



ScrewDrivers Essentials
Administrator Guide
Version 7.0

Release Info

This version of the *ScrewDrivers Essentials Administrator Guide* is applicable for all software versions of ScrewDrivers 7.0 and greater, and is current until replaced.

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Preface

Welcome to the *ScrewDrivers Essentials Administrator Guide*. The purpose of the *ScrewDrivers Essentials Administrator Guide* is to answer your questions and guide you through the procedures necessary to configure and administer the ScrewDrivers Endpoint products efficiently and effectively.

Conventions used in the manual

The *ScrewDrivers Essentials Administrator Guide* uses the following conventions:

- Information that can vary in a command—variable information—is indicated by alphanumeric characters enclosed in angle brackets; for example, <server address>. Do not type the angle brackets when you specify the variable information.
- A new term, or term that must be emphasized for clarity of procedures, is *italicized*.
- Page numbering is “online friendly.” Pages are numbered from 1 to x, *starting with the cover*, and ending on the last page of the guide.



Although numbering begins on the cover page, this number is not visible on the cover page or front matter pages. Page numbers are visible beginning with the first page of the Table of Contents.

- This manual is intended for both print and online viewing.
 - If information appears in [blue](#), it is a hyperlink. Table of Contents entries are also hyperlinks. Click the hyperlink to advance to the referenced information.

Organization of the manual

In addition to this Preface, the *ScrewDrivers Essentials Administrator Guide* contains the following chapters and appendices:

- [Chapter 1, “The ScrewDrivers Endpoint Application,” on page 9](#) details the functions that are available in the Session Agent application for ScrewDrivers Endpoint. Administrators use the Session Agent application to specify the shared settings for all the users who are logging in and using the same machine for remote printing capabilities.
- [Chapter 2, “The ScrewDrivers Endpoint Client Application,” on page 33](#) details the functions that are available to you in the ScrewDrivers Endpoint Client app.
- [Chapter 3, “The ScrewDrivers Scanning Application,” on page 45](#) details the configuration settings and functions that are available in the ScrewDrivers Scanning Session Agent app.
- [Chapter 4, “The ScrewDrivers Scanning Client Application,” on page 61](#) chapter details the configuration settings and functions that are available to you in the ScrewDrivers

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Scanning Client app.

- [Appendix A, “ScrewDrivers Endpoint Troubleshooting,” on page 73](#) provides some general considerations when troubleshooting ScrewDrivers Endpoint. It also provides information about solving some of the most common problems you might encounter when using ScrewDrivers Endpoint.
- [Appendix B, “ScrewDrivers Scanning Troubleshooting,” on page 83](#) provides some general considerations when troubleshooting ScrewDrivers Scanning. It also provides information about solving some of the most common problems you might encounter when using ScrewDrivers Scanning.

Chapter 1

The ScrewDrivers Endpoint Application

The ScrewDrivers Endpoint Session Agent is installed on the machine that your users are logging in to remotely. You access the configuration settings for the ScrewDrivers Endpoint Session Agent through the ScrewDrivers Endpoint application (app). This chapter details the settings and functions that are available in the ScrewDrivers Endpoint app.

This chapter covers the following topics:

- [“Introduction” on page 11.](#)
- [“General Tab” on page 14.](#)
- [“Printer Configuration Tab” on page 16.](#)
- [“Advanced Tab” on page 25.](#)
- [“Denial Tab” on page 27.](#)
- [“Licensing Configuration Tab” on page 29.](#)
- [“Logging Tab” on page 30.](#)
- [“About Tab” on page 31.](#)

Chapter 1

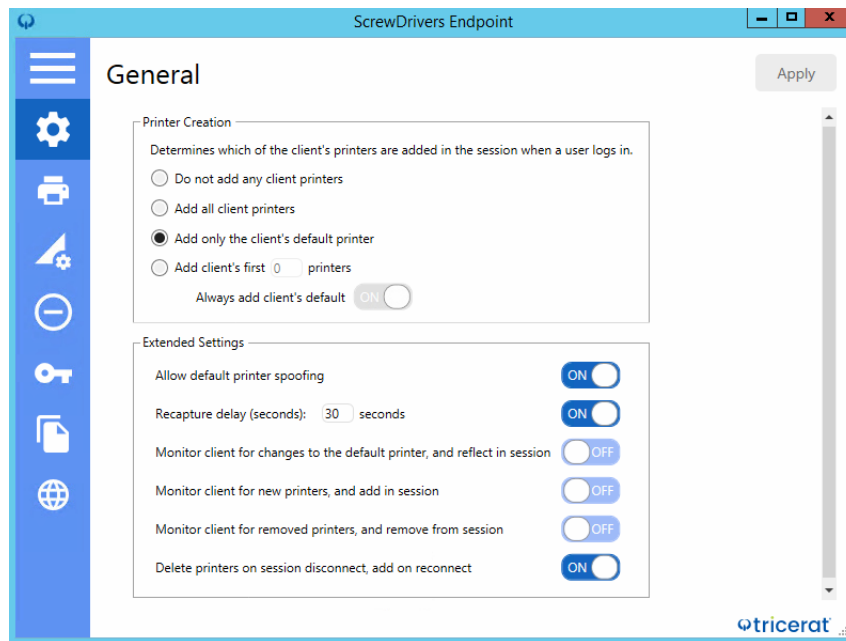
The ScrewDrivers Endpoint Application

Introduction


The ScrewDrivers Endpoint Session Agent is installed on the machine that your users are logging in to remotely. You access the ScrewDrivers Endpoint Session Agent through the ScrewDrivers Endpoint application (app). The app contains the settings for the detailed configuration of your ScrewDrivers Endpoint printing environments. To open the ScrewDrivers Endpoint app, do the following:







Open the Start menu, and then under Programs, click ScrewDrivers Endpoint.

Figure 1-1: ScrewDrivers Endpoint app



The ScrewDrivers Endpoint app has seven tabs for managing your Session Agent functions. Each tab is represented by an icon on a Tab bar that is displayed on the left side of the console. Click an icon to view the corresponding tab.

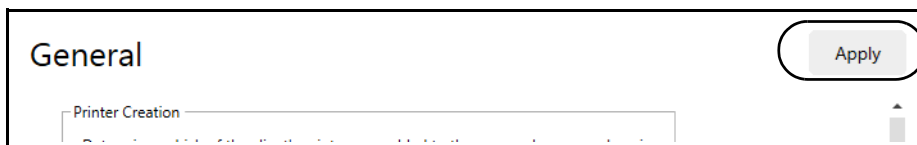
Tab	Description
Tip: When the ScrewDrivers Endpoint app first opens, the Tab bar is collapsed. You can hold your cursor over an icon on the Tab bar to display a tooltip that shows the name of the corresponding tab, or you can click the Hamburger icon to expand the Tab bar and view the complete name of each tab.	
	General tab - Contains printer creation options that determine the client printers that the Session Agent automatically builds and adds to the session when a user logs in. The tab also contains extended settings options that allow for further customizations of your users' printing environments, such as specifying the default printer and when to delete printers from sessions. See "General Tab" on page 14 .

Tab	Description
	Printer Configuration tab - Has four sub-tabs, each of which contains different options for the configuration of the printers in your users' environments, including printer naming schemes, allowed formats for saving files, and so on. See "Printer Configuration Tab" on page 16.
	Advanced tab - Contains options for optimizing printing. See "Advanced Tab" on page 25.
	Denial tab - Contains options for specifying which printers the Session Agent is not to build automatically (printers are denied) when a user logs in. You can deny all local printers or all network printers for the client in a single step, or you can deny printers on a per print driver basis. See "Denial Tab" on page 27.
	Licensing tab - Displays information about the license that the Session Agent is currently using, including, if applicable, the expiration date. See "Licensing Configuration Tab" on page 29.
	Logging tab - Provides options for diagnostic logging from the Session Agent. See "Logging Tab" on page 30.
	About tab - Provides information about the Session Agent. See "About Tab" on page 31.

With the exception of the About tab, all the tabs have the following features in common:

- For some toggle options, you must specify the availability of the option on the client:
 - Deny - Prevents the user from enabling the administrator-denied option. (The option is unavailable.)
 - Force - Prevents the user from changing the administrator-defined setting and/or value for the option. The ScrewDrivers Administrator determines if the option is turned on or not.
 - Suggest - The ScrewDrivers Administrator can define a default setting and/or value for the option, but a user can override the setting and/or value at the time of printing.
- After you make a change to any setting and/or value on a tab, you must click Apply (displayed in the top right corner of the app) to save the change. All current values on all tabs are saved when you click Apply. You cannot save changes on a per tab basis.

Figure 1-2: Apply button



- After you have made and applied all the needed changes for your Session Agent settings, click Close (x) in the upper right corner of the app to close and exit out of the app.

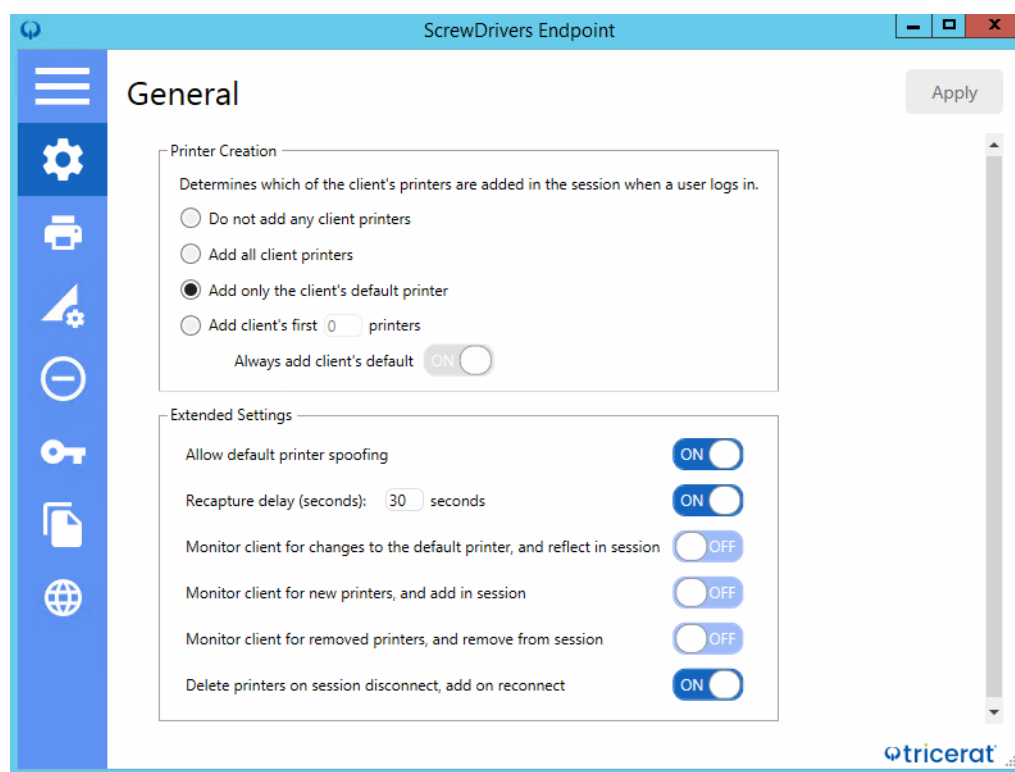


If you make any changes to the Session Agent settings on a tab, and do not immediately apply these changes, then you are prompted to do so before opening another tab or exiting the app.

General Tab

When the ScrewDrivers Endpoint app first opens, the General tab is the open tab. The tab contains printer creation options that determine the client printers that the Session Agent automatically builds when a user logs in. The tab also contains extended settings options that allow for further customizations of your users' printing environments, such as specifying the default printer and when to delete printers from sessions.

Figure 1-3: ScrewDrivers Endpoint app, General tab



Option	Description
Printer Creation: Determines which of the client's printers that the Session Agent automatically builds and adds to the session after a user logs in. You can select only one Printer Creation option at a time.	
Do not add any client printers	If selected, then the Session Agent does not build any of the client's printers after a user logs in. Note: You typically enable this option only when Tricerat Support instructs you to do so.
Add all client printers	If selected, then the Session Agent builds all of the client's printers after a user logs in.
Add only the client's default printer	Selected by default. The Session Agent builds only the client's default printer after a user logs in.

Option	Description
Add clients first <u>0</u> printers	Change the default value of 0 as needed. The Session Agent builds the first “n” number of printers that are displayed in the list of available printers for the ScrewDrivers Endpoint client after a user logs in.
Always add client's default	Selected by default if Add clients first <u>0</u> printers is turned on. The Session Agent builds the client's default printer after a user logs in, even if the client's default printer is not contained in the first “n” number of printers that are displayed in the list of available printers for the ScrewDrivers Endpoint client.
Extended Settings - Provide additional printing features that can be useful depending on your users' environments	
Allow default printer spoofing	If turned on, then a user can specify a printer that is not defined as the default printer on the ScrewDrivers Endpoint client to be the default printer for the user's remote session. Note: This option is applicable for situations in which a user can work locally or through a remote session, but requires a different default printer in each case.
Recapture the default printer after <u>30</u> seconds	If turned on, then the default printer for the ScrewDrivers Endpoint client is set again for the remote session after the specified time period. This prevents the traditional “server printers” from being set as the user's default printers during a remote session. You can change the default value of 30 seconds as needed.
Monitor client for changes to the default printer, and reflect in session	If turned on, then a user can change the default printer on the ScrewDrivers Endpoint client, and have this change reflected immediately during a remote session.
Monitor client for new printers, and add in session	If turned on, then when a new printer is added to the ScrewDrivers Endpoint client during a remote session, it is also added to the remote session.
Monitor client for removed printers, and remove from session	If turned on, then when a printer is removed from the ScrewDrivers Endpoint client during a remote session, it is also removed from the remote session.
Delete printers on session disconnect, add on reconnect	If turned on, then when a remote session is disconnected, or a user logs off, all the client printers are removed from the remote session. When the remote session is reconnected, or a user logs back in, then the Session Agent builds the printers again. Tip: This option is particularly useful if the end user typically moves between more than one client machine for a given session. If the end user is stationary, then turn this option off to reduce the load on the system and make printers available more quickly upon reconnect.

Printer Configuration Tab

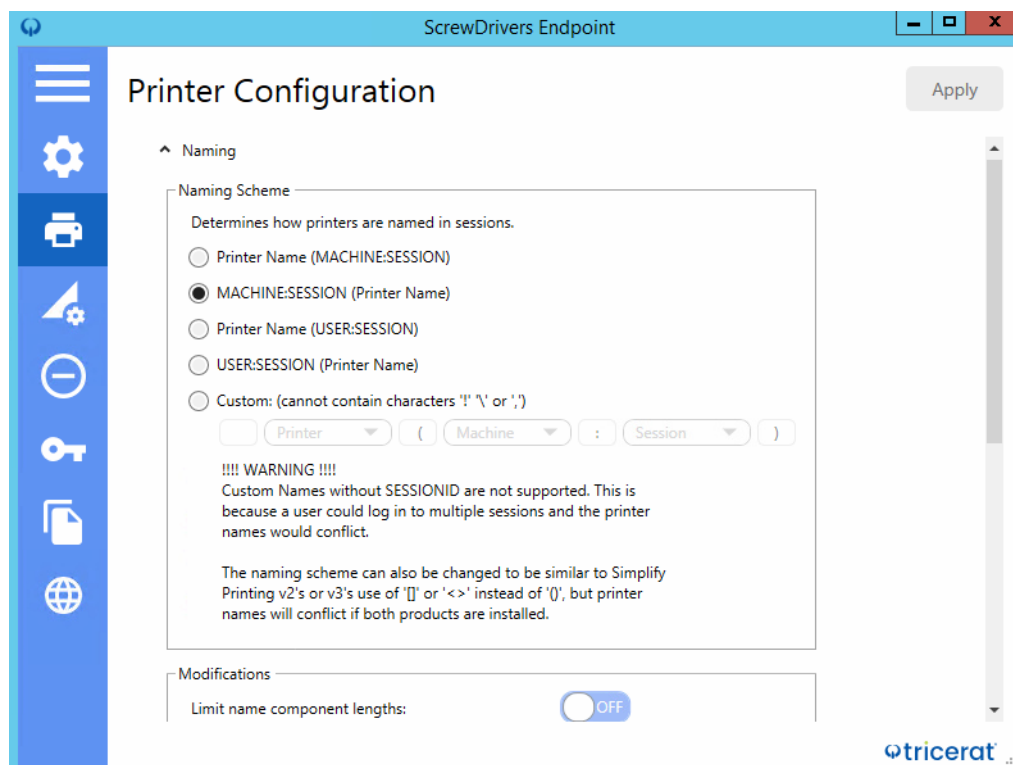
The Printer Configuration tab on the ScrewDrivers Endpoint app has four sub-tabs, each of which contains different options for the configuration of the printers in your users' environments, such as printer naming schemes, saved file formats, and so on. See:

- “Printer Configuration tab, Naming sub-tab” below.
- “Printer Configuration tab, Extended sub-tab” on page 18.
- “Printer Configuration tab, Action sub-tab” on page 20.
- “Printer Configuration tab, Export sub-tab” on page 22.

Printer Configuration tab, Naming sub-tab

The Naming sub-tab on the Printer Configuration tab contains options for specifying how the printer names are displayed in a list of available printers to your users.

Figure 1-4: ScrewDrivers Endpoint app, Printer Configuration tab, Naming sub-tab



By default, the printer naming scheme is set to MACHINE SESSION (Printer Name); however, you might need to implement a printer naming convention to support legacy technologies in your particular environment. If you set a naming scheme for the printers in your ScrewDrivers Endpoint environment, then the scheme is applied universally to all printers. You cannot set the naming scheme on per printer basis. You can select from one of four default schemes, or you can create a custom naming scheme.



To automate printer configurations within certain applications, Tricerat recommends using the RDP naming convention, which can be accomplished using a Custom naming scheme.

See:

- [“To set a default printer naming scheme”](#) below.
- [“To set a custom printer naming scheme”](#) on page 18.

To set a default printer naming scheme

1. Select one of the four default schemes.
 - Printer Name (MACHINE:SESSION)
 - MACHINE:SESSION (Printer Name)
 - Printer name (USER:SESSION)
 - USER:SESSION (Printer Name)
2. Do one of the following:
 - If you are implementing a default naming scheme as-is, then click Apply.
 - If you are editing and implementing a default printer naming scheme, then in the Modifications pane, do any or all of the following, and then click Apply:
 - Enable “Limit name component lengths,” and then set the maximum value for any or all of the indicated components (Printer Name, MACHINE and/or USER.) For example, you can set the Printer Name to 0 for an unlimited length and the User Name to 6, for a maximum of 6 characters.
 - Enable “For the client’s network printers, remove “on” from the PrinterName.



If the ScrewDrivers Endpoint environment contains network printers, then use this option.

- Enable one or both options for replacing values in the printer name, and then leave a default replacement value as-is, or edit it as needed. For example, if you select “Replace backslashes (\) in the printer name with _” then, by default, an underscore replaces every backslash in the printer name. You can leave the underscore as-is, or you change it to another value such as an asterisk (*).



Novell printers include backslashes in their names, which Windows does not support.

To set a custom printer naming scheme



If you set a custom printer naming scheme, then Tricerat strongly recommends that you do not use a format without a Session ID. A user could log in to multiple sessions, which can result in a naming conflict.

1. Set the format of the scheme using Session ID and one or more of the following: Printer, Machine Name, and User.

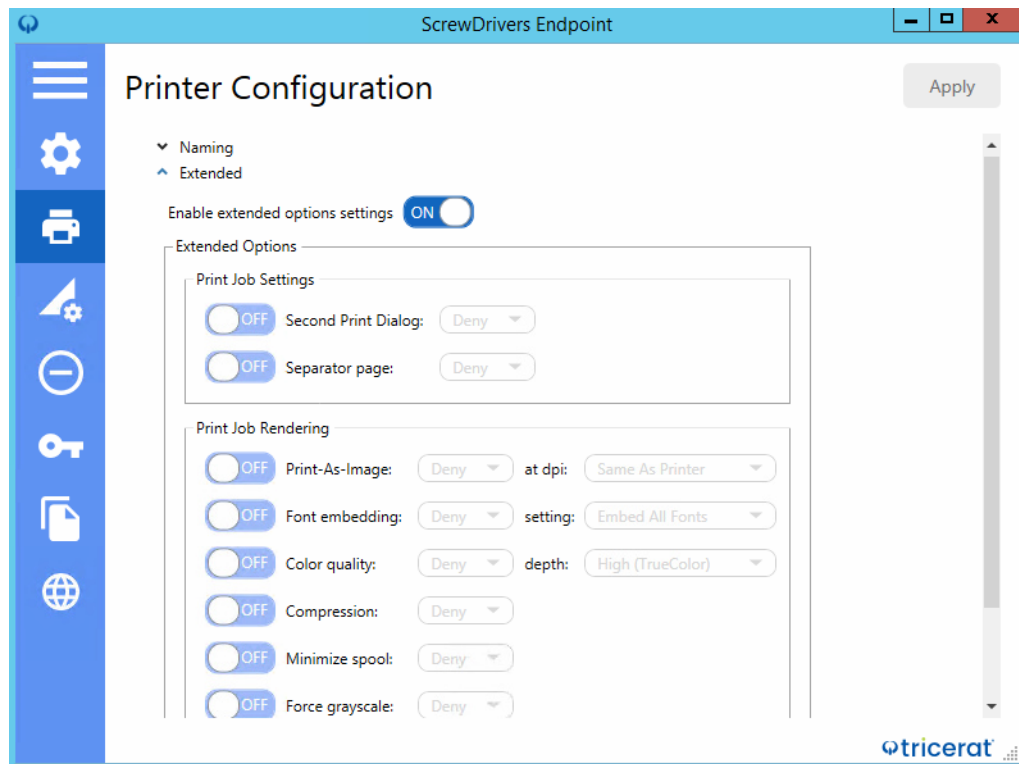
In addition to the Session ID, the name can have up to three components, but you can specify a single component (for example, Machine Name), two components (for example, Machine Name and Printer), or all three components (for example, Machine Name, Printer, and User).

2. Optionally, do any or all of the following as needed:
 - Enable “Limit name component lengths,” and then set the maximum value for any or all of the indicated components (Printer, Machine, and/or User.) The default value is zero, which means unlimited length.
 - Enable one or both options for replacing values in the printer name, and then leave a default replacement value as-is, or modify it as needed. For example, if you select “Replace backslashes (\) in the printer name with _” then, by default, an underscore replaces every backslash in the printer name. You can leave the underscore as-is, or you change it to another value such as an asterisk (*).
3. Click Apply.

Printer Configuration tab, Extended sub-tab

The Extended sub-tab on the Printer Configuration tab contains an option for displaying the Extended Options tab for your users on the ScrewDrivers Endpoint Printing Preferences dialog box. If you are displaying the Extended Options tab, then you must also specify the client availability—Deny, Force, or Suggest—for each option on the tab. See [Figure 1-5 on page 19](#).

Figure 1-5: ScrewDrivers Endpoint app, Printer Configuration tab, Extended sub-tab



Option	Description
Display the extended options settings	If turned on, then the Extended Options tab is displayed for your users on the ScrewDrivers Endpoint Printing Preferences dialog box.
Extended Options - Print Job Settings	
Second Print Dialog	The second print dialog box is the Client Print Spooler dialog box, and by default, this dialog box is not displayed. If turned on, then this dialog box is displayed when a print job begins to spool on the client, and your users can carry out advanced printing functions such as stapling, booklet printing, hole punching, and so on.
Separator Page	If turned on, then an additional page that contains information about the print job, such as the name of the user who submitted the job, is printed.
Extended Options - Print Job Rendering: Enable these options to implement workarounds when your users encounter printing issues related to font, scaling, and/or graphics.	
Print-As-Image	<p>If turned on, then the Session Agent converts each page of the print job to a bitmap.</p> <p>Note: Although enabling this option can resolve output issues such as font issues, uncompressed printing can also use a significant amount of bandwidth.</p> <p>Caution: Do not automatically choose the default DPI as the DPI for a job. Because each doubling of DPI results in four times the amount of data that is sent, select the lowest possible DPI that results in acceptable output. Typically, 300DPI is sufficient.</p>

Option	Description
Font embedding	<p>If turned on, then the Session Agent embeds a temporary copy of the font or font data in the print jobs.</p> <ul style="list-style-type: none"> • Embed All Fonts - The default setting. If turned on, and the fonts that are used in the print job are not available on the client, then the Session Agent sends a temporary copy of each font to the client with the print job. After the print job is complete, then the Session Agent removes the temporary copies from the client. • Pre-Render Embedded - If turned on, and the fonts that are used in the print job are not available on the client, then the Session Agent sends these fonts as images to the client, and then integrates the corresponding text back into the job file. • Pre-Render All - If turned on, then the Session Agent sends <i>all</i> fonts as images to the client (it does not matter whether the font is available on the client), and then integrates the corresponding text back into the job file. <p>Note: Typically, you select Pre-Render All only when Tricerat support directs you to do so. This option is useful for situations in which the client's fonts are unreliable or incomplete, or there are font mismatches between the session host and client.</p>
Color quality	<p>If turned on, then, by default, the Session Agent renders images in High (TrueColor), which is 24-bit. You can select a different default value:</p> <ul style="list-style-type: none"> • Medium (HighColor), which is 16-bit • Low, which is 8-bit. • Monochrome, which is 1-bit. (True black and white). <p>Note: If you lower the color quality, then the document spool size is reduced; however, the quality of the output is affected. The difference between 24-bit and 16-bit is negligible, but the difference becomes more pronounced as you continue to lower the color quality.</p>
Compression	<p>If turned on, then a lossy compression algorithm is carried out for images in the document for additional reduction in spool size.</p>
Minimize spool	<p>Turned on by default. Breaks large images up into multiple smaller images, which allows data to be streamed to the printer faster and also allows the printer to discard the "data chunks" as they are rendered, resulting in less memory in use at any given time.</p>
Force grayscale	<p>If turned on, then all images in the document are converted to grayscale, which is 8-bit gray and reduces file size.</p>

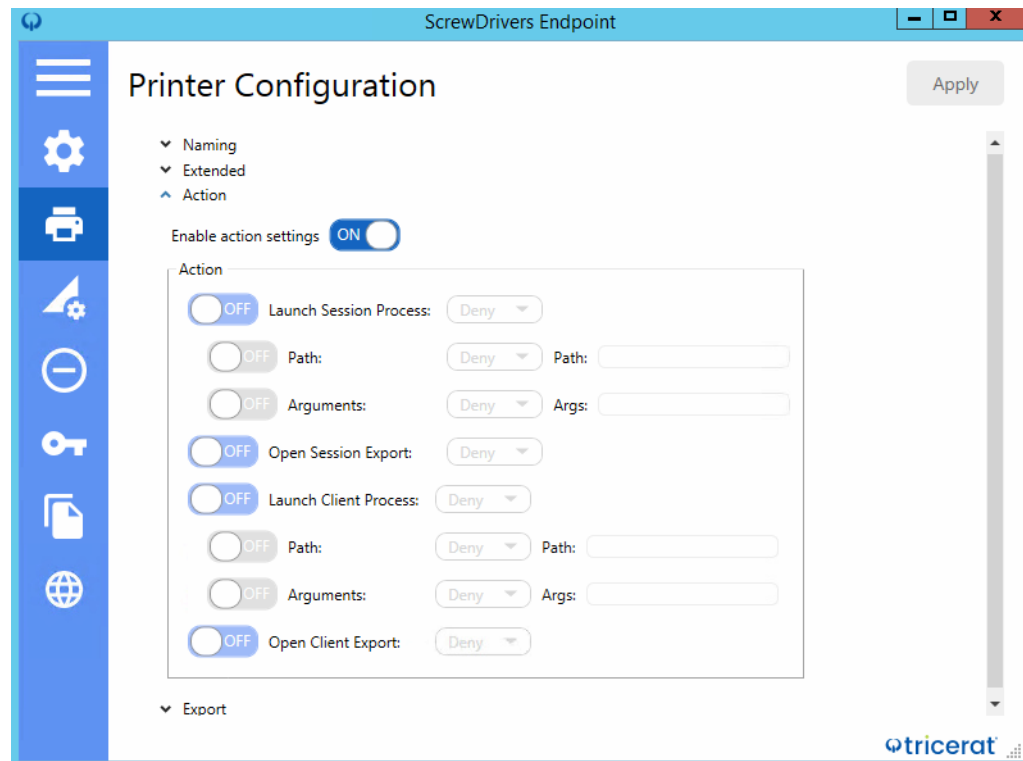
Printer Configuration tab, Action sub-tab

The Action sub-tab on the Printer Configuration tab contains an option for displaying the Action tab for your users on the ScrewDrivers Endpoint Printing Preferences dialog box. The Action tab contains options for tying executables to ScrewDrivers Endpoint print functions on the ScrewDrivers Endpoint Session Agent or client. If you are displaying the Action tab, then you must also specify the client availability—Deny, Force, or Suggest—for each option on the tab. See [Figure 1-6 on page 21](#).



Although the Action feature is not commonly used, it is beneficial for environments in which users carry out repetitious tasks after printing.

Figure 1-6: ScrewDrivers Endpoint app, Printer Configuration tab, Action sub-tab



Option	Description
Enable action settings	If turned on, then the Action tab is displayed for your users on the ScrewDrivers Endpoint Printing Preferences dialog box.
Action	
Launch Session Process	If turned on, indicates whether the Action function is to be Denied, Forced, or Suggested by the Session Agent.
Path	If turned on, you must specify the full directory path to the app.
Arguments	If turned on, you must specify the arguments and switches that are to be sent to the specified app.
Open Session Export	If turned on, then any PDF or BMP file that the Session Agent has saved through the Export function is automatically opened.
Launch Client Process	If turned on, indicates whether the Action function is to be Denied, Forced, or Suggested by the ScrewDrivers Endpoint client.
Path	If turned on, you must specify the full directory path to the app.
Arguments	If turned on, you must specify the arguments and switches that are to be sent to the specified app.

Option	Description
Open Client Export	If turned on, then any PDF or BMP file that the ScrewDrivers Endpoint client has saved through the Export function is automatically opened.

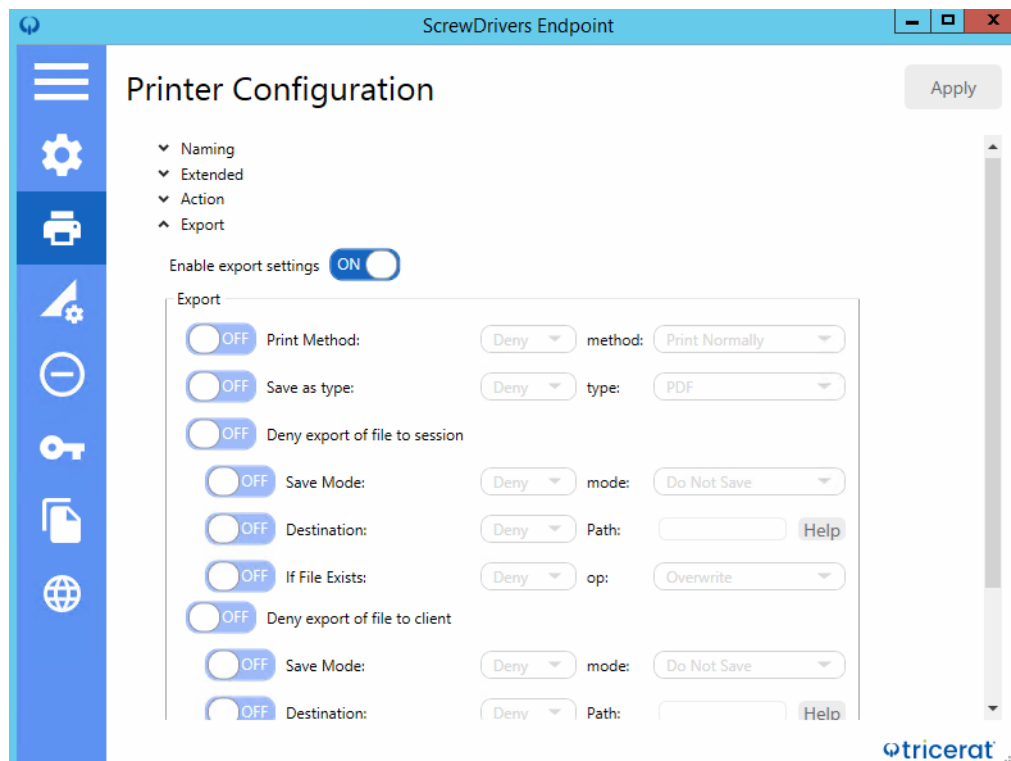
Printer Configuration tab, Export sub-tab

The Export sub-tab on the Printer Configuration tab contains an option for displaying the Export tab for your users on the ScrewDrivers Endpoint Printing Preferences dialog box. The Export tab also contains options for the specifying the following:

- The format (PDF or BMP) in which users can save a file on the Session Agent machine or client.
- The directory in which to save the file.
- The actions to take if the file is not a new file, but already exists on the local machine or client (Overwrite, Prompt, Cancel, or Append).

If you are displaying the Export tab, then you must also specify the client availability—Deny, Force, or Suggest—for each option on the tab.

Figure 1-7: ScrewDrivers Endpoint app, Printer Configuration tab, Export sub-tab



Option	Description
Enable export settings	If turned on, then the Export tab is displayed for your users on the ScrewDrivers Endpoint Printing Preferences dialog box.

Option	Description
Export	
Print Method	<p>If turned on, determines whether the file is printed or exported (saved) to a selected format.</p> <ul style="list-style-type: none"> Print Normally: The file is physically printed from the selected printer. Export to File: The user can save on the Session Agent machine or client in one of two allowed formats (PDF or BMP).
Save as type	The two file formats in which a user can save a file on the Session Agent machine: PDF or BMP.
Deny export of file to session	If turned on, then a user cannot save a file on the Session Agent machine.
Save Mode	<ul style="list-style-type: none"> Do not Save: If selected, then a user cannot save a file on the Session Agent machine. Display Save Dialog: If selected, then a Save File message opens when a user saves a file on the Session Agent machine. Use Input Pathname: If selected, then you must specify a Destination (the directory) in which users can save the file on the Session Agent machine.
Destination	Applicable if Use Input Pathname is selected for Save Mode. Makes the path text field available. You must enter either the full directory path for saving the file on the Session Agent machine, or you can enter the name of an existing file (filename.pdf or filename.bmp) on the Session Agent machine.
If File Exists	<p>Applicable if Save Mode is Use Input Pathname and the file that is being saved already exists on the Session Agent machine.</p> <ul style="list-style-type: none"> Overwrite: Automatically overwrite the existing file with the new file. Prompt: Prompt the user to overwrite the existing file, or take other actions. Cancel: Cancel the saving of the file. The existing file remains unchanged and no new file is saved. Append: Add the new file to the end of the existing file. A single file is produced that contains both the existing (old) content and the new content.
Deny export of file to client	If turned on, users cannot save a file on the ScrewDrivers Endpoint client.
Save Mode	<ul style="list-style-type: none"> Do not Save: If selected, then a user cannot save the file on the ScrewDrivers Endpoint client. Display Save Dialog: If selected, then a Save File message opens when a user saves a file on the ScrewDrivers Endpoint client. If selected, then you must specify a Destination (the directory) in which users can save the file on the ScrewDrivers Endpoint client.
Destination	Applicable if Use Input Pathname is selected for Save Mode. Makes the path text field available. You must enter either the full directory path for saving the file on the ScrewDrivers Endpoint client, or you can enter the name of an existing file on the ScrewDrivers Endpoint client (filename.pdf or filename.bmp).

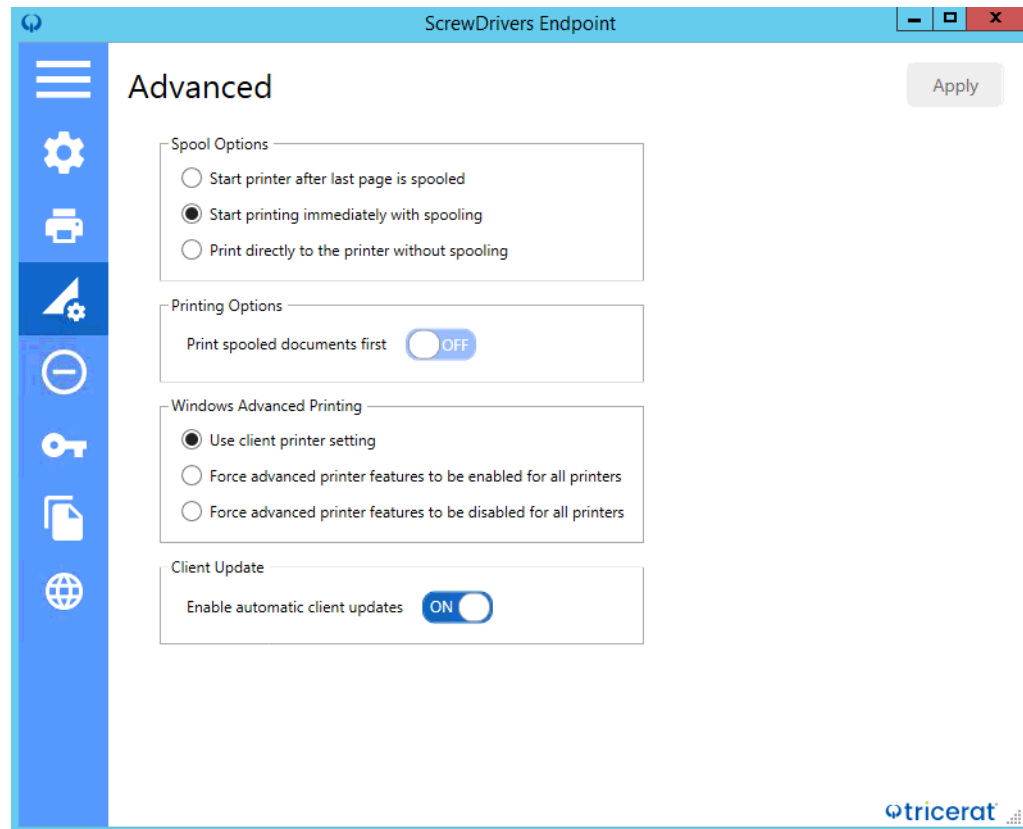
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Option	Description
Dest. Option	<p>If turned on, then the saved file is automatically generated without any user input.</p> <p>Autogenerate Filename: Available if Dest. Option set to Force or Suggest. If turned on, then the saved file, including its name, is generated without any user input.</p>
If File Exists	<p>Applicable if Save Mode is Use Input Pathname and the file that is being saved already exists on the ScrewDrivers Endpoint client.</p> <ul style="list-style-type: none">• Overwrite: Automatically overwrite the existing file with the new file.• Prompt: Prompt the user to overwrite the existing file, or take other actions.• Cancel: Cancel the saving of the file. The existing file remains unchanged and no new file is saved.• Append: Add the new file to the end of the existing file. A single file is produced that contains both the existing (old) content and the new content.

Advanced Tab

The Advanced tab on the ScrewDrivers Endpoint Session Agent app contains options for optimizing printing.

Figure 1-8: *ScrewDrivers Endpoint app, Advanced tab*



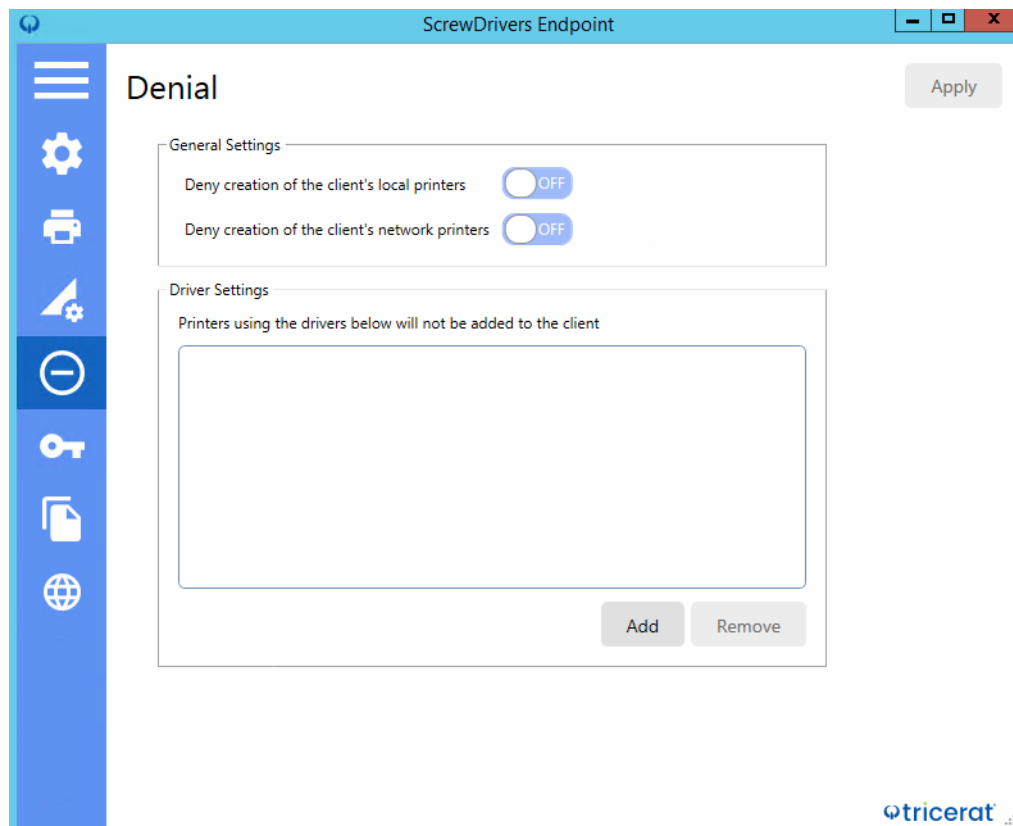
Option	Description
Spool Options - You can select only a single spool option at a time.	
Note: For the first two spool options that are detailed below, Windows spools the printed documents to a specified spool directory on the print server, where they are then despoiled to the printer.	
<ul style="list-style-type: none"> Start printer after last page is spooled 	<ul style="list-style-type: none"> If selected, then a print job must be completely spooled before it is sent to the client printer.
<ul style="list-style-type: none"> Start printing immediately with spooling 	<ul style="list-style-type: none"> Selected by default. The print job is despoiled to the printer immediately after queuing of the job is started. This is the preferred spool option as it provides both a quick return of app control to the user and the fastest printing of documents.

Option	Description
<ul style="list-style-type: none"> Print directly to the printer 	<ul style="list-style-type: none"> If selected, then Windows sends the documents directly to the printer instead of queuing them to the spool directory. If the spooling computer is low on disk space, or if you have an especially large print job to spool, it might be better to print directly to the printer.
Printing Options	
Print spooled documents first	<p>If turned on, then the Windows print spooler prints the documents that have completed spooling first, and then the documents that are still in the process of spooling. If no documents are completely spooled, then print spooler prints the documents in order of decreasing file size.</p> <p>Note: This option provides the best overall printer efficiency. If the option is disabled, then the print spooler prints the documents based on the priority of the associated printer. The priority for a printer is set on the Printers tab on the ScrewDrivers Endpoint Client app. See "Printers Tab" on page 37.</p>
Windows Advanced Printing - You can select only one advanced printing option at a time.	
<p>Note: The options in this section control EMF Spooling. For most print drivers, you should leave this setting turned on to allow for faster app return time; however, because ScrewDrivers Endpoint can use RAW data and convert it into triMetaFile (TMF) data, this option has little influence over app return time in ScrewDrivers Endpoint. In certain scenarios, if Advanced Printing Features are turned on, then conversion of data from EMF to TMF might slow down the printing, or spool the data to a large size. In these situations, disabling the Advanced Printing Features can resolve the spooling issues for ScrewDrivers Endpoint.</p>	
<ul style="list-style-type: none"> Use client printer setting 	<ul style="list-style-type: none"> Selected by default. References the client's Enable Advanced Printing setting (On or Off) for the ScrewDrivers Endpoint driver on the Session Agent machine.
<ul style="list-style-type: none"> Force advanced printer features to be turned on for all printers 	<ul style="list-style-type: none"> If selected, then the Enable Advanced Printing setting is forced on for all printers that are using the ScrewDrivers Endpoint driver on the Session Agent machine.
<ul style="list-style-type: none"> Force advanced printer features to be disabled for all printers 	<ul style="list-style-type: none"> If selected, then the Enable Advanced Printing setting is forced off for all printers that are using the ScrewDrivers Endpoint driver on the Session Agent machine.
Client Update	
Enable automatic client updates	Turned on by default. Keeps V6.1 or later clients in sync with the ScrewDrivers Endpoint version that is installed on the Session Agent machine.

Denial Tab

The Denial tab on the ScrewDrivers Endpoint app contains options for specifying which client printers the Session Agent is not to automatically build (printers are denied) when a user logs in. You can deny all local printers or all network printers for the client in a single step, or you can deny printers on a per driver basis.

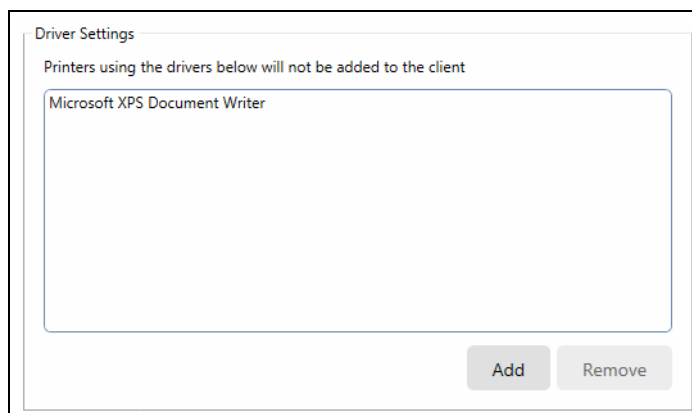
Figure 1-9: *ScrewDrivers Endpoint app, Denial tab*



Option	Description
General Settings	
Deny creation of the client's local printers	If turned on, then prevents the Session Agent from automatically building all locally attached printers when a user logs in.
Deny creation of the client's network printers	If turned on, then prevents the Session Agent from automatically building all network printers when a user logs in.

Option	Description
Driver Settings	<p>To prevent the Session Agent from automatically building printers on a per print driver basis after a user logs in, then do the following:</p> <ol style="list-style-type: none">1. Click Add. A new line with the placeholder entry of Denied Driver is displayed in the Driver Settings field.2. Double-click the placeholder entry to place it in editing mode, and then enter the name of the driver for the client printer. The denied drivers are displayed in a list below the Driver Settings field. For example, entering Microsoft XPS Document Writer prevents the Session Agent from automatically building any printer that uses this driver when a user logs in. To remove a client driver from the Denied list, select the driver entry in the list, and then click Remove. See Figure 1-10 below.

Figure 1-10: Denied client printers on a per driver basis



The screenshot shows a window titled "Driver Settings". Inside, there is a text area at the top with the instruction "Printers using the drivers below will not be added to the client". Below this is a list box containing the text "Microsoft XPS Document Writer". At the bottom right of the window are two buttons: "Add" and "Remove".

Licensing Configuration Tab

The Licensing Configuration tab on the ScrewDrivers Endpoint app displays information about the license that the ScrewDrivers Endpoint Session Agent is currently using, including, if applicable, the expiration date. If the Session Agent is using a trial license, and you purchase a license, then you can enter the activation code for the purchased license in the Activation Key field. If you are using a Tricerat License Server, you can select the Network option, and then enter the requested information for the Session Agent. You can also test the connection to the Tricerat License Server from this tab.



Please refer to the Tricerat License Server Installation and Application Guide for additional details about licensing the ScrewDrivers Endpoint product.

Figure 1-11: ScrewDrivers Endpoint app, Licensing Configuration tab

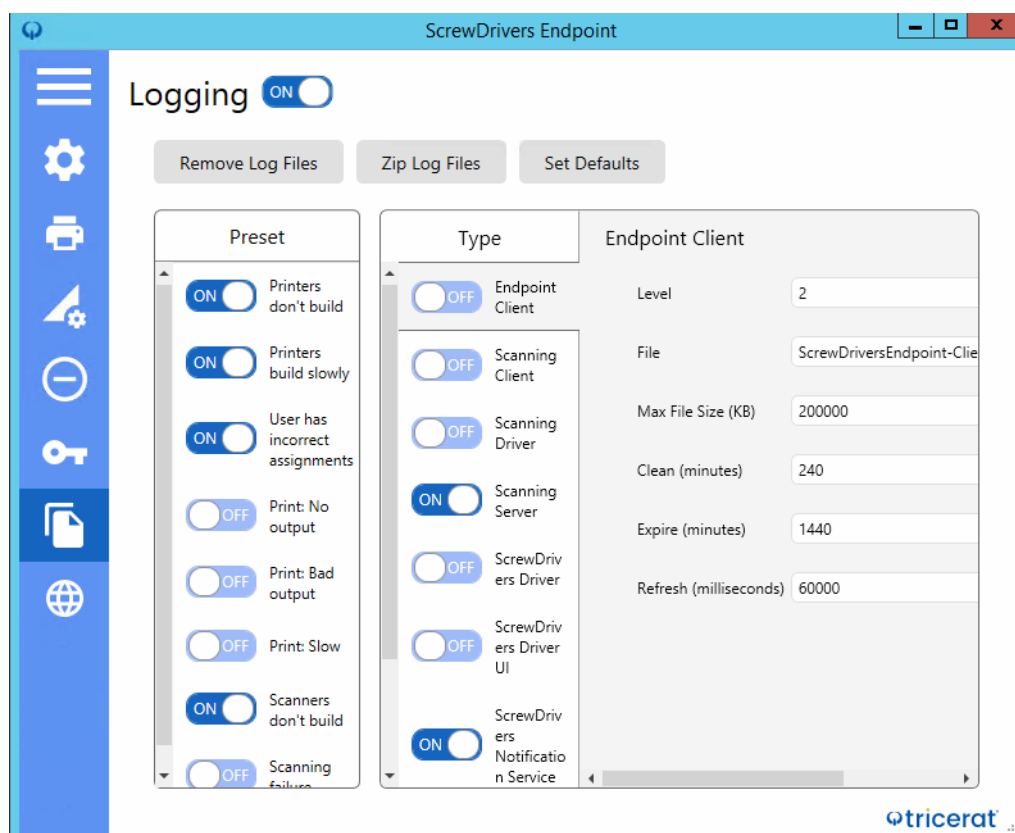
Logging Tab

The Logging tab on the ScrewDrivers Endpoint app provides options for diagnostic logging from the ScrewDrivers Endpoint Session Agent. This logging information is used for debugging or problem tracking purposes.



Because Tricerat support primarily uses this information, you should not change any of the default values or use any of the commands on this tab unless Tricerat Support instructs you to do so.

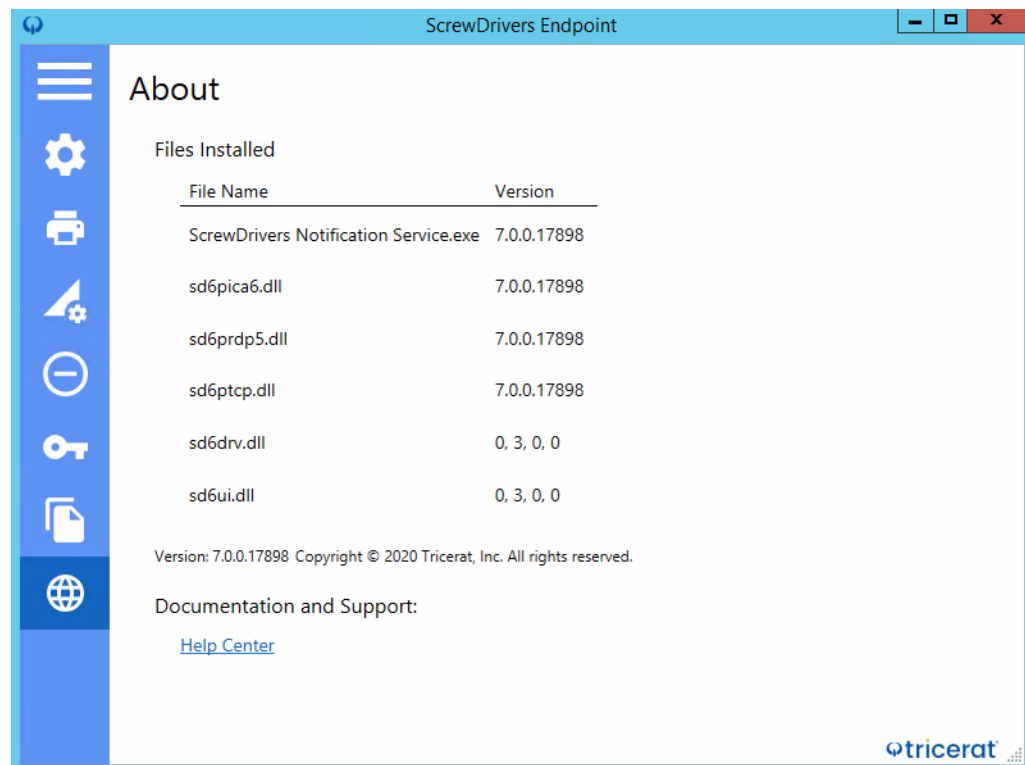
Figure 1-12: ScrewDrivers Endpoint app, Logging tab



About Tab

The About tab on the ScrewDrivers Endpoint app displays all the DLLs, alphabetically by name, that were installed for the ScrewDrivers Endpoint Session Agent. The version number for each DLL is also displayed. Hold your mouse pointer over the name of a DLL to open a tooltip that displays the full path to the installation directory for the DLL. The tab also displays a Help link for documentation and support.

Figure 1-13: ScrewDrivers Endpoint app, About tab



Chapter 1

The ScrewDrivers Endpoint Application

Chapter 2

The ScrewDrivers Endpoint Client Application

The ScrewDrivers Endpoint client does not require your users to configure their printers for a remote session. As long as the ScrewDrivers Endpoint client is installed on the connecting workstations and the ScrewDrivers Session Agent is installed on the remote machine, then the printers are built for your users. You access the settings for the ScrewDrivers Endpoint client through the ScrewDrivers Endpoint Client application (app). The app contains the settings for the defining and configuring of the client printers that are to be made available to the remote machine. This chapter details the functions that are available to you in the ScrewDrivers Endpoint Client app.



The ScrewDrivers Session Agent dictates the client settings. A client setting is applicable only if the ScrewDrivers Session Agent allows (Force or Suggest) it.

This chapter covers the following topics:

- [“Introduction” on page 35.](#)
- [“Printers Tab” on page 37.](#)
- [“General Settings Tab” on page 40.](#)
- [“Logging Tab” on page 42.](#)
- [“About Tab” on page 43.](#)


Chapter 2

The ScrewDrivers Endpoint Client Application

Introduction

The ScrewDrivers Endpoint client is installed on every client workstation that your users are using to log in to the remote machine. You access the settings ScrewDrivers Endpoint client through the ScrewDrivers Endpoint Client app. The app contains the settings for the defining and configuring of the client printers that are to be made available to the remote machine. To open the ScrewDrivers Endpoint Client app, do the following:

Open the Start menu, and then under Programs, click ScrewDrivers Endpoint Client.

 Although you do not need to provide your users access to the ScrewDrivers Endpoint Client app, this access can be very helpful for your power users that connect to multiple environments.


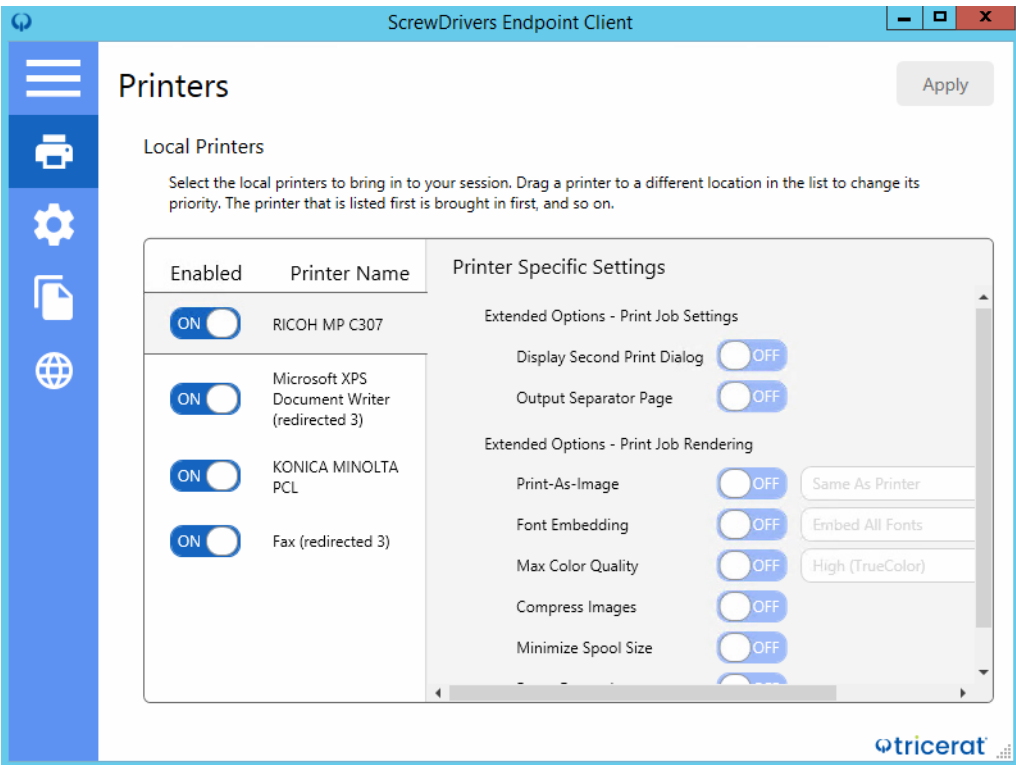
 You can automate the configuration for your users by deploying registry settings to their clients that mimic the settings that are available in the ScrewDrivers Endpoint Client app. Contact support@tricerat.com for more information and assistance.





Figure 2-1: ScrewDrivers Endpoint Client app



Chapter 2

The ScrewDrivers Endpoint Client Application

The ScrewDrivers Endpoint Client app has four tabs for managing your client functions. Each tab is represented by an icon on a Tab bar that is displayed on the left side of the main window. Click an icon to view the corresponding tab.

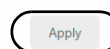
Tab	Description
Tip: When the ScrewDrivers Endpoint Client app first opens, the Tab bar is collapsed. You can hold your cursor over an icon on the Tab bar to display a tooltip that shows the name of the corresponding tab, or you can click the Hamburger icon to expand the Tab bar and view the complete name of each tab.	
	Printers tab - Contains options for the configuration of the printers in your users' environments. See "Printers Tab" on page 37 .
	General Settings tab - Contains options for configuring your users' remote sessions and options for specifying the printer data cache method. See "General Settings Tab" on page 40 .
	Logging tab - Provides options for diagnostic logging from the ScrewDrivers Endpoint Client. See "Logging Tab" on page 42 .
	About tab - Provides information about the ScrewDrivers Endpoint client. See "About Tab" on page 43 .

With the exception of the About tab, all the tabs have the following features in common:

- After you make a change to any value on any tab, you must click Apply (displayed in the top right corner of the app) to save the change. All current values on all tabs are saved when you click Apply. You cannot save changes on a per tab basis.

Figure 2-2: Apply button

General Settings



- After you have made and applied all the needed changes for your ScrewDrivers Endpoint client, click Close (x) in the upper right corner of the app to close and exit out of the app.

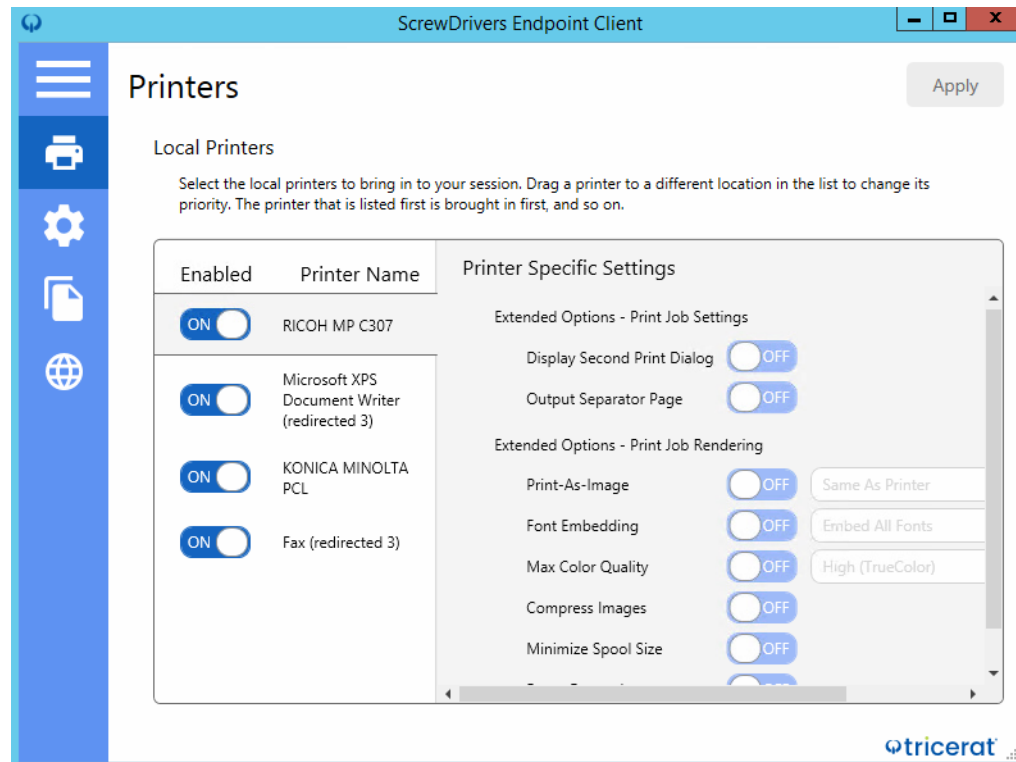


If you make any changes to the client settings on a tab, and do not immediately apply these changes, then you are prompted to do so before opening another tab or exiting the app.

Printers Tab

When the ScrewDrivers Endpoint Client app first opens, the Printers tab is the open tab. The tab contains options for the configuration of the client printers in your users' environments.

Figure 2-3: *ScrewDrivers Endpoint Client app, Printers tab*



The Printers tab displays a list of all the printers (locally attached and network) that are available for the client workstation and turned on on the remote machine. The list is arranged in order of decreasing printer priority. To change the priority of a printer, click and drag the printer to a different location in the list. You can also turn on and turn off the availability of a printer, regardless of its priority. If a printer is turned on, then after a user logs in to a remote session, the Session Agent makes the printer available to the user during the session.

Chapter 2

The ScrewDrivers Endpoint Client Application

You can apply printer-specific settings to each printer on the Printers tab. To apply any of the following printer-specific settings to a printer, select the printer, and then enable or disable the settings as appropriate.

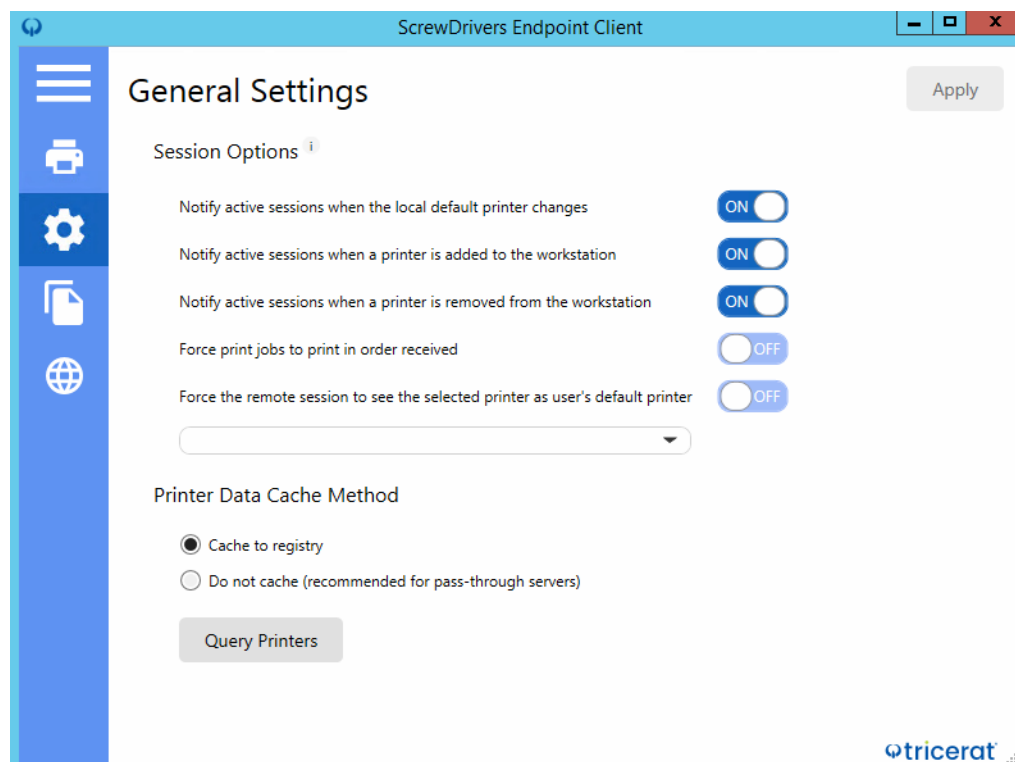
Option	Description
Extended Options - Print Job Settings	
Display Second Print Dialog	The second print dialog box is the Client Print Spooler dialog box, and by default, this dialog box is not displayed. If turned on, then this dialog box is displayed when a print job begins to spool on the client, and your users can carry out advanced printing functions such as stapling, booklet printing, hole punching, and so on.
Output Separator Page	If turned on, then an additional page that contains information about the print job, such as the name of the user who submitted the job, is printed.
Extend Options - Print Job Rendering: Enable these options to implement workarounds when your users encounter printing issues related to font, scaling, and/or graphics.	
Print-As-Image	<p>If turned on, then ScrewDrivers Endpoint converts each page of the print job to a BMP.</p> <p>Note: Although enabling this option can resolve output issues such as font issues, uncompressed printing can also use a significant amount of bandwidth.</p> <p>Caution: Do not automatically choose the default DPI as the DPI for a job. Because each doubling of DPI results in four times the amount of data that is sent, select the lowest possible DPI that results in acceptable output. Typically, 300DPI is sufficient.</p>
Font Embedding	<p>If turned on, ScrewDrivers Endpoint embeds a temporary copy of the font or font data in the print jobs.</p> <ul style="list-style-type: none"> • Embed All Fonts - The default setting. If turned on, and the fonts that are used in the print job are not available on the client, then ScrewDrivers Endpoint sends a temporary copy of each font to the client with the print job. After the print job is complete, then ScrewDrivers Endpoint removes the temporary copies from the client. • Pre-Render Embedded - If turned on, and the fonts that are used in the print job are not available on the client, then ScrewDrivers Endpoint sends these fonts as images to the client, and then integrates the corresponding text back into the job file. • Pre-Render All - If turned on, then ScrewDrivers Endpoint sends <i>all</i> fonts as images to the client (it does not matter whether the font is available on the client or not), and then integrates the corresponding text back into the job file. <p>Note: Typically, you select Pre-Render All only when Tricerat support directs you to do so. This option is useful for situations in which the client's fonts are unreliable or incomplete, or there are font mismatches between the ScrewDrivers Session Agent and client.</p>

Option	Description
Max Color Quality	<p>If turned on, then, by default, ScrewDrivers Endpoint renders images in High (TrueColor), which is 24-bit. You can select a different default value:</p> <ul style="list-style-type: none"> • Medium (HighColor), which is 16-bit • Low, which is 8-bit. • Monochrome, which is 1-bit. (True black and white). <p>Note: If you lower the color quality, then the document spool size is reduced; however, the quality of the output is affected. The difference between 24-bit and 16-bit is negligible, but the difference becomes more pronounced as you continue to lower the color quality.</p>
Compress Images	If turned on, then a lossy compression algorithm is carried out for images in the document for additional reduction in spool size.
Minimize spool	Turned on by default. Breaks large images up into multiple smaller images, which allows data to be streamed to the printer faster and also allows the printer to discard the “data chunks” as they are rendered, resulting in less memory in use at any given time.
Force Grayscale	If turned on, then all images in the document are converted to grayscale, which is 8-bit gray and reduces file size.

General Settings Tab

The General Settings tab on the ScrewDrivers Endpoint Client app contains options for configuring your users' remote sessions and options for specifying the printer data cache method.

Figure 2-4: ScrewDrivers Endpoint Client app, General Settings tab



Option	Description
Session Options - Use only if Terminal Server allows.	
Notify active sessions when the local default printer changes	If turned on, then a notification is sent to the remote machine anytime any information about the default printer changes during a remote session, including if another printer is set as the default printer on the client workstation.
Notify active sessions when a printer is added to the workstation	If turned on, then a notification is sent to the remote machine when any new printer is added to the client workstation during a remote session.
Notify active sessions when a printer is removed from the workstation	If turned on, then a notification is sent to the remote machine when any printer is removed from the client workstation during a remote session.
Force print jobs to print in order received	If turned on, then the local print spool is forced to process print jobs in the order in which they were received, instead of printing the spooled documents first.

Option	Description
Force the remote session to see the selected printer as user's default printer	If turned on, then a dropdown list opens that displays all the available printers for the client workstation. Select the appropriate printer on this list that is to be the default printer during the remote session instead of the printer that is set as the default printer on the client workstation.
Printer Data Cache Method	
Cache to registry	If selected, then the printer data is stored in the client workstation registry, and is sent to the remote machine after a user logs in to the workstation.
Do not cache (recommended for pass-through servers)	Selected by default. Printer data is not cached. Instead, ScrewDrivers Endpoint queries the printers at log in. Note: If this option is selected, then slower printer creation is the result; however, this option is recommended for pass through servers, for example, when users nest multiple remote sessions.
Query Printers	Click to query all enabled printers and save to the registry.

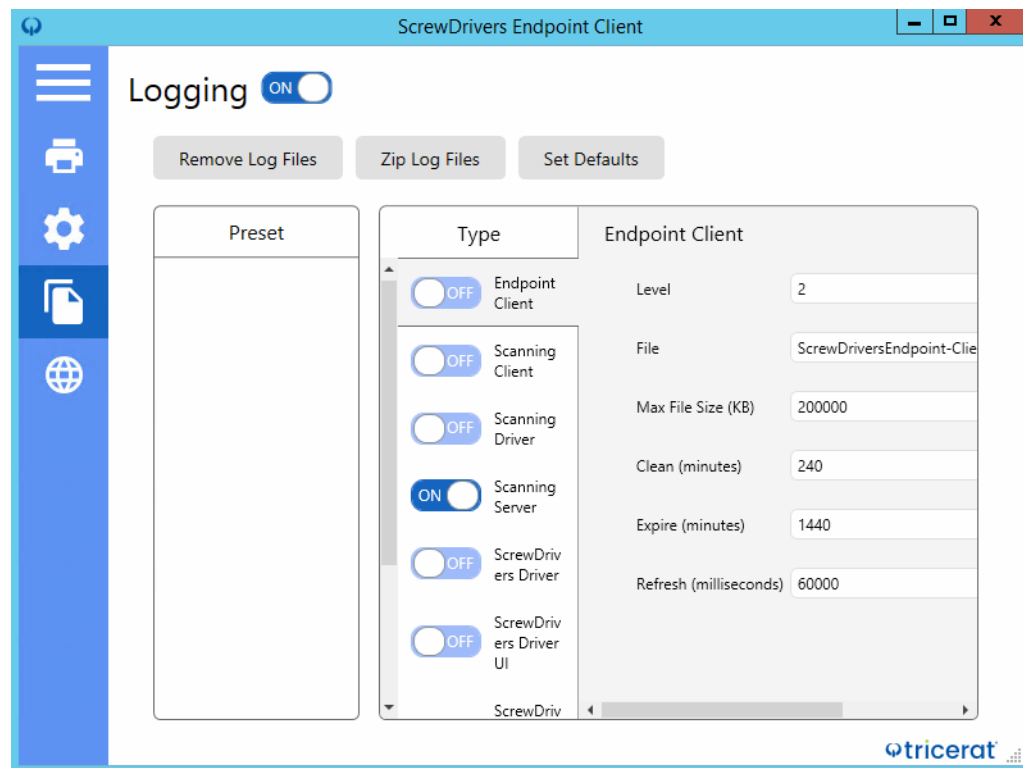
Logging Tab

The Logging tab on the ScrewDrivers Endpoint Client app provides options for diagnostic logging from a ScrewDrivers Endpoint client workstation. This logging information is used for debugging or problem tracking purposes.



Because Tricerat support primarily uses this information, you should not change any of the default values or use any of the commands on this tab unless Tricerat Support instructs you to do so.

Figure 2-5: ScrewDrivers Endpoint Client app, Logging tab



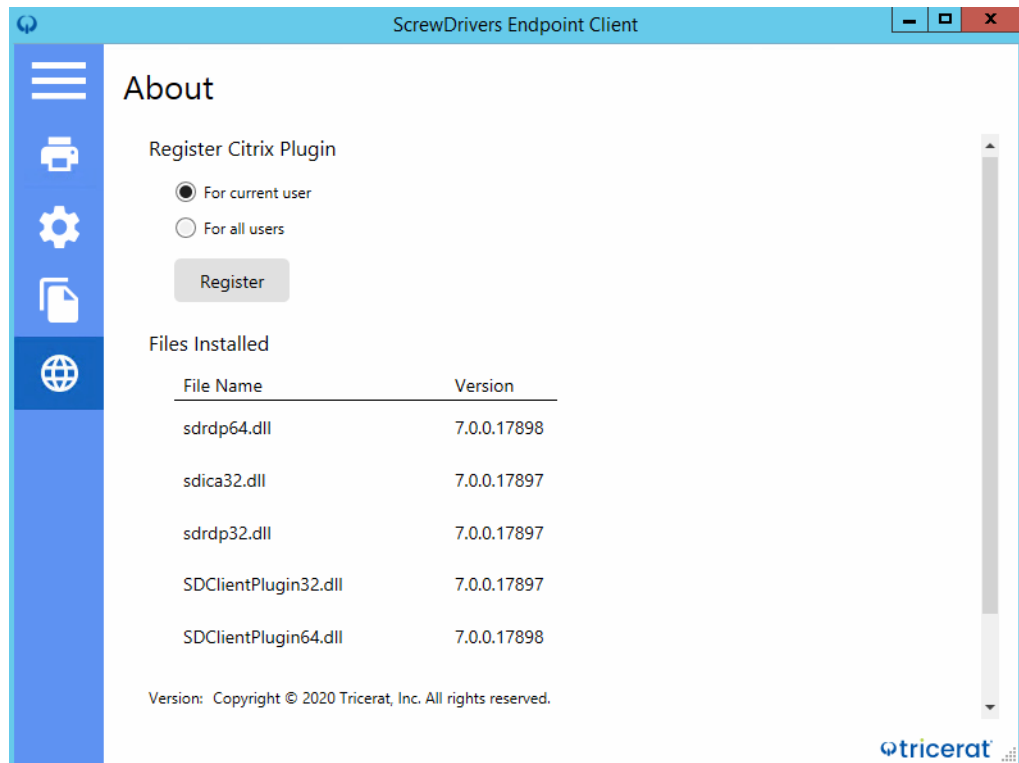
About Tab

The About tab on the ScrewDrivers Endpoint Client app contains an option for registering Tricerat's Citrix plugin, either for the currently logged in user, or for all users.* The tab also displays all the dlls, alphabetically by name, that were installed for the ScrewDrivers Endpoint client. The version number for each dll is also displayed. Hold your mouse pointer over the name of a dll to open a tooltip that displays the full path to the installation directory for the dll. The tab also displays a Help link for documentation and support.



**If you must re-register the Citrix plugin, then generally, the “For all users” option is the better selection as the typical end user does not have the correct permissions to execute this action.*

Figure 2-6: ScrewDrivers Endpoint Client app, About tab



Chapter 2

The ScrewDrivers Endpoint Client Application

Chapter 3

The ScrewDrivers Scanning Application

You access the configuration settings for the ScrewDrivers Session Agent for ScrewDrivers Scanning through an application (app) that allows for the detailed configuration and administration of your users' scanning environments. This chapter details the configuration settings and functions that are available in the ScrewDrivers Scanning Session Agent app.

This chapter covers the following topics:

- [“Introduction” on page 47.](#)
- [“Scanning Settings Tab” on page 49.](#)
- [“Profiles Tab” on page 52.](#)
- [“Users Tab” on page 55.](#)
- [“Logging Tab” on page 57.](#)
- [“Licensing Configuration Tab” on page 58.](#)
- [“About Tab” on page 59.](#)

Chapter 3

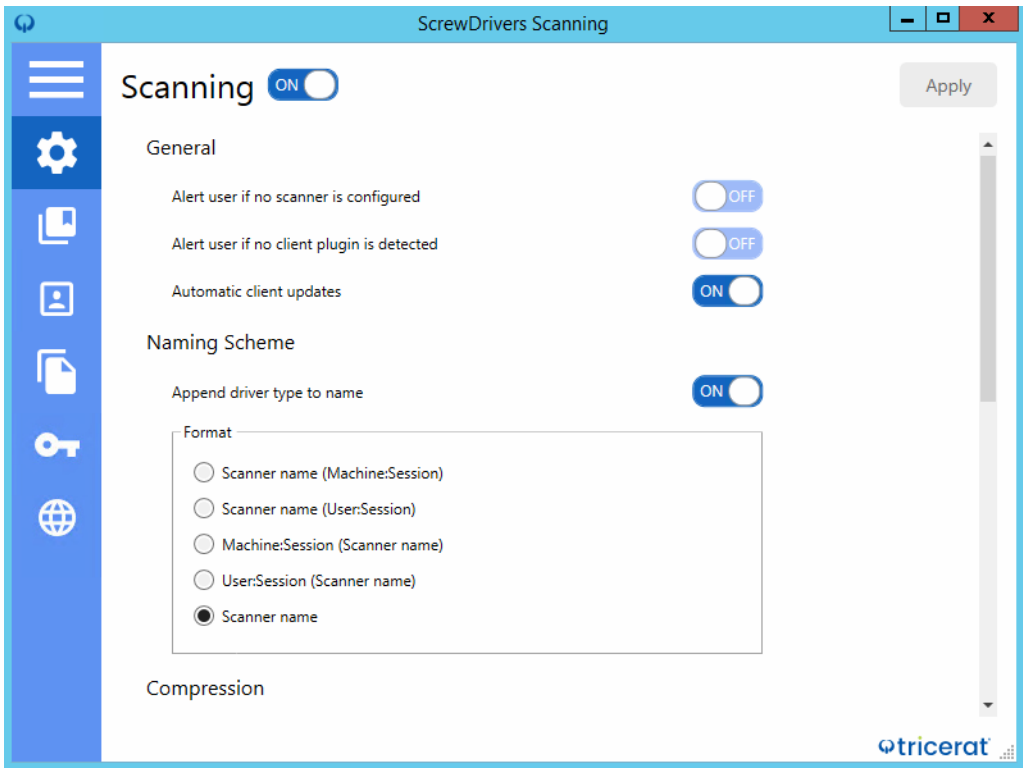
The ScrewDrivers Scanning Application

Introduction

The ScrewDrivers Scanning Session Agent is installed on the machine that your users are logging in to remotely. You access the configuration settings for the ScrewDrivers ScanningSession Agent through the ScrewDrivers Scanning application (app). The app contains the settings for the detailed configuration of your ScrewDrivers Scanning objects and scanning environments. To open the ScrewDrivers Scanning app:

Open the Start menu, and then under Programs, click ScrewDrivers Scanning.

Figure 3-1: ScrewDrivers Scanning app








The ScrewDrivers Scanning app has six tabs for managing your Session Agent configuration and functions. Each tab is represented by an icon on a Tab bar that is displayed on the left side of the console. Click an icon to view the corresponding tab.

Tab	Description
Tip: When the ScrewDrivers Scanning app first opens, the Tab bar is collapsed. You can hold your cursor over an icon on the Tab bar to display a tooltip that shows the name of the corresponding tab, or you can click the Hamburger icon to expand the Tab bar and view the complete name of each tab.	
	Scanning Settings tab - Contains options for specifying the settings for your users' remote scanning sessions. See "Scanning Settings Tab" on page 49 .

Chapter 3

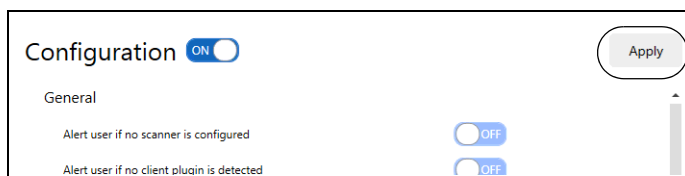
The ScrewDrivers Scanning Application

Tab	Description
	Profiles tab - Contains specific scanning settings, known as a scan profile, that can be applied to a client scanner. See “Profiles Tab” on page 52 .
	Users tab - A read-only tab that displays all the users, by name, who have configured scanners on the Session Agent. See “Users Tab” on page 55 .
	Logging tab - Provides options for diagnostic logging from the ScrewDrivers Scanning Session Agent. See “Logging Tab” on page 57 .
	Licensing Configuration tab - Displays information about the license that the ScrewDrivers Scanning Session Agent is currently using, including, if applicable, the expiration date. See “Licensing Configuration Tab” on page 58 .
	About tab - Provides information about the ScrewDrivers Scanning Session Agent. See “About Tab” on page 59 .

With the exception of the About tab, all the tabs have the following features in common:

- After you make a change to any value on a tab, then you must click Apply (displayed in the top right corner of the app) to save the change. All current values on all tabs are saved when you click Apply. You cannot save changes on a per tab basis.

Figure 3-2: Apply button



- After you have made and applied all the needed changes for your ScrewDrivers Scanning Session Agent settings, click Close (x) in the upper right corner of the app to close and exit out of the app.

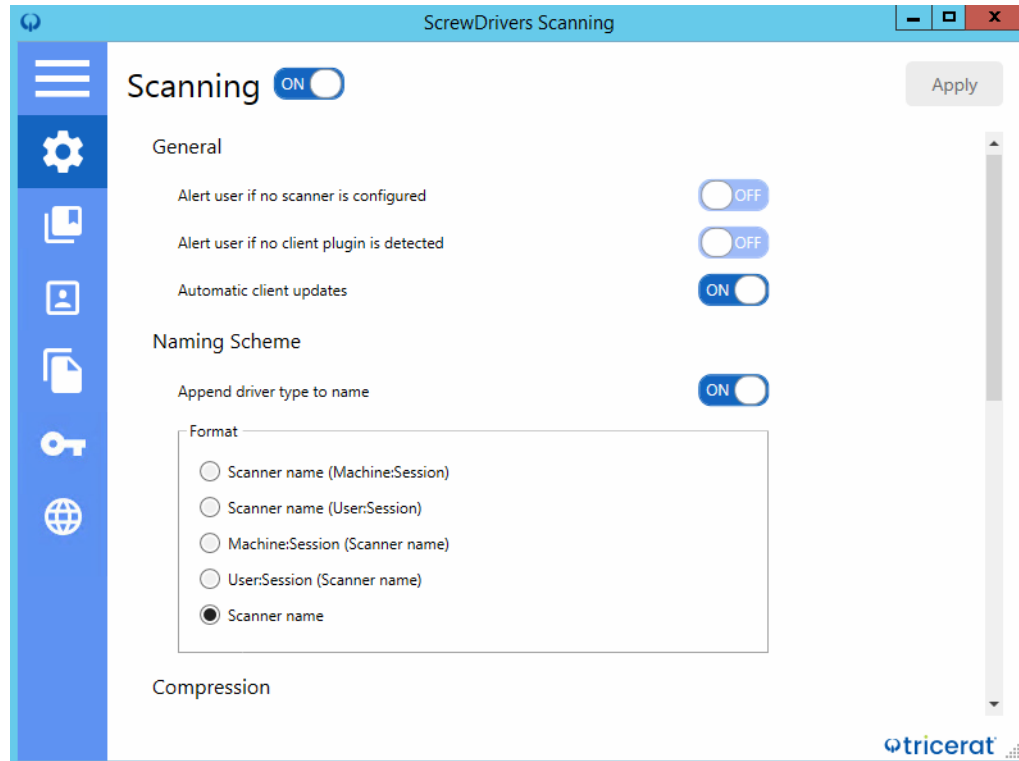


If you make any changes to the Session Agent settings on a tab, and do not immediately apply these changes, then you are prompted to do so before opening another tab or exiting the app.

Scanning Settings Tab

When the ScrewDrivers Scanning app first opens, the Scanning Settings tab is the open tab. The tab contains options for specifying the settings for your users' remote scanning sessions.

Figure 3-3: *ScrewDrivers Scanning app, Scanning Settings tab*



Option	Description
Scanning	By default, Scanning is turned on for the Session Agent. If you turn off Scanning, then all users are prevented from scanning on the remote machine.
General	
Alert user if no scanner is configured	If turned on, then a notification is displayed if no scanner is configured for the user's client.
Alert user if no client plugin is detected	If turned on, then a notification is displayed if the ScrewDrivers Scanning client software is not installed on the user's client.

Chapter 3
The ScrewDrivers Scanning Application

Option	Description
Automatic client updates	<p>If turned on, then ensures that the software versions that are running on the ScrewDrivers Scanning remote machine and a ScrewDrivers Scanning client are always in sync. If the ScrewDrivers Scanning Session Agent detects that any client that connects to the remote machine is running a version of the software that is different than what it is currently running on the remote machine, then the Session Agent automatically carries out an upgrade or downgrade as necessary to synchronize the versions between the remote machine and the client. (Upgrades are typically more common than downgrades).</p> <p>Note: The plugins that the Session Agent has downloaded are displayed on a per client basis on the About tab of the ScrewDrivers Scanning Client app. See "About Tab" on page 71.</p>
Naming Scheme - Indicates how the names of the scanners that are available to the user are displayed. Five options are available. You can select only one option at a time.	
Append driver type to name	Turned on by default. This option applies for any naming scheme that you select.
• Scanner Name (Machine:Session)	
• Scanner Name (User:Session)	
• Machine:Session (Scanner Name)	
• User:Session (Scanner Name)	
• Scanner Name	The default value.
Compression	
General compression	Turned on by default. Results in compression of all non-image data.
Image data compression	<p>Turned on by default. Results in image data compression.</p> <p>Note: This option has no effect on any image attribute. It simply ensures that the image data is compressed before being transferred.</p>
Priority	
<ul style="list-style-type: none"> Speed (quicker compression) Size (smallest compression) 	<ul style="list-style-type: none"> Turned on by default. Results in the running of a compression algorithm that increases the rate of image data compression but the size of the compressed data is larger than if you select Size. Select this option to enable a compression algorithm that is slower than the algorithm that is used if you select Speed, but decreases the size of the compressed image data.

Option	Description
Image Packet Size	Before the compressed image data is sent to the remote machine, it is broken into packets. This setting controls the size of these packets. The default value of 512K is appropriate for most servers; however, for ultimate network utilization, you can select a size that matches your network requirements.
User Interface	
Always display primary user interface	Some TWAIN applications might prevent the ScrewDrivers Scanning data source from displaying a user interface. Enable this option to ensure that the ScrewDrivers Scanning user interface is always displayed. Note: The preview features in the ScrewDrivers Scanning user interface make this a useful option.
Suppress secondary user interface	Enable this option to ensure that the ScrewDrivers Scanning secondary user interface is <i>not</i> displayed. Note: The secondary user interface is a progress bar that displays the progress of the image transfer.

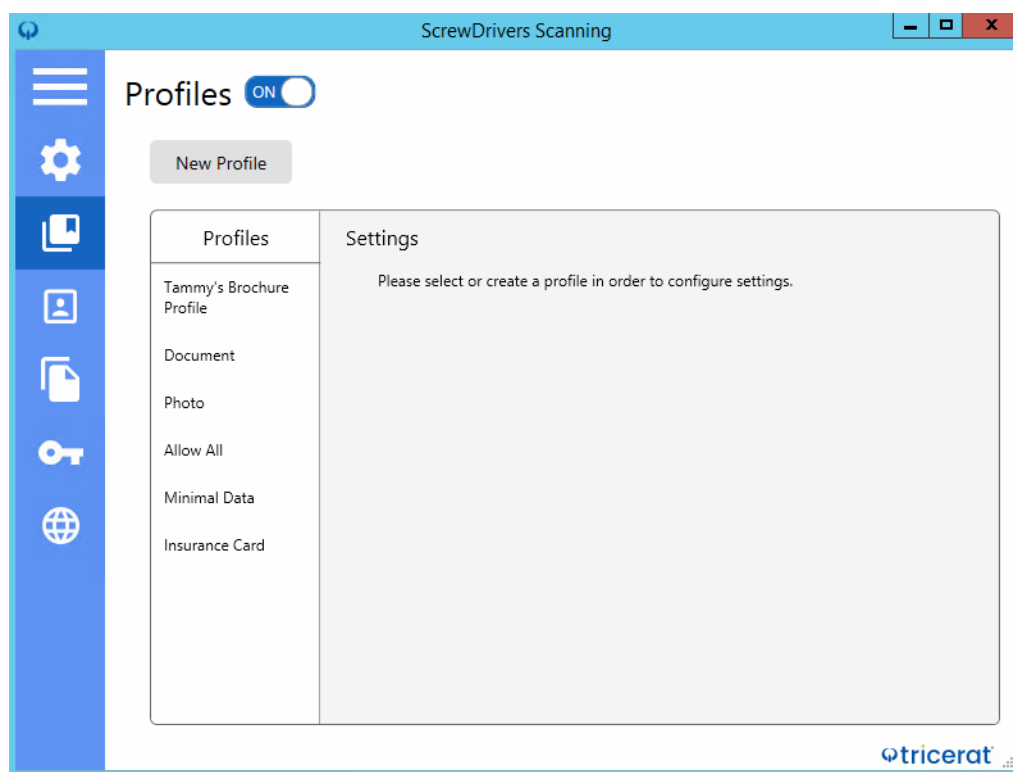
Profiles Tab

The Profiles tab on the ScrewDrivers Scanning Client app specifies scanning settings, known as a *scan profile*, that can be applied to a client scanner. A scan profile can specify up to three types of settings: the scanning DPI, the scanning color mode, and the scanning source. Because a profile forces these settings for a client scanner, a user cannot override and/or change these settings.



If scan profiles are turned on, then a user must select a profile to use for scanning.

Figure 3-4: ScrewDrivers Scanning Session Agent app, Scan Profiles tab



To define a scan profile, do the following:

1. Enable Profiles.
2. Click New Profile.

A placeholder for a new scan profile—New Scan Profile—is displayed in the Profiles pane.

3. Select the New Scan Profile placeholder.

The Settings pane is retitled New Scan Profile and the pane is updated with options for the profile, including its name.

4. Click in the Display Name field, and then enter the name for the new scan profile.

The name that you enter here is the name that is displayed to your users when they are selecting a scan profile.

5. Specify the values for the profile settings of DPI, Color Mode, and Source.

Option	Description
DPI	
Allow All	Turned on by default. All DPIs are allowed for client scanning. To set a specific DPI value, turn off Allow All, and then select one of two options: Max DPI or Selective DPI.
Max DPI	Available only if Allow All is turned off. If you turn on Max DPI, then DPIs <i>up to and including</i> the maximum amount that you specify here are allowed for client scanning.
Selective DPI	Available only if Allow All is turned off. If you turn on Selective DPI, then you must select a single value from the list of preset DPI values for client scanning.
Color Mode	
Allow All	Turned on by default. All three color modes (Color, Grayscale, and Black/White) are allowed for client scanning. To allow only specific modes, turn off Allow All, and then selectively turn on and/or turn off any of the three color mode options.
Source	
Always display primary user interface	Some TWAIN applications might prevent the ScrewDrivers Scanning data source from displaying a user interface. Enable this option to ensure that the ScrewDrivers Scanning user interface is always displayed. Note: The preview features in the ScrewDrivers Scanning user interface make this a useful option.

6. Click Save.

Optionally, you can also edit a profile, including renaming it and/or delete a profile.

- To edit a profile, select the profile, and then edit the name and/or any of the profile settings, including turning or turning off the profile, and then click Save.



If you edit a scan profile, then any jobs that were in progress before the profile was edited are completed based on the “old” settings. Going forward, the scans are completed based on the “new” settings.

Chapter 3

The ScrewDrivers Scanning Application

- To delete a profile, select the profile, and then click Delete. Click OK in the Delete Profile message that opens to confirm and complete the deletion. The profile is removed immediately from the ScrewDrivers Scanning remote machine.



If you delete a scan profile, then any jobs that were in progress before the profile was deleted are completed.

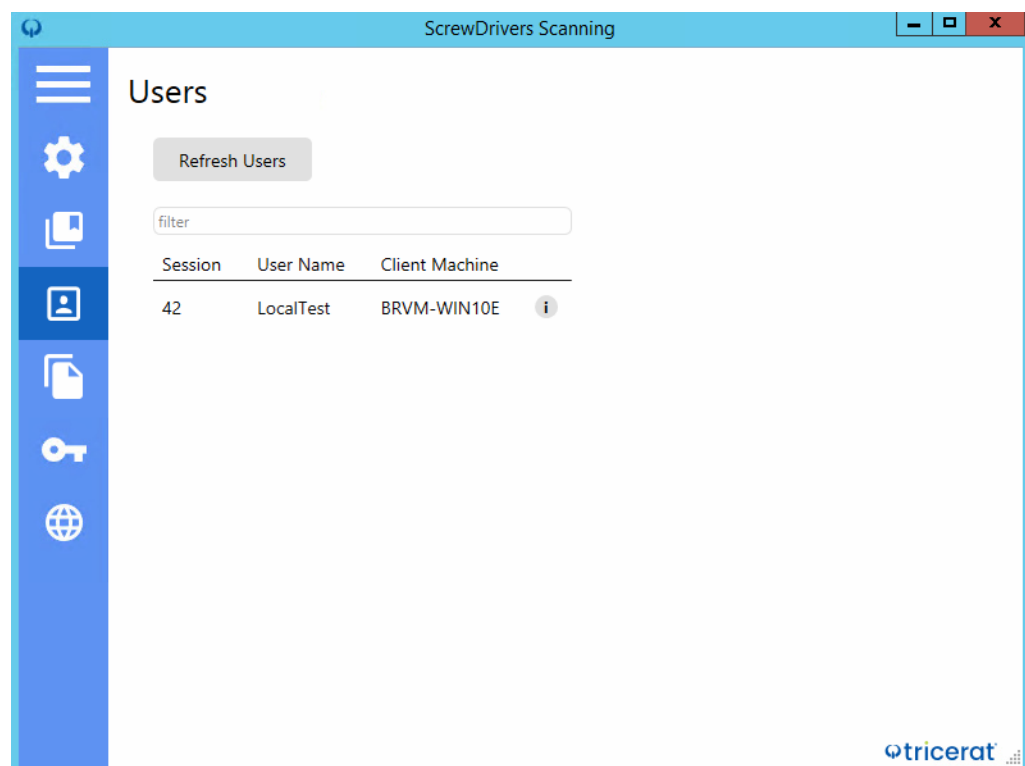
Users Tab

The Users tab on the ScrewDrivers Scanning Session Agent app is a read-only tab that displays all the users, by name, who have configured scanners on the Session Agent. The tab also displays the session information for each user, and the user's machine name.



If no users are currently logged in, then when you open the tab, the message “No users are currently logged in” is displayed.

Figure 3-5: ScrewDrivers Scanning app, Users tab



You can do the following on this tab:

- To refresh the Users list during the remote session (which users have logged in during the session and which users have logged off during the session), click Refresh Users.
- To search for a specific user, in the filter field that is displayed above the Users list, enter a search string. The string is not case-sensitive and the string can appear anywhere in the search results. As you enter the search string, the list of users that meet your search criteria is dynamically updated.

Chapter 3

The ScrewDrivers Scanning Application


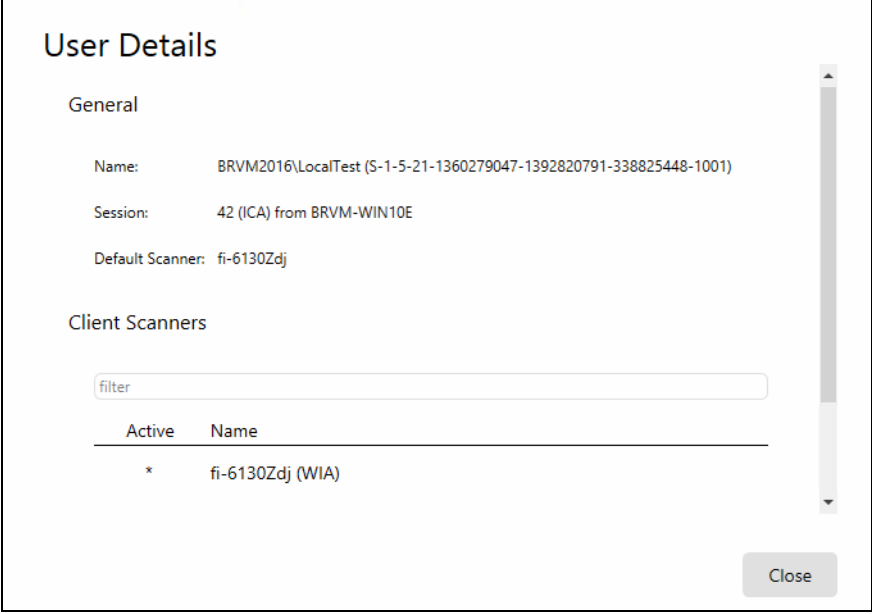
- To view details about a user, such as the user's default scanner and the user's detected scanners, click the Information icon  that is displayed next to the user's entry to open a User Details dialog box.

Figure 3-6: User Details dialog box



The User Details dialog box is a window with a title bar and a close button. It contains two sections: 'General' and 'Client Scanners'. The 'General' section displays the user's Name, Session, and Default Scanner. The 'Client Scanners' section includes a search filter field and a table of detected scanners.

Active	Name
*	fi-6130Zdj (WIA)

Close

- After you open the User Details dialog box for a selected user, you can search the list of client scanners that have been brought in to the user's remote session. In the filter field that is displayed above the list of client scanners, enter your search string. The string is not case-sensitive and the string can appear anywhere in the search results. As you enter the search string, the list of client scanners that meet your search criteria is dynamically updated.

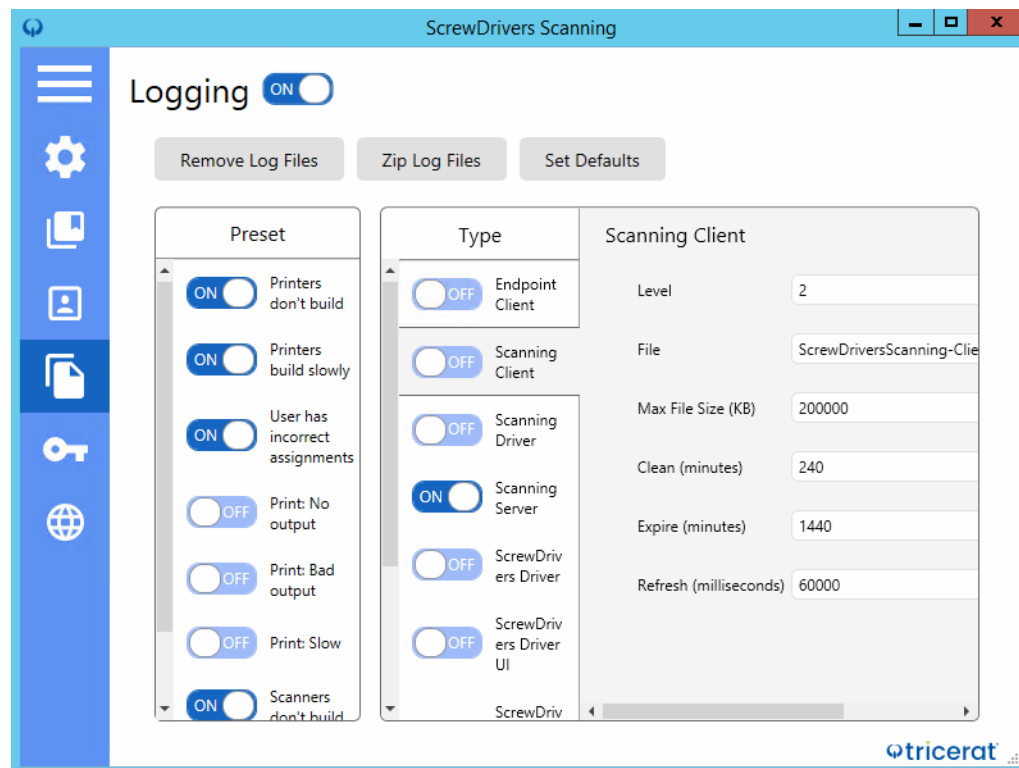
Logging Tab

The Logging tab on the ScrewDrivers Scanning app provides options for diagnostic logging from the ScrewDrivers Scanning Session Agent. This logging information is used for debugging or problem tracking purposes.



Because Tricerat support primarily uses this information, you should not change any of the default values or use any of the commands on this tab unless Tricerat Support instructs you to do so.

Figure 3-7: ScrewDrivers Scanning app, Logging tab



Licensing Configuration Tab

The Licensing Configuration tab on the ScrewDrivers Scanning app displays information about the license that the ScrewDrivers Scanning Session Agent is currently using, including, if applicable, the expiration date. If the Session Agent is using a trial license, and you purchase a license, then you can enter the activation code for the purchased license in the Activation Key field. If you are using a Tricerat License Server, you can select the Network option, and then enter the requested information for the Session Agent. You can also test the connection to the Tricerat License Server from this tab.



Please refer to the Tricerat License Server Installation and Application Guide for additional details about licensing the ScrewDrivers Scanning application.

Figure 3-8: ScrewDrivers Scanning app, Licensing Configuration tab

ScrewDrivers Scanning

Licensing Configuration

Apply

☒ Network - Single Server

IP Address/Host Name: 127.0.0.1

Port: 6200

Test Connection

☐ Node Lock

Activation Key: 4KFGR - EG5CM - ORB5G - M3Q1X

Expiration Date: N/A

Days Remaining: N/A

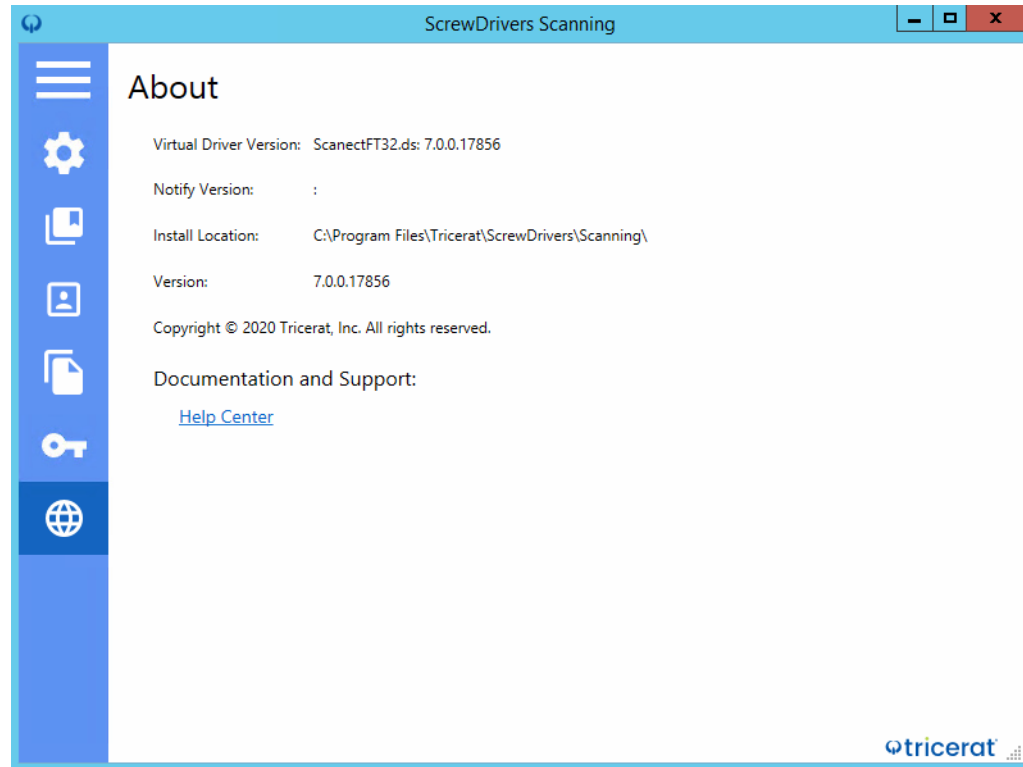
Activate Deactivate

tricerat

About Tab

The About tab on the ScrewDrivers Scanning app displays critical version information about the ScrewDrivers Scanning Session Agent software. The tab also displays a Help link for documentation and support.

Figure 3-9: ScrewDrivers Scanning Session Agent app, About tab



Option	Description
Virtual Driver Version	The version of the virtual driver that the ScrewDrivers Scanning Session Agent uses.
Notify Version	The version of the notification dlls that the ScrewDrivers Scanning Session Agent uses.
Install location	The detected installation location for the ScrewDrivers Scanning Session Agent.
Version	The version for the ScrewDrivers Scanning Session Agent software.
Note: The Virtual Driver version, the Notify version, and the ScrewDrivers Scanning version should be identical. If they are not, contact support@Tricerat .	

Chapter 3

The ScrewDrivers Scanning Application

Chapter 4

The ScrewDrivers Scanning Client Application

The ScrewDrivers Scanning client does not require your users to configure their scanners for a remote session. As long as the ScrewDrivers Scanning client is installed on the connecting workstations and the ScrewDrivers Scanning Session Agent is installed on the remote machine, then the scanners are built for your users. Your users, however, can still access the settings for the ScrewDrivers Scanning client through the ScrewDrivers Scanning application (App). The App contains the settings for the defining and configuring of the client scanners that are to be made available to the remote machine. The client supports both major scanning protocols, TWAIN and WIA, as well as a proprietary protocol, RPOS, that Tricerat has developed. This chapter details the configuration settings and functions that are available to you in the ScrewDrivers Scanning Client app.

This chapter covers the following topics:

- [“Introduction” on page 63.](#)
- [“Scanning Settings Tab” on page 65.](#)
- [“Scanners Tab” on page 67.](#)
- [“Camera Tab” on page 69.](#)
- [“Logging Tab” on page 70.](#)
- [“About Tab” on page 71.](#)

Chapter 4

The ScrewDrivers Scanning Client Application

Introduction

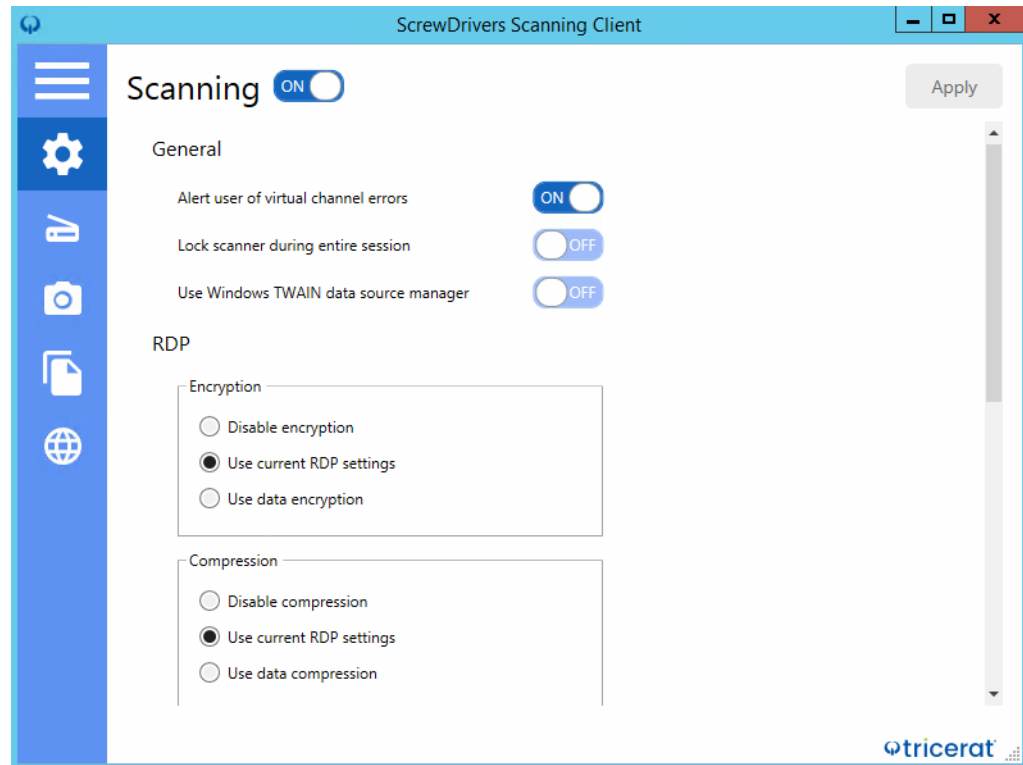
The ScrewDrivers Scanning client is installed on every client workstation that your users are using to log in to the Session Agent. You access the settings for the ScrewDrivers Scanning client through the ScrewDrivers Scanning application (app). The app contains the settings for the defining and configuring of the client scanners that are to be made available to the remote machine. To open the ScrewDrivers Scanning Client app, do the following:

Open the Start menu, and then under Programs, click ScrewDrivers Scanning Client.



Although you do not need to provide your users access to the ScrewDrivers Scanning Client App, it is a rare occurrence that the scanner that is set to the default scanner is the correct scanner, or that it even has the correct driver type. By providing your users access to the ScrewDrivers Scanning client App., then your users can test and then select the correct scanners/driver types for their sessions.






Figure 4-1: ScrewDrivers Scanning Client app



Chapter 4

The ScrewDrivers Scanning Client Application

The ScrewDrivers Scanning Client app has five tabs for managing your client functions. Each tab is represented by an icon on a Tab bar that is displayed on the left side of the main window. Click an icon to view the corresponding tab.

Tab	Description
Tip: When the ScrewDrivers Scanning Client app first opens, the Tab bar is collapsed. You can hold your cursor over an icon on the Tab bar to display a tooltip that shows the name of the corresponding tab, or you can click the Hamburger icon to expand the Tab bar and view the complete name of each tab.	
	Scanning Settings tab - Contains options for specifying the settings for a user's remote scanning session. See "Scanning Settings Tab" on page 65 .
	Scanners tab - Displays all the scanner drivers, by name, that were detected on the client or client's network. See "Scanners Tab" on page 67 .
	Camera tab - Contains the options for configuring the settings for a digital camera that a ScrewDrivers Scanning client is using. See "Camera Tab" on page 69 .
	Logging tab - Provides options for diagnostic logging from the ScrewDrivers Scanning client. See "Logging Tab" on page 70 .
	About tab - Provides information about the ScrewDrivers Scanning client. See "About Tab" on page 71 .

With the exception of the About tab, all the tabs have the following features in common:

- After you make a change to any value on any tab, you must click Apply (displayed in the top right corner of the app) to save the change. All current values on all tabs are saved when you click Apply. You cannot save changes on a per tab basis.

Figure 4-2: Apply button



- After you have made and applied all the needed changes for your ScrewDrivers Scanning client, click Close (x) in the upper right corner of the app to close and exit out of the app.



If you make any changes to the client settings on a tab, and do not immediately apply these changes, then you are prompted to do so before opening another tab or exiting the app.

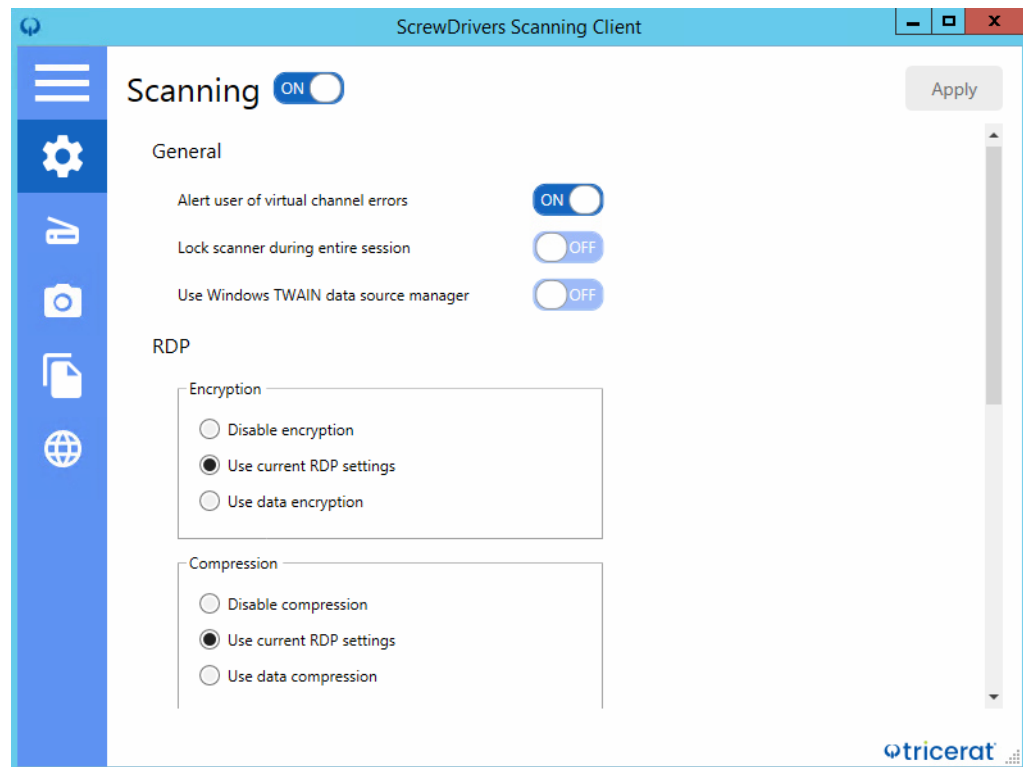
Scanning Settings Tab

When the ScrewDrivers Scanning Client app first opens, the Scanning Settings tab is the open tab. The tab contains options for configuring a user's remote scanning session.



Contact your ScrewDrivers Administrator for assistance with these settings.

Figure 4-3: ScrewDrivers Scanning Client app, Scanning tab



Option	Description
Scanning	By default, Scanning is turned on for a client. If you turn off Scanning, then all users are prevented from scanning on the client.
General	
Alert user of virtual channel errors	Turned on by default. Leave this option selected to display a notification to the user anytime an error in communication between the ScrewDrivers remote machine and client occurs.
Lock scanner during entire session	Typically, a scanner driver is locked before a scan and unlocked after a scan. Select this option to keep the scanner driver locked for the entire user session. Note: This option is useful for some network scanner drivers.
Use TWAIN data source manager (DSM)	Enable only if Tricerat support directs you to do so.

Option	Description
RDP	
Encryption - You can select only one option at a time.	
• Disable encryption	• Forces the disabling of RDP encryption.
• Use current RDP settings	• Turned on by default. Use the RDP encryption settings as specified by the ScrewDrivers Administrator.
• Use data encryption	• Forces the enabling of RDP encryption.
Compression - You can select only one option at a time.	
• Disable compression	• Forces the disabling of RDP compression..
• Use current RDP settings	• Turned on by default. Use the RDP compression settings as specified by the ScrewDrivers Administrator.
• Use data compression	• Forces the enabling of RDP compression.
Duplex	
Detect and skip blank second page	Turned on by default. During a duplex scan, use the current threshold setting to detect blank second pages. Blank second pages are not sent to the remote machine.
Threshold	Adjust the Threshold setting to set the percentage of white or black pixels that determine if a page is blank or not.
Margins	Specify the margin size for the paper. You can do one of the following: <ul style="list-style-type: none"> • Select from a pre-defined list (Narrow, Normal, or Wide). • Set a margin other than a pre-defined value. To do so, select Other, and then enter the margin values. Any data that falls outside the specified margins is not evaluated.

Scanners Tab

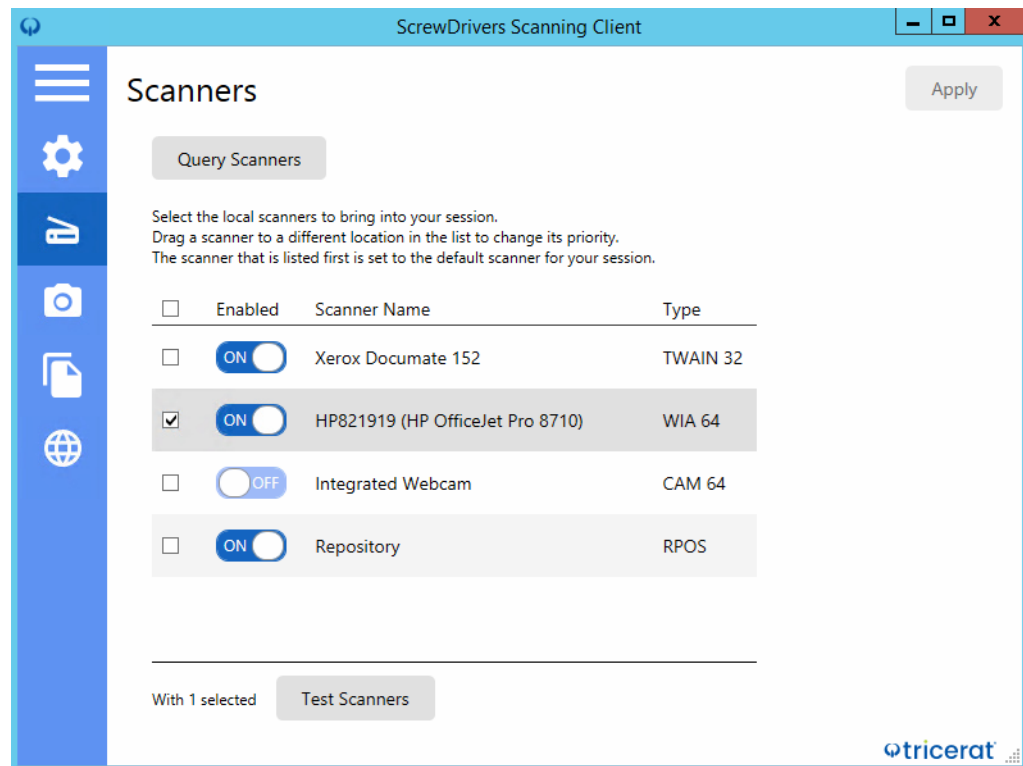
The Scanners tab on the ScrewDrivers Scanning Client app displays all the scanner drivers, by name, that were detected on your client or client's network that can be brought in to your session. The Type column for each scanner indicates the protocol, TWAIN, WIA, or CAM that the scanner uses. RPOS, which stands for Repository, is always displayed on the tab, and it is a proprietary protocol developed by Tricerat. If this protocol is selected, then you can “scan” an image that is currently stored elsewhere; for example, on an external and connected USB drive, the C: drive of the client, or a digital camera's storage location when the digital camera is connected to the ScrewDrivers Scanning client by USB and using a file browser to select the image and digitally transfer it.



Currently, the RPOS protocol supports only bitmap (.bmp) images.

The list of available scanners is displayed in decreasing priority of scanners. The first scanner that is displayed in the list of available scanners is *always* set to the default scanner for your session.

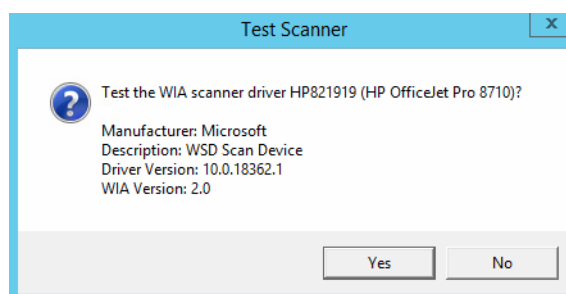
Figure 4-4: ScrewDrivers Scanning Client app, Scanners tab



You can do any or all of the following for the list of available scanners:

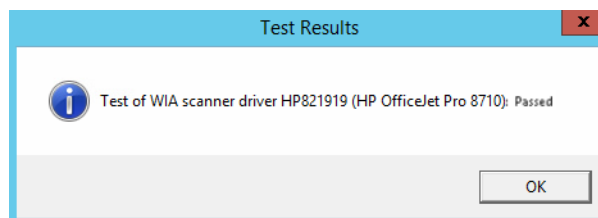
- Change the order of scanners that are displayed in the list of available scanners. Select a scanner, and then drag the scanner to a new location in the list. If you drag a scanner to the first position in the list of scanners, then the scanner is automatically set as the default scanner for your session.
- View information about a scanner. Select a scanner, and then click Test Scanners to open a Test Scanner dialog box. The dialog box displays name of the scanner's manufacturer, the scanner's product name and product family, its current version, and the scanning protocol that it uses. The dialog box also prompts you about testing the scanner.

Figure 4-5: Test Scanner dialog box



- To test a scanner before opening a scanner session, open a Test Scanner dialog box (see [Figure 4-5](#) above), and then click Yes. The results of the test are displayed in a Test Results dialog box.

Figure 4-6: Test Results dialog box

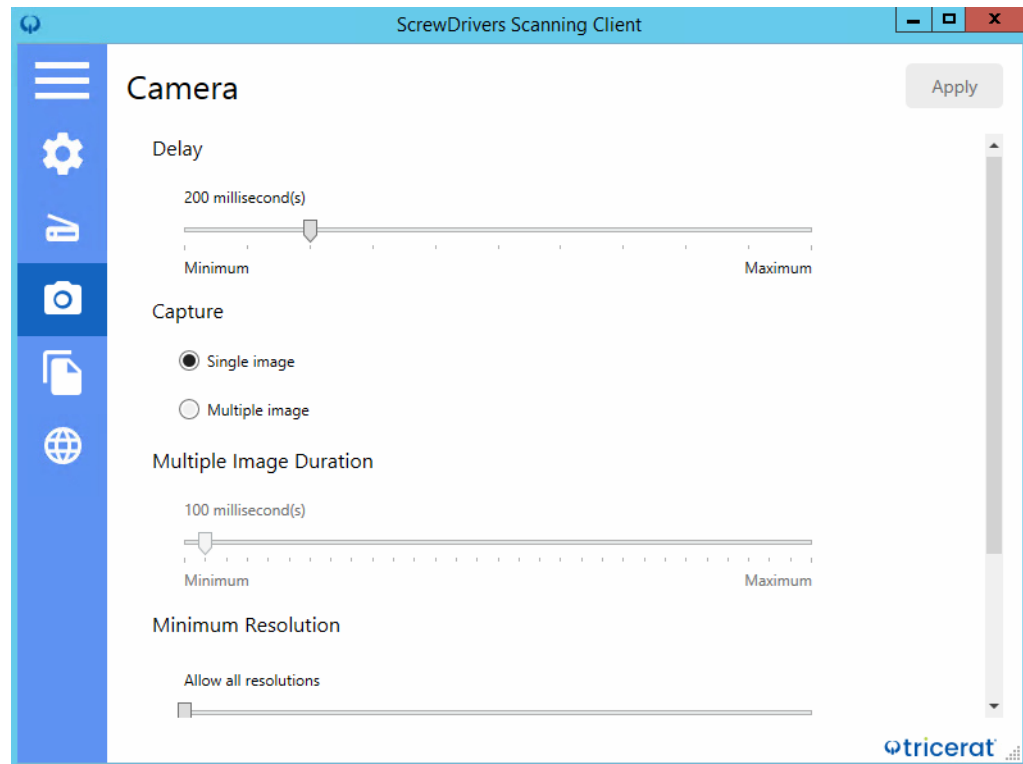


- To update the information about the scanners that are installed on your client, click Query Scanners. Note that after you query your installed scanners, the order of the scanners that are displayed in the list of available scanners might change. Also, if any scanner driver fails this simple query, then after the query is complete, the scanner is turned off.

Camera Tab

In addition to traditional scanners, ScrewDrivers Scanning client supports digital camera output. For example, the camera can be connected via USB to a client on which the ScrewDrivers Scanning client is installed, or the camera can be an integrated camera as is common on many laptops. The Camera tab on the ScrewDrivers Scanning Client app contains the options for configuring the settings for a digital camera that is being used with the ScrewDrivers Scanning client.

Figure 4-7: ScrewDrivers Scanning Client app, Camera tab



Option	Description
Delay	The time to delay before capturing a picture with the camera.
Capture	You can select only one option. <ul style="list-style-type: none"> Single image Multiple images
Duration	Turned on only for multiple images. The duration for capturing multiple images, which are collated from a video.
Min Resolution	The minimum resolution required for pictures. You can adjust the value on the slider bar to allow for all camera resolutions all the way to the highest resolution for the camera.
Use a custom minimum resolution	Turn on this option, and then enter the appropriate DPIs (height and width) for the minimum resolution.

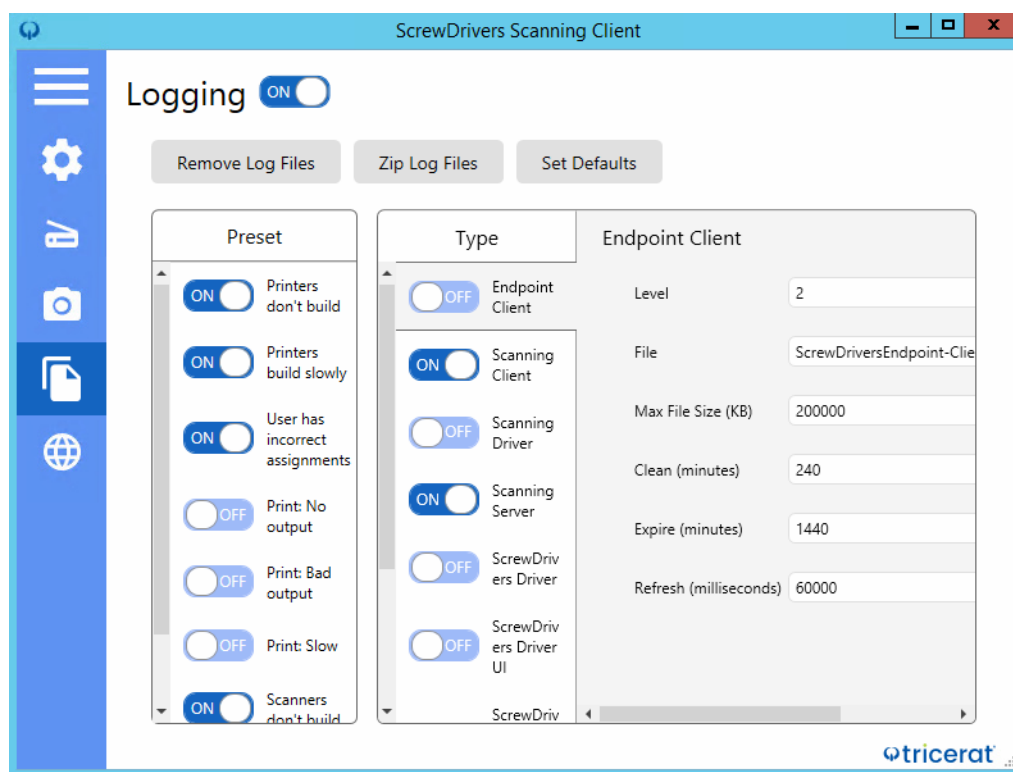
Logging Tab

The Logging tab on the ScrewDrivers Scanning Client app provides options for diagnostic logging from the ScrewDrivers Scanning client. This logging information is used for debugging or problem tracking purposes.



Because Tricerat support primarily uses this information, you should not change any of the default values or use any of the commands on this tab unless Tricerat Support instructs you to do so.

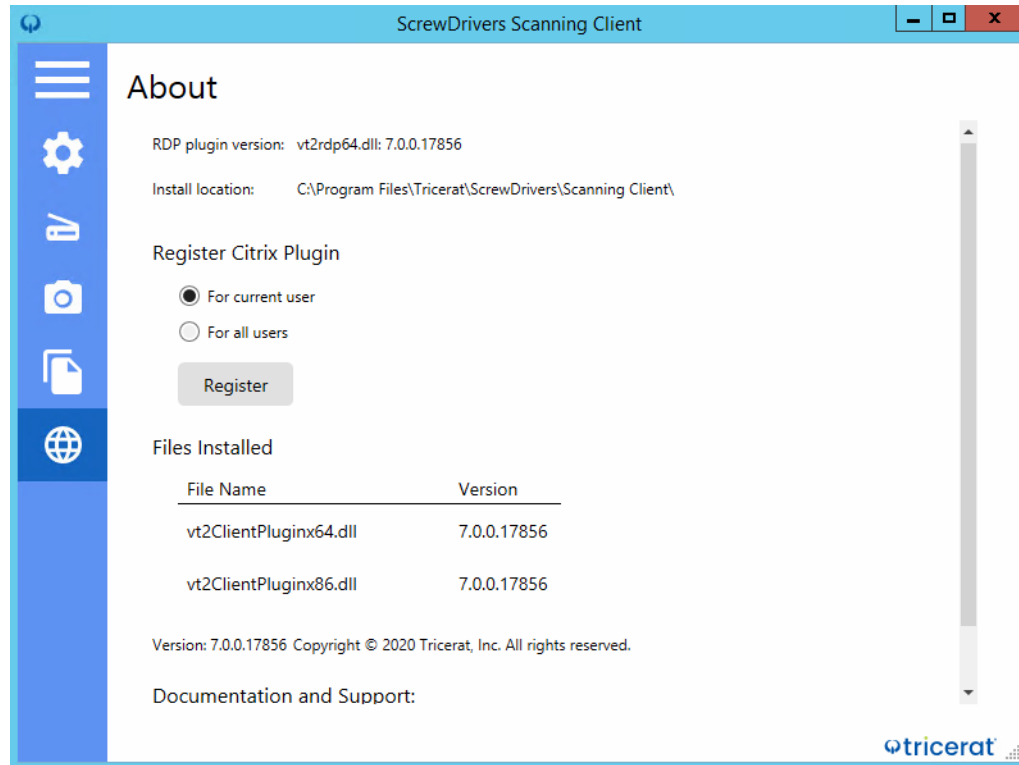
Figure 4-8: ScrewDrivers Scanning Client app, Logging tab



About Tab

The About tab on the ScrewDrivers Scanning Client app displays critical information about the ScrewDrivers Scanning client software. The tab also displays a Help link for documentation and support.

Figure 4-9: *ScrewDrivers Scanning Client app, About tab*



Option	Description
RDP Plugin Version	The version of the RDP plugin dll that the ScrewDrivers Scanning client software uses.
Install location	The detected installation location for the ScrewDrivers Scanning client.
Register Citrix Plugin	<p>If you update the Citrix app after installing ScrewDrivers Scanning, then you might need to register the Tricerat plug-in again. You can register the plug-in for the current user or for all users.</p> <p>Tip: If you must re-register the Citrix plugin, then generally, the “For all users” option is the better selection as the typical end user does not have the correct permissions to execute this action.</p>
Files Installed	A list of all the plugins (name and version) that the ScrewDrivers Session Agent automatically downloaded to the client for the purpose of upgrading the client and keeping the versions on the remote machine and the client in sync.

Chapter 4

The ScrewDrivers Scanning Client Application

Option	Description
Version	The major version for the ScrewDrivers Scanning client software.
Note: The RDP Plugin Version and the ScrewDrivers Scanning version should be identical. If they are not, then contact support@Tricerat .	

Appendix A

ScrewDrivers Endpoint Troubleshooting

This appendix provides some general considerations when troubleshooting ScrewDrivers Endpoint. It also provides information about solving some of the most common problems you might encounter when using ScrewDrivers Endpoint.

This appendix covers the following topics:

- [“General Troubleshooting Considerations” on page 75.](#)
- [“ScrewDrivers Endpoint Session Agent Troubleshooting” on page 76.](#)
- [“ScrewDrivers Endpoint Client Troubleshooting” on page 80.](#)

Appendix A
ScrewDrivers Endpoint Troubleshooting

General Troubleshooting Considerations

The most common issues that you encounter with ScrewDrivers Endpoint are the following:

- Printers are not building for any user.
- Printers are not deleted after a user logs off a session.
- Output issues with fonts and/or graphics.
- Missing features.
- Slow server spooling.
- Users are seeing duplicate printers.
- Users are seeing other users' printers.
- The default printer is not being assigned correctly, or assigned at all.

When you are troubleshooting ScrewDrivers Endpoint, keep in mind the three key functional areas that are involved:

- The application from which the job is being printed.
- The ScrewDrivers Endpoint Session Agent and client.
- The client spooler and native print driver.

As is typical with any product, the recommended way to troubleshoot ScrewDrivers Endpoint is to eliminate possible causes first, and then focus on the root cause. Generally, when troubleshooting ScrewDrivers Endpoint, you should first determine whether the problem resides with the ScrewDrivers Endpoint Session Agent or the client. To do this, you can test the ScrewDrivers Endpoint Session Agent with multiple clients. If the same negative results are associated with multiple clients, then more than likely, the problem resides on the server. After you have isolated the problem to the server or the client, your next step is to review the troubleshooting recommendations in this appendix. If you cannot resolve the issue using the recommendations in this appendix, then you must contact support@tricerat.com for additional assistance.

ScrewDrivers Endpoint Session Agent Troubleshooting

The following are high-level instructions for troubleshooting the ScrewDrivers Endpoint Session Agent. If you cannot resolve the issue with the Session Agent based on these instructions, then contact support@tricerat.com for additional assistance. See:

- “Printers are not building for any user” below.
- “Some printers are not deleted when the user logs off” on page 77.
- “Output issues with fonts and/or graphics” on page 78.
- “Users are seeing duplicate printers” on page 79.
- “Users are seeing not only their own printers but also other users’ printers” on page 79.

Printers are not building for any user



The following procedure should be carried out only if no users are logged in to the ScrewDrivers Endpoint Session Agent.

Typically, printers do not build for any user because of one of two issues:

- Incorrectly configured licensing, which should be indicated by a licensing error message opening during the session.
- The “ScrewDrivers Notification Service” has not started. If this service has not started, then simply start/restart the service and verify that the printers become available upon the next remote connection by a user.

If neither of these issues is the cause of printers not building, then continue to “[To verify the ScrewDrivers driver](#)” below.

To verify the ScrewDrivers driver

1. Open the Devices and Printers control panel.
2. Select a printer
The Print Server Properties option becomes available at the top of the control panel.
3. Select Print Server Properties
The Print Server Properties dialog box opens.
4. Open the Drivers tab and verify that the ScrewDrivers driver is listed on the tab.
 - If the ScrewDrivers driver is listed on the Drivers tab, then contact support@tricerat.com for additional assistance
 - If the ScrewDrivers driver is *not* listed on the tab, then continue to “[To troubleshoot printers not building for any user](#)” on page 77..

To troubleshoot printers not building for any user

The following procedure is dependent on the existence of the following files:
ScrewDriversDrv.dll and ScrewDriversUI.dll.

1. Navigate to the following directory: C:\Windows\System32\spool\drivers\x64\3.
 - If the files ScrewDriversDrv.dll and ScrewDriversUI.dll exist, then go to [Step 2](#).
 - If the files ScrewDriversDrv.dll and ScrewDriversUI.dll do not exist, then go to [Step 5](#).
2. Rename the following files with an extension of .old: ScrewDriversDrv.dll and ScrewDriversUI.dll.
3. Restart the Windows Print Spooler service.
4. Delete the two “old” files that you renamed in [Step 2](#).
5. Navigate to the following directory: C:\Tricerat\ScrewDrivers Endpoint Session Agent.
6. Run the following executables in the order indicated:
 - install_driver.exe (installs the print driver)
 - install_port.exe (installs the printer port)



An error message that indicates that the ports have already been installed might open. You can ignore this message, and click OK to continue.

Your users should now be able to log in to new sessions and have their printers built.

Some printers are not deleted when the user logs off

You can clear the spool directory.



The following procedure should be carried out only if no users are logged in to the ScrewDrivers Endpoint Session Agent.

1. Open the Services dialog box: Control Panel > Administrative Tools > Services.
2. Stop the Windows Print Spooler service.
3. In Windows\System32\Spool\Printers, delete all files.
4. Start the Windows Print Spooler service.
5. Under Printers and Faxes on the server, delete any printers that are not installed directly on the server.

Output issues with fonts and/or graphics

If fonts are not being formatted correctly and/or fonts and graphics are not properly scaling, then two options are available:

- Upgrade the print driver on the ScrewDrivers Endpoint client. See [“To upgrade the print driver”](#) below.
- Enable Print-As-Image. See [“To enable Print-As-Image”](#) below.

To upgrade the print driver

You should first attempt to resolve the issue by upgrading the print driver.

1. Upgrade the local print driver to the latest version on the ScrewDrivers Endpoint client, where PCL > PS.
2. Carry out a query on the ScrewDrivers Endpoint client. See [“Query Printers”](#) in the [“General Settings Tab”](#) on page 40.
3. Carry out a test print.

If the issue is still not resolved, then your next option is to enable Print-As-Image on the server. See [“To enable Print-As-Image”](#) below.

To enable Print-As-Image

You enable Print-As-Image either mid-session, or you can set Print-As-Image as the default for a client printer. See [“To enable Print-As-Image mid-session”](#) below or [“To set Print-As-Image as the default for a client printer”](#) below.



For details about Print-As-Image, including recommended DPI settings for the server, see [“Print-As-Image”](#) in [“Printer Configuration tab, Extended sub-tab”](#) on page 18. For the client, see [“Print-As-Image”](#) in [“Printers Tab”](#) on page 37.

To enable Print-As-Image mid-session

1. In any application on the ScrewDrivers Endpoint Session Agent, click Print to open a Print dialog box.
2. In the list of available printers on the Print dialog box, select the correct ScrewDrivers Endpoint printer, and then click Preference to open the Printing Preferences dialog box.
3. On the Printing Preferences dialog box, open the Extended Options tab.
4. On the Extended Options tab, select Sent print job as an image, and then set the DPI.
5. Click OK.

To set Print-As-Image as the default for a client printer

1. Open the ScrewDrivers Endpoint Client application.
2. Open the Printers tab.

3. In the list of Available Printers, select the appropriate printer.
4. In the Extended Options - Print Job Rendering Options panel, enable Print-As-Image, and then set the DPI.
5. Click Apply.

Users are seeing duplicate printers

By default, auto-creation is turned on for Citrix (ICA protocol) or Terminal Services (RDP protocol). If auto-creation is turned on through Citrix or Terminal Services, then it is possible for users to see duplicate printers after the ScrewDrivers Endpoint Session Agent and client are installed. As a result, Tricerat recommends that you turn off auto-creation in your ScrewDrivers Endpoint environment. This not only eliminates the appearance of duplicate printers, but it also mitigates the known issues that are associated with auto-creation such as print driver problems, output (font and graphics) problems, and so on.

Users are seeing not only their own printers but also other users' printers

This problem is not associated with ScrewDrivers Endpoint. Instead, it is a known third-party issue. Contact support@tricerat.com for assistance.

ScrewDrivers Endpoint Client Troubleshooting

The following are high-level instructions for troubleshooting the ScrewDrivers Endpoint client. If you cannot resolve the issue with your client based on these instructions, then contact support@tricerat.com for additional assistance. See:

- “ScrewDrivers Endpoint not building during a session” below.
- “Output issues with fonts and/or graphics” on page 81.
- “Default printer not being set correctly for one or more users” on page 82.

ScrewDrivers Endpoint not building during a session

Generally, the two most common reasons for ScrewDrivers Endpoint not building during a session are:

- Client updates. See “Client updates” below.
- Incompatible ScrewDrivers Endpoint client version. See “Incompatible ScrewDrivers Endpoint client version” below.

Client updates

Re-register the Citrix Plugin for the client. See “About Tab” on page 43.

Incompatible ScrewDrivers Endpoint client version

The version of ScrewDrivers Endpoint client that is currently installed on a workstation is displayed on the About tab of the ScrewDrivers Endpoint Client application. (See “About Tab” on page 43.) If the ScrewDrivers Endpoint client that is installed on a workstation is not the most current version, then you have two options:

- You can download the most recent version from the Tricerat website at <http://www.tricerat.com/support-center/downloads/printing-clients>, and manually update the client version.
- You can enable automatic client updates on the server side, which prevents the client from ever being out of date. See “Enable automatic client updates” in “Advanced Tab” on page 25.

If neither of these options work, then the final troubleshooting step is to reinstall the ScrewDrivers Endpoint client. To do so:

1. Uninstall the current ScrewDrivers Endpoint client through Add/Remove Programs.
2. Restart the client workstation.
3. Install the latest version of the ScrewDrivers Endpoint client.

Output issues with fonts and/or graphics

If fonts are not being formatted correctly and/or fonts and graphics are not properly scaling, then two options are available:

- Upgrade the print driver on the ScrewDrivers Endpoint client. See [“Upgrade the print driver”](#) below.
- *If allowed by the Session Agent, (Suggest) enable Print-As-Image.* See [“Enable Print-As-Image”](#) below.

Upgrade the print driver

You should first attempt to resolve the issue by upgrading the print driver.

1. Upgrade the local print driver to the latest version on the ScrewDrivers Endpoint client, where PCL > PS.
2. Carry out a query on the ScrewDrivers Endpoint client. See [“Query Printers”](#) in the [“General Settings Tab”](#) on page 40.
3. Carry out a test print.

If the issue is still not resolved, then your next option is to enable Print-As-Image on the server.

Enable Print-As-Image

You enable Print-As-Image either mid-session, or you can set Print-As-Image as the default for a client printer. See [“To enable Print-As-Image mid-session”](#) below or [“To set Print-As-Image as the default for a client printer”](#) on page 82.



If needed, you can also set Print-As-Image is to Force on the ScrewDrivers Endpoint Session Agent and this option then is applied to all client printers in a single step. For details about Print-As-Image, including recommended DPI settings for the Session Agent, see [“Print-As-Image”](#) in [“Printer Configuration tab, Extended sub-tab”](#) on page 18. For the client, see [“Print-As-Image”](#) in [“Printers Tab”](#) on page 37.

To enable Print-As-Image mid-session

1. In any application on the ScrewDrivers Endpoint client, click Print to open a Print dialog box.
2. In the list of available printers on the Print dialog box, select the correct ScrewDrivers Endpoint printer, and then click Preference to open the Printing Preferences dialog box.
3. On the Printing Preferences dialog box, open the Extended Options tab.
4. On the Extended Options tab, select Sent print job as an image, and then set the DPI.
5. Click OK.

To set Print-As-Image as the default for a client printer

1. Open the ScrewDrivers Endpoint Client application.
2. Open the Printers tab.
3. In the list of Available Printers, select the appropriate printer.
4. In the Extended Options - Print Job Rendering Options panel, enable Print-As-Image, and then set the DPI.
5. Click Apply.

Default printer not being set correctly for one or more users

Window printer information is stored in the HKEY_CURRENT_USER hive. If a user logs in to ScrewDrivers Endpoint with the same username from multiple different locations, then all these logins modify the HKEY_CURRENT_USER hive. Because there can be only one default printer, the printers do not get assigned correctly for any session other than the most recent session. To resolve this issue, you should first disable Window printer mapping. If the problem still persists, and multiple users are having this issue, then verify whether these multiple users are using the same username to log in to the same ScrewDrivers Endpoint environment. If they are not using the same username, then verify whether each user is logging in to different client computers with the same username while remaining logged in to the original session.

Appendix B

ScrewDrivers Scanning Troubleshooting

This appendix provides some general considerations when troubleshooting ScrewDrivers Scanning. It also provides information about solving some of the most common problems you might encounter when using ScrewDrivers Scanning.

This appendix covers the following topics:

- [“General Troubleshooting Considerations” on page 85.](#)
- [“ScrewDrivers Scanning Session Agent Troubleshooting” on page 86.](#)
- [“ScrewDrivers Scanning Client Troubleshooting” on page 89.](#)

Appendix B
ScrewDrivers Scanning Troubleshooting

General Troubleshooting Considerations

The two most common issues that you encounter with ScrewDrivers Scanning are the following:

- TWAIN-enabled app cannot see the ScrewDrivers Scanning data source (DS).
- Some scanners are running slower than others, to the point that some end users are receiving timeout messages.

When you are troubleshooting ScrewDrivers Scanning, keep in mind the three key functional areas that are involved:

- The application that is being used to acquire the scan.
- The ScrewDrivers Scanning Session Agent and client.
- The ScrewDrivers Scanning DS.

As is typical with any product, the recommended way to troubleshoot ScrewDrivers Scanning is to eliminate possible causes first, and then focus on the root cause. Generally, when troubleshooting ScrewDrivers Scanning, you should first determine whether the problem resides with the ScrewDrivers Scanning Session Agent or the client. To do this, you can test the ScrewDrivers Session Agent with multiple clients. If the same negative results are associated with multiple clients, then more than likely, the problem resides on the server. After you have isolated the problem to the server or the client, your next step is to review the troubleshooting recommendations in this appendix. If you cannot resolve the issue using the recommendations in this appendix, then you must contact support@tricerat.com for additional assistance.

ScrewDrivers Scanning Session Agent Troubleshooting

The following sections provide answers to frequently asked questions that you might have or problems that you might encounter about the ScrewDrivers Scanning Session Agent. See:

- [“TWAIN Data Source \(DS\)”](#) below.
- [“TWAIN - Windows and User Profiles”](#) on page 87.
- [“ScrewDrivers Scanning miscellaneous”](#) on page 87.

TWAIN Data Source (DS)

What TWAIN Data Sources (DS) should be loaded on the server for ScrewDrivers Scanning?

The only DS that is required is the ScrewDrivers Scanning DS that is loaded during the installation of ScrewDrivers Scanning. No software from the scanner manufacturer is required on the server. If you have been testing USB re-direction or other solutions, then you might want to consider removing any other scanner software that is already loaded on the server. By removing these extra DSs, your users have fewer choices when selecting a DS because the ScrewDrivers Session Agent DS will be the only one listed.

How do I determine what TWAIN Data Sources (DS) are loaded?

- 32bit TWAIN DSs are located in the folders under C:\Windows\twain_32.
- 64bit TWAIN DSs are located in the folders under C:\Windows\twain_64.

Each folder contains a file with an extension of “.ds” and this file is the DS which is actually a DLL. Other files might also be located in the folder. ScrewDrivers Scanning installs a 32bit DS and a 64bit DS as well.

Why can't my TWAIN-enabled app see the ScrewDrivers Scanning DS?

Make sure you that you have selected the DS from a valid ScrewDrivers Scanning user session, where a valid user has the ScrewDrivers Scanning client installed. You cannot open the ScrewDrivers Scanning DS from a ScrewDrivers Administration session or a non- valid ScrewDrivers Scanning user session. The Users tab on the ScrewDrivers Scanning Session Agent app your session displays all the users, by name, who have configured scanners on the Session Agent. If a user session is not listed on this tab, then the session is not a valid session. (See [“Users Tab”](#) on page 55.)

Note that some apps do not recognize a newly installed DS until the app is initially run “As Administrator.” If a specific TWAIN-enabled app still cannot see the ScrewDrivers Scanning DS, then test a different TWAIN enabled app. (Remember, Tricerat supplies two sample applications from TWAIN.org—Twack_32.exe and Twack_64.exe—for testing your ScrewDrivers Scanning installation. See the *ScrewDrivers Essentials Installation Guide*.) If the problem persists, then you must contact support@tricerat.com for additional assistance.

How do I delete a DS?

If the scanner manufacturer has an entry in the Control Panel under Programs and Features, then Tricerat recommends using this method to uninstall the DS. If the scanner manufacturer does not have an entry in the Control Panel, then you can delete the appropriate folder under C:\Windows\twain_32 or C:\Windows\twain_64 folders. Note that similar folders might exist under each User's profile at one of the following locations:

- %USERPROFILE%\Windows\twain_32
- %USERPROFILE%\Windows\twain_64.

TWAIN - Windows and User Profiles

Why is my scanner not shown under the Device Manager, Imaging devices?

ScrewDrivers Scanning installs a single TWAIN DS on the server. Only Microsoft's Windows Image Acquisition (WIA) drivers are shown under the Device Manager, Imaging Devices.

Why can't I use Microsoft Paint or Windows Fax and Scan with ScrewDrivers Scanning?

ScrewDrivers Scanning installs a single TWAIN DS on the server. The utilities from Microsoft support only Microsoft's Windows Image Acquisition (WIA) drivers.

How does TWAIN use the Windows folder under the user's profile?

Some apps use the C:\Windows folder and some use the %USERPROFILE%\Windows folder. Tricerat supplies a batch file that should run after each user login:

```
C:\Program Files\Tricerat\ScrewDrivers\Scanning\UserCopyScanectDS.bat
```

This batch file copies the ScrewDrivers Scanning DS to the user's profile folder.

Is ScrewDrivers Scanning compatible with mandatory profiles?

Yes, ScrewDrivers Scanning is compatible with mandatory profiles; however, you must make sure that the mandatory profile contains the files that the UserCopyScanectDS.bat script sets up. After being copied in to the user's mandatory profile, these files do not change from session to session. However, if you update the ScrewDrivers Scanning version, then you must remember to also update these files.

ScrewDrivers Scanning miscellaneous

How do I know which users have configured scanners to use ScrewDrivers Scanning?

The Users tab on the ScrewDrivers Scanning Session Agent app is a read-only tab that displays all the users, by name, who have configured scanners on the Session Agent. The tab also displays the session information for each user, and the user's machine name. See ["Users Tab" on page 55](#).



The tab does not show all the users who are logged in to the ScrewDrivers Scanning Session Agent.

Some scanners are slower than others and some users receive a timeout message dialog. Can I adjust the timing and eliminate this timeout issue?

Yes, you can edit this timeout value. To do so:

1. On the ScrewDrivers server, open regedit.
2. Navigate to the following key:

HKEY_LOCAL_MACHINE\SOFTWARE\Tricerat\ScrewDrivers\Scanning

3. Add a DWORD value named ClientWait.
4. Set the value to milliseconds, making sure to select decimal as the input.

The default is 30000 which is 30 seconds. To double the wait time, use a value of 60000.

5. Exit regedit

The next time that a user starts his/her TWAIN- enabled app, this updated setting is used. The user does not have to logout.

ScrewDrivers Scanning Client Troubleshooting

The following sections provide answers to frequently asked questions that you might have or problems that you might encounter about the ScrewDrivers Scanning client. See:

- [“Setting the default scanner”](#) below.
- [“ScrewDrivers Scanning client and Citrix”](#) on page 90.
- [“Scanner drivers”](#) on page 91.

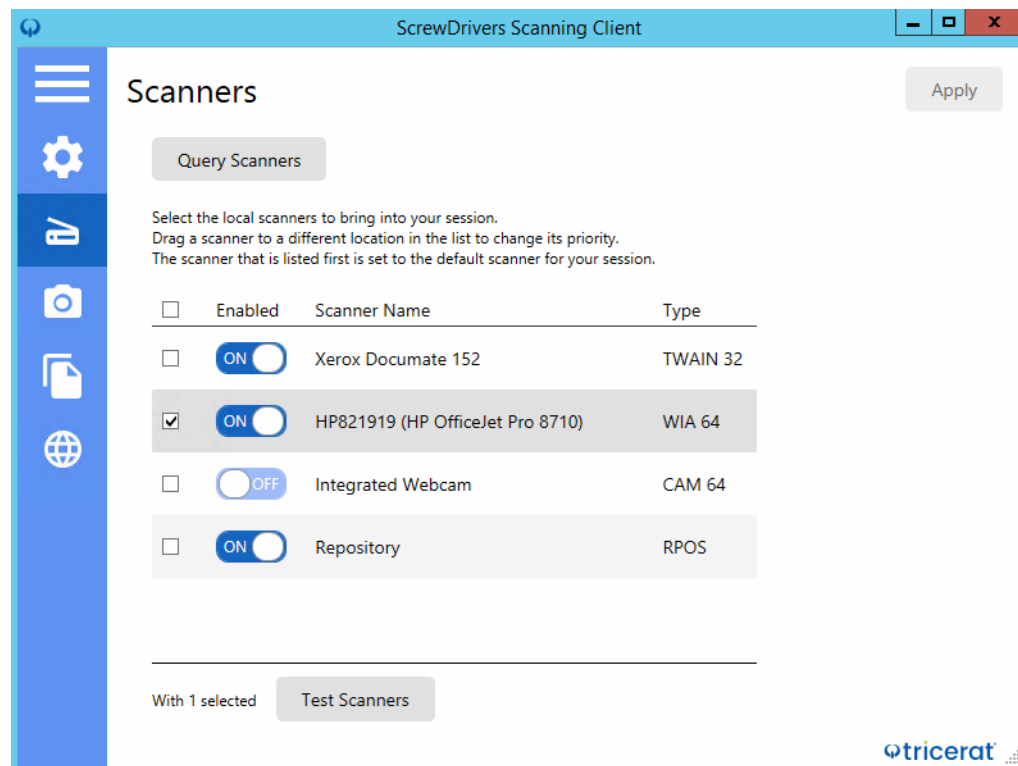
Setting the default scanner

How do I control which scanner is automatically set as the default scanner for a remote session?

1. Open the ScrewDrivers Scanning Client app, and then open the Scanners tab. (See [“Scanners Tab”](#) on page 67.)

The displays all the scanner drivers, by name, that were detected on your client or client’s network that can be brought in to your session. The first scanner that is displayed in the list of available scanners is *always* set to the default scanner for your session.

Figure B-1: ScrewDrivers Scanning Client app, Scanners tab



2. To set another scanner as the default scanner, drag the selected scanner to the first position in the list.

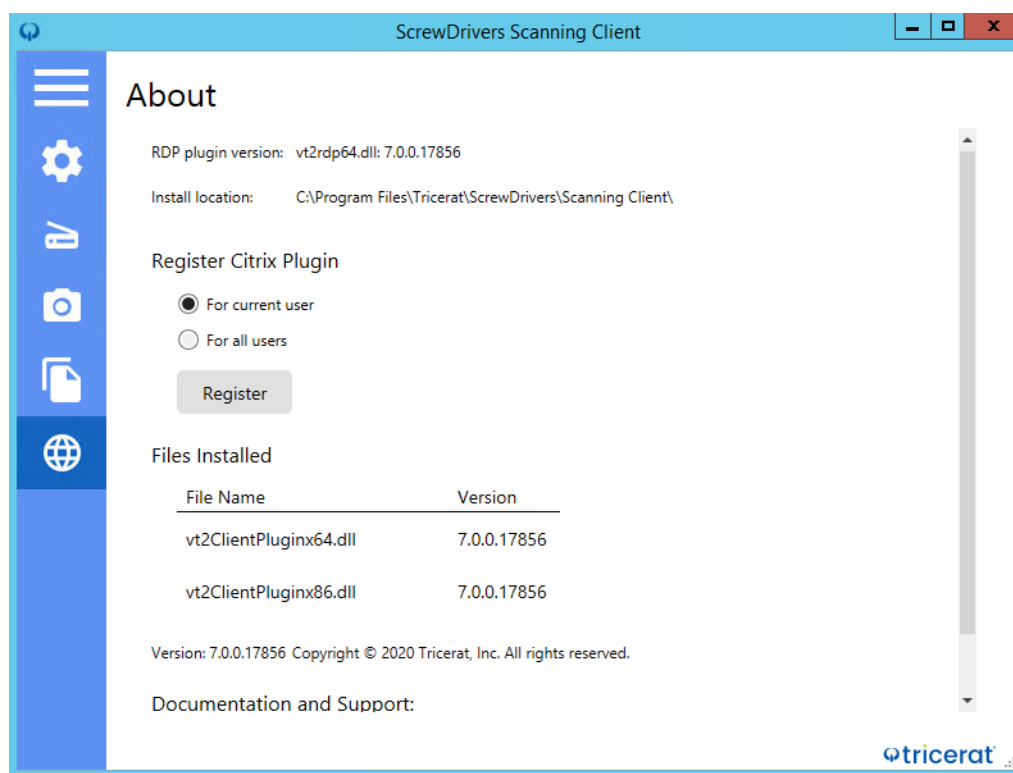
ScrewDrivers Scanning client and Citrix

Does it matter if I install ScrewDrivers Scanning before my Citrix receiver on my client?

If you are installing ScrewDrivers Scanning, then you must install the Citrix receiver on the client before you install the ScrewDrivers Scanning client. If you do not install the Citrix receiver first, then ScrewDrivers Scanning cannot detect the Citrix environment and properly install Tricerat's Citrix add-in dll. If you install the ScrewDrivers Scanning client first, you must re-register this add-in with Citrix.

1. Open the ScrewDrivers Scanning Client app As Administrator.
2. Open the About tab.

Figure B-2: ScrewDrivers Scanning Client app, About tab



3. Under Register Citrix Plugin, select For all users
4. Click Register.

I have been testing TWAIN re-direction in my Citrix environment. Is there anything I must do before testing ScrewDrivers Scanning?

Before ScrewDrivers Scanning can work, you must disable the TWAIN re-direction Windows policies. If you do not disable these policies, then you cannot see the ScrewDrivers Scanning DS on the server. You can see only the data sources that are loaded on your client.

Scanner drivers

What is the difference between a TWAIN driver and a WIA driver?

Both the TWAIN driver and the WIA driver “talk” to the same scanner hardware. The major difference is the Application Program Interface (API) that these drivers present to an application. TWAIN drivers use a standard developed by the [TWAIN Working Group](#), a not for profit organization which represents the imaging industry. [Windows Image Acquisition \(WIA\)](#) drivers use a standard developed by Microsoft.

Does ScrewDrivers Scanning require any special software to be installed from the scanner manufacturer?

No. Only the TWAIN driver or the WIA driver must be installed. Use the Test Scanners function to validate that the driver is operating correctly.

My scanner manufacturer installed both a TWAIN driver and a WIA driver. Which one should I use?

In general, Tricerat suggests starting with the TWAIN driver and running some scanning tests. If the tests reveal any issues, try using the WIA driver to see if the issues persist. If the issues persist, then check the manufacturer's website for an updated driver. Sometimes, the installation CD that is provided with a scanner does not contain the latest driver, so Tricerat recommends that you check the manufacturer's website to confirm that you are using the latest driver. Tricerat recommends that you also check for any firmware updates that might be available for your scanner.

Appendix B
ScrewDrivers Scanning Troubleshooting