ScrewDrivers
Administrator Guide
Version 6.8

Release Info

This version of the *ScrewDrivers Administrator Guide* is applicable for all software versions of ScrewDrivers 6.8 and greater, and is current until replaced.

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Preface

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

Using the manual

You will find the *ScrewDrivers Administrator Guide* easy to use. You can simply look up the topic that you need in the Table of Contents. Later, in this Preface, you will find a brief discussion of each chapter to further assist you in locating the information that you need.

Special information about the manual

The *ScrewDrivers Administrator Guide* has a dual purpose design. It can be distributed electronically and then printed on an as-needed basis, or it can be viewed online in its fully interactive capacity. If you view the document online, a standard set of bookmarks appears in a frame on the left side of the document window for navigation through the document.

Conventions used in the manual

The *ScrewDrivers 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.

Assumptions for the manual

The *ScrewDrivers Administrator Guide* assumes that:

- You are familiar with Windows-based applications and basic Windows functions and navigational elements.
- References to any third-party standards or third-party software functions were current as of the release of this version of ScrewDrivers, and might have already changed.

Organization of the manual

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

- Chapter 1, “Getting Started with ScrewDrivers,” on page 6 provides a high-level overview of the ScrewDrivers infrastructure. It also provides a summary of the ScrewDrivers communication through this infrastructure. Finally, it details the installation options that are available for the ScrewDrivers client.
- Chapter 2, “The ScrewDrivers Server,” on page 10 details the functions that are available in the ScrewDrivers Server Control Panel.
- Chapter 3, “The ScrewDrivers Client,” on page 32 details the functions that are available in the ScrewDrivers Client Control Panel.
- Appendix A, “ScrewDrivers Troubleshooting,” on page 43 provides some general considerations when troubleshooting ScrewDrivers. It also provides information about solving some of the most common problems you might encounter when using ScrewDrivers.

Chapter 1
Getting Started with ScrewDrivers

ScrewDrivers is a remote desktop print management solution that employs '"driverless"' technology to mirror print drivers from the users' endpoints to a remote session, giving the users access to all their local and network printers. Tricerat's lossless TMF print protocol compresses the printer files to achieve the printing. This chapter provides a high-level overview of the ScrewDrivers infrastructure. It also provides a summary of the ScrewDrivers communication through this infrastructure. Finally, it details the installation options that are available for the ScrewDrivers client.

This chapter covers the following topics:

- "ScrewDrivers Infrastructure and Communication Summary" on page 7.
- "ScrewDrivers Client Installation Considerations" on page 9.

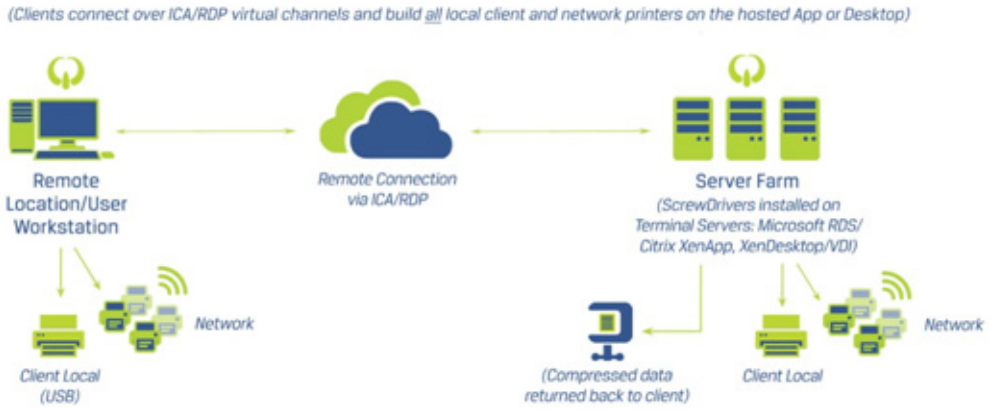
ScrewDrivers Infrastructure and Communication Summary

A user can connect to a client in one of two ways to use ScrewDrivers for printing from the attached local or network printers. In both cases, the print drivers are installed on the local computer.

- A user can connect to a *server* operating system over an RDP, ICA, or PCoIP connection from a client with a desktop or server operating system to print to the local printers.
- A user can connect to a *desktop* operating system over an RDP, ICA, or PCoIP connection from a client with a desktop or server operating system to print to the local printers.

Figure 1-1 below details the two scenarios for using ScrewDrivers.

Figure 1-1: ScrewDrivers infrastructure



Based on this infrastructure, the ScrewDrivers communication pathway can be summarized as follows:

At Log In
1. The ScrewDrivers client connects to the remote server or virtual desktop using a system protocol, which for Microsoft Windows is RDP, for Citrix is ICA, and for Vmware is PCoiP.
2. The ScrewDrivers Server detects a new session with the ScrewDrivers client, and carries out the initial required communication such as version verification.
3. The ScrewDrivers client queries the registry for cached printer drivers data.
4. The ScrewDrivers client sends the data to the ScrewDrivers Server.
5. The ScrewDrivers Server detects the printer drivers data.
6. The ScrewDrivers Server customizes the ScrewDrivers virtual driver to mimic the client printer drivers.
7. The ScrewDrivers Server creates the printers and the ScrewDrivers remote printing port (which is specific to the ScrewDrivers client that connected to the remote server or virtual desktop).

Printing Functions
1. The ScrewDrivers Server detects the print command.
2. The print job spools using the Windows print spooler.
3. After spooling on the ScrewDrivers Server begins, ScrewDrivers compresses the data, and then sends the data to the ScrewDrivers client.
4. The ScrewDrivers client detects the ScrewDrivers print data, decompresses the data, and then spools the data on the ScrewDrivers client.
5. The print job is completed on the ScrewDrivers client, and the data is printed from the physical printer that is attached to the client.
At Log Out
1. The ScrewDrivers Server detects log out/disconnect.
2. The ScrewDrivers Server deletes the client's printers.
3. The ScrewDrivers Server deletes the ScrewDrivers remote printing port.
4. The ScrewDrivers Server purges the registry of the ScrewDrivers data for the session.

ScrewDrivers Client Installation Considerations

Four options of available for deploying the ScrewDrivers client. The option that you select is based on how the ScrewDrivers clients exist in your ScrewDrivers environment.

- Manual installation: For smaller environments, manually installing the ScrewDrivers client on each workstation that will be connecting to the remote server or virtual desktop is the recommended option. Refer to the ScrewDrivers *Quick Start Installation Guide* for instructions about manually installing the ScrewDrivers client.

For any of the following options, contact support@tricerat.com for assistance:

- Deploy the ScrewDrivers client through a webpage: Many variations of deploying the ScrewDrivers client through a webpage are possible. The most basic option is to set up a link on a designated webpage, and then have your users click this link to download the installation file and install the ScrewDrivers client on their workstations. Another option is to deploy the client through an ActiveX control on a designated webpage. This option installs the ScrewDrivers client silently after a user confirms that the installation is to be started.
- Deploy the ScrewDrivers client through a Group Policy: Deploying the ScrewDrivers client through a policy is the preferred method if all your client workstations are not in the same domain. When you install the ScrewDrivers client on a workstation through a group policy, the client is installed on the SYSTEM account, which gives you administrative rights on the workstation to the client. To deploy the ScrewDrivers client through a group policy, do the following:

  1. From the deployment page, download the appropriate ScrewDrivers client MSI package.
  2. Save the package to a network share drive, for example, server\\SDClient.
  3. Create a new group policy, and then click Edit.
  4. Under User Configuration, create a new software installation. Make sure to select the ScrewDrivers MSI that you saved to the network share drive.
  5. Select “Assigned” as the deployment method.

     The ScrewDrivers client is now installed on all your users’ workstations.
- Deploy the ScrewDrivers client through a software deployment platform: If your organization has a software deployment program with a “Silent” switch, then you can deploy the ScrewDrivers client through this platform.

Chapter 2
The ScrewDrivers Server

You access the ScrewDrivers Server through a control panel that allows for the detailed configuration and administration of your users' printing environments. This chapter details the functions that are available in the ScrewDrivers Server Control Panel.

This chapter covers the following topics:

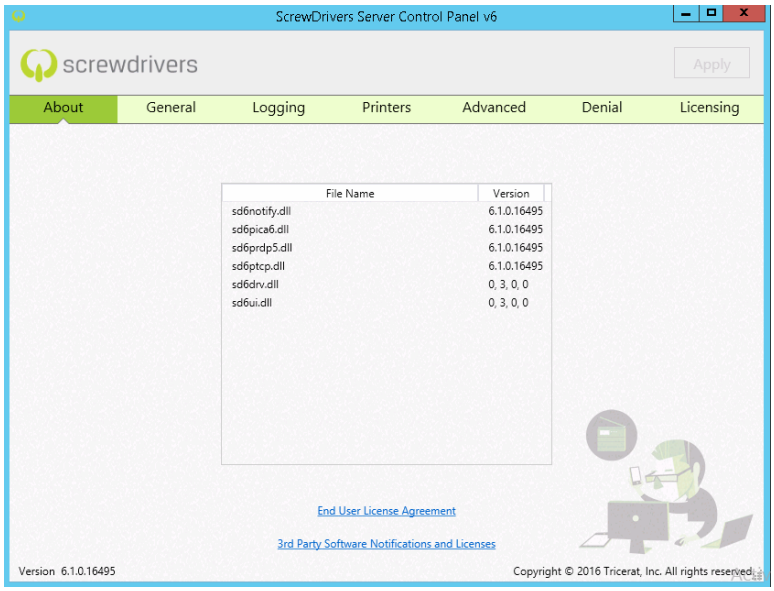
- "The ScrewDrivers Server Control Panel" on page 11.
- "The ScrewDrivers Server Control Panel, About Tab" on page 14.
- "The ScrewDrivers Server Control Panel, General Tab" on page 15.
- "The ScrewDrivers Server Control Panel, Logging tab" on page 17.
- "The ScrewDrivers Server Control Panel, Printers Tab" on page 18.
- "The ScrewDrivers Server Control Panel, Advanced Tab" on page 27.
- "The ScrewDrivers Server Control Panel, Denial Tab" on page 29.
- "The ScrewDrivers Server Control Panel, Licensing Tab" on page 31.

The ScrewDrivers Server Control Panel

The ScrewDrivers Server is installed on the computer that your users are logging in to remotely. You access The ScrewDrivers Server through a control panel that allows for the detailed configuration of your ScrewDrivers objects and printing environments. To open the ScrewDrivers Server Control Panel, on the remote server, do one of the following:

- Navigate to the Control Panel, and then double-click ScrewDrivers Server v6.
- Open the Start menu, and then under Tricerat > ScrewDrivers Server v6, double-click Server Control Panel.

Figure 2-1: ScrewDrivers Server Control Panel

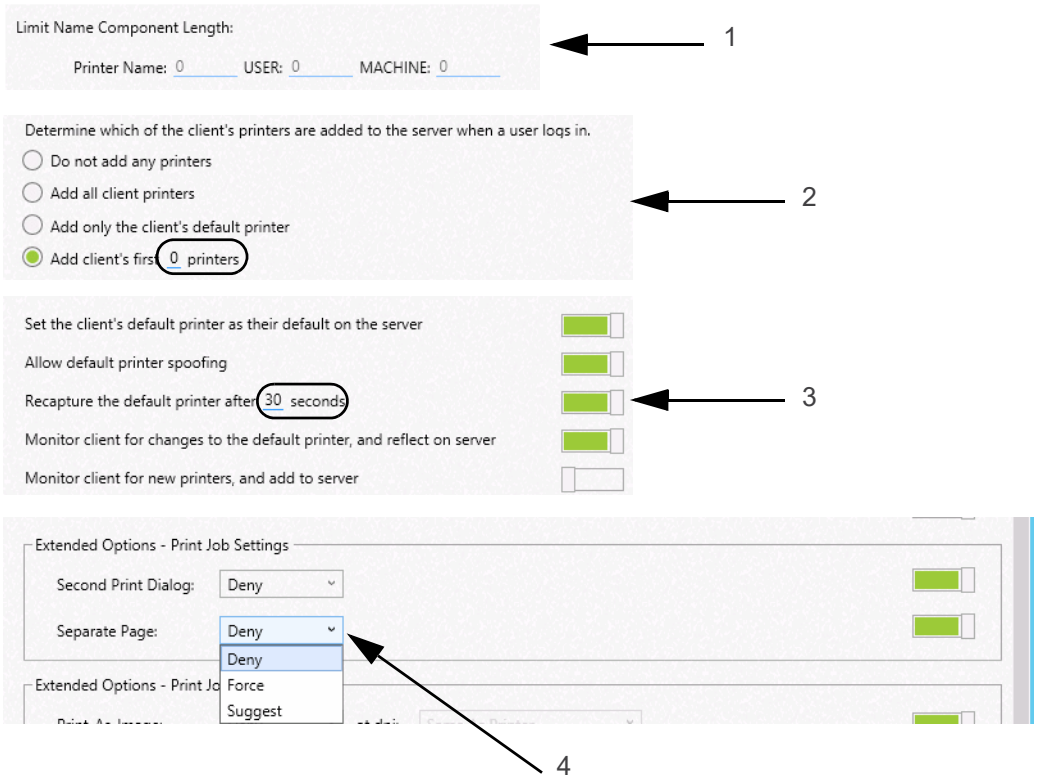


The ScrewDrivers Server Control Panel has seven primary tabs, each with different options for configuring and administering your ScrewDrivers objects and printing environments. With the exception of the About tab, all the tabs have the following features in common:

- An option can be a free text field, a radio button, or a toggle. A free text field has a blue underline. If you toggle on an option, then the option turns green. If you toggle off an option, then option turns gray. If you select a radio button or a toggle on an option, and a default value is supplied for the option, then you can leave the default value as-is, or you can edit it. If you toggle off an option, then the option is set to its default value. See Figure 2-2 on page 12.
- 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 and changing the setting or value for the option.
  - Force - Prevents the user from changing the administrator-defined setting or value for the option. The ScrewDrivers Administrator determines if the option is enabled or not.
  - Suggest - The ScrewDrivers Administrator can define a default setting and/or value

for the option, but a user can always override the setting and/or value at the time of printing.

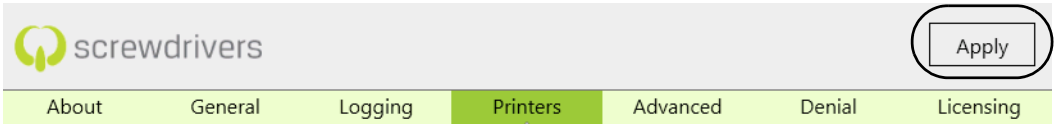
Figure 2-2: Different option formats



Option	Description
1	Free text field.
2	Radio buttons, including one with a default value.
3	Toggles, including one with a default value. Toggles that are turned on are green. Toggles that are turned off are gray.
4	Toggles with a Deny, Force, or Suggested availability requirement.

- After you make a change to any value on any tab, you must click Apply (displayed in the top right corner of the control panel) 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 2-3: Apply button



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

If you have made any changes to the server settings, and have not applied these changes, then you are prompted to do so before exiting the application.

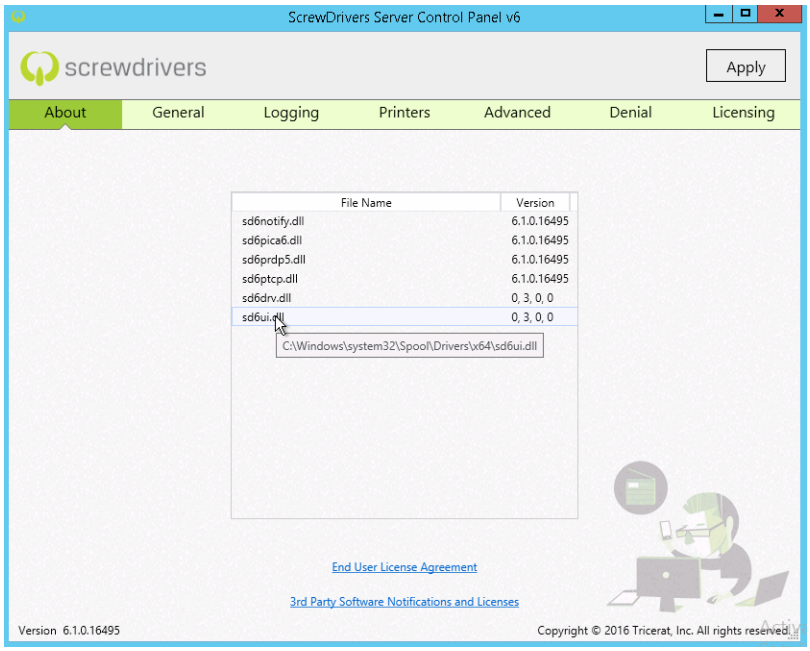
See:

- "The ScrewDrivers Server Control Panel, About Tab" on page 14.
- "The ScrewDrivers Server Control Panel, General Tab" on page 15.
- "The ScrewDrivers Server Control Panel, Logging tab" on page 17.
- "The ScrewDrivers Server Control Panel, Printers Tab" on page 18.
- "The ScrewDrivers Server Control Panel, Advanced Tab" on page 27.
- "The ScrewDrivers Server Control Panel, Denial Tab" on page 29.
- "The ScrewDrivers Server Control Panel, Licensing Tab" on page 31.

The ScrewDrivers Server Control Panel, About Tab

When the ScrewDrivers Server Control Panel first opens, the About tab is the open tab. The About tab displays all the dlls, alphabetically by name, that were installed for the ScrewDrivers Server. 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.

Figure 2-4: ScrewDrivers Server Control Panel, About tab with tooltip displayed

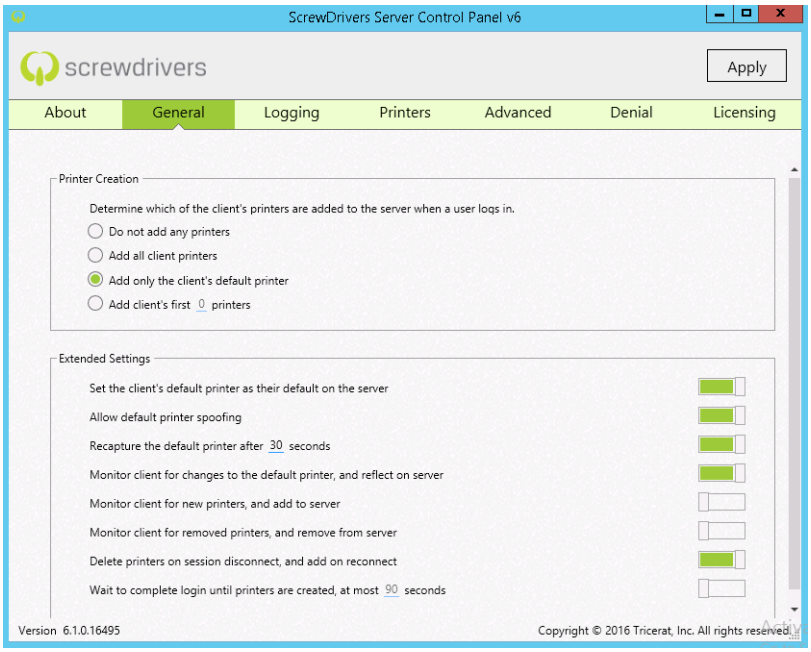


The ScrewDrivers Server Control Panel, General Tab

The General tab on the ScrewDrivers Server Control Panel contains printer creation options that determine the client printers that are built on the ScrewDrivers Server 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, Printer Creation options" below.
- "General tab, Extended Settings options" on page 16.

Figure 2-5: ScrewDrivers Server Control Panel, General tab



General tab, Printer Creation options

The Printer Creation options determine which of the client's printers are built on the ScrewDrivers Server after a user logs in. You can select only one Printer Creation option at a time.

Option	Description
Do not add any printers	If enabled, none of the client's printers are added to the ScrewDrivers Server after a user logs in. **Note:** You typically enable this option only when Tricerat Support instructs you to do so.

Option	Description
Add all client printers	If enabled, all the client's printers are added to the ScrewDrivers Server after a user logs in.
Add only the client's default printer	Selected by default. If enabled, only the client's default printer is added to the ScrewDrivers Server after a user logs in.
Add clients first 0 printers	Change the default value of 0 as needed. The first "n" number of printers that are displayed in the list of available printers for the ScrewDrivers client are then added to the ScrewDrivers Server after a user logs in.

General tab, Extended Settings options

The Extended Settings options provide additional printing features that can be useful depending on your users' environments.

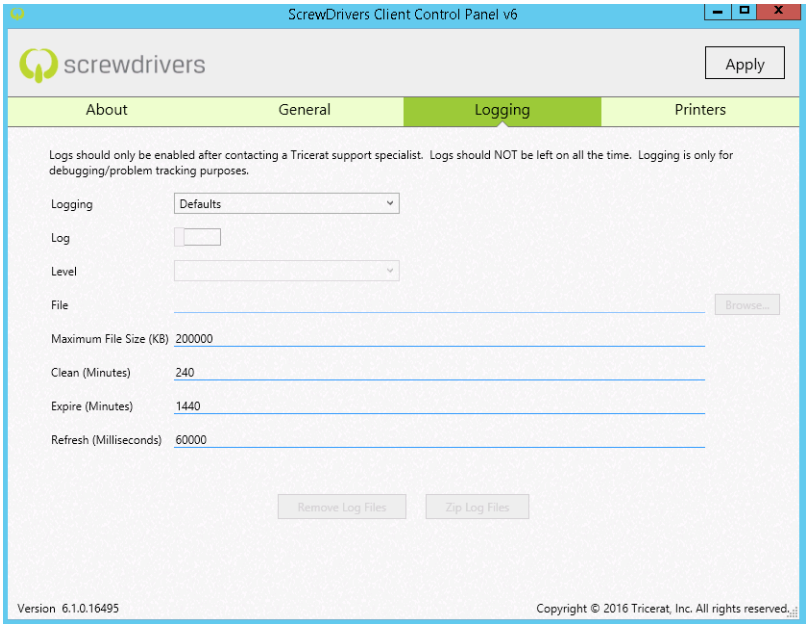
Option	Description
Set the client's default printer as their default on the server	If enabled, then the default printer for the ScrewDrivers client is also the default printer on the ScrewDrivers Server during a user's terminal session; otherwise, the traditional "server printers" are set as the default printers.
Allow default printer spoofing	If enabled, then a user can specify a printer that is not defined as the default printer on the ScrewDrivers client to be the default printer on the ScrewDrivers Server for a terminal session. **Note:** This option is applicable for situations in which a user can work locally or through a terminal session, but requires a different default printer in each case.
Recapture the default printer after 30 seconds	If enabled, then the default printer for the ScrewDrivers client is set again on the ScrewDrivers Server after the specified time period. This prevents the traditional "server printers" from being set as the user's default printers during a terminal session. You can change the default value of 30 seconds as needed.
Monitor client for changes to the default printer, and reflect on server	If enabled, then a user can change the default printer on the ScrewDrivers client, and have this change reflected immediately on the ScrewDrivers Server during a terminal session.
Monitor client for new printers, and add to server	If enabled, then when a new printer is added to the ScrewDrivers client during a terminal session, it is also added to the ScrewDrivers Server.
Monitor client for removed printers, and remove from server	If enabled, then when a printer is removed from the ScrewDrivers client during a terminal session, it is also removed from the ScrewDrivers Server.
Delete printers on session disconnect, and add on reconnect	If enabled, then when a terminal session is disconnected, or a user logs off, all the client printers are removed from the ScrewDrivers Server. When the terminal session is reconnected, or a user logs back in, all the client printers are then built again on the server.

The ScrewDrivers Server Control Panel, Logging tab

The Logging tab on the ScrewDrivers Server Control Panel provides options for diagnostic logging from the ScrewDrivers Server. 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 on this tab unless Tricerat Support instructs you to do so.

Figure 2-6: ScrewDrivers Server Control Panel, Logging tab



The ScrewDrivers Server Control Panel, Printers Tab

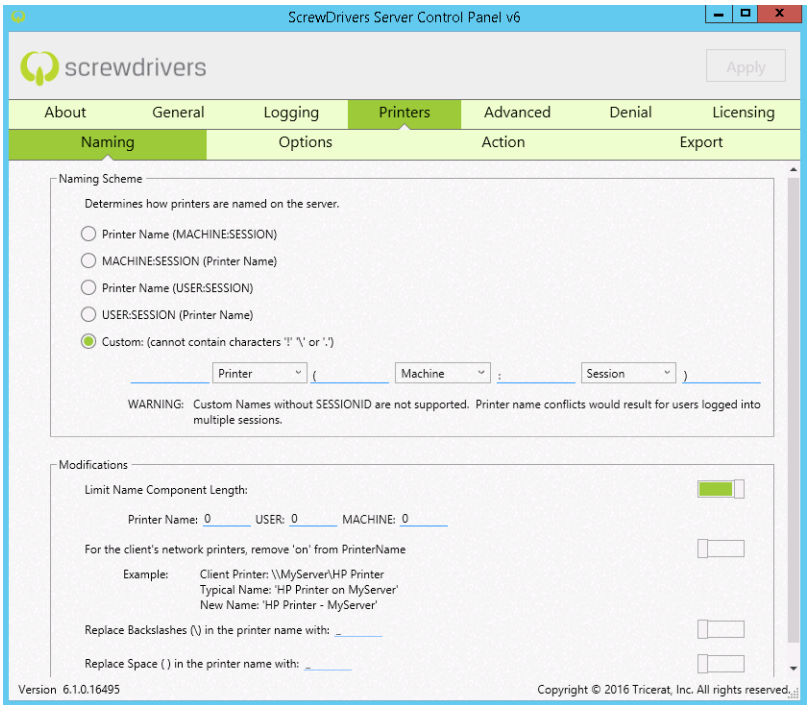
The Printers tab on the ScrewDrivers Server Control Panel has four sub-tabs, each of which contains different options for configuration of the printers in your users' environments, including printer naming schemes, allowed formats for saving files, and so on. See:

- "Printers tab, Naming sub-tab" below.
- "Printers tab, Options sub-tab" on page 21.
- "Printers tab, Action sub-tab" on page 23.
- "Printers tab, Export sub-tab" on page 24.

Printers tab, Naming sub-tab

The Naming sub-tab on the Printers tab contains options for specifying how the printers are displayed to your users.

Figure 2-7: ScrewDrivers Server Control Panel, Printers tab, Naming sub-tab



By default, the printer naming scheme is set to Printer Name (MACHINE SESSION); 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 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 that you use 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 20.

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:

Step	Action
If you are implementing a default naming scheme as-is.	Click Apply.
If you are implementing a default printer naming scheme, but you want to edit the scheme.	1. Do any or all of the following as needed: • Enable "Limit name component lengths," and then in the Modifications pane, set the maximum value for any or all of the indicated components (Printer, User and/or Machine.) 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. **Note:** As the instructions imply, this option is used if the ScrewDrivers environment contains *network* printers. • 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 (*). **Note:** Novell printers include backslashes in their names, which Windows does not support. 2. Click Apply.

To set a custom printer naming scheme

If you set a custom printer naming scheme, 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:

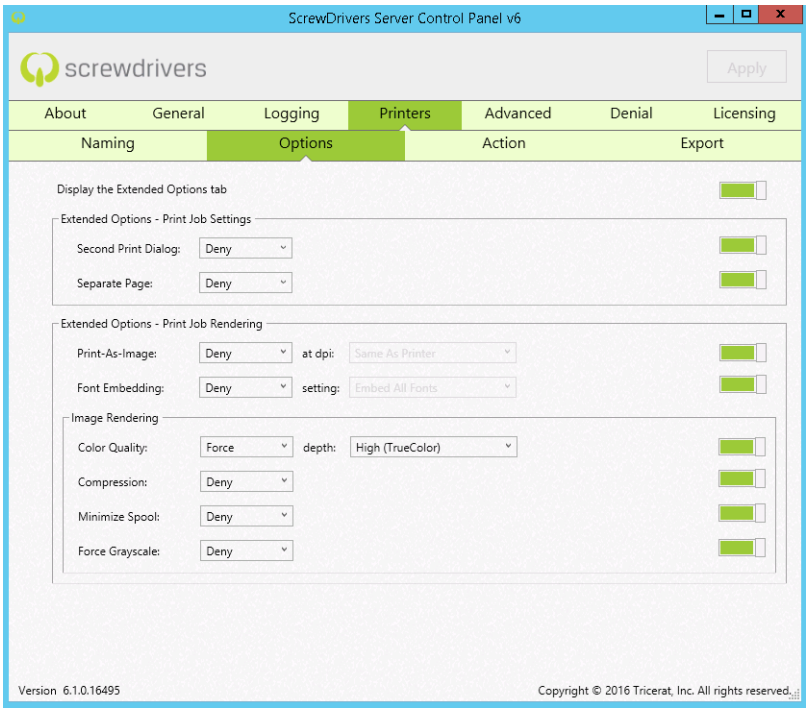
   - Enable “Limit name component lengths,” and then set the maximum value for any or all of the indicated components (Printer, Machine, and/or User.) The default value is zero.
   - Enable one or both options for replacing values in the printer name, and then leave a default replacement value as-is, or 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.

Printers tab, Options sub-tab

The Options sub-tab on the Printers tab contains an option for specifying whether the Extended Options tab is to be displayed for your users on the ScrewDrivers Printing Preferences dialog box. If the Extended Options tab is to be displayed, then you must also specify the client availability—Deny, Force, or Suggest—for each option on the tab.

Figure 2-8: ScrewDrivers Server Control Panel, Printers tab, Options sub-tab



Option	Description
Display the Extended Options tab	If enabled, then the Extended Options tab is displayed for your users on the ScrewDrivers 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 enabled, 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 enabled, then an additional page that contains information about the print job, such as the name of the user who submitted the job, is printed.

Option	Description
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	If enabled, then ScrewDrivers converts the entire print job to a BMP for printing locally. **Note:** Although enabling this option can resolve output issues such as font issues, uncompressed printing can also use a significant amount of bandwidth. For text, 600 x 600 the minimum recommended DPI. **Caution:** Do not set the DPI for a print job the same as the default value for a printer. Because some printers are set to a high default DPI, this avoids a direct impact on the spool size. For example, a 1200 x 1200 DPI print job uses four times the bandwidth of a 600 x 600 print job.
Font Embedding	If enabled, ScrewDrivers embeds a temporary copy of the font or font data in the print jobs. • Embed All Fonts - The default setting. If enabled, and the fonts that are used in the print job are not available on the client, then ScrewDrivers sends a temporary copy of each font to the client with the print job. After the print job is complete, then ScrewDrivers removes the temporary copies from the client. • Pre-Render Embedded - If enabled, and the fonts that are used in the print job are not available on the client, then ScrewDrivers sends these fonts as images to the client, and then integrates the corresponding text back into the job file. • Pre-Render All - If enabled, then ScrewDrivers sends *all* 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. **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 Server and client.

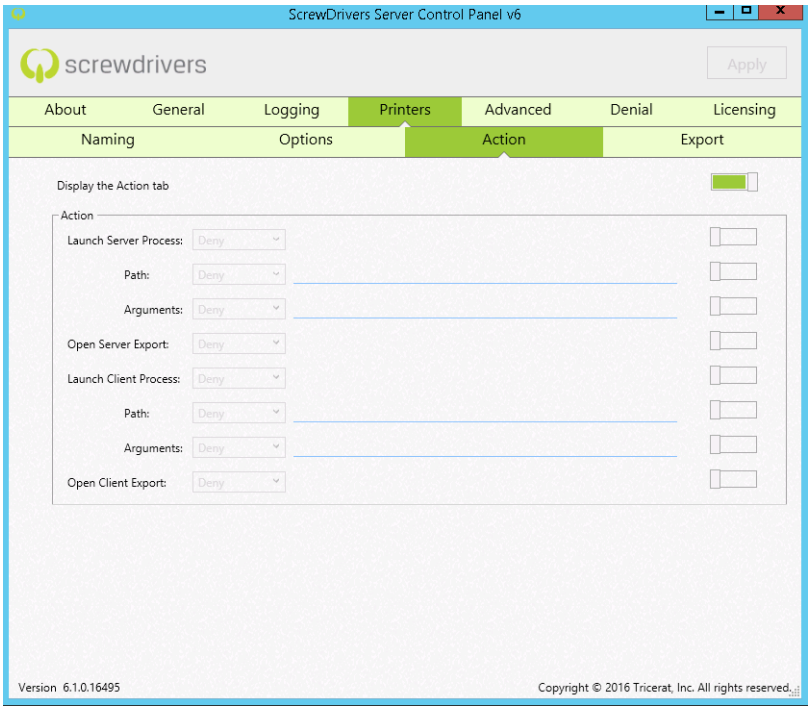
Image Rendering	• Color Quality - If enabled, then, by default, ScrewDrivers renders images in HIgh (TrueColor), which is 24-bit. You can select a different default value:
	  • Medium (HighColor), which is 16-bit
	  • Low, which is 8-bit.
	  • Monochrome, which is 1-bit. (True black and white).
	Note: 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.
	• Compression - If enabled, then a lossy compression algorithm is carried out for images in the document for additional reduction in spool size.
	• Minimize Spool - A legacy option. Not applicable.
	• Force Grayscale - If enabled, then all images in the document are converted to grayscale, which is 8-bit gray and reduces file size.

Printers tab, Action sub-tab

The Action sub-tab on the Printers tab contains an option for specifying whether the Action tab is to be displayed for your users on the ScrewDrivers Printing Preferences dialog box. The Action tab contains options for tying executables to ScrewDrivers print functions on the ScrewDrivers Server or client. If the Action tab is to be displayed, then you must also specify the client availability—Deny, Force, or Suggest—for each option on the tab. See Figure 2-9 on page 23.

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

Figure 2-9: ScrewDrivers Server Control Panel, Printers tab, Action sub-tab



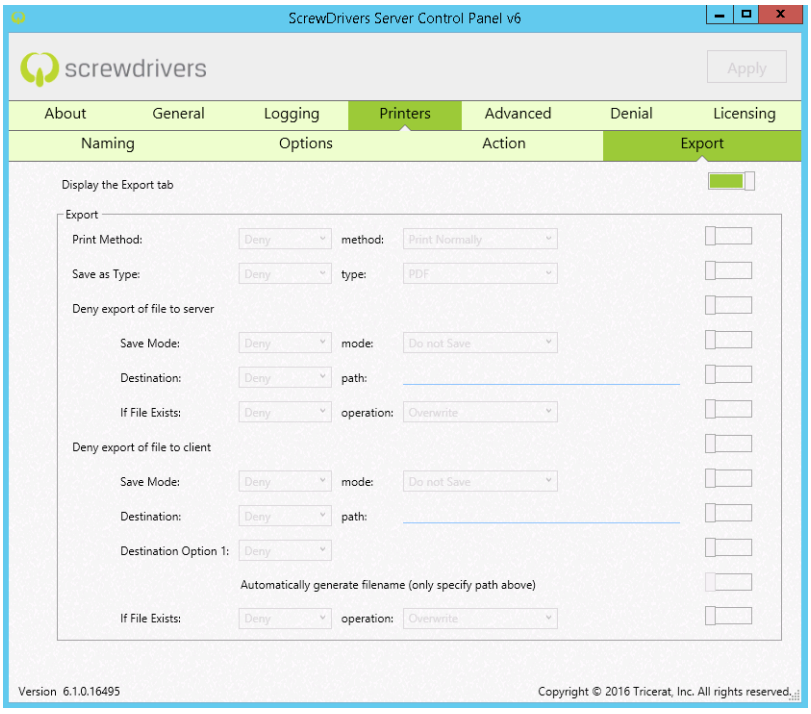
Option	Description
Display the Extended Options tab	If enabled, then the Action tab is displayed for your users on the ScrewDrivers Printing Preferences dialog box.
Action	
Launch Server Process	If enabled, indicates whether the Action function is to be Denied, Forced, or Suggested on the ScrewDrivers Server.
Path	If enabled, you must specify the full directory path to the application on the ScrewDrivers Server that is to be hooked.
Arguments	If enabled, you must specify the arguments and switches that are to be sent to the hooked application.

Option	Description
Open Server Export	If enabled, then any PDF or BMP file that has been saved to the ScrewDrivers Server through the ScrewDrivers Export function is automatically opened.
Launch Client Process	If enabled, indicates whether the Action function is to be Denied, Forced, or Suggested on the ScrewDrivers client.
Path	If enabled, you must specify the full directory path to the application on the ScrewDrivers client that is to be hooked.
Arguments	If enabled, you must specify the arguments and switches that are to be sent to the hooked application.
Open Client Export	If enabled, then any PDF or BMP file that has been saved to the ScrewDrivers client through the ScrewDrivers Export function is automatically opened.

Printers tab, Export sub-tab

The Export sub-tab on the Printers tab contains an option for specifying whether the Export tab is to be displayed for your users on the ScrewDrivers Printing Preferences dialog box. The Export tab contains options for specifying how a document is to be saved on the ScrewDrivers Server or client (as a PDF or BMP), the directory in which the file is to be saved, and the actions to be taken if the file is not a new file, but already exists on the server or client (Overwrite, Prompt, Cancel, or Append). If the Export tab is to be displayed, then you must also specify the client availability—Deny, Force, or Suggest—for each option on the tab.

Figure 2-10: ScrewDrivers Server Control Panel, Printers tab, Export sub-tab



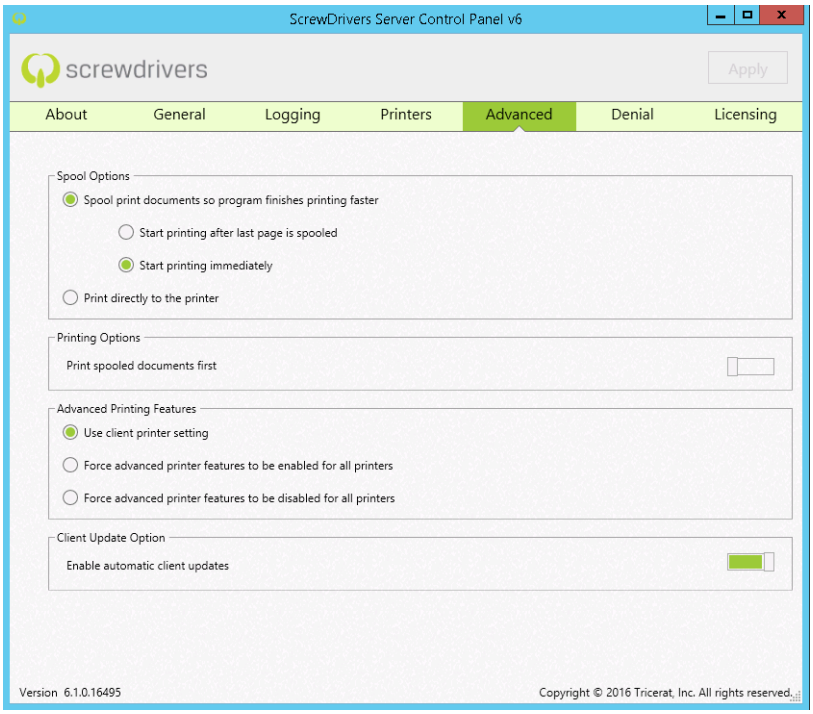
Option	Description
Display the Export tab	If enabled, then the Export tab is displayed for your users on the ScrewDrivers Printing Preferences dialog box.
Export	
Print Method	If enabled, determines whether the file is printed or exported (saved) to a selected format. • Print Normally: The file is physically printed from the selected printer. • Export to File: The file is saved on the ScrewDrivers Server or client in one of two allowed formats (PDF or BMP).
Save as Type	The two allowed file types for saving a file on the ScrewDrivers Server or client: PDF or BMP.
Deny export of file to server	If enabled, users cannot save a file on the ScrewDrivers Server.
Save Mode	• Do not Save: If selected, then a user cannot save the file on the ScrewDrivers Server. • Display Save Dialog: If selected, then a Save File message opens when a user saves a file on the ScrewDrivers Server. • Use Input Pathname: If selected, then you must specify a Destination (directory) for saving the file on the ScrewDrivers Server.
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 Server, or you can enter the name of an existing file on the ScrewDrivers Server (filename.pdf or filename.bmp).
If File Exists	Applicable if Save Mode is Use Input Pathname and the file that is being saved already exists on the ScrewDrivers Server. • Overwrite: Automatically overwrite the existing file on the ScrewDrivers Server with the new file. • Prompt: Prompt the user to overwrite the existing file on the ScrewDrivers Server, or take other actions. • Cancel: Cancel the saving of the file. The existing file on the ScrewDrivers Server remains unchanged and no new file is saved. • Append: Add the new file to the end of the existing file on the ScrewDrivers Server. A single file is produced that contains both the existing (old) content and the new content.
Deny export of file to client	If enabled, users cannot save a file on the ScrewDrivers client.
Save Mode	• Do not Save: If selected, then a user cannot save the file on the ScrewDrivers client. • Display Save Dialog: If selected, then a Save File message opens when a user saves a file on the ScrewDrivers client. • Use Input Pathname: If selected, then you must specify a Destination (directory) for saving the file on the ScrewDrivers client.

Option	Description
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 client, or you can enter the name of an existing file on the ScrewDrivers client (filename.pdf or filename.bmp).
Destination Option 1:	If enabled, then the saved file is automatically generated (including the filename) without any user input.
If File Exists	Applicable if Save Mode is Use Input Pathname and the file that is being saved already exists on the ScrewDrivers client. • Overwrite: Automatically overwrite the existing file on the ScrewDrivers client with the new file. • Prompt: Prompt the user to overwrite the existing file on the ScrewDrivers client, or take other actions. • Cancel: Cancel the saving of the file. The existing file on the ScrewDrivers client remains unchanged and no new file is saved. • Append: Add the new file to the end of the existing file on the ScrewDrivers client. A single file is produced that contains both the existing (old) content and the new content.

The ScrewDrivers Server Control Panel, Advanced Tab

The Advanced tab on the ScrewDrivers Server Control Panel contains options for optimizing printing.

Figure 2-11: ScrewDrivers Server Control Panel, Advanced tab



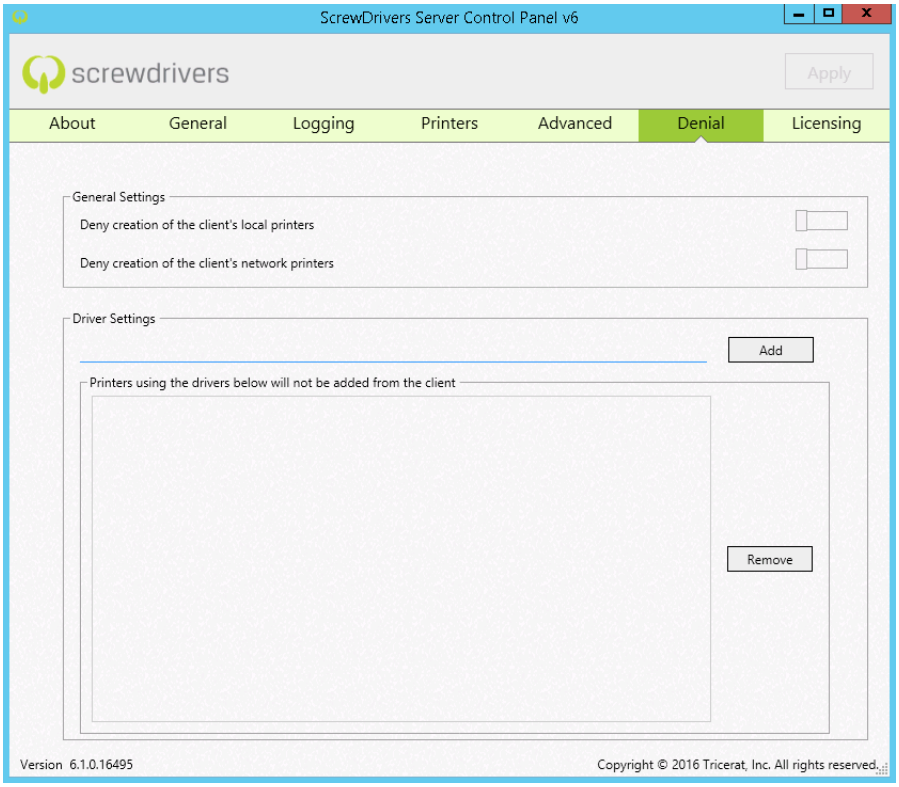
Option	Description
Spool Options	
Spool print documents so program finishes printing faster	Selected by default. Windows spools the printed documents to a specified spool directory on the print server, where they are then despooled to the printer. **Note:** Tricerat recommends that you select this option as it provides the quickest return of application control to the user and does not have a negative impact on performance. • Start printing after last page is spooled: If selected, then a print job must be completely spooled before it is sent to the client printer. • Start printing immediately: Selected by default. The print job is despooled to the printer immediately after queuing of the job is started. This is the preferred option as it provides both a quick return of application control to the user and the fastest printing of documents.

Option	Description
Print directly to the printer	If selected, then Windows sends the documents directly to the printer instead of queueing them to the spool directory. **Note:** 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	If enabled, 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. **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 Client Control Panel. See "The ScrewDrivers Client Control Panel, Printers Tab" on page 40.
Advanced Printing Features - The options in this section control EMF Spooling. For most print drivers, you should leave this setting turned on to allow for faster application return time; however, because ScrewDrivers can use RAW data and convert it into triMetaFile (TMF) data, this option has little influence over application return time in ScrewDrivers. In certain scenarios, if Advanced Printing Features are enabled, then conversion of data from EMF to TMF might slow down the printing, or spool the data to a large size. In this situation, disabling the Advanced Printing Features can resolve the spooling issues for ScrewDrivers.	
Use client printer setting	Selected by default. References the client's Enable Advanced Printing setting (On or Off) for the ScrewDrivers driver on the server.
Force advanced printer features to be enabled for all printers	If selected, the Enable Advanced Printing setting is forced on for all printers that are using the ScrewDrivers driver on the server.
Force advanced printer features to be disabled for all printers	If selected, the Enable Advanced Printing setting is forced off for all printers that are using the ScrewDrivers driver on the server.
Client Update Option	
Enable automatic client updates	Enabled by default. Keeps V6.1 or later clients in sync with the ScrewDrivers version that is installed on the server.

The ScrewDrivers Server Control Panel, Denial Tab

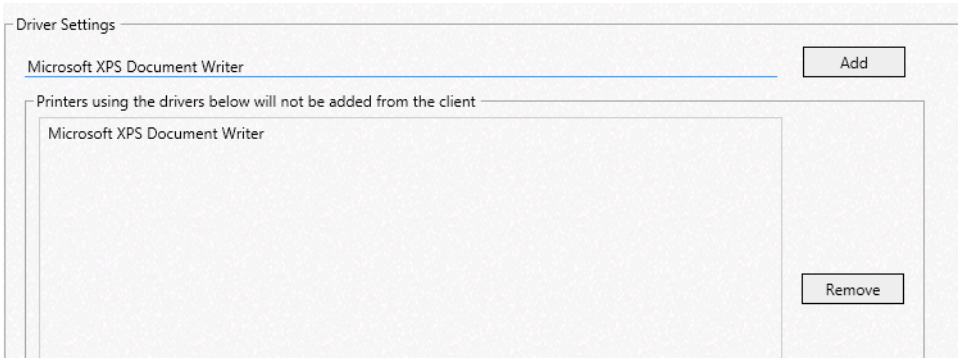
The Denial tab on the ScrewDrivers Server Control Panel contains options for specifying which printers are not to be automatically built (denied) with ScrewDrivers. You can deny all local printers or all network printers for the client in a single step, or you can deny printers on a per printer basis.

Figure 2-12: ScrewDrivers Server Control Panel, Denial tab



Option	Description
General Settings	
Deny creation of the client's local printers	If enabled, then all locally attached printers are prevented from being automatically built on the server when a user logs in to ScrewDrivers.
Deny creation of the client's network printers	If enabled, then all network printers are prevented from being automatically built on the server when a user logs in to ScrewDrivers.
Driver Settings - To deny printers from being automatically built on a per printer basis after a user logs in to ScrewDrivers, then in the blank Driver Settings field, enter the complete name of each appropriate printer as it appears in the list of available client printers, and then click Add. The denied printers are displayed in a list below the Driver Settings field. For example, entering Microsoft XPS Document Writer in the field, and then clicking Add prevents this client printer from being automatically built when a user logs in to ScrewDrivers. To remove a client printer from the Denied list, select the printer, and then click Remove. See Figure 2-13 on page 30.	

Figure 2-13: Denied client printers on a per printer basis

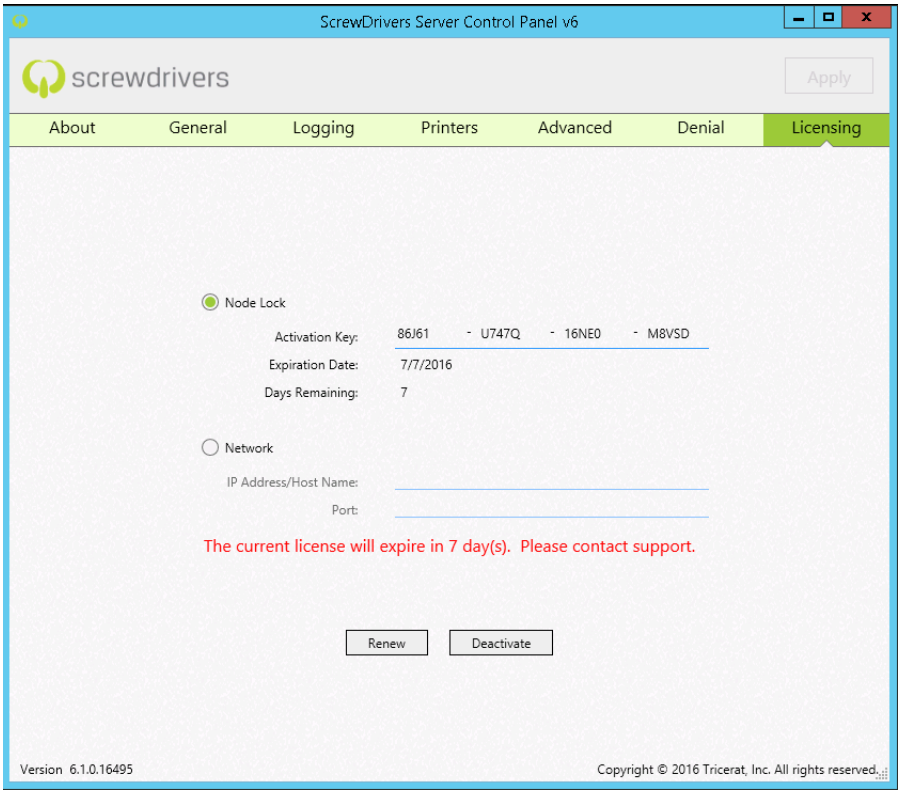


The ScrewDrivers Server Control Panel, Licensing Tab

The Licensing tab on the ScrewDrivers Server Control Panel displays information about the license that the ScrewDrivers Server is currently using, including, if applicable, the expiration date. If the server is using a trial license, then you can enter the activation code for a purchased license in the Activation Key field. If you are using a Tricerat License Server, then you can select the Network option, and then enter the requested information for the server.

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

Figure 2-14: ScrewDrivers Server Control Panel, Licensing tab



Chapter 3
The ScrewDrivers Client

The ScrewDrivers client does not require your users to configure their printers for a remote session. As long as the ScrewDrivers client is installed on the connecting workstations and the ScrewDrivers Server is installed on the remote server, then the printers are built for your users. You access the ScrewDrivers client through a control panel that allows for the defining and configuring of the client printers that are to be made available to the remote server. This chapter details the functions that are available in the ScrewDrivers Client Control Panel.

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

This chapter covers the following topics:

- "The ScrewDrivers Client Control Panel" on page 33.
- "The ScrewDrivers Client Control Panel, About Tab" on page 36.
- "The ScrewDrivers Client Control Panel, General Tab" on page 37.
- "The ScrewDrivers Client Control Panel, Logging tab" on page 39.
- "The ScrewDrivers Client Control Panel, Printers Tab" on page 40.

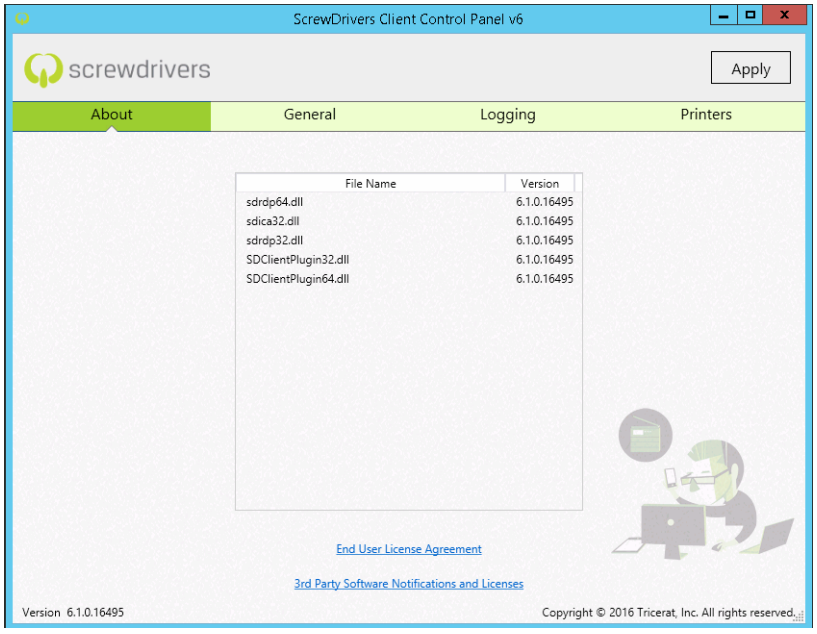
The ScrewDrivers Client Control Panel

The ScrewDrivers client is installed on every client workstation that your users are using to log in to the remote server. You access the ScrewDrivers client through a control panel that allows for the defining and configuring of the client printers that are to be made available to the remote server. To open the ScrewDrivers Client Control Panel, do one of the following:

- Navigate to the Control Panel, and then double-click ScrewDrivers Client v6.
- Open the Start menu, and then under Tricerat > ScrewDrivers Client v6, double-click Client Control Panel.

You do not need to provide your users access to the ScrewDrivers Client Control panel; however, access to the control panel can be very helpful for your power users that connect to multiple environments. Also, 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 Client Control Panel. Contact support@tricerat.com for more information and assistance.

Figure 3-1: ScrewDrivers Client Control Panel



The ScrewDrivers Client Control Panel has four primary tabs, each with different options for defining and configuring the client printers that are to be made available to the remote server. With the exception of the About tab, all the tabs have the following features in common:

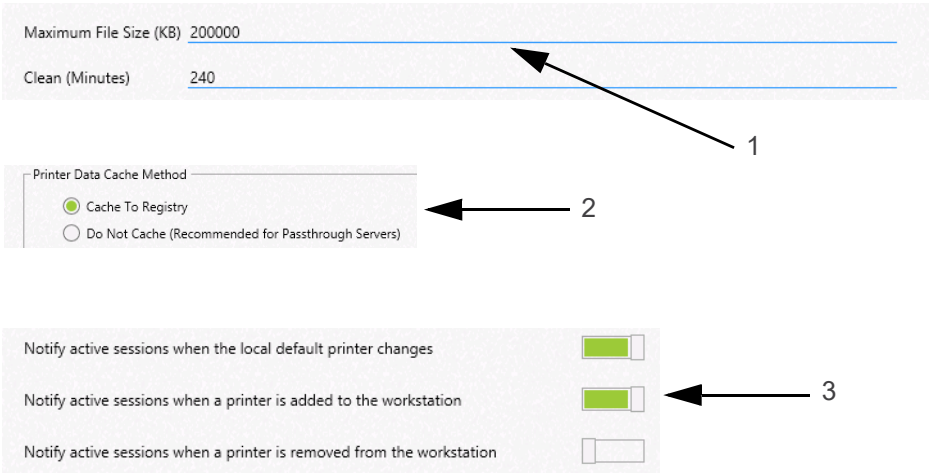
- An option can be a free text field, a radio button, or a toggle. A free text field has a blue underline. If you toggle on an option, then the option turns green. If you toggle off an option, then option turns gray. If you select a radio button or a toggle on an option, and a

default value is supplied for the option, then you can leave the default value as-is, or you can edit it. If you toggle off an option, then the option is set to its default value. See Figure 3-2 below.

- After you make a change to any value on any tab, you must click Apply (displayed in the top right corner of the control panel) 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. See Figure 3-3 below.
- After you have made and applied all the needed changes for your ScrewDrivers client, click Close (x) in the upper right corner of the control panel to close and exit out of the control panel.

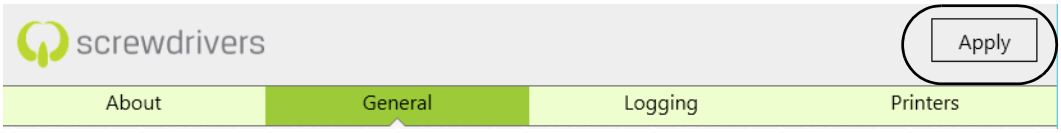
If you have made any changes to the client settings, and have not applied these changes, then you are prompted to do so before exiting the application.

Figure 3-2: Different option formats



Option	Description
1	Free text field.
2	Radio buttons.
3	Toggles. Toggles that are turned on are green. Toggles that are turned off are gray.

Figure 3-3: Apply button



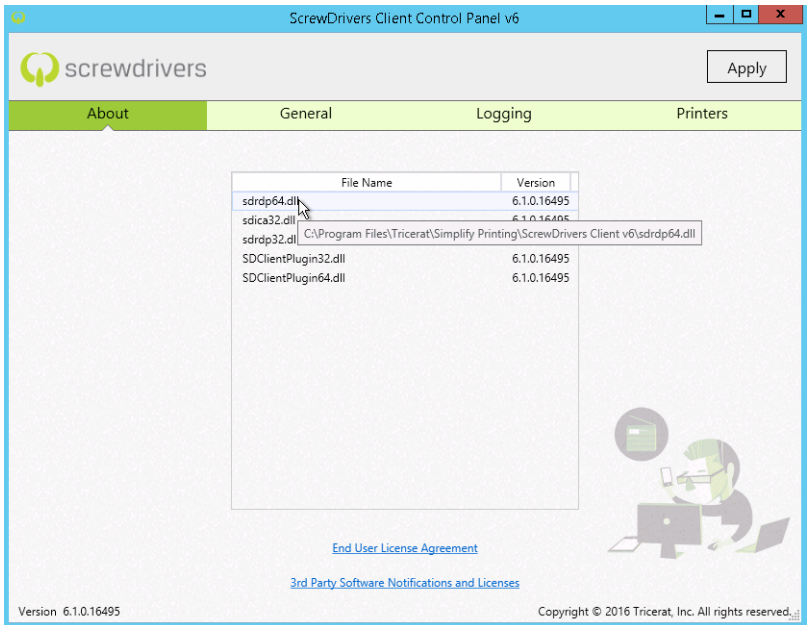
See:

- “The ScrewDrivers Client Control Panel, About Tab” on page 36.
- “The ScrewDrivers Client Control Panel, General Tab” on page 37.
- “The ScrewDrivers Client Control Panel, Logging tab” on page 39.
- “The ScrewDrivers Client Control Panel, Printers Tab” on page 40.

The ScrewDrivers Client Control Panel, About Tab

When the ScrewDrivers Client Control Panel first opens, the About tab is the open tab. The About tab displays all the dlls, alphabetically by name, that were installed for the ScrewDrivers 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.

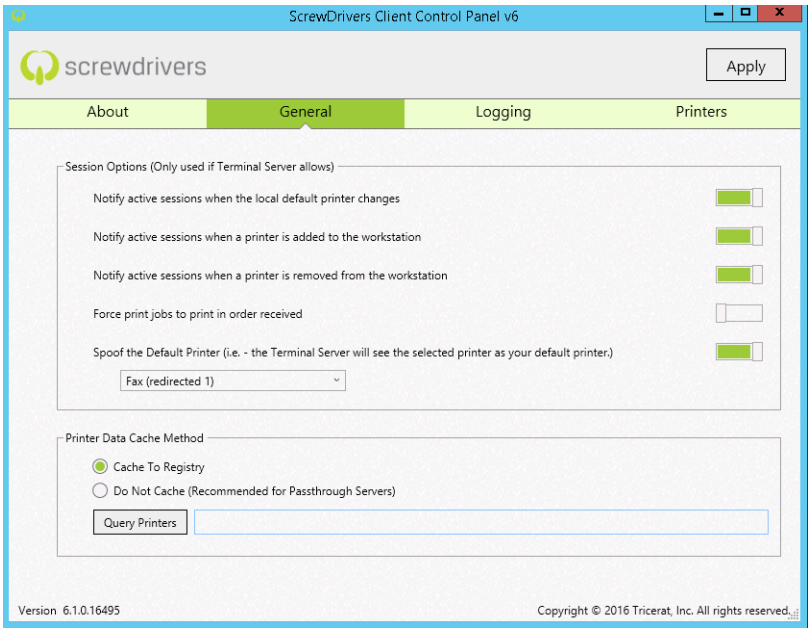
Figure 3-4: ScrewDrivers Client Control Panel, About tab with tooltip displayed



The ScrewDrivers Client Control Panel, General Tab

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

Figure 3-5: ScrewDrivers Client Control Panel, General tab



Option	Description
Session Options (Only used if Terminal Server allows)	
Notify active sessions when the local default printer changes	If enabled, then a notification is sent to the remote server anytime any information about the default printer changes during a terminal 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 enabled, then a notification is sent to the remote server when any new printer is added to the client workstation during a terminal session.
Notify active sessions when a printer is removed from the workstation	If enabled, then a notification is sent to the remote server when any printer is removed from the client workstation during a terminal session.
Force print jobs to print in order received	If enabled, 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.
Spoof the Default Printer	If enabled, 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 terminal session instead of the printer that is set as the default printer on the client workstation.

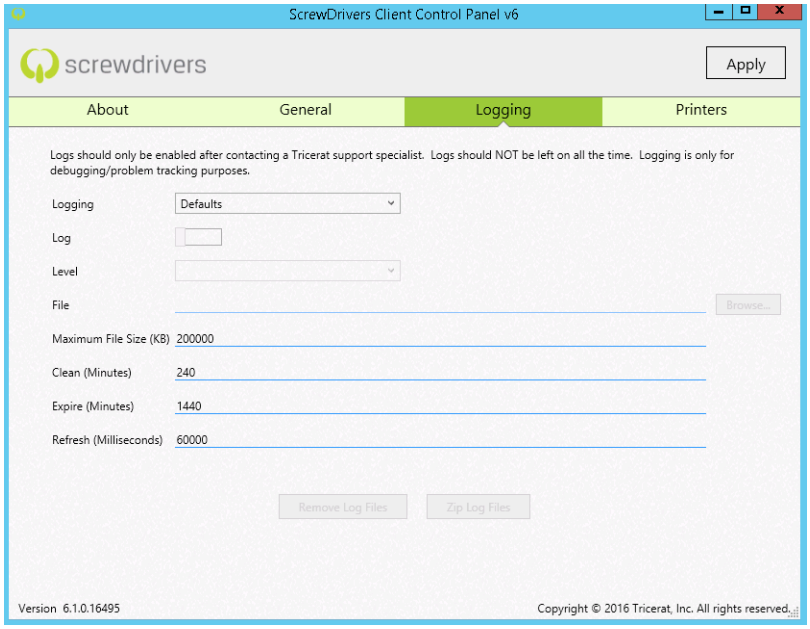
Option	Description
Printer Data Cache Method	
Cache to Registry	If selected, then the printer data is stored in the client workstation registry, and is sent to the terminal server after a user logs in to the workstation.
Do Not Cache (Recommended for Pass through Servers)	If selected, printer data is not cached. Instead, ScrewDrivers 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 workstation printers at times other than just when a user logs in.

The ScrewDrivers Client Control Panel, Logging tab

The Logging tab on the ScrewDrivers Client Control Panel provides options for diagnostic logging from a ScrewDrivers 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 on this tab unless Tricerat Support instructs you to do so.

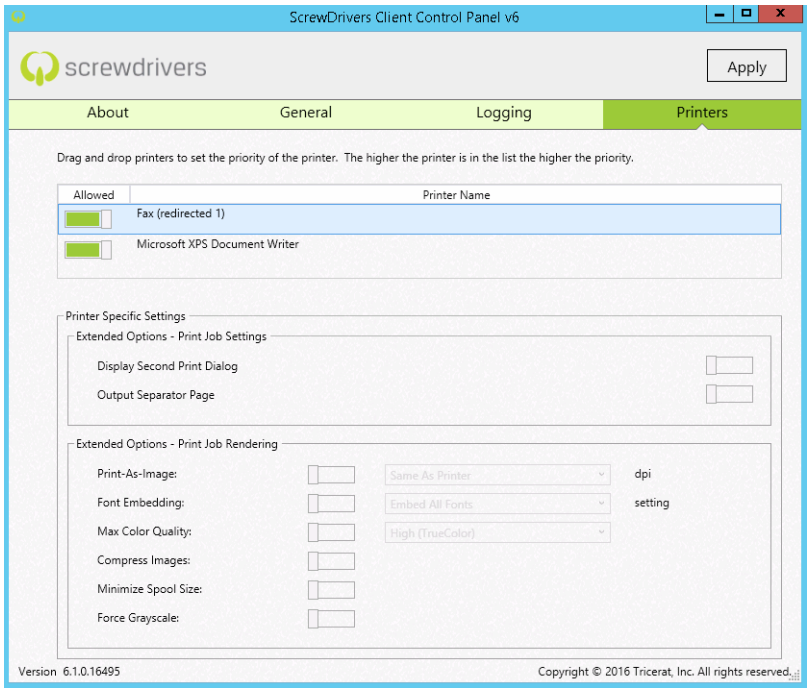
Figure 3-6: ScrewDrivers Client Control Panel, Logging tab



The ScrewDrivers Client Control Panel, Printers Tab

The Printers tab on the ScrewDrivers Client Control Panel contains options for the configuration of the printers in your users' environments.

Figure 3-7: ScrewDrivers Client Control Panel, Printers tab



The top pane of the tab displays a list of all the printers (locally attached and network) that are available for the client workstation (the Available Printers list). Drag a printer to a different location in the list to change the priority of the printer. The higher that the printer is displayed in the list, the higher the priority of the printer. You can also toggle on and toggle off the Allowed status for a printer, regardless of its priority. If a printer has an Allowed status and is enabled on the remote server, then after the user logs in to the client workstation, the printer is passed to the remote session and built on the server.

You can apply printer-specific settings to each printer in the Available Printers list. To apply any of the following printer-specific settings to a printer, select the printer in the list, and then set the values for the options as needed.

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 enabled, 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 enabled, 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	If enabled, then ScrewDrivers converts the entire print job to a BMP for printing locally. **Note:** Although enabling this option can resolve output issues such as font issues, uncompressed printing can also use a significant amount of bandwidth. For text, 600 x 600 the minimum recommended DPI. **Caution:** Do not set the DPI for a print job the same as the default value for a printer. Because some printers are set to a high default DPI, this avoids a direct impact on the spool size. For example, a 1200 x 1200 DPI print job uses four times the bandwidth of a 600 x 600 print job.
Font Embedding	If enabled, ScrewDrivers embeds a temporary copy of the font or font data in the print jobs. • Embed All Fonts - The default setting. If enabled, and the fonts that are used in the print job are not available on the client, then ScrewDrivers sends a temporary copy of each font to the client with the print job. After the print job is complete, then ScrewDrivers removes the temporary copies from the client. • Pre-Render Embedded - If enabled, and the fonts that are used in the print job are not available on the client, then ScrewDrivers sends these fonts as images to the client, and then integrates the corresponding text back into the job file. • Pre-Render All - If enabled, then ScrewDrivers sends *all* 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. **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 Server and client.

Option	Description

Image Rendering	• Color Quality - If enabled, then, by default, ScrewDrivers renders images in HIgh (TrueColor), which is 24-bit. You can select a different default value:
	  • Medium (HighColor), which is 16-bit
	  • Low, which is 8-bit.
	  • Monochrome, which is 1-bit. (True black and white).
	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.
	• Compression - If enabled, then a lossy compression algorithm is carried out for images in the document for additional reduction in spool size.
	• Minimize Spool - A legacy option. Not applicable.
	• Force Grayscale - If enabled, then all images in the document are converted to grayscale, which is 8-bit gray and reduces file size.

Appendix A
ScrewDrivers Troubleshooting

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

This appendix covers the following topics:

- "General Troubleshooting Considerations" on page 44.
- "ScrewDrivers Server Troubleshooting" on page 45.
- "ScrewDrivers Client Troubleshooting" on page 48.

General Troubleshooting Considerations

The most common issues that you encounter with ScrewDrivers 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, keep in mind the three key functional areas that are involved:

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

As is typical with any product, the recommended way to troubleshoot ScrewDrivers is to eliminate possible causes first, and then focus on the root cause. Generally, when troubleshooting ScrewDrivers, you should first determine whether the problem resides with the ScrewDrivers Server or the client. To do this, you can test ScrewDrivers 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 Server Troubleshooting

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

Printers are not building for any user

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

Typically, when printers build for a user's session, they are displayed in the users' Registry under HKLM\System\Current\ControlSet\Control\Print\Printers. Keeping in mind that a user sees only those printers for which permissions have been granted, the system location is equivalent to what is observed in the regular Printers folder in the Terminal or Remote Desktop session. If printers are not building for a user, then you must reinstall the print driver and the printer port.

1. Navigate to the following directory:C:\Windows\System32\spool\drivers\w32x86\3
2. Rename the following files with an extension of .old: sd6drv.dll and sd6ui.dll.
3. Reboot the print server.
4. Delete the two "old" files that you renamed in Step 2.
5. Navigate to the following directory: C:\Tricerat\ScrewDrivers Server v6.
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.

   - setsec_server.exe (sets the security for the server components)

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 Server.

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 nor properly scaling, then two options are available:

- Upgrade the print driver on the ScrewDrivers client.
- Enable Print-As-Image.

Upgrade the print driver

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

1. Upgrade the local print driver to the latest version on the ScrewDrivers client, where PCL > PS.
2. Carry out a query on the ScrewDrivers client. See “Query Printers” in the “The ScrewDrivers Client Control Panel, General Tab” on page 37.
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.

For details about Print-As-Image, including recommended DPI settings for the server, see “Print-As-Image” in “Printers tab, Options sub-tab” on page 21. For the client, see “Print-As-Image” in “The ScrewDrivers Server Control Panel, Printers Tab” on page 18.

To enable Print-As-Image mid-session

1. In any application on the ScrewDrivers Server, click Print to open a Print dialog box.
2. In the list of available printers on the Print dialog box, select the correct ScrewDrivers 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 Client Control Panel.
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 enabled through Citrix or Terminal Services, then it is possible for users to see duplicate printers after the ScrewDrivers Server and client are installed. As a result, Tricerat recommends that you turn off auto-creation in your ScrewDrivers 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. Instead, it is a known third-party issue. Contact support@tricerat.com for assistance.

ScrewDrivers Client Troubleshooting

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

ScrewDrivers not building during a session

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

- Client updates.
- Incompatible ScrewDrivers client version. See

Client updates

If the ICA or RDP client is updated, then the reference to the ScrewDrivers client is overwritten. To resolve this issue, run the appropriate executable on the ScrewDrivers client:

- For an ICA client: C:\Program Files\Tricerat\Simplify Printing\ScrewDrivers Client v6\install_ica.exe.
- For an RDP client: C:\Program Files\Tricerat\Simplify Printing\ScrewDrivers Client v6\install_rdp.exe.

Incompatible ScrewDrivers client version

The version of ScrewDrivers client that is currently installed on a workstation is displayed on the About tab of the ScrewDrivers Client Control Panel. (See “The ScrewDrivers Client Control Panel” on page 33.) If the ScrewDrivers 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, and prevent the client from ever being out of date. See “Enable automatic client updates” in “The ScrewDrivers Server Control Panel, Printers Tab” on page 18.

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

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

Output issues with fonts and/or graphics

If fonts are not being formatted correctly and/or fonts and graphics are nor properly scaling, then two options are available:

- Upgrade the print driver on the ScrewDrivers client.
- *If allowed by the server,* (Suggest) enable Print-As-Image.

Upgrade the print driver

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

1. Upgrade the local print driver to the latest version on the ScrewDrivers client, where PCL > PS.
2. Carry out a query on the ScrewDrivers client. See “Query Printers” in the “The ScrewDrivers Client Control Panel, General Tab” on page 37.
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.

If needed, you can also set Print-As-Image is to Force on the ScrewDrivers Server 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 server, see “Print-As-Image” in “Printers tab, Options sub-tab” on page 21. For the client, see “Print-As-Image” in “The ScrewDrivers Server Control Panel, Printers Tab” on page 18.

To enable Print-As-Image mid-session

1. In any application on the ScrewDrivers 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 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 Client Control Panel.
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 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 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.