



3.0 Software Troubleshooting

3.1 Given a scenario, troubleshoot common Windows OS problems.

- **Common symptoms**
 - Blue screen of death (BSOD)
 - Sluggish performance
 - Boot problems
 - Frequent shutdowns
 - Services not starting
 - Applications crashing
 - Low memory warnings
 - USB controller resource warnings
 - System instability
 - No OS found
 - Slow profile load
 - Time drift
- **Common troubleshooting steps**
 - Reboot
 - Restart services
 - Uninstall/reinstall/update applications
 - Add resources
 - Verify requirements
 - System file check
 - Repair Windows
 - Restore
 - Reimage
 - Roll back updates
 - Rebuild Windows profiles

3.2 Given a scenario, troubleshoot common personal computer (PC) security issues.

- **Common symptoms**
 - Unable to access the network
 - Desktop alerts
 - False alerts regarding antivirus protection
 - Altered system or personal files
 - Missing/renamed files
 - Unwanted notifications within the OS
 - OS update failures
- **Browser-related symptoms**
 - Random/frequent pop-ups
 - Certificate warnings
 - Redirection



3.3 Given a scenario, use best practice procedures for malware removal.

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| <ol style="list-style-type: none"> 1. Investigate and verify malware symptoms 2. Quarantine infected systems 3. Disable System Restore in Windows | <ol style="list-style-type: none"> 4. Remediate infected systems <ol style="list-style-type: none"> a. Update anti-malware software b. Scanning and removal techniques (e.g., safe mode, preinstallation environment) | <ol style="list-style-type: none"> 5. Schedule scans and run updates 6. Enable System Restore and create a restore point in Windows 7. Educate the end user |
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3.4 Given a scenario, troubleshoot common mobile OS and application issues.

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| <ul style="list-style-type: none"> • Common symptoms <ul style="list-style-type: none"> - Application fails to launch - Application fails to close/crashes - Application fails to update - Slow to respond - OS fails to update - Battery life issues | <ul style="list-style-type: none"> - Randomly reboots - Connectivity issues <ul style="list-style-type: none"> ▫ Bluetooth ▫ WiFi ▫ Near-field communication (NFC) ▫ AirDrop | <ul style="list-style-type: none"> - Screen does not autorotate |
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3.5 Given a scenario, troubleshoot common mobile OS and application security issues.

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| <ul style="list-style-type: none"> • Security concerns <ul style="list-style-type: none"> - Android package (APK) source - Developer mode - Root access/jailbreak - Bootleg/malicious application <ul style="list-style-type: none"> ▫ Application spoofing | <ul style="list-style-type: none"> • Common symptoms <ul style="list-style-type: none"> - High network traffic - Sluggish response time - Data-usage limit notification - Limited Internet connectivity - No Internet connectivity - High number of ads - Fake security warnings - Unexpected application behavior - Leaked personal files/data |
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