**RxStar Print Service User Guide**

**Overview**

RxStar print service includes the RxStar application servers, the Remote Printing Service OAS servers, and the RxStar CUPS print servers. In this document we are primarily concerned with the RxStar CUPS print servers. Hospital departments and clinics use the print services to print prescriptions based on roles defined within the RxStar application.

The users also have the ability to select "local print" as an option to remote printing (CUPS). The "local print" option is used when a remote print queue is not available. A print queue may not be available during scheduled maintenance, a physical printer problem, or a problem with the individual print queue.

Currently, there are two RxStar CUPS print servers, rxc01lt-vm (test) and rxc02lp (prod). The test server is used to evaluate new policies, new printers, etc. Whether using self-service or opening a new communication, ensure the appropriate server is listed as the Configuration Item (CI). If in doubt, use “rxc02lp”. This will ensure the ticket is directed to the EAI-UNIX team.

**Adding a new print queue**

* The requestor will ensure the printer in the request is on the Approved Printer List. This is a list of printers that have been evaluated by EAI-UNIX and the RxStar teams for compatibility and print quality. The list is maintained by the EAI-UNIX team and is available upon request.
* If a printer is not on the list, a request can be submitted for evaluation. A test model should be provided to the EAI-UNIX or the RxStar Application Development teams. The test model is returned to the owner after the evaluation.
* A ticket will be submitted by the printer admin (LMS/CWS/other printer support staff). It should have all of the following information needed to identify the printer and add the queue:
	1. **Four character printer name**, also known a device id from [NCS web site](https://aida.mc.vanderbilt.edu/ncs). From the eight-character name, the last four characters, in lower-case, will be used for the printer name (hostname), the DNS/DHCP name, and the queue name.
	2. **Fully Qualified Domain Name**, this is the above printer name and the domain. For example, “yaad.dhcp.mc.vanderbilt.edu” where “yaad” is the hostname and “dhcp.mc.vanderbilt.edu” is the domain name. Together, this is the FQDN. Some printers are statically entered into DNS, resulting in the FQDN “yaad.mc.vanderbilt.edu”.
	3. **IP address** of the printer. This is requested in advance in the event we need to troubleshoot/verify the printer.
	4. **Make and model of the printer**. Usually either an HP LaserJet xxxx or Samsung ML-xxxx.
	5. **Location** of the printer. This is generally defined by the user in the form of "clinic/department", address or building, room number and/or floor. While primarily for the user to search for a printer using the "free text" field within RxStar, it can be helpful when verifying printer information.
* For example:

Name: ybab

FQDN: ybab.dhcp.mc.vanderbilt.edu

IP: 10.230.450.670

Description: HP LaserJet P1505

Location: VUH Heart Clinic Room 2334 Checkout

**Deleting/Modifying a print queue**

Periodically, a printer is retired or replaced by another printer. Submit a ticket containing the same information as above.

* If the printer name will be reused, just replacing the physical printer, then submit a The ticket should request deletion if the queue will not be used.

**Troubleshooting a print queue**

* Troubleshooting begins with the user and the assigned printer support team (CWS, LMS, or other tech support team). The printer must be working and available on the VUMC network. Anyone can run the command, "nslookup <hostname>" to verify the printer is registered with DNS/DHCP. Some locations use a local DHCP, which does not resolve on the VUMC network. Running the command, "ping <hostname>" is not valid for DNS resolution (See next step).
1. If the hostname does not resolve, the printer support team must fix this problem.
2. If the hostname resolves to the expected IP and FQDN, verify the printer is available on the network.
* Presuming the hostname resolves correctly, check if the printer is available on the network by using the command, "ping <hostname>".
	1. If it is not available, the user or printer support team must fix that problem.
	2. If it is available, open a ticket to EAI-UNIX to troubleshoot the print queue.
* Troubleshooting the queue includes sending a test print from CUPS or the print server. If the queue appears to be functioning, but the user still doesn't get the print jobs from the application, the print job is not being sent to the CUPS print server. The Clinic Support /RxStar applications team will have to work with the user to determine why their print jobs are not going from the application to the CUPS server.