

Support Queue Case Study

Instructions:

Select two tickets from each level and explain how you would solve them.

Name: Jalen Smith



Level 1 Tickets

Instructions:

Select two of the five scenarios to troubleshoot.

One template has been created for each of the two tickets you need to choose.

Make one to two slides for each scenario for the solution(s) you researched.

Add audio explaining the steps you took, including your recommended solution.

Scenario: My printer ink is smearing

Identify the problem: Bill's printing job is resulting in smeared ink

Establish a theory of probable cause: Bill is probably using an injket printer and is using either low quality paper or ink for this print job.

Evaluate the theory to determine the actual cause: There is not enough information here to determine the actual cause of the ink smearing.

Establish a plan of action to resolve the problem and implement the solution: To resolve this issue I would first advise Bill to allow the print time to dry after printing. If smearing is still an issue, I would recommend Bill to get higher quality paper for his printer. If the smearing continues, he needs to get higher quality ink.

Scenario: Network Connectivity Issues

Identify the problem: Beverly is having trouble connecting to the network

Establish a theory of probable cause: 3 areas could be the problem: the network devices, the cabling, or the computer NIC.

Evaluate the theory to determine the actual cause: The area for greatest investigation would seem to be cabling or the computer NIC. I reason this because Beverly reported that the NIC status lights were off.

Scenario: Network Connectivity Issues

Establish a plan of action to resolve the problem and implement the solution:

- 1.) Check another device for network connectivity to insure the network is available for other devices
- 2.) Test the cable with a cable tester and test the NIC by pinging it
- 3.) Fix the problem revealed by each test
- 4a.) Replace the cable
- 4b.) Update NIC device driver. Then, after installation, ping again to see if that restores the NIC

Level 2 Tickets

Instructions:

Select two of the five scenarios to troubleshoot.

One template has been created for each of the two tickets you need to choose.

Make one to two slides for each scenario for the solution(s) you researched.

Add audio explaining the steps you took, including your recommended solution.

Scenario: Dell Machine Making Clicking Sounds Identify the problem: The computer will not display the windows desktop.

Establish a theory of probable cause: The clicking noises and specific beep code explained by Juan indicate a memory problem.

Evaluate the theory to determine the actual cause: According to "Understanding Beep Codes on a Dell Desktops", the 1-3-2 beep code for a Dell OptiPlex indicates a memory problem. The clicking noises may indicate that the problem is in the hard drive.

Scenario: Dell Machine Making Clicking Sounds Establish a plan of action to resolve the problem and implement the solution:

- 1.) Run the ePSA diagnostic which will conduct hardware self-checks. Run the memory checks as well.
- 2.) Use the error code to further pinpoint the fault to the DIMM or slot on the device.
- 3.) This will inform next steps on what needs to be updated, replaced, etc.

Scenario: ADOBE
Illustrator Throwing
Errors

Identify the problem: ADOBE Illustrator is running slow to crashing on devices

Establish a theory of probable cause: There is not enough RAM or the processor isn't made to work with this program.

Evaluate the theory to determine the actual cause: After further investigation its revealed that minimum requirements for running ADOBE Illustrator are Intel i5 processor, 4 GB RAM, NVIDIA GeForce 970. The current hardware specs are Intel i3 processor, 8 GB RAM, Graphics card unknown.

Establish a plan of action to resolve the problem and implement the solution: The team of designers collectively need new computers to run the tasks the programs they want to use. They could upgrade the hardware on the current devices however it's probably cheaper to just buy new computers with adequate hardware to perform the functions needed.

Level 3 Tickets

Instructions:

Select two of the five scenarios to troubleshoot.

One template has been created for each of the two tickets you need to choose.

Make one to two slides for each scenario for the solution(s) you researched.

Add audio explaining the steps you took, including your recommended solution.

Scenario: No Internet Connection

Identify the problem: Michelle and another person in the office cannot access the internet.

Establish a theory of probable cause: A new router was installed. It could be a misconfiguration of the router during setup.

Evaluate the theory to determine the actual cause: Upon further investigation, the default gateway on the router wasn't configured.

Establish a plan of action to resolve the problem and implement the solution: Configure the default gateway to 192.168.1.1. This should enable internet access.

Scenario: Restart/ Update loop Identify the problem: Windows update is stuck in a loop

Establish a theory of probable cause: The cause is the update itself

Evaluate the theory to determine the actual cause: Marci's computer is stuck in an Update loop caused by the update she is downloading to her system

Establish a plan of action to resolve the problem and implement the solution: The solution is to cut all power to the device then reboot it in safe mode. Once your able to reboot in safe, the update should finish and you'll be able to login. Reboot again to leave safe mode.

Summary

What did you find challenging or interesting about one or two of the support cases?

All of these were a fun challenge to test our knowledge of things we've learned over the past few weeks. The common theme among a few of these computer issues were online research. Using the web to read about other people's problems and how they solved them was a huge part of the assignment. As IT technician we aren't going to know every solution at any given moment; this just showed me the importance of research and being resourceful in this field.

References

Computer Hope. (n.d.). Computer beep codes. Retrieved February 8, 2025, from https://www.computerhope.com/beep.htm

Dell Technologies. (n.d.-a). *Understanding beep codes on a Dell desktop PC*. Retrieved February 8, 2025, from <a href="https://www.dell.com/support/kbdoc/en-us/000124349/understanding-beep-codes-on-a-dell-desktop-pc#optiplex-

Dell Technologies. (n.d.-b). How to diagnose and resolve common memory issues on a Dell desktop PC. Retrieved February 8, 2025, from

https://www.dell.com/support/kbdoc/en-us/000126068/how-to-diagnose-and-resolve-common-memory-issues-on-a-dell-desktop-p

Scottie's Tech Info. (2023, August 22). *Windows updates are stuck in a loop, and I can't log in*. Retrieved February 8, 2025, from https://scottiestech.info/2023/08/22/windows-updates-are-stuck-in-a-loop-and-i-cant-log-in/

Spiceworks Community. (n.d.). *Quick test to ensure your NIC card is working*. Retrieved February 8, 2025, from https://community.spiceworks.com/t/quick-test-to-ensure-your-nic-card-is-working/1003988