



# Installation and Configuration Quick Start Guide

v. 1.6.4

Release Info	This version of the <i>Simplify Printing TX iPhone Agent User Guide</i> is applicable for all software versions of Simplify Printing TX 1.6.4 and greater, and is current until replaced.
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# Preface

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Welcome to the *Simplify Printing TX Installation and Configuration Quick Start Guide*. The purpose of the *Simplify Printing TX Installation and Configuration Quick Start Guide* is to answer your questions and guide you through the procedures that are necessary to quickly install and configure Simplify Printing TX for evaluation purposes.

## Using the manual

You will find the *Simplify Printing TX Installation and Configuration Quick Start 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 *Simplify Printing TX Installation and Configuration Quick Start 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 *Simplify Printing TX Installation and Configuration Quick Start 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>. 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 *Simplify Printing TX Installation and Configuration Quick Start Guide* assumes that:

- References to any third-party standards or third-party software functions were current as of the release of this version of Simplify Printing TX, and might have already changed.

## Organization of the manual

In addition to this Preface, the *Simplify Printing TX Installation and Configuration Quick Start Guide* contains the following chapters:

- [Chapter 1, "Getting Started with Simplify Printing TX," on page 7](#) provides a high-level overview of the Simplify Printing TX infrastructure. It also details the system requirements for installing and configuring Simplify Printing TX. Finally, the chapter details the most common installation scenarios for Simplify Printing TX and the configuration considerations and requirements for each scenario.
- [Chapter 2, "Installing and Configuring Simplify Printing TX," on page 19](#) guides you through the procedures for installing and configuring Simplify Printing TX for evaluation purposes, and then testing the installation.

# Chapter 1

## Getting Started with Simplify Printing TX

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Simplify Printing TX is a printing application that provides trouble-free enterprise printing from any desktop, virtual desktop, or mobile device to any printer whether users are in the office, at home, or on the road. IT administrators can feel confident knowing that their printing environments are under control without the hours associated with printer driver management and user configuration. This chapter provides a high-level overview of the Simplify Printing TX infrastructure. It also details the software and hardware requirements for installing and configuring Simplify Printing TX.

This chapter covers the following topics:

- ["Simplify Printing TX Infrastructure Standard Installation" on page 8.](#)
- ["Simplify Printing TX Requirements" on page 9.](#)
- ["Common Installation Considerations" on page 11.](#)
- ["Print Path-Specific Installation Considerations" on page 13.](#)

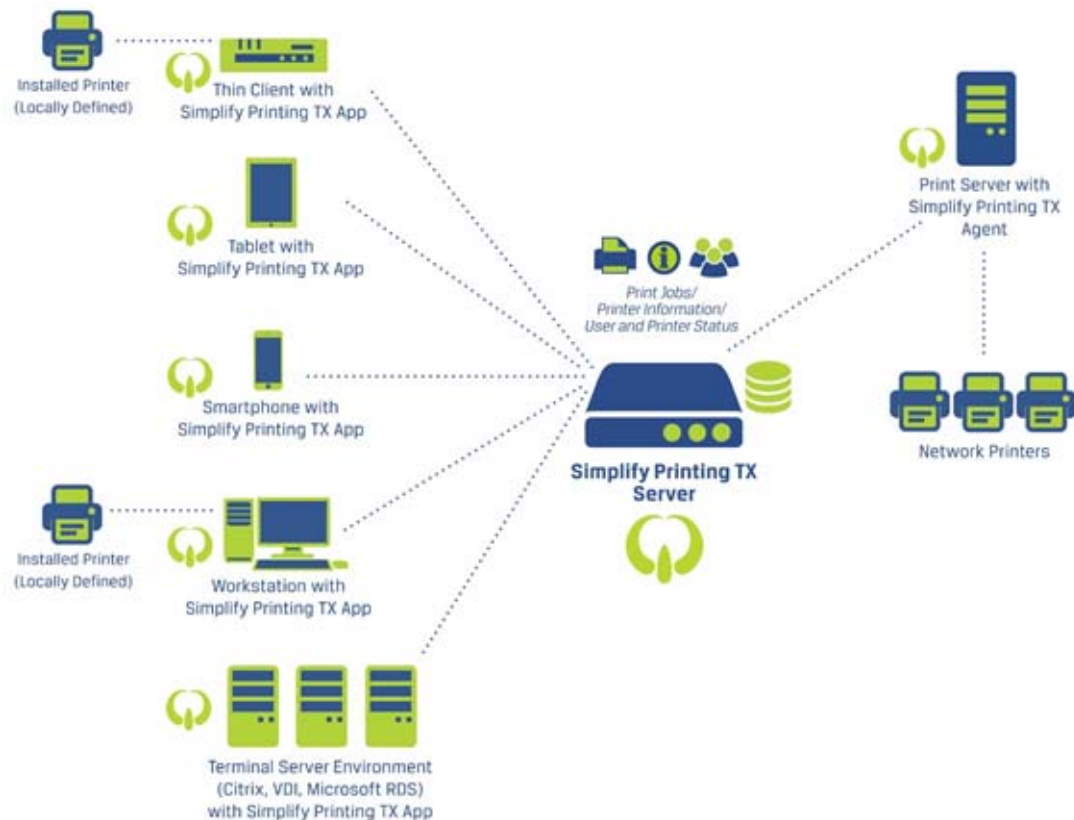


*The Simplify Printing TX Installation and Configuration Guide and the Simplify Printing TX Administrator Guide are complete guides for the installation, configuration, and administration of Simplify Printing TX. This Quick Start Installation Guide is designed to quickly implement, test, and evaluate the core components for your organization. Where needed, please refer to the full guides for additional details.*

# Simplify Printing TX Infrastructure Standard Installation

Figure 1-1 below details the Simplify Printing TX infrastructure for a standard installation. The dotted lines in the figure represent the available *print paths* for a Simplify Printing TX installation, where a print path consists of two components: the device that hosts the print queue or discovers the printer and the printing application. The "central spoke" of the Simplify Printing TX application is the Simplify Printing TX (SPTX) Server. It is the server on which the Simplify Printing TX Server services run. It is also the server on which the Simplify Printing TX Central Store (database), the Simplify Printing TX License Server, and the Simplify Printing TX Admin Console are installed. The Simplify Printing TX infrastructure ensures both 32-bit and 64-bit compatibility. A Google Cloud Print option eliminates the need for Printer Server printer management.

Figure 1-1: Simplify Printing TX infrastructure





# Simplify Printing TX Requirements

Table 1-1 below details the system requirements for the installation of Simplify Printing TX.

Table 1-1: Simplify Printing TX system requirements

Machine	Operating System	Purpose
Simplify Printing TX Server	Windows 2008 R2 and newer, x64 only. Minimum memory requirements: 8 GB	Simplify Printing TX Central Store, Simplify Printing TX Server, and Bonjour
Simplify Printing TX License Server	Windows 2008 and newer, x86 or x64	License management for the Simplify Printing TX Server
Client	<ul style="list-style-type: none"> <li>Windows 7x and greater (x32/x64)</li> <li>macOS: 10.6 and greater</li> <li>iOS: 9 or greater</li> <li>Android: 4.4.x and greater</li> </ul>	Simplify Printing TX Agent, WinPcap, and Bonjour for a Windows client
Simplify Printing TX Print Server	Windows 2008 and newer, x86 or x64	Simplify Printing TX Server Agent
Citrix or Terminal Server*	Windows 2008 and newer, x86 or x64	Simplify Printing TX Agent, WinPcap, and Bonjour
<b>Note:</b> *If you are installing a Citrix or Terminal server, you do not install any TX server-specific software. You must install the Simplify Printing TX Agent instead.		

Table 1-2 below details the minimum hardware requirements for the installation of Simplify Printing TX.

Table 1-2: Simplify Printing TX hardware requirements

Machine	Hardware
Simplify Printing TX Server	<ul style="list-style-type: none"> <li>2 CPUs</li> <li>8 GB RAM</li> <li>20 GB available disk space to accommodate for the page file, the Simplify Printing TX application, and the database files.</li> </ul> <p><b>Tip:</b> To automate the downloading of the trial license and simplify the installation, internet connectivity is recommended but not required.</p>
Windows	N/A
macOS	N/A
Android devices	N/A
iPad	<ul style="list-style-type: none"> <li>4th generation iPad</li> <li>iPad mini II or later</li> <li>iPad Pro</li> </ul>
iPhone	5s or higher

Table 1-3 below details the requirements for the installation and operation of the Simplify Printing TX Admin Console.

Table 1-3: Simplify Printing TX Admin Console requirements

Component	Description
Web Browser	The Simplify Printing TX Admin console is compatible with the following browsers: <ul style="list-style-type: none"><li>• Microsoft Edge (All versions)</li><li>• Mozilla Firefox (All versions)</li><li>• Google Chrome (All versions)</li><li>• Microsoft Internet Explorer (Version 10 or higher)</li></ul>
Server version (for additional standalone installations)	Windows 2008 or Windows 2012
Redis service	Installed automatically. No manual intervention required. Requires that the system free space be at least the amount of RAM, or the service does not run.

## Common Installation Considerations

Regardless of the print paths that you are implementing for your Simplify Printing TX installation, you must always consider the following:

- Printer availability. See ["Making printers available based on the location of the device that is logging in to the Simplify Printing TX Server"](#) below.
- Remote printers. See ["Using a remote printer that is behind a NAT"](#) below.
- Automatic login of a Simplify Printing TX Agent. See ["Enabling automatic login of a Simplify Printing TX Agent"](#) on page 11.

### Making printers available based on the location of the device that is logging in to the Simplify Printing TX Server

#### Conditions/Pre-requisites

- Individual remote sites or internal areas must have numerically distinguishable subnet ranges (different internal network masks) for identification such as 192.168.1.xxx and 192.168.2.xxx, and so on.

Frequently, an administrator must associate printers with specific users, such as users on a given floor of a building or at a particular remote site, so that end-users see only those printers that are local to their work area. To do so, the administrator can create a policy via the Simplify Printing TX Admin Console that is based on a combination of single IPs or a range of IPs to assign printers to users at agent login based on their current IPs.



*For information about enabling automatic login of a Simplify Printing TX Agent, see ["Enabling automatic login of a Simplify Printing TX Agent"](#) on page 11.*

### Using a remote printer that is behind a NAT

#### Conditions/Pre-requisites

- The Simplify Printing TX (SPTX) Server is available at a public IP address and open on TCP port 40404.

During the installation of the SPTX Server, the administrator sets the address of the server. The 18Simplify Printing TX Print Server Agent connects to the SPTX Server to initiate all communication, which means that the SPTX Server does not require direct communication to the Simplify Printing TX Print Server Agent. As a result, the remote site can be behind a NAT or other firewall without any ports that are open from the Internet.

### Enabling automatic login of a Simplify Printing TX Agent

To print to a local device, the Simplify Printing TX Agent must be running and logged in to the Simplify Printing TX (SPTX) Server. For Windows and macOS devices, the agent must be running in the background so that printers can be built and print jobs processed. For

iOS devices, the agent must be connected to the SPTX Server from the current network, or brought to the foreground to refresh the network information.

Enabling automatic login of a Simplify Printing TX Agent is particularly critical in a remote desktop or VDI environment. In these situations, a user connects to a remote session, and the agent must run for printers to be enabled in the session. If the environment is a published application environment, then the Simplify Printing TX user interface is not even visible to the user.

The Simplify Printing TX Agent can read the DNS server for a special SRV resource record, and then automatically use this information to determine the name of the server to log in to. Additionally, the agent automatically attempts to use the current Active Directory credentials. If both conditions are met, then the client automatically logs in to the SPTX Server and creates the correct printer queues.

If you must configure different settings, then a user should first connect to a desktop session, open the Simplify Printing TX user interface, and then save the current settings for login. All future sessions use this saved information to automatically log in.

## Print Path-Specific Installation Considerations

As detailed in "[Simplify Printing TX Infrastructure Standard Installation](#)" on page 8, a variety of installation scenarios for Simplify Printing TX are possible. Any scenario requires the standard installation setup, which is the Simplify Printing TX (SPTX) Server and at least one Simplify Printing TX Agent; however, because of different features and capabilities, each print path scenario also has additional requirements and other set up considerations. Generally, at least one Print Server agent is located in the printing environment, either in a data center or at the remote location. The following are the most common installation scenarios for Simplify Printing TX:

- Print from a virtual desktop or Windows application to a Bonjour printer that is on the same network as an iOS device.
- Print from an iOS application to a Windows printer.
- Print from any Windows or Android device to a Windows or macOS printer.
- Print from any macOS device to a Windows, Android, or macOS printer.
- Print from any Windows or Android device to an Android printer.
- Print from a local Windows session to a remote Windows printer.
- Print from a remote Windows session (VDI Or Citrix-hosted desktop) to a local macOS printer.

[Table 1-4](#) below details these installation scenarios based on the selected printing application and the location for where the printer is discovered or hosted. In the event that a mobile device is using Citrix or another VDI technology to connect to a Windows application, refer to the "VDI or Citrix-hosted desktop entry." Each entry in the table is a hyperlink to the detailed scenario.



*Based on how Simplify Printing TX works, there is no entry for a Windows Print Server to a host a printing application or for a hosted desktop with native print drivers loaded.*

Table 1-4: Simplify Printing TX Installation Scenarios

	Device that hosts the print queue or discovers the printer				
	Windows Desktop	Windows Print Server	macOS	iOS (iPhone or iPad)	Android Device
Printing Application					
Windows Desktop	<a href="#">Scenario 6 on page 17</a>	<a href="#">Scenario 6 on page 17</a>	<a href="#">Scenario 7 on page 18</a>	<a href="#">Scenario 1 on page 14</a>	<a href="#">Scenario 5 on page 17</a>
VDI or Citrix-hosted desktop	<a href="#">Scenario 6 on page 17</a>	<a href="#">Scenario 6 on page 17</a>	<a href="#">Scenario 7 on page 18</a>	<a href="#">Scenario 1 on page 14</a>	<a href="#">Scenario 5 on page 17</a>
macOS	<a href="#">Scenario 4 on page 16</a>	<a href="#">Scenario 4 on page 16</a>	<a href="#">Scenario 4 on page 16</a>	<a href="#">Scenario 1 on page 14</a>	<a href="#">Scenario 5 on page 17</a>

Table 1-4: Simplify Printing TX Installation Scenarios (Continued)

	Device that hosts the print queue or discovers the printer				
	Windows Desktop	Windows Print Server	macOS	iOS (iPhone or iPad)	Android Device
Printing Application					
iOS (iPhone or iPad)	<a href="#">Scenario 2 on page 15</a>	<a href="#">Scenario 2 on page 15</a>	<a href="#">Scenario 2 on page 15</a>	N/A	N/A
Android Device	<a href="#">Scenario 3 on page 16</a>	<a href="#">Scenario 3 on page 16</a>	<a href="#">Scenario 3 on page 16</a>	N/A	<a href="#">Scenario 5 on page 17</a>

## Scenario 1: Print from a virtual desktop or Windows application to a Bonjour printer that is on the same network as an iOS device

In this scenario, a data center hosts the Citrix application or desktop and the iOS device and Bonjour printer are in a remote location. If supported by the printer, Simplify Printing TX can retrieve information about the printer from the iOS device or the Simplify Printing TX (SPTX) Server finds an agent that has access to the Bonjour printer and prints through the agent.

### Conditions/Pre-requisites

- Printer with Bonjour capabilities.
  - Windows Print Server in the data center.
  - Windows printer driver for the printer.
- or
- Windows computer that can access the printer.

### Printing with a local Windows computer

Ideally, the local Windows computer is set up as a Window Print Server, but it can be any Windows agent. The printer connection can be a physical connection such as a USB cable, or it can use TCP/IP to connect through the network.

When a user opens the Simplify Printing TX Agent on the iOS device or the Windows desktop, the user can search for the printer and subscribe to it. When the user prints to the printer from the Citrix application, Simplify Printing TX routes the job to the Windows agent, and then to the printer. It is important to note that the iOS device is not directly involved in the printing process. It is simply the device that accesses the Citrix application.

### Mobile-only printing

If a Windows computer is not available, then Simplify Printing TX can route the print job directly through the iOS device, which requires that the printer have Bonjour capabilities. (You can use an iOS application such as "Flame - Bonjour services browser" to check for

active Bonjour devices.) Additionally, a Windows Print Server with the Simplify Printing TX Print Server Agent must present in the data center. An administrator or user must open the Simplify Printing TX Agent on a workstation that has the print driver installed.

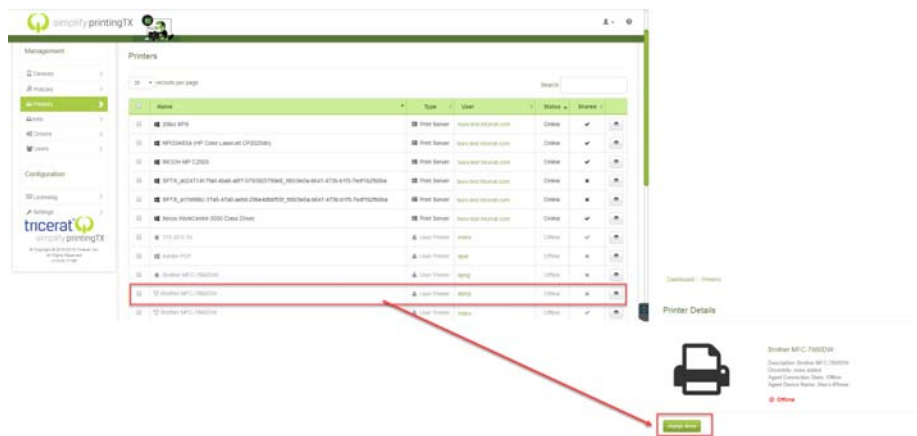


*This is a one time setup, and going forward, the system can operate without a Windows computer at the remote site.*



*In the event that the Bonjour printer is not automatically detected, then in the Simplify Printing TX Admin Console, you must manually link the correct Windows print driver to the Bonjour printer. See the Simplify Printing TX Administrator's Guide for details.*

Figure 1-2: Assigning a printer driver to a Bonjour printer in the Simplify Printing TX Admin Console



When a user opens Simplify Printing TX on the iOS device, Simplify Printing TX passes information about the detected printer to the SPTX Server. In the Citrix session, Simplify Printing TX creates a printer queue with the information about the Bonjour printer. A print job is sent to the Windows Print Server in the data center, rendered, and then streamed through the iOS device to the printer at the remote location.

## Scenario 2: Print from an iOS application to a Windows printer

In this scenario, users who are running an application on an iOS device can print to the same printers that are available from their Windows or macOS desktops.

### Conditions/Pre-requisites

- Mobile device must be on the same TCP/IP subnet as either a Windows Print Server or a Windows or macOS client.
  - AirPrint/Bonjour/mDNS traffic allowed on the subnet with the mobile device.
- or
- Selected applications on the iOS device that allow the user to print directly through the Share Sheet extension to the Simplify Printing TX application. The application can then forward the print job directly to the destination printer.

Simplify Printing TX can *announce* any traditional printer to a mobile device and have the printer appear as if it is an AirPrint-enabled printer. AirPrint, however, is a multi-cast protocol, and therefore, it cannot naturally traverse subnets. Additionally, switches can block the protocol. Also, because AirPrint is related to mDNS (Bonjour), blocking any of these services causes AirPrint to fail on the local subnet. Because of the protocol implementation, Simplify Printing TX must publish the printer on the same subnet as the iOS device, and the traffic must be permitted on the local subnet. Simplify Printing TX employs advanced algorithms to find a Windows agent automatically on the correct subnet, and then announce the agent to an iOS device; however, an Administrator must ensure that an agent is present on each subnet to which an iOS device can connect. Print Servers with multiple network interfaces can handle multiple subnets.

### Scenario 3: Print from any Windows or Android device to a Windows or macOS printer

In this scenario, users can access their normal Windows and macOS print queues from an Android device that is connected to their network via WiFi. The Windows desktops can be physical workstations, VDI instances, and/or remote sessions (RDP/ICA/PCoIP) for both local printers and network printers.

Conditions/Pre-requisites
---------------------------

- User has access to the local print queues on a Windows or macOS device.

or

- The administrator shares a Print Server printer to the user via the Simplify Printing TX Admin Console.

For a job to be printed from any local or network printer, the user simply has to ensure that the agent that hosts the printer is connected to the Simplify Printing TX Server via the Simplify Printing TX Agent.

### Scenario 4: Print from any macOS device to a Windows, Android, or macOS printer

In this scenario, users can access their normal Windows and macOS print queues from any macOS environment.

Conditions/Pre-requisites
---------------------------

- User has access to the local print on queues on a Windows, Android, or macOS device.

or

- The administrator shares a Print Server printer to the user via the Simplify Printing TX Admin Console.
- For the macOS device to see the printer as an AirPrint printer and an Android device to discover any printers, the network must allow mDNS (Bonjour) network traffic to be sent.



The Simplify Printing TX Agent makes the remote queues locally available as an AirPrint printer, which allows all native applications to print to it.



*macOS does not automatically add the printers to the Printers list. Instead, when printing from an application, the OS displays these printers in a list named Nearby Printers, and moves a printer to the Printers list after a printer is selected and a print job completes.*

## Scenario 5: Print from any Windows or other Android device to an Android printer

In this scenario, users can access Bonjour-discoverable printers on their Android devices from any of their Windows devices or any other of their other Android devices.

### Conditions/Pre-requisites

- To ensure that an Android device can discover any printers, the network printer must allow mDNS (Bonjour) network traffic to be sent.
- A Windows driver for the printer must be installed on a Windows device in the Simplify Printing TX network.

The Android device queries Bonjour for available printers, and then an available Windows agent that has the correct drive is used to create the print queues.

## Scenario 6: Print from a local Windows session to a remote Windows printer

In this scenario, a user is working in a local Windows session and must print to a print queue that is in a remote Windows session.

### Conditions/Pre-requisites

- A Windows print driver must be present on the local desktop that has access to the printer.
- Simplify Printing TX Agents must be installed on both the local Windows desktop and the remote Windows device.

or

- A Windows Print Server must have a print queue with the correct driver installed.
- Simplify Printing TX Agents must be installed on both the Windows Print Server and the Windows device that is hosting the application.

This scenario is similar to the methods of printing that Tricerat ScrewDrivers v6 uses for desktop printing. The native print driver must exist in one location and all other clients use the virtual ScrewDrivers driver to present a print queue to remote sessions.

## Scenario 7: Print from a remote Windows session (VDI Or Citrix-hosted desktop) to a local macOS printer

### Conditions/Pre-requisites

- Simplify Printing TX macOS Agent is installed on the macOS desktop.
- A valid print queue exists on the macOS desktop.
- The Simplify Printing TX Agent is installed on the remote Windows computer.

When a macOS user connects to a remote Windows session using Citrix ICA, Microsoft RDP, or another remote protocol, Simplify Printing TX can create a virtual print queue on the remote session, which allows for printing to a locally connected printer on the macOS device. Both sides of the connection must have the appropriate Simplify Printing TX Agent installed and logged in and connected to the Simplify Printing TX Server *as the same user*. When a login is initiated to the remote Windows desktop or application, Simplify Printing TX builds a virtual printer. An application that prints to the virtual printer delivers the print job to the macOS device and the job is then printed to the local printer.



*For information about enabling automatic login of a Simplify Printing TX Agent, see ["Enabling automatic login of a Simplify Printing TX Agent" on page 11.](#)*

# Chapter 2

## Installing and Configuring Simplify Printing TX

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By design, Simplify Printing TX builds printers in the normal process for each distinct OS, and then all applications print as expected, which is known as *printing natively*. If you properly install and configure the different Simplify Printing TX components, then you see your printers built in Simplify Printing TX and you are able to publish to the native print queue of your OS, and then print from any application to any printer. This chapter provides a high-level summary of the procedures that you must carry out to install and configure Simplify Printing TX for your users' printing environments. To maximize the opportunity for a successful installation and configuration, you must carry out the procedures in the order that they are detailed in this chapter.



*The Simplify Printing TX Installation and Configuration Guide and the Simplify Printing TX Administrator Guide are complete guides for the installation, configuration, and administration of Simplify Printing TX. This Quick Start Installation Guide is designed to quickly implement, test, and evaluate the core components for your organization. Where needed, please refer to the full guides for additional details.*

This chapter covers the following topics:

- ["Preparing for Installation" on page 20.](#)
- ["Installing the Printing Communication Hub on the Simplify Printing TX Server" on page 21.](#)
- ["Adding Printer Policies" on page 23.](#)
- ["Installing the Simplify Printing TX Agents on Clients" on page 26.](#)
- ["Testing a Simplify Printing TX Installation" on page 28.](#)

# Preparing for Installation

The first step in installing Simplify Printing TX for evaluation requires that you prepare for the installation.

## To prepare for installation

1. Confirm the print path scenarios that are to be evaluated:
  - What agents are to be evaluated - Windows, iOS, macOS, or all agents, or a mix of agents?
  - Are your end users in a single subnet, or multiple subnets, for example, wireless and wired?
  - Is DNS functioning correctly or, if applicable, must you use IP addresses to route between subnets?



Refer to "[Print Path-Specific Installation Considerations](#)" on page 13 for the different installation scenarios and understand about the path between the origin of a print job and the device that is hosting the printer.

2. Prepare the server that is to be the Simplify Printing TX (SPTX) Server.

This server contains not only the central database but also the Simplify Printing TX Admin Console through which you create your organization's printer policies for assigning printers. Tricerat recommends that you also use this server as the Print Server when testing and evaluating your installation.

3. Download the appropriate installation package:



Make sure to stage the software in a folder that is accessible to the SPTX Server and any clients that you are installing and evaluating.

- For all server components for Simplify Printing TX, download the Complete 30Simplify Printing TX package from Tricerat's website:  
<http://www.tricerat.com/printingTX-CS-DL>.
  - For Windows OS clients and macOS clients, the Complete Simplify Printing TX package also contains the necessary installation files.
  - For iOS devices, the installation files are available from the Apple App Store:  
<https://itunes.apple.com/app/simplify-printing-tx/id671781603?mt=8&ign-mpt=uo%3D4>.
  - For Android devices, the installation files are available from the Google Play Store:  
<https://play.google.com/store/apps/details?id=com.Tricerat.SimplifyPrintingTX>.
4. Continue to "[Installing the Printing Communication Hub on the Simplify Printing TX Server](#)" on page 21.

# Installing the Printing Communication Hub on the Simplify Printing TX Server

The second step installing Simplify Printing TX for evaluation is to install the printing communication hub on the Simplify Printing TX (SPTX) Server. To install the hub's components, you must have access to an account that is a member of the Domain Admin group in Active Directory.



*During the installation of the communication hub, the database and the Simplify Printing TX Admin Console are installed in the background. You do not have to specify any special installation parameters or configuration information.*

## To install the printing communication hub on the SPTX server

1. Through the normal Windows Server control panel, install the printer server role and printers that are to be evaluated.
2. To install the Simplify Printing TX Admin Console and the central database, locate your downloaded Complete Simplify Printing TX Package and run the SPTX.exe file. During the installation of these components, note the following:
  - By default, the installation authenticates with your local Active Directory.
  - You must select the option to Download a Trial License, and then enter your organization's valid contact information.
  - You must accept all default values to install to the local C: drive.
3. To install the Simplify Printing TX Print Server, confirm your OS bit level, 32 or 64, and then run 30SimplifyPrintingTXPrintServer.exe or SimplifyPrintingTXPrintServer\_x64.exe as appropriate.



*Follow all the installation instructions, and when prompted for the localhost IP address, enter 127.0.0.1.*

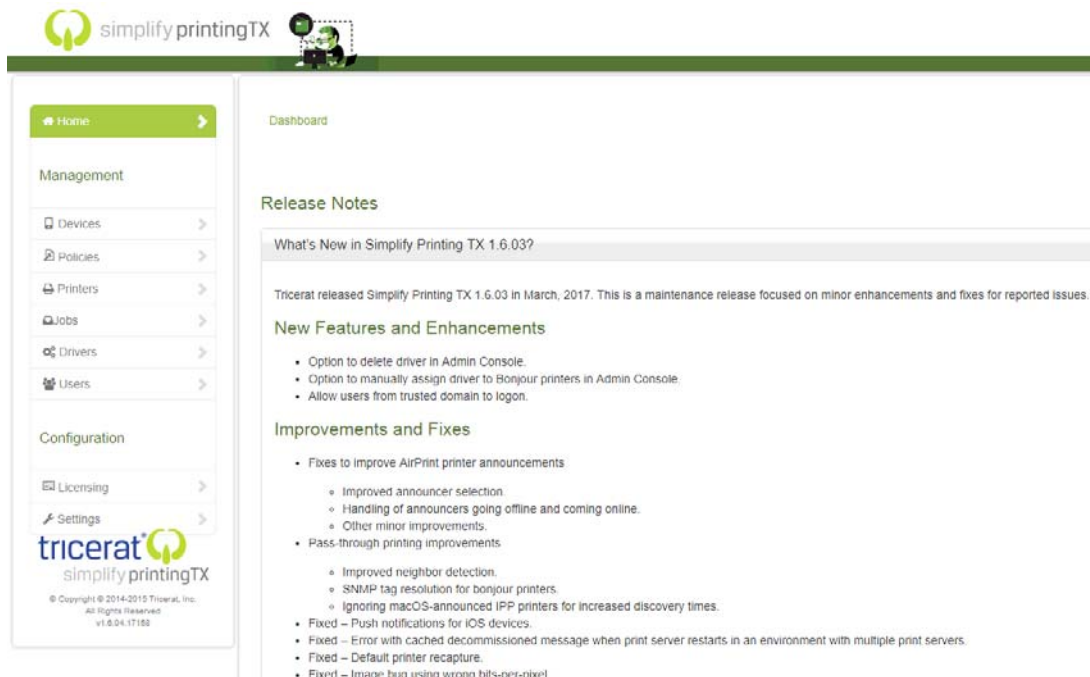
4. To open the Admin Console and confirm that the components were installed correctly, do the following:
  - a. In a browser, enter the following address: `https://localhost:8080`.  
The Login page for the Simplify Printing TX Admin Console opens.
  - b. Enter your Domain Administrator account credentials.



*Enter only the account name. The DOMAIN\user format is not required.*

The Simplify Printing TX Admin Console Home page opens. See [Figure 2-1 on page 22](#).

Figure 2-1: Simplify Printing TX Admin Console, Home page



- c. On the Dashboard, do the following:
  - Click Devices to open the Devices page and confirm that your local print server is displayed.
  - Click Printers to open the Printers page and confirm that locally installed Windows printers are displayed.
4. Leave the Admin Console UI open and continue to ["Adding Printer Policies" on page 23.](#)

## Adding Printer Policies

A *printer policy* specifies the objects that are assigned and/or shared to selected users, or groups of users in your Simplify Printing TX network. A printer policy ensures that your users have access to all the necessary and appropriate devices that are required for their jobs. A printer policy has two variables: *actions*, which determine what happens to a specific device in your network (for example, a printer will be assigned) and *conditions*, which determine the users, groups of users, or devices for which the actions apply. You can add a printer policy with multiple actions and conditions, or you can add a new policy for every action that is to be administered through the Simplify Printing TX Admin Console.



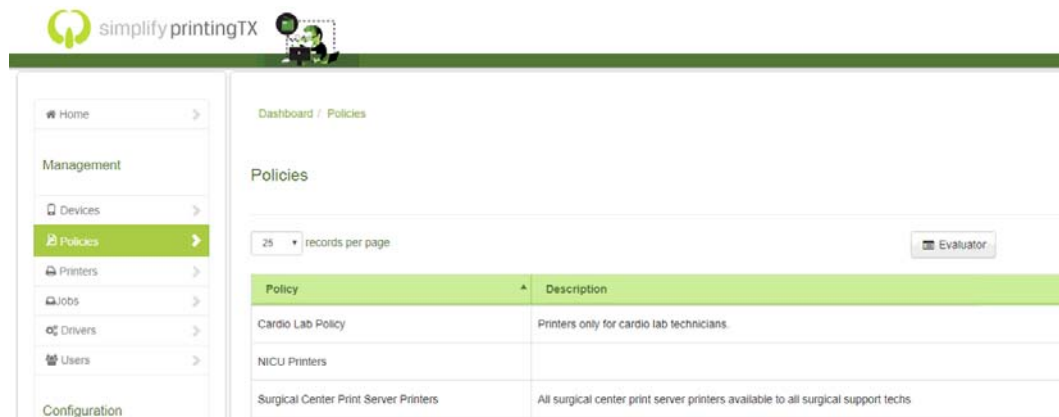
In the following example of adding a printer policy, we will assign a printer (the action) to a specific group (the condition) in your Simplify Printing TX network.

### To add a printer policy

1. On the Dashboard, click Policies.

The Policies page opens. The page lists all the policies that are currently available for your Simplify Printing TX network by name. It also indicates which policies are currently enabled.

Figure 2-2: Simplify Printing TX Admin Console, Policies page



2. Click New Policy.

The New Policy popup opens.

Figure 2-3: New Policy popup

New Policy

Name

Description

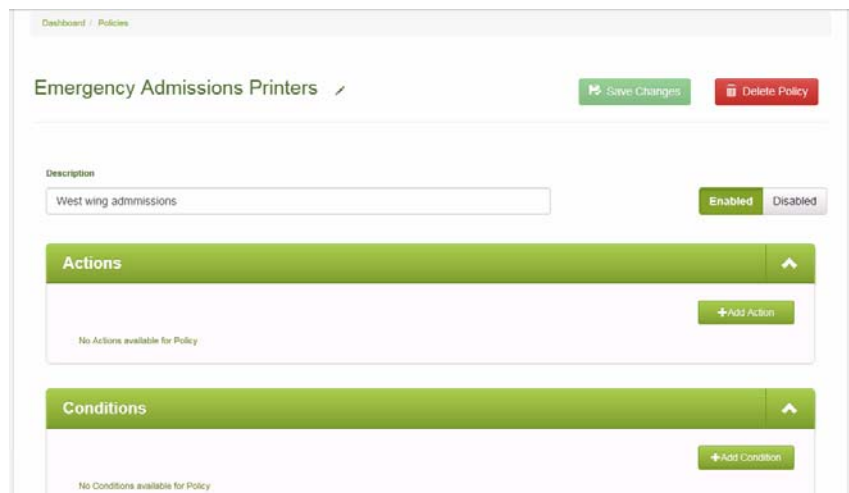
3. Enter the name for the new policy, and optionally, a description, and then click Create.



*Give your policy a name that is easy to associate with its required testing, such as "Student Printers," or "Domain Users' Printers."*

The Policy Details page opens with options for adding the necessary policy actions and conditions. The policy name is displayed at the top of the page.

Figure 2-4: Policy Details page for a new printer policy

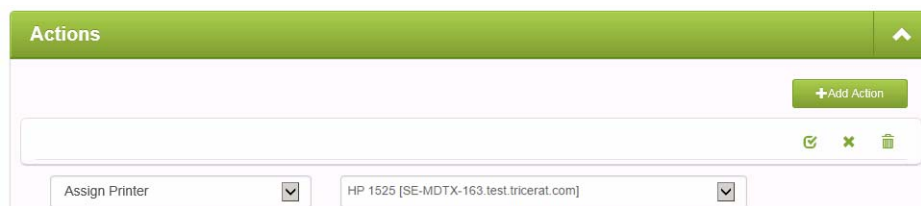



4. To add the action for the policy, do the following:
  - a. Click Add Action.
  - b. Leave Assign Printer as the selected action.



*By default, Assign Printer is the selected action type, and the first printer that is displayed in the Objects list is selected, where the Objects list is the list of all the local printers and print server printers ordered alphabetically by name that are available for assignment in your Simplify Printing TX network.*

Figure 2-5: New Action option



- c. In the Objects list, select the object, for example, HP 1525, that is to be assigned.
- d. Click the Save Changes icon (  ).
- e. Click Save Changes.



6. To add the condition for the policy, do the following:
  - a. Click Add Condition.
  - b. Select the "AND" boolean operator.




*AND requires all the condition components (entity, condition operator, and value) to be included for the condition to be applied. OR requires only one of the condition components (entity, condition operator, or value) to be included for the condition to be applied.*

- c. Select the appropriate condition entity and operator based on the goal of the action for example, assigning a specific printer to a group or user in your Simplify Printing TX network, and then enter the appropriate value.



*In this example, the entity would be a Group, the operator would be IS, and the value would be the Active Directory group name, The name is not case-sensitive, and as you enter it, the list of groups that match the search string is dynamically updated.*

- d. Click the Save Changes icon (  ).
    - e. Click Save Changes.
6. You can now add as many actions and conditions as needed to this single policy, or you can add a policy for every action that is to be administered through the Admin Console.
7. After you have added all your necessary printer policies for evaluating, continue to ["Installing the Simplify Printing TX Agents on Clients" on page 26.](#)

# Installing the Simplify Printing TX Agents on Clients

Installing a Simplify Printing TX Agent on a client is a straightforward procedure. You simply follow the normal application installation procedure for each supported operating system.



*Ensure that the network on which a client resides can successfully connect and log in to the Simplify Printing TX (SPTX) Server.*

## To install the Simplify Printing TX Agent on a client

1. Download and run the appropriate installation file.

Client	Installation Caveats
Windows	<ul style="list-style-type: none"><li>• You must match the OS bit level for installation. To install the Windows agent on a client, run SimplifyPrintingTXAgent.exe or SimplifyPrintingTXAgent_x64.exe as appropriate.</li><li>• No activation code is necessary and you can install the agent on as many clients as is needed.</li></ul>
macOS	<ul style="list-style-type: none"><li>• To install the macOS agent on a client, run SimplifyPrintingTX.dmg.</li><li>• No activation code is necessary and you can install the agent on as many clients as is needed.</li></ul>
iOS devices	<ul style="list-style-type: none"><li>• Search the Apple App Store for "Simplify Printing TX," or browse to the following: <a href="https://itunes.apple.com/app/simplify-printing-tx/id671781603?mt=8&amp;ign-mpt=uo%3D4">https://itunes.apple.com/app/simplify-printing-tx/id671781603?mt=8&amp;ign-mpt=uo%3D4</a>.</li><li>• The download is free and fully functional, and no activation code is required.</li></ul>
Android devices	<ul style="list-style-type: none"><li>• Search the Google Play Store for "Simplify Printing TX," or browse to the following: <a href="https://play.google.com/store/apps/details?id=com.Tricerat.SimplifyPrintingTX">https://play.google.com/store/apps/details?id=com.Tricerat.SimplifyPrintingTX</a>.</li><li>• The download is free and fully functional, and no activation code is required.</li></ul>

2. After installation of the Simplify Printing TX Agent on the client is complete, log in and authenticate to the SPTX Server:
  - Username – The Active Directory user account. Do not enter Domain\User.
  - Password – The Active Directory user password.
  - Server – The IP address or Fully Qualified Domain Name (FQDN) of the SPTX Server.



*Each OS has a slight variation in the appearance of its Login window/page, but all are windows/pages are similar to the one shown in [Figure 2-6 on page 27](#).*

Figure 2-6: Simplify Printing TX Agent Login window



3. Continue to ["Testing a Simplify Printing TX Installation"](#) on page 28.

## Testing a Simplify Printing TX Installation

Because Simplify Printing TX allows for "native" printing, after installation, you should be able to see your printers building in Simplify Printing TX, and then you should be able to publish to the native print queue for your OS and print from any application to any printer.

- Windows: Control Panel > Devices and Printers
- macOS: System Preferences > Printers and Scanners
- iOS: AirPrint printers
- Android: Printing Service

The following are scenarios for testing your Simplify Printing TX installation and confirming its expected operation.

### Print from a virtual desktop or a Windows application to a Bonjour printer that is on the same network as an iOS device



See [Scenario 1 on page 14](#).

If installation was successful, then you should see a queue created on the print sever that is prefixed with "SPTX." This queue renders the print job for Simplify Printing TX to send through the iOS device to the Bonjour printer.

1. On the iOS device, log in to Simplify Printing TX.
2. Do one of the following:
  - If printers have already been added for the agent, then messages indicate that these printers are published. Continue to [Step 4](#).
  - If no printers are published, then continue to [Step 3](#).
3. Open the Printers tab and search for and add the locally discovered Bonjour printers.
4. From the iOS device, log in to the remote Windows desktop *as the same user that is logged in to the iOS device*, and then open the appropriate application.



*In the Window session, the Simplify Printing TX Agent should be automatically started. See ["Enabling automatic login of a Simplify Printing TX Agent" on page 11](#).*

5. In the opened application, enter the information that is to be printed.
6. Select the printer for the print job (File > Print), and then select the appropriate Windows printer to complete the print job.

Two results are possible:

- A Push notification from Apple opens, indicating that a print job is ready. Tap this

notification to bring the Simplify Printing TX Agent application to the foreground and complete the print job.

- No Push notification is displayed. Manually bring the Simplify Printing TX Agent application to the foreground and complete the print job.



If a Push notification is displayed, but you do not tap it before it closes, then you must manually bring the Simplify Printing TX Agent application to the foreground and complete the print job.

## Print from an iOS application to a Windows printer



See [Scenario 2 on page 15](#).



On the Printers page for a Simplify Printing TX Agent, printers are sorted based on whether they have native AirPrint functionality, or whether Simplify Printing TX publishes them as AirPrint printers. Native AirPrint printers are displayed first in a list of printers that are available to an iOS device, and printers that Simplify Printing TX has published are displayed second in the list, prefixed with "TX\_".

1. Verify that a Windows or Mac Simplify Printing TX Agent that is on the same local network as the iOS device is connected and is logged in to the Simplify Printing TX (SPTX) server.

Figure 2-7: iOS device, available printers list



2. To initiate the AirPrint printer publish, open the mobile device, open Simplify Printing TX, and then log in to the SPTX Server.
3. Do one of the following:
  - If printers have already been added for the agent, then messages indicate that these printers are published. Continue to [Step 5](#).
  - If no printers are published, then continue to [Step 4](#).
4. Open the Printers tab and search for and add the Windows printers.
5. On the iOS device, open the appropriate application, such as Notes, and enter the information that is to be printed.

6. Tap the Share icon , and then tap the Print icon .
7. Select a printer, and then send the print job to the printer.

## Print from a macOS



See [Scenario 4 on page 16](#).

After the Simplify Printing TX macOS Agent is started and logs in to the 30Simplify Printing TX Server, Windows computers publish printers as AirPrint printers to the macOS client. The macOS displays these printers in a list named Nearby Printers, and moves a printer to the Printers list after a printer is selected and a print job completes.

## Print from a Windows session to a Windows printer



See [Scenario 6 on page 17](#).

In any Windows session, for the print queues to be built, the Simplify Printing TX Agent must be running and logged in to the Simplify Printing TX Server. The print queues are built using the virtual print driver for any printer to which the user is subscribed. Each Simplify Printing TX print queue is named identically to the printer and is appended with the username and session number. A review of the properties of the printer shows that it is using the Simplify Printing TX print driver and not the native print driver from the manufacturer. To initiate a print job through Simplify Printing TX, print from a Windows application, making sure to select a print Simplify Printing TX print queue.

## Print from a remote Windows session (VDI Or Citrix-hosted desktop) to a local macOS printer



See [Scenario 7 on page 18](#).

In the Windows desktop, printer queues are created using the printer information from the macOS client. On Windows, the printers use the Simplify Printing TX virtual driver, and not the driver from the manufacturer. In a Windows application, select the appropriate printer to print to the client printer on the macOS device.