
Procedure

Printer Troubleshooting

Purpose

Use this procedure as a guideline for troubleshooting common printer problems.

Description

Network printing problems can occur because of issues with any of the following:

- The printing device
- The connection between the printer and the network.
- Printing components offered through a Windows Server network
- Configuration specific to the user's workstation
- Document formatting or corruption

Using the procedures outlined below as a roadmap should help to efficiently diagnose and fix the most common printer problems experienced with network printers.

Process

Eliminate the variables

- 1) If other users or workstations can print to a network print device, the problem is probably not with the printer or with the print server. Focus the troubleshooting on the user's workstation.
- 2) Try printing the problem document from an alternate workstation.
 - a. If the document prints correctly, focus the troubleshooting on the user's workstation.
 - b. If the problem follows the document, the document likely IS the problem.
- 3) If you cannot print any document to a print device, proceed to examine the print device and network configuration.

Verify that the Physical Printer is operational

- 4) Check the physical printer. Confirm that it is powered on, ready to print and is not displaying any error messages at the console. Most printers will allow you to print a test page from the console to verify correct operation. (The method here will vary by printer.)
- 5) Check the cable that connects the printer and make sure that it is connected securely. If the printer is connected directly to the network, check the LED on the NIC that indicates network connectivity.

Ask I.T. Procedures

Verify Network Connectivity to the Print Device

- 6) PING the printer's IP address to confirm network connectivity.
- 7) If PING returns a successful response, attempt to access the print device's Administrative Web Page. Check the device's web page for any error messages or status alerts.

Verify Print Server communication to the Print Device

- 8) Access the network print server share to check the status of the print queue. Do the following:
 - a. Open the Run box on your workstation and input: \\localprintservername
The local print servers in use at the time of this writing are:
 - i. London = \\londonprintserver
 - ii. Miami = \\miamiprintserver
 - iii. Newport = \\newportbeachprintserver
 - b. Double-click the entry labeled "Printers and Faxes"
 - c. Identify and double-click the icon representing the print device in question. This will allow you to view the current print queue for that device and delete any queued jobs that may be preventing others from printing.
- 9) If the queue for the device in question is clear, try to print a test page from the print server.
 - a. From the printer status box (opened in step c above) select "Properties" from the PRINTER menu.
 - b. Select the "Advanced" tab and make a note of the driver being used.
 - c. Return to the "General" tab and Select the "Print Test Page" button from the Properties dialog box and then monitor the printer status window.
 - i. If you see the test job queue and then delete, it means that the print server has successfully handed off to the port servicing the print device.
 - ii. If the test job stays in the queue, it indicates a communication error to the port servicing the print device.
- 10) If the test print job fails, access the logical server via the Cluster Administrator and verify that the print spooler is running. Try stopping, and then re-starting, the print spooler service. Retry a test print from the print server. If the test print still fails, escalate to OPS.

NOTE: *The standard infrastructure approach at the time of this writing is to use Cluster Services to present a logical server hosted by a pair of physical servers. Accordingly, access to services offered by the logical server (like the Print Spooler Service) need to be managed through the Cluster Administrator. If you are unfamiliar with this tool, or are denied access to a network resource when trying to use this tool, contact the End User Services Manager for assistance.*

Ask I.T. Procedures

Verify Client Access to the Print Device and the Print Server

- 11) Configure a local TCP port from a workstation to print directly to the print device. This will bypass the network print server and provide an alternate confirmation that the device is functioning properly.
- 12) Create a simple test document from the user's workstation using the same application as the problem document. Successfully printing this document further implicates a document specific problem. Try printing the test document through both the local TCP printer and the logical network printer and compare the results.
- 13) If the previous step is successful for the local TCP printer but the logical network printer on the associate's workstation is still not printing, delete / re-install the logical printer at that workstation. When prompted, choose to overwrite the existing print driver. Reboot and re-test.

Troubleshoot document specific problems

- 14) If a test print is successful from the associate's workstation but printing the document that initiated the troubleshooting continues to be unsuccessful, the problem is most likely specific to that document and must be identified and corrected by process of elimination. Items that can create print problems are:
 - a. Embedded graphics
 - b. Custom page sizes
 - c. Non-standard fonts
 - d. Application versions and or service packs
 - e. Incorrect or mismatched printer drivers (i.e. PCL5 vs. PCL6). Compare the size of the file on disk to the size showing in the print queue. These will always be different BUT, if they are alarmingly different, it is worth trying different driver options.