LANTRONIX®

LANTRONIX®
xPrintServer®

Cloud Print Edition
User Guide

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Intellectual Property

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Revision History

Date	Rev.	Comments
February 2014	A	Initial document for firmware release 4.1.0.
November 2014	B	General update.
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Table of Contents

Intellectual Property 2
Contacts 2
Disclaimer 2
Revision History 2
List of Figures 6
List of Tables 6

1: Introduction 7

Cloud Print, Network, Home and Office Editions 7
Key Features 7
Supported Devices 7
Supported Printers and Printer Protocols 8
Supported DHCP Configuration 8
Supported Browsers 8
Product Label 8
Serial Number 9
IP Address 9

2: Installation 10

Package Contents 10
User-Supplied Items 10
Hardware Components 10
Ethernet LEDs 11
Status LEDs 11
Hardware Installation Steps 12
xPrintServer Device Network Details 13
Establishing a Google Cloud Print Connection 14

3: Navigation and Printing 17

Finding the xPrintServer IP Address 17
System Status on the Home Page 19
Logging In 20
Logging Off 20
Navigation 21
Installing the Google Cloud Print App on Android Devices 23
Printing from an Android-based Phone or Tablet 24
Printing from Chrome OS and Chromebook Devices 28
Printing from a Windows 7 Desktop Computer 29

Performing Add Printer Setup 29
Configuring a Default Printer 30
Printing from a Windows 8 Desktop Computer 31
Performing Add Printer Setup 31
Configuring a Default Printer 32
Printing from a Mac OS X Desktop Computer 32

4: Configuration 35

Viewing Configured Printers 35
Configuring Printers 36
Discovering and Provisioning Printers 36
Enabling or Disabling Discovery 37
Configuring Printers through Auto Discovery 37
Configuring Printers through Discovery 38
Deleting All Configured Printers 39
Setting Real Time Clock 40
Assigning a Static IP Address to the xPrintServer 41
Admin Printer Configuration Options 41
Printing a Test Page 41
Purging Job History 42
Deleting a Printer 42
Changing Printer Description 43
Changing Printer Location 43
Changing Printer Geolocation 44
Showing Shared Printer Information 44
Sharing a Printer 45
Hiding a Printer 45
Setting Printer Options 46
Showing Toner Supply Levels 47
Updating Printer IP Addresses 48
Viewing and Exporting Print Jobs 49
Renaming an xPrintServer Device 50
Resetting the xPrintServer Unit to Factory Defaults 51
Via the Admin Interface 51
Via the Hardware Reset Button 51
Restarting the xPrintServer Device 52
Viewing Logs 52
Printer Drivers 53
Downloading Printer Drivers from the Internet 53
Exporting Printer Drivers 55
Downloading Printer Drivers from a USB Flash Drive 56
Saving Configuration 57

Restoring Configuration 58
Managing Security Certificates and SSL/TLS Keys 59
Generating a Private Key and Self-Signed Certificate 59
Generating a Certificate Signing Request 60
Uploading a Private Key and Signed Certificate 60
Deleting and Adding a Google Email Account 61
Supplementary Google Cloud Print Administrative Features 64
Google Cloud Print Administrative Options 64
Accessing Google Cloud Print Administrative Features Online 64
Sharing a Printer through Google Cloud Print Service 64
User Administration 65
Changing Passwords 66
Adding a New User 67
Deleting a User 68
Exporting Users 68
Importing Users 69
Downloading a Sample CSV 69

5: Updating Firmware 70

Updating Firmware via the Lantronix Web Services Website 70
Updating Firmware via a Local USB Port 71

6: Technical Specifications 72

A: Technical Support 73

Diagnostic Support 73
Lantronix Technical Support 73

B: Troubleshooting 75

Problems and Error Messages 75

C: Compliance 76

Declaration of Conformity 76
RoHS Notice 77

D: Warranty 78

Index 79

List of Figures

Figure 1-1 xPrintServer Cloud Print Device 7
Figure 1-2 Sample Product Label 8
Figure 1-3 Product Label on Underside of xPrintServer Device 9
Figure 1-4 Sample Serial Numbers on Hardware Devices 9
Figure 2-1 xPrintServer LEDs 10
Figure 2-2 Sample xPrintServer Mounting Options 12
Figure 2-3 Quick Connect Diagram 13
Figure 2-4 Start Quick Setup 15
Figure 2-5 Google Cloud Print Printer Confirmation 16
Figure 2-6 Quick Setup Complete 16
Figure 3-1 Serial Number 17
Figure 3-2 Login Prompt 18
Figure 3-3 IP System Status Information on the Home Page 19
Figure 3-4 Login Prompt 20
Figure 3-5 Navigating the xPrintServer Device's Admin Interface 21
Figure 4-1 Printer Details and Pop-Up Command Menu 35
Figure 4-2 Printer Discovery Page 37
Figure 4-3 Sample Printer Auto Discovery Report 38
Figure 4-4 Expanding Detected Printers Information 39
Figure 4-5 Admin Menu 40
Figure 4-6 New Printer Description 43
Figure 4-7 New Printer Location 43
Figure 4-8 Show Share Info Popup 44
Figure 4-9 Sample Printer Options 46
Figure 4-10 Show Supply Levels 47
Figure 4-11 Printer IP Address Page 48
Figure 4-12 Print Job Details 49
Figure 4-13 Changing the xPrintServer Name 50
Figure 4-14 Logs 53
Figure 4-15 Drivers List Tab 54
Figure 4-16 Export Drivers Button 55
Figure 4-17 Loaded Drivers Tab 56
Figure 4-18 Saving Configuration 57
Figure 4-19 Restoring Configuration 58
Figure 4-20 SSL/TLS Key and Certificate Management 59
Figure 4-21 Google Account 61
Figure 4-22 Adding a Google Account 62
Figure 4-23 Finishing Printer Registration 63
Figure 4-24 Google Cloud Print Administrative Features 64
Figure 4-25 Creating Matching Username & Passwords 65
Figure 4-26 Non-Admin User Access 66
Figure 4-27 Changing Own Password 66
Figure 4-28 Changing Other User Passwords (Admin User Only) 67
Figure 4-29 Adding or Deleting a User (Admin User Only) 68
Figure 4-30 Exporting Users 68
Figure 5-1 Firmware Update Options 70

List of Tables

Table 2-1 Status LED on Top of Device 11
Table 6-1 Technical Specifications 72

1: Introduction

The Lantronix® xPrintServer® Cloud Print edition print server provides printing capabilities for all Google Cloud Print supported platforms, such as Chrome OS™ and Android™ platforms. Simply plug the xPrintServer device into your network (router or switch with internet access), then plug your USB printer(s) into the xPrintServer unit. Within seconds the xPrintServer device will auto-discover your printers to enable printing from your devices. A registered Google account is required to establish a Google Cloud Print connection.

Figure 1-1 xPrintServer Cloud Print Device

Cloud Print, Network, Home and Office Editions

The xPrintServer printer server comes in Cloud Print, Network, Home and Office editions. This user guide documents the features and functionality of the xPrintServer Cloud Print Edition print server.

Key Features

- Simple configuration
- Supports up to 8 USB printers via USB hub and an unlimited number of network-attached printers.

  Note: *Up to 10 network-attached printers is recommended for optimal performance. Print jobs process one at a time regardless of the number of configured printers. The xPrintServer device includes one USB port as a part of the unit; an additional USB hub for connecting additional USB printers is not included.*

- Automatic printer discovery and configuration (for supported printers)
- Security features
- External LED status indicator
- Configuration via browser (HTTP)

Supported Devices

- All Chrome OS devices.
- All Android (2.3.3 and up) devices. Requires installation of a Google apps with Google Cloud Print web printing service functionality.

Supported Printers and Printer Protocols

See http://www.lantronix.com/xprintserver-supported-printers for the latest list of all supported printers. This list is periodically updated with new printers.

Supported DHCP Configuration

The Lantronix xPrintServer device supports both DHCP and Static IP Address Assignments.

Supported Browsers

Lantronix supports the latest version of Internet Explorer®, Mozilla® Suite, Mozilla Firefox®, Safari®, and Chrome™ web browsers.

Product Label

You will need the **QR code** or the **serial number** of your xPrintServer device when setting up your xPrintServer device's Admin interface. These can be found on the product label adhered to your device.

Figure 1-2 Sample Product Label

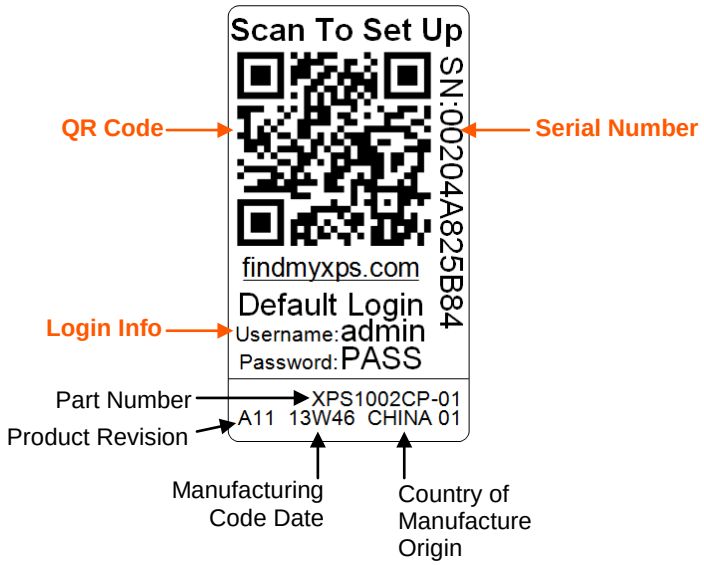


Figure 1-3 Product Label on Underside of xPrintServer Device

Serial Number

A serial number is a unique, identifying number specific to a hardware device including an xPrintServer, PC, printer or any Apple or Android device.

Figure 1-4 Sample Serial Numbers on Hardware Devices

`00-80-A3-8E-00-63` or `00:80:A3:8E:00:63` or `0080A38E0063`

IP Address

Every device connected to an IP network must have a unique IP address. The xPrintServer gets a unique IP address from the DHCP server on your network (default method) or can be manually configured with a static IP address.

2: Installation

This chapter describes how to install your Lantronix xPrintServer device and how to establish a connection with Google Cloud Print™ web printing solution. Directions to register with Google Cloud Print service are applicable only the first time to establish a connection between a new xPrintServer unit and Google Cloud Print web printing services, and in the event of a factory reset.

Package Contents

Your xPrintServer product package includes the following:

- One (1) xPrintServer print server
- One (1) Quick Start Guide
- One (1) RJ-45 Ethernet Cable (3 ft)
- One (1) Power Supply with Regional Adapters
- Mounting Bracket with Two (2) Screws
- Four (4) Rubber Feet

User-Supplied Items

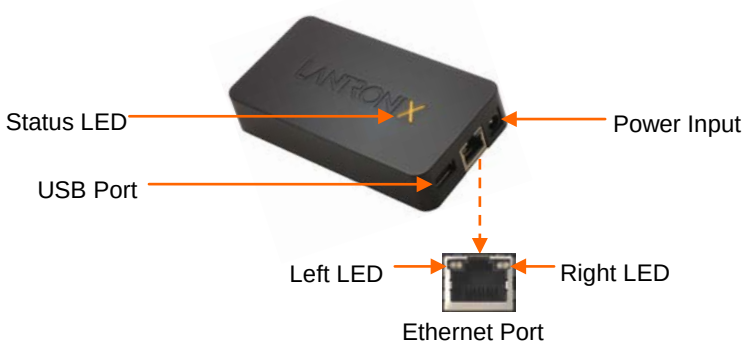
You also need the following items to install and operate your xPrintServer device:

- A working power outlet
- Internet connection (with outbound ports 80, 443 and 5222 open)
- Network-attached printer (wired or wireless)
- USB printer (if any)
- Your device (e.g., PC, tablet or smartphone) with a connection to the network
- A Google® email account (must be logged in to be able to setup and print)

Hardware Components

There is one USB port, one power input, one Ethernet port, and two types of LED indicators on the xPrintServer. The LEDs provide information about device activity and status.

Figure 2-1 xPrintServer LEDs



Ethernet LEDs

There are two LEDs located on the upper left and right corners of the Ethernet socket (see *Figure 2-1*.) These indicate the status of the connection.

Left LED

- Green ON, 100 Mbps Ethernet Link
- Green Blinking, 100 Mbps Activity
- Orange ON, 10 Mbps Ethernet Link
- Orange Blinking, 10 Mbps Activity
- OFF, No Ethernet Link

Right LED

- Always OFF

The Ethernet port can connect to an Ethernet (10 Mbps) or Fast Ethernet (100 Mbps) network.

Status LEDs

The Status LED on the xPrintServer device is incorporated into the "X" letter of the Lantronix logo on the top of the device. The behavior of this LED indicates the type of activity occurring in the xPrintServer device. The Status LED color is orange when lit, and unique display patterns indicate the specific type of activity. The LED may display a solid light, display no light, slowly glow on, slowly glow off, or flash on/off.

Table 2-1 Status LED on Top of Device

Orange "X" LED	Description	
Solid	A continuous solid light indicates the power is on or the device is booting.	
OFF	No light indicates the power is off.	
Blinking	Even blinking pattern indicates the device is printing.	
Glow/Dim (Repeating Pattern)	Pulsating pattern of glowing and dimming light cycle occurring once every three seconds. Indicates the device is booted, idle and waiting for a job.	
Code 1	A repeating pattern of a **single flash** followed by two seconds of no light indicates the device is obtaining the DHCP address.	***Note:*** *Codes 1 through 7 indicate a grouped number of flashes in the Orange "X" LED separated by a two second interval where the light is off. The specific code/number of flashes separated by a two second no-light interval indicates a specific status as*
Code 2	A repeating pattern of **two flashes** followed by two seconds of no light indicates there are no configured printers.	
Code 3	A repeating pattern of **three flashes** followed by two seconds of no light indicates a factory default reset.	
Code 4	A repeating pattern of **four flashes** followed by two seconds of no light indicates a *successful* firmware update.	
Code 5	A repeating pattern of **five flashes** followed by two seconds of no light indicates a *failed* firmware update.	
Code 6	A repeating pattern of **six flashes** followed by two seconds of no light indicates a printing error.	
Code 7	A repeating pattern of **seven flashes** followed by two seconds of no light indicates printer discovery is in process.	

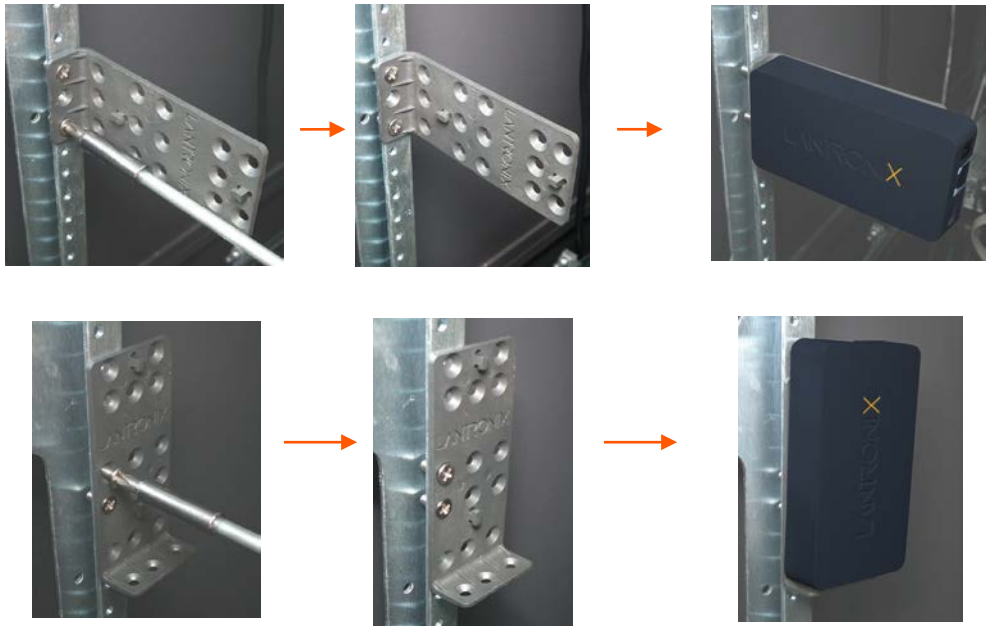
Orange "X" LED	Description	
Code 8	A repeating pattern of **eight flashes** followed by two seconds of no light indicates USB device (printer or flash drive) discovery is in progress.	*described in the grey cells to the left.*

Hardware Installation Steps

With all xPrintServer package contents and the requisite user-supplied items listed above, you may begin installation.

1. Make sure of the following:
   - Your devices (smartphone, tablet or PC) are on the same Wi-Fi® or wired network as your xPrintServer unit.
   - Printing from your Windows or Mac computer (from which the USB printer is directly attached) is working before proceeding. If you are installing a new USB printer, this may require downloading and installing printer drivers to your desktop from the printer manufacturer.
2. Position the xPrintServer device. The xPrintServer can simply be placed as it is on a desk or other secure flat surface. Here are additional options:
   - To install the rubber feet on the xPrintServer (for added grip and stability on a flat surface), peel to unveil the adhesive strip on each rubber foot and press one foot onto each of all four bottom corners of the xPrintServer unit.
   - To secure the xPrintServer into a server rack, utilize the included mounting bracket and screws. There are a variety of ways to mount the bracket and then the xPrintServer unit, including the two sample methods in *Figure 2-2*.

Figure 2-2 Sample xPrintServer Mounting Options



3. Connect printer(s).
   - **For USB printers:** connect the USB printer cable to the USB port of the xPrintServer device, if any.
   - **For network printers:** connect all printers to the network through a wired, wireless–to-router, switch or LAN connection.
4. Connect the network cable from the router/switch to the xPrintServer device.
5. Power on the xPrintServer device with the supplied power adapter. The xPrintServer device will automatically set-up all printers on your network and/or USB-connected printers. The glowing "X" will blink quickly for about 30 seconds, and then it will pulse slowly to show it is ready for printing.
6. Monitor the LEDs on the xPrintServer for activity and status information (see *Ethernet LEDs* and *Status LEDs*.)

Figure 2-3 Quick Connect Diagram

xPrintServer Device Network Details

The xPrintServer device is hardwired (via standard CAT-5) cabling to a router, switch or hub. The system requires an Access Point (A/P), which can be also hardwired and connected to the network. The tablet or smart phone device associates with the A/Pand communicates to the xPrintServer when a print job is ready to be processed. The xPrintServer device communicates with network attached printer(s); the printers may either be wired or wirelessly connected to the network.

For the xPrintServer device to auto-detect printers on bootup, the xPrintServer and printers must be on the same subnet. After auto-detection has been completed, the xPrintServer device can then be relocated to a different subnet (Wi-Fi connected subnet that devices are connected to) assuming that subnet can route to the previous subnet.

The xPrintServer device uses Zeroconf to advertise print services to the your tablet, smartphone or PC device(s) and requires your device(s) and the xPrintServer are on the same routable network

Multicast configuration and support can be found in the Lantronix knowledgebase. You may perform word searches, such as for "multicast", at http://www.lantronix.com/resources/.

Establishing a Google Cloud Print Connection

After performing *Hardware Installation* Steps, follow these directions to register a Google Cloud Print connection to a new xPrintServer unit. This connection does not need to be re-established after the initial connection is made unless *Resetting the xPrintServer Unit to Factory* Defaults is performed.

Note: *A Google account and up-to-date web browser are required for establishing a Google Cloud Print connection. Since multiple Google account logins and passwords may be stored in a browser maintaining "signed-in" status, it is recommended that you make sure to log out of all Google accounts prior to beginning these steps. One way of doing this is by using the incognito/privacy mode in a browser. This way you may select the desired Google account to be used in establishing this Google Cloud Print connection. Only one Google account can be associated with an xPrintServer unit at any time. If more than one account needs access to xPrintServer admin functions, consider using a Google account that can be shared. See Accessing Google Cloud Print Administrative Features Online. Your device (smartphone/table/PC) must be on the same wired or Wi-Fi network as your xPrintServer unit.*

1. Login to the Admin interface of your xPrintServer device in one of two ways below. You will need to access the QR code or serial number on the *Product Label* on the underside of your xPrintServer device.

   - **Scan the QR code on the *Product Label*** using your Android smartphone or tablet and click the link displayed on your QR code reader to access the xPrintServer device Admin interface where you may log in (see *Figure 3-2 Login Prompt*.)

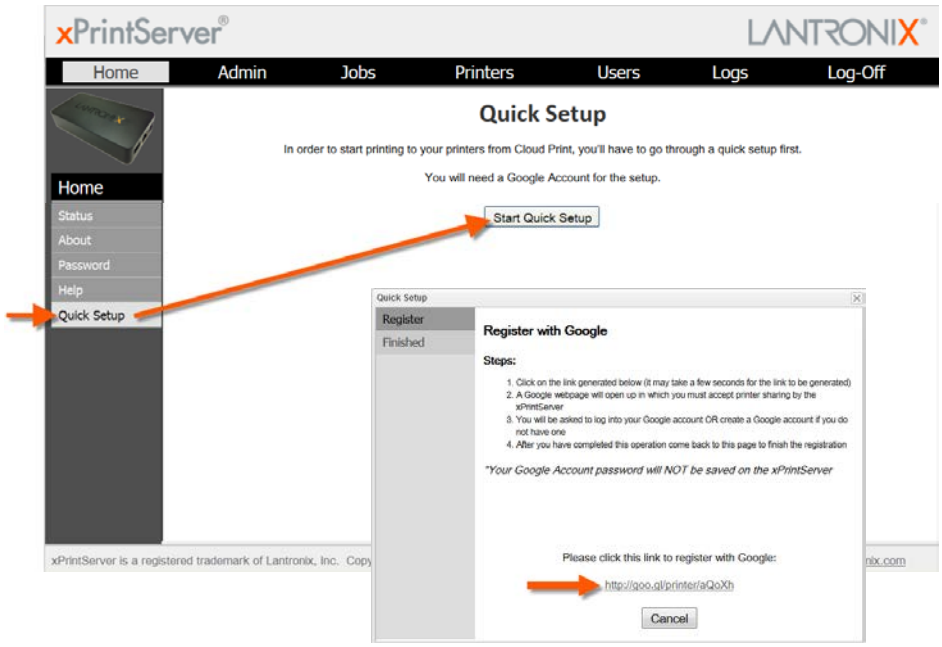
     Note: *QR code readers are available for Android smartphones and tablets at the Google Play™ store. Lantronix recommends using the ZXing Barcode Scanner app, which may be found at https://play.google.com/store/apps/details?id=com.google.zxing.client.android.*

   OR

   - **Type** http://www.findmyxps.com **directly into a web browser** and enter the alphanumeric serial number from the *Product Label*. Web browsers can be accessed on a smartphone, tablet or PC. The serial number is alphanumeric and 12 characters in length. A login window in the xPrintServer device Admin interface appears for login (see *Figure 3-2 Login Prompt*.)

2. Click the **Quick Setup** link on the left side of the Home page. The Quick Setup page appears.

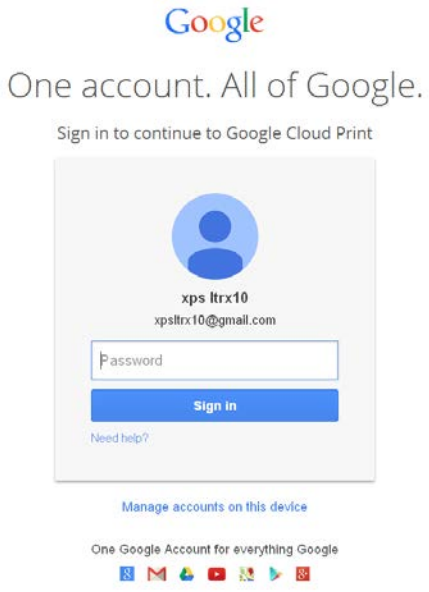
Figure 2-4 Start Quick Setup



3. Click **Start Quick Setup** to initiate registration with Google. A **Quick Setup** window with a unique Google registration link appears within 30 seconds.

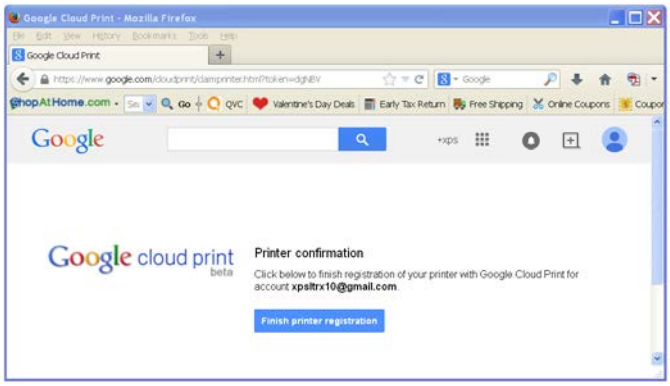
4. Click the Google registration link when it appears. A Google login window appears.

5. Login into the Google account you wish to use to establish the Google Cloud Print connection. This account will control printer sharing with other Google accounts. Businesses may want to select a Google account for the IT department. If your browser has information about multiple Google accounts, each may be available for selection in the login window. If your browser is already logged on to a particular Google account, you will bypass this step by directly connecting through that account.



Note: *Since multiple Google account logins and passwords may be stored in a browser maintaining "signed-in" status, it is recommended that you make sure to log out of all Google accounts prior to beginning these steps. This way you may select the desired Google account to be used in establishing this Google Cloud Print connection. In order to be able to see printers on an xPrintServer unit, a user must be only logged onto the Google account associated with the xPrintServer unit within the same browser. Also, it may be necessary to delete all cookies if switching between Google accounts after logging into a Google account associated with an xPrintServer unit.*

Figure 2-5 Google Cloud Print Printer Confirmation



6. Confirmation of your registration with Google Cloud Print appears upon login.

7. Click **Finish printer registration**.

8. Return to the Quick Setup page at the xPrintServer device Admin interface. You will also see "Finished! Registration Successful" message on the Quick Setup window. From here you may:

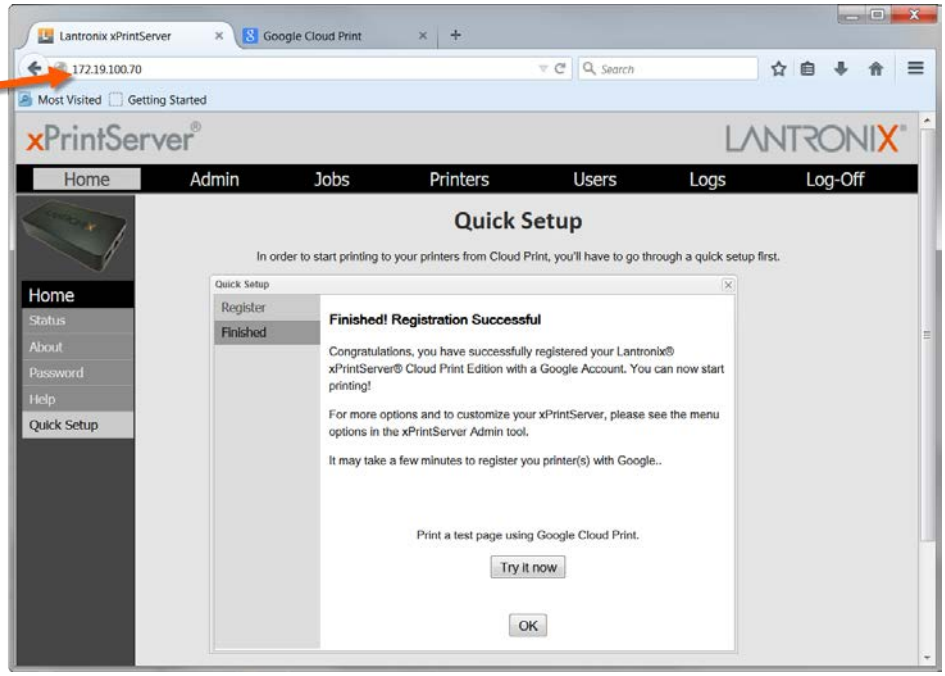
   - Click **Try it now** to initiate printing a test page and to explore. The xPrintServer web interface provides a wide range of *printer management features* and there are also some management capabilities on the *Google Cloud Print management page*.
   - Click **OK** to finish registration and to return to the xPrintServer device Admin interface (see *System Status on the Home Page*.)

Figure 2-6 Quick Setup Complete

The IP address assigned to your xPrintServer unit is listed at the browser address bar (up top) and can be used to access this Admin interface for future logins.

Note: *IP address may change if set to DHCP.*

Rediscover your xPrintServer IP address by following the directions in *Finding the xPrintServer IP Address*, as necessary.



3: Navigation and Printing

This chapter explains how to navigate and use your Lantronix xPrintServer device Admin interface including directions on how to log in and log out, how to change your password, and most importantly, how to print from your PC, smartphone or tablet device. Refer to *Establishing a Google Cloud Print Connection* for one-time directions needed to initially set up the xPrintServer device with Google Cloud Print first.

Finding the xPrintServer IP Address

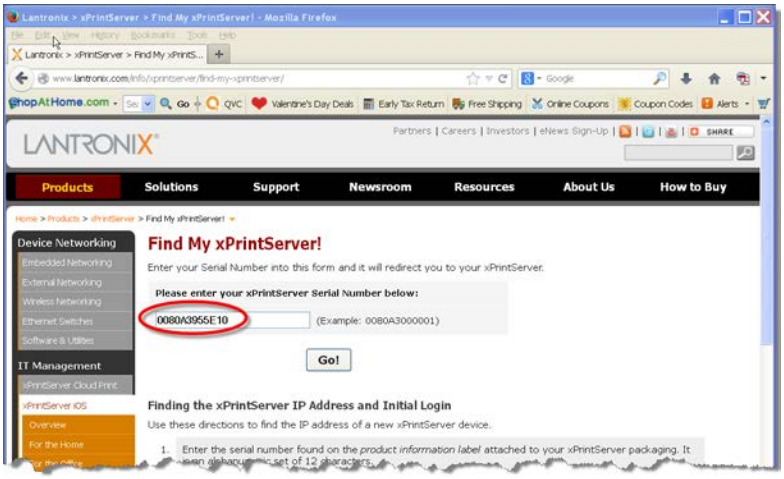
An IP address was assigned to your xPrintServer unit when you were *Establishing a Google Cloud Print Connection* in the instructions above. You may also use these directions to rediscover your device IP address. You use this IP address to log into and manage your xPrintServer device through the xPrintServer device's Admin interface available online. Internet access is required.

Every xPrintServer device has a unique, identifying serial number that can be found on the *product information label* (see *Figure 1-2*.) As part of the initialization/boot up process, the xPrintServer will automatically register its IP address and associated serial number with the Lantronix Web Services website (http://www.findmyxps.com) which in turn provides the unique IP address of the xPrintServer device. You may then use the xPrintServer IP address to log into the Admin interface for printing management.

Use these directions to find the IP address of a new xPrintServer device.

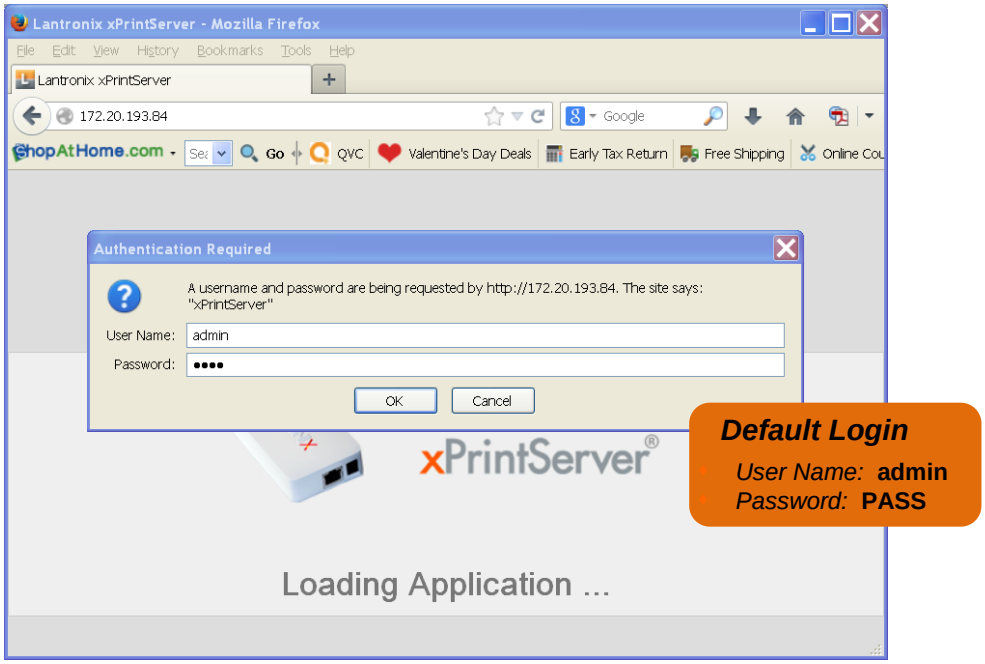
1. Open an internet web browser. See *Supported Browsers*.
2. Enter http://findmyxps.com into the web browser address bar.
3. Press **Enter** on the keyboard. You will be prompted for the xPrintServer device serial number.
4. Enter the serial number of your xPrintServer unit. The serial number can be found on the *product information label* attached to your xPrintServer packaging (see *Figure 1-2*.) It is an alphanumeric set of 12 characters.

Figure 3-1 Serial Number



5. Click the **Go!** button. You will be redirected to your xPrintServer URL, after which a login prompt appears.

Figure 3-2 Login Prompt



6. Enter the default login information.

   - User Name: **admin**
   - Password: **PASS**

Note: *Upon initial login, modify the default "PASS" password as soon as possible for security reasons. See Changing Passwords.*

7. You will be redirected to your xPrintServer device URL where you will see the *System Status on the Home Page.*

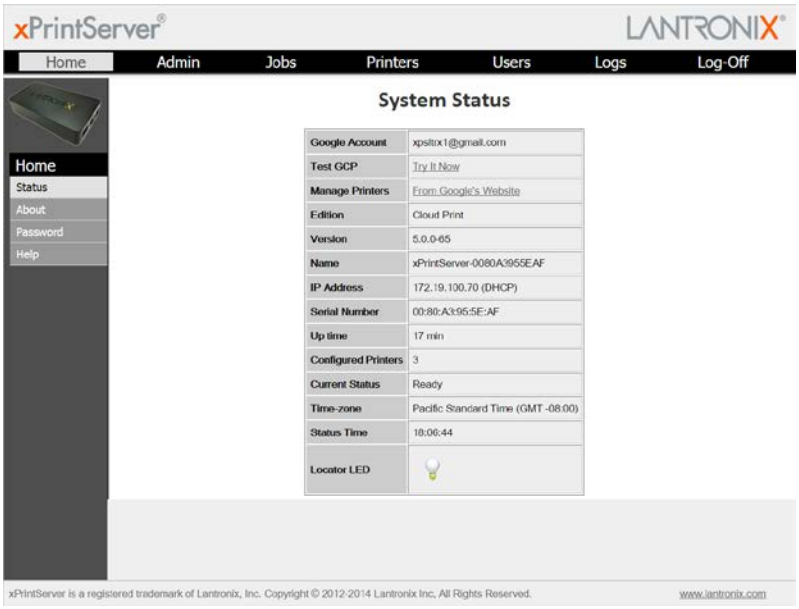
8. Take note of the IP address of your xPrintServer device for all future logins.

Note: *Your xPrintServer IP address is assigned by DHCP by default, however, you can manually configure a static IP address. See Assigning a Static IP Address to the xPrintServer.*

System Status on the Home Page

You will see your xPrintServer **System Status** information on the **Home** page whenever you log into your xPrintServer URL.

Figure 3-3 IP System Status Information on the Home Page



The System Status information includes your **IP address** along with other important system status information:

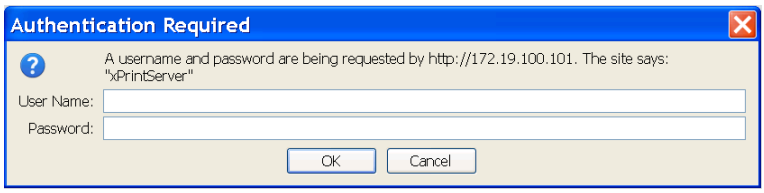
- **Google Account**
  Indicates the Google email account address used to link the xPrintServer device to Google Cloud Print.
- **Test GCP**
  Print a test page from Google Cloud Print web printing services.
- **Manage Printers**
  Access connected printers through Google Cloud Print management page accessed online.
- **Edition**
  The edition of xPrintServer print server (Cloud Print.)
- **Version**
  The current version of your firmware.
- **Name**
  The configurable name for the xPrintServer device. The default name is **xPrintServer-[serial number]**.
- **IP Address**
  The unique IP address associated with your xPrintServer device. This IP address may be used to directly pull up the Admin interface of a connected and live xPrintServer.
- **Serial Number**
  The unique serial number associated with the xPrintServer device which should match what is on the *product information label*.

- **Up time**
  The amount of time the xPrintServer has been operational since powered on or last restarted.
- **Configured Printers**
  The number of total discovered printers available for use on various PC, tablet or cellular devices.
- **Current Status**
  The current status of the xPrintServer.
- **Time-zone**
  The configured time zone (can be changed through the **Admin** page.)
- **Status Time**
  The time at which the system status information you see on the screen was captured.
- **Locator LED**
  Clicking the light bulb will cause the "X" LED on top of the xPrintServer unit to blink rapidly. Clicking the light bulb again turns off this feature. This feature is useful in situations where you wish to identify a specific xPrintServer amongst multiple units.

Logging In

Once the xPrintServer unit is installed (see *Installation Steps*) and the IP address discovered (see *Finding the xPrintServer IP Address and Initial Login*), you may follow these directions to login to xPrintServer via Local or Remote Authentication at any time.

Figure 3-4 Login Prompt



To Login:

1. Open an internet web browser.
2. Enter the IP address of your xPrintServer device.
3. Enter your login information when prompted. You are logged into the xPrintServer device's Admin interface when you see *System Status on the Home Page*.
   - User Name
   - Password

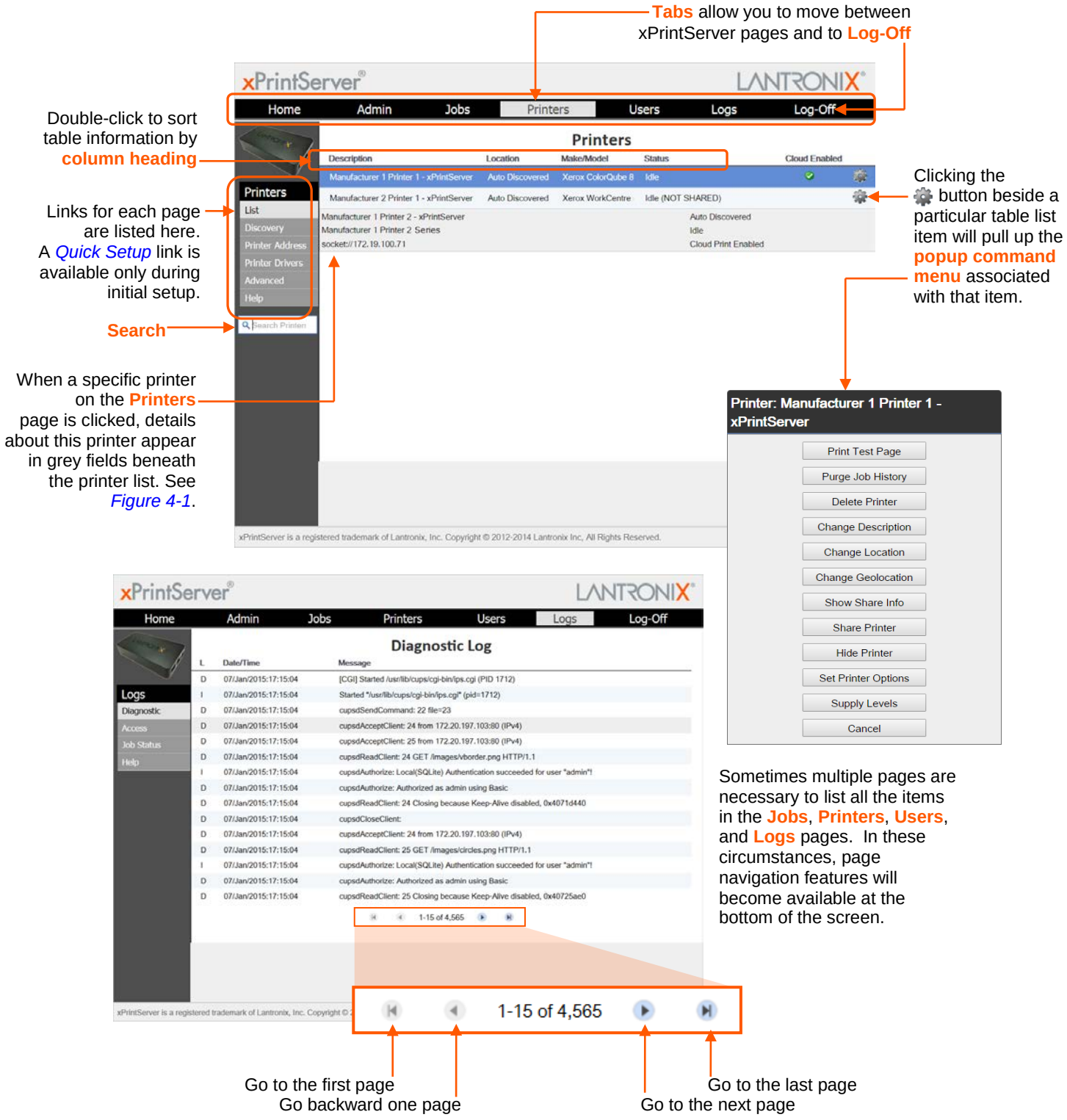
Logging Off

1. Click the **Log-Off** tab located at the top far right of any xPrintServer device's Admin interface page. You will be prompted to close out of your browser window.
2. Close out of your browser to completely log off.

Navigation

Navigation features for the xPrintServer device's Admin interface are outlined in this section.

Figure 3-5 Navigating the xPrintServer Device's Admin Interface



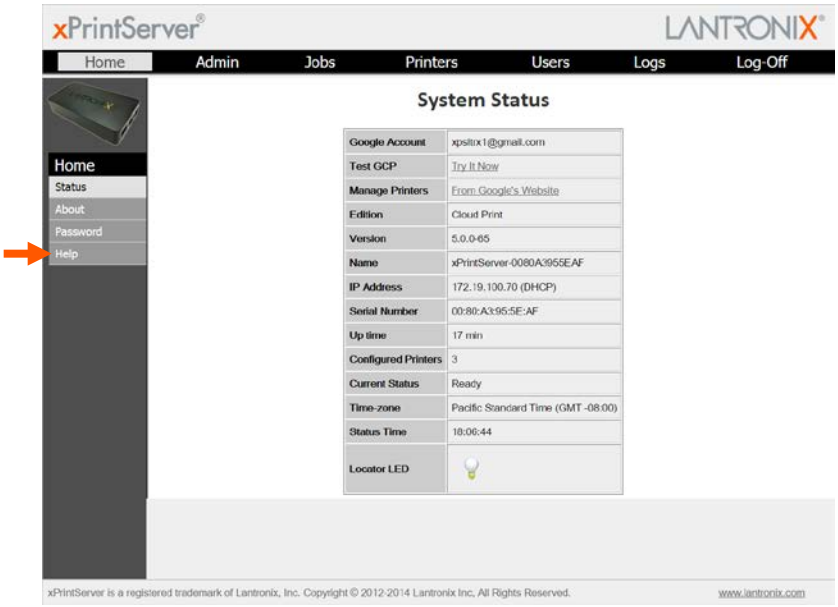
Sometimes multiple pages are necessary to list all the items in the **Jobs**, **Printers**, **Users**, and **Logs** pages. In these circumstances, page navigation features will become available at the bottom of the screen.

As illustrated above, basic navigation features for the xPrintServer device's Admin interface include the following:

- **Tabs**
  All the functionality of your xPrintServer device's Admin interface is divided between the **Home**, **Admin**, **Jobs**, **Printers**, **Logs** and **Log-Off** tabs located across the top of the Admin interface. Access these pages by clicking the same-named tab along the top of the screen. For instance, click the **Jobs** tab to get to the **Jobs** page or click **Home** to get to the **Home** page.

- **Links**
  Click to select from the links/commands available for each page. All links available for a particular web page are displayed along the left side. For instance, links to **Active**, **Completed** and **All** jobs are available on the left side of the **Jobs** page.

  *Note: A **Help** link is available on the bottom left of every page and provides access to the Lantronix xPrintServer Help Section online.*



- **Search**
  A **Search** field is available for the **Jobs**, **Printers** and **Users** tabs. The search field features dynamic filtering that provides results based on the search string entered into the search field. The results dynamically update according to the search parameters entered in the search field. Deleting all contents of the **Search** field removes the filter and will show all results.

- **Button**
  This button may be found beside all items listed on the **Jobs** and **Printers** pages. Click the button beside a particular print job or printer on these pages to pull up a popup command menu with commands that are available for that item.

- **Log-Off Tab**
  A **Log-Off** tab located at the far upper right of every xPrintServer device's Admin interface page allows you to logout easily.

Installing the Google Cloud Print App on Android Devices

Android devices such as cell phones and tablets require the installation of the Google Cloud Print app (created by Google) to print using Google Cloud Print web printing web printing service. The Google Cloud Print app is available free of charge through the Google Play store and takes less than a minute to install.

Note: *To enable printing on other Android devices, be sure that the Google Cloud Print app is installed on those devices. To allow other users to print, be sure to add the Google accounts to the Google Cloud Print web print service. See Accessing Google Cloud Print Administrative Features Online. The Google Chrome operating systems and Chromebook notebook computers do not require the Google Cloud Print app to be able to print via the xPrintServer Cloud Print Edition device.*

1. Get the Google Cloud Print app in one of two ways:

   - **Scan the QR code on your Android device with a QR reader.** A QR code reader app can be downloaded for free from the Google Play store (most QR code readers will work, however Barcode Scanner by the ZXing team QR code reader is recommended.)

   OR

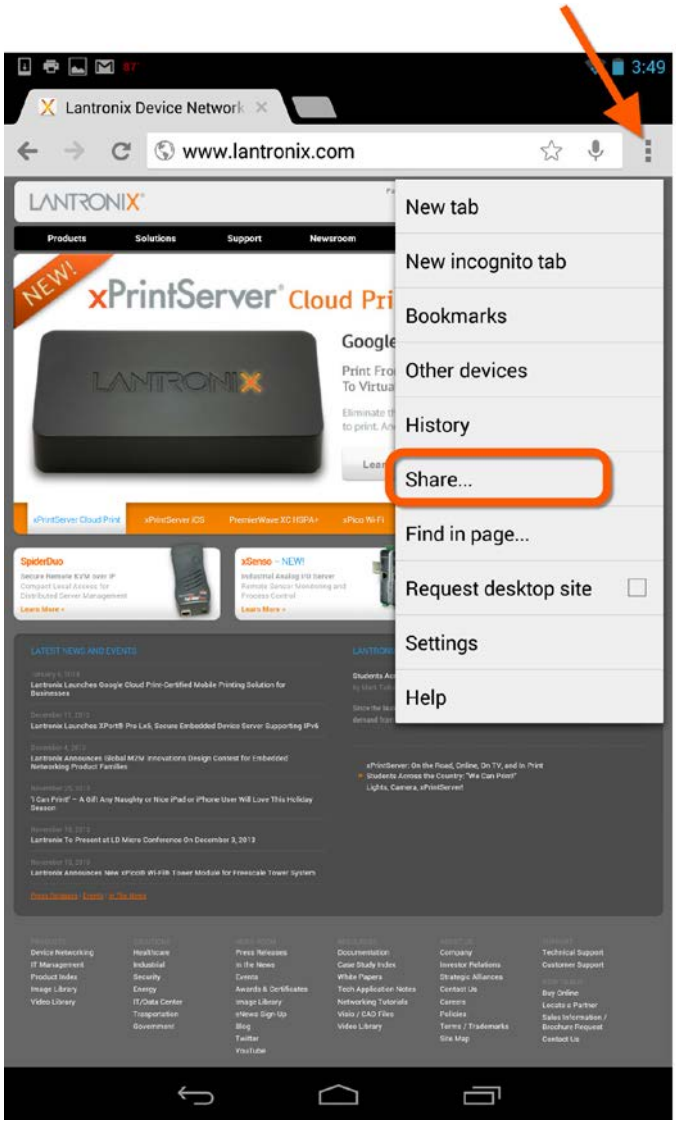
   - **Search for the Google Cloud Print app at the Google Play Store.** Find the Google Play store icon on your Android device to access the Google Play store. Search for the Google Cloud Print app using the Google Play store search tool.

2. Download the Google Cloud Print app to your Android device.
3. Repeat steps 1 and 2 to install the Google Cloud Print app on all Android devices from which you wish to print.
4. Be sure to share printers with other Google account users

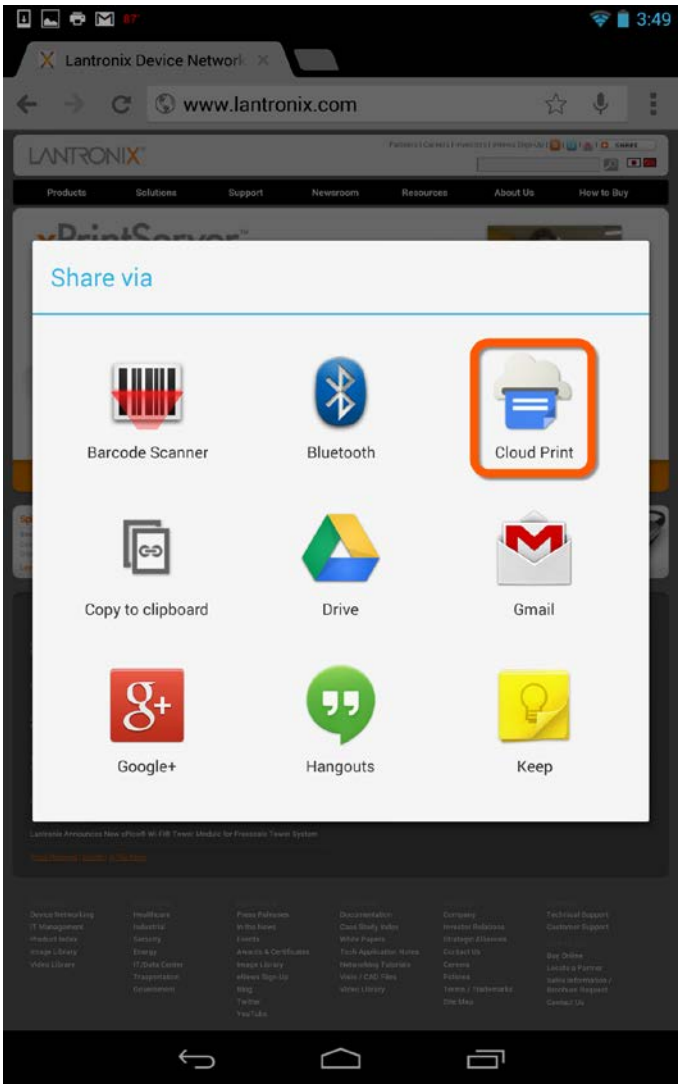
Printing from an Android-based Phone or Tablet

Many apps (web browser, photo, email and productivity) for Android phones and tablets provide the ability to print through the Google Cloud Print web printing service. To print, the Android device needs to be online but does not need to be on the same network as the xPrintServer unit. In order to use Google Cloud Print, you must have and be logged into a Google account. Combined with the Lantronix xPrintServer Cloud Print Edition device, you can print to your existing printers (see Lantronix.com for compatible printers.) Below are instructions for a typical scenario for printing from an Android device. Be sure that the Google Cloud Print app is installed on the Android device and that the Google account of the device's user has been added to the Google Cloud Print utility. See *Accessing Google Cloud Print Administrative Features Online*.

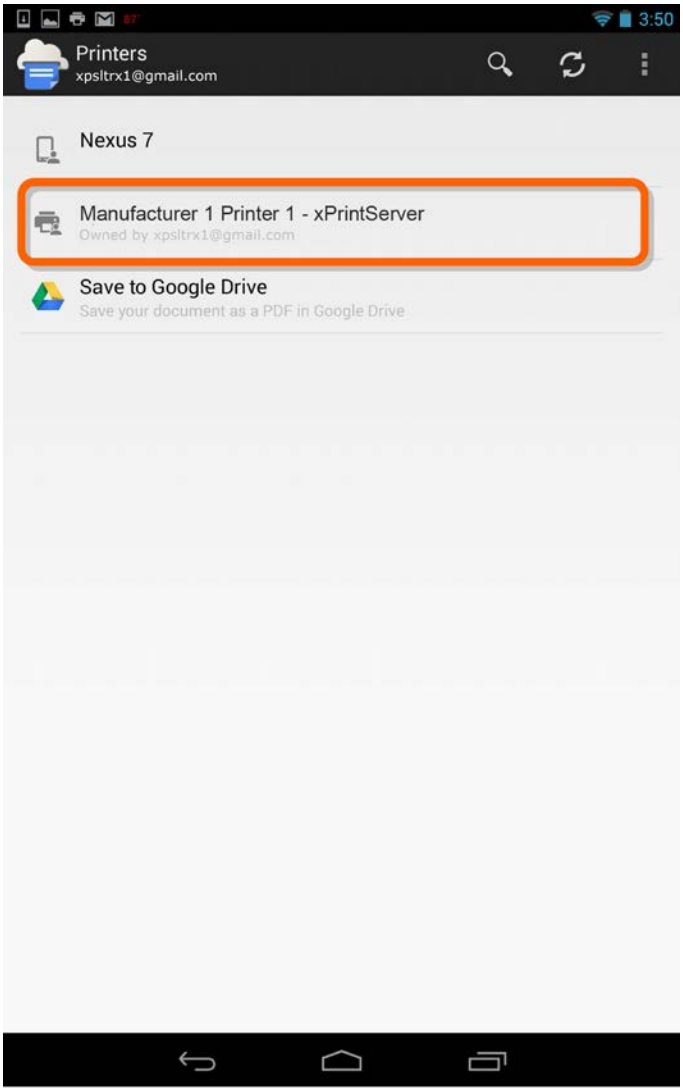
1. Make sure you have completed *Installing the Google Cloud Print App on Android Devices*.
2. Open the app you wish to use.
3. Click the ⋮ (options) button on the top right. A drop-down menu appears.
4. Select **Share…** from drop-down menu.



5. Select **Cloud Print**.
   A printer list appears.



6. Select a printer from the printer list. The number of printers you see will vary depending on how many printers the xPrintServer device auto-discovered and set-up on your network.



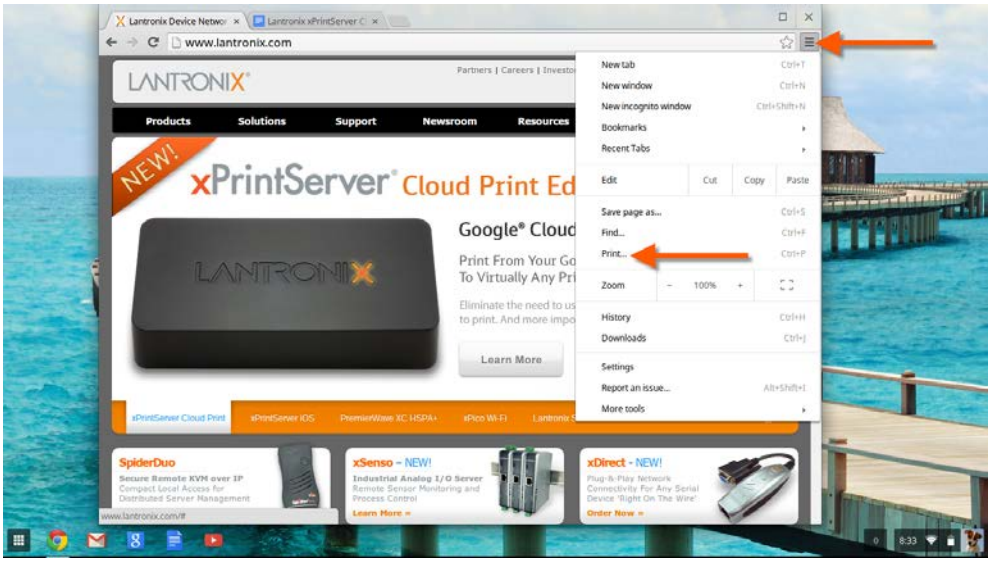
7. Click the (refresh) icon as necessary to refresh this printer list.

8. From the Print Preview page, select the (share action) icon to send the print job to the printer. You may see additional print options available for modification on this page depending on the printer model.

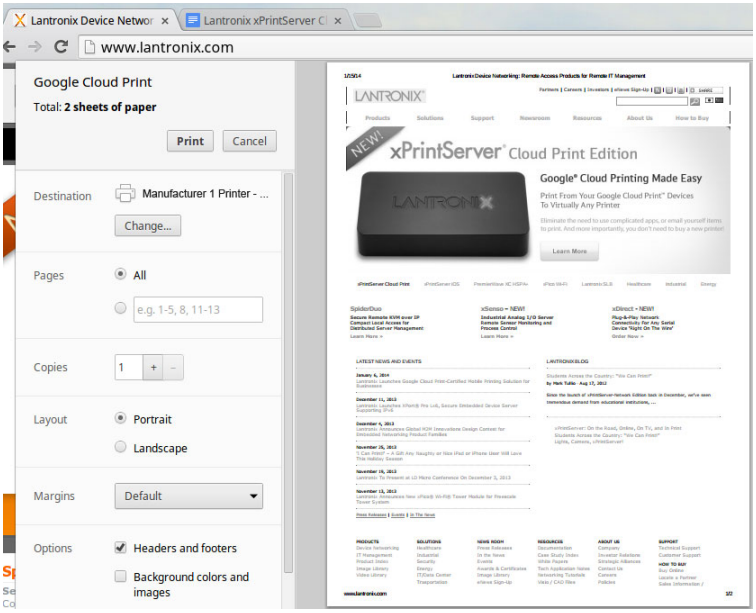
Printing from Chrome OS and Chromebook Devices

Many apps (web browser, photo, email and productivity) for Chromebook notebook computers provide the ability to print through Google Cloud Print web printing service. To print, the Chrome OS device needs to be online but does not need to be on the same network as the xPrintServer unit. In order to use Google Cloud Print, you must have and be logged into a Google account. Combined with Lantronix xPrintServer Cloud Print Edition print server, your Chrome OS and Chromebook devices can print to your existing printers (see http://www.lantronix.com/xprintserver-supported-printers for compatible printers) without installing the Google Cloud Print app. Below are instructions for a typical scenario for printing from a Chromebook device.

1. Select the (options) button on top right to reveal a drop-down menu.
2. Select **Print…** from drop-down menu.



3. A Google Cloud Print window will open for you to select your printer and other print options. Select **Print** when ready to print.

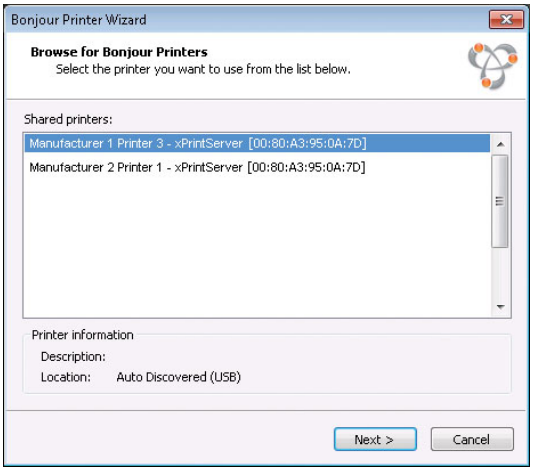


Printing from a Windows 7 Desktop Computer

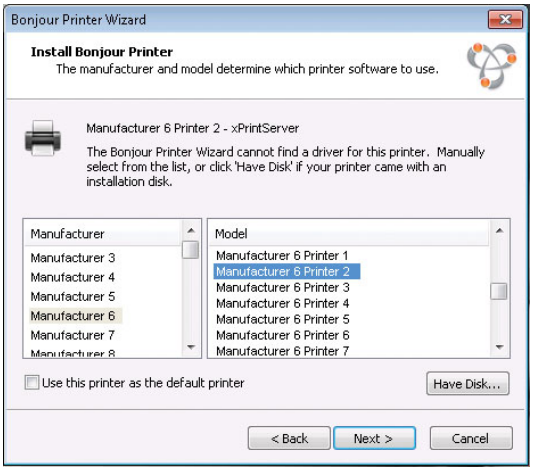
This section explains how to prepare your Windows 7 PC for printing to a printer connected to an xPrintServer unit via USB. To print, the Windows 7 device needs to be online and on the same subnet as the xPrintServer unit. In order to use Google Cloud Print, you must have and be logged into a Google account. The xPrintServer Cloud Print Edition print server supports desktop printing from Windows 7 and Windows 8 operating systems through Bonjour Print Services. You will need to download Apple Bonjour Print Services for Windows v2.0.2 or higher.

Performing Add Printer Setup

1. Connect your xPrintServer device according to *Hardware Installation* Steps.
2. Download Bonjour Print Services at http://support.apple.com/kb/DL999, following prompts as instructed.
3. Launch Bonjour Printer Wizard:
   - Through the Windows Start Menu by clicking **Start > Control Panel > Bonjour Print Services > Bonjour Print Wizard**; or
   - By double-clicking the **Bonjour Print Wizard** icon on your desktop.
4. The Bonjour Printer Wizard appears with a list of discovered printers.

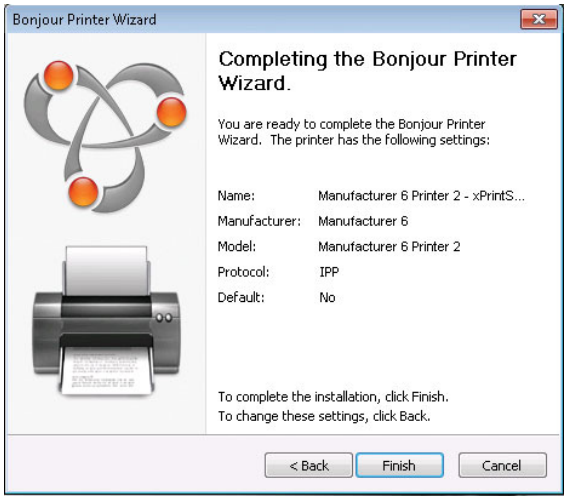


5. Click on printer you wish to install.



6. Search and select your printer by **Manufacturer** and **Model**, and click **Next**.

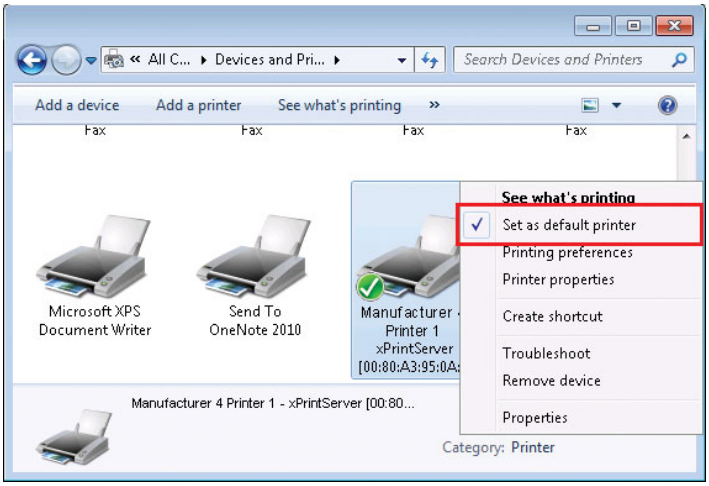
7. Click **Finish** to complete the installation.



Configuring a Default Printer

This section provides instructions on setting an installed printer on your network as the default printer.

1. Click **Start > Control Panel** on your desktop.
2. Double-click to select **Devices and Printers**.
3. Right-click the printer to be set as default and select **Set as default printer**. The selected printer is now set as the default printer.



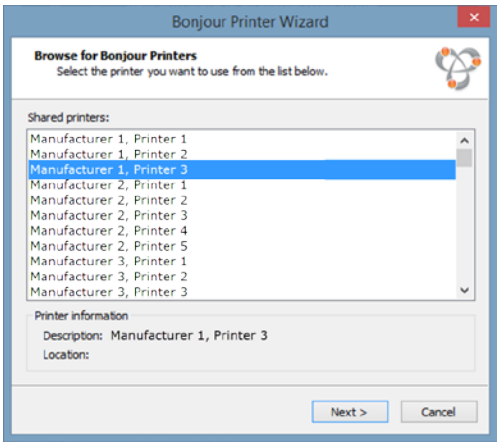
Printing from a Windows 8 Desktop Computer

This section explains how to prepare your Windows 8 computer for printing to a printer connected to an xPrintServer unit via USB. To print, the Windows 8 device needs to be online and on the same subnet as the xPrintServer unit. In order to use Google Cloud Print, you must have and be logged into a Google account. xPrintServer Cloud Print Edition supports desktop printing from Windows 7 and Windows 8 Operating Systems through Bonjour Print Services. You will need to download Bonjour Print Services for Windows v2.0.2 or higher.

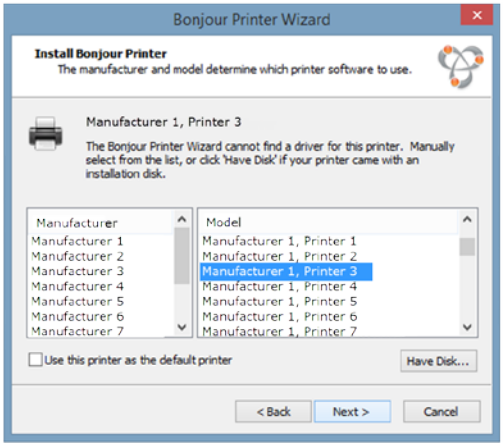
Note: *Apple recommends updating to the latest service pack if utilizing Windows 8 operating system.*

Performing Add Printer Setup

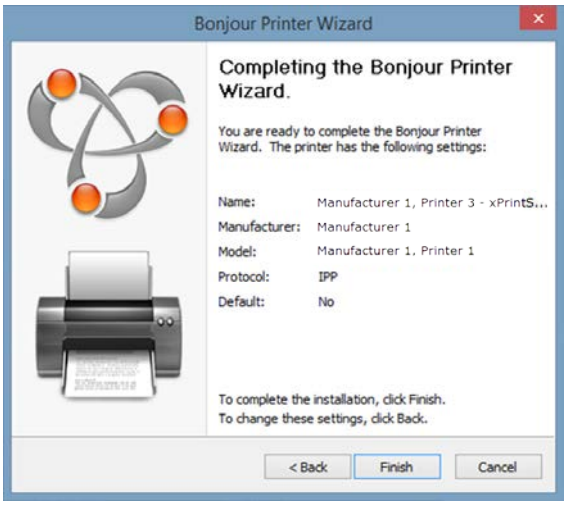
1. Connect your xPrintServer device according to *Hardware Installation* Steps.
2. Download Bonjour Print Services at http://support.apple.com/kb/DL999, following prompts as instructed.
3. Launch Bonjour Printer Wizard:
   - Through Window's Start Menu by clicking **Start > Bonjour Print Services > Bonjour Print Wizard**.
   - By double-clicking the **Bonjour Printer Wizard** icon on your desktop.
4. The Bonjour Printer Wizard appears with a list of discovered printers.



5. Click on printer you wish to install.
6. Search and select your printer by **Manufacturer** and **Model**, and click **Next**.



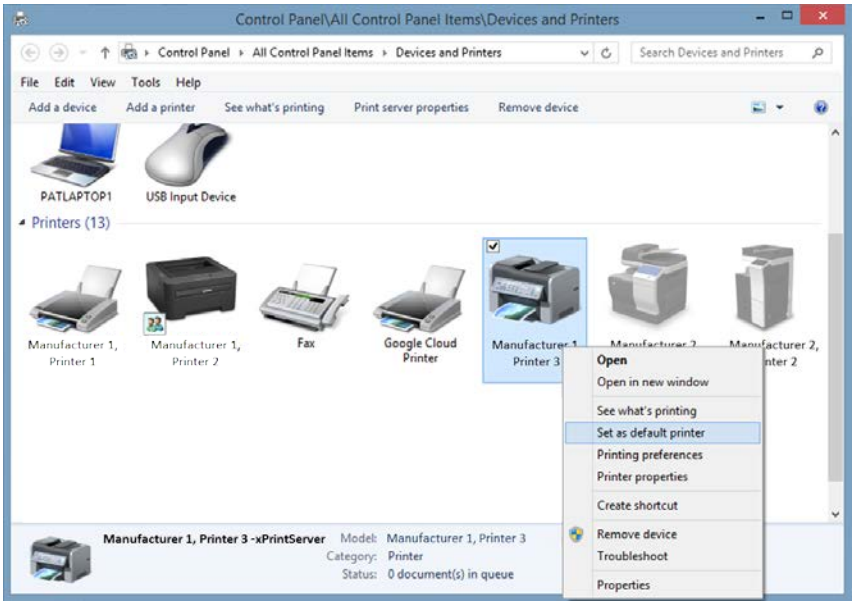
7. Click **Finish** to complete the installation.



Configuring a Default Printer

This section provides instructions on setting an installed printer on your network as the default printer.

1. Click **Start > Windows System > Control Panel** on your desktop.
2. Double-click to select **Printers and Faxes**.
3. Right-click the printer to be set as default and select **Set as default printer**. The selected printer is now set as the default printer.



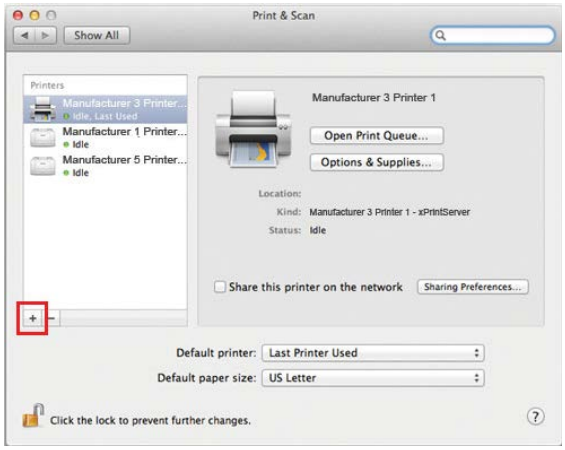
Printing from a Mac OS X Desktop Computer

This section explains how to print from your Mac OS desktop. To print, the Mac OS device needs to be online and on the same subnet as the xPrintServer unit. In order to use Google Cloud Print, you must have and be logged into a Google account. The xPrintServer Cloud Print Edition device supports desktop printing from Mac OS X Lion and newer versions.

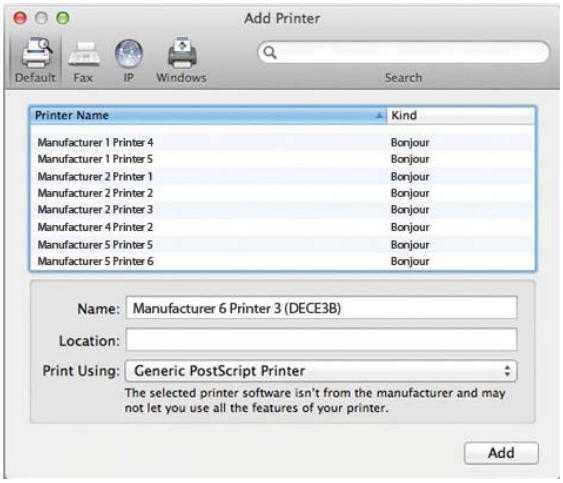
Use these steps to setup printing from your Mac OS through the xPrintServer device.

1. Make sure to have the printer driver of any printers to be used downloaded from the manufacturer's website.
2. Connect your xPrintServer according to *Hardware Installation* Steps.
3. Go to System Preferences > Hardware.
4. Click on Print & Scan.

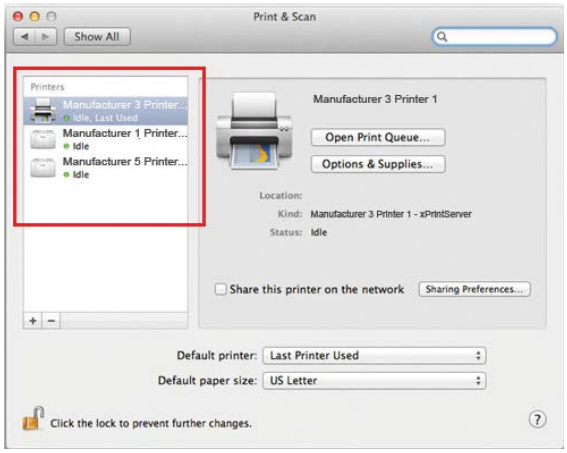
5. Click on the **+** button on the lower left corner. A list of printers appears.



6. Select the printer you wish to add.



7. Click on the **Add** button. The printer is now added in your available list of printers and is ready to print.



4: Configuration

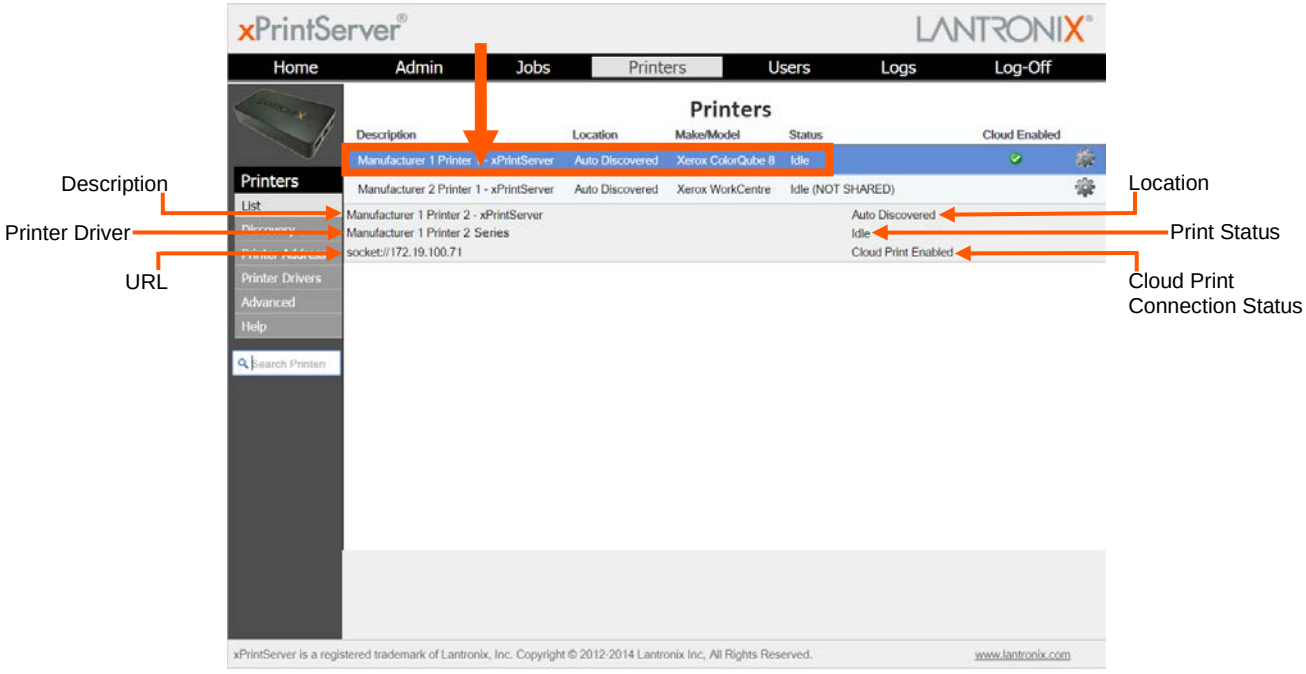
This chapter describes how to configure your Lantronix xPrintServer device using the xPrintServer device's Admin interface.

Viewing Configured Printers

Utilize these instructions to view provisioned network-connected printers. These include printers installed since the xPrintServer last started up or any newly added printers on other networks (see *Adding a Printer IP Address*.)

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printers** tab to access the **Printers > List** page. The **Description**, **Location**, **Make/Model**, the last known **Status** of all currently configured printers, and **Cloud Enabled** status will be listed on this page.
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click on any printer in the list to retrieve additional information on that printer. In *Figure 4-1* below, the second printer in the list was clicked and the associated printer details displayed in a grey field at the bottom of the list of printers.

Figure 4-1 Printer Details and Pop-Up Command Menu



6. Click the button to the right of a specific printer to access a pop-up command menu of options available for that printer (see *Figure 4-1*.) Each of these options is explained in greater detail under *Admin Printer Configuration Options*.

Configuring Printers

Discovering and Provisioning Printers

The xPrintServer device discovers and provisions all network-connected printers in one of two ways:

- **Auto Discovery:** This is the ***automatic method*** of printer discovery and provisioning. Auto discovery is enabled by default so that each time the xPrintServer device starts up or a printer is connected to the USB port, the Discovery protocol automatically runs one time, discovering and provisioning all printers connected since the last start up. This automatic feature can be disabled.
- **Discovery:** This is a method of discovering and provisioning printers that can be initiated after the xPrintServer device is up and running. This method is useful in situations where printer(s) have been added since the last startup of the xPrintServer device. A user may wish to discover and provision the printer(s) at a particular moment rather than waiting until the auto discovery opportunity at the next startup of the xPrintServer device.

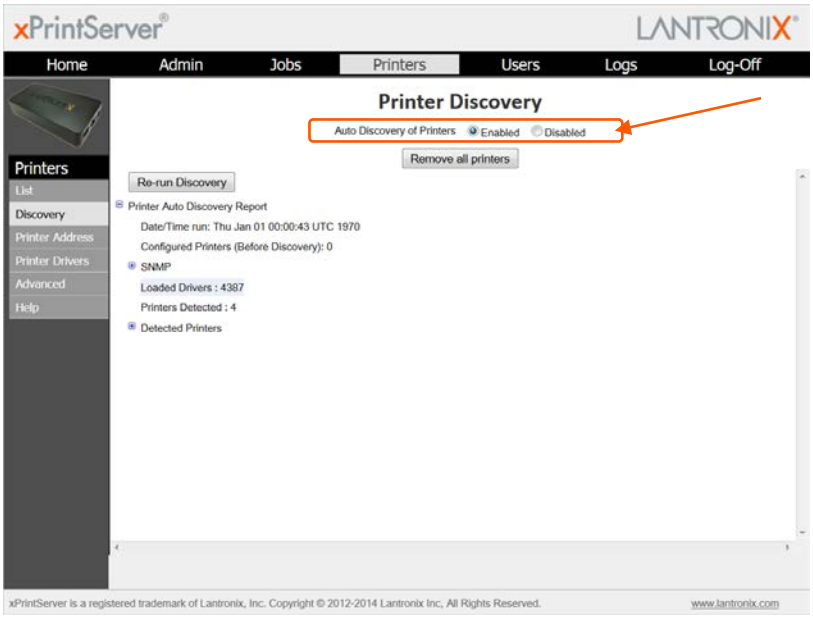
Note: *Only printer models that are in the Supported Printers List (see* http://www.lantronix.com/xprintserver-supported-printers*) will be auto-provisioned after Discovery. Configuration options to manually add a printer and modify advanced printer settings are available under* **Printers > Advanced***. Use these advanced options only if instructed to do so by Lantronix Technical support.*

Enabling or Disabling Discovery

The xPrintServer device's printer auto-discovery is enabled by default so that whenever you start up your xPrintServer device, auto discovery will automatically run one time. Auto discovery can be disabled or re-enabled at any time. Use these instructions to disable or re-enable auto discovery.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1*.)
3. Click the **Discovery** link to the left of the page to reach the **Printer Discovery** page. The current auto discovery mode will be displayed at the top of the page.

Figure 4-2 Printer Discovery Page



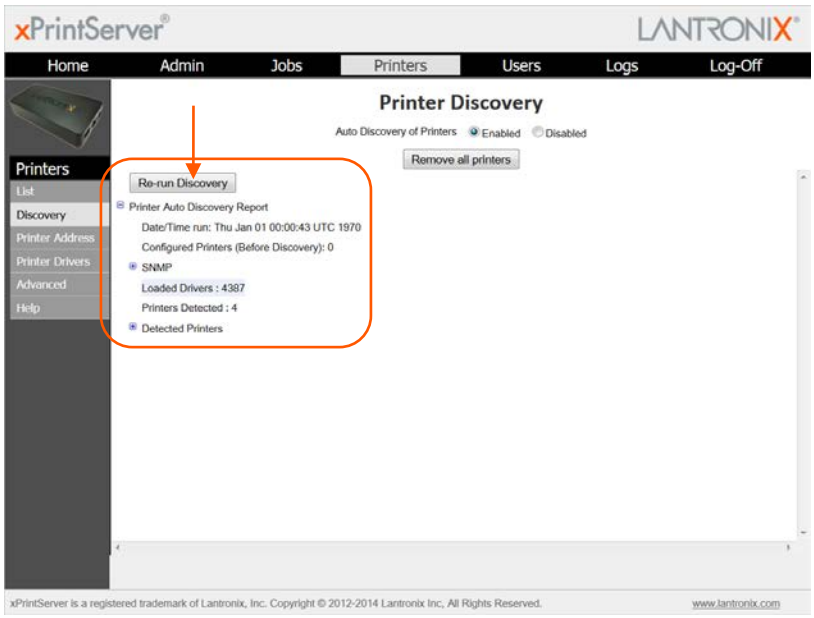
4. Check **Enabled** or **Disabled** to enable or disable printer discovery, as desired. The auto discovery mode will automatically adjust to your selection in a few seconds and your mode choice will be remembered for subsequent xPrintServer unit startups.

Configuring Printers through Auto Discovery

Auto discovery of printers happens automatically each time you startup the xPrintServer unit, so long as auto discovery is enabled prior to the startup.

1. Make sure auto discovery is enabled (see *Enabling or Disabling Discovery* above.)
2. Startup and login to the xPrintServer device's Admin interface (see *Logging In*) as usual. The Discovery protocol runs one time automatically upon startup.
3. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1*.) All printers which were auto discovered at this startup will be listed here with "Auto Discovered" listed under the **Location** column.
4. Click the **Discovery** link to the left of the page to reach the **Printer Discovery** page. A *Printer Auto Discovery Report* appears showing the current date and time the xPrintServer unit automatically discovered and configured printers and associated downloaded drivers.

Figure 4-3 Sample Printer Auto Discovery Report



Configuring Printers through Discovery

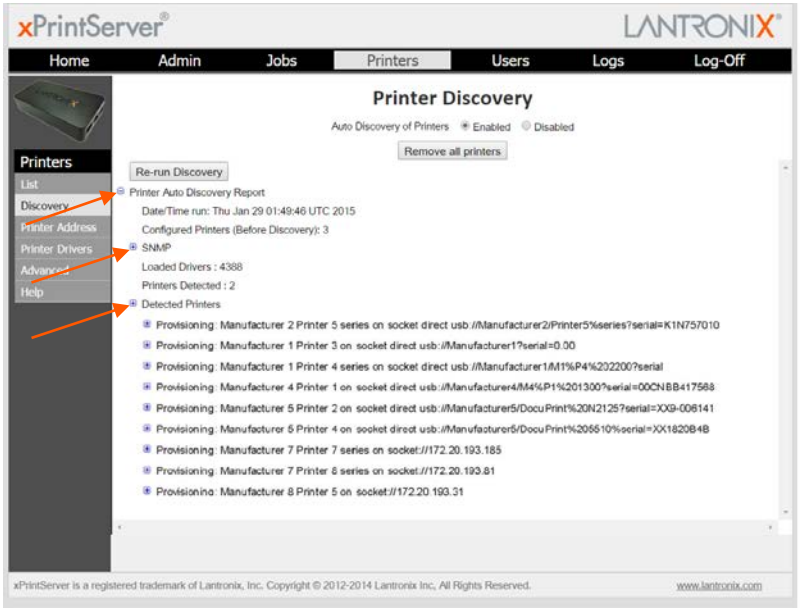
Run Discovery any time after the xPrintServer device is started up. Utilize these instructions to discover and provision network printers connected after the xPrintServer last started up or printers on other networks if their IP addresses have been added (see *Updating Printer IP Addresses*.)

Note: *If Deleting All Configured Printers was recently performed, first to verify all printers have been de-registered on Google Cloud Print management interface. Reference steps in Deleting All Configured Printers.*

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1*.)
3. Click the **Discovery** link to the left of the page to reach the **Printer Discovery** page. A message stating "Printer Auto Discovery has not yet been run" appears if printers are available for discovery. If new printers are not available for discovery, you will see a Printer Auto Discovery Report (see *Figure 4-3*.)
4. Click the **Re-run Discovery** button above the ***Printer Auto Discovery Report*** to manually check for any new printers. After a few minutes, a new *Printer Auto Discovery Report* appears showing the current date and time of the current discovery and configuration of printers and associated downloaded drivers.

5. Expand the **SNMP** field to see configuration information about the discovered printer(s). An example of what you may see in the SNMP field:

Figure 4-4 Expanding Detected Printers Information



6. Expand the **Detected Printers** field and further expand additional available subcategories (indicated with a ⊞ icon to the left) to see a list of discovered printers and the status of the provisioning results.

Note: *If you expand the **Printer Auto Discovery Report**, you may need to use the left-right and up-down scroll bar to see the entire contents of your report.*

Deleting All Configured Printers

The auto discovery utility of the xPrintServer device is enabled by default so that whenever you turn on your xPrintServer device, auto discovery will automatically run one time.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1*.)
3. Click the **Discovery** link to the left of the page to reach the **Printer Discovery** page.
4. Click the **Remove all printers** button to remove all configured printers, as desired.
5. Click **Yes** in the confirmation popup that appears.
6. Log-off (see *Logging Off*) and close your browser. All printers are deleted.
7. Click the **Home** tab to access the **System Status** page (see *Figure 3-3 IP System Status Information on the Home Page*.)
8. Click **From Google's Website** to access the Google Cloud Print management page (see *Supplementary Google Cloud Print Administrative Features*.)
9. Verify all printers have been de-registered by going into the Google Cloud Print management page and deleting any leftover printers from the previous xPrintServer device registration.

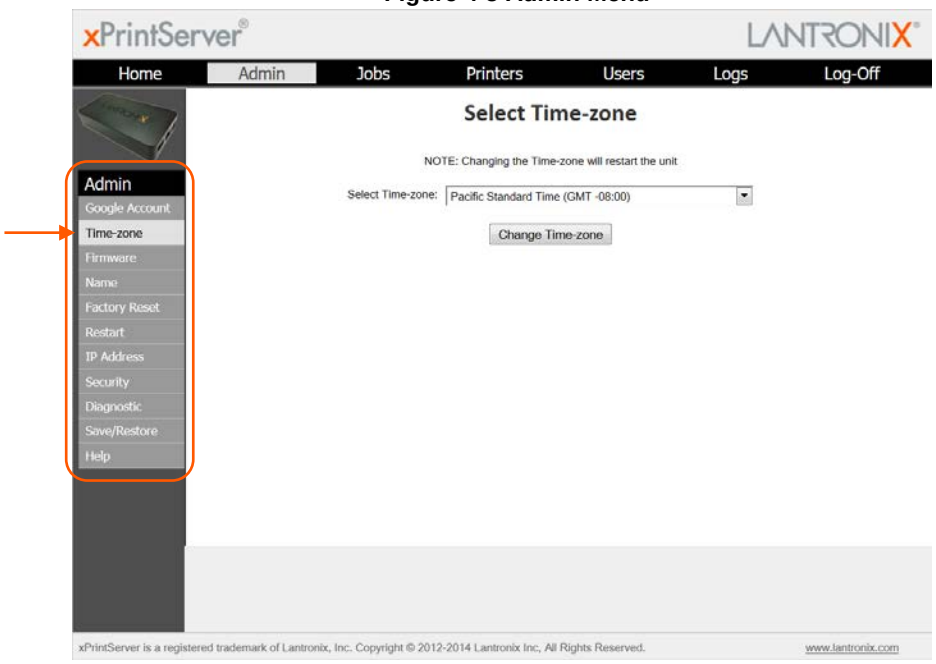
Setting Real Time Clock

Real Time Clock is a built-in function in the xPrintServer device which time-stamps printing-related activities such as those identifying the time of log activities or print jobs. Real Time Clock is automatically on and syncs time with pool.ntp.org (Network Time Protocol) and is set, by default, at GMT -800 PST (Pacific Standard Time.)

To modify the Time-zone

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Time-zone** link on the left side of the **Admin** page.

Figure 4-5 Admin Menu



4. Select a new time zone from the **Select Time-zone** drop-down menu.
5. Click the **Change Time-zone** button.
6. Click **Yes** in the confirmation popup that appears.
7. Wait for the xPrintServer to reboot. When the time zone is changed, the xPrintServer device automatically restarts, bringing you back to *System Status on the Home Page*. The unit is now set to your new chosen time zone.

Assigning a Static IP Address to the xPrintServer

Your xPrintServer unit IP address is DHCP by default, but can be configured with a static IP address. Use these instructions to establish a static IP address.

1. Login to the xPrintServer device's Admin interface (see *Logging In.*)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Select **IP Address** to access the **Admin > IP Address** page.
4. Click the **Static** radio button near the top of the page to access static IP address configuration fields.
5. Complete the following fields:
   - IP Address
   - Netmask
   - Default Gateway
   - DNS Server
6. Click **Save**.
7. Click **OK** in the confirmation popup that appears. The unit automatically restarts.
8. Close out of your xPrintServer browser and open a new browser.
9. Enter the newly assigned static IP address in the browser address bar.
10. Login to the xPrintServer device's Admin interface (see *Logging In.*) The assigned static IP address is displayed on the **System Status** page.

Admin Printer Configuration Options

Configuration options available on a specific printer can be accessed through the **Pop-Up Printer Command Menu** (see *Figure 3-5*) of the xPrintServer Admin interface. Use the ***Search*** feature as necessary to find a particular, previously discovered printer, and access the Pop-Up Printer Command Menu for that printer.

Printing a Test Page

Use these directions to print a test page for a selected printer.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer to which a test page will be sent.

6. Click **Print Test Page** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it) and a test page print job will be sent to the selected printer.
7. Click **OK** in the confirmation popup providing a print job ID.

Purging Job History

Use this selection to purge all printed job history information. Otherwise, by default, the xPrintServer print server maintains a list of the last 50 printed jobs.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer through which the job history will be purged.
6. Click **Purge Job History** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.)
7. Click **Yes** in the confirmation popup to continue (or **No** to cancel action) and all print jobs not yet printed will be purged from the selected printer.
8. Click **OK** in the second confirmation popup.

Deleting a Printer

Use this selection to delete a printer that is currently configured. Printers may later be added and configured according to the directions in the *Adding, Finding and Discovering Printers* section.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer to be deleted.
6. Click **Delete Printer** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.)
7. Click **Yes** in the confirmation popup to continue (or **No** to cancel action) and the selected printer will be deleted.
8. Click **OK** in the second confirmation popup.

Changing Printer Description

Use this selection to change the advertised printer name of a configured printer as it will be displayed to all users on their tablet, smartphone or PC device(s.)

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer description to be changed.
6. Click **Change Description** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.)
7. Modify the new description for the printer in the popup window which appears.

Figure 4-6 New Printer Description

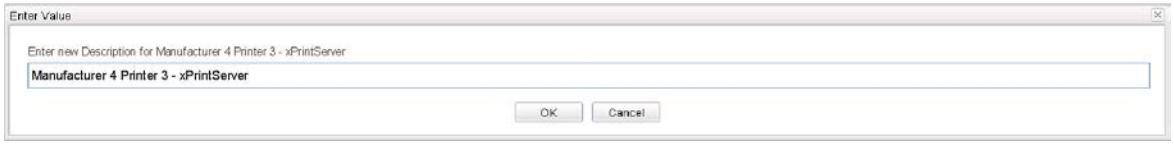
8. Click **OK**. After a few seconds, the printer description will be changed.

Changing Printer Location

Use this selection to change the advertised location of a configured printer as it will be displayed to all users on their tablet, smartphone or PC device(s). This command is useful for updating the location of printers initially identified as "Auto Discovery".

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer with location to be changed.
6. Click **Change Location** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.)
7. Modify the printer location in the popup window which appears.

Figure 4-7 New Printer Location



8. Click **OK**. After a few seconds, the printer location will be changed.

Changing Printer Geolocation

Use this selection to specify the advertised geographical location (geolocation) of a configured printer as it will be displayed to all users on their tablet, smartphone or PC device(s). Reference https://tools.ietf.org/html/rfc5870 to learn more URI use for geographic locations. Geolocation information for a printer is blank by default.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer with geolocation to be specified.
6. Click **Change Geolocation** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.)
7. Modify the printer geolocation in the popup window which appears.
8. Click **OK**. After a few seconds, the printer location will be changed.

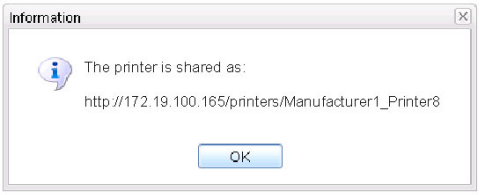
Showing Shared Printer Information

Note: *All printers are shared to the registered Google account by default.*

Use this selection to show the url information of a specific printer provisioned for the xPrintServer device. Up to 10 network-attached printers can be seen and shared at a time.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer information to be shared.
6. Click **Show Share Info** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.) An information popup window appears showing the printer as it is shared:

Figure 4-8 Show Share Info Popup



7. Click **OK** in the popup window to close it.

Sharing a Printer

Use this selection to make a printer provisioned for the xPrintServer device available for connection to Google Cloud Print and general use. *Accessing Google Cloud Print Administrative Features Online* is also available to provide access for a specific printer provisioned to an xPrintServer device to anyone who is online.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer to be shared.
6. Click **Share Printer** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.)
7. Click **Yes** in the confirmation popup to continue (or **No** to cancel action) and the selected printer becomes visible and available on a tablet, smartphone or PC device.
8. Click **OK** in the second confirmation popup.

Hiding a Printer

Use this selection to remove a printer provisioned for the xPrintServer device from connection to Google Cloud Print and to keep it from general use.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Search*** as necessary to find a particular printer.
4. Click the button beside the printer you wish to hide.
5. Click **Hide Printer** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.)
6. Click **Yes** in the confirmation popup to continue (or **No** to cancel action) and the selected printer becomes invisible and no longer available on a tablet, smartphone or PC device.
7. Click **OK** in the second confirmation popup.

Setting Printer Options

Use this selection to view and modify settings in a printer provisioned for the xPrintServer device.

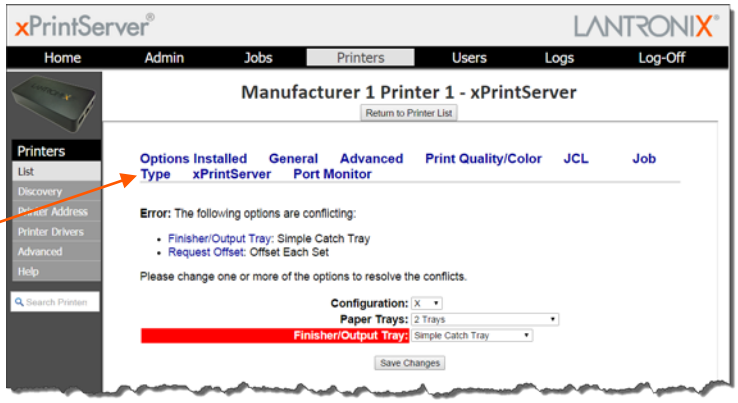
1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Search*** as necessary to find a particular printer.
4. Click the button beside the printer you wish to set printer options.
5. Click **Set Printer Options** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.) Available printer settings appears.
   - Different printers will have different printer settings available for modification.
   - Some printers will have ***multiple heading tabs*** by which all the setting options are organized.

Figure 4-9 Sample Printer Options

Different printer models will have different sets of configurable settings organized under one or more dark blue tab(s) as exemplified by the options available in these printers. Clicking a tab brings you to the modifiable settings organized under that tab.

The **printer options above** provides configurable settings under six tabs: "Options Installed", "JCL", "General", "Output", "Advanced Options" and "Cover".

The **printer options to the right** has several more configurable settings organized beneath each of ten tabs.



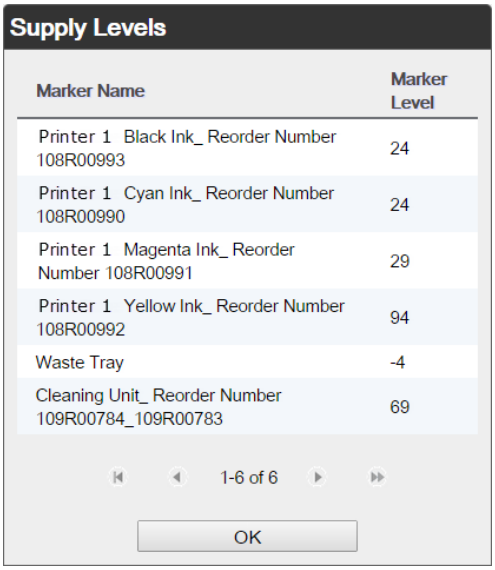
6. Click through available tabbed headings (all in dark blue) and make changes as desired.
7. Click **Save Changes** to save. A note verifying that settings have been saved successfully appears on the screen. Changes to printer settings will remain in place until changed through the xPrintServer unit.
8. Click the **Return to Printer List** button at any time to return to the **Printers > List** page.

Showing Toner Supply Levels

Use this selection to show the toner levels of a particular printer.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printer** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Utilize ***Navigation*** as necessary in situations where there are multiple pages of printers.
4. Utilize ***Search*** as necessary to find a particular printer.
5. Click the button beside the printer with toner information to view.
6. Click **Supply Levels** in the popup command menu that appears (or **Cancel** within the same menu if you want to back out of it.) An information popup window appears showing the printer toner supply levels:

Figure 4-10 Show Supply Levels



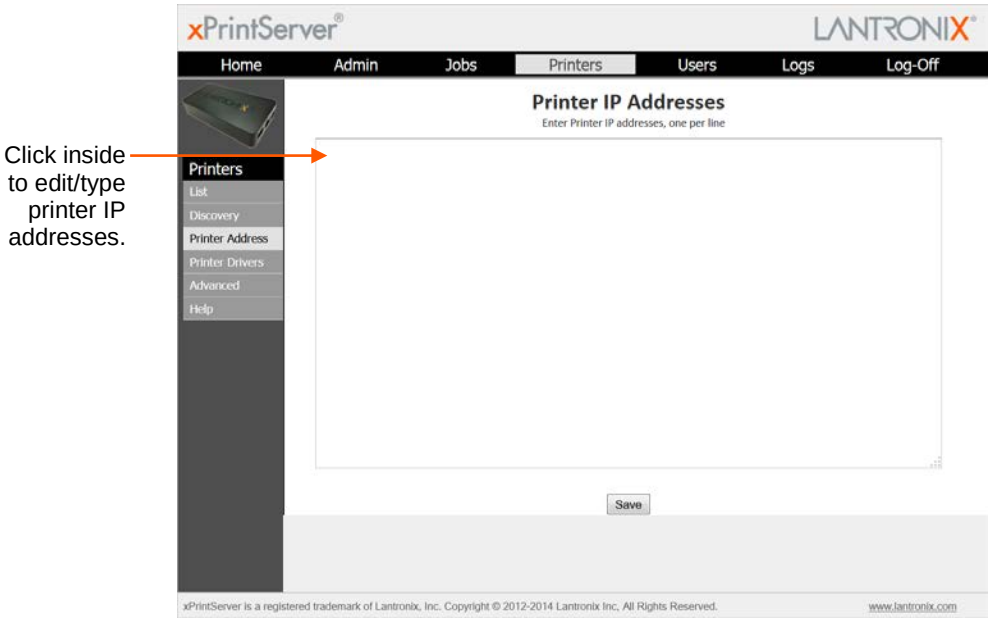
7. Click **OK** in the popup window to close it.

Updating Printer IP Addresses

Use this feature to provide a list of printers outside of the same subnet the xPrintServer unit is on. This feature allows auto-discovery of printers outside the current subnet.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printers** tab to access the **Printers > List** page (see *Figure 4-1.*)
3. Click the **Printer Address** link on the left side of the **Printers** page. A list of existing Printer IP Addresses appears in the **Printer IP Addresses** page, if any were previously added.
4. Click into the large square field in the **Printer IP Addresses** page.

Figure 4-11 Printer IP Address Page



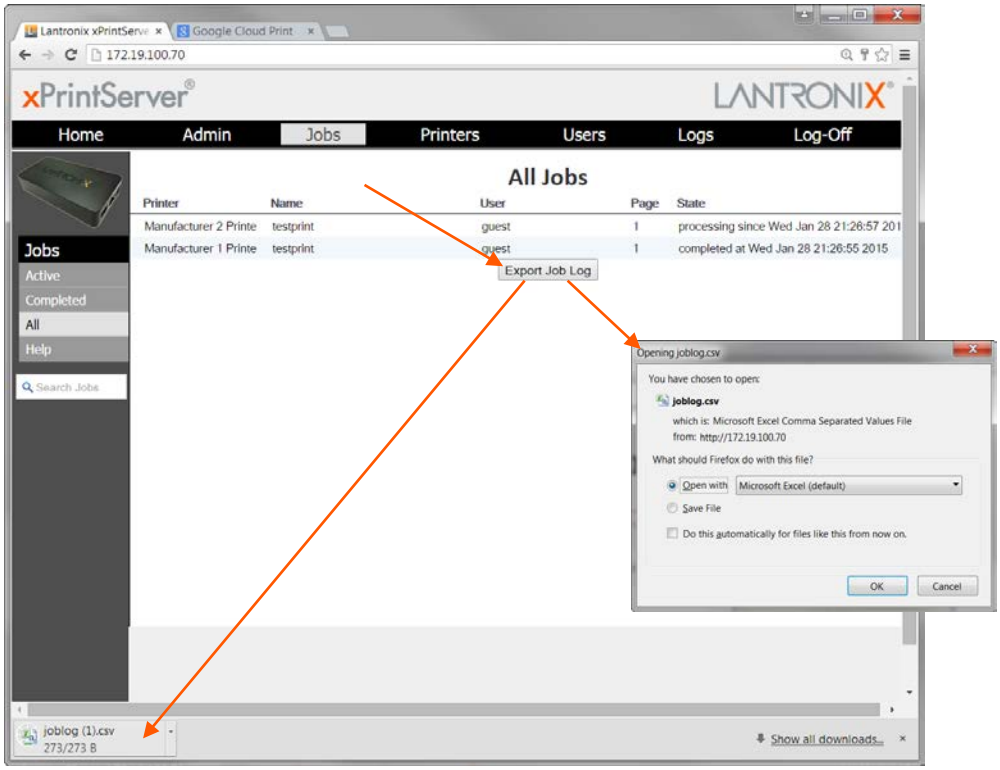
5. Update the Printer IP Addresses by adding a new printer IP address, modifying an existing IP address or deleting an address. To add more than one printer IP address, enter one address per line (separated by a paragraph break using the **Enter** key on the keyboard.)
6. Click **Save** to save added or modified IP address(es.)
7. Click **OK** in the confirmation popup.

Viewing and Exporting Print Jobs

Use these steps to view and export print jobs and the details on a specific print job. The xPrintServer maintains a list of the last 50 printed jobs by default.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Jobs** tab to access the **Jobs** page. All **Active Jobs** are listed here. The information on this page is refreshed every 15 seconds.
3. Click the desired link to left to view a desired job category:
   - **Active**: to show all jobs that are currently active (default view)
   - **Completed**: to show all jobs that have been completed
   - **All**: to show all jobs, active or completed.
4. Utilize ***Navigation*** as necessary in situations where there are multiple pages of jobs.
5. Utilize ***Search*** as necessary to find a particular print job.
6. Click a particular job to bring up information about the job in a grey field below the job list.

Figure 4-12 Print Job Details



7. Click **Export Job Log** to export the job log of the selected printer to an Excel spreadsheet in csv (comma separated values) format. The same information that can be viewed on the screen will available in the exported jog log.

Renaming an xPrintServer Device

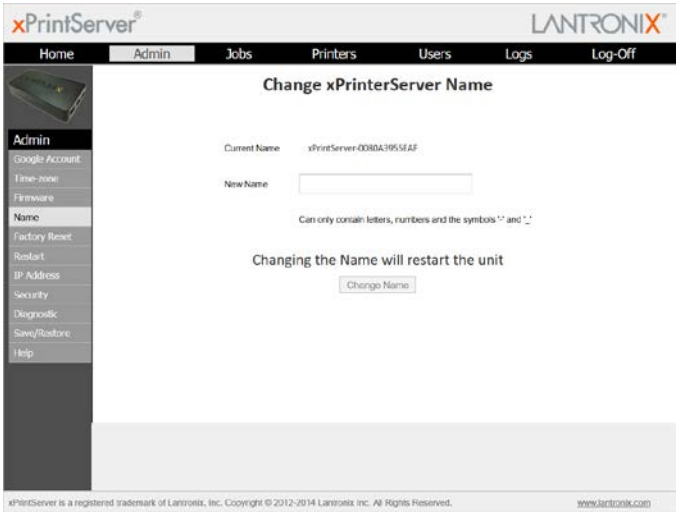
As part of the initialization process, the xPrintServer device registers a Bonjour Print Service Type (specific to Lantronix) (`lantronix-xps._tcp` which uses the default device name of `xPrintServer`.) As with any Bonjour discovery application, you can find your xPrintServer or any web browser supported by the Bonjour application using the URL: `http://<devicename>-<serial number>.local`, substituting the `<devicename>` with the name of the device. Therefore, you would search for your xPrintServer device with `http://xprintserver-<serial number>` by default. If you change the default device name, the xPrintServer device's URL used to access the xPrintServer unit's Admin interface would also be modified.

Note: *Microsoft Windows operating systems do not include Bonjour Print Services and will require an installation of an application that includes Bonjour for Windows, such as the Apple Bonjour Print Services for Windows or the Apple Safari for Windows. Once Bonjour Print Services for Windows has been installed, the xPrintServer device can be discovered using the configured* `<name>` *in the web browser, as described above. All Apple devices natively include Bonjour.*

The directions below can be used to rename an xPrintServer device. This is a useful function in situations where there are multiple xPrintServer devices on a network as each device should have a unique name. Changing the xPrintServer unit name requires a restart to use the new name.

1. Login to the xPrintServer device's Admin interface (see *Logging In*).
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Name** link on the left side of the page to access the **Change xPrintServer Name** page. The **Current Name** of your device will display, which by default is "xPrintServer" followed by a dash and the serial number of your xPrintServer unit (for example, `xPrintServer-0080A3854E09`).
4. Type in the **New Name** (an alpha and/or numeric combination that may include the `-` and `_` characters.)

Figure 4-13 Changing the xPrintServer Name



5. Click the **Change Name** button to submit the new name.

6. Click **Yes** in the confirmation popup to continue (or **No** to cancel action) renaming your xPrintServer device.

7. Wait for the xPrintServer to reboot. When the renaming of your unit is complete, the xPrintServer device will restart, bringing you to *System Status on the Home Page*.

Resetting the xPrintServer Unit to Factory Defaults

Resetting the xPrintServer device to factory default wipes out all configuration information and resets the configuration parameters to the original factory settings. There are two ways to reset the xPrintServer to factory default settings:

1. Through the Admin interface of the xPrintServer device; or

2. By utilizing the **Reset** button on the xPrintServer unit

Via the Admin Interface

Use these directions to reset the xPrintServer device to factory default settings through the **Reset Unit to Factory Defaults** page of the xPrintServer device's Admin interface. A device restart automatically follows a reset.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)

2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.

3. Click the **Factory Reset** link on the left side of the page to access the **Reset Unit to Factory Defaults** page.

4. Click **Reset to Factory Defaults**.

5. Click **Yes** in the confirmation popup that appears (or **No** to cancel this action.) The unit automatically restarts in order to complete resetting to factory defaults.

6. Wait for the xPrintServer to reboot. When the reset to factory default process is complete and the device restarted, you will be brought back to before being able to utilize your xPrintServer device or the xPrintServer device's Admin interface.

7. Verify all printers have been de-registered by going into the Google Cloud Print management page and deleting any leftover printers from the previous xPrintServer device registration.

Via the Hardware Reset Button

Reset the xPrintServer device to factory default settings utilizing the **Reset** button on the bottom of the xPrintServer device. This button is accessible through a hole in the case.

To reset the unit to factory defaults, perform the following steps:

1. Place the end of a paperclip or similar object into the reset opening (pin-sized hole on the bottom of the device) and press for a minimum of 10 seconds. Within the 10 seconds, the "X" Status LED on top of the xPrintServer unit will display a solid orange light to indicate the device is rebooting (see *Table 2-1*) after which it will begin to blink.

2. Remove the paperclip to release the button. This procedure restores factory default settings to the configuration and reboots the unit. When the reset to factory default process is complete and the device restarted, you will need to repeat the instructions in

Establishing a Google Cloud Print Connection before being able to utilize your xPrintServer device or the Admin interface for the xPrintServer device.

3. Verify all printers have been de-registered by going into the Google Cloud Print management page and deleting any leftover printers from the previous xPrintServer device registration.

Restarting the xPrintServer Device

Use these directions to restart the xPrintServer device through the xPrintServer device's Admin interface and without changing any settings.

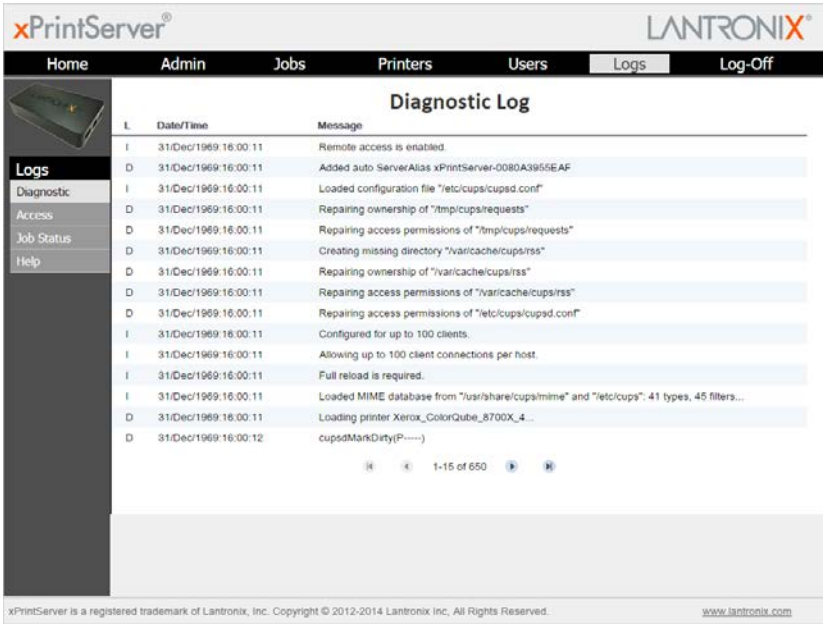
1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Restart** link on the left side of the page to access the **Restart Unit** page.
4. Click the **Restart Unit** button.
5. Click **Yes** in the confirmation popup that appears (or **No** to cancel this action.)
6. Wait for the xPrintServer to reboot. The xPrintServer device will restart, bringing you back to *System Status on the Home Page*. Authentication (*Logging In*) will be required to access the xPrintServer device's Admin interface.

Viewing Logs

Use these directions to view logs. The xPrintServer device's Admin interface provides logs for all diagnostic and access messages.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Logs** tab to access the **Logs** page. A list of all **Diagnostic** logs appears by default.
3. Click the **Access** link to the left to view only access logs.
4. Click the **Job Status** link to the left to view only job status logs.
5. Click the **Diagnostic** link to the left to view only diagnostic logs.
6. Utilize ***Navigation*** as necessary in situations where there are multiple pages of logs.
7. Export logs by following the directions in *Viewing and Exporting Print Jobs*, as needed.

Figure 4-14 Logs



Note: *The number of logs on the bottom of the page will update each time the* ***Diagnostic*** *or* ***Access*** *link on the left is clicked.*

Printer Drivers

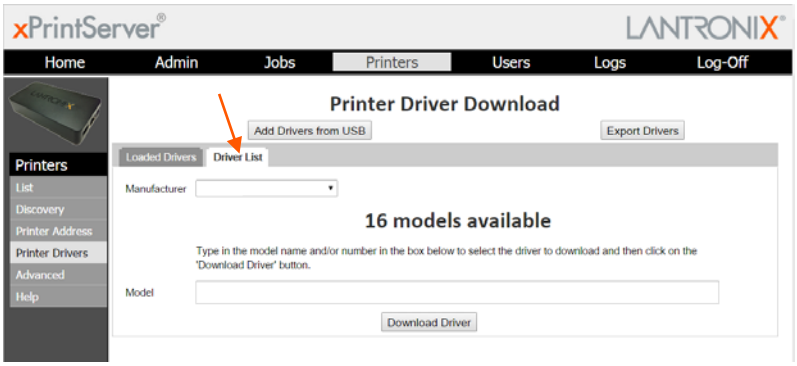
The Printer Driver Download page provides two ways to download a printer driver: from the internet or from a USB flash drive. This page also provides a method to export printer drivers onto a USB flash drive for downloading onto other xPrintServer devices as well as a way to preload drivers onto the xPrintServer unit.

Downloading Printer Drivers from the Internet

Use these directions to download printer drivers from the xPrintServer device driver base in the cloud. The downloaded drivers will be saved in the xPrintServer device's flash memory and will be used as a local cache of drivers for printer provisioning. This is useful when using the xPrintServer device in locations that don't have Internet access, and consequently, no access to the xPrintServer unit's printer driver base in the cloud.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printers** tab to access the **Printers > List** page (see *Figure 4-1*.) All printers configured to the xPrintServer device are listed here.
3. Click the **Printer Drivers** link to get to the Printer Driver Download page. You will see a list of drivers that have been previously downloaded by make and model under the **Loaded Drivers** tab.
4. Click the **Drivers List** tab. A drop-down **Manufacturer** menu will display on the screen.

Figure 4-15 Drivers List Tab



5. Select the desired printer **Manufacturer** from the drop-down menu. The number of printer models associated with that manufacturer and available for download will display on the screen.
6. Enter the Printer **Model** name. Once you begin typing the model name, models with the characters you have typed appears on the screen.
7. Select the correct model from the list of models.
8. Click **Download Driver** to save the file into the xPrintServer device. The driver file will be saved in the xPrintServer device's flash memory. You will be notified when the driver has been downloaded or if there was any kind of error.
9. Click **OK**.

Exporting Printer Drivers

Use these directions to export printer drivers from the xPrintServer device. Exported drivers will be saved to the computer's local file system. Once exported, you may move the printer driver onto a USB flash drive. This is useful in situations where you may wish to use the printer driver on other xPrintServer devices.

Note: *The xPrintServer device only reads data from USB flash drives that are connected to its USB port. It does not write to USB flash drives that are connected to its USB port.*

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printers** tab to access the **Printers > List** page (see *Figure 4-1*.) All printers configured to the xPrintServer device are listed here.
3. Click the **Printer Drivers** link to get to the Printer Driver Download page. You will see a list of drivers that have been previously downloaded by make and model under the **Loaded Drivers** tab.

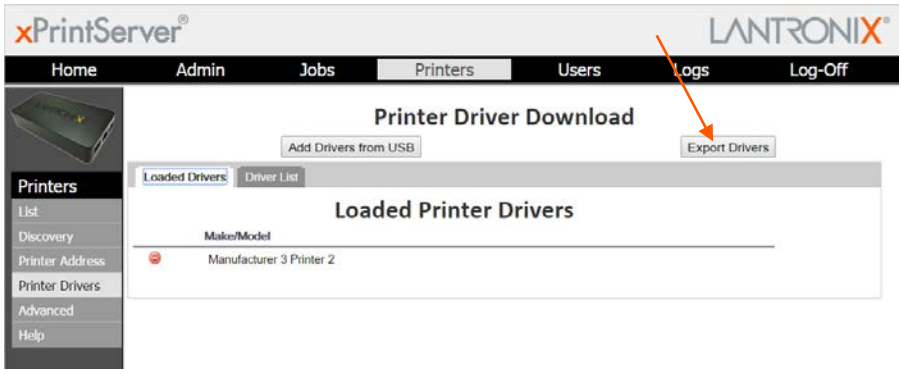
   Note: *You must have already downloaded printer drivers under the* ***Loaded Drivers*** *tab.*

4. Insert USB flash drive to the computer from where you are browsing. This USB flash is where the printer driver files are to be moved, once saved.

   Note: *The file name of the printer driver must be* **printerdrivers.bin**. *Also, the xPrintServer will only recognize USB flash drives formatted with a FAT file system.*

5. Click **Export Drivers**. A popup window appears.
6. Click **OK** to save the file directly to your PC's local file system. You will be notified when the driver has been exported or if there was any kind of error.
7. Move the exported file onto the USB flash drive if you wish to upload the driver onto another xPrintServer device.

Figure 4-16 Export Drivers Button

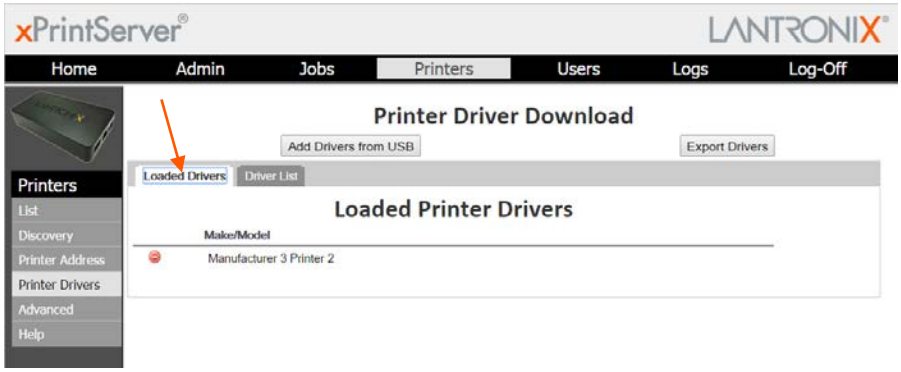


Downloading Printer Drivers from a USB Flash Drive

Use these directions to download printer drivers from a USB flash drive. The xPrintServer unit can load supported drivers that had been previously saved to a USB flash drive. Supported drivers are drivers that were downloaded from the xPrintServer driver base in the cloud. This is very useful for xPrintServer devices that are installed in sites that have no Internet access.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Printers** tab to access the **Printers > List** page (see *Figure 4-1*.) All printers configured to the xPrintServer device are listed here.

Figure 4-17 Loaded Drivers Tab



3. Click the **Printer Drivers** link to get to the Printer Driver Download page. You will see a list of drivers that have been previously downloaded by make and model under the **Loaded Drivers** tab.
4. Connect the USB Flash drive containing the printer drivers to the xPrintServer device's USB port. See *Exporting Printer Drivers* for directions on exporting printer drivers onto the USB flash drive.

   Note: *The file name of the printer driver must be* **printerdrivers.bin**. *Also, the xPrintServer will only recognize USB flash drives formatted with a FAT file system.*

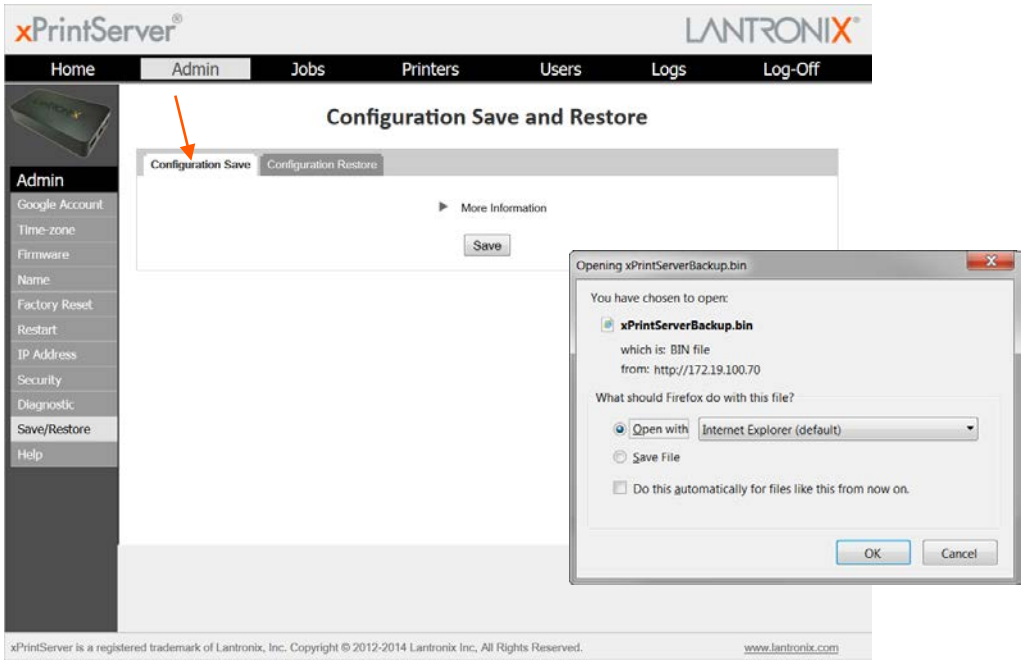
5. Click the **Add Drivers from USB** button. The xPrintServer device will begin an automatic search and download of drivers from the USB flash drive. You will be notified when the driver has been downloaded or if there was any kind of error.
6. Click **OK**.

Saving Configuration

Use these directions to save the configuration of an xPrintServer unit. Saving the xPrintServer device configuration saves all settings to a file which can be backed up to a computer. Information saved includes all configurable parameters and printer driver files (which includes printer driver files downloaded during the xPrintServer unit's auto-discovery process and those manually downloaded via the xPrintServer device's GUI.) This configuration file can later be used to restore the configuration on the xPrintServer or to upload settings of one xPrintServer unit onto others.

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Save/Restore** link to the left to access the **Configuration Save and Restore** page.
4. Click **Save** under the **Configuration Save** tab. A popup window appears.

Figure 4-18 Saving Configuration



5. Click **OK** to save the file directly to your PC. You will be notified when the driver has been exported or if there was any kind of error.

   Note: *The saved configuration file can be sent to any computer that will be used to load the configuration file into other xPrintServer devices.*

6. Delete and re-add your Google email account (see *Deleting and Adding a Google Email Account*.)

Restoring Configuration

Use these directions to restore to a previously saved xPrintServer device configuration. These steps can also be followed to overwrite configurations on other xPrintServer units.

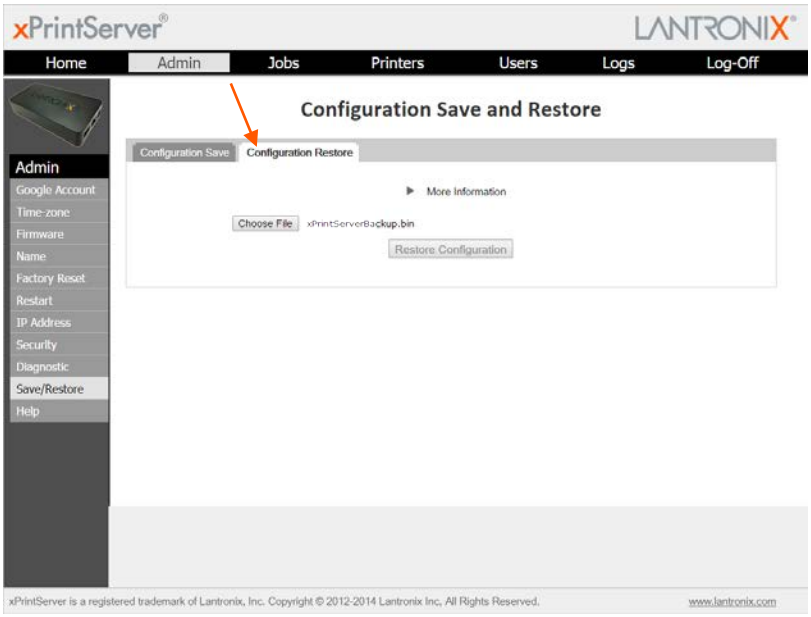
Note: *The configuration filename can include alphanumeric and special characters with the exclusion of the following: "\|/*?"<>:" (double quotes included.) Filename plus path information cannot exceed 250 characters.*

1. Login to the xPrintServer device's Admin interface (see *Logging In*.)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Save/Restore** link to the left to access the **Configuration Save and Restore** page.

   Note: *The saved configuration file can be sent to any computer that will be used to load the configuration file into other xPrintServer devices.*

4. Click the Configuration Restore tab.

Figure 4-19 Restoring Configuration



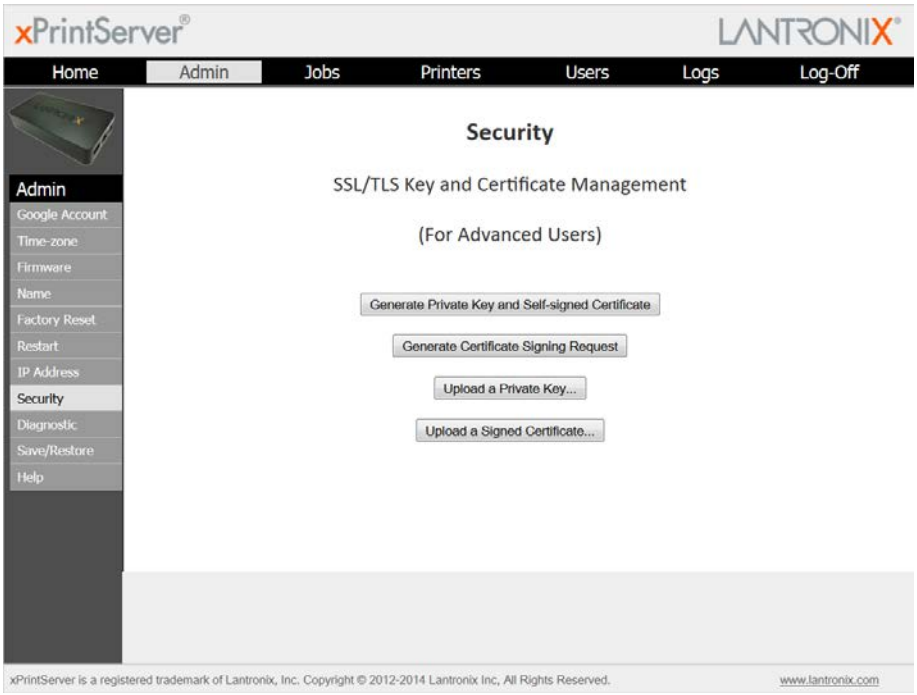
5. Click **Browse**. A popup window appears.
6. Browse to the configuration file on your PC or a USB flash drive.
7. Double-click the configuration file.
8. Click **Restore Configuration**.
9. Click **Yes** to confirm to overwriting the current xPrintServer device's configuration.
10. Click **OK** to dismiss a confirmation popup indicating success of the restoration. Your xPrintServer automatically reboots according to a countdown which appears on your screen.
11. Delete and re-add your Google email account (see *Deleting and Adding a Google Email Account*.)

Managing Security Certificates and SSL/TLS Keys

This section provides directions for generating private keys, self-signed certificates, and certificate signing requests. Directions are also available for uploading a private key or signed certificate. Only the Admin user may manage security certificates and keys through the xPrintServer user interface.

Note: *SSL doesn't support private DSA keys. Use an RSA key.*

Figure 4-20 SSL/TLS Key and Certificate Management



Generating a Private Key and Self-Signed Certificate

1. Login to the xPrintServer user interface (see *Logging In*.)
2. Click the **Admin** tab to access the Admin menu. A list of all available Admin user configuration options appears to the left of the screen.
3. Click the **Security** link on the left side of the page to reach the Security page.
4. Click **Generate Private Key and Self-signed Certificate**. After one minute, a message indicating successful generation of the key and certificate appears on the xPrintServer user interface.
5. If you are using a secure https connection, close and re-open the web browser to use the certificate.
6. If you wish to access other Security features, click **Back to Main Security Page**.

Generating a Certificate Signing Request

Note: *A private key needs to be generated or uploaded before performing these steps.*

1. Login to the xPrintServer user interface (see *Logging In*.)
2. Click the **Admin** tab to access the Admin menu. A list of all available Admin user configuration options appears to the left of the screen.
3. Click the **Security** link on the left side of the page to reach the Security page.
4. Click **Generate Certificate Signing Request**.
5. Enter the information in the fields:
   - Country (2 letter code)
   - State or Province Name
   - Locality Name
   - Organization Name
   - Organizational Unit Name
   - Common Name
   - Email Address
   - A Challenge Password
6. Click **Generate Certificate Signing Request**. The certificate signing request generates and downloads to your PC as a `xprintserver.csr` file.
7. If you wish to access other Security features, click **Back to Main Security Page**.

Uploading a Private Key and Signed Certificate

1. Login to the xPrintServer user interface (see Logging In.)
2. Click the **Admin** tab to access the Admin menu. A list of all available Admin user configuration options appears to the left of the screen.
3. Click the **Security** link on the left side of the page to reach the Security page.
4. Click **Upload a Private Key…**
5. Click **Browse…** to browse to and select a private key file. Once selected, the file name appears on your xPrintServer user interface.
6. Click **Upload** to upload the private key.
7. Click **Yes** to verify overwriting existing private keys on the xPrintServer, if any. The "Uploaded Private Key Successfully" message appears on the xPrintServer user interface once the key is successfully uploaded.
8. Click **Back to Main Security Page** to return to the Security page listing all security options.
9. Click **Upload a Signed Certificate…**
10. Click **Browse…** to browse to and select the certificate.

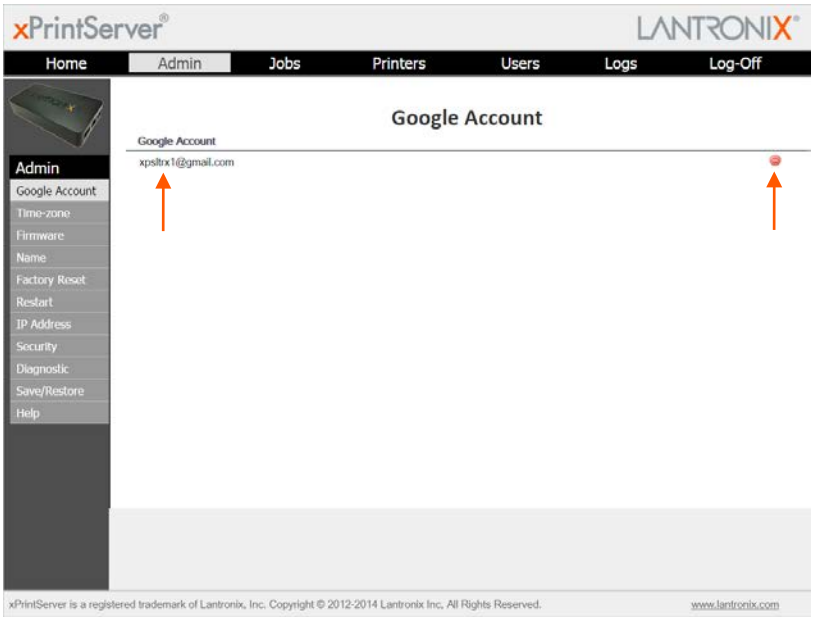
11. Click the **Upload** button to upload the selected file. A confirmation window indicating success of the upload appears immediately.
12. Click **OK** to dismiss the confirmation window.
13. If you are using a secure https connection, close and re-open the web browser to use the certificate.
14. If you wish to access other Security features, click the **Back to Main Security Page** button.

Deleting and Adding a Google Email Account

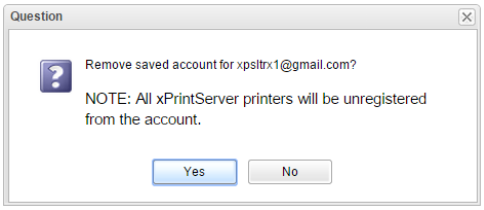
Use these directions to delete a Google email account and to re-add it. These steps are required after either *Saving Configuration* or *Restoring Configuration*.

1. Login to the xPrintServer user interface (see *Logging In*.)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Google Account** link to the left to access the **Google Account** page.
4. Click the existing Google email account to be deleted.

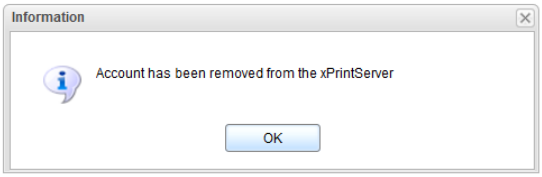
Figure 4-21 Google Account



5. Click the icon to the right of the account to delete it.
6. Click **Yes** in the confirmation window which appears.

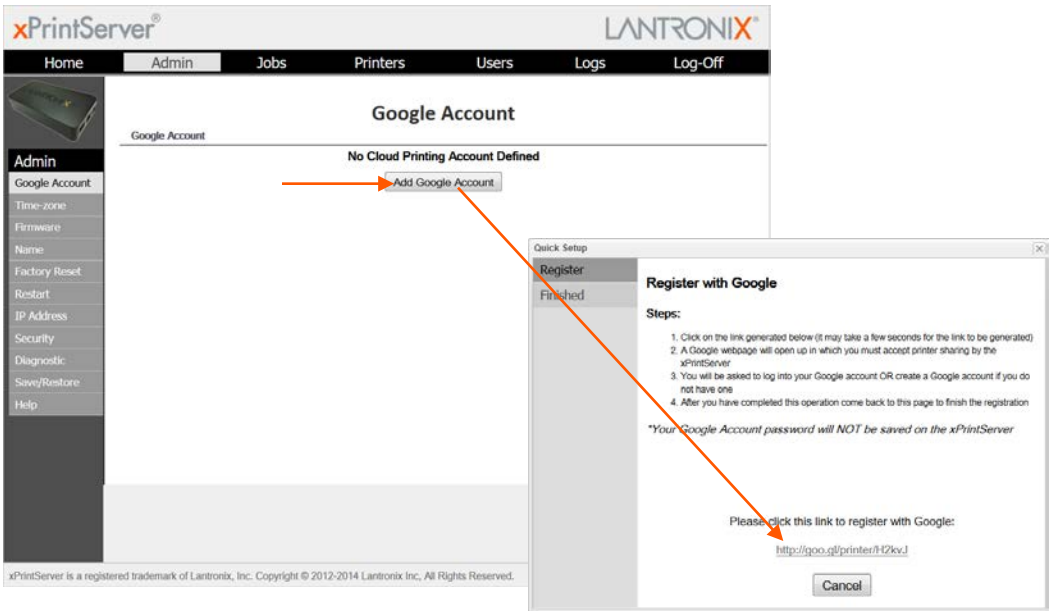


After a few seconds (amount of time depends on the number of printers deregistering), the Google email account is deleted and the following window appears:



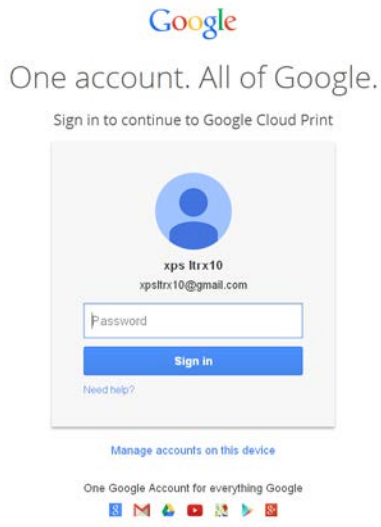
7. Click **Add Google Account**. You will be prompted to register with Google in a Quick Setup window that appears with a unique Google registration link.

Figure 4-22 Adding a Google Account



8. Click the Google registration link when it appears. A Google login window appears.

9. Login into the Google account you wish to use to establish the Google Cloud Print web printing connection. If your browser has information about multiple Google accounts, each may be available for selection in the login window. If your browser is already logged on to a particular Google account, you will bypass this step by directly connecting through that account.

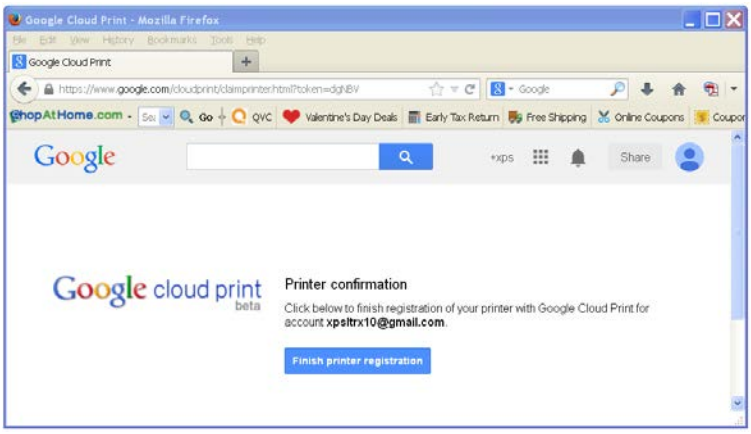


Note: *Since multiple Google account logins and passwords may be stored in a browser maintaining "signed-in" status, it is recommended that you log out of all Google accounts prior to beginning these steps. This ensures that you select the desired Google account to be used in establishing this Google Cloud Print connection. In order to be able to see printers on an xPrintServer unit, a user must be only logged onto the Google account associated with the xPrintServer unit within the same browser. Also, it may be necessary to delete all cookies if switching between Google accounts after logging into a Google account associated with an xPrintServer unit.*

10. Confirmation of your registration with Google Cloud Print appears upon login.

11. Click **Finish printer registration**.

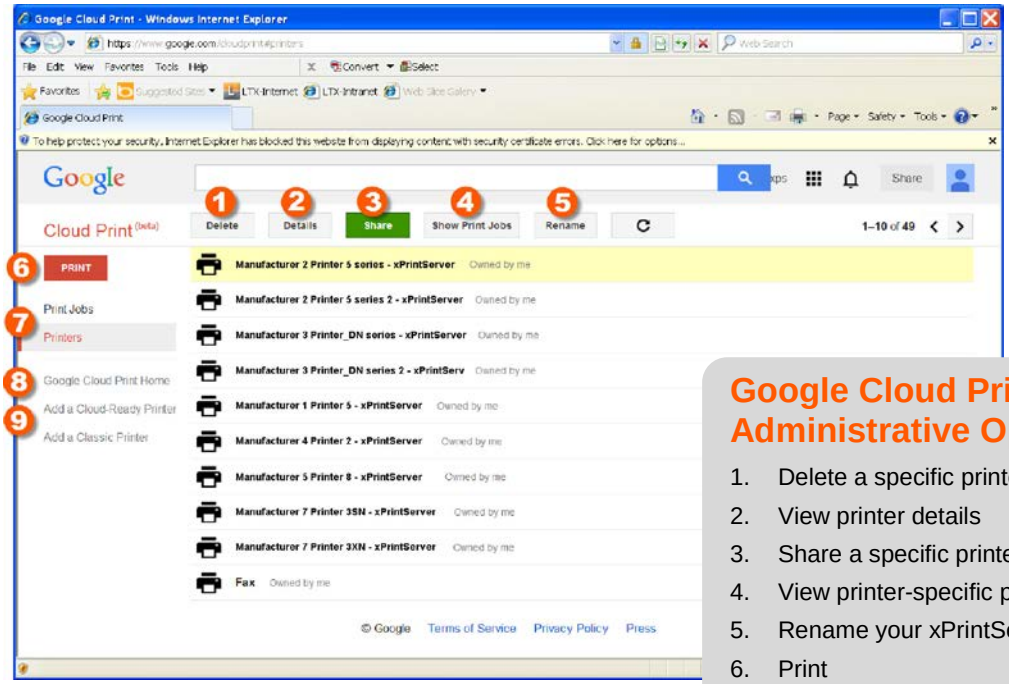
Figure 4-23 Finishing Printer Registration



Supplementary Google Cloud Print Administrative Features

Supplementary administrative features are available for your Lantronix xPrintServer unit through the Google Cloud Print management page. Most of these features overlap with the features in the xPrintServer device's Admin interface described, however, Google Cloud Print's Sharing feature provides an especially useful function of allow you to share specific printers with anyone with internet access. The directions are provided below. A list of available Google Cloud Print administrative features are listed and keyed with *Figure 4-24* . Refer to https://support.google.com/cloudprint/ for detailed information about the Google Cloud Print service.

Figure 4-24 Google Cloud Print Administrative Features



Google Cloud Print Administrative Options

1. Delete a specific printer
2. View printer details
3. Share a specific printer
4. View printer-specific print jobs
5. Rename your xPrintServer unit
6. Print
7. View all printers or print jobs
8. Visit Google Cloud Print Home
9. Add an additional printer

Accessing Google Cloud Print Administrative Features Online

1. Make sure to be logged into the Google account registered to the xPrintServer unit. Reference Establishing a Google Cloud Print Connection as necessary.
2. Go to https://www.google.com/cloudprint#printers to access the Google Cloud Print management page.

Sharing a Printer through Google Cloud Print Service

Note: *This features supplements the xPrintServer device Admin interface's Sharing a Printer and Hiding a Printer capability.*

1. Click on a specific printer to be shared.
2. Click **Share** to access the share settings window for this printer.

3. Click **Change** to access share options.
4. Define the access for this printer:
   - Click **Anyone with the link** has access to the printer; or
   - Click **Private** to specify individuals allowed access.
5. Click **Save**. You will be brought back to the printer share settings page.
6. Finish configuring your share settings depending on your choice of action in step 4 above:
   - If you selected **Anyone with the link**, copy the entire printer URL within the **Link to share** field and click **Close** (you may now share the copied link to anyone with internet access); or
   - If you selected **Private**, enter the individual emails and groups allowed access and click **Share**.

User Administration

Note: *User administration is only applicable for use with certain printers which require authentication and/or account tracking. Go to* http://www.lantronix.com/support/downloads/ *and select the* ***xPrintServer – Cloud Print Edition*** *link for a list of applicable printers.*

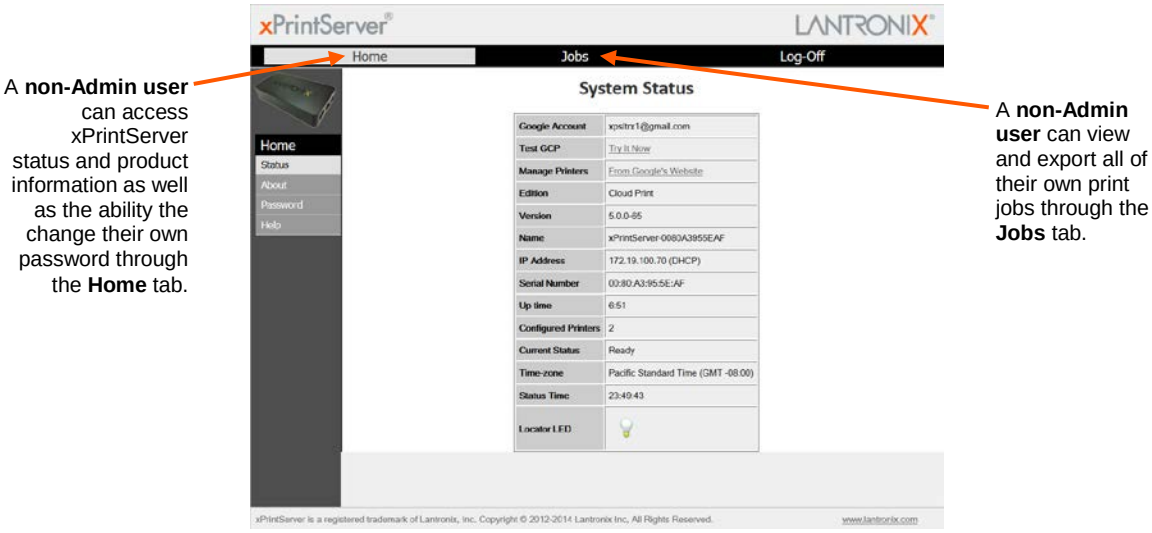
xPrintServer user administration supports authentication and account tracking features for printers with built-in authentication and/or account tracking databases. Such printers require the matching of Google Cloud Print accounts to pre-assigned username(s) and passwords(s) stored on the printer database for authentication and/or account tracking purposes. Only print jobs sent from a Google Cloud Print account which matches an existing printer username and password are allowed to print. xPrintServer user administration provides different ways to manage and assign matching usernames and passwords between Google Cloud Print accounts and usernames and passwords stored on the printer database. All xPrintServer user administration functionality is found under the **User** tab.

Figure 4-25 Creating Matching Username & Passwords

Note: *The printer* depicted in Figure 4-25 represents models with authentication and /or account tracking capability.*

The upcoming user admin subsections, including *Adding a New User*, *Deleting a User*, *Exporting Users*, *Importing Users*, *Downloading a Sample CSV* and portions of *Changing Passwords* are only available to Admin users to facilitate the assignment of Google Cloud accounts to usernames and passwords stored on authenticating and/or account tracking printers. Non-Admin users, if created, can print and monitor their own print jobs and will have access to the information and functionality within the **Home**, **Jobs** and **Log-Off** tabs. See *Figure 4-26*.

Figure 4-26 Non-Admin User Access



Changing Passwords

The Admin user and non-Admin users may use the *To change your password* directions below to change their user password. Only the Admin user may use the *To change a non-Admin user password as the Admin* directions below to change the password for any non-Admin user. Password changes are effective immediately.

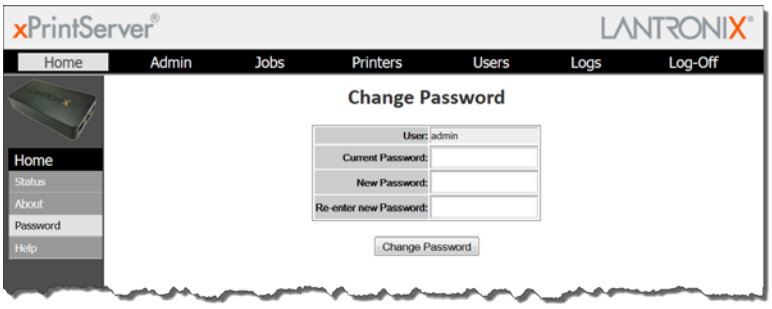
To change your password:

1. Login to the xPrintServer user interface as Admin user (see *Logging In*.)
2. Click the **Password** link on the left side of the **Home** page. The **Change Password** page appears displaying the **User** for which the password change is being made.
3. Complete the following fields:
   - Current Password
   - New Password
   - Re-enter new Password

   Note: *Passwords are case-sensitive and may include up to 32 characters. All printable characters may be used with the exception of single and double quotation marks such as: ‘ or “.*
4. Click **Change Password**.
5. Click **OK** in the confirmation popup that appears. Your password is changed.

Note: *You will be asked to login again if you attempt to navigate to a different user interface page.*

Figure 4-27 Changing Own Password



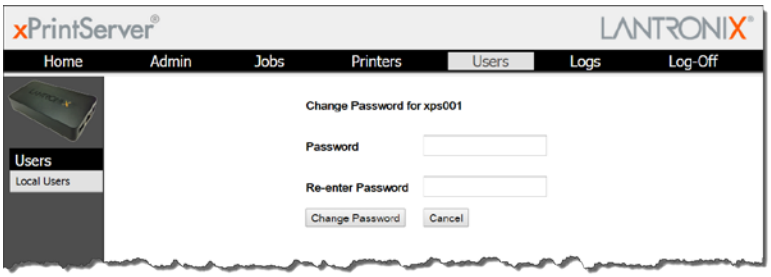
To change a non-Admin user password as the Admin:

1. Login to the xPrintServer user interface as Admin user (see *Logging In*.)
2. Click the **Users** tab to access the **Users** page. All users are listed here.
3. Utilize ***Search*** as necessary to find a particular user.
4. Click **Password** button to the right of the **User ID** to be changed.
5. Enter the new password into both fields:
   - Password
   - Re-enter Password
6. Click **Change Password**.
7. Click **OK** in the confirmation popup that appears. User password is changed.

Note: *Passwords are case-sensitive and may include up to 32 characters. All printable characters maybe used with the exception of single and double quotation marks such as: ‘ or “.*

Note: *If the Admin user password is changed, you will be asked to login again if you attempt to navigate to a different user interface page.*

Figure 4-28 Changing Other User Passwords (Admin User Only)



Adding a New User

The Admin user can use these steps to create new users.

1. Login to the xPrintServer user interface as Admin user (see *Logging In*.)
2. Click the **Users** tab to access the **Users** page. All users are listed here.
3. Click **Add User…**

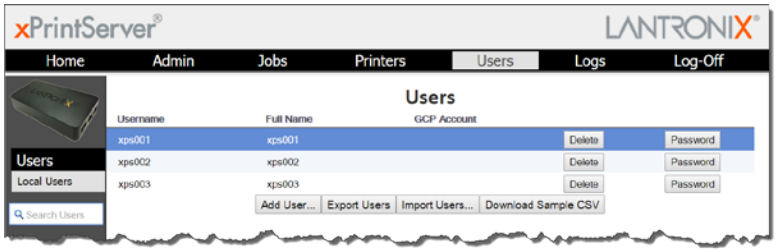
Note: *The **Full Name** of a new user is case sensitive and may include up to 32 alpha and/or numeric characters.*

4. Enter the following fields for the new user:
   - Username
   - Password
   - Re-enter Password
   - Full Name
   - GCP Account

Note: *When establishing a new user, please note that the iOS device browser capitalizes the first character of the User ID. Make sure the User ID is correct prior to submitting your request to add user.*

5. Click **Add User** (or **Cancel** if you want to cancel this action.) The new user will immediately display on the **Users** page.

Figure 4-29 Adding or Deleting a User (Admin User Only)



Deleting a User

The Admin user can use these steps to delete users.

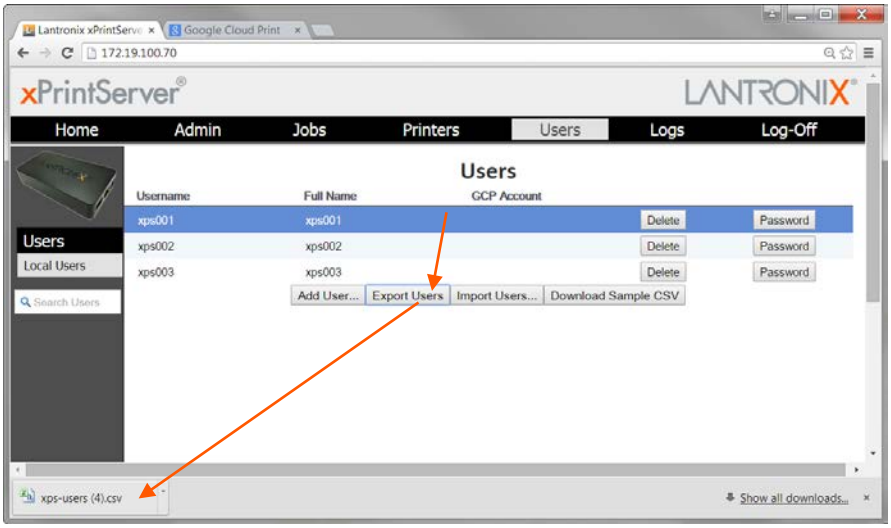
1. Login to the xPrintServer user interface as Admin user (see *Logging In*.)
2. Click the **Users** tab to access the **Users** page. All users are listed here.
3. Utilize ***Search*** as necessary to find a particular user.
4. Click the **Delete** button to the right of the User ID to be deleted.
5. Click **Yes** in the confirmation popup that appears (or **No** if you want to cancel this action.) . The deleted user will immediately be removed from the list of users on the **Users** page.

Exporting Users

The Admin user can use these steps to export users. The user information is exported as a CSV file that can be saved to specific chosen location (e.g., a flash drive or a designated place on the hard drive.) This user information can then be imported into other xPrintServer units. See *Importing Users* below for directions as necessary.

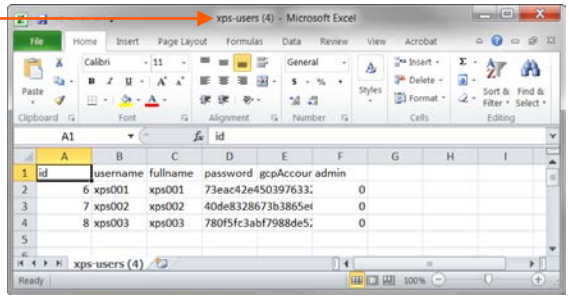
1. Login to the xPrintServer user interface as Admin user (see *Logging In*.)
2. Click the **Users** tab to access the **Users** page. All users are listed here.
3. Click the **Export Users** button. A file name with user information appears at the bottom left corner of the screen as a button. The name of this file will be `xps-users.csv` by default. This file will contain the username, full name, password, GCP Account and Admin information of all non-Admin users. See *Figure 4-30* below.

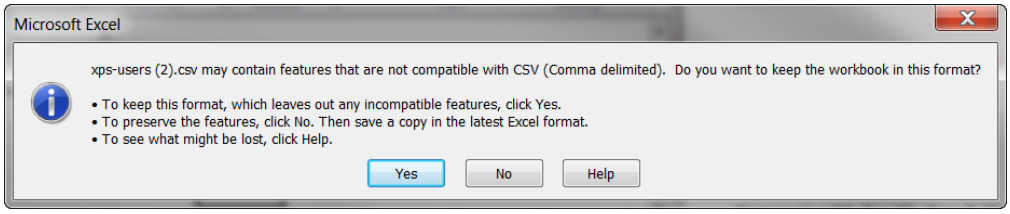
Figure 4-30 Exporting Users



4. Click the file name button to open the CSV file.

5. Save this file to a known location if you wish to import the file to another xPrintServer unit.





6. Click **Yes** if this Microsoft Excel window appears.

Importing Users

The Admin user can use these steps to import users from one xPrintServer device to a different xPrintServer device. A previously exported Microsoft Excel file of users needs to be available in order to import users. See *Exporting Users* for directions as necessary.

1. Login to the xPrintServer user interface as Admin user (see *Logging In*.)
2. Click the **Users** tab to access the **Users** page. All users are listed here.
3. Click the **Import Users…** button. The **Import Users** page appears.
4. Click the **Choose File** button to browse to and open the file of exported users. The file name appears on the **Import Users** page to indicate the success of the import.

Note: *Repeating the steps above to import a separate user list will cause you to override any pre-existing user list.*

Downloading a Sample CSV

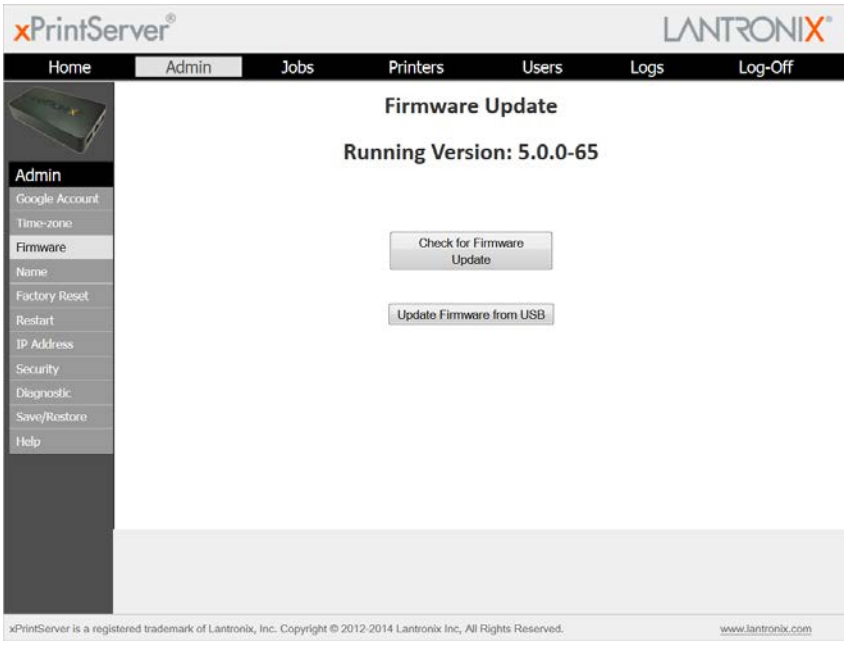
The Admin user can use these steps to download a sample CSV file showing the categories of information that would be listed per user. The process provides a sample CSV file of a user list that can be exported in the *Exporting Users* process (see *Figure 4-30*.)

1. Login to the xPrintServer user interface as Admin user (see *Logging In*.)
2. Click the **Users** tab to access the **Users** page. All users are listed here.
3. Click the **Download Sample CSV** button. A sample file appears at the bottom left corner of the screen as a button. The name of this file will be `xps-users-cleartext.csv` by default. This file contains the sample username, full name, password, GCP Account and Admin information of non-Admin users.
4. Click the file name button to open the CSV file.

5: Updating Firmware

Use one of two methods to update firmware through the **Admin > Firmware** page. Clicking one of the two buttons allows firmware to be uploaded directly from the Lantronix Web services website or through a USB flash drive.

Figure 5-1 Firmware Update Options



Updating Firmware via the Lantronix Web Services Website

Note: *Internet access is required for firmware updates.*

This chapter provides directions for updating firmware, which may be necessary from time to time, through the xPrintServer device's Admin interface.

1. Login to the xPrintServer user interface (see *Logging In*.)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Firmware** link on the left side of the page. The firmware you are currently running displays. Click the **Check for Firmware Update** button to check if a firmware update is available at this time. After a few seconds, you will receive one of two messages:
   - "Firmware update is available" indicating you may proceed to step 5.
   - "You are running the latest version of the firmware" indicating no firmware update is necessary at this time.

   Note: *If the **Check for Firmware Update** button is disabled (unavailable), this indicates that internet connectivity is not available.*
4. Click **Upgrade Firmware**.

5. Click **Yes** in the confirmation popup that appears. Wait a few minutes while firmware upgrades. When the upgrade is complete, the xPrintServer device automatically restarts, bringing you back to *System Status on the Home Page*. The list of discovered printers and other custom configuration settings remain unchanged across firmware updates.

Updating Firmware via a Local USB Port

The latest firmware image file can be retrieved from http://www.lantronix.com/support/downloads/.

1. Download firmware image to the root folder of the USB thumb drive.

   Note: *Do not change the firmware file name downloaded from the Lantronix website. Most USB flash drives are compatible but only FAT file systems are supported.*

2. Insert the USB thumb drive directly into the xPrintServer USB port. See *Table 2-1* to decipher LED behavior.

   Note: *USB thumb drive must be directly inserted into the xPrintServer device and not connected through a USB hub.*

3. Login to the xPrintServer user interface (see *Logging In*.)

4. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.

5. Click the **Firmware** link on the left side of the page. The firmware you are currently running displays.

   Note: *The firmware version is also visible beside the xPrintServer logo on top of all xPrintServer pages.*

6. Click the **Update Firmware from USB** button to check if a firmware update is available at this time. After a few seconds, you will receive one of two messages:

   - "Firmware update is available…" indicates you may proceed to step 7.
   - "You are running the latest version of the firmware" indicates no firmware update is necessary at this time.

7. Click **Upgrade Firmware**.

8. Click **Yes** in the confirmation popup that appears. Wait a few minutes while firmware upgrades. When the upgrade is complete, the xPrintServer device automatically restarts, bringing you back to *System Status on the Home Page*. The list of discovered printers, created users and other custom configuration settings remain unchanged across firmware updates.

6: Technical Specifications

Basic device information is provided in this chapter.

Table 6-1 Technical Specifications

Category	Description
Power Input	90-264 VAC on barrel connecter (5V power supply) Efficiency: 87% Normal Power Usage: <1 Watt
Network Interface	1 RJ45 10Base-T/100Base-TX Ethernet port
USB Port	1 USB Port
Dimensions	11.43 x 6.02 x 2.16 cm (4.5 x 2.37 x .85 in)
Weight	.27 kg (.6 lbs)
Temperature	Operating range: 0° to 55°C Storage range: -40° to 70°C
Relative Humidity	Operating 0% to 90% non-condensing
Case	Black plastic case.
ProtocolsSupported	SNMP JetDirect (AppSocket) LPD LPR IPP
Management	HTTP (HTML/browser-based)
System Software	♦ Zeroconf ♦ Google Cloud Print-Ready App *The latest versions of the following browsers are supported:* ♦ Bonjour ♦ Internet Explorer, ♦ Firefox ♦ Safari ♦ Chrome
LEDs	(1) Status LED (2) Ethernet LEDs

A: Technical Support

This chapter provides directions and contact information for getting live technical support for your Lantronix xPrintServer device. The xPrintServer device's Admin interface provides an easy way for you to directly send helpful diagnostic information to Lantronix and to also download this information for emailing at a separate time. Calling Technical Support after they have received this information will help them better and more quickly assist you.

Note: *Downloading diagnostic information is not supported on tablet, smartphone or PC device(s.)*

Diagnostic Support

There are two ways to send diagnostic support information about your xPrintServer device to the Lantronix Technical Support before calling for assistance.

1. Login to the xPrintServer user interface (see *Logging In*.)
2. Click the **Admin** tab to access the **Admin** menu. A list of all available configuration options appears to the left of the screen.
3. Click the **Diagnostic** link on the left side of the page.
4. Select a method to send diagnostic information:
   a) To send information directly to Lantronix from the xPrintServer device's Admin interface:
      - Click **Send Diagnostic Information**
      - Click **OK** in the confirmation popup. A progress bar indicating the amount of time remaining for diagnostic information to be sent appears on your screen.
      - Please wait for confirmation that diagnostic information is sent before contacting Lantronix Technical Support.

   b) To download diagnostic information to your PC to email to Lantronix Technical support:
      - Click **Download Diagnostic Info**.
      - Wait for diagnostic information to be generated according to a progress bar that appears on your screen..
      - Click **OK** to immediately download the generated information to your hard drive.
      - Email the downloaded file to Lantronix Technical Support.

Lantronix Technical Support

Lantronix Technical Support offices are located worldwide. Contact your office at http://www.lantronix.com/about/contact.html. When you report a problem, please provide the following information:

- Your name, company name, address, and phone number
- Lantronix model number and serial number/MAC address
- Firmware version

- Description of the problem including the status of the unit when the problem occurred (please try to include information on user and network activity at the time of the problem)

B: Troubleshooting

Some of the errors encountered setting up or using the Lantronix xPrintServer device are addressed in this appendix. When troubleshooting, always ensure that the physical connections (power cable, network cable) are secure. When troubleshooting the following problems, make sure that the xPrintServer unit is powered up and connected to a good network connection.

Problems and Error Messages

Problem/Message	Possible Solution
LED lights display correctly but printer does not print job.	Make sure that the network printer: ♦ Is powered on. ♦ Has a good network connection – wired or wireless. This includes proper cabling, correct IP addressing and/or Wi-Fi connection configuration settings and proper routing if going across routed network environments. ♦ Has adequate paper supply. ♦ Has adequate ink or toner supply. ♦ Has no paper jams. Consult the printer manufacturer to troubleshoot these or other print-specific technical issues.
Status LED does not display light.	Make sure that xPrintServer unit is connected securely to its power supply unit. Otherwise, try another wall outlet. Contact Technical Support if xPrintServer device's status LED continues to not display light after confirming good power.
Ethernet LED(s) are not displaying light.	Make sure that Ethernet patch cable is securely connected to both thexPrintServer device's Ethernet port and the Ethernet hub or switch to the network at both ends. Otherwise, swap the patch cable for another known good cable. Use a straight CAT5 (or greater) Ethernet patch cable, not a crossover Ethernet cable to connect to the network drop.
Designated banner page is not printing with print job.	Ensure that banners configurations are enabled under **Set Default Options** in **Printers > Advanced** page.
Network-attached printer is not displaying on the device.	1) Reboot the xPrintServer device. 2) Manually run Discovery
Your device cannot print or access the xPrintServer unit.	Make sure your device is compatible. See *Supported Devices*.

C: Compliance

Declaration of Conformity

Manufacturer's Name & Address:

Lantronix, Inc.
167 Technology Drive, Irvine, CA 92618 USA
Tel: 800-526-8766
Tel: 949-453-3990
Fax: 949-453-3995

Product Name Model: xPrintServer

Conforms to the following standards or other normative documents:

Emissions

FCC Part 15 Class B, VCCI Class B, EN 55022, CISPR22, ICES-003

Safety Agency

UL, CE Mark, and C-Tick

Agency Approvals

RoHS, Reach, Linux OS

RoHS Notice

All Lantronix products in the following families are China RoHS-compliant and free of the following hazardous substances and elements:

- Lead (Pb)
- Cadmium (Cd)
- Mercury (Hg)
- Hexavalent Chromium (Cr (VI))
- Polybrominated biphenyls (PBB)
- Polybrominated diphenyl ethers (PBDE)

Product Family Name	Toxic or hazardous Substances and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
DSC	0	0	0	0	0	0
EDS	0	0	0	0	0	0
IntelliBox	0	0	0	0	0	0
MatchPort	0	0	0	0	0	0
Micro	0	0	0	0	0	0
MSS100	0	0	0	0	0	0
PremierWave	0	0	0	0	0	0
SCS	0	0	0	0	0	0
SecureBox	0	0	0	0	0	0
SLB	0	0	0	0	0	0
SLC	0	0	0	0	0	0
SLP	0	0	0	0	0	0
Spider and Spider Duo	0	0	0	0	0	0
UBox	0	0	0	0	0	0
UDS1100 and 2100	0	0	0	0	0	0
WiBox	0	0	0	0	0	0
WiPort	0	0	0	0	0	0
xDirect	0	0	0	0	0	0
xPico	0	0	0	0	0	0
XPort	0	0	0	0	0	0
XPress DR & XPress-DR+	0	0	0	0	0	0
xPrintServer	0	0	0	0	0	0
xSenso	0	0	0	0	0	0

O: toxic or hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement in SJ/T11363-2006.
X: toxic or hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement in SJ/T11363-2006.

D: Warranty

For details on the Lantronix warranty, go to our web site at http://www.lantronix.com/support/warranty/index.html.

Index

A

A/P, 13
Access Log, 52
Access Point, 13
Activity LED, 11
Adding a Printer IP Address, 48
Address
  IP, 9
Addresses, 8
Advanced Options, 36
Agency Approvals, 76
Android Device, 23
Assign Static IP Address, 41
Auto Discovery, 36
Auto printer discovery, 7

B

Bonjour, 50
Bonjour Print Service Type, 50
Bonjour Print Services (Windows 7 OS), 29
Bonjour Print Services (Windows 8 OS), 31

C

Cabling, 13
Case, 72
Certificates
  Certificate Signing Request, 60
  Self-Signed Certificates, 59
  Uploading Signed Certificate, 60
Change Password, 66
Change Printer Description, 43
Change Printer Location, 43
Change Time-Zone, 40
Chrome, 72
Chrome OS, 28
Chromebook, 28
Compliance, 76
Configuration, 7, 35
Contacts, 2
Copyright, 2

D

Declaration of Conformity, 76
Delete a Printer, 42
Delete All P rinters, 39
Deleting a Printer IP Address, 48
DHCP, 8, 11
Diagnostic Log, 52
Diagnostic Support, 73
Dim, 11
Dimensions, 72
Discovery, 36, 37, 38
Download Printer Drivers, 53
DSA, 59

E

Emissions, 76
Ethernet, 72
Ethernet Cable, 10
Ethernet LEDs, 11
Ethernet Port, 11
Export Print Jobs, 49
Export Printer Drivers, 55

F

Factory Defaults, 51
Firefox, 72
Firmware, 70

G

Geolocation, 44
Glow, 11
Google Cloud Print Administrative Features, 64
Google Cloud Print App, 23
Google Cloud Print management page, 64
Google Cloud Print-Ready App, 72

H

Hide a Printer, 45
Hub, 13

I

Installation, 10
Installation Steps, 12
Internet Explorer, 72
IP
  Address, 9
IP Address, 17
IPP, 72

J

JetDirect, 72
Job History, 42
Job Status Log, 52

K

Keys
  Private Keys, 59
  Uploading Private Key, 60

L

Lantronix Technical Support, 36, 73
LED, 7, 11
LEDs, 10, 72
Links, 22
Linux OS, 76
Logging In, 20
Logging Off, 20
Logout, 22
Logs, 52
LPD, 72
LPR, 72

M

Management, 72
Manufacturer's Name & Address, 76
Modifying a Printer IP Address, 48

N

Navigation, 21
Network Interface, 72

P

Package Contents, 10
Password, 66
Power Input, 72
Print Job, 13
Print Jobs, 49
Print Test Page, 41
Printer Configuration, 41
Printer Drivers, 53
Printer IP Address, 48
Printing from a Desktop (Mac OS X Lion), 33
Printing from a Desktop (Windows 7 OS), 29
Printing from a Desktop (Windows 8 OS), 31
Problems and Error Messages, 75
Product Information Label, 17
Product label, 8
Product Label, 14
Protocols, 72
Purge Job History, 42

Q

QR Code, 8
Quick Start Guide, 10

R

Reach, 76, 78–79
Real Time Clock, 40
Relative Humidity, 72
Rename xPrintServer, 50
Renaming xPrintServer, 50
Reset Button, 51
Resetting, 51
Restarting Unit, 52
Restore Configuration, 58
Restoring, 51
RoHS, 76
RoHS Notice, 77
Routable Network, 13
Router, 13
RSA, 59

S

Safari, 72
Safety Agency, 76
Save Configuration, 57
Save/Restore, 57, 58
Search, 22
Security, 7, 59
Send Diagnostic Support, 73
Serial Number, 8, 9
Set Printer Options, 46
Show Shared Info, 44
SNMP, 39, 72
Software, 72
Solid, 11
SSL, 59
Status LED, 11
Supply Levels, 47
Supported DHCP Configuration, 8
Switch, 13
System Status, 19

T

Tabs, 22
Technical Specifications, 72
Technical Support, 73
Temperature, 72
Test Page, 41
Time Zone, 40
Toner Levels, 47
Topology, 13
Trademark, 2
Troubleshooting, 75

U

Uniform resource identifier, 44
Universal Power Supply, 10
Updating Firmware, 70
Updating Printer IP Addresses, 48
Upgrade Firmware, 70, 71
URI, 44
USB Port, 72
User
  Exporting Users, 68
User
  Adding a New User, 67
  Changing Password, 66

Deleting a User, 68
User Administration, 65
Users
Downloading a Sample CSV, 69
Importing User, 69

V
View Print Jobs, 49

W
Warranty, 78
Weight, 72

X
xPrintServer, 7, 8, 11, 13, 76

Z
Zeroconf, 72