

Quick Start Guide – Simplify Printing

Purpose

This document is intended to give the reader a quick start to installing Simplify Printing. It covers installation, configuration, and some Frequently Asked Questions. It is not intended to be used a full documentation for the product, for that refer to <http://www.tricerat.com/dochelp.php>

Pre-requisites

SQL Server

- Simplify Printing v5 requires a SQL server backend database. It can be MSDE, SQL Express 2005/2008, or SQL 2000/2005/2008.

Terminal Server

- The Terminal Server needs to be Windows 2000, 2003, or 2008 Server
- The Terminal Server can be installed with Citrix
- Network access on specific port to print server (default is TCP 3550)

Print Server

- The print server needs to be Windows 2000, XP, Vista workstation or Windows 2000, 2003, 2008 server.
- The print server needs to have printers installed and connected. (printers may not be pointing to other print servers, as if they are, that print server should have the agent installed).
- Network access on specific port to Terminal Server(s) (default is TCP 3550).

Client (Optional)

- If you want to use client printers too, then the ScrewDrivers Client needs to be installed on each Windows client.
- These are found in the ScrewDrivers Client directory and on the triCerat website:
<http://www.tricerat.com/clidown.php>

Download Components

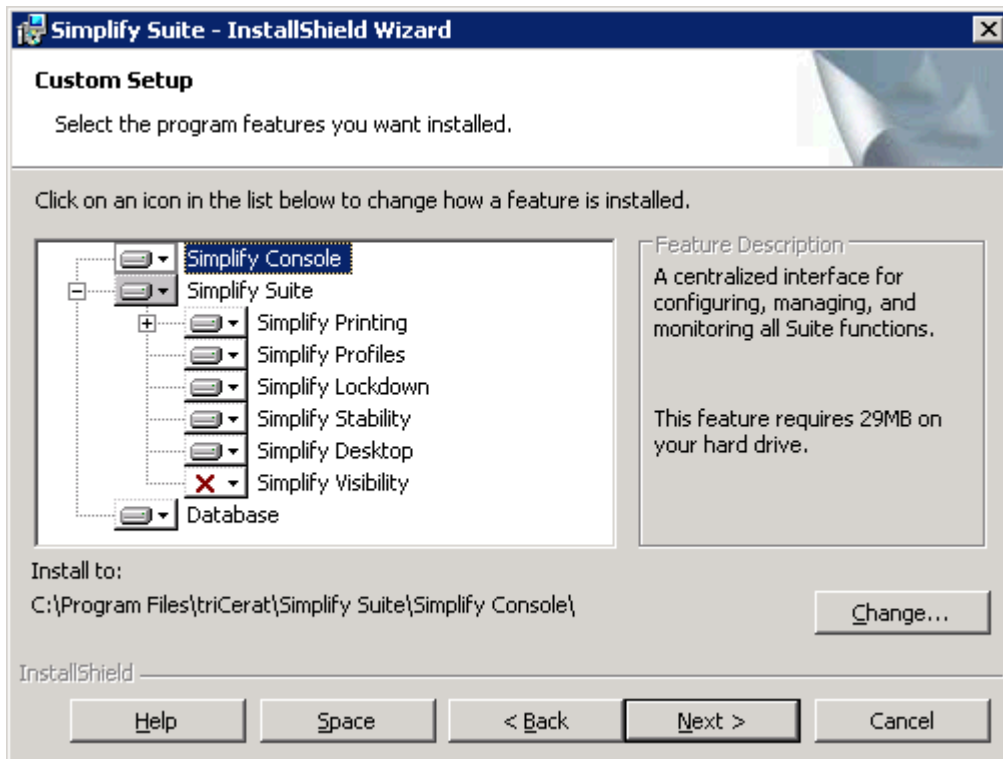
The Simplify.zip contains the following files:

SimplifySuite.exe	The Simplify Suite (Printing) is installed on each Terminal Server, it will install all necessary components.
README FIRST.txt	This text file explains the Simplify Suite pre-requisites.
Installing SQL Express for Simplify Suite.doc	Directions to install SQL Express. Not required if you already have a SQL server.
ScrewDrivers v4 Print Server Agent.msi	This agent needs to be installed on every Windows Print Server that you want to include in your configuration.
ScrewDrivers Client v4.msi	ScrewDrivers client for RDP and/or ICA. This is installed on the Windows clients for local printer mapping.
ScrewDrivers Client v4 x64 (rdp only).msi	ScrewDrivers client for RDP x64 (not ICA). This is installed on the Windows clients for local printer mapping.

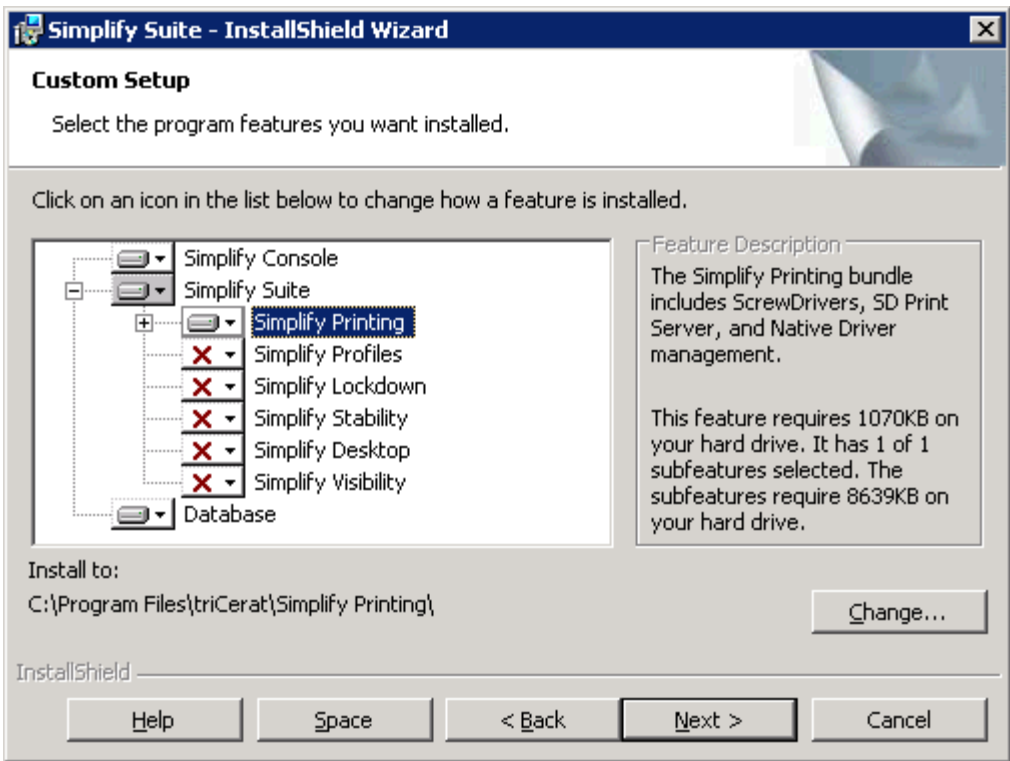
Installation on Terminal and Citrix Servers

Login to the Terminal Server

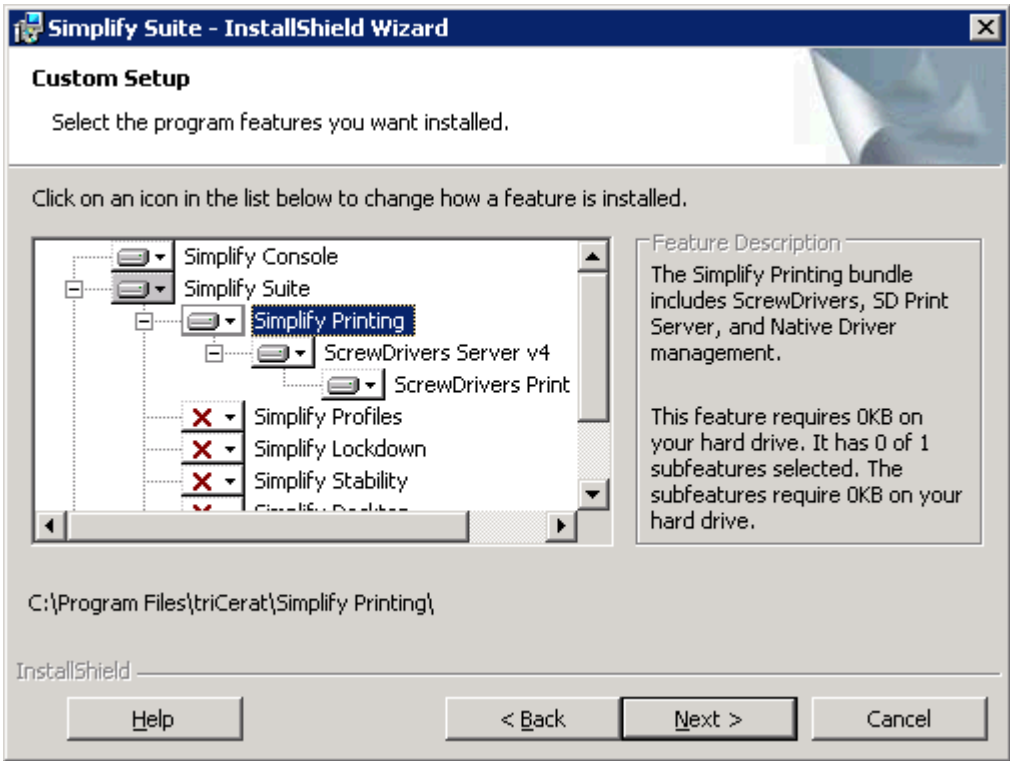
Run SimplifySuite.exe, client Next until you reach the screen below:



Customize the installer to your specifications. The example below is for Simplify Printing:



As you can see, Simplify Printing includes subcomponents. Generally you want all subcomponents for Simplify Printing.

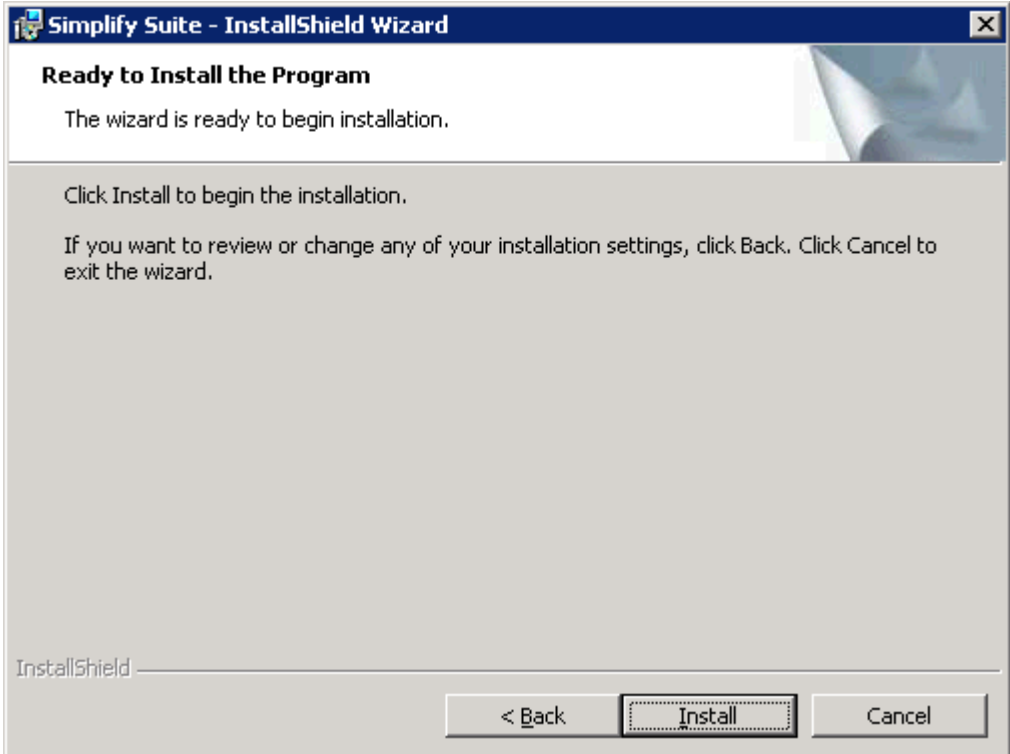


Then you click next, you will be asked to select a database server, if you have a SQL server, type in the name of the server or browse to the server. We recommend you to use Server Authentication. For the first server install, user sa account if possible to create the database. You can then create a new account on the SQL server that is db_owner of

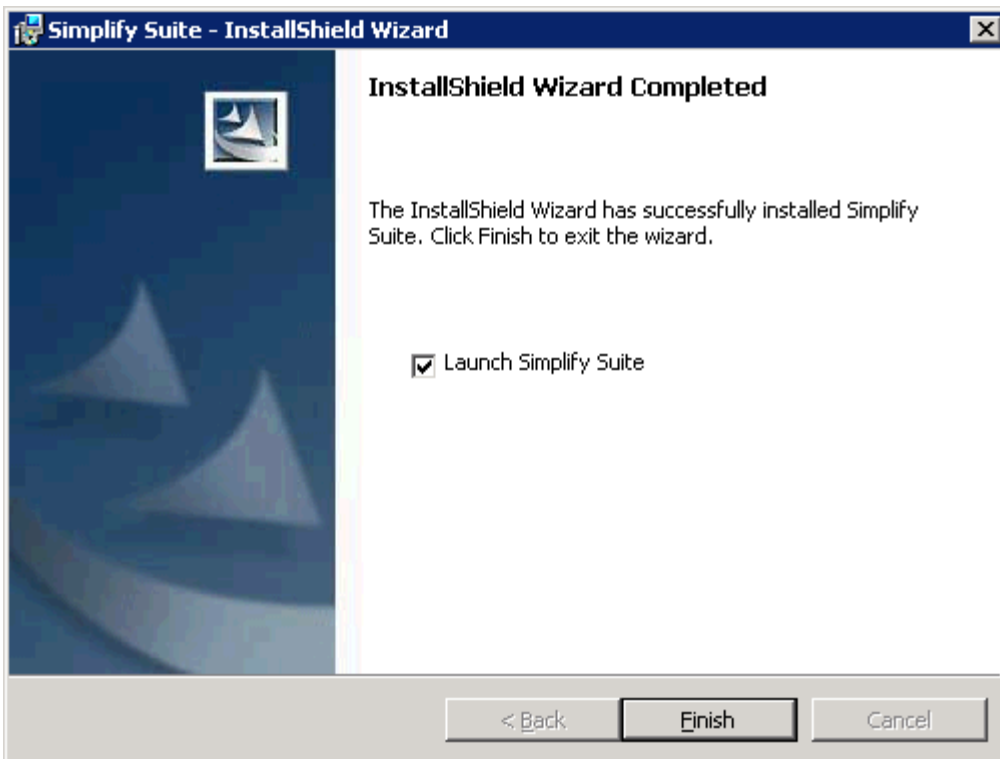
the database “Simplify” and change the account used by Simplify from “Manage Data Sources” found on the file menu in Simplify Console.



If you provide a correct user name and password you will get the following screen:



The software will then be installed, and you will get a screen displaying that the install finished. You can select to start Simplify Console by using the checkbox and clicking Finish.



Installation on Print Server

Login to Print Server, and run the ScrewDrivers v4 Print Server Agent.msi installer.

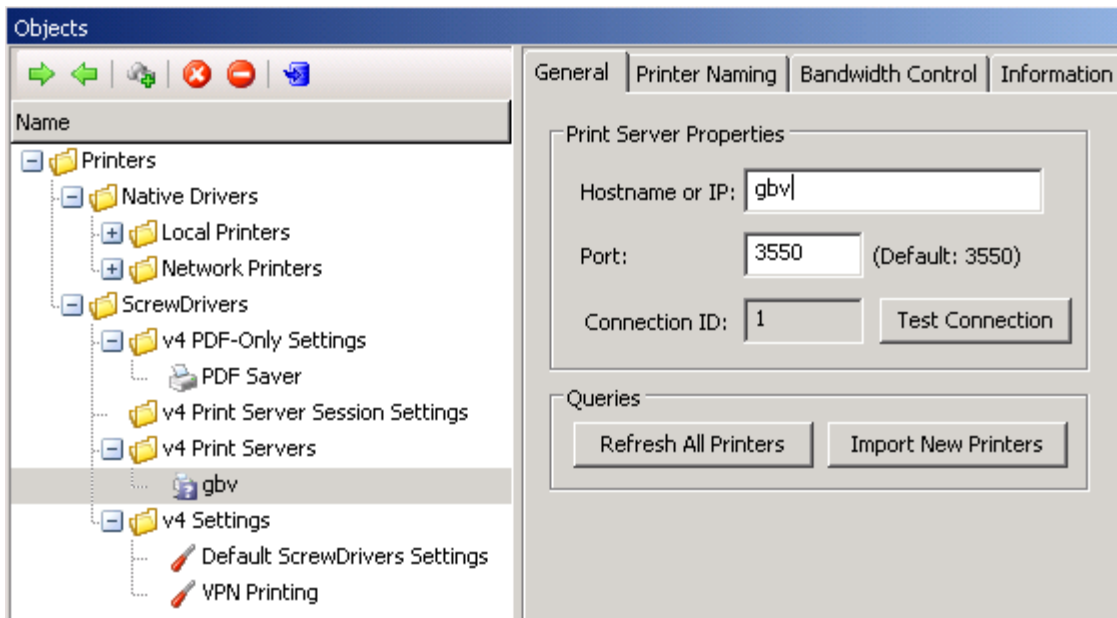
Once you have installed this package, you will have a new service named: ScrewDrivers v4 Print Server. This service accepts and processes print data from the Terminal Servers with Simplify Printing.

Record the IP address or hostname of the print server, to be used later.

Creating Print Server Object

Start the Simplify Console. By default, it can be found in the Start Menu or Program Files\triCerat\Simplify Suite\Simplify Console\SimplifyConsole.exe

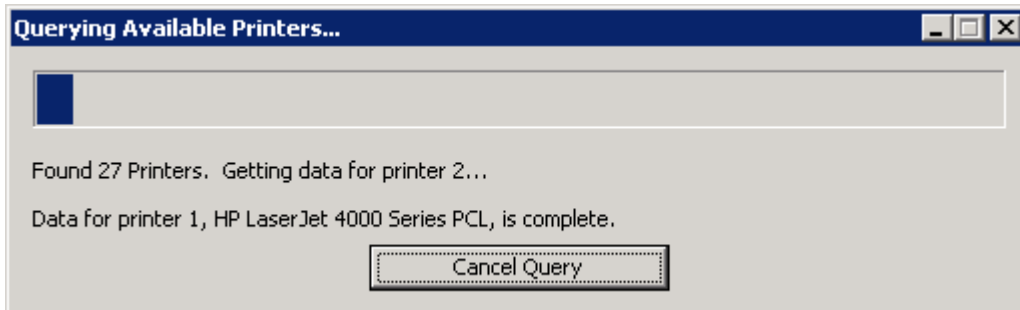
In the Objects pane, select v4 Print Servers, and right click and select New Object, and type in a name for the new object. It's recommended to use the print server's hostname for the object's name.



You must now complete the object's configuration. Type in the Hostname or IP in the field.

Click Test connection to verify the ScrewDrivers v4 Print Server communication. Upon success, click Import New Printers

You will see a dialog with connection to Print Server, gathering a list of printers and features. Let the Import New Printers complete. This process locks up the Simplify Console until it's complete. It may give the impression that Simplify Console crashed, but it's working.



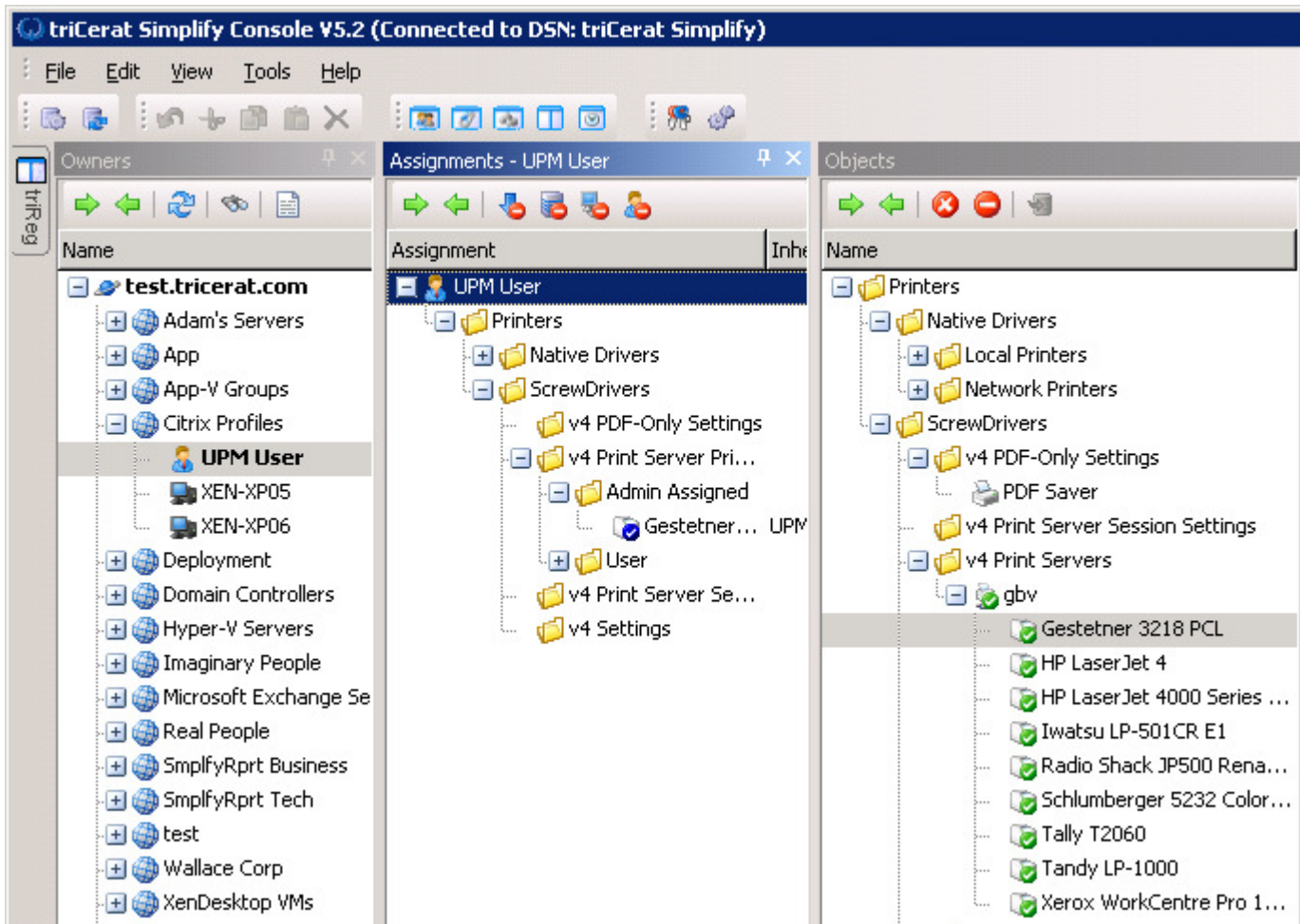
After the query completes, you are ready to assign the printers.

Assigning Print Server Printers to owner

When you have a list of printers in under the v4 Print Server object, you are ready to assign printers to your users.

To assign the printer, you must first select the owner (user, group, OU, etc).

Once you have selected the owner, just drag and drop the printer from the Objects pane to Assignments pane. The print server printer object should be placed under v4 Print Server Printers > Admin Assigned.



The above setting will create the Gestetner printer when the UPM User connects to the Simplify Printing server.

The Default Printer can be assigned by right-clicking the Assigned printer and selecting “Set the printer as default”

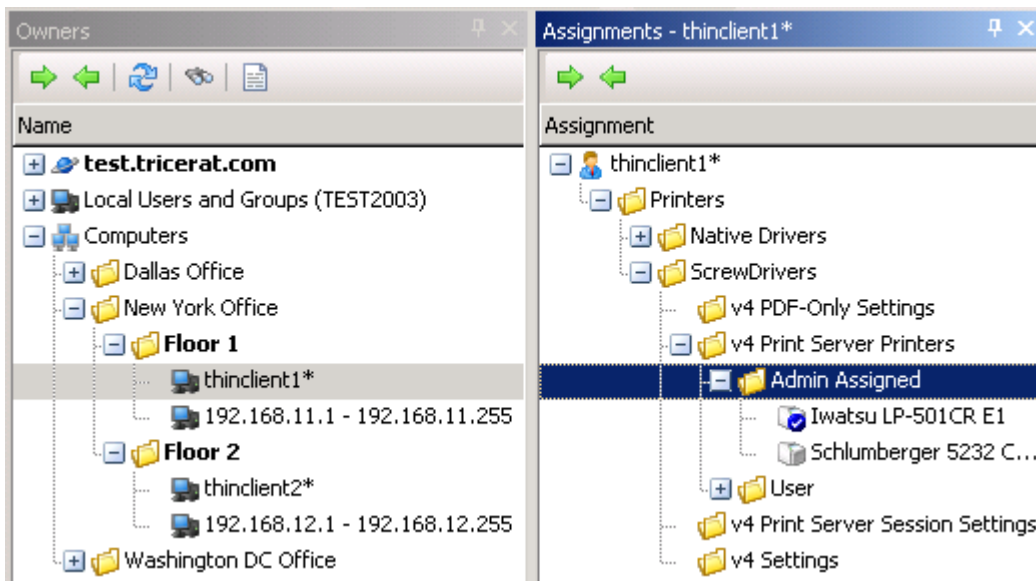
The Default Printer is always flagged with a blue checkmark in the Simplify Console.

For information on “User Assigned” and “User Allowed” printers please refer to this document:

http://www.tricerat.com/support/Simplify%20Suite/User_Assigned_Printers.html

Assigning printers based on client location (Proximity Printing)

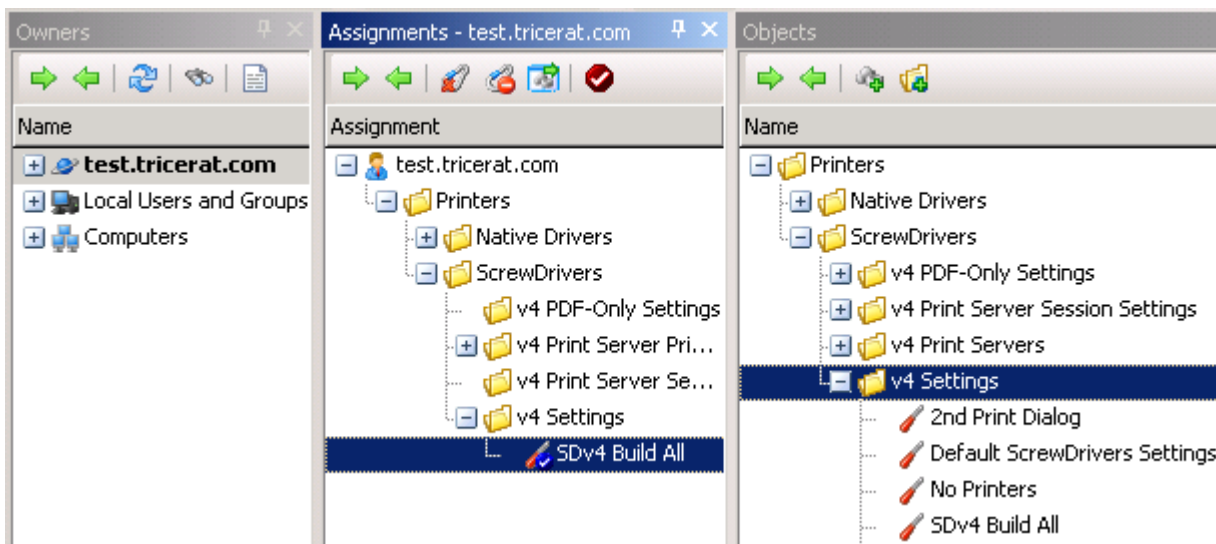
Simplify Printing includes the ability to dynamically assign printers based on where the user is logging in from, based on IP address or client hostname. If you have many locations, you may also want to create a “group” to organize the IP addresses and hostnames. The group can be something that makes sense to you (building, location, country, etc) rather than referring directly to IP addresses and hostnames (see the example below).



Client Based Printers

If you wish to allow users to use locally installed printers from their workstations then they will need to have the ScrewDrivers client installed on their workstation.

You also need to create and assign a ScrewDrivers v4 Setting object to the user(s). In the example below, the SDv4 Build All is assigned to the domain.



Frequently Asked Questions

The Simplify Suite install fails with the error: *Error 27502. Could not connect to Microsoft SQL Server (server)\SQLEXPRESS'. [DBNETLIB][ConnectionOpen(Connect()).]Specified SQL server not found. (6)*

This error occurs if the installer cannot locate the SQL server, strictly a connectivity problem. Hardware and software firewalls can block required TCP/UDP communication. The SQL server needs TCP/IP and Named Pipes protocols enabled. The installer automatically targets the default SQL port (1433). For other ports specific the Database Server as SERVER\INSTANCE,PORT.

Why doesn't ScrewDrivers Client work with the Remote Desktop web interface (TSWeb)?

You must modify the web interface to allow ScrewDrivers to work with Remote Desktop via the web interface. Without these modifications ScrewDrivers is unable to create a virtual channel within the Remote Desktop Protocol. Please follow these directions:

Windows 2003

1. Edit the web portal's HTML file, typically default.htm in C:\inetpub\wwwroot\tsweb\default.htm. Check Internet Information Service (IIS) if you do not know where the TSWeb HTML file resides.
2. In the HTML file find **Device redirection options**. It should read as:

```
'Device redirection options
MsRdpClient.AdvancedSettings2.RedirectDrives = FALSE
MsRdpClient.AdvancedSettings2.RedirectPrinters = TRUE
MsRdpClient.AdvancedSettings2.RedirectPorts = FALSE
MsRdpClient.AdvancedSettings2.RedirectSmartCards = FALSE
* the TRUE or FALSE values may differ in your environment
```

3. Add the following line of code at the end of the **Device redirection options** section:

```
MsRdpClient.AdvancedSettings2.PluginDlls = "sdrdp5.dll"
```

Windows 2008

1. Open up the web.config file in the TS web directory, typically C:\Windows\web\ts\web.config on your server.
2. Look for these entries:

```
<add key = "xPrinterRedirection" value = "true" />
<add key = "xClipboard" value = "true" />
<add key = "xDriveRedirection" value = "false" />
<add key = "xPnPRedirection" value = "false" />
<add key = "xPortRedirection" value = "false" />
```

3. Add the following:

```
<add key = "xPluginDlls" value = "sdrdp5.dll" />
```

4. Restart IIS

Does the solution use the Print Spooler?

Yes, Simplify Printing uses the Print Spool service on the client and server. In Citrix environments Simplify Printing does not use the Citrix Print Manager service (cpsvc.exe). Simplify Printing sends data to the print server using the ScrewDrivers v4 Print Server service.

Does Simplify Printing require any drivers on the Terminal or Citrix Server?

No drivers need to be installed on the Terminal Server. Simplify Printing uses triCerat's proprietary universal print driver (ScrewDrivers).

Why are some printer settings missing?

Simplify Printing virtualizes all Windows DEVMODE driver settings, but some drivers use private settings which will not virtualize. Enabling the **Second Print Dialog** will force the Printing Preferences dialog to appear on the client side using the client's driver. The user has access to all features with the **Second Print Dialog**.

Users See Everyone's Printers

It is important to note that ScrewDrivers has no control over this behavior as this problem would occur with or without ScrewDrivers. However it is also important to know where this problem is exhibited...

If a user can see another user's printers in Printers and Faxes, then the user has elevated permissions. Users that are a member of either local or domain Administrators, Power Users, and Printer Operators have Full Control to all printers.

If a user can see another user's printers in specific applications, then the application is presenting other users' printers. Depending on the application the solution may vary, so contact the application vendor.

Don't panic in situations where you cannot fix this behavior, as in all circumstances ScrewDrivers does not allow a printer to be used from a separate session. ScrewDrivers printers are session-specific, and not even administrators can print to another user's ScrewDrivers printer.

The client printers are creating, but why isn't the default printer set? Adobe product(s) display "Before you can printer-related task such as page setup or printing a document, you need to install a printer"

There are a number of problems that can exhibit this behavior. The default printer is not set until all printers are created – verify that all client printers are in the remote connection. ScrewDrivers, by default, sets the client's default as the default on the server, unless **Spoof the Default Printer** is enabled in the ScrewDrivers Client applet – check these settings on the client. The user's profile on the server maybe corrupted, refer to this article: <http://support.microsoft.com/kb/929270/en-us>. If this does not fix the problem, then create the "Device" registry string (REG_SZ) in HKEY_CURRENT_USER\Software\Microsoft\Windows NT\CurrentVersion\Windows with an empty value and make grant the user access to Full Control.

In Citrix (or RemoteApp) the ScrewDrivers print disappeared (or stopped working) after opening a second published application. Why does this happen?

This is generally a case of perception, in that the printers do not actually disappear. What is most likely occurring is that the user is opening more than one Citrix session, causing the default printer to change to a printer in the newest session. ScrewDrivers permissions printers by session ID, therefore if a user logs on to the Citrix Server a second time, the default printer is then changed to a printer that the user cannot access from the first Citrix session.

This can be fixed by limiting the user to one session. With Citrix and other published application solutions (RemoteApp, ProPalms, Ericom) each application must be published with the same settings (Screen Size, Color depth, Sound, Drive Mapping, Access Control Filters, Printer Mapping) for session sharing to work properly.

The ScrewDrivers Client works for some Remote Desktop users, but not everyone. Why?

The ScrewDrivers Client used to work on this PC, but not anymore. How do I fix this?

ScrewDrivers works by loading a DLL (sdrdp5.dll) into the Remote Desktop Client. Sometimes the plugin DLL does not load because the user's profile on the client loses this configuration. ScrewDrivers can be re-registered to the Remote Desktop Client as a plugin by executing Program Files\triCerat\Simplify Printing\ScrewDrivers Client v4\install_rdp.exe.

Does ScrewDrivers require any ports to be opened?

No, the ScrewDrivers Client communicates through virtual channels of the ICA or RDP protocols. Simplify Printing's printer server does require TCP/IP communication through port 3550. A different port can be specified through the Simplify Console by modifying the print server's object.