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Using Apple® AirPrint™ with Xerox® ConnectKey™ Devices

User Guide

Table of Contents

What is AirPrint?

AirPrint is Apple's driverless printing technology. It enables Apple devices including the iPhone®, iPad®, iPod touch® and even Mac® OS X® to print to AirPrint-enabled devices, without installing drivers or downloading software.

What are the requirements for using AirPrint?

Network Requirements

AirPrint requires that devices are discoverable via the Bonjour® protocol. Bonjour is Multicast DNS (mDNS) based. In some networks, mDNS traffic is not allowed to be passed across subnets. In these instances, a device will only be discoverable if the Apple iOS® device and the AirPrint-capable Xerox® device are on the same subnet.

Xerox® Device Requirements:

Xerox® ConnectKey™ Devices launched in 2013. For the most current list of devices that have been updated with the .dlm AirPrint enablement software, please visit **www.xerox.com/connectkey**.

The Xerox® device can be configured for wired or wireless networking. There is no requirement for a Xerox® device to be wirelessly enabled. The Apple iOS device will be using wireless. For AirPrint to work with a wired printer, the wired and wireless network segments need to be bridged and allow mDNS traffic to be routed between them.

Apple Device Requirements

To use AirPrint, you will need one of the following devices with the latest version of iOS:

- iPad (all models)

- iPhone (3GS or later)

- iPod touch (3rd generation or later)

AirPrint OS X Requirements

- OS X 10.6 and above

- See **www.apple.com** for the latest operating systems that support AirPrint

Applications that Support AirPrint

You can print from these any iOS application that supports the Print function. For example: iBooks®, Mail, iPhoto®, and Safari®. Other applications are available from the App Store and may also offer this feature.

How is AirPrint enabled and configured on a Xerox® device?

AirPrint is enabled on Xerox devices by default. If, however, AirPrint has been disabled on the Xerox device, an administrator can re-enable it following the steps below:

- You will need the device IP address or DNS name to access the AirPrint configuration web interface from your browser. You can find the IP address at the device UI screen. From the front panel in the device, go to the **Machine Status** menu and select the **Machine Information** tab. The IP address will be shown on this page or you can select **Informational Pages** button and select and print the configuration report.

- Open the Xerox® device's web interface by entering the IP address of the Xerox® device into a web browser's address box (http://<IP>). This will open the web interface.

- Click on the **Properties** tab (enter credentials if prompted: default administrative user is: admin, password: 1111).

- Select **Connectivity > Setup**. This will bring up the Connectivity page in the right frame.

- Under **Protocols** look for **AirPrint**.
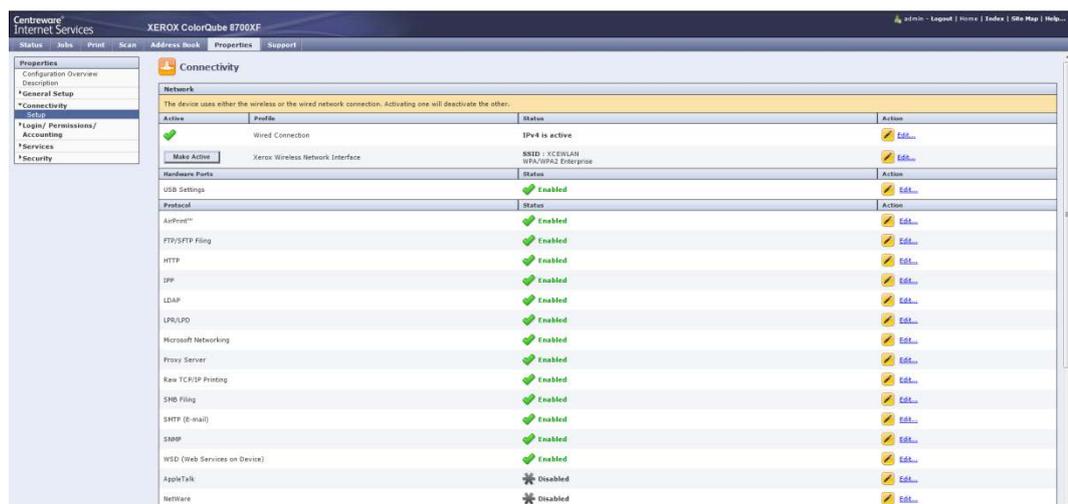
- Select **Edit** on the **AirPrint** row.

- This will open the AirPrint configuration page.
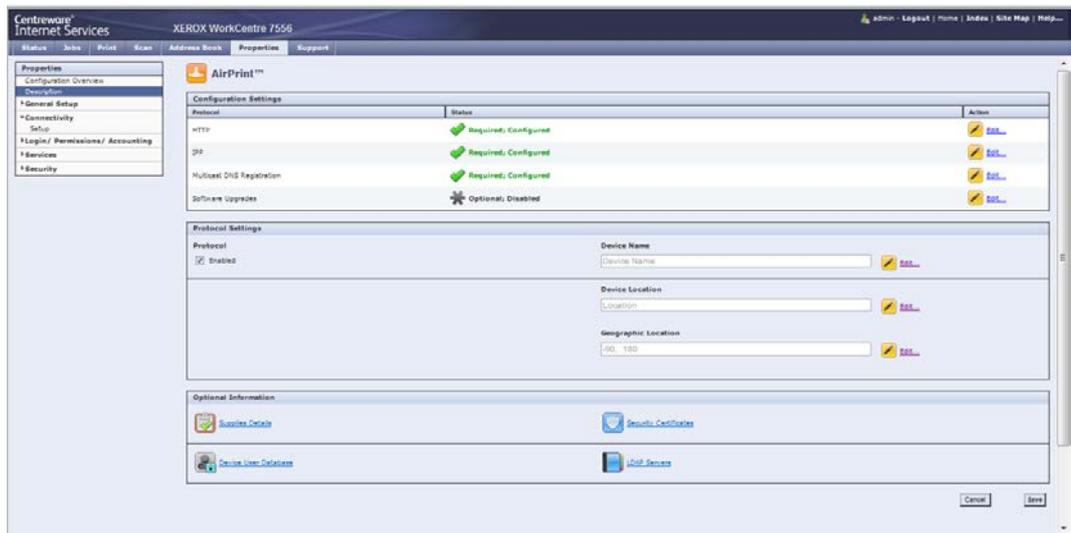
- On the AirPrint page, under **Protocol Settings**, check the box under Protocol next to Enabled.

  Note: HTTP, IPP and mDNS all need to be enabled and configured for AirPrint to be enabled.

- Configure a **Device Name**, **Device Location** and **Geographic Location**. These attributes distinguish the AirPrint printer as seen from the Apple iOS application.

How do I send a job over AirPrint from an Apple iPad?

- Select something to print (such as an email or a photo) from an Apple iPad. You can print from these Apple iOS applications: iBooks, Mail, iPhoto and Safari. These applications are available from the App Store and supports printing.

- You can initiate printing by selecting the **Action** icon (i.e. the arrow) at the bottom / top of the app.
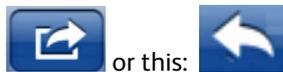
  It will look similar to this: or this:

- Then tap the **Print** button to print via AirPrint.

  Note: If the Print button does not display in an app, then the app does not support AirPrint at this time.

- If you are printing for the first time, or if the previously selected printer is not available, you will need to select the AirPrint printer by touching **Select Printer**. You should see a list of one or more AirPrint-enabled printers in your area. Touch the printer to which you would like to print.
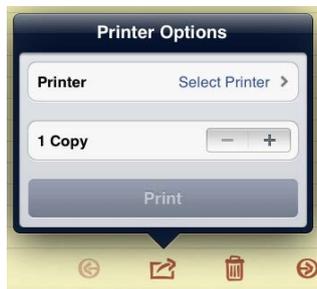
- Configure the printer options:

  - You should now see configuration options for the printer that you selected – **Printer Options.** Adjust these as desired for the print job.

  - In general, there are a few print options (depending on the printer and the file type):

    - **Number of copies:** Select the number of copies of the document or image that you want to print.

    - **Double-sided printing:** You can choose to print on both sides of the paper if your printer supports two-sided (duplex) printing.

    - **Paper selection:** Choose from the supported paper sizes.

    - **Page range:** You can select certain pages within a document to print. Page range is only available with certain apps and file types, such as PDFs.

- Tap the **Print** button to begin printing.

How do I send a job over AirPrint from an Apple iPhone?

- Open the document, picture, or email that you need to print and touch the arrow.

- Select the **Print** option.

- Touch **Select Printer**.

- Select a printer.

- Select the print options and touch **Print.**

- After submitting a job via AirPrint, you may see a message like this on the iPhone:
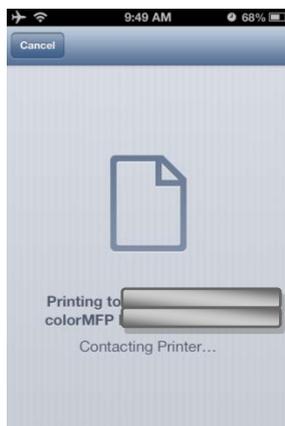
How do I manage / cancel print jobs from my Apple device?

- You can check the Apple device print queue by double-tapping the **Home** button to show the recently used apps.

- Next, tap the **Print Center**.

Note: The Print Center is only available while printing is in progress.

- The Print Center will display a window with the jobs queued locally on the Apple iOS device.

- To cancel a print job from your Apple device queue, select the **Cancel Printing** button.

- When there are no more jobs queued on the Apple device, the Print Center will show no documents waiting.

Troubleshooting

What if I can't find an AirPrint printer from my Apple device?

I can't find my Xerox® device when I try to print from my Apple device or I get a message:
No AirPrint Printers Found. What's going on?

- First try to confirm that AirPrint is enabled on the Xerox® printer. See "**How is AirPrint enabled and configured on the Xerox® device?**" above.

- Next, AirPrint requires that devices are discoverable via the Apple proprietary protocol. In some networks this traffic is not allowed to be passed across subnets. In this case, a device will only be discoverable if the Apple device and the Xerox® device are on the same subnet.

  - Make sure that your Apple device is connected to the same subnet as the Xerox® device.

    - From the Apple Device, tap on the **Settings** icon.

    - Navigate and tap on **Wi-Fi** networks.

    - Confirm the Apple Device is connected to the correct Wi-Fi network (check mark next to network name).

    - Check the IP address of the Apple Device by selecting the **More Details Arrow** to the right of the network.

    - Confirm that the IP address of the Apple device is for the correct network.

- Make sure that the Xerox® device is connected to the correct network.

    - Either print a Configuration Report to confirm the IPv4 address of the device: See the Connectivity Physical Connections, and Connectivity Protocols, TCP/IPv4 sections of the report or check the Xerox® device's Control Panel and select the **Machine Information** button and view the IPv4 address in the **Machine Information** tab.

    - Confirm that the IP address of the Xerox® device is for the correct network.

- If both devices are on the same subnet and your device is still not being discovered, check with your IT administrator to ensure that mDNS traffic is not being filtered on your network.

- Finally, if you still can't find the Xerox® AirPrint-enabled device, restart the Apple device and the Xerox® device.

Where are my AirPrint jobs on the Xerox® device's queue?

When an Apple iOS device appears to submit consecutive print jobs to an AirPrint-enabled Xerox® device, it really only sends the first job and queues the subsequent jobs at the Apple device until it gets notification that the prior print job complete. After one job completes, the next job is released from the Apple device. This behavior is driven by Apple's AirPrint implementation.

For Example:

- On an Apple iOS device, submit 5 consecutive jobs to a Xerox® device (See **How do I send a job over AirPrint from an Apple iPad** or **How do I send a job over AirPrint from an Apple iPhone**)

- Observe the jobs in the Apple device's print queue. (See **How do I manage / cancel print jobs from my Apple device?**)
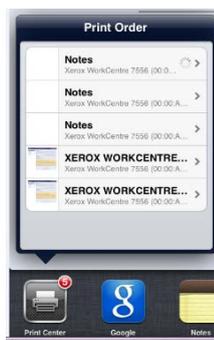
- Notice the status of each of the 5 jobs by touching each job in the list. The first job has a status of Printing, all subsequent jobs are **Waiting**.

On the Xerox® device, select the **Job Status** button. Observe the device Print Queue (Active Jobs) and notice that only the first job from that Apple iOS device is visible. It is the only job that has been sent to the Xerox® device from that Apple iOS device. Once this job completes, the next job queued on the Apple iOS device will be sent to the Xerox® device.

I discovered the Xerox® device from my Apple device. Why am I having trouble with my job completing?

Please try disconnecting your Apple device from any cellular data networks (by enabling airplane mode and re-enabling Wi-Fi) and then try submitting the job again.

I submitted a print job from my Apple device to a Xerox® device via AirPrint, but I am getting a message on my Apple device that says "Check the printer for errors." What is going on?

AirPrint provides generic error message handling. The AirPrint message, "Check the printer for errors," can correspond to multiple kinds of alerts or faults on the device and often it will not impact the ability of the Xerox® device to print. Select Continue and check the printer for your output. If your job has not been completed, check the Xerox® device for errors.

I submitted a print job from my Apple device to a Xerox® device via AirPrint, but I am getting a message on my Apple device that says "Printer out of paper." My job still prints – why is this happening?

AirPrint provides generic error message handling. The AirPrint message, "**Printer out of paper**," can correspond to multiple kinds of paper alerts on the device and often it will not impact the ability of the Xerox® device to print. The message may be alerting you that one tray is out of paper but other trays may be available to complete the job. Select **Continue / Cancel** and check the printer for your output. If your job has not been completed, check the Xerox® device for errors.

I only see a few printer configuration features in the AirPrint dialog. Why?

Currently Apple is only providing a limited subset of printer configuration features from within iOS. As the AirPrint feature evolves, you can expect to see additional device settings and capabilities within the print dialogs. For the time being, only a small number of printer configurations are available.

I'm looking for AirPrint jobs in my Xerox® device accounting records, but I don't see any. Why not?

All AirPrint jobs are passed across the IPP protocol and do not contain specific information identifying them as "AirPrint" jobs. The Xerox® job accounting and tracking tools will all see IPP job information but currently there is no capability to specifically track AirPrint jobs.

What are some possible solutions for Enterprise Networks that span multiple subnets but still want to leverage AirPrint capabilities?

Please refer to: "AirPrint in multi-subnet networks – Xerox® ConnectKey™ devices deliver Apple® AirPrint™ to the Enterprise".