



# Troubleshooting

Resources and Scenarios

# Four Troubleshooting Scenarios



- Each of the four scenarios might occur at your library. You and your staff need to determine which troubleshooting steps would aid in determining what the problem is and hopefully how to fix the problem.
- Things that you can assume are already in place at your library.
  - Have a database on paper and online of the inventory of all the equipment and software installed at the library.
  - You and your staff keep a log of all computer and device updates that occur at your library
  - You and your staff keep a log of all computer and device issues that occur at your library.
  - You have an tech support company for the library but they are expensive and you want to be sure to at least do some initial troubleshooting to provide to your it support to perhaps avoid a site visit by the company.
  - Each group will have 10 minutes to research the problem and provide detailed troubleshooting solutions.

# Scenario One



## **A bad day to print at the Canprint Public Library**

Your morning started off in a rush at the library entrance. The local phone company arrived at the library and told you they need to install a new router for broadband service at the library. They were done in about 30 minutes and left the library. You were able to log onto the internet using your Firefox browser and begin your daily library activities.

At 2 p.m. 3 students stopped in after class and needed to print a color map for their school social study project. They tried to print the picture that was attached to one of the students, Sally's email several times without success. They need your assistance to get the picture printed to turn in their assignment tomorrow.

What are the basic troubleshooting techniques you would need to use to help the 3 students print their report?

# Scenario One Suggestions...



- Cords: printer to network connection are all working
- Enter DOS PING command to the IP Address of the printer
- For shared computers ; Is printer attached to a PC and that PC is not powered on?
- Can you a print to the printer using a different application or different document?
- Can other computers print to the printer?
- If the printer is networked were there any new networking related devices installed at the library recently?

# Scenario One Answer....



The printer's IP address is no longer recognized by the new wi-fi router. The computer and the printer were not able to communicate with each other. Scenario 1 mentions that the telephone company installed a new wi-fi router at the library (you may assume that the wi-fi router has a different LAN address setup than the "old" wi-fi router)

Printers are assigned a Static IP Address so they are always accessible using the same IP address or an IP address is assigned a "reservation" in the router setup.

In this case the printer needs to be assigned a new static address that matches the new Routers LAN IP address setup. The computer and printer need to be restarted for the computer to find the printer device and print the picture.

# Scenario Two

## Rosie's résumé trials at the Docitt Public Library



After taking a few Word classes offered by the local community college, Rosie decided that she needed to create a resume to be included with her job application for the part-time library aide position hiring at the Docitt Public Library. Rosie sat down at a public computer and opened up the MS Word 2010 application. She selected a resume template to use and began to create her resume.

She was entering her academic background and suddenly the keyboard locked up and she was not able to type anything into the document and every time she moved the mouse over the Word screen she saw a spinning circle, a message at the top of the application indicated that Word was not responding. She's asked you for assistance to save her work and fix MS Word on her computer. What do you do?

# Scenario Two Suggestions...



- End all Word related processes. Restart Word and then see if the missing file is displayed in the Document Recovery task pane to recover the Word document.
- Close MS Word and Restart your computer, see if that solves the problem.
- Can you open other MS Word files without the program freezing?
- Make sure that your Windows Updates are up-to-date
- **Check to see if you have add-ins that are causing the problem and remove all unnecessary add-ins.** An add-in is a software program that extends the capabilities of larger programs. For example, there are many Word add-ins designed to complement the basic functionality offered by Word.
  - How to remove add-ins,  
<https://social.technet.microsoft.com/Forums/en-US/7c00370c-02d2-46e4-ad40-08c02dcf0f09/word-2010-freezes?forum=officesetupdeployprevious>

# Scenario Two Answer...



- You were able to recover Rosie's résumé document using the AutoRecovery file function in Word.
- When you reviewed the computers add-in list for MS Word she found an add-in that appeared multiple times when she was Google searching the problem when said that the AdobeAcrobat PDFMaker Office COM Addin installed on PCs along with Office programs
- You checked the add-ins installed on MS Word for this computer and you saw AdobeAcrobat PDFMaker Office COM Addin. You researched what the add-in provided as far as enhanced programming for the library's public users and decided that it was not required and removed the add-in from MS Word.

# Scenario Three

## Blue Screen of Death (BSOD) Error on Windows 7 Computer



```
Home COMP18 VM8 (under PlateSpin c... x
*** STOP: 0x0000000A (0x00000000,0x0000001C,0x00000000,0x8042BB2B)
IRQL_NOT_LESS_OR_EQUAL
*** Address 8042BB2B base at 80400000, DateStamp 3975dfdf - ntoskrnl.exe
Beginning dump of physical memory

STOP 0x0000000A: IRQL_NOT_LESS_EQUAL
```

Your solution must be more than I would call the IT Support Vendor!

# Scenario Three Suggestions



- Blue Screen errors can be caused by both hardware and software problems. If you added new hardware to your PC before the Blue Screen error, shut down your PC, remove the hardware, and try restarting. If you're having trouble restarting, you can start (boot) your PC in safe mode.

You can also try the following:

- Get all the latest updates with Windows Update.
  - Get help from other sources.
  - Try restoring Windows back to an earlier point in time.
  - Read through Resolving stop (blue screen) errors in Windows 7, <http://windows.microsoft.com/en-us/windows7/resolving-stop-blue-screen-errors-in-windows-7>
- Contact your IT Support Vendor

# Scenario Three Answer...



- Resolving this scenario largely depends on you and your staffs comfort level to fix the problem
- The computer will automatically restart after a BSOD event. At a minimum if the computer reboots successfully you will want to review the computers event log to see if you can determine what is causing the computer to hard stop.
- If the computer restarts and runs fine, you may want to take a wait and see attitude for the next BSOD error.
- Do document the error in your equipment issues log.
- Do make sure that you have up-to-date Windows Updates, Anti-virus protection and drivers installed on the computer
- If the problem persist and you can access a previous restore point on the computer, do so.
- Use online resources like Everything you need to know About BSOD, <http://www.howtogeek.com/163452/everything-you-need-to-know-about-the-blue-screen-of-death/>

# Scenario Four



## Wi-fi Confusion at the Crosswire Public Library

Crosswire Public Library is a very busy library and has decided to go wireless for public access. This has been very convenient for the library customers. Renee went to the circulation desk and checked out a laptop computer to use to read her email.

She logged on to the computer and accessed her Pinterest account and she decided to print a recipe she'd pinned on the library printer to take with her to the grocery store.

When she returned to the circulation desk and requested her printed copy of the recipe from you, the newly hired part-time staff person, first day on the job, told her that there was nothing that had printed at the printer for the past hour. **What happened to her printer copy of her recipe? How can the library assist to make sure this doesn't happen again?**

# Scenario Four Suggestions...



- Check to see what network printers are available to Renee to use from her laptop.
- Are any of these printer names used at the library?
- Check to see what wireless network Renee is using to access her Pinterest account
  - Use the desktop toolbar or Network Sharing options in Windows
- Check to see if that wireless network is defined to the Crosswire Public Library

# Scenario Four Answer...



Renee and the new staff person (that's you) at the library are baffled that they cannot find the printer or the network on her computer.

"Wow that's weird!", said Renee I always just walk in to the library and check out a computer to access my Pinterest account. You go and look up in library's equipment documentation about the devices in the library and you see that the printer on her computer is not listed as one of the library's printers and the network she's on is not one of the library's three wi-fi networks (although it look very similar to the one her laptop is using)

So Renee disconnects from the wireless network she's connected to and connects to one of the Crosswire Public Library's wi-fi networks that is connected to the printer and she prints her recipe.

You take the laptop computer and change its settings to default connect to one of the three library wi-fi connections (preferably one that can access the library printers) and make a suggestion to the director that the three wi-fi networks available in the library be posted for the library customers to view.

# Resources Online



- <https://www.google.com>
  - World's number one search engine
- <http://support.microsoft.com/kb/242450>
  - MS Knowledge Base – official Microsoft trouble shooting web site
- <http://forums.techguy.org/>
  - Review TechGuy Forums
- <http://www.computerhope.com/index.htm>
  - Check out the forum section
- <http://www.practicallynetworked.com/>
  - Offers excellent network troubleshooting section on this site and some excellent tutorials related