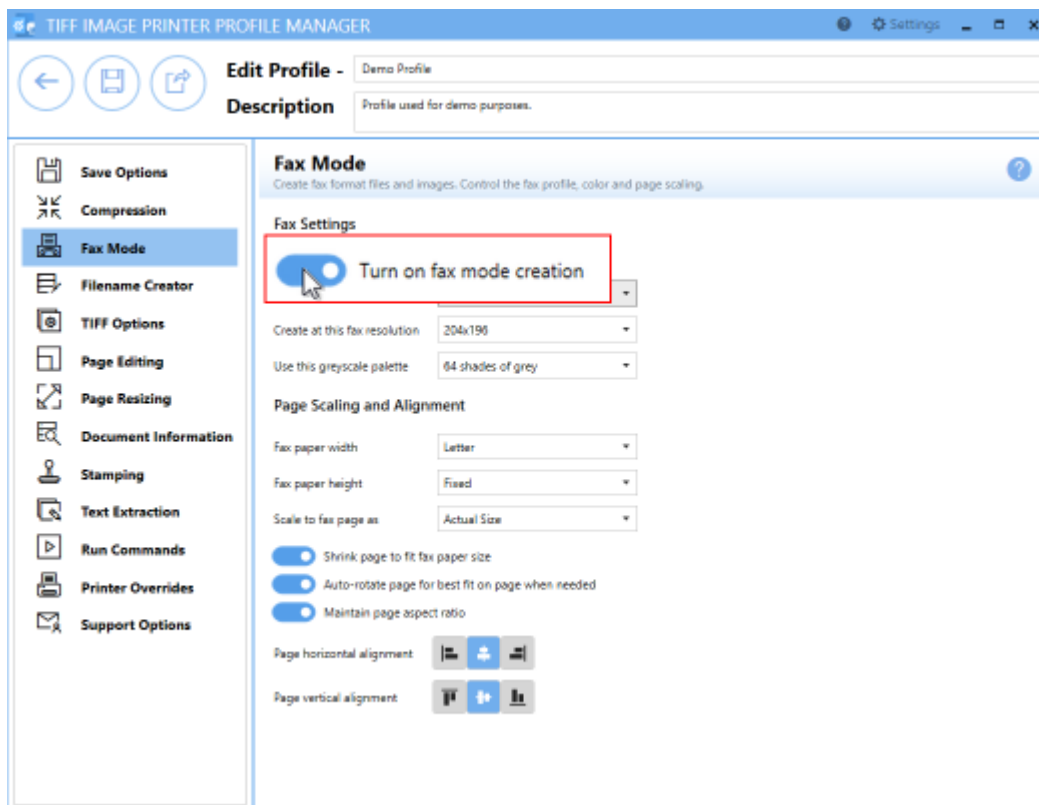
All [fax related settings](#) including fax profile, fax resolutions, and fax paper size are controlled through the profile.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Fax Mode**, enable **Turn on fax mode creation**.



6. Beside **Use this fax profile**, use the drop boxes to set your desired fax profile.

- Profile F will create standard monochrome faxes.
- Profile S will create simplified monochrome faxes.
- Profile C will create color faxes.

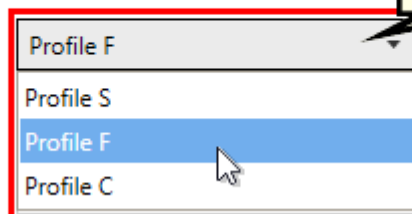
#### Fax Settings

☒ Turn on fax mode creation

Use this fax profile

Create at this fax resolution

Use this greyscale palette



Select desired fax profile.

7. Beside **Create at this fax resolution**, use the drop boxes to set your desired fax resolution.

- If you are creating a monochrome fax, common fax resolutions are 200x200, 204x196 and 204x98.
- If you are creating a color fax, a common fax resolution is 200x200.

### Fax Settings

☒ Turn on fax mode creation

Use this fax profile: Profile F

Create at this fax resolution: 204x196

Use this greyscale palette:

Page Scaling and Alignment

Fax paper width: 204x196

Fax paper height: 204x391

Scale to fax page as:

☒ Shrink page to fit fax

☒ Auto-rotate page for

☒ Maintain page aspect

Page horizontal alignment:

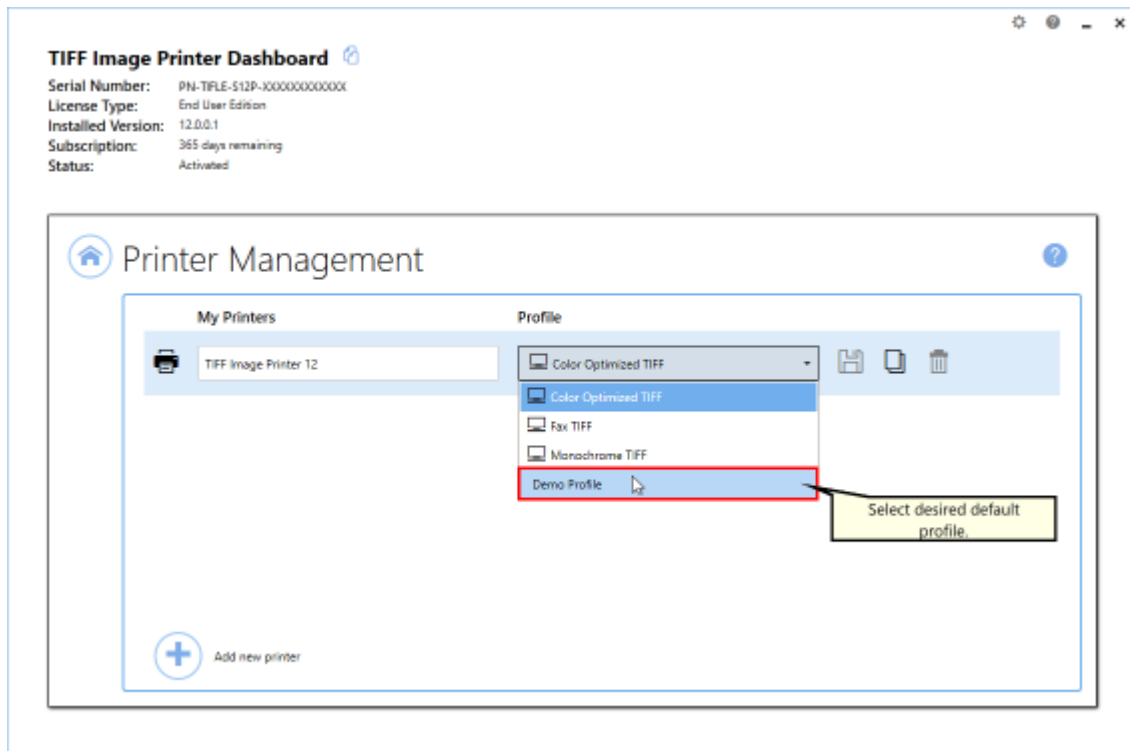
Page vertical alignment:

Select desired fax resolution.

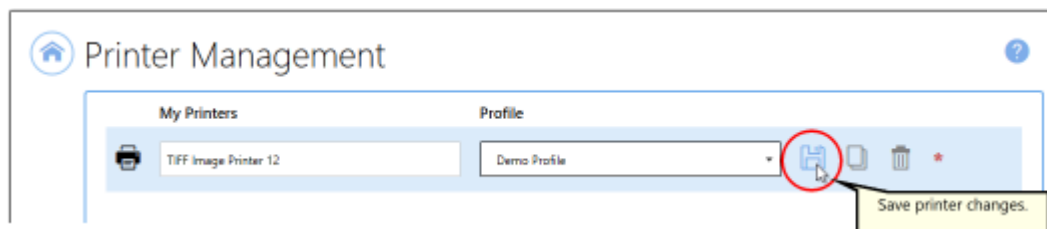
8. Adjust any other fax related settings. See the [Fax Mode tab](#) in the Profile Manager section for more details.
9. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

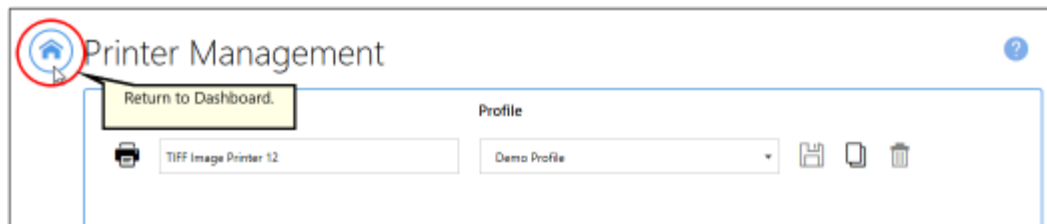
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



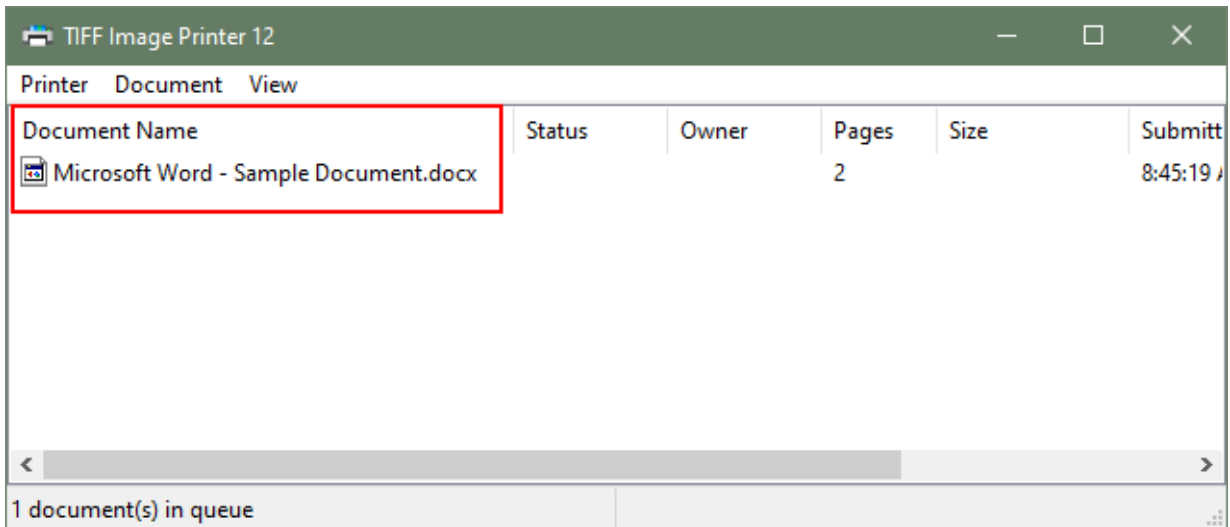
- iv. Select the **Home icon** to return to the **Dashboard**.



10. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will create an output file that is restricted to fax paper size and fax resolutions.

## Create a Custom Filename

By default, TIFF Image Printer will save all output files to the My Documents folder and name them using the filename from the print job. This print job document name, or filename, is created by the printing application.



You can change both the [default output location and output file name](#) through the profile manager on the **Save Options tab**.

The **Save Options tab** also has options for automatically removing any product name information and file format extensions that are commonly submitted as part of print job file names. For finer control of the print job file name, the [job replacement strings](#) can be used to remove or replace text in the print job file name, and leave only the desired part of the print job file name.

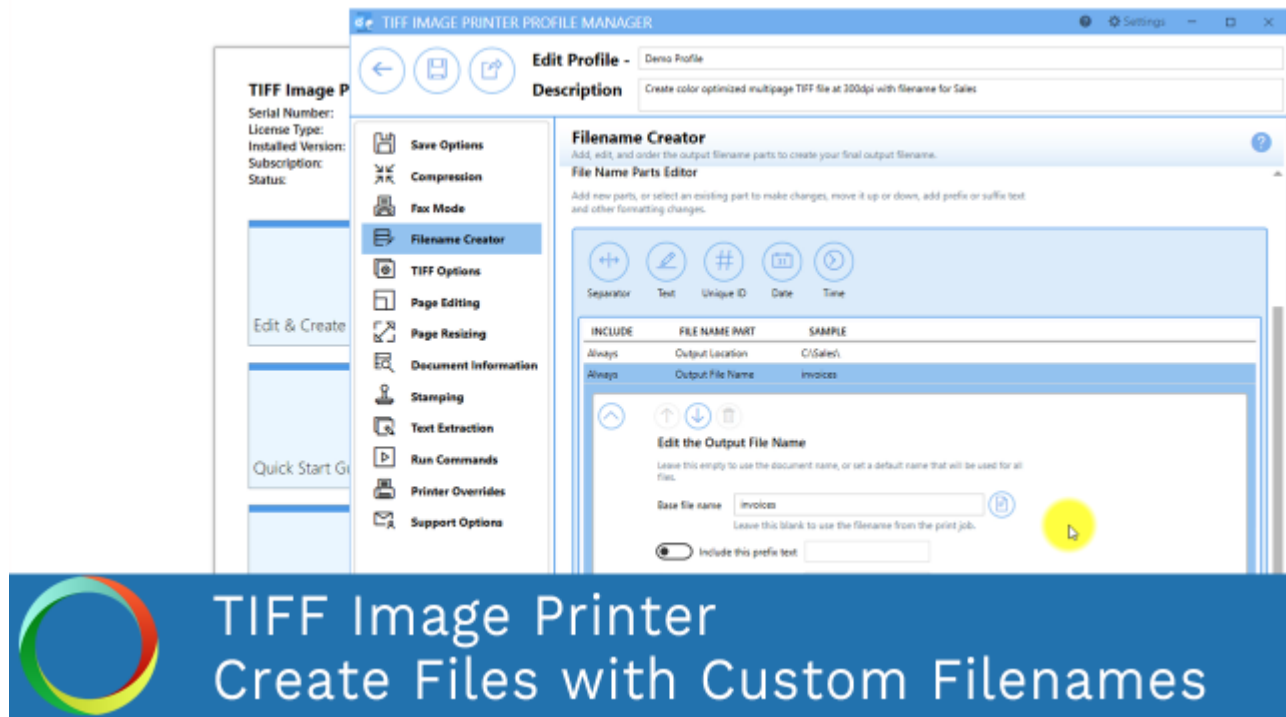
For more customized file naming options we recommend exploring the **Filename Creator tab**. The custom file naming settings allow you to add, edit, and reorder output filename parts to automatically create unique filenames for your TIFF Image Printer output files.

The [custom file naming options](#) are controlled through the profile.

The steps below demonstrate how to use the **Filename Creator tab** to customize the default output location and output name of created file. Please see the following sections for step-by-step instructions for:

- [Creating a Custom Filename with Custom Text](#)
- [Creating a Custom Filename with a Unique File ID](#)

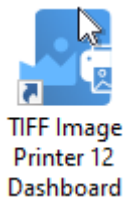
- [Creating a Custom Filename with a Date and Time](#)
- [Creating a Custom Filename with Dynamic Output Folders](#)
- 



*Click the image above to watch the video tutorial.*

### **Step by Step Instructions**

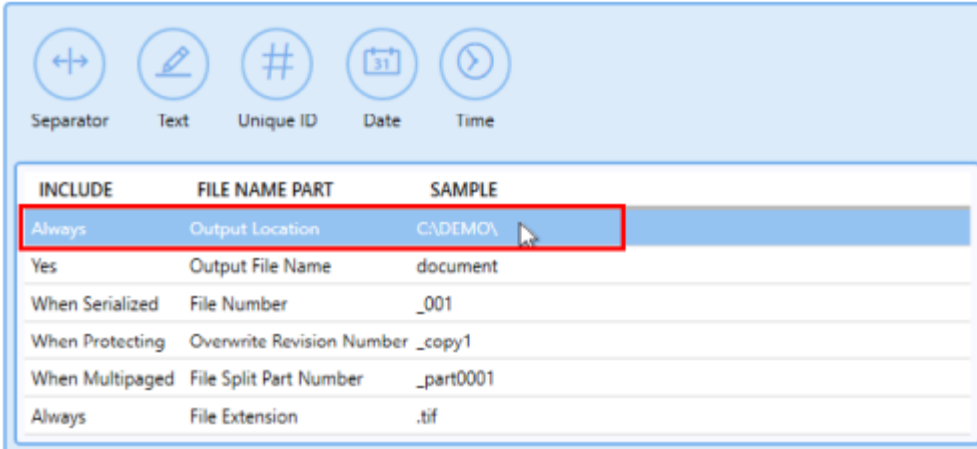
1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.



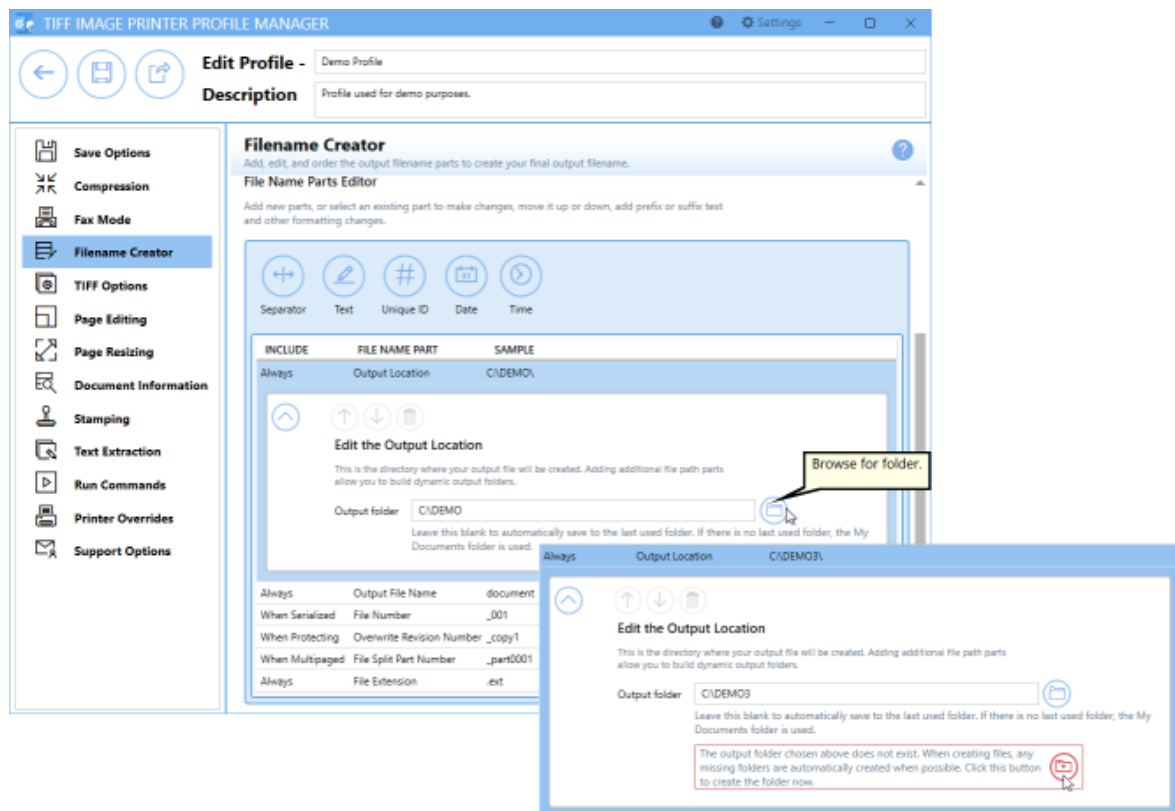
5. On the **Filename Creator tab**, select the file name part for **Output Location**.



INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	CADEMO\'
Yes	Output File Name	document
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

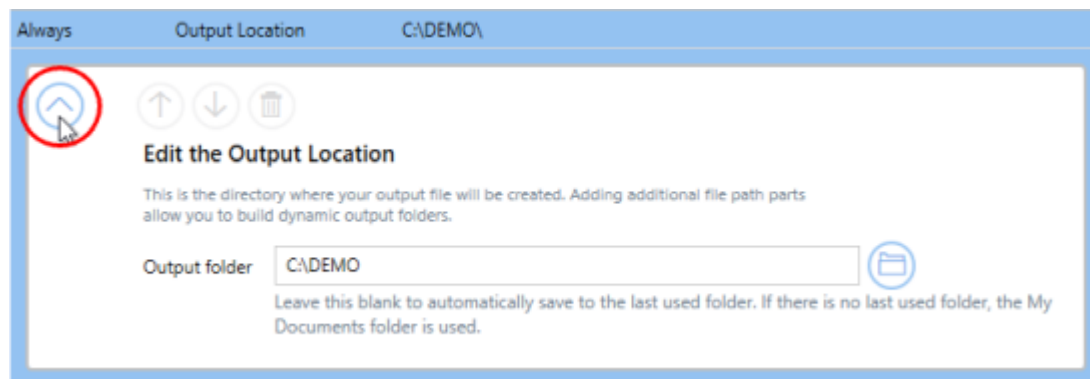
6. Select the file icon to browse to your desired location.
7. When prompting is enabled, and this field blank, TIFF Image Printer will default to the last used folder, if this is set in the [printer options](#). If there is no last used folder, the My Documents folder is used. When prompting is disabled, the My Documents folder is always used.

You can also type directly into the Output folder field. If the folder location you enter does not exist, you will see a warning message explaining that this folder location does not exist and that when a new file is created TIFF Image Printer will automatically try to create the missing folder if possible. Alternatively, you can click the red folder icon to create the new folder now.



8. Any changes made to this file name part will be reflected on the **Save Options tab**.

9. Click the arrow icon to hide the file part details for Output Location.



10. Select the file name part for **Output File Name**.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

11. Enter your desired base file name. If you leave this field blank, TIFF Image Printer will use the filename from the print job. You also have the option to include prefix and/or suffix text to the filename.

TIFF IMAGE PRINTER PROFILE MANAGER

Edit Profile - Demo Profile

Description: Profile used for demo purposes.

**Filename Creator**

Add, edit, and order the output filename parts to create your final output filename.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Always	Output File Name	DEMO

**Edit the Output File Name**

Leave this empty to use the document name, or set a default name that will be used for all files.

Base file name:

Leave this blank to use the filename from the print job.

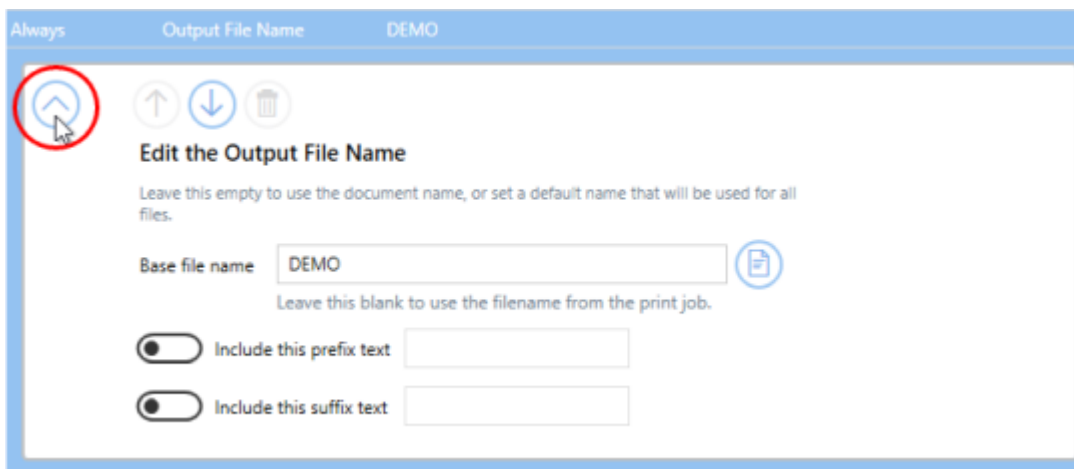
☐ Include this prefix text

☐ Include this suffix text

When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.ext

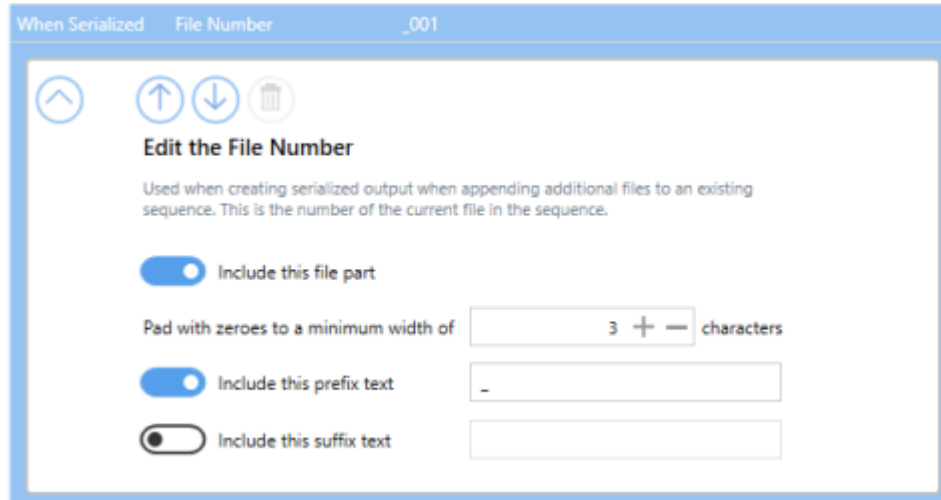
12. Again, any changes made to this file name part will be reflected on the **Save Options** tab.

13. Click the arrow icon to hide the file part details for Output File Name.







14. There are four additional required file name parts which you can customize if you wish:

- *File Number* - This is only applicable when creating [serialized output](#). If desired, you can add or remove prefix/suffix text or increase/decrease the number of padding zeros. Do not remove this part unless you know you are only converting single page documents.





- *Overwrite Revision Number* - This is only applicable when [prompting is disabled and override protection is enabled](#). If desired, you can add or remove prefix/suffix text or increase/decrease the number of padding zeros.

When Protecting: Overwrite Revision Number \_copy1

### Edit the Overwrite Revision Number

When override protection is on, this part formats the text added to create a unique file name.

Pad with zeroes to a minimum width of    characters

☒ Include this prefix text

☒ Include this suffix text

- *File Split Part Number* - This is only applicable when [automatically splitting](#) multipaged files. If desired, you can add or remove prefix/suffix text or increase/decrease the number of padding zeros.

When Multipaged: File Split Part Number \_part0001






### Edit the File Split Part Number

When splitting multipaged files by size or pages is on, this file name part is added to the file name.





Pad with zeroes to a minimum width of    characters

☒ Include this prefix text

☒ Include this suffix text

- *File Extension* - By default, the file extension of the output file will match the [output type selected](#), but you also have the option to customize the file extension of the output file.

Always: File Extension .ext

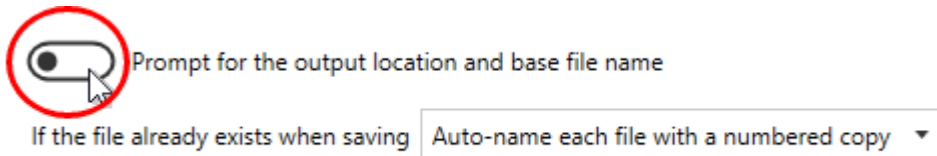
### Edit the File Extension

Use a custom file extension or leave blank to use the default output file type extension.

☐ Replace default file extension with

If you choose to set the Output Location and/or Output File Name, you may also want to [disable prompting by the Save As dialog](#) each time you print.

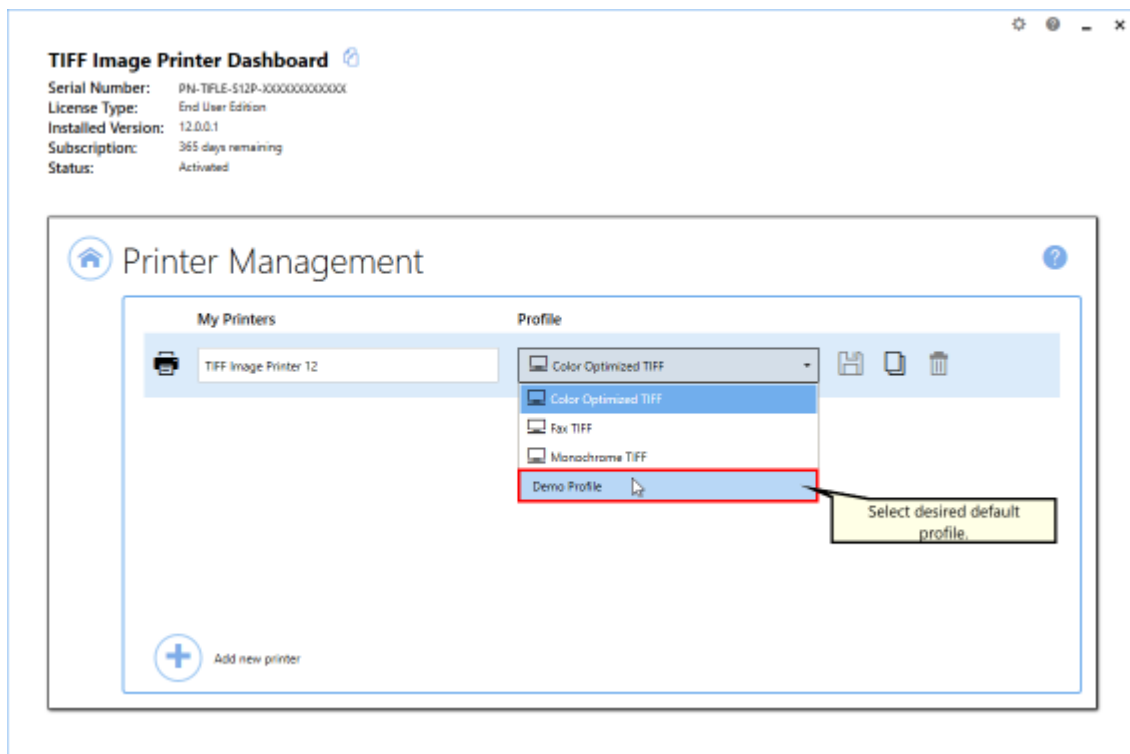
- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.



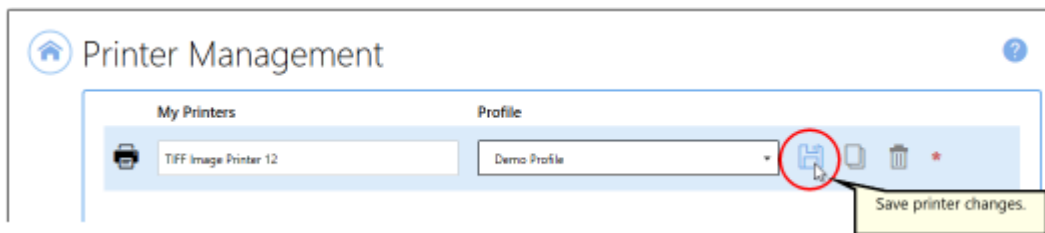
15. Click **Save-Back**, and close **Profile Manager**.

If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

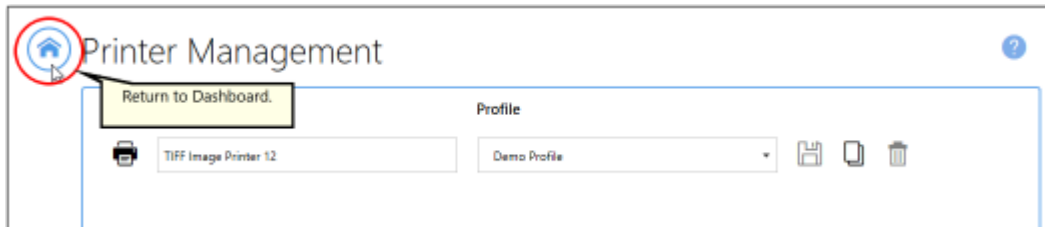
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



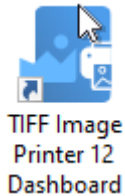
16. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output file will be saved to your desired output location with your custom filename.

### With Custom Text

The steps below demonstrate how to use the **Filename Creator tab** to customize the output filename by adding custom text.

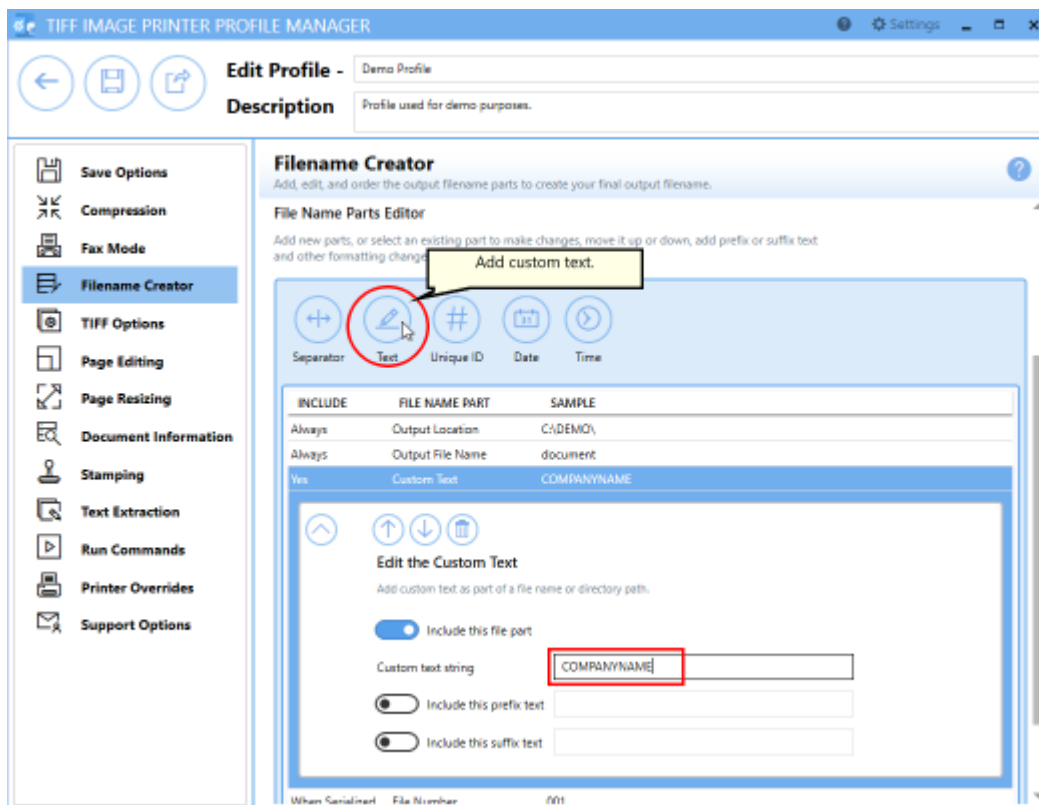
#### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Filename Creator tab**, add the file name part for **Custom Text**. Enter your desired custom text (ex. company name, group name, department name). This text can be added before or after the Output File Name.

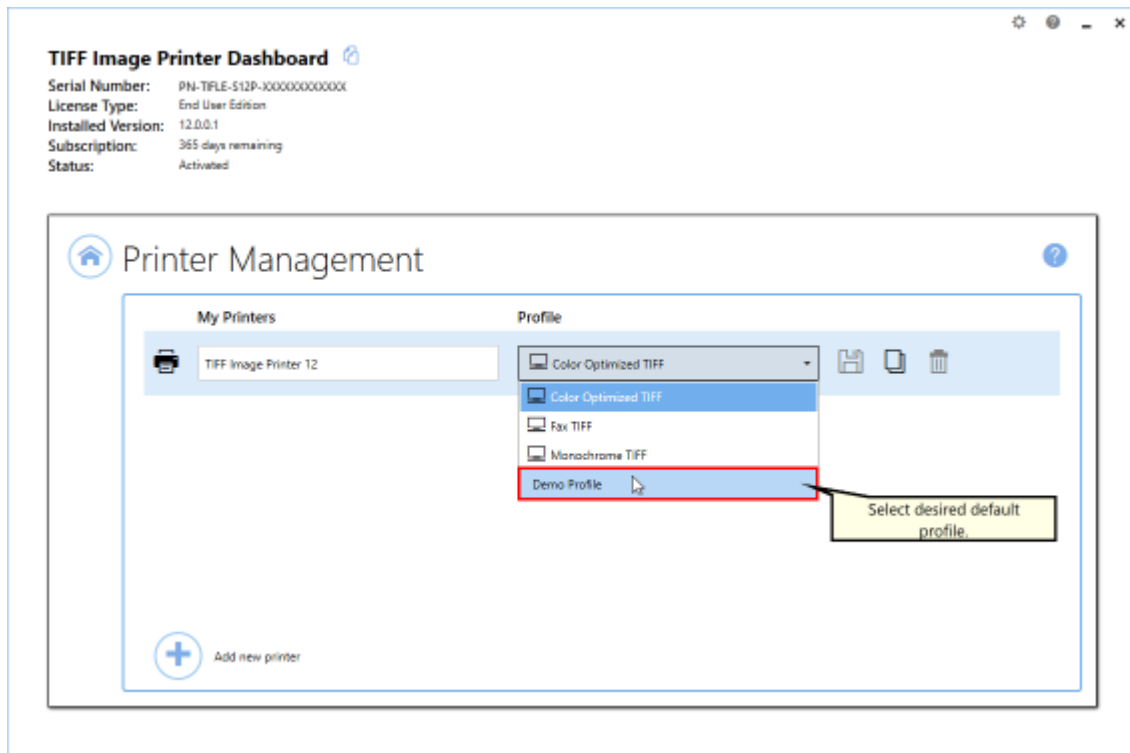




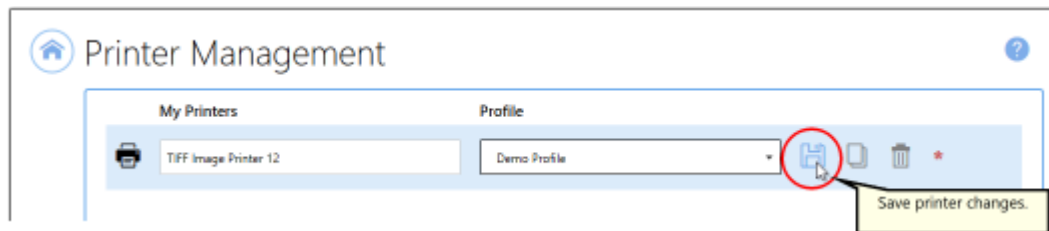
6. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

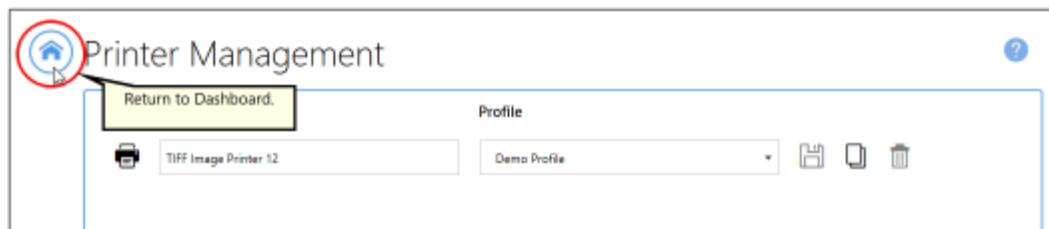
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



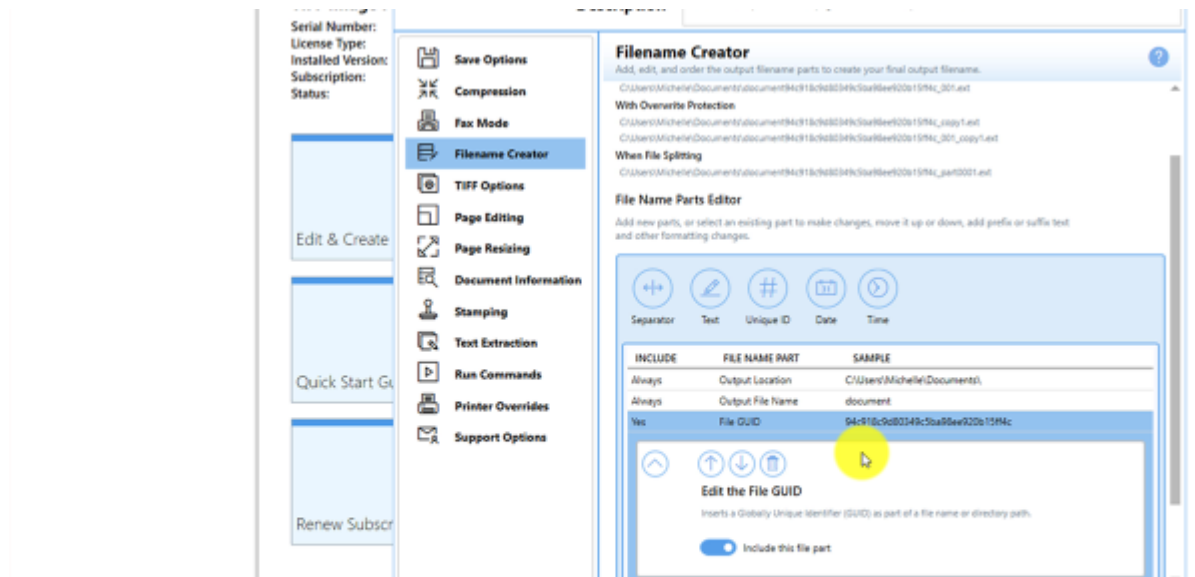
iv. Select the **Home icon** to return to the **Dashboard**.



7. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output filename will have *CompanyName* added to the filename from the print job.

## With Unique File ID

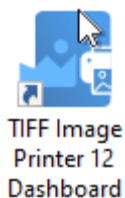
The steps below demonstrate how to use the **Filename Creator** tab to customize the output filename by adding either a Globally Unique Identifier (GUID) or Job ID.



*Click the image above to watch the video tutorial.*

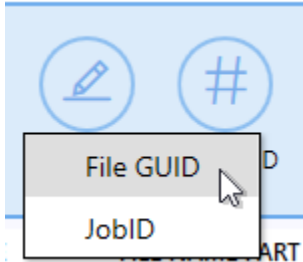
## Step by Step Instructions

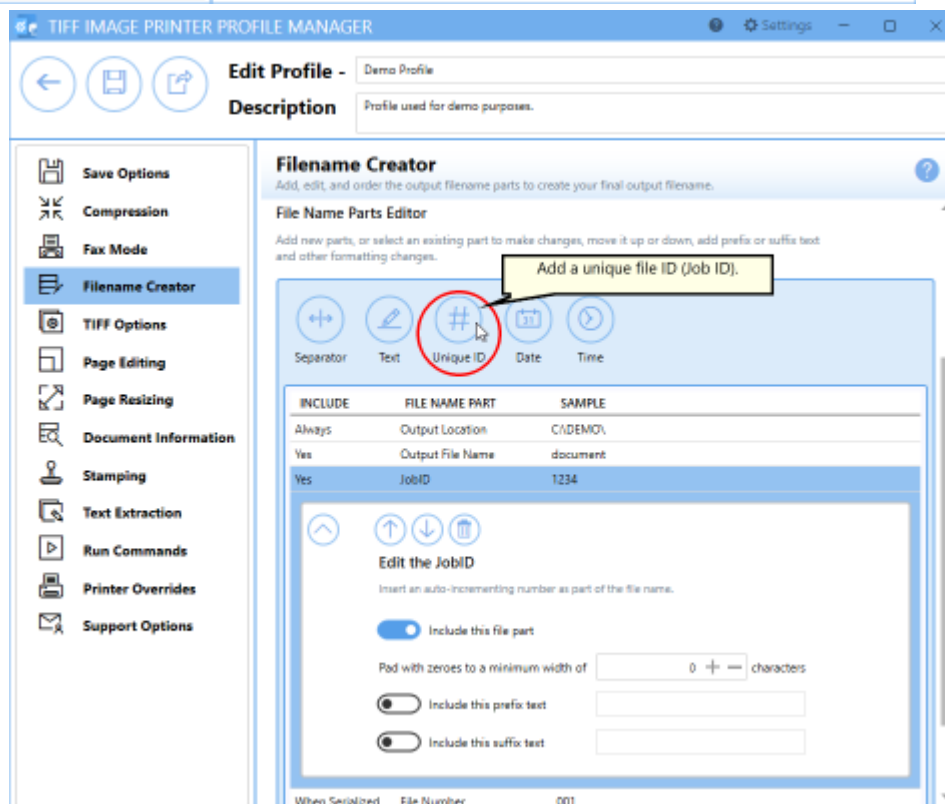
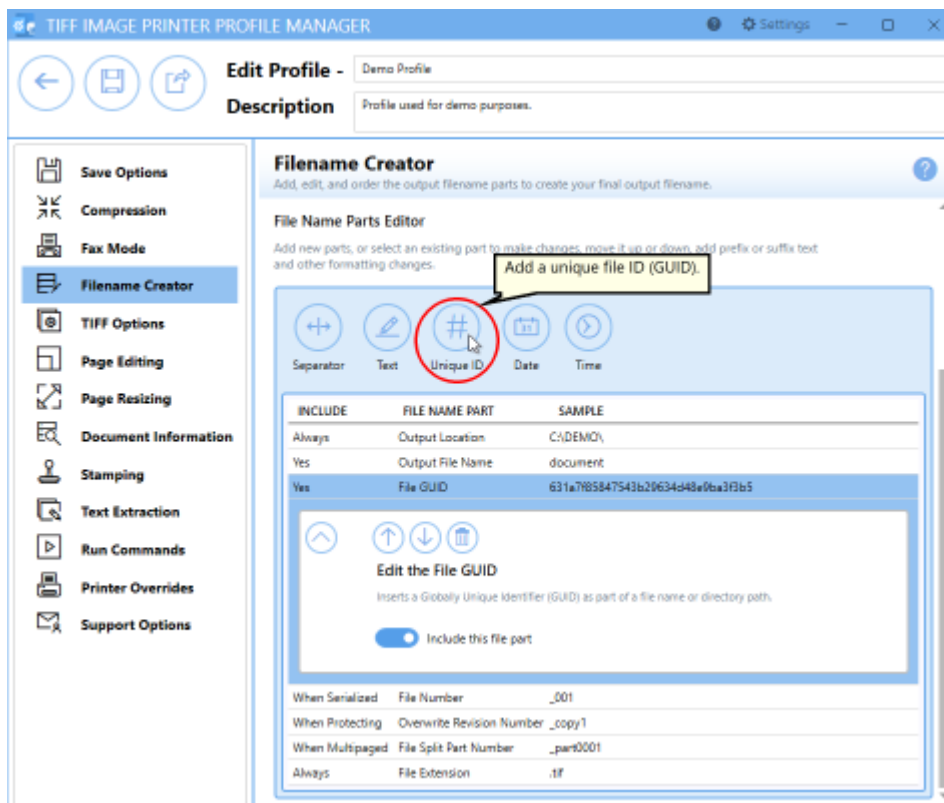
1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.

5. On the **Filename Creator tab**, add the file name part for **Unique ID**. You can choose to add *File GUID* or *JobID*. If this file name part is ordered after the Output File Name, the unique ID will be added to the filename.

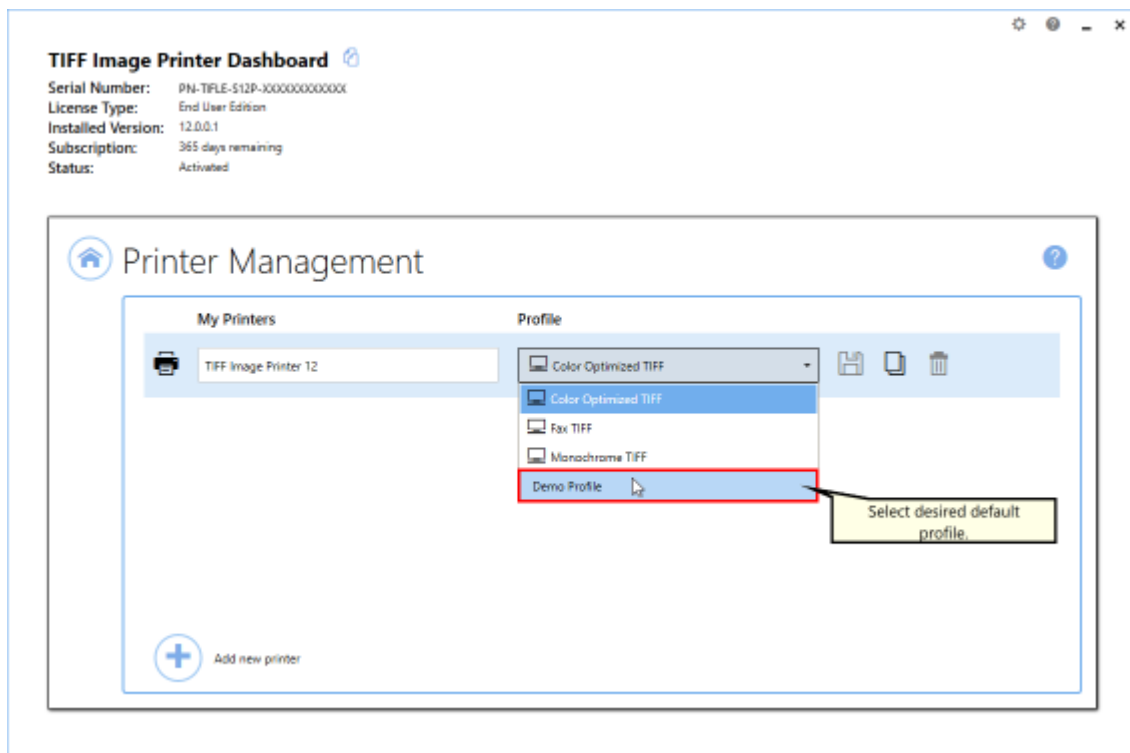




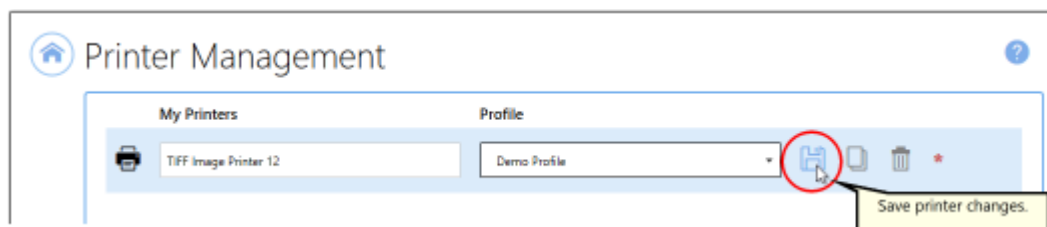
6. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

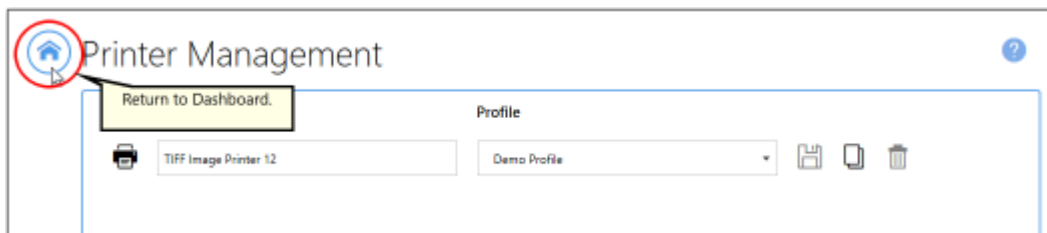
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



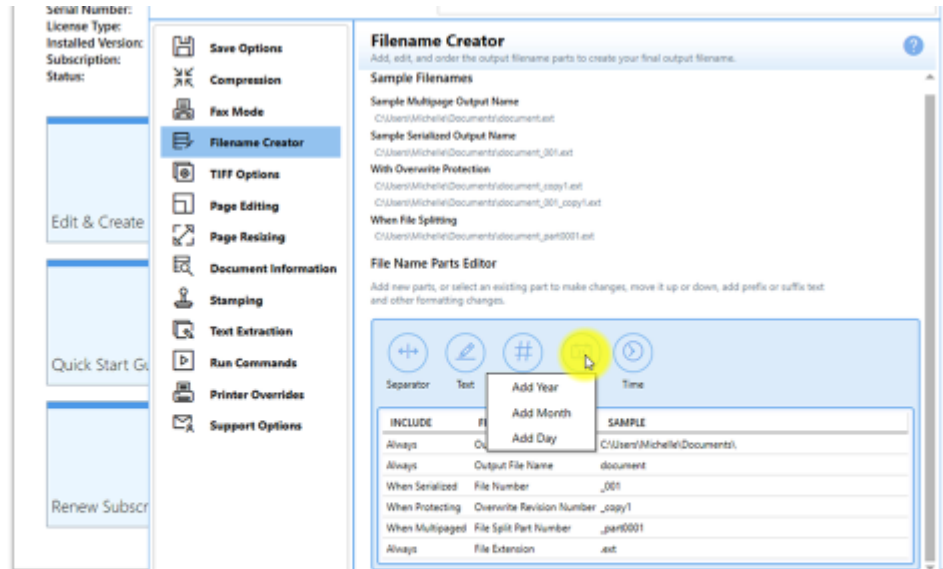
- iv. Select the **Home icon** to return to the **Dashboard**.



7. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output filename will have a GUID added to the filename from the print job.

### With Date and Time

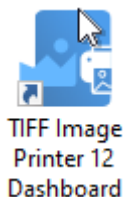
The steps below demonstrate how to use the **Filename Creator tab** to customize the output filename by adding the date and time of conversion.



*Click the image above to watch the video tutorial.*

### Step by Step Instructions

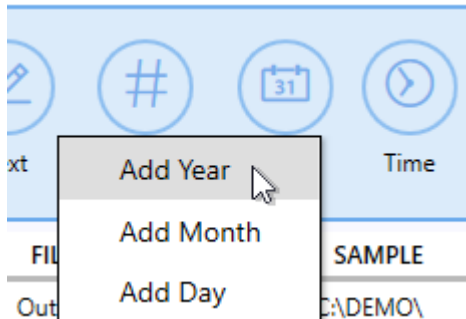
1. Launch the TIFF Image Printer **Dashboard**.



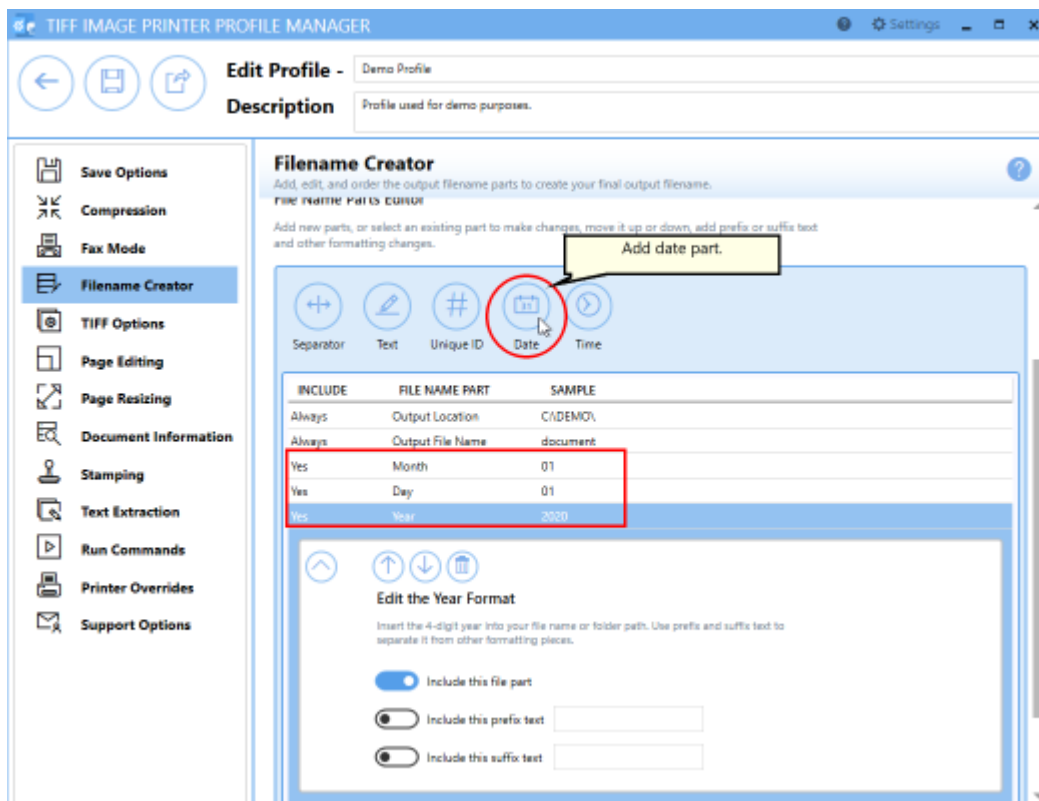
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.



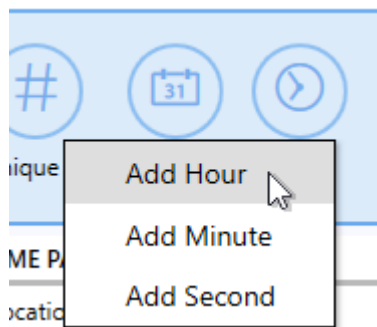
5. On the **Filename Creator** tab, add the file name part for **Date**. You can choose to add *Year*, *Month*, or *Day*, or any combination of all three.



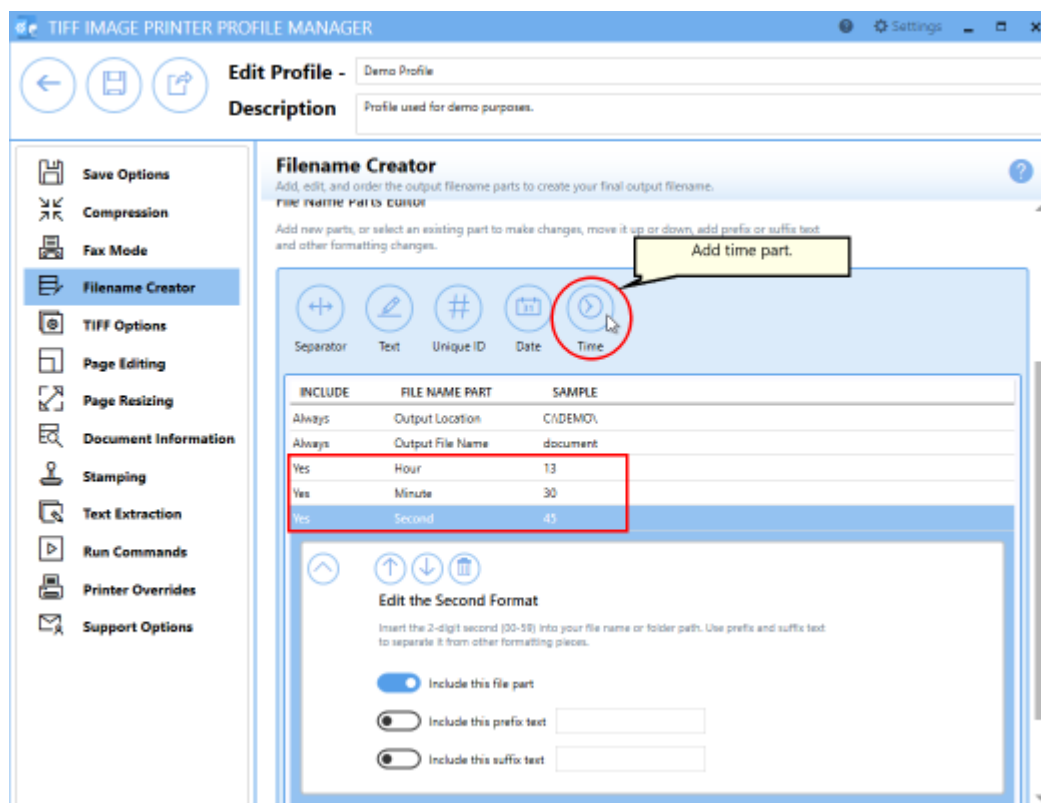
- *Year* - add the 4-digit year into your filename
- *Month* - add the 2-digit month into your filename
- *Day* - add the 2-digit day into your filename



6. Add the file name part for **Time**. You can choose to add *Hour*, *Minute*, or *Second*, or any combination of all three.



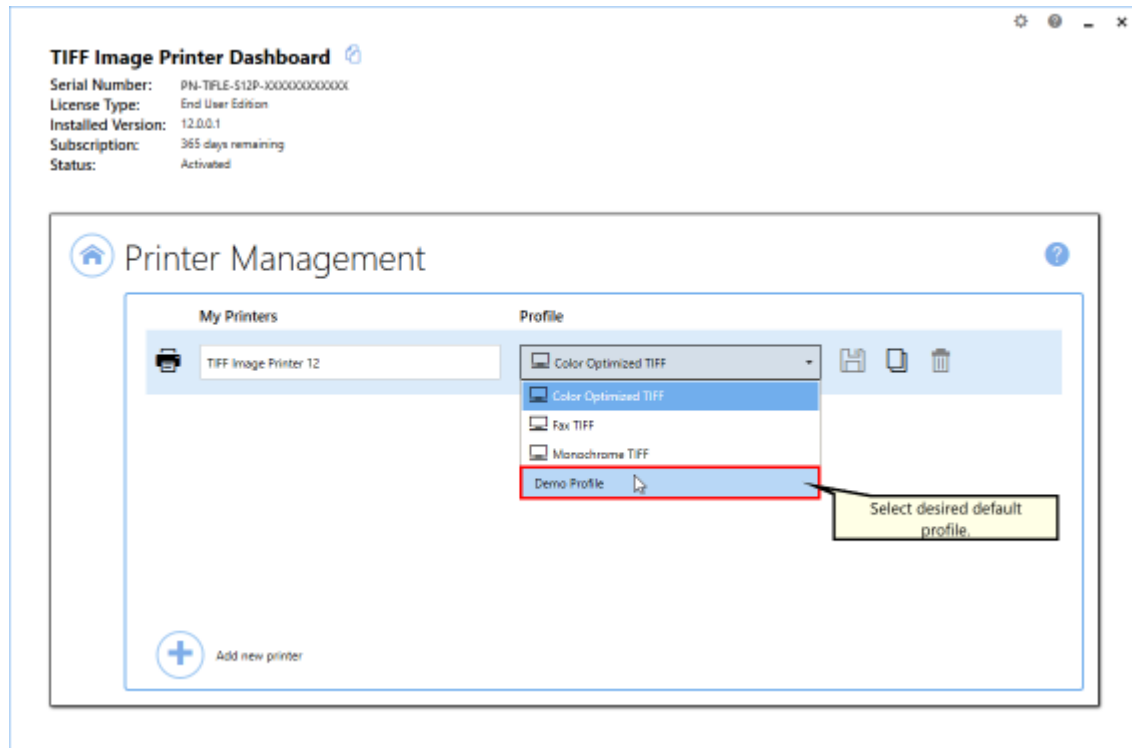
- *Hour* - add the 2-digit hour into your filename
- *Minute* - add the 2-digit month into your filename
- *Second* - add the 2-digit day into your filename



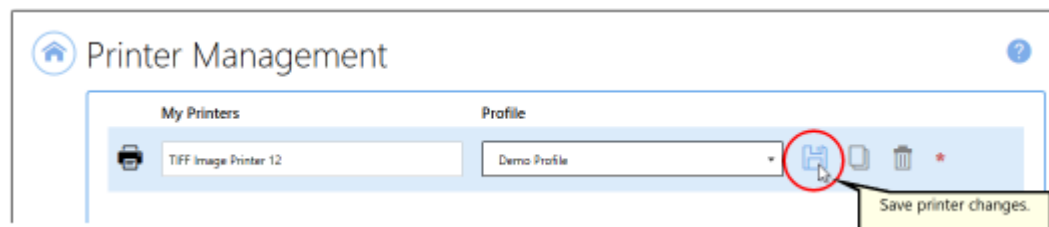
7. You can customize the order that the date and time parts will appear in the filename. You also have the option to include prefix and/or suffix text with each date and time part.
8. Click **Save-Back**, and close **Profile Manager**.

If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

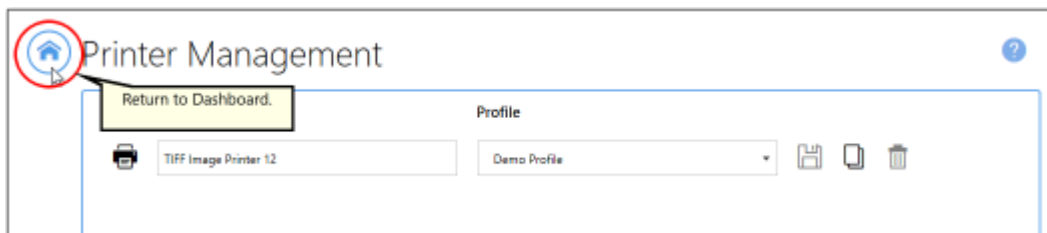
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



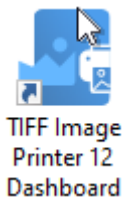
9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output filename will have the time and time of conversion added to the filename from the print job.

## With Dynamic Output Folders

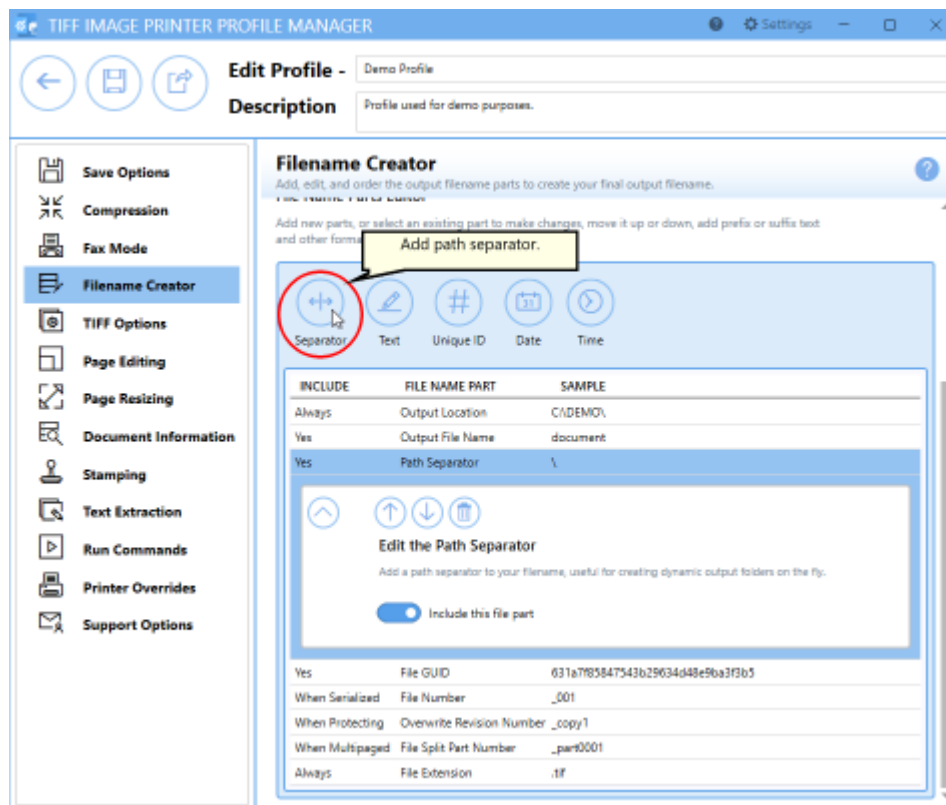
The steps below demonstrate how to use the **Filename Creator tab** to create dynamic folders on the fly. This is accomplished by using the Separator file name part in conjunction with a Globally Unique Identifier (GUID) or the date/time of conversion.

### **Step by Step Instructions**

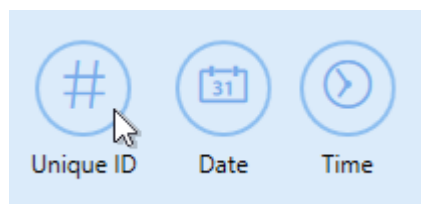
1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Filename Creator tab**, add the file name part for **Separator**.



6. Then add either a **Unique ID**, **Date**, or **Time**.

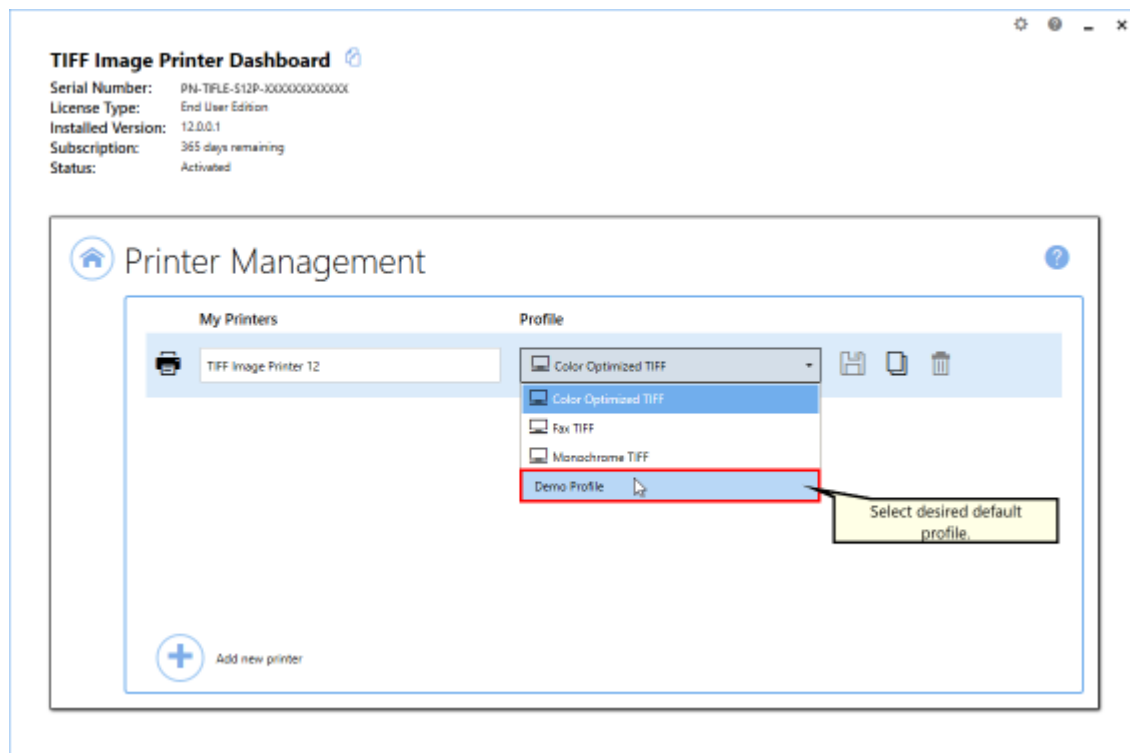


- *Unique ID* - This will create a new output folder named using a Globally Unique Identifier (GUID) or a Job ID for each new output file.
- *Date* - This will create a new output folder named using the date of conversion to contain output file(s). All output files created on the same day will be saved to the same output folder.
- *Time* - This will create a new output folder named using the time of conversion to contain output file(s). All output files created within the same time period will be saved to the same output folder.

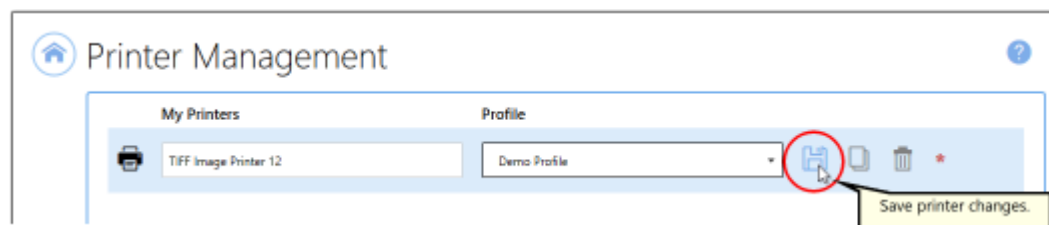
7. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

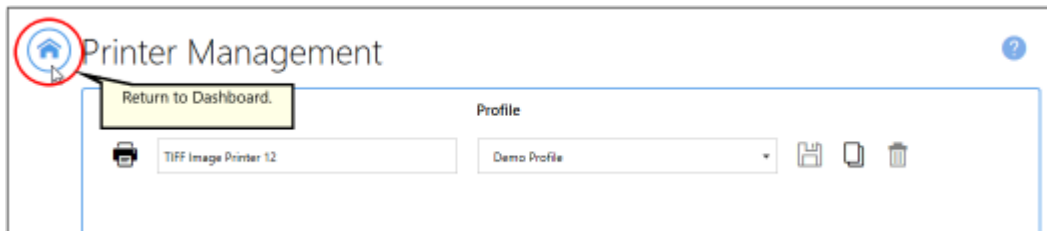
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, a dynamic output folder will be created on the fly named either using a GUID or with the date/time of conversion. The output file will be found in this new output folder.



## Dynamically Set Filename and Output Location

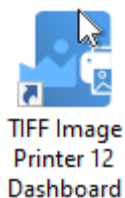
Dynamically controlling the output file name or location during the print job using document content is done using specially formatted strings called *control strings*. They are often used with reporting tools such as Crystal Reports, PowerBuilder and similar. They can also be used with mail merges in Word or other productivity suites.

This allows you to use data fields on the page or report, such as invoice numbers or customer name or ID, to name the output file or change where the file is saved. Control strings are used internally and are not included on the page in the final output.

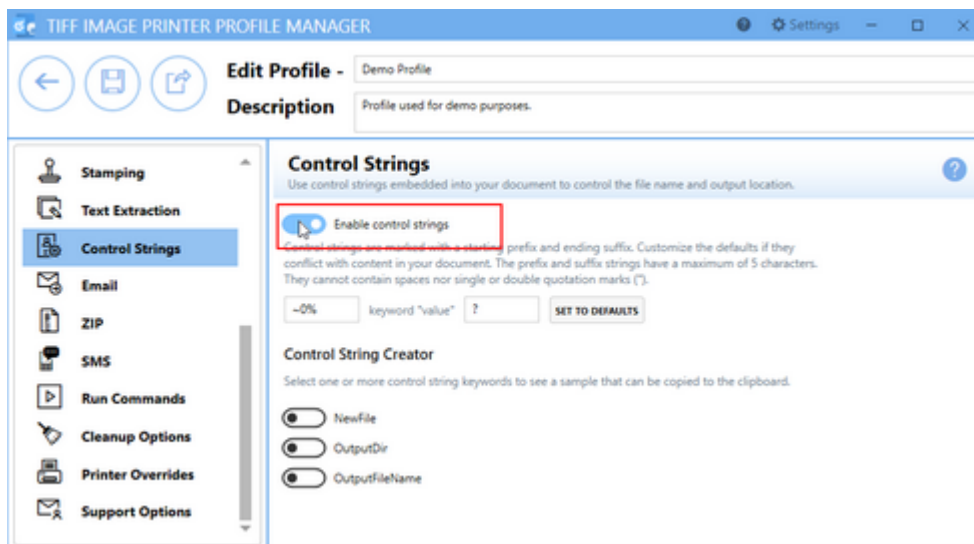
All [control string settings](#) are configured through the profile.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



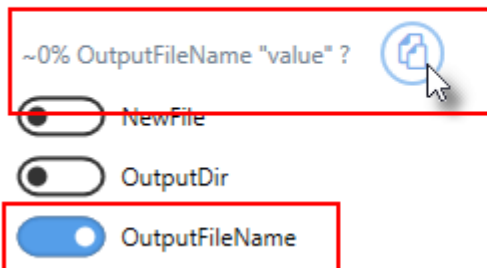
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Control Strings tab**, click **Enable control strings**. This means that files printed to TIFF Image Printer using this profile will search and use any control strings on the pages of the file.



- The control strings tab includes a *control string builder* to make it easier to insert the control string into your files. Here, we will enable the **OutputFileName** control string and then copy the sample control string to the clipboard to use later in our Word mail merge document.

## Control String Creator

Select one or more control string keywords to see a sample that can be copied to the clipboard.



- Click **Save-Back**, and close **Profile Manager**.
- Open up your report or mail merge document and paste the control string at the top of the page. Edit the *value* to reference the data field that contains the value you want for the output file name. Here we show a Word mail merge document and the Excel spreadsheet with sample data, and a control string with the field **Invoice** set to be used to set the output file name.

~0% OutputFileName "«Invoice»" ?

 **Peernet Inc.**

18 Deakin St.  
Suite 208  
Ottawa, Ontario, Canada  
K2E 8B7

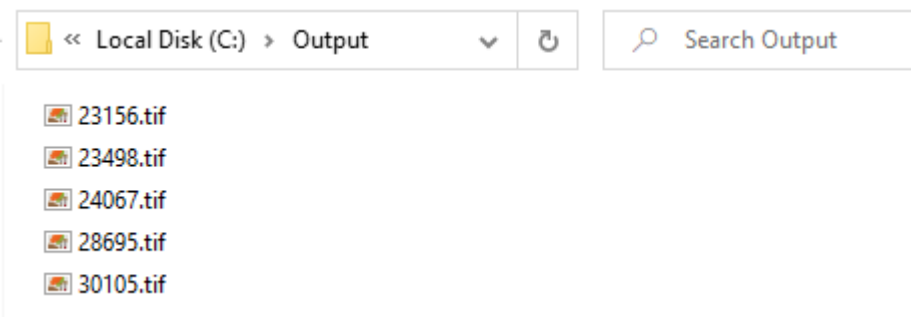
Invoice: «Invoice»

«Date»  
«Name»

«Address\_1»  
«Address\_2»  
«Address\_3»  
«Address\_4»

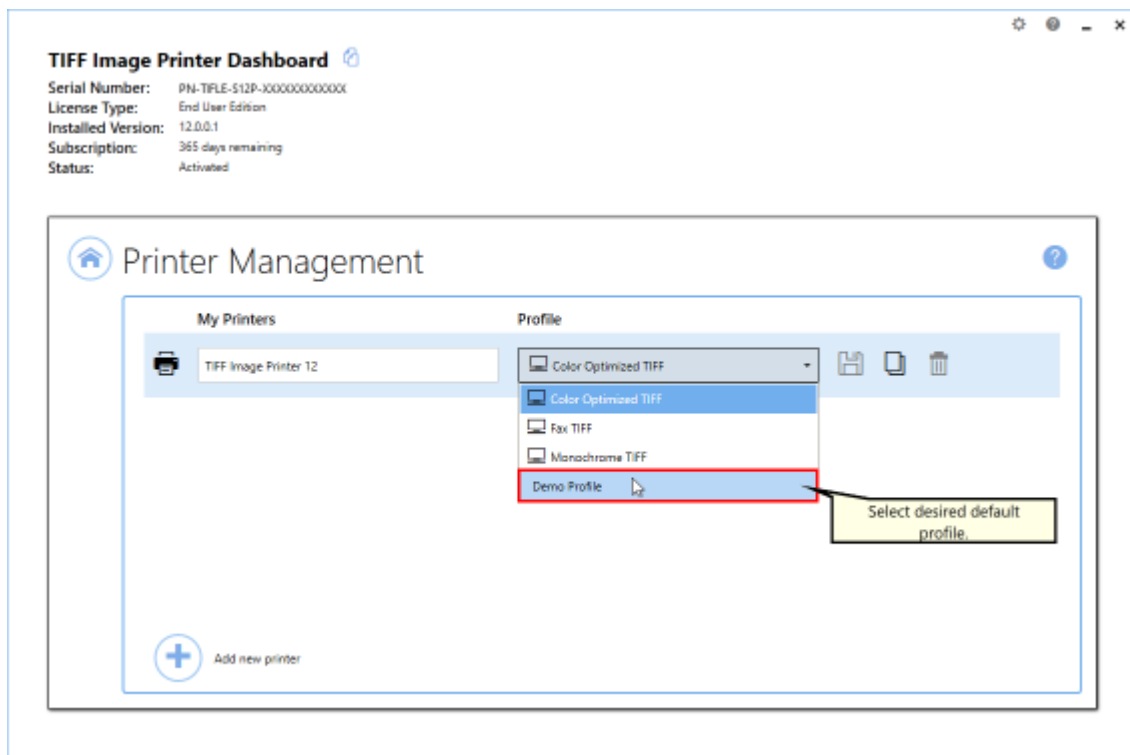
	A	B	C	D	E	F	G
1	Date	Invoice	Name	Address 1	Address 2	Address 3	Address 4
2	January 1, 2022	23156	COMPANY A	1 Street Name Road	Washington, DC	XXXXX	USA
3	January 10, 2022	23498	COMPANY B	2 Street Name Drive	Ottawa, ON	X1X 1X1	Canada
4	January 14, 2022	24067	COMPANY C	3 Street Name Avenue	London, England	X11 1X1	UK
5	February 2, 2022	28695	COMPANY D	4 Street Name Crescent	Canberra, ACT	XXXX	Australia
6	February 12, 2022	30105	COMPANY E	5 Street Name Parkway	Berlin	XXXXX	Germany

9. From Word, print your mail merge or report to 12 12 with your control string profile selected when printing. Here, the result is a file created for each page of the mail merge, named using the <<Invoice>> field.

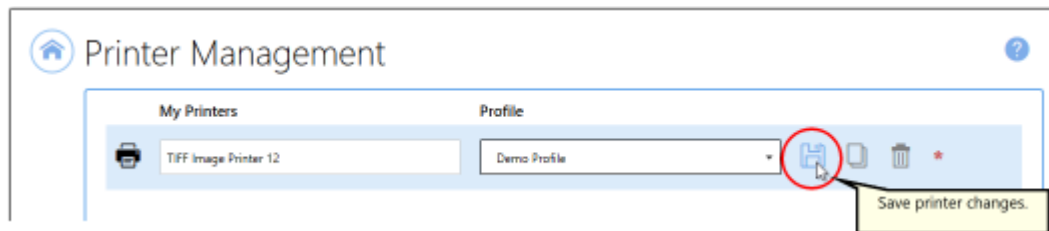


*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

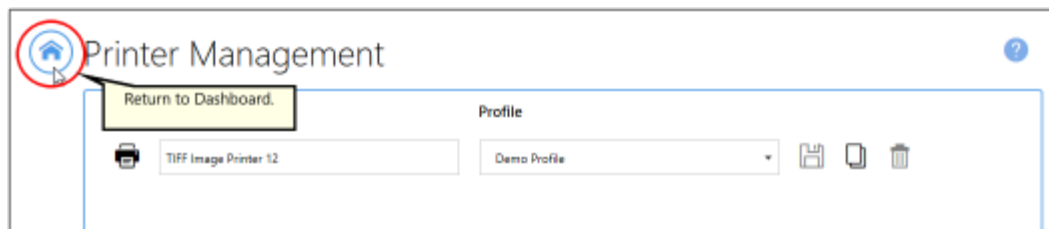
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



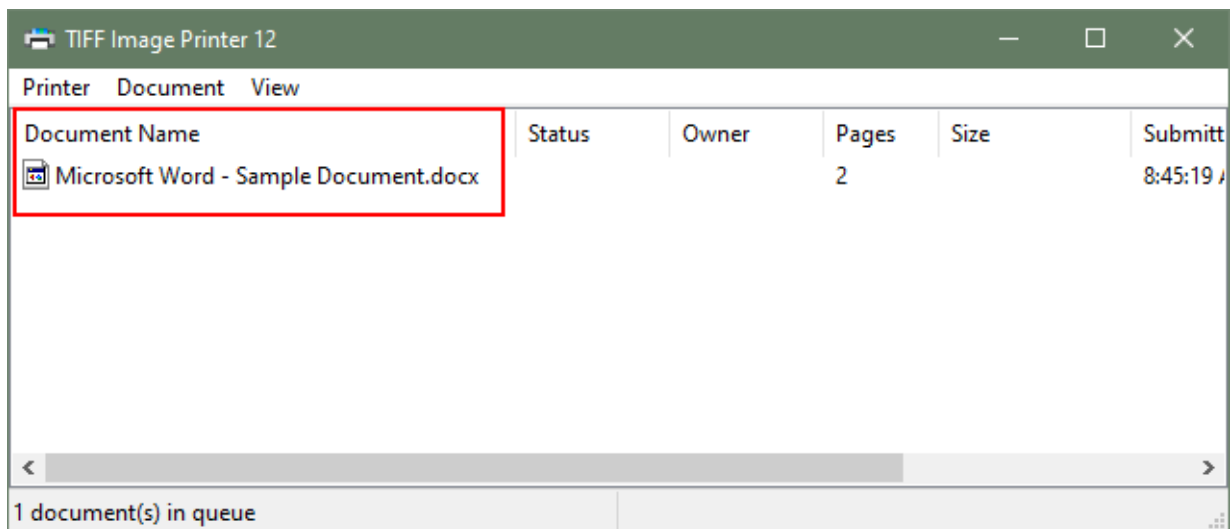
iv. Select the **Home icon** to return to the **Dashboard**.



10. Close the **Dashboard**. Now when you print any documents with control strings, TIFF Image Printer will use them to decide the filename and/or output location as set by fields in your document or report.

## Set Filename Using the Print Job File Name

By default, TIFF Image Printer will use the print job document name as the base name for the file. This name is created by the printing application and can be seen in the print queue when a document is printing. The format of this name varies for each application. The Office products commonly precede the document name with the name of the printing application whereas Notepad is the opposite, appending ' - *Notepad*' to the name of the document.



The **Save Options tab** has options for automatically removing product name information that are commonly submitted as part of print job file names, as well as file extensions, such as those created by Office products and Notepad. These options are enabled by default.

For other applications, text appearing in the print job document name text can be removed or replaced using [job name replacement strings](#), leaving only the desired part of the print job document name. This feature allows dynamic file name creation from the original print job document name, easily removing any text, such as product name text from any printing application, as well as replacing text with different text. To replace the entire file name, use the [output base filename](#) on the **Save Options tab**.

The steps below demonstrate how to use the **Job Name Replacement Strings** to remove text from the print job document name and replace it with different text. When replacing text you can choose to replace only the first occurrence of the text, the last occurrence of the text or all occurrences of the text in the print job document name.

For example, if your print job document name contains spaces and you want to replace all spaces with underscores, you would set up a job name replacement string that looks for all occurrences of a space character ' ' and replace each space character with an underscore '\_' character. Multiple space characters in a row will be replaced with the same amount of underscore characters.

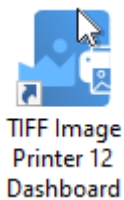
For our example, the fictional application creates a print job document name of *ABC Printing 12345*, where 12345 is an invoice number which changes for each invoice printed.

If only the invoice number is wanted for the file name, a job replacement string would be set up to look for only the first occurrence of the text string '*ABC Printing*' and remove it, leaving *12345.tif*.

If the desired output is *Invoice 12345.tif*, a job replacement string is set up to look for the text *ABC Printing* and replace it with the new text, '*Invoice*'.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Save Options** tab, under **Output File Name** enable **Remove or replace text in the print job document name**.

## Output File Name

Base file name



Leave this blank to use the print job document name.



Remove product extension from the print job document name



Remove product name from the print job document name



Remove or replace text in the print job document name

Double click a cell in the 'Replace' column to add text from the print job document name that you want to change or replace. Leave the cell next to it in the 'With' column empty to remove the text, or enter new text to replace it. The X when editing will clear the cell contents.

REPLACE	WITH	REPLACE ACTION
		First ▼
		First ▼
		First ▼

6. Double-click a cell in the **Replace** column to add text from the print job document name that you want to remove or replace. Leave the cell next to it in the **With** column empty to remove the text.

REPLACE	WITH	REPLACE ACTION
ABC Printing X		First ▼
		First ▼
		First ▼

7. Add the desired replacement text in the **With** column to change the text in the print job document name, or leave this field empty to remove the text instead.

REPLACE	WITH	REPLACE ACTION
ABC Printing	Invoice X	First ▼
		First ▼
		First ▼

8. Only the first occurrence of matching text will be replaced by default. This can be changed to replace the last occurrence, or all occurrences of matching text in the print job document name.

REPLACE	WITH	REPLACE ACTION
ABC Printing	Invoice	First ▼
		All
		First
		Last

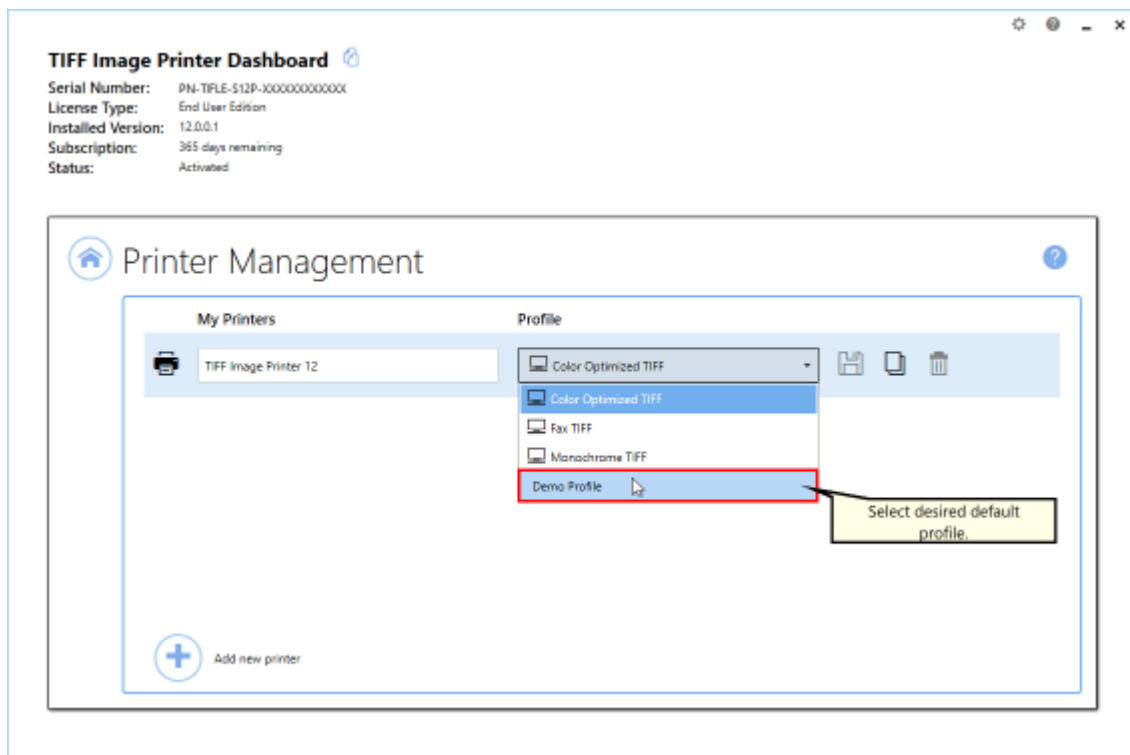
9. Multiple strings can be entered to replace different parts of the file name. The job name replacement strings are processed in the order in which they are listed. Each subsequent replacement uses the edited string result from the previous one.

10. Click **Save-Back**, and close **Profile Manager**.

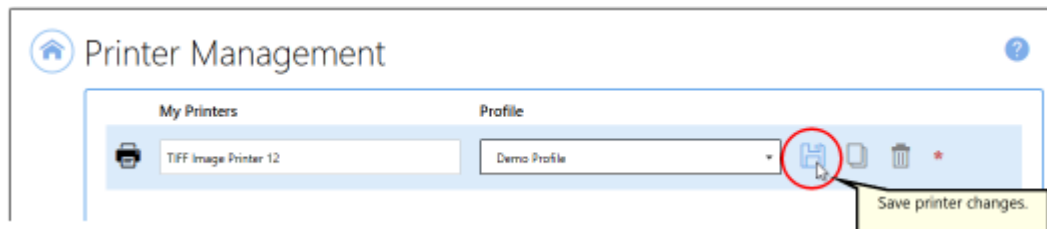
*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.

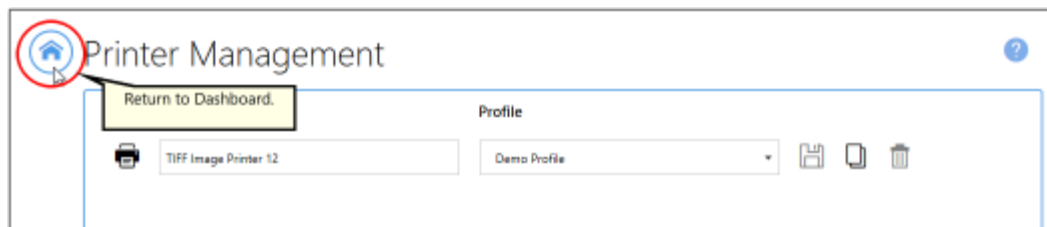




iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



11. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the text matching the job replacement strings will be removed or replaced when creating the filename from the print job.

## Set Document Information

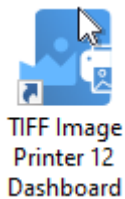
The Document Information feature allows basic descriptive information to be added to your output file. These descriptions are used by many search engines to describe the document in their results list.

By default, all descriptive information fields are left empty. These descriptions will not auto-populate. Conversely, if a value is entered in these descriptive information fields, all files created will have the same entered description.

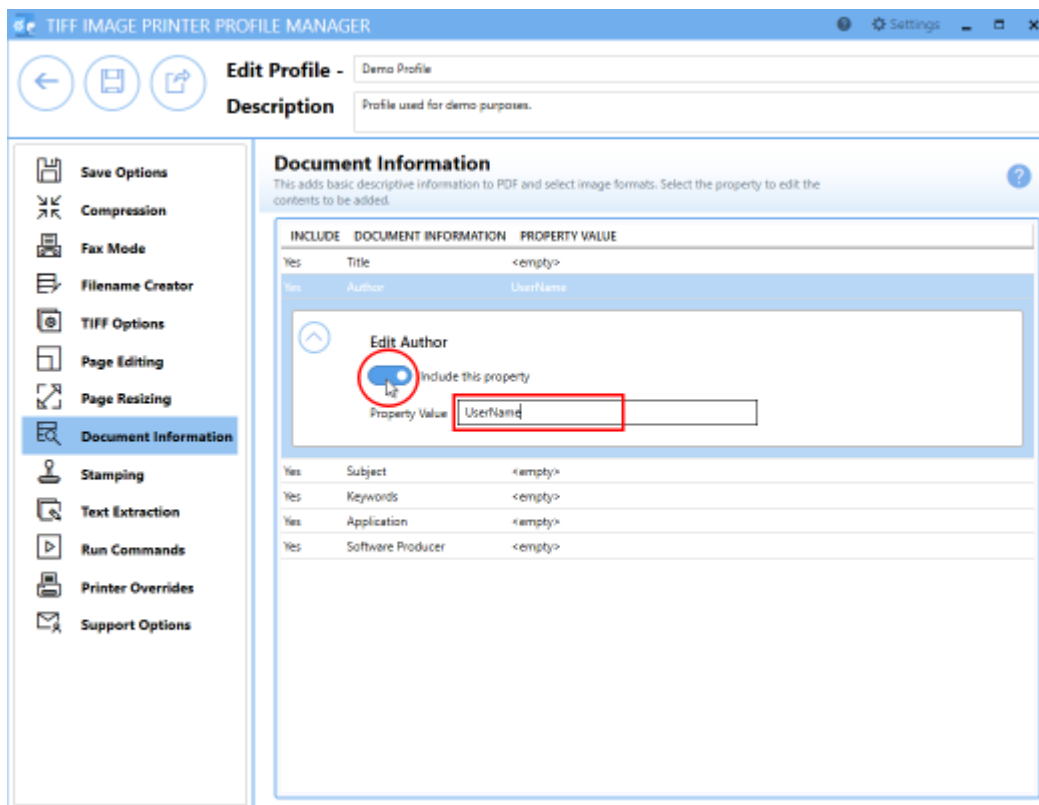
All [document information settings](#) are controlled through the profile.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



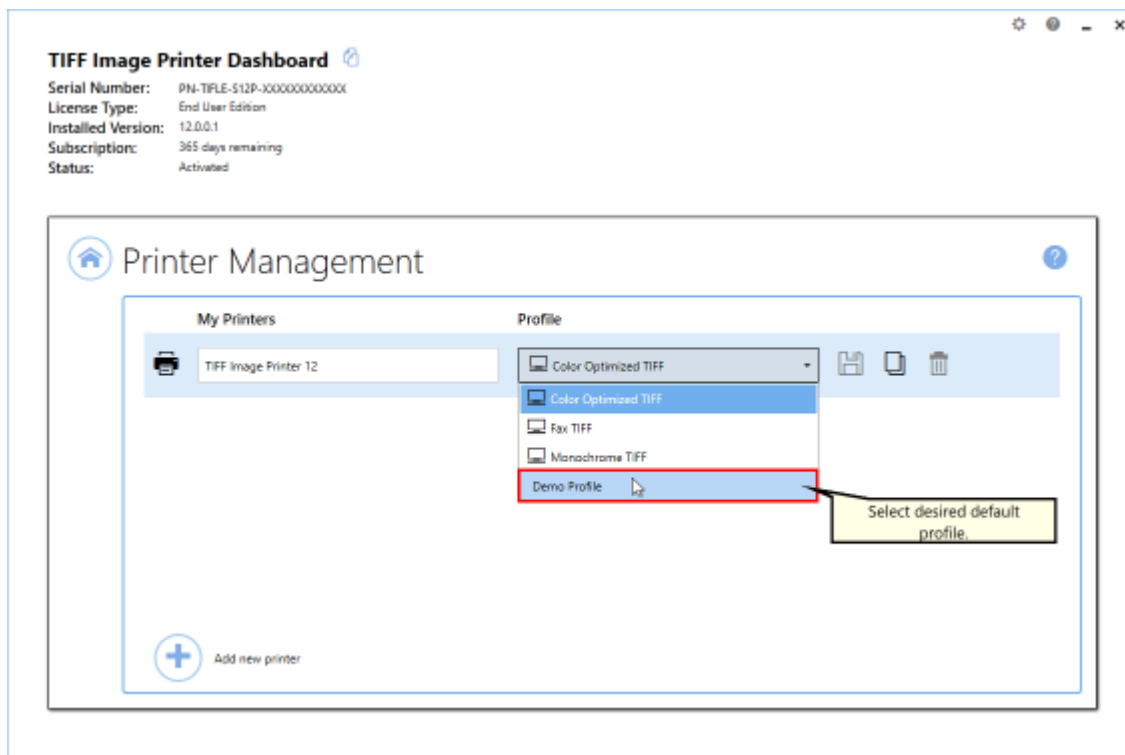
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Document Information tab**, select each document information type and enter your desired descriptive information in the **Property Value** field.
  - *Title* - ex. enter the filename (Whatever is entered as the title will also appear in the subject descriptive information field.)
  - *Author* - ex. enter the user's name
  - *Software Producer* (also called *Program Name* for TIFF images) - ex. enter your company name (If left empty, all files created will have TIFF Image Printer 12 as the software producer/program name.)



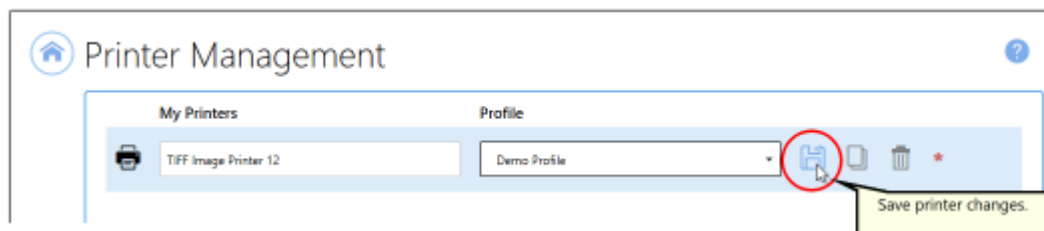
1. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

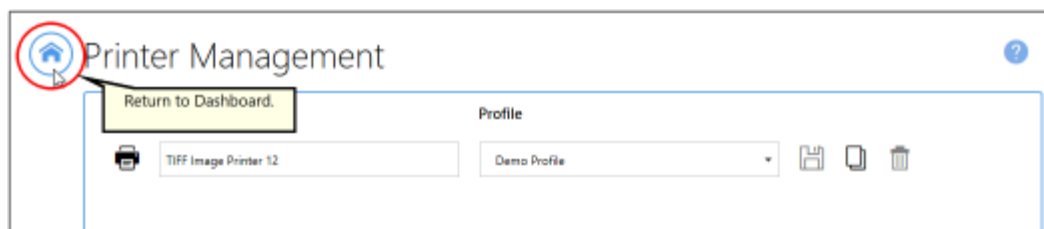
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.

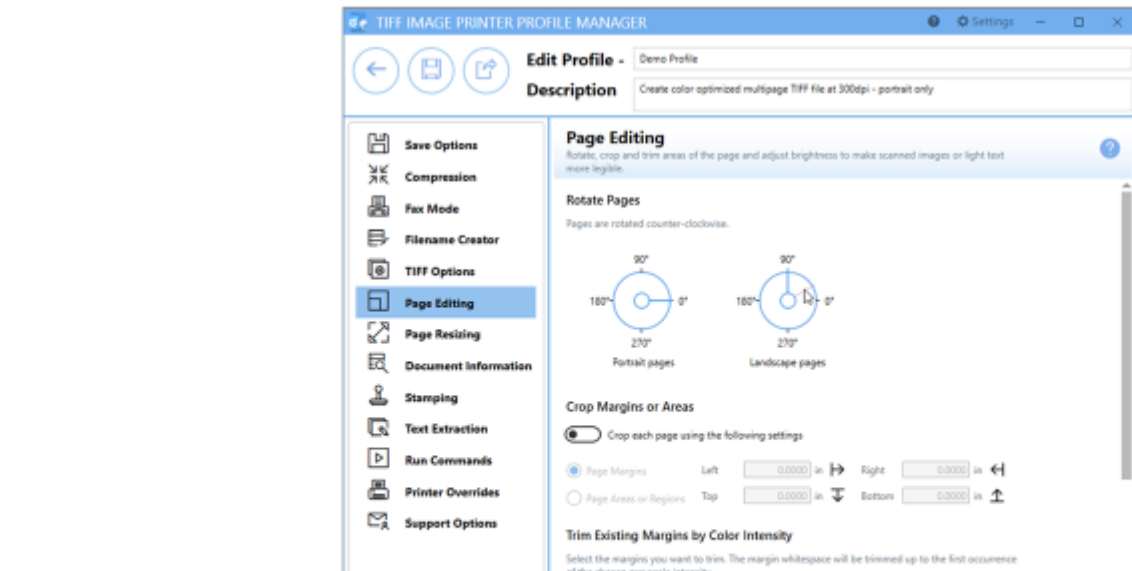


2. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, your desired document information will be stored within the output TIFF image. This information can later be viewed by right-clicking your TIFF image within File Explorer, selecting Properties, and viewing the Details tab.

## Rotate Pages

There are two methods available that you can use to adjust page orientation or rotate pages with TIFF Image Printer. You can either carry out a basic page rotation using the **Page Editing tab**, or you can copy page contents to a new page size on the **Page Resizing tab**.

Both methods of rotating pages are controlled through the profile.



*Click the image above to watch the video tutorial.*

## Page Editing

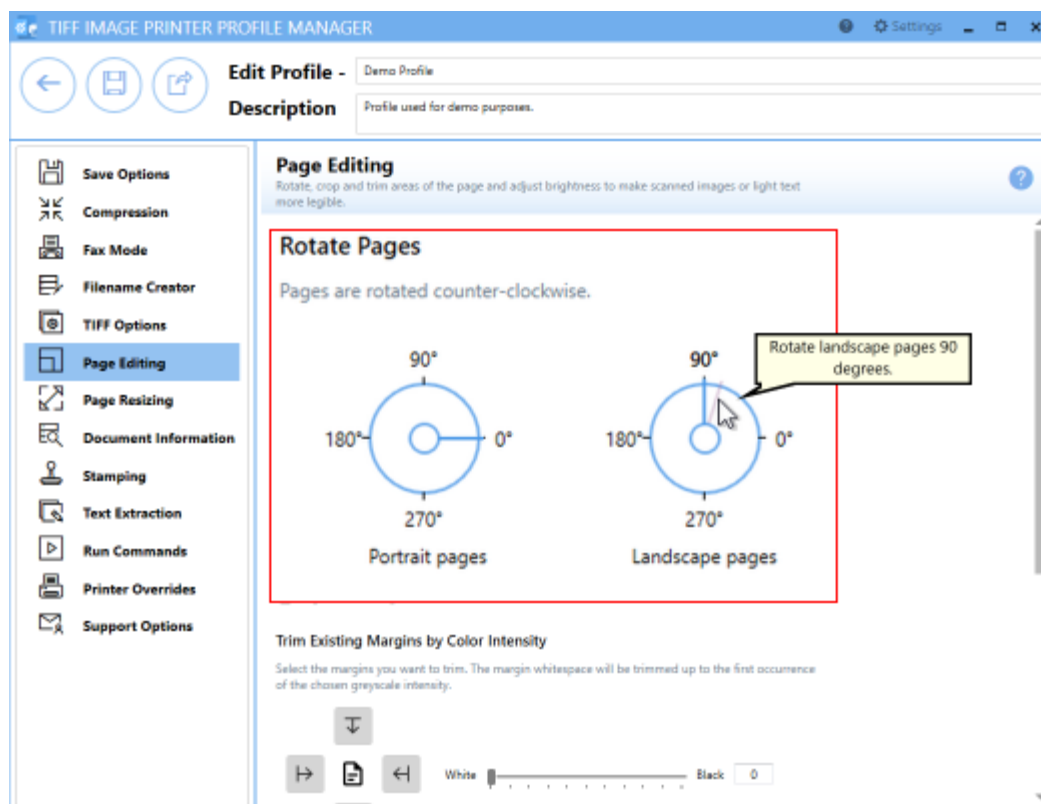
The steps below demonstrate how to take a multipaged document with a mixture of portrait and landscape pages, and produce an output file with only portrait pages, using basic [page rotation settings](#) available on the **Page Editing tab**.

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



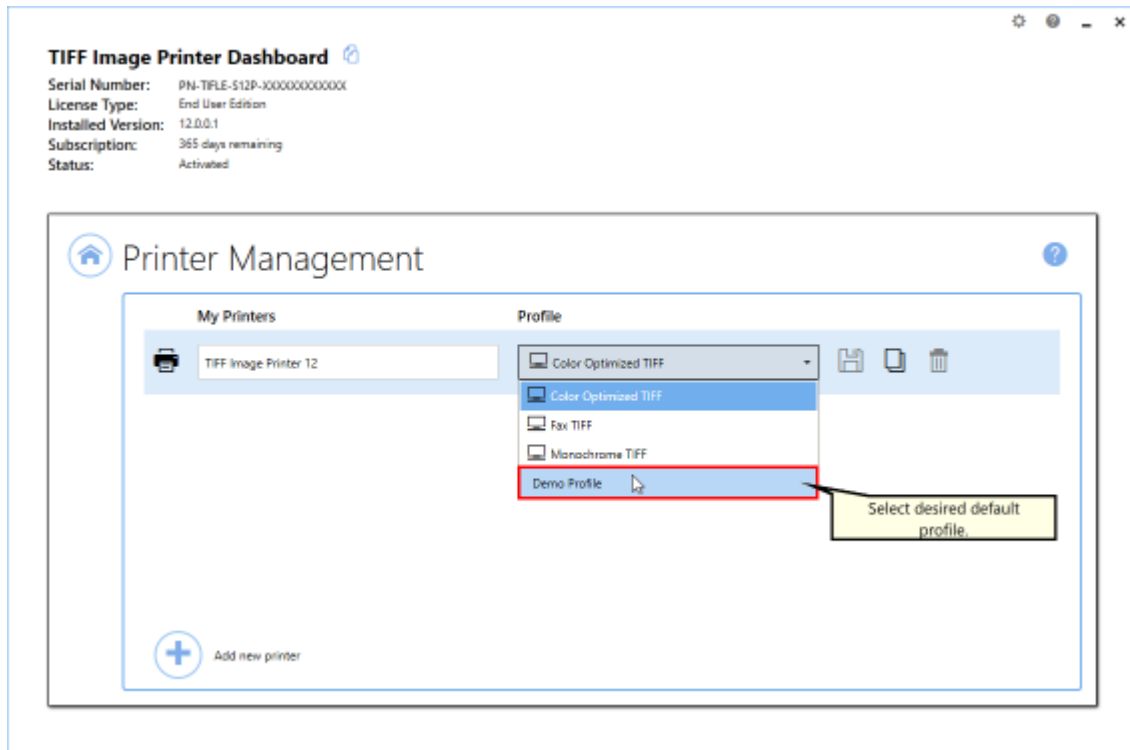
2. Select "Edit & Create Profiles" to open Profile Manager.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Editing tab**, under **Rotate Pages**, set the *landscape dial* to rotate landscape pages *90 degrees*. This means that all landscape pages in our mixed orientation document will be rotated to portrait orientation during conversion.



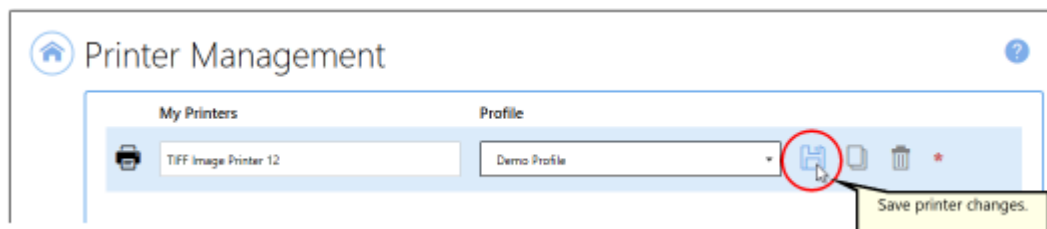
6. Click **Save-Back**, and close **Profile Manager**.

If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

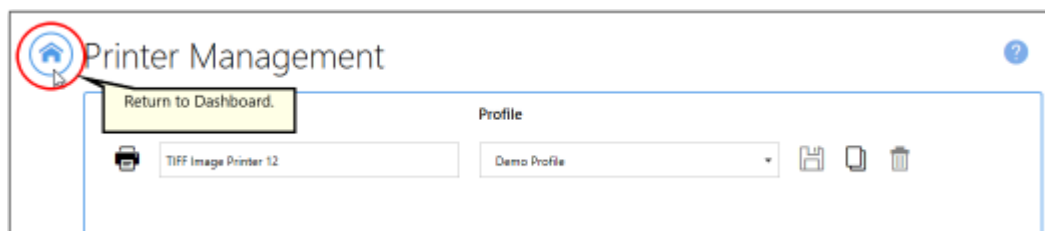
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



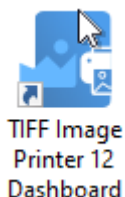
7. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, any landscape pages will be rotated 90 degrees, changing their orientation to portrait in the output file.

## Page Resizing

The steps below demonstrate how to take a multipaged document with a mixture of portrait and landscape pages, and produce an output file with only portrait pages, using the [copy page contents to a new page size](#) settings available on the **Page resizing tab**. Use this method if you do not want to rotate the contents of the page, but still want the output file to only have portrait pages.

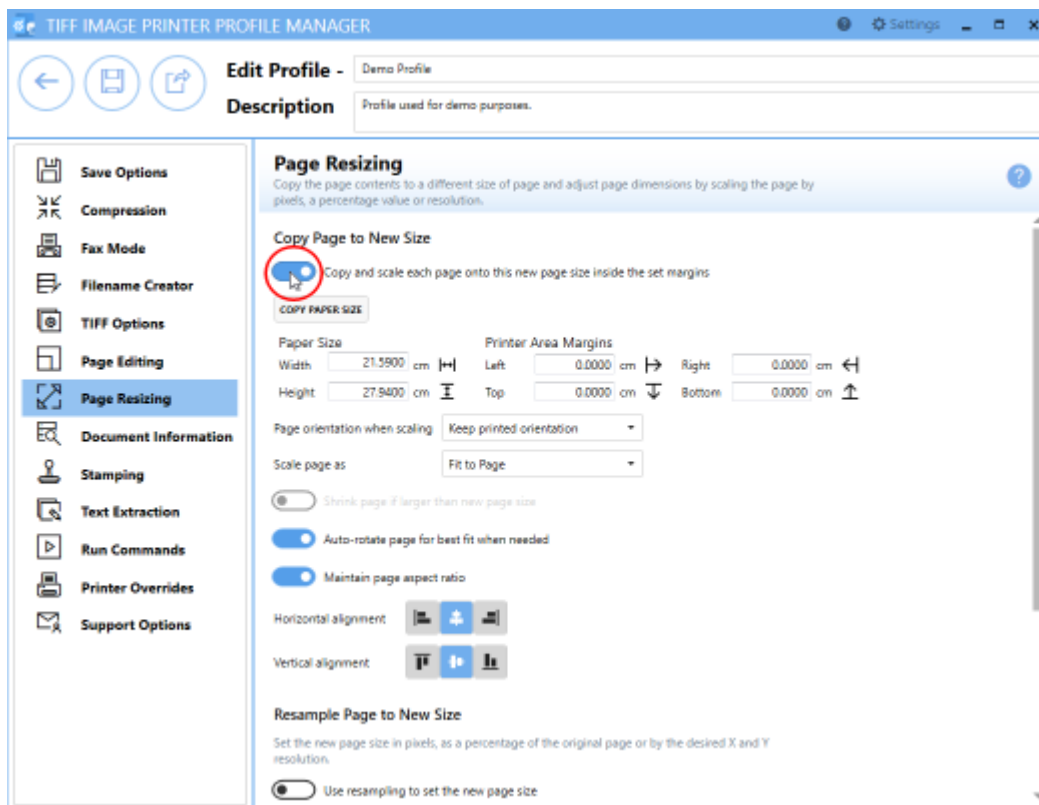
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.

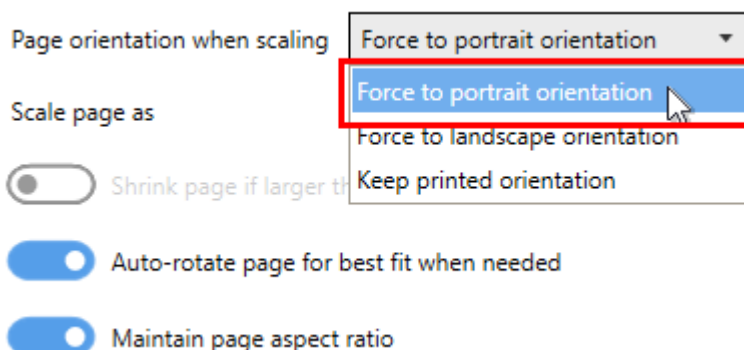


2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Resizing tab**, enable **Copy and scale each page onto this new page size inside the set margins**. This setting means that TIFF Image Printer will take a snapshot of each page and copy it onto the new page size.

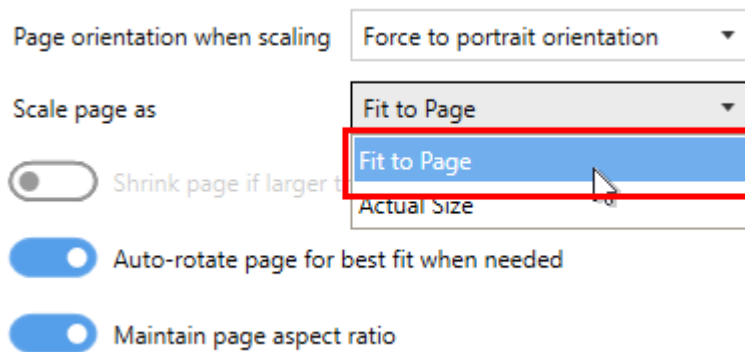




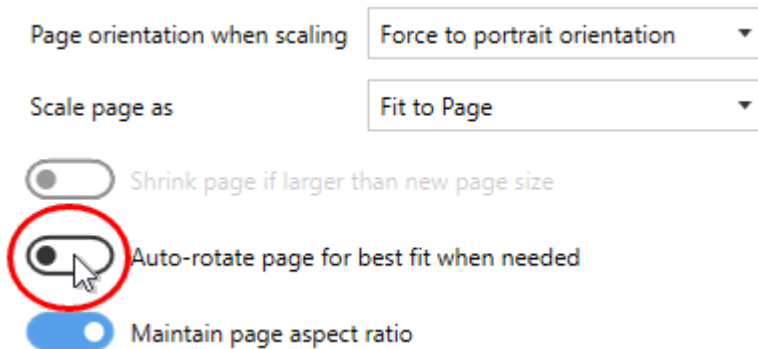
6. You can amend the **Paper Size** if you wish, but by default page size is set to *Letter*. Click "Copy Paper Size" to copy a new paper size from our list of paper sizes.
7. Beside **Page Orientation when scaling**, drop the box and select *Force to portrait orientation*. This means that the contents of all landscape pages in our mixed orientation document, will be copied to portrait pages during conversion.



8. Ensure **page scaling** is set to *Fit to Page*.



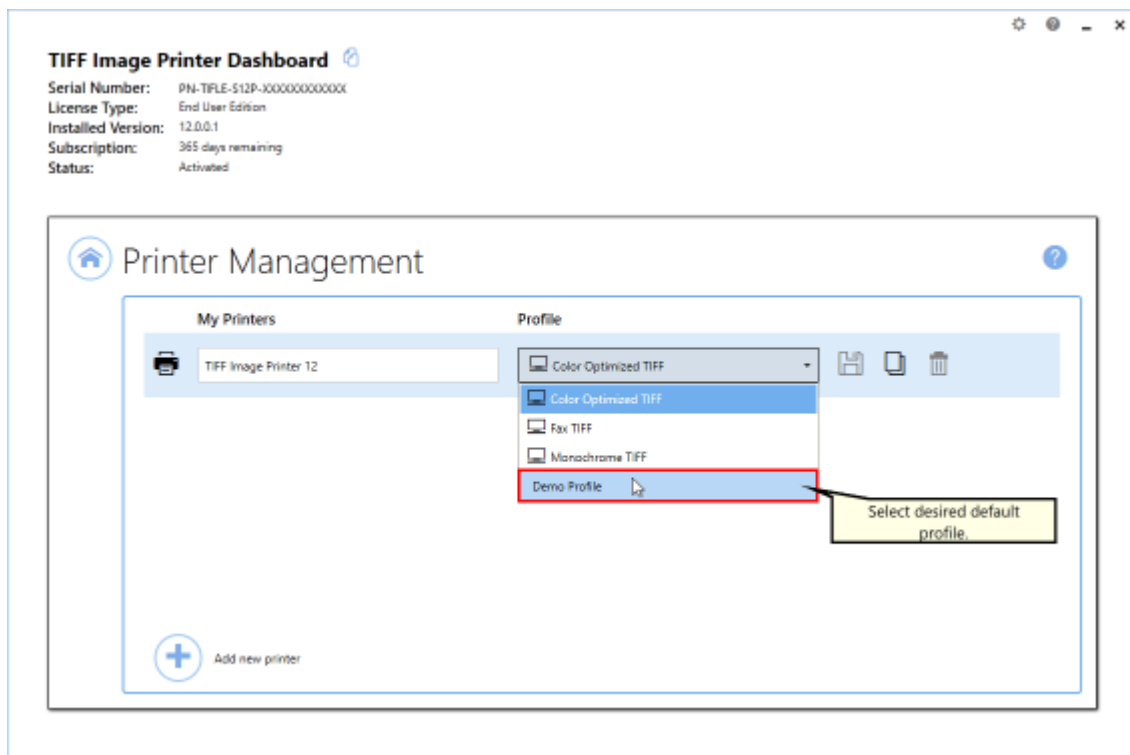
9. Disable **Auto-rotate page for best fit when needed**.



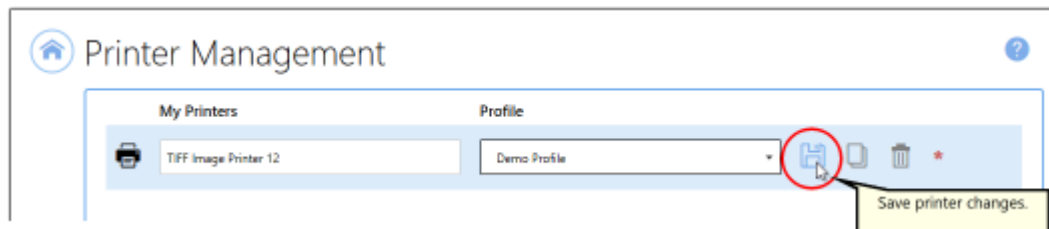
8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

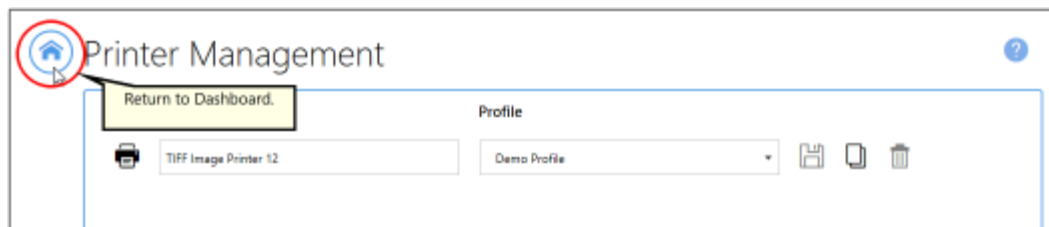
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, any page contents on landscape pages will be copied to portrait pages in the output file.

## Crop Page Margins or Areas

The cropping features in TIFF Image Printer are used to crop, or cut away, the outer parts of the page, and keep the inner area. While most often associated with editing photos, cropping also works to remove unwanted areas of your printed pages.

There are methods available that you can use to crop images or pages:

- Page Margins
- Page Areas or Regions.

A side effect of cropping can be a change in outputted page size. If you need to remove the margins, and also keep the original page size, see also [Copy Page Contents to a New Page Size](#).

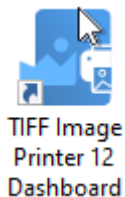
All [cropping settings](#) are controlled through the profile.

### Cropping Page Margins

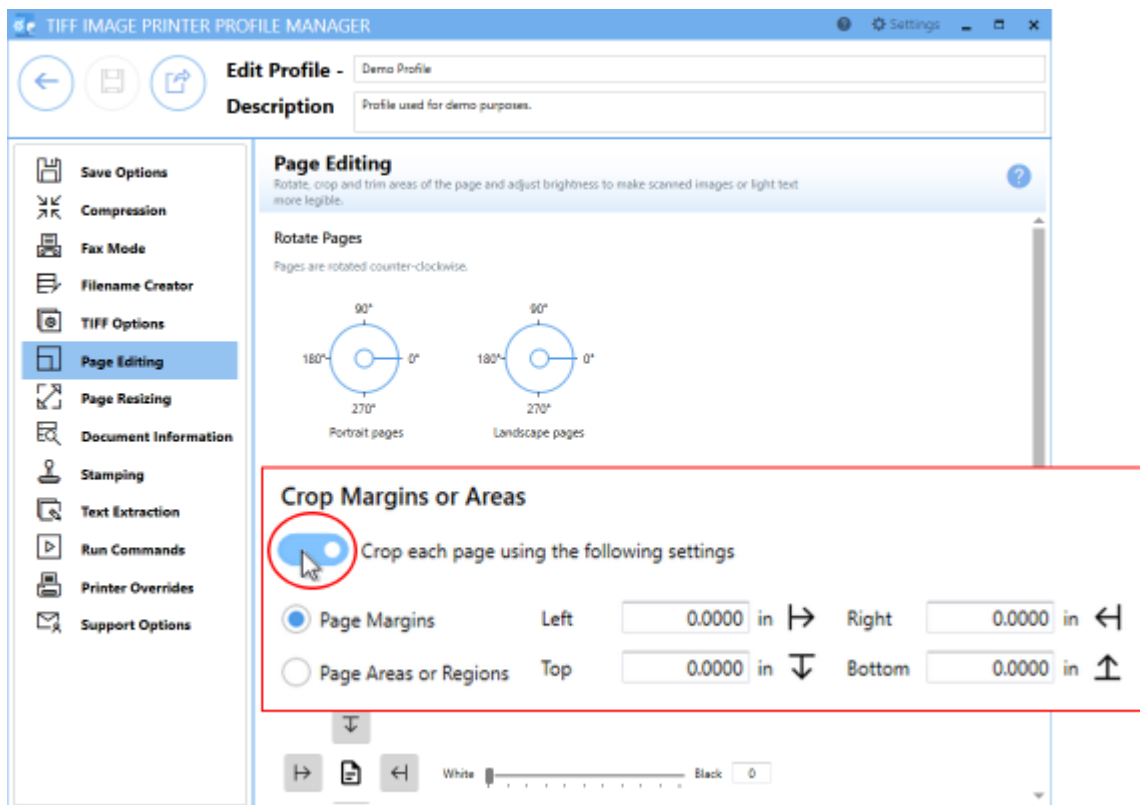
The steps below demonstrate how to use the crop page margins features to remove a solid-color frame (border) on each page, such as the white border around the page shown below.

#### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Editing tab**, under **Crop Margins or Areas**, enable **Crop each page using the following settings**.



6. Ensure that the **Page Margins** cropping method is selected.
7. For each side of the page, *Left*, *Top*, *Right* and *Bottom*, enter your desired margins to be cropped. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

#### Crop Margins or Areas

☒ Crop each page using the following settings

☒ Page Margins      Left  in    Right  in

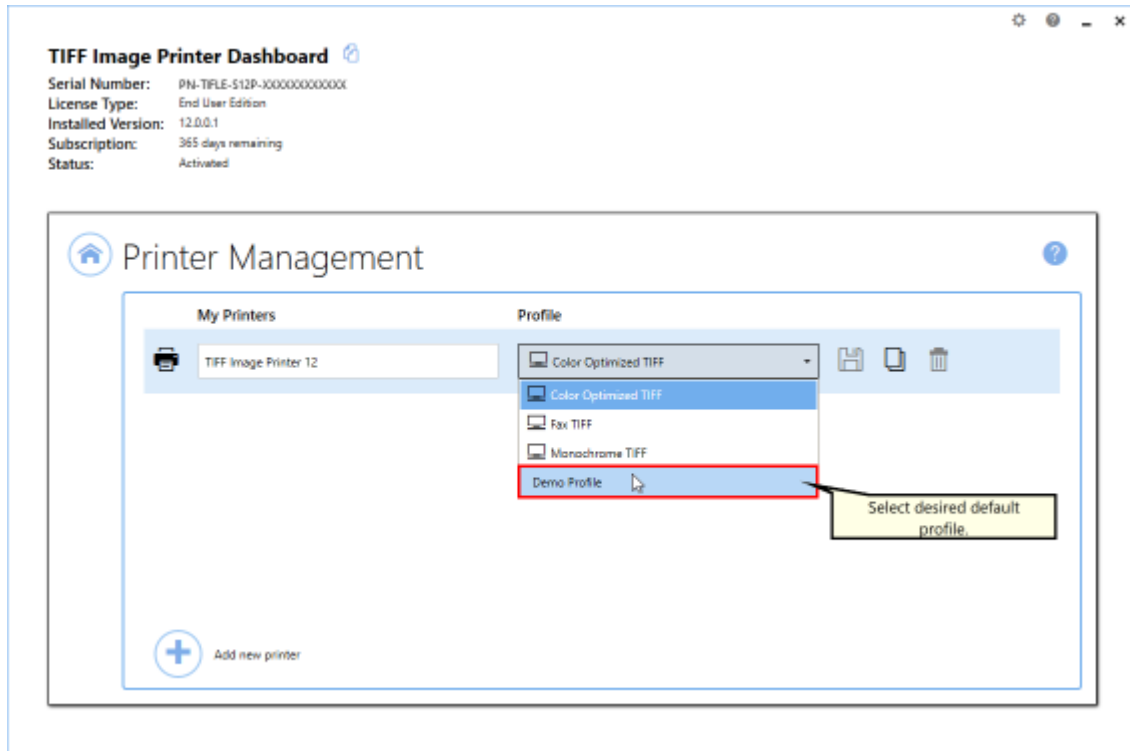
☐ Page Areas or Regions      Top  in    Bottom  in

Enter desired margins to be cropped.

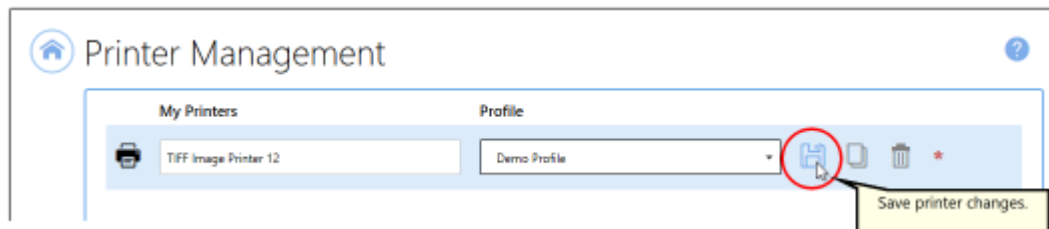
8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

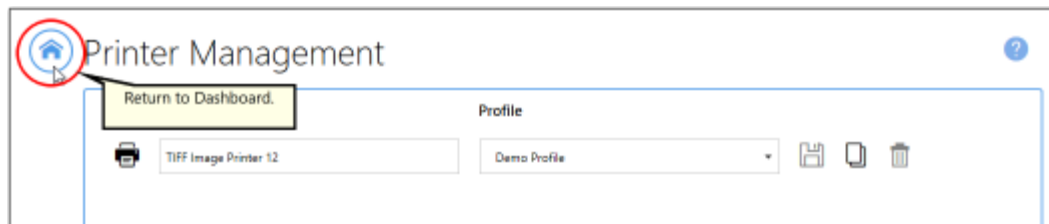
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



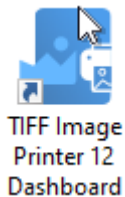
9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the margins (white border) will be cropped away and removed from the output file.

## Cropping Page Areas or Regions

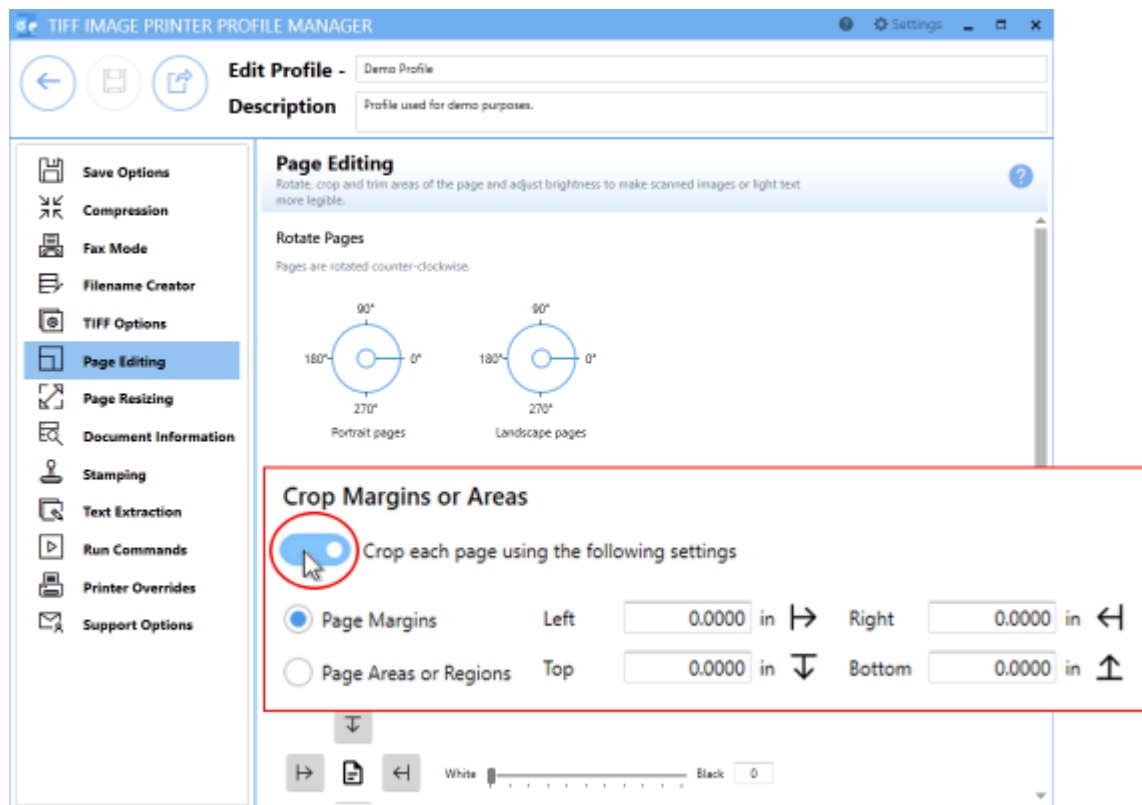
The steps below demonstrate how to use the crop page areas or regions features to cut the desired part of the image out of the page, such as cutting out the colored areas of the page shown below.

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



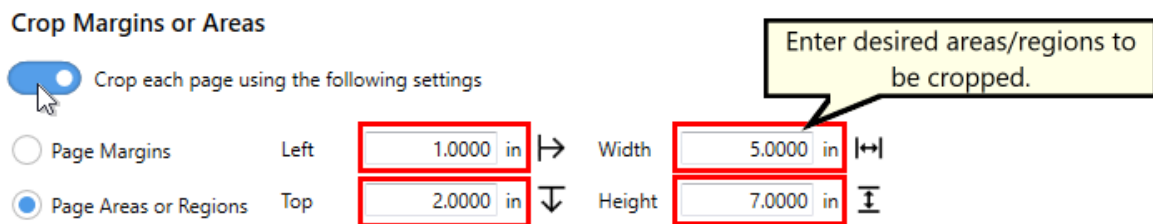
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Editing tab**, under **Crop Margins or Areas**, enable **Crop each page using the following settings**.



6. Select the **Page Areas and Regions** cropping method.
7. For each of the *Left*, *Top*, *Width* and *Height* fields enter your desired area/region to be cropped:
  - *Left* - enter how far from the left hand side to start cropping
  - *Top* - enter in how far down from the top edge of the page to start cropping
  - *Width* - enter in the width of the area to crop
  - *Height* - enter in the height of the area to crop

You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

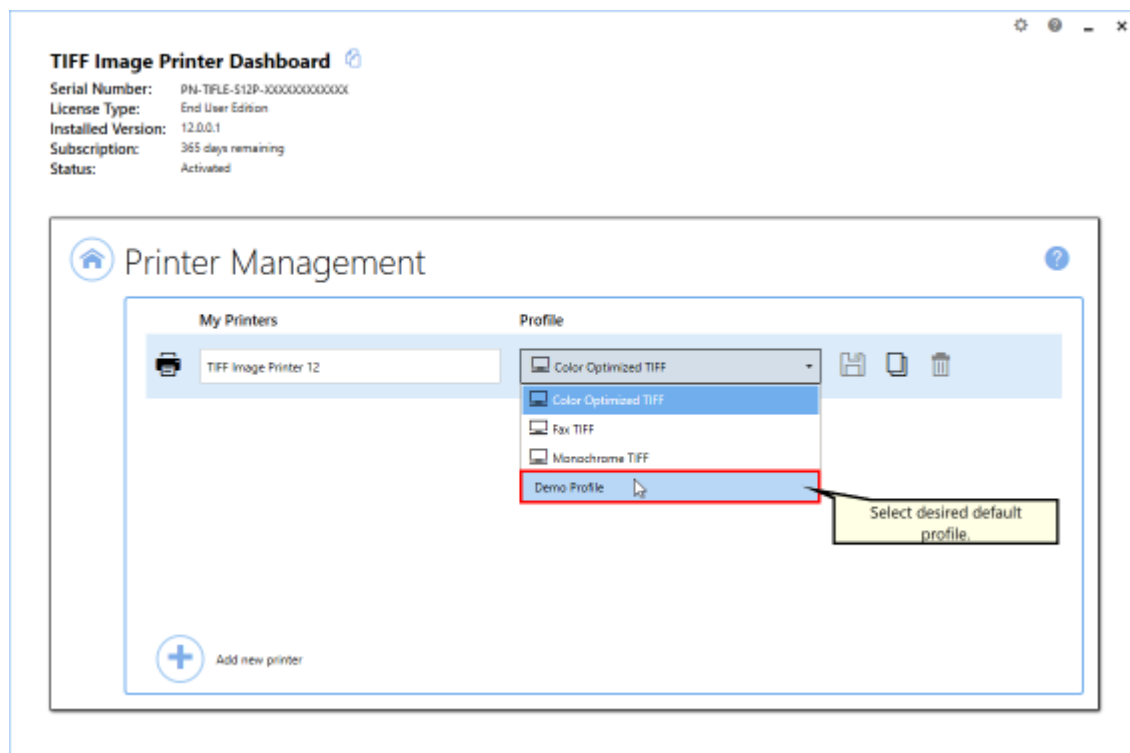




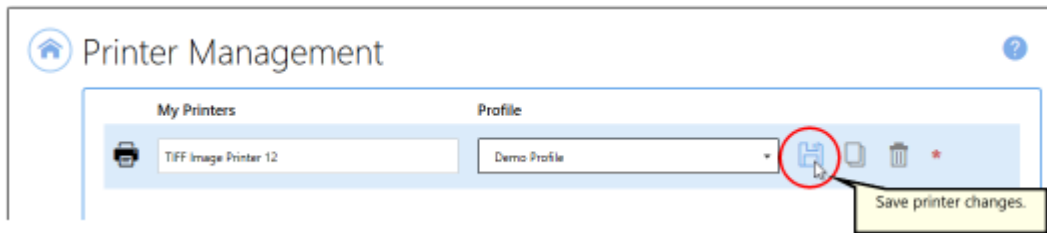
8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

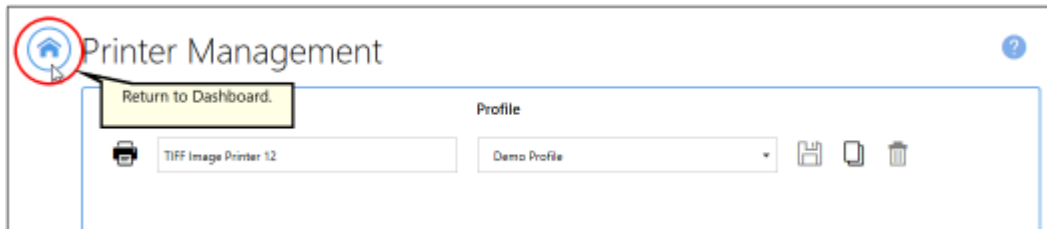
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the area/regions (colored area) will be cropped out and saved in the output file.

## Trim Existing Margins

The trimming feature is an easy way to remove unwanted margins or borders from your pages. While similar to cropping, trimming is an automatic process. All areas to the left, top, right and bottom of the document where the color falls at or below the chosen color intensity level are removed. As soon as a color that is above the intensity level is found, trimming on that side stops.

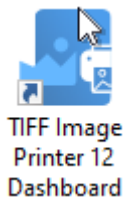
A common use of this feature would be to remove the lighter shades of grey on scanned images, as we do in the example below. This also works with color images as TIFF Image Printer will use a greyscale representation of the page to determine trimming.

A side effect of trimming can be a change in outputted page size. If you need to remove the grey from the sides, and also keep the original page size, see also [Copy Page Contents to a New Page Size](#).

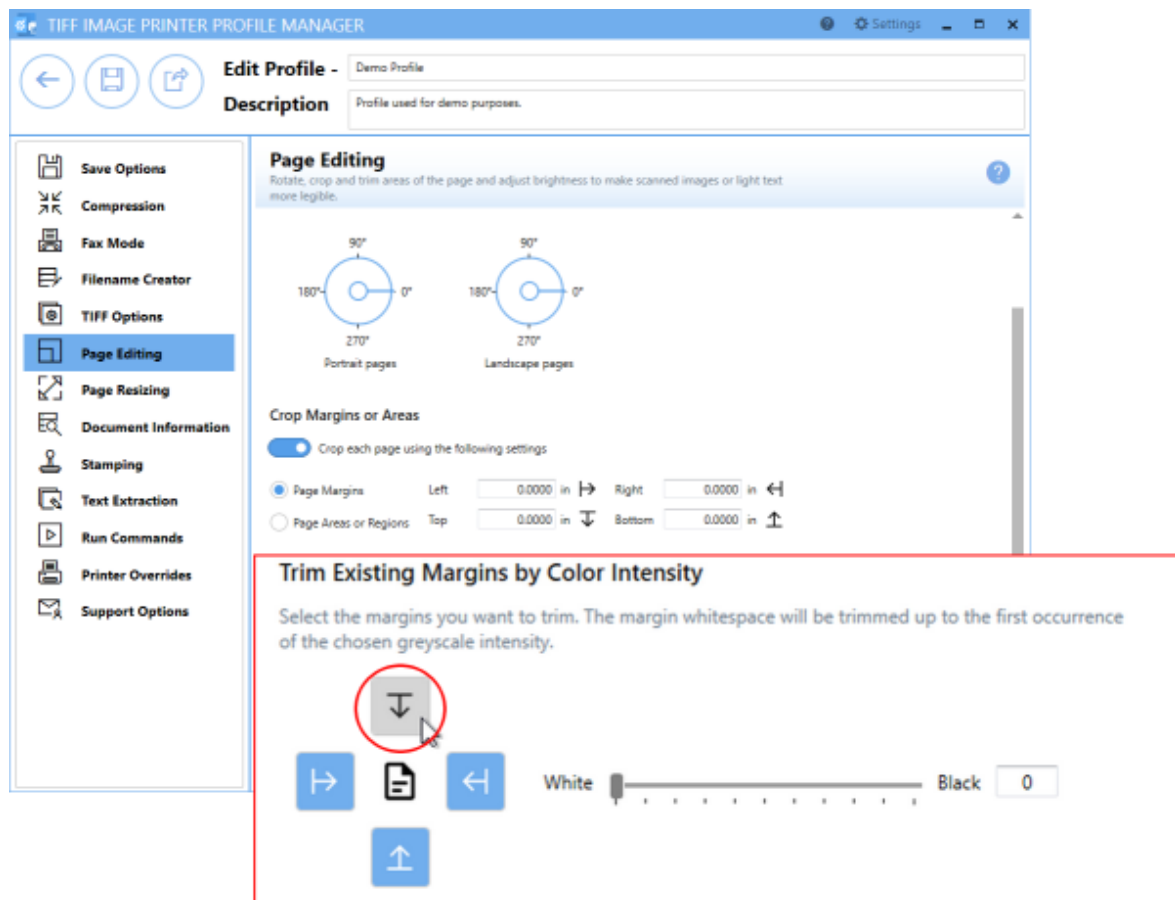
All [trimming settings](#) are controlled through the profile.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



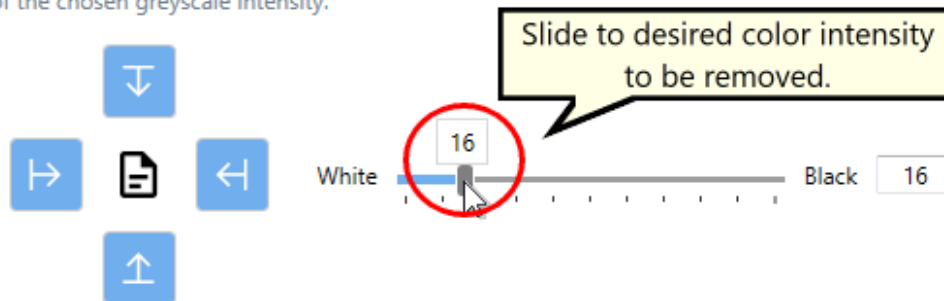
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Editing tab**, under **Trim Existing Margins by Color Intensity**, use the arrow buttons to select which sides of the document to trim. You can trim *Left*, *Top*, *Right* or *Bottom*, or any combination of all four.



6. Use the sliding scale or enter a value to choose the level of grey to remove. If the slider is all the way to the left, or White, only pure white pixels will be removed. For a scanned image, the border is generally not pure white so the intensity should be moved to the right. The darker the grey on the border, the further towards Black you will need to move the slider.

### Trim Existing Margins by Color Intensity

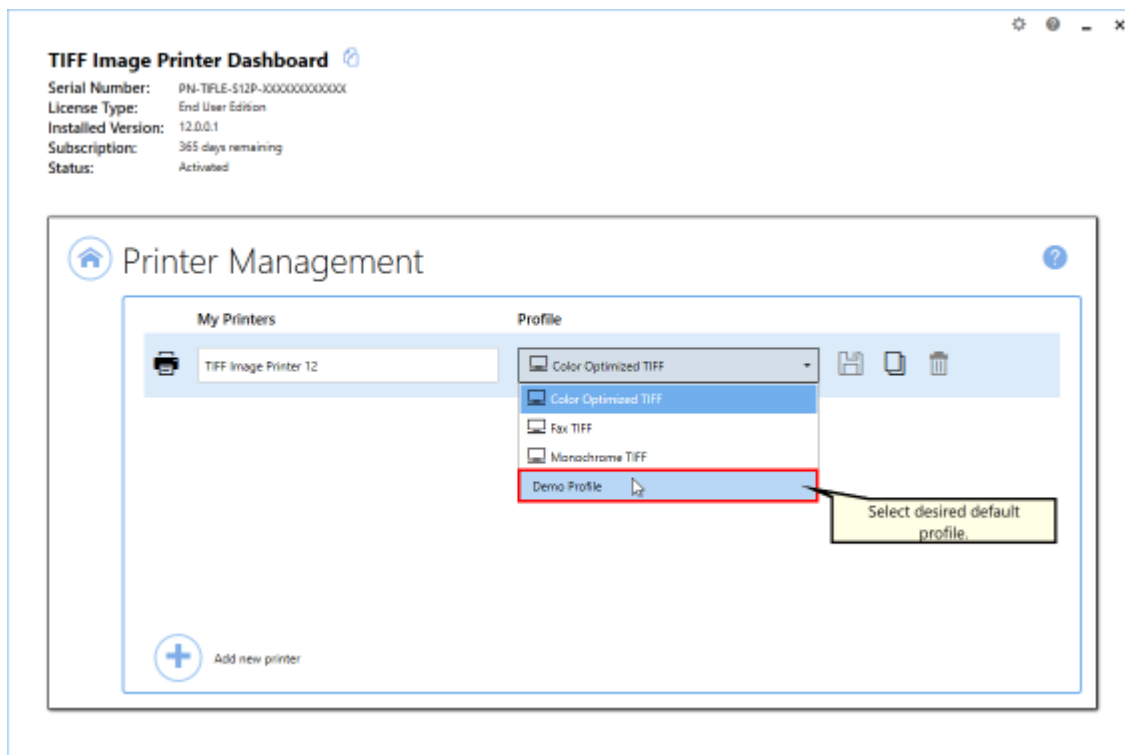
Select the margins you want to trim. The margin whitespace will be trimmed up to the first occurrence of the chosen greyscale intensity.



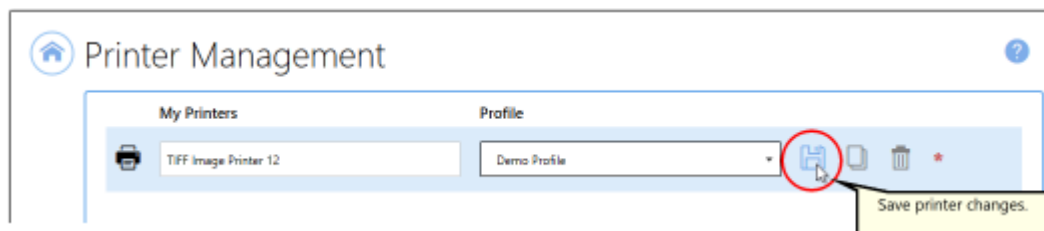
7. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

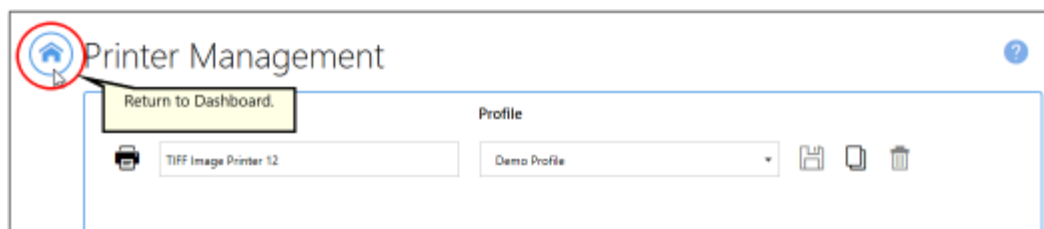
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



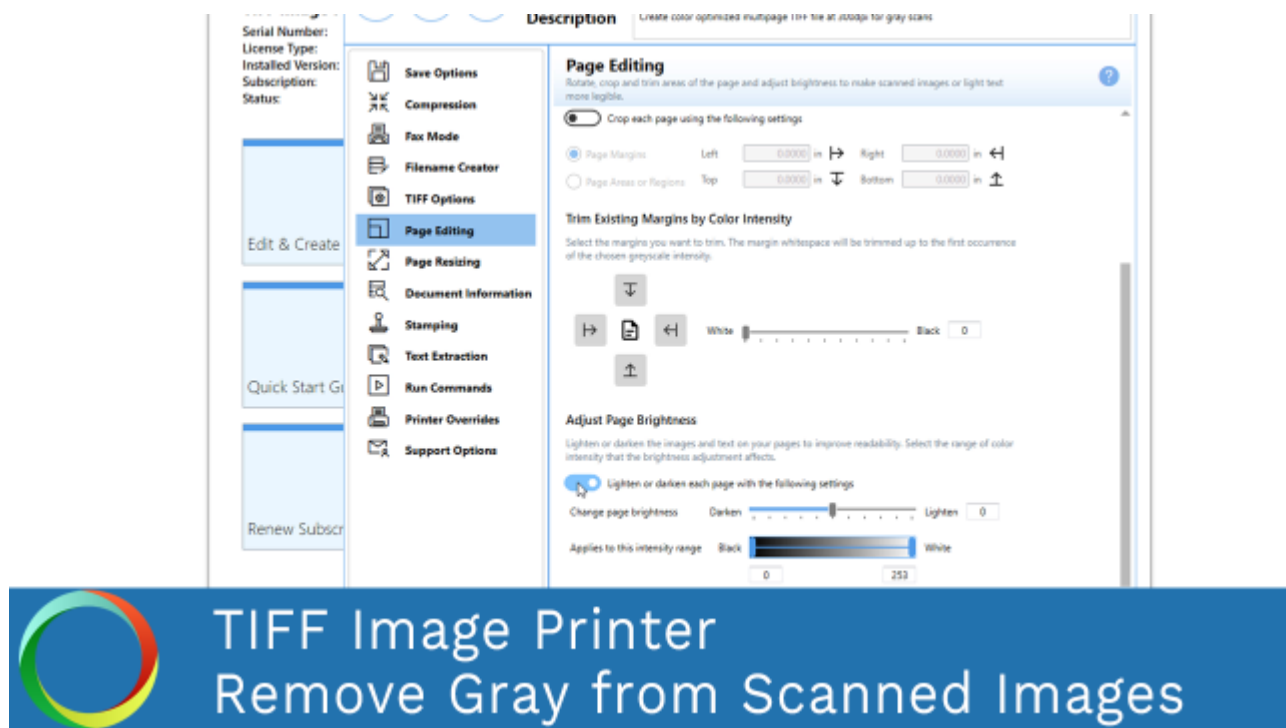
8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the grey will be trimmed from all four sides stopping at the designated intensity level.

## Adjust Page Brightness

Adjusting page brightness will lighten or darken the images or text on your pages to improve readability. Darkening the page can help to make light colored text more readable, or, conversely, lightening a page can make a dark image more visible.

A common use of this feature would be to remove the grey cast from the background of scanned images. It is particularly common to get a grey cast when scanning a book or receipts.

All [page brightness settings](#) are controlled through the profile.



*Click the image above to watch the video tutorial.*

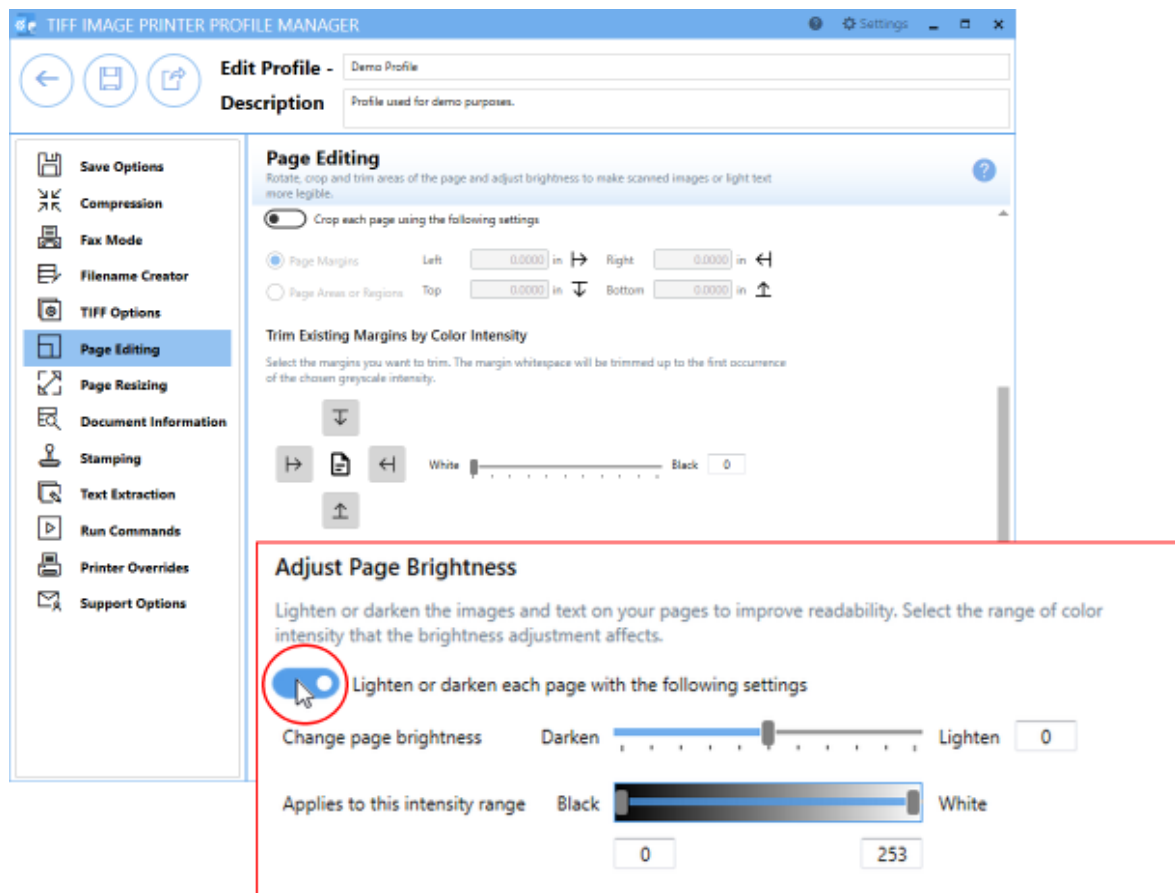
## Step by Step Instructions

The steps below demonstrate how to use the page brightness features to remove a gray cast from a scanned image.

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Editing** tab, under **Adjust Page Brightness**, enable **Lighten or darken each page with the following settings**.

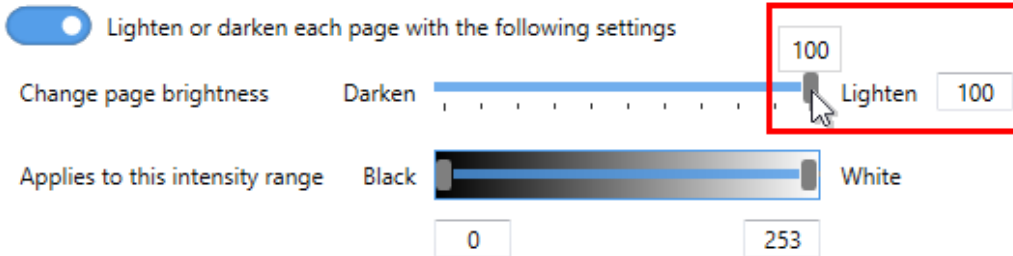


6. Drag the sliding scale all the way to Lighten or enter the value of 100.



### Adjust Page Brightness

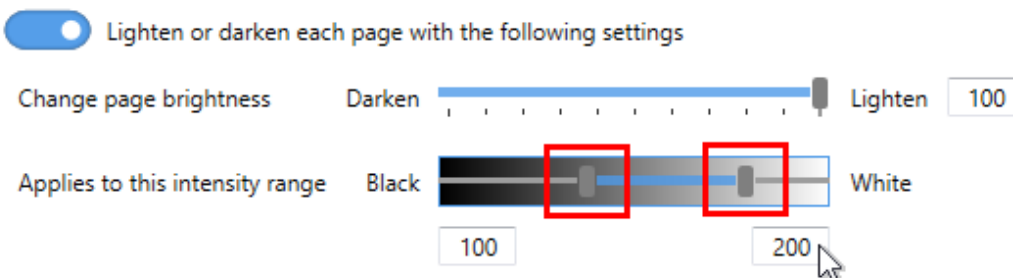
Lighten or darken the images and text on your pages to improve readability. Select the range of color intensity that the brightness adjustment affects.



7. Then set the intensity range that you want lightened. We just want the grey shades to be lightened, so we could use the values of 100 to 200 for example.

### Adjust Page Brightness

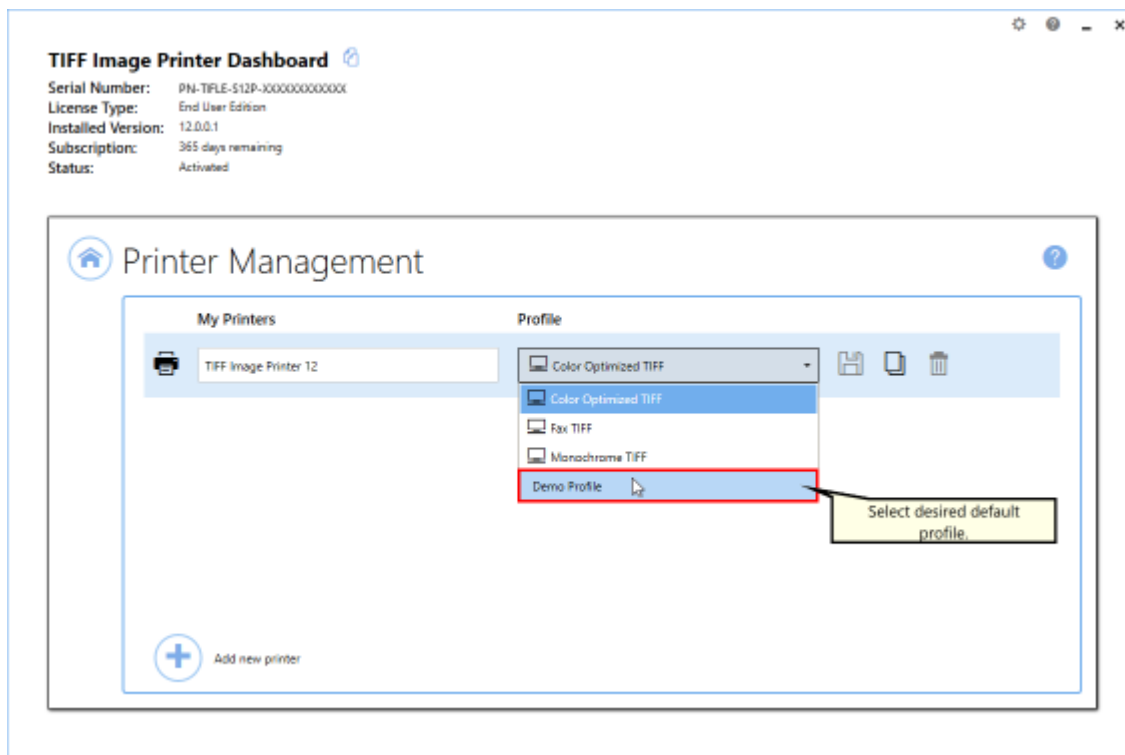
Lighten or darken the images and text on your pages to improve readability. Select the range of color intensity that the brightness adjustment affects.



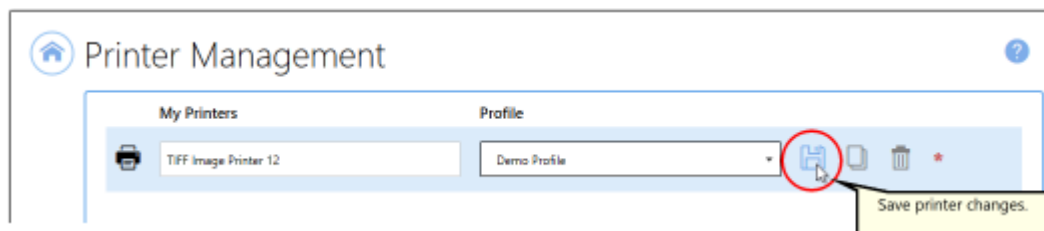
8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

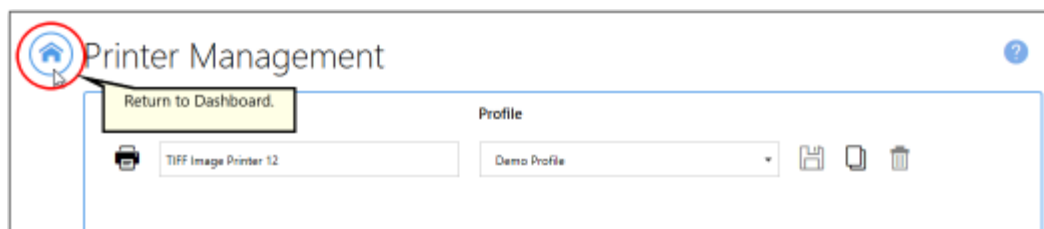
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



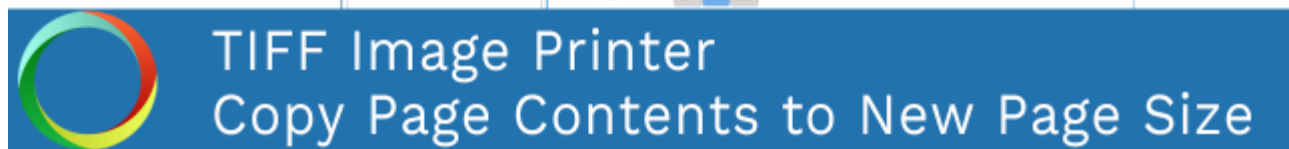
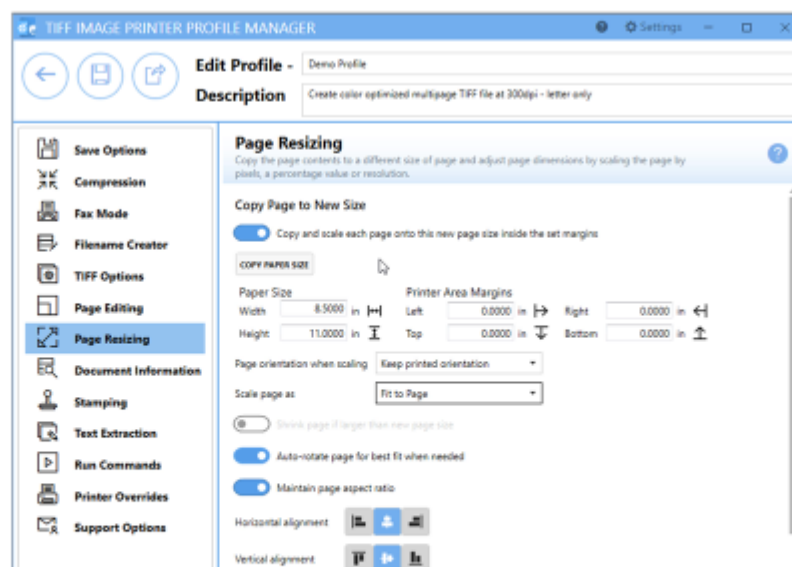
9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, all shades between the designated intensity will be replaced by pure white. This may be too much lightening for your needs. Adjust the page brightness and applicable intensity range as needed.

## Copy Page Contents to a New Page Size

The Copy To feature is used to copy the output image to a new "page" of a different size. If you have a document consisting of a mix of Letter, Legal and other paper sizes, the Copy To feature can be used to create an image or file where each page is the same size.

This feature can also be used in conjunction with [Cropping](#) and [Trimming](#) to remove unwanted margins and borders and then place the image back onto the same size page.

All [Copy To settings](#) are controlled through the profile.

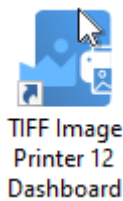


*Click the image above to watch the video tutorial.*

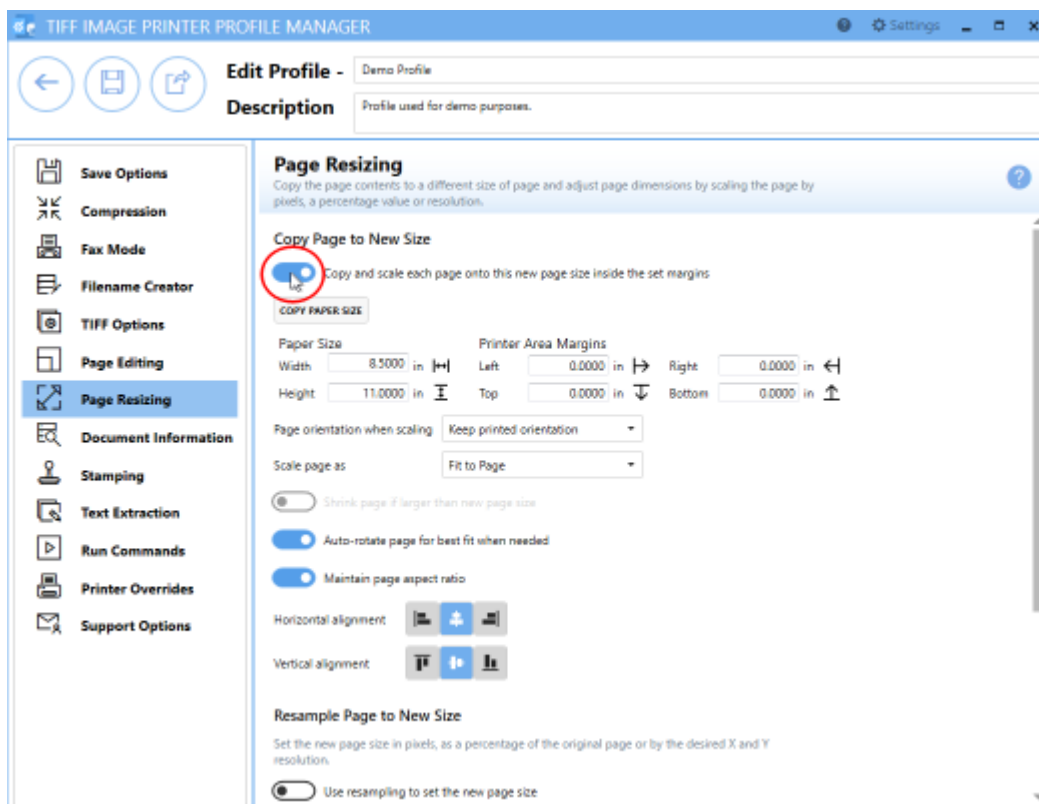
## Step by Step Instructions

The steps below demonstrate how to use the Copy To feature to convert a document with a mix of letter and legal paper sizes to a single paper size file.

1. Launch the TIFF Image Printer **Dashboard**.

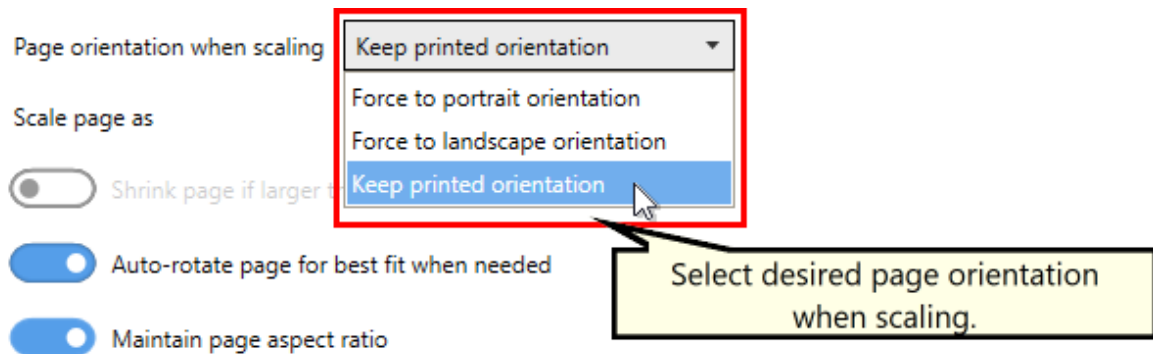


2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Resizing** tab, under **Copy Page to New Size**, enable **Copy and scale each page onto this new page size inside the set margins**.

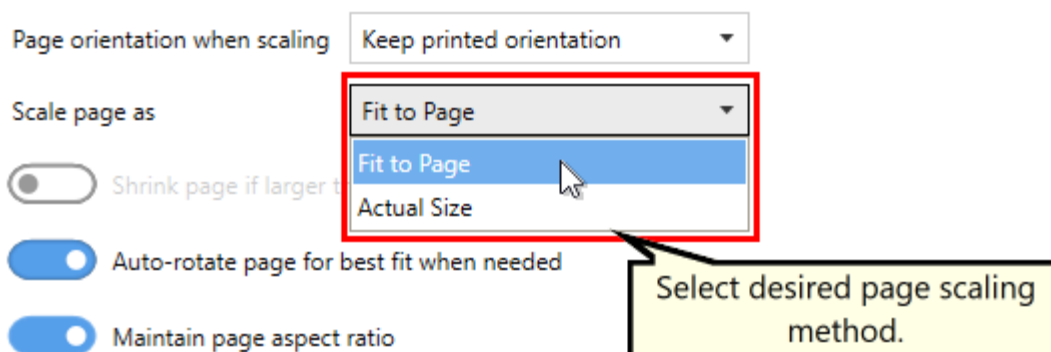


6. Enter the dimensions of your desired output page size. Select **Copy Paper Size** to copy the dimensions from our list of standard paper sizes.

7. Beside **Page orientation when scaling**, you have the option to *force either portrait or landscape orientation*, or just *keep printed orientation*.



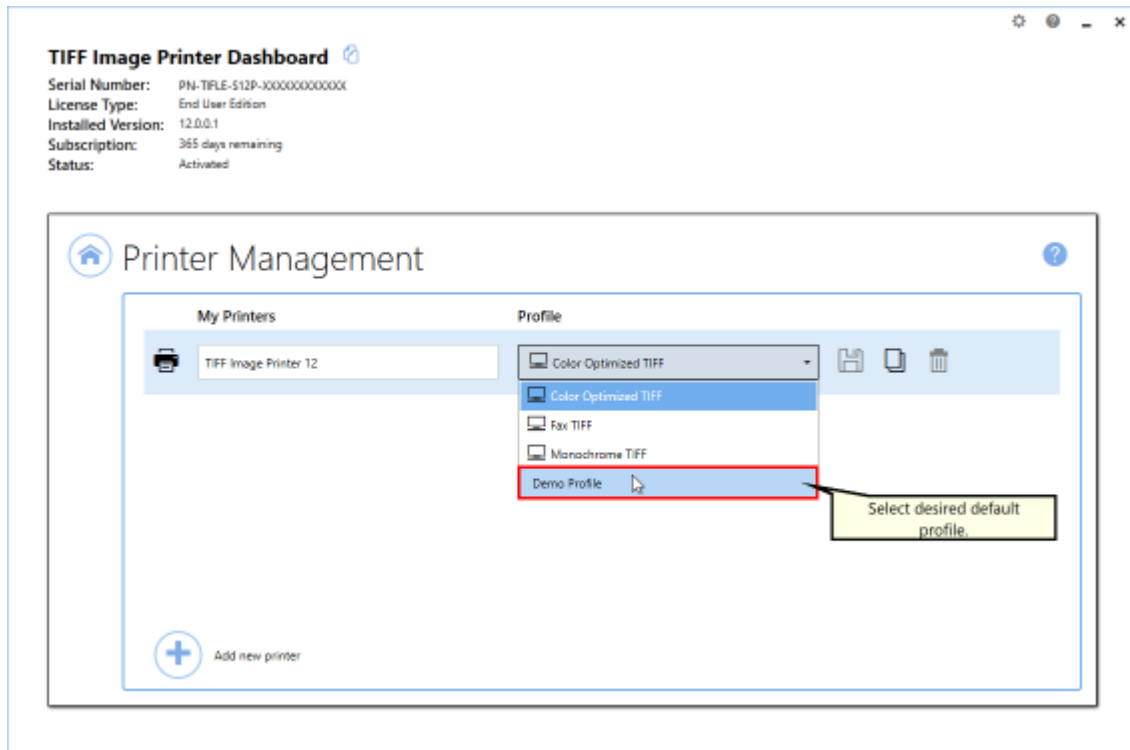
8. Beside **Scale page as** you can select *Fit to Page* or *Actual Size*. We recommend setting this to *Fit to Page* so that TIFF Image Printer can increase or decrease the size of the page contents as needed to fit the new page size. The only time you may need to change scale page to *Actual Size* is if your original document is a much smaller page size and you do not want the contents stretched to fit the new page size.



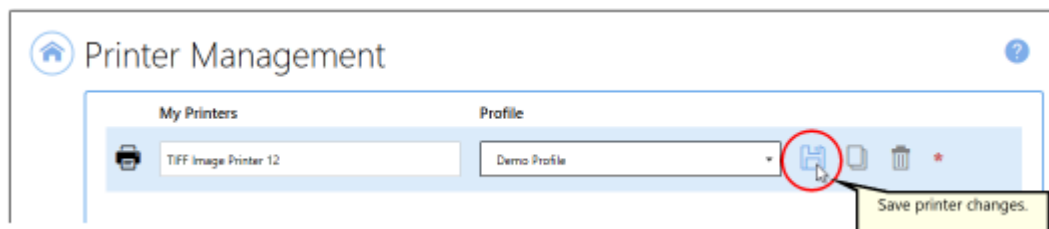
9. Leave **Auto-rotate page for best fit when needed** enabled unless you are forcing a specific page orientation and want any page contents on the wrong page orientation to be copied to the new page size and orientation without being rotated.
10. We recommend leaving the settings related to **maintaining aspect ratio** and **alignment** in their default states.
11. Click **Save-Back**, and close **Profile Manager**.

If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

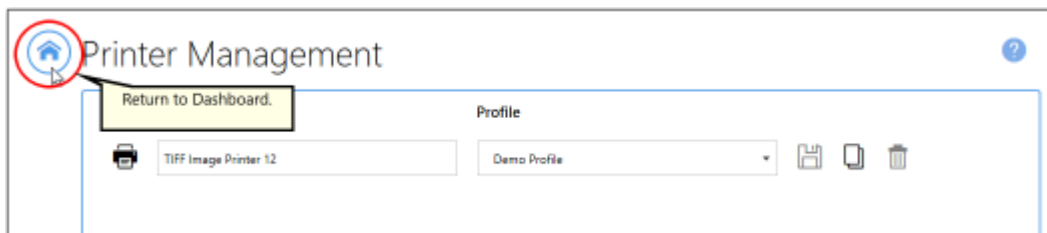
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



12. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the original page contents will be copied to the new page size.

## Resize Images Using Resampling

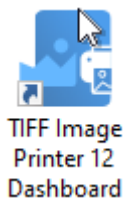
The Resampling feature is used to create images or files in custom sizes. The resampling features are not a replacement for choosing the proper page size on the properties dialog when printing, or setting up a custom paper size through the [Printer Overrides](#) tab.

You can resample images by choosing Pixels, Percentage (%) or Resolution (DPI). To prevent image distortion (a stretched or squished image), Lock Aspect Ratio can be left enabled to have TIFF Image Printer calculate the height needed automatically.

All [page resampling settings](#) are controlled through the profile.

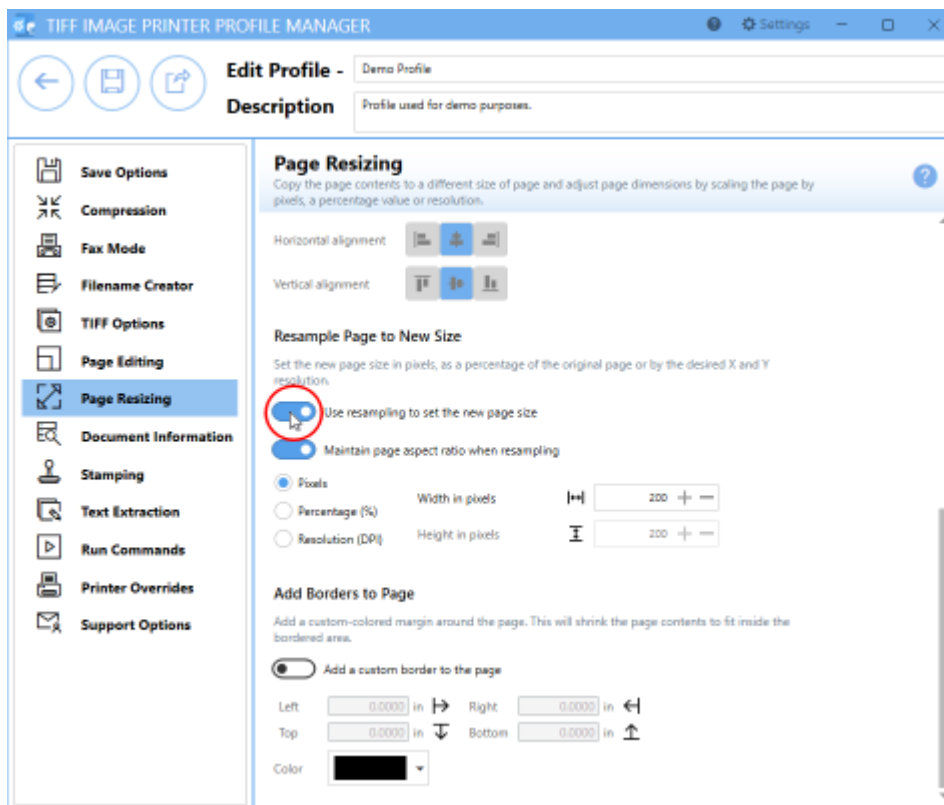
### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Resizing tab**, under **Resample Page to New size**, enable **Use resampling to set the new page size**.





6. Leave **Maintain page aspect ratio when resampling** enabled if you want TIFF Image Printer to automatically determine the *Height* based on the value entered for the *Width*.

### Resample Page to New Size

Set the new page size in pixels, as a percentage of the original page or by the desired X and Y resolution.

☒ Use resampling to set the new page size

☒ Maintain page aspect ratio when resampling

☒ Pixels  
☐ Percentage (%)      Width in pixels          
☐ Resolution (DPI)      Height in pixels     

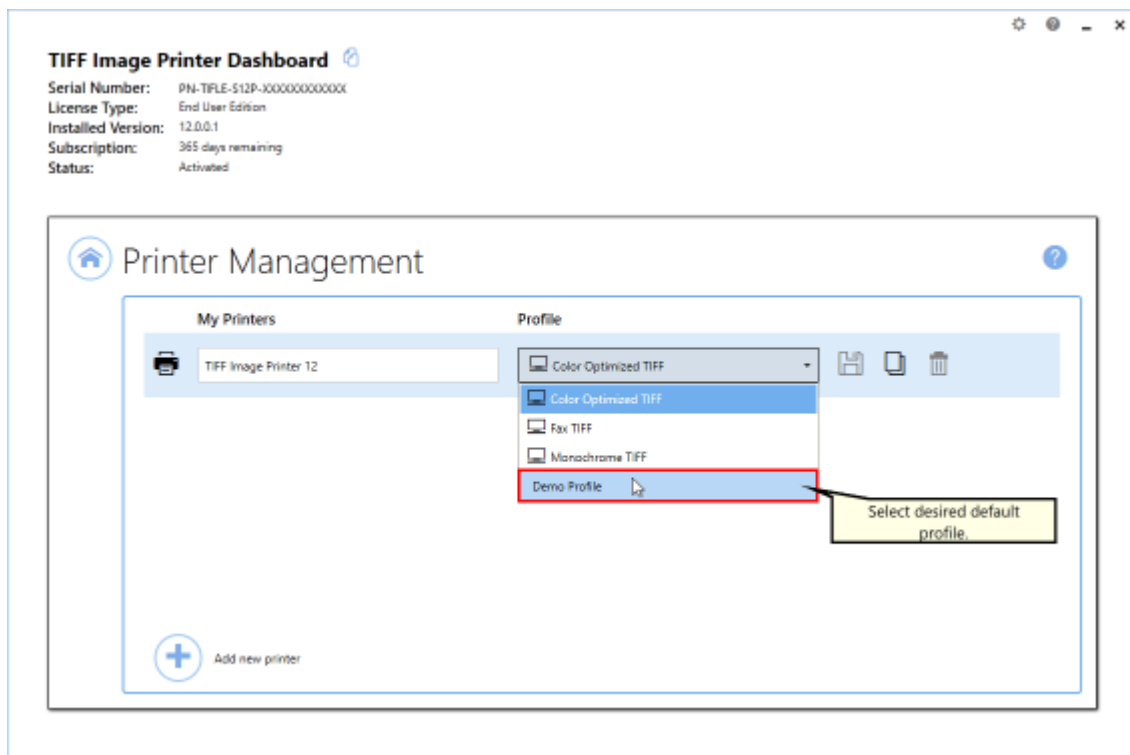
7. Select either *Pixels*, *Percentage (%)*, or *Resolution (DPI)* and enter your desired measurements.

<input checked="" type="radio"/> Pixels	Width in pixels	<=>	200 + -
<input type="radio"/> Percentage (%)			
<input type="radio"/> Resolution (DPI)	Height in pixels	≡	200 + -
<input type="radio"/> Pixels	% of original image width	<=>	100 + -
<input checked="" type="radio"/> Percentage (%)			
<input type="radio"/> Resolution (DPI)	% of original image height	≡	100 + -
<input type="radio"/> Pixels	X Resolution	<=>	200 + -
<input type="radio"/> Percentage (%)			
<input checked="" type="radio"/> Resolution (DPI)	Y Resolution	≡	200 + -

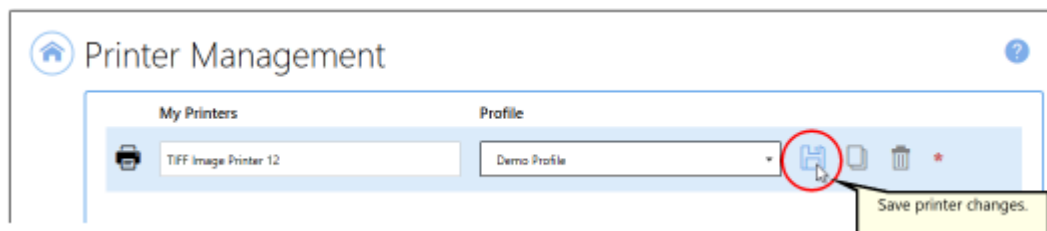
8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

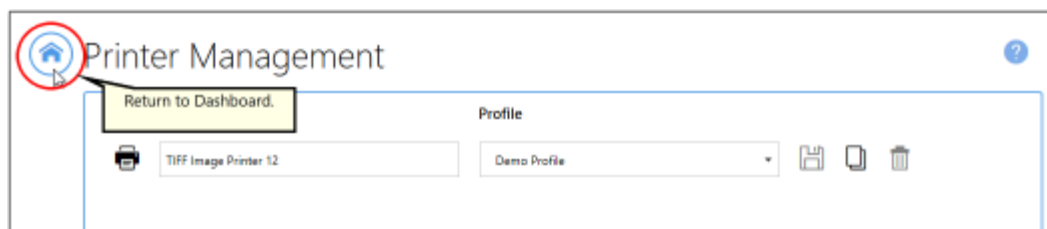
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output file will have your designated dimensions.

### Add Borders to Page

The Adding Borders to Page feature is used to add a custom-colored margin around the page. This feature will shrink the page contents to fit inside the bordered area.

A common use of this feature would be to create a white border in order to create space to add a watermark to the header or footer of a page where the page contents previously went right to the edge of the page.

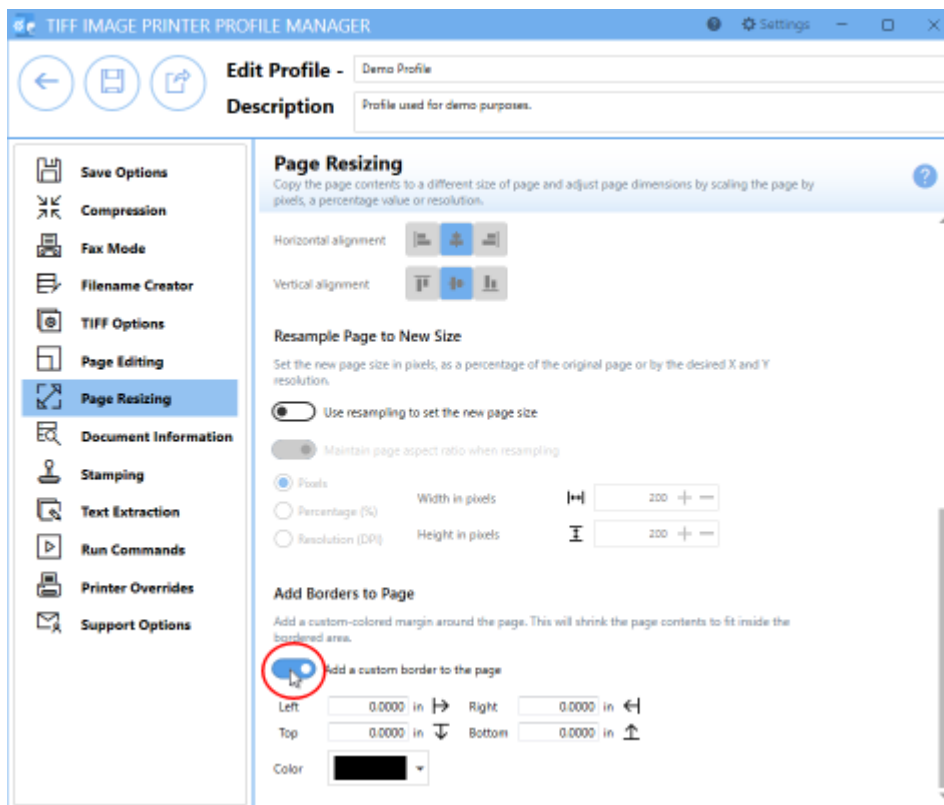
All [adding border settings](#) are controlled through the profile.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



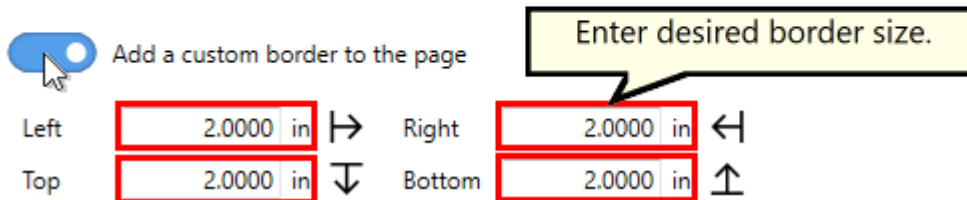
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Page Resizing tab**, under **Add Borders to Page**, enable **Add a custom border to the page**.



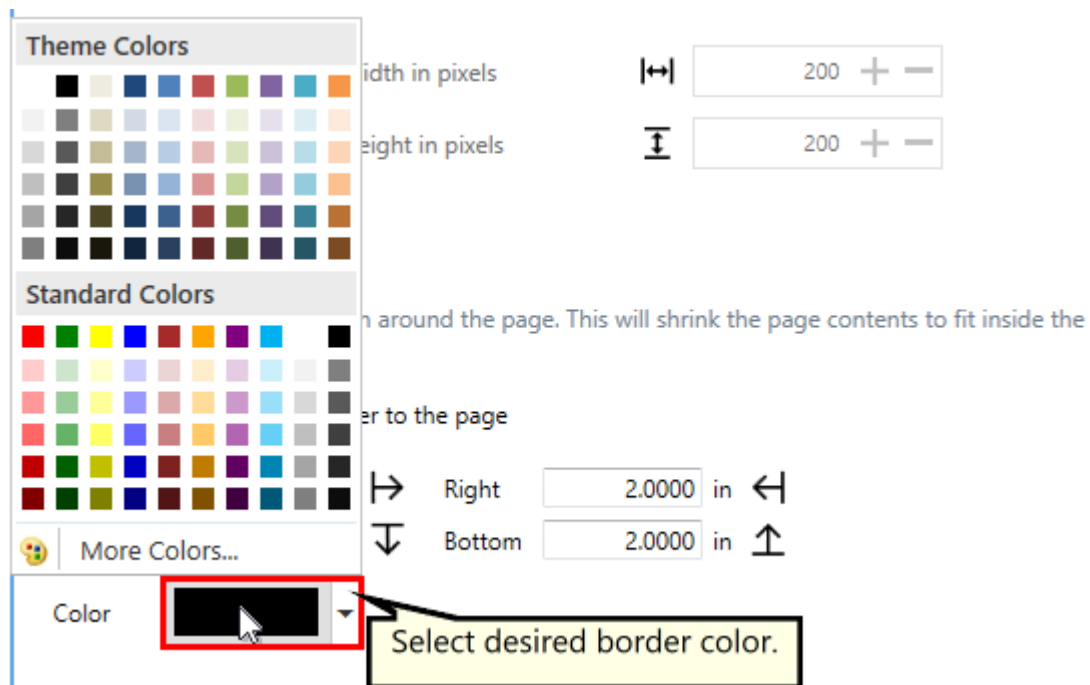
- For each side of the page, *Left*, *Top*, *Right* and *Bottom*, enter your desired border size. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

### Add Borders to Page

Add a custom-colored margin around the page. This will shrink the page contents to fit inside the bordered area.



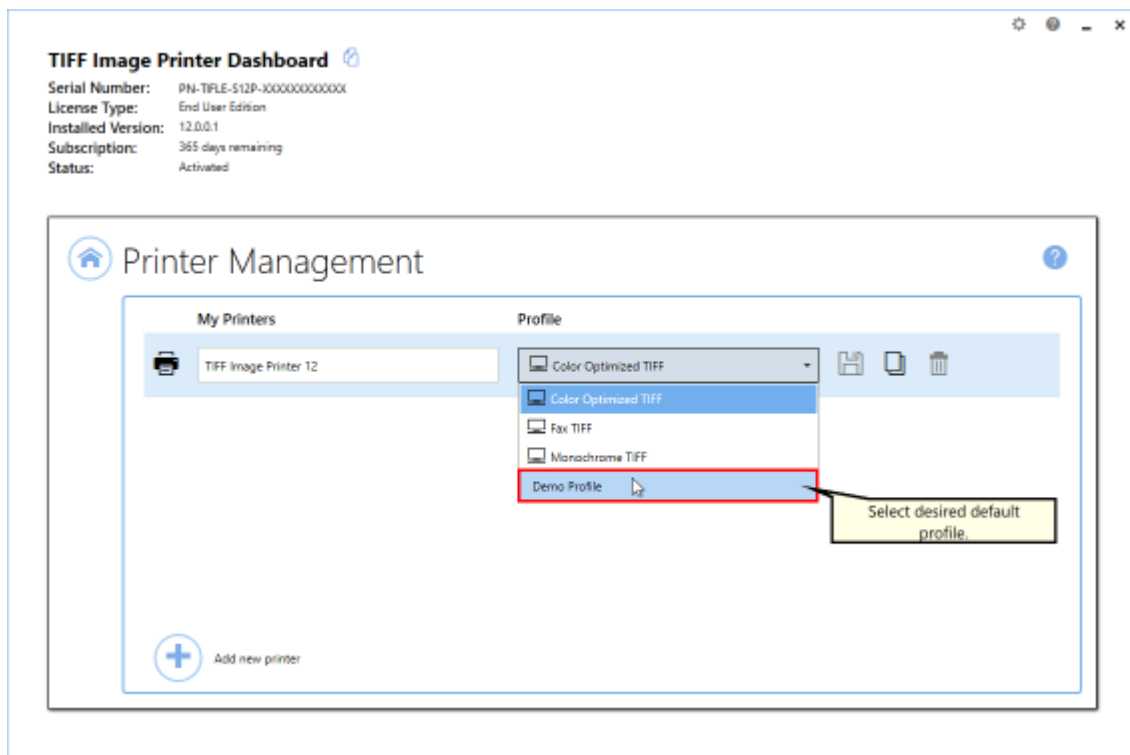
- Select your desired border color either by using the color picker, entering the hex color code, or entering the RGBA color code. Note that the A slider will allow you to adjust the transparency of the border color.



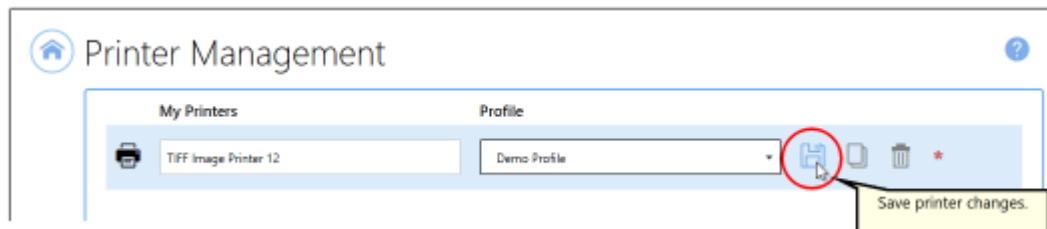
8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

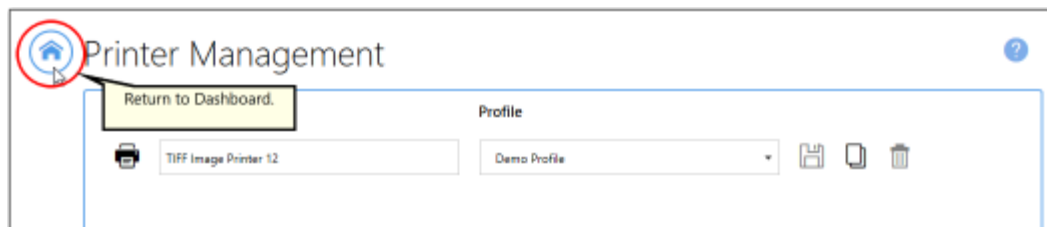
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the page contents will be shrunk down to fit within your designated border size and color.

## Add Watermark to Each Page

The Stamping tool will add text, images, page numbering or date/time information as a watermark stamp onto a page. The watermark will overlay the page content.

If your page has standard 1 inch margins, adding a stamp to the top or bottom of the page will appear as though it is in the header or footer, but in fact the Stamping tool does not reserve space for the stamp. Therefore, if you have a page with no margins or very small margins, the stamp may be layered over the page content. If you have non-traditional margins and need to reserve space for a stamp in the header or footer space, please go to the **Page Resizing tab** and [add borders to the page](#).

All [stamping options](#) are controlled through the profile.

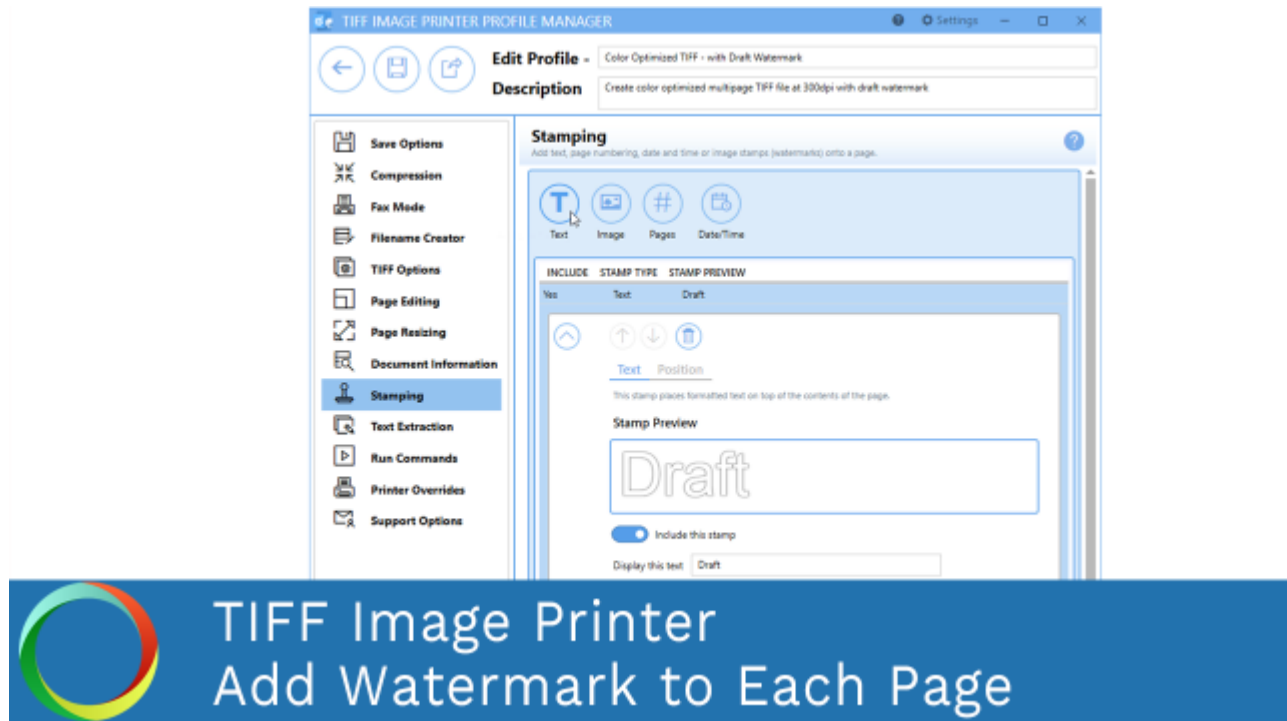
There are four types of watermark stamps that can be added to output files using the **Stamping tab**:

- [Adding Text Watermark Stamp](#)
- [Adding Image Watermark Stamp](#)
- [Adding Page Numbering Watermark Stamp](#)
- [Adding Date and Time Watermark Stamp](#)



## Text Stamp

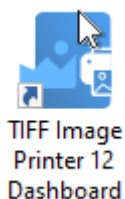
The steps below demonstrate how to use the **Stamping tab** to add a text watermark to output files.



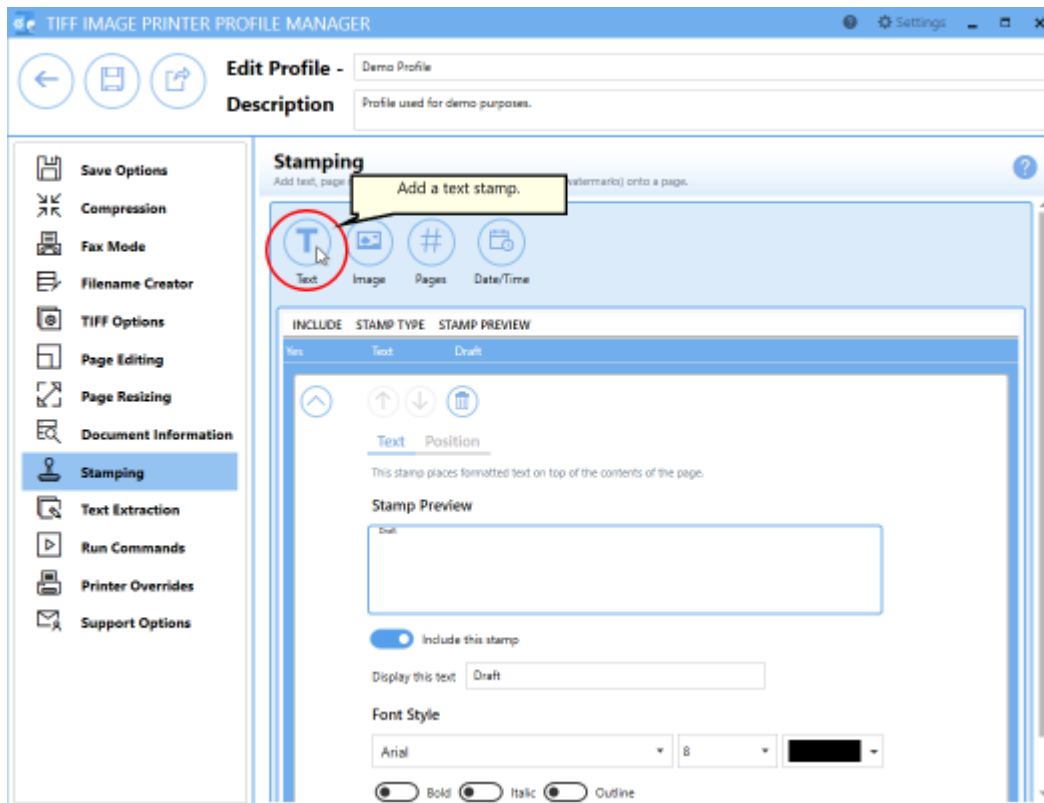
*Click the image above to watch the video tutorial.*

## Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



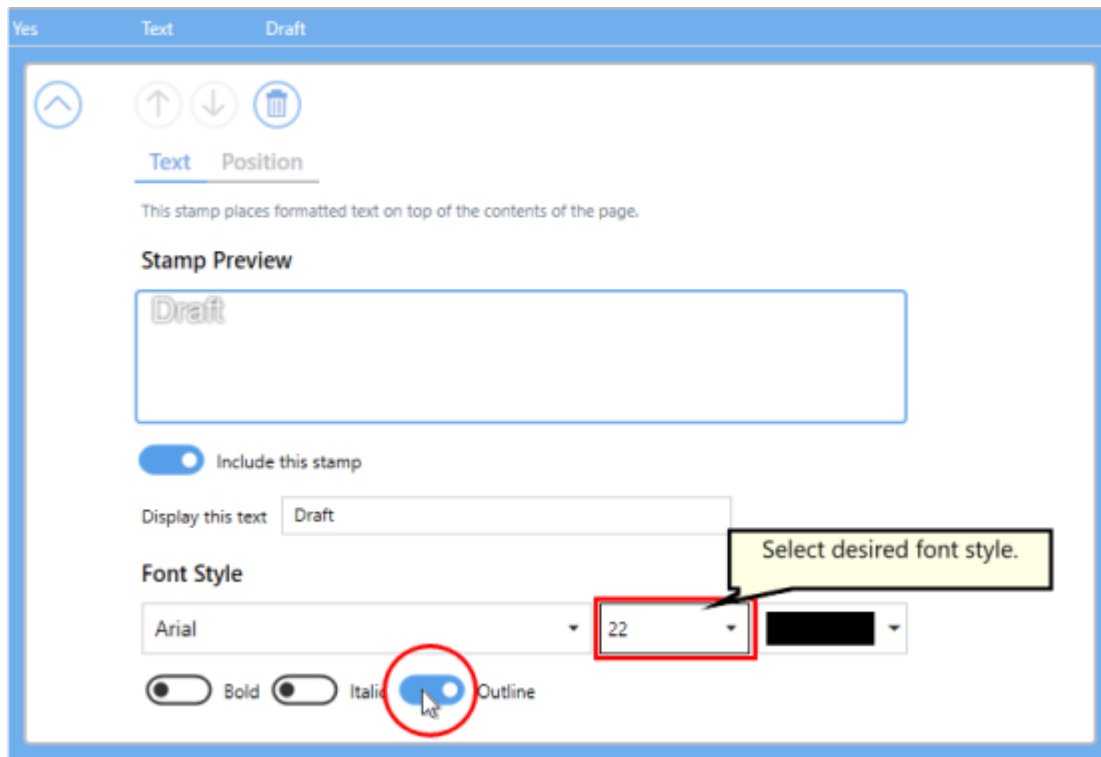
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Stamping tab**, select **Add a text stamp**.



6. Beside *Display this text*, enter your desired text. By default, the text that is entered is: "Draft".

The screenshot shows the 'Text' tab of the TIFF Image Printer interface. At the top, there are three tabs: 'Yes', 'Text', and 'Draft'. Below the tabs are three icons: a circular arrow, up and down arrows, and a trash can. The 'Text' tab is selected, and the 'Text' sub-tab is active. A description states: 'This stamp places formatted text on top of the contents of the page.' Below this is a 'Stamp Preview' section with a text box containing the word 'Draft'. A red rectangle highlights the 'Draft' text in the preview box, and a yellow callout bubble points to it with the text 'Enter desired text.' Below the preview is a toggle switch labeled 'Include this stamp' which is turned on. Below that is a label 'Display this text' followed by a text box containing 'Draft'. At the bottom is the 'Font Style' section, which includes a font family dropdown set to 'Arial', a font size dropdown set to '8', and a color dropdown set to black. Below these are three toggle switches for 'Bold', 'Italic', and 'Outline', all of which are currently turned off.

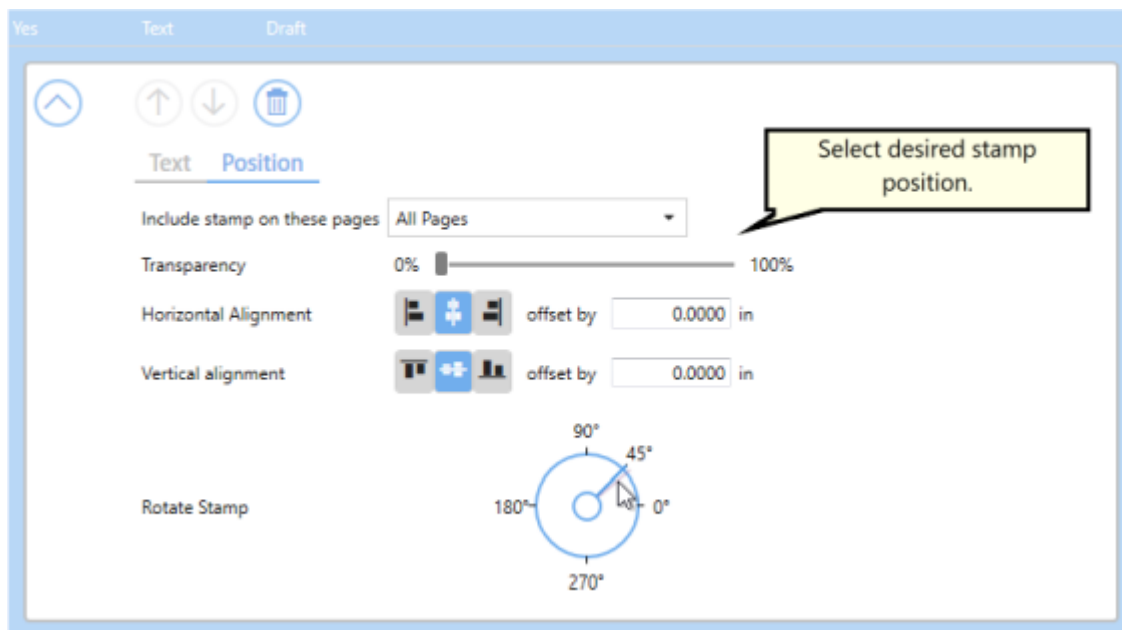
7. You can change the font type, font size, font color, and enable *bold*, *italic* or *outline* font styles. For this example, we will use font size 22 and enable outline.



### 8. Under **Position**:

- you can choose which pages in the output file will be stamped,
- you can adjust the transparency of the stamp,
- you can change the horizontal and vertical alignment of the stamp,
- and you can rotate the stamp.

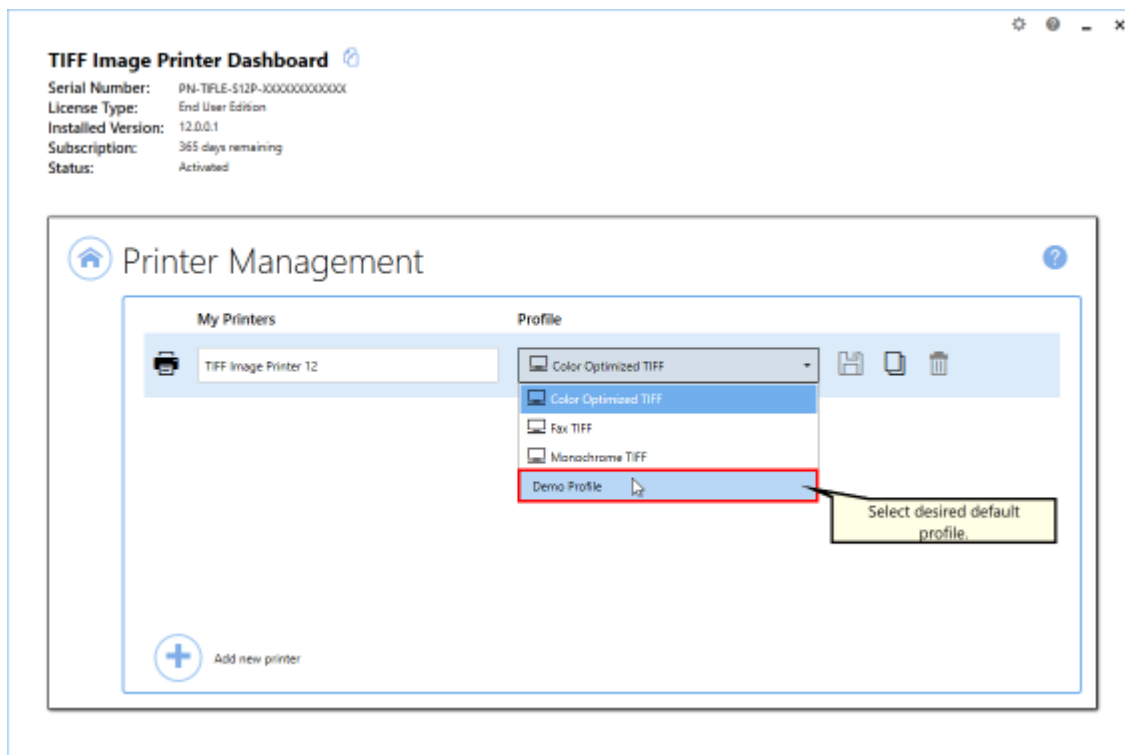
For this example, we will rotate the text stamp 45 degrees.



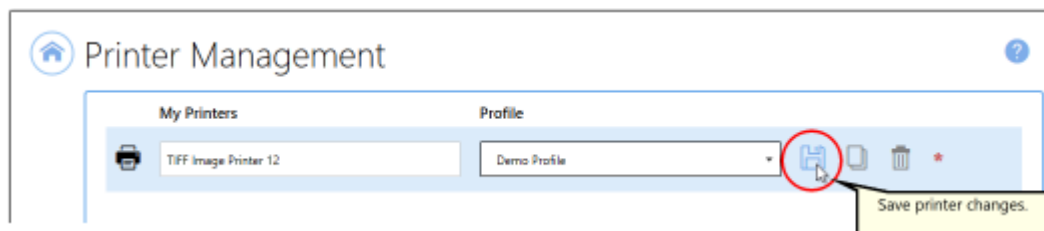
9. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

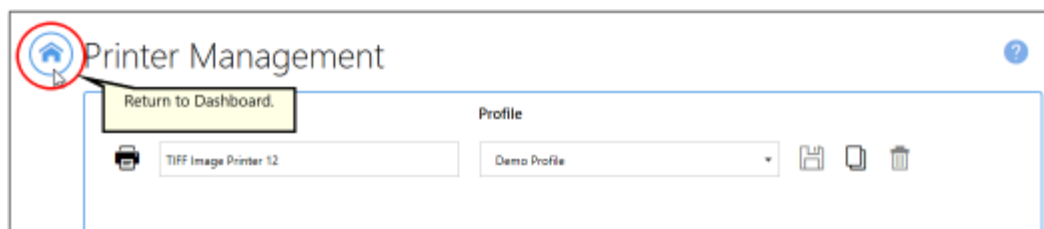
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



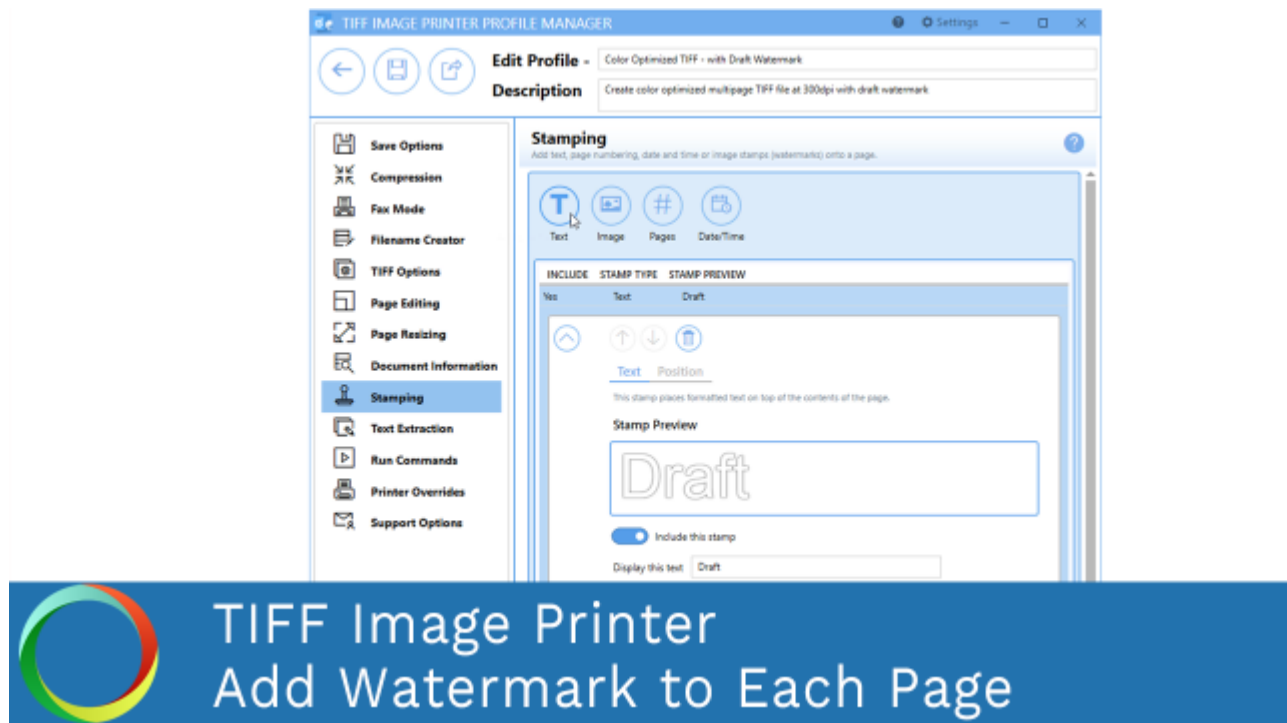
iv. Select the **Home icon** to return to the **Dashboard**.



10. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, every page of the output file will be stamped with the text watermark **DRAFT** diagonally across the center of the page.

## Image Stamp

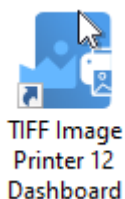
The steps below demonstrate how to use the **Stamping tab** to add an image watermark to output files.



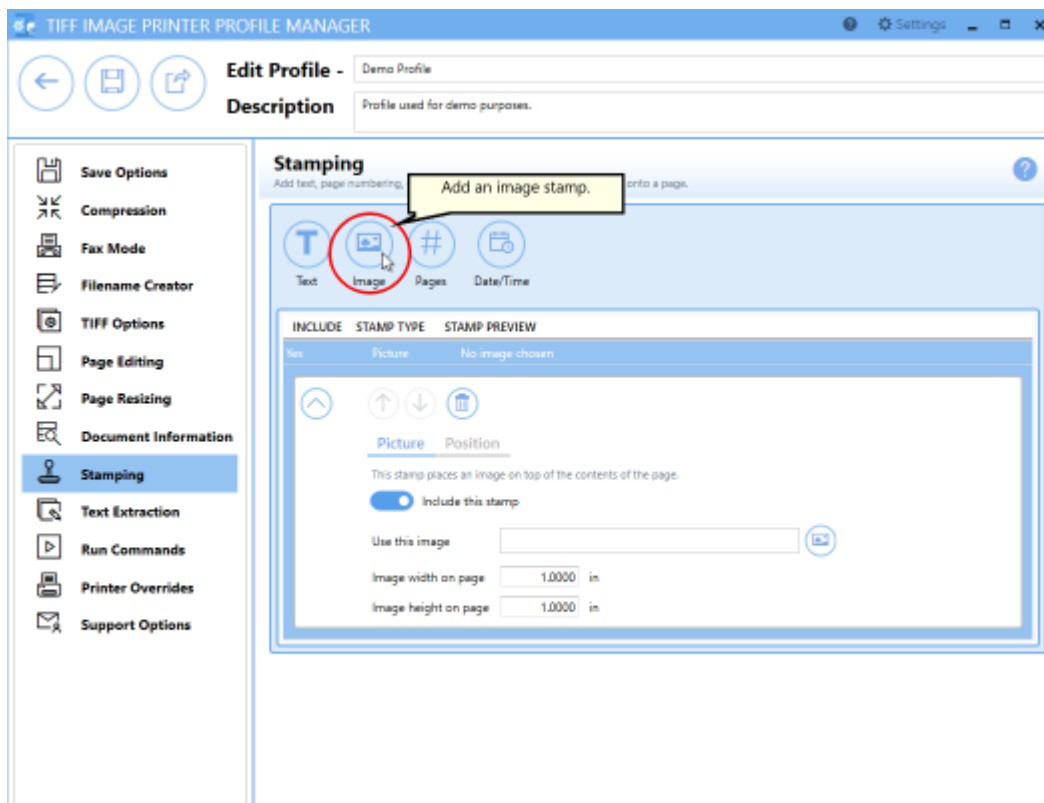
*Click the image above to watch the video tutorial.*

## Step by Step Instructions

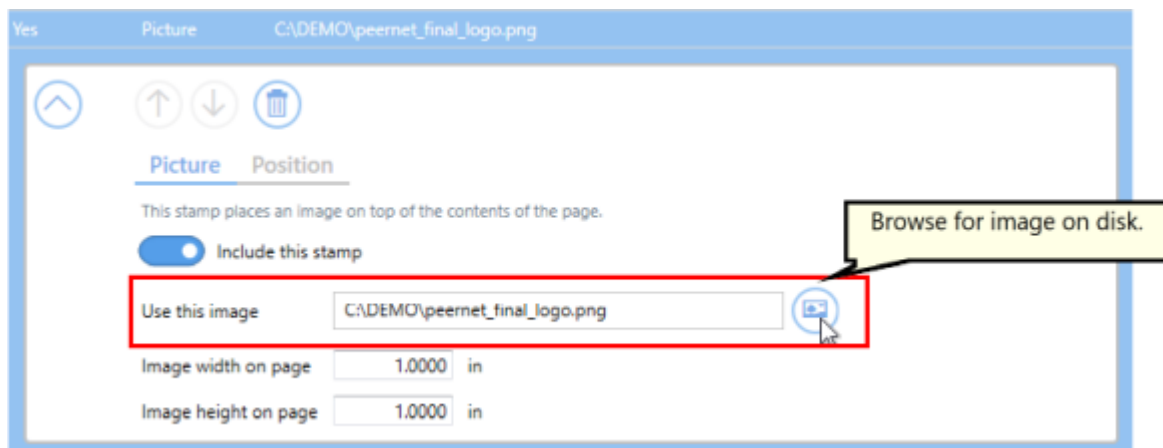
1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Stamping tab**, select **Add an image stamp**.

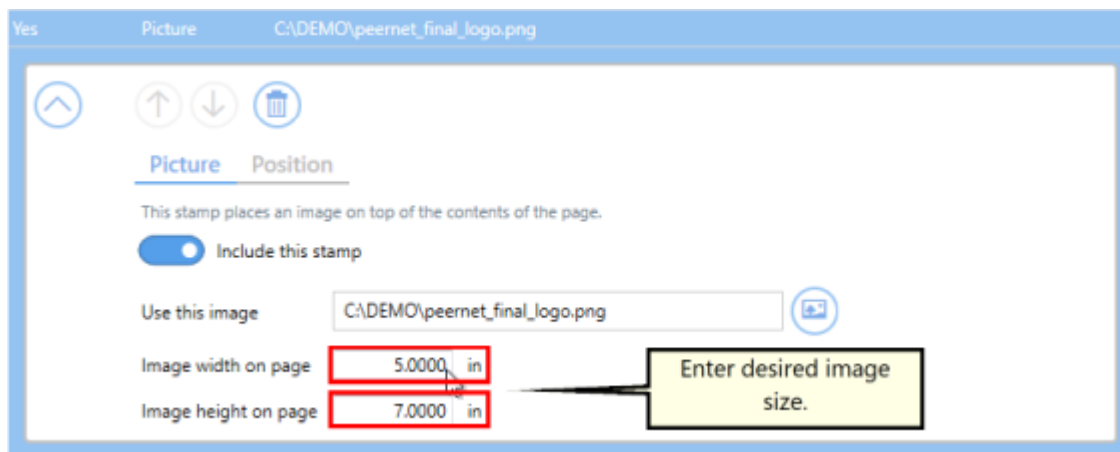


6. Beside *Use this image*, select the file icon to browse to your desired image. We recommend selecting a PNG image. If TIFF Image Printer cannot find the selected image when creating the output file, no image stamp will be added to your output file.



7. Change the image *width* and *height* on the page to match the image aspect ratio. By default, image *width* and *height* are set to 1.0000 inch or 2.5400 cm.

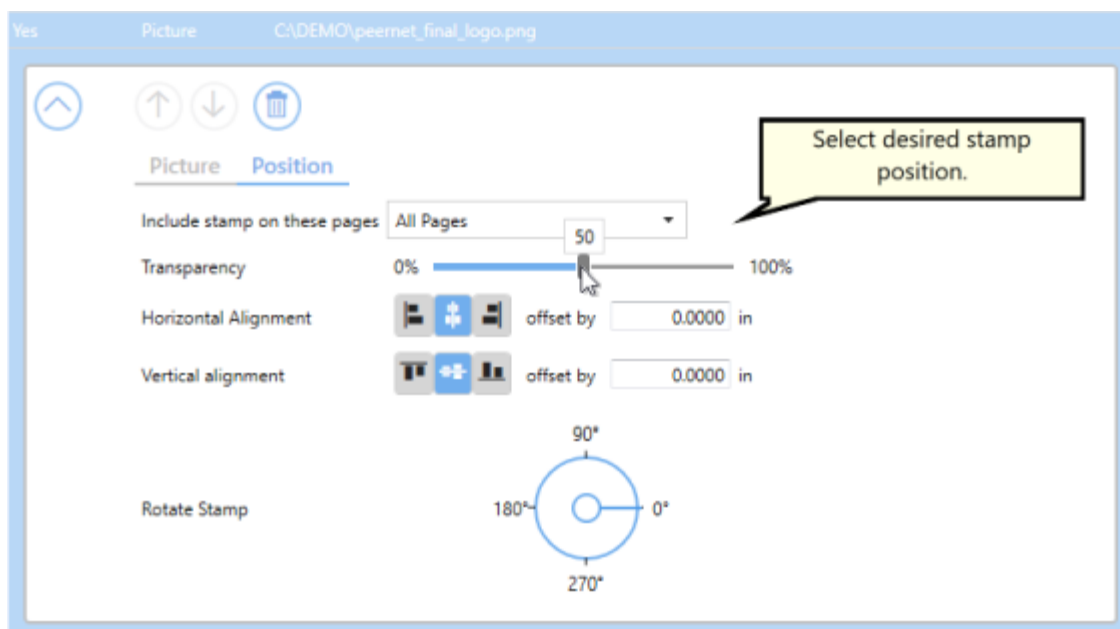




#### 8. Under **Position**:

- you can choose which pages in the output file will be stamped,
- you can adjust the transparency of the stamp,
- you can change the horizontal and vertical alignment of the stamp,
- and you can rotate the stamp.

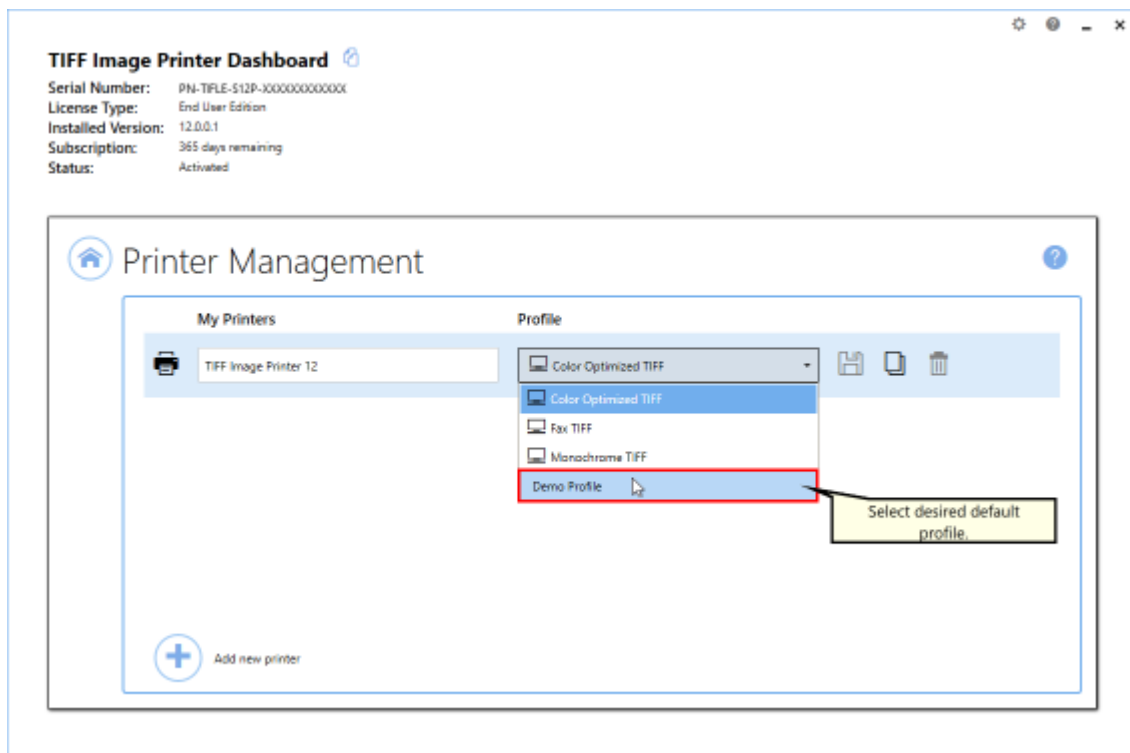
For this example, we will adjust the transparency of our image stamp to 50%.



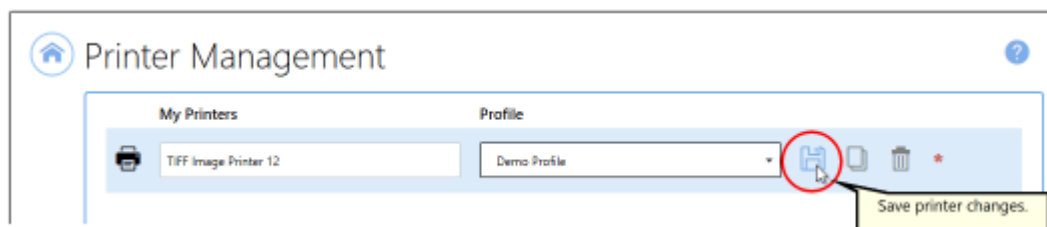
9. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

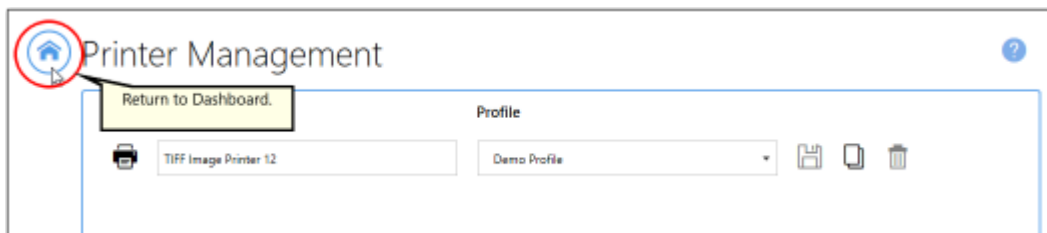
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



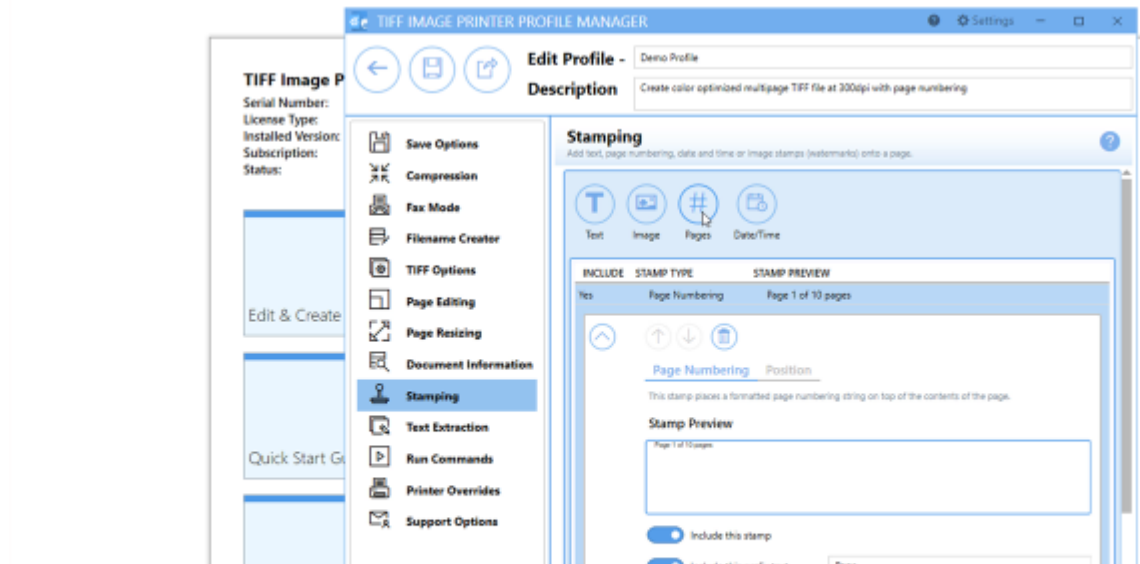
- iv. Select the **Home icon** to return to the **Dashboard**.



10. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, every page of the output file will be stamped with the image watermark at 50% transparency across the center of the page.

### Page Numbering Stamp

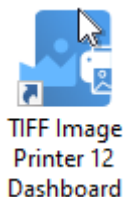
The steps below demonstrate how to use the **Stamping tab** to add page numbering to output files.



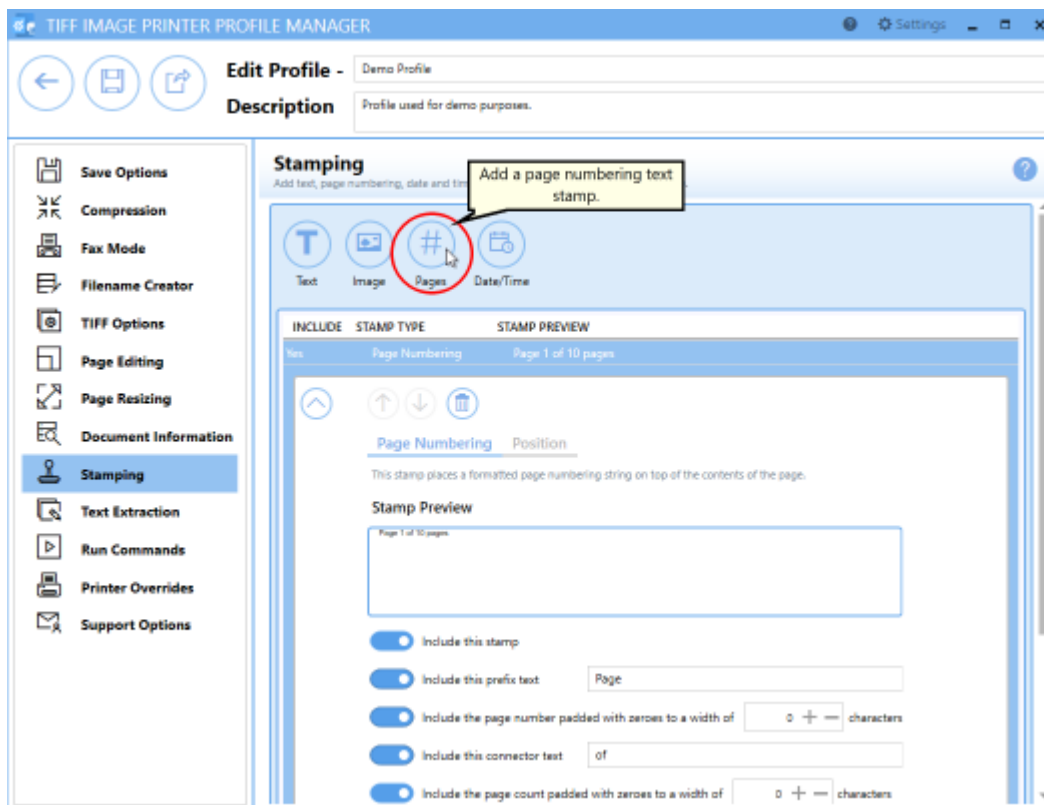
*Click the image above to watch the video tutorial.*

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Stamping tab**, select **Add a page numbering text stamp**.



6. Use the settings toggles to customize your page numbering stamp:

- Enable/disable *prefix text*
- Enable/disable *specific page number* and increase/decrease the number of padding zeros
- Enable/disable *connector text*
- Enable/disable *total page count* and increase/decrease the number of padding zeros
- Enable/disable *suffix text*

Page Numbering

Position

This stamp places a formatted page numbering string on top of the contents of the page.

**Stamp Preview**

Page 1 of 10 pages

Configure desired page numbering.

☒ Include this stamp

☒ Include this prefix text

Page

☒ Include the page number padded with zeroes to a width of

0 + —

characters

☒ Include this connector text

of

☒ Include the page count padded with zeroes to a width of

0 + —

characters

☒ Include this suffix text

pages

**Font Style**

Arial

8

☒ Bold

☒ Italic

☒ Outline

7. You can change the font type, font size, font color, and enable *bold*, *italic* or *outline* font styles.

**Page Numbering** Position

This stamp places a formatted page numbering string on top of the contents of the page.

**Stamp Preview**

Page 1 of 10 pages

☒ Include this stamp

☒ Include this prefix text

☒ Include the page number padded with zeroes to a width of    characters

☒ Include this connector text

☒ Include the page count padded with zeroes to a width of    characters

☒ Include this suffix text

**Font Style**

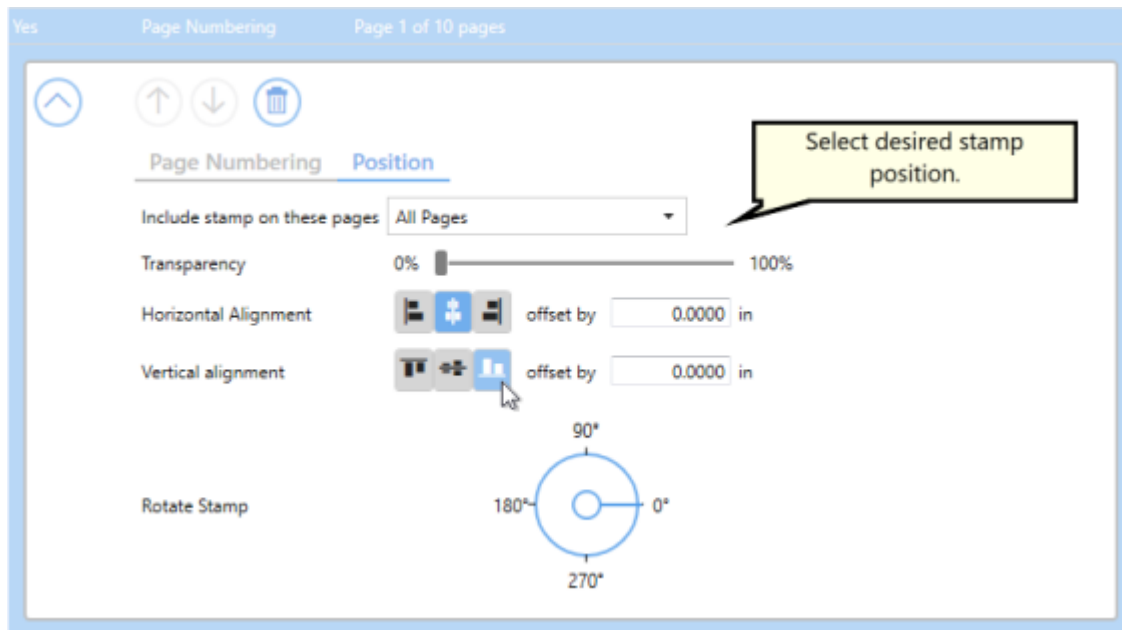
☒ Bold ☒ Italic ☒ Outline

Select desired font style.

8. Under **Position**:

- you can choose which pages in the output file will be stamped,
- you can adjust the transparency of the stamp,
- you can change the horizontal and vertical alignment of the stamp,
- and you can rotate the stamp.

For this example, we will change the vertical alignment to bottom so that the page numbering stamp appear in the footer area.

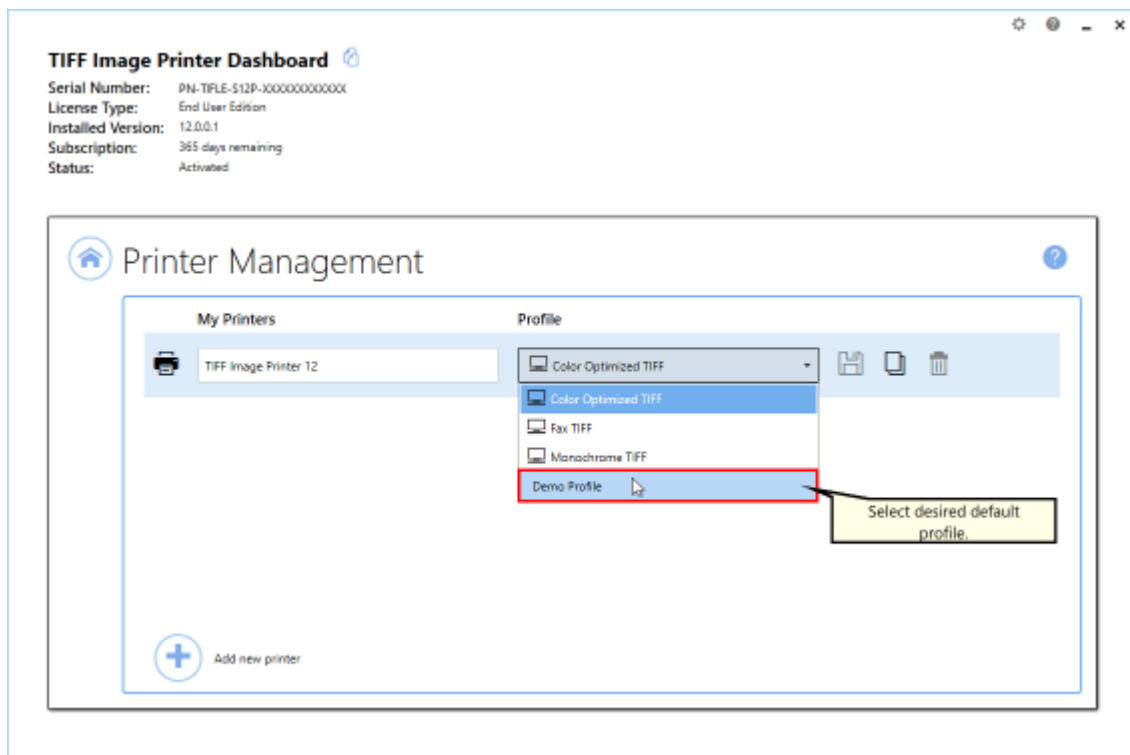


9. Click **Save-Back**, and close **Profile Manager**.

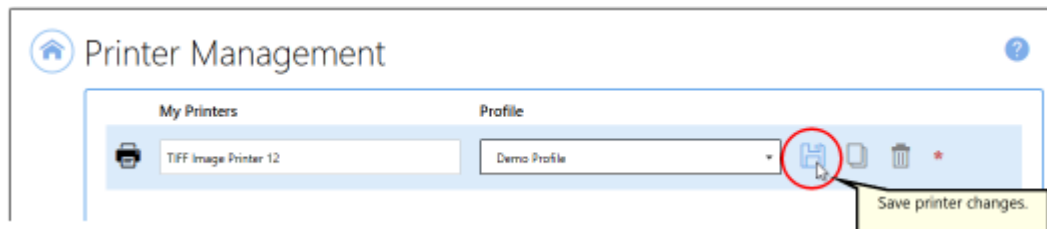
*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.

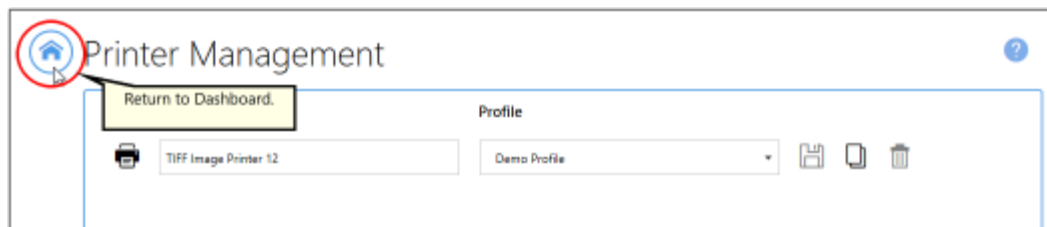




iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.

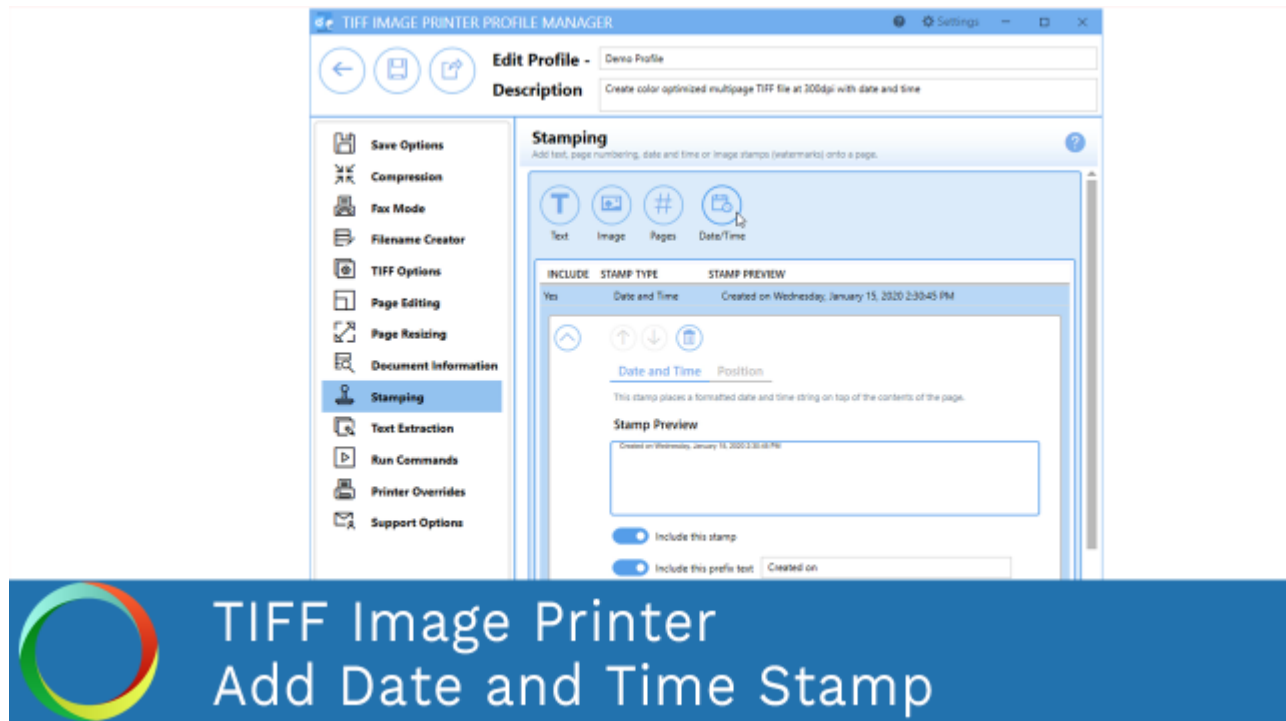


10. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, every page of the output file will be stamped with the page numbering stamp in the bottom center of the page.

If your page has standard 1 inch margins, this stamp will appear in the footer area, but the Stamping tool does not reserve space for the stamp. Therefore, if you have a page with no margins or very small margins, the stamp will be layered over the page content. If you have non-traditional margins and need to reserve space for a stamp in the footer space, please go to the **Page Resizing tab** and [add borders to the page](#).

## Date and Time Stamp

The steps below demonstrate how to use the **Stamping tab** to stamp the date and time of conversion on output files.



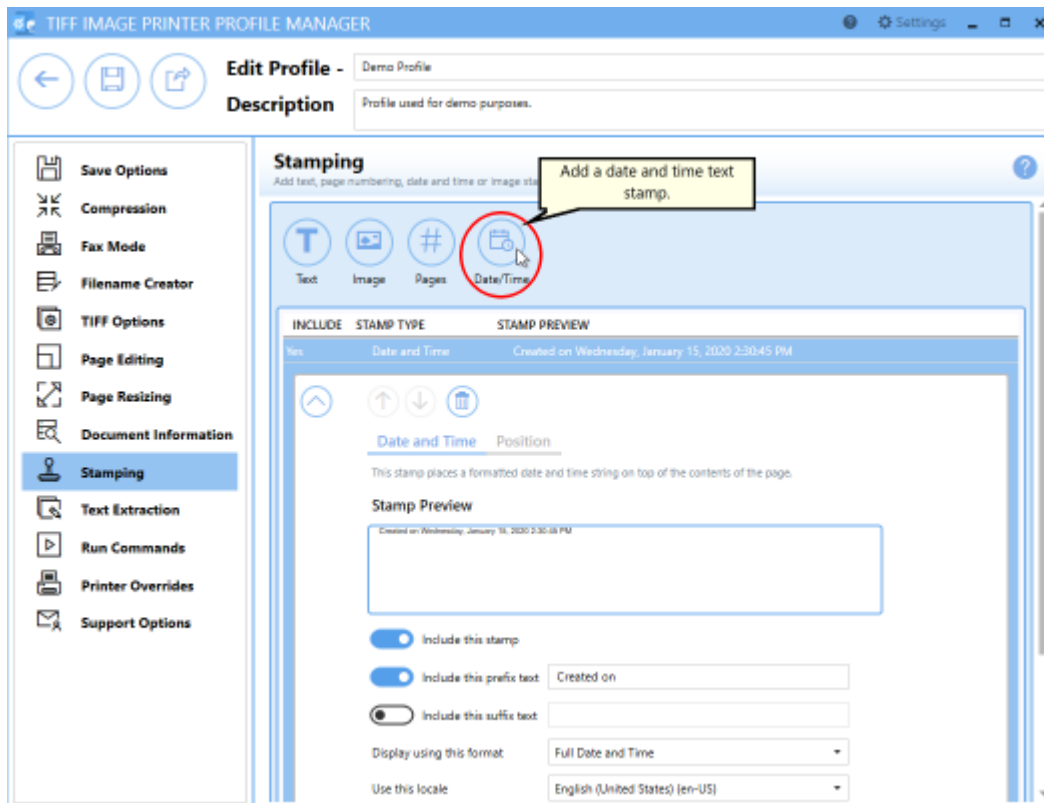
*Click the image above to watch the video tutorial.*

## Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Stamping tab**, select **Add a date and time text stamp**.



6. Use the settings toggles to customize your date and time text stamp:
  - Enable/disable *prefix text*
  - Enable/disable *suffix text*
7. Select date and time format. By default, the format is set to *Full Date and Time*.

^ ↑ ↓ 🗑

Date and Time Position

This stamp places a formatted date and time string on top of the contents of the page.

**Stamp Preview**

Created on Wednesday, January 15, 2020 2:30:45 PM

☒ Include this stamp

☒ Include this prefix text Created on

☐ Include this suffix text

Display using this format

Use this locale

**Font Style**

Arial

☐ Bold ☐ Italic

Full Date and Time

Short Date

Short Time

Long Date

Long Time

Full Date with Short Time

Full Date and Time

General Date with Short Time

General Date and Time

Round Trip (ISO 8601) Date and Time

Select desired date and time format.

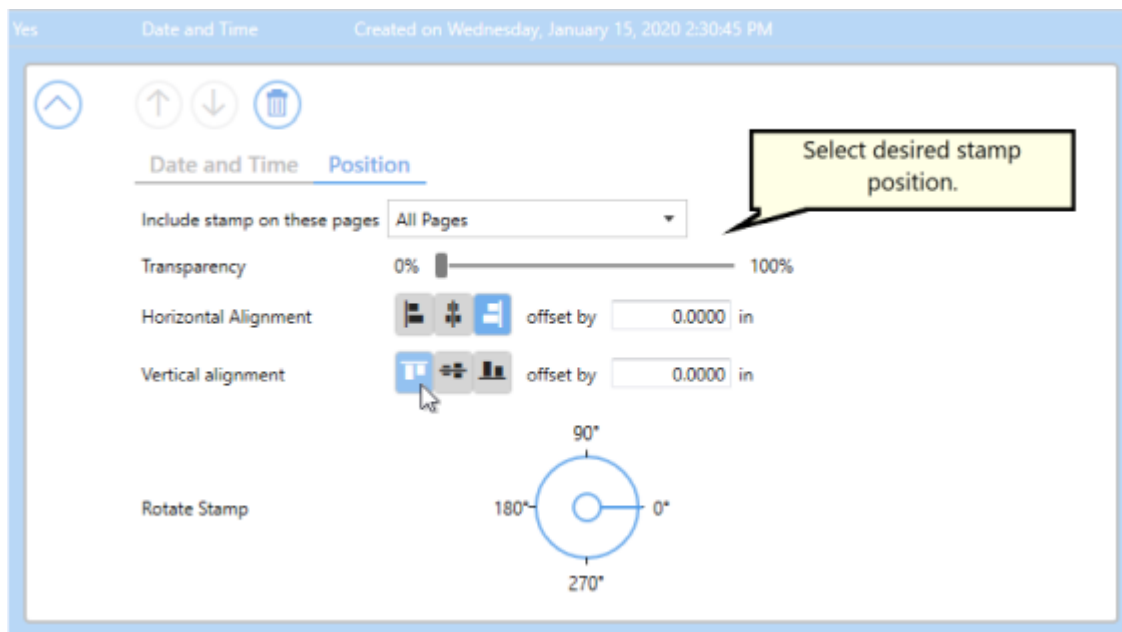
8. You can change the font type, font size, font color, and enable *bold*, *italic* or *outline* font styles.

^ ↑ ↓ 🗑️  
**Date and Time** Position  
 This stamp places a formatted date and time string on top of the contents of the page.  
**Stamp Preview**  
 Created on Wednesday, January 15, 2020 2:30:45 PM  
☒ Include this stamp  
☒ Include this prefix text Created on  
☐ Include this suffix text  
 Display using this format Full Date and Time  
 Use this locale English (United States) (en-US)  
**Font Style**  
 Arial 8 [Color]  
☐ Bold ☐ Italic ☐ Outline

## 9. Under **Position**:

- you can choose which pages in the output file will be stamped,
- you can adjust the transparency of the stamp,
- you can change the horizontal and vertical alignment of the stamp,
- and you can rotate the stamp.

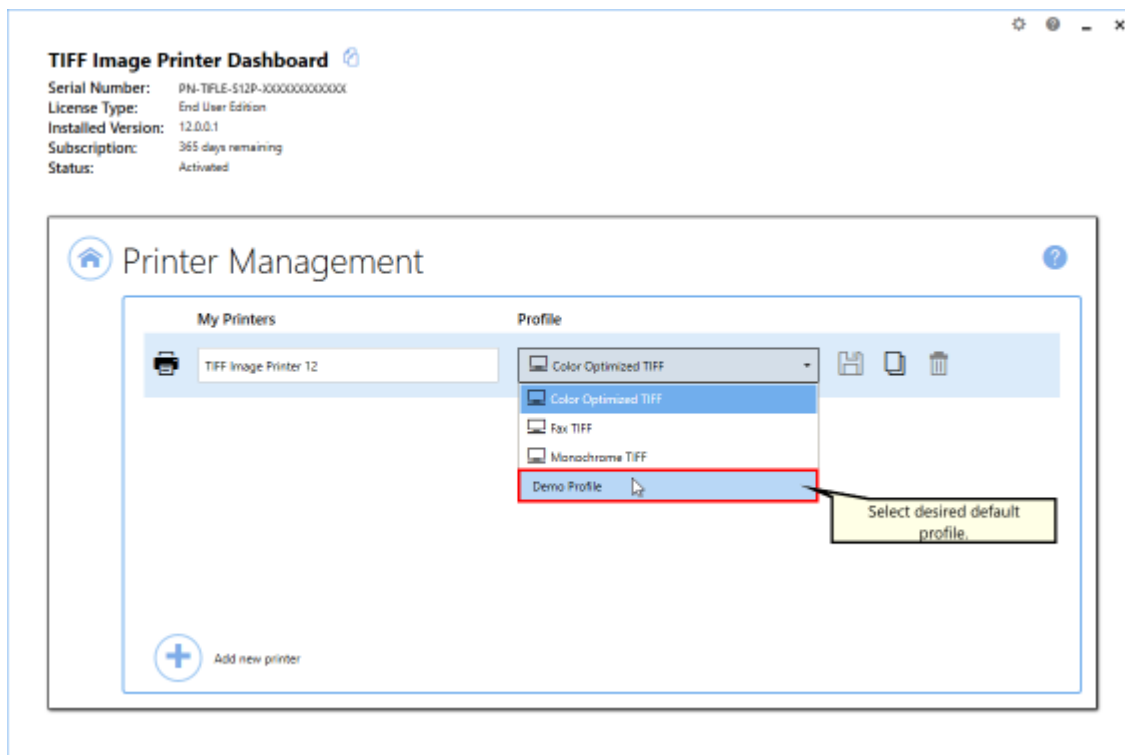
For this example, we will change the horizontal alignment to right and the vertical alignment to top so that the date and time stamp appear in the header area.



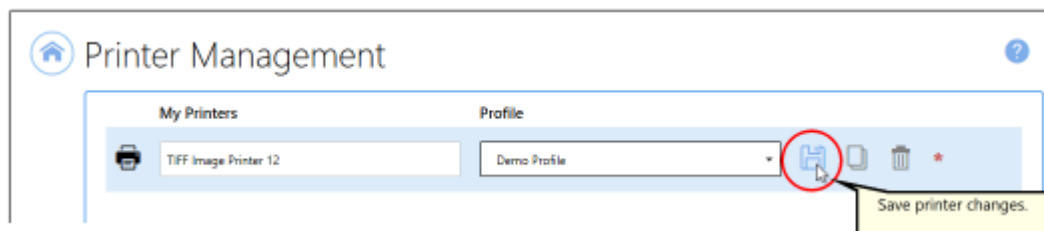
10. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

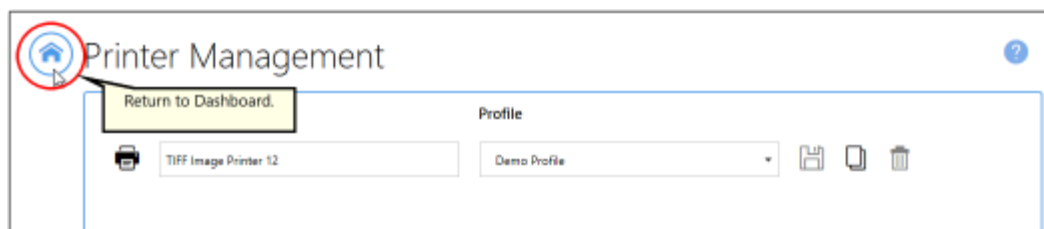
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



11. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, every page of the output file will be stamped with the date and time of conversion in the top right of the page.



If your page has standard 1 inch margins, this stamp will appear in the header area, but the Stamping tool does not reserve space for the stamp. Therefore, if you have a page with no margins or very small margins, the stamp will be layered over the page content. If you have non-traditional margins and need to reserve space for a stamp in the header space, please go to the **Page Resizing tab** and [add borders to the page](#).

## Extract Text From the Created File

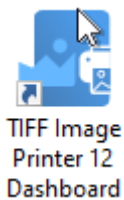
This feature will create a separate text file containing all of the textual elements of your printed document. These text files are often paired with the output files when stored in archival systems to allow searching and retrieval of the files using textual data. By default all of the text extraction files are stored in the same directory with the same base name as the original document. For example, creating a TIFF image with a base name of JanuaryMemo.tif will also create a file JanuaryMemo.tif.txt containing all the text in file.

The text extraction feature extracts as much text as it can from a printed document. It does not extract text from images or scanned pages. To do that see [Use OCR to Extract Text When Creating TIFF Images](#). Text extraction will not necessarily produce the same results as Optical Character Recognition (OCR) software. Any text formatting is approximate and may not completely match your original document.

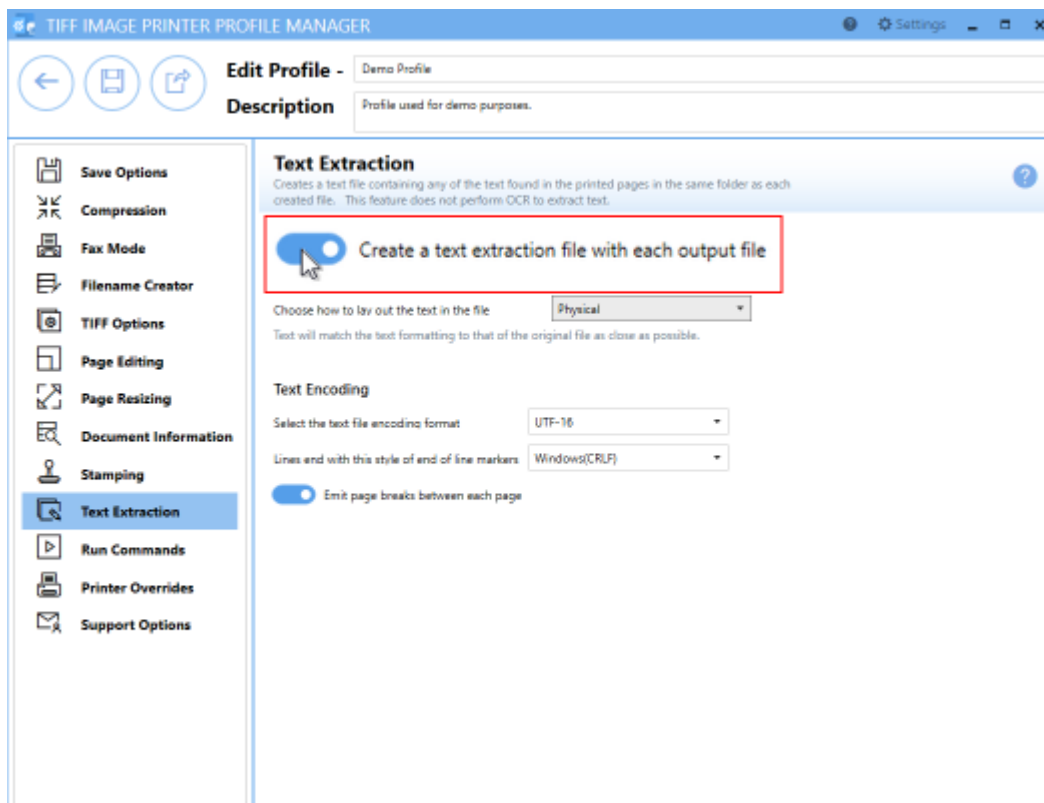
All [text extractions settings](#) are controlled through the profile.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Text Extractions tab**, enable **Create a text extraction file with each output file**.

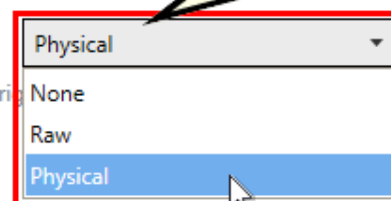


- Under **Text Layout**, select how to lay out the text in the file. The default layout, *Physical*, will try and match the format of the text in the original file as much as possible.

#### Text Layout

Choose how to lay out the text in the file

Text will match the text formatting to that of the original file



- Under **Text Encoding**, select your desired text file encoding format.

**Text Encoding**

Select the text file encoding format

Lines end with this style of end of line markers

☒ Emit page breaks between each page

Select desired text encoding format.

UTF-16  
ANSI  
UTF-8  
UTF-16

8. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.

TIFF Image Printer Dashboard

Serial Number:

PN-TIFL-S12P-J0000000000000

License Type:

End User Edition

Installed Version:

12.0.0.1

Subscription:


365 days remaining

Status:

Activated

Printer Management

My Printers



TIFF Image Printer 12

Profile

Color Optimized TIFF


Color Optimized TIFF

Fax TIFF

Monochrome TIFF

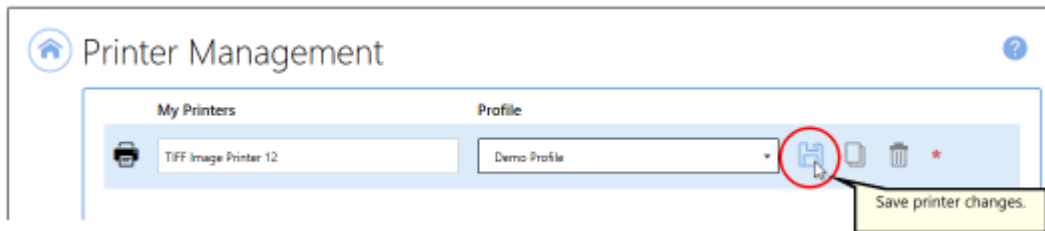
Demo Profile

Select desired default profile.

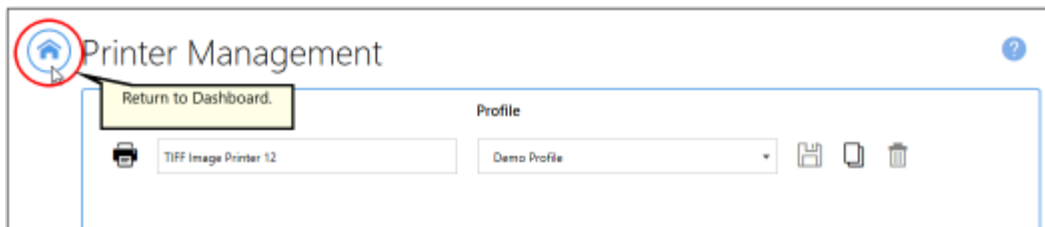


Add new printer

iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will also create a text file with the textual contents of the original file.

## Email the Created File

This feature creates and sends an email to your desired recipients with the converted file, or files, attached. The file can be attached individually, or it can be compressed into a ZIP file to create a smaller email. The size and number of emails sent can also be configured to help keep emails below any size and email count limitation that may be in place by your organization.

The attached files are not automatically deleted after the email is sent; this can be controlled using the settings on the [Cleanup Options](#) tab.

Emails can also be sent to notify someone when a file fails to convert. In this case, no files are attached to the email that is sent.

Emails are sent using Outlook, or using SMTP (*Simple Mail Transfer Protocol*) mail server. All [email settings](#) are controlled through the profile.

These topics cover how to send emails using these different methods:

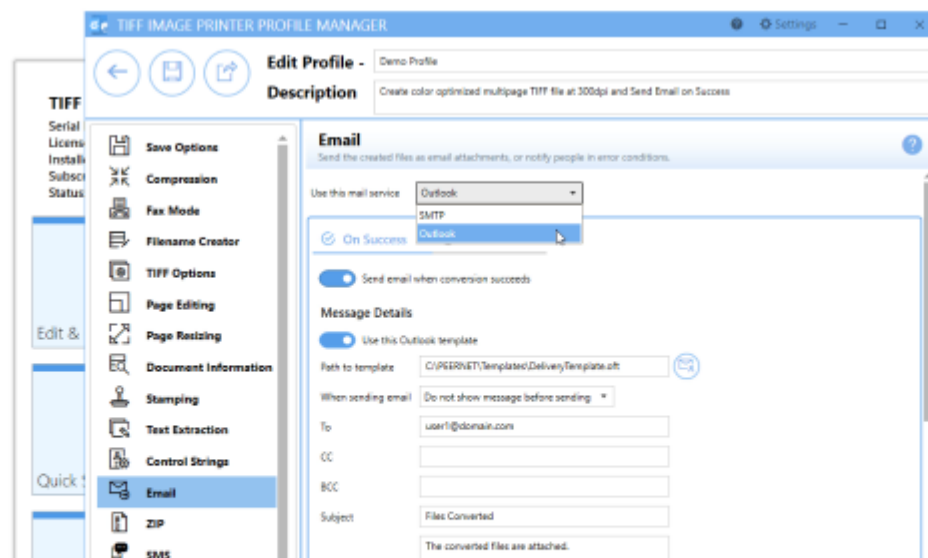
- [Send Email Using Outlook](#)
- [Send Email Using SMTP](#)
- [Send Email on Failure](#)

## Send Email Using Outlook

The steps below demonstrate using the **Email tab** to send an email with Outlook. The created files will be zipped and attached to the email, and then automatically deleted using the [Cleanup Options](#) once finished.

When using Outlook the application must be installed and an email account configured. Emails sent using Outlook can be sent silently or can prompt with the default email window.

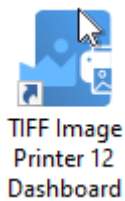
An Outlook email template may be used to set up the initial content of the email fields From, To, CC, BCC, Subject, and Body. Addresses entered in the To, CC, and BCC fields are added to any address in the template. Text entered for the Subject and Body fields on the email tab settings will override the Subject and Message contents in the template.



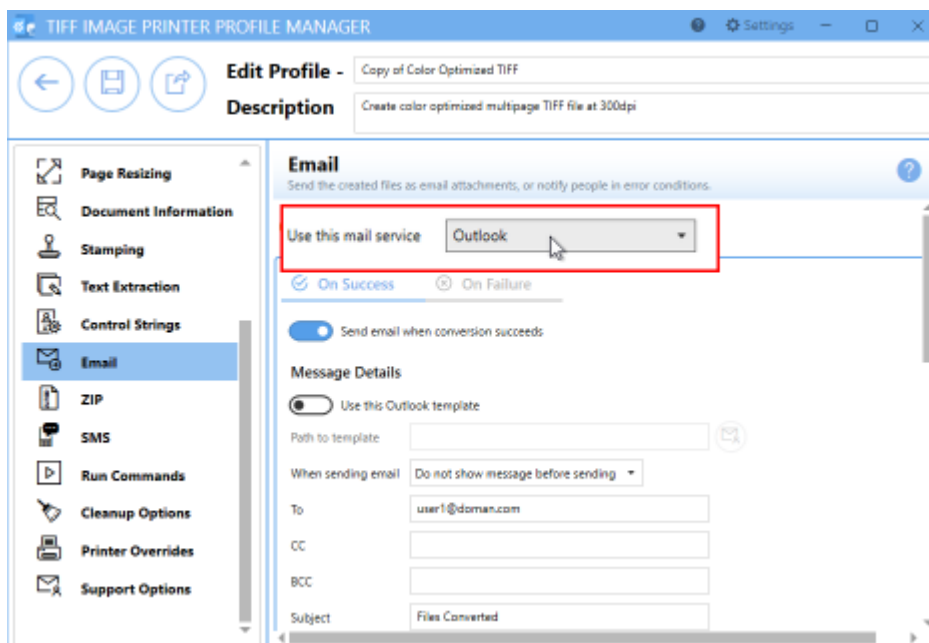
## TIFF Image Printer Send Created Files using Outlook

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.

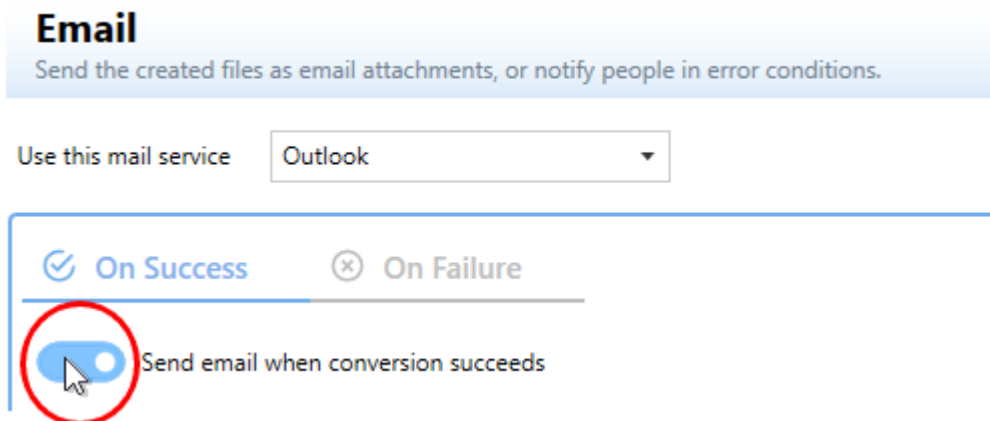


2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Email tab**, under **Use this mail service**, select *Outlook*.



6. Enable **Send email when conversion succeeds**.





7. There is an option to use an Outlook template. If you wish to use an Outlook template, enable **Use this Outlook template** and select the mail icon to browse to your desired Outlook template. The content of the Outlook template will be used as the Message Details (To, CC, BCC, Subject, Message). Any recipients (To, CC, BCC) entered here are added to the template. Any Subject or Message content here will replace what is in the Outlook template.

*\*A folder named **Templates** has been provided in the product installation folder (C:\Program Files\TIFF Image Printer 12\Templates). Any Outlook templates used for emails can be placed here. When using a template from this folder, the location of the template is stored in the profile using a macro. This allows the template and profile to be deployed and to work on any computer, no matter where the product is installed.*

## Email

Send the created files as email attachments, or notify people in error conditions.

Use this mail service Outlook

☒ On Success ☐ On Failure

☒ Send email when conversion succeeds

### Message Details

☒ Use this Outlook template

Path to template C:\PEERNET\Templates\DeliveryTemplate.oft



8. If you are not using an Outlook template, the Message Details parts To (or CC, BCC), Subject, and Message are required.

### Message Details

☐ Use this Outlook template

Path to template



When sending email Do not show message before sending

To user1@doman.com

CC

BCC

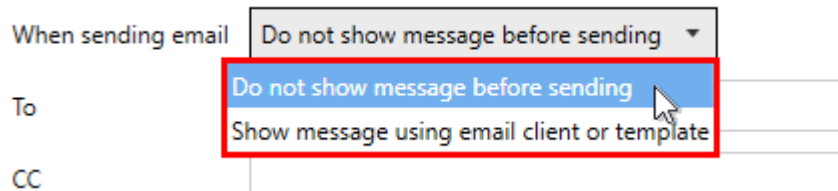
Subject Files Converted

Message

The converted files are attached.

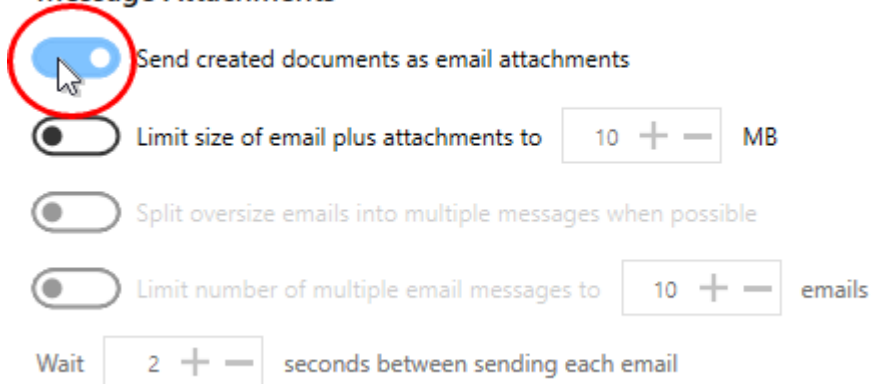
SEND TEST EMAIL

9. Select whether to *Show message using client or template* or *Do not show message before sending*. This setting will determine if you will be prompted before the email is sent or if the email will be sent silently.



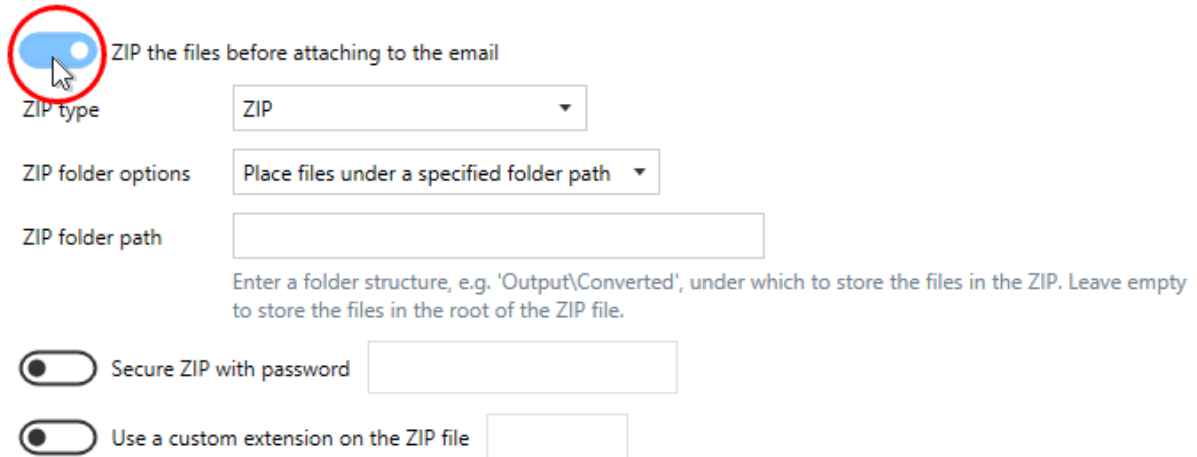
10. By default, the email settings are configured to send created documents as email attachments. There are additional settings options to limit the size of the email, split oversized emails, and limit the number of emails sent at once. See the [Email](#) section for more details.

### Message Attachments



11. To ZIP the created documents before attaching to the email, enable **ZIP the files before attaching to the email**.

### Compression Options



ZIP the files before attaching to the email

ZIP type: ZIP

ZIP folder options: Place files under a specified folder path

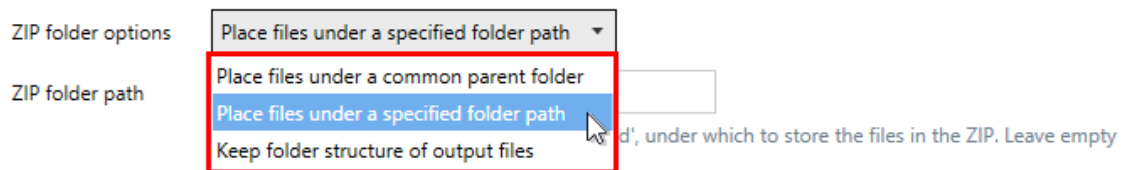
ZIP folder path:

Enter a folder structure, e.g. 'Output\Converted', under which to store the files in the ZIP. Leave empty to store the files in the root of the ZIP file.

Secure ZIP with password:

Use a custom extension on the ZIP file:

12. Select your desired ZIP folder option and enter your desired ZIP folder path if required. If the ZIP folder path is left empty, the files will be stored at the root of the ZIP file.



ZIP folder options: Place files under a specified folder path

ZIP folder path:

Place files under a common parent folder

Place files under a specified folder path

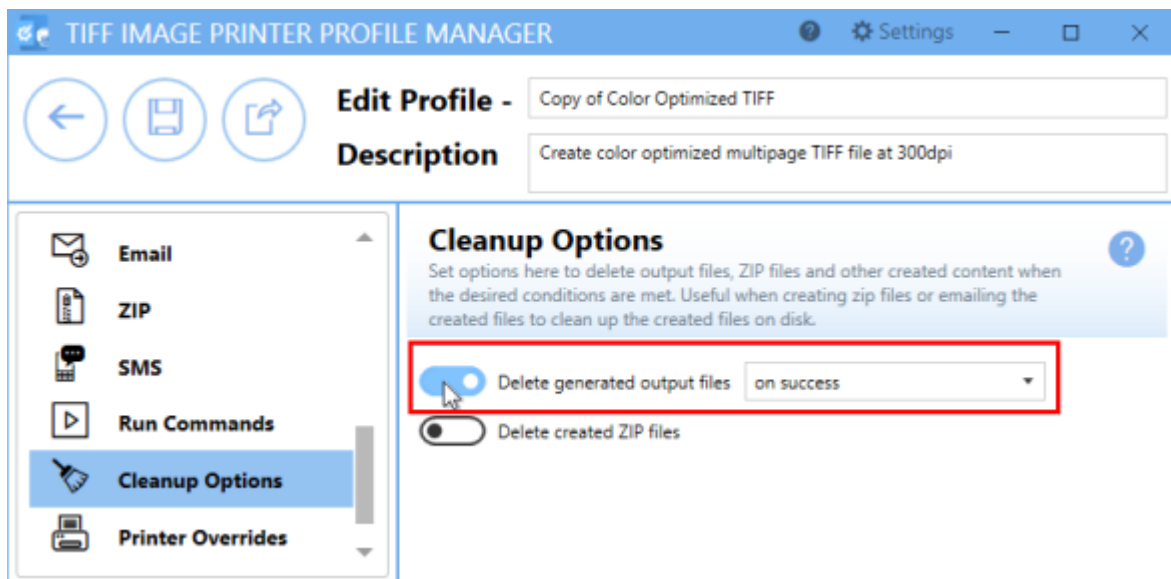
Keep folder structure of output files

Enter a folder structure, e.g. 'Output\Converted', under which to store the files in the ZIP. Leave empty

13. There are also options to add a password to the ZIP file and to use a custom extension.

14. To automatically delete created documents after sending, go to the **Cleanup Options tab**.

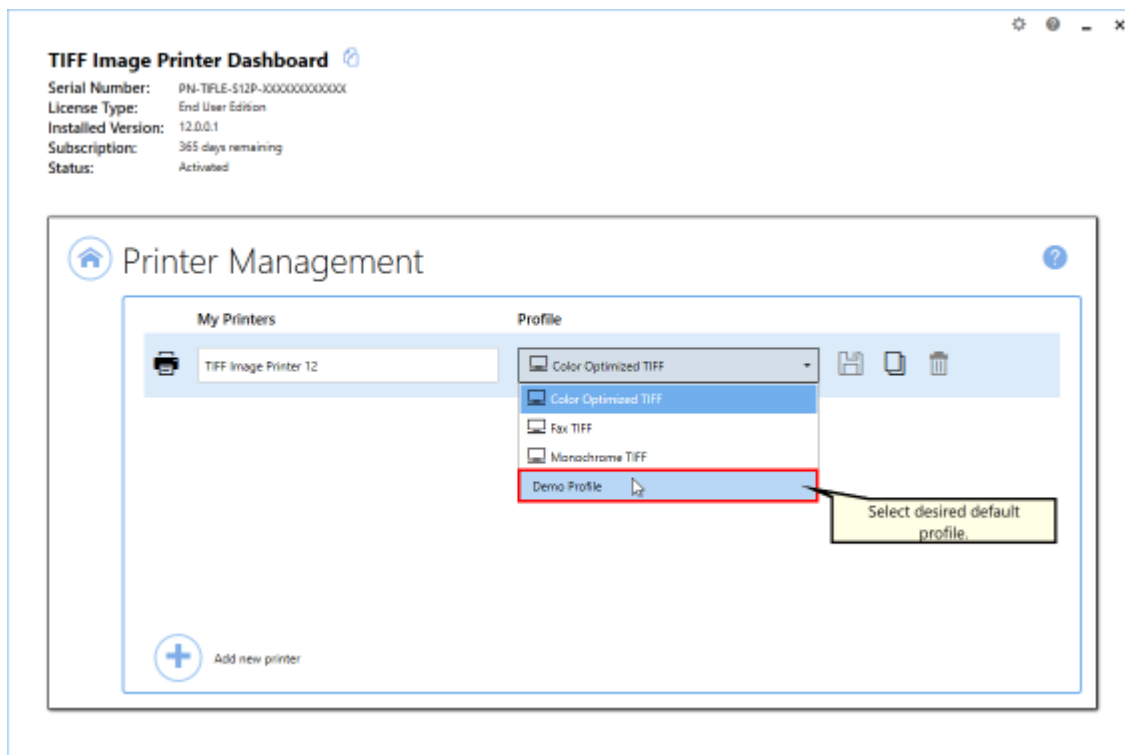
15. Enable **Delete generated output files** and select *on success*.



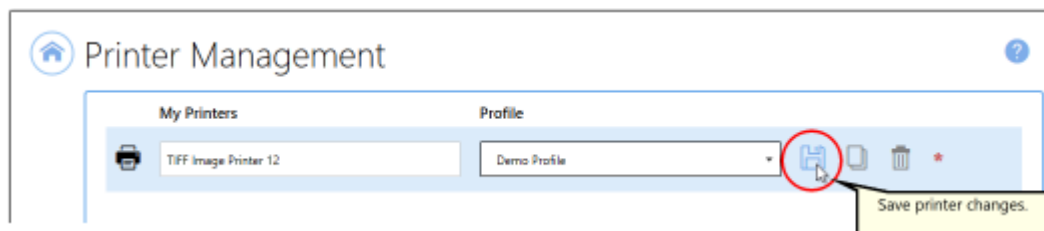
16. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

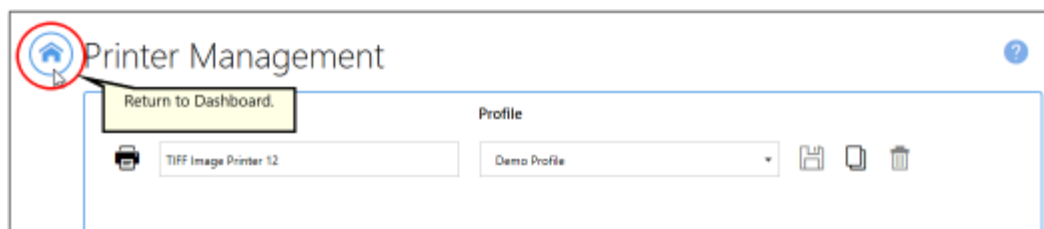
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



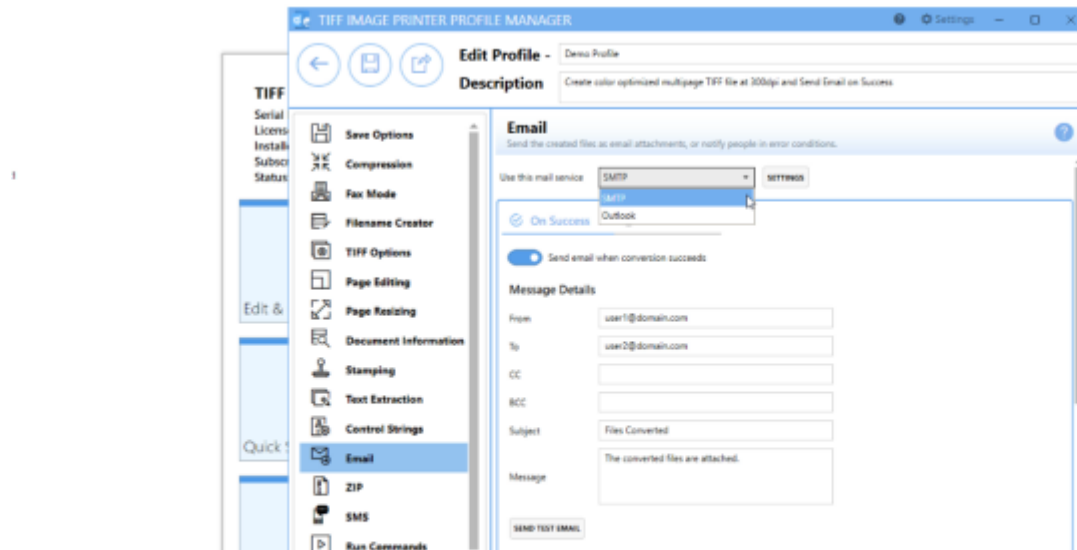
iv. Select the **Home icon** to return to the **Dashboard**.



17. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will receive an email notification after successful conversion with the created document attached as a zip file. The created files will automatically be deleted.

## Send Email Using SMTP

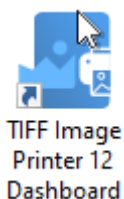
The steps below demonstrate using the **Email tab** to send an email using the SMTP mail service. The created files will be zipped and attached to the email, and then automatically deleted using the [Cleanup Options](#) once finished.



## TIFF Image Printer Email Created Files using SMTP

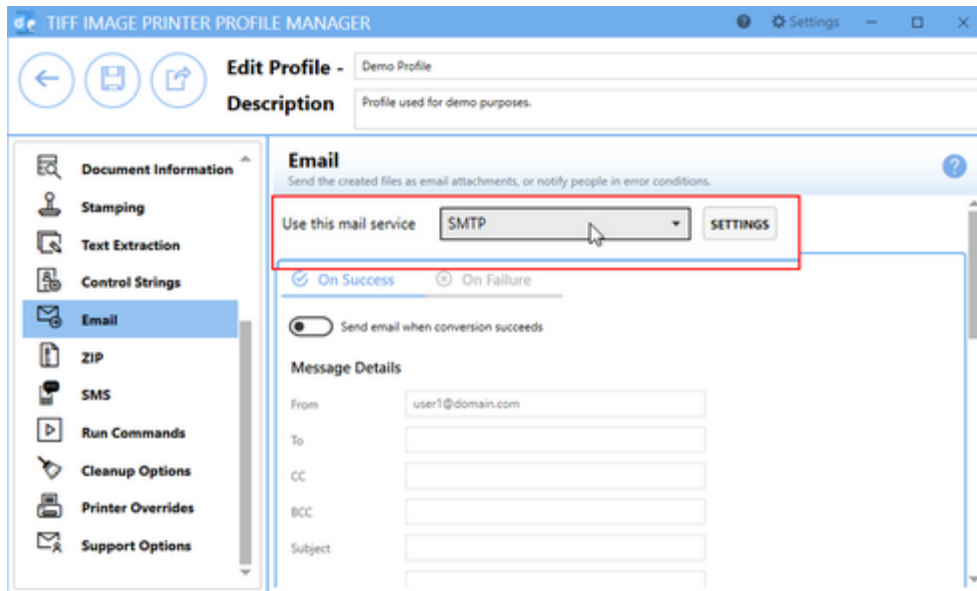
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



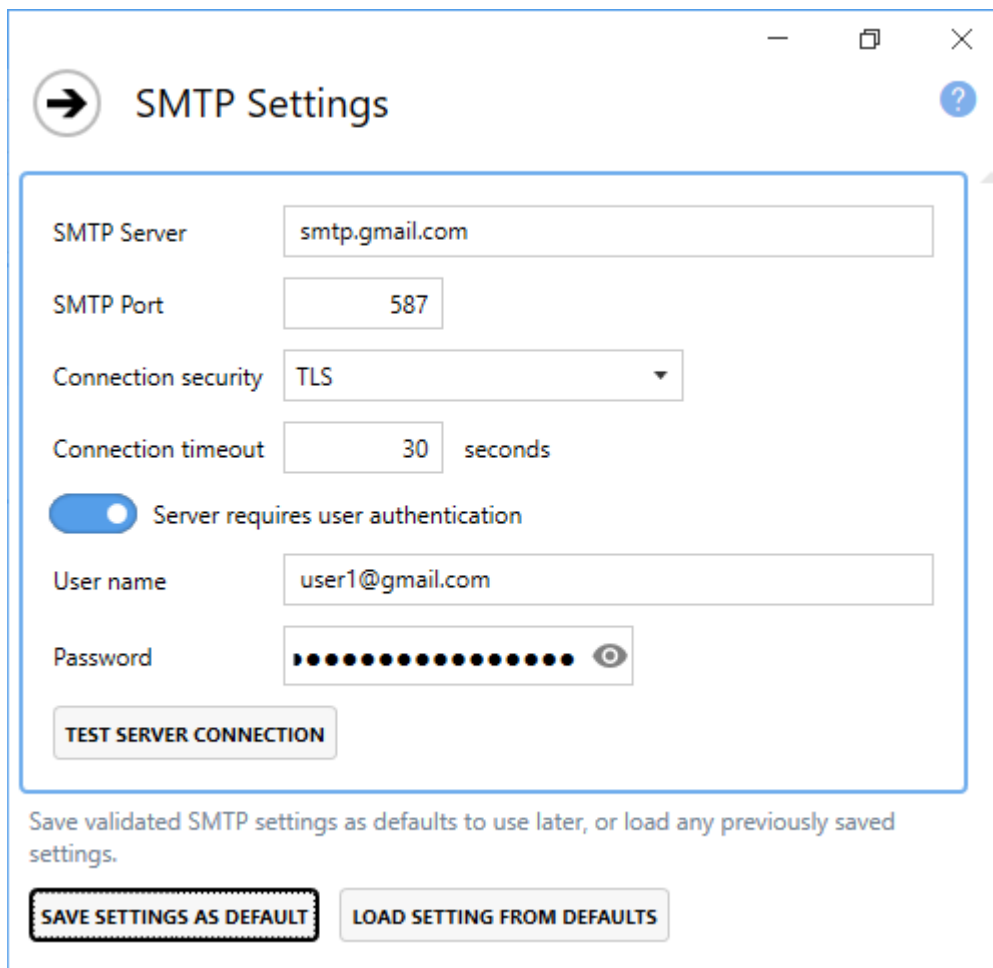
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.

5. On the **Email tab**, under **Use this mail service** select the *SMTP* option..



6. Click the **Settings** button to open the *SMTP Settings* flyout. The server name, port, connection type and any required authentication settings for your SMTP server should be available from your IT department or your email provider. Here, we are using GMail's SMTP settings. See [SMTP Settings](#) for more details on this panel.





The screenshot shows the 'SMTP Settings' dialog box. It has a title bar with a back arrow icon, the text 'SMTP Settings', and standard window controls (minimize, maximize, close). A help icon (?) is in the top right. The settings are as follows:

- SMTP Server: smtp.gmail.com
- SMTP Port: 587
- Connection security: TLS (dropdown menu)
- Connection timeout: 30 seconds
- Server requires user authentication: ☒ (toggle switch)
- User name: user1@gmail.com
- Password: [masked with dots] and an eye icon to toggle visibility
- A 'TEST SERVER CONNECTION' button is located below the password field.

Below the settings area, there is a text instruction: 'Save validated SMTP settings as defaults to use later, or load any previously saved settings.' At the bottom, there are two buttons: 'SAVE SETTINGS AS DEFAULT' (highlighted with a dashed border) and 'LOAD SETTING FROM DEFAULTS'.

7. Enter your desired Message Details parts. From, To, Subject, and Message are required. CC and BCC are optional.

✓ On Success

✗ On Failure

☒ Send email when conversion succeeds

### Message Details

From	user1@gmail.com
To	user2@domain.com
CC	
BCC	
Subject	Files Converted
Message	The converted files are attached.

8. By default, the email settings are configured to send created documents as email attachments. There are additional settings options to limit the size of the email, split oversized emails, and limit the number of emails sent at once. See the [Email](#) section for more details.

### Message Attachments

☒ Send created documents as email attachments

☐ Limit size of email plus attachments to    MB

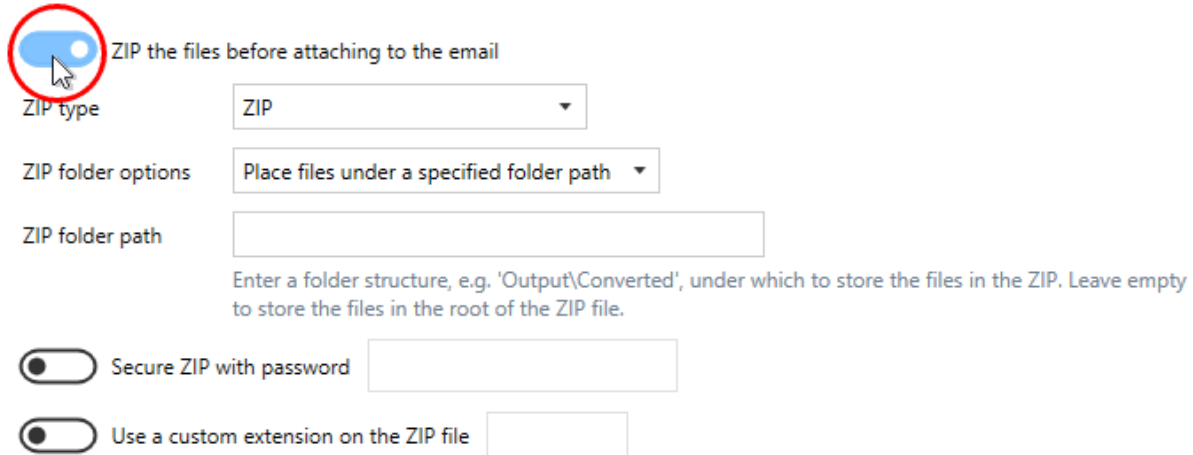
☐ Split oversized emails into multiple messages when possible

☐ Limit number of multiple email messages to    emails

Wait    seconds between sending each email

9. To ZIP the created documents before attaching to the email, enable **ZIP the files before attaching to the email**.

#### Compression Options



☒ ZIP the files before attaching to the email

ZIP type: ZIP

ZIP folder options: Place files under a specified folder path

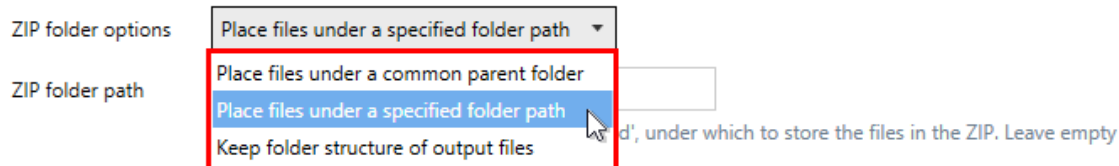
ZIP folder path:

Enter a folder structure, e.g. 'Output\Converted', under which to store the files in the ZIP. Leave empty to store the files in the root of the ZIP file.

☐ Secure ZIP with password

☐ Use a custom extension on the ZIP file

10. Select your desired ZIP folder option and enter your desired ZIP folder path if required. If the ZIP folder path is left empty, the files will be stored at the root of the ZIP file.

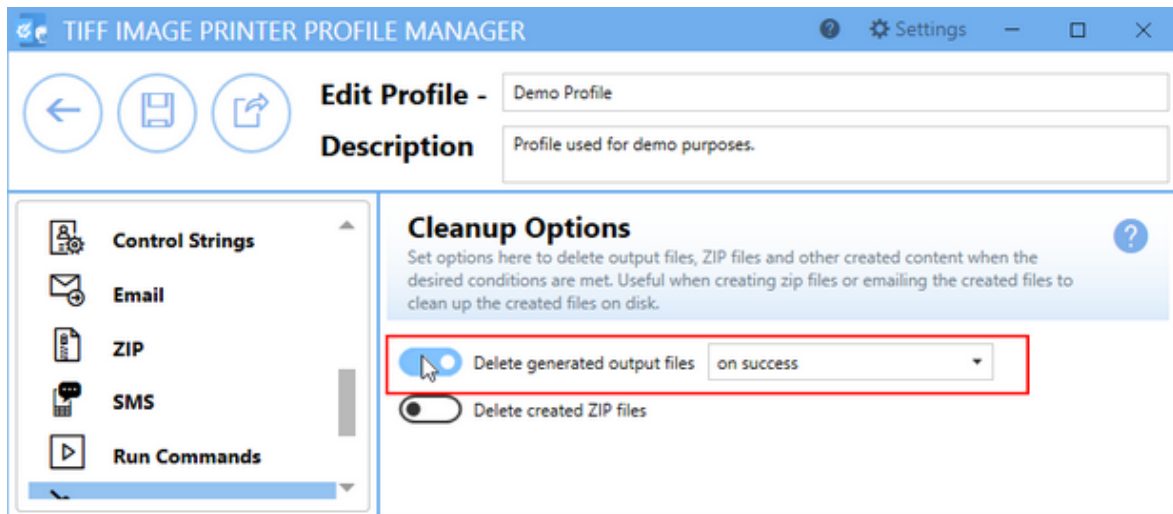


ZIP folder options: Place files under a specified folder path

ZIP folder path:

Enter a folder structure, e.g. 'Output\Converted', under which to store the files in the ZIP. Leave empty to store the files in the root of the ZIP file.

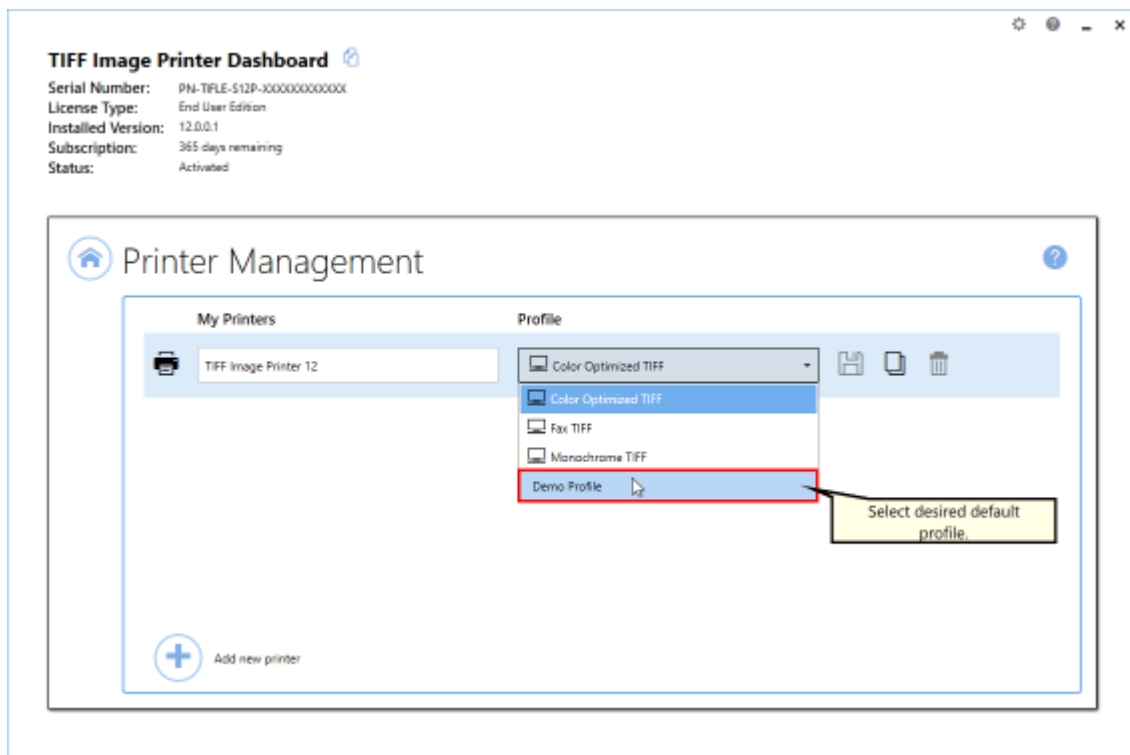
11. There are also options to add a password to the ZIP file and to use a custom extension.
12. To automatically delete created documents after sending, go to the **Cleanup Options** tab.
13. Enable **Delete generated output files** and select *on success*.



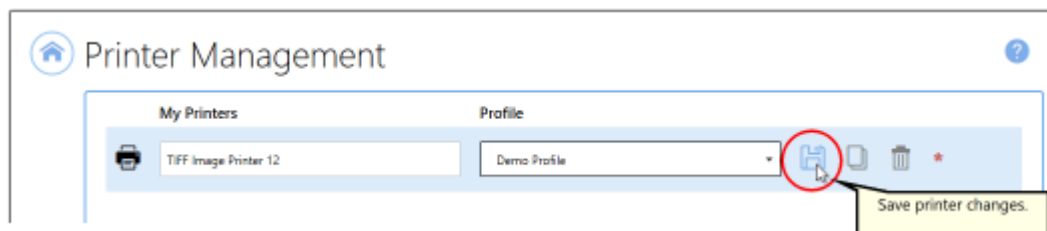
14. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

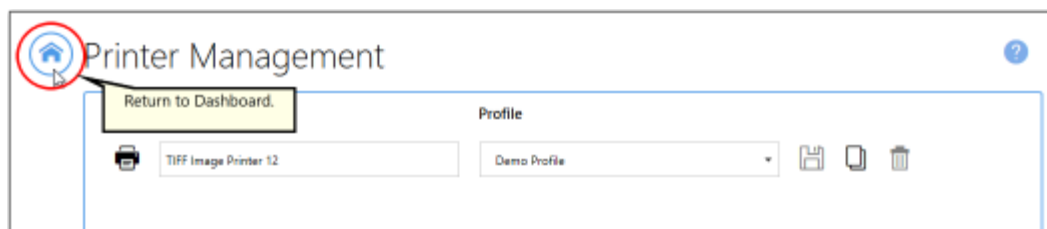
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



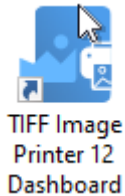
15. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will receive an email notification after successful conversion with the created document attached as a zip file. The created files will automatically be deleted.

### Send Email on Failure

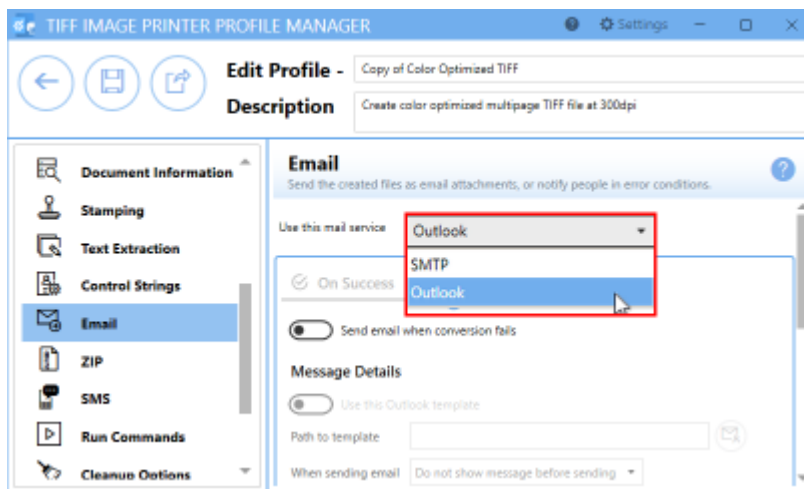
The steps below demonstrate using the **Email tab** to send an email when a file fails to convert.

#### **Step by Step Instructions**

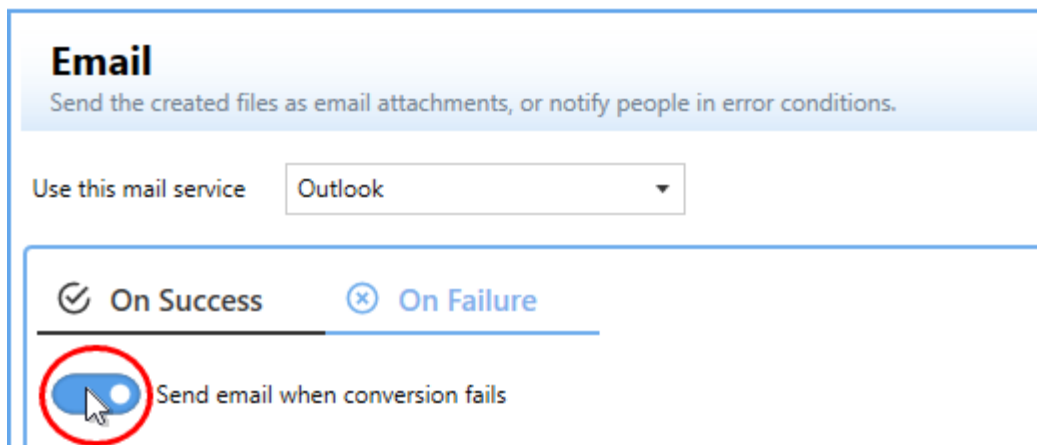
1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Email tab**, under **Use this mail service**, select *Outlook* or *SMTP*.
  - a. If you select *Outlook*, the application must be installed and an email account created in order to send email.
  - b. If you select *SMTP*, click the **Settings** button to open the *SMTP Settings* flyout. The server name, port, connection type and any required authentication settings for your SMTP server should be available from your IT department or your email provider. Here, we are using GMail's SMTP settings. See [SMTP Settings](#) for more details on this panel.




6. Select **On Failure** and enable **Send email when conversion fails**



7. Enter your desired Message Details (if you are not using an Outlook template). The Message Details parts To, Subject, and Message are required.

**Message Details**

☒ Use this Outlook template

Path to template  

When sending email

To

CC

BCC

Subject

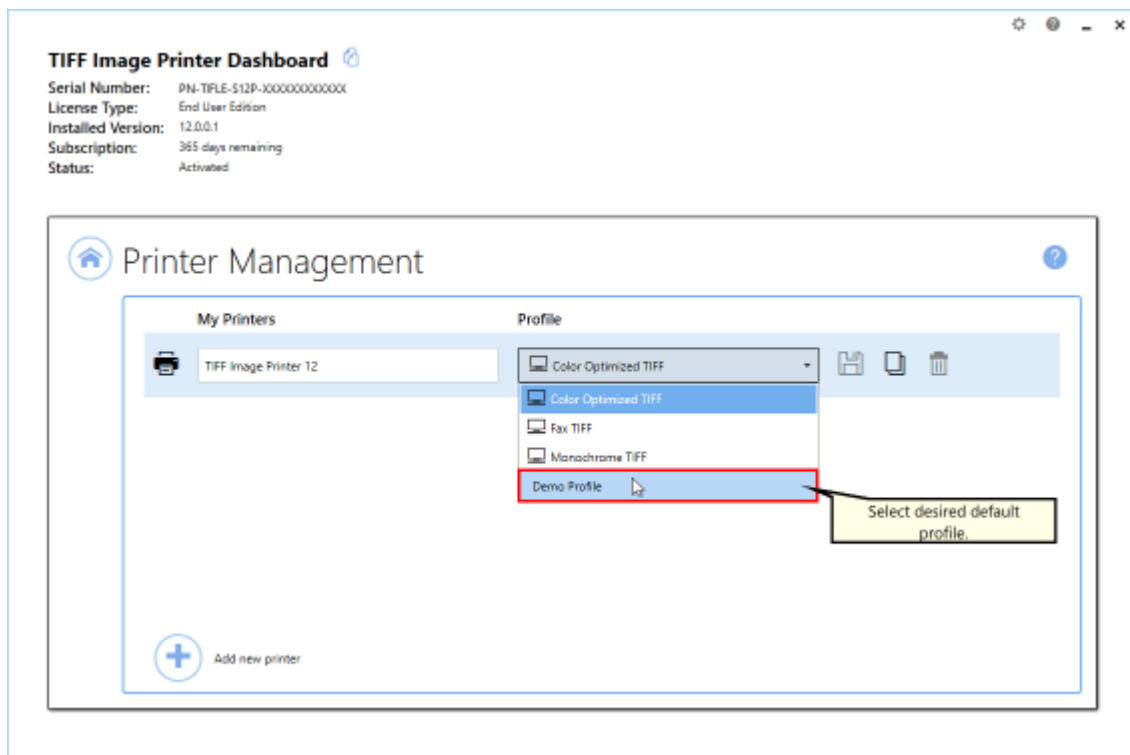
Message

8. Click **Save-Back**, and close **Profile Manager**.

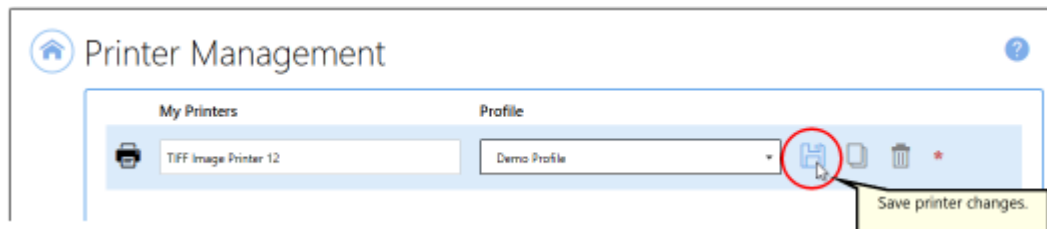
*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.

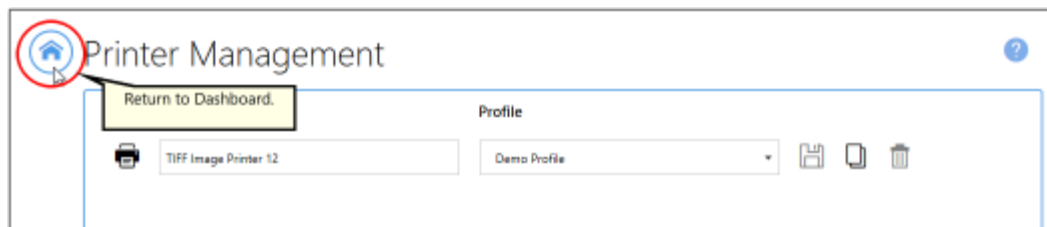




iii. Select the **Save icon** to save changes.



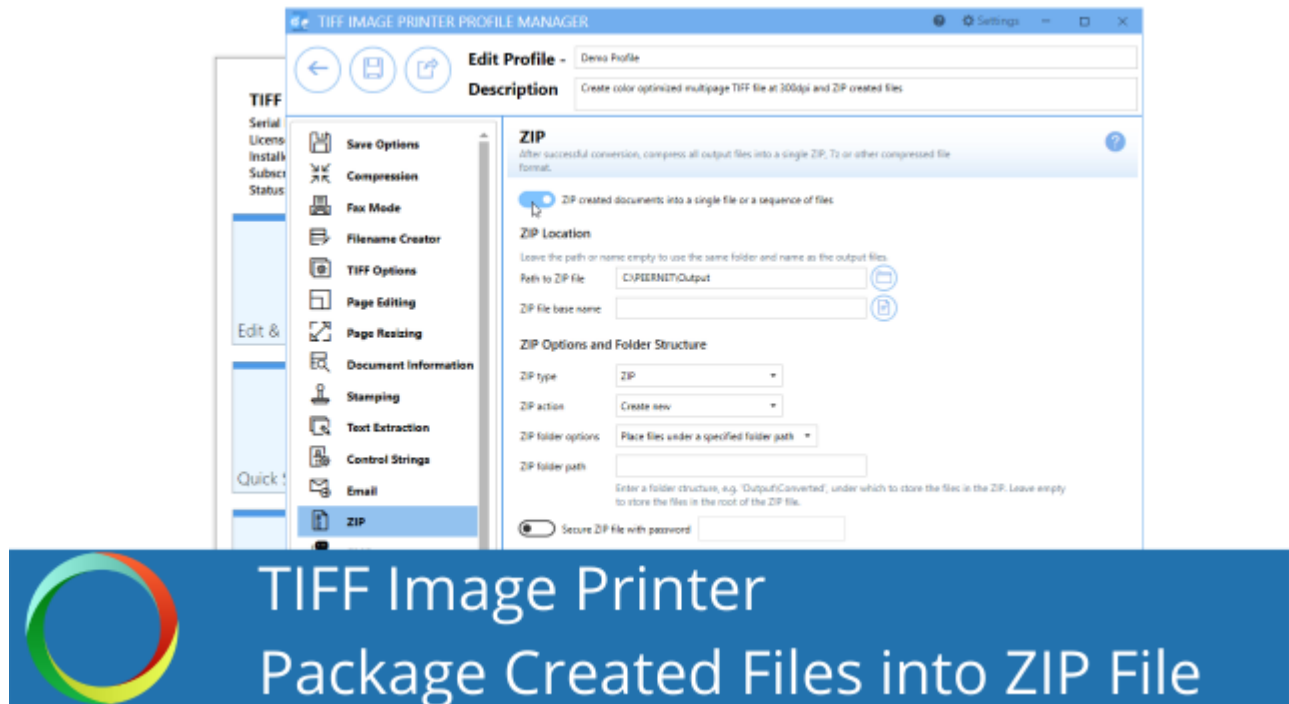
iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will receive an email notification after a failed conversion.

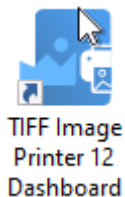
### ZIP the Created File

The steps below demonstrate using the **ZIP tab** to compress the created files into a new ZIP file, and then automatically delete them using the [Cleanup Options](#) once the ZIP file is created.



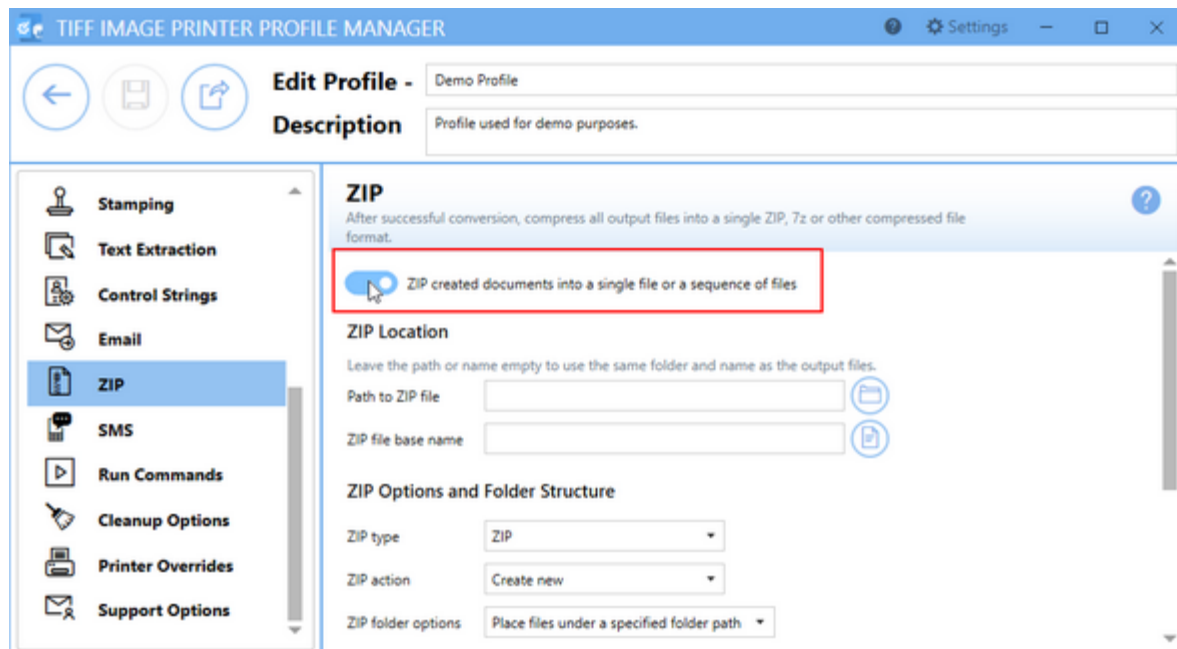
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.

5. On the **ZIP** tab, enable **ZIP created documents into a single file or a sequence of files**.



6. Leave the **ZIP Location** fields blank to create the ZIP file in the same location as the output files, and with the same name, or choose a new location and different name.

### ZIP Location

Leave the path or name empty to use the same folder and name as the output files.

Path to ZIP file

ZIP file base name

7. In **ZIP Options and Folder Structure**, select the type of ZIP file you want to create - *ZIP*, *7z*, or *TAR*.

### ZIP Options and Folder Structure

ZIP type

ZIP action

ZIP folder options

8. For **ZIP actions**, select *Create new* to create a new ZIP file each time.

ZIP action Create new ▼

ZIP folder options 
Create new  
Update existing
path ▼

9. Select your desired **ZIP folder option** and enter a **ZIP folder path** if required. These options determines how the files are stored inside the ZIP file. When *Place files under a specified folder path* is selected and the ZIP folder path is left empty, the files will be stored at the root of the ZIP file. See the [ZIP](#) tab for more details about the folder options.

ZIP folder options Place files under a specified folder path ▼

ZIP folder path 
Place files under a common parent folder  
Place files under a specified folder path  
Keep folder structure of output files


d', under which to store the files in the ZIP. Leave empty

10. There are also options to add a password to the ZIP file and to use a custom extension.

☒ Secure ZIP file with password

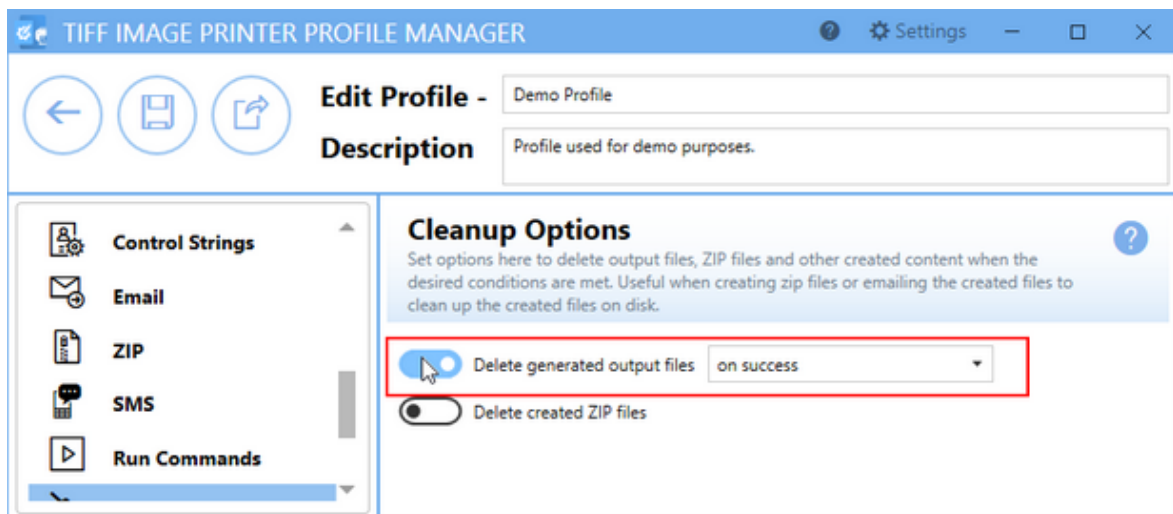
☒ Use a custom extension on the ZIP file

11. Lastly, if you are dealing with very large files, or a large number of serialized files, you can configure the ZIP file to automatically split into multiple files when a size limit is reached.

☒ Split ZIP file into multiple files when larger than  + - MB

12. To automatically delete created documents after sending, go to the **Cleanup Options tab**.

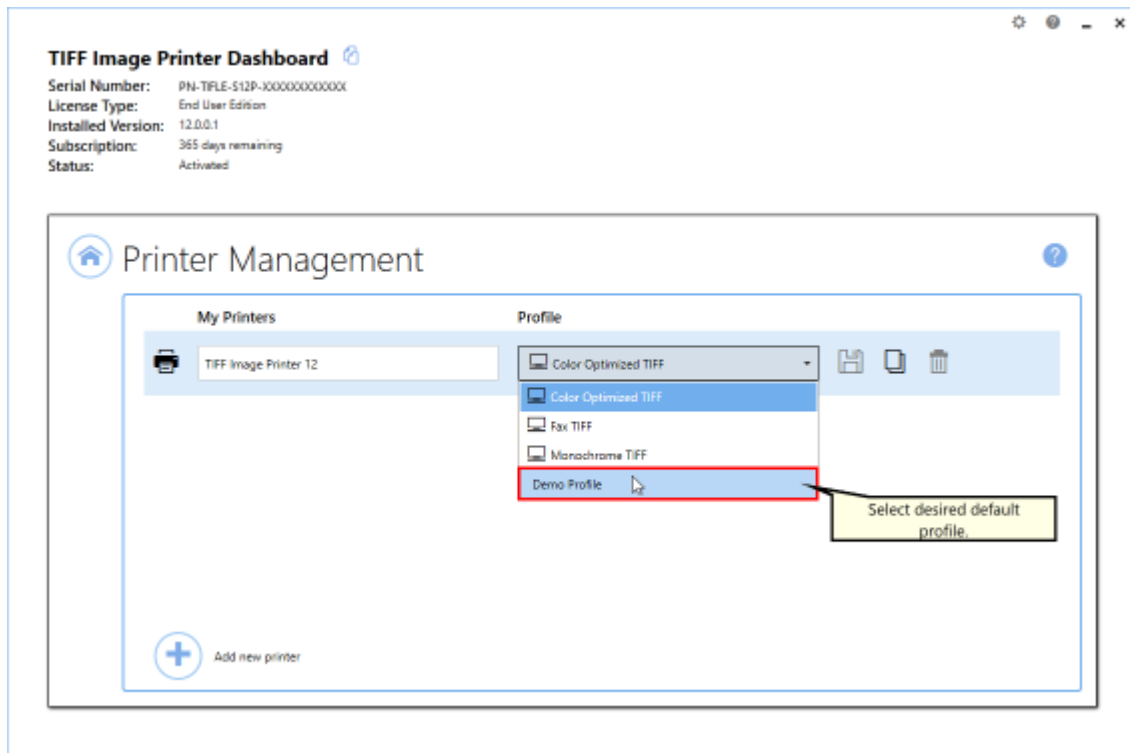
13. Enable **Delete generated output files** and select *on success*.



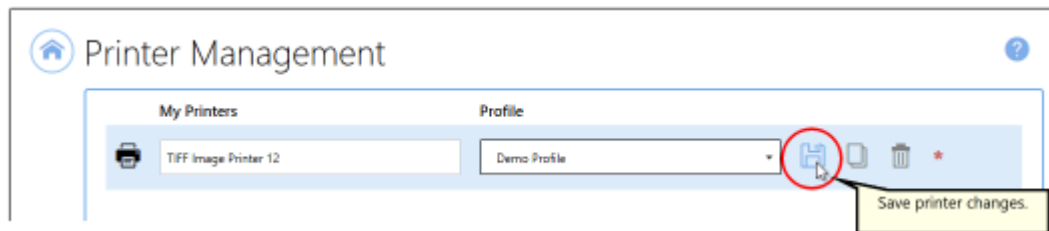
14. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

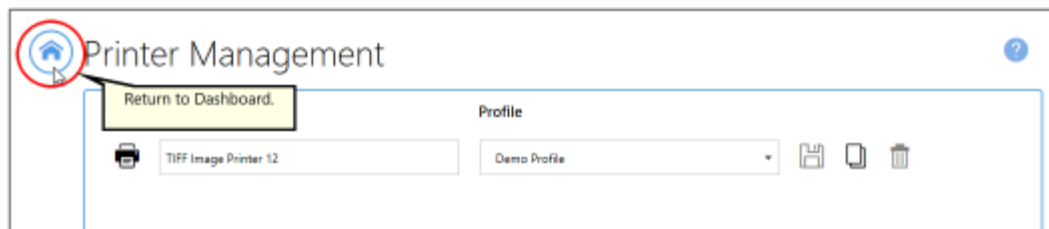
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



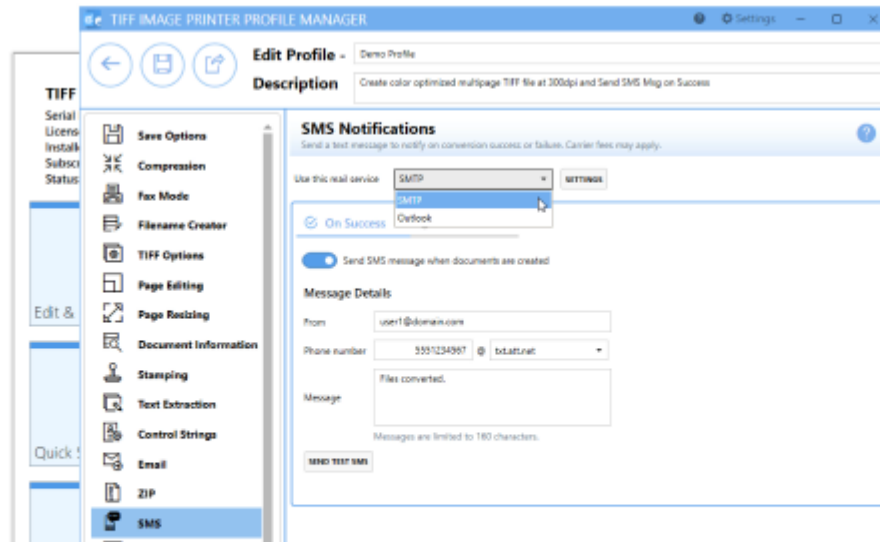
iv. Select the **Home icon** to return to the **Dashboard**.



15. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will end up with all of the created documents in a zip file. The created files will automatically be deleted.

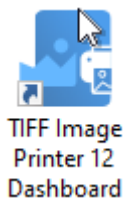
## Sending SMS Text Messages

The steps below demonstrate using the **SMS tab** to send a text message when a conversion succeeds and/or fails.



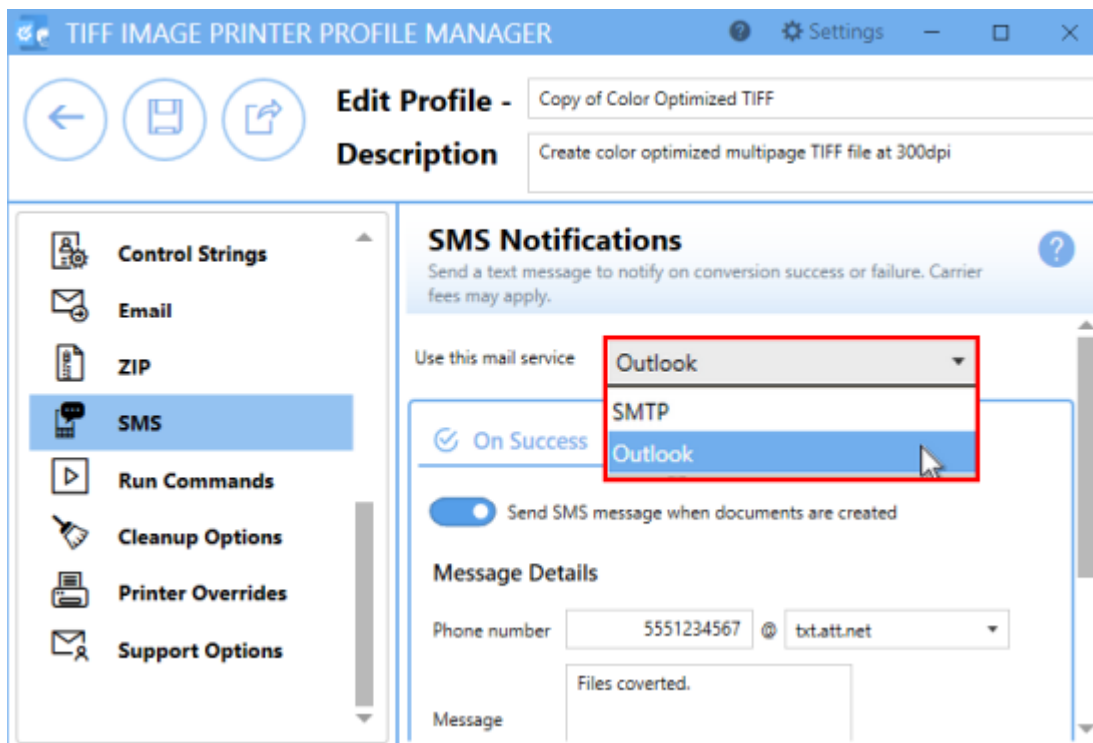
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



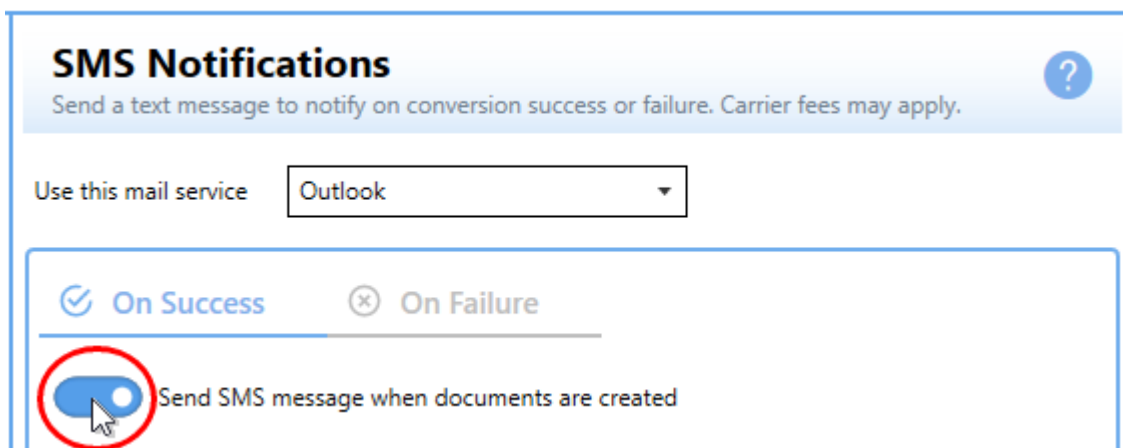
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **SMS tab**, under **Use this mail service**, select *Outlook* or *SMTP*.

- a. If you select *Outlook*, the application must be installed and an email account created in order to send email.
- b. If you select *SMTP*, click the **Settings** button to open the *SMTP Settings* flyout. The server name, port, connection type and any required authentication settings for your SMTP server should be available from your IT department or your email provider. Here, we are using GMail's SMTP settings. See [SMTP Settings](#) for more details on this panel.



6. Select either *On Success* or *On Failure*. You can enable an SMS message for both successful or failed conversions, or you can enable an SMS message in only one circumstance.
7. Enable **Send SMS message when documents are created** and/or **Send SMS message when conversion fails**.





**SMS Notifications** ?

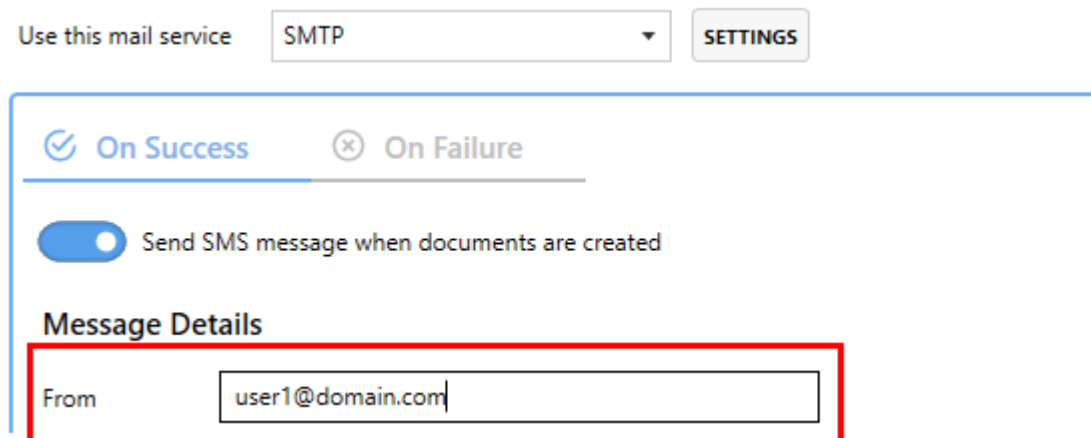
Send a text message to notify on conversion success or failure. Carrier fees may apply.

Use this mail service Outlook

✓ On Success ✗ On Failure

☒ Send SMS message when documents are created

8. If you are using *SMTP*, enter the From email address.



Use this mail service SMTP SETTINGS

✓ On Success ✗ On Failure

☒ Send SMS message when documents are created

**Message Details**

From user1@domain.com

9. Enter the phone number where you would like the SMS message sent to and select the SMS gateway of the cellular provider for that phone number.

✓ On Success

✗ On Failure

Send SMS message when documents are created

Message Details

Phone number

5551234567

@

txt.att.net

Message

Files covered.

Messages are limited to 160

SEND TEST SMS

txt.att.net

txt.bell.ca

pcs.rogers.com

fido.ca

vtext.com

txt.att.net

messaging.sprintpcs.com

tmomail.net

vmobl.com

mmst5.tracfone.com

message.ting.com

sms.myboostmobile.com

email.uscc.net

mymetropcs.com

sms.alltelwireless.com

msg.fi.google.com

text.republicwireless.com

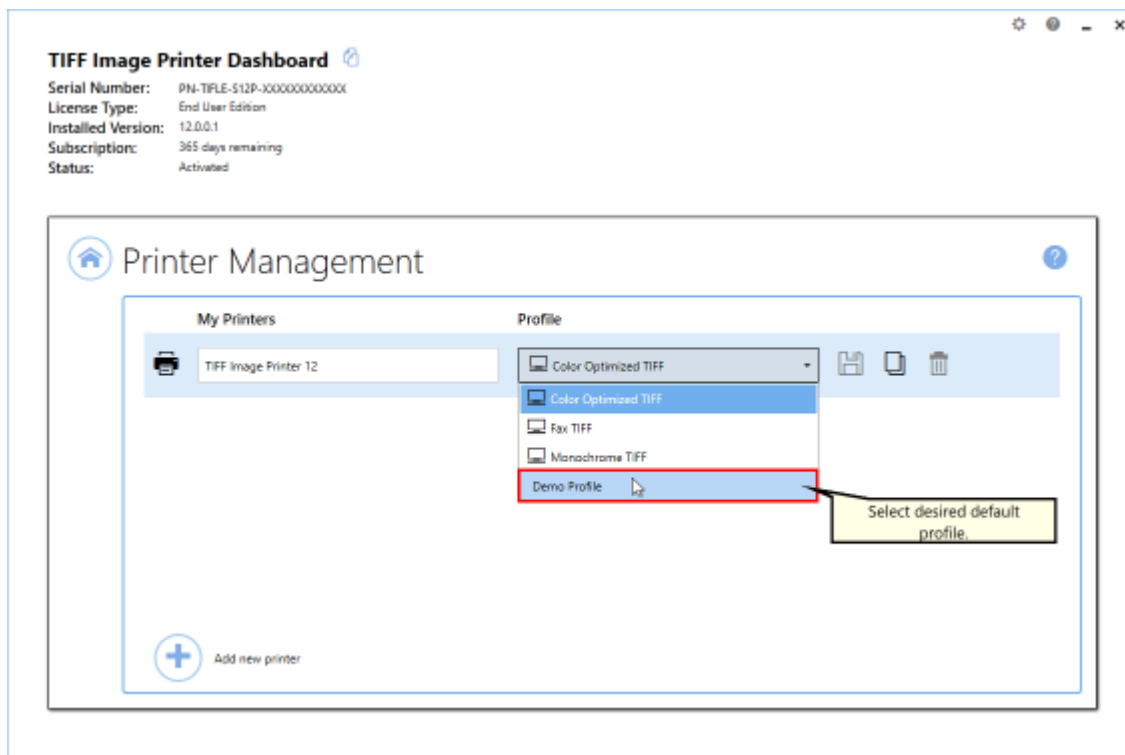
10. Enter the content of the message.

The screenshot shows the 'On Success' tab of a configuration window. At the top, there are two tabs: 'On Success' (selected) and 'On Failure'. Below the tabs is a toggle switch labeled 'Send SMS message when documents are created', which is currently turned on. Underneath is the 'Message Details' section. It contains three input fields: 'From' (with the value 'user1@domain.com'), 'Phone number' (with the value '5551234567'), and a dropdown menu for the domain (currently showing 'txt.att.net'). Below these fields is a large text area labeled 'Message' containing the text 'Files covered.'. A red rectangular box highlights the 'Message' text area. Below the text area, a note states 'Messages are limited to 160 characters.'. At the bottom left of the form is a button labeled 'SEND TEST SMS'.

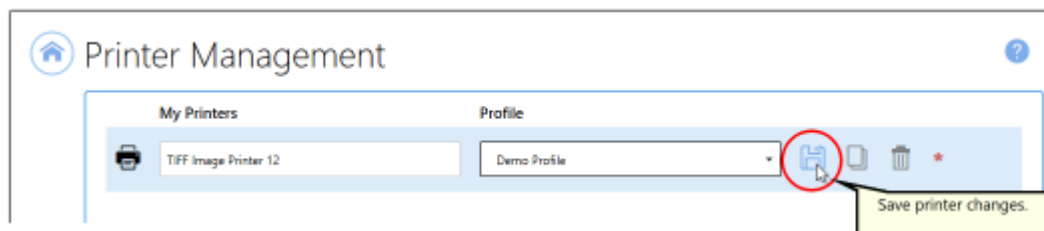
11. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

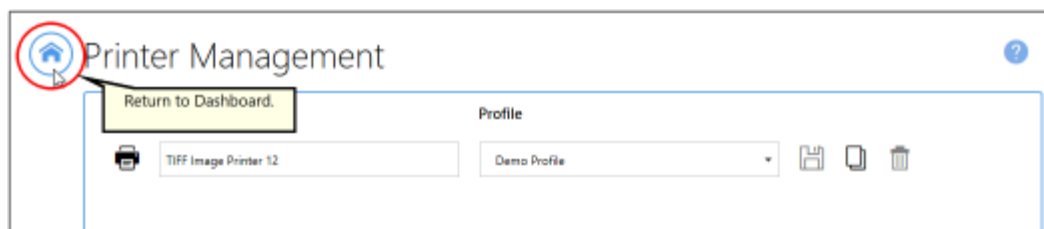
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



12. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will receive SMS message successful conversion or failed conversion.

## Using the Run Commands

The run commands can be used to perform an action at three different times:

- at the start of the print job
- after a successful or failed print
- at the end of the print job

Each of these different stages can have more than one command associated with it. Commands are run in the order in which they are set in the profile, and each command runs to completion before the next command is started.

You can run commands from a batch file (.bat), an executable (.exe) or a command (.com). All [run command options](#) are controlled through the profile. Some commonly used run commands have been provided in the **RunCommands** folder in the product installation folder. Users can also create their own run command files (.bat, .exe. or .com) to meet their specific requirements.

Examples of possible run commands include: sending the output file to a document management system, uploading the output file to an FTP server, emailing the user after a failed print, compressing the output file into a zip, or automatically opening a created file.

When a run command for a successful or failed print is executed by TIFF Image Printer, the last parameter is always a path to a text file that contains a list of the file(s) created by the conversion process. This text file can contain zero or more lines, with each line being the full path to a file created by TIFF Image Printer. You can then use this text file to operate on the files successfully created and the files that failed to convert. The text file is created with UTF-16LE encoding.

All [run command options](#) are controlled through the profile. Some commonly used run commands have been provided in the **RunCommands** folder in the product installation folder. Users can also create their own run command files (.bat, .exe. or .com) to meet their specific requirements.

When using a command from the **RunCommands** folder under the product setup, the location of the command is stored in the profile using a macro. This allows the profile to work on any computer, no matter where the product is installed. It also allows users the freedom to add their own commands to this folder as part of deployment and they will automatically be found.

These topics cover using the run commands included with TIFF Image Printer:

- [Automatically View the Created File](#)
- [Execute a Command for Each File Created](#)
- [Launch an Application or Program](#)
- [Send Email when File Created](#)
- [Compress Created File into ZIP](#)
- [Batch Files for Common Tasks](#)

### Run Command Macros

These macros can be used in the command, parameter and starting folder fields. They are automatically expanded to their values when the command is run.

### Output Variables

#### **\$(FileGUID)**

A GUID (*Globally Unique Identifier*) for this file, this alphanumeric number is unique.

#### **\$(JobGUID)**

Current job GUID (*Globally Unique Identifier*) maintained by the driver, this alphanumeric number is unique.

#### **\$(JobID)**

Current job ID maintained by the driver for this printer. Increments for every print job. This number is shared across all copies of the TIFF Image Printer printer and stored as a UInt64 with a maximum value of 18,446,744,073,709,551,615.

#### **\$(JobStatus)**

1 indicates success, 0 indicates failure

#### **\$(OutputDir)**

The output directory where the files are created. The directory string is passed in quotes. This macro cannot be used with the [PNStart12.exe utility](#).

**\$(OutputDirNoQuotes)**

Same as \$(OutputDir), but without quotation marks. This macro cannot be used with the [PNStart12.exe utility](#)

**\$(PageOrientation)**

The orientation of the first page of the output pages, either "Portrait" or "Landscape".

**\$(PrintJobID)**

The job ID from the print queue; this job id increments for every print job. It is not unique and numbers can be repeated.

**\$(PrintedPageCount)**

The number of pages printed.

**Date and Time Variables****\$(Year)**

The year the job was started.

**\$(Month)**

The month the job was started, two digits, 01-12.

**\$(Day)**

The day the job was started, two digits, 01-31.

**\$(Hour)**

The hour the job was started, two digits, 24-hr format, 00-23.

**\$(Minute)**

The minute the job was started, two digits, 00-59.

**\$(Second)**

The second the job was started, two digits, 00-59

**Other Variables****\$(PrinterName)**

Name of the printer that printed the file.

### **\$(Copies)**

The number of copies chosen in the print dialog. This number is not used, just passed on as information.

### **\$(Collate)**

Any collation settings chosen on the print dialog.

- 0 if collate was not checked
- 1 if it was checked

### **\$(Duplex)**

Any duplex settings chosen on the print dialog.

- 1 = No duplex
- 2 = flip page on long edge
- 3 = flip page on short edge

### **\$(Color)**

The color setting used when printing the document.

- 1 = Black and White
- 2 = Color



## Automatically View the Created File

The steps below demonstrate how to use the **Run Commands tab** to automatically open and view created files.

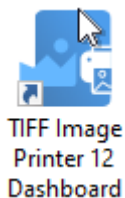
We have provided a bat file, **AutoOpen.bat**, to automatically open a file. It can be found in the **RunCommands** folder of the installation folder. This is usually C:\Program Files\TIFF Image Printer 12\RunCommands\.

If you enable a conversion profile to run our **AutoOpen.bat** on success, TIFF Image Printer will auto open the created file if the profile creates multipaged output, or it will open the first page of the output series when creating serialized output.

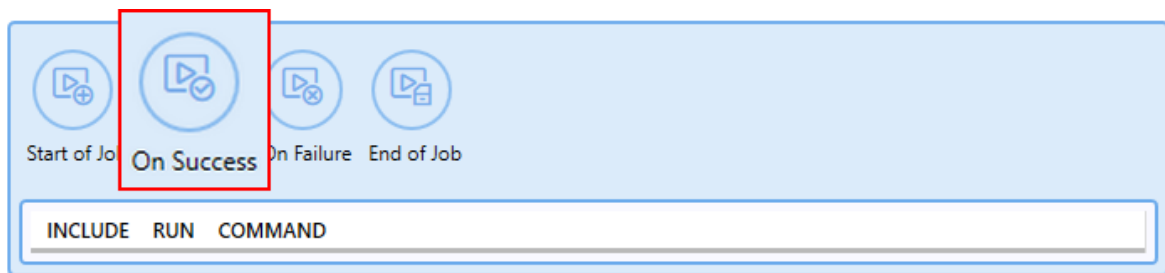
The AutoOpen batch file performs the same action as when you double click the output file in Windows Explorer to open it. If double-clicking a TIFF file opens in Windows Photos, that is what will happen through the run command.

## Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Run Commands tab**, click the *On Success* button to add an **On Success** command.



6. The command will be added already enabled and the details expanded. Beside *Run this command*, browse to your desired command or enter the full path and file name of the command. In this case we will use our sample auto open batch file which is **C:\Program Files\TIFF Image Printer 12\RunCommands\AutoOpen.bat**.

## Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\AutoOpen.bat

"C:\Program Files\TIFF Image Printer 12\RunCommands\AutoOpen.bat" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters

Starting folder for command is

7. Click **Save-Back**, and close **Profile Manager**.

If you choose to enable run commands, you may also want to [disable prompting by the Save As dialog](#) each time you print.

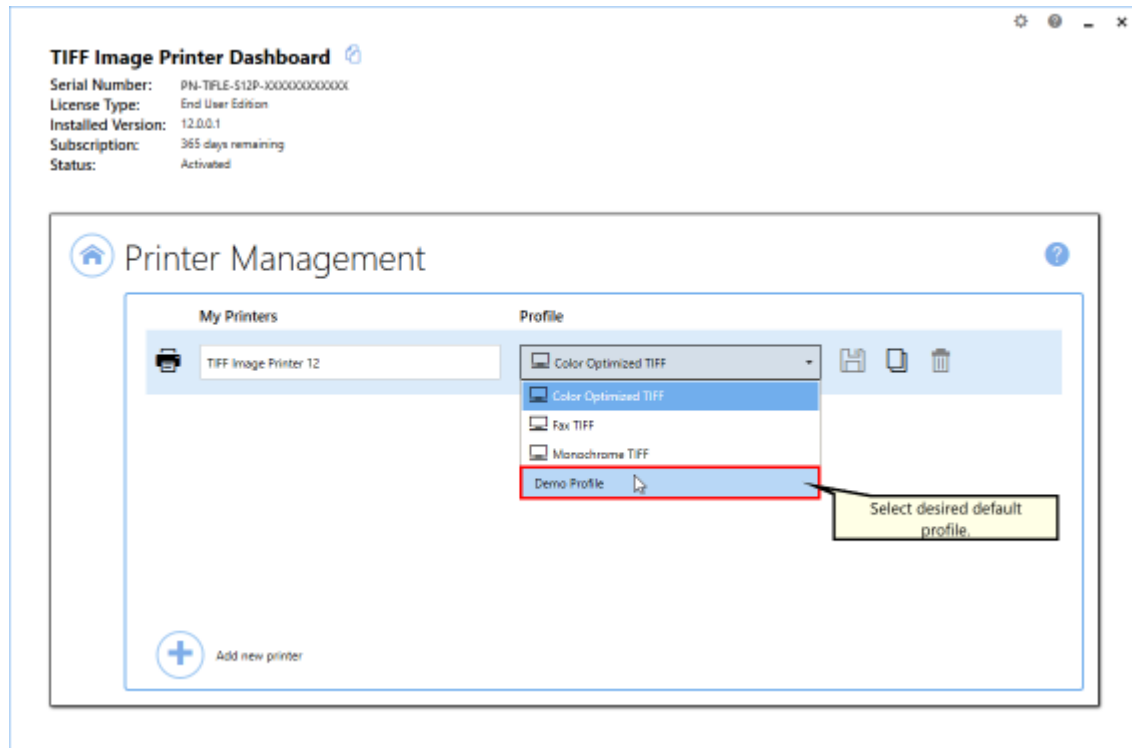
- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.

☒ Prompt for the output location and base file name

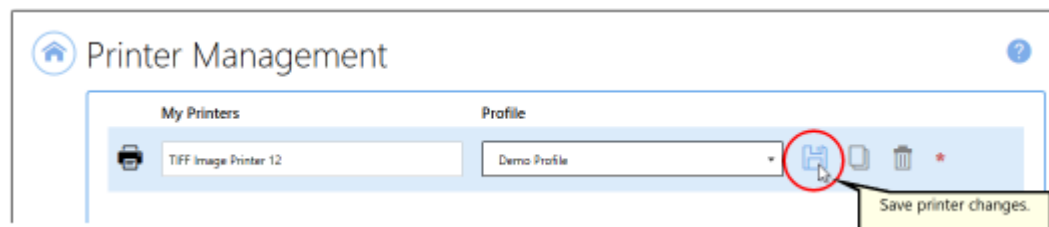
If the file already exists when saving Auto-name each file with a numbered copy

If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

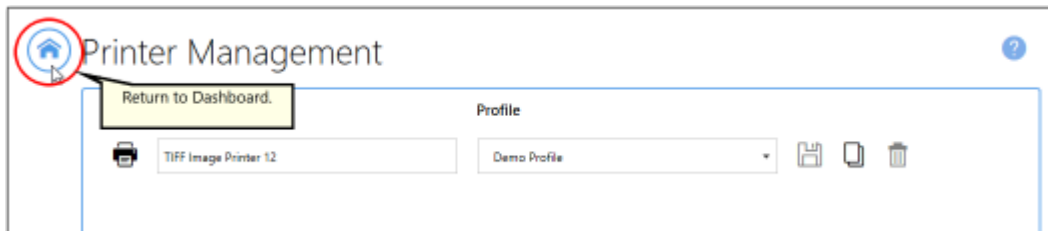
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output file will automatically open after a successful print.

## Execute a Command for Each File Created

Prior to version 12, the **Run at End** command was triggered for each file created, and the name of each file created could be passed to the command using a macro, `$(OutputFileName)`. Other macros could also be passed to the command.

As of version 12, there are now two **Run at End** commands, **On Success** and **on Failure**. one which runs on success after all the files have been created, and one which runs on failure. Both commands always includes a text file containing a list of any files created as the last parameter. The **Run at End** commands are different from the **End of Job** command. The **End of Job** command always runs when the print job is finished, while only one of **On Success** or **On Failure** runs, depending on the state of the print job.

The included **PNExec12.exe** tool allows you to reproduce the previous Run at End command behavior in the current version. It allows you to execute a command ( \*.exe) for each file created, making it easier to migrate from earlier versions.

If you just want to run a program or application, and don't need it to run for every file you create, see the **PNStart12.exe** utility in [Launch an Application or Program](#).

### PNExec12.exe Utility

The included utility has been provided in the **RunCommands** folder in your TIFF Image Printer install folder. This is usually `C:\Program Files\TIFF Image Printer 12\RunCommands\`.

### PNExec12 Macros

There are two extra [Run Command macros](#) that can only be used with this utility:

#### **\$(OutputFilePath)**

The final output file, a fully qualified path to the created file, in quotation marks.

#### **\$(OutputFilePathNoQuotes)**

Same as `$(OutputFilePath)`, but without quotation marks.

### Command Line Arguments

<code>/C="path to command"</code>	Required, pass in the full path to the command to execute. Use quotes if there are spaces in the path.
-----------------------------------	--

## Command Line Arguments

	<p>Single quotes can also be used.</p>
<code>/A=" 'arg 1' arg2"</code>	<p>Optional, extra arguments to pass to the command.</p> <p>Use double quotes around the entire argument string, and single quotes around any argument in the string that needs to be passed quoted. Optionally, you can use single quotes around the entire argument string and double quotes around any argument in the string that needs to be passed quoted.</p> <p><code>/A=""arg 1" arg2'</code></p> <p>This argument can contain the <code>\$(OutputFilePath)</code> or <code>\$(OutputFilePathNoQuotes)</code> macro. If it does, the macro is replaced with the name of the file from the file list for each file we run.</p> <p>If the macros are not present in this argument, or this argument is not used, the quoted file name for the file in the list the command is being run for is appended to the end of the command.</p> <p>Other run command macros can also be used here.</p>
<code>/WAIT=&lt;time in seconds&gt;</code>	<p>Optional; how many seconds PNExec12.exe will wait for the command to complete.</p> <p>When not provided or a negative number - waits indefinitely for the command to finish (complete)</p> <p>If set to 0 = does not wait for the command to complete</p> <p>If greater than 0 - waits that many seconds for the command to complete</p>
<code>/MODE=&lt;window state&gt;</code>	<p>Pass in the initial windows state for the command you are running. The default windows state is to show the window (5 - <code>SW_SHOW</code>).</p> <p>To hide the window, pass <code>/MODE=0</code>.</p> <p>0 - Hide the window (<code>SW_HIDE</code>).</p> <p>1 - Activates and display the window (<code>SW_SHOWNORMAL</code>).</p>

### Command Line Arguments

- 2 - Show the window minimized (SW\_SHOWMINIMIZED).
- 3 - Show the window maximized (SW\_SHOWMAXIMIZED).
- 4 - Show the window but do not activate it (SW\_SHOWNOACTIVATE).
- 5 - Activates and and display the window (SW\_SHOW).

**PNExec12 Logging** - If there is an error running the command, a log file is created in the %TEMP% folder. The log file name has the pattern *pnexec12-{GUID}.txt*.

### Sample Migration For Run Commands

For users migrating from the older-style commands from version 11 or previous, the following shows the changes needed to update your commands for version 12 and later. To see how to add a new command, go to the [step-by-step instructions below](#).

### Single Argument Command

This is a sample run at end command in TIFF Image Printer 11.0 using *ArchiveUpdate.exe*, a fictional utility used for demonstration only. It is not an included utility. This utility expects the full path to the output file that was created.

TIFF Image Printer 11.0 End of job settings in Printer Preferences:

Show settings for:

☐ Start of job    ☐ Each page    ☐ File close    ☒ End of job

End of job settings

☒ Enabled

Command:

Parameters:

Start in:

☒ Wait for completion    Window:

☐ Wait with exit code    ☐ Activate window

☐ Do not wait

☐ Prompt to continue:

TIFF Image Printer Script File settings for Run at End :

```
[Run]
RunAtEnd enable=1
RunAtEnd command=C:\CustomActions\ArchiveUpdate.exe
RunAtEnd parameters=$(OutputFilePath)
RunAtEnd directory=
RunAtEnd window=Hidden
RunAtEnd window active=0
RunAtEnd wait=0
RunAtEnd prompt=Do you want to continue?
```

In TIFF Image Printer 12, using the **PNExec12.exe** utility in the profile to call the fictional *ArchiveUpdate.exe* for each output file created would look like the following:



## Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe  
 "C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe" /C="C:\CustomActions\ArchiveUpdate.exe" /A="{OutputFilePath}" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters /C="C:\CustomActions\ArchiveUpdate.exe" /A="{OutputFilePath}"

Starting folder for command is

## Multiple Custom Arguments Command

This is a sample run at end command in TIFF Image Printer 11.0 using *UpdateDatabase.exe*, a fictional utility used for demonstration only. It is not an included utility. This utility takes some custom arguments, the JobID of print job and full path to the output file that was created.

TIFF Image Printer 11.0 End of job settings in Printer Preferences:

Show settings for:

☐ Start of job ☐ Each page ☐ File close ☒ End of job

End of job settings

☒ Enabled

Command: C:\CustomActions\UpdateDatabase.exe Browse...

Parameters: /U /ID={JobID} {OutputFilePath}

Start in:  Browse...

☐ Wait for completion ☐ Wait with exit code ☒ Do not wait ☐ Prompt to continue: Do you want to continue?

Window: Hidden ☐ Activate window

License Restore Defaults Help

TIFF Image Printer Script File settings for Run at End :

```
[Run]
RunAtEnd enable=1
RunAtEnd command=C:\CustomActions\UpdateDatabase.exe
RunAtEnd parameters=/U /ID=$(JobID) $(OutputFilePath)
RunAtEnd directory=
RunAtEnd window=Hidden
RunAtEnd window active=0
RunAtEnd wait=2
RunAtEnd prompt=Do you want to continue?
```

In TIFF Image Printer 12, using the **PNExec12.exe** utility in the profile to call the fictional *ArchiveUpdate.exe* for each output file created would look like the following.

### Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe

"C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe" /WAIT=0 /C="C:\CustomActions\UpdateDatabase.exe" /A="/U /ID=\$(JobID) \$(OutputFilePath)" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters /WAIT=0 /C="C:\CustomActions\UpdateDatabase.exe" /A="/U /ID=\$(JobID) \$(OutputFilePath)"

Starting folder for command is

## Step by Step Instructions

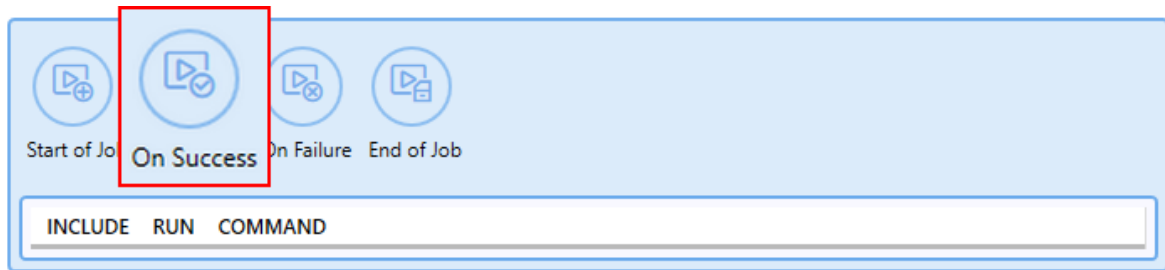
The steps below demonstrate how to use the **PNExec12.exe** tool and the new **Run Commands** tab to call a fictional utility, *ArchiveUpdate.exe* that takes the full path to the output file that was created. This tool name is for demonstration only and is not an included utility.

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.

3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Run Commands** tab, click the *On Success* button to add an **On Success** command.



6. The command will be added already enabled and the details expanded. Beside *Run this command*, enter the full path and file name of the PNExec12.exe:

#### Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe

"C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters

Starting folder for command is

7. In the *Use these parameters* field, add any parameters needed by the command being run. For our fictional tool, we only need to pass the full output file name. We can do this using the macro \$(OutputFilePath). The PNExec12 utility will automatically replace this value with the quoted output file path from text file when it processes the list of files created.

### Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe  
"C:\Program Files\TIFF Image Printer 12\RunCommands\pnexec12.exe" /C="C:\CustomActions\ArchiveUpdate.exe" /A="\$(OutputFilePath)" "pnf-daecd751c7f0435da6acfce7a616602f.txt"


Use these parameters /C="C:\CustomActions\ArchiveUpdate.exe" /A="\$(OutputFilePath)"

Starting folder for command is

8. Click **Save-Back**, and close **Profile Manager**.

*If you choose to enable run commands, you may also want to [disable prompting by the Save As dialog](#) each time you print.*

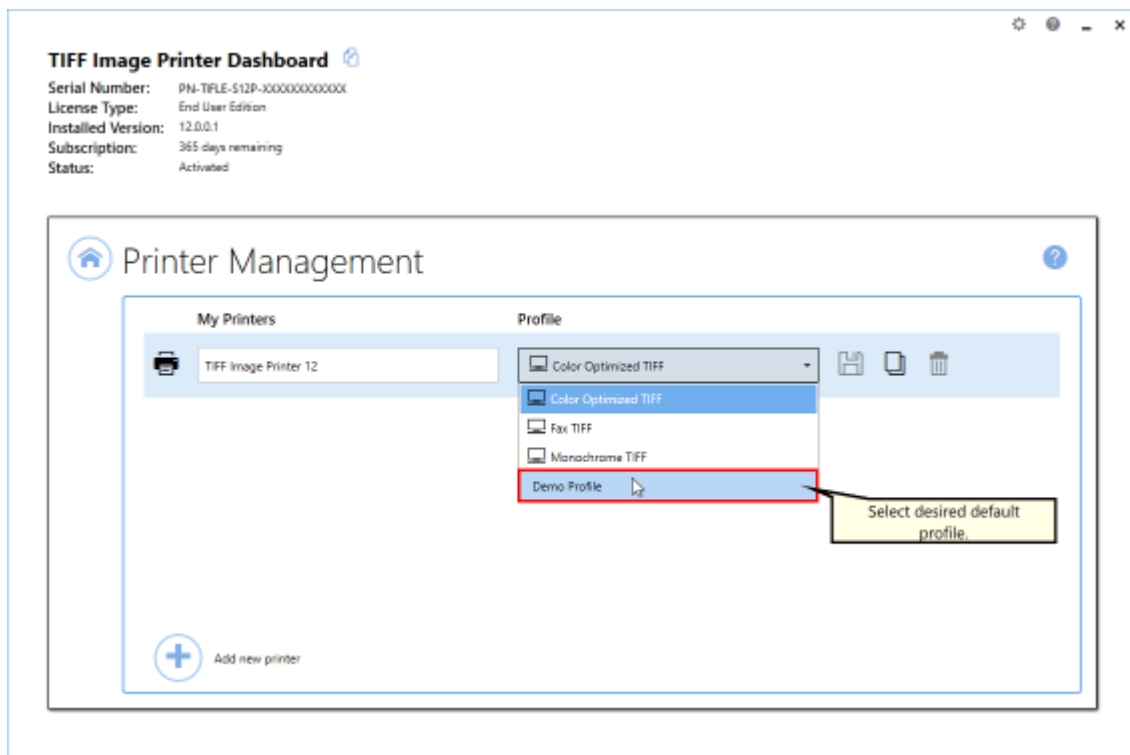
- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.

 Prompt for the output location and base file name

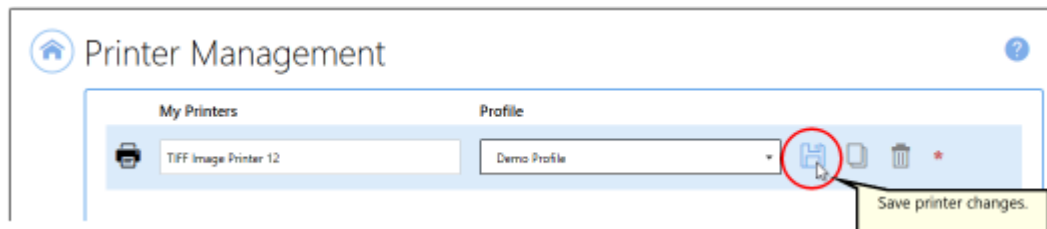
If the file already exists when saving Auto-name each file with a numbered copy

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

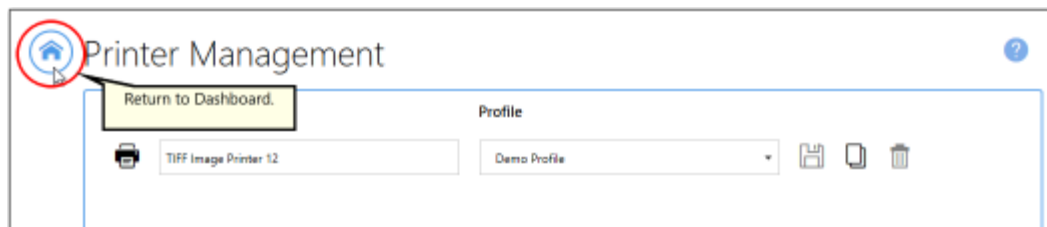
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



9. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, all created output images will be passed to the program you specified to be processed.

## Launch an Application or Program

The included **PNStart12.exe** tool allows you to run a command that simply starts the given program or application. It provides control over the window state, allowing you to show or hide the program window. You also have control over if you want to wait for the program to finish before moving to the next step, and if so, how long to wait.

The difference between this utility and the *PNExec12.exe* utility is that this will only launch the application; it does not expect or process the list of created files. If you need to run a command that does an action on each created file, see [Execute a Command for Each File Created](#).

### PNStart12.exe Utility

The included utility has been provided in the **RunCommands** folder in your TIFF Image Printer install folder. This is usually C:\Program Files\TIFF Image Printer 12\RunCommands\.

#### Command Line Arguments

/C="path to command"	Required, pass in the full path to the command to execute. Use quotes if there are spaces in the path. Single quotes can also be used.
/A=" 'arg 1' arg2"	Optional, extra arguments to pass to the command.  Use double quotes around the entire argument string, and single quotes around any argument in the string that needs to be passed quoted. Optionally, you can use single quotes around the entire argument string and double quotes around any argument in the string that needs to be passed quoted.  /A=""arg 1" arg2'
/WAIT=<time in seconds>	Optional; how many seconds PNStart12.exe will wait for the command to complete.  When not provided or a negative number - waits indefinitely for the command to finish (complete)  If set to 0 = does not wait for the command to complete  If greater than 0 - waits that many seconds for the command to complete

## Command Line Arguments

`/MODE=<window state>` Pass in the initial windows state for the command you are running. The default windows state is to show the window (5 - `SW_SHOW`).

To hide the window, pass `/MODE=0`.

0 - Hide the window (`SW_HIDE`).

1 - Activates and display the window (`SW_SHOWNORMAL`).

2 - Show the window minimized (`SW_SHOWMINIMIZED`).

3 - Show the window maximized (`SW_SHOWMAXIMIZED`).

4 - Show the window but do not activate it (`SW_SHOWNOACTIVATE`).

5 - Activates and and display the window (`SW_SHOW`).

**pnstart12 Logging** - If there is an error running the command, a log file is created in the `%TEMP%` folder. The log file name has the pattern *pnstart12-{GUID}.txt*.

## Sample Migration For Run Commands

For users migrating from the older-style commands from version 11 or previous, the following shows the changes needed to update your commands for version 12 and later. To see how to add a new command, go to the [step-by-step instructions below](#).

## Single Argument Command

This is a sample run at end command in TIFF Image Printer 11.0 using a fictional utility, *ArchiveReports.exe*. It is not an included utility. In this sample we are running this at **End of Job** and are passing a argument to the utility.

TIFF Image Printer 11.0 End of job settings in Printer Preferences:

Show settings for:

☐ Start of job    ☐ Each page    ☐ File close    ☒ End of job

End of job settings

☒ Enabled

Command:

Parameters:

Start in:

☒ Wait for completion    Window:

☐ Wait with exit code    ☒ Activate window

☐ Do not wait

☐ Prompt to continue:

TIFF Image Printer Script File settings for Run at End :

```
[Run]
RunAtEnd enable=1
RunAtEnd command=C:\Tools\ArchiveReports.exe
RunAtEnd parameters=Mode=New
RunAtEnd directory=
RunAtEnd window=Normal
RunAtEnd window active=1
RunAtEnd wait=0
RunAtEnd prompt=Do you want to continue?
```

In TIFF Image Printer 12, using the **PNStart12.exe** utility in the profile to call the fictional *ArchiveReports.exe* with the argument "Mode=New", show the window and wait for the program to finish would be added as the following On Success Run Command. Note that even though the list of files is passed to PNStart12.exe, this parameter is ignored.



## Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe  
 "C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe" /MODE=1 /C="C:\Tools\ArchiveReports.exe" /A="Mode=NEW" "pnf-cb71067101464841abbcc8f0d0620655.txt"

Use these parameters /MODE=1 /C="C:\Tools\ArchiveReports.exe" /A="Mode=NEW"

Starting folder for command is

## Multiple Custom Arguments Command

This is a sample run at end command in TIFF Image Printer 11.0 using the fictional tool, *ArchiveReports.exe*. It is not an included utility. This utility takes one custom argument and the JobID of the print job supplied by a [printer macro](#). We also want to show the window and wait for the program to finish.

TIFF Image Printer 11.0 End of job settings in Printer Preferences:

Show settings for:

☐ Start of job    ☐ Each page    ☐ File close    ☒ End of job

End of job settings

☒ Enabled

Command:  Browse...

Parameters:

Start in:  Browse...

☒ Wait for completion    Window: Normal ▼

☐ Wait with exit code    ☒ Activate window

☐ Do not wait

☐ Prompt to continue:

License Restore Defaults Help

### TIFF Image Printer Script File settings for Run at End :

```
[Run]
RunAtEnd enable=1
RunAtEnd command=C:\Tools\ArchiveReports.exe
RunAtEnd parameters=Mode=NEW $(JobID)
RunAtEnd directory=
RunAtEnd window=Normal
RunAtEnd window active=1
RunAtEnd wait=0
RunAtEnd prompt=Do you want to continue?
```

In TIFF Image Printer 12, using the **PNStart12.exe** utility in the profile to open the fictional *ArchiverReports.exe* utility with the given arguments would look like the following.

#### Edit Command

☒ Enable this command

Run command on

Success

Run this command

C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe

"C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe" /MODE=1 /C="C:\Tools\ArchiveReports.exe" /A="Mode=NEW \$(JobID)" "pnf-cb71067101464841abbcc8f0d0620655.txt"

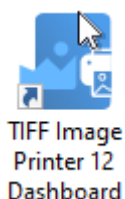
Use these parameters

/MODE=1 /C="C:\Tools\ArchiveReports.exe" /A="Mode=NEW \$(JobID)"

Starting folder for command is

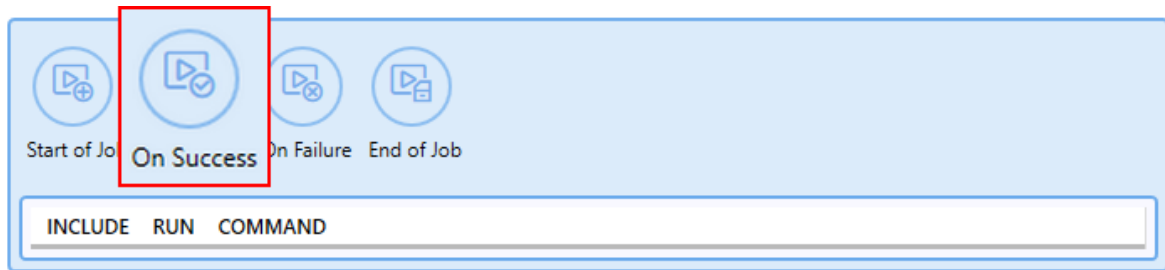
### Step by Step Instructions

The steps below demonstrate how to use the **PNStart12.exe** tool and the new **Run Commands tab** to call a fictional utility, *ArchiveReports.exe*. This is not an included utility. It takes as an argument the Job ID supplied by the printer using the printer macro, `$(JobID)`.



1. Select "Edit & Create Profiles" to open **Profile Manager**.

2. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
3. Name the profile, add a description, and click Save.
4. On the **Run Commands tab**, click the *On Success* button to add an **On Success** command.



5. The command will be added already enabled and the details expanded. Beside *Run this command*, enter the full path and file name of the PNStart12.exe:

#### Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe

"C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe" "pnf-cb71067101464841abbcc8f0d0620655.txt"

Use these parameters

Starting folder for command is

6. In the *Use these parameters* field, add any parameters needed by the command being run. For our fictional tool, we need to pass the Job ID from the printer. We do this using the [printer macro](#) \$(JobID). The PNStart12 utility will automatically replace this value with Job Id from the printer when it runs..

### Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe  
 "C:\Program Files\TIFF Image Printer 12\RunCommands\pnstart12.exe" /MODE=1 /C="C:\Tools\ArchiveReports.exe" /A="\$ (JobID)" "pnf-cb71067101464841abbcc8f0d0620655.txt"

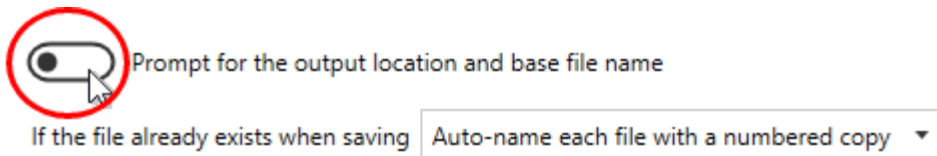
Use these parameters /MODE=1 /C="C:\Tools\ArchiveReports.exe" /A="\$ (JobID)"

Starting folder for command is

7. Click **Save-Back**, and close **Profile Manager**.

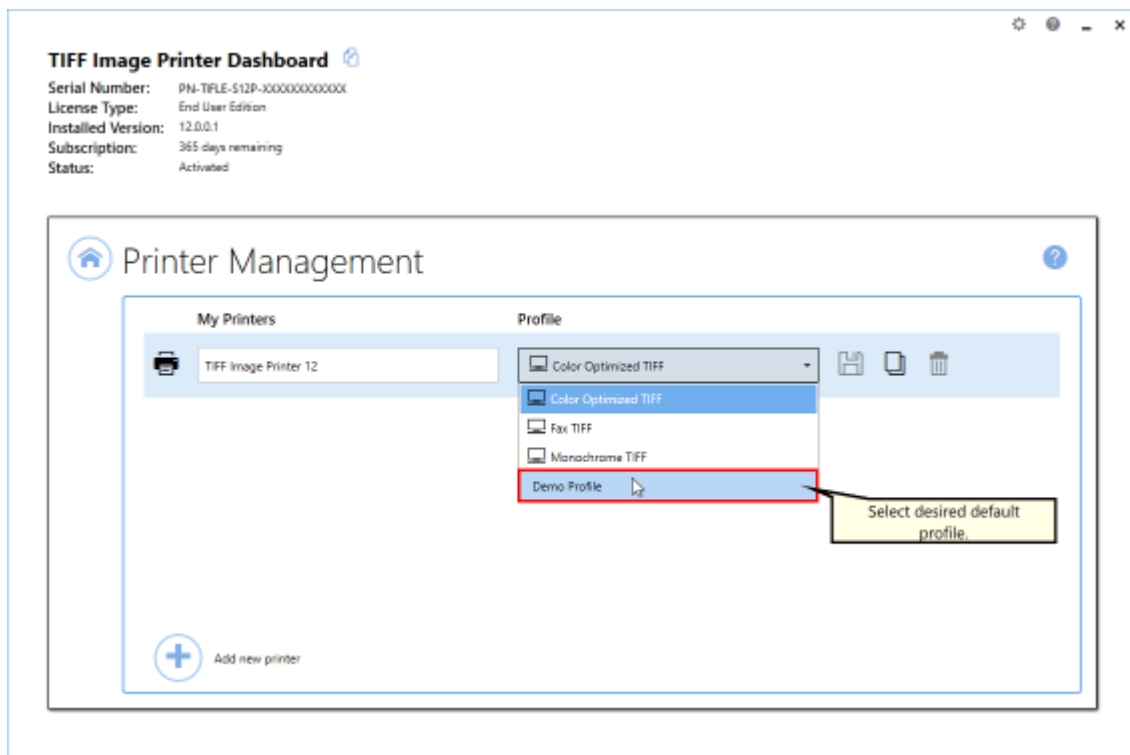
*If you choose to enable run commands, you may also want to [disable prompting by the Save As dialog](#) each time you print.*

- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.

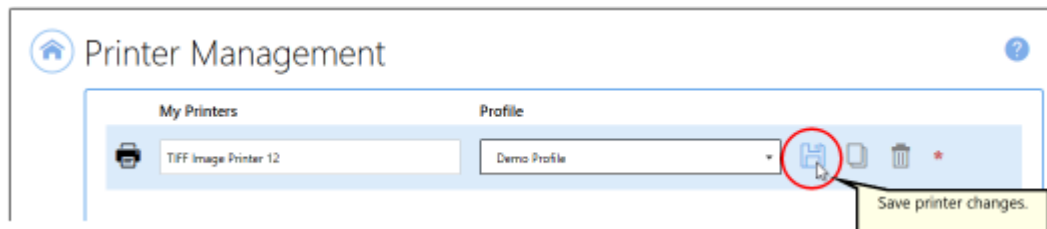


*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

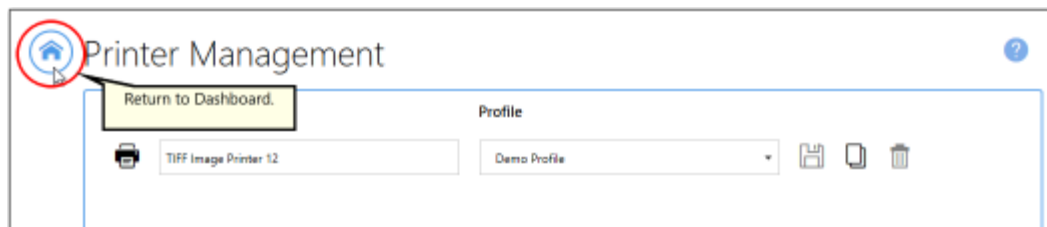
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, if the job succeeds, the application, in this case our fictional utility *ArchiveReports.exe*, is launched and the printer macro \$(JobID) passed to the program.



## Send Email when File Created

The steps below demonstrate how to use the **Run Commands tab** to automatically send yourself an email after both a successful and failed print.

As an alternative to using the Run Commands, a built-in action for sending emails was added to TIFF Image Printer in version 12.0.012. See the [Email the Created File](#) topic to learn how to send email using this feature. The built-in feature can use both Outlook or SMTP and provides options for zipping the attached files and controlling the email size.

### Using the Built-In SMTP Email Utility

The included email utility, **PNSMTPSend.exe**, uses the **SMTP protocol** to create and send an email to the specified recipients. **SMTP** stands for *Simple Mail Transfer Protocol*, which is a protocol for sending e-mail messages. This option does not require an email client to be installed but it does require the following information from your SMTP or IT administrator.

- the SMTP host server and port that you use to send email
- credentials for authentication, if required by the SMTP server
- the email address of the sender

There are two parts to the settings for this utility - the SMTP settings in the utility configuration file, and command line arguments passed down via the [Run Commands parameters](#) in your conversion profiles.

The utility is located in the **RunCommands** folder in your TIFF Image Printer install folder. This is usually C:\Program Files\TIFF Image Printer 12\RunCommands\.

The configuration file, **PNSMTPSend.exe.config**, located in the same folder as the utility, defines and uses these SMTP protocol settings.

### PNSMTPSend.exe Configuration Settings

SMTPUserName	The user email address that has permissions to send SMTP email on the server. This user name is used to create credentials when <b>SMTPUseDefaultCredentials</b> is set to <i>true</i> .
SMTPPassword	The password for the user email address. This password is used to create credentials when <b>SMTPUseDefaultCredentials</b> is set to <i>true</i> .
SMTPServerName	The mail server.

**PNSMTPSend.exe Configuration Settings**

SMTPPort	The port used for SMTP transactions on the SMTP host. The default value is 25.
SMTPSendTimeout	Set how long to try and send the email, in milliseconds. Default is 2 minutes, 120,000ms.
SMTPUseDefaultCredentials	Default is <i>false</i> to create credentials from SMTPUserName and SMTPPassword. Credentials are necessary if the server requires the client to authenticate before it will send email on the client's behalf.  Set to <i>true</i> to use default credentials to send the email instead.
SMTPUseSSL	Set to <i>true</i> to Secure Sockets Layer (SSL) to encrypt the connection.
SMTPSendMailDelay	Sets a delay between sending emails to multiple recipients.
SMTPToRecipients	The email addresses to send the email to. Multiple emails can be separated with a comma (,) or a semi-colon (;).
SMTPFromEmailAddress	The from address for the email.

The utility arguments allow custom subject line, message text and optionally attaching the created files.

**PNSMTPSend.exe Command Line Arguments**

"subject:subject line"	The text to put on the subject line of the email. If there are spaces in your subject, use quotes around the argument.
"message:body text"	The message body to include in the email. This is a simple text string. If there are spaces in your subject, use quotes around the argument.
clean	Optional  Deletes any created output files at the end after sending the email.



## PNSMTPSend.exe Command Line Arguments

list	Optional
	Lists the files in the email, but does not attach them to the message. Default behavior is to attach any files from the output files list as well as list them in the email body.
<path to file list>	Path to the list of files to attach to the email message. This must be the last argument on the command line. It is automatically passed as the last argument via the Run command.

## Sample Usage For Run Commands

Send an email message:

```
PNSMTPSend.exe "subject:Convert Success" "message:Files successfully converted."
```

Send an email message on success but only list the file output location":

```
PNSMTPSend.exe "subject:Convert Success" "message:Files successfully converted." list
```

Send an email message with attached files and delete the files when finished:

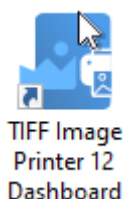
```
PNSMTPSend.exe "subject:Convert Success" "message:File Conversion Status " clean
```

Send an email message but don't attach the files, good for failure notifications:

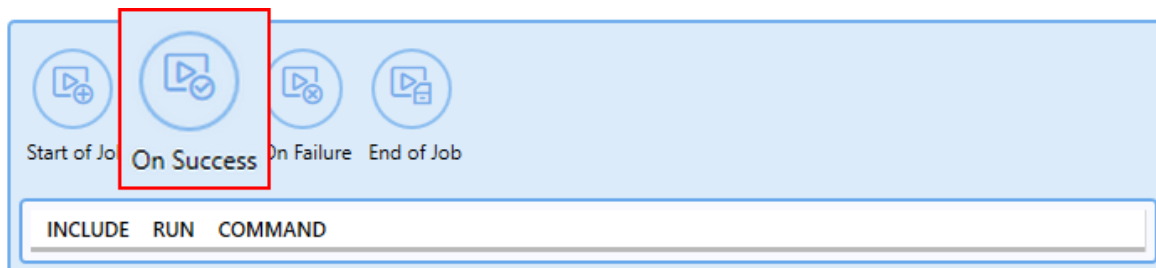
```
PNSMTPSend.exe "subject:Convert Failed" "message:There were errors with the conversion." list
```

## Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Run Commands tab**, click the *On Success* button to add an **On Success** command.



6. The command will be added already enabled and the details expanded. Beside *Run this command*, enter the full path and file name of the command. In this case we will use our example C# command file called **PNSMTPSend.exe**.

#### Edit Command

☒ Enable this command

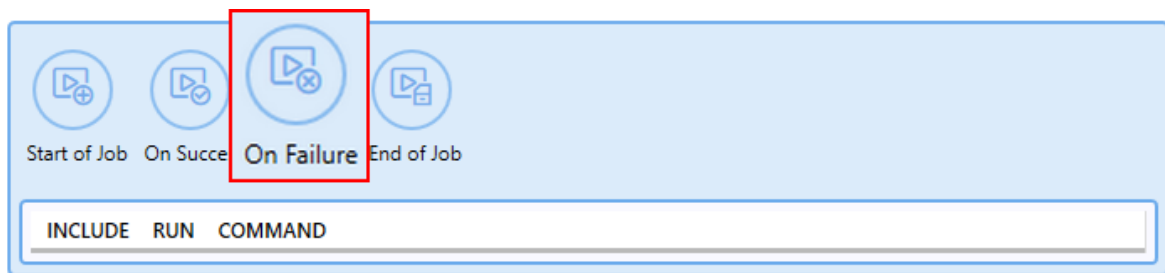
Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\PNSMTPSend.exe  
 "C:\Program Files\TIFF Image Printer 12\RunCommands\PNSMTPSend.exe" "subject:Converted Images" "message:See attached images." "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters "subject:Converted Images" "message:See attached images."

Starting folder for command is

7. Beside setting the command to run, you also need to configure the PNSMTPSend.exe utility's configuration file with your SMTP email and server credentials. See [Using the Built-In SMTP Email Utility](#) at the top of this topic.
8. On the **Run Commands tab**, click the *On Failure* button to add an **On Failure** command.



9. Again, the command will be added already enabled and the details expanded. Beside *Run this command*, enter the full path and file name of the command. Again we will use our example C# command file called **SendEmail.com** which is located in the TIFF Image Printer's setup folder.
10. On the **Run Commands tab**, under *On Failure*, enable **Enable this command**.

#### Edit Command

☒ Enable this command

Run command on Failure

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\PNSMTPSend.exe  
 "C:\Program Files\TIFF Image Printer 12\RunCommands\PNSMTPSend.exe" "subject:Conversion Failed" "message:Conversion process failed." list "pnf-daecd751c7f0435da6acfce7a616602f.txt"

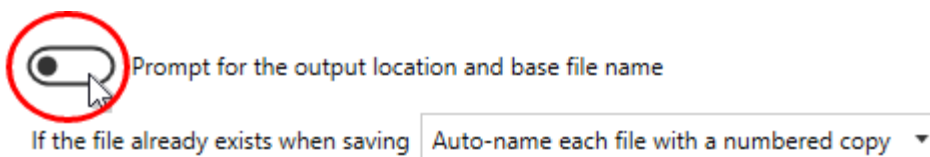
Use these parameters "subject:Conversion Failed" "message:Conversion process failed." list

Starting folder for command is

11. Click **Save-Back**, and close **Profile Manager**.

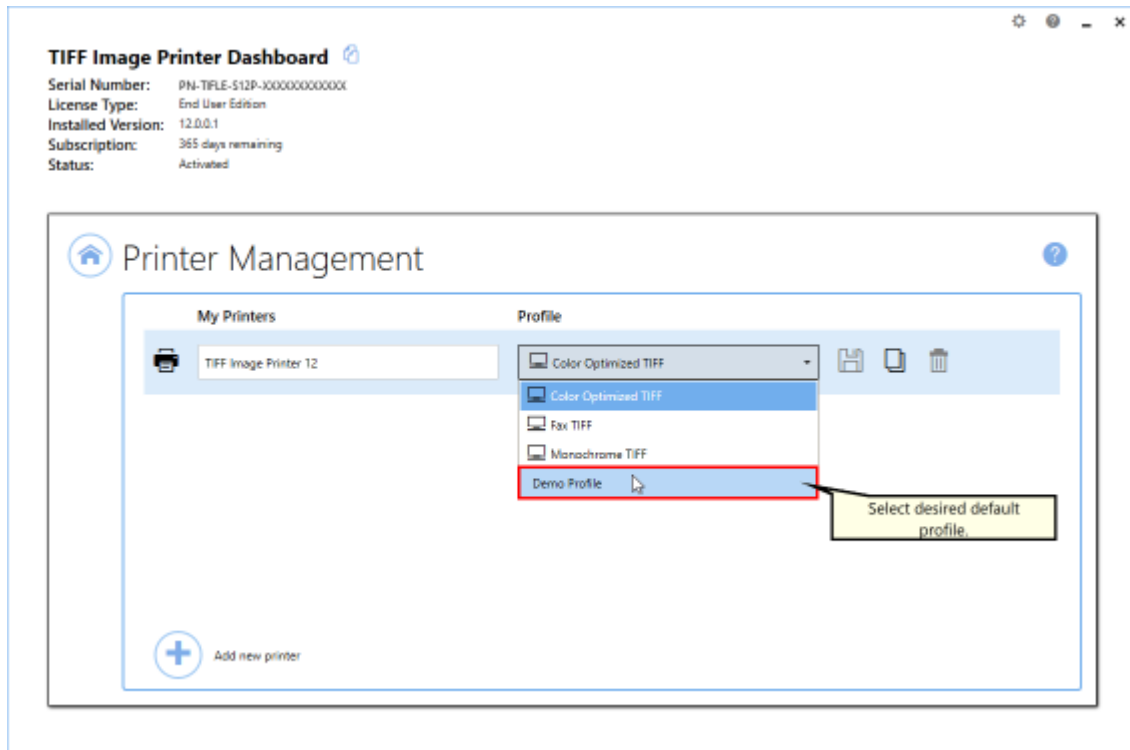
If you choose to enable run commands, you may also want to [disable prompting by the Save As dialog](#) each time you print.

- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.

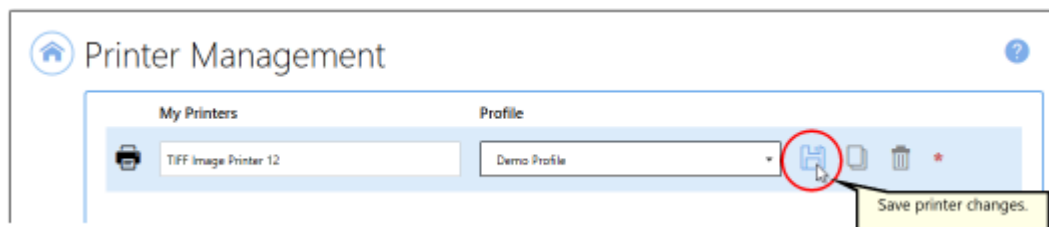


If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.

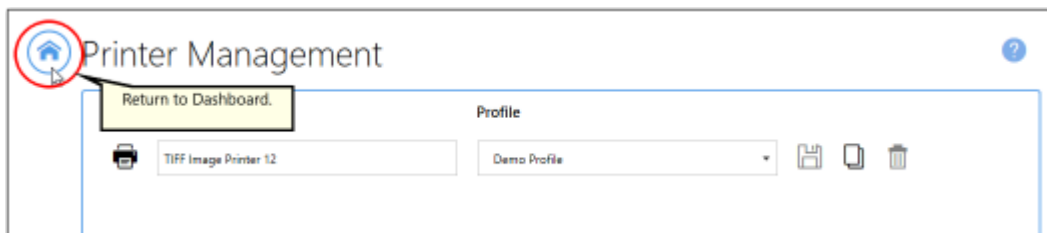
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



12. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, you will receive an email notifying you if the print is a success or failure.

## Compress Created File into ZIP

The steps below demonstrate how to use the **Run Commands tab** to automatically compress created files into a ZIP file.

You can also use the built-in ZIP action in the profile settings to compress the files into a ZIP file. This action was added to TIFF Image Printer in version 12.0.012. See the [ZIP the Created File](#) topic to learn more. The built-in action has additional options for ZIP type, customizing the folder structure inside the ZIP file and splitting the ZIP file into multiple volumes based on size.

### Using the Built-In Compression Utility

A compression utility, **PNCompressToZip.exe**, that creates a zip file has been provided in the **RunCommands** folder in your TIFF Image Printer install folder. This is usually C:\Program Files\TIFF Image Printer 12\RunCommands\.

#### PNCompressToZip.exe Command Line Arguments

path:zip path	<p>Optional argument.</p> <p>Pass in the path in which to create the zip file; use quotes if there are spaces in the path. If the directory path doesn't exist, it is created. Do not enter a trailing backslash on the path name.</p> <p>If this argument is not provided, the zip file is created in the same location as the output files.</p>
name: zip name	<p>Optional argument.</p> <p>Pass in the base name to use for the zip file; use quotes if there are spaces in the name.</p> <p>If this argument is not provided, the zip file name will match the name of the first output file created. with the .zip extension added.</p>
create add update	<p>Optional arguments. When not used, the default is to create a new zip file, deleting any existing zip file of the same name.</p> <p><i>create</i> - creates a new zip file, replaces any existing zip file</p>

### PNCompressToZip.exe Command Line Arguments

	<i>add</i> - adds files as new entries if the zip already exists, zip file can have duplicate entries with the same name
	<i>update</i> - adds files as new entries, matching entries, based on the file name, are replaced.
clean	Optional  Deletes the files at the end if the zip file is successfully created or updated.
<path to file list>	Path to the list of files to add into the zip file. This must be the last argument on the command line. It is automatically passed as the last argument via the Run command.

### Sample Usage for Run Commands

Create a zip file in the same location as the output folder, using the base name of the created files, and then delete the files:

```
PNCompressToZip.exe clean
```

Create a zip file in a different folder with the same name as the output files:

```
PNCompressToZip.exe "path:C:\Zipped Output"
```

Create a zip file in a different folder with a custom name and keep adding files to the zip:

```
PNCompressToZip.exe "path:C:\Zipped Output" "name:ConvertedFiles.zip" add
```

### Using 7-Zip

Another option is the freeware utility, **7-Zip** and its command line options. Any command line zip tool that can take a list of files as a text file to compress should work as well.

A batch file, **7ZipCompress.bat** has been provided with basic settings. This batch file is located in the **RunCommands** folder in your TIFF Image Printer install folder.

The batch file is listed below showing the arguments and parameters used. When using the batch file, you only need to specify the full output path and file name (**%1**) for the zip file as a parameter. The list of files to compress (**%2**) is automatically appended as the last argument for all run commands.

Note that the list of files created by the printer driver is UTF-16LE encoded and this argument needs to be set for 7zip to read the file.

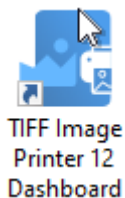
```
"%programfiles%\7-Zip\7z.exe" a -tzip "%1" -scsUTF-16LE @"%2"
```

A second batch file, **7ZipCompressAutoName.bat**, is also provided that will use the path and base name of the first file in the list of created files as basis for the zip file name and location. For this batch file you do not need to provide any arguments.

If your installed location for 7-Zip is different, you may need to edit the batch files accordingly.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. The command will be added already enabled and the details expanded. Beside *Run this command*, enter the full path and file name of the command. In this case we will use our provided utility, **PNCompressToZip.exe**, which is located in the **RunCommands** folder in your install folder. A complete parameter list is described [above](#).



## Edit Command

☒ Enable this command

Run command on Success

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\PNCompressToZip.exe  
"C:\Program Files\TIFF Image Printer 12\RunCommands\PNCompressToZip.exe" "path:C:\Zipped Output" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters "path:C:\Zipped Output"

Starting folder for command is

6. Alternatively, if you wish to use **7-Zip**, you need to provide the full path and file name to the zip file as the parameter to the provided **7ZipCompress.bat** utility. If you use the **7ZipCompressAutoName.bat** instead, you do not need to provide any parameters. An explanation of these [batch zip utilities](#) is included above.

Command Preview "C:\Program Files\TIFF Image Printer 12\RunCommands\7ZipCompress.bat" "C:\Output\compress.zip" "pnf-d9379a14c63b441b88dc443bc01a06ee.txt"

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\7ZipCompress.bat

Use these parameters "C:\Output\compress.zip"

Starting folder for command is

7. Click **Save-Back**, and close **Profile Manager**.

*If you choose to enable run commands, you may also want to [disable prompting by the Save As dialog](#) each time you print.*

- i. To turn off prompting by the Save As dialog, disable **Prompt for the output location and base file name**.

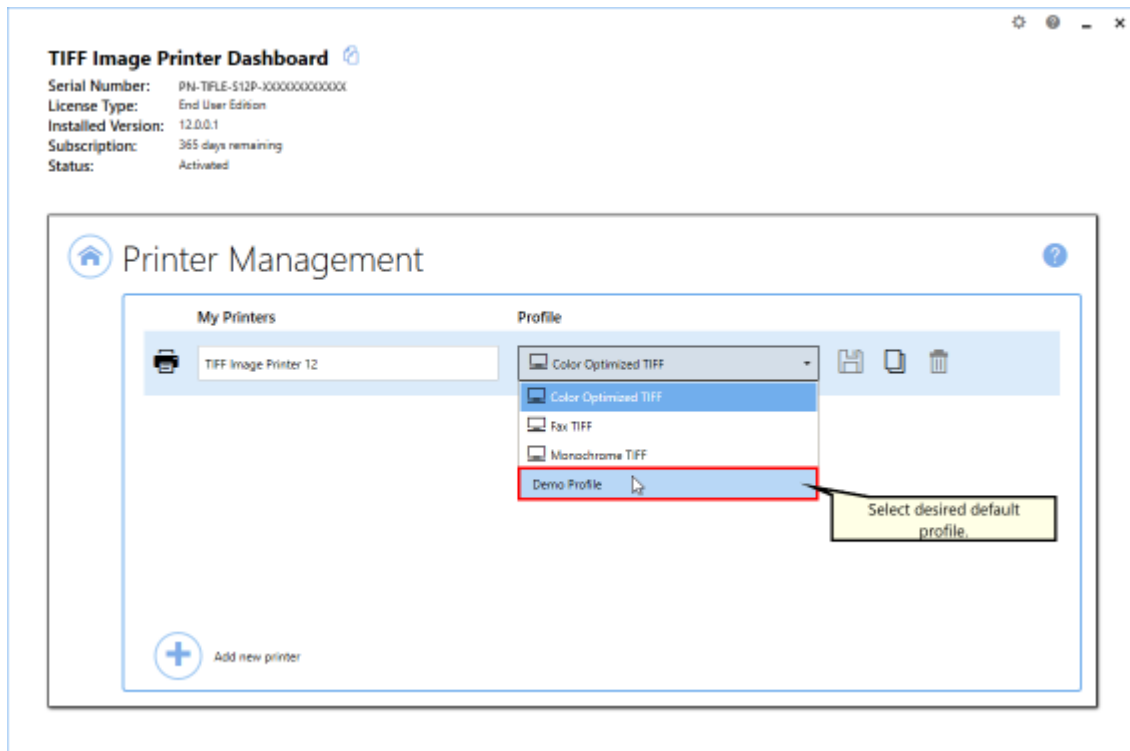


Prompt for the output location and base file name

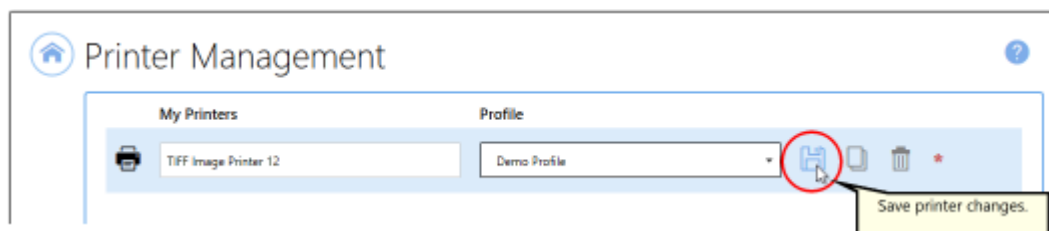
If the file already exists when saving Auto-name each file with a numbered copy

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

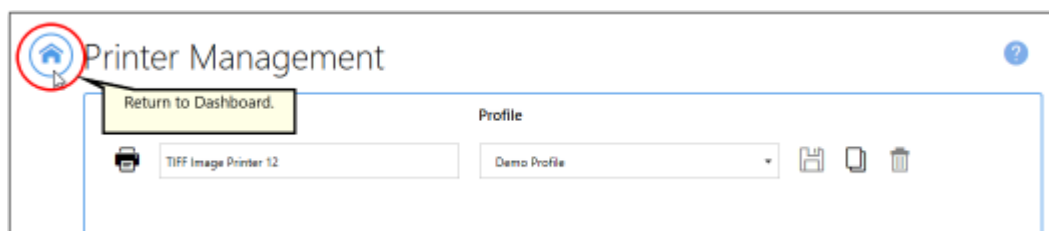
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output file will automatically be compressed into a ZIP file at the desired location.

## Batch Files for Common Tasks

Several batch files to handle common tasks such as file moving, extension renaming, renaming the file using a part of the original name, and deleting the files have been provided for your use. These batch files are located in the **RunCommands** folder in your TIFF Image Printer install folder. This is usually C:\Program Files\TIFF Image Printer 12\RunCommands\.

- [Move Files When Completed](#)
- [Rename File Extensions When Completed](#)
- [Rename File Using Part of the File Name](#)
- [Delete Files on Failure](#)

### Move Files When Completed

The **PNMoveFiles.bat** tool moves the created output files into the folder of your choosing.

This tool is useful when another process is monitoring the output folder waiting to perform a task on the created files. Monitoring the initial output folder can cause premature pick-up while the file is still be created by TIFF Image Printer. This can be resolved by monitoring a second folder where the files are moved to when the whole file (or all files) have been created.

Another way to resolve this is to wait for exclusive access to the output file. The file is locked for writing while TIFF Image Printer is creating the file.

#### Command Line Arguments

"destination folder"	Required, pass in the full path to the destination folder. Use quotes if there are spaces in the path.  If this folder does not exist, the batch file will try to create it. If that fails, no files are moved.
"text file listing created files"	This argument is automatically supplied by the run command as the last argument.

Using **PNMoveFiles** in TIFF Image Printer would look like the following:

**Edit Command**

Enable this command

Run command on

Success ▼

Run this command

C:\Program Files\TIFF Image Printer 12\RunCommands\PNMoveFiles.bat



"C:\Program Files\TIFF Image Printer 12\RunCommands\PNMoveFiles.bat" "C:\OutputFiles\Done" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters

"C:\OutputFiles\Done"

Starting folder for command is

**Rename File Extensions When Completed**

The **PNRenameFilesExtension.bat** tool will rename the file extension of the created files.

This tool is useful when another process is monitoring the output folder for files with a particular file extension, in order to perform additional tasks on the completed files. Creating the file with the desired extension can cause premature pick-up while the file is still be created by TIFF Image Printer. This can be resolved by creating the file (or files) with a custom extension, then renaming them with the correct extension when the entire file (or all files) have been created.

Another way to resolve this is to wait for exclusive access to the output file. The file is locked for writing while TIFF Image Printer is creating the file.

**Command Line Arguments**


".extension"	Required. The file extension, in quotes, that you want, with the preceding dot (.) character(.), such as ".tif".
"text file listing created files"	This argument is automatically supplied by the run command as the last argument.

Using **PNRenameFilesExtension.bat** in TIFF Image Printer would look like the following:


### Edit Command


☒ Enable this command

Run command on Success ▼

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\PNRenameFilesExtension.bat 




"C:\Program Files\TIFF Image Printer 12\RunCommands\PNRenameFilesExtension.bat" ".tif" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters ".tif" 

Starting folder for command is 

Setting a custom file extension instead of the default output type extension is set in the [Filename Creator](#) tab, on the File Extension file part:

Always File Extension .tmp

### Edit the File Extension

To change the default output file extension, set a custom file extension here or leave blank to have no extension.

☒ Replace default file extension with tmp

## Rename File Using Part of the File Name

The **PNRenameFilesSubString.bat** tool will rename the created file name by pulling a substring of the given or calculated length from the created file name. This allows stripping unwanted characters of a certain length from the beginning or end every file name, or using a section of characters from the middle of the file name.

This tool is useful when your printing application adds additional characters to the file name in the print queue that you want to remove. This can sometimes be handled using the [Job Replacement Strings](#) but in cases where the text after or before the part you want to keep is of varying length, this

tool can keep a set number of starting or ending characters to create your file name.

The string to extract is specified using a starting index and an ending index. These indexes can be positive or negative numbers, and they start at 0. If the string indexes result in an empty string, no renaming takes place.

If a file of the same name already exists, it is deleted and replaced with the new file.

### Sample Arguments - Using sample string ABCDEFG012345

"6"	Result: <b>G012345</b> Skips the first 6 characters.
"0,6"	Result: <b>ABCDEF</b> Starting at 0, the beginning, use the next 6 characters.
"0,-6"	Result: <b>ABCDEFG</b> Drop the last 6 characters, and keep the rest, starting at 0, the beginning,
"-8,4"	Result: <b>FG01</b> Count back 8 characters from the end, then take the next 4 characters.
"-3,4"	Result: <b>345</b> Count back 3 characters from the end, then take the next 4 characters, or whatever is left.
"-8,-3"	Result: <b>FG012</b> Count back 8 characters from the end, and take all characters until you reach 3 characters from the end.

### Command Line Arguments

"startindex"	<i>start_index</i> - This is the starting point for the text in the file name you want to return. When a positive number is used, this is the number of characters skipped from the beginning of the file name. If this is a negative number, this counts backwards from the end of the file name.
"startindex,endindex"	

Command Line Arguments

	<i>end_index</i> - This is the end point for the sub-string returned from the file name. When this is positive it means the number of characters to return after the start index. If this is a negative number, this counts backwards from the end of the file name.
"text file listing created files"	This argument is automatically supplied by the run command as the last argument.

Using **PNRenameFilesSubString.bat** in TIFF Image Printer to use the first 5 characters of any file name would look like the following:

Edit Command

☒

 Enable this command

Run command on

Success

Run this command

C:\Program Files\TIFF Image Printer 12\RunCommands\PNRenameFilesSubString.bat

"C:\Program Files\TIFF Image Printer 12\RunCommands\PNRenameFilesSubString.bat" "0,5" "pnf-d1c3cc13f84346c7a33c525a0c5f44f5.txt"

Use these parameters

"0,5"

Starting folder for command is

Delete Files in Failure

The **PNDeleteFiles.bat** tool deletes the files contained in the list of created files. This tool would commonly be used on [Run Commands](#) On Failure section, to clean up any created files.

Command Line Arguments

"text file listing created files"	This argument is automatically supplied by the run command as the last argument.
-----------------------------------	--


Using **PNDeleteFiles** in TIFF Image Printer would look like the following:



### Edit Command

☒ Enable this command

Run command on Success ▼

Run this command C:\Program Files\TIFF Image Printer 12\RunCommands\PNDeleteFiles.bat   
"C:\Program Files\TIFF Image Printer 12\RunCommands\PNDeleteFiles.bat" "pnf-daecd751c7f0435da6acfce7a616602f.txt"

Use these parameters

Starting folder for command is  

### Using the Cleanup Options

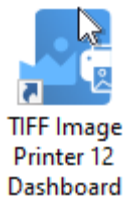
For easy cleanup, there are options to delete the created files, or any other interim files that have been created from other actions such as zipping. By default, the created images are not automatically deleted.

If you are using the [Email](#) or the [ZIP](#) actions to further process the created images, or are running your own commands using the [Run Commands](#), you often do not want to keep the output once it is processed.

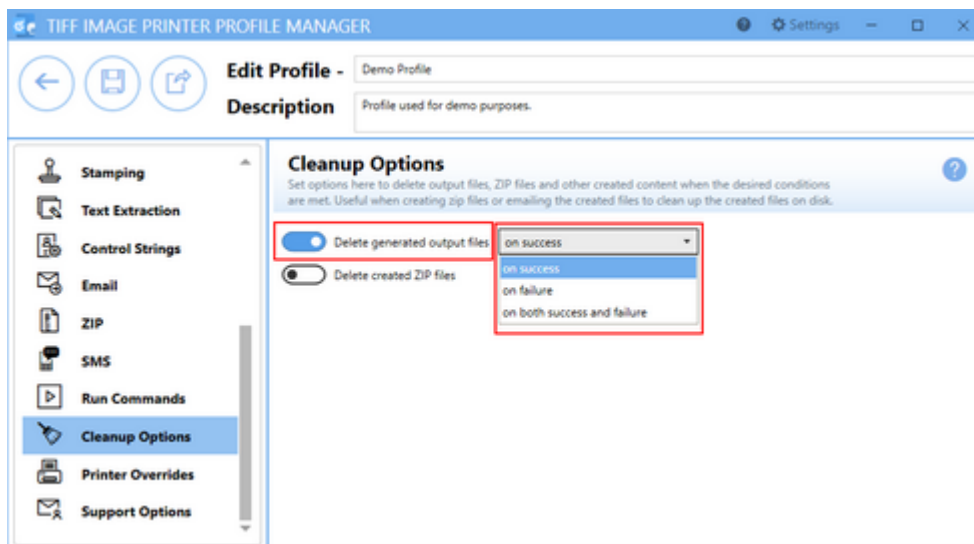
These options allow you to control if and when these files are deleted, and take place after any built-in actions occur. Note that any cleanup actions selected always take place, even when there are no other built-in actions or Run Commands set up to process the files.

### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



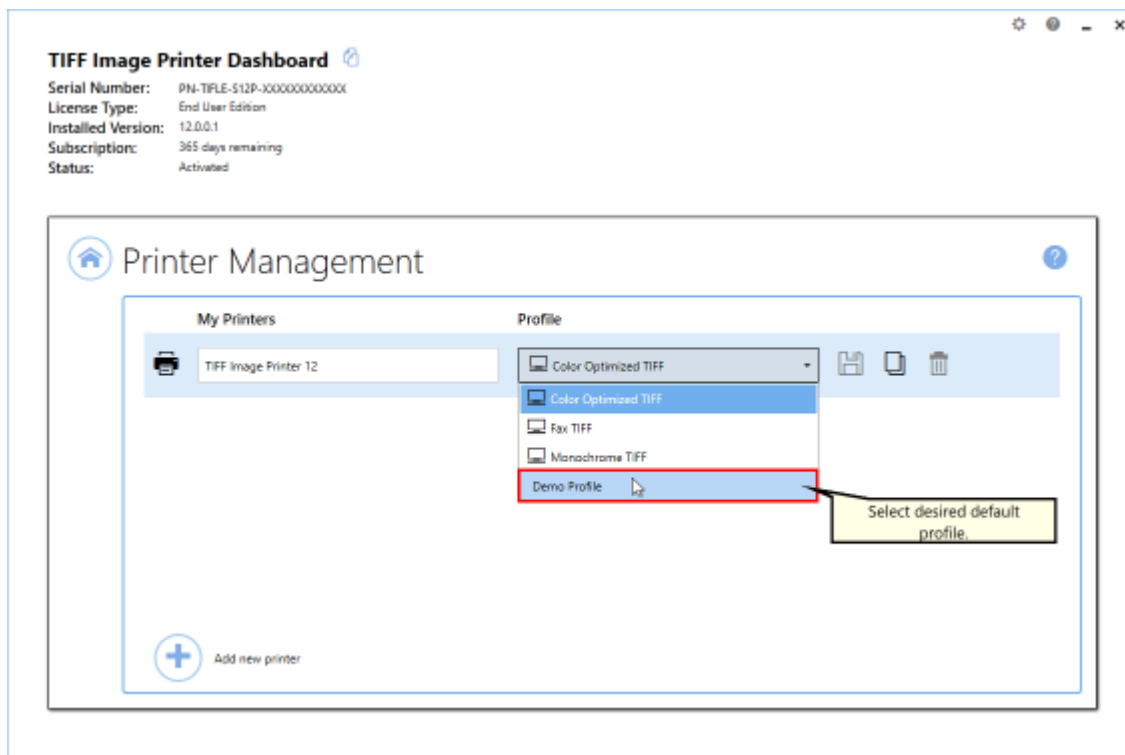
2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. For this scenario, assume we have enabled the [Email](#) options and are emailing our created files. After they have been emailed, we don't need to keep them.
6. On the **Cleanup Options tab**, click **Delete generated output files**.
7. Then use the drop down to choose to delete the files "on success". Other available options are "on failure" and "on both success and failure".



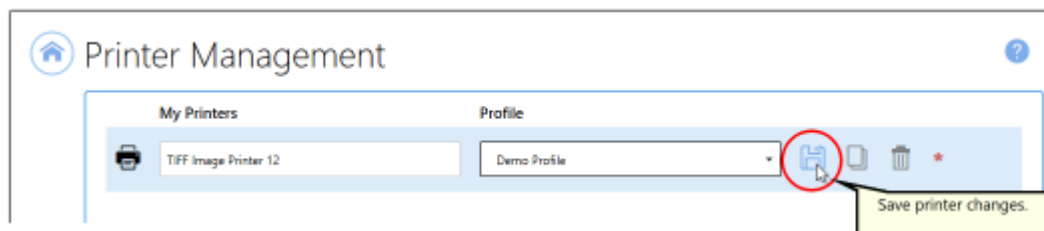
8. Click **Save-Back**, and close **Profile Manager**.
9. Now when printing a file and generating the email, you will not be left with files on disk.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

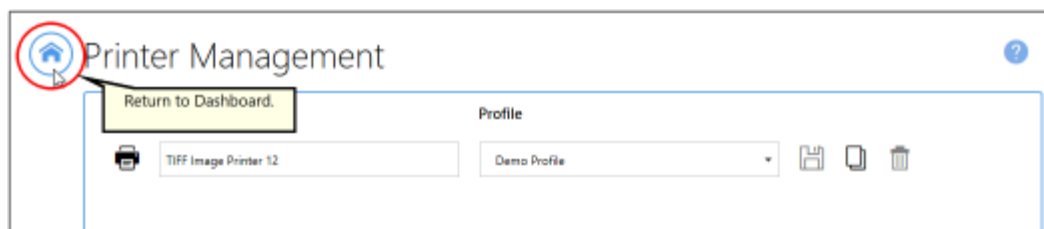
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.



10. Close the **Dashboard**. Now when you print any documents, the generated files are automatically deleted at the end of the cycle. If you are not running any additional built-in actions or Run Commands to process the files, the delete action still takes place.

## Working with Large Paper Size

Large paper sizes are commonly needed when CAD (computer aided design) software is being used. This type of software is often used by engineers and architects when making large scale drawings. Some applications require that you create custom forms, or paper sizes, in order to print to a particular paper size.

There are two ways to have TIFF Image Printer use a larger paper size:

- [Adding a Custom Paper Form](#)
- [Configuring TIFF Image Printer to use a Custom Paper Size](#)

A good example of a situation where users would need to configure TIFF Image Printer to use a custom paper size is if they are printing oil well logs and therefore need to [print a long page as one continuous page](#).

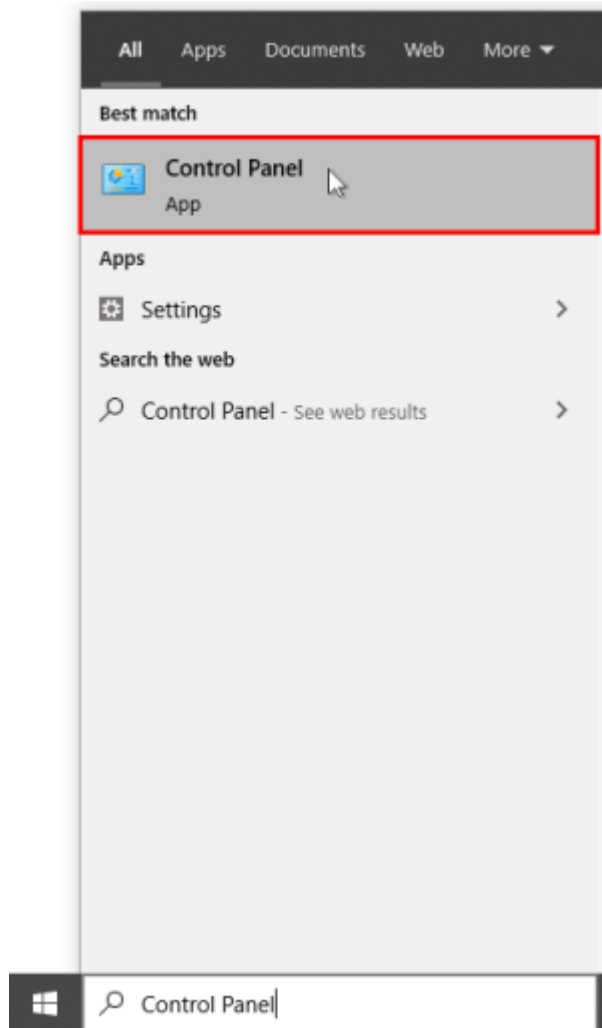
### Add a Custom Paper Form

The following steps outline how to create a custom paper size or form and use it in your application. You will need to close your application before doing these steps.

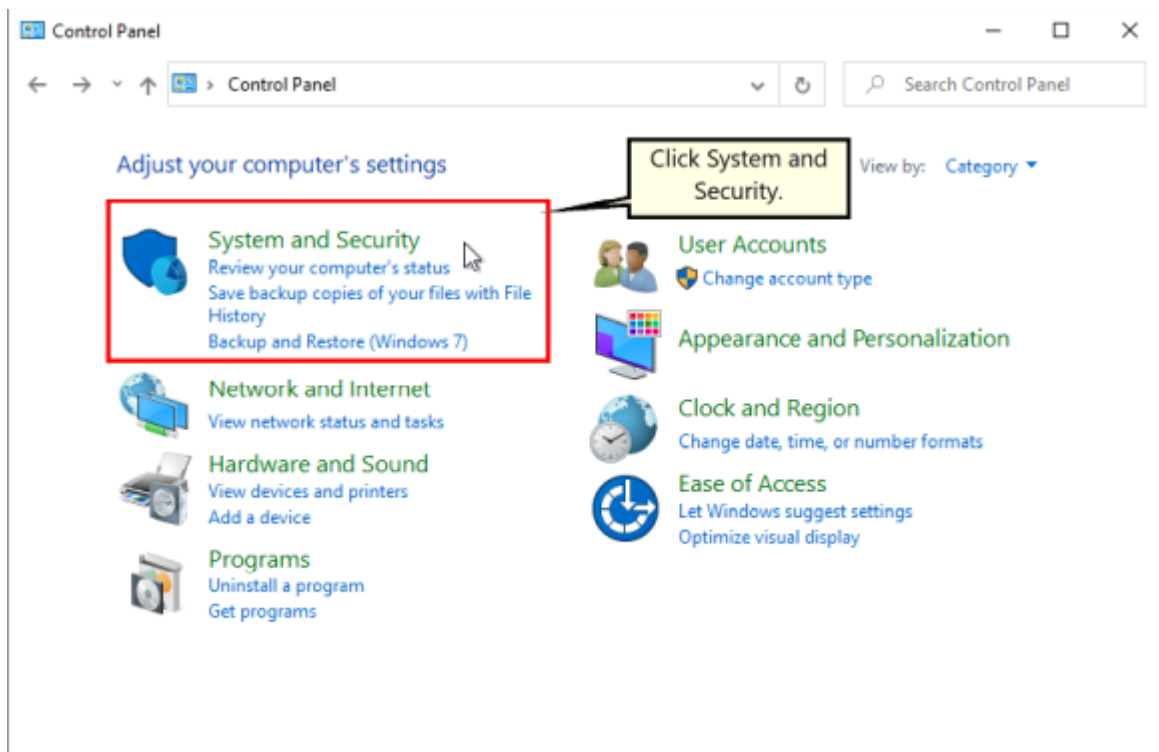
**Note:** You may require administrative permissions to add custom paper sizes.

#### ▼ Adding custom paper sizes to Windows 10, Windows Server 2016, Windows Server 2019

1. Close any open applications.
2. Go to **Start** and search for "Control Panel" to open **Control Panel** applet.

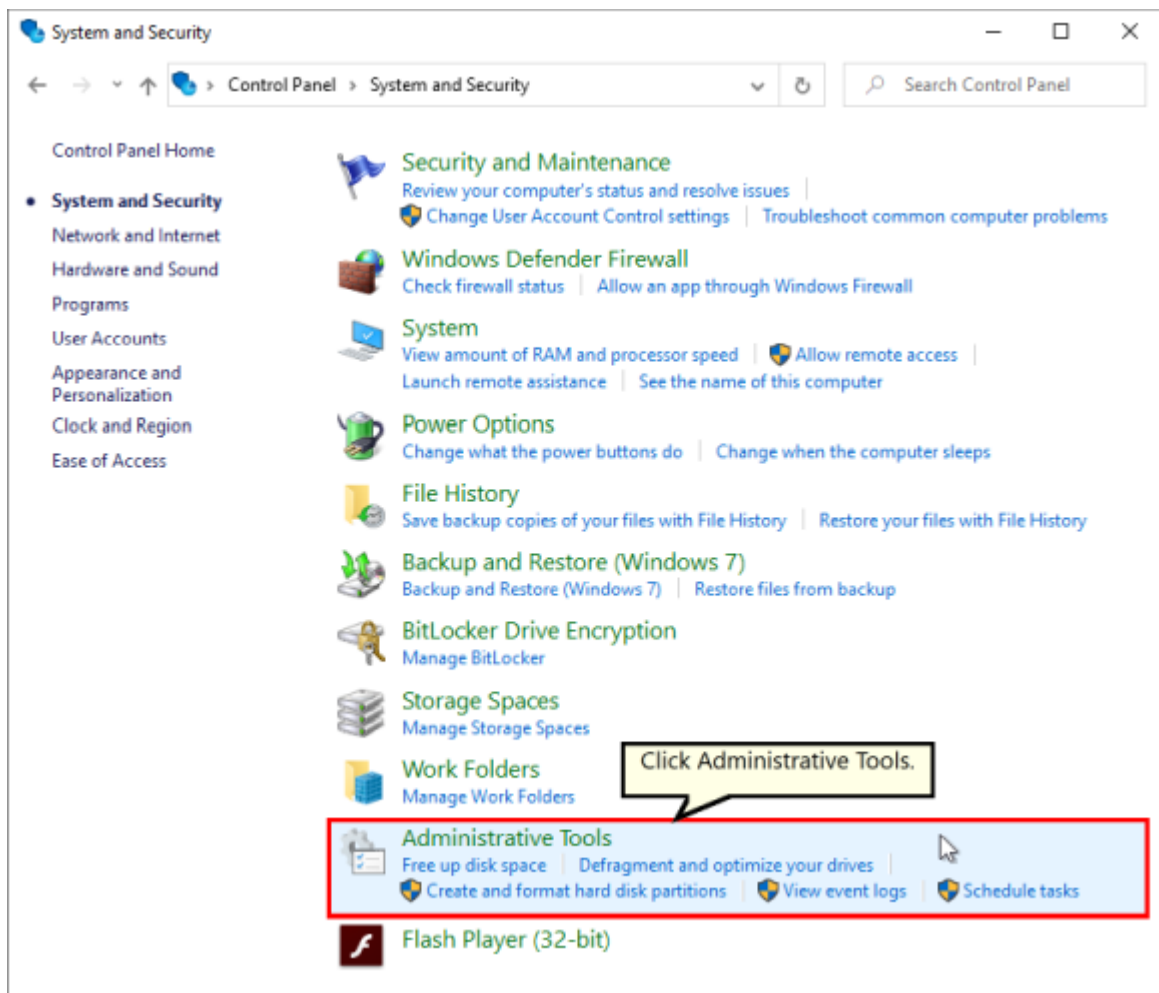


3. Click **System and Security**.

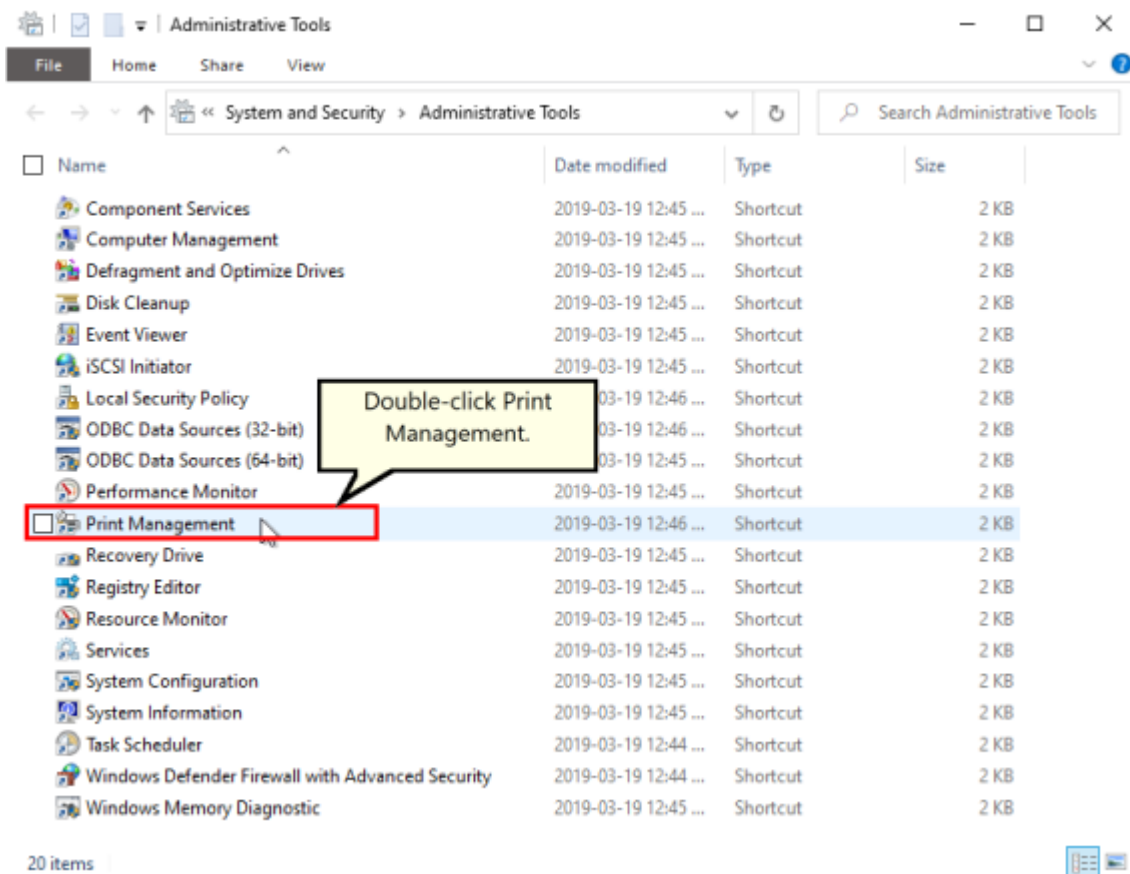


4. Click **Administrative Tools**.

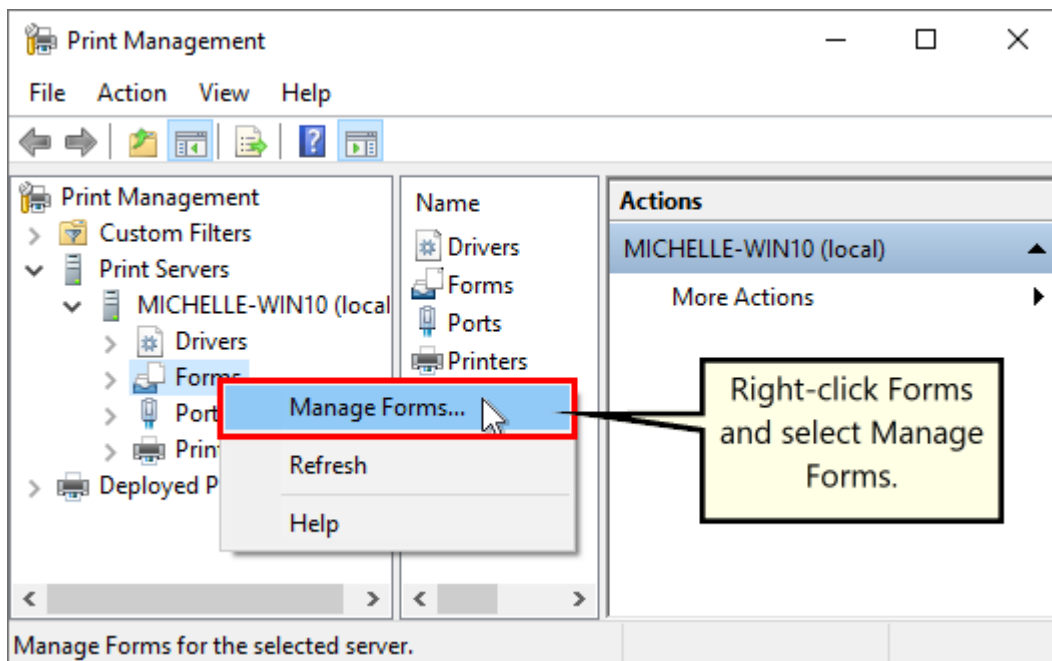




5. Double-click **Printer Management**.

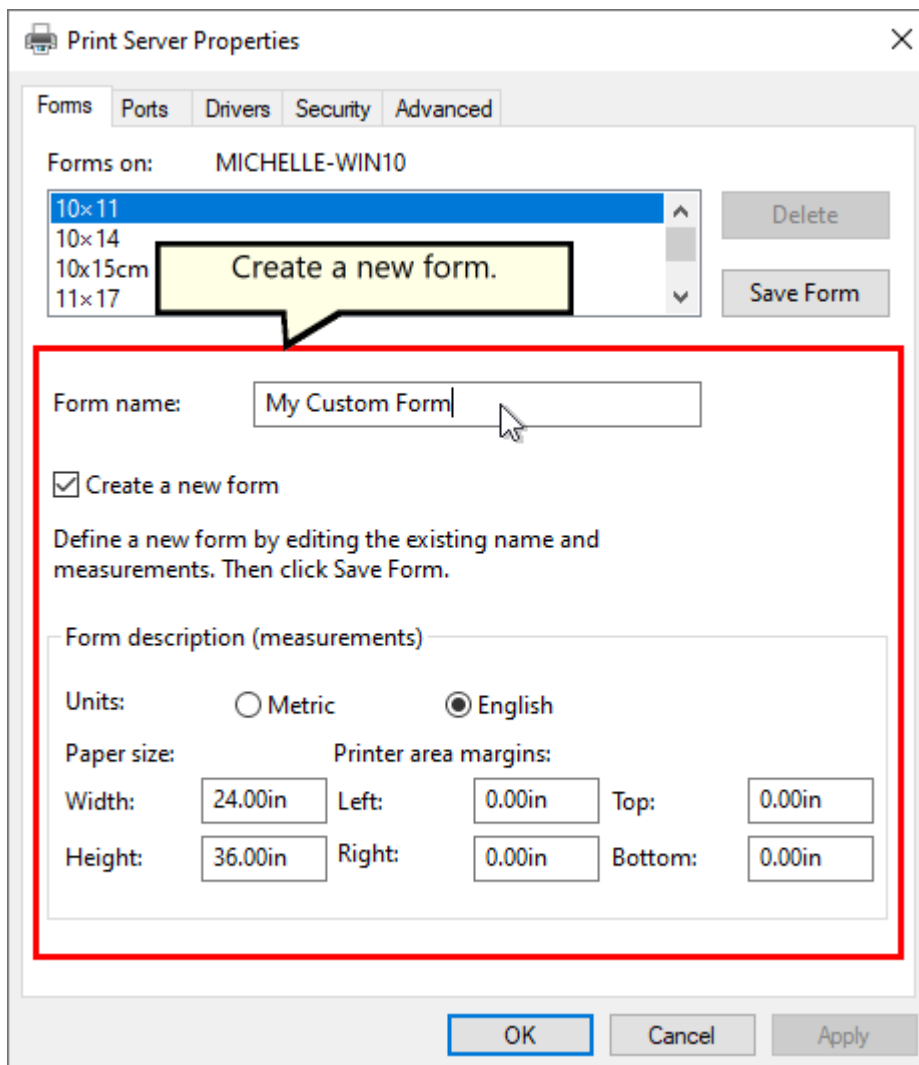


6. Select **Print Servers** and then select the name of your computer (ie. Server1).
7. Right-click **Forms** and select **Manage Forms...**

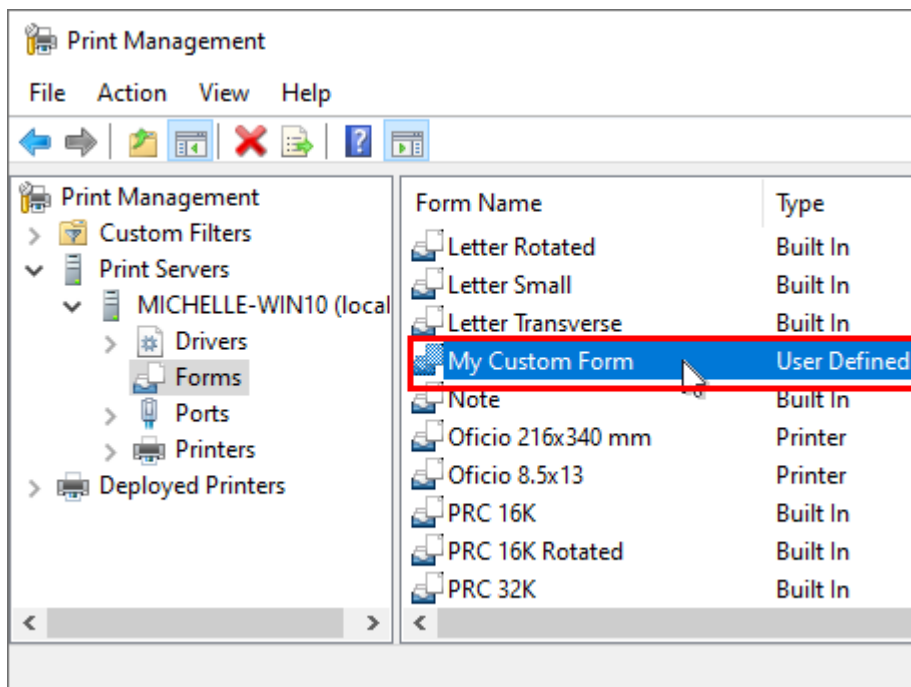


8. Check "Create a new form".

- a. Enter a descriptive name in the "Form name:" field (e.g. "30 x 42" or "36 x 48")
- b. Set the measurement units of "Metric" or "English"
- c. Enter the desired Width and Height for your paper size. **NOTE:** Always make the Width less than the Height (e.g. Width 30, Height 42) as you can always choose Landscape orientation later.

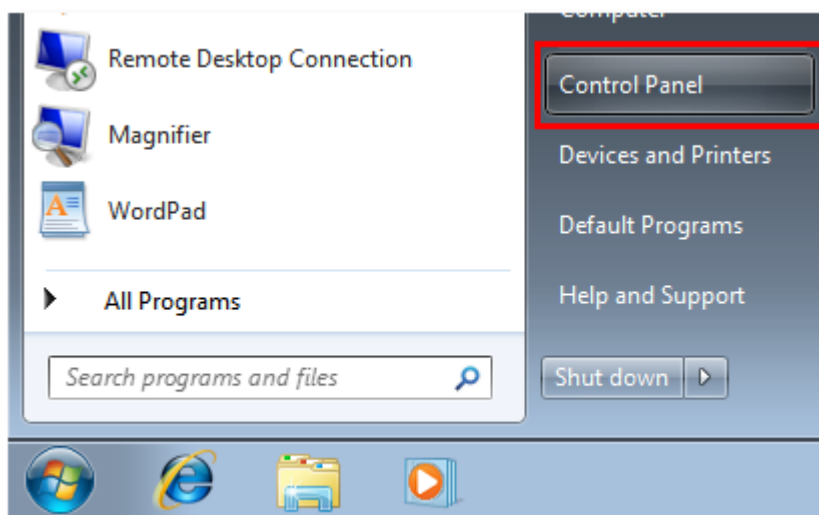


9. Click **Save Form**, and then click **OK** to close the window.
10. You can now use your new computer paper size in your application, or as a paper size on TIFF Image Printer's Profile Manager [Printer Overrides tab](#).

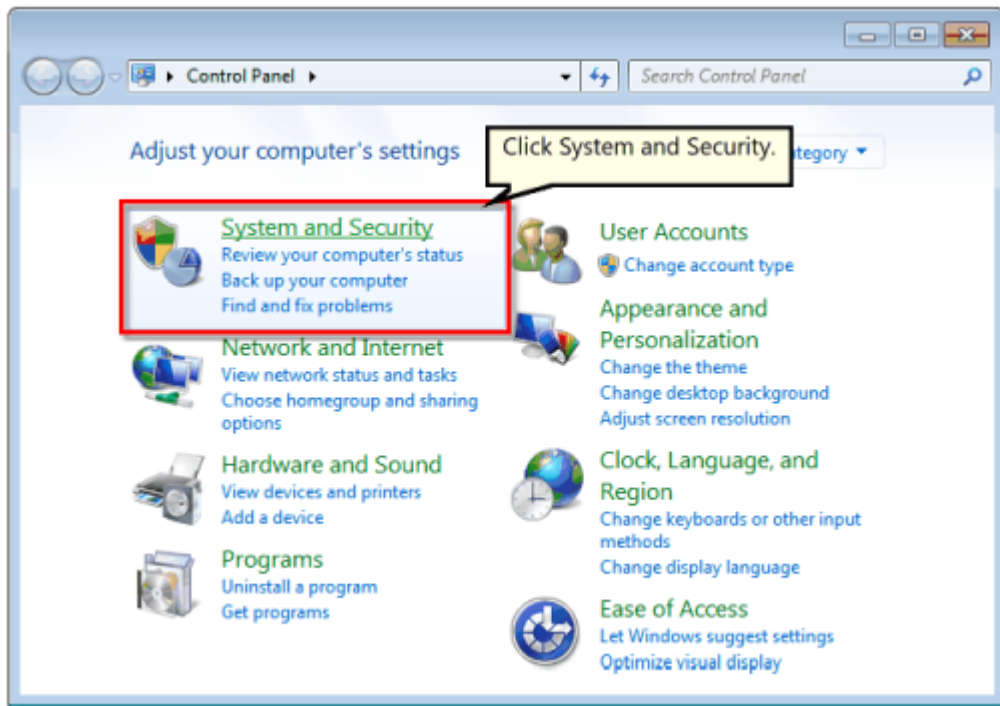


## ▼ Adding custom paper sizes to Windows 7, Windows Server 2008 R2

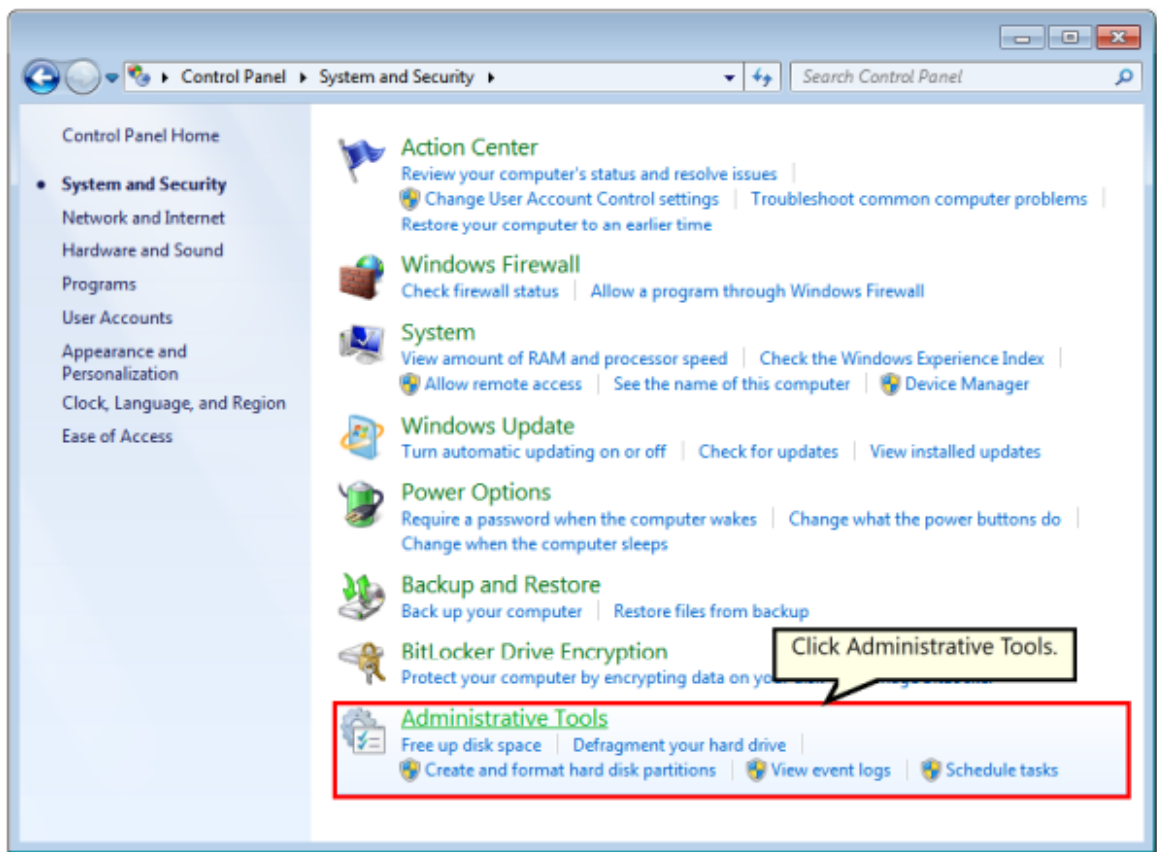
1. Close any open applications.
2. Go to **Start - Control Panel** to open Control Panel applet.



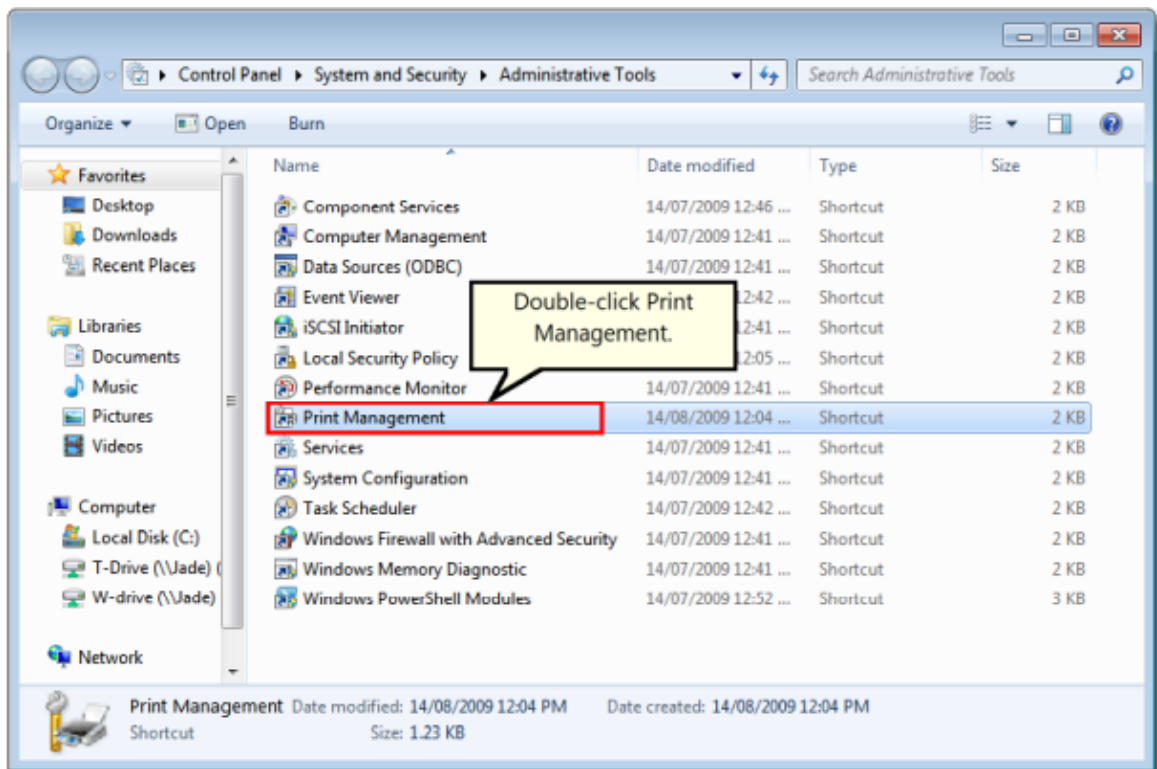
3. Click **System and Security**.



4. Click **Administrative Tools**.

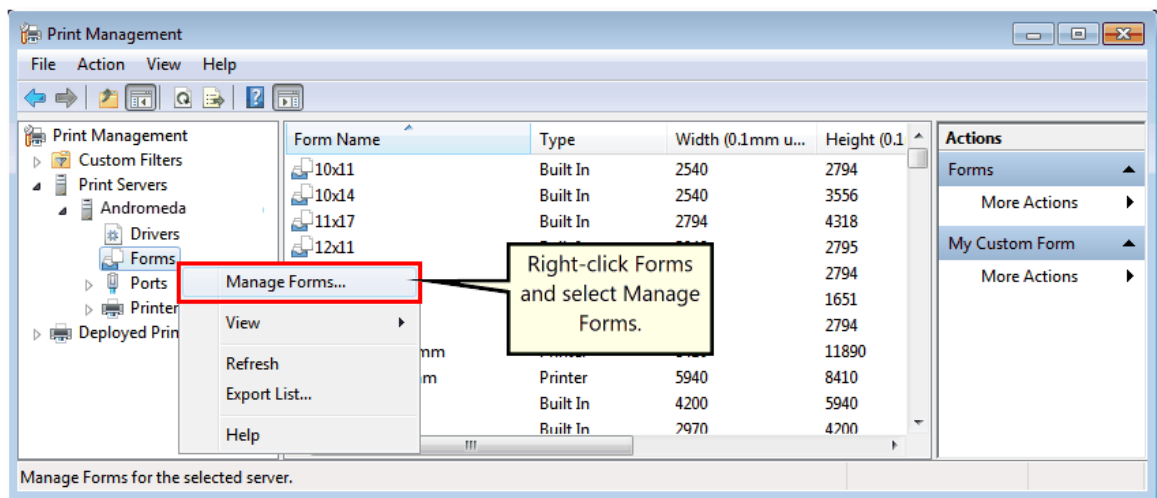


5. Double-click **Printer Management**.



6. Select **Print Servers** and then select the name of your computer (ie. Server1).

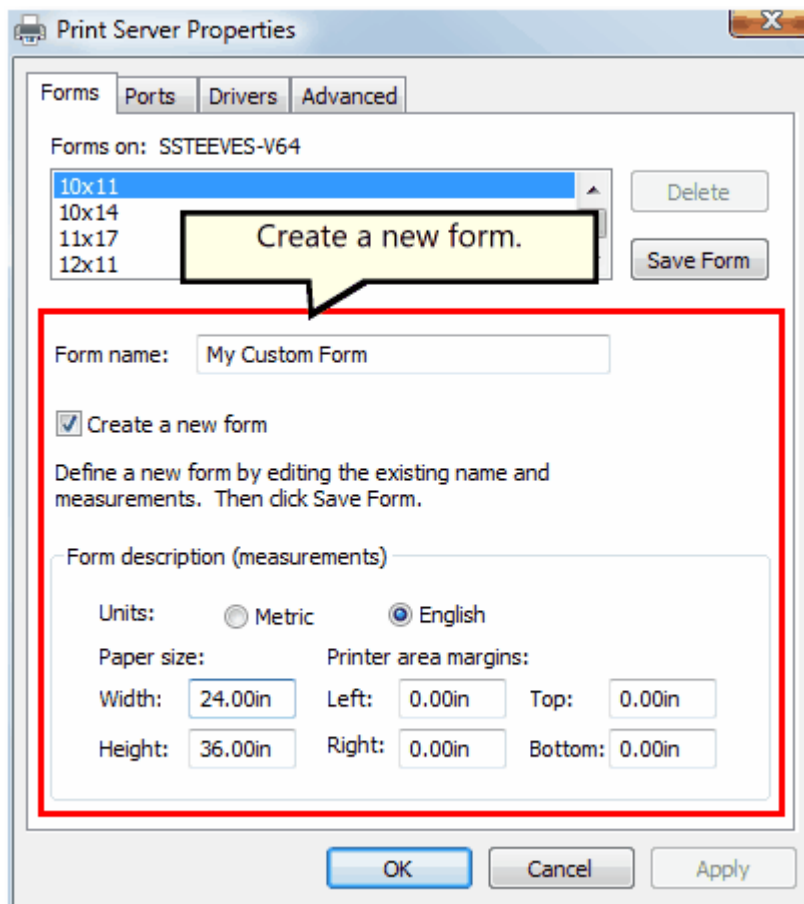
7. Right-click **Forms** and select **Manage Forms...**



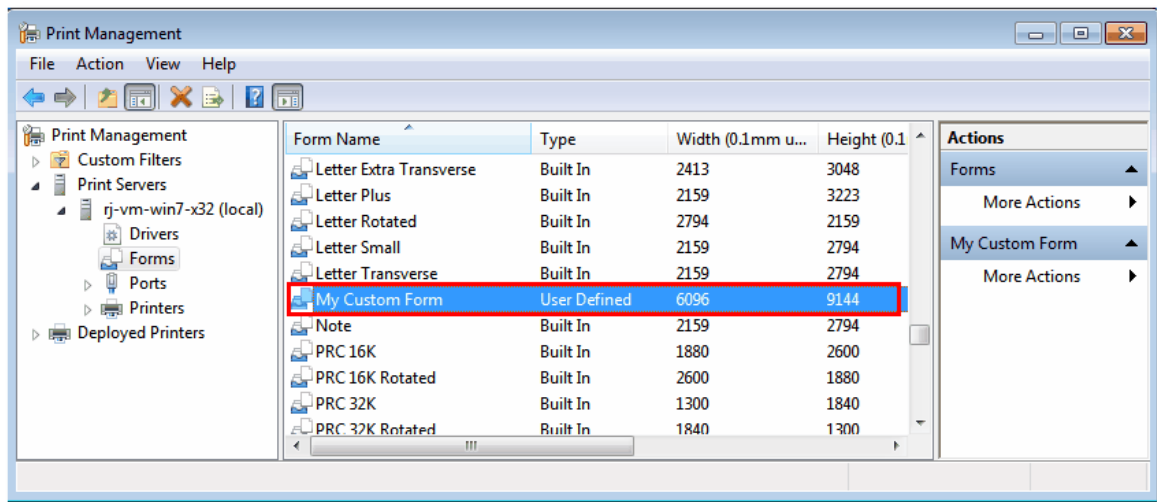
8. Check "Create a new form".



- a. Enter a descriptive name in the "Form name:" field (e.g. "30 x 42" or "36 x 48")
- b. Set the measurement units of "Metric" or "English"
- c. Enter the desired Width and Height for your paper size. **NOTE:** Always make the Width less than the Height (e.g. Width 30, Height 42) as you can always choose Landscape orientation later.



9. Click **Save Form**, and then click **OK** to close the window.



10. You can now use your new computer paper size in your application, or as a paper size on TIFF Image Printer's Profile Manager [Printer Overrides tab](#).

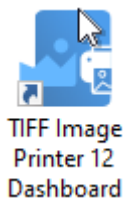
## Configure TIFF Image Printer to Use a Custom Paper Size

For most applications, when the original file is printed, the paper size is part of the information being sent to TIFF Image Printer. Therefore, we would recommend [adding a custom paper form](#) and selecting that paper size in the application before printing. That said, there are some instances where you may need to override the paper size within TIFF Image Printer, such as when [printing oil well logs](#).

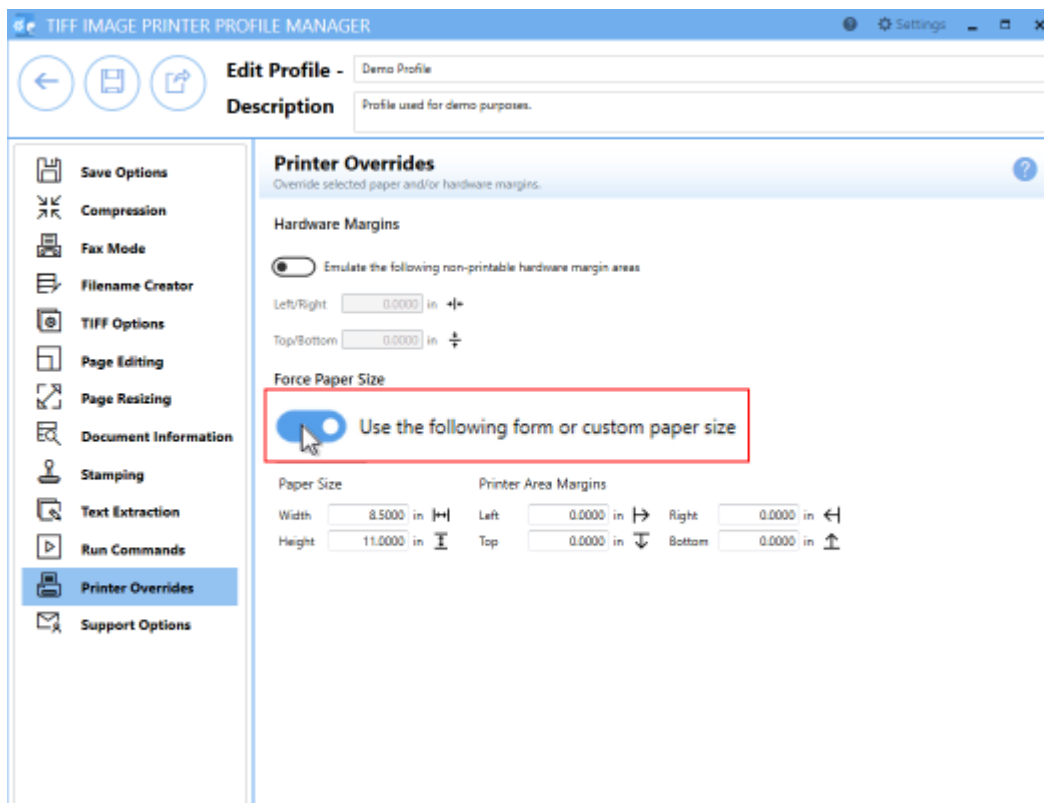
All settings to [override paper size](#) are controlled through the profile. Note that configuring a custom paper size within the profile will override any other paper size selection that you have set on the application.

### **Step by Step Instructions**

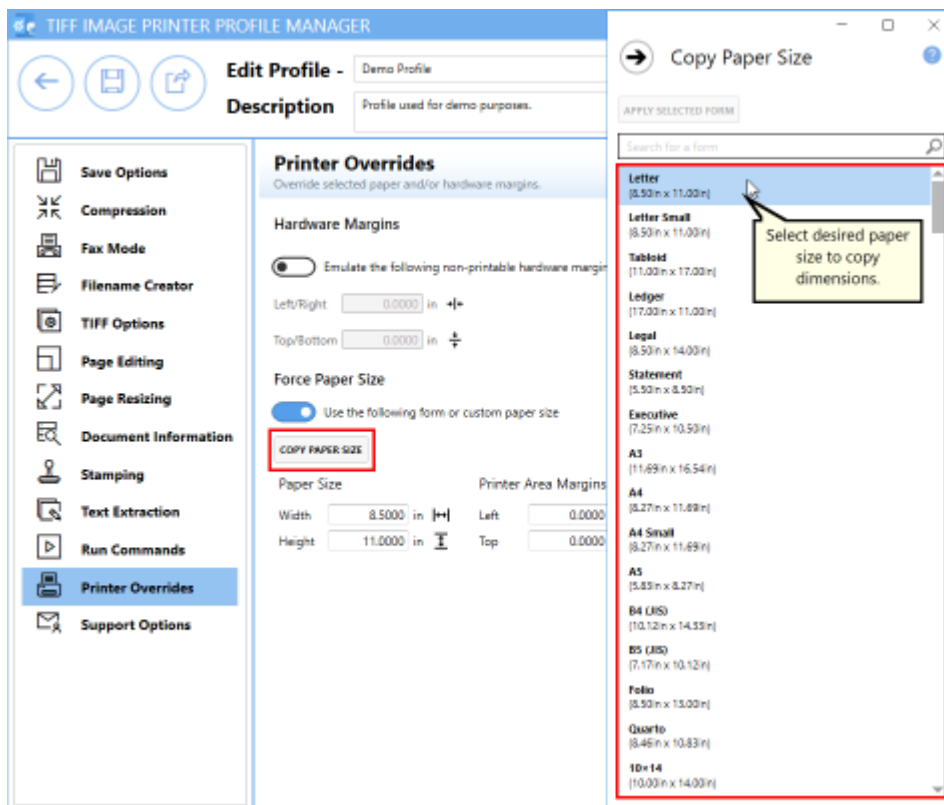
1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Printer Overrides tab**, under **Force Paper Size**, enable **Use the following form or custom paper size**.



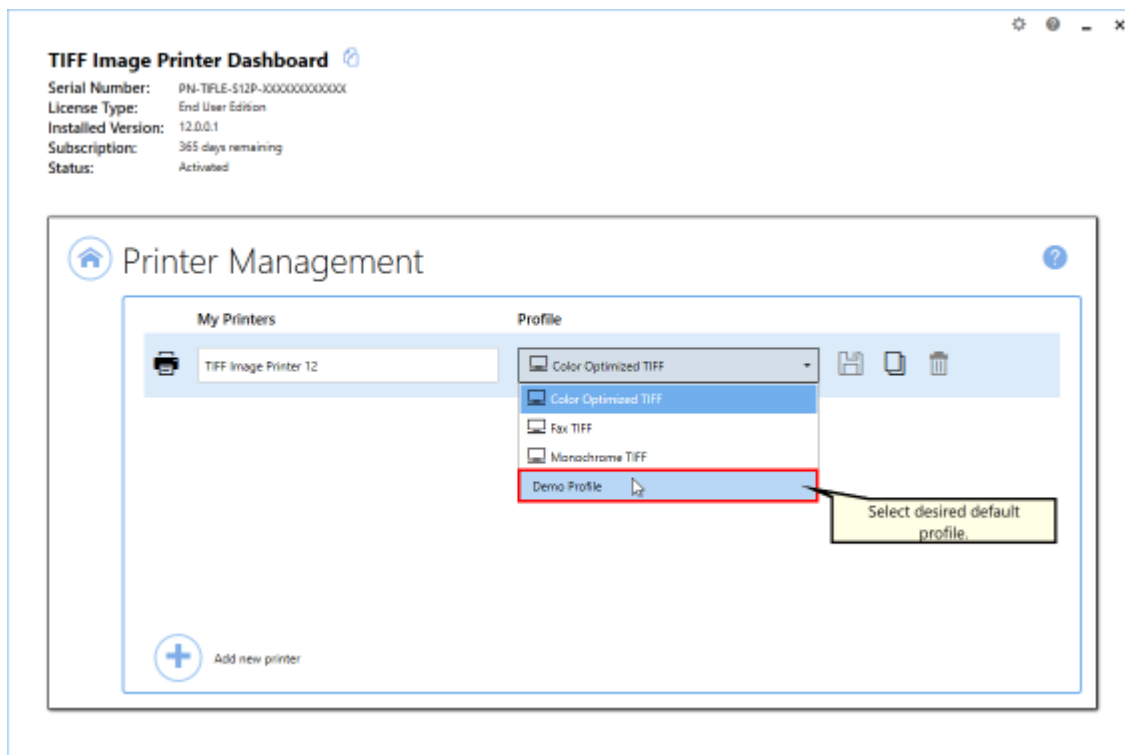
6. Enter the desired *Width* and *Height* for the custom paper size, or use the **Copy Paper Size** button to copy the dimensions from our list of standard paper sizes. Dimensions for Paper Size are entered based on a portrait oriented page. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).



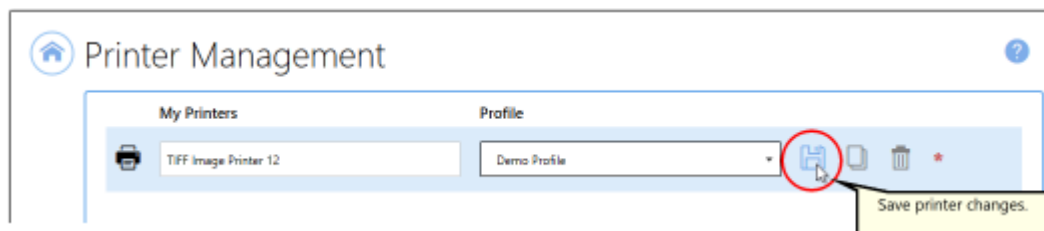
7. Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

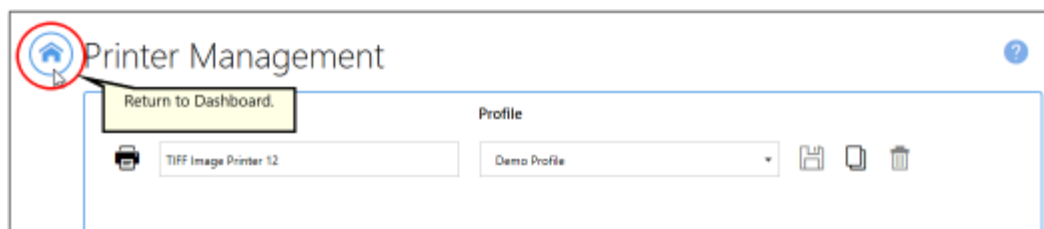
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



iii. Select the **Save icon** to save changes.



iv. Select the **Home icon** to return to the **Dashboard**.

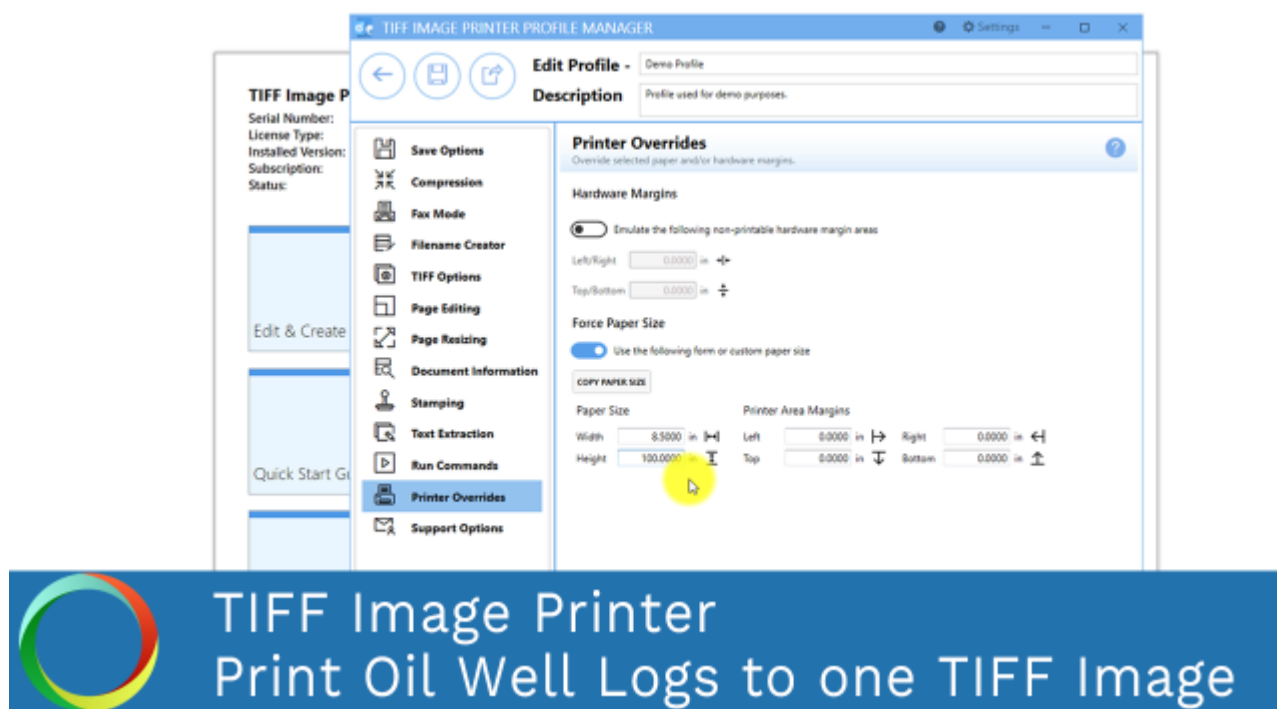


8. Close the **Dashboard**. Now when you print your document to TIFF Image Printer, the output page size will match the custom paper size you entered.

## Print Well Logs as One Continuous Image

A common application for using TIFF Image Printer's printer overrides to force the paper size is when printing oil well logs. An oil well log is one long continuous page of data that varies in length. We have many companies that use TIFF Image Printer to print oil well logs because TIFF Image Printer can be configured to print the oil well log as one continuous page, rather than breaking the oil well log into multiple pages, and end the page where the data ends despite the variability in page length.

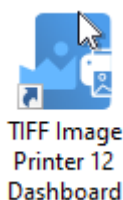
Below are instructions on how to create a profile that will correctly convert your oil well logs to your desired output format by using the [Printer Overrides tab](#) to force a custom paper size and the [Page Editing tab](#) to enabling trimming.



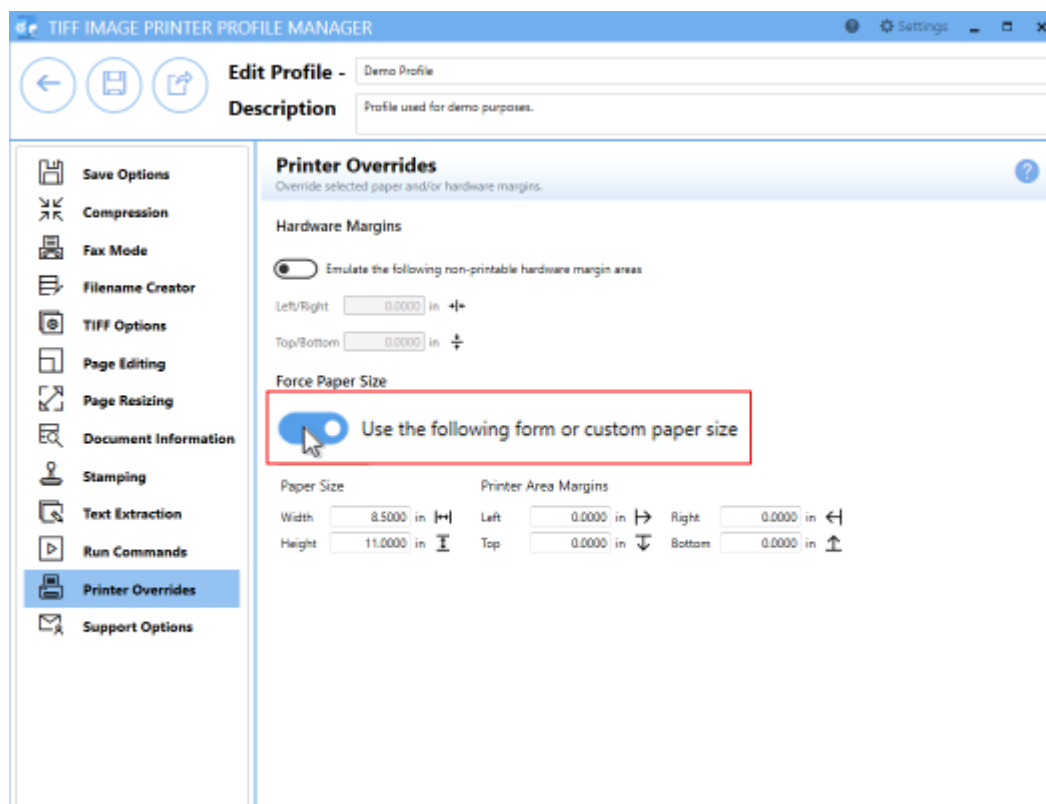
*Click the image above to watch the video tutorial.*

## **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a personal profile, or create a copy of one of our system profiles.
4. Name the profile, add a description, and click Save.
5. On the **Printer Overrides** tab, under **Force Paper Size**, enable **Use the following form or custom paper size**.



6. Enter the page size. In this example we will use *Width 8.5"* and *Height 100"*. Since the length of oil well logs vary, we are going to enter the maximum possible page length which is 100". This will create a varying amount of white space at the bottom of your output files which we will remove using the trimming feature.



## Force Paper Size

☒ Use the following form or custom paper size

COPY PAPER SIZE

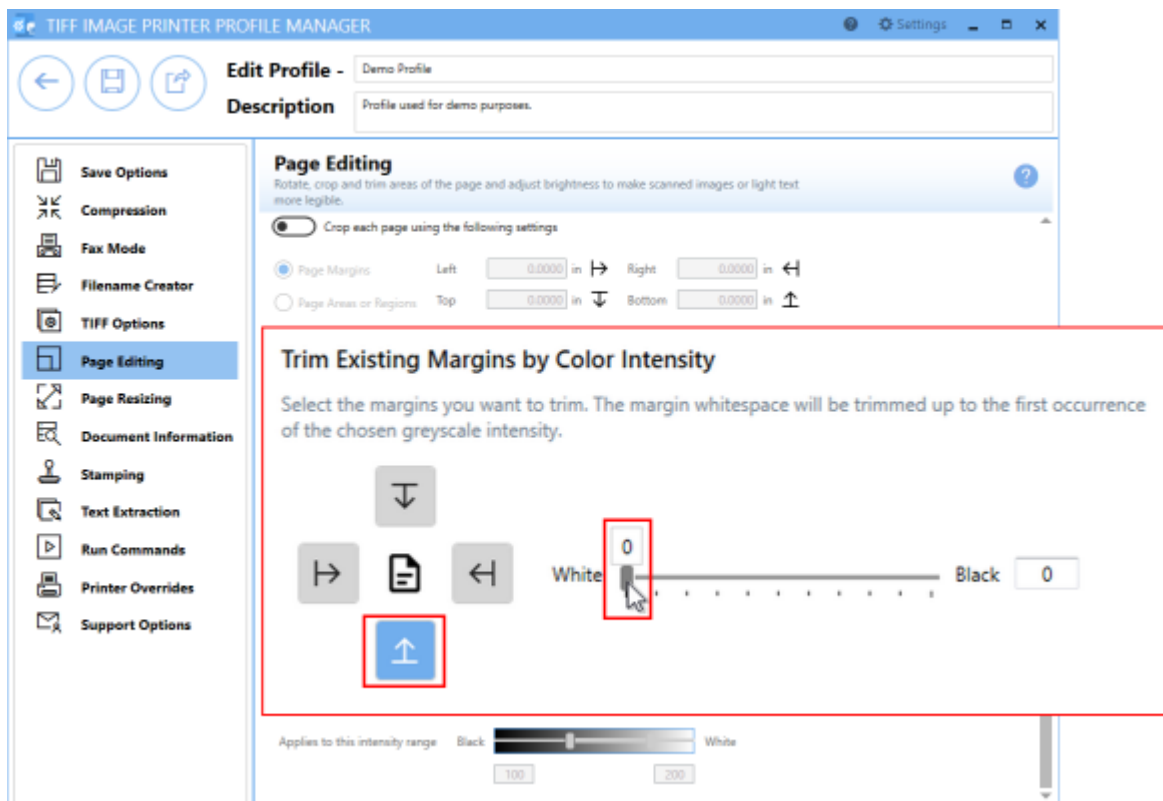
Paper Size

Printer Area Margins

Width  in  Left  in  Right  in

Height  in  Top  in  Bottom  in

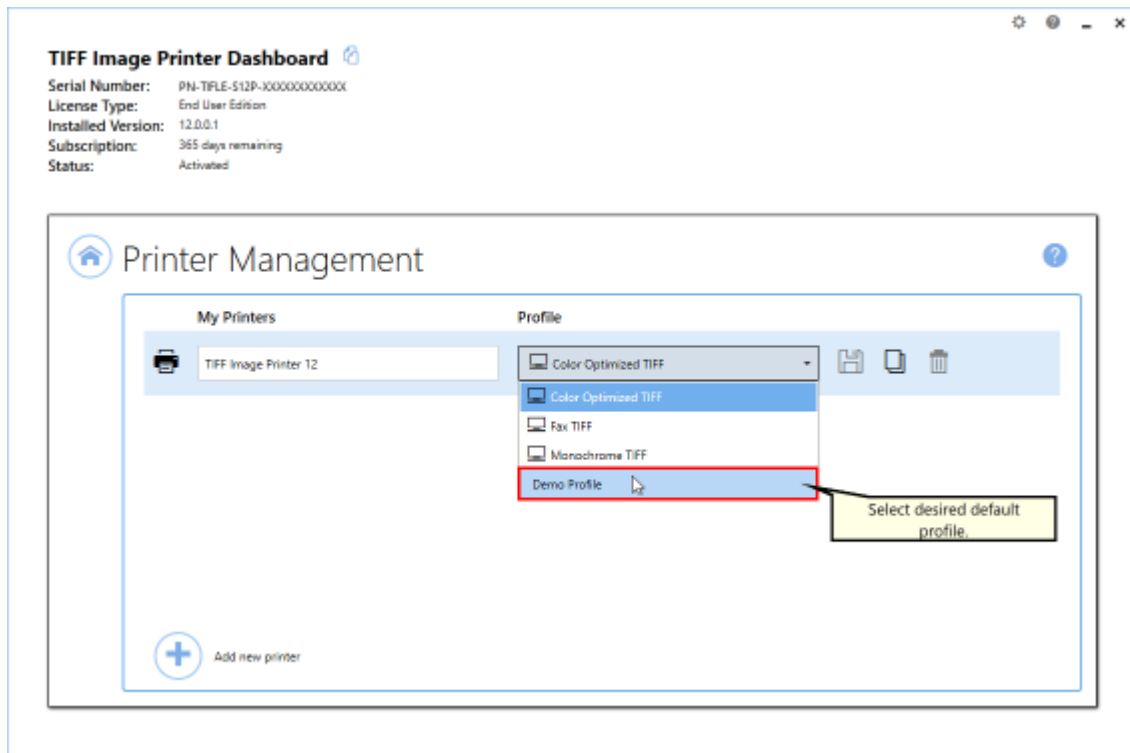
- On the **Page Editing** tab, under **Trim Existing Margins by Color Intensity**, click the **bottom arrow** to enable trimming of the bottom margin of the page.
- Ensure that the color intensity sliding scale is set to white. This means that TIFF Image Printer will trim your output file from the bottom of the page until it reaches the first pixel that is not white.



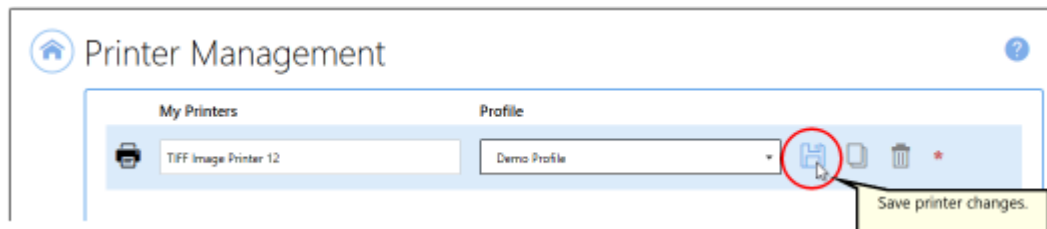
- Click **Save-Back**, and close **Profile Manager**.

*If you plan to use these settings regularly, you may wish to make this personal profile the [default profile](#) used by TIFF Image Printer.*

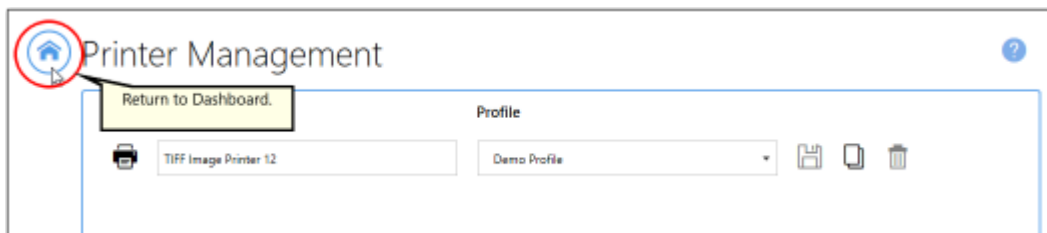
- i. Select "Manage Printers" to open **Printer Management**.
- ii. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



- iii. Select the **Save icon** to save changes.



- iv. Select the **Home icon** to return to the **Dashboard**.



10. Close the **Dashboard**. Now when you print your documents to TIFF Image Printer, you will create output files as one continuous page of varying lengths depending on the length of the original oil well logs.

### Create a Shared Profile

Like the system profiles, a shared profile can be used by any user on the computer.

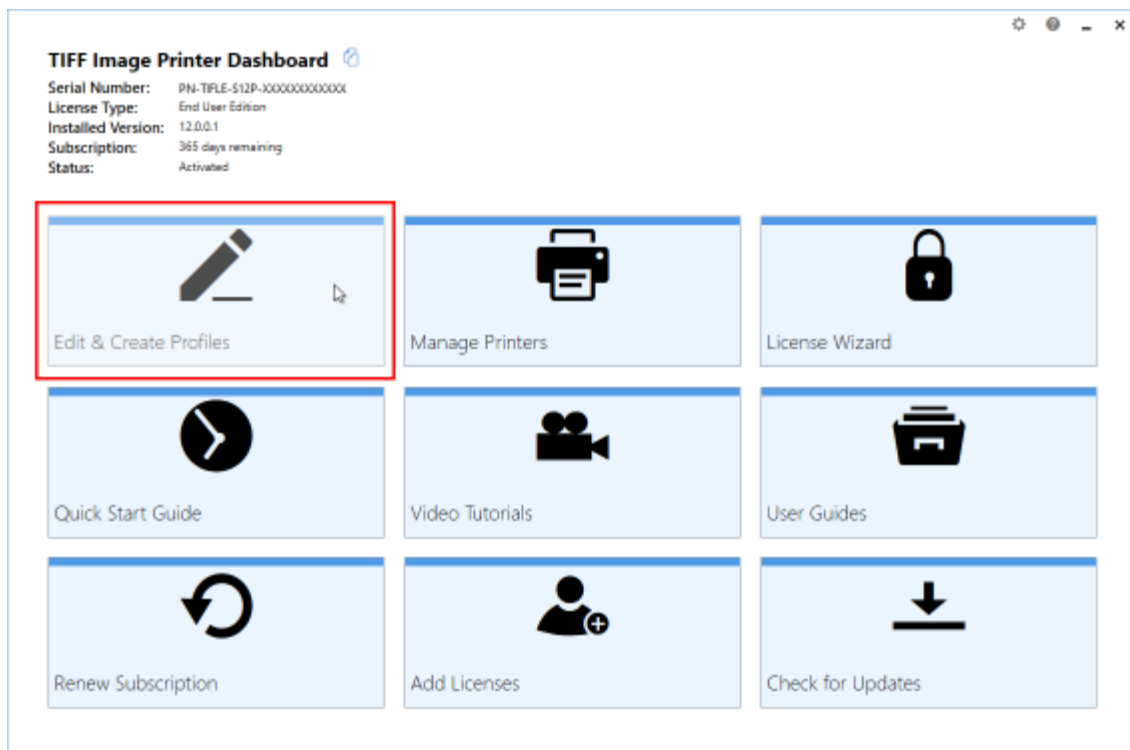
Shared profiles are created by converting a personal profile into a shared profile. Shared profiles are the only type of profile that can be [locked to a printer](#), useful when needing to force a printer to customized settings and prevent users from choosing different settings.

### Step by Step Instructions

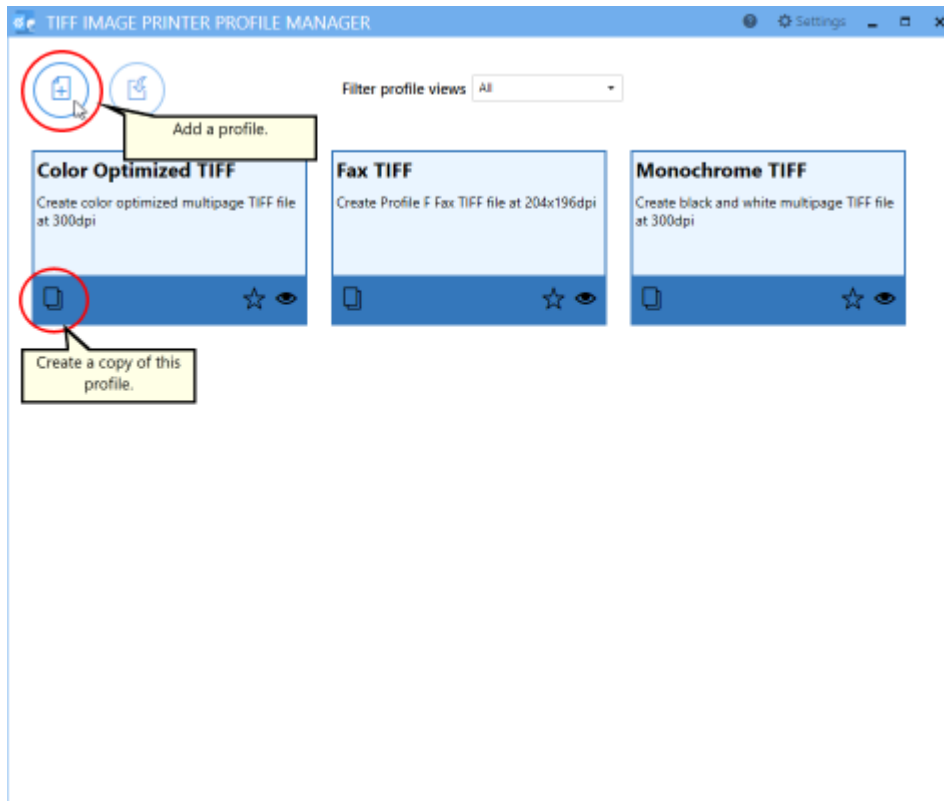
1. Launch the TIFF Image Printer **Dashboard**.



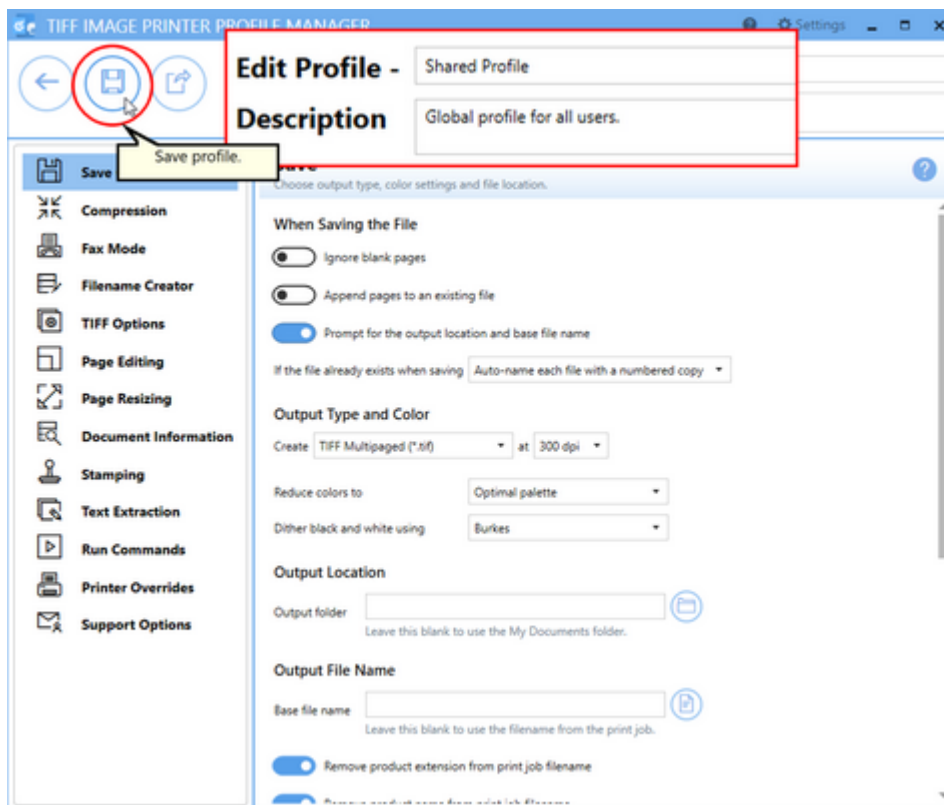
2. Select "Edit & Create Profiles" to open **Profile Manager**.



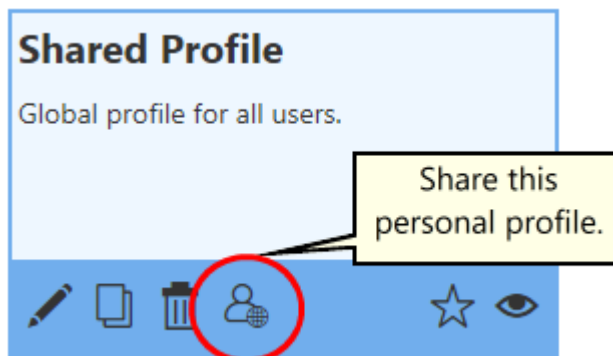
3. You can either create a copy of a system profile, if it has similar settings to what you require, by selecting "Create a copy of this profile", or create a personal profile by selecting "Add a profile".



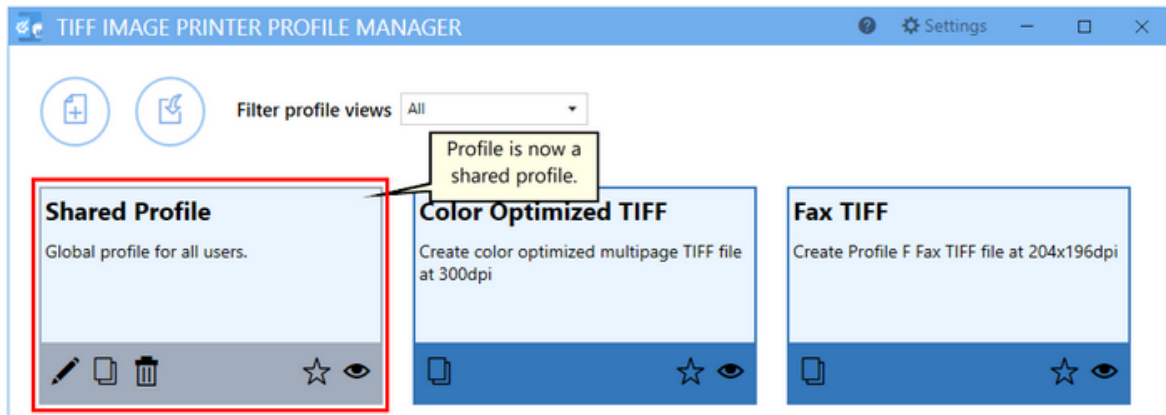
4. Name the profile, add a description, and click **Save**.



5. Go through the tabs and adjust the settings as desired. The subsequent topics in the [Working with TIFF Image Printer](#) section provide detailed instructions on how to adjust the settings in your personal profile to create different types of images/files.
6. Click **Save-Back**, and return to the tiles view of the **Profile Manager**.
7. On the tile for your new profile use the share profile icon to convert this to a shared profile.



8. This action will convert the personal profile into a shared profile. It will change from the lighter colored tile to one with a gray border.

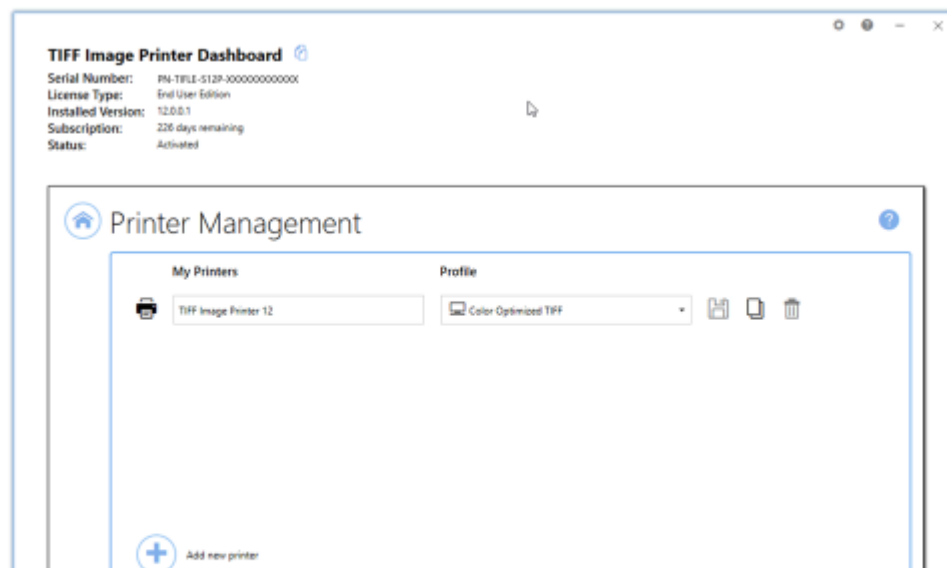


9. This shared profile is now accessible to anyone who logs into this computer. It can also be used to enforce settings on a printer by following the steps in [Lock Shared Profile to Printer](#).

### Printer Management

This section contains information on how to use the Printer Management utility. Printer Management allows users to rename TIFF Image Printer, assign the default Profile used by TIFF Image Printer, create a copy of TIFF Image Printer, and add a new TIFF Image Printer.

- [Printer Management and User Permissions](#)
- [Rename Printer](#)
- [Change Default Profile Assigned to Printer](#)
- [Create a Copy of Printer](#)
- [Add a New Printer](#)
- [Advanced Settings](#)
- [Lock Shared Profile to Printer](#)
- [User Linked Profiles](#)
- [Repair Missing Printer](#)



## TIFF Image Printer Printer Management Overview

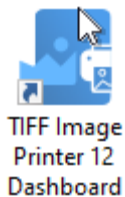
*Click the image above to watch the video tutorial.*



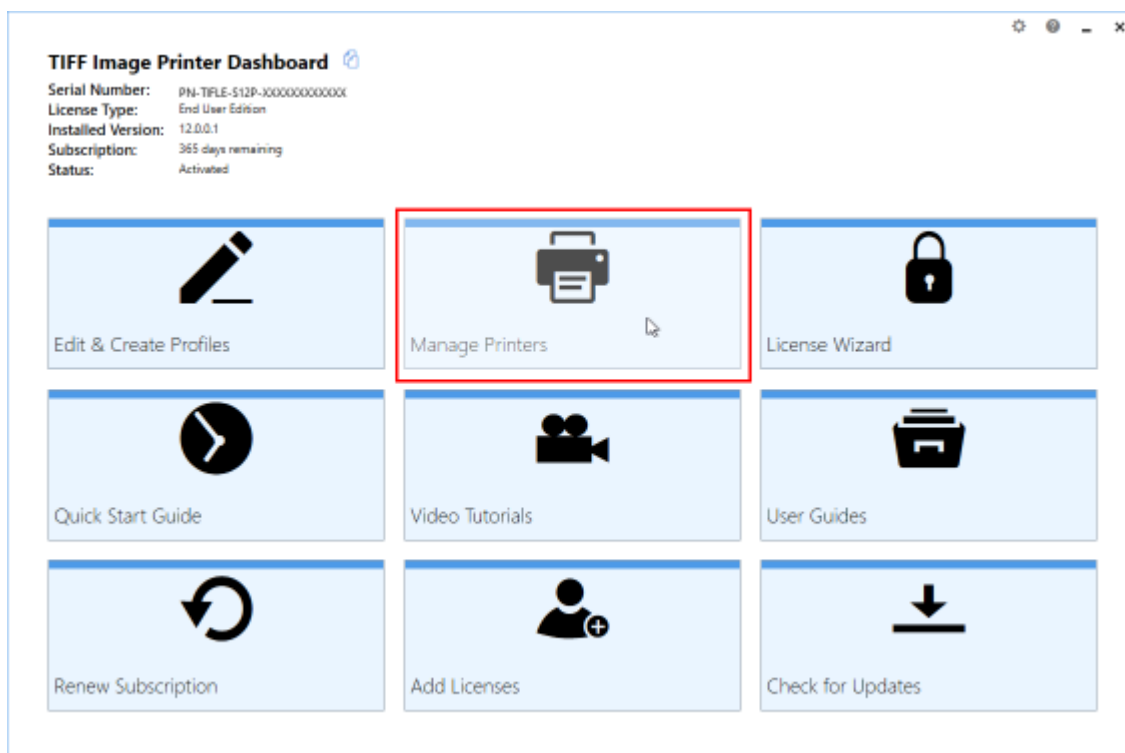
## Printer Management

To launch **Printer Management**:

1. Begin by opening the **Dashboard** (double-click the TIFF Image Printer icon on your desktop or select TIFF Image Printer 12 from the Start menu).



2. Select "Manage Printers" to open **Printer Management**.

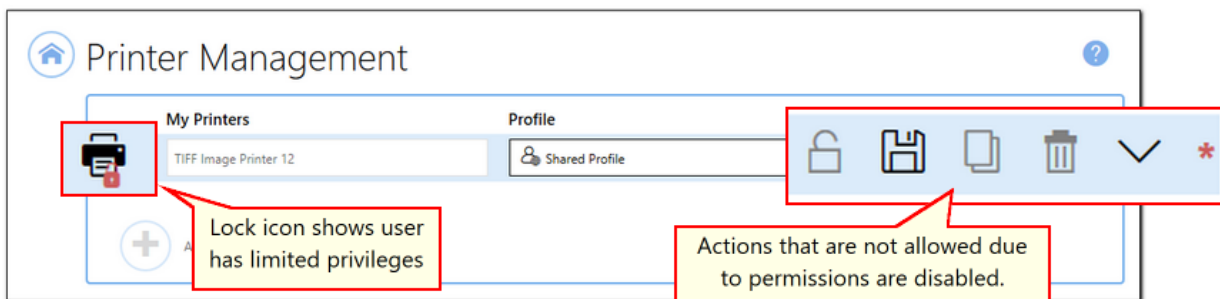


On launch, **Printer Management** will show you all of the existing printer(s), the name of the printer(s), and the default profile currently assigned to each printer. If TIFF Image Printer has just been installed, there will only be one printer listed with the name TIFF Image Printer 12, and the default profile will be set to Color Optimized TIFF.

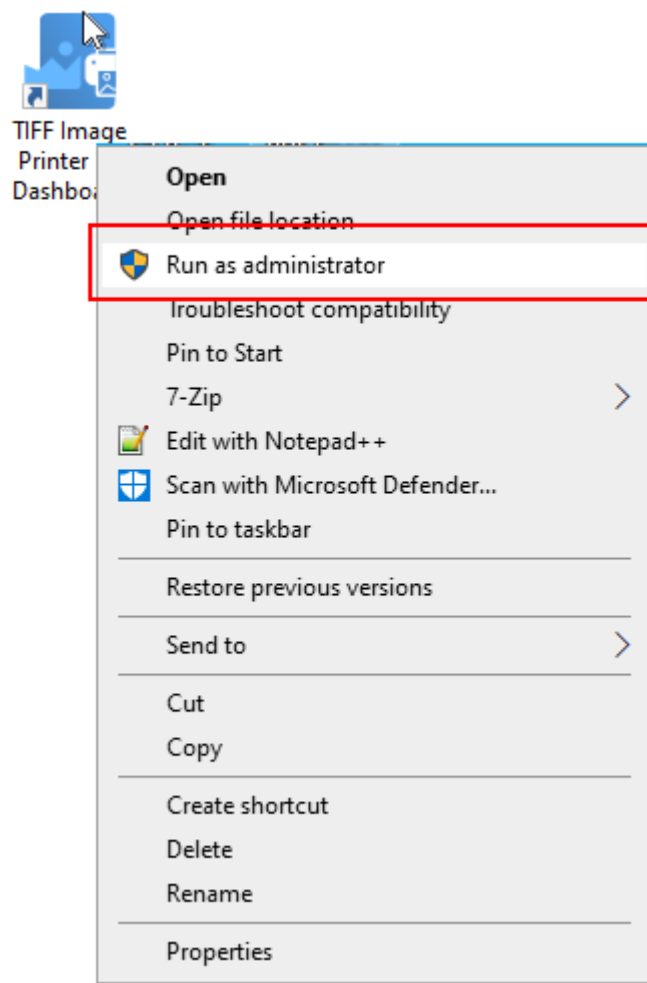
## Printer Management and User Permissions

Your user account may or may not have all of the permissions needed to perform some of the actions available in Printer Management. Some actions, such as adding or deleting printers, or locking a profile to a printer require Administrative permissions for the print server subsystem.

When you do not have the necessary permissions to perform these actions, a red lock icon will be displayed on the printer, and actions that you cannot do will be disabled and appear gray.



If you do not have the needed permissions and need to add or delete printers, or lock a shared profile, you will need to run the Dashboard as an Administrator and have access to an account with administrative permissions that you can sign into. To run the Dashboard as an administrator, right-click the Dashboard shortcut on the desktop and choose "Run as administrator" from the menu. You will be prompted to enter an admin user name and password.



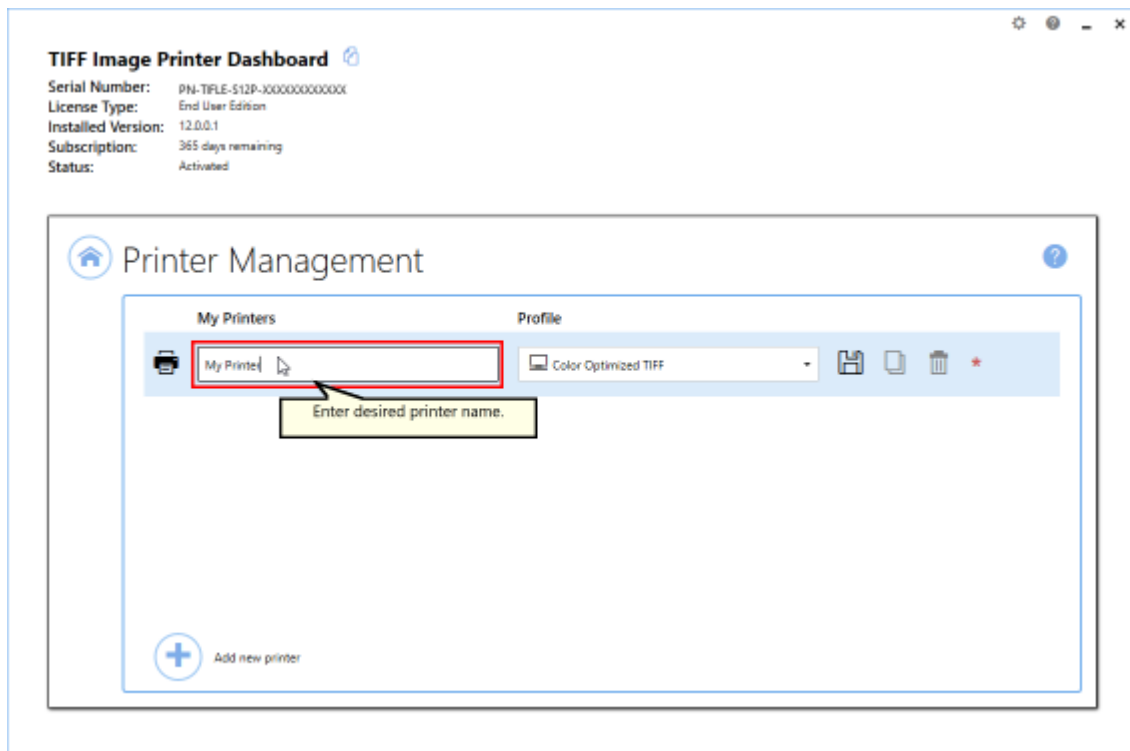
### Rename Printer

By default, the printer name is set to TIFF Image Printer 12, meaning that users would need to look for TIFF Image Printer 12 when printing a document to the TIFF Image Printer software for conversion to TIFF.

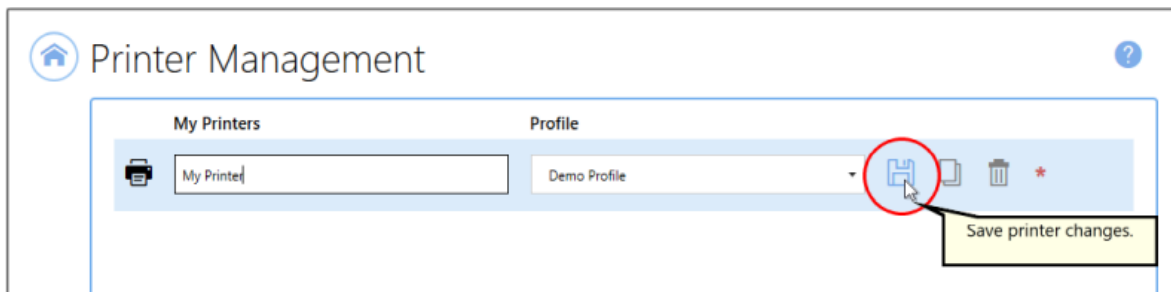
Using **Printer Management** the printer name can be changed to any custom name desired by the user or organization. The new name may be a reflection of the conversion function of the printer (ie. "Convert to TIFF") or the use of the printer within the company (ie. "Save Invoices"). Renaming is particularly relevant when a user has [created a copy of the printer](#) or [added a new printer](#), and the two printers serve different functions.

#### **Step by Step Instructions**

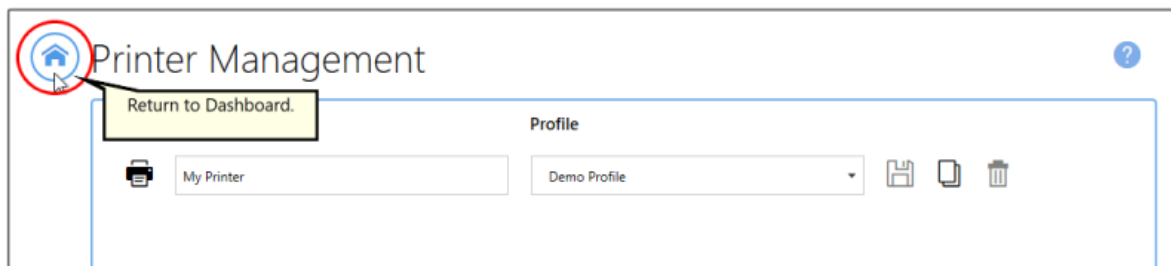
1. Launch the TIFF Image Printer **Dashboard**.
2. Select "Manage Printers" to open **Printer Management**.
3. Select the current name of the printer (by default, this is set to TIFF Image Printer 12) and enter your desired printer name.



4. Select the **Save icon** to save changes.



5. Select the **Home icon** to return to the Dashboard.



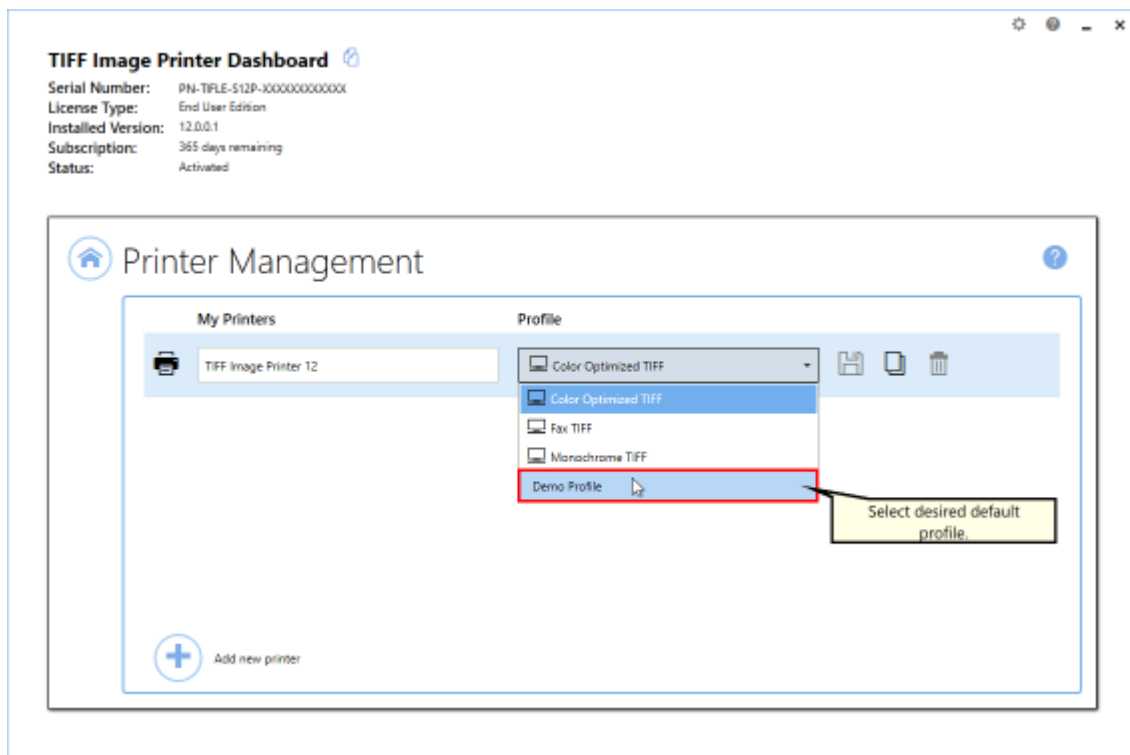
### Change Default Profile

TIFF Image Printer uses Profiles, which are a group of settings, to create the output image you want. Personal profiles are created and edited through the [Profile Manager](#) utility. Users can select their desired profile either using the **Printer Management** utility or on the fly during the printing process on the Save As dialog. In the [Working with TIFF Image Printer](#) section, which contains step-by-step instructions demonstrating how to use [Profile Manager](#) to enable and configure specific settings in order to create personal profiles, each topics concludes by recommending users that plan to use those settings regularly set their personal profile as the default profile used by TIFF Image Printer.

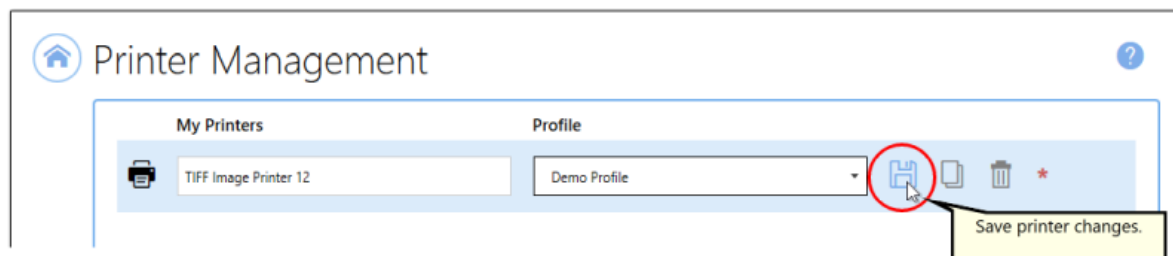
By default, the profile assigned to TIFF Image Printer 12 will be Color Optimized TIFF, meaning that when the user prints to TIFF Image Printer, the settings stored in this default profile will automatically be applied to the output file. The default profile used by a printer can be changed to either another one of the system profiles that come with TIFF Image Printer or to one of your personal profiles.

#### **Step by Step Instructions**

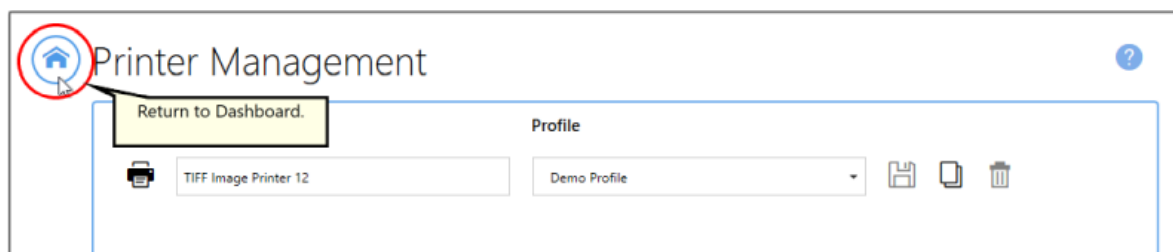
1. Launch the TIFF Image Printer **Dashboard**.
2. Select "Manage Printers" to open **Printer Management**.
3. Select the printer you wish to edit and use the Profile drop box to select your desired default profile.



4. Select the **Save icon** to save changes.



5. Select the **Home icon** to return to the Dashboard.

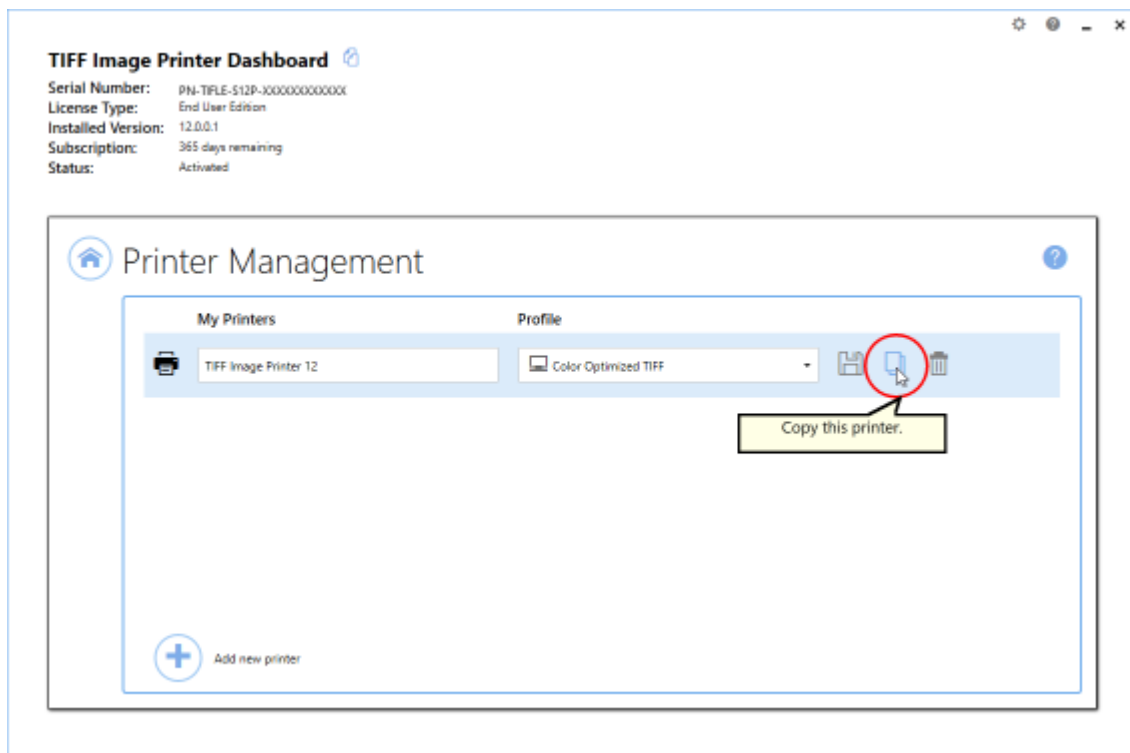


### Create Copy of Printer

By default, only a single copy of TIFF Image Printer is created. If you know that you need to use two groups of settings - two profiles - on a regular basis, you may consider creating a second copy of TIFF Image Printer instead of continuously changing the profile that is being applied to output files. A common example of this is users that need to create both color and black and white TIFF images.

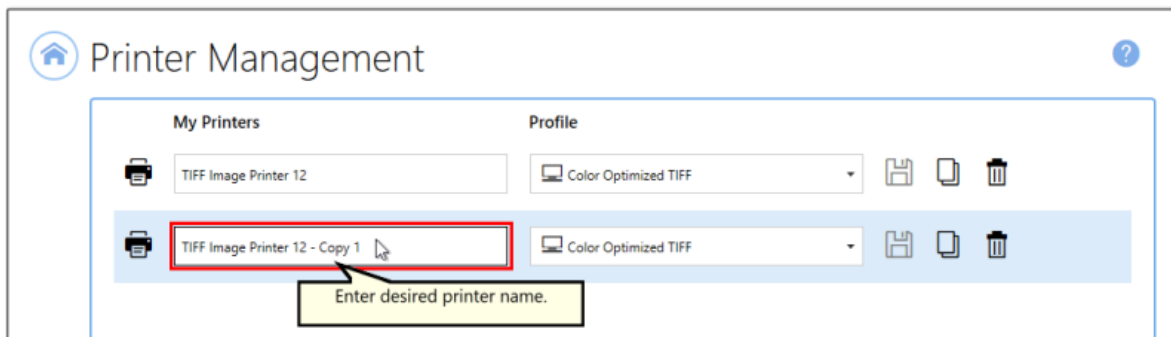
#### **Step by Step Instructions**

1. Launch the TIFF Image Printer **Dashboard**.
2. Select "Manage Printers" to open **Printer Management**.
3. Beside the printer you wish to copy, select the **Copy icon** to create a copy of the selected printer.

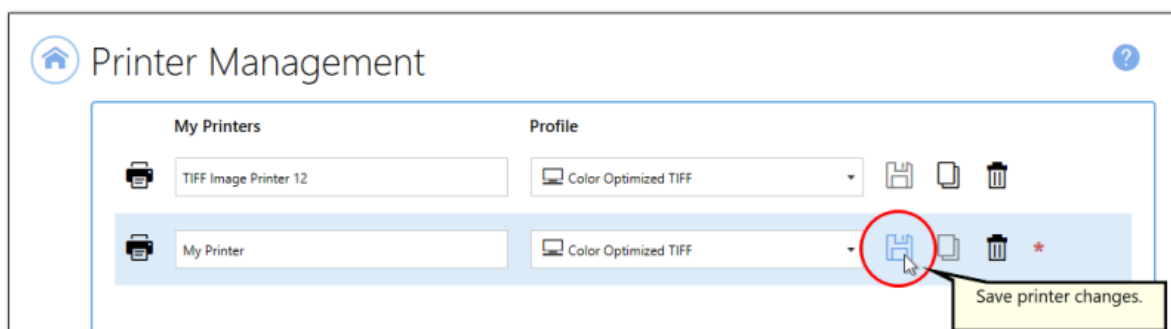


4. By default, the newly copied printer will be named "Printer Name - Copy 1". You can change the name by selecting the current name of the printer and entering your desired printer name.

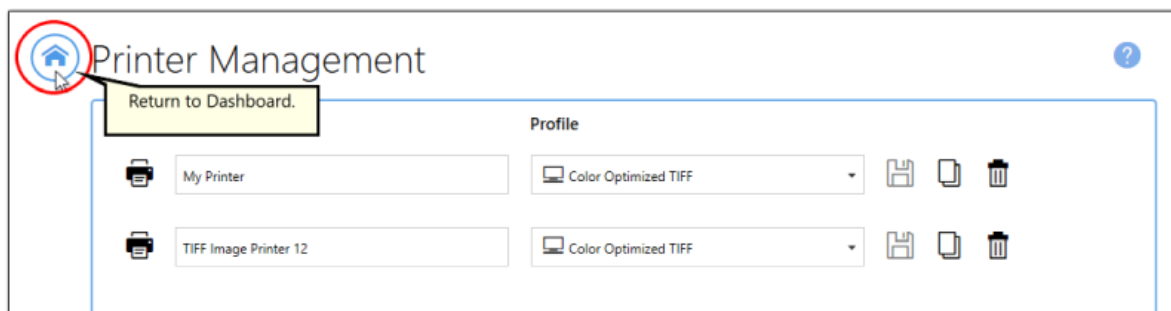




5. Select the **Save icon** to save changes.



6. Select the **Home icon** to return to the Dashboard.



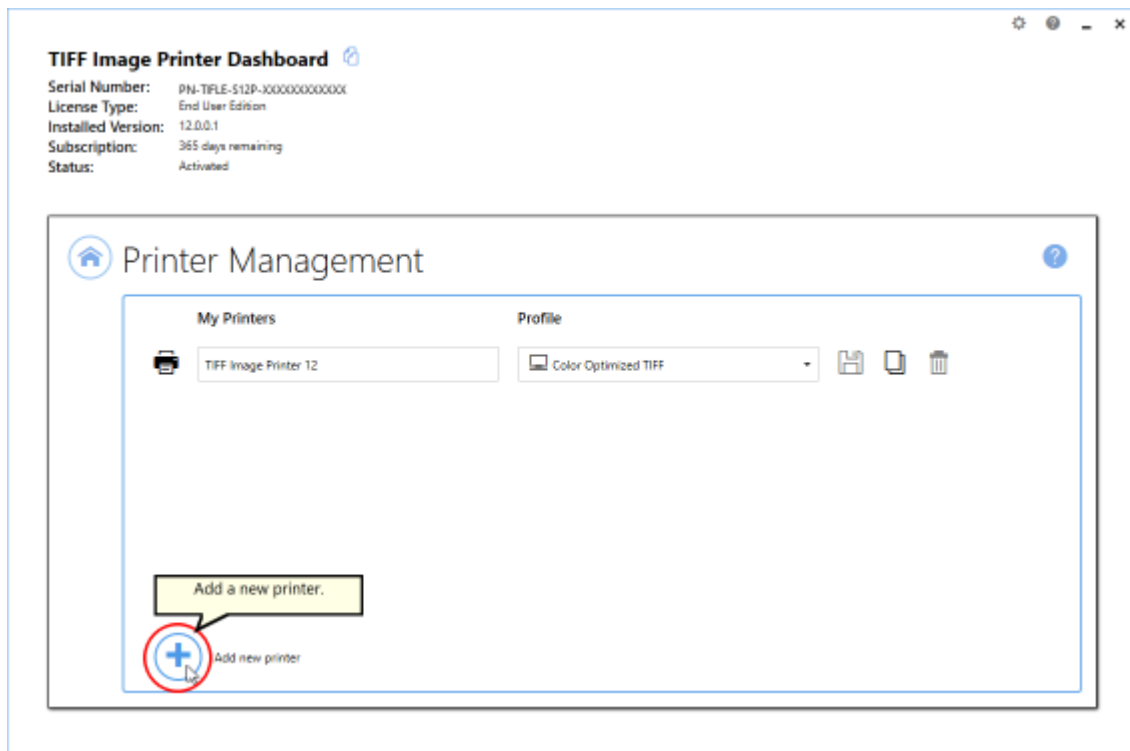
### Add New Printer

By default, only a single instance of TIFF Image Printer is created. If you know that you need to use two groups of settings - two profiles - on a regular basis, you may considering creating a second instance of TIFF Image Printer instead of continuously changing the profile that is being applied to output files. A common example of this is users that need to create both color and black and white TIFF images.

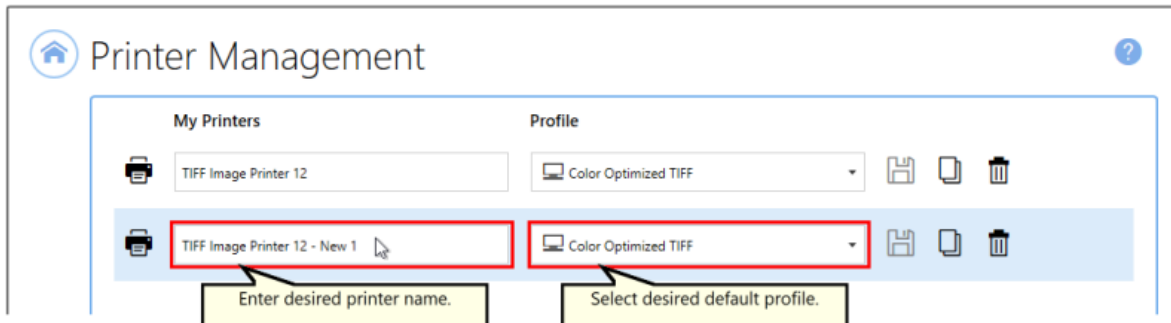
**NOTE:** Adding an new printer is an action that requires administrative level permissions. See [Printer Management and User Permissions](#) for details on which actions you can do and how to run the TIFF Image Printer Dashboard as an administrator to perform this task.

### Step by Step Instructions

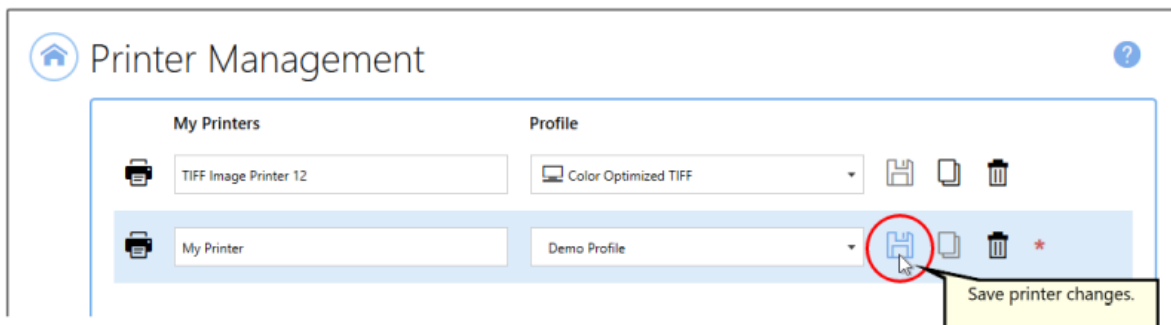
1. Launch the TIFF Image Printer **Dashboard**.
2. Select "Manage Printers" to open **Printer Management**.
3. Select the **Add icon** at the bottom of the screen to add a new printer.



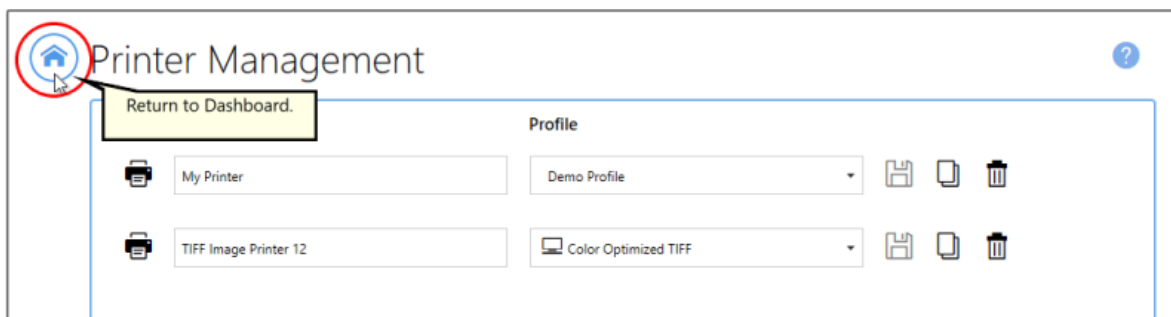
4. By default, the newly added printer will be named "TIFF Image Printer <%PRODVERSION\_S% - New 1" and will be assigned the default profile Color Optimized TIFF.
  - i. You can change the name by selecting the current name of the printer and entering your desired printer name.
  - ii. You can change the default profile by dropping the box and selecting your desired profile.



5. Select the **Save icon** to save changes.



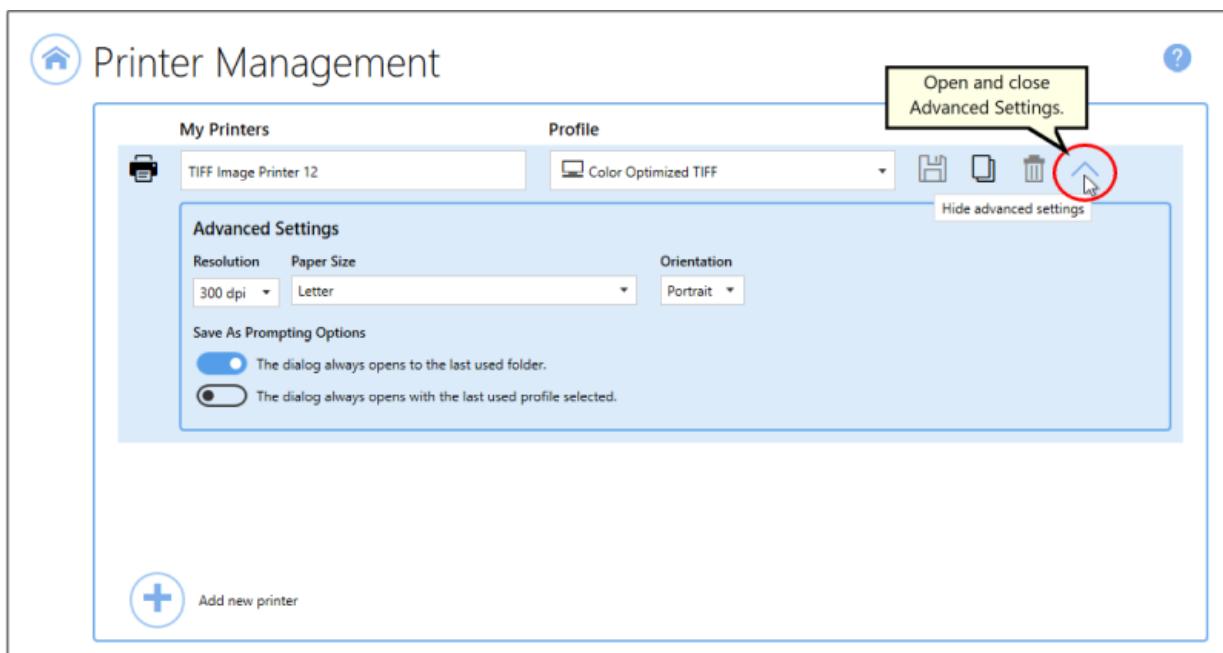
6. Select the **Home icon** to return to the Dashboard.



## Advanced Settings

Advanced Settings allow users to configure how their printing application will send information to TIFF Image Printer and customize the Save As dialog behavior to improve their workflow. The basic user should not need to edit any of these advanced settings but they are available for advanced users that need to create their output files at a specific resolution (e.g. well log users).

To access advanced settings, select the **down arrow** for the relevant printer listing. Once you are done viewing / editing the advanced settings, select the **up arrow** to collapse the advanced settings dialog.

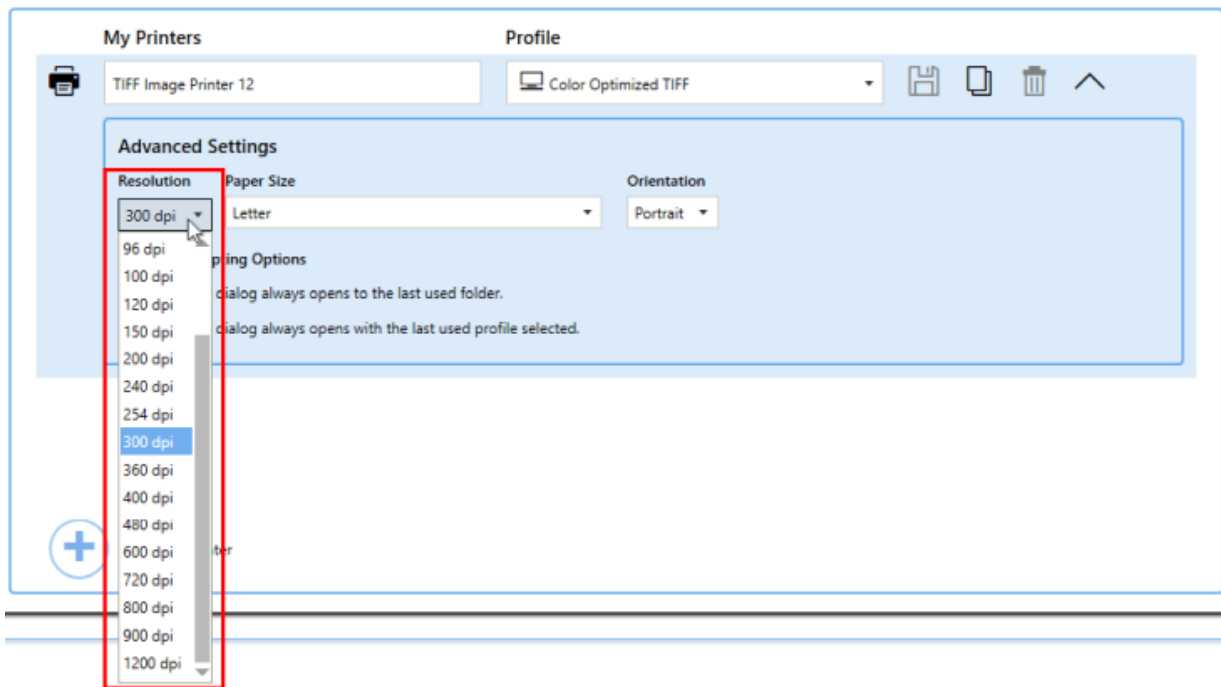


You can also access these advanced settings during a print job by selecting **Printer Properties** from your printing application.

## Resolution

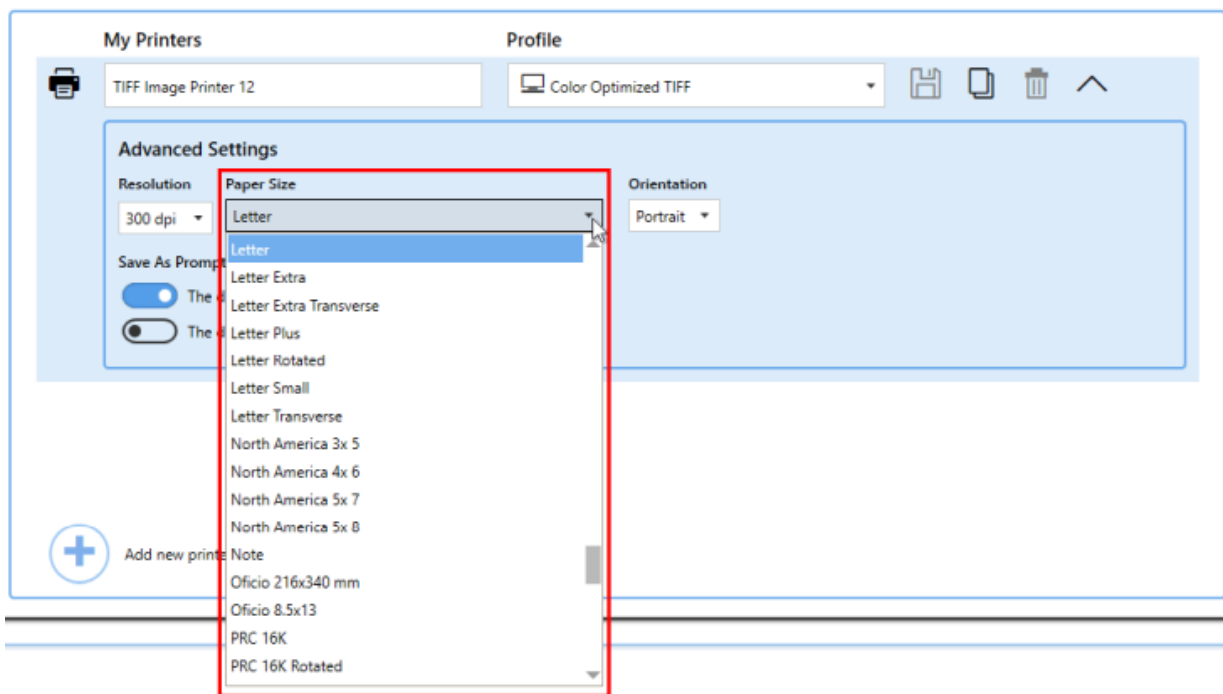
This is the resolution at which your printing application will render your information when it is sent to TIFF Image Printer. By default, printer resolution is set to 300 DPI. This setting specifies the print resolution, or DPI (Dots Per Inch) of data that is sent to us to use to create the output file. Higher resolutions produce graphic images that are sharper and show finer detail, but are also very large if they are not compressed. Low-resolution images are not of as high a quality, but they take up less disk space. In general, TIFF Image Printer will perform a readable text conversion at any

resolution. If your document contains graphics, you may want to use one of the higher resolution settings.



## Paper Size/Orientation

This is the paper size and orientation at which your printing application will render your information when it is sent to TIFF Image Printer. For most applications, when the original file is printed, the paper size and orientation are part of the information being sent to TIFF Image Printer, so setting paper information is unnecessary. If you are printing a [large paper size](#) from a CAD (computer aided design) software, you may need to [add the custom paper size](#) to your Windows paper list first. There are some instances where you may need to override the paper information, such as when printing oil well logs. This can be done on the [Printer Overrides](#) tab with the Profile Manager. If you are forcing the paper size within the profile, the paper size in the profile will override this setting.



## Save As Prompting Options

These settings allow users to customize the Save As dialog behavior to improve workflow. If you have many different personal profiles, it may be useful to enable the Save As dialog to always open with the last used profile selected.

### Save As Prompting Options

- ☒ The dialog always opens to the last used folder.
- ☐ The dialog always opens with the last used profile selected.

## The dialog always opens to the last used folder.

By default this setting is enabled. TIFF Image Printer will always open the Save As dialog to the last used folder location. Disabling this settings means that the Save As dialog will always open to the My Documents folder instead. If you have set a specific path for the output location within the profile, the path set in the profile will override this setting.

**The dialog always opens with the last used profile selected.**

By default this setting is disabled. Enabling this setting means that TIFF Image Printer will always open the Save As dialog with the last used profile selected. When this setting is disabled, TIFF Image Printer will always open the Save As dialog with the default profile selected.

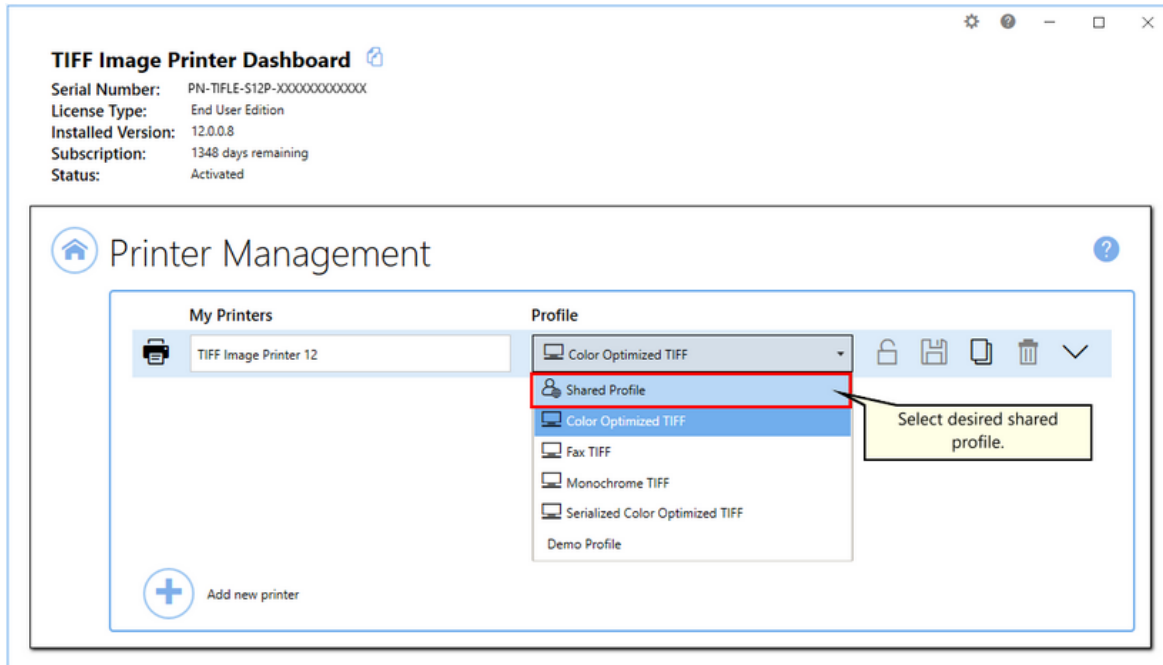
## Lock Shared Profile to Printer

Locking a shared profile to a printer restricts that printer to only that profile, perfect for when a base set of options needs to be used by all users. Once you have created a shared profile as shown in [Create a Shared Profile](#), this profile can then be locked to a printer. Only shared profiles can be locked to a printer.

**NOTE:** Locking a profile to a printer is an action that requires administrative level permissions. See [Printer Management and User Permissions](#) for details on which actions you can do and how to run the TIFF Image Printer Dashboard as an administrator to perform this task.

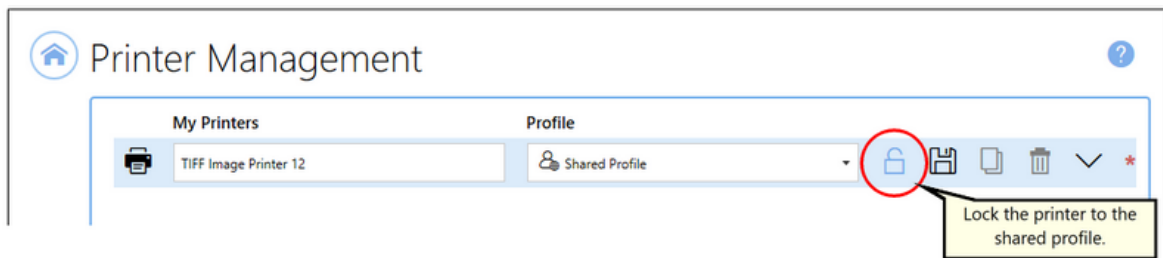
### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.
2. Select "Manage Printers" to open **Printer Management**.
3. Select the printer you wish to edit and use the Profile drop box to select a shared profile. A shared profile is designated with the user and globe icon in the drop down list.

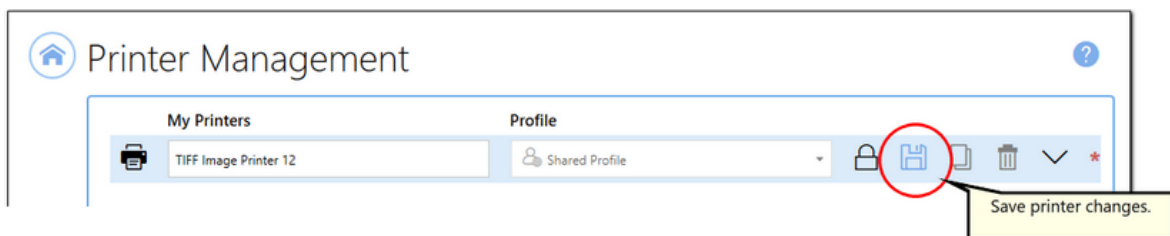


4. Once a shared profile is selected, the lock icon will become enabled. To lock the printer to the shared profile, click the lock icon.

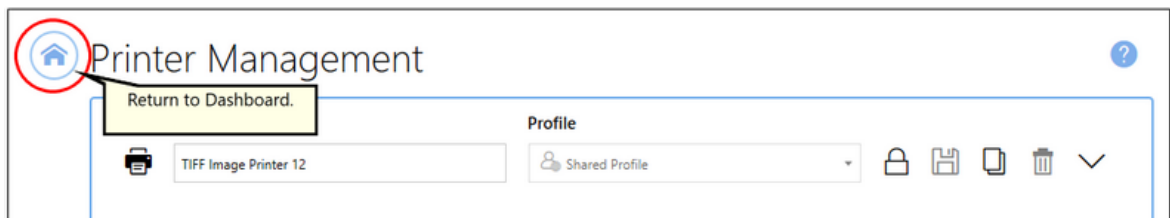




5. When locked to a shared profile the icon will change to a closed lock and the Profile combo will be disabled. Select the **Save icon** to save changes.



6. Select the **Home icon** to return to the Dashboard.



## User Linked Profiles

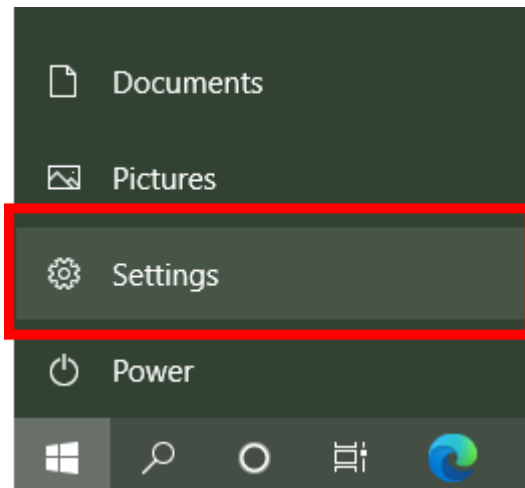
For scenarios where a base profile is wanted, but users may need to modify a few select settings, a linked profile can be created from a shared profile. A linked profile is a per-user copy of the base shared profile. When printing to a printer with a locked profile, any user-modified linked profile, if it exists, is used. If one does not exist, the settings in the shared profile are used.

### Creating the Linked File

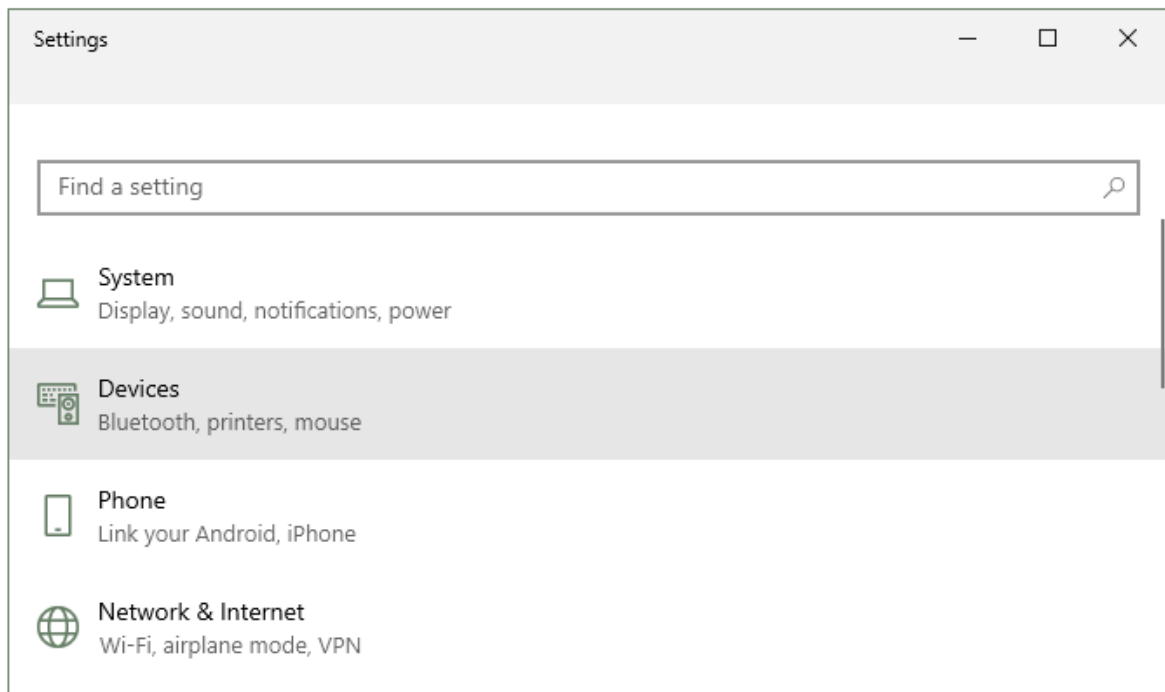
Linked profiles can only be created from a printer that has a locked profile, and only through the printer's printing preferences dialog. The printing preferences dialog can be accessed through the printing options on most applications when printing, as well as the Printers & Scanners section of the Windows settings app, or the *View Devices and printers* section of the Control Panel applet.

#### Step by Step Instructions

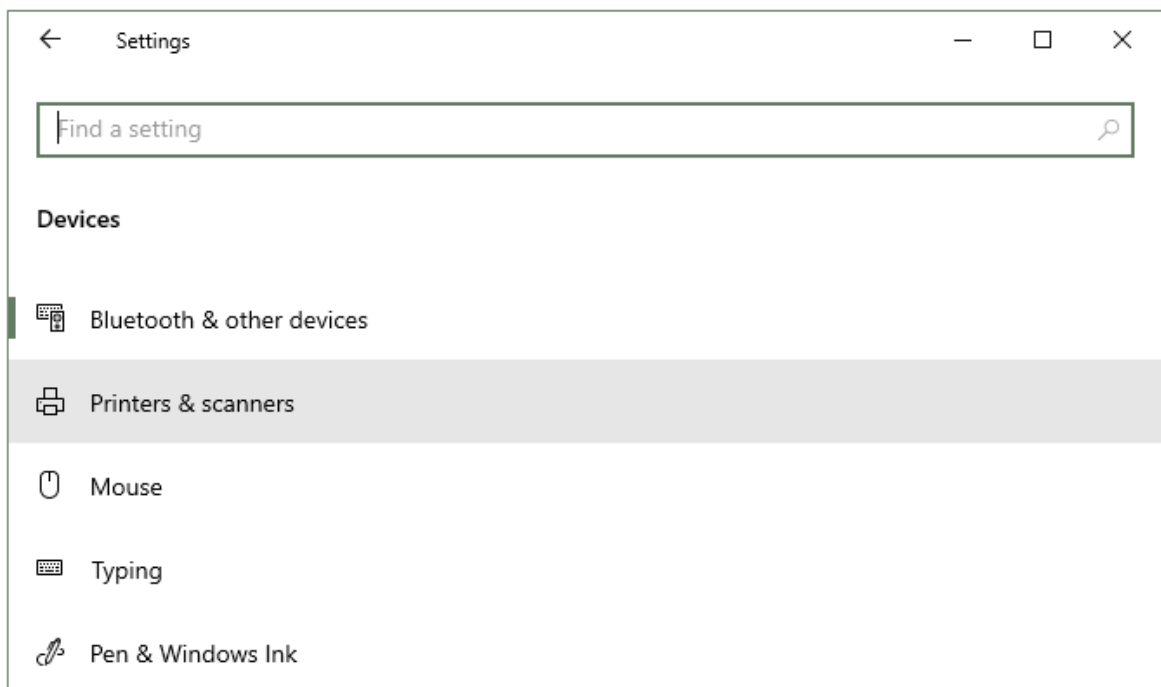
1. From the Windows 10 Start menu, open the **Settings** app (the gear icon).



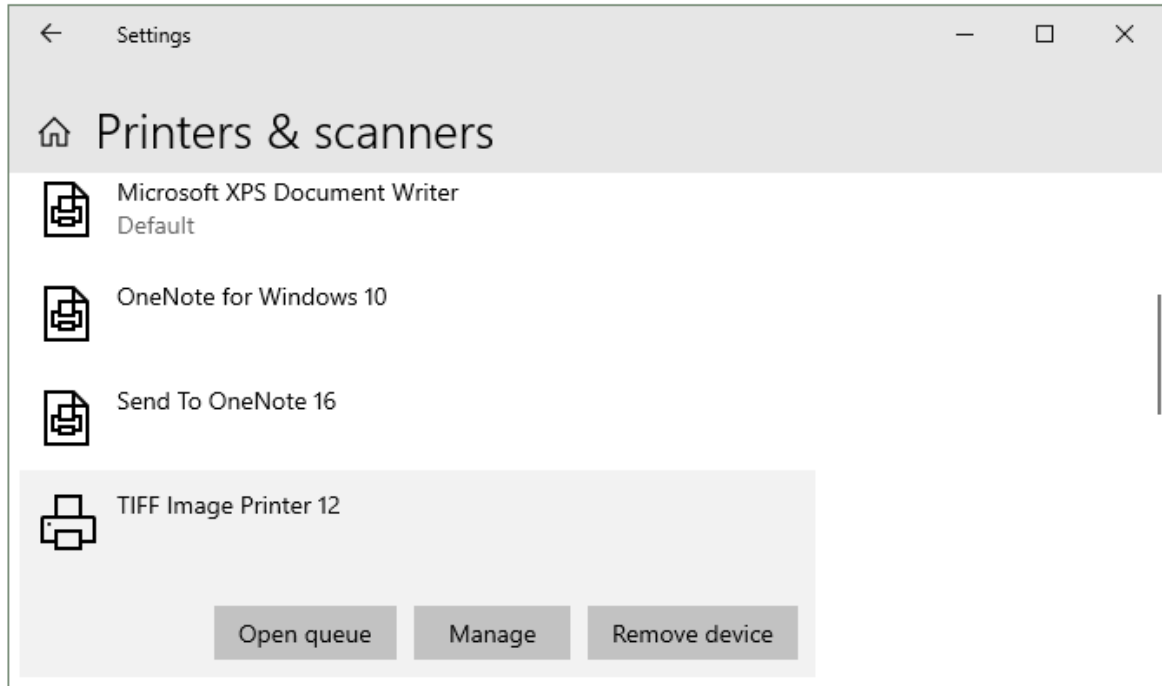
2. In the list of Settings options, choose **Devices**.



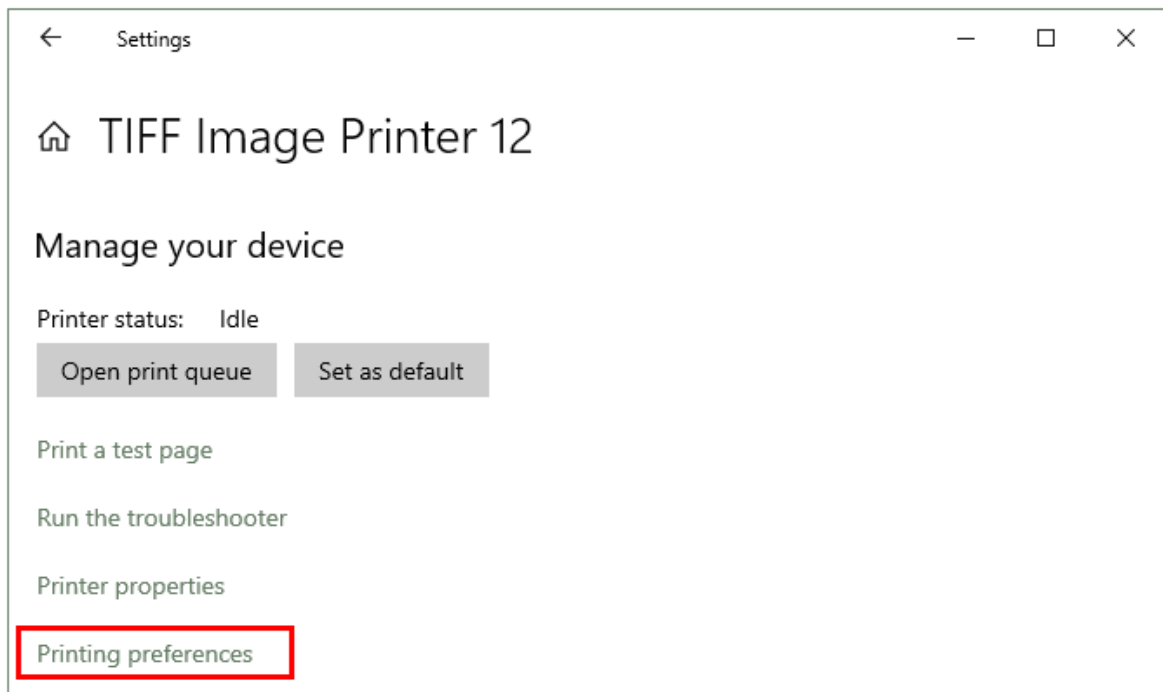
3. In the list of Devices, select **Printers & Scanners**.



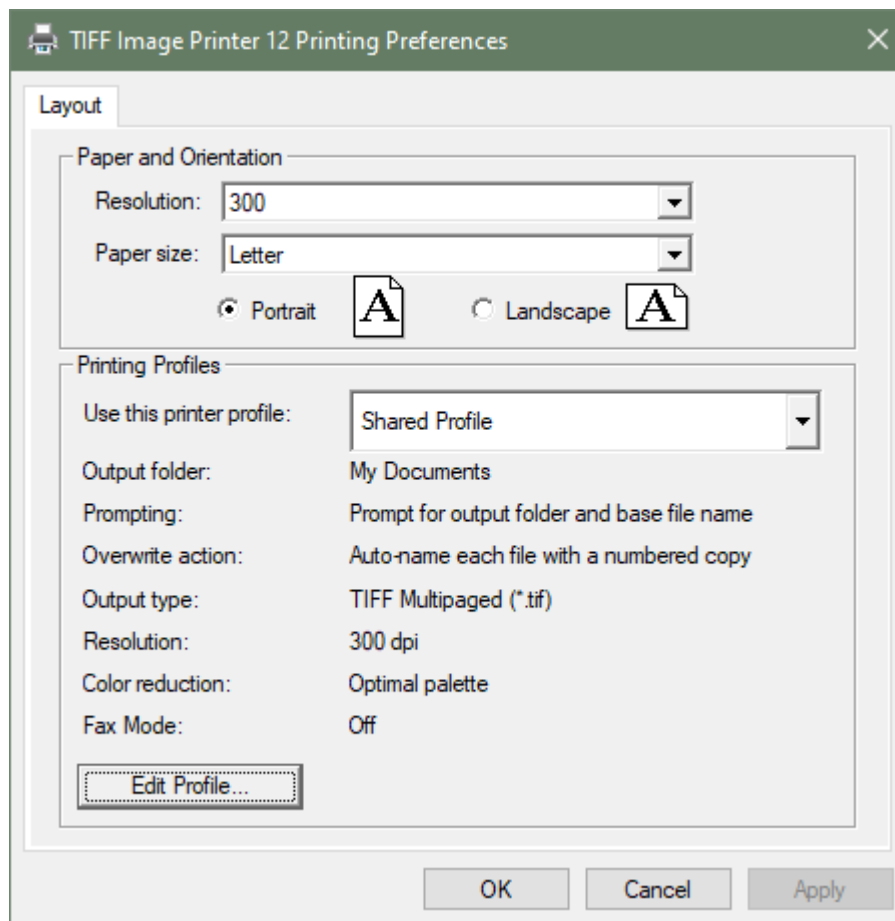
4. In the list of Printers & scanners, scroll to find the TIFF Image Printer 12 printer and select it. From the additional options shown, choose **Manage**.



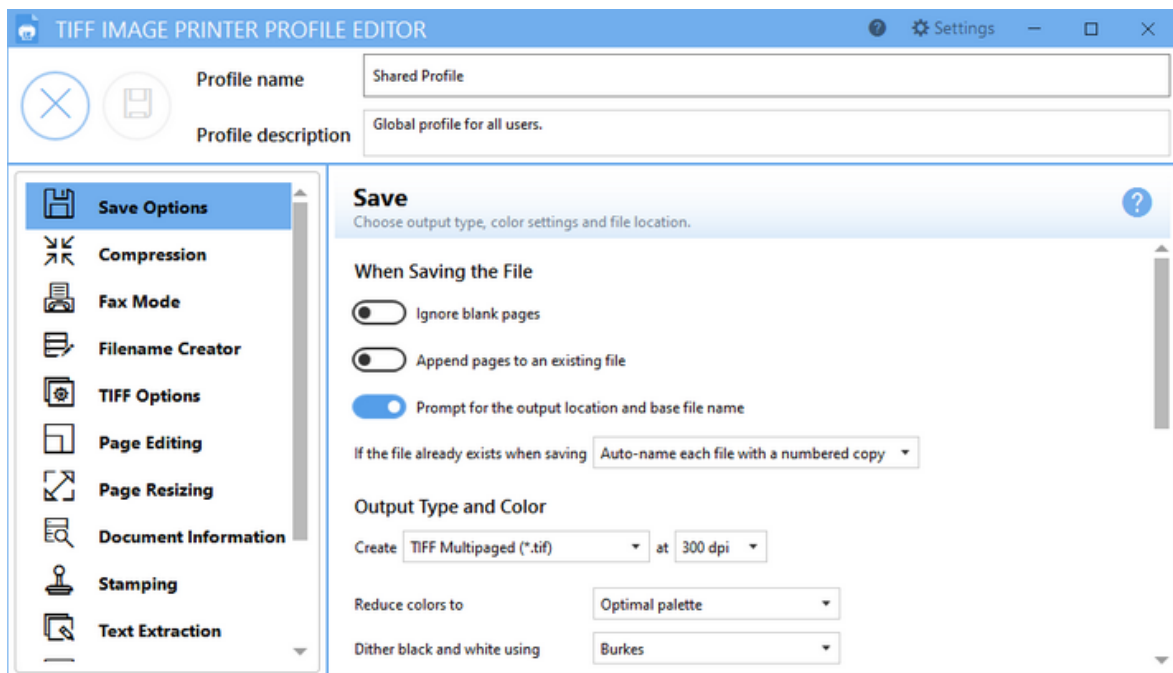
5. On the Manage your device screen, open the **Printing preferences** by clicking the text link at the bottom.



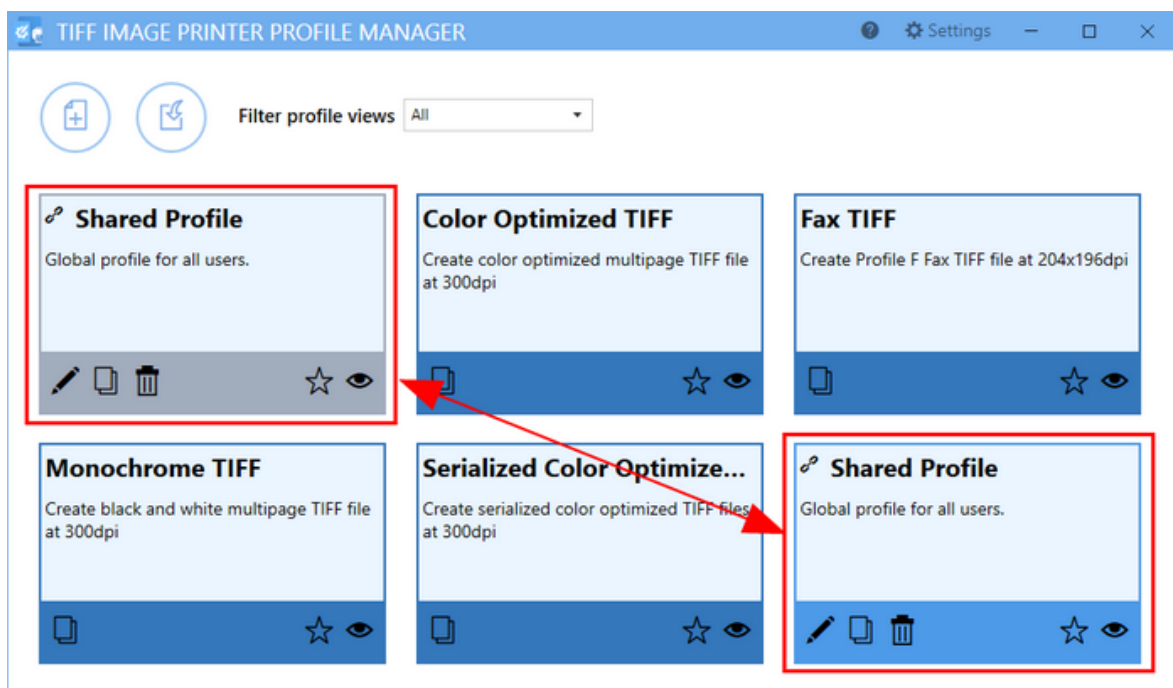
6. The Printing Preferences dialog lists the same options that can be set using [Printer Management](#) from the dashboard. From here, select **Edit Profile...** button to create the linked profile (if needed), then open it in the [Profile Editor](#) for editing.



7. Make any changes needed, if necessary and then save and close the linked copy of the profile.



8. Once the linked profile has been created, the two profiles are shown in the [Profile Manager](#) with a link icon beside each to show that they are linked. Linked profiles can also be edited from within the Profile Manager.

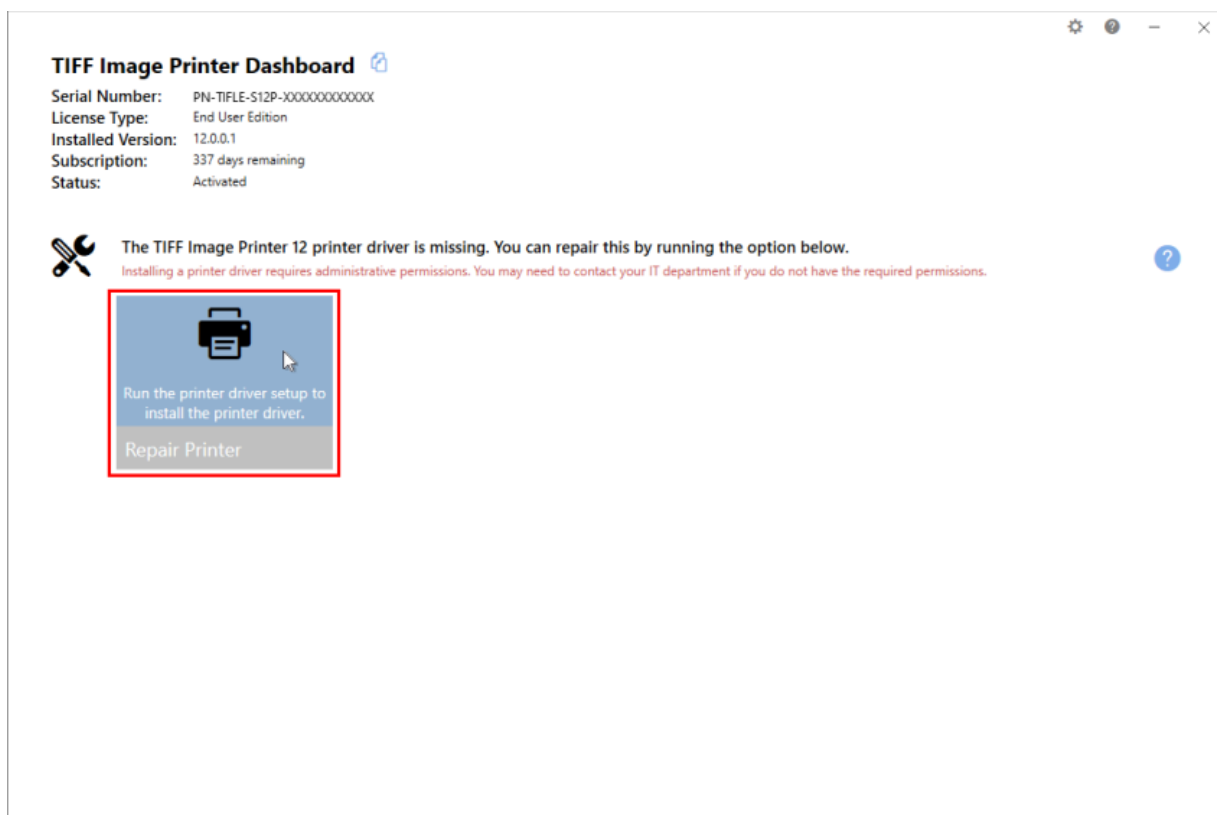


### Repair Missing Printer

If all copies of TIFF Image Printer have been deleted from *Devices and Printers*, you will see the message below when you launch the **Dashboard** indicating that the TIFF Image Printer 12 printer driver is missing. You are given the option to repair the missing printer driver by installing it again without having to reinstall the software completely. Select **"Run the printer driver setup to install the printer driver"** in order to repair the missing printer.

**NOTE:** Installing a printer driver requires administrative permissions. See [Printer Management and User Permissions](#) for details on which actions you can do and how to run the TIFF Image Printer Dashboard as an administrator to perform this task. You may need to contact your IT department if you do not have the required permissions.

If the repair printer function does not work, please contact PEERNET support at [support@peernet.com](mailto:support@peernet.com) for further assistance.



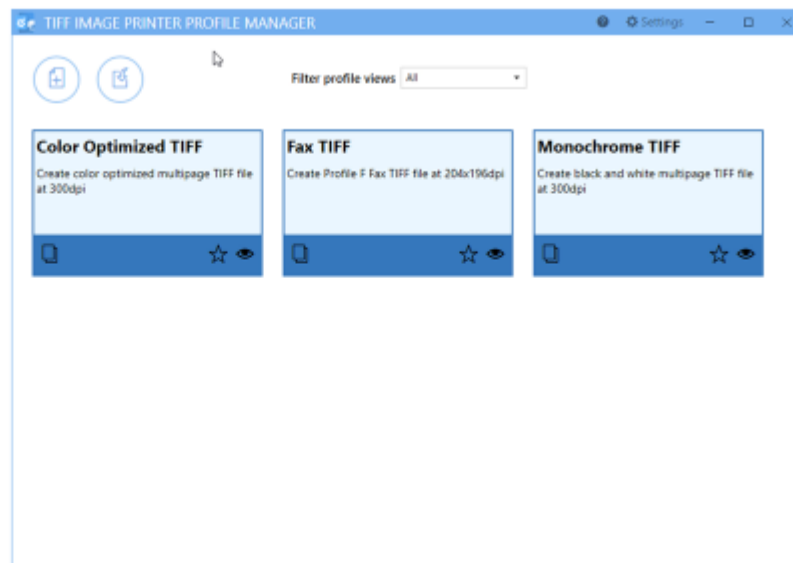


## Profile Manager

This section contains technical documentation on using and creating profiles in the **Profile Manager** utility, as well as covering the different settings in each property tab found in the [profile editing view](#). For step-by-step instructions demonstrating how to use these property tabs to enable and configure specific settings offered by TIFF Image Printer, see the [Working with TIFF Image Printer](#) section.

TIFF Image Printer uses Profiles, which are a group of settings, to create the output image you want. Personal profiles are created and edited through the **Profile Manager** utility. A personal profile is only available to the user who created it. Users can select their default profile either using the [Printer Management](#) utility or on the fly during the printing process on the Save As dialog.

Personal profiles can also be converted to a shared profile. Promoting a personal profile to a shared profile allows the profile to be used by all users on the computer. See [Create a Shared Profile](#) topic to learn how to share a profile.



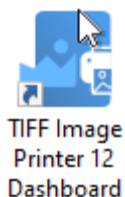
## TIFF Image Printer Profile Manager Overview

*Click the image above to watch the video tutorial.*

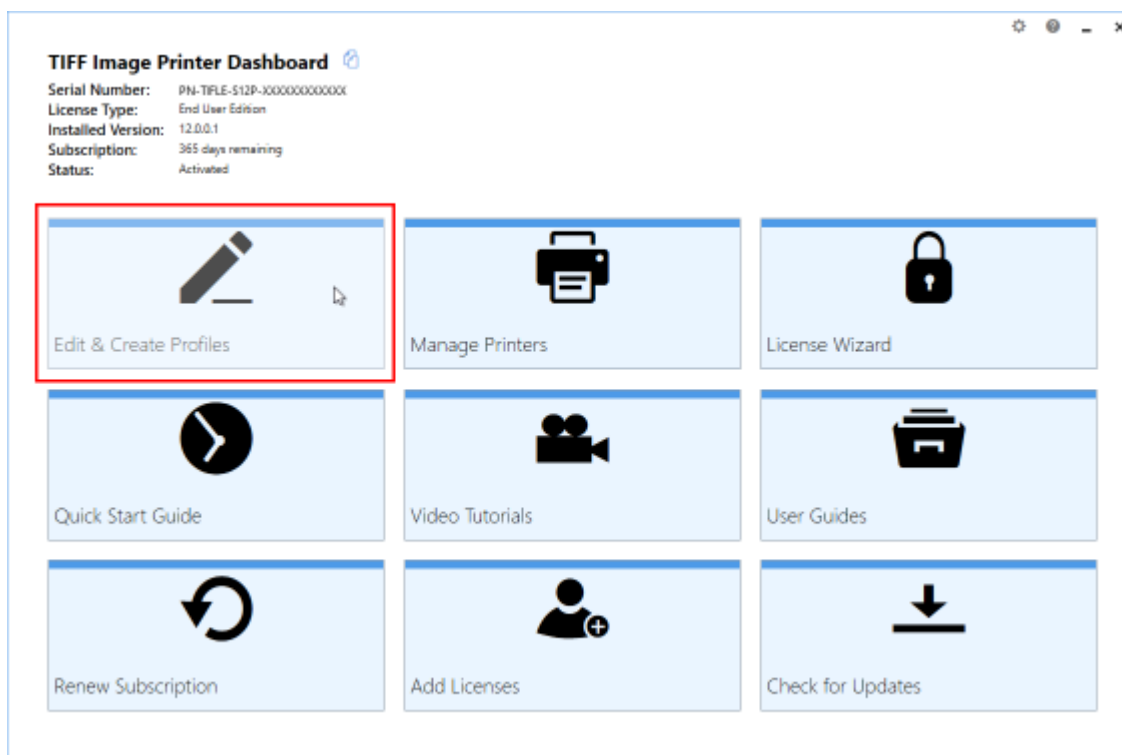
## Profile Manager

To launch **Profile Manager**:

1. Begin by opening the **Dashboard** (double-click the TIFF Image Printer icon on your desktop or select TIFF Image Printer 12 from the Start menu).



2. Select "Edit & Create Profiles" to open **Profile Manager**.

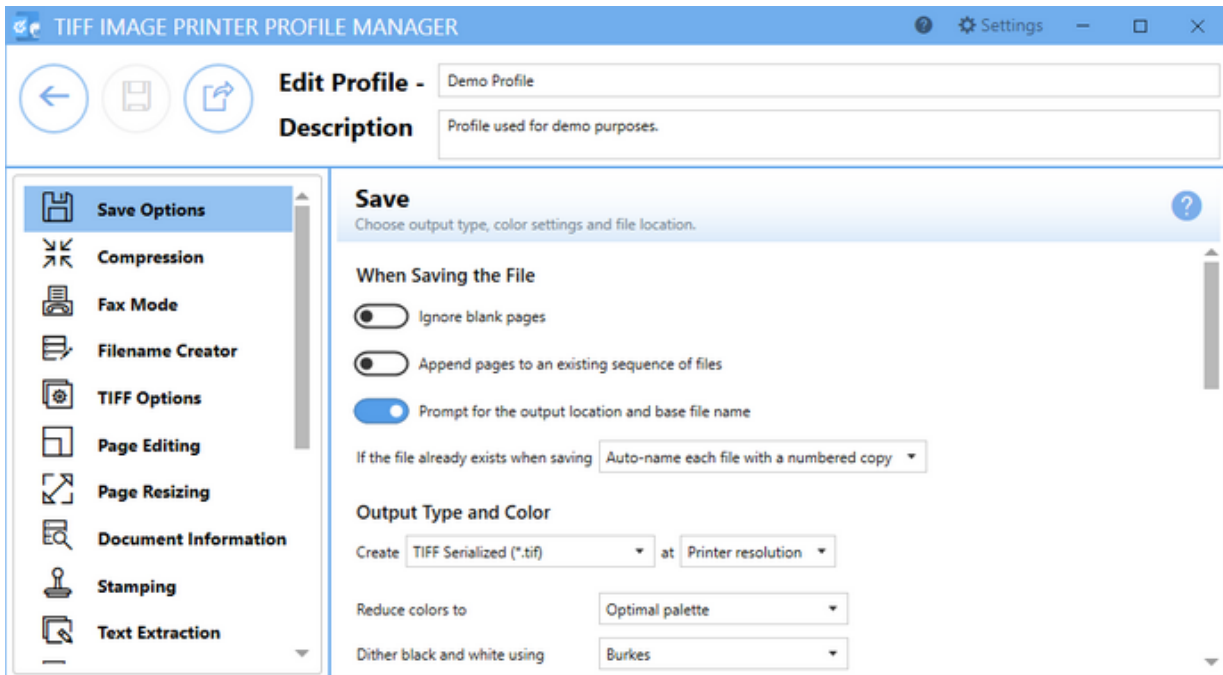


On launch, **Profile Manager** will show you all of the existing profiles. If TIFF Image Printer has just been installed, only the system profiles that come with the printer will be present. TIFF Image Printer comes with system profiles: Color Optimized TIFF, Monochrome TIFF, Fax TIFF, and Serialized Color Optimized TIFF.



## Save Options

The **Save Options** tab holds all of the most frequently used settings. On this tab you can choose output type, color settings and file location.



## When Saving the File

### When Saving the File

☐ Ignore blank pages

☐ Append pages to an existing file

☒ Prompt for the output location and base file name

If the file already exists when saving

## Ignore blank pages

By default this setting is disabled. Enabling this setting means that blank pages will be omitted from the output file.

**Append pages to an existing file / Appending pages to an existing sequence of files**

By default this setting is disabled. Enabling this setting means new files, of the same base file name and saved to the same output folder, will be appended to an existing file or existing sequence. Appending pages to an existing file applies to multipaged file formats where you are merging multiple documents into a single file. Appending pages to an existing sequence of files applied to serialized file formats where you want to create a single file for each page of your document.

See Also: [Appending Multiple Files Into a Single File](#)

**Prompt for the output location and base file name**

By default this setting is enabled. Disabling this setting means that you will not be prompted with the Save As dialog to choose where you want save the output file after each print. When disabling prompting, it is important to consider how to handle overwrite situations.

TIFF Image Printer offers three options for "If the file already exists when saving":

1. Auto-name each file with a numbered copy (default)
2. Show prompt to let me choose my action
3. Always overwrite the existing file (Warning! This option means that if a file of the same name already exists, it will be replaced by the new file and no warning dialog will be shown).

See Also: [Save Files Without Prompting](#)

## Output Type and Color

**Output Type and Color**

Create TIFF Serialized (\*.tif) ▼ at Printer resolution ▼

Reduce colors to Optimal palette ▼

Dither black and white using Burkes ▼

☒ Use antialiasing to smooth lines, text and images

### Output Type

TIFF Image Printer can create two output types: TIFF Multipaged (\*.tif) and TIFF Serialized (\*.tif).

See Also: [Change Output Type](#)

### Resolution

This setting specifies the print resolution, or DPI (Dots Per Inch) of the output file. By default, resolution is set to Printer Resolution. This means that the print resolution of your output file will match the printing resolution used when your printing application renders your information and sends it to TIFF Image Printer. The default printing resolution is 300 DPI. You can change the printing resolution of your printing application through either [Printer Management](#) or on the Printer Properties screen within your printing application. If you need to change the resolution of your output file, we recommend changing the resolution used when your printing application renders your information, rather than changing the resolution through the profile.

Higher resolutions produce graphic images that are sharper and show finer detail, but are also very large if they are not compressed. Low-resolution images are not of as high a quality, but they take up less disk space. In general, TIFF Image Printer will perform a readable text conversion at any resolution. If your document contains graphics, you may want to use one of the higher resolution settings.

## Color Reduction

By default, color reduction is set to reduce colors to optimal palette. Several color reduction options are available for reducing the number of colors in the output files. In general, the fewer the colors in an image, the smaller the file size. If the output file type chosen does not support that color mode, the closest match is found.

- *Optimal palette* - Reduces each page down to the smallest number of colors needed to represent the page. Each page is counted separately, meaning the end result can be a file containing a mix of black and white, greyscale and color pages. If your pages are mixed black and white with occasional color, this method will often result in the smallest size file.
- *Black and white* - All pages are reduced to monochrome, or black and white. This color reduction method uses the Dithering Method chosen to smooth the appearance of the text and information on the page.
- *Greyscale* - Pages are reduced to a greyscale image composed exclusively of shades of neutral gray.
- *256 color palette* - Reduce each page down to 256 colors.
- *16 color palette* - Reduce each page down to 16 colors.
- *Optimal palette, maximum 256 colors* - Reduces each page down to the smallest number of colors needed to represent the page. Any color pages that result in more than 256 colors are reduced to 256 colors.
- *Optimal palette, maximum 16 colors* - Reduces each page down to the smallest number of colors needed to represent the page. Any color pages that result in more than 16 colors are reduced to 16 colors.
- *Optimal palette, using 32-bit color* - Reduces each page down to the smallest number of colors. Uses a 32-bit palette to improve the appearance of single color gradients in final images when applying color reduction.
- *None* - No color reduction is done.

## Dithering Method

By default, dithering method is set to Burkes. Dithering greatly enhances the appearance of color images that have been reduced to black and white.

Because the same dithering method may produce different results in different situations, it is best to experiment when trying to determine the best dithering method for a given source image.



*Original image*



*Floyd-Steinberg*



*Burkes*



*Bayer*



*Halftone*

### **Use antialiasing to smooth lines, text and images**

Antialiasing makes text, lines and images smoother and more legible. By default this setting is enabled. It is not used when reducing the image to black and white or when fax mode is enabled for black and white fax images.

See Also: [Reduce TIFF File Size](#)



## Output Location

### Output Location

Output folder



Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

### Output folder

This is the default directory for saving your output files.

When [prompting](#) is enabled, and this field blank, TIFF Image Printer will default to the last used folder, if this is set in the [printer options](#). If there is no last used folder, the My Documents folder is used. When prompting is disabled, the My Documents folder is always used.

Select the folder icon to browse to your desired folder location or enter in the absolute path (for example, C:\My Files) of the directory to be used. If the path entered does not exist, an error message will appear giving you the option to create the new folder now or wait to create the new folder during conversion.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the output folder, as explained in [Using Environment Variables and Registry Keys](#).

See Also: [Change Where the Files are Saved](#)

## Output File Name

### Output File Name

Base file name

Leave this blank to use the print job document name.



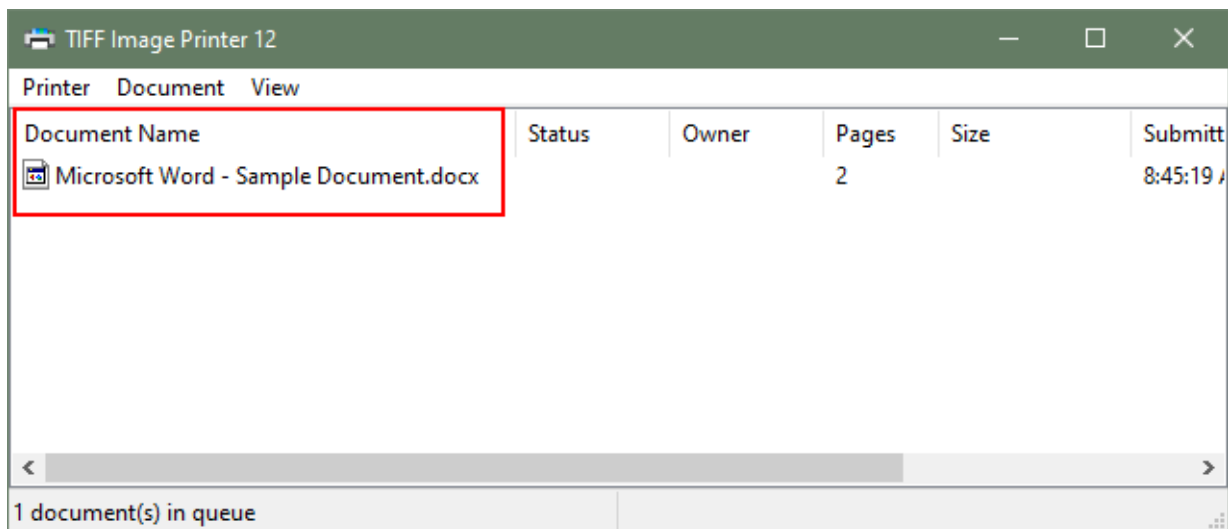
- ☒ Remove product extension from the print job document name
- ☒ Remove product name from the print job document name
- ☐ Remove or replace text in the print job document name

Double click a cell in the 'Replace' column to add text from the print job document name that you want to change or replace. Leave the cell next to it in the 'With' column empty to remove the text, or enter new text to replace it. The X when editing will clear the cell contents.

REPLACE	WITH	REPLACE ACTION
		First ▾
		First ▾
		First ▾

### Base file name

This is the base filename for your output file. If this field is empty, the document name associated with the print job as submitted to the print queue will be used as the filename.



The base filename excludes any directory path and file extension. If you want your files to always use the same filename, enter that name here. Select the folder icon to browse to an existing filename on your computer.

Advanced file naming options are available on the [Filename Creator tab](#).

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the base filename, as explained in [Using Environment Variables and Registry Keys](#).

### Remove product extension from print job document name

By default this setting is enabled. TIFF Image Printer automatically appends the appropriate file format extension of the new output file type in addition to any original extension that was part of the print job document name. When enabled, this setting removes any extension from the print job document name. Disabling this setting means that, in addition to the output file extension, the file extension from the original print job document name will also be maintained in the output filename.

### Remove product name from print job document name

By default this setting is enabled. Some commonly used applications precede the print job document name with the name of their product and a hyphen (-). This option will remove the text up to the hyphen and a trailing space. It also looks for and removes the trailing text '- Notepad' from documents

printed from Notepad. Disabling this setting means that the product name from the print job will be maintained in the output file name.

### Remove or replace text in print job document name

By default this setting is disabled. When enabled, this setting allows you specify up to three pieces of custom text that can be removed or replaced in the print job document name.

If any of the strings entered in the **Replace** column are found in the print job document name, they will be replaced with the corresponding text in the **With** column. When replacing text you can choose to replace only the **First** occurrence of the text, the **Last** occurrence of the text or **All** occurrences of the text in the print job document name.

Leave the **With** column text empty to remove that string, or enter different text to replace it. The string match is case sensitive, which means it must be an exact match of upper case and lowercase letters. The Replace text cannot be an empty string when there is corresponding With text, but you can enter a single space or other special characters.

The example below will remove the first occurrence of the string 'ABC Printing' from the print job document name.

REPLACE	WITH	REPLACE ACTION
ABC Printing		First ▼
		First ▼
		First ▼

This example shows how to replace all instances of a space character in the file name with an underscore '\_' character. The space in the **Replace** column is shown selected for visibility below. Multiple blanks in a row will be replaced with the same amount of underscore characters.

REPLACE	WITH	REPLACE ACTION
<input type="text" value=""/>	-	All ▼
		First ▼
		First ▼

## File Splitting

### File Splitting

☐ Start a new file after  + - MB

☐ Start a new file after  + - pages

File splitting is only available for multipaged file formats (ex. TIFF Multipaged)

### Split after size

By default this setting is disabled. Enabling this setting means your file will be split into a new file based on a size threshold. The file will be split when the size exceeds the threshold. When file splitting is enabled, the file splitting naming scheme is always used to name each file in the sequence. File size and page count splitting can be used together.

### Split every N pages

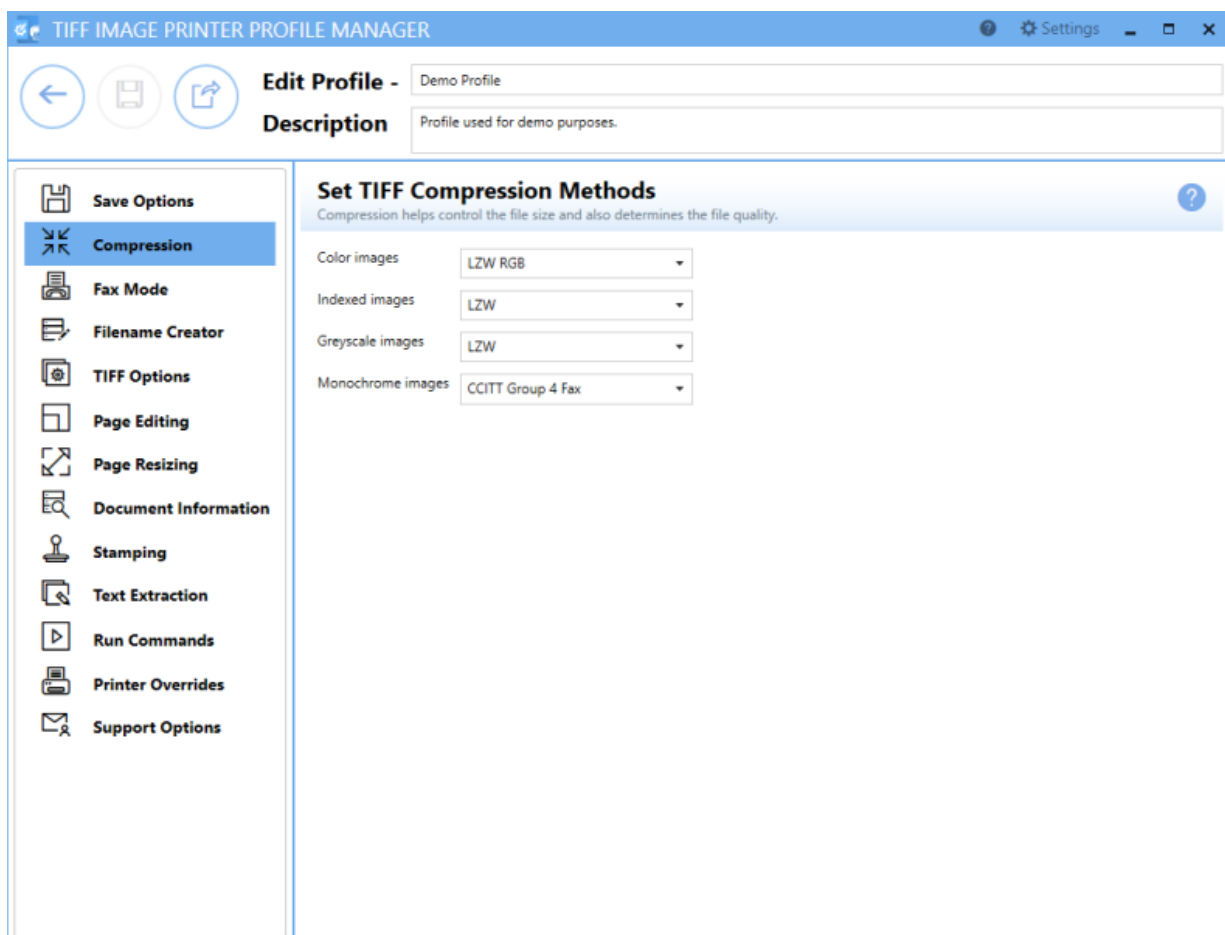
By default this setting is disabled. Enabling this setting means your file will be split into a new file based on the page count. When file splitting is enabled, the file splitting naming scheme is always used to name each file in the sequence. File size and page count splitting can be used together.

See Also: [Automatically Split Files](#)

## Compression

Changing the compression options can have a large impact on the size of the file but care must be taken when choosing compression methods as the file contents can also determine how well the chosen compression method will work. For instance, full color publication from Microsoft® Publisher or similar will compress better using JPEG compression than using Packbits because JPEG compression was designed to compress images with lots of color variation while Packbits works best with runs of solid colors in the image.

## TIFF Compression



The default compression methods chosen for each color type will often give the smallest TIFF image. When changing compression methods, be sure that you are changing the correct compression field in relation to the color reduction option selected on the Save Options tab.

Typically you will only need to change the compression method if you have been instructed to do so by a publisher or archiving software. For example, CCITT Group 4 Fax compression for monochrome images is a standard compression required by archiving systems.

**Color Images** - Used when Color Reduction on the Save Options tab is set to Reduce Color to Optimal Palette and there are more than 256 colors in the document, or when Color Reduction on the Save Options tab is set to None.

- Uncompressed RGB
- Uncompressed CMYK
- JPEG (Low, Medium Low, Medium, Medium High, High)
- Packbits RGB
- Packbits CMYK
- LZW RGB
- LZW CMYK

**Indexed Images** - Used when Color Reduction on the Save Options tab is set to Reduce Colors to Optimal Palette and there is less than 256 colors in the document.

- JPEG (Low, Medium Low, Medium, Medium High, High)
- Packbits
- LZW
- None

**Greyscale Images** - Used when Color Reduction on the Save Options tab is set to Reduce Colors to Optimal Palette and there is only greyscale colors in the document, or when Color Reduction on the Save Options tab is set to *Reduce Colors to Greyscale*.

- JPEG (Low, Medium Low, Medium, Medium High, High)
- Packbits
- LZW
- None

**Monochrome Images** - Used when Color Reduction on the Save Options tab is set to *Reduce Colors to Black and White*, or when Color Reduction on the Save Options tab is set to *Reduce Colors to Optimal Palette* and there are only 2 colors, black and white, in the document. Also used when fax mode is enabled on the Fax Mode tab.

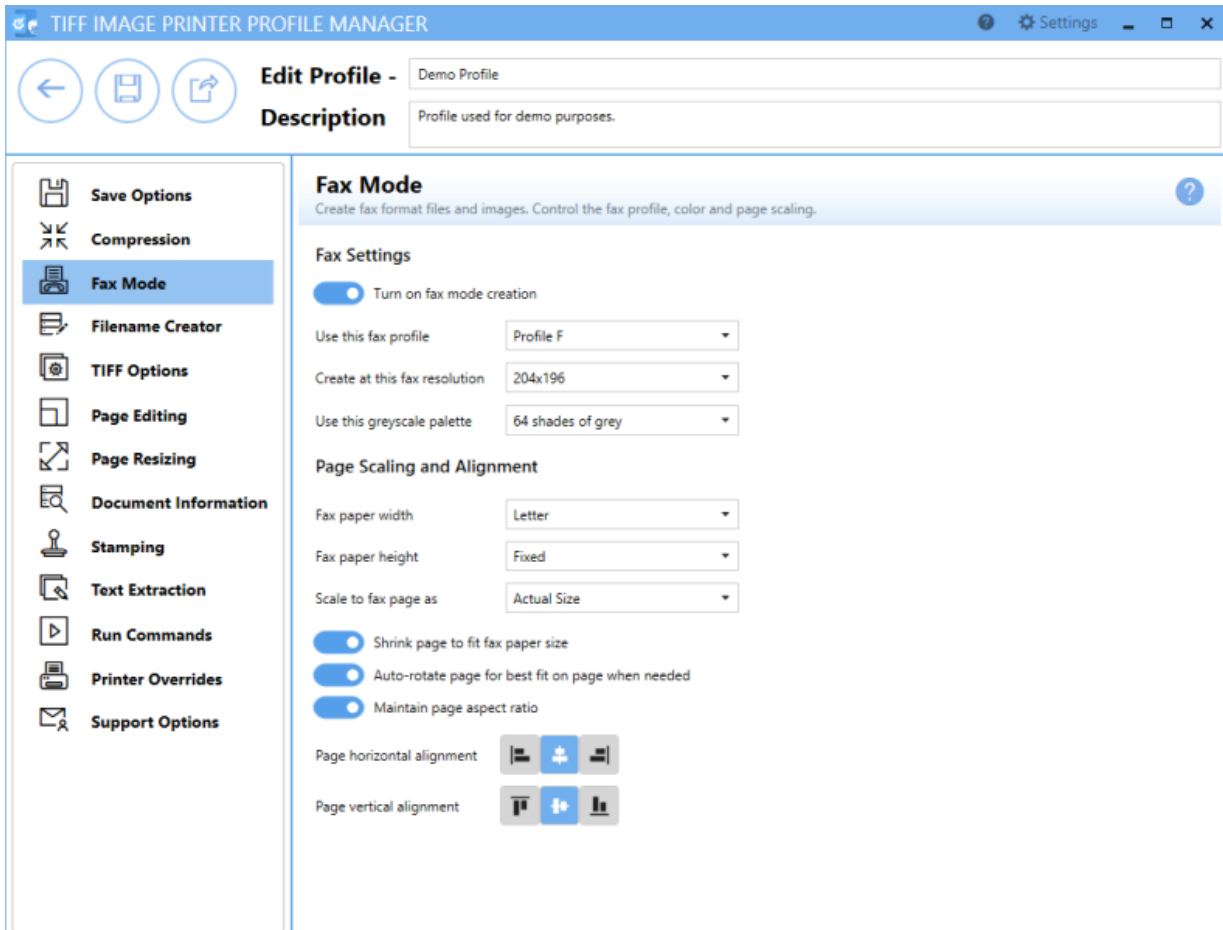
- CCITT Group 4 Fax
- CCITT Group 3 2D Fax
- CCITT Group 3 1D Fax
- CCITT Modified Huffman
- LZW
- Packbits
- None

See Also: [Reduce TIFF File Size](#)



## Fax Mode

The Fax Mode tab holds all settings used to create fax-format images and files. On this tab you can control the fax profile, create your fax in various paper size, and determine how the fax image is scaled and aligned on the page.



See Also: [Create Fax Format Files](#)

## Fax Settings

### Enable fax mode creation

By default this setting is disabled. Enabling this setting means TIFF Image Printer will create faxable files.

## Fax profile

Select a fax format profile for your output file.

- Profile F will create standard monochrome faxes.
- Profile S will create simplified monochrome faxes.
- Profile C will create color faxes.

## Fax resolution

Different fax profiles allow different fax resolutions, with Profile F having the most.

Fax Resolution	Profiles S	Profile F	Profile C
100x100		✓	✓
200x100	✓	✓	
200x200	✓	✓	✓
204x98	✓	✓	
204x196	✓	✓	
204x391		✓	
300x300		✓	✓
300x600		✓	
400x400		✓	✓
400x800		✓	
408x391		✓	
600x600		✓	✓
600x1200		✓	
1200x1200		✓	✓

## Greyscale palette

By default, the greyscale palette is set to *64 shades of grey* to reduce the size of the fax and eliminate low intensity colors used normally to shape areas. There is also the option to allow fax mode to use the full *256 shades of grey* when dithering to black and white.

## Page Scaling and Alignment

### Fax paper width

Sets the width of the fax paper to be used when creating the faxable image. If you choose one of the paper sizes: Letter, Legal, A4, B4, or A3, the width of your original document will be scaled to fit this selection, based on the scaling options chosen. If you choose Auto, the original paper size of your source document will be used to find the closed match of the five paper sizes and that size will be used.

### Fax paper height

Sets the height of the fax image.

- *Fixed fax paper height* will limit the image length based on the *Fax Paper Width* chosen above. Any scaling required is done based on the scaling options chosen.
- *Variable fax paper height* will vary the image length depending on the size of the document sent to the printer and its resulting size after being scaled to fit the chosen *Fax Paper Width*.

### Fax page scaling

Determines how the original information is placed on the fax sized image.

- *Fit to Page* will scale the original page to fit on the fax paper size chosen, scaling up to a larger page size or down to a smaller page size as needed. Pages will maintain their aspect ratio if **Maintain page aspect ratio** is enabled.
- *Actual Size* keeps the original information at the same size. Any part that does not fit on the fax paper is cut off. If **Shrink page to fit fax paper size** is enabled, then you also have the choice of maintaining the aspect ratio.

### Shrink page to fit fax paper size

By default this setting is enabled. Scales the image down to fit the fax paper if the original image is larger.

### **Auto-rotate page to best fit on page when needed**

By default this setting is enabled. The original image is rotated to fit on the fax-sized paper if the rotated image will fit without having to scale the image.

### **Maintain page aspect ratio**

By default this setting is enabled. Prevents distortion when scaling larger or smaller pages. When this option is enabled, the height and width of the page change in relation to one another.

### **Page horizontal alignment**

By default, horizontal alignment is set to center. Choose how to horizontally align the incoming image on the fax-sized paper.

- *Left* will align the left side of the image to the left side of the fax paper.
- *Center* will center the image in the horizontal middle of the fax paper.
- *Right* will align the right side of the image to the right side of the fax paper.

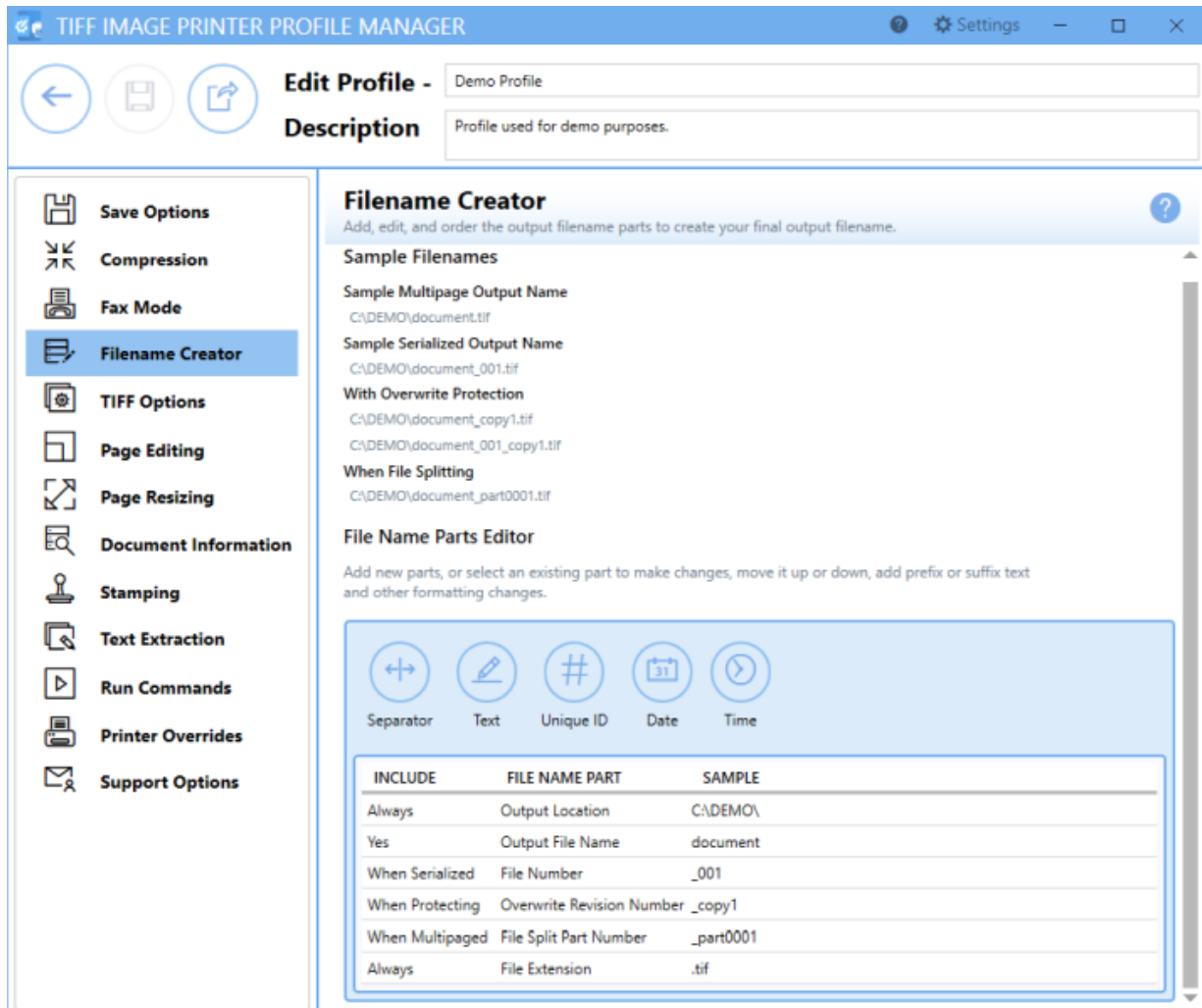
### **Page vertical alignment**

By default, horizontal alignment is set to center. Choose how to vertically align the incoming image on the fax-sized paper.

- *Top* will align the top of the image to the top of the fax paper.
- *Center* will center the image in the vertical middle of the fax paper.
- *Bottom* will align the bottom of the image to the bottom of the fax paper.

## Filename Creator

The Filename Creator tab allow you to add, edit, and reorder output filename parts to automatically create unique filenames for your TIFF Image Printer output files.



## Using File Name Parts Editor

The File Name Parts Editor allows users to add new parts, select an existing part to make changes, move parts up or down, add prefix or suffix text, and make other formatting changes.

- *Add new parts* - Select a button across the top to add a new file name part.

- *Select an existing part to make changes* - Hover over file name parts until the desired file name part is highlighted, and click to edit.
- *Hide details of selected part* - Click the left-most close arrow to hide details of selected file name part. Selecting another file name part will also close the previous file name part.
- *Move parts up or down* - Click the up and down arrows from within the edit window of a file name part to re-order file name parts. There are some file name parts which cannot be reordered.
- *Delete parts* - Click the trash bin to delete unwanted file name parts. There are some file name parts which are required and cannot be deleted.

## File Name Parts

### Output Location

This is the default directory for saving your output files. If this field is empty, the My Documents folder is used as the default directory. Select the folder icon to browse to your desired folder location or enter in the absolute path (for example, C:\My Files) of the directory to be used. If the path entered does not exist, an error message will appear giving you the option to create the new folder now or wait to create the new folder during conversion.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the output folder, as explained in [Using Environment Variables and Registry Keys](#).

Any changes made to this file name part will be reflected on the [Save Options tab](#).

The screenshot shows the 'Edit the Output Location' section of the TIFF Image Printer configuration window. At the top, there are five icons: Separator, Text, Unique ID, Date, and Time. Below these is a table with three columns: INCLUDE, FILE NAME PART, and SAMPLE. The 'INCLUDE' column has a value of 'Always'. The 'FILE NAME PART' column has a value of 'Output Location'. The 'SAMPLE' column has a value of 'C:\DEMO\'. Below this table is a section titled 'Edit the Output Location' with a text box containing 'C:\DEMO\'. To the right of the text box is a folder icon. Below the text box is a note: 'Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.' Below this section is a table with five rows and three columns: INCLUDE, FILE NAME PART, and SAMPLE.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

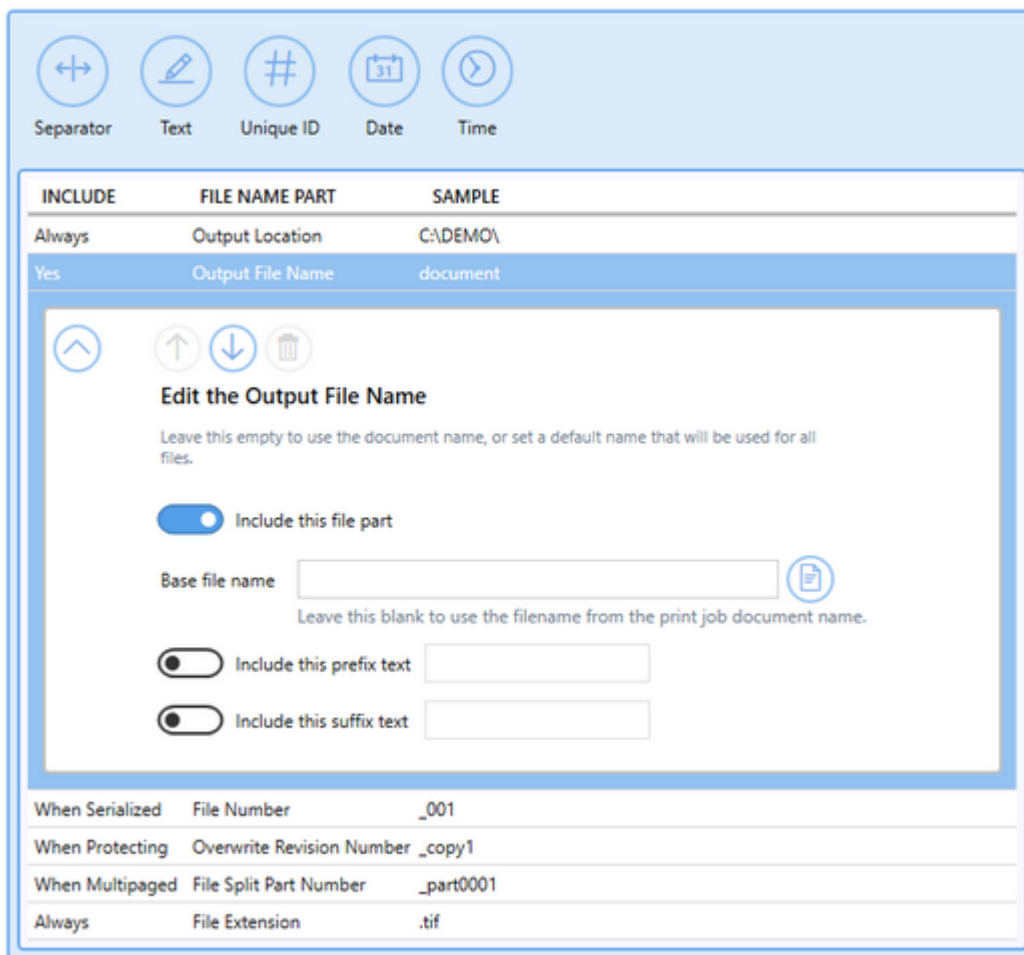
See Also: [Create a Custom Filename](#)

## Output File Name

This is the base filename for your output file. When empty, the [document name associated with the print job](#) is used as the base filename. If you want your images to always use the same filename, enter that name here. Do not include any directory path or file extension information. You can use the folder icon to browse to an existing filename on your computer.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the base filename, as explained in [Using Environment Variables and Registry Keys](#).

Any changes made to this file name part will be reflected on the [Save Options tab](#).




INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document

**Edit the Output File Name**

Leave this empty to use the document name, or set a default name that will be used for all files.

☒ Include this file part

Base file name  

Leave this blank to use the filename from the print job document name.

☐ Include this prefix text

☐ Include this suffix text


When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif


See Also: [Create a Custom Filename](#)


## File Number


Used when creating [serialized output](#) when appending additional files to an existing sequence. This is the number of the current file in the sequence. There is the option to add or remove prefix/suffix text or increase/decrease the number of padding zeros. You have the option to do not include this file part, but only exclude this file part if you know you are only converting 1 page documents. File numbering is necessary when creating serialized output if you are converting documents with more than 1 page.




  
Separator


  
Text




  
Unique ID

  
Date

  
Time

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
When Serialized	File Number	_001





**Edit the File Number**

Used when creating serialized output when appending additional files to an existing sequence. This is the number of the current file in the sequence.

☒ Include this file part

Pad with zeroes to a minimum width of    characters

☒ Include this prefix text

☐ Include this suffix text

When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

## Overwrite Revision Number

Used when [prompting is disabled and override protection is enabled](#). There is the option to add or remove prefix/suffix text or increase/decrease the number of padding zeros.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1

**Edit the Overwrite Revision Number**

When override protection is on, this part formats the text added to create a unique file name.

Pad with zeroes to a minimum width of    characters

☒ Include this prefix text

☒ Include this suffix text

When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

### File Split Part Number

Used when [automatically splitting](#) multipaged files by file sizes or number of pages. There is the option to add or remove prefix/suffix text or increase/decrease the number of padding zeros.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001

**Edit the File Split Part Number**

When splitting multipaged files by size or pages is on, this file name part is added to the file name.

Pad with zeroes to a minimum width of  + - characters

☒ Include this prefix text

☒ Include this suffix text

Always	File Extension	.tif
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## File Extension

By default, the file extension of the output file will match the [output type selected](#). There is the option to replace the default file extension with a custom extension.

Separator

Text

Unique ID

Date

Time

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

Edit the File Extension

Use a custom file extension or leave blank to use the default output file type extension.

Replace default file extension with

Separator

Add a path separator to a filename. Useful for creating dynamic output folders on the fly.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
Yes	Path Separator	\
<div><div>↑ ↓ 🗑</div><h3>Edit the Path Separator</h3><p>Add a path separator to your filename, useful for creating dynamic output folders on the fly.</p><div><input checked="" type="checkbox"/> Include this file part</div></div>		
Yes	Custom Text	DEMO
When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

See Also: [Create Dynamic Output Folders](#)

## Text

Add custom text as part of a filename or directory path. There is the option to enter a custom text string and add or remove prefix/suffix text.

↔

Separator

✎

Text

#

Unique ID

📅

Date

🕒

Time

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
Yes	Path Separator	\
Yes	Custom Text	DEMO

⬆

⬆ ⬇ ⬇

### Edit the Custom Text

Add custom text as part of a file name or directory path.

☒ Include this file part

Custom text string

☐ Include this prefix text

☐ Include this suffix text

When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

See Also: [Create Custom Filename with Custom Text](#)

## Unique ID - GUID

Insert a Globally Unique Identifier (GUID) as part of a file name or directory path.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
Yes	File GUID	631a7f85847543b29634d48e9ba3f3b5

**Edit the File GUID**

Inserts a Globally Unique Identifier (GUID) as part of a file name or directory path.

☒ Include this file part

When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

See Also: [Create Custom Filename with Unique File ID](#)

## Unique ID - Job ID

Insert a Job ID as part of a file name or directory path.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\DEMO\
Yes	Output File Name	document
Yes	JobID	1234

### Edit the JobID

Insert an auto-incrementing number as part of the file name.

☒ Include this file part

Pad with zeroes to a minimum width of  characters

☒ Include this prefix text

☒ Include this suffix text

When Serialized	File Number	_001
When Protecting	Overwrite Revision Number	_copy1
When Multipaged	File Split Part Number	_part0001
Always	File Extension	.tif

*See Also:* [Create Custom Filename with Unique File ID](#)

**Date**

- *Add Year* - Insert the 4-digit year into a file name or directory path. There is the option to add or remove prefix/suffix text.
- *Add Month* - Insert the 2-digit minute (01 to 12) into a file name or directory path. There is the option to add or remove prefix/suffix text.
- *Add Day* - Insert the 2-digit day (01 to 31) into a file name or directory path. There is the option to add or remove prefix/suffix text.



Yes	Month	01
Yes	Day	01

## Time

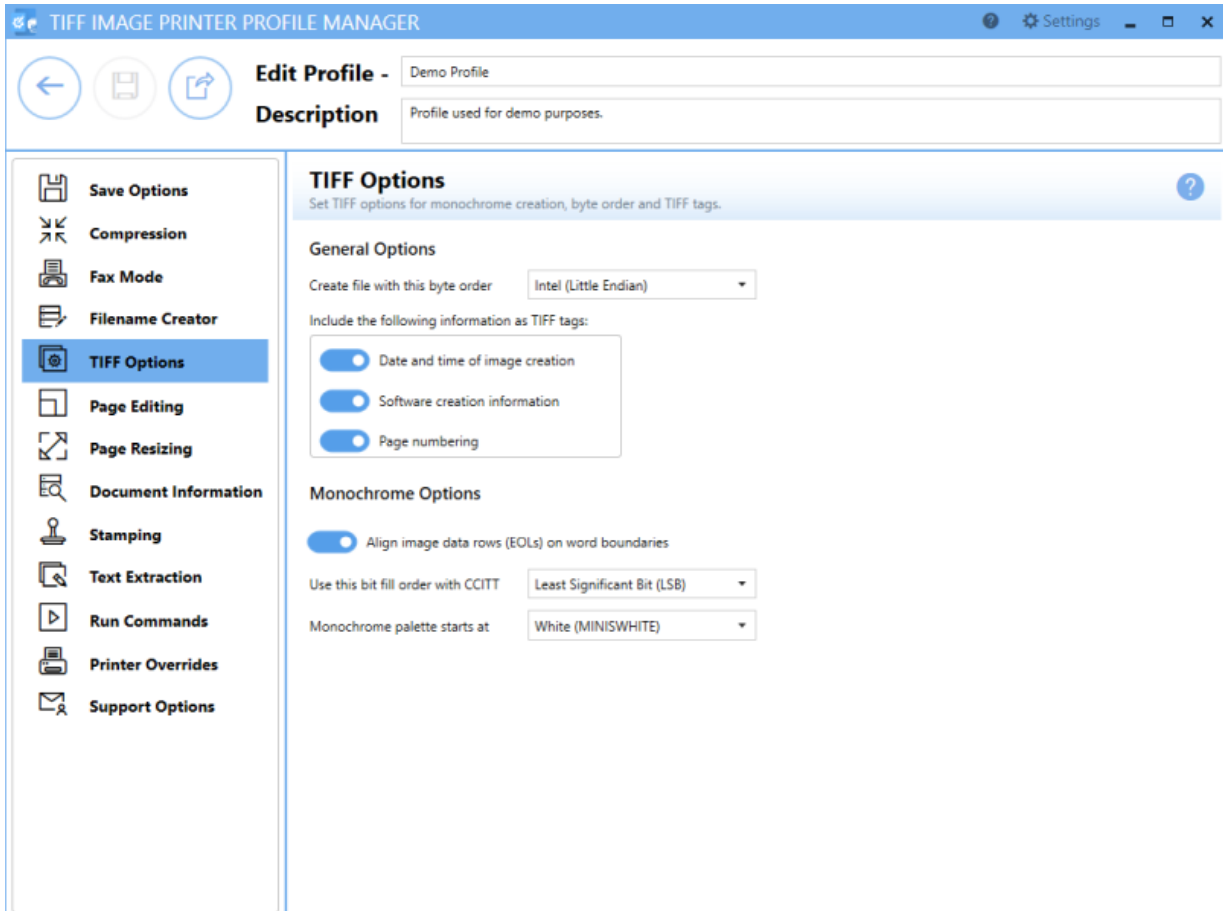
- *Add Hour* - Insert the 2-digit hour (00 to 23) into a file name or directory path. There is the option to add or remove prefix/suffix text.
- *Add Minute* - Insert the 2-digit minute (00 to 59) into a file name or directory path. There is the option to add or remove prefix/suffix text.
- *Add Second* - Insert the 2-digit second (00 to 59) into a file name or directory path. There is the option to add or remove prefix/suffix text.

Yes	Minute	30
Yes	Second	45

*See Also:* [Create Custom Filename with Date and Time](#)

### TIFF Options

The TIFF Options tab holds all TIFF specific settings including byte order, TIFF tags, and monochrome options.



### General Options

#### Byte Order

By default, the byte order is set to use *Intel* (Little Endian). There is also the option to use *Motorola* (Big Endian) byte order.

#### TIFF tags

By default, all TIFF tags are enabled. These settings mean that the associated information will be stored as tags in the output TIFF file.

- *Date and time of image creation*
- *Software creation information*
- *Page numbering*

## Monochrome Options

### Align image data rows (EOLs) on word boundaries

By default this setting is enabled. Aligns rows of CCITT Group 3 1D and 2D image data on word boundaries. This option only applies if the Monochrome compression option on the [Compression tab](#) is set to use either CCITT Group 3 2D Fax or CCITT Group 3 1D Fax.

### Fill order with CCITT

Used to specify the bit order in which the image data in a CCITT compressed TIFF file should be stored. The bit fill order can either be *Least Significant Bit (LSB) to Most Significant Bit (MSB)* or *Most Significant Bit (MSB) to Least Significant Bit (LSB)*.

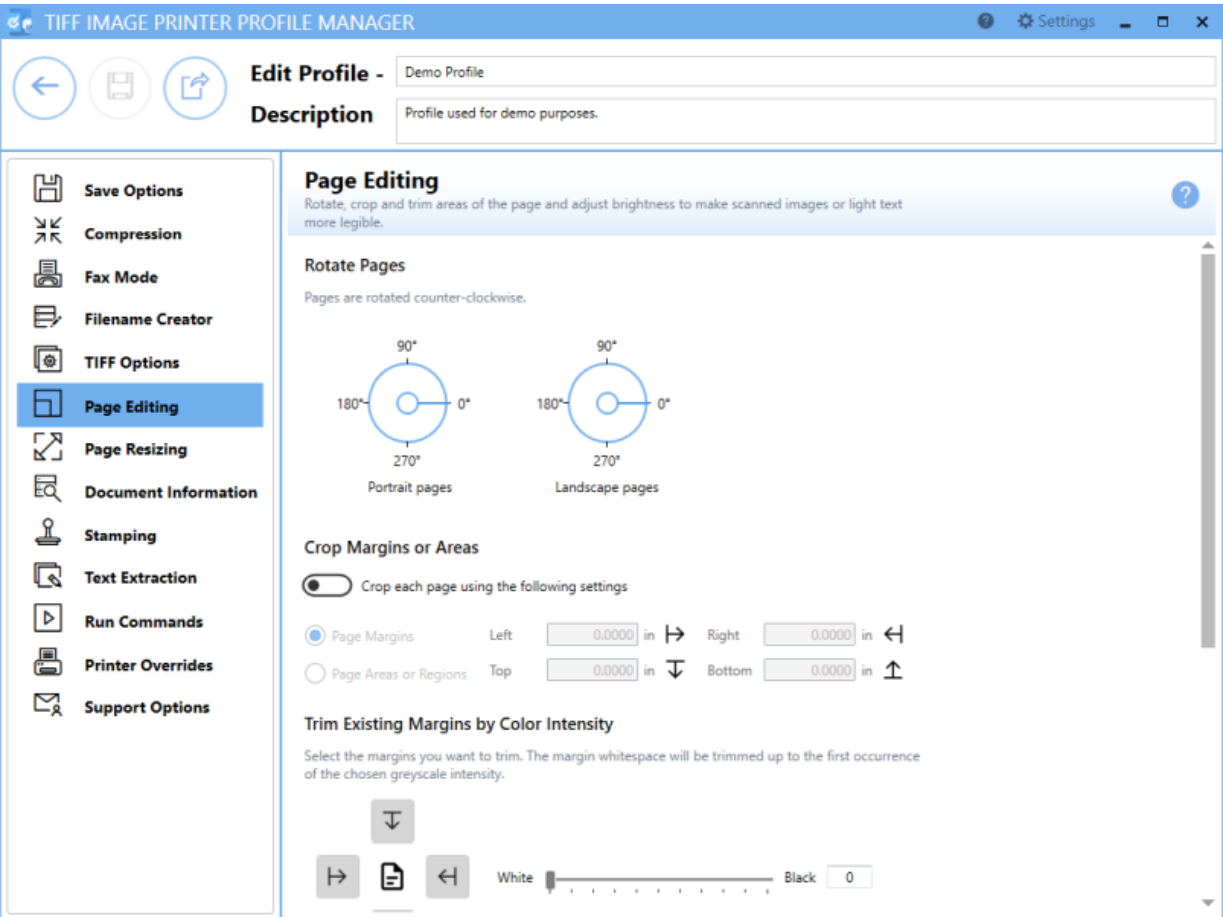
### Monochrome palette

Used to specify the order of the black and white palette entries for a monochrome TIFF file. A monochrome TIFF file has a palette of exactly two colors - white and black.

- *White (MINISWHITE)* - The palette entry for 0 is white. This will give you black text on a white background.
- *Black (MINISBLACK)* - The palette entry for 0 is black. This will give you a reverse, or inverted, effect of white text on a black background.

Page Editing

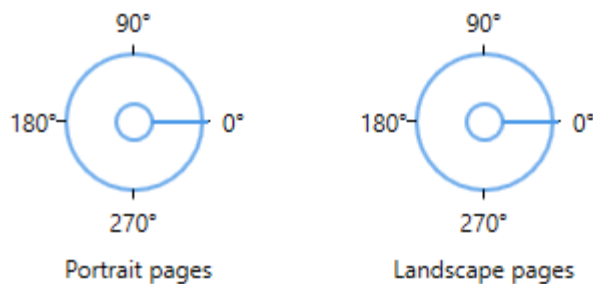
The Page Editing tab holds settings used to modify each page of the document, including rotate, crop and trim areas of the page, and adjust brightness to make scanned images or light text more legible.



## Rotate Pages

### Rotate Pages

Pages are rotated counter-clockwise.



Set any rotation options for the incoming pages before they are put into the output file. Rotation options can be set separately for Portrait and Landscape oriented pages.

Use the dials to select the degree of rotation for portrait and landscape oriented pages. All pages are rotated counter-clockwise. Pages can be rotated 0°, 90°, 180°, or 270°.

See Also: [Rotate Pages](#)

## Crop Margins or Areas

### Enable crop each page

By default this setting is disabled. Enabling this setting means TIFF Image Printer will crop each page using either Page Margins or Page Areas or Regions.

If any rotation is chosen, cropping is applied as if the page was not rotated. For example, rotating a portrait page 90° counter-clockwise and cropping a 1" margin from the Top, will crop a 1" margin off the left hand side of the rotated page, which was originally the top of the page.

## Page Margins

### Crop Margins or Areas



Crop each page using the following settings

☒ Page Margins
 Left  in Right  in

☐ Page Areas or Regions
 Top  in Bottom  in

Enter the desired measurements to crop margins of that width from the *Left*, *Top*, *Right*, or *Bottom* of the page. If all four fields are zero then no cropping is performed. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

See Also: [Crop Page Margins](#)

## Page Areas or Regions

### Crop Margins or Areas



Crop each page using the following settings

☐ Page Margins
 Left  in Width  in

☒ Page Areas or Regions
 Top  in Height  in

Opposite to Page Margins, cropping using Page Areas or Regions using the entered measurements to determine what area of the page to preserve.

Enter the desired measurement to crop out a section of the page.

- The *Left* and *Top* measurement are the starting points for your cropped area; the left and topmost edges of the preserved area.
- The *Width* and *Height* are the actual dimensions of the area you want to crop from the original page.

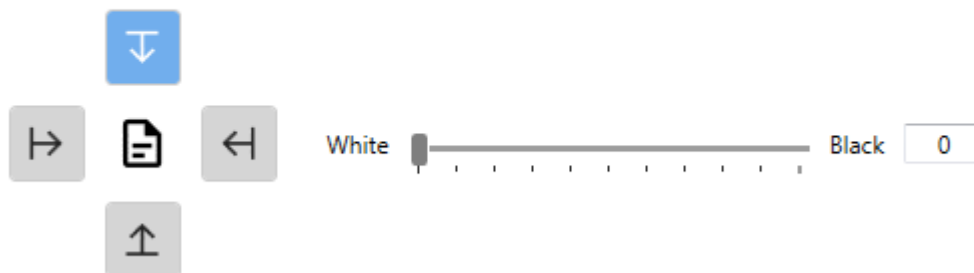
If all four fields are zero then no cropping is performed. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

See Also: [Crop Page Areas or Regions](#)

## Trim Existing Margins by Color Intensity

### Trim Existing Margins by Color Intensity

Select the margins you want to trim. The margin whitespace will be trimmed up to the first occurrence of the chosen greyscale intensity.



Trimming is similar to cropping. TIFF Image Printer will automatically remove all areas on the chosen sides (*Left, Right, Top* or *Bottom*) of the image that fall at or below the chosen intensity level.

The intensity level is used to decide what pixels get thrown away. Colors are converted to a greyscale palette, and then compared to the chosen intensity level. Trimming on any side stops as soon as a pixel is encountered that is greater the chosen level.

### Left/Right/Top/Bottom

Use the arrow buttons to select the side or sides of the document to be trimmed.

### Intensity

By default, intensity is set to White. Use the sliding scale or enter in the absolute value to set the intensity level desired. When the intensity is set all the way to the left on White(0), only pure white pixels will be removed. The higher the intensity, the more colors will be removed. If the intensity is set to

Black(100), the entire page will in effect be "trimmed", and the trimming operation is abandoned.

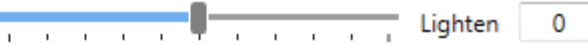
See Also: [Trim Existing Margins](#)


## Adjust Page Brightness

### Adjust Page Brightness

Lighten or darken the images and text on your pages to improve readability. Select the range of color intensity that the brightness adjustment affects.

☒ Lighten or darken each page with the following settings

Change page brightness      Darken  Lighten      0

Applies to this intensity range      Black  White  
0      253

### Enable lighten or darken each page with the following settings

By default this setting is disabled. Enabling this setting means TIFF Image Printer lighten or darken the images or text on your pages to improve readability. Darkening the page can help to make light colored text more readable, or, conversely, lightening a page can make a dark image more visible.

### Change page brightness

By default, page brightness is set in the middle. Use the sliding scale or enter in the absolute value to set the brightness desired.

### Applies to this intensity range

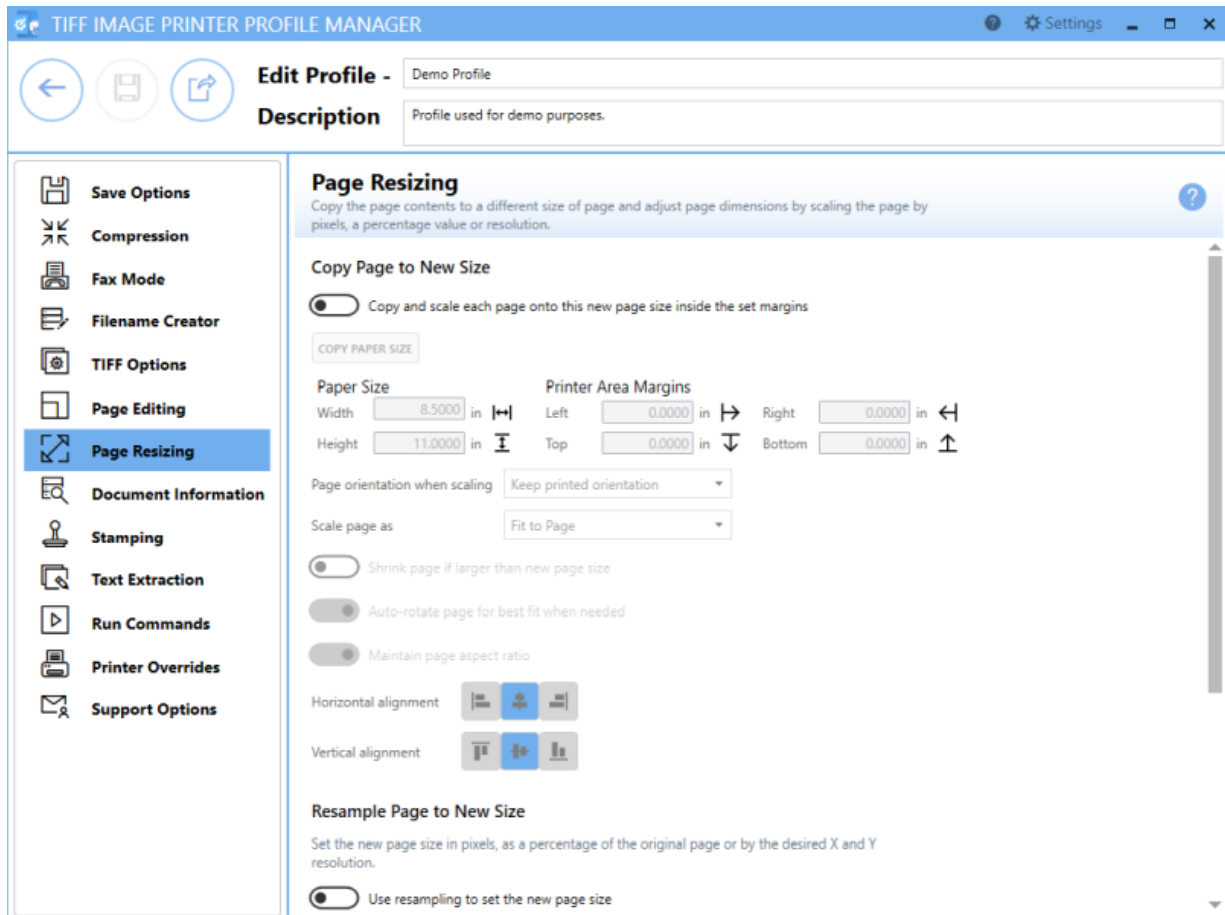
Use the two sliders or enter in the absolute values to set the intensities, or shades, to which you want the page brightening setting selected above applied. All intensities between the two sliders will be brightened or darkened accordingly.

See Also: [Adjust Page Brightness](#)



## Page Resizing

The Page Resizing tab holds settings used to modify page contents to fit a new page, including copy page to new size, resample page to new size, and add borders to page.



## Copy Page to New Size


### Copy Page to New Size

☒ Copy and scale each page onto this new page size inside the set margins

#### COPY PAPER SIZE

##### Paper Size

Width  in 

Height  in 

##### Printer Area Margins

Left  in  Right  in 

Top  in  Bottom  in 

Page orientation when scaling Keep printed orientation ▼

Scale page as Fit to Page ▼

☐ Shrink page if larger than new page size

☒ Auto-rotate page for best fit when needed

☒ Maintain page aspect ratio

Horizontal alignment



Vertical alignment



### Enable copy and scale each page onto this new page size inside the set margins

By default this setting is disabled. Enabling this setting means TIFF Image Printer will copy and scale each page onto your desired new page size.

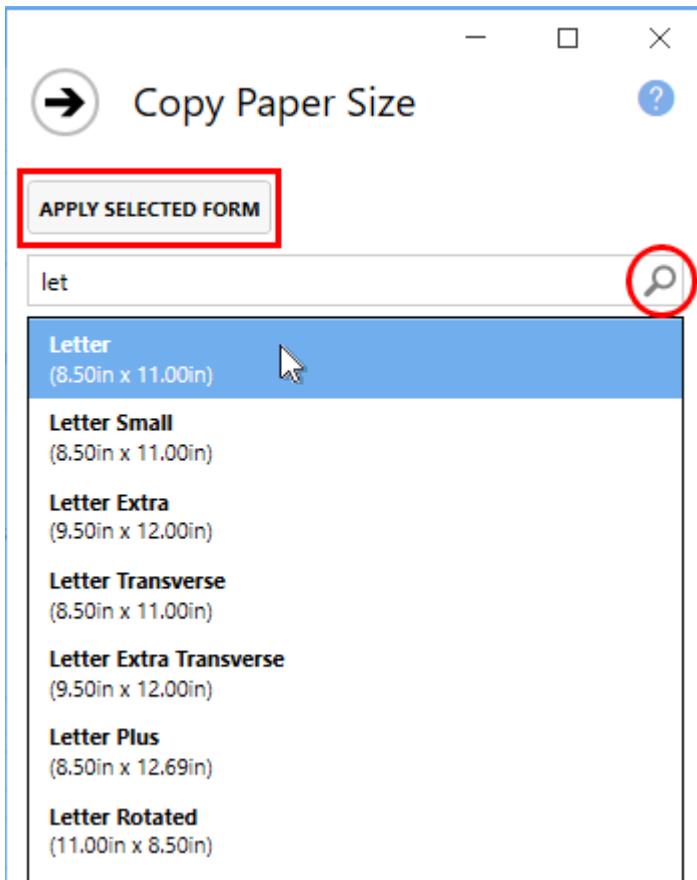
The concept of image copying is similar to enlarging or shrinking a page using a photocopier, with the added ability to position the page on the new image using the scaling and alignment options.

### Paper Size

Enter the desired *Width* and *Height* of the new page.

Use the **Copy Paper Size** button to copy the dimensions from our list of standard paper sizes.

- Select **Copy Paper Size** to open the Copy Paper Size flyout.
- Use the filter field to search and refine the list.
- Click **Apply Selected Form** to copy selected paper size directly to *Width* and *Height* fields.



Dimensions for Paper Size are entered based on a portrait oriented page. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

## Printer Area Margins

Enter the desired *Left*, *Right*, *Top* and *Bottom* image area margin settings for the new image. The original page will be copied inside this area using the scaling options as selected.

The combined *Left* and *Right* margins must be less than the *Width* of the new page. The combined *Top* and *Bottom* margins must be less than the *Height* of the new page.

Dimensions for Printer Area Margins are entered based on a portrait oriented page. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

### Page Orientation

Determines the page orientation of new page.

- *Keep printed orientation* will maintain the original orientation of the page.
- *Force to portrait orientation* will create only portrait oriented pages. Any content from pages that were originally landscape will be auto-rotated to best fit the new portrait page, unless **auto-rotate page for best fit when needed** is disabled.
- *Force to landscape orientation* will create only landscape oriented pages. Any content from pages that were originally portrait will be auto-rotated to best fit the new landscape page, unless **auto-rotate page for best fit when needed** is disabled.

### Page Scaling

By default page scaling is set to **Fit to Page**. Determines how the original page is placed on the new image.

- *Fit to Page* will scale the original page to fit on the new image size chosen, scaling up to a larger image or down to a smaller one as needed. Pages will maintain their aspect ratio if the **Maintain page aspect ratio** is enabled.
- *Actual Size* keeps the original information at the same size. Any part that does not fit on the new image size will be cut off. If **Shrink page if larger than new page size** is enabled, then you also have the choice of maintaining the aspect ratio. *Actual Size* is typically only required if your original document is a much smaller page size and you do not want the contents stretched to fit the new page size.

### **Shrink page if larger than new page size**

Only available if page scaling is set to **Actual Size**. Scales the image down to fit the new page size if the original image is larger than the new page size.

### **Auto-rotate page for best fit when needed**

By default this setting is enabled. Allows TIFF Image Printer to rotate page content when necessary in order to best fit the new page size. This is most relevant when forcing portrait orientation or forcing landscape orientation, and page content needs to be rotated in order to best fit the new page orientation.

Disabling this settings means that the original orientation of the content from the original document will be preserved on the new page. For example, if the original page was landscape orientated, and you are copying the content of that page onto a new portrait page, if this setting is disabled, the content from the original will be shrunk down to fit in an upright orientation on the new portrait page.

See Also: [Rotate Pages](#)

### **Maintain page aspect ratio**

By default this setting is enabled. This settings is used to prevent distortion when scaling larger or smaller page to different page sizes. When this option is on, the height and width of the page change in relation to one another.

### **Horizontal alignment**

Choose how to horizontally align the original page contents on the new page.

- *Left* will align the left side of the page contents to the left side of the new page.
- *Middle* will center the page contents in the horizontal middle of the new page.
- *Right* will align the right side of the page contents to the right side of the new page.

## Vertical alignment

Choose how to vertically align the original page contents on the new page.

- *Top* will align the top of the page contents to the top of the new page.
- *Middle* will center the page contents in the vertical middle of the new page.
- *Bottom* will align the bottom of the page contents to the bottom of the new page.

See Also: [Copy Page Contents to a New Page Size](#)

## Resample Page to New Size

### Resample Page to New Size

Set the new page size in pixels, as a percentage of the original page or by the desired X and Y resolution.

☒ Use resampling to set the new page size

☒ Maintain page aspect ratio when resampling

☒ Pixels

Width in pixels



200



☐ Percentage (%)

☐ Resolution (DPI)

Height in pixels



200



## Enable use resampling to set the new page size

By default this setting is disabled. Enabling this setting means TIFF Image Printer will scale the output file to a particular width and height in pixels, as a percentage of the original size, or by setting a new image resolution (DPI).

## Maintain page aspect ratio when resampling

By default this setting is enabled. This settings means that *Height* will automatically be calculated to prevent distortion of the image. Disable this settings to enter a specific *Height* for your output file.

## Pixels

Enter in the new file *Width* in pixels.

## Percentage (%)

Enter in the new file *Width* as a percentage (%) of the original page size. You can scale images up to 500% larger, but note that if the image is very large to begin with, it may not scale successfully due to memory limitations.

## Resolution (DPI)

Enter in the new X Resolution for your output file. You can scale as low as 50 DPI and up to as high as 3600 DPI.

See Also: [Resizing Images Using Resampling](#)

## Add Borders to Page

### Add Borders to Page

Add a custom-colored margin around the page. This will shrink the page contents to fit inside the bordered area.

☒ Add a custom border to the page

Left	<input type="text" value="2.0000"/> in	↔	Right	<input type="text" value="2.0000"/> in	↔
Top	<input type="text" value="2.0000"/> in	↕	Bottom	<input type="text" value="2.0000"/> in	↕
Color	<div><div></div><div></div></div>				

### Enable add a custom border to the page

By default this setting is disabled. Enabling this setting means TIFF Image Printer will add a custom-colored margin around the page. This will shrink the page contents to fit inside the bordered area.

This setting is commonly used to create a white border in order to create space to add a watermark to the header or footer of a page if the page contents previously went right to the edge of the page.

## Border Size

Enter the desired measurements of custom border for the *Left*, *Top*, *Right*, or *Bottom* of the page. If all four fields are zero then no border is added. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

## Border Color

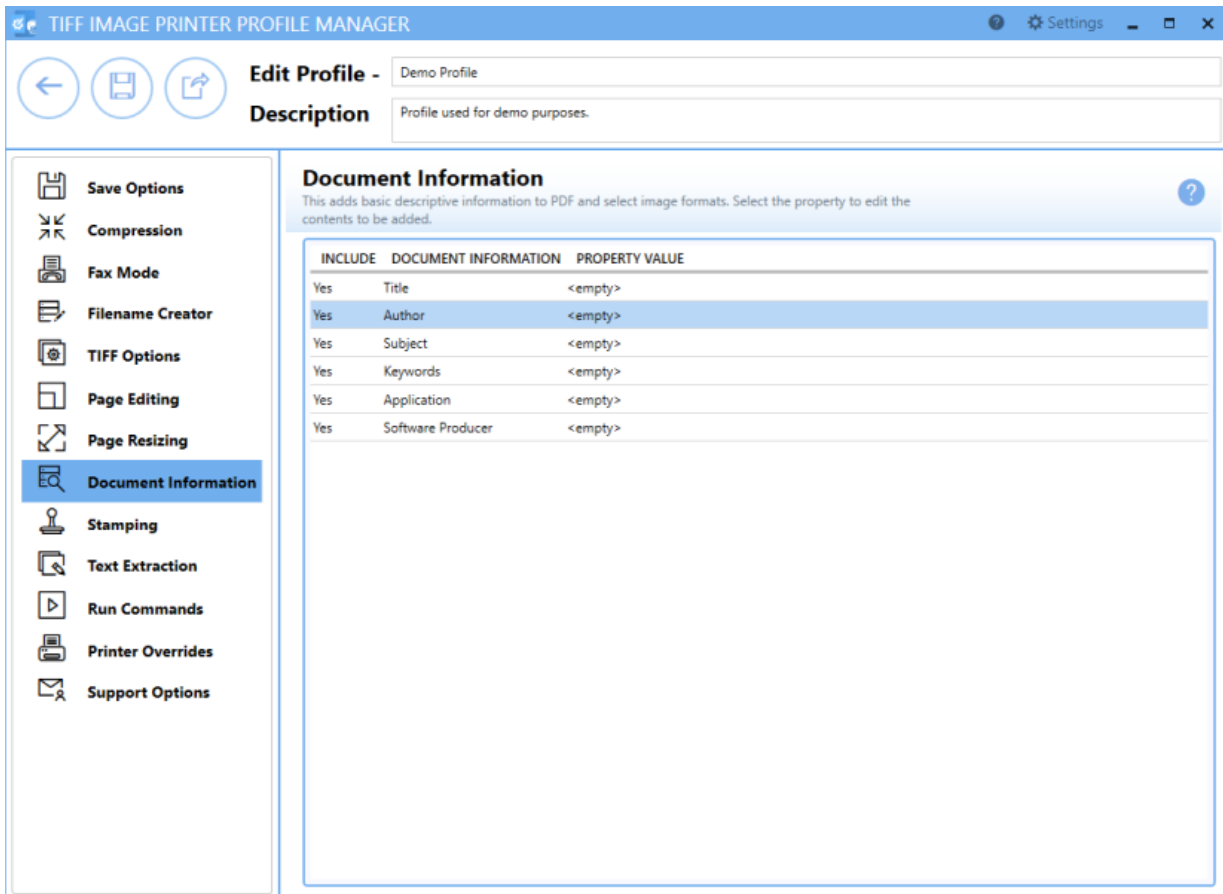
Enter the desired color of custom border. Either use the color picker, entering the hex color code, or entering the RGBA color code. Note that the A slider will allow you to adjust the transparency of the border color.

See Also: [Add Borders to Page](#)



## Document Information

The Document Information tab allows basic descriptive information to be added to your output file. Only the title, author, and software producer (program name) descriptive information is stored in TIFF images.



This information can later be viewed by right-clicking your TIFF image within File Explorer, selecting Properties, and viewing the Details tab. While you can complete all of these descriptions, only title, author and software producer (program name) will be displayed in the properties dialog.

## Document Information

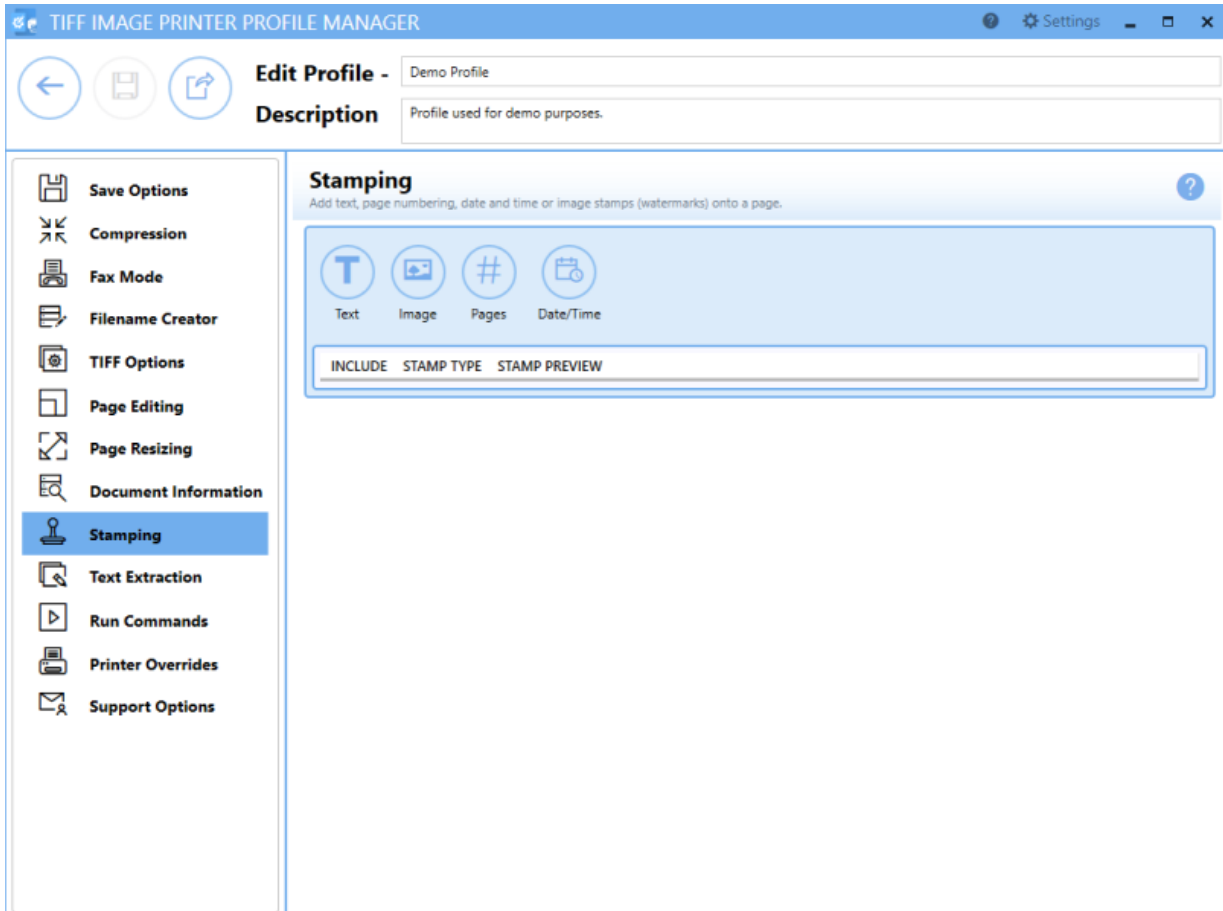
Select each document information type to expand the view. Enter the desired descriptive information in the **Property Value** field. To stop that descriptive information being passed to the output file, either delete the text in the property value field or disable **include this property**.

- *Title* - Enter the title of the document. All files created will have this title. This is not the filename of the document. For TIFF images, whatever is entered as the title will also appear in the subject descriptive information field.
- *Author* - Enter the author of the document. All files created will have this author.
- *Software Producer* (also called *Program Name* for TIFF images) - Enter the software producer of the document. If left blank, all files created will have TIFF Image Printer 12 as the software producer/program name

See Also: [Set Document Information](#)

## Stamping

The Stamping tab holds all settings related to adding a text, image, page numbering, or date/time watermark to your TIFF Image Printer output files.



### Using Stamping Editor

The Stamping Editor allows users to add new stamps, move stamps up or down, edit existing stamps, and make other formatting changes.

- *Add new stamps* - Select a button across the top to add a new stamp.
- *Select an existing stamp* - Hover over stamp type until the desired stamp is highlighted, and click to edit.
- *Hide details of selected stamp* - Click the left-most close arrow to hide details of selected stamp. Selecting another stamp type will also close the previous stamp.

- *Move stamp up or down* - Click the up and down arrows from within the edit window of a stamp type to re-order stamps. Stamps are applied to the page in the order they are listed, top to bottom.
- *Delete stamps* - Click the trash bin to delete unwanted stamps.

## Stamp Types

### Text Stamp

This stamp places formatted text on top of the contents of the page. By default, the text "Draft" is populated for the text stamp. Enter your desired text into the *Display this text* field. The font style of the text can be customized by changing the font type, font size, font color, and by enabling *bold*, *italic* or *outline* font styles. The stamp preview box will update to reflect any changes made to the text stamp settings.

The screenshot shows the 'Text' stamp configuration window. At the top, there are four icons: 'Text' (T), 'Image' (img), 'Pages' (#), and 'Date/Time' (calendar). Below these is a table with three columns: 'INCLUDE', 'STAMP TYPE', and 'STAMP PREVIEW'. The 'Text' stamp is selected, showing 'Yes' under 'INCLUDE', 'Text' under 'STAMP TYPE', and 'Draft' under 'STAMP PREVIEW'. The main configuration area has a 'Text' tab and a 'Position' tab. The 'Text' tab is active, showing a description: 'This stamp places formatted text on top of the contents of the page.' Below this is a 'Stamp Preview' box containing the word 'Draft'. There is a toggle switch for 'Include this stamp' which is turned on. Below that is a 'Display this text' field containing 'Draft'. The 'Font Style' section includes a font dropdown set to 'Arial', a size dropdown set to '8', and a color dropdown set to black. At the bottom, there are three checkboxes: 'Bold' (checked), 'Italic' (unchecked), and 'Outline' (unchecked).

See Also: [Add Text Watermark Stamp to Each Page](#)

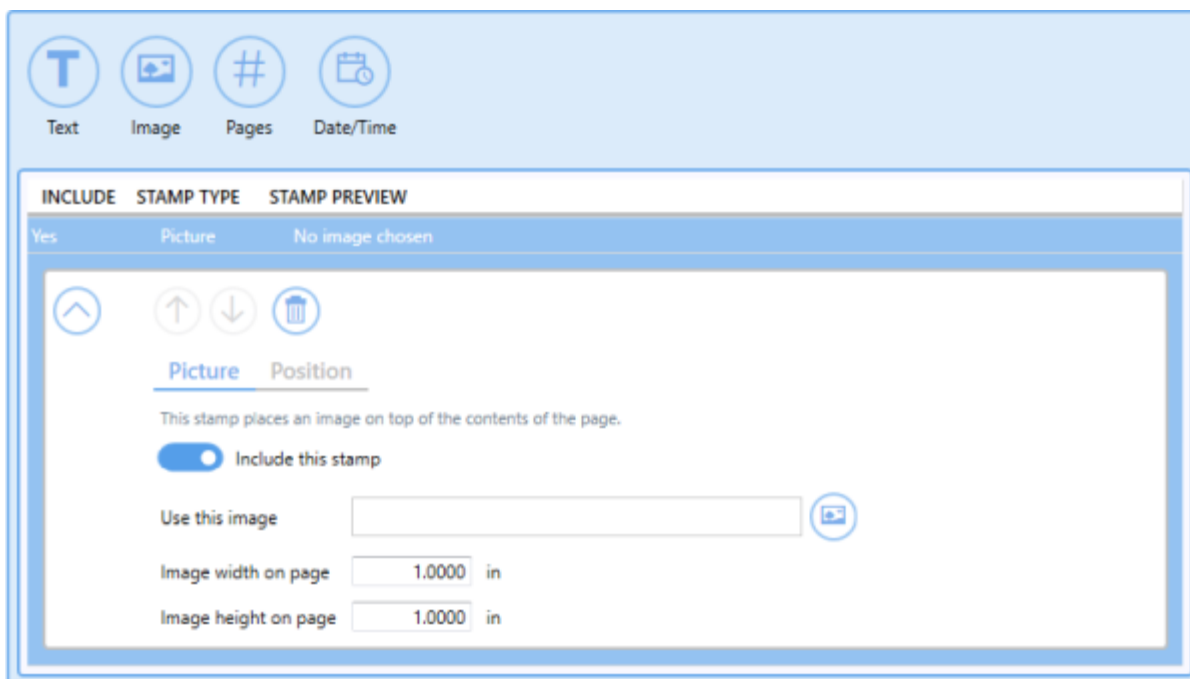
## Image Stamp

This stamp places an image on top of the contents of the page. Select the file icon to browse to your desired image. It is recommended the image be a PNG, but a JPEG can also be selected. TIFF Image Printer has support for alpha channels, so the PNG image can be transparent. If TIFF Image Printer cannot find the selected image when creating the output file, no image stamp will be added to your output file.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the path to the stamping image, as explained in [Using Environment Variables and Registry Keys](#).

A folder named **Images** has been provided in the product installation folder. Any images used for stamping can be placed here. When using an image from this folder, the location of the image command is stored in the profile using a macro. This allows the image and profile to be deployed and to work on any computer, no matter where the product is installed.

Adjust *image width on page* and *image height on page* as desired. The image size set should either match the dimensions of the image or at least maintain the aspect ratio. By default, *image width on page* and *image height on page* are set to 1.0000 inch or 2.5400 cm.



See Also: [Add Image Watermark Stamp to Each Page](#)

### Page Numbering Stamp

This stamp places a formatted page numbering string on top of the contents of the page.

Use the settings toggles to customize the page numbering stamp formatting.

- *Include this prefix text* - Add custom text before page numbers (ex. Page).
- *Include the page number padded with zeros to a width of* - Add the specific page number and increase/decrease the number of padding zeros.

- *Include this connector text* - Add custom text between the page number and page count (ex. of).
- *Include the page count padded with zeros to a width of* - Add the total page count and increase/decrease the number of padding zeros.
- *Include this suffix text* - Add custom text after page numbers (ex. pages).

The font style of the text can be customized by changing the font type, font size, font color, and by enabling *bold*, *italic* or *outline* font styles. The stamp preview box will update to reflect any changes made to the page numbering stamp settings.

The screenshot shows the 'Stamping' configuration window for the TIFF Image Printer. At the top, there are four icons: a 'T' for Text, an image icon for Image, a '#' for Pages, and a calendar for Date/Time. Below these is a table with three columns: 'INCLUDE', 'STAMP TYPE', and 'STAMP PREVIEW'. The 'Page Numbering' row is highlighted. The main content area is titled 'Page Numbering' and contains a description: 'This stamp places a formatted page numbering string on top of the contents of the page.' Below this is a 'Stamp Preview' window showing 'Page 1 of 10 pages'. There are six toggle switches, all of which are turned on: 'Include this stamp', 'Include this prefix text' (with a text field containing 'Page'), 'Include the page number padded with zeroes to a width of' (with a spinner set to 0), 'Include this connector text' (with a text field containing 'of'), 'Include the page count padded with zeroes to a width of' (with a spinner set to 0), and 'Include this suffix text' (with a text field containing 'pages'). At the bottom, the 'Font Style' section includes a font face dropdown set to 'Arial', a font size dropdown set to '8', a color selector set to black, and three style toggles for 'Bold', 'Italic', and 'Outline', all of which are currently off.

See Also: [Add Page Numbering Watermark Stamp to Each Page](#)

## Date and Time Stamp

This stamp places a formatted date and time string on top of the contents of the page.

Use the settings toggles to customize the date and time stamp formatting.



- *Include this prefix text* - Add custom text before date and time (ex. Created on).
- *Include this suffix text* - Add custom text after date and time.

Select your desired date and time formatting using the *Display using this format* drop box. By default, the format is set to *Full Date and Time*.

- *Short Date*
- *Short Time*
- *Long Date*
- *Long Time*
- *Full Date with Short Time*
- *Full Date and Time*
- *General Date with Short Time*
- *General Date and Time*
- *Round Trip (ISO 8601) Date and Time*
- *RFC1123 Date and Time*
- *Sortable Date and Time*
- *Universal Sortable*
- *Universal Full Date and Time*
- *Month and Day*
- *Month and Year*

Select your desired locale (language/location) to be applied to the date and time using the *Use this locale* drop box. By default, the locale will be set to match the locale of the computer.

The font style of the text can be customized by changing the font type, font size, font color, and by enabling *bold*, *italic* or *outline* font styles. The stamp preview box will update to reflect any changes made to the date and time stamp settings.

T

Text

Image

#

Pages

Date/Time

INCLUDE

STAMP TYPE

STAMP PREVIEW

Yes

Date and Time

Created on Wednesday, January 15, 2020 2:30:45 PM

Up arrow

Down arrow

Trash

Date and Time

Position

This stamp places a formatted date and time string on top of the contents of the page.

Stamp Preview

Created on Wednesday, January 15, 2020 2:30:45 PM

☒

Include this stamp

☒

Include this prefix text

Created on

☐

Include this suffix text

Display using this format

Full Date and Time

Use this locale

English (United States) (en-US)

Font Style

Arial

8

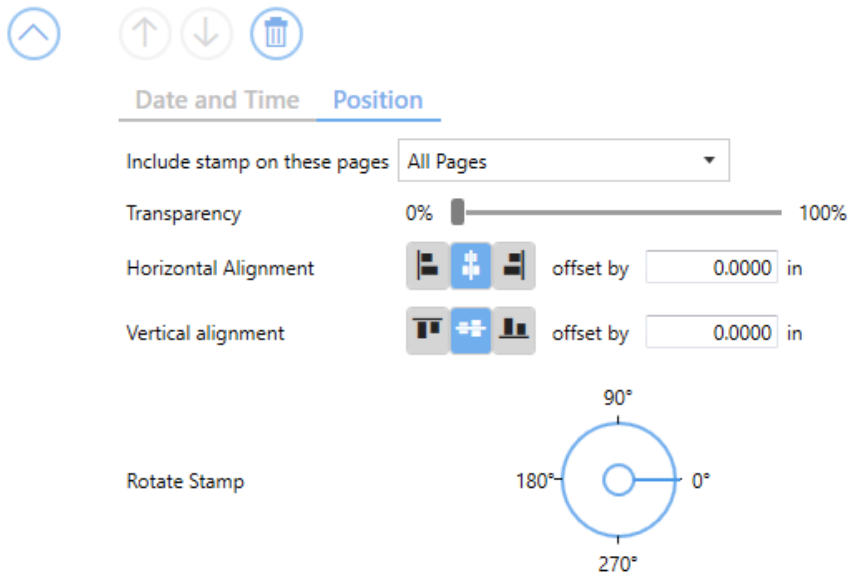
☐ Bold

☐ Italic

☐ Outline

*See Also:* [Add Date and Time Watermark Stamp to Each Page](#)

## Stamp Position



The interface for configuring stamp position includes several controls:

- Four circular icons at the top: a blue circle with an upward arrow, a grey circle with an upward arrow, a grey circle with a downward arrow, and a blue circle with a trash can icon.
- Two tabs: "Date and Time" (grey) and "Position" (blue).
- A dropdown menu labeled "Include stamp on these pages" with "All Pages" selected.
- A transparency slider ranging from 0% to 100%.
- Horizontal Alignment controls: three icons (left, center, right) and an "offset by" text box containing "0.0000 in".
- Vertical alignment controls: three icons (top, center, bottom) and an "offset by" text box containing "0.0000 in".
- A "Rotate Stamp" label and a circular rotation dial with markers at 0°, 90°, 180°, and 270°.

### Include stamp on these pages

Choose which pages of the output file to stamp:

- *All Pages*
- *First Page Only*
- *Even Pages Only*
- *Odd Pages Only*
- *All Pages Except First Page*

### Transparency

By default, transparency is set to 0%. Use the sliding scale to set the desired degree of transparency. 100% transparency will make the stamp invisible.

### Horizontal Alignment

Choose how to horizontally align the stamp on top of the contents of the page.

- *Left* will align the stamp to the left side over the page contents.

- *Middle* will center the stamp over the page contents.
- *Right* will align the stamp to the right side over the page contents.

This alignment can be offset by a desired value. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

### Vertical Alignment

Choose how to vertically align the stamp on top of the contents of the page.

- *Top* will align the stamp to the top over the page contents.
- *Middle* will center the stamp over the page contents.
- *Bottom* will align the stamp to the bottom over the page contents.

This alignment can be offset by a desired value. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

### Rotate Stamp

Use the dials to select the degree of rotation of the stamp. Stamps can be rotated in 5 degree increments.

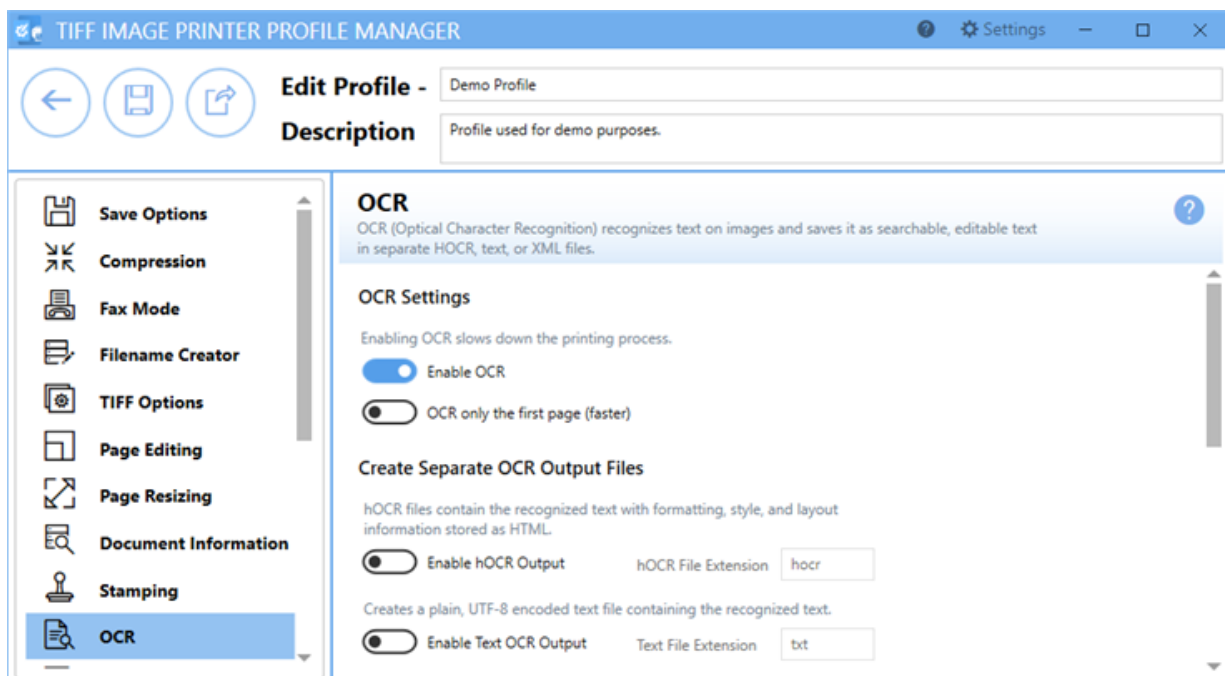
## OCR

The OCR tab holds all settings for performing **optical character recognition** in PDF files, scanned documents, and images.

**Optical character recognition**, or **OCR** for short, attempts to recognize the text, or characters, on scanned pages or images and extract it as digital text. When performing OCR on a page, the OCR engine needs to know which languages you want to look for on the page. It does not automatically detect what language the characters are.

With the list of the target languages, the engine will attempt to recognize a character, text, or field on the page against each chosen language and assign a confidence score for each. A confidence score is how likely the OCR engine has correctly recognized the text. The language with the highest confidence score determines the text. Outside factors such as image quality, the font used, and any image background all affect the validity of the OCR results.

You can save the OCR results externally as hOCR (.hocr), text (.txt), and ALTO (.xml) files. These files are saved in the same directory and with the same base name as the output TIFF image.



## Enable OCR

Enabling OCR slows down the printing process.



Enable OCR



OCR only the first page (faster)

This setting is disabled to start. Enable this setting to have TIFF Image Printer run OCR on your printed pages. Running OCR does slow down the conversion process.

## OCR only the first page

Enable this to have TIFF Image Printer run OCR only on the first printed page. Only searching the first page speeds up the OCR process when you only need the information on the first page.

## Create Separate OCR Output Files

### Create Separate OCR Output Files

hOCR files contain the recognized text with formatting, style, and layout information stored as HTML.



Enable hOCR Output

hOCR File Extension

Creates a plain, UTF-8 encoded text file containing the recognized text.



Enable Text OCR Output

Text File Extension

Saves the recognized text and layout information as XML using the Analyzed Layout and Text Object XML schema.



Enable Alto OCR Output

Alto File Extension

When creating images with OCR enabled, you save the recognized text in one or more of three different output formats for further processing and examination. These external files are created in the same directory and with the same base name as the output file.

## hOCR Output

Enable this to create hOCR files. These files are *human-readable* OCR files. They contain the recognized text, formatting and layout information, and confidence scores from the OCR process. Saved as XHTML, an hOCR file is a standardized format for making digital files searchable.

### hOCR File Extension

The default file extension for hOCR files is **hocr**. You can change this if needed.

## Text OCR Output

Creates a UTF-8 encoded text file that contains the recognized text. No formatting or confidence levels are stored.

If you have [Text Extraction](#) enabled, and enable this option, an error will be shown as both features will try to write to the same file when using the default extension of **txt** for OCR. You can either turn off Text Extraction or change the OCR text output extension to prevent errors trying to write to the same file name.

### Text File Extension

The default file extension for text OCR files is **txt**. You can change this if needed.

## ALTO Output

*Analyzed Layout and Text Object*, or ALTO format, is an XML-formatted file that contains information about the page and text layout. It stores the recognized text and information about its position on the page.

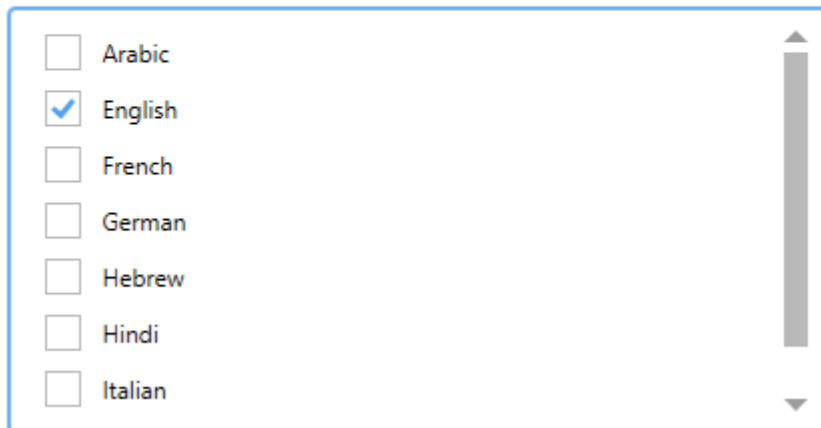
### ALTO File Extension

The default file extension for ALTO OCR files is **xml** as it is an XML-formatted document. You can change this if needed.

## Choose Languages to Recognize

### Choose Languages to Recognize

Check each language to look for and perform recognition of text on your images. Each additional language you select for character recognition will increase the processing time.



<input type="checkbox"/>	Arabic
<input checked="" type="checkbox"/>	English
<input type="checkbox"/>	French
<input type="checkbox"/>	German
<input type="checkbox"/>	Hebrew
<input type="checkbox"/>	Hindi
<input type="checkbox"/>	Italian

Select from the list which languages to recognize on the page. English is preselected by default. You must have at least one language selected for OCR.

The OCR process cannot automatically determine what language a character on the page is from. It needs to know what to try and match against. If you have a mix of English and Spanish on your page, you must check both English and Spanish from the list. If you have documents in English, French, and German, you must check English, French, and German.

The more languages selected from the list, the longer the OCR process will take as it validates the text against each language.

When running OCR over the text on the page, how well each character matches each language is assigned a **confidence level**. When recognizing text against multiple languages, the language with the highest confidence level determines which language matches.

## Adding Languages

TIFF Image Printer comes with language files for the following languages:

- Arabic
- English



- French
- German
- Hebrew
- Hindi
- Italian
- Spanish

You can download additional language files or complete sets of language files from [Traineddata Files for Tesseract](#).

To add them to TIFF Image Printer, copy the desired **\*.traineddata** files into the following folder:

%PROGRAMDATA%\PEERNET Inc\TIFF Image Printer\tessdata

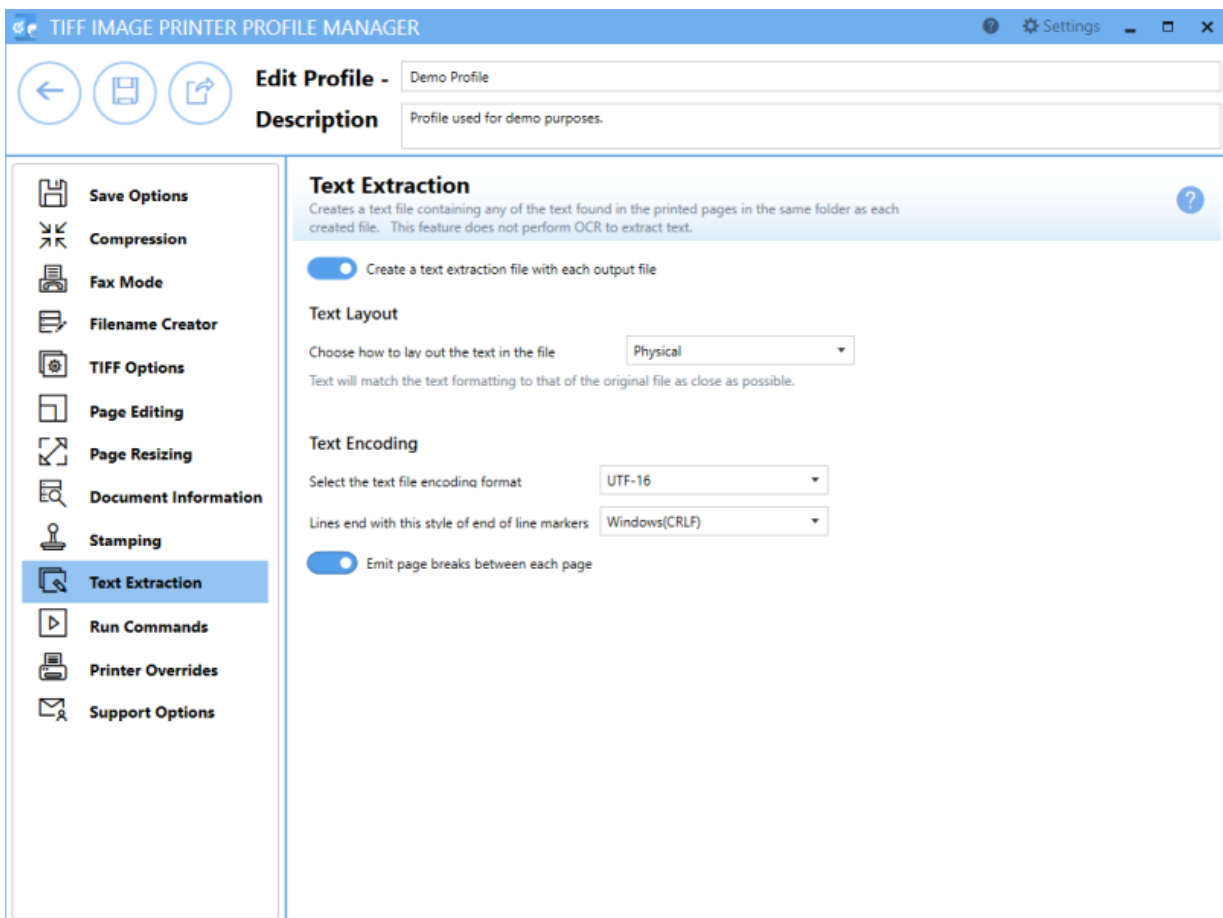
To refresh the language list on this tab, select a different option from the list on the left-hand side and then return to the OCR options tab.

See Also: [Use OCR to Extract Text From TIFF Images](#)

## Text Extraction

The Text Extraction tab will create a separate text file containing all of the textual elements of your printed document. These text files are often paired with the image when stored in archival systems to allow searching and retrieval of the files using textual data.

The text extraction feature was not designed to be Optical Character Recognition (OCR) software and does not extract text from images. It only recognizes and extracts straight text from printed documents and saves it to a text file. Formatting of the text file may not be exact. To OCR scanned pages and images, see the [OCR settings tab](#).



### Enable create a text extraction file with each output file

By default this setting is disabled. Enabling this setting means TIFF Image Printer will extract text and save the created text file in the same directory and with the same name as the output file. Note that text extraction only works for printed

documents; it cannot extract text from images. To extract text from images [use our OCR feature instead of text extraction](#).

If you have [text output enabled for OCR](#), enabling this option will display an error. To perform both text extraction and OCR to Text output, you will need to change the default extension of .txt used in the OCR options to .text or similar.

## Text Layout

### Layout

Choose the layout for the text in your file.

- *Physical* - Attempts to match the format of the text in the original file.
- *Raw* - Saves the text in the order in which it was sent to the driver. This may not be the same order as the text in the original file.
- *None* - No formatting is attempted. All text is written to the file in the order in which it is received from the printing application.

## Text Encoding

### Format

Choose the encoding format for your text file.

- *UTF-16* - uses 16-bit Unicode encoding
- *UTF-8* - uses 8-bit Unicode encoding
- *ANSI* - uses the current ANSI code page

### End-of-Line

Choose the end-of-line encoding for your text file. Depending on the operating system the text file will be used on, you may need to choose the appropriate line return code.

- *Windows* - lines end with the carriage return line feed (CRLF, \r\n) used by Windows
- *Mac* - lines end with the carriage return (CR, \r) used by Macintosh

- *Unix* - lines end with the line feed (LF, \n) used by UNIX.

### **Emit page breaks between each page**

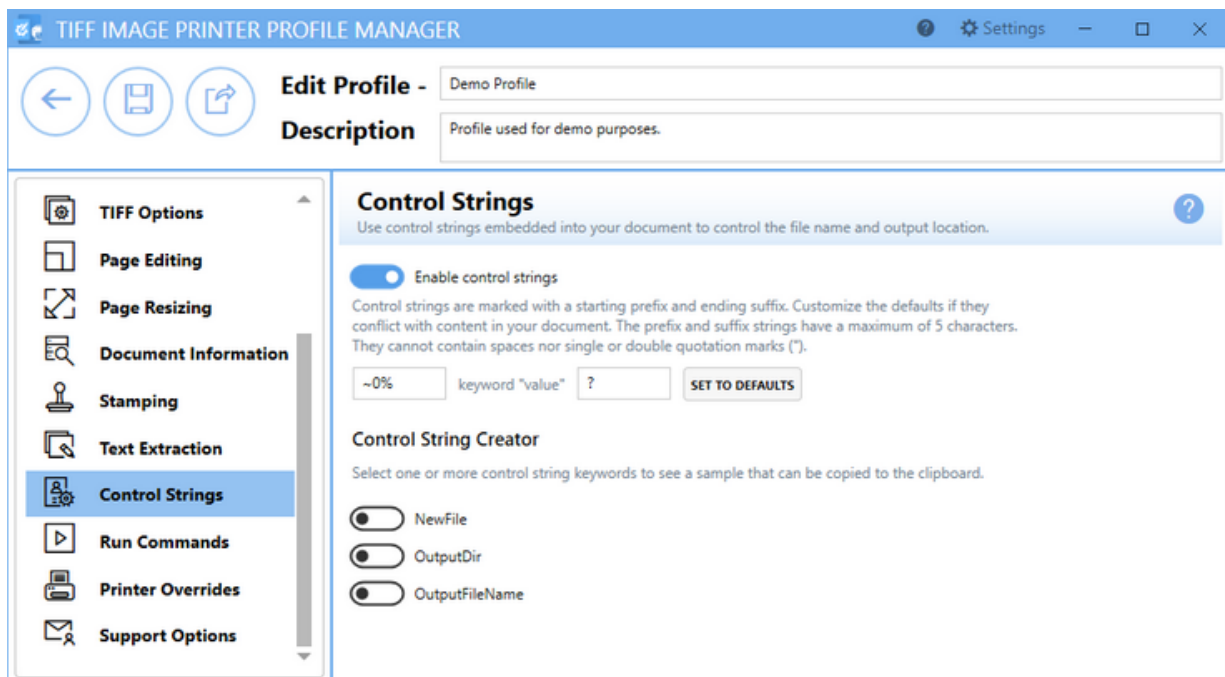
By default this setting is enabled. Enabling this setting means TIFF Image Printer will insert a page break, or form feed (\f) in your text file for every page in your original document.

See *Also*: [Extracting Text From the Created File](#)

## Control Strings

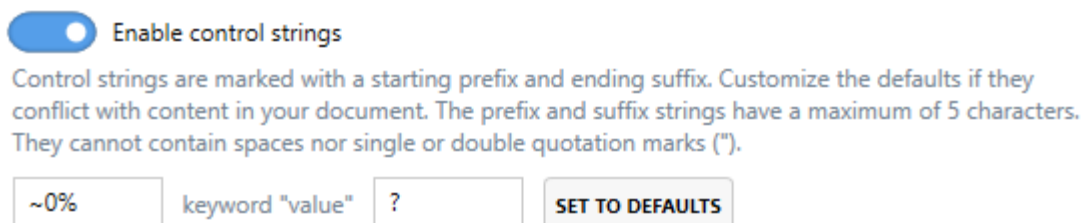
Control strings are text strings embedded in your documents that can be used to change settings dynamically during a print job. Often used in Word with mail merge documents, or reporting tools such as Crystal Reports and PowerBuilder, it can be used to dynamically set the output folder and output file name information from data fields on the report.

For example, this feature allows a single report of multiple invoices to generate separate , one for each invoice, and named using the invoice number taken from the report.



### Enable control strings

By default this setting is disabled. Enabling this setting means TIFF Image Printer will search for and use any properly formatted control strings found in the document.



## Changing the control string prefix and suffix

Control strings use the following syntax:

**~0% keyword "value" ?**

Multiple control strings can be chained together as follows:

**~0% keyword "value" keyword "value" keyword "value" ?**

The default prefix of '**~0%**' and suffix of '**?**' are used to recognize a control string pattern in a printed document. If this format conflicts with content in your documents, it can be changed, up to a maximum of 5 characters. Spaces and single or double quote characters are not allowed as control string patterns.

The **Set to Defaults** button can be used to reset any changes to the control string prefix and suffix back to the system defaults.

Control strings are processed by the printer, but are not printed on the final output unless they are not formatted correctly, or the keyword is incorrect. If your control strings appear in the output, check your formatting and keyword spelling first. Control strings must conform to the following criteria in order to be processed by TIFF Image Printer:

- It must contain at least one keyword-value pair
- No spaces should separate the characters in the prefix (default is ~0% )
- The final character(s) must be the default of a question mark ( ? ) or custom character(s) set in the suffix field
- Control strings must appear at the very beginning of a line
- No other text should appear on lines that hold control strings
- Values are enclosed in quotation marks (""); when using control strings in Microsoft Word you will need to turn off Smart Quotes. Control strings formatted with Smart Quotes will not be recognized by the driver

## Control String Creator

This section shows the control strings that are supported by TIFF Image Printer 12. Many of the control strings that were supported in earlier versions of TIFF Image Printer have been removed.

This tool allows you to build sample control string text, by toggling the different control strings. This text can then be copied to the clipboard for easy insertion into your reports and documents. It does not control which control strings will be used.

### Control String Creator

Select one or more control string keywords to see a sample that can be copied to the clipboard.

~0% OutputDir "value" ? 

☐ NewFile

☒ OutputDir

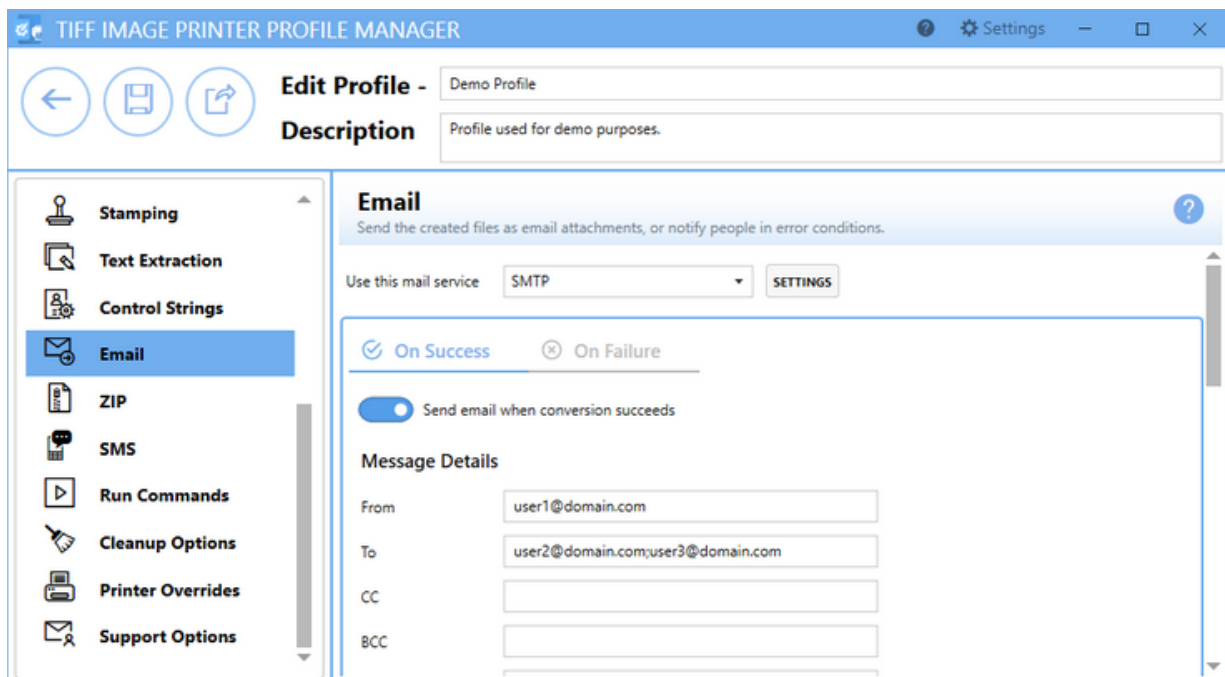
☐ OutputFileName

## Email

The email action can be used to automatically email the images you create, or to send an email notification on failure when a file did not convert successfully.

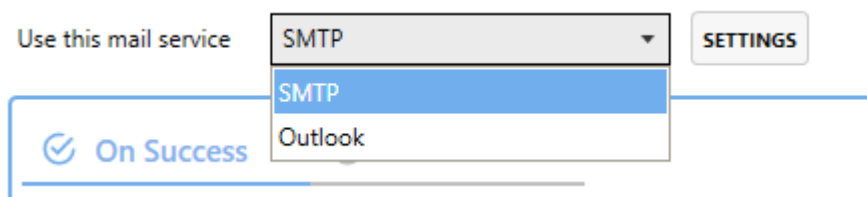
Options to zip the attachments, useful for serialized output or to reduce size when emailing, as well as features to control the size of the email with its attachments, and the ability to automatically split the emails based on size allow for full control over the emails created.

The created images are not deleted when the email action is enabled. To automatically cleanup the files, enabled the *Delete generated output files* on the [Cleanup Options](#) tab.



### Use this mail service

Choose either **Outlook** or **SMTP** (*Simple Mail Transfer Protocol*) as the mail service to use to send the email.





An SMTP server, which does not require an email client to be installed, can be used to send email silently; it will never prompt. When SMTP is chosen, the **Settings** button is available to display a flyout panel to [set up your SMTP server settings](#). You will need your SMTP server address, and other credentials from your IT personnel. Emails sent using an SMTP server are always sent silently with no prompting.

When using Outlook, it must be installed, and an email account configured. Emails sent using Outlook can be sent silently or can prompt with the default email window.

In addition, an Outlook email template may be used to set up the initial content of the email fields From, To, CC, BCC, Subject, and Body. Addresses entered in the To, CC, and BCC fields are added to any address in the template. Text entered for the Subject and Body fields on the email tab settings will override the Subject and Message contents in the template.

## On Success\On Failure

Emails can be sent when the file conversion succeeds, when it fails, or for both cases. There are two tabs at the top to switch between success and failure and enable or disable them independently. The options shown on each tab will depend on which mail service, Outlook or SMTP, is selected.



## Send email when conversion succeeds\fails

By default this setting is disabled. Enabling this setting means TIFF Image Printer will use the email settings provided to send an email for that scenario.

## Message Details

This section provides details for sending the email using both Outlook and SMTP. What fields are shown depends on the mail service you have chosen.


For advanced users and programmers automating the printer, environment variables and registry keys, as explained in [Using Environment Variables and Registry Keys](#), can be used in the following message details fields:

- *Path to template for Outlook templates*

- *The From (SMTP Only), To, CC, BCC email fields*
- *The subject line and message body*

## Outlook Settings

☒ Use this Outlook template

Path to template  

When sending email

To

### Use this Outlook template

Shown when the Outlook mail service is selected, this setting is disabled to start. Enable this setting to select a saved Outlook template file (\*.oft) to use when sending email. If no template is used, the default new email window from Outlook is used.

### Path to template

Shown when the Outlook is chosen as the mail service, select the mail icon to browse to your desired template. If TIFF Image Printer cannot find the template when sending the email, the default new email window will be used.

A folder named **Templates** has been provided in the product installation folder. Any Outlook templates used for emails can be placed here. When using a template from this folder, the location of the template is stored in the profile using a macro. This allows the template and profile to be deployed and to work on any computer, no matter where the product is installed.

### When sending email

Choose if you want to prompt or send the email silently:

- *Show message using email client or template*
- *Do not show message before sending*

## SMTP Settings

From

### From

The field is only used when sending email using the SMTP mail service. Enter an email address that has permissions to send email through your SMTP server. Only a single email can be entered here.

## Shared Outlook and SMTP Settings

To

CC

BCC

Subject

Message

### To, CC, BCC

Enter the To, CC or BCC email addresses here. Multiple email addresses can be entered separated with either a semi-colon (;) or a comma (,). When using an Outlook template, these addresses are added to any email addresses that have been included in the template.

### Subject

Enter the subject line here. When using an Outlook template, this will overwrite the Subject in the template.

## Message

Enter the message content here. This replaces any message content in an Outlook template.

## Send Test Email

Test your email settings by sending a test message to the recipients listed. Any errors that occur when sending are displayed here as well. If you are using SMTP, your [server settings](#) must be entered before you can send a test message.

## Message Attachments

This section only appears on the **On Success** tab when there are images to be attached.

Many email systems limit how large an email and its attachments can be. These options control adding created files as attachments, setting limits on the size of the email, and handling larger emails by splitting them into multiple email messages. Sending too many emails can also trigger spam filters so the total number of emails as well as a timeout between sending emails can also be set.

☒ Send created documents as email attachments

☒ Limit size of email plus attachments to    MB

☒ Split oversize emails into multiple messages when possible

☐ Limit number of multiple email messages to    emails

Wait    seconds between sending each email

## Send created documents as email attachments

Enabled by default, this attaches the created images to your email. Disable this to send an email with no attachments when the documents have been created.

**Limit size of emails plus attachments to**

Set the size limit for each email including the attachments, where possible, up to a maximum of 10MB. There will always be at least one file attached to the email, even if this file is larger than the size limit.

For serialized output when the individual files are under the size limit, files in the sequence will only be attached to the email up to the set size. When email splitting is not enabled, any remaining files are not included. If email splitting is enabled, the remaining files will overflow to the next email, up to the any email count limit set.

**Split oversize emails into multiple messages when possible**

Disabled by default, this option applies only when the size of the email is being limited, and when serialized, or single paged, output is being created. Enable this option to split the attachments between multiple emails based on the maximum size set above.

**Limit number of multiple email messages to**

Disabled by default, this option applies only when the size of the email is being limited and the emails are being split. Sending too many emails can sometimes be flagged by email systems as spamming and can cause issues. Setting an upper limit of the number of emails to send can help prevent this.

**Wait timeout between sending multiple email messages**

Disabled by default, this option applies only when the size of the email is being limited and the emails are being split. Sending emails too quickly can sometimes be flagged by email systems as spamming and can cause issues. Set a timeout interval, in seconds, to wait in between sending each emails to help prevent this.

**Compression Options**

This section only appears on the **On Success** tab when there are images to be attached.

Email attachments can be zipped, or compressed, into a single file to save space in the email as well as reducing the number of attachments to a single file.

☒ ZIP the files before attaching to the email

ZIP type

ZIP folder options

ZIP folder path

Enter a folder structure, e.g. 'Output\Converted', under which to store the files in the ZIP. Leave empty to store the files in the root of the ZIP file.

☐ Secure ZIP with password

☐ Use a custom extension on the ZIP file

### ZIP the files before attaching to the email

Disabled by default, enable this option to zip any files before attaching them to the email.

### ZIP type

Select the type of zip file to create:

- *ZIP*
- *7-Zip*
- *TAR*

### ZIP folder options

This determines the folder structure used, if any, when storing the files inside the ZIP file.

- *Place files under a common parent folder* - Uses the last common folder name in the path to the created files. Output files created under 'C:\PEERNET\Output' are stored in the ZIP file under a folder named 'Output'.
- *Place files under a specified folder path* - Selecting this option shows a folder path field to be filled in. Leave this folder path empty to store

the created files inside the ZIP file with no folder structure, or provide a different folder path (folder1\folder2) to change the folder structure inside the ZIP file.

- *Keep folder structure of output files* - This maintains the folder structure of the created files inside the ZIP file. Output files created under 'C:\PEERNET\Output' are stored in the ZIP file under a folder path named 'PEERNET\Output'.

### **Secure ZIP with password**

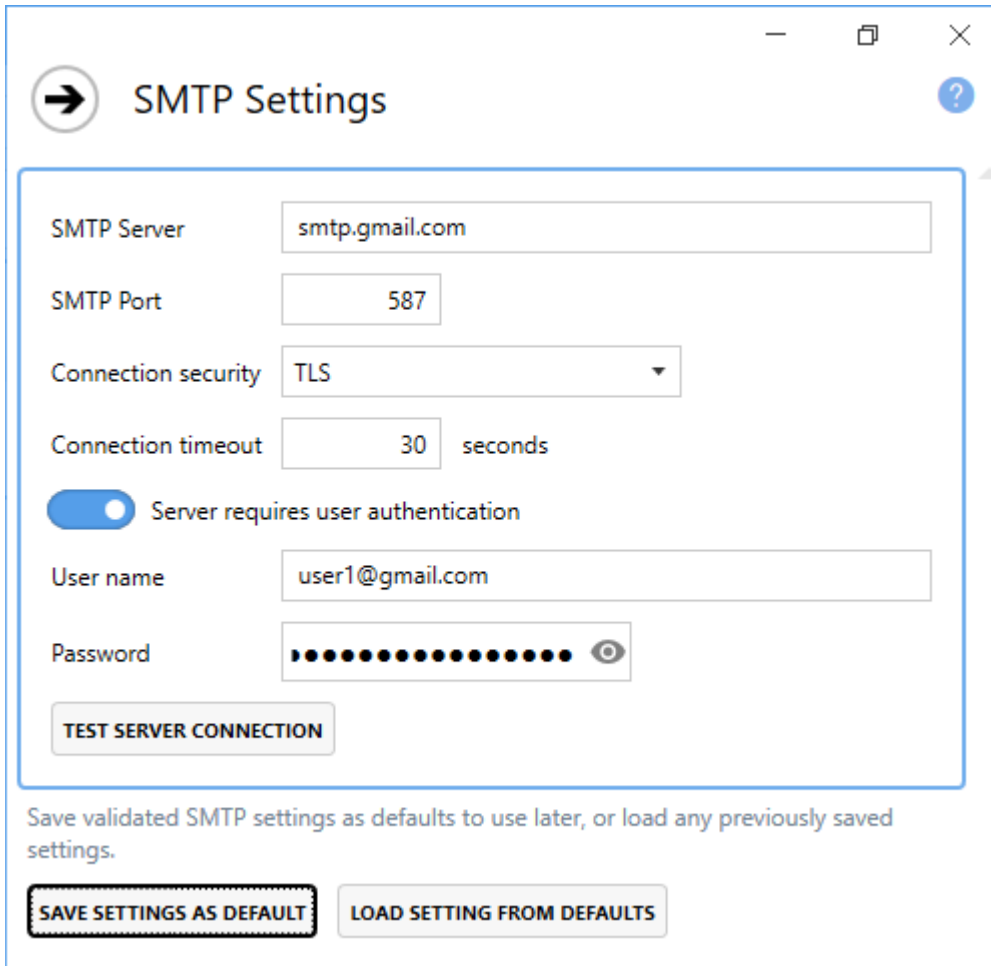
Disabled by default, enable this to apply a password to the ZIP file. A password can only be applied to ZIP files of type ZIP and 7-Zip.

### **Use custom extension on ZIP file**

Disabled by default, enable use this to change the extension of the ZIP file. This is sometimes needed to allow ZIP files through email filters. You do not need to enter in the dot(.), and a the custom extension can be up to a maximum of five (5) characters.

## SMTP Settings

Selecting the **Settings** button for the SMTP server from the [Email](#) or [SMS](#) tabs will show the **SMTP Settings** flyout. The server name, port, connection type and any required authentication settings for your SMTP server should be available from your IT department or your email provider.



The screenshot shows a window titled "SMTP Settings" with a back arrow icon on the left and a help icon on the right. The window contains the following fields and controls:

- SMTP Server:** A text input field containing "smtp.gmail.com".
- SMTP Port:** A text input field containing "587".
- Connection security:** A dropdown menu with "TLS" selected.
- Connection timeout:** A text input field containing "30" followed by the text "seconds".
- Server requires user authentication:** A toggle switch that is currently turned on (blue).
- User name:** A text input field containing "user1@gmail.com".
- Password:** A text input field with masked characters (dots) and an eye icon to toggle visibility.
- TEST SERVER CONNECTION:** A button located below the password field.

Below the form fields, there is a message: "Save validated SMTP settings as defaults to use later, or load any previously saved settings." At the bottom of the window are two buttons: "SAVE SETTINGS AS DEFAULT" and "LOAD SETTING FROM DEFAULTS".

### SMTP server

Enter the address of your SMTP server here.

### SMTP Port

Enter the port for your SMTP mail server here. Port 25 is the default, but is often blocked for security reasons. Other common ports are 465 when using SSL connections and 587 for TLS connections.



**Connection security**

Email delivery with SMTP can occur over plain text, or using encrypted connections. Choose the type of connection your SMTP server uses here.

**Connection timeout**

The time, in seconds to wait for a connection to the server to be established.

**Server requires authentication**

If your SMTP server needs account authentication to send email, enable this option and fill in the user name and password below.

**User Name**

The user name of the account allowed to send email on the SMTP server.

**Password**

The password of the account allowed to send email on the SMTP server.

**Test Server Connection**

Tests your SMTP settings are valid by trying to connect to the SMTP server. Any errors encountered when trying to establish a connection are shown when the test is complete.

**Save Settings Default**

Save the current settings on the screen as defaults to use in other profiles.

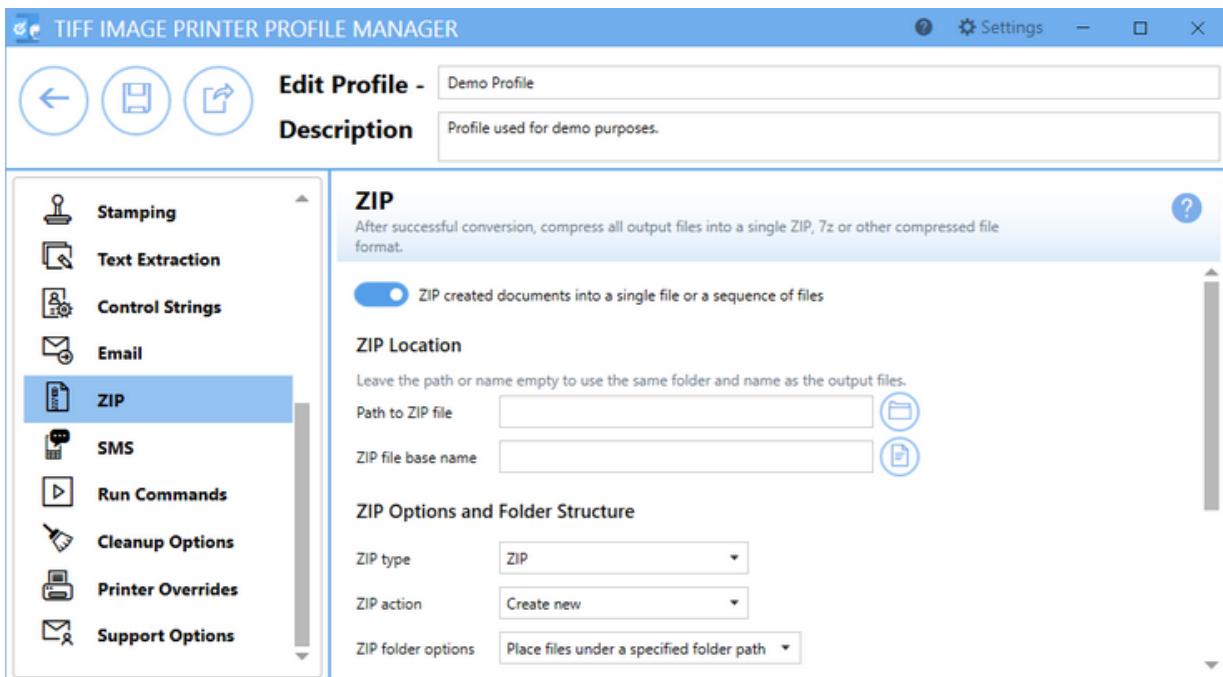
**Load Settings From Defaults**

If there are any SMTP settings previously saved as defaults, this action will be enabled and allows you to quickly fill in the settings.

## ZIP

The ZIP action will compress all of the created images into a single ZIP archive file. A ZIP archive file may contain one or more files, and also folders of files. Settings to add to existing ZIP files, split ZIP files by size and to customize the folder structure inside the ZIP file are available.

The created images are not deleted when the ZIP action is enabled. To automatically cleanup the files, enabled the *Delete generated output files* on the [Cleanup Options](#) tab.



### ZIP created documents into a single file or a sequence of files

Disabled to start, enable this feature to create a ZIP archive of the created files.

### ZIP Location

This section provides details for where to save the ZIP file. Leave both of these fields blank to store the ZIP file in the same location and using the same base name as the created files.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the path to

the ZIP file and the ZIP file base name, as explained in [Using Environment Variables and Registry Keys](#).

Leave the path or name empty to use the same folder and name as the output files.

Path to ZIP file



ZIP file base name



## Path to ZIP file

This is the location where you want the ZIP file saved. If this field is empty, the ZIP file is stored in the same location as the output files. Select the folder icon to browse to a different folder location or enter in the absolute path (for example, C:\My Files) of the directory to be used. If the path entered does not exist, an error message will appear giving you the option to create the new folder now or wait to create the new folder during conversion.

## ZIP file base name

This is the base filename for your ZIP file. If this field is empty, the same base file name used for the output files is used. This base ZIP filename excludes any directory path and file extension. You can also select the folder icon to browse to an existing filename on your computer.

## ZIP Options and Folder Structure

This section provides option on the type of ZIP file created and how the files are stored inside it, as well as options for adding a password and automatically splitting the ZIP file based on size.

ZIP type	<input type="text" value="ZIP"/>
ZIP action	<input type="text" value="Create new"/>
ZIP folder options	<input type="text" value="Place files under a specified folder path"/>
ZIP folder path	<input type="text"/> <small>Enter a folder structure, e.g. 'Output\Converted', under which to store the files in the ZIP. Leave empty to store the files in the root of the ZIP file.</small>
<input checked="" type="checkbox"/> Secure ZIP file with password	<input type="text"/>
<input checked="" type="checkbox"/> Use a custom extension on the ZIP file	<input type="text"/>
<input checked="" type="checkbox"/> Split ZIP file into multiple files when larger than	<input type="text" value="2048"/> <input type="button" value="+"/> <input type="button" value="-"/> MB

### ZIP type

Select the type of zip file to create. :

- *ZIP*
- *7-Zip*
- *TAR*

### ZIP action

Select the type of zip file to create. :

- *Create new* - Creates a new ZIP file each time. Existing ZIP files of the same name are overwritten.
- *Update existing* - Adds the files to an existing ZIP file when it already exists, otherwise creates a new ZIP file.

### ZIP folder options

This determines the folder structure used, if any, when storing the files inside the ZIP file.

- *Place files under a common parent folder* - Uses the last common folder name in the path to the created files. Output files created under 'C:\PEERNET\Output' are stored in the ZIP file under a folder named 'Output'.

- *Place files under a specified folder path* - Selecting this option shows a folder path field to be filled in. Leave this folder path empty to store the created files inside the ZIP file with no folder structure, or provide a different folder path (folder1\folder2) to change the folder structure inside the ZIP file.
- *Keep folder structure of output files* - This maintains the folder structure of the created files inside the ZIP file. Output files created under 'C:\PEERNET\Output' are stored in the ZIP file under a folder path named 'PEERNET\Output'.

### **Secure ZIP with password**

Disabled by default, enable this to apply a password to the ZIP file. A password can only be applied to ZIP files of type ZIP and 7-Zip.

### **Use custom extension on ZIP file**

Disabled by default, enable use this to change the extension of the ZIP file. This is sometimes needed to allow ZIP files through email filters. You do not need to enter in the dot(.), and a the custom extension can be up to a maximum of five (5) characters.

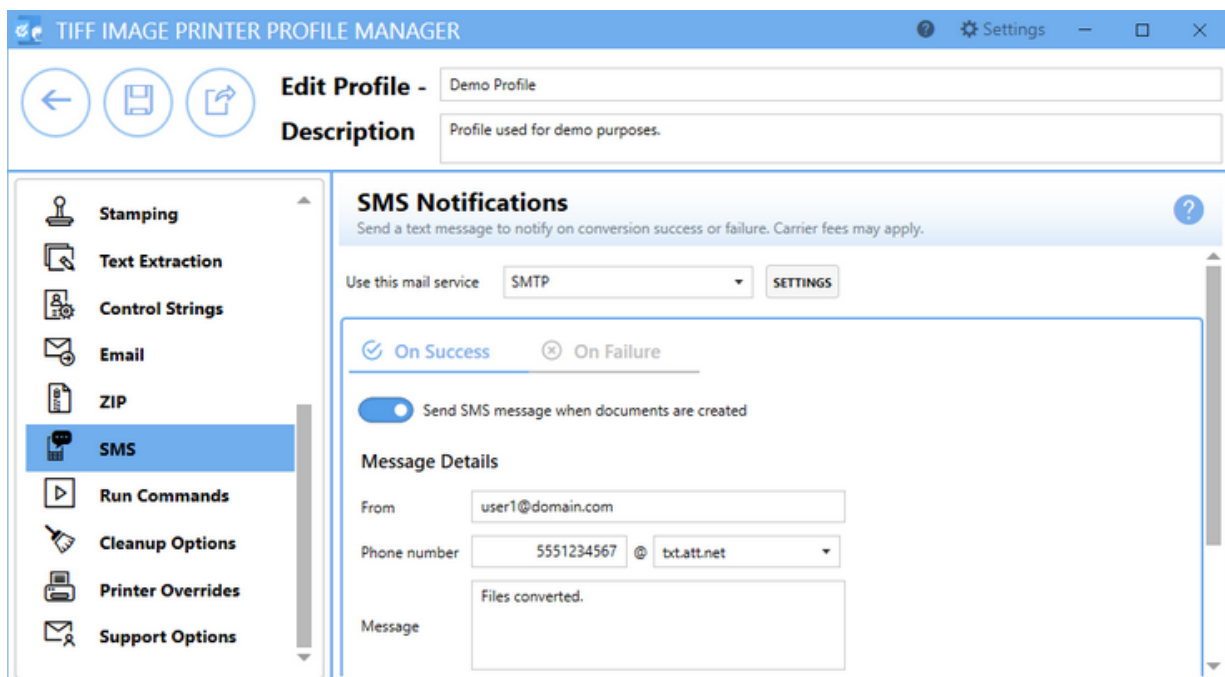
### **Split ZIP file into multiple files when larger than**

When enabled, this sets a size limit for ZIP files, up to a maximum of 2048MB. Each time the current ZIP file exceeds that size, and there is more than one output file to be compressed, a new ZIP file is created. The multi-volume ZIP files are automatically numbered by appending .001, .002, etc. to the end of each one. When your output files consists of a single file this option is ignored.

## SMS

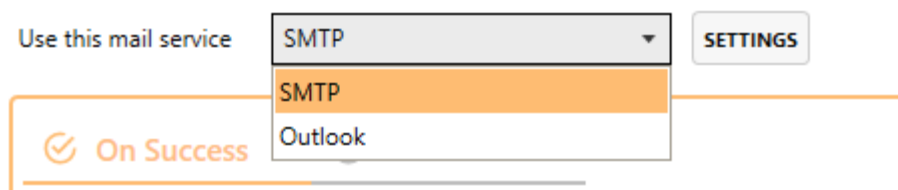
The SMS action can be used to automatically send a text message notification when images have been created, or if the file did not convert successfully. Created files are not attached to SMS messages and SMS messages are always sent silently.

Most wireless, or cellular, phone numbers have a corresponding email address created using the cell phone number and the SMS gateway of the cellular provider. By combining them together to create an email address, *5551234567@txt.att.net*, an email can be sent that is delivered to the mobile device as a text message.



### Use this mail service

Choose either **Outlook** or **SMTP** as the mail service to use to send the SMS email.

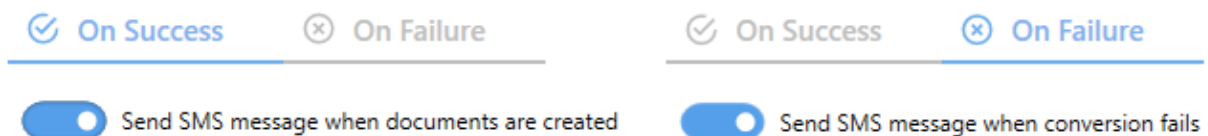


An SMTP server, which does not require an email client to be installed, can be used to send email. When chosen, the **Settings** button is available to display a flyout panel to [set up your SMTP server settings](#). You will need your SMTP server address, and other credentials from your IT personnel. Emails sent using an SMTP server are always sent silently with no prompting.

When using Outlook, it must be installed and an email account created in order to send email. SMS emails sent using Outlook are always sent silently.

## On Success\On Failure

SMS text notifications can be sent when the file conversion succeeds, when it fails, or for both cases. There are two tabs at the top to switch between success and failure and enable or disable them independently. The options shown on each tab will depend on which mail service, Outlook or SMTP, is selected.



## Send SMS message when documents are created\when conversion fails

By default this setting is disabled. Enabling this setting means TIFF Image Printer will use the mail service settings, phone number and cellular provider gateway to send an email that will be delivered as a text message to the mobile device.

## Message Details

This section provides details for sending the SMS message using both Outlook and SMTP. What fields are shown depends on the mail service you have chosen.

For advanced users and programmers automating the printer, environment variables and registry keys, as explained in [Using Environment Variables and Registry Keys](#), can be used in the following message details fields:

- *The Phone number and Provider fields*
- *The From (SMTP only), To, CC, BCC email fields*
- *The subject line and message body*

## SMTP Settings

From

user1@domain.com

### From

The field is only used when sending the SMS message using the SMTP mail service. Enter an email address that has permissions to send email through your SMTP server.

## Shared Outlook and SMTP Settings

Phone number

5551234567

@

txt.att.net

Message

Files converted.

Messages are limited to 160 characters.

SEND TEST SMS

### Phone number

The phone number and the SMS gateway of the cellular provider combined create the email address that will be used to send the email to the mobile device.

Enter the cell phone number, without dashes or spaces, into the first field. This is a 10-digit number for most of North America, similar to 5551234567. For regions outside North America, enter in a valid format for a cellular phone number for your region.

After the @ symbol, enter in the SMS gateway address, or choose from the drop down list of SMS gateway addresses for popular cellular providers.

If your cellular provider is not in the list, you can add to this list by editing the text file named *SMSProviders.txt* found in the location below. Copy and paste this path into an Explorer window to open the file. It will initially be empty.



%APPDATA%\PEERNET Inc\TIFF Image Printer 12\Settings\SMSProviders.txt

In the *SMSProviders.txt* file, list each custom provider one per line and save the file. Next time the Profile Manager or Profile Editor is opened, your new provider will appear in the list.

### **Message**

Enter the message content here.

### **Send Test SMS**

Test your SMS email settings by sending a test message to the mobile device.

### Run Commands

The Run Commands tab holds all settings related to specifying a specific command or running a program while printing to TIFF Image Printer. There are three stages at which commands can be run:

- at start of the printing process
- after a successful or failed print
- at the end of the printing process

Multiple commands of each type can be added to chain together custom actions as needed. Commands can be enabled or disabled individually, and will run in the order set within each stage by moving them up or down in the grid view. Commands are run sequentially in the order given, with each command finishing before moving on to the next one.

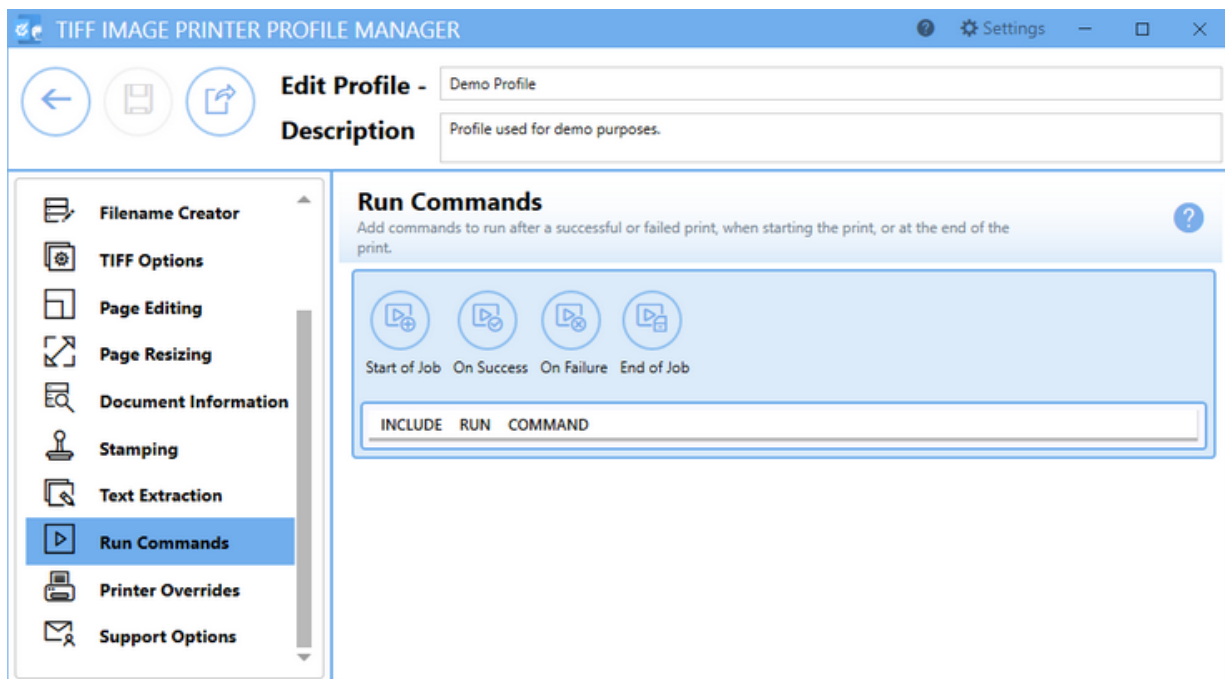
The commands that run on a successful or failed print automatically create a text file containing a list of files generated. This text file can contain zero or more lines, with each line being the full path to a file generated by TIFF Image Printer. TIFF Image Printer will pass the full path of this text file (pnf-**<GUID>**.txt) when executing the success or failure command. If no files are generated, neither the success or the failed commands are run.

Commonly used run commands have been provided in the **RunCommands** folder in the product installation folder, and custom run command files (.bat, .exe. or .com) can be created to meet specific requirements. When using a command from the **RunCommands** folder under the product setup, the location of the command is stored in the profile using a macro. This allows the profile to work on any computer, no matter where the product is installed. It also allows users the freedom to add their own commands to this folder as part of deployment and they will automatically be found.

See the topics [Using the Run Commands](#) for examples of using the provided commands.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the paths and parameters for the commands. The run commands can also be used to signal events in other programs. For examples of this see the following topics:

- [Using Environment Variables and Registry Keys](#)
- [Signaling Events Using Run Commands](#)



## Using the Command Editor

The Command Editor allows users to add new commands for each stage, move the commands up and down for each stage, delete commands, edit existing commands, and change which stage a command runs.

To edit a command, hover over the command in the list until it is highlighted, and click to edit its details.



- *Start of Job* - Adds a command that will run when the print job starts. This command is always run.



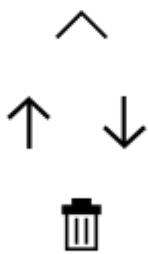
- *On Success* - Adds a command that will run when the print completes and is successful. This command is always passed a last argument of a path to a text file containing a list of files generated.



- *On Failure* - Adds a command that will run when the print job fails, such as when out of disk space. This command is always passed a last argument of a path to a text file containing a list of files generated.



- *End of Job* - Adds a command that will run when the print job completes. This command is always run.



- *Collapse Row* - Use the close arrow icon to hide the command details
- *Move Up/Down* - The arrow icons are used to change the order or the commands within each group.
- *Delete* - Click the trash bin to delete unwanted commands.

## Editing Command Details

### Enable this command

When a new command is added, this setting starts out disabled. Enabling this setting means TIFF Image Printer will run the command at its designated stage when printing.

### Run command on

This is the stage during the print cycle at which the command will be run, one of *Start of Job*, *Success*, *Failure*, or *End of Job*.

### Run this command

Enter the full path to the command you want to run. If this string is left empty, a warning message will appear when printing,

Select the run icon to browse to your desired run command or enter in the absolute path (for example, C:\My Files\RUNCOMMAND.exe) of the run command to be used. Environment variable like %userprofile%, %username %, and %systemroot% can be used in the command string.

The most common run commands are executable files (.exe) or batch files (.bat), but TIFF Image Printer will accept run commands with any file extension including .com, .cmd, or PowerShell files. TIFF Image Printer will attempt to execute any run command entered. If the command is not runnable, you will receive any error indicating that it could not be run.

A **command preview** will appear for anything entered in the command string, including any possible expansion of environmental variables and run [command macros](#).

## Use these parameters

Type any parameters you need to send to your application.

When entering parameters:

- Use blank spaces to separate parameters.
- Enclose parameters that contain spaces in double quotation marks.

Environment variable like %userprofile%, %username%, and %systemroot% can be used as parameters. Run [command macros](#) can also be used.

The *On Success* and *On Failure* commands will automatically add the full path to a generated text file (pnf-<GUID>.txt) as the very last parameter when executing the command. This text file can contain zero or more lines, with each line being the full path to a file generated by TIFF Image Printer. TIFF Image Printer. If no files are generated, neither the success or the failed commands are run.

## Starting folder for command is

You can specify a default working directory for your application. Select the folder icon to browse to your desired working directory or enter in the absolute path (for example, C:\My Files) of the directory to be used. If the path entered does not exist, the folder will not be automatically created and therefore the driver will not run the command. Environment variable like %username%, %systemroot% can be used in the starting folder.

Although designating the starting folder is not frequently required, you may need to designate the starting folder if your run command requires that the working folder be a specific folder.

## Run Command Macros

These macros can be used in the command, parameter and starting folder fields. They are automatically expanded to their values when the command is run.

## Output Variables

### **\$(FileGUID)**

A GUID (*Globally Unique Identifier*) for this file, this alphanumeric number is unique.

### **\$(JobGUID)**

Current job GUID (*Globally Unique Identifier*) maintained by the driver, this alphanumeric number is unique.

### **\$(JobID)**

Current job ID maintained by the driver for this printer. Increments for every print job. This number is shared across all copies of the TIFF Image Printer printer and stored as a UInt64 with a maximum value of 18,446,744,073,709,551,615.

### **\$(JobStatus)**

1 indicates success, 0 indicates failure

### **\$(OutputDir)**

The output directory where the files are created. The directory string is passed in quotes. This macro cannot be used with the [PNStart12.exe utility](#).

### **\$(OutputDirNoQuotes)**

Same as \$(OutputDir), but without quotation marks. This macro cannot be used with the [PNStart12.exe utility](#)

### **\$(PageOrientation)**

The orientation of the first page of the output pages, either "Portrait" or "Landscape".

### **\$(PrintJobID)**

The job ID from the print queue; this job id increments for every print job. It is not unique and numbers can be repeated.

### **\$(PrintedPageCount)**

The number of pages printed.

## Date and Time Variables

### **\$(Year)**

The year the job was started.

### **\$(Month)**

The month the job was started, two digits, 01-12.

### **\$(Day)**

The day the job was started, two digits, 01-31.

### **\$(Hour)**

The hour the job was started, two digits, 24-hr format, 00-23.

### **\$(Minute)**

The minute the job was started, two digits, 00-59.

### **\$(Second)**

The second the job was started, two digits, 00-59

## Other Variables

### **\$(PrinterName)**

Name of the printer that printed the file.

### **\$(Copies)**

The number of copies chosen in the print dialog. This number is not used, just passed on as information.

### **\$(Collate)**

Any collation settings chosen on the print dialog.

- 0 if collate was not checked
- 1 if it was checked

### **\$(Duplex)**

Any duplex settings chosen on the print dialog.

- 1 = No duplex
- 2 = flip page on long edge

- 3 = flip page on short edge

### **\$(Color)**

The color setting used when printing the document.

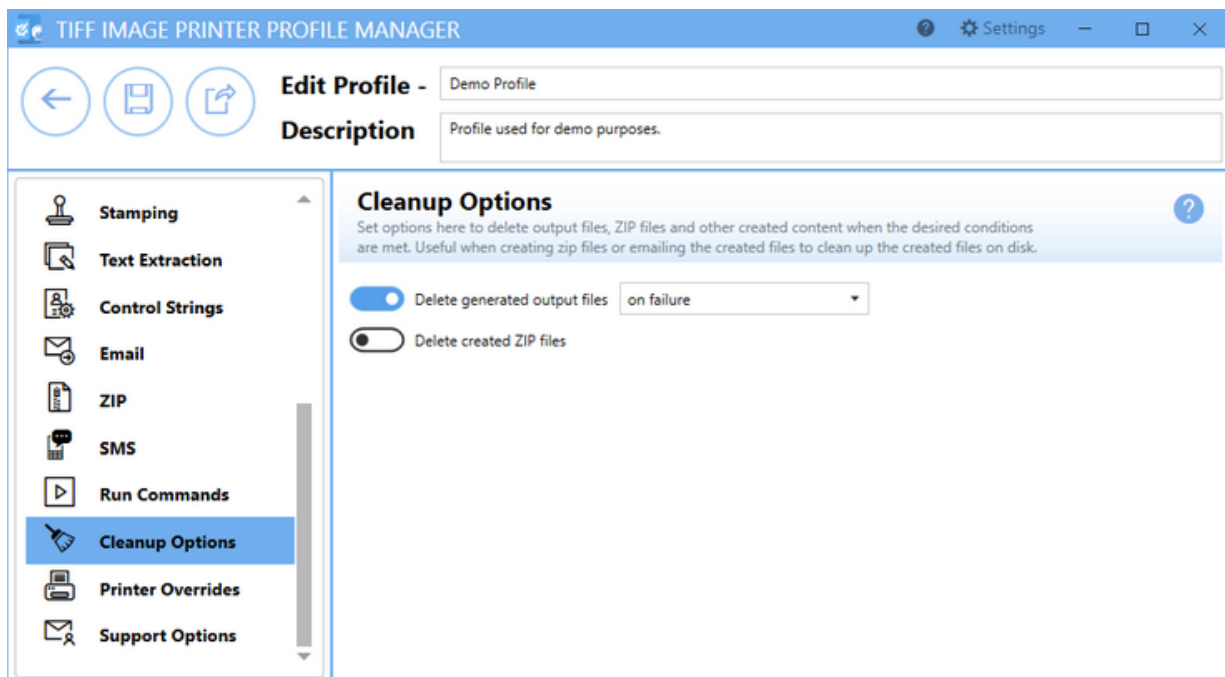
- 1 = Black and White
- 2 = Color



## Cleanup Options

When using the [Email](#) or the [ZIP](#) actions to email or ZIP the created images, the created images are not automatically deleted. Most of the time when emailing or zipping the output files, or running your own commands using the [Run Commands](#), you do not want to keep the output once you have processed it. These options allow you to control if and when these files are deleted.

These actions take place after any [Email](#), [ZIP](#) and [Run Commands](#) have been processed.



### Delete generated output files

Enable this option to automatically delete the created images. You can choose to delete the files in the case of success, failure or both success and failure.

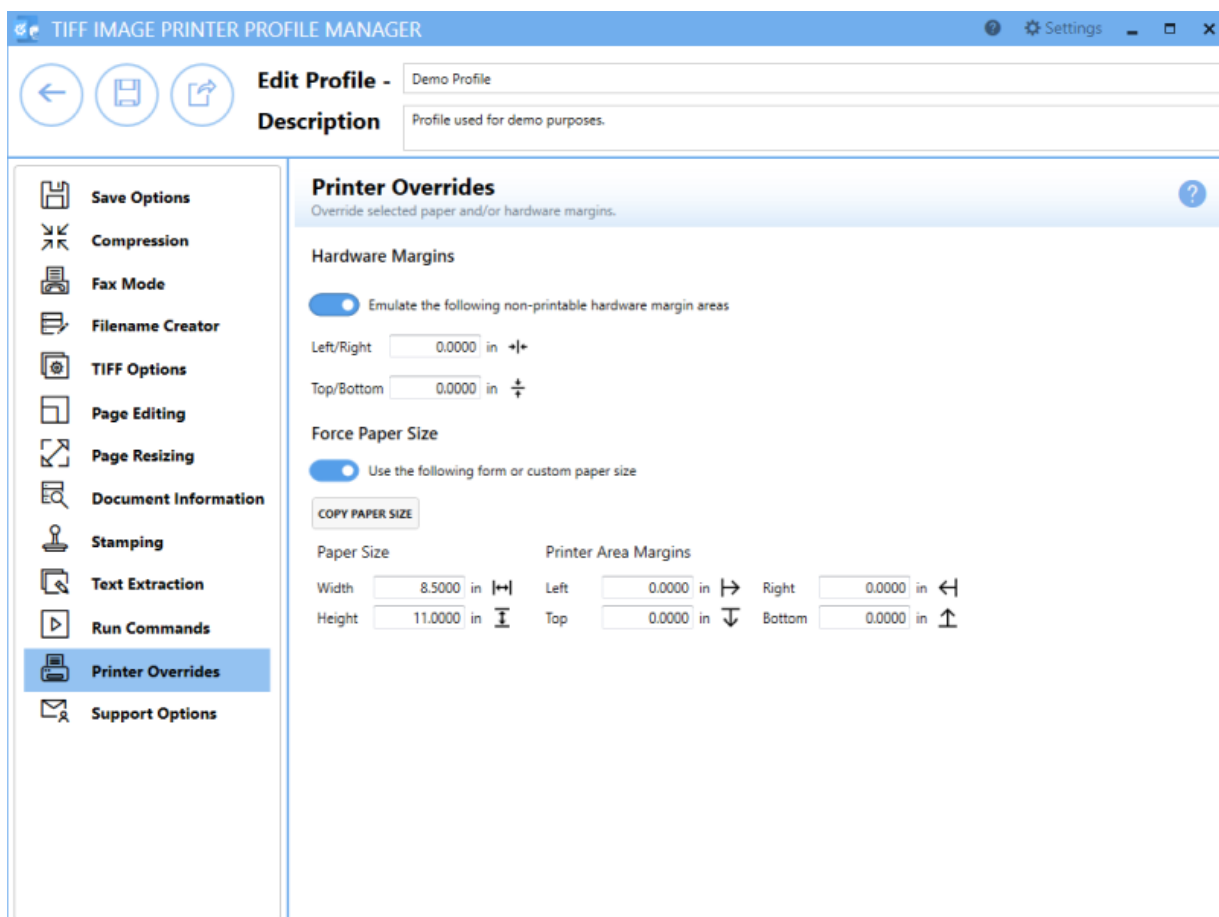
### Delete created ZIP files

Enable this option to automatically delete any ZIP files created using the [ZIP](#) action. This would most often be used when you are using the [Run Commands](#) to further process the created ZIP file.

## Printer Overrides

The Printer Overrides Tab holds all settings related to controlling paper size and margins of the printer. For most applications, when the original file is printed, the paper size and margins are part of the information being sent to TIFF Image Printer, so setting paper information on the Printer Override Tab is unnecessary. There are some instances where you may need to override the paper information, such as when printing oil well logs.

All settings on the Printer Overrides tab will override any selections that you have set within the application.



See Also: [Print Well Logs as One Continuous Image](#)

## Hardware Margins

### Enable emulate the following non-printable hardware margin area

By default this setting is disabled. Enabling this setting allows you to customize the size of the printer-supplied edge on your output file. Hardware margins cannot be large than 1.00in (2.54cm) on each side of the paper.

- *Left/Right* - Enter the Left and Right hardware margins settings into the appropriate fields.
- *Top/Bottom* - Enter in the Top and Bottom hardware margin settings into the appropriate fields.

Dimensions for Hardware Margins are entered based on a portrait oriented page. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

## Force Paper Size

### Enable use the following form or custom paper size

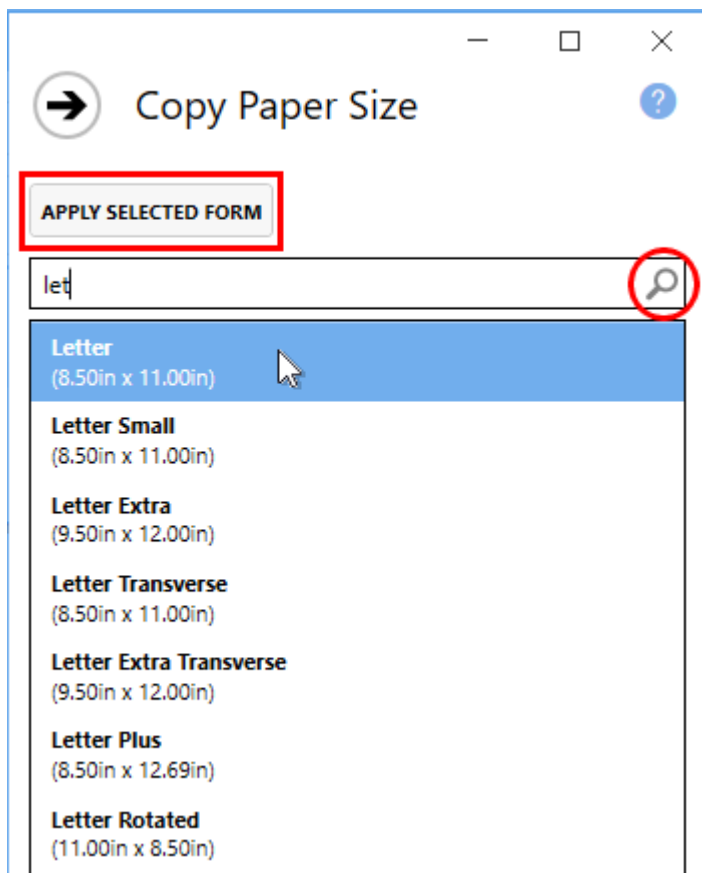
By default this setting is disabled. Enabling this setting means TIFF Image Printer will use custom paper size for the output file. Note that this selection overrides any other paper size selection that you have set on the application.

### Paper Size

Enter the desired *Width* and *Height* for the custom paper size.

Use the **Copy Paper Size** button to copy the dimensions from our list of standard paper sizes.

- Select **Copy Paper Size** to open the Copy Paper Size flyout.
- Use the filter field to search and refine the list.
- Click **Apply Selected Form** to copy selected paper size directly to *Width* and *Height* fields.



Dimensions for Paper Size are entered based on a portrait oriented page. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

## Printer Area Margins

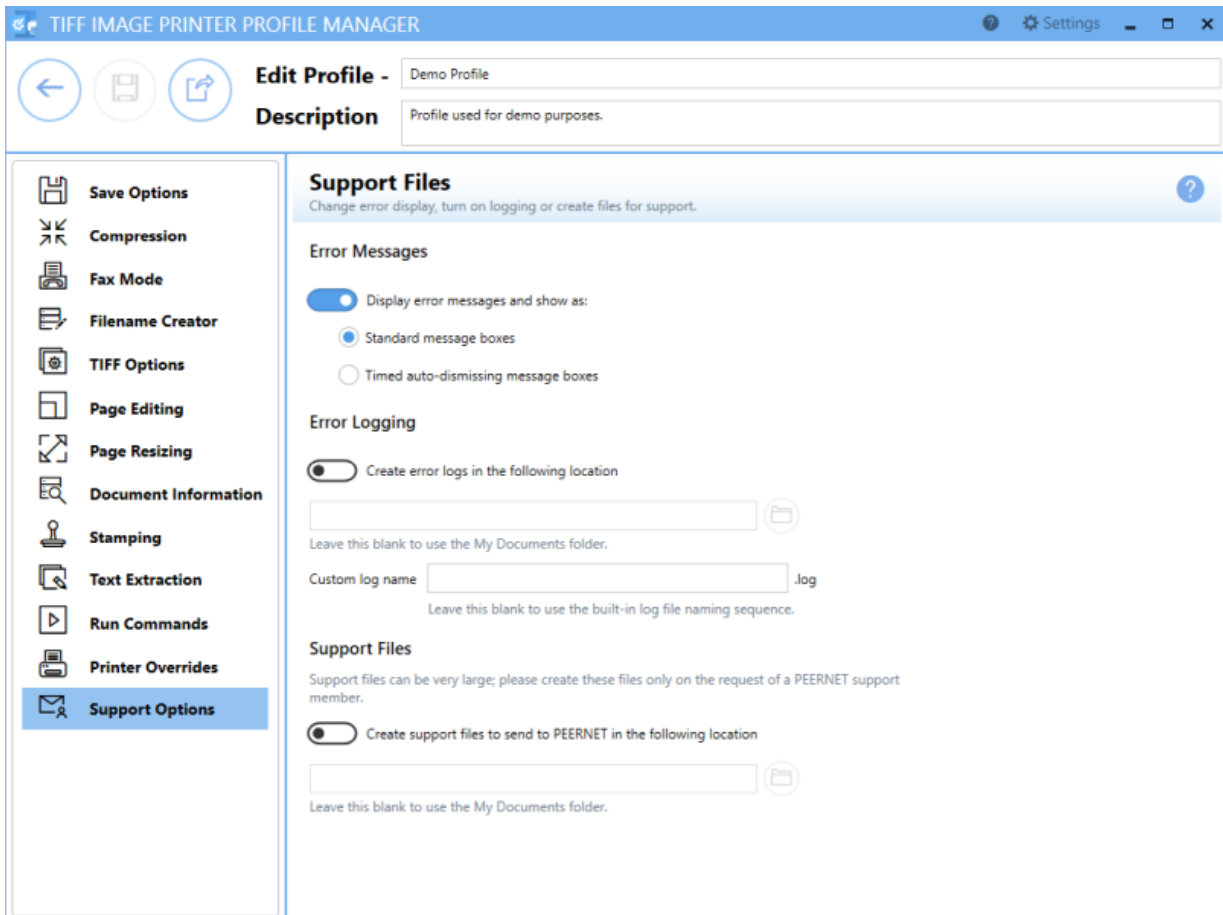
Enter the desired *Left*, *Right*, *Top*, and *Bottom* printer area margin settings for the custom paper size.

The combined *Left* and *Right* printer area margins must be less than the *Width* of the custom paper. The combined *Top* and *Bottom* printer area margins must be less than the *Height* of the custom paper.

Dimensions for Printer Area Margins are entered based on a portrait oriented page. You can change the units by selecting **Settings** from the top right hand corner of the Profile Manager window, and toggling between inches (in) and centimeters (cm).

## Support Options

The Support Options tab holds all error reporting features of TIFF Image Printer, including the display of any error dialogs and customizing the location of any error log files or support files created.



## Error Messages

### Display error messages

By default, error messages are displayed as *standard message boxes*.

Choose how to display error messages:

- *Standard message boxes* - required user to dismiss error messages
- *Timed auto-dismissing message boxes* - error messages automatically disappear after 5 seconds

## Error Logging

### Enable create error logs in the following location

By default this setting is disabled. Enabling this setting will activate error logging. A log file is only created if errors occur during the printing process.

If this field is empty, the My Documents folder is used as the default directory. Select the folder icon to browse to your desired folder location or enter in the absolute path (for example, C:\My Files) of the directory to be used. If the path entered does not exist, an error message will appear giving you the option to create the new folder now or wait to create the new folder when saving log files.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the path to the error logs, as described in [Using Environment Variables and Registry Keys](#).

By default, a custom naming sequence is imposed on all logging files so that every job will create its own unique log file. The log file name always includes the name of the printer that printed the job. If you have renamed the printer to a custom name, or are using a copy of the printer with a different name, that name is used to create the log file names. A GUID is also added to create a unique log name. Alternatively, enter a custom log name in the **Custom log name** field.

## Support Files

### Enable create support files to send to PEERNET in the following location

By default this setting is disabled. Enabling this setting means TIFF Image Printer will create support files to send to PEERNET. Support files can be very large so please only create these files on the request of the PEERNET support team.

If this field is empty, the My Documents folder is used as the default directory. Select the folder icon to browse to your desired folder location or enter in the absolute path (for example, C:\My Files) of the directory to be used. If the path entered does not exist, an error message will appear giving

you the option to create the new folder now or wait to create the new folder when saving support files.

For advanced users and programmers automating the printer, environment variables and registry keys can be used to specify all or part of the path to where the support files are created, as described in [Using Environment Variables and Registry Keys](#).

A custom naming sequence is imposed on all support files so that every job will create its own unique support file. The support file name always includes the name of the printer that printed the job. If you have renamed the printer to a custom name, or are using a copy of the printer with a different name, that name is used to create the support file names. A GUID is also added to create a unique log name.

## Profile Editor

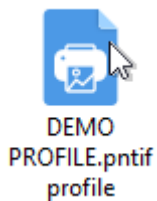
The **Profile Editor** is used to review and edit exported profiles. The Profile Editor is a simplified version of Profile Manager. It will open directly to your exported profile allowing you to review and edit all of the same settings available through Profile Manager.

Go to the [Profile Manager](#) section for information about the settings available within each property tab of the Profile Editor.

### Profile Editor

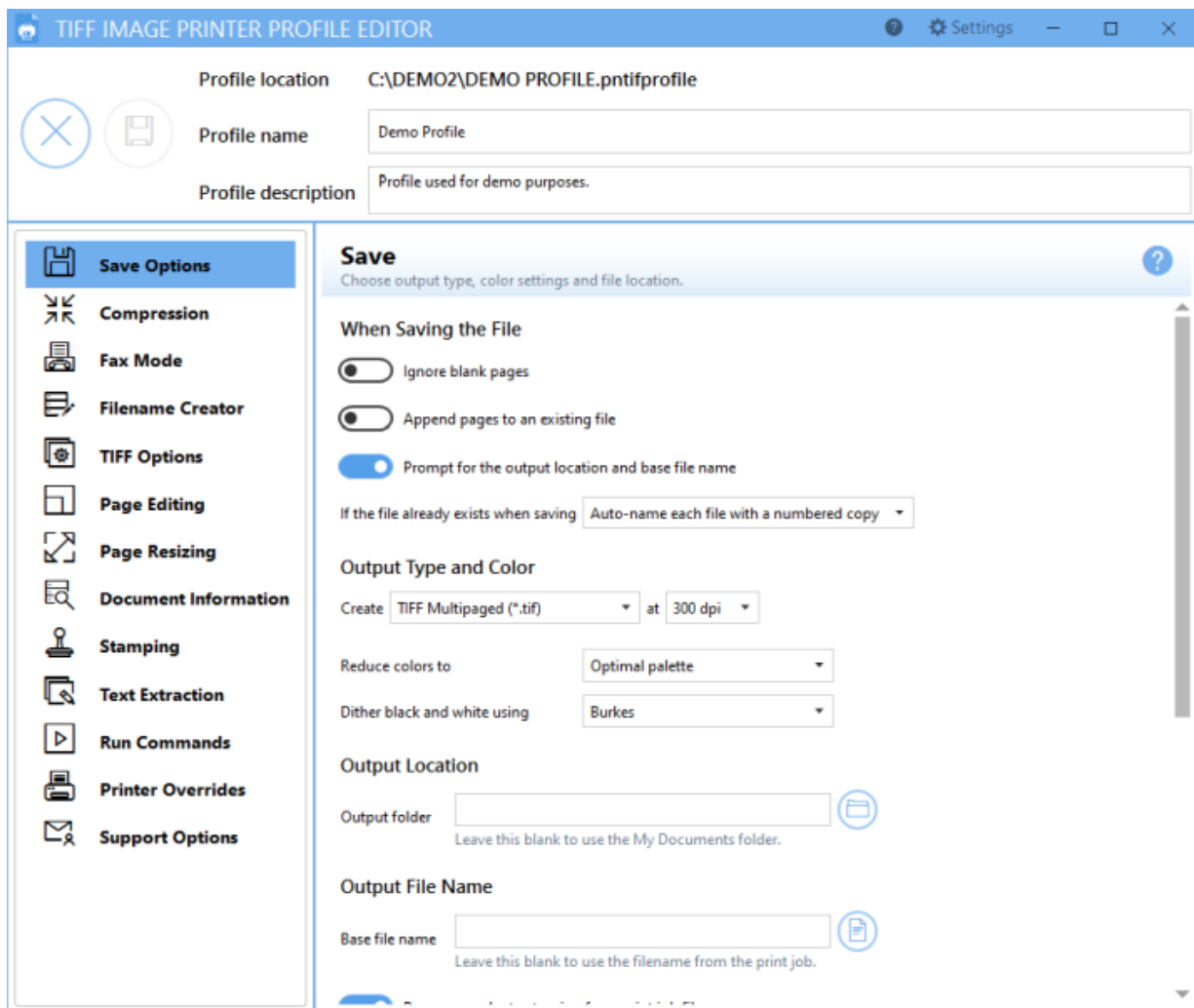
To launch **Profile Editor**:

1. Navigate to a where you have saved an exported profile.

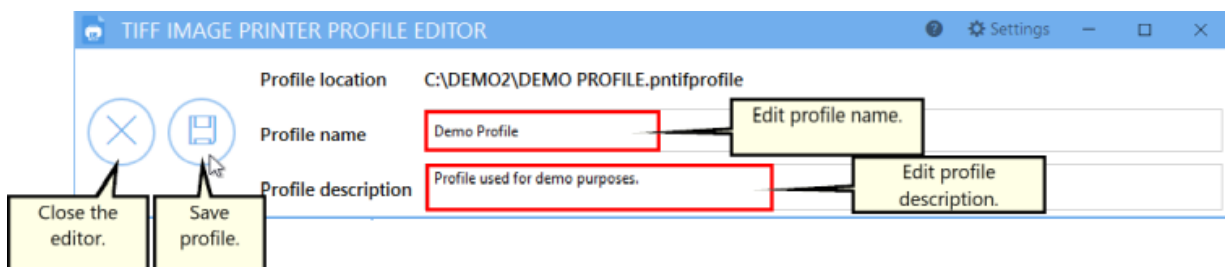


2. Double-click the TIFF Image Printer profile icon to open the profile in **Profile Editor**.





If you make any changes to the exported profile, select the **save icon** to save profile. Select the **close icon** to close the editor.

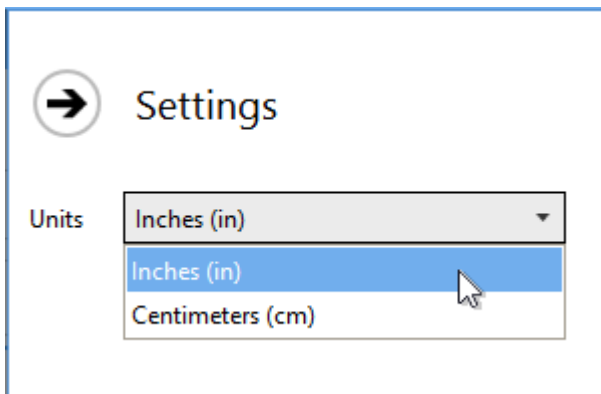


- *Close the editor* - Close the Profile Editor.
- *Save profile* - Save any changes made to the settings stored in the profile.

- *Edit Profile* - Edit the name of the profile. We recommend that you name your personal profiles something recognizable.
- *Description* - If desired, you can add a description to the profile to remind you of the settings stored in the profile and/or the purpose of the profile.

### Settings panel

Select the **Settings gear icon** from the top right hand corner of the Profile Manager window at any time to change units by toggling between inches (in) and centimeters (cm).



Visit the topics within the [Profile Manager](#) section to learn about the settings stored on each property tab within the Profile Editor.

## TIFF Image Printer Advanced Concepts

If you only need to create TIFF images (\*.tif) from applications on your desktop you likely will not need the following information.

These topics are geared towards IT personnel who need to install the driver over a network or use push software such as SCCM to distribute the driver to users and computers within an organization. or for programmers who need to automate printing to the TIFF Image Printer in their own software.

The following topics are covered:

- [Installing the Printer Silently](#)
- [Installing a Customized Printer](#)

See this topic covering printer automation as well:

- [Automating the Printing Process](#)

### Installing the Printer Silently

The TIFF Image Printer can be installed silently to multiple users on a network using Microsoft SCCM or a similar product with software push capability. For One Time and Subscription licenses this only installs the software on the computer, it does not activate the license on that computer. If you have a large number of users and need a pre-authorized installation, please contact PEERNET Sales for information on this type of custom install.

### Deployment Requirements

Any PEERNET provided Run Command tools you may be using, or other custom programs or tools (and their requirements) used in the Run Commands in your conversion profile will also have to be included in your install or deployment scripts.

The PEERNET Run Command tools require **.NET Framework 4.8**. Your installation software should already have the ability to detect and install this requirement. If it does not, start with how to [download and install the .NET Framework 4.8 Runtime](#).

### Command Line Syntax

#### Logging - /L=<Path to Log>

To create a log file when installing, use the /L parameter and pass in a full path to the name of a log file. Two files will be created, the log file specified, and another one using the same name with PEERNET.txt appended. The one ending in PEERNET.txt is a trace of what happens during the initial install setup script, including testing for system compatibility and pre-requisites, and going through the setup wizard. The base one is created by the installer during the actual install step after the setup wizard has gathered all of its information. Both log files can be used to troubleshoot install issues, especially when using the /S silent install parameter with SCCM or other push software.

**Subscription License**

```
pntifsubsetup_12.0.001.exe /L="C:\PEERNET\Setup.log"
```

**One Time License**

```
pntifotsetup_12.0.001.exe /L="C:\PEERNET\Setup.log"
```

**Silent install - /S**

With the silent install command line parameter set, the entire installation will execute silently, without a user interface, or any user intervention. When any input is required on dialog boxes, the default values of dialog controls will be used.

**Subscription License**

```
pntifsubsetup_12.0.001.exe /S
```

**One Time License**

```
pntifotsetup_12.0.001.exe /S
```

**Password protected installs- /k=<password>**

*Only valid with Subscription licenses.*

For clients with password protected installs the /k parameter allows passing the password into the install. Quotes around the password are not needed but are accepted. This is often used with the /S parameter for silent installs.

**This parameter must be entered in lower case.**

**Subscription License**

```
pntifsubsetup_12.0.001.exe /k=password /S
```

**Silent uninstall - /S MODIFY=FALSE REMOVE=TRUE UNINSTALL=YES**

Running the install with the /S when it is already installed will automatically remove the product. To force the install to always run an uninstall, as is needed with some SCCM and push software tools, add the MODIFY, REMOVE and UNINSTALL flags to the command line.

### **Subscription License**

```
pntifsubsetup_12.0.001.exe /S MODIFY=FALSE REMOVE=TRUE
```

### **One Time License**

```
pntifotsetup_12.0.001.exe /S MODIFY=FALSE REMOVE=TRUE
```

## **Removing License Activations - DEACTIVATEUSER=TRUE|FALSE**

*Only valid with Subscription licenses and with an internet connection.*

When uninstalling a Subscription license, you can automatically remove this user from your list of authenticated users, provided the computer has internet access and connect to the PEERNET licensing server. This is useful when transferring the subscription installation to another user, or moving the same user to a new computer.

If you are uninstalling and re-installing TIFF Image Printer silently for the same user, and do not want to remove the authentication, pass in FALSE for this option. The default value for this is TRUE.

### **Subscription License - Remove user from authentication list**

```
pntifsubsetup_12.0.001.exe /S DEACTIVATEUSER=TRUE
```

## **Hiding the Desktop Icons and Start Menu Shortcuts - SHOWUI=TRUE|FALSE**

*Only valid with Subscription licenses.*

When installing a Subscription license across an organization, the IT department may not want the end users to be able to change the printer configuration. Desktop icons and start menu icons are normally created as part of the install. Passing in FALSE for the SHOWUI option will install the product but not create the icons and shortcuts. This is often used in conjunction with the CONFIGPRINTER, NOEDIT, NODASH, NOPMGR and NOPMGT options when [Installing a Customized Printer](#).

**Subscription License - Do not show desktop icons or start menu shortcuts**

```
pntifsubsetup_12.0.001.exe /S SHOWUI=FALSE CONFIGPRINTER="C:\PEERNET\PrinterSettings.pntifexport"
```

**Hiding the License and Update Notifications - NOTIFYUI=TRUE|FALSE**

*Only valid with Subscription licenses and on Windows 10 and higher, Windows Server 2016 and higher.*

On Windows 10 and higher, and Windows Server 2016 and higher, a notification component is installed as part of the software. This utility validates the license status and will show a popup, or toast, notification in the lower right corner when the subscription is close to its renew date, or if it has expired. Notifications are also shown if a newer version of the product is available to download.

Passing in FALSE for the NOTIFYUI option will install the product but not add the notification components.

**Subscription License - Do not check for license and update notifications**

```
pntifsubsetup_12.0.001.exe /S NOTIFYUI=FALSE
```

**Hiding the Profile Editor - NOEDIT=TRUE**

*Only valid with Subscription licenses.*

When installing a customized printer setup with a locked profile, you may not want the end users to be able to edit the locked profiles. Passing in TRUE for the NOEDIT option will install all of the product except the [Profile Editor](#). The *Edit Profile/Manage Profiles* button on the Printing Preferences dialog will be hidden. This is often used in conjunction with the CONFIGPRINTER, SHOWUI, NODASH, NOMGR and NOPMGT options when [Installing a Customized Printer](#).

**Subscription License - Do not allow editing profiles from Printing Preferences**

```
pntifsubsetup_12.0.001.exe /S SHOWUI=FALSE NOEDIT=TRUE  
CONFIGPRINTER="C:\PEERNET\PrinterSettings.pntifexport"
```

**Hiding the Profile Manager - NOMGR=TRUE**

*Only valid with Subscription licenses.*

Passing TRUE for the NOMGR option when installing will exclude the [Profile Manager](#) from the install of the product. If the Dashboard is still included, clicking the Edit & Create Profiles tile will show a view stating the feature is disabled. This is often used in conjunction with the CONFIGPRINTER, SHOWUI, NODASH, NOEDIT, and NOPMGT options when [Installing a Customized Printer](#).

**Subscription License - Do not allow editing and creating profiles**

```
pntifsubsetup_12.0.001.exe /S SHOWUI=FALSE NOMGR=TRUE  
CONFIGPRINTER="C:\PEERNET\PrinterSettings.pntifexport"
```

**Hiding the Print Management View - NOPMGT=TRUE**

*Only valid with Subscription licenses.*

When installing a customized printer setup you may want to hide the [Printer Management](#) features in the dashboard. Passing in TRUE for the NOPMGT option will show a view stating the feature is disabled when the *Mange Printers* tile is selected on the [Dashboard](#). This is often used in conjunction with the CONFIGPRINTER, SHOWUI, NOEDIT, NOMGR, and NODASH options when [Installing a Customized Printer](#).

**Subscription License - Do not allow print management**

```
pntifsubsetup_12.0.001.exe /S NOPMGT=TRUE CONFIGPRINTER="C:  
\PEERNET\PrinterSettings.pntifexport"
```

**Hiding the Dashboard - NODASH=TRUE**

*Only valid with Subscription licenses.*



When installing a customized printer setup you may want to hide the printer dashboard completely from your users to keep them from editing profiles or changing printer configurations. Passing in TRUE for the NODASH option to exclude the [Dashboard](#) from the install of the product. This also prevents the dashboard's desktop icons and shortcuts from being created as part of the install, even when SHOWUI is not used.. This is often used in conjunction with the CONFIGPRINTER, SHOWUI, NOEDIT, NOMGR, and NOPMGT options when [Installing a Customized Printer](#).

**Subscription License - Do not show desktop icons or start menu shortcuts**

```
pntifsubsetup_12.0.001.exe /S SHOWUI=FALSE NODASH=TRUE  
CONFIGPRINTER="C:\PEERNET\PrinterSettings.pntifexport"
```

### Installing a Customized Printer

In some environments you may need to install a customized version of the TIFF Image Printer printer for all of your users, or to install one or more custom-named printers with their own settings. This approach is commonly used when distributing software remotely and/or silently to multiple users on a network using Microsoft SCCM or a similar product with software push capability.

The steps below will walk you through creating a custom profile, and if desired, a custom-named printer, and setting that profile to be used by the printer. It also shows how to create a printer that is locked to a profile, perfect for when a base set of options needs to be used by all users.

Once we have our profile created and the TIFF Image Printer printer configured, or our custom-named printer created, the [Backup and Restore All Settings](#) feature is used to create an export file containing only the printer(s) you want to update or add during the installation. This export file is used when pushing TIFF Image Printer on other computers.

For push software like Intune, SCCM or others where you may have to run them in a System account environment, and not as the logged in user,

- [Creating Custom Settings for TIFF Image Printer](#)
- [Creating a Custom Printer with Locked Settings](#)
- [How to Create the Export File](#)
- [Installing TIFF Image Printer with Custom Settings](#)
- [Updating TIFF Image Printer with New Settings](#)

### Creating the Custom Settings and a Printer

This configures the TIFF Image Printer printer with your own settings or creates a custom-named printer with your own settings. Users can still create their own profiles, and edit the profiles you distribute. If you are pushing the software as the logged in user, you can configure custom settings this way. If you are pushing the software under the System account, go to [Creating a Custom Printer with Locked Settings](#).

### **Step by Step Instructions**

1. Install the TIFF Image Printer on a single computer. You do not have to license the software at this point.
2. Follow the steps [Create a New Profile Settings File](#) to create a custom profile with your settings and save the profile.
3. To set the default profile for the TIFF Image Printer printer to the one you just created, follow the steps in [Change Default Profile](#).
4. If you want to install your own custom-named printer, follow the steps in [Add New Printer](#) to create and name your custom printer. Set the default profile for your custom printer to the profile you created in step 2 above.

## **Creating the Custom Settings and a Locked Printer**

This configures the TIFF Image Printer printer, or a custom-named printer with a locked version of your own settings. When a printer is locked to a profile, that is the only profile available in the Save As prompt, and the only profile listed in the Printing Preferences dialog.

When pushing the software using the System account, custom settings must be set using a locked printer.

### **Step by Step Instructions**

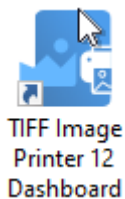
1. Install the TIFF Image Printer on a single computer. You do not have to license the software at this point.
2. Follow the steps [Create a Shared Profile](#) to create a custom profile with your settings and share the profile. Only shared profiles can be locked to a printer.
3. To lock the profile to the printer, follow the steps in [Lock Shared Profile to Printer](#).
4. If you want to install your own custom-named printer, follow the steps in [Add New Printer](#) to create and name your custom printer. Then follow step 3 above to lock the profile for your custom printer to the shared profile you created in step 2.

## Creating the Export File

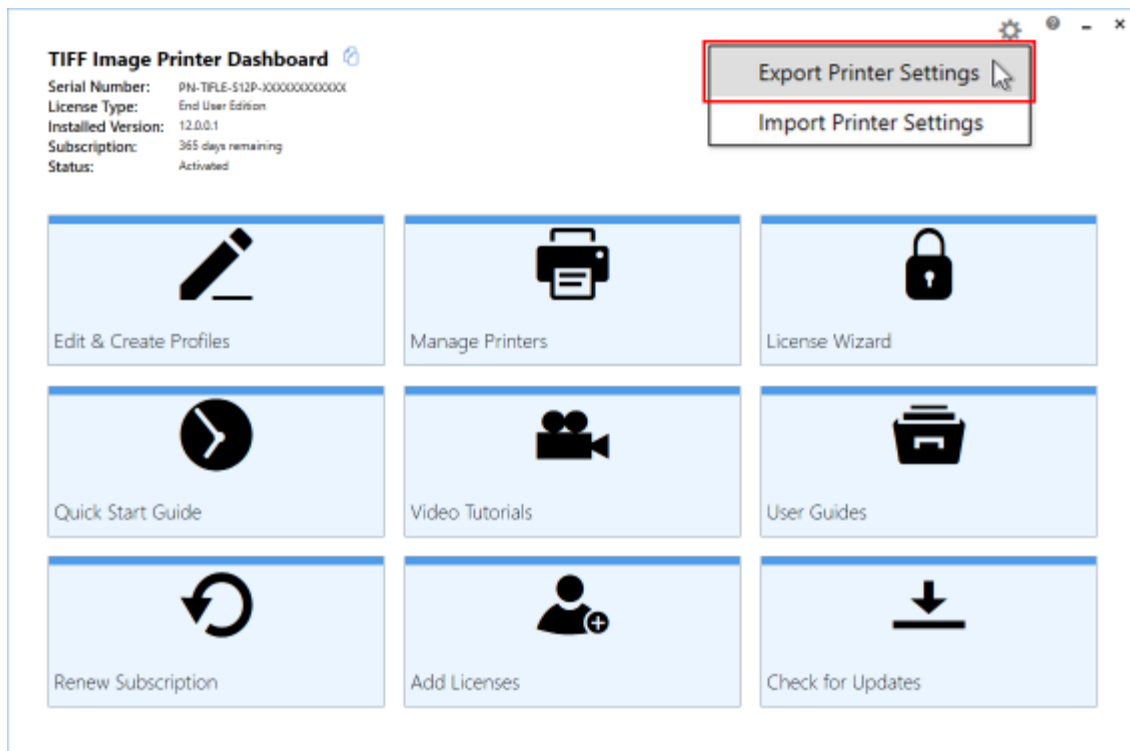
The [Backup and Restore All Settings](#) feature is used to create the export file that contains only the printer(s) you want to update or add when pushing the setup.

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.





2. Click the gear icon from the top right hand corner of the **Dashboard** window, and select "Export Printer Settings".



- Under **Choose Printers** disable "Export all printers" and check the printer(s) you want to export.

#### Choose Printers

☐ Export all printers

<input checked="" type="checkbox"/>	Custom Printer	Custom Profile
<input checked="" type="checkbox"/>	Locked Printer	 Shared Profile
<input type="checkbox"/>	TIFF Image Printer 12	 Color Optimized TIFF

- Under **Choose Profiles** disable "Export all personal profiles". The profiles that are in use by a printer being exported are automatically selected and cannot be unselected.

#### Choose Profiles

Profiles in use by a printer being exported cannot be unselected.

☐ Export all personal profiles

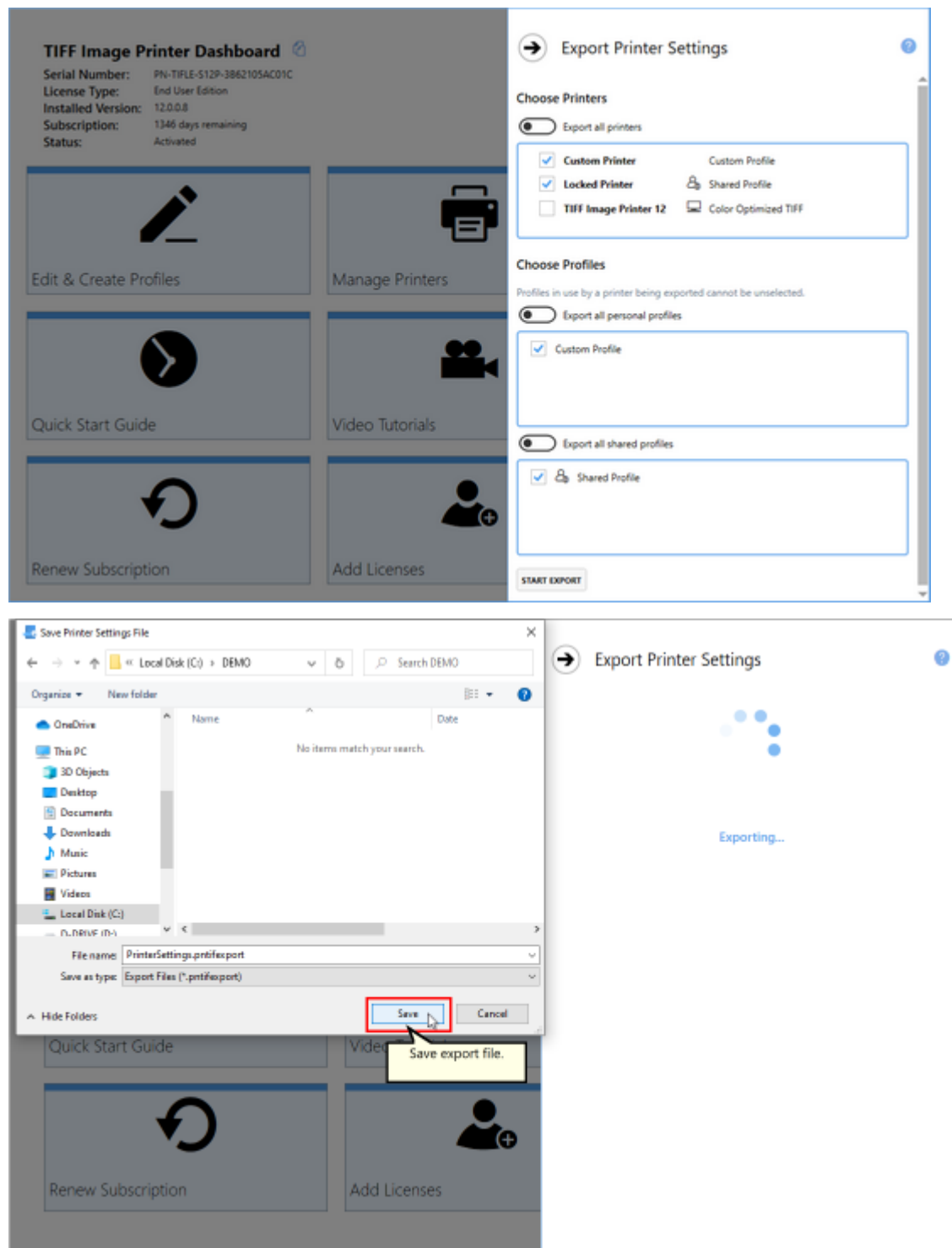
<input checked="" type="checkbox"/>	Custom Profile
-------------------------------------	----------------

- For any shared profiles disable "Export all shared profiles". The shared profiles that are in use by a printer being exported are automatically selected and cannot be unselected.

☐ Export all shared profiles

<input checked="" type="checkbox"/>	 Shared Profile
-------------------------------------	--

6. Select **Start Export**, and save the export file.



## Running the Setup

To run the customized setup on another computer, the setup program and the export file need to be accessible from that computer.

For push software, the export settings file needs to be in a location that is accessible when the push software runs the setup. Push software that used the System account needs to use an export file where the [custom printer is using locked settings](#).

## Command Line Syntax

### /S

With the silent install command line parameter set, the entire installation will execute silently, without a user interface, or any user intervention. When any input is required on dialog boxes, the default values of dialog controls will be used.

### SHOWUI=TRUE|FALSE

This option determines if the desktop icon and start menu shortcut for TIFF Image Printer Dashboard are created as part of the install. This option is only valid for Subscription installs. Passing in FALSE for the SHOWUI option will install the product but not create the desktop icons and start menu shortcuts.

### CONFIGPRINTER="Path to export file"

This is the full path to the exported settings file created above, in quotes.

For a full description of the install command line arguments see [Installing the Printer Silently](#).

#### Subscription License

```
pntifsubsetup_12.0.001.exe /S SHOWUI=FALSE CONFIGPRINTER="C:\PEERNET\PrinterSettings.pntifexport"
```

#### One Time License

```
pntifotsetup_12.0.001.exe /S CONFIGPRINTER="C:\PEERNET\PrinterSettings.pntifexport"
```

## Updating the Custom Settings

If you need to update the custom settings used by the TIFF Image Printer printer after the software has been pushed to all the clients, the **PNCustomPrinterSetup** console utility can be used to apply an updated export file for each user without having to remove/re-install. This utility is included in the TIFF Image Printer install folder and will already be on each user's computer.

The utility is in the **ProfileUI** subfolder of the product install location on the computer. This is normally *C:\Program Files\TIFF Image Printer 12\*.

The updated the export settings file needs to be in a location that is accessible when the utility is run.

```
"C:\Program Files\TIFF Image Printer  
12\ProfileUI\PNCustomPrinterSetup.exe" "C:  
\PEERNET\NewPrinterSettings.pntifexport"
```



## Using Environment Variables and Registry Keys

Environment variables and registry key values can be used to supply custom information to the printer profiles and script file at the time of printing. This technique is often used when automating printing or creating custom printer setups. The following settings in the conversion profiles can use this feature:

- the Output Folder Location and Base File Name on the [Save Options](#) and [Filename Creator](#) settings
- any image path when an image is included as a stamp from [Stamping](#)
- paths and parameters from the [Run Commands](#)
- paths to the error log and support files from [Support Options](#)

In the printer script file, environment variables and registry key values can be set in the [Save](#) and [Run Commands](#) sections.

## Environment Variables

Environment variables are specified using the syntax **%VARIABLE%**, such as C:\Output\%USERNAME%, or %USERPROFILE%\Output. You can also create and use your own system or user environment variables.

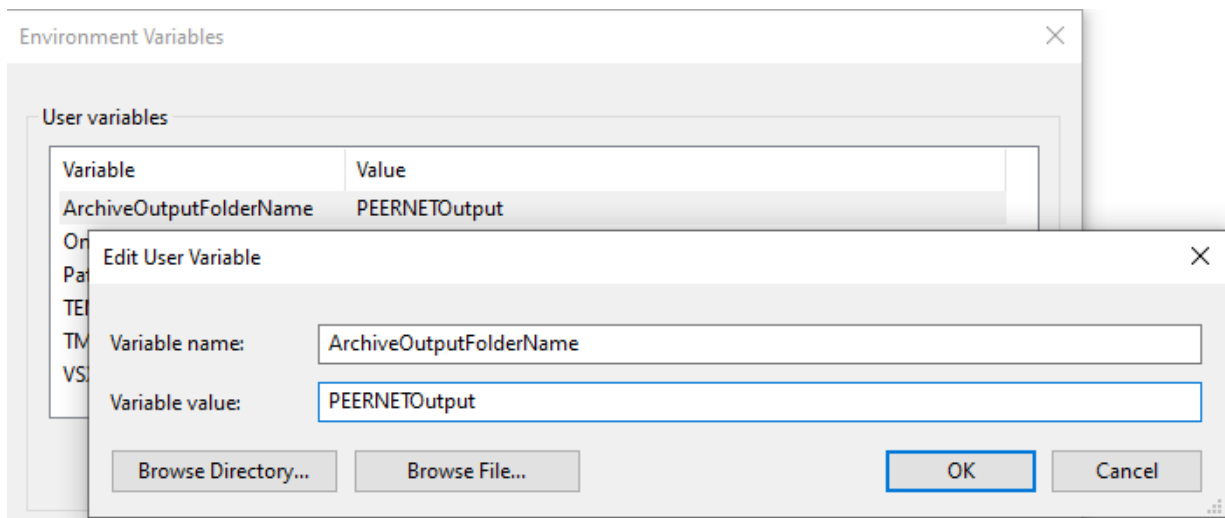
Here, the well-known environment variable, %USERPROFILE% is used to set the output location to a folder named *PeernetOutput* in each users Documents folder.

This resolves to C:\Users\user\Documents\Converted, where *user* is replaced by the name of the current logged in user.

### Output Location

Output folder	%USERPROFILE%\Documents\Converted
<small>Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.</small>	

Custom environment variables can also be. Here the environment variable, **%ArchiveOutputFolderName%** has been created and set to the folder name *PEERNETOutput*.



It can now be used to set the name of the output folder, which would resolve to `C:\Users\user\Documents\PEERNETOutput`, where *user* is replaced by the name of the current logged in user.

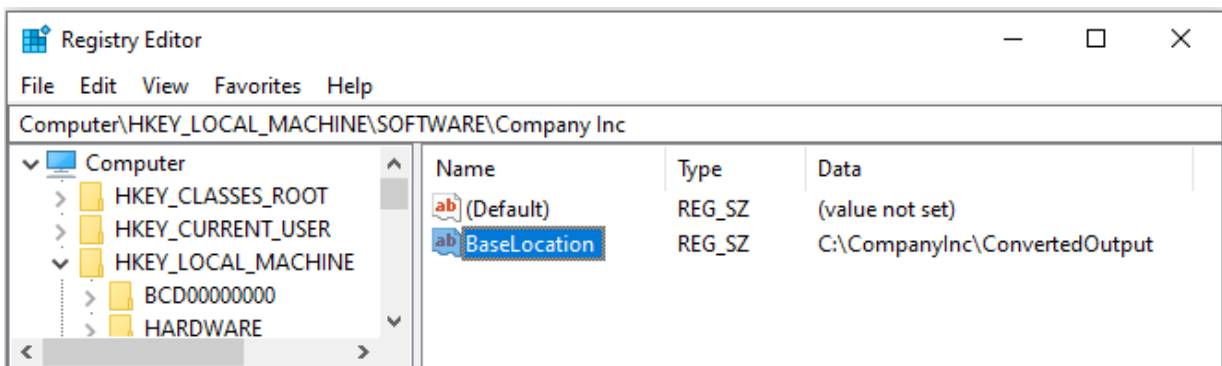
### Output Location

Output folder

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

## Registry Keys

Registry keys expand in the same way as environment variables. They are designated using a special syntax, **`$[registry key]`**, where *registry key* is replaced by the complete path to a valid registry key value that you want to use. This value stored in the registry can be a complete path, or a single piece of information.



The complete path to a valid registry key value must appear inside the square brackets, including the value name as the last item.

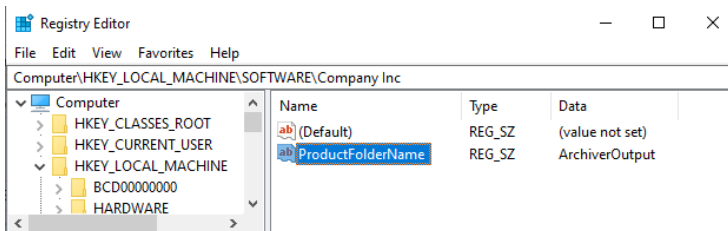
### Output Location

Output folder

`[$[HKEY_LOCAL_MACHINE\SOFTWARE\Company Inc\BaseLocation]`

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

Registry keys can be any information you need to inject into a path or run command, or run command parameters. Here, the key, **`[$[HKEY_LOCAL_MACHINE\SOFTWARE\Company Inc\ProductFolderName]`** contains only a string, the name we want to use as part of the output folder path.



Combining this with the environment variable **`%USERPROFILE%`** we can build the path from dynamic information at runtime.

### Output Location

Output folder

`%USERPROFILE%\$[HKEY_LOCAL_MACHINE\SOFTWARE\Company Inc\ProductFolderName]`

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

## Signaling Events Using Run Commands

Both the [Run Commands](#), Success and Failure, can be used to identify events for the driver to signal.

This is useful for signaling to your own application when the conversion is complete, or when it failed. The driver only opens and signals the events. It is your responsibility to create and block on the events in your own code.

### Signaling the Event

Events are specified using the syntax **{EventName}**, with *Eventname* the event that you want to signal. When a run command is an event name, the parameters and start in folder information is ignored.

Command Preview	Signals this event: "Global\JobSuccess"
Run this command	<input data-bbox="573 844 1430 892" type="text" value="{Global\JobSuccess}"/>
Use these parameters	<input data-bbox="573 913 1430 961" type="text"/>
Starting folder for command is	<input data-bbox="573 972 1430 1020" type="text"/>

### Sample C++ Code

Below is a code snippet showing the creation of the event and how to wait for the driver to signal the event before continuing the processing of the file.

```
DWORD dwWait = WAIT_TIMEOUT;

// Create the event
m_hEvent = ::CreateEvent( NULL, FALSE, FALSE, _T("Global\\JobSuccess") );

if ( m_hEvent == NULL ) {
    ::AfxMessageBox( _T("Failed to create the event") );
    return ;
}

// do some other coding here, such as printing the document
// wait for event, 2 min
dwWait = ::WaitForSingleObject( this->m_hEvent, 120000 );

if ( WAIT_OBJECT_0 == dwWait ) {
    ::AfxMessageBox( _T("Success on event signal") );

    // do something with the complete file here such as
    // uploading to an FTP site or an in-house archive system
}
else if ( WAIT_TIMEOUT == dwWait ){
    ::AfxMessageBox( _T("TIMEOUT on event signal") );
}
else {
    ::AfxMessageBox( _T("FAIL on event signal") );
}
```

## Automating the Printing Process

TIFF Image Printer provides several approaches to allow the printing process to be integrated into a custom desktop program or workflow, or as part of automated solutions such as scheduled tasks and batch scripts.

TIFF Image Printer's automation using a script file is the original technique used by programmers to automate printing, especially batch printing.

If you are new to automating TIFF Image Printer, it is recommended to start with the PNSrv12 COM object instead:

- [Using the PNSrv12 COM Object](#)
- [Print to File to Control Output Name and Location](#)
- [Using the Printer Script File](#)

## Using the PNSrv12 COM Object

The PNSrv12 COM Interface provides the ability to control and communicate with the printer during the printing and file creation process. It replaces and greatly enhances the older script file methodology.

Through the PNSrv12 you can:

- set file naming and conversion preferences on a per file basis
- wait until the file has been created to continue your workflow
- use a pool of printers to increase conversion capacity
- track the files printed and the output files associated with each file
- retrieve information about the output files created
- interact with the printer in a thread-safe manner

### Requirements and Prerequisites

#### Required Files for Distribution

You do not need to include any additional files with your application but the end-user must have the appropriate printer installed and licensed.

The PNSrv12 COM object is distributed with the following PEERNET printers and is registered as part of their printer installation.

- Raster Image Printer
- TIFF Image Printer
- PDF Image Printer

The code examples shown in the following pages are written using the TIFF Image Printer but are also applicable to both Raster Image Printer and PDF Image Printer unless otherwise stated in the description of the method or enumeration.

All code samples are provided in C#.NET.

Any PEERNET provided Run Command tools you may be using, or other custom programs or tools (and their requirements) used in the Run Commands in your conversion profile will also have to be included in your install or deployment scripts. Any Run Command tools from PEERNET require **.NET Framework 4.8** be installed. Your installation software should already have the ability to detect and install these requirements. If it does not, start with this link to [download and install the .NET Framework 4.8 Runtime](#).

#### Supported Development Environments

- Visual Basic 6.0
- Visual Basic .NET
- Visual C# .NET
- Visual C++
- VB Script
- PowerShell



## Supported Operating Systems

The PNSrv12 COM object supports the following Microsoft® Windows operating systems:

- Microsoft® Windows 11
- Microsoft® Windows Server 2022
- Microsoft® Windows Server 2019
- Microsoft® Windows 10
- Microsoft® Windows Server 2016
- Microsoft® Windows 8.1
- Microsoft® Windows Server 2012 R2
- Microsoft® Windows Server 2012
- Microsoft® Windows 7
- Microsoft® Windows Server 2008 R2

### Concepts and Terminology

In order to understand how the PNSrv12 COM interface works, an understanding of printers and the Windows printing subsystem can be useful.

## Windows Printing

The main component of the Windows printing subsystem is the *print spooler*. It manages all communication between the printing application and the desired printer. Each printer has its own *print queue*, and each time a document is printed, a *print job*, or a *series of print jobs*, is added to that printer's print queue. Most of the time there is only a single print job in the queue for each document printed, but some applications will send more than one job.

When a print job is submitted, it goes through several states. The first state is *spooling*, meaning the printing application is still sending the document to the printer. Once finished spooling, it switches to *spooled*. At this point the print job is ready to be printed and will enter the *printing* state. If there is more than one job spooled in the *print queue*, a single print job may stay in the spooled state until the printer is finished with job currently being printed. When all pages are printed, the state of the print job is set to *printed*. After a print job is printed, it is then deleted from the print queue by first entering the *deleting* state, and then finally going to the *deleted* state. At this point, the print job is removed from print queue and, if there are more than one job in the queue, the printer begins processing the next job.

## Terminology

This guide uses terminology common to Windows applications, as well as some terms specific to the PNSrv12 COM interface. The following terms are used throughout the guide:

### ***asynchronous***

An asynchronous operation executes in a thread separate from the main application thread. This leaves the main application window free to continue executing while the second thread performs its time-consuming task. Programming with events and event handlers is asynchronous. See also [synchronous](#).

### ***factory defaults***

The default conversion profile installed for the printer properties when the printer was installed contains the factory defaults for the printer settings.

### ***integer***

A 32-bit signed value.

**JobID**

A JobID is a non-unique number associated with every print job submitted to a print queue. It is initially set to zero when the printer is created and is automatically incremented by the printer at the start of every print job submitted to that printer, up to a max of 4294967295. (UINT32 max value). Each printer has its own JobID counter. This is not the same as the unique ID used with the new file name creator option in a conversion profile.

**job tracking**

When enabled, the [Jobs](#) collection in the IPNSession object is maintained with a new object added for every job printed through any printer in the session's pool. Job tracking is enabled through the IPNSession [TrackingOn](#) property. The feature is off by default.

**object**

An instance of any COM interface class, such as IPNSession, or IPNJob.

**printer**

An installed PEERNET printer, such as TIFF Image Printer.

**printing application**

The application being used to print a document, usually the same application used to open the document.

**print job**

A print job is a file that has been sent to a printer to be printed. Most often there is a single print job for each file (or document) printed, but occasionally printing a single file will create multiple print jobs in a print queue.

**printer pool**

A group of printers that is created and used by the PNSrv12 COM interface. A printer pool has a minimum of one printer, and can have as many printers in the pool as needed.

**print queue**

Each printer has its own printer queue. A print queue shows which documents (or print jobs) are being printed or are waiting to be printed.

**print spooler**

The print spooler is part of the Windows printing subsystem. It manages communication between the printing application and the printers on your computer.

**session object**

An instance of the [IPNSession](#) COM interface object.

### ***synchronous***

Synchronous programming occurs in the same thread in a linear manner. When making a call that blocks until it returns, program execution is halted until the call returns.

## What's New in PNSrv12Lib

This version of the TIFF Image Printer brings with it major changes and improvements to how the printer operates and how to interact with the printer to control the printer settings.

The PNSrv12 COM object has been updated to support these changes and simplified to make it easier to program. Many methods that you may have used in the past may have been changed or made obsolete and removed.

The biggest change is the move to use *conversion profiles* to control the printer settings. In the past, the settings were initialized by calling various methods on the COM object; now settings are initialized with a single call passing in the path to the desired *conversion profile*.

The settings can be set a single time when the printer pool is created, or multiple conversion profiles can be used to modify the settings on a per-document basis.

Conversion profiles are created using the new [Profile Manager](#) utility, a GUI-based application that makes creating, saving and exporting profiles easy. These exported profiles can then be stored with your custom application and used to control the conversion settings.

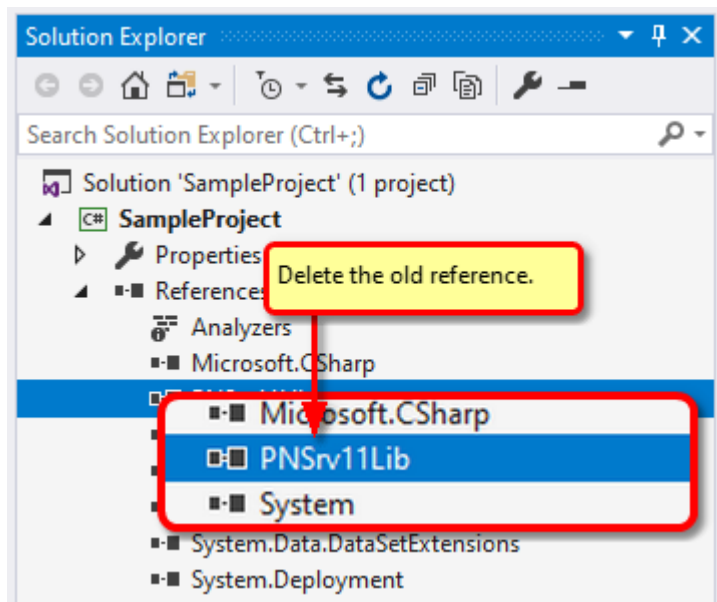
## Migrating to PNSrv12Lib

If you need to migrate existing applications that use earlier versions of TIFF Image Printer and the COM automation interface, the following steps outline what you need to change in your code.

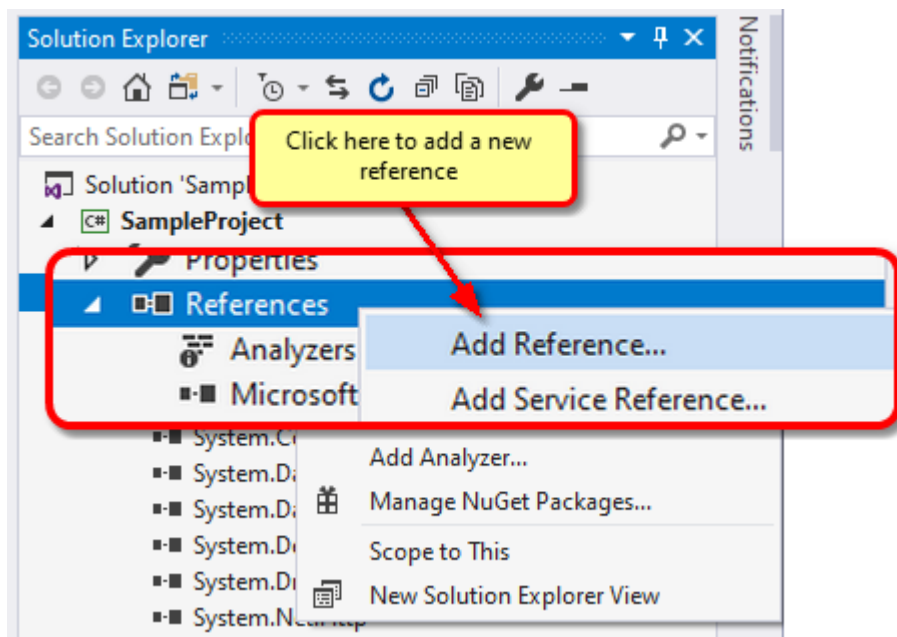
### 1. Updating the References in Your Application

The first step is to update the references in your application to PNSrv12Lib.

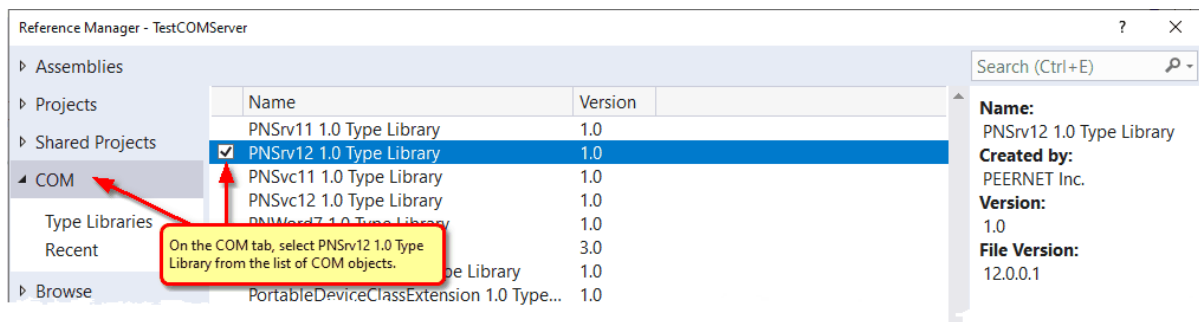
1. Find and delete the old reference from your project.



2. Right click on the **References** node and select **Add Reference...**



3. From the **Add Reference** dialog, select PNSrv12 1.0 Type Library.



## 2. Update any using Statements

Any **using** statements (for C#) or **Imports** statements (for VB) must be updated to reference PNSrv12Lib.

### C#

```
// Update to use the new version
// using PNSrv11Lib
using PNSrv12Lib;
```

### Visual Basic

```
' Update to use the new version
' Imports PNSrv11Lib
Imports PNSrv12Lib
```

## 3. Updating the SetSessionPrinter call

Any calls to [SetSessionPrinter](#) need to be modified to use the new printer name and the new arguments added in version 12.

A process ID must now be passed to the COM object. It is used to monitor the running process to ensure all COM objects, references and printers are cleaned up if the current owner process unexpectedly crashes or is terminated.

An optional prefix can be used when naming the GUID-named printers in the printer pool for easy recognition.

The last argument is the path to an exported conversion profile containing the settings you wish use. This can be overridden later using [SetPrinterProfile](#) or the [property](#) methods.

### C#

```
PNSession session = new PNSession();
int pID = Process.GetCurrentProcess().Id;

session.SetSessionPrinter(pID, "TIFF Image Printer 12", 2, "Converter-",
                          "C:\\Profiles\\FaxTIFF.pntifprofile");
```

### Visual Basic

```
Dim session As PNSession = New PNSession
Dim pID As Integer = Process.GetCurrentProcess().Id

session.SetSessionPrinter(pID, "TIFF Image Printer 12", 2, "Converter-",
                          "C:\\Profiles\\FaxTIFF.pntifprofile")
```

## 4. Updating and Replacing any Deprecated Methods

With the release of PNSrv12Lib many [IPNSession](#) and [INPrintSession](#) methods have been removed or changed. Some classes and enumerations have also been removed. You may find that your previous code will no longer compile.

The following list contains links to what has changed. The [included C# samples](#) also show the programming changes introduced with PNSrv12Lib.

- [Obsolete Classes and Enumerations](#)
- [IPNSession Changes](#)



## Getting Started With PNSrv12Lib

The PNSrv12 COM object, PNSrv12Lib is included with your TIFF Image Printer printer.

This topic covers the sample programs provided, adding PNSrv12Lib to your program, and how to do common tasks.

- [Sample Programs](#)
- [Referencing PNSrv12Lib in Your Application](#)
- [Creating Your own Conversion Profiles](#)
- [Initializing the PNSession](#)
- [Customize the Output File Name](#)
- [Printing Using the IPNPrintSession](#)
- [How to Tell When the File is Converted](#)

## Sample Programs

Sample programs are provided as part of the install to demonstrate using PNSrv12Lib in your own programs.

These samples can be found in the **COMSamples** folder of the installation folder. This is usually *C:\Program Files\TIFF Image Printer 12\COMSamples\*.

A pre-built demo of each sample is available in a \Demo folder under each individual project.

All of the sample programs include a reference to Microsoft Word 2016 to automate printing to the TIFF Image Printer printer. If you have a different version of Office installed, you will need to update the Word reference in order to build and run the samples.

- **ConvertWord** - converts a Word document using the settings in the selected conversion profile. Also demonstrates overriding the conversion profile's setting for the name of the output file.
- **ConvertPDF** - converts a PDF document using the settings in the selected conversion profile using the ShellPrintTo feature instead of automating the printing application. Also demonstrates overriding the conversion profile's setting for the name of the output file.
- **CustomNaming** - this sample also converts a Word document using the selected conversion profile settings, and then uses the

[OnGetNextFileName](#) event to create a unique filename for the output file at the point at which the file is to be saved. It also shows using the other [IPNSession events](#) to monitor the start and end of the print job, as well as to log errors and messages.

- **ConsoleConvertFolder** - illustrates batch conversion with a folder of files using Parallel.For to take advantage of the printer pool and setting a custom name for each file. Demonstrates using the printer pool and setting options in a thread-safe way.

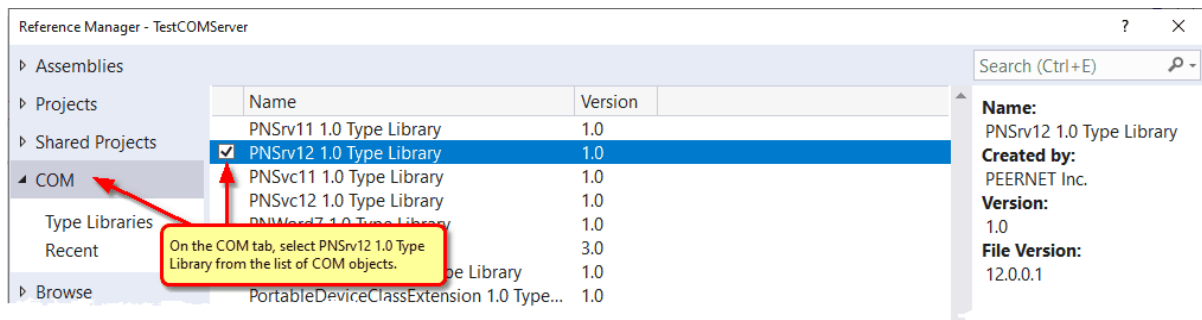
The samples all use the folder `C:\PEERNET\Samples\` to store the created files, with a sub folder for the output created when running each sample.

For the purposes of the samples, all of the profiles are configured to use copy protection when creating files and default to use the name of the profile as the preset output file name unless changed as part of the sample.

## Referencing PNSrv12Lib in Your Application

To add PNSrv12Lib as a COM reference in your application select PNSrv12 1.0 Type Library from the list of available COM objects.

If you are updating an older application that uses a previous version of the COM interface see [Migrating to PNSrv12Lib](#) for upgrade instructions.



## Creating Your own Conversion Profiles

The samples are designed to work with any of the PEERNET printers and profiles for each of the printers that included in the samples folder. For your own programs, you will instead want to create your own profiles.

The sample profiles ending in `pntifprofile` are for TIFF Image Printer printer. They can be copied and edited using the [Profile Editor](#). You can also create your own profiles in the [Profile Manager](#) and then [export the profile](#) to use in your programs.

Conversion profiles are used to set the conversion settings when initializing the IPNSession object with the [SetSessionPrinter](#) method. This approach works well when you are using the same settings for all of your documents.

When your conversion settings are the same for all documents, but you need to control the output folder and/or the output file name for each document, the section [Customize the Output File Name](#) shows how to use a single conversion profile and only alter the file destination and/or name using [SetSaveOptionsOutputLocationAndOutputFileName](#).

If you need to set different conversion settings individually for each document, [SetPrinterProfile](#) allows you to change printer profiles before printing each document. Again, this can be combined with [SetSaveOptionsOutputLocationAndOutputFileName](#) to customize the file name for each file.

## Initializing PNSession

The starting point of working with the TIFF Image Printer is the [IPNSession](#) interface.

Once you have an instance of a IPNSession object, that object is then initialized with one of PEERNET's printers through a call to [SetSessionPrinter](#). This establishes the [printer](#) that will be used by this IPNSession object and the number of available [printer queues](#) in the [printer pool](#) for this session.

A process ID is passed to the COM object and used to monitor the running process to ensure all COM objects, references and printers are cleaned up if the current owner process (your program) unexpectedly crashes or is terminated.

An optional prefix can be used when naming the GUID-named printers in the printer pool for easy recognition. This can be useful if you have more than one program using PNSrv12Lib running at a time and you need to examine the printer queues.

The last argument is the path to an exported conversion profile containing the settings you wish use. This can be overridden later using [SetPrinterProfile](#) or, in rare cases, the [property](#) methods.

### C#

```
PNSession session = new PNSession();  
int pID = Process.GetCurrentProcess().Id;  
  
session.SetSessionPrinter(pID, "TIFF Image Printer 12", 2, "Converter-",  
                           "C:\\Profiles\\FaxTIFF.pntifprofile");
```

### Visual Basic

```
Dim session As PNSession = New PNSession  
Dim pID As Integer = Process.GetCurrentProcess().Id  
  
session.SetSessionPrinter(pID, "TIFF Image Printer 12", 2, "Converter-",  
                           "C:\\Profiles\\FaxTIFF.pntifprofile")
```

## Customize the Output File Name

Providing custom file naming for your output files can normally be accomplished by setting up your file name formatting in the conversion profile used by the printer. See the [Filename Creator](#) settings available in the conversion profile for configuring custom naming, including unique IDs, prefix and suffix terms, page numbers and date and time strings as part of the name..

When your file naming requirements vary too much from file to file, the main object [IPNSession](#) has two alternative options.

### SetSaveOptionsOutputLocationAndOutputFileName

The [SetSaveOptionsOutputLocationAndOutputFileName](#) method allows you to override the output folder and/or the output file name before you print the file. One or the other or both of the arguments can be set by passing empty string for the unneeded argument.

An example scenario would be if you need to read an index file that contains the path to the source file to convert and the desired name and final output location. This method would be used to set the output folder or the output file name from the index file.

The **ConvertWord** sample uses this method to override the chosen conversion profile settings and set the output directory to *C:\\PEERNET\\Samples\\ConvertWordOutput* and to set the output file name to any custom filename entered on the form.

## OnGetNextFileName Event

The [OnGetNextFileName](#) event is called each time the printer needs to create a new file on disk.

For example, when creating a single, multi-paged file from a single print job, the event will be called exactly once, at the start. When creating serialized output where one output file is created for each page in a single print job, this event is called once for each page.

The sample, **CustomNaming**, uses this event to name each file based on a fictional call to get an order number from an external source.

## Printing Using IPNPrintSession

The [IPNPrintSession](#) object is used to manage a printer from the pool to be used to print a single document. A new **IPNPrintSession** object is needed for each document printed. This object should not be retrieved until just before you are about to print the document and should be released back into the printer pool as soon as possible.

In pseudo-code:

- get an **IPNPrintSession** object to control the printing steps
- using the printer name ([PrinterName](#)) from the object, print the document to that printer
- check for the document to have been sent to the printer using [WaitForJobsSpooled](#)
- wait for the document to finish printing using [WaitForJobsCompleted](#)
- handle error cases with [Cancel](#)
- free the **IPNPrintSession** object using `Marshal.FinalReleaseComObject`

All of the samples demonstrate these steps, as well as handling error cases and exceptions to clean up properly.

As there may not be a free printer available, [NewPrintSession](#) is a timed method and will return *null* if no printer is available. This allows looping while waiting for a printer and the ability to cancel if a set time period has been exceeded.

## How to Tell When the File is Converted

With the PNSrv12 COM object it is easy to determine when the output file has been created, or "done".

In many cases, this information is needed in order to know when to move on to the next file, or continue the workflow for the current file. There are two different approaches that can be used to find this out.

### Using the OnEndJob Event

The first way is to add an event handler to the **IPNSession** [OnEndJob](#) event. This event is called when the file is complete. An [IPNJob](#) object is passed to the event that contains information about the job, such as the name of the source file, and a list of the file or files created.

This allows you to get the exact name of the file created, even when serialized or other custom file naming properties have been set.

The **CustomNaming** sample demonstrates using an **OnEndJob** event handler to retrieve the names of the created files. It also demonstrates how to use `Marshal.FinalReleaseComObject` to safely dispose of the objects passed into and used in the event handler. These objects must be released properly in order for the COM object to shutdown cleanly when your application is finished.

### Using the WaitForJobsCompleted method

The other way is to use the **IPNPrintSession** [WaitForJobsCompleted](#) method after printing the file.

This method does not return until the file(s) have been created, or until a specified timeout period has expired. If the timeout period has not expired then the printer has created the file and it is available for further processing.

This approach works when the exact file name created is not needed, such as when creating all output files in a specific folder, and then uploading the entire folder contents to an archive system.

If events are not supported, and you need the names of the created files, **WaitForJobsCompleted** and *job tracking* using [TrackingOn](#) and [Reset](#) on the **IPNSession** object can track the created files.

Job tracking will add an [IPNJob](#) item to the [Jobs](#) collection on the parent [IPNSession](#) object for every job printed on any printer in the pool. This collection will continue to grow until [Reset](#) is called to clear the current list, or the IPNSession is released using `Marshal.FinalReleaseComObject`.

When using this technique with a very large number of files, or with long running applications, it is critical to periodically call [Reset](#) to clear this list or you will eventually run out of memory and resources.

The **ConvertWord** sample uses *job tracking* to store the completed job information for the file conversion. The information is outputted to the form and then cleared to keep the memory use low.

### PNSrv12Lib Object Reference

The PNSrv12 COM interface provides developers with the ability to control the PEERNET printers through their own application code for easy print automation. You can easily configure the printer settings and you have complete control over the printing process right to the end.

- [Classes](#)
- [Enumerations](#)
- [Obsolete Classes and Enumerations](#)

## Classes

### [IPNSession](#)

The IPNSession object is the starting point for working with the PNSrv12Lib COM interface. It is associated with a single PEERNET printer, and creates a pool of printers containing one or more copies of the printer requested using the [SetSessionPrinter](#) method.

### [IPNPrintSession](#)

Represents a single printer from the pool of printers held by the [IPNSession](#) object. Each document printed needs its own IPNPrintSession object to control and synchronize the printing process.

### [IPNNextFileNameOptions](#)

Used to set the file naming options used in the [OnGetNextFileName](#) event to customize the output file name. The most common use of this event is to customize the file name of the output file.

### [IPNJobs](#)

A collection of [IPNJob](#) objects, one for every job that has been printed.

### [IPNJob](#)

Each IPNJob object represents a single print job sent to any one of the printer queues in the current [IPNSession](#) object. A job object contains information about the print job, such as the size of the job, submitted time, print job status among others.

### [IPNFiles](#)

A collection of [IPNFile](#) objects, one for every file created by the printer.



## **IPNFile**

An IPNFile object is created for every file created by the printer and represents the physical file on disk. Stores the filename for the file created on disk.

## **Enumerations**

Enumerations are common groups of settings used to set printer properties.

### **pnBWCompressionMethod**

Compression algorithms for monochrome, or black and white, images.

### **pnColorCompressionMethod**

Compression algorithms for color images.

### **pnColorReduction**

Color reduction options for reducing the number of colors in true color images.

### **pnDitheringMethod**

Dithering algorithms to control how color images are reduces to black and white.

### **pnFaxPageScaling**

Scale the original information is placed on the fax sized paper.

### **pnFaxPageScalingHAlign**

Horizontally align the incoming image on the fax sized paper.

### **pnFaxPageScalingVAlign**

Vertically align the incoming image on the fax sized paper.

### **pnFaxPaperHeight**

Height of the fax paper.

### **pnFaxPaperWidth**

Width of the fax paper.

### **pnFaxProfile**

Choose the fax profile used to create a fax image.

**pnFaxResolution**

The resolution of the fax image.

**pnGreyscaleCompressionMethod**

Compression algorithms for greyscale images.

**pnImageCopyScaling**

Determines how the original page is placed on the new image.

**pnImageCopyScalingHAlign**

Horizontally align the image on the output page when copying the image to a new page size.

**pnImageCopyScalingVAlign**

Vertically align the image on the output page when copying the image to a new page size.

**pnIndexedCompressionMethod**

Compression algorithms for indexed images.

**pnOutputFileFormat**

The type of file to create.

**pnOverwriteActionWhenSaving**

Action to take when handling overwrite situations where a file of the same name already exists.

**pnPDFContentEncodingMethod**

The content encoding, or compression methods used by PDF files.

**pnPDFEncryption**

The encryption levels for PDF files.

**pnPDFStandard**

The PDF output standard for creating image-based (or raster) PDF files, one of None or PDF/A-1b.

**pnPrinterResolution**

Sets the printer resolution, or dots per inch (DPI) for the printer.

**pnResampleUnits**

How to scale the output image.

**pnRotation**

How much to rotate the output image. Rotation is counter-clockwise.

**pnShellAndCommandWaitMode**

The printed document state to wait for when printing using the shell commands or the command line

**pnTextEncoding**

The encoding formats for the output text extraction file.

**pnTextEOL**

The end-of-line encoding formats of the output text extraction

**pnTextLayout**

The layout of the text in the output text extraction file.

**pnUnits**

The unit of measure used to enter options requiring a unit of measure.

## **Obsolete Classes and Enumerations**

The following class and enumerations are for features that have been deprecated.

- IPNPages
- IPNPage
- IPNImages
- IPNImage
- pnEmailDialog
- pnEmailService
- pnErrorMessageBoxStyle
- pnJobVariable
- pnMAPIEmailLogon
- pnNamingProfile

- pnPrinterOrientation
- pnPrinterColorMode
- pnRunCommandsWaitMode
- pnRunCommandWindowState
- pnUserVariable
- pnWatermarkPosition

## IPNSession

The IPNSession object is the starting point for working with the PNSrv12 COM object. It is associated with a single PEERNET printer, and creates a pool of one or more printers as defined using the [SetSessionPrinter](#) method.

The IPNSession object also holds the settings used to control each print job's output. These settings are first determined by the conversion profile passed in to either [SetSessionPrinter](#) at the beginning, or passed to [SetPrinterProfile](#) on a per file basis. The settings can be further modified using the [property methods](#) listed in the table below. Not all methods are valid for all printers.

If no conversion profile is specified, the default system conversion profile for the printer is used.

The printer settings must be set before calling [NewPrintSession](#) to get an [IPNPrintSession](#) object for printing. The IPNPrintSession object returned contains a copy of the settings from the IPNSession object and is associated with a single non-busy printer from the pool of printers. A new IPNPrintSession object is needed for each document printed.

To further control the print and conversion process, there are several [events](#) that are fired that enable an application to intercept and apply specific custom logic. For example, the [OnGetNextFileName](#) event can be used to further customize the filename used to store the output file.

There are two main groups of methods for the IPNSession object. The first group, the initialization methods, are methods used to initialize the object and provide access to top-level objects. For example, [NewPrintSession](#) returns an [IPNPrintSession](#) object. The property methods, the second group of methods, are used to modify the settings for the print jobs over and above the settings in the conversion profile.

Optionally, you can choose to track job information as the documents are printed. This option is off by default and can be turned on by setting the IPNSession property [TrackingOn](#) to TRUE. When job tracking is enabled, the [Jobs](#) property, an [IPNJobs](#) collection, is populated with an [IPNJob](#) object for every print job processed.

- [Breaking Changes](#)
- [Initialization Methods](#)
- [Job Tracking Methods](#)
- [Property Setting Methods](#)
- [Properties](#)

### ➤ [Events](#)

## Breaking Changes

The following methods, properties, events and enumerations have been removed as of PNSrvLib12.

- AddSessionPrinter
- NewPrintSessionEx
- EnableControlStrings
- ForcePrinterColorMode, ForcePrinterOrientation, ForcePrinterPaperSize, ForcePrinterResolution
- SetCompressionOptions
- SetDevmodeSettings
- SetEmailMessageOptions, SetEmailOn, SetEmailService, SetMAPIEmailService, SetSMTPEmailService, SetVIMEmailService
- SetErrorReporting
- SetFileNamingOptions
- SetLandscapeWatermarkOptions, SetPortraitWatermarkOptions, SetWatermarkOptionsOn
- SetMessageBoxAlerts
- SetNamingProfileFormat
- SetPDFFileFormatOptions
- SetRunAtStartCommand, SetRunAtFileCloseCommand, SetRunAtPageCommand, SetRunAtEndCommand
- SetUserExit32, SetUserExit64
- SetUserVariable
- All clear properties methods (methods starting with Clear\*\*\*)
- OnStartPage, OnEndPage events
- OnStartImage, OnEndImage events

## Initialization Methods

### [SetSessionPrinter](#)

Initializes the IPNSession object to work with a particular printer.

### [SetPrinterProfile](#)

Sets the printer profile that contains the settings that the [IPNPrintSession](#) printers will use when converting files.

### [NewPrintSession](#)

Replaces the previous NewPrintSession and NewPrintSessionEx methods; returns a new instance of an [IPNPrintSession](#) object for printing.

## Job Tracking Methods

### [Reset](#)

Clears any accumulated job information when job information is being tracked.

### [WaitForCompletion](#)

Waits a given timeout period for all jobs in all print sessions to be completed before returning control back to the calling application.

## Property Methods

### [GetProperty](#)

Retrieves settings from the printer using a keyword string.

### [SetProperty](#)

Set individual printer settings using section and property names. See each individual set options call for a list of section and property names for each call.

### [SetCustomPaperOn](#)

Enable or disable any custom paper size set.

### [SetCustomPaperOptions](#)

Set or clear custom paper size options. Custom paper must be enabled using [SetCustomPaperOn](#) for these options to be used.

### **SetFaxModeOn**

Enable or disable fax mode.

### **SetFaxOptions**

Sets or clears fax options. Fax mode must be enabled by calling [SetFaxModeOn](#) for these options to be used.

### **SetHardwareMargins**

Set or clear printer hardware margins.

### **SetImageCopyToOn**

Enable or disabled image copy to options.

### **SetImageCopyToOptions**

Set or clear image copy options. Image Copy To options must be enabled by calling [SetImageCopyToOn](#) for these options to be applied.

### **SetJPEGCompressionOptions**

Sets or clears the color and greyscale compression options for creating JPEG files, or JPEG-compressed TIFF or PDF files.

### **SetPageBrightness**

Set and clear any page brightness options.

### **SetPageCropAreaOptions**

Set and clear any page cropping area options. Page cropping must be enabled by calling [SetPageCropOn](#) for these options to be applied. Only one of [SetPageCropAreaOptions](#) or [SetPageCropMarginOptions](#) can be set at any one time. Whichever method is last called determines whether margins or a page area is cropped.

### **SetPageCropMarginOptions**

Set and clear any page cropping margin options. Page cropping must be enabled by calling [SetPageCropOn](#) for these options to be applied. Only one of [SetPageCropAreaOptions](#) or [SetPageCropMarginOptions](#) can be set at any one time. Whichever method is last called determines whether margins or a page area is cropped.

### **SetPageCropOn**

Enable or disable page cropping options.



**SetPageRotationOptions**

Set or clear page rotation options for portrait and landscape pages.

**SetPageTrimOptions**

Set or clear page trimming options

**SetPDFCompressionOptions**

Set or clear PDF compression options for color, indexed, greyscale and monochrome images.

**SetPDFPassword**

Sets or clears the password options for PDF files.

**SetPDFSecurity**

Sets or clears the security options for PDF files.

**SetResamplingOn**

Enable or disable resampling options.

**SetResamplingOptions**

Set or clear resampling options. Resampling must be enabled by calling [SetResamplingOn](#) for these options to be applied.

**SetSaveOptions**

Set or clear file location and base file naming options, as well as append, prompting and overwrite options.

**SetSaveOptionsOutputLocationAndOutputFileName**

Set or clear file location and base file naming options.

**SetSaveOptionsOutputResolution**

Set or clear output resolution options.

**SetTextExtractionOn**

Enable or disable the text extraction options.

**SetTextExtractionOptions**

Set or clear the text extraction options. Text extraction must be enabled by calling [SetTextExtractionOn](#) for these options to be applied.

### **SetTIFFAdvancedOptions**

Set or clear TIFF options such as fill order, photometric and byte alignment.

### **SetTIFFCompressionOptions**

Set or clear TIFF compression options for color, indexed, greyscale and monochrome images.

## **Properties**

### **Jobs**

Read-only; A collection of IPNJob objects, one for each file printed.

### **TrackingOn**

Read/Write; A boolean flag to turn job information tracking on or off.

## **Events**

### **OnGetNextFileName**

This event is fired each time a filename is needed, allowing full customization of the output file names.

### **OnStartJob, OnEndJob**

Event is fired when a new print job has entered or exited the print queue.

### **OnOpenFile, OnCloseFile**

This event is fired each time a new output file is opened or closed.

### **OnReportError**

This event is fired when an error is reported by the driver.

### **OnLogMessage**

This event is fired when an informational message is reported by the driver.

## Initialization Methods

### SetSessionPrinter

#### Description

Sets the active printer used by the session and the number of temporary printers to create in the printer pool. Having more than one printer in the pool of printers allows more than one file to be submitted at a time. While you can have as many printers in your pool as you want, care must be taken to balance the number of printers with your system resources.

#### Syntax

```
expression.SetSessionPrinter(ProcessId,PrinterName,PrinterPoolSize,  
PrinterPoolBaseNameOptional,PrinterPoolProfile  
Optional)
```

where expression is an [IPNSession](#) object.

#### Parameters

##### Integer ProcessId

The process id of the current process using the PNSrv12Lib. This allows PNSrv12Lib to monitor the running process and ensure all COM objects, references and printers are cleaned up if the current owner process unexpectedly crashes or is terminated.

##### String PrinterName

The name of the printer to use. Can be one of TIFF Image Printer, PDF Image Printer, or Raster Image Printer. The respective printer must be installed on the computer.

##### Integer PrinterPoolSize

The number of printers to create in the printer pool.

##### String PrinterPoolBaseNameOptional

Each printer is created with a unique GUID name, and is deleted when all references to this process's IPNSession are closed.

An optional prefix can be added to each GUID printer name to make the printers visually recognizable; this is useful if you have more than one process running and using PNSrv12Lib. The prefix can be combination of letters and numbers that create a valid printer name. '\ ' and ',' are not valid.

Pass empty string if you are not using this.

##### String PrinterPoolProfileOptional

Full path to the conversion profile to be used by all printers in the pool.

Conversion profiles are created and exported using the printer's **Profile Manager** utility. Once saved on disk, they can then be used from PNSrv12Lib. Exported profiles end with pntifprofile.

This can be overridden later using [SetPrinterProfile](#) or the [property methods](#). Pass an empty string if you are not using this. If not set, the default system conversion profile for the printer is used.

### Exceptions

An exception will be thrown if any of the following is true:

- The printer cannot be found; check that the printer exists and that the printer name is spelled correctly
- You do not have sufficient privileges to create copies of the printer, or to create local printer ports
- SetSessionPrinter is called more than once on a single IPNSession object

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [NewPrintSession](#), [SetPrinterProfile](#)

## SetPrinterProfile

### Description

Sets the conversion profile to be used to read the settings for each print job's output.

Conversion profiles are created and exported using the printer's **Profile Manager** utility. Once saved on disk, they can then be used from the PNSrv12Lib. Exported profiles end with pntifprofile.

Overrides the profile set in the [SetSessionPrinter](#) printer call. If no conversion profile is passed into either method, the default system conversion profile for the printer is used, followed by any settings configured using the [property methods](#).

### Syntax

```
expression.SetPrinterProfile(PrinterPoolProfile)
```

where expression is an [IPNSession](#) object.

### Parameters

**String PrinterPoolProfile**

The full path to the conversion profile, or empty string to use the system default profile.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [NewPrintSession](#), [SetSessionPrinter](#)

## NewPrintSession

### Description

Returns a new instance of an [IPNPrintSession](#) object. A new print session object represents one printer from the pool of printers. A separate print session is needed for each file printed. The IPNPrintSession object copies the current settings from the IPNSession object and is used to monitor the status of the file as it is printed.

### Syntax

```
expression.NewPrintSession(Timeout,FirstJobTimeout,AvailableTimeout,Options  
Flags)
```

where *expression* is a [IPNSession](#) object.

Returns a new [IPNPrintSession](#) instance , or NULL if a new printer session could not be retrieved.

### Parameters

#### Integer Timeout

How long to wait, in milliseconds, for a printer in the printer pool to become available.

#### Integer FirstJobTimeout

How long to wait, in milliseconds, for a job to appear in the printer queue before putting the printer back into the printer pool. This timeout only comes into effect after the printSession object has been released by the calling application.

#### Integer AvailableTimeout

How long to wait, in milliseconds, for a second job to appear in the printer queue. As long as new print jobs are submitted to the printer, the printer is not available. When *AvailableTimeout* milliseconds have passed with no additional jobs in the printer queue, the printer is made available and returned to the printer pool.

#### Integer OptionsFlags

Reserved for future use; specify 0 for this parameter.

### Remarks

After the document has been printed the print session object needs to be garbage collected in order to be released back into the printer pool. In .NET, use the method *InteropServices.Marshal.FinalReleaseComObject* to trigger the garbage collection.

If the print session is released but the file fails to print to the printer, the *IPNPrintSession* object will wait the timeout specified in the *FirstJobTimeout* parameter before being released back into the printer pool.

To determine if the file has been sent to the printer call the [WaitForDocSpooling](#) method on the print session object before calling *FinalReleaseComObject* to release the print session.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetSessionPrinter](#), [SetPrinterProfile](#)

### Job Tracking Methods

#### Reset

### Description

Clears any currently accumulated job tracking information from the [Jobs](#) collection. Job tracking information can only be cleared from the collection when there are no jobs running on any of the printers in your printer pool.

Job information is only accumulated if job tracking is enabled for the session object. Job tracking is off by default and is enabled through the [TrackingOn](#) property.

The *Reset* method should be called after calling [WaitForCompletion](#) to determine that all print sessions have completed, or the *WaitTimeout* parameter can be used to specify a timeout period to wait for any running print jobs to finish. If the print jobs have not completed the method returns **False** and nothing is cleared.

### Syntax

```
expression.Reset (WaitTimeout)
```

Returns Boolean **True** if the job collection was cleared within the timeout period, and **False** if it did not.

## Parameters

### Integer WaitTimeout

The amount of time, in milliseconds, to wait for the job information to be cleared.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [WaitForCompletion](#) [TrackingOn](#) [IPNJobs](#) [IPNJob](#)

## WaitForCompletion

### Description

Waits for all print jobs in all printers in the printer pool to be completed. The method returns **True** as soon as all print jobs in all printers in the printer pool are completed, or **False** if the timeout period elapses before the jobs are complete.

If any of the IPNSession events, in particular [OnCloseFile](#) and [OnEndJob](#), are being used then this function has to be called before releasing the session object in order to ensure that all event notifications are received.

### Syntax

*expression*.WaitForCompletion (WaitTimeout)

Returns Boolean **True** if all print jobs were completed within the timeout period, and **False** if they did not.

## Parameters

### Integer WaitTimeout

The amount of time, in milliseconds, to wait for all the jobs to be completed.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [Reset](#) [TrackingOn](#) [IPNJobs](#) [IPNJob](#)

### Property Methods

#### GetProperty

##### Description

Allows you to retrieve any conversion settings that you have set on the [IPNSession](#) object using the [SetSessionPrinter](#), [SetPrinterProfile](#), [SetProperty](#) method or any of the other set options methods like [SetSaveOptions](#) that group the settings into a single call.

The conversion settings are organized into sections and then by name within that section. The section and properties names are case sensitive. The section and property names, and values for each property are the same as the configuration file settings explained in the [Printer Script File Settings](#) section.

Not all properties are available to all printers, and some properties are specific to certain printers. GetProperty uses the same arguments as [SetProperty](#); see the individual set option methods for a list of section and property names used for each.

##### Syntax

```
expression.GetProperty(SectionName, PropertyName)
```

where *expression* is an [IPNSession](#) object.

Returns a **VARIANT** containing the property value, or **VT\_EMPTY** if that property is not set.

##### Parameters

**String** *SectionName*

The section name for the property you are retrieving.

**String** *PropertyName*

The property name.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetProperty](#)

#### SetProperty

##### Description

Allows you to individually set any properties, or options, on the [IPNSession](#) object instead of using other set options methods like



[SetSaveOptions](#) that group the settings into a single call. The *SetProperty* method can also be used to clear a property by passing an empty argument as the property value.



**Note:**

*The section and properties names are case sensitive and they and the values for each property are the same as the configuration file settings explained in the "[Printer Script File Settings](#)" topic. Not all properties are available to all printers, and some properties are specific to certain printers.*

*The properties are organized into sections and then by name within that section. See the individual [set property methods](#) for a list of section and property names to use for each argument in the method.*

## Syntax

```
expression.SetProperty(SectionName,PropertyName,varValue)
```

where *expression* is an [IPNSession](#) object.

## Parameters

**String** *SectionName*

The section name for the property you are settings.

**String** *PropertyName*

The property name.

**Variant** *varValue*

The value of the property you are setting.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [GetProperty](#)

## SetCustomPaperOn

### Description

Enables or disables any custom paper size settings.

Custom paper can also enabled or disabled using the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

**Syntax**

```
expression.SetCustomPaperOn(Enable)
```

where *expression* is an [IPNSession](#) object.

**Parameters****Boolean Enable**

A Boolean value, **True** to turn on custom paper size, **False** to disable custom paper size.

**Remarks**

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Enable	SectionName:	Advanced Features
	PropertyName:	Custom Paper Enable
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetCustomPaperOptions](#) [SetHardwareMargins](#) [SetProperty](#)

### [SetCustomPaperOptions](#)

**Description**

Sets a custom paper size for the output file. Custom paper size consists of the width and height and top, left, right and bottom printer area margins for the new paper size. You can enter units with up to three digits of accuracy, or to an eighth of an inch (0.125in or 0.318cm).

These settings are only applied when custom paper size is enabled. The combined *Left* and *Right* printer area margins must be less than the *Width* of the custom paper. The combined *Top* and *Bottom* printer area margins must be less than the *Height* of the custom paper.

Custom paper options can also be set using the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

For a more detailed explanation of the custom paper options, see the [Printer Overrides](#) options in the conversion profile.

**Syntax**

```
expression.SetCustomPaperOn(Units, CustomPaperWidth, CustomPaperHeight,
```

```
PrinterMarginLeft, PrinterMarginTop,  
PrinterMarginRight, PrinterMarginBottom)
```

where *expression* is an [IPNSession](#) object.

## Parameters

### pnUnits Units

A [pnUnits](#) constant for the unit of measure used to enter any paper size options.

### Double CustomPaperWidth

The width of the new paper size, in units to match Units.

### Double CustomPaperHeight

The height of the new paper size, in units to match Units.

### Double PrinterMarginLeft

The size of the left printer margin, in units to match Units

### Double PrinterMarginTop

The size of the top printer margin, in units to match Units.

### Double PrinterMarginRight

The size of the right printer margin, in units to match Units.

### Double PrinterMarginBottom

The size of the bottom printer margin, in units to match Units.

## Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Units	SectionName:	Advanced Features
	PropertyName:	Units
	varValue:	VT_BSTR, one of the following: .01 Inches 1 Millimeters  Ignored if the units are specified in the strings below
CustomPaperHeight	SectionName:	Advanced Features
	PropertyName:	Custom Paper Height
	varValue:	VT_BSTR, one of the following: 25-8000000 (hundredths of an inch) 64-20000000 (tenths of a millimeter)

Method Parameter	SetProperty Parameters	
CustomPaperWidth		0.250in-80000in (inches) 0.640cm-200000.000cm (centimeters)
	SectionName:	Advanced Features
	PropertyName:	Custom Paper Width
	varValue:	VT_BSTR, one of the following: 25-8000000 (hundredths of an inch) 64-20000000 (tenths of a millimeter) 0.250in-80000in (inches) 0.640cm-200000.000cm (centimeters)
PrinterMarginLeft	SectionName:	Advanced Features
	PropertyName:	Printer Area Margin Left
	varValue:	VT_BSTR, one of the following: 0-100 (hundredths of an inch) 0 -254 (tenths of a millimeter) 0in-1in (inches) 0cm-2.540cm (centimeters)
PrinterMarginTop	SectionName:	Advanced Features
	PropertyName:	Printer Area Margin Top
	varValue:	VT_BSTR, one of the following: 0-100 (hundredths of an inch) 0 -254 (tenths of a millimeter) 0in-1in (inches) 0cm-2.540cm (centimeters)
PrinterMarginRight	SectionName:	Advanced Features
	PropertyName:	Printer Area Margin Right
	varValue:	VT_BSTR, one of the following: 0-100 (hundredths of an inch) 0 -254 (tenths of a millimeter) 0in-1in (inches) 0cm-2.540cm (centimeters)
PrinterMarginBottom	SectionName:	Advanced Features
	PropertyName:	Printer Area Margin Bottom
	varValue:	VT_BSTR, one of the following: 0-100 (hundredths of an inch) 0 -254 (tenths of a millimeter) 0in-1in (inches) 0cm-2.540cm (centimeters)

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetCustomPaperOn](#) [SetHardwareMargins](#) [SetProperty](#) [pnUnits](#)

## SetFaxModeOn

### Description

Enables or disables the fax mode options.

Fax mode can also enabled or disabled using the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

### Syntax

*expression*.SetFaxModeOn(Enable)

where *expression* is an [IPNSession](#) object.

### Parameters

#### Boolean Enable

Set **True** to enable fax mode options, **False** to disable the fax options.

### Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Enable	SectionName:	Image Options
	PropertyName:	Fax
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetFaxOptions](#) [SetTIFFAdvancedOptions](#) [SetProperty](#)

## SetFaxOptions

### Description

Sets fax options on the [IPNSession](#) object.

To set a single fax option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

## Syntax

```
expression.SetFaxOptions(FaxProfile, FaxResolution, FaxPaperWidth,  
FaxPaperHeight,  
FaxPageScaling, FaxPageHAlign, FaxPageVAlign,  
FaxPageShrinkIfLarger,  
FaxPageAutoRotate, FaxPageMaintainAspect)
```

where *expression* is an [IPNSession](#) object.

## Parameters

### **pnFaxProfile FaxProfile**

A [pnFaxProfile](#) constant for the fax format profile to use.

### **pnFaxResolution FaxResolution**

A [pnFaxResolution](#) constant for the fax resolution to create. The fax format profile being used determines what resolutions are valid. Not all resolutions are valid with all fax format profiles.

### **pnFaxPaperWidth FaxPaperWidth**

A [pnFaxPaperWidth](#) constant for the width of the fax paper to be used when creating the faxable image.

### **pnFaxPaperHeight FaxPaperHeight**

A [pnFaxPaperHeight](#) constant to set the height of the fax paper.

### **pnFaxPageScaling FaxPageScaling**

A [pnFaxPageScaling](#) constant to determine how the page is scaled to the size of the fax paper.

### **pnFaxPageScalingHAlign FaxPageHAlign**

A [pnFaxPageScalingHAlign](#) constant to determine how to horizontally align the page on the fax paper.

### **pnFaxPageScalingVAlign FaxPageVAlign**

A [pnFaxPageScalingVAlign](#) constant to determine how to vertically align the page on the fax paper.

### **Boolean FaxPageShrinkIfLarger**

Set to **True** to automatically shrink the page if it is larger than the fax paper size.

### **Boolean FaxPageAutoRotate**

Set as **True** to automatically rotate the page if it will fit on the fax paper without scaling.

### **Boolean FaxPageMaintainAspect**

Set as **True** to prevent distortion when scaling larger or smaller pages. When this option is on, the height and width of the page change in relation to one another.

## Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
FaxProfile	SectionName:	Image Options
	PropertyName:	Fax Profile
	varValue:	VT_I4, one of the following: 0 = Profile F 1 = Profile S 2 = Profile C
FaxResolution	SectionName:	Image Options
	PropertyName:	Fax Resolution
	varValue:	VT_I4, one of the following resolutions: 0 = 200 x 100, Profile S, F 1 = 200 x 200, Profile S, F, C 2 = 204 x 98, Profile S, F 3 = 204 x 196, Profile S, F 4 = 300 x 300, Profile F, C 5 = 400 x 400, Profile F, C 6 = 408 x 391, Profile F 7 = 204 x 391, Profile F 8 = 300 x 600, Profile F 9 = 400 x 800, Profile F 10 = 600 x 600, Profile F, C 11 = 600 x 1200, Profile F 12 = 1200 x 1200, Profile F, C 13 = 100 x 100, Profile F, C
FaxPaperWidth	SectionName:	Image Options
	PropertyName:	Fax Paper Width
	varValue:	VT_I4, one of the following: 0 = Letter 1 = Legal 2 = A4 (ISO) 3 = B4 (ISO) 4 = A3 (ISO)
FaxPaperHeight	SectionName:	Image Options
	PropertyName:	Fax Paper Height

Method Parameter	SetProperty Parameters	
FaxPageScaling	varValue:	VT_I4, one of the following: 0 = Variable Height 1 = Fixed Height
	SectionName:	Image Options
	PropertyName:	Fax Page Scaling
FaxPageHAlign	varValue:	VT_I4, one of the following: 0 = Fit to Page 1 = Actual Size
	SectionName:	Image Options
	PropertyName:	Fax Page Scaling H Align
FaxPageVAlign	varValue:	VT_BSTR, one of the following: Left Middle Right
	SectionName:	Image Options
	PropertyName:	Fax Page Scaling V Align
FaxPageShrinkIfLarger	varValue:	VT_BSTR, one of the following: Top Middle Bottom
	SectionName:	Image Options
	PropertyName:	Fax Page Scaling Shrink Larger
FaxPageAutoRotate	varValue:	VT_BOOL
	SectionName:	Image Options
	PropertyName:	Fax Page Scaling Auto Rotate
FaxPageMaintainAspect	varValue:	VT_BOOL
	SectionName:	Image Options
	PropertyName:	Fax Page Scaling Lock Aspect Ratio
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetFaxModeOn](#) [SetTIFFAdvancedOptions](#) [SetProperty](#) [pnFaxProfile](#) [pnFaxResolution](#) [pnFaxPaperWidth](#) [pnFaxPaperHeight](#) [pnFaxPageScaling](#) [pnFaxPageScalingHAlign](#) [pnFaxPageScalingVAlign](#)



## SetHardwareMargins

### Description

Sets the hardware margin options on the [IPNSession](#) object.

The hardware margins option allows you to customize the size of the printer-supplied edge on your outputted files. Hardware margins cannot be larger than 1.00in (2.54cm) on each side of the paper. You can enter units with up to three digits of accuracy, or to an eighth of an inch (0.125in or 0.318cm).

To clear a single hardware margin option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

For a more detailed explanation of hardware margins, see the [Printer Overrides](#) options in the conversion profile settings.

### Syntax

```
expression.SetHardwareMargins(Units, HardwareMarginLeftRight,  
HardwareMarginTopBottom)
```

where *expression* is an [IPNSession](#) object.

### Parameters

#### pnUnits Units

A [pnUnits](#) constant for the unit of measure used to enter any paper size options.

#### Double HardwareMarginLeftRight

The left and right hardware margin settings in units to match Units.

#### Double HardwareMarginTopBottom

The top and bottom hardware margin settings in units to match Units.

### Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Units	SectionName:	Advanced Features
	PropertyName:	Units
	varValue:	VT_BSTR, one of the following: .01 Inches 1 Millimeters  Ignored if the units are specified in the strings below

Method Parameter	SetProperty Parameters	
HardwareMarginLeftRight	SectionName:	Advanced Features
	PropertyName:	Hardware Margin Left
	varValue:	VT_BSTR, one of the following ranges 0-100 (hundredths of an inch) 0-254 (tenths of a millimeter) 0.0in-1.0in (inches) 0.0cm-2.540cm (centimeters)
HardwareMarginTopBottom	SectionName:	Advanced Features
	PropertyName:	Hardware Margin Top
	varValue:	VT_BSTR, one of the following ranges 0-100 (hundredths of an inch) 0-254 (tenths of a millimeter) 0.0in-1.0in (inches) 0.0cm-2.540cm (centimeters)

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetCustomPaperOn](#) [SetCustomPaperOptions](#) [SetProperty pnUnits](#)

### SetImageCopyToOn

#### Description

Enables or disables the Copy To options.

The Copy To option can also be enabled or disabled using the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

#### Syntax

*expression*.SetImageCopyToOn(Enable)

where *expression* is an [IPNSession](#) object.

#### Parameters

##### Boolean Enable

Set **True** to enable any Copy To options, **False** to disable them.

#### Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Enable	SectionName:	Processing
	PropertyName:	Copy
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetImageCopyToOptions](#) [SetResamplingOn](#) [SetResamplingOptions](#) [SetProperty](#)

## SetImageCopyToOptions

### Description

Sets the Copy To options on the [IPNSession](#) object. The concept of image copying is similar to enlarging or shrinking a page using a photocopier, with the added ability to position the page on the new image using the scaling and alignment options. You can enter units with up to three digits of accuracy, or to an eighth of an inch (0.125in or 0.318cm).

These settings are only applied when the Copy To options is enabled. The combined *Left* and *Right* image area margins must be less than the *Width* of the new page. The combined *Top* and *Bottom* image area margins must be less than the *Height* of the new page.

To set a single Copy To option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

For a more detailed explanation of the copy to feature, see the [Page Resizing](#) options in the conversion profile settings.

### Syntax

```
expression.SetImageCopyToOn(Units, CopyToWidth, CopyToHeight,
                             CopyToImageMarginLeft, CopyToImageMarginTop,
                             CopyToImageMarginRight,
                             CopyToImageMarginBottom,
                             ImageCopyScaling, ImageCopyHAlign,
                             ImageCopyVAlign,
                             ImageCopyShrinkIfLarger,
                             ImageCopyMaintainAspect)
```

where *expression* is an [IPNSession](#) object.

## Parameters

### **pnUnits Units**

A [pnUnits](#) constant for the unit of measure used to enter any Copy To image size options.

### **Double CopyToWidth**

The width of the new image in units to match Units.

### **Double CopyToHeight**

The height of the new image in units to match Units.

### **Double CopyToImageMarginLeft**

The left margin in units to match Units.

### **Double CopyToImageMarginTop**

The top margin in units to match Units.

### **Double CopyToImageMarginRight**

The right margin in units to match Units.

### **Double CopyToImageMarginBottom**

The bottom margin in units to match Units.

### **pnImageCopyScaling ImageCopyScaling**

A [pnImageCopyScaling](#) constant to determine how the page is scaled to fit the new image size.

### **pnImageCopyScalingHAlign ImageCopyHAlign**

A [pnImageCopyScalingHAlign](#) constant for how to horizontally align the page in the new image.

### **pnImageCopyScalingVAlign ImageCopyVAlign**

A [pnImageCopyScalingVAlign](#) constant for how to vertically align the page in the new image.

### **Boolean ImageCopyShrinkIfLarger**

Enter **True** to shrink the page to fit inside the new image size if the original page size is larger.

### **Boolean ImageCopyMaintainAspect**

Enter **True** to prevent distortion when scaling larger or smaller image to different image sizes.

## Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Units	SectionName:	Processing
	PropertyName:	Units

Method Parameter	SetProperty Parameters	
CopyToWidth	varValue:	VT_BSTR, one of the following: .01 Inches 1 Millimeters  Ignored if the units are specified in the strings below
	SectionName:	Processing
	PropertyName:	Copy to width
CopyToHeight	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
	SectionName:	Processing
	PropertyName:	Copy to height
CopyToImageMarginLeft	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
	SectionName:	Processing
	PropertyName:	Copy to IAM Left
CopyToImageMarginTop	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
	SectionName:	Processing
	PropertyName:	Copy to IAM Top
CopyToImageMarginRight	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch)
	SectionName:	Processing
	PropertyName:	Copy to IAM Right

Method Parameter	SetProperty Parameters	
CopyToImageMarginBottom		0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
	SectionName:	Processing
	PropertyName:	Copy to IAM Bottom
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
ImageCopyScaling	SectionName:	Processing
	PropertyName:	Copy Page Scaling
	varValue:	VT_UI4, one of the following: 0 = Fit to page 1 = Actual Size
ImageCopyHAlign	SectionName:	Processing
	PropertyName:	Copy H Align
	varValue:	VT_BSTR, one of the following: Left Middle Right
ImageCopyVAlign	SectionName:	Processing
	PropertyName:	Copy V Align
	varValue:	VT_BSTR, one of the following: Top Middle Bottom
ImageCopyShrinkIfLarger	SectionName:	Processing
	PropertyName:	Copy Page Scaling Shrink Larger
	varValue:	VT_BOOL
ImageCopyMaintainAspect	SectionName:	Processing
	PropertyName:	Copy Page Lock Aspect Ratio
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetImageCopyOn](#) [SetResamplingOn](#) [SetResamplingOptions](#) [SetProperty](#) [pnUnits](#) [pnImageCopyScaling](#) [pnImageCopyScalingHAlign](#) [pnImageCopyScalingVAlign](#)

## SetJPEGCompressionOptions

### Description

Sets the compression methods to use when storing color or greyscale JPEG images. The actual compression method used on each page will depend on any color reduction method chosen through the [SetSaveOptions](#) method. Other output options used, such as [SetFaxImageOptions](#) may override any settings chosen here.

To set only a single compression option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

### Syntax

```
expression.SetJPEGCompressionOptions(Color, Greyscale)
```

where expression is an [IPNSession](#) object.

### Parameters

#### pnColorCompressionMethod Color

A [pnColorCompressionMethod](#) constant for the compression method to use for color images. Not all of the constants are valid for this method, only *pnColorCompressionJPEGHighQuality*, *pnColorCompressionJPEGMediumHighQuality*, *pnColorCompressionJPEGMediumQuality*, *pnColorCompressionJPEGMediumLowQuality*, and *pnColorCompressionJPEGLowQuality* apply. If an invalid constant is passed the default compression of *pnColorCompressionJPEGMediumQuality* is used.

#### pnGreyscaleCompressionMethod Greyscale

A [pnGreyscaleCompressionMethod](#) constant for the compression method to use for greyscale images. Not all of the constants are valid for this method, only *pnGreyscaleCompressionJPEGHighQuality*, *pnGreyscaleCompressionJPEGMediumHighQuality*, *pnGreyscaleCompressionJPEGMediumQuality*, *pnGreyscaleCompressionJPEGMediumLowQuality*, and *pnGreyscaleCompressionJPEGLowQuality* apply. If an invalid constant

is passed the default compression of *pnGreyscaleCompressionJPEGMediumQuality* is used.

## Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Color	SectionName:	JPEG File Format
	PropertyName:	Color compression
	varValue:	VT_BSTR, one of the following: High Quality Medium High Quality Medium Quality Medium Low Quality Low Quality
Greyscale	SectionName:	JPEG File Format
	PropertyName:	Greyscale compression
	varValue:	VT_BSTR, one of the following: High Quality Medium High Quality Medium Quality Medium Low Quality Low Quality

**Supported Printers:** Raster Image Printer

**See Also:** [SetProperty pnColorColorCompressionMethod](#)  
[pnGreyscaleCompressionMethod](#)

## SetPageCropAreaOptions

### Description

Sets any page area cropping options in the [IPNSession](#) object. The concept of page cropping is analogous to scissors that cut away sections of paper. In this case portions of the page are removed and the remaining image area is smaller than the original page.

If all four fields, *CropLeft*, *CropTop*, *CropWidth* and *CropHeight*, are 0 then no cropping is performed.

To set a only a single page area cropping option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.



See the [Crop Margins or Areas](#) section for a more detailed explanation.

## Syntax

```
expression.SetPageCropAreaOptions(Units, CropLeft, CropTop, CropWidth,  
CropHeight)
```

where *expression* is an [IPNSession](#) object.

## Parameters

### pnUnits Units

A [pnUnits](#) constant for the unit of measure used to enter the cropping measurements.

### Double CropLeft

This is the leftmost starting point for the cropped area, in [pnUnits](#) from the left side of the page.

### Double CropTop

This is the topmost starting point for the cropped area, in [pnUnits](#) from the top of the page.

### Double CropWidth

The width of the area you want to crop from the original page in [pnUnits](#). This area starts at *CropLeft*.

### Double CropHeight

The width of the area you want to crop from the original page in [pnUnits](#). This area starts at *CropTop*.

## Remarks

Only one of *SetPageCropAreaOptions* or [SetPageCropMarginOptions](#) can be set at any one time. Whichever method is last called determines whether margins or a page area is cropped.

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Units	SectionName:	Processing
	PropertyName:	Units
	varValue:	VT_BSTR, one of the following: .01 Inches 1 Millimeters  Ignored if the units are specified in the strings below

Method Parameter	SetProperty Parameters	
CropLeft	SectionName:	Processing
	PropertyName:	Crop left
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
CropTop	SectionName:	Processing
	PropertyName:	Crop top
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
CropWidth	SectionName:	Processing
	PropertyName:	Crop width
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
CropHeight	SectionName:	Processing
	PropertyName:	Crop height
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
There is no parameter for this option, it is automatically set.	SectionName:	Processing
	PropertyName:	Crop Option
	varValue:	VT_I4, must be 0 to crop by area or region

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageBrightness](#) [SetPageCropOn](#) [SetPageCropMarginOptions](#) [SetPageRotationOptions](#) [SetPageTrimOptions](#) [SetProperty pnUnits](#)

## SetPageBrightness

### Description

Sets the page brightness options in the [IPNSession](#) object.

You can also set the page brightness adjustment by calling [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

See the [Adjust Page Brightness](#) section for a more detailed explanation.

### Syntax

*expression*.SetPageBrightness(Brightness)

where *expression* is an [IPNSession](#) object.

### Parameters

#### Integer Brightness

A value between -100 and 100 that determines the brightness level of the page.

Range	Action
-100 to -1	Darkens the image, with -100 being black.
0	No change
1 to 100	Lightens the image, with 100 being white.

### Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Brightness	SectionName:	Processing
	PropertyName:	Brightness Adjust
	varValue:	VT_I4, -100 - 100 as above

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageCropOn](#) [SetPageCropAreaOptions](#) [SetPageCropMarginOptions](#) [SetPageRotationOptions](#) [SetPageTrimOptions](#) [SetProperty](#)

## SetPageTrimOptions

### Description

Sets any page trimming options in the [IPNSession](#) object. Trimming is similar to cropping except that all areas on the chosen sides (Left, Right,

Top or Bottom) of the page that fall at or below the chosen intensity level will be automatically removed.

To set a single trimming option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

See the [Trim Existing Margins by Color Intensity](#) section for a more detailed explanation.

## Syntax

```
expression.SetPageTrimOptions(TrimLeft, TrimTop, TrimRight, TrimBottom,  
TrimLevel)
```

where *expression* is an [IPNSession](#) object.

## Parameters

### Boolean TrimLeft

Pass as **True** to trim the left side of the page, **False** to ignore.

### Boolean TrimTop

Pass as **True** to trim the top of the page, **False** to ignore.

### Boolean TrimRight

Pass as **True** to trim the right side of the page, **False** to ignore.

### Boolean TrimBottom

Pass as **True** to trim the bottom of the page, **False** to ignore.

### Integer TrimLevel

This must be a value between 0 - 100. When the intensity is set all the way to the left on White(0), only pure white pixels will be removed. The higher the intensity level, the more colors will be removed. If the intensity is set to Black(100), the entire page will in effect be "trimmed", and the trimming operation is abandoned.

## Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
TrimLeft	SectionName:	Processing
	PropertyName:	Trim left
	varValue:	VT_BOOL
TrimTop	SectionName:	Processing
	PropertyName:	Trim top
	varValue:	VT_BOOL

Method Parameter	SetProperty Parameters	
TrimRight	SectionName:	Processing
	PropertyName:	Trim right
	varValue:	VT_BOOL
TrimBottom	SectionName:	Processing
	PropertyName:	Trim bottom
	varValue:	VT_BOOL
TrimLevel	SectionName:	Processing
	PropertyName:	Trim Threshold
	varValue:	VT_I4 Range of 1-100

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageBrightness](#) [SetPageRotationOptions](#) [SetPageCropOn](#) [SetPageCropAreaOptions](#) [SetPageCropMarginOptions](#) [SetProperty](#)

## SetPageRotationOptions

### Description

Sets any page rotation options in the [IPNSession](#) object.

To set a single page rotation option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

See the [Rotate Pages](#) section for a more detailed explanation.

### Syntax

*expression*.SetPageRotationOptions(Portrait, Landscape)

where *expression* is an [IPNSession](#) object.

### Parameters

#### pnRotation Portrait

A [pnRotation](#) constant for the degree of counter-clockwise rotation for portrait pages.

#### pnRotation Landscape

A [pnRotation](#) constant for the degree of counter-clockwise rotation for landscape pages.

**Remarks**

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Portrait	SectionName:	Image Options
	PropertyName:	Rotate portrait
	varValue:	VT_I4, one of: 0 90 180 270
Landscape	SectionName:	Image Options
	PropertyName:	Rotate landscape
	varValue:	VT_I4, one of: 0 90 180 270

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageBrightness](#) [SetPageCropOn](#) [SetPageCropAreaOptions](#) [SetPageCropMarginOptions](#) [SetPageTrimOptions](#) [SetProperty pnRotation](#)

**SetPageCropOn****Description**

Enables or disables any page cropping options set.

Cropping can also be enabled or disabled using the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

**Syntax**

*expression*.SetPageCropOn(Enable)

where *expression* is an [IPNSession](#) object.

**Parameters****Boolean Enable**

Set **True** to enable any Cropping options, **False** to disable them.

## Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Enable	SectionName:	Processing
	PropertyName:	Crop
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageBrightness](#) [SetPageCropAreaOptions](#) [SetPageCropMarginOptions](#) [SetPageRotationOptions](#) [SetPageTrimOptions](#) [SetProperty](#)

## SetPageCropMarginOptions

### Description

Sets the page margin cropping options in the [IPNSession](#) object. The concept of page cropping is analogous to scissors that cut away sections of paper. In this case the top, left, right and bottom edges of the page are removed and the remaining image area is smaller than the original page.

To set a single page margin cropping option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

See the [Crop Margins or Areas](#) section for a more detailed explanation.

### Syntax

```
expression.SetPageCropAreaOptions(Units, CropLeft, CropTop, CropRight, CropBottom)
```

where *expression* is an [IPNSession](#) object.

### Parameters

#### pnUnits Units

A [pnUnits](#) constant for the unit of measure used to enter the cropping measurements.

#### Double CropLeft

The desired width of the left margin to crop in [pnUnits](#) from the left-hand side of the page.

#### Double CropTop

The desired height of the top margin to crop in [pnUnits](#) from the top of the page.

### Double CropRight

The desired width of the right margin to crop in [pnUnits](#) from the right-hand side of the page.

### Double CropBottom

The desired height of the bottom margin to crop in [pnUnits](#) from the bottom of the page.

## Remarks

Only one of [SetPageCropAreaOptions](#) or [SetPageCropMarginOptions](#) can be set at any one time. Whichever method is last called determines whether margins or a page area is cropped.

Use the following to set these options using [SetProperty](#):

Method	SetProperty Parameters	
Parameter		
Units	SectionName:	Processing
	PropertyName:	Units
	varValue:	VT_BSTR, one of the following: .01 Inches 1 Millimeters  Ignored if the units are specified in the strings below
CropLeft	SectionName:	Processing
	PropertyName:	Crop margin left
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
CropTop	SectionName:	Processing
	PropertyName:	Crop margin top
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
CropRight	SectionName:	Processing



Method Parameter	SetProperty Parameters	
CropBottom	PropertyName:	Crop margin right
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
	SectionName:	Processing
	PropertyName:	Crop margin bottom
	varValue:	VT_BSTR, one of the following ranges: 0-8000000 (hundredths of an inch) 0-20000000 (tenths of a millimeter) 0in-80000in (inches) 0cm-200000.000cm (centimeters)
There is no parameter for this option, it is automatically set.	SectionName:	Processing
	PropertyName:	Crop Option
	varValue:	VT_I4, must be 1 to crop margins

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageBrightness](#) [SetPageCropOn](#) [SetPageCropAreaOptions](#) [SetPageRotationOptions](#) [SetPageTrimOptions](#) [SetProperty](#) [pnUnits](#)

## SetPDFCompressionOptions

### Description

Sets the PDF file format image and content compression methods used to store any images in the output file. The actual compression method used on each image will depend on the color reduction method chosen through the [SetSaveOptions](#) method. Other output options used, such as [SetFaxImageOptions](#) may override any settings chosen here.

When creating vector PDF files, the color, indexed, greyscale and BW compression options apply to any images on the pages of the file. When creating raster, or non-searchable PDF files where each page is an image, the compression options apply to the entire page.

To set only a single compression option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

## Syntax

```
expression.SetPDFCompressionOptions(UseCompression,  
UseASCIICompression,ContentEncoding,  
Color, Indexed, Greyscale, BW,  
PDFStandard)
```

where expression is an [IPNSession](#) object.

## Parameters

### Boolean UseCompression

Set **True** to create a compressed PDF file, **False** to create an uncompressed document. Uncompressed PDF files can be very large.

### Boolean UseASCIICompression

Set **True** to store the PDF document in ASCII format.

### pnPDFContentEncodingMethod ContentEncoding

A [pnPDFContentEncodingMethod](#) constant for the compression method to use to compress any text and line art in the PDF document.

### pnColorCompressionMethod Color

A [pnColorCompressionMethod](#) constant for the compression method to use for color images.

### pnIndexedCompressionMethod Indexed

A [pnIndexedCompressionMethod](#) constant for the compression method to use for indexed images. An indexed image is an image that has 256 colors or less.

### pnGreyscaleCompressionMethod Greyscale

A [pnGreyscaleCompressionMethod](#) constant for the compression method to use for greyscale images.

### pnBWCompressionMethod BW

A [pnBWCompressionMethod](#) constant for the compression method to use for black and white images.

### pnPDFStandard PDFStandard

A [pnPDFStandard](#) constant for the compression method to use for black and white images.

## Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
UseCompression	SectionName:	PDF File Format
	PropertyName:	Use compression

Method Parameter	SetProperty Parameters	
UseASCIICompression	varValue:	VT_BOOL
	SectionName:	PDF File Format
	PropertyName:	Use ASCII
ContentEncoding	varValue:	VT_BOOL
	SectionName:	PDF File Format
	PropertyName:	Content Encoding
Color	varValue:	VT_BSTR, one of the following: None ZIP RLE LZW
	SectionName:	PDF File Format
	PropertyName:	Color compression
Indexed	varValue:	VT_BSTR, one of the following: None ZIP RLE JPEG High JPEG Medium High JPEG Medium JPEG Medium Low JPEG Low LZW
	SectionName:	PDF File Format
	PropertyName:	Indexed compression
Greyscale	varValue:	VT_BSTR, one of the following: None ZIP RLE JPEG High JPEG Medium High JPEG Medium JPEG Medium Low JPEG Low LZW
	SectionName:	PDF File Format
	PropertyName:	Greyscale compression
	varValue:	VT_BSTR, one of the following:

Method Parameter	SetProperty Parameters	
BW		None ZIP RLE JPEG High JPEG Medium High JPEG Medium JPEG Medium Low JPEG Low LZW
	SectionName:	PDF File Format
	PropertyName:	BW compression
	varValue:	VT_BSTR, one of the following: None Group4 Group3-2D Group3-1D MH
PDFStandard	SectionName:	PDF File Format
	PropertyName:	PDF Standard
	varValue:	VT_BSTR, one of the following: None PDF/A-1b

**Supported Printers:** PDF Image Printer, %SUPDRV\_RASTER%>

**See Also:** [SetPDFPassword](#) [SetPDFSecurity](#) [SetProperty](#) [pnColorReduction](#) [pnDitheringMethod](#) [pnPDFContentEncodingMethod](#) [pnColorColorCompressionMethod](#) [pnIndexedCompressionMethod](#) [pnGreyscaleCompressionMethod](#) [pnBWCompressionMethod](#) [pnPDFStandard](#)

## SetPDFSecurity

### Description

PDF files can be created with or without security. Creating a secure PDF allows you to restrict what can be done with the contents of the file. For instance, you can allow people to read and print the file but not be able to copy any of the text or images out of the file. Supported security options consist of two different levels of encryption and the ability to control what the viewer can do with PDF file. You can also set up to two levels of password protection using the [SetPDFPassword](#) method.

To set only a single security option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

## Syntax

```
expression.SetPDFSecurity(UseSecurity, Encryption,  
                           AllowCopyText, AllowPrinting,  
                           AllowDocumentChange, AllowCommentsAndFormFields)
```

where expression is an [IPNSession](#) object.

## Parameters

### Boolean UseSecurity

Set **True** to create a secure PDF file, **False** to create an unsecured document.

### pnPDFEncryption Encryption

A [pnPDFEncryption](#) constant for the encryption level of the PDF. The encryption option chosen determines what version of Acrobat is needed to open and view the file

### Boolean AllowCopyText

Set **True** to allow text and images in the PDF file to be selected and copied to the clipboard for use in other documents, **False** to disallow.

### Boolean AllowPrinting

Set **True** to allow the PDF file to be printed, **False** to disallow.

### Boolean AllowDocumentChange

Set **True** to allow pages in the PDF file to be inserted, removed and modified, **False** to disallow. This also allows document signing as well as adding or editing form fields.

### Boolean AllowCommentsAndFormFields

Set **True** to allow only form fields and comments to added, edited or removed; **False** to disallow.

## Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
UseSecurity	SectionName:	PDF Security
	PropertyName:	Use Security
	varValue:	VT_BOOL
Encryption	SectionName:	PDF Security
	PropertyName:	Encrypt Level

Method Parameter	SetProperty Parameters	
AllowCopyText	varValue:	VT_I4 1 = 40-bit encryption 2 = 128-bit encryption 3 = 128-bit AES encryption 4 = 256-bit AES encryption
	SectionName:	PDF Security
	PropertyName:	Can Copy
AllowPrinting	varValue:	VT_BOOL
	SectionName:	PDF Security
	PropertyName:	Can Print
AllowDocumentChange	varValue:	VT_BOOL
	SectionName:	PDF Security
	PropertyName:	Can Change Doc
AllowCommentsAndFormFields	varValue:	VT_BOOL
	SectionName:	PDF Security
	PropertyName:	Can ChangeOther
	varValue:	VT_BOOL

**Supported Printers:** PDF Image Printer, %SUPDRV\_RASTER%>

**See Also:** [SetPDFPassword](#) [SetProperty](#) [pnPDFEncryption](#)

## SetPDFPassword

### Description

There are two levels of password protection that can be set for PDF files – one for opening the PDF file (also known as the document open password), and one for making changes or modifying the PDF file (also called the permissions, or change, password).

This method allows you to specify these passwords. PDF password protection is only applies if PDF security is enabled. This is done through the [PDFSetSecurity](#) method.

To set only a single security option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

### Syntax

```
expression.SetPDFPassword(EnableOpenPassword, OpenPassword,
```

```
EnableChangePassword, ChangePassword)
```

where expression is a [IPNSession](#) object.

## Parameters

### Boolean EnableOpenPassword

Set **True** to require anyone opening this PDF file to type in the password you specify.

### String OpenPassword

The password you want to use to allow the PDF file to be opened.

### Boolean EnableChangePassword

Set **True** to require anyone making changes to this PDF file to type in the password you specify. When set, this password is required to change the security settings or to modify permissions on the document.

### String ChangePassword

The password you want to use to allow changes to the PDF file.

## Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
EnableOpenPassword	SectionName:	PDF Security
	PropertyName:	User Pswd On
	varValue:	VT_BOOL
OpenPassword	SectionName:	PDF Security
	PropertyName:	User Pswd
	varValue:	VT_BSTR
EnableChangePassword	SectionName:	PDF Security
	PropertyName:	Owner Pswd On
	varValue:	VT_BOOL
ChangePassword	SectionName:	PDF Security
	PropertyName:	Owner Pswd
	varValue:	VT_BSTR

**Supported Printers:** PDF Image Printer, Raster Image Printer

**See Also:** [SetPDFSecurity](#) [SetProperty](#)

## SetResamplingOptions

### Description

Sets any resampling options in the [IPNSession](#) object. The resample feature allows you to scale the output image to:

- a particular width and height in pixels
- a percentage of the original size, ranging from 1% - 500%
- a new image resolution (DPI), ranging from 50 DPI - 3600 DPI

To set a single resampling option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

See the [Resample Page to New Size](#) section for a more detailed explanation.

### Syntax

```
expression.SetResamplingOptions(Resample, ResampleWidthOrXResolution,  
                                ResampleHeightOrYResolution,  
                                ResampleLockAspectRatio)
```

where *expression* is an [IPNSession](#) object.

### Parameters

#### **pnResampleUnits Resample**

A [pnResampleUnits](#) constant for resampling using pixels, percentage or resolution.

#### **Integer ResampleWidthOrXResolution**

Enter in the new image width in pixels, as a percentage of the original page size, or the new x resolution (dots per inch).

#### **Integer ResampleHeightOrYResolution**

Enter in the new image height in pixels, as a percentage of the original page size, or the new y resolution (dots per inch). If *ResampleLockAspectRatio* is *True*, you can pass 0 for the height and it will be calculated automatically to prevent distortion.

#### **Boolean ResampleLockAspectRatio**

Pass **True** to constrain the image height and width so the image does not get distorted when resampling.

### Remarks

Use the following to set options using [SetProperty](#) when *Resample* is **pnResampleUnitsPixels**:



Method Parameter	SetProperty Parameters	
Resample	SectionName:	Processing
	PropertyName:	Resample Units
	varValue:	VT_I4, must be 0
ResampleWidthOrXResolution	SectionName:	Processing
	PropertyName:	Resample Pixels Width
	varValue:	VT_I4 Range between 0 - 4294967295
ResampleHeightOrYResolution	SectionName:	Processing
	PropertyName:	Resample Pixels Height
	varValue:	VT_I4 Range between 0 - 4294967295
ResampleLockAspectRatio	SectionName:	Processing
	PropertyName:	Resample Lock Aspect Ratio
	varValue:	VT_BOOL

Use the following to set options using [SetProperty](#) when *Resample* is **pnResampleUnitsPercentage**:

Method Parameter	SetProperty Parameters	
Resample	SectionName:	Processing
	PropertyName:	Resample Units
	varValue:	VT_UI4, must be 1
ResampleWidthOrXResolution	SectionName:	Processing
	PropertyName:	Resample Width Percentage
	varValue:	VT_UI4 Range between 1 - 500
ResampleHeightOrYResolution	SectionName:	Processing
	PropertyName:	Resample Height Percentage
	varValue:	VT_UI4 Range between 1 - 500
ResampleLockAspectRatio	SectionName:	Processing
	PropertyName:	Resample Lock Aspect Ratio
	varValue:	VT_BOOL

Use the following to set options using [SetProperty](#) when *Resample* is **pnResampleUnitsDPI**:

Method Parameter	SetProperty Parameters	
Resample	SectionName:	Processing
	PropertyName:	Resample Units
	varValue:	VT_UI4, must be 2
ResampleWidthOrXResolution	SectionName:	Processing
	PropertyName:	Resample X DPI
	varValue:	VT_UI4 Range between 50 - 3600
ResampleHeightOrYResolution	SectionName:	Processing
	PropertyName:	Resample Y DPI
	varValue:	VT_UI4 Range between 50 - 3600
ResampleLockAspectRatio	SectionName:	Processing
	PropertyName:	Resample Lock Aspect Ratio
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetResamplingOn](#) [SetImageCopyToOn](#) [SetImageCopyToOptions](#) [SetProperty pnResampleUnits](#)

### [SetResamplingOn](#)

#### Description

Enables or disables the resampling options. When these options are not set through the [IPNSession](#) object the default options for *Resampling* in the *Page Processing* tab in the PEERNET Inc. printer's *Printing Preferences* dialog will be applied to the output file instead.

Resampling can also be enabled or disabled using the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

#### Syntax

```
expression.SetResamplingOn(Enable)
```

where *expression* is an [IPNSession](#) object.

## Parameters

### Boolean Enable

Set **True** to enable any resampling options, **False** to disable them.

## Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Enable	SectionName:	Processing
	PropertyName:	Resample
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageBrightness](#) [SetPageCropAreaOptions](#) [SetPageCropMarginOptions](#) [SetPageRotationOptions](#) [SetPageTrimOptions](#) [SetProperty](#)

## SetSaveOptions

## Description

Modifies the file save options on the [IPNSession](#) object.

To set a single save option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

For a more advanced file naming options, use the [file name creator](#) options in a conversion profile.

## Syntax

```
expression.SetSaveOptions(OutputLocation, OutputBaseFileName,
OutputFileFormat,
Append, ColorReduction, Dithering,
PromptForOutputLocationAndBaseFileName,
OverwriteActionWhenSaving, RemoveExt,
RemoveProdName)
```

where *expression* is an [IPNSession](#) object.

## Parameters

### String OutputLocation

Pass the fully qualified path to the directory for storing the output your files. Pass this string as empty to use any OutputLocation setting from the conversion profile. If no location is set in the profile, the last used folder is used as the default directory when running in an interactive process on the desktop and prompting is enabled. When prompting is disabled or there is no last used folder, the My Documents folder is used. When running non-interactively, such as in the Task Scheduler or a Windows service, the My Documents folder for the running process is always used if this string is empty.

### **String OutputBaseFileName**

This is the base filename for your output file. The base filename excludes any directory path and file extension. If you want your output files to always be saved under the same filename, enter that name here. If this field is empty the print job name the printing application uses when submitting the file to the printer is used instead.

### **pnOutputFileFormat OutputFileFormat**

A [pnOutputFileFormat](#) constant for the possible types of files that can be created with any of the supported printer drivers. Not all file formats are valid for all drivers.

### **Boolean Append**

Set this to **True** to append, or concatenate, the pages to an existing output file or, if you are creating serialized files, an existing sequence of files.

### **pnColorReduction ColorReduction**

A [pnColorReduction](#) constant for any color reduction options to apply to the output file. There are eight color reduction options available for reducing the number of colors in true color images. In general, the fewer the colors in an image, the smaller the file size.

### **pnDitheringMethod Dithering**

A [pnDitheringMethod](#) constant to determine the method used when reducing color images to black and white. Dithering is used to enhance the appearance of color images that have been reduced to black and white.

### **Boolean PromptForOutputLocationAndBaseFileName**

Set to **True** to show the printer's *Save Image* dialog prompt, or **False** to hide the prompt and use the *Directory* and *BaseFilename* settings to create the filename.

### **pnOverwriteActionWhenSaving OverwriteActionWhenSaving**

A [pnOverwriteActionWhenSaving](#) constant to determine the action to take in overwrite situations where a file of the same name already exists for the file you are creating.

### Boolean RemoveExt

Set to **True** to automatically remove any file extension passed to the printer as part of the filename.

### Boolean RemoveProdName

Set to **True** to automatically remove any product names that are added to the printed filename by the printing application. Product names are any text that precedes the following characters: a space, a dash and a space (" - ").

### Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
OutputLocation	SectionName:	Save
	PropertyName:	Output directory
	varValue:	VT_BSTR, as above
OutputBaseFileName	SectionName:	Save
	PropertyName:	Output filename
	varValue:	VT_BSTR, as above
OutputFileFormat	SectionName:	Save
	PropertyName:	Output File Format
	varValue:	VT_BSTR, one of the following driver-dependant values: JPEG TIFF Multipaged TIFF Serialized Adobe PDF Multipaged Adobe PDF Serialized CompuServe GIF CompuServe PNG Windows BMP TARGA Adobe Photoshop 3.0 ZSoft PCX ZSoft DCX
Append	SectionName:	Save

Method Parameter	SetProperty Parameters	
ColorReduction	PropertyName:	Append
	varValue:	VT_BOOL
	SectionName:	Save
	PropertyName:	Color reduction
	varValue:	VT_BSTR, one of the following none Optimal BW grey 256Colors 16Colors optimalMax256Colors optimalMax16Colors
Dithering	SectionName:	Save
	PropertyName:	Dithering Method
	varValue:	VT_BSTR, one of the following None Floyd Burkes Bayer Halftone
PromptForOutputLocationAndBaseFileName	SectionName:	Save
OverwriteActionWhenSaving	PropertyName:	Prompt
	varValue:	VT_BOOL
	SectionName:	Save
RemoveExt	PropertyName:	When Saving
	varValue:	VT_BOOL
	SectionName:	Save
RemoveProdName	PropertyName:	Remove filename extension
	varValue:	VT_BOOL
	SectionName:	Save
	PropertyName:	Remove product name
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetSaveOptionsOutputLocationAndOutputFileName](#)  
[SetSaveOptionsOutputResolution](#) [SetProperty](#)

### [SetSaveOptionsOutputLocationAndOutputFileName](#)

#### **Description**

Modifies the file save options for the output directory and output filename on the [IPNSession](#) object. Overrides any conversion setting from the profile passed in the [SetSessionPrinter](#) or the [SetPrinterProfile](#) method.

To set a single save option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

#### **Syntax**

```
expression.SetSaveOptionsOutputLocationAndOutputFileName(OutputLocation,  
                                                         OutputBaseFileName  
)
```

where *expression* is an [IPNSession](#) object.

#### **Parameters**

##### **String OutputLocation**

Pass the fully qualified path to the directory for storing the output your files. Pass this string as empty to use any OutputLocation setting from the conversion profile. If no location is set in the profile, the last used folder is used as the default directory when running in an interactive process on the desktop and prompting is enabled. When prompting is disabled or there is no last used folder, the My Documents folder is used. When running non-interactively, such as in the Task Scheduler or a Windows service, the My Documents folder for the running process is always used if this string is empty.

##### **String OutputBaseFileName**

This is the base filename for your output file. The base filename excludes any directory path and file extension. If you want your output files to always be saved under the same filename, enter that name here. Pass this string as empty to use the base filename from the conversion profile. If no basename is set in the conversion profile, the print job name set by the printing application when submitting the file to the printer is used instead.

**Remarks**

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
OutputLocation	SectionName:	Save
	PropertyName:	Output directory
	varValue:	VT_BSTR, as above
OutputBaseFileName	SectionName:	Save
	PropertyName:	Output filename
	varValue:	VT_BSTR, as above

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetSaveOptions](#) [SetSaveOptionsOutputResolution](#) [SetProperty](#)

[SetSaveOptionsOutputResolution](#)**Description**

Modifies the file save options for the output resolution on the [IPNSession](#) object. Other settings, such as [fax options](#) or [resampling](#) can change this as the file is processed.

To set a single save option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

**Syntax**

*expression*.SetSaveOptionsOutputResolution (OutputResolution)

where *expression* is an [IPNSession](#) object.

**Parameters****pnPrinterResolution OutputResolution**

A [pnPrinterResolution](#) constant for the desired resolution of the output file.

**Remarks**

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
OutputResolution	SectionName:	Devmode settings
	PropertyName:	Resolution



Method Parameter	SetProperty Parameters	
	varValue:	VT_I4, one of the following: 50, 60, 72, 75, 96, 100, 150, 200, 240, 254, 300, 400, 480, 600, 720, 800, 1200

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetSaveOptions](#) [SetSaveOptionsOutputLocationAndOutputFileName](#) [SetProperty](#)

## SetTextExtractionOn

### Description

Enables or disables the text extraction options. Text extraction creates a separate text file containing all of the textual elements of your printed documents. The text extraction files are stored in the same location as the output files, with the same name and the *.txt* extension.

The text extraction feature was not designed to be Optical Character Recognition (OCR) software. Only straight text will be extracted and formatting of the text file may not be exact. To run OCR, see the [OCR options tab](#) in the profile.

Text extraction can also be enabled or disabled using the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

### Syntax

*expression*.SetTextExtractionOn(Enable)

where *expression* is an [IPNSession](#) object.

### Parameters

#### Boolean Enable

Set **True** to enable any text extraction options, **False** to disable them.

### Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Enable	SectionName:	Advanced Features

Method Parameter	SetProperty Parameters	
	PropertyName:	Extract Text
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetTextExtractionOptions](#) [SetProperty](#)

## SetTextExtractionOptions

### Description

Sets the text extraction options. Text extraction creates a separate text file containing all of the textual elements of your printed documents. The files are stored in the same location as the output files, with a *.txt* extension.

The text extraction feature was not designed to be Optical Character Recognition (OCR) software. Only straight text will be extracted and formatting of the text file may not be exact. To run OCR, see the [OCR options tab](#) in the profile.

To set a single text extraction options use the [SetProperty](#) call with the appropriate arguments.

### Syntax

```
expression.SetTextExtractionOptions (TextLayout, TextEncoding,  
                                     TextEOL, EmitPageBreaks)
```

where *expression* is an [IPNSession](#) object.

### Parameters

#### **pnTextLayout TextLayout**

A [pnTextLayout](#) constant to determine how the text in your text extraction file is formatted.

#### **pnTextEncoding TextEncoding**

A [pnTextEncoding](#) constant to determine the encoding for your text file.

#### **pnTextEOL TextEOL**

A [pnTextEOL](#) constant to determine the end of line (EOL) encoding for your text file. This differs between Windows, Unix and Macintosh systems.

#### **Boolean EmitPageBreaks**

Pass *True* to emit page breaks (or form feeds) for every page in your document.

## Remarks

See the **Remarks** below for a list of arguments.

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
TextFilePath	SectionName:	Advanced Features
	PropertyName:	Extract Text Filepath
	varValue:	VT_BSTR, as above
TextLayout	SectionName:	Advanced Features
	PropertyName:	Extract Text Layout
	varValue:	VT_BSTR, one of the following: Physical, Raw, None
TextEncoding	SectionName:	Advanced Features
	PropertyName:	Extract Text Encoding
	varValue:	VT_BSTR, one of the following: ANSI, UTF-8, UTF-16
TextEOL	SectionName:	Advanced Features
	PropertyName:	Extract Text EOL
	varValue:	VT_BSTR, one of the following: Windows, Mac, Unix
EmitPageBreaks	SectionName:	Advanced Features
	PropertyName:	Extract Text Emit Page Breaks
	varValue:	VT_BOOL, as above

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetTextExtractionOn](#) [SetProperty](#) [pnTextLayout](#) [pnTextEncoding](#) [pnTextEOL](#)

## SetTIFFAdvancedOptions

### Description

Sets the advanced TIFF options on the [IPNSession](#) object. These options include both monochrome-specific options sometimes needed by older fax printers and some general TIFF options that apply to all TIFF output.

To set a single TIFF advanced option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

### Syntax

```
expression.SetTIFFAdvancedOptions(ReverseBits, EOLByteAlign,  
InvertPhotometric,  
IncludeDateTime, MotorolaFormat)
```

where *expression* is an [IPNSession](#) object.

### Parameters

#### Boolean ReverseBits

Also known as fill order, pass **True** to store the image data in least significant bit to most significant bit (LSB to MSB) order, or **False** to store the bits in most significant bit to least significant bit (MSB to LSB) order.

#### Boolean EOLByteAlign

Pass **True** to align rows of CCITT Group 3 1D and 2D image data on word boundaries.

#### Boolean InvertPhotometric

The photometric interpretation option determines the order of the black and white palette entries for a monochrome TIFF file. Pass **True** to invert the palette entries (MINISBLACK, the palette entry for 0 is black) and create a TIFF with white text on a black background. Pass **False** (MINISWHITE, the palette entry for 0 is white) to create a TIFF with black text on a white background.

#### Boolean IncludeDateTime

Pass **True** to have the creation time and date added to your outputted TIFF file.

#### Boolean MotorolaFormat

Pass **True** to create TIFF images using Motorola (big-endian) byte order. The default format is Intel (little-endian) byte order.

### Remarks

Use the following to set this option using [SetProperty](#):

Method Parameter	SetProperty Parameters	
ReverseBits	SectionName:	Image Options
	PropertyName:	Fill order
	varValue:	VT_BSTR, one of the following LSB2MSB, MSB2LSB
EOLByteAlign	SectionName:	Image Options
	PropertyName:	EOLs Byte Aligned
	varValue:	VT_BOOL
InvertPhotometric	SectionName:	Image Options
	PropertyName:	Photometric
	varValue:	VT_BSTR, one of the following: MINISWHITE, MINISBLACK
IncludeDateTime	SectionName:	Image Options
	PropertyName:	Include DateTime
	varValue:	VT_BOOL
MotorolaFormat	SectionName:	Image Options
	PropertyName:	Motorola Format
	varValue:	VT_BOOL

**Supported Printers:** TIFF Image Printer, Raster Image Printer

**See Also:** [SetFaxModeOn](#) [SetFaxOptions](#) [SetTIFFCompressionOptions](#) [SetProperty](#)

## SetTIFFCompressionOptions

### Description

Sets the TIFF compression options used to store the image in the output file. The actual compression method used on each page will depend on the color reduction method chosen through the [SetSaveOptions](#) method. Other output options used, such as [SetFaxImageOptions](#) may also override any settings chosen here.

To set only a single compression option use the [SetProperty](#) call with the appropriate arguments. See the **Remarks** below for a list of arguments.

### Syntax

```
expression.SetTIFFCompressionOptions(Color, Indexed, Greyscale, BW)
```

where expression is an [IPNSession](#) object.

## Parameters

### **pnColorCompressionMethod Color**

A [pnColorCompressionMethod](#) constant for the compression method to use for color images.

### **pnIndexedCompressionMethod Indexed**

A [pnIndexedCompressionMethod](#) constant for the compression method to use for indexed images. An indexed image is an image that has 256 colors or less.

### **pnGreyscaleCompressionMethod Greyscale**

A [pnGreyscaleCompressionMethod](#) constant for the compression method to use for greyscale images.

### **pnBWCompressionMethod BW**

A [pnBWCompressionMethod](#) constant for the compression method to use for black and white images.

## Remarks

Use the following to set these options using [SetProperty](#):

Method Parameter	SetProperty Parameters	
Color	SectionName:	TIFF File Format
	PropertyName:	Color compression
	varValue:	VT_BSTR, one of the following: Uncompressed RGB Uncompressed CMYK Packbits RGB Packbits CMYK High quality JPEG Medium High quality JPEG Medium quality JPEG Medium Low quality JPEG Low quality JPEG LZW RGB LZW CMYK
Indexed	SectionName:	TIFF File Format
	PropertyName:	Indexed compression
	varValue:	VT_BSTR, one of the following: Uncompressed Packbits High quality JPEG Medium High quality JPEG

Method Parameter	SetProperty Parameters	
Greyscale		Medium quality JPEG Medium Low quality JPEG Low quality JPEG LZW
	SectionName:	TIFF File Format
	PropertyName:	Greyscale compression
	varValue:	VT_BSTR, one of the following: Uncompressed Packbits High quality JPEG Medium High quality JPEG Medium quality JPEG Medium Low quality JPEG Low quality JPEG LZW
BW	SectionName:	TIFF File Format
	PropertyName:	BW compression
	varValue:	VT_BSTR, one of the following: None Group4 Group3-2D Group3-1D MH LZW Packbits

**Supported Printers:** TIFF Image Printer, Raster Image Printer

**See Also:** [SetProperty pnColorColorCompressionMethod](#)  
[pnIndexedCompressionMethod](#) [pnGreyscaleCompressionMethod](#)  
[pnBWCompressionMethod](#)

## Properties

## Jobs

## Description

Returns an [IPNJobs](#) collection of [IPNJob](#) objects. If job tracking is enabled through the [TrackingOn](#) property a new IPNJob object is added to this collection each time a file is printed to one of the printers in the printer

pool for this session. If nothing has been printed, the collection will be empty. The collection can be cleared using the [Reset](#) method.

Job tracking is off for each session by default.

Read-only.

### Syntax

*expression*.Jobs

where *expression* is an [IPNSession](#) object.

Returns an [IPNJobs](#) collection.

**See Also:** [IPNJobs](#) [IPNJob](#) [TrackingOn](#) [Reset](#)

## TrackingOn

### Description

Enable or disable job tracking through this property. When job tracking is enabled a new [IPNJob](#) object is added to the [Jobs](#) collection for each print job printed by one of the printers in the printer pool for this session.

When job tracking is enabled, the jobs collection will continue to grow until either the session object is released or [Reset](#) is called to clear the jobs collection. When tracking job information for a large number of files per session, you can use the *Reset* method to keep the collection from getting too large.

Read/write.

### Syntax

*expression*.TrackingOn

where *expression* is an [IPNSession](#) object.

Returns or sets a **Boolean**.

**See Also:** [IPNJobs](#) [IPNJob](#) [Jobs](#) [Reset](#)

## Events

### OnCloseFile

### Description

The OnCloseFile event occurs each time a file is closed. Attach a handler to this event to perform custom actions with the newly created file.



The [IPNFile](#) object passed to the event handler contains the file path. This object must be released using *System.Runtime.InteropServices.Marshal.FinalReleaseComObject* call at the end of the event handler before returning.

## Syntax

```
objectName_OnCloseFile(pFile)
```

where the [IPNSession](#) object is declared with events.

## Parameters

### IPNFile pFile

An [IPNFile](#) object representing the file currently being saved.

**See Also:** [OnEndJob](#) [OnGetNextFileName](#) [OnOpenFile](#) [OnLogMessage](#) [OnReportError](#) [OnStartJob](#) [IPNFile](#)

## OnEndJob

## Description

The OnEndJob event occurs each time a file has completed printing. This event, along with [OnStartJob](#), is useful for tracking the files printed.

The [IPNJob](#) object passed into the event handler contains information about the print job such as its print status, and conversion status among others.

The job object must be released using *System.Runtime.InteropServices.Marshal.FinalReleaseComObject* call at the end of the event handler before returning.

## Syntax

```
objectName_OnEndJob(pJob)
```

where the [IPNSession](#) object is declared with events.

## Parameters

### IPNJob pJob

An [IPNJob](#) object representing the print job for the file.

**See Also:** [OnCloseFile](#) [OnGetNextFileName](#) [OnOpenFile](#) [OnLogMessage](#) [OnReportError](#) [OnStartJob](#) [IPNJob](#)

### OnGetNextFileName

#### Description

The OnGetNextFileName event occurs each time a filename needs to be created. This can happen once for each file if the output is multi-paged or once for every page that is printed if the output is serialized

The most common use of this event is to customize the output location and filename of the output file. Both of these can be set using the [IPNNextFileNameOptions](#) object passed to the event handler.

Both the job object and the naming options object must be released using *System.Runtime.InteropServices.Marshal.FinalReleaseComObject* call at the end of the event handler before returning.

#### Syntax

```
objectName_OnGetNextFileName(pJob, pOptions)
```

where the [IPNSession](#) object is declared with events.

#### Parameters

##### **IPNJob pJob**

An [IPNJob](#) object representing the print job for the file.

##### **IPNNextFileNameOptions pOptions**

An [IPNNextFileNameOptions](#) object to store the updated output location and file name information.

**See Also:** [OnCloseFile](#) [OnEndJob](#) [OnOpenFile](#) [OnLogMessage](#) [OnReportError](#) [OnStartJob](#) [IPNJob](#) [IPNNextFileNameOptions](#)

### OnLogMessage

#### Description

The OnLogMessage event is fired when the print driver logs any non-critical messages. Errors are reported using the [OnReportError](#) event.

#### Syntax

```
objectName_OnReportError(pJob, Message)
```

where the [IPNSession](#) object is declared with events.

#### Parameters

##### **IPNJob pJob**

An [IPNJob](#) object representing the print job for the file.

##### **String Message**

The message reported by the driver.

**See Also:** [OnCloseFile](#) [OnEndJob](#) [OnGetNextFileName](#) [OnReportError](#) [OnOpenFile](#) [OnStartJob](#) [IPNJob](#)

## OnOpenFile

### Description

The OnOpenFile event occurs each time a new output file is opened or created.

### Syntax

```
objectName_OnOpenFile(pFile)
```

where the [IPNSession](#) object is declared with events.

### Parameters

#### IPNFile pFile

An [IPNFile](#) object representing the file currently to be created.

**See Also:** [OnCloseFile](#) [OnEndJob](#) [OnGetNextFileName](#) [OnLogMessage](#) [OnReportError](#) [OnStartJob](#) [IPNFile](#)

## OnReportError

### Description

The OnReportError event is fired when the print driver reports an error, such as not having permissions to create the files in the output folder.

### Syntax

```
objectName_OnReportError(pJob, Error)
```

where the [IPNSession](#) object is declared with events.

### Parameters

#### IPNJob pJob

An [IPNJob](#) object representing the print job for the file.

#### String Error

The error message reported by the driver.

**See Also:** [OnCloseFile](#) [OnEndJob](#) [OnGetNextFileName](#) [OnLogMessage](#) [OnOpenFile](#) [OnStartJob](#) [IPNJob](#)

### OnStartJob

#### Description

The OnStartJob event occurs each time a file is printed, just as the print job enters the print queue. This event is useful for tracking the files printed.

#### Syntax

```
objectName_OnStartJob(pJob)
```

where the [IPNSession](#) object is declared with events.

#### Parameters

##### IPNJob pJob

An [IPNJob](#) object representing the print job information for the file currently printing.

**See Also:** [OnCloseFile](#) [OnEndJob](#) [OnGetNextFileName](#) [OnLogMessage](#) [OnReportError](#) [OnOpenFile](#) [IPNJob](#)

## IPNNextFileNameOptions

### Description

Used by the [OnGetNextFileName](#) event to allow detailed customization of output file names at the time of file creation.

### Properties

#### [OutputFileName](#)

Read/Write; The desired output base file name. Do not add a file extension.

#### [OutputLocation](#)

Read/Write; The full path to the desired output location,

## Properties

### OutputFileName

#### Description

The output base file name for naming the file. Do not add a file extension  
Read/Write.

#### Syntax

*expression*.OutputFileName

where *expression* is an [IPNNextFileNameOptions](#) object.

Returns or sets a **String**

**See Also:** [OutputLocation](#) [OnGetNextFileName](#)

## OutputLocation

### Description

The full path to the output folder in which to store the new output file.  
Read/Write.

### Syntax

*expression*.OutputLocation

where *expression* is an [IPNNextFileNameOptions](#) object.

Returns or sets a **String**

**See Also:** [OutputFileName](#) [OnGetNextFileName](#)

## IPNPrintSession

### Description

Represents a single printer from the pool of PEERNET Inc. printers held by the [IPNSession](#) object. A new IPNPrintSession object is needed to control and synchronize the printing process for each document that will be printed.

Use the [NewPrintSession](#) method on IPNSession to get a print session object. Each print session object copies the current settings from the IPNSession object. The print session settings are read-only.

The pool of printers is accessed in a round-robin sequence. A printer can only be assigned to a IPNPrintSession when it is *free*. While a printer is being used by any IPNPrintSession object it is seen as busy and cannot be used by any other IPNPrintSession object.

- [Methods](#)
- [Properties](#)

### Public Methods

#### [\*\*Cancel\*\*](#)

Cancels the current set of print jobs.

#### [\*\*GetProperty\*\*](#)

Retrieves print settings from the printer

#### [\*\*MakeSystemDefaultPrinter\*\*](#)

Sets the printer associated with this print session as the system default printer.

#### [\*\*Pause\*\*](#)

Pauses the printer queue associated with this IPNPrintSession object.

#### [\*\*PrintUsingCommand\*\*](#)

Print a file using a custom command line and arguments.

#### [\*\*Resume\*\*](#)

Resume the printer queue associated with this IPNPrintSession object.

#### [\*\*ShellPrint\*\*](#)

Use the Windows Explorer shell verb "print" to print a a file.

### **ShellPrintTo**

Use the Windows Explorer shell verb "printto" to print a a file.

### **WaitForJobsCompleted**

Waits a given timeout period for all jobs in this print session to be completed before returning control back to the calling application.

### **WaitForJobsPrinted**

Waits a given timeout period for all jobs in this print session to be printed before returning control back to the calling application.

### **WaitForJobsSpooled**

Waits a given timeout period for all jobs in this print session to be spooled before returning control back to the calling application.

### **WaitForJobsSpooling**

Waits a given timeout period for all jobs in this print session to be spooling before returning control back to the calling application.

## **Public Properties**

### **PrinterName**

Read-only; The name of the printer associated with this IPNPrintSession object.

### **PrintSessionGUID**

Read-only; A unique identifier associated with this IPNPrintSession object.

## **Methods**

### **Cancel**

#### **Description**

Cancels the current print session, allowing the printer to be returned to the pool of available printers. Canceling the print session does not delete any currently printing documents, any remaining jobs in the printer queue will finish printing associated with this [IPNPrintSession](#) object.

#### **Syntax**

*expression*.Cancel()



where *expression* is an [IPNPrintSession](#) object.

**See Also:** [Pause](#) [Resume](#)

## GetProperty

### Description

Allows you to retrieve any properties, or options set on the [IPNPrintSession](#) object. The IPNPrintSession object copies all of the current settings from the IPNSession object when [NewPrintSession](#) is called.

The conversion settings are organized into sections and then by name within that section. The section and properties names are case sensitive. The section and property names, and values for each property are the same as the configuration file settings explained in the [Printer Script File Settings](#) section.

Not all properties are available to all printers, and some properties are specific to certain printers. See the individual set option methods on the IPNSession object for a list of section and property names that can be used to retrieve the individual settings for each.

### Syntax

```
expression.GetProperty(SectionName, PropertyName)
```

where *expression* is an [IPNPrintSession](#) object.

Returns a **VARIANT** containing the property value, or **VT\_EMPTY** if that property is not set.

### Parameters

**String** *rSectionName*

The section name for the property you are retrieving.

**String** *PropertyName*

The property name.

## MakeSystemDefaultPrinter

### Description

Not all applications have the ability to choose a specific printer and rely on the system default printer when printing. The default printer is a global setting; when you set the default printer, it is set for the entire system.

When printing in a multi-threaded environment, care must be taken to share the default printer setting between the threads to ensure that one thread is not changing the default printer while another thread is about to print to the default printer.

The `MakeSystemDefaultPrinter` method sets the printer associated with this print session as the system default printer and blocks any other [IPNPrintSession](#) printers from becoming the default printer, allowing for thread-safe printing from applications that rely on the system default printer. When this print session is released back into the pool of available printers, the original system default printer is restored.

**Note:**

*If at all possible, try to avoid having to set the default printer. Even when using **MakeSystemDefaultPrinter** to control the default printer, you cannot protect against the default printer being changed by an outside process or manually by a user. As well, having to share the default printer, a single resource, between multiple threads can slow down processing.*

### Syntax

```
expression.MakeSystemDefaultPrinter()
```

where *expression* is an [IPNPrintSession](#) object.

## Pause

### Description

Pauses the printer queue associated with this [IPNPrintSession](#) object. Any jobs in the printer queue will not be processed until [Resume](#) is called.

### Syntax

```
expression.Pause()
```

where *expression* is an [IPNPrintSession](#) object.

**See Also:** [Cancel](#) [Resume](#)

## PrintUsingCommand

### Description

Specify a custom program to print the files to the `IPNPrintSession` object's printer.

## Syntax

```
expression.PrintUsingCommand(PathToEXE, Parameters, WaitMode,
WaitModeTimeout,
                                SetAsDefaultPrinter, ForceHiddenWnd,
ShellProcessTimeout,
                                ForceAppClose, CheckExitCode, ValidExitCode)
```

where expression is an [IPNSession](#) object.

Returns Boolean **True** if the shell executed correctly and the file being printed reached the requested state (spooled, printed or completed) in the time period specified.

The method returns **False** if:

- the printer cannot be set as the system default printer within the timeout period specified by the *WaitModeTimeout* argument.
- the file being printed has not entered the print queue within a set amount of time. This timeout period used is the *FirstJobTimeout* value passed in the [NewPrintSession](#) call when getting the [IPNPrintSession](#) object.
- the file being printed has not reached the requested state (spooled, printed, completed) within the timeout period specified by *WaitModeTimeout*

An exception is thrown if the shell call fails. See the **Remarks** section below for a list of errors.

## Parameters

### String PathToEXE

Fully-qualified path to the program to use to print the file.

### String Parameters

Any parameters needed by the program to print the file.

### pnShellAndCommandWaitMode WaitMode

A [pnShellAndCommandWaitMode](#) constant to determine the wait mode (spooled, printed, completed) for the file being printed.

### Integer WaitModeTimeout

How long, in milliseconds, to wait for the program to print the document and for the print job to be spooled, printed or completed.

### Boolean SetAsDefaultPrinter

Pass **True** if the program requires the printer to be the default printer. The original default printer is restored when the print command is completed.

**Boolean ForceHiddenWnd**

Pass **True** to force the program window to be hidden. This will not work on all applications.

**Integer ShellProcessTimeout**

The amount of time, in milliseconds, to wait for the launched program to close by itself. If it has not closed by the end of the timeout period and *ForceAppClose* is **True**, the program is passed a close message to request that it close cleanly and again waits the timeout period. If at the end of the second wait the program still has not closed, it is forcibly terminated.

**Boolean ForceAppClose**

Pass **True** to force the program to close.

**Boolean CheckExitCode**

Pass **True** if the program returns an exit code with a meaningful value.

**Integer ValidExitCode**

If the program returns an exit code, pass the valid exit code here to have the *PrintUsingCommand* check the exit code and return accordingly.

**Exceptions**

If the shell call fails one of the following error message is thrown as an exception:

Error Code	Description
ERROR_FILE_NOT_FOUND	The specified file was not found
ERROR_PATH_NOT_FOUND	The specified path was not found
ERROR_DDE_FAIL	The Dynamic Data Exchange (DDE) transaction failed.
ERROR_NO_ASSOCIATION	There is no application associated with the given file name extension.
ERROR_ACCESS_DENIED	Access to the specified file is denied.
ERROR_DLL_NOT_FOUND	One of the library files necessary to run the application can't be found.
ERROR_CANCELLED	The function prompted the user for additional information, but the user canceled the request.
ERROR_NOT_ENOUGH_MEMORY	There is not enough memory to perform the specified action.
ERROR_SHARING_VIOLATION	A sharing violation occurred.

**See Also:** [ShellPrint](#) [ShellPrintTo](#)

## Resume

### Description

Resumes the printer queue associated with this [IPNPrintSession](#) object. Any jobs accumulated in the printer queue since the [Pause](#) call will now be processed.

### Syntax

```
expression.Resume()
```

where *expression* is an [IPNPrintSession](#) object.

**See Also:** [Pause](#) [Cancel](#)

## ShellPrint

### Description

Uses the Windows shell verb "*print*" to print the file. This only works with files that have known associations, meaning there is an installed application already on the computer that knows how to open and print the file.

As a general rule, if you can drag and drop the file onto a printer icon, or if there is a Print option in the context menu that appears when you right-click the file, you can use the shell to print it.

The ShellPrint method sets the default printer to be the printer associated with the [IPNPrintSession](#) object, then returns to the original default printer when finished.

### Syntax

```
expression.ShellPrint(FullPathToFile, WaitMode, WaitModeTimeout,  
                      ForceHiddenWnd, ShellProcessTimeout, ForceAppClose)
```

where *expression* is an [IPNPrintSession](#) object.

Returns Boolean **True** if the shell executed correctly and the file being printed reached the requested state (spooled, printed or completed) in the time period specified.

The method returns **False** if:

- the printer cannot be set as the system default printer within the timeout period specified by the `WaitModeTimeout` argument.
- the file being printed has not entered the print queue within a set amount of time. This timeout period used is the `FirstJobTimeout` value passed in the [NewPrintSession](#) call when getting the [IPNPrintSession](#) object.
- the file being printed has not reached the requested state(spooled, printed, completed) within the timeout period specified by `WaitModeTimeout`.

An exception is thrown if the shell call fails. See the **Remarks** section below for a list of errors.

### Parameters

#### **String FullPathToFile**

Fully-qualified path to the file to be printed.

#### **pnShellAndCommandWaitMode WaitMode**

A [pnShellAndCommandWaitMode](#) constant to determine the wait mode (spooled, printed, completed) for the file being printed.

#### **Integer WaitModeTimeout**

How long, in milliseconds, to wait for the program to print the document and for the print job to be spooled, printed or completed, depending on the wait mode chosen for *WaitMode* above.

#### **Boolean ForceHiddenWnd**

Pass **True** to force the program window to be hidden. This will not work on all applications.

#### **Integer ShellProcessTimeout**

The amount of time, in milliseconds, to wait for the launched program to close by itself. If it has not closed by the end of the timeout period and *ForceAppClose* is **True**, the program is passed a close message to request that it close cleanly and again waits the timeout period. If at the end of the second wait the program still has not closed, it is forcibly terminated.

#### **Boolean ForceAppClose**

Pass **True** to force the program to close.

### Remarks

If the shell call fails one of the following error message is thrown as an exception.

Error Code	Description
ERROR_FILE_NOT_FOUND	The specified file was not found
ERROR_PATH_NOT_FOUND	The specified path was not found
ERROR_DDE_FAIL	The Dynamic Data Exchange (DDE) transaction failed.
ERROR_NO_ASSOCIATION	There is no application associated with the given file name extension.
ERROR_ACCESS_DENIED	Access to the specified file is denied.
ERROR_DLL_NOT_FOUND	One of the library files necessary to run the application can't be found.
ERROR_CANCELLED	The function prompted the user for additional information, but the user canceled the request.
ERROR_NOT_ENOUGH_MEMORY	There is not enough memory to perform the specified action.
ERROR_SHARING_VIOLATION	A sharing violation occurred.

**See Also:** [ShellPrintTo](#) [PrintUsingCommand](#)

## ShellPrintTo

### Description

Uses the Windows shell verb "*printto*" to print the file. This only works with files that have known associations, meaning there is an installed application already on the computer that knows how to open and print the file.

Not all applications support the "*printto*" verb. As a general rule, if you can drag and drop the file onto a printer icon, or if there is a Print option in the context menu that appears when you right-click the file, you can use the shell to print it. Optionally, you can have ShellPrintTo default to the ShellPrint command in the case where the *printto* verb fails.

### Syntax

```
expression.ShellPrintTo(FullPathToFile, WaitMode, WaitModeTimeout,
ForceHiddenWnd,
ShellProcessTimeout, ForceAppClose,
UseShellPrintOnFail)
```

where *expression* is an [IPNPrintSession](#) object.

Returns Boolean **True** if the shell executed correctly and the file being printed reached the requested state (spooled, printed or completed) in the time period specified.

The method returns **False** if:

- the file being printed has not entered the print queue within a set amount of time. This timeout period used is the `FirstJobTimeout` value passed in the [NewPrintSession](#) call when getting the [IPNPrintSession](#) object.
- the file being printed has not reached the requested state(spooled, printed, completed) within the timeout period specified by `WaitModeTimeout`.

An exception is thrown if the shell call fails. See the **Remarks** section below for a list of errors.

### Parameters

#### **String FullPathToFile**

Fully-qualified path to the file to be printed.

#### **pnShellAndCommandWaitMode WaitMode**

A [pnShellAndCommandWaitMode](#) constant to determine the wait mode (spooled, printed, completed) for the file being printed.

#### **Integer WaitModeTimeout**

How long, in milliseconds, to wait for the program to print the document and for the print job to be spooled, printed or completed, depending on the value chosen for *WaitMode* above.

#### **Boolean ForceHiddenWnd**

Pass **True** to force the program window to be hidden. This will not work on all applications.

#### **Integer ShellProcessTimeout**

The amount of time, in milliseconds, to wait for the launched program to close by itself. If it has not closed by the end of the timeout period and *ForceAppClose* is **True**, the program is passed a close message to request that it close cleanly and again waits the timeout period. If at the end of the second wait the program still has not closed, it is forcibly terminated.

#### **Boolean ForceAppClose**

Pass **True** to have this method close the program manually.

#### **Boolean UseShellPrintOnFail**

If the shell print verb "printto" fails, automatically call [ShellPrint](#).

### Remarks

If the shell call fails one of the following error message is thrown as an exception.



Error Code	Description
ERROR_FILE_NOT_FOUND	The specified file was not found
ERROR_PATH_NOT_FOUND	The specified path was not found
ERROR_DDE_FAIL	The Dynamic Data Exchange (DDE) transaction failed.
ERROR_NO_ASSOCIATION	There is no application associated with the given file name extension.
ERROR_ACCESS_DENIED	Access to the specified file is denied.
ERROR_DLL_NOT_FOUND	One of the library files necessary to run the application can't be found.
ERROR_CANCELLED	The function prompted the user for additional information, but the user canceled the request.
ERROR_NOT_ENOUGH_MEMORY	There is not enough memory to perform the specified action.
ERROR_SHARING_VIOLATION	A sharing violation occurred.

**See Also:** [ShellPrint](#) [PrintUsingCommand](#)

## WaitForJobsCompleted

### Description

The collection of wait functions allows you to synchronize and control the flow of documents being printed with your application. The `WaitForJobsCompleted` method should be called after the document has been printed and [WaitForJobsSpooling](#) has been called to verify that a print job actually entered the printer queue.

The `WaitForJobsCompleted` method will return when the document is finished printing and the output file is created, or when the given timeout period has elapsed, whichever is first. This method is not needed if any [events](#), such as [OnEndJob](#), are being used to determine when the output file is created and ready for further processed. If events are not being used, this method can be used to determine, in a synchronous manner, when it is safe to process the output file.

### Syntax

```
expression.WaitForJobsCompleted(Timeout)
```

where *expression* is an [IPNPrintSession](#) object.

Returns Boolean **True** if the print job completed within the timeout period, and **False** if the print job did not complete.

## Parameters

### Integer Timeout

The length of time, in milliseconds, to wait for the print job to be completed.

**See Also:** [WaitForJobsSpooling](#) [WaitForJobsSpooled](#) [WaitForJobsPrinted](#)

## WaitForJobsSpooled

### Description

The collection of wait functions allows you to synchronize and control the flow of documents being printed with your application. The `WaitForJobsSpooled` method should be called after the document has been printed and [WaitForJobsSpooling](#) has been called to verify that a print job actually entered the printer queue.

In many cases, the document needs to be completely spooled to the printer before either the document or the printing application can be closed. Closing either too early in the process can cause the application to cancel the print job, or send an incomplete print job.

Depending on the behaviour of the printing application this method may not need to be called at all. One example of this is the Microsoft Word automation object where background printing and the `BackgroundPrintingStatus` flag can be used to determine when the file has been completely spooled to the printer and it is safe to close the document and/or the application. In comparison, when automating printing with Microsoft PowerPoint the `WaitForJobsSpooled` method needs to be called in order to determine when it is safe to close the PowerPoint file.

### Syntax

*expression*.`WaitForJobsSpooled`(Timeout)

where *expression* is an [IPNPrintSession](#) object.

Returns Boolean **True** if the print job spooled within the timeout period, and **False** if it did not.

## Parameters

### Integer Timeout

The length of time, in milliseconds, to wait for the print job to be spooled.

**See Also:** [WaitForJobsSpooling](#) [WaitForJobsPrinted](#) [WaitForJobsCompleted](#)

## WaitForJobsSpooling

### Description

The collection of wait functions allows you to synchronize and control the flow of documents being printed with your application.

The WaitForJobsSpooling method should be called just after the document has been printed and will return as soon as the document has started to spool or when the given timeout period has elapsed.

This allows for error recovery if the document fails to print from the printing application. If the document does not start spooling within the timeout period the print session should be canceled using the [Cancel](#) method before releasing the print session object to allow the printer to be returned to the pool of available printers as soon as possible.

If no print job enters the print queue and the print session is not canceled before being released, the printer will wait a specified timeout period before being returned to the pool of available printers. This timeout period determined from the *FirstJobTimeout* parameter passed into the [NewPrintSession](#) method.

In many cases, other printing states such as *spooled* or *printed* may need to be checked before the document or printing application can be safely closed. Closing either too early can cause the printing application to abort the print job.

### Syntax

*expression*.WaitForJobsSpooling(*Timeout*)

where *expression* is an [IPNPrintSession](#) object.

Returns Boolean **True** if a print job started spooling in the print queue within the timeout period, and **False** if it did not.

### Parameters

#### Integer Timeout

The length of time, in milliseconds, to wait for a print job to start spooling.

**See Also:** [WaitForJobsPrinted](#) [WaitForJobsCompleted](#) [WaitForJobsSpooled](#)

### WaitForJobsPrinted

#### Description

The collection of wait functions allows you to synchronize and control the flow of documents being printed with your application. The `WaitForJobsPrinted` method should be called after the document has been printed and [WaitForJobsSpooling](#) has been called to verify that a print job actually entered the printer queue.

There is a distinction between when the document finishes printing and when the output file is complete. The document can be printed and have left the print queue before the printer has finished creating the output file; this difference is minimal and only becomes apparent in automation code when trying to use the output file before the printer has finished creating it.

Depending on the behaviour of the printing application this method may not need to be called at all. One example of this is the Microsoft Word automation object where background printing and the *BackgroundPrintingStatus* flag can be used to determine when the file has been completely spooled to the printer and it is safe to close the document and/or the application. In comparison, other applications may need to wait for the entire file to completely printed before it is safe to close both the file and the application.

#### Syntax

```
expression.WaitForJobsPrinted(Timeout)
```

where *expression* is an [IPNPrintSession](#) object.

Returns Boolean **True** if the print job has completed printing within the timeout period, and **False** if it did not.

#### Parameters

##### Integer Timeout

The length of time, in milliseconds, to wait for the print job to be printed.

**See Also:** [WaitForJobsSpooling](#) [WaitForJobsSpooled](#) [WaitForJobsCompleted](#)

## Properties

### PrinterName

#### Description

Returns the name of the printer associated with this print session object. Use this printer name when setting the default printer or passing the printer name to a program.

Read-only.

#### Syntax

*expression*.PrinterName

where *expression* is an [IPNPrintSession](#) object.

Returns a **String**.

**See Also:** [SetSessionPrinter](#) [NewPrintSession](#)

### PrintSessionGUID

#### Description

A string based unique identifier for matching [IPNJob](#) information to a print session. Every new print session is given a unique identifier, and every print job processed by that print session is also assigned that unique identifier.

This identifier can be used to track information from the printing cycle to be used in the event handlers. The *IPNJob* object sent to the event handler also contains a reference to the PrintSessionGUID. An example of this would be to storing the source document name in a key-value mapped collection keyed by PrintSessionGUID to later be used on the [OnEndJob](#) event handler.

Read-only.

#### Syntax

*expression*.PrintSessionGUID

where *expression* is an [IPNPrintSession](#) object.

Returns a **String**.

**See Also:** [IPNJob](#) [IPNJob.PrintSessionGUID](#)

## IPNJobs Collection

### Description

A collection of [IPNJob](#) objects, one for every job that has been printed. Allows quick iteration through the collection using the foreach statement of the C# language and the for each statement in Visual Basic.

- [Methods](#)
- [Properties](#)

### Methods

#### [Item](#)

Returns an individual [IPNJob](#) item from the collection. The collection can be indexed by position or by [JobGUID](#) string.

### Properties

#### [Count](#)

Read-only; Returns an Integer that represents the number of [IPNJob](#) objects in the collection.

## Methods

### Item

### Description

Returns an individual [IPNJob](#) item from the collection.

### Syntax

*expression*.Item(*Index*)

where *expression* is an [IPNJobs](#) collection

Returns an [IPNJob](#) item, or E\_FAIL if the *Index* is out of range.

### Parameters

#### Object Index

The collection can be indexed by integer position or by [JobGUID](#) string.

**See Also:** [Count](#) [IPNJob](#)

## Properties

### Count

#### Description

Returns the number of IPNJob objects in the [IPNJobs](#) collection. Each time a file is printed, a new IPNJob object is added to the collection. If nothing has been printed, the collection will be empty.

Read-only Integer.

#### Syntax

*expression.Count*

where *expression* is an [IPNJobs](#) collection

Returns an **Integer**.

**See Also:** [Item IPNJob](#)

### IPNJob

#### Description

Each IPNJob object represents a single print job sent to any one of the printer queues in the current [IPNSession](#) object.

Most often there is a single print job created each for each document printed, but some applications can send multiple jobs when printing a single file. One example of this is Excel when printing a workbook containing multiple worksheets at different print quality settings. Excel will create a separate print job for each group of worksheets with different print qualities.

The job object is identified by a unique identifier, the [JOBGUID](#) and contains information about the job such as the job status and the number of pages spooled and printed. It also provides access to an [IPNFiles](#) collection of the files created by this job.

- [Breaking Changes](#)
- [Properties](#)

#### Breaking Changes

The following methods and properties have been removed as of PNSrvLib12.

- GetVariable, SetVariable
- GetVariableByKeyword, SetVariableByKeyword
- IPNPages collection

#### Properties

##### [AbortedBySystem](#)

Read-only; Boolean value True if the job was deleted by the system.

##### [AbortedByUser](#)

Read-only; Boolean value True if the job was deleted by the user.

##### [BytesPrinted](#)

Read-only; How much of the spooled document has been printed. This value is updated during the printing process.



**BytesSpooled**

Read-only; Size of the document (in bytes) in the printer queue. This value is updated as the file is spooled.

**ConversionStatus**

Read-only; Boolean value True if the job was successfully converted to the output file.

**ConvertedPages**

Read-only; The number of pages converted. Can be different from [PagesPrinted](#).

**ConvertedPagesSkipped**

Read-only; Count of any pages skipped when the skip blank pages option is enabled.

**Document**

Read-only; Name of the document printed.

**Files**

Read-only; [IPNFiles](#) collection of [IPNFile](#) objects created by this print job. This value is updated during the printing process.

**JobGUID**

Read-only; Unique identifier for this object. Can be used to query the [IPNJobs](#) collection.

**JobID**

Read-only; non-unique identifier used by the Windows printing sub-system.

**PagesPrinted**

Read-only; count of the number of pages printed. This value is updated during the printing process.

**PagesSpooled**

Read-only; count of the number of pages spooled. This value is updated during the printing process.

**PrintSessionGUID**

Read-only; Unique identifier that can be used to associate this job with a print session.

### Session

Read-only; The parent [IPNSession](#) object that created this IPNJob object.

### Status

Read-only; current print status of the job as an Integer value. This value is updated during the printing process.

### StatusMessage

Read-only; current print status of the job as an string value. This value is updated during the printing process.

### SubmittedTime

Read-only; VT\_DATE variant that specifies the time this document was spooled.

### UserName

Read-only; name of the user who printed the document.

## Properties

### [AbortedBySystem](#)

#### **Description**

This property is *True* if the job was halted during the conversion process. This can happen if the Windows printing subsystem (print spooler) is restarted while the job is being spooled and printed.

Read-only.

#### **Syntax**

*expression*.AbortedBySystem

where *expression* is an [IPNJob](#) object.

Returns a **Boolean**.

**See Also:** [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## AbortedByUser

### Description

This property is *True* if the job was halted during the conversion process. This can happen if the job was manually deleted by the user from the printer queue.

Read-only.

### Syntax

*expression*.AbortedByUser

where *expression* is an [IPNJob](#) object.

Returns a **Boolean**.

**See Also:** [AbortedBySystem](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## BytesPrinted

### Description

Returns the size of the printed job in bytes. This can be different from [BytesSpooled](#), and is updated while the file is being printed.

Read-only.

### Syntax

*expression*.BytesPrinted

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## BytesSpooled

### Description

The size of the spooled job in bytes. This value is updated as the file is spooled to the printer and can be different from [BytesPrinted](#).

Read-only.

### Syntax

`expression.BytesSpooled`

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## ConversionStatus

### Description

This property returns an HRESULT value for the conversion status. To get the status and any error message information the property, use the HRESULT to create an instance of a *Win32Exception* class. This state can only be checked when the job is completely finished.

Read-only.

### Syntax

`expression.ConversionStatus`

where *expression* is an [IPNJob](#) object.

Returns an **Integer** containing the HRESULT return code.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## ConvertedPages

### Description

Returns the number of pages converted. Can be different from [PagesPrinted](#).

Read-only.

### Syntax

`expression.ConvertedPages`

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

### ConvertedPagesSkipped

#### Description

Returns the number of pages skipped when the skip blank pages feature is enabled.

Read-only.

#### Syntax

*expression*.ConvertedPagesSkipped

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

### Document

#### Description

The name of the document printed that created this print job. This is the name the printing application uses in the print queue. It can be different from the actual document name.

Read-only.

#### Syntax

*expression*.Document

where *expression* is an [IPNJob](#) object.

Returns a **String**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

### Files

#### Description

The [IPNFiles](#) collection of [IPNFile](#) objects for this job. There will be one IPNFile object for every file created by this job. The collection is updated during the printing process.

Read-only.

#### Syntax

*expression.Files*

where *expression* is an [IPNJob](#) object.

Returns an [IPNFiles](#) collection.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

### JobGUID

#### Description

A string based unique identifier for this object. This string can be used to query the [IPNJobs](#) collection.

Read-only.

#### Syntax

*expression.JobGUID*

where *expression* is an [IPNJob](#) object.

Returns a **String**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

### JobID

#### Description

This is a non-unique numerical identifier used by the Windows printing sub-system.

Read-only.

### Syntax

*expression*.JobID

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## PagesPrinted

### Description

Returns the number of pages printed. This can be different from [PagesSpooled](#), and is updated while the file is being printed.

Read-only.

### Syntax

*expression*.PagesPrinted

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## PagesSpooled

### Description

Returns the number of pages spooled. This can be different from [PagesPrinted](#), and is updated while the file is being spooled to the printer by the printing application.

Read-only.

### Syntax

*expression*.PagesSpooled

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

### PrintSessionGUID

#### Description

A string based unique identifier for matching [IPNPrintSession](#) information to jobs processed by that print session. Every new print session is given a unique identifier, and every print job processed by that print session is also assigned that unique identifier.

This identifier can be used to track information from the printing cycle to be used in the event handlers. The *IPNJob* object sent to the event handler also contains a reference to the PrintSessionGUID. An example of this would be to storing the source document name in a key-value mapped collection keyed by PrintSessionGUID to later be used on the [OnEndJob](#) event handler.

Read-only.

#### Syntax

*expression.Session*

where *expression* is an [IPNJob](#) object.

Returns a **String**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [StatusStatusMessage](#) [SubmittedTime](#) [UserName](#)

### Session

#### Description

The parent [IPNSession](#) object that created this IPNJob object.

Read-only.

#### Syntax

*expression.Session*

where *expression* is an [IPNJob](#) object.



Returns an **IPNSession** object.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Status](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

## Status

### Description

The current print status of the job as a numerical value. This value is updated during the printing process. See the **Remarks** section for a list of the status values and what they mean.

Read-only.

### Syntax

*expression*.Status

where *expression* is an [IPNJob](#) object.

Returns an **Integer**.

### Remarks

The status is reported as a Long and can be one or more of the values in the table below. These are the same values used by the *JOB\_INFO\_2* structure in Microsoft's Win32 Printing and Print Spooler functions and structures. See the Microsoft documentation for more details.

The values are OR'd together to define the current status of the job. To determine which values, the hexadecimal values must be examined:

If Status = 388, which is 0x00000184

JOB_STATUS_DELETED	0x00000100
JOB_STATUS_PRINTED	0x00000080
JOB_STATUS_DELETING	0x00000004
-----	
	0x00000184

Job Status	Hexadecimal Value	Integer Value
JOB_STATUS_PAUSED	0x00000001	1
JOB_STATUS_ERROR	0x00000002	2
JOB_STATUS_DELETING	0x00000004	4
JOB_STATUS_SPOOLING	0x00000008	8
JOB_STATUS_PRINTING	0x00000010	16
JOB_STATUS_OFFLINE	0x00000020	32
JOB_STATUS_PAPEROUT	0x00000040	64

Job Status	Hexadecimal Value	Integer Value
JOB_STATUS_PRINTED	0x00000080	128
JOB_STATUS_DELETED	0x00000100	256
JOB_STATUS_BLOCKED_DEVQ	0x00000200	512
JOB_STATUS_USER_INTERVENTI ON	0x00000400	1024
JOB_STATUS_RESTART	0x00000800	2048
JOB_STATUS_COMPLETE	0x00001000	4096
JOB_STATUS_RETAINED	0x00002000	8192
JOB_STATUS_RENDERING_LOCALLY	0x00004000	16384

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [StatusMessage](#) [SubmittedTime](#) [UserName](#)

### StatusMessage

#### Description

The current print status of the job as a string value. This value is updated during the printing process, and can be an empty string.

Read-only.

#### Syntax

*expression*.StatusMessage

where *expression* is an [IPNJob](#) object.

Returns a **String**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [SubmittedTime](#) [UserName](#)

### SubmittedTime

#### Description

Returns the time this document was spooled.

Read-only.

#### Syntax

*expression*.SubmittedTime

where *expression* is an [IPNJob](#) object.

Returns a VT\_DATE **VARIANT**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [UserName](#)

## UserName

### Description

Returns the name of the user who printed the document.

Read-only.

### Syntax

*expression*.UserName

where *expression* is an [IPNJob](#) object.

Returns a **String**.

**See Also:** [AbortedBySystem](#) [AbortedByUser](#) [BytesPrinted](#) [BytesSpooled](#) [ConversionStatus](#) [ConvertedPages](#) [ConvertedPagesSkipped](#) [Document](#) [Files](#) [JobGUID](#) [JobID](#) [PagesPrinted](#) [PagesSpooled](#) [PrintSessionGUID](#) [Session](#) [Status](#) [StatusMessage](#) [SubmittedTime](#)

## IPNFiles Collection

### Description

A collection of [IPNFile](#) objects. Allows quick iteration through the collection using the foreach statement of the C# language and the for each statement in Visual Basic.

- [Methods](#)
- [Properties](#)

### Methods

#### [Item](#)

Returns an individual [IPNFile](#) item from the collection. The collection is indexed by position.

### Properties

#### [Count](#)

Returns an Integer that represents the number of [IPNFile](#) objects in the collection.

## Methods

### Item

### Description

Returns an individual [IPNFile](#) item from the collection.

### Syntax

*expression*.Item(*Index*)

where *expression* is an [IPNFiles](#) collection

Returns an [IPNFile](#) item, or E\_FAIL if the *Index* is out of range.

### Parameters

#### Object Index

The collection is indexed by integer position.

**See Also:** [Count IPNFile](#)

## Properties

### Count

#### Description

Returns the number of IPNFile objects in the [IPNFiles](#) collection. Each time the printer creates a new file, a new IPNFile object is added to the collection. The printer settings for file creation, such as multi-page or serialized output, and append mode will determine the resulting number of IPNFile objects in the collection.

Read-only.

#### Syntax

*expression.Count*

where *expression* is an [IPNFiles](#) collection

Returns an **Integer**.

**See Also:** [Item IPNFile](#)

### IPNFile

#### Description

An IPNFile object is created for every file created by the printer. The file object represents the physical file on disk and provides access to the full output filename, the [IPNJob](#) that created the files, and the parent [IPNSession](#) object.

- [Breaking Changes](#)
- [Properties](#)

#### Breaking Changes

The following properties have been removed as of PNSrvLib12.

- Images collection
- Pages collection

#### Properties

##### [Filename](#)

Read-only; The filename of the file created by the printer.

##### [Job](#)

Read-only; The parent [IPNJob](#) object that created this IPNFile object.

##### [Session](#)

Read-only; The parent [IPNSession](#) object that created this IPNFile object.

### Properties

#### Filename

##### Description

The name of the file created. This is the fully qualified path, including directory and filename.

Read-only.

##### Syntax

*expression*.Filename

where *expression* is an [IPNFile](#) object

Returns a **String**.

**See Also:** [Job Session](#)

## Job

### Description

The parent [IPNJob](#) object that created this IPNFile object.

Read-only.

### Syntax

*expression.Job*

where *expression* is an [IPNFile](#) object

Returns an [IPNJob](#) object.

**See Also:** [Filename Session](#)

## Session

### Description

The parent [IPNSession](#) object that created this IPNFile object.

Read-only.

### Syntax

*expression.Session*

where *expression* is an [IPNFile](#) object

Returns an [IPNSession](#) object.

**See Also:** [Filename Job](#)

## Enumerations

### pnBWCompressionMethod

#### Description

Compression algorithms for monochrome, or black and white, images.

Name	Value	Description
pnBWCompressionNone	1	No compression algorithm used
pnBWCompressionGroup4	2	CCITT Group4 Fax compression
pnBWCompressionGroup32D	3	CCITT Group3 2D Fax compression
pnBWCompressionGroup31D	4	CCITT Group3 1D Fax compression
pnBWCompressionMH	5	CCITT Modified Huffman compression
pnBWCompressionLZW	6	LZW compression
pnBWCompressionPackbits	7	Packbits (RLE) compression

#### Remarks

Not all of the compression methods can be used by each driver. Calling these methods on a driver that does not support them will return an invalid argument exception, or an argument out of range exception.

Name	Driver Support
pnBWCompressionNone	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnBWCompressionGroup4	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnBWCompressionGroup32D	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnBWCompressionGroup31D	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnBWCompressionMH	TIFF Image Printer, Raster Image Printer
pnBWCompressionLZW	TIFF Image Printer, Raster Image Printer
pnBWCompressionPackbits	TIFF Image Printer, Raster Image Printer

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnColorCompressionMethod](#) [pnGrayscaleCompressionMethod](#)  
[pnIndexedCompressionMethod](#) [pnPDFContentEncodingMethod](#)  
[SetTIFFCompressionOptions](#) [SetPDFCompressionOptions](#)  
[SetJPEGCompressionOptions](#)

### pnColorCompressionMethod

#### Description



Compression algorithms for color images.

Name	Value	Description
pnColorCompressionNone	1	No color compression, RGB color
pnColorCompressionNoneCMYK	2	No color compression, CMYK color
pnColorCompressionPackbits	3	Packbits (RLE) compression, RGB color
pnColorCompressionPackbitsCMYK	4	Packbits (RLE) compression, CMYK color
pnColorCompressionJPEGHighQuality	5	High quality JPEG compression
pnColorCompressionJPEGMediumHighQuality	6	Medium-High quality JPEG compression
pnColorCompressionJPEGMediumQuality	7	Medium quality JPEG compression
pnColorCompressionJPEGMediumLowQuality	8	Medium-Low quality JPEG compression
pnColorCompressionJPEGLowQuality	9	Low quality JPEG compression
pnColorCompressionLZW	10	LZW compression, RGB color
pnColorCompressionLZWCMYK	11	LZW compression, CMYK color
pnColorCompressionZIP	12	ZIP compression

## Remarks

Not all of the compression methods can be used by each driver. Calling these methods on a driver that does not support them will return an invalid argument exception, or an argument out of range exception.

Name	Driver Support
pnColorCompressionNone	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnColorCompressionNoneCMYK	TIFF Image Printer, Raster Image Printer
pnColorCompressionPackbits	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnColorCompressionPackbitsCMYK	TIFF Image Printer, Raster Image Printer
pnColorCompressionJPEGHighQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnColorCompressionJPEGMediumHighQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer

Name	Driver Supprt
pnColorCompressionJPEGMediumQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnColorCompressionJPEGMediumHighQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnColorCompressionJPEGLowQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnColorCompressionLZW	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnColorCompressionLZWCMYK	TIFF Image Printer, Raster Image Printer
pnColorCompressionZIP	PDF Image Printer, Raster Image Printer

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnBWCompressionMethod](#) [pnGrayscaleCompressionMethod](#) [pnIndexedCompressionMethod](#) [pnPDFContentEncodingMethod](#) [SetTIFFCompressionOptions](#) [SetPDFCompressionOptions](#) [SetJPEGCompressionOptions](#)

### pnColorReduction

#### Description

Color reduction options for reducing the number of colors in true color images.

Name	Value	Description
pnColorReductionNone	1	No color reduction
pnColorReductionOptimal	2	Reduce to lowest color count needed per page
pnColorReductionBlackAndWhite	3	Reduce to black and white using selected dithering method
pnColorReductionGreyscale	4	Reduce to greyscale
pnColorReduction256Colors	5	Create all pages as 8-bit color (256 colors)
pnColorReduction16Colors	6	Create all pages as 4-bit color (16 colors)
pnColorReductionOptimalMax256Colors	7	Reduces to lowest color count needed for each page, any pages over 256 colors are reduced to 256 colors.

Name	Value	Description
pnColorReductionOptimalMax16Colors	8	Reduces to lowest color count needed for each page, any pages over 16 colors are reduced to 16 colors.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnDitheringMethod](#) [SetSaveOptions](#)

### pnDitheringMethod

#### Description

Dithering algorithms to control how color images are reduces to black and white.

Name	Value	Description
pnDitheringNone	1	No dithering
pnDitheringFloyd	2	Floyd-Steinberg dithering
pnDitheringBurkes	3	Burkes dithering
pnDitheringBayer	4	Bayer dithering
pnDitheringHalftone	5	Halftone dithering

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnColorReduction](#) [SetSaveOptions](#)

### pnFaxPageScaling

#### Description

Determines how the original information is placed on the fax sized paper.

Name	Value	Description
pnFaxPageScalingFitToPage	1	Scale the original image to fit on the fax paper size chosen.
pnFaxPageScalingActualSize	2	Keeps the original information at the same size, any part that does not fit on the fax paper is cut off.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnFaxProfile](#) [pnFaxResolution](#) [pnFaxPaperWidth](#) [pnFaxPaperHeight](#) [pnFaxPageScalingHAlign](#) [pnFaxPageScalingVAlign](#) [SetFaxOptions](#)

### pnFaxPageScalingHAlign

#### Description

Determines how to horizontally align the incoming image on the fax sized paper.

Name	Value	Description
pnFaxPageScalingHAlignLeft	1	Align to the left of the page
pnFaxPageScalingHAlignMiddle	2	Align in the middle of the page
pnFaxPageScalingHAlignRight	3	Align to the right of the page

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnFaxProfile](#) [pnFaxResolution](#) [pnFaxPaperWidth](#) [pnFaxPaperHeight](#) [pnFaxPageScaling](#) [pnFaxPageScalingVAlign](#) [SetFaxOptions](#)

### pnFaxPageScalingVAlign

#### Description

Determines how to vertically align the incoming image on the fax sized paper.

Name	Value	Description
pnFaxPageScalingVAlignTop	1	Align to the top of the page
pnFaxPageScalingVAlignMiddle	2	Align in the middle of the page
pnFaxPageScalingVAlignBottom	3	Align to the bottom of the page

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnFaxProfile](#) [pnFaxResolution](#) [pnFaxPaperWidth](#) [pnFaxPaperHeight](#) [pnFaxPageScaling](#) [pnFaxPageScalingHAlign](#) [SetFaxOptions](#)

### pnFaxPaperHeight

#### Description

Determines the height of the fax paper.

Name	Value	Description
pnFaxPaperHeightVariable	1	Varies the image length depending on the size of the incoming document.
pnFaxPaperHeightFixed	2	Limit the image length based on the <a href="#">pnFaxPaperWidth</a> chosen

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnFaxProfile](#) [pnFaxResolution](#) [pnFaxPaperWidth](#) [pnFaxPageScaling](#) [pnFaxPageScalingHAlign](#) [pnFaxPageScalingVAlign](#) [SetFaxOptions](#)

### pnFaxPaperWidth

#### Description

Determines the width of the fax paper.

Name	Value	Description
pnFaxPaperWidthLetter	1	Letter
pnFaxPaperWidthLegal	2	Legal
pnFaxPaperWidthA4	3	A4 (ISO)
pnFaxPaperWidthB4	4	B4 (ISO)
pnFaxPaperWidthA3	5	A3 (ISO)

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnFaxProfile](#) [pnFaxResolution](#) [pnFaxPaperHeight](#) [pnFaxPageScaling](#) [pnFaxPageScalingHAlign](#) [pnFaxPageScalingVAlign](#) [SetFaxOptions](#)

### pnFaxProfile

#### Description

Determines the fax profile used to create a fax image.

Name	Value	Description
pnFaxProfileF	1	Profile F (standard) monochrome fax
pnFaxProfileS	2	Profile S (simplified) monochrome fax

Name	Value	Description
pnFaxProfileC	3	Profile C color fax

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnFaxResolution](#) [pnFaxPaperHeight](#) [pnFaxPaperWidth](#) [pnFaxPageScaling](#) [pnFaxPageScalingHAlign](#) [pnFaxPageScalingVAlign](#) [SetFaxOptions](#)

### pnFaxResolution

#### Description

Determines the fax resolution used to create a fax image. Note that the fax profile chosen ([pnFaxProfile](#)) affects which resolutions can be chosen. Not all resolutions are valid for all fax profiles.

Name	Value	Description
pnFaxResolution100x100	1	100 x 100 resolution (Profile F, C)
pnFaxResolution200x100	2	200 x 100 resolution (Profile S, F)
pnFaxResolution200x200	3	200 x 200 resolution (Profile S, F, C)
pnFaxResolution204x98	4	204 x 98 resolution (Profile S, F)"
pnFaxResolution204x196	5	204 x 196 resolution (Profile S, F)
pnFaxResolution300x300	6	300 x 300 resolution (Profile F, C)
pnFaxResolution400x400	7	400 x 400 resolution (Profile F, C)
pnFaxResolution408x391	8	408 x 391 resolution (Profile F)
pnFaxResolution204x391	9	204 x 391 resolution (Profile F)
pnFaxResolution300x600	10	300 x 600 resolution (Profile F)
pnFaxResolution400x800	11	400 x 800 resolution (Profile F)
pnFaxResolution600x600	12	600 x 600 resolution (Profile F, C)
pnFaxResolution600x1200	13	600 x 1200 resolution (Profile F)
pnFaxResolution1200x1200	14	1200 x 1200 resolution (Profile F, C)

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnFaxProfile](#) [pnFaxPaperHeight](#) [pnFaxPaperWidth](#) [pnFaxPageScaling](#) [pnFaxPageScalingHAlign](#) [pnFaxPageScalingVAlign](#) [SetFaxOptions](#)

### pnGrayscaleCompressionMethod

#### Description

Compression algorithms for greyscale images.

Name	Value	Description
pnGreyscaleCompressionNone	1	No color compression
pnGreyscaleCompressionPackbits	2	Packbits (RLE) compression
pnGreyscaleCompressionJPEGHighQuality	3	High quality JPEG compression
pnGreyscaleCompressionJPEGMediumHighQuality	4	Medium High quality JPEG compression
pnGreyscaleCompressionJPEGMediumQuality	5	Medium quality JPEG compression
pnGreyscaleCompressionJPEGMediumLowQuality	6	Medium Low quality JPEG compression
pnGreyscaleCompressionJPEGLowQuality	7	Low quality JPEG compression
pnGreyscaleCompressionLZW	8	LZW compression
pnGreyscaleCompressionZIP	9	ZIP compression

### Remarks

Not all of the compression methods can be used by each driver. Calling these methods on a driver that does not support them will return an invalid argument exception, or an argument out of range exception.

Name	Driver Support
pnGreyscaleCompressionNone	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnGreyscaleCompressionPackbits	TIFF Image Printer, Raster Image Printer
pnGreyscaleCompressionJPEGHighQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnGreyscaleCompressionJPEGMediumHighQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnGreyscaleCompressionJPEGMediumQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnGreyscaleCompressionJPEGMediumLowQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnGreyscaleCompressionJPEGLowQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnGreyscaleCompressionLZW	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnGreyscaleCompressionZIP	PDF Image Printer, Raster Image Printer

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnBWCompressionMethod](#) [pnColorCompressionMethod](#) [pnIndexedCompressionMethod](#) [pnDitheringMethod](#) [pnPDFContentEncodingMethod](#) [SetJPEGCompressionOptions](#) [SetTIFFCompressionOptions](#) [SetPDFCompressionOptions](#)

### pnImageCopyScaling

#### Description

Determines how the original page is placed on the new image.

Name	Value	Description
pnImageCopyScalingFitToPage	1	Scales the original page up or down to fit on the new image size chosen.
pnImageCopyScalingActualSize	2	Keeps the original information at the same size, any part that does not fit on the new image size will be cut off.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnUnits](#) [pnImageCopyScalingHAlign](#) [pnImageCopyScalingVAlign](#) [SetImageCopyToOptions](#)

### pnImageCopyScalingHAlign

#### Description

Choose how to horizontally align the image on the output pag when copying the image to a new page size.

Name	Value	Description
pnImageCopyScalingHAlignLeft	1	Align to the left of the page
pnImageCopyScalingHAlignMiddle	2	Align in the middle of the page
pnImageCopyScalingHAlignRight	3	Align to the right of the page

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnUnits](#) [pnImageCopyScaling](#) [pnImageCopyScalingVAlign](#) [SetImageCopyToOptions](#)



[pnImageCopyScalingVAlign](#)**Description**

Choose how to vertically align the image on the output page when copying the image to a new page size.

Name	Value	Description
pnImageCopyScalingVAlignTop	1	Align to the top of the page
pnImageCopyScalingVAlignMiddle	2	Align in the middle of the page
pnImageCopyScalingVAlignBottom	3	Align to the bottom of the page

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnUnits](#) [pnImageCopyScaling](#) [pnImageCopyScalingHAlign](#) [SetImageCopyToOptions](#)

[pnIndexedCompressionMethod](#)**Description**

Compression algorithms for indexed images. An indexed image is an image that has 256 colors or less.

Name	Value	Description
pnIndexedCompressionNone	1	No color compression
pnIndexedCompressionPackbits	2	Packbits (RLE) compression
pnIndexedCompressionJPEGHighQuality	3	High quality JPEG compression
pnIndexedCompressionJPEGMediumHighQuality	4	Medium High quality JPEG compression
pnIndexedCompressionJPEGMediumQuality	5	Medium quality JPEG compression
pnIndexedCompressionJPEGMediumLowQuality	6	Medium Low quality JPEG compression
pnIndexedCompressionJPEGLowQuality	7	Low quality JPEG compression
pnIndexedCompressionLZW	8	LZW compression
pnIndexedCompressionZIP	9	ZIP compression

## Remarks

Not all of the compression methods can be used by each driver. Calling these methods on a driver that does not support them will return an invalid argument exception, or an argument out of range exception.

Name	Driver Support
pnIndexedCompressionNone	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionPackbits	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionJPEGHighQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionJPEGMediumHighQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionJPEGMediumQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionJPEGMediumLowQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionJPEGLowQuality	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionLZW	TIFF Image Printer, PDF Image Printer, Raster Image Printer
pnIndexedCompressionZIP	PDF Image Printer

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnBWCompressionMethod](#) [pnColorCompressionMethod](#) [pnGrayscaleCompressionMethod](#) [pnPDFContentEncodingMethod](#) [SetTIFFCompressionOptions](#) [SetPDFCompressionOptions](#) [SetJPEGCompressionOptions](#)

## pnOutputFileFormat

### Description

The output format, or type of file to create.

Not all formats can be used with all drivers. For instance, pnOutputFileFormatTIFFMultipaged and pnOutputFileFormatTIFFSerialized can only be used with TIFF Image Printer and Raster Image Printer, while pnOutputFileFormatJPEG can only be used with Raster Image Printer.

Name	Value	Description
pnOutputFileFormatTIFFMultipaged	1	TIFF Multipaged (*.tif) (TIFF Image Printer, Raster Image Printer)

Name	Value	Description
pnOutputFileFormatTIFFSerialized	2	TIFF Serialized (*.tif) (TIFF Image Printer, Raster Image Printer)
pnOutputFileFormatAdobePDFMultipaged	3	Adobe PDF Multipaged (*.pdf) (PDF Image Printer, Raster Image Printer)
pnOutputFileFormatAdobePDFSerialized	4	Adobe PDF Serialized (*.pdf) (PDF Image Printer, Raster Image Printer)
pnOutputFileFormatJPEG	5	JPEG (*.jpg)
pnOutputFileFormatCompuServeGIF	6	CompuServe GIF (*.gif) (Raster Image Printer)
pnOutputFileFormatCompuServePNG	7	CompuServe PNG (*.png) (Raster Image Printer)
pnOutputFileFormatWindowsBMP	8	Windows BMP (*.bmp) (Raster Image Printer)
pnOutputFileFormatTARGA	9	Targa (*.tga) (Raster Image Printer)
pnOutputFileFormatAdobePhotoshop3	10	Adobe Photoshop 3.0 (*.psd) (Raster Image Printer)
pnOutputFileFormatZSoftPCX	11	ZSoft PCX (*.pcx) (Raster Image Printer)
pnOutputFileFormatZSoftDCX	12	ZSoft DCX (*.dcx) (Raster Image Printer)

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnColorReduction](#) [pnDitheringMethod](#) [SetSaveOptions](#)

### pnOverwriteActionWhenSaving

#### Description

Determines how to handle overwrite situations where a file of the same name already exists for the file you are creating.

Name	Value	Description
pnOverwriteActionWhenSaving_PromptOnOver 1 writeForCopyProtectOrReplaceOrCancel		Show prompt let me choose my action
pnOverwriteActionWhenSaving_NoPromptOnO 2 verwriteReplaceExistingFile		Always overwrite the existing files
pnOverwriteActionWhenSaving_NoPromptOnO 3 verwriteCopyProtectExistingFile		Auto-name each file with a numbered copy

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetSaveOptions](#)

## pnPDFContentEncodingMethod

### Description

Compression algorithms for used for encoding the contents of the PDF files.

Name	Value	Description
pnPDFContentEncodingNone	1	No content encoding
pnPDFContentEncodingZIP	2	Use ZIP compression to encode the file contents.
pnPDFContentEncodingPackbits	3	Use Packbits (RLE) compression to encode the file contents.
pnPDFContentEncodingLZW	4	Use LZW compression to encode the file contents.

**Supported Printers:** PDF Image Printer Raster Image Printer

**See Also:** [pnBWCompressionMethod](#) [pnGrayscaleCompressionMethod](#)  
[pnColorCompressionMethod](#) [pnIndexedCompressionMethod](#)  
[SetTIFFCompressionOptions](#) [SetPDFCompressionOptions](#)  
[SetJPEGCompressionOptions](#)

## pnPDFEncryption

### Description

Encryption options for PDF security.

Name	Value	Description
pnPDFEncryptionRC40	1	Use 40-bit encryption. The PDF file can be opened in Acrobat 3.0 and later versions.
pnPDFEncryptionRC128	2	Use 128-bit encryption. The PDF file can be opened in Acrobat 5.0 and later versions.
pnPDFEncryptionAES128	3	Use 128-bit AES encryption. The PDF file can be opened in Acrobat 8.0 and later versions
pnPDFEncryptionAES256	5	Use 256-bit AES encryption. The PDF file can be opened in Acrobat 9.0 and later versions.

**Supported Printers:** PDF Image Printer Raster Image Printer

**See Also:** [SetPDFSecurity](#)

**pnPDFStandard****Description**

Set the PDF output standard for creating image-based (or raster) PDF files. The PDF/A-1b standard is often used for long-term archiving of electronic documents.

Name	Value	Description
pnPDFStandardNone	1	Create PDF files that are not PDF/A-1b compliant
pnPDFStandardPDFA1B	2	Create PDF/A-1b compliant PDF files

**Supported Printers:** PDF Image Printer Raster Image Printer

**See Also:** [SetPDFCompressionOptions](#)

**pnPrinterResolution****Description**

Sets the resolution for the output file.

Name	Value	Description
pnPrinterResolutionDefault	0	Uses the profile setting.
pnPrinterResolution50	1	50 DPI
pnPrinterResolution60	2	60 DPI
pnPrinterResolution72	3	72 DPI
pnPrinterResolution75	4	75 DPI
pnPrinterResolution96	5	96 DPI
pnPrinterResolution100	6	100 DPI
pnPrinterResolution120	7	120 DPI
pnPrinterResolution150	8	150 DPI
pnPrinterResolution200	9	200 DPI
pnPrinterResolution240	10	240 DPI
pnPrinterResolution254	11	254 DPI
pnPrinterResolution300	12	300 DPI
pnPrinterResolution360	13	360 DPI
pnPrinterResolution400	14	400 DPI
pnPrinterResolution480	15	480 DPI
pnPrinterResolution600	16	600 DPI
pnPrinterResolution720	17	720 DPI
pnPrinterResolution800	18	800 DPI
pnPrinterResolution900	19	900 DPI
pnPrinterResolution1200	20	1200 DPI

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetSaveOptionsOutputResolution](#)

## pnResampleUnits

### Description

Determine how to scale the output image.

Name	Value	Description
pnResampleUnitsPixels	1	Scale using new width and height in pixels.
pnResampleUnitsPercentage	2	Scale as a percentage (%) of the original size.
pnResampleUnitsDPI	3	Scale by setting a new image resolution (DPI).

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetResamplingOptions](#)

## pnRotation

### Description

Determine how much to rotate the output image. Rotation is counter-clockwise.

Name	Value	Description
pnRotationNone	1	Do not rotate the image.
pnRotation90	2	Rotate 90 degrees.
pnRotation180	3	Rotate 180 degrees.
pnRotation270	4	Rotate 270 degrees.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetPageRotationOptions](#)

### pnShellAndCommandWaitMode

#### Description

Determines the printed document state to wait for when printing using the shell commands or the command line.

Name	Value	Description
pnShellAndCommandWaitModeSpooled	1	Do not rotate the image.
pnShellAndCommandWaitModePrinted	2	Rotate 90 degrees.
pnShellAndCommandWaitModeComplete	3	Rotate 180 degrees.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [ShellPrintTo](#) [ShellPrint](#) [PrintUsingCommand](#)

### pnTextEncoding

#### Description

Determines the encoding format of the output text extraction file.

Name	Value	Description
pnTextEncodingANSI	1	ASCII encoded text
pnTextEncodingUTF8	2	UTF-8 encoded text
pnTextEncodingUTF16	3	UTF-16 encoded text

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnTextLayout](#) [pnTextEOL](#) [SetTextExtractionOptions](#)

### pnTextEOL

#### Description

Determines the end-of-line encoding format of the output text extraction file. Depending on the operating system the text file will be used on, you may need to choose the appropriate line return code.

Name	Value	Description
pnTextEOLWindows	1	Lines end with the carriage return line feed (CRLF, \r\n) used by Windows.
pnTextEOLMac	2	Lines end with the line feed (LF, \n) used by UNIX.
pnTextEOLUnix	3	Lines end with the carriage return (CR, \r) used by Macintosh.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnTextLayout](#) [pnTextEncoding](#) [SetTextExtractionOptions](#)

### pnTextLayout

#### Description

Determines the layout of the text in the output text extraction file.

Name	Value	Description
pnTextLayoutPhysical	1	Matches the format of the text in the original file as best as can be determined.
pnTextLayoutRaw	2	Text is outputted in the order in which is was sent to the printer. This may not be the same order in the original file.
pnTextLayoutNone	3	No formatting is attempted. The text is written to the output file exactly as it is received by the printer.

**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [pnTextEncoding](#) [pnTextEOL](#) [SetTextExtractionOptions](#)

### pnUnits

#### Description

Determines the unit of measure used to enter options requiring a unit of measure.

Name	Value	Description
pnUnitsEnglish	1	Enter the units in inches
pnUnitsMetric	2	Enter the units in centimeters.



**Supported Printers:** TIFF Image Printer, PDF Image Printer, Raster Image Printer

**See Also:** [SetCustomPaperOptions](#) [SetHardwareMargins](#) [SetImageCopyToOptions](#) [SetPageCropAreaOptions](#) [SetPageCropMarginOptions](#)

## Print to File to Control Output Name and Location

When writing automation code as part of integrating printing with TIFF Image Printer in custom programs and workflows, the built-in Print to File capability when printing offers a quick way to dynamically control the output name and location of the created file while automatically suppressing prompting. All other conversion settings to control the output file type are determined by the profile selected on the TIFF Image Printer 12 printer when printing.

- [Office Print to File Methods](#)
- [Word VBA Macro](#)
- [C# Sample](#)

### Office Print to File Methods

The Office products, Word, Excel, PowerPoint, Publisher and Visio have this capability, Outlook does not. This technique can be used in VBA macros and scripts, and anywhere else you can automate the Office products. Other applications that have a COM interface for automation and printing may also support this. Look for arguments similar to **PrintToFile** and **OutputFileName** as part of the print method.

In Word, Excel and Visio, the **PrintToFile** argument needs to be set to *true* as well as passing the full path to the desired output file in a separate argument. For Publisher and PowerPoint, supplying the full path in the **PrintToFile** argument is all that is needed.

#### Word

```
Document.PrintOut(Background, Append, Range, OutputFileName,  
From, To, Item, Copies, Pages, PageType, PrintToFile, Collate,  
FileName, ActivePrinterMacGX, ManualDuplexPrint, PrintZoomColumn,  
PrintZoomRow, PrintZoomPaperWidth, PrintZoomPaperHeight)
```

#### Excel

```
Workbook.PrintOutEx(From, To, Copies, Preview, ActivePrinter,  
PrintToFile, Collate, PrToFileName, IgnorePrintAreas)
```

#### PowerPoint

```
Presentation.PrintOut(From, To, PrintToFile, Copies, Collate)
```

#### Publisher

```
Document.PrintOutEx(From, To, PrintToFile, Copies, Collate,  
PrintStyle)
```

## Visio

```
Document.PrintOut(PrintRange, FromPage, ToPage,  
ScaleCurrentViewToPaper, PrinterName, PrintToFile,  
OutputFileName, Copies, Collate, ColorAsBlack)
```

## Word VBA Macro

The Word VBA macro below prints the currently open document to the TIFF Image Printer printer and saves it to the folder C:\AutoPrint\ with the name MacroTest.tif.

The output folder needs to exist or the macro will fail. The output file is overwritten each time the macro is run. All other settings used to create the file are taken from the profile set on the printer.

This macro is also included in the sample Word file, TIFF Image Printer VBA MACRO.docm in the **COMSamples\VBA Macro** folder of the installation folder. This is usually *C:\Program Files\TIFF Image Printer 12\COMSamples\*.

This same type of macro can be created from any Office application that supports macros.

```

Sub PrintToFile()
'
' PrintToFile Macro
' Prints the open Word document to the TIFF Image Printer with
' custom location and no prompting
'

' Get base document name for output
Dim documentName As String
Dim baseDocumentName As String
documentName = ThisDocument.Name
If InStrRev(documentName, ".") > 0 Then
    baseDocumentName = Left(documentName,
InStrRev(documentName, ".") - 1)
End If

' Create the directory if needed
Dim outputDir As String
Dim outputDirExists As String
outputDir = "C:\PEERNETPrintToFile\"
outputDirExists = Dir(outputDir, vbDirectory)
If outputDirExists = "" Then
    MkDir (outputDir)
End If

' Get current date/time for file name
Dim datetimeStr As String
datetimeStr = Format(Now(), "MM-DD-YYYY-hh-nn-ss")

' Create the file name. Print to File requires the full path,
' including
' the file extension of the output file you are creating
Dim outputFileName As String
outputFileName = outputDir & baseDocumentName & "-" &
datetimeStr & ".tif".pdf".jpg"

' Set the printer
ActivePrinter = "TIFF Image Printer 12"

' Print the document
Application.PrintOut PrintToFile:=True,
outputFileName:=outputFileName, _
    FileName:="", Range:=wdPrintAllDocument, Item:= _
    wdPrintDocumentWithMarkup, Copies:=1, Pages:="", _
PageType:= _
    wdPrintAllPages, Collate:=True, Background:=False, _
    PrintZoomColumn:=0, PrintZoomRow:=0,
PrintZoomPaperWidth:=0, _
    PrintZoomPaperHeight:=0
End Sub

```

## C# Sample

A sample C# application is provided as part of the install to demonstrate using this in your own programs. This sample shows using the *Print to File*

technique using each of the supported Office applications. The sample includes references to the Office 2016 products Word, Excel, PowerPoint, Publisher and Visio to automate printing to the TIFF Image Printer printer. If you have a different version of Office installed, you will need to update the references in order to build and run the samples.

The sample, **PrintToFile**, can be found in the **COMSamples** folder of the installation folder. This is usually *C:\Program Files\TIFF Image Printer 12\COMSamples\*.

A pre-built demo of the sample is available in a **\Demo** folder under the project.

## Using the Printer Script File

TIFF Image Printer's automation using a script file is the original technique used by programmers to automate printing, especially batch printing.

This type of automation has been grandfathered into the product to support existing customers already using this technique on previous versions of the driver. If you are just starting to automate using TIFF Image Printer, we recommend starting with the following tools instead:

- [Using the PNSrv12 COM Object](#)

### The Script File

If you need to continue using the script file, see the section on [Migrating to Version 12](#) for important script file changes.

Script file automation uses a file named PNTIF12S.INI to control the printer settings. This script file will override any settings that have been set in the printing profile set as the default profile for the printer. The script file is a text based Windows-style initialization file and lists all the settings that can be changed. The settings consist of a key-value pair for each property with related settings are organized into sections.

Automating using the script file allows you to accomplish the following workflow-related tasks. For example, a common use of the script file is to change the name or output location of the file created in between print jobs.

- change driver settings "on the fly" before any print job
- signal events at critical points during the printing process
- use the events to perform thread-safe batch printing

The script file works by being placed in your Windows **TEMP** folder. You can find this folder quickly using the environment variable shortcut **%TEMP%**. This is usually the temp folder in the AppData folder for the logged in user, **%USERPROFILE%\AppData\Local\Temp**.

There is also a system temp folder under the **C:\Windows\temp** folder. In rare cases the script file is placed there.

## Sample Script File

A sample script file is included in the **\Setup** folder as part of the installation. If you have installed the driver in the default location, the sample script file will be located in the following folder:

```
C:\Program Files\TIFF Image Printer 12\Setup\PNTIF12S.INI
```

Normally, you would write to the script file only the settings you need to change. Go to [Printer Script File Settings](#) to see a listing of the values you can set in the script file.

## Using the Script File

When automating, a script file should be dynamically created on an as-needed basis, and then deleted when you are finished with it. A [built-in event](#) is signaled by the print driver when it has read the script file and it is safe to delete it or change the settings for the next print job.

A pseudo-code outline of the printing process would look like the following:

1. Collect any needed information and create the script file with the necessary settings
2. Print the required document to the TIFF Image Printer
3. Wait for the driver to signal that it has read the script file
4. Delete the script file
5. It is now safe to loop to step 1 and convert another file

This is only a very simple example. The above steps work for a single-threaded process but extra care must be taken when printing in multiple threads to share access to the script file.

## Migrating to Version 12

This section is for users of previous versions of TIFF Image Printer who are currently using the script file. It discusses any breaking changes with the new printer driver and offers the changes needed to migrate to version 12.

## Breaking Changes

### Profiles

The most significant change with TIFF Image Printer 12 is that the settings used to create the output file are now stored in a *profile* and the printer is then configured to use a particular profile. Custom profiles can be created, exported and imported using the [Profile Manager](#). In many cases, a profile will replace the need for the script file; in other cases, the script file can be reduced to simply indicating which conversion profile to use.

### Simplified Run Commands

The run commands available in the script file have been reduced to only running a command at the end of the printing job. There is the option to run a command after a successful print, or after a failed print, or after both a successful and failed print. When a run command is executed the last parameter is always a path to a text file that contains a list of the file(s) created by the conversion process.

The options to run commands at the start of the print job, the start of each page, the end of each page and the end of the print job have been removed from the script file. The conversion profiles do have options to set up multiple commands each for start of the print job, on successful print, on failed print and on end of job.

See [Using the Run Commands](#) to see how to set up new commands, or [Run Commands](#) in the Printer Script File Settings section.

### Control Strings

Control string support has been reduced down to three key control strings - **NewFile**, **OutputDir** and **OutputFileName**. Additionally, these can only be enabled and configured in a conversion profile. The script file settings for



control strings is deprecated. See the [Control Strings](#) section for enabling and using this feature.

## Deprecated Script File Sections

With the new version, many script file sections have been deprecated in favor of the more powerful options for these same features in a profiles. If you were using these features, you will need to create and use a profile either instead of the script file, or in conjunction with the script file.

- Watermark, Endorsements - see [Stamping](#)
- Advanced File Naming - use the updated [Filename Creator](#) settings
- Error Reporting - use [Support Options](#)

## Sample Migration Scenarios

This section covers some of the more common use-cases with script files and how to migrate them to using the new profiles.

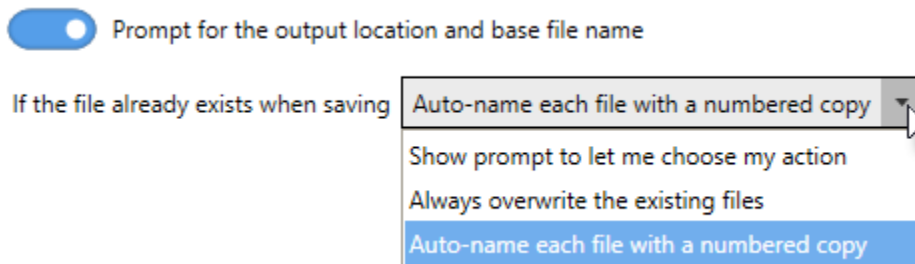
- [Turning off Prompting](#)
- [Setting Default Output Location and Conversion Settings](#)
- [Use the Script File to Set the Conversion Profile](#)
- [Change the Output Folder and Filename on Each Print](#)
- [Customizing How the Files are Named](#)

## Turning off Prompting

When using the script file, the file save prompting was often turned off, and commonly the overwrite option turned on to prevent further prompting.

New options have been introduced for handling overwrite situations, and as a result the old script file setting **Overwrite** is no longer valid, and is now ignored.

The new setting in the profile, "If the file already exists when saving" replaces **Overwrite** and has three options:



You will want to set this option in your profile to either "Always overwrite the existing files" or "Auto-name each file with a numbered copy". Setting this in a conversion profile and using the profile instead of the script file is the preferred way control this now. For older programs, a new script file setting was introduced that can be used if needed:

```
[Save]
;Values for When Saving, NEW in Version 12
;NoPromptOnOverwriteCopyProtectExistingFile
;NoPromptOnOverwriteReplaceExistingFile
;PromptOnOverwriteForCopyProtectOrReplaceOrCancel
When Saving=NoPromptOnOverwriteReplaceExistingFile
```

## Setting Default Output Location and Conversion Settings

If the script file was used to configure the output location, and/or filename, and the conversion settings used by all users, update this to version 12 by creating a custom profile with the same conversion settings and set to save in the same output location with the same filename, if using..

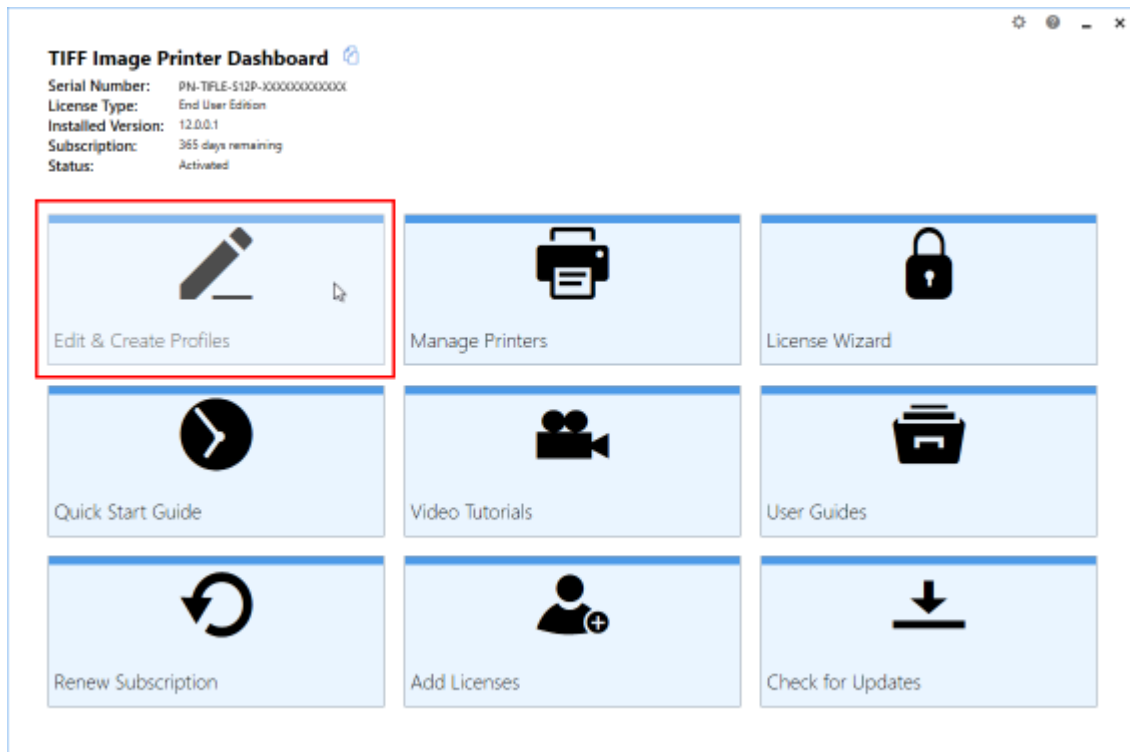
Saving an exported copy of this new profile allows you to push this setup to all your users as covered in the section [Installing a Customized Printer](#). For only one or two users, the profile can be easily [imported](#) and then [set as the default profile](#).

## Step by Step Instructions

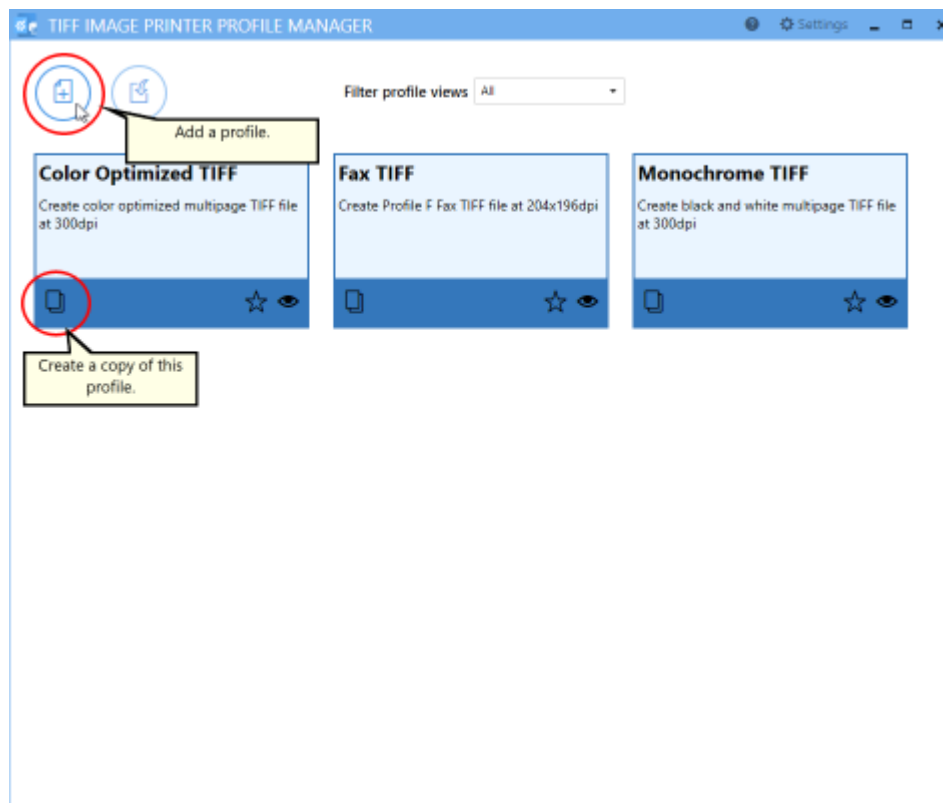
1. Launch the TIFF Image Printer **Dashboard**.



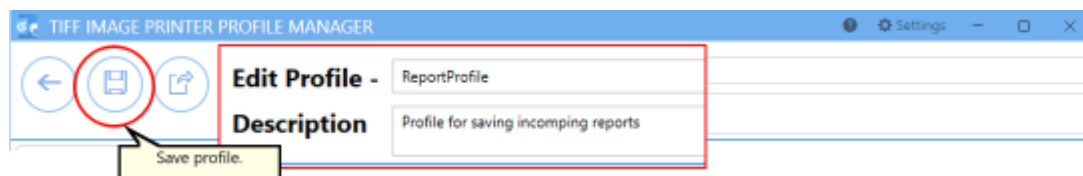
2. Select "Edit & Create Profiles" to open **Profile Manager**.



3. You can either create a copy of a system profile, if it has similar settings to what you require, by selecting "Create a copy of this profile", or create a personal profile by selecting "Add a profile".



4. Name the profile, add a description, and click **Save**.



5. On the **Save Options** tab, set the output location. This can be the same path for all users, or, as shown here, a path to a shared folder on a server where each user has their own folder. The **%USERNAME%** environment variable is used here so the profile can be copied to other users and their name will automatically be used. Other environment variables can also be used as needed.

## Output Location

Output folder

Leave this blank to automatically save to the last used folder. If there is no last used folder, the My Documents folder is used.

6. Go through the tabs and adjust the rest of the settings as desired. The topics in the [Working with TIFF Image Printer](#) section provide detailed instructions on how to adjust the settings to create different types of images/files.
7. Click **Save** at the top of the screen when you are done editing the profile.
8. To create a custom install to push out to your users, see the section on creating the export file in [Installing a Customized Printer](#).
9. If you only need to set up one or two users, click **Save** at the top of the screen, and then **Export** to [create an external copy of the profile](#). On each users' machine, [import the new profile](#) and follow the steps in [Change Default Profile](#) to set the new profile as the default profile for TIFF Image Printer.

## Use the Script File to Set the Conversion Profile

A new script file setting has been added to the **Devmode settings** section that can be used to set which conversion profile the printer will apply when printing. The profile set in the script file overrides the conversion profile set on the printer through the [Printer Management](#) screen.

This is similar to pushing a customized printer or importing a conversion profile and changing the printer's default profile but works by placing the script file and the exported conversion profile on the user's computer instead.

The script file is normally placed in the temp folder, and the exported conversion profile can be placed anywhere the printing process will have permission to read.

```
[Devmode settings]
Printer Profile=C:\PEERNETFiles\MyCustomProfile.pntifprofile
```

## Change the Output Folder and File Name on Each Print

The script file can still be used to customize the output folder and file name on-the-fly before each print job. The main change is that now all other settings that are not modified in between print jobs should be set using an exported profile referenced in the **Devmode settings** section **Printer Profile** setting.

```
[Devmode settings]
Printer Profile=C:\PEERNETFiles\MyCustomProfile.pntifprofile

[Save]
Output directory=C:\PEERNET\OutputFiles
Output filename=CustomFilename
```

### Customizing How the Files are Named

The **Advanced Naming** section in the script file has been deprecated. If this section was being used to customize how the file was named, a profile will need to be created and the [Filename Creator](#) options used to control the file naming format instead.

A common use of custom naming was to add a *unique ID* to each file name using the now deprecated JobID variable. The JobID variable has been replaced with a built-in unique id which uses a Globally Unique Identifier (GUID) as part of a file name or folder path.

As an example, the old-style multipaged format string below has been customized here to use the output file name and the JobID as part of the output basename. This would create a file name similar to *document\_00001.tif*.

```
[Advanced File Naming]
Format string S=%s_%3d
Format string SJ=%3d_%s_%3d
Format string M=%s_%5d
Format string MJ=%3d_%s
Use default extension S=1
Use default extension SJ=1
Use default extension M=1
Use default extension MJ=1
Variables S=$(OutputFileName);$(FileNumber)
Variables SJ=$(JobID);$(OutputFileName);$(FileNumber)
Variables M=$(OutputFileName);$(JobID)
Variables MJ=$(JobID);$(OutputFileName)
```

Using the new GUID as part of the filename through the [Filename Creator](#), the output filename would now be similar to *document\_e6ce05fd71b24c29bd024188cfdc110d.tif*.

### Step by Step Instructions

1. Launch the TIFF Image Printer **Dashboard**.



2. Select "Edit & Create Profiles" to open **Profile Manager**.
3. Select "Add a profile" to create a new profile or open an existing profile.
4. On the **Filename Creator tab**, go to file name part for **Output File Name** and add the underscore (\_) as a suffix to this file part. This will provide a separator between the Output File Name, and the unique ID.

The screenshot shows the 'Filename Creator' tab in the Profile Manager. At the top, there are five icons: Separator, Text, Unique ID, Date, and Time. Below these is a table with three columns: INCLUDE, FILE NAME PART, and SAMPLE. The table has two rows: one for 'Output Location' (C:\Output\) and one for 'Output File Name' (document\_). The 'Output File Name' row is selected. Below the table is a section titled 'Edit the Output File Name' with instructions: 'Leave this empty to use the document name, or set a default name that will be used for all files.' There are two input fields: 'Base file name' and 'Include this prefix text'. The 'Include this suffix text' toggle is turned on, and the suffix text is set to '\_'. The 'When Serialized' section shows 'File Number' as '\_001'. The 'When Protecting' section shows 'Overwrite Revision Number' as '\_copy1'. The 'When Multipaged' section shows 'File Split Part Number' as '\_part0001'. The 'Always' section shows 'File Extension' as '.tiff'.

INCLUDE	FILE NAME PART	SAMPLE
Always	Output Location	C:\Output\
Always	Output File Name	document_

**Edit the Output File Name**  
Leave this empty to use the document name, or set a default name that will be used for all files.

Base file name

☐ Include this prefix text

☒ Include this suffix text

When Serialized File Number

When Protecting Overwrite Revision Number

When Multipaged File Split Part Number

Always File Extension

### Built-In Script File Events

There are three built-in events in the script file that can be automatically signaled by the printer if they are set. These events are used to synchronize access to the script file.

To signal an event, set the name of the event in the script file. An event name is limited to MAX\_PATH characters and comparison is case sensitive. The name can have a "Global\" or "Local\" prefix to explicitly create the object in the global or session namespace.

```
[EventNames]
CommandsProcessed=Global\PNTIFCommandsProcessed
DocumentSpooled=Global\PNTIFDocumentSpooled
DocumentCancelled=Global\PNTIFDocumentCanceled
```

### CommandsProcessed

If you are changing printer settings between print jobs, you must set the **CommandsProcessed** to the name of an event you have created and are waiting on in order to know when the printer has finished reading the script file and it is now safe to move on and change the values in the script file for the next print job.

This is to ensure that each job is matched with the appropriate settings (thread-safe batch printing in a multi-thread multi-process environment). It is the responsibility of the printing application to create and block the event. The printer will automatically signal the event when it has finished reading the script file.

### DocumentSpooled, DocumentCanceled

The DocumentSpooled and DocumentCanceled events are signaled by the printer when the print job has finished being spooled successfully or has failed to spool, respectively.

These events do not mean the conversion process has completed, only that the print job was spooled or cancelled. Once a print job has been spooled successfully then TIFF Image Printer will start the conversion process.



## Using a Separate Script File For Each Printer

The [Add New Printer](#) feature allows you to easily create named copies of the printer. Unless specified, the same script file, PNTIF12S.INI, applies to each printer.

To use a separate script file for each printer, you can add a registry key to the registry information for each printer. This registry key tells the printer where to look for its script file.

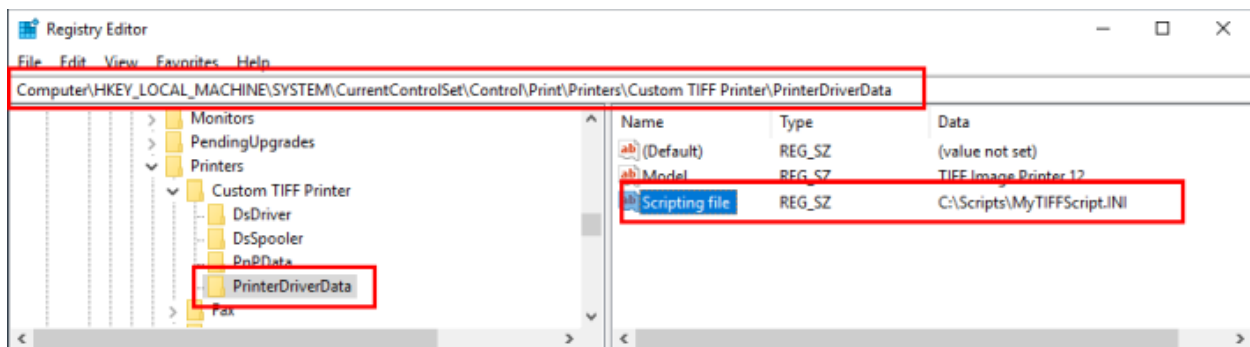
Creating multiple printers, each with its own script file, can be useful when you have more than one automation program running. Each program can have its own printer. Or, a single program can use this "pool" of printers to have multiple conversion threads running.

Open the registry key for the desired printer. Here we are opening the registry key for the printer named **Custom TIFF Printer**.

HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Control\Print\Printers\Custom TIFF Printer\PrinterDriverData

Create a new string value named **Scripting file** and set the data in the new string value to the complete path to the script file to use with this printer.

C:\Scripts\MyTIFFScript.INI



## Printer Script File Settings

The sample script file provided lists all of the printer settings that can be modified, separated into sections containing related settings.

Not all of the script file sections and settings from previous versions are available in 12. These have been removed or marked as deprecated in the sample script file. See the lists below for breaking changes and deprecated sections as well.

These script file sections are still in use.

- [Save](#)
- [Image Options](#)
- [TIFF File Format](#)
- [Processing](#)
- [Run Commands](#)
- [Advanced Features](#)
- [DevMode](#)
- [EventNames](#)

The following script file sections from previous versions of TIFF Image Printer have been replaced with new features in the printer profiles.

- Watermark, Endorsements - see [Stamping](#)
- Advanced File Naming - use the updated [Filename Creator](#) settings
- Error Reporting - use [Support Options](#)

The following script file sections have been deprecated.

- User Exit 1, User Exit 1.x64
- User variables

## Save

[Prompt](#), [When Saving](#), [Overwrite](#), [Use JobID](#), [Append](#), [Output directory](#), [Output filename](#), [Remove product name](#), [Remove filename extension](#), [Delete files](#), [Output File Format](#), [Color reduction](#), [Dithering method](#), [SplitFileEveryNPagesEnabled](#), [SplitFileEveryNPages](#), [SplitFileWhenFileSizeExceedsThresholdEnabled](#), [SplitFileSizeThresholdInBytes](#), [IgnoreBlankPages](#), [IncludePages](#)

### Prompt

Default: **1**

Set this to **0** to prompt only when the output path is invalid. When disabling prompting, also set the [When Saving](#) options to control what happens in overwrite situations.

```
[Save]
Prompt=1
```

See also: [Save Options](#)

### When Saving

Default: **NoPromptOnOverwriteCopyProtectExistingFile**

Determines how to handle overwrite situations where a file of the same name already exists for the file you are creating.

- NoPromptOnOverwriteCopyProtectExistingFile - auto-name each file with a numbered copy
- NoPromptOnOverwriteReplaceExistingFile - overwrite, or replace, the existing file
- PromptOnOverwriteForCopyProtectOrReplaceOrCancel - show a prompt to choose what to do

```
[Save]
When Saving=NoPromptOnOverwriteCopyProtectExistingFile
```

See also: [Save Options](#)

### Overwrite

Deprecated, replaced with [When Saving](#).

## Use JobID

Deprecated. Replaced with the **Unique ID** element in the [File Name Creator](#) settings in a printer profile.

## Append

Default: **0**

Set this to **1** to append new files, of the same base file name and saved to the same output folder, to an existing file or existing sequence if files.

```
[Save]
Append=0
```

See also: [Save Options](#)

## Output directory

Default: *empty string*

When set to *empty string*, the last used folder is used as the default directory if prompting is enabled. If there is no last used folder, or prompting is disabled, the My Documents folder is used. Set this to the absolute path (for example, C:\My Files) of the directory to be used.

```
[Save]
Output directory=
```

See also: [Save Options](#)

## Output filename

Default: *empty string*

The desired base filename without directory path or file extension. When set to *empty string*, the filename from the print job is used.

```
[Save]
Output filename=
```

See also: [Save Options](#)

## Remove product name

Default: **1**

Some applications precede the document name with the name of their product; this settings will remove it. Set this to **0** to keep the product name in the output filename.

```
[Save]
Remove product name=1
```

See also: [Save Options](#)

## Remove filename extension

Default: **1**

Some applications include the file extension of the original document in the print job name, this settings will remove it. Set this to **0** to keep the original product file extension as part of the output filename.

```
[Save]
Remove filename extension=1
```

See also: [Save Options](#)

## Delete files

Deprecated.

## Output File Format

Default: **TIFF Multipaged**

The type of file to create.

- TIFF Multipaged
- TIFF Serialized

```
[Save]
Output File Format=TIFF Multipaged
```

See also: [Save Options](#)

## Color reduction

Default: **Optimal**

Color reduction reduces the number of colors in the output and can help create smaller files. If the output file type chosen does not support that color mode, the closest match is found.

- none - No color reduction
- Optimal - Reduce to lowest color count needed per page
- BW - Reduce to black and white using selected dithering method
- grey - Reduce to greyscale
- 256Colors - Create all pages as 8-bit color (256 colors)
- 16Colors - Create all pages as 4-bit color (16 colors)
- optimalMax256Colors - Reduces to lowest color count needed for each page, any pages over 256 colors are reduced to 256 colors.
- optimalMax16Colors - Reduces to lowest color count needed for each page, any pages over 16 colors are reduced to 16 colors.
- optimalTrueColor - Reduces to lowest color count for each page using a 32-bit palette. Improves the appearance of single color gradients in final images when applying color reduction.

```
[Save]  
Color reduction=Optimal
```

See also: [Save Options](#)

### Dithering method

Default: **Burkes**

The dithering method affects the appearance of color images that have been reduced to black and white.

- none - No dithering
- Floyd - Floyd-Steinberg dithering
- Burkes - Burkes dithering
- Bayer - Bayer dithering
- Halftone - halftone dithering

```
[Save]  
Dithering method=Burkes
```

See also: [Save Options](#)

## SplitFileEveryNPagesEnabled

Default: **0**

File splitting is only available for multipaged file formats. Set this to **1** to split the file to a new file after the page count set in [SplitFileEveryNPages](#).

```
[Save]
SplitFileEveryNPagesEnabled=0
```

See also: [Save Options](#)

## SplitFileEveryNPages

Default: **10000**

The number of pages to store in one file before splitting. Range: 0-4294967295.

```
[Save]
SplitFileEveryNPages=10000
```

See also: [Save Options](#)

## SplitFileWhenFileSizeExceedsThresholdEnabled

Default: **0**

File splitting is only available for multipaged file formats. Set this to **1** to splits the file to a new file after the file size set in [SplitFileSizeThresholdInBytes](#) is exceeded.

```
[Save]
SplitFileWhenFileSizeExceedsThresholdEnabled=0
```

See also: [Save Options](#)

## SplitFileSizeThresholdInBytes

Default: **1073741824**

The number of pages to store in one file before splitting. The default of 1073741824 bytes is 1GB. Range: 0-2147483648.

```
[Save]
SplitFileSizeThresholdInBytes=1073741824
```

See also: [Save Options](#)

### **IgnoreBlankPages**

Default: **0**

Blank pages are included in the output by default. Setting this to **1** means that blank pages will be omitted from the output file.

```
[Save]
IgnoreBlankPages=0
```

See also: [Save Options](#)

### **IncludePages**

Default: *empty string*

A page range specifying what pages to include in the output file.

```
[Save]
IgnoreBlankPages=1,2-4,10-10000
```

See also: *No user interface equivalent*



## Image Options

[Fax](#), [Fax Profile](#), [Fax Resolution](#), [Fax Use Printer Resolution](#), [Fax Paper Width](#), [Fax Paper Height](#), [Fax Page Scaling](#), [Fax Page Scaling Auto Rotate](#), [Fax Page Scaling Lock Aspect Ratio](#), [Fax Page Scaling Shrink Larger](#), [Fax Page Scaling H Align](#), [Fax Page Scaling V Align](#), [Fax Page Use 256 Greyscale Palette](#), [Fill Order](#), [EOLs Byte Aligned](#), [Photometric](#), [Include DateTime](#), [Motorola Format](#), [Rotate portrait](#), [Rotate landscape](#)

### Fax

Default: **0**

Set this to **1** to toggle the creation of fax resolution images as determined by Fax Profile and Fax Resolution settings.

```
[Image Options]
Fax=0
```

See also: [Fax Mode](#)

### Fax Profile

Default: **0**

Set the fax profile to use when creating fax resolution images.

- 0 - Profile F
- 1 - Profile S
- 2 - Profile C

```
[Image Options]
Fax Profile=0
```

See also: [Fax Mode](#)

### Fax Resolution

Default: **3**

Set the fax resolution for the image. The chosen fax profile can override the resolution.

- 0 - 200 x 100 resolution (Profile S, F)
- 1 - 200 x 200 resolution (Profile S, F, C)

- 2 - 204 x 98 resolution (Profile S, F)
- 3 - 204 x 196 resolution (Profile S, F)
- 4 - 300 x 300 resolution (Profile F, C)
- 5 - 400 x 400 resolution (Profile F, C)
- 6 - 408 x 391 resolution (Profile F)
- 7 - 204 x 391 resolution (Profile F)
- 8 - 300 x 600 resolution (Profile F)
- 9 - 400 x 800 resolution (Profile F)
- 10 - 600 x 600 resolution (Profile F, C)
- 11 - 600 x 1200 resolution (Profile F)
- 12 - 1200 x 1200 resolution (Profile F, C)
- 13 - 100 x 100 resolution (Profile F, C)

```
[Image Options]  
Fax Resolution=3
```

See also: [Fax Mode](#)

### Fax Use Printer Resolution

Deprecated.

### Fax Paper Width

Default: **0**

Sets the width of the paper to be used when creating the fax image.

- 0 - Letter
- 1 - Legal
- 2 - A4 (ISO)
- 3 - B4 (ISO)
- 4 - A3 (ISO)
- 5 - Auto

```
[Image Options]
Fax Paper Width=0
```

See also: [Fax Mode](#)

## Fax Paper Height

Default: **1**

Sets the height of the fax image.

- 0 - Variable height
- 1 - Fixed height

```
[Image Options]
Fax Paper Height=1
```

See also: [Fax Mode](#)

## Fax Page Scaling

Default: **1**

Determines how the original information is placed on the fax sized image.

- 0 - Fit to Page
- 1 - Actual Size

```
[Image Options]
Fax Page Scaling=1
```

See also: [Fax Mode](#)

## Fax Page Scaling Auto Rotate

Default: **1**

The image is rotated to fit on the fax-sized paper if it will fit without having to scale the image. Set this to **0** to turn off this behavior.

```
[Image Options]
Fax Page Scaling Auto Rotate=1
```

See also: [Fax Mode](#)

### Fax Page Scaling Lock Aspect Ratio

Default: **1**

Prevents distortion when scaling larger or smaller pages by keeping the change in height and width of the page in relation to one another. Set to **0** to disable this behavior.

```
[Image Options]
Fax Page Scaling Lock Aspect Ratio=1
```

See also: [Fax Mode](#)

### Fax Page Scaling Shrink Larger

Default: **1**

Scales the image down to fit the fax paper if the original image is larger. Set to **0** to keep the original image size.

```
[Image Options]
Fax Page Scaling Shrink Larger=1
```

See also: [Fax Mode](#)

### Fax Page Scaling H Align

Default: **Middle**

Set the horizontal alignment of the image on the fax sized paged.

- Left
- Middle
- Right

```
[Image Options]
Fax Page Scaling H Align=Middle
```

See also: [Fax Mode](#)

### Fax Page Scaling V Align

Default: **Middle**

Set the vertical alignment of the image on the fax sized paged.

- Top
- Middle
- Bottom

```
[Image Options]
Fax Page Scaling V Align=Middle
```

See also: [Fax Mode](#)

## Fax Page Use 256 Greyscale Palette

Default: **0**

Set this to **1** to use a full 256 grayscale palette when dithering to black and white. The default uses a 64 grayscale palette to reduce the size of the fax and eliminate low intensity colors used normally to shape areas.

```
[Image Options]
Fax Page Use 256 Greyscale Palette=0
```

See also: [Fax Mode](#)

## Fill Order

Default: **MSB2LSB**

Applies to monochrome TIFF images only. Specifies the bit order in which the image data in a CCITT compressed TIFF file will be stored.

- LSB2MSB - Least significant bit to most significant bit
- MSB2LSB - Most significant bit to least significant bit

```
[Image Options]
Fill Order=MSB2LSB
```

See also: [TIFF Options](#)

## EOLs Byte Aligned

Default: **1**

Applies to monochrome TIFF images only. Aligns rows of CCITT Group 3 1D and 2D image data on word boundaries. Set to **0** to not add the fillbits.

```
[Image Options]
EOls Byte Aligned=1
```

See also: [TIFF Options](#)

### Photometric

Default: **MINISWHITE**

Applies to monochrome TIFF images only. Determines the order of the black and white palette entries for a monochrome TIFF file.

- **MINISWHITE** - The palette entry for 0 is white. This will give you black text on a white background
- **MINISBLACK** - The palette entry for 0 is black. This will give you the reverse effect of white text on a black background

```
[Image Options]
Photometric=MINISWHITE
```

See also: [TIFF Options](#)

### Include DateTime

Default: **1**

Applies to TIFF images only. Includes the creation date and time in the file. Set to **0** to not include this information.

```
[Image Options]
Include DateTime=1
```

See also: [TIFF Options](#)

### Motorola Format

Default: **0**

Applies to TIFF images only. Sets the byte order in the file. Default is Intel byte order, set to **1** to use Motorola byte order instead.

```
[Image Options]
Motorola Format=0
```

See also: [TIFF Options](#)

## Rotate portrait

Default: **0**

Set the degrees of counter-clockwise rotation of the page. Choices are **0**, **90**, **180** and **270**.

```
[Image Options]
Rotate portrait=0
```

See also: [Page Editing](#)

## Rotate landscape

Default: **0**

Set the degrees of counter-clockwise rotation of the page. Choices are **0**, **90**, **180** and **270**.

```
[Image Options]
Rotate landscape=0
```

See also: [Page Editing](#)

## TIFF File Format

[BW compression](#), [Color compression](#), [Grayscale compression](#), [Indexed compression](#)

### BW compression

Default: **Group4**

Set the compression to use on output images with only two colors, black and white.

- None - No black and white compression
- Group4 - CCITT Group4 Fax compression
- Group3-2D - CCITT Group3 2D Fax compression
- Group3-1D - CCITT Group3 1D Fax compression
- MH - CCITT Modified Huffman compression
- LZW - LZW compression
- Packbits - Packbits (RLE) compression

```
[TIFF File Format]  
BW compression=Group4
```

See also: [Compression](#)

### Color compression

Default: **LZW RGB**

Set the compression to use on color output images with 256 or more colors.

- Uncompressed RGB - No color compression
- Uncompressed CMYK - No color compression, CMYK color
- Packbits RGB - Packbits (RLE) compression
- Packbits CMYK - Packbits (RLE) compression, CMYK color
- High quality JPEG - High quality JPEG compression
- Medium High quality JPEG - Medium high quality JPEG compression
- Medium quality JPEG - Medium quality JPEG compression



- Medium Low quality JPEG - Medium low quality JPEG compression
- Low quality JPEG - Low quality JPEG compression
- LZW RGB - LZW compression
- LZW CMYK - LZW compression, CMYK color

```
[TIFF File Format]  
Color compression=LZW RGB
```

See also: [Compression](#)

## Grayscale compression

Default: **LZW**

Set the compression to use when the colors in the image are all shades of gray, or grayscale.

- Uncompressed - No compression
- Packbits - Packbits (RLE) compression
- High quality JPEG - High quality JPEG compression
- Medium High quality JPEG - Medium quality JPEG compression
- Medium quality JPEG - Medium quality JPEG compression
- Medium Low quality JPEG - Medium low quality JPEG compression
- Low quality JPEG - Low quality JPEG compression
- LZW - LZW compression

```
[TIFF File Format]  
Grayscale compression=LZW
```

See also: [Compression](#)

## Indexed compression

Default: **LZW**

Set the compression to use on color output images where there is less than 256 colors.

- Uncompressed - No compression
- Packbits - Packbits (RLE) compression

- High quality JPEG - High quality JPEG compression
- Medium High quality JPEG - Medium quality JPEG compression
- Medium quality JPEG - Medium quality JPEG compression
- Medium Low quality JPEG - Medium low quality JPEG compression
- Low quality JPEG - Low quality JPEG compression
- LZW - LZW compression

```
[TIFF File Format]  
Indexed compression=LZW
```

See also: [Compression](#)

## Processing

[Units](#), [Trim left](#), [Trim top](#), [Trim right](#), [Trim bottom](#), [Trim Threshold](#), [Crop](#), [Crop Option](#), [Crop left](#), [Crop top](#), [Crop width](#), [Crop height](#), [Crop margin left](#), [Crop margin top](#), [Crop margin right](#), [Crop margin bottom](#), [Copy](#), [Copy to width](#), [Copy to height](#), [Copy to IAM Left](#), [Copy to IAM Top](#), [Copy to IAM Right](#), [Copy to IAM Bottom](#), [Copy H align](#), [Copy V align](#), [Copy Page Scaling](#), [Copy Page Scaling Shrink Larger](#), [Copy Page Lock Aspect Ratio](#), [Resample](#), [Resample Units](#), [Resample Lock Aspect Ratio](#), [Resample Pixels Width](#), [Resample Pixels Height](#), [Resample X DPI](#), [Resample Y DPI](#), [Brightness Adjust](#), [Rotate portrait](#), [Rotate landscape](#)

### Units

Default: **.01 Inches**

The unit of measurement used in this section

- .01 Inches - Units are in hundredths of an inch
- .1 Millimeters - Units are in tenths of a millimeter

```
[Processing]
Units=.01 Inches
```

See also: [Page Editing](#)

### Trim left

Default: **0**

Set this to **1** to trim any border (pixels) on the left side of the page that fall at or below the chosen [threshold level](#).

```
[Processing]
Trim left=0
```

See also: [Page Editing](#)

### Trim top

Default: **0**

Set this to **1** to trim any border (pixels) on the top of the page that fall at or below the chosen [threshold level](#).

```
[Processing]
Trim top=0
```

See also: [Page Editing](#)

## Trim right

Default: **0**

Set this to **1** to trim any border (pixels) on the right side of the page that fall at or below the chosen [threshold level](#).

```
[Processing]
Trim right=0
```

See also: [Page Editing](#)

## Trim bottom

Default: **0**

Set this to **1** to trim any border (pixels) from the bottom of the page that fall at or below the chosen [threshold level](#).

```
[Processing]
Trim bottom=0
```

See also: [Page Editing](#)

## Trim Threshold

Default: **0**

Set this from **0 (white) to 100 (black)** to set the color intensity to limit the page trimming.

```
[Processing]
Trim Threshold=0
```

See also: [Page Editing](#)

## Crop

Default: **0**

Set this to **1** to turn on page cropping.

```
[Processing]
Crop=0
```

See also: [Page Editing](#)

## Crop Option

Default: **1**

Crop each page by trimming page margins or by cutting out a region on the page.

- 0 - crop a region out of the page
- 1 - crop margins from the top, left, bottom and right sides of the page

```
[Processing]  
Crop Option=0
```

See also: [Page Editing](#)

## Crop left

Default: **0**

Desired measurement for the left side of the region to crop out of the page when [Crop Option](#). is **0**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]  
Crop left=0
```

See also: [Page Editing](#)

## Crop top

Default: **0**

Desired measurement for the top side of the region to crop out of the page when [Crop Option](#). is **0**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Crop top=0
```

See also: [Page Editing](#)

### Crop width

Default: **0**

Desired measurement for the width of the region to crop out of the page when [Crop Option](#). is **0**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Crop width=0
```

See also: [Page Editing](#)

### Crop height

Default: **0**

Desired measurement for the height of the region to crop out of the page when [Crop Option](#). is **0**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Crop height=0
```

See also: [Page Editing](#)

### Crop margin left

Default: **0**

Desired measurement for the left margin to crop off the page when [Crop Option](#). is **1**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Crop margin left=0
```

See also: [Page Editing](#)

## Crop margin top

Default: **0**

Desired measurement for the top margin to crop off the page when [Crop Option](#). is **1**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Crop margin top=0
```

See also: [Page Editing](#)

## Crop margin right

Default: **0**

Desired measurement for the right margin to crop off the page when [Crop Option](#). is **1**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Crop margin right=0
```

See also: [Page Editing](#)

## Crop margin bottom

Default: **0**

Desired measurement for the bottom margin to crop off the page when [Crop Option](#). is **1**.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Crop margin bottom=0
```

See also: [Page Editing](#)

## Copy

Default: **0**

Set this to **1** to copy and scale the page onto a new page size.

```
[Processing]
Copy=0
```

See also: [Page Resizing](#)

## Copy to width

Default: **0**

The width of new paper size.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]
Copy to width=0
```

See also: [Page Resizing](#)



## Copy to height

Default: **0**

The height of new paper size.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]  
Copy to height=0
```

See also: [Page Resizing](#)

## Copy to IAM Left

Default: **0**

The left image area margin for the new paper size. The original page will be copied inside this area using the scaling options as selected.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]  
Copy to IAM Left=0
```

See also: [Page Resizing](#)

## Copy to IAM Top

Default: **0**

The top image area margin for the new paper size. The original page will be copied inside this area using the scaling options as selected.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*

- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]  
Copy to IAM Top=0
```

See also: [Page Resizing](#)

### Copy to IAM Right

Default: **0**

The right image area margin for the new paper size. The original page will be copied inside this area using the scaling options as selected.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]  
Copy to IAM Right=0
```

See also: [Page Resizing](#)

### Copy to IAM Bottom

Default: **0**

The bottom image area margin for the new paper size. The original page will be copied inside this area using the scaling options as selected.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Processing]  
Copy to IAM Bottom=0
```

See also: [Page Resizing](#)

## Copy H align

Default: **Middle**

Set the horizontal alignment of the original page contents on the new page.

- Left
- Middle
- Right

```
[Processing]  
Copy H align=Middle
```

See also: [Page Resizing](#)

## Copy V align

Default: **Middle**

Set the vertical alignment of the original page contents on the new page.

- Top
- Middle
- Bottom

```
[Processing]  
Copy V align=Middle
```

See also: [Page Resizing](#)

## Copy Page Scaling

Default: **0**

Sets how the original page is scaled onto the new image area.

- 0 - Fit to Page
- 1 - Actual Size

```
[Processing]  
Copy Page Scaling=0
```

See also: [Page Resizing](#)

## Copy Page Scaling Shrink Larger

Default: **1**

Shrinks the image down to fit the new page size if the original image is larger than the new page. Set this to **0** to maintain the original size. Only applies if [Copy Page Scaling](#) is set to **Actual Size**.

```
[Processing]
Copy Page Scaling Shrink Larger=1
```

See also: [Page Resizing](#)

## Copy Page Lock Aspect Ratio

Default: **1**

Locking the aspect ratio prevents distortion when scaling larger or smaller pages to different page sizes. Set this to **0** to allow the height and width of the page change independent of each another.

```
[Processing]
Copy Page Lock Aspect Ratio=1
```

See also: [Page Resizing](#)

## Resample

Default: **0**

Set this to **1** to enable any resampling options that are set.

```
[Processing]
Resample=0
```

See also: [Page Resizing](#)

## Resample Units

Default: **0**

Sets how to resample the output file to a new page size.

- 0 - set the new size in pixels
- 1 - set the new size as a percentage of the original size
- 2. - scale the output to a new image resolution

```
[Processing]
Resample Units=0
```

See also: [Page Resizing](#)

## Resample Lock Aspect Ratio

Default: **1**

Locking the aspect ratio prevents distortion when scaling larger or smaller pages to different page sizes. Set this to **0** to change height and width of the page independent of each another.

```
[Processing]
Resample Lock Aspect Ratio=0
```

See also: [Page Resizing](#)

## Resample Pixels Width

Default: **200**

The new file width in pixels, range is 1-4294967295.

```
[Processing]
Resample Pixels Width=200
```

See also: [Page Resizing](#)

## Resample Pixels Height

Default: **200**

The new file height in pixels, range is 1-4294967295. This setting is not used when [Resample Lock Aspect Ratio](#) is set to 1.

```
[Processing]
Resample Pixels Height=200
```

See also: [Page Resizing](#)

## Resample X DPI

Default: **200**

The new resolution for the width of your file, range is 50-3600.

```
[Processing]
Resample X DPI=200
```

See also: [Page Resizing](#)

### Resample Y DPI

Default: **200**

The new resolution for the width of your file, range is 50-3600. This setting is not used when [Resample Lock Aspect Ratio](#) is set to 1.

```
[Processing]
Resample Y DPI=200
```

See also: [Page Resizing](#)

### Brightness Adjust

Default: **0**

Set this from **-100 to -1** to darken the image, and **1- 100** to lighten the image. The default of **0** means no change.

```
[Processing]
Brightness Adjust=0
```

See also: [Page Editing](#)

### Rotate portrait

Default: **0**

Set the degrees of counter-clockwise rotation of the page. Choices are **0, 90, 180** and **270**.

```
[Processing]
Rotate portrait=0
```

See also: [Page Editing](#)

### Rotate landscape

Default: **0**

Set the degrees of counter-clockwise rotation of the page. Choices are **0, 90, 180** and **270**.

```
[Processing]
Rotate landscape=0
```

See also: [Page Editing](#)

## Run Commands

[OnSuccessEnabled](#), [OnSuccessCommand](#), [OnSuccessParameters](#),  
[OnSuccessStartingFolder](#), [OnFailureEnabled](#), [OnFailureCommand](#),  
[OnFailureParameters](#), [OnFailureStartingFolder](#)

### OnSuccessEnabled

Default: *empty string*

When empty, any Run Command options set in the profile for success are used. Set to **0** to disable or **1** to enable.

```
[Run]
OnSuccessEnabled=1
```

See also: [Run Commands](#)

### OnSuccessCommand

Default: *empty string*

The path to the command to run when conversion succeeds. This path can be hard coded, or dynamically created using environment variables (%VARIABLE%) and/or a value read from a registry keys (\$[REGKEY]). When using any of the commands provided in the *RunCommands* folder, our internal variable %InstallFolder% can be used to generically specify the path. Your own commands can also be copied into this folder to take advantage of this feature.

This command can also be used to signal an event to another waiting program. See [Using Environment Variables and Registry Keys](#) and [Signaling Events Using Run Commands](#).

```
[Run]
OnSuccessCommand="C:\Program Files\TIFF Image Printer
12\RunCommands\CustomMoveFiles.bat"
;OnSuccessCommand="%InstallFolder%\RunCommands\CustomMoveFiles.bat"
```

See also: [Run Commands](#)

### OnSuccessParameters

Default: *empty string*

Any parameters to pass to the command. Parameters can include [built-in run command macros](#). If you need to pass quoted parameters, you need to have

one level of outer quotes. When the script file is read the outer quotes are striped off. [Environment variables](#) can also be used in the parameters list.

The last parameter passed is always the path to a text file (pnf-<GUID>.txt) created by TIFF Image Printer. This text file lists each file generated, one per line, and can contain zero or more lines.

```
[Run]
OnSuccessParameters="$ (OutputDir) "$ (PrintJobID) " "$ (FileGUID) ""
```

See also: [Run Commands](#)

### OnSuccessStartingFolder

Default: *empty string*

The default working directory for your application, if needed. [Environment variables and registry keys](#) can also be used.

```
[Run]
OnSuccessStartingFolder=
```

See also: [Run Commands](#)

### OnFailureEnabled

Default: *empty string*

When empty, any Run Command options set in the profile for failure are used instead. Set to **0** to disable or **1** to enable.

```
[Run]
OnFailureEnabled=1
```

See also: [Run Commands](#)

### OnFailureCommand

Default: *empty string*

The path to the command to run when conversion fails. This path can be hard coded, or dynamically created using environment variables (%VARIABLE%) and/or a value read from a registry keys (\$[REGKEY]). When using any of the commands provided in the *RunCommands* folder, our internal variable %InstallFolder% can be used to generically specify the path. Your own commands can also be copied into this folder to take advantage of this feature.



This command can also be used to signal an event to another waiting program. See [Using Environment Variables and Registry Keys](#) and [Signaling Events Using Run Commands](#).

```
[Run]
OnFailureCommand="C:\Program Files\TIFF Image Printer
12\RunCommands\SendEmail.bat"
;OnFailureCommand="%InstallFolder%\RunCommands\SendEmail.bat"
```

See also: [Run Commands](#)

## OnFailureParameters

Default: *empty string*

Any parameters to pass to the command. Parameters can include [built-in run command macros](#). If you need to pass quoted parameters, you need to have one level of outer quotes. When the script file is read the outer quotes are striped off. [Environment variables](#) can also be used in the parameters list.

The last parameter passed is always the path to a text file (pnf-<GUID>.txt) created by TIFF Image Printer. This text file lists each file generated, one per line, and can contain zero or more lines.

```
[Run]
OnFailureParameters="$ (OutputDir) "$ (PrintJobID) " "$ (FileGUID) ""
```

See also: [Run Commands](#)

## OnFailureStartingFolder

Default: *empty string*

The default working directory for your application, if needed. [Environment variables and registry keys](#) can also be used.

```
[Run]
OnFailureStartingFolder=
```

See also: [Run Commands](#)

## Advanced Features

[Units](#), [Hardware Margin Left](#), [Hardware Margin Top](#), [Custom Paper Enable](#), [Custom Paper Width](#), [Custom Paper Height](#), [Printer Area Margin Left](#), [Printer Area Margin Top](#), [Printer Area Margin Right](#), [Printer Area Margin Bottom](#), [Extract Text](#), [Extract Text Filepath](#), [Extract Text Layout](#), [Extract Text Encoding](#), [Extract Text EOL](#), [Extract Text Emit Page Breaks](#), [Control Strings Enabled](#), [Control String Prefix](#), [Control String Suffix](#)

### Units

Default: **.01 Inches**

The unit of measurement used in this section

- .01 Inches - Units are in hundredths of an inch
- .1 Millimeters - Units are in tenths of a millimeter

```
[Advanced Features]  
Units=.01 Inches
```

See also: [Printer Overrides](#)

### Hardware Margin Left

Default: 0

Customize the desired measurement for the size of the printer-supplied left and right edge on your output.

- 0 - 100 - range when [units](#) is set to *.01 Inches*
- 0 - 254 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 1.000in - range in inches.
- 0.000cm - 2.540cm - Range in centimeters

```
[Advanced Features]  
Hardware Margin Left=1100
```

See also: [Printer Overrides](#)

### Hardware Margin Top

Default: 0

Customize the desired measurement for the size of the printer-supplied top

and bottom edge on your output.

- 0 - 100 - range when [units](#) is set to *.01 Inches*
- 0 - 254 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 1.000in - range in inches.
- 0.000cm - 2.540cm - Range in centimeters

```
[Advanced Features]
Hardware Margin Top=0
```

See also: [Printer Overrides](#)

## Custom Paper Enable

Default: **0**

Set this to **1** to have TIFF Image Printer use the custom paper size defined for the output file. This setting overrides any other paper size selection that you have set on the application.

```
[Advanced Features]
Custom Paper Enable=0
```

See also: [Printer Overrides](#)

## Custom Paper Width

Default: 850

Desired measurement for the width of the new paper size.

- 0.25 - 8000000 - range when [units](#) is set to *.01 Inches*
- 64 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.250in - 80000.000in - range in inches.
- 0.640cm - 200000.000cm - Range in centimeters

```
[Advanced Features]
Custom Paper Width=850
```

See also: [Printer Overrides](#)

## Custom Paper Height

Default: 1100

Desired measurement for the height of the new paper size.

- 0.25 - 8000000 - range when [units](#) is set to *.01 Inches*
- 64 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.250in - 80000.000in - range in inches.
- 0.640cm - 200000.000cm - Range in centimeters

```
[Advanced Features]  
Custom Paper Height=1100
```

See also: [Printer Overrides](#)

### Printer Area Margin Left

Default: 0

The desired left margin setting for the custom paper size. The combined Left and Right printer area margins must be less than the Width of the custom paper. Dimensions for printer area margins are entered based on a portrait oriented page.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Advanced Features]  
Printer Area Margin Left=0
```

See also: [Printer Overrides](#)

### Printer Area Margin Top

Default: 0

The desired top margin setting for the custom paper size. The combined Top and Bottom printer area margins must be less than the Height of the custom paper. Dimensions for printer area margins are entered based on a portrait oriented page.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.

- 0.000cm - 200000.000cm - Range in centimeters

```
[Advanced Features]
Printer Area Margin Top=0
```

See also: [Printer Overrides](#)

## Printer Area Margin Right

Default: 0

The desired right margin setting for the custom paper size. The combined Left and Right printer area margins must be less than the Width of the custom paper. Dimensions for printer area margins are entered based on a portrait oriented page.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Advanced Features]
Printer Area Margin Right=0
```

See also: [Printer Overrides](#)

## Printer Area Margin Bottom

Default: 0

The desired bottom margin setting for the custom paper size. The combined Top and Bottom printer area margins must be less than the Height of the custom paper. Dimensions for printer area margins are entered based on a portrait oriented page.

- 0 - 8000000 - range when [units](#) is set to *.01 Inches*
- 0 - 20000000 - range when [units](#) is set to *.1 Millimeters*
- 0.000in - 80000.000in - range in inches.
- 0.000cm - 200000.000cm - Range in centimeters

```
[Advanced Features]
Printer Area Margin Bottom=0
```

See also: [Printer Overrides](#)

## Extract Text

Default: **0**

Set this to **1** to extract any text in the file and save the created text file in the same directory and with the same name as the output file.

```
[Advanced Features]  
Extract Text=0
```

See also: [Text Extraction](#)

## Extract Text Filepath

Deprecated; all text extraction files are stored in the same location as the output file.

## Extract Text Layout

Default: **Physical**

Sets the layout for the text in outputted text.

- Physical - Match the format of the text in the original file
- Raw - Saves the text in the order in which it was sent to the driver. This may not be the same order in the original file
- None - No formatting is attempted. All text is written to the file as it is received

```
[Advanced Features]  
Extract Text Layout=Physical
```

See also: [Text Extraction](#)

## Extract Text Encoding

Default: **UTF-16**

Sets the encoding format for your text file.

- ANSI
- UTF-8
- UTF-16

```
[Advanced Features]
Extract Text Encoding=UTF-16
```

See also: [Text Extraction](#)

## Extract Text EOL

Default: **Windows**

Sets the end-of-line encoding for your text file.

- Windows - Lines end with the CRLF (\r\n) line feed
- Mac - Lines end with the LF (\n) line feed
- Unix - Lines end with the CR (\r) line feed

```
[Advanced Features]
Extract Text EOL=Windows
```

See also: [Text Extraction](#)

## Extract Text Emit Page Breaks

Default: **1**

Emits a page break, or form feed (\f) in your text file for every page in your original document. Set this to **0** to disable page breaks.

```
[Advanced Features]
Extract Text Emit Page Breaks=1
```

See also: [Text Extraction](#)

## Control Strings Enabled

Deprecated; control strings are no longer supported.

## Control String Prefix

Deprecated; control strings are no longer supported.

## Control String Suffix

Deprecated; control strings are no longer supported.

### DevMode

[Resolution](#), [Printer Profile](#) [Orientation](#) [Color](#), [Paper Size](#)

#### Resolution

Default: **300**

Set the target rendering DPI (dots per inch) to use. One of 50, 60, 72, 75, 96, 100, 120, 150, 200, 240, 254, 300, 360, 400, 480, 600, 720, 800, 900, 1200.

```
[Devmode settings]  
Resolution=300
```

See also: [Save Options](#)

#### Printer Profile

Full path to an exported printer conversion profile. Overrides the profile selected on the printer.

```
[Devmode settings]  
PrinterProfile=C:\PEERNET\CustomProfile.pntifprofile
```

See also: [Create a New Profile Settings File](#)

#### Orientation

Deprecated.

#### Color

Deprecated.

#### Paper Size

Deprecated.



## EventNames

[CommandsProcessed](#), [DocumentSpooled](#), [DocumentCancelled](#)

### CommandsProcessed

Default: *empty string*

When not an empty string, an event of this name is signaled on each print job when the printer has finished reading the current script file settings. This event is scan be used to synchronize printing when you are changing printer settings between print jobs.

```
[EventNames]  
CommandsProcessed=Global\ScriptFileProcessed
```

See also: [Built-In Script File Events](#)

### DocumentSpooled

Default: *empty string*

When not an empty string, an event of this name is signaled on each print job when the print job has been spooled successfully. This **does not** mean that the output file creation is complete.

```
[EventNames]  
DocumentSpooled=Global\PrintJobSpooled
```

See also: [Built-In Script File Events](#)

### DocumentCancelled

Default: *empty string*

When not an empty string, an event of this name is signaled on each print job if the user cancels the print job, or if the print job does not spool successfully.

```
[EventNames]  
DocumentCancelled=Global\PrintJobCancelled
```

See also: [Built-In Script File Events](#)