

# IT\_Troubleshooting\_Guide

## [Network Troubleshooting Guide](#)

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### **Warning**

User Forgot Password

### **Info**

Reset the user's password following your organization's password reset procedures. Ensure the user receives the new password securely.

## Reset the user's password.

- \*\*Run the following command as an administrator to reset the user's password:

```
net user [username] [new_password]

# net user johndoe newpassword123
```

Ensure the user can log in successfully.

- \*Confirm with the user that they can log in using the new password.
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### **Warning**

Server Disk Space Full

### **Info**

Investigate and free up disk space by deleting unnecessary files or logs. Consider expanding storage or implementing a storage management plan to prevent future issues.

## Troubleshooting Commands and Actions

1. **\*\*Check disk usage with `wmic` command.**
  - **\*To check disk space on all drives:**

```
wmic logicaldisk get caption,freespace
```

- **\*To check a specific drive (e.g., C: drive):**

```
wmic logicaldisk where "DeviceID='C:'" get caption,freespace
```

2. **\*\*Identify and delete unnecessary files.**
  - **\*Manually locate and delete large or unnecessary files using Windows File Explorer.**
3. **\*\*Implement disk cleanup procedures.**
  - **\*Run the built-in Windows Disk Cleanup utility:**

```
cleanmgr
```

4. **\*\*Consider adding more storage space.**
  - **\*Plan to add more hard drives or expand storage as needed.**

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### **Warning**

Slow Network Connection

### **Info**

Check network cables, switches, and routers for connectivity issues. Test network speed and consider bandwidth upgrades if necessary.

## Troubleshooting Commands and Actions

1. **\*\*Use `ping` to test network connectivity.**
  - **\*To ping a specific host or IP address:**

```
ping [host_or_IP]
# Example: `ping google.com`
```

2. **\*\*Check cable connections.**
    - \*Ensure all network cables are securely connected to devices.
  3. **\*\*Inspect network hardware for faults.**
    - \*Physically check routers, switches, and network devices for any visible issues.
  4. **\*\*Monitor network traffic with tools like Wireshark .**
    - \*Install and run Wireshark to capture and analyze network traffic.
  5. **\*\*Consider network infrastructure upgrades.**
    - \*Evaluate network capacity and consider upgrading equipment or increasing bandwidth.
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### **Warning**

Application Crashes Frequently

### **Info**

Examine application logs for error messages. Update the application or apply patches if available. Check system compatibility and hardware requirements.

## **Troubleshooting Commands and Actions**

1. **\*\*Review application logs for error details.**
    - \*Locate application logs, usually found in the application's directory or in the Windows Event Viewer.
  2. **\*\*Update the application to the latest version.**
    - \*Follow the application vendor's instructions for updating.
  3. **\*\*Verify system compatibility.**
    - \*Check if the application is compatible with your Windows version.
  4. **\*\*Check hardware resources (RAM, CPU) for sufficiency.**
    - \*Use the Windows Task Manager to monitor resource usage.
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### **Warning**

User Unable to Access Email

### **Info**

Verify user credentials and email server status. Check email client settings for accuracy. Troubleshoot email server issues or password problems if necessary.

## Troubleshooting Commands and Actions

1. **\*\*Confirm user's login credentials.**
  - **\*Verify that the user is using the correct username and password.**
2. **\*\*Test email client settings.**
  - **\*Check email client settings, including incoming and outgoing server details.**
3. **Verify email server status.**
  - **\*Use `telnet` to test email server connectivity (if supported by your email server):**

```
telnet mail.server.com 25
```

5. **\*\*Reset email password if necessary.**
  - **\*Follow your organization's password reset procedures.**
6. **\*\*Investigate email server logs for errors.**
  - **\*Check email server logs for any error messages or issues.**

### **Warning**

Server Service Unavailable

### **Info**

Restart the server service. Monitor resource usage and investigate the root cause of the service failure. Consider service redundancy for critical services.

## Troubleshooting Commands and Actions

1. **\*\*Restart the affected service.**
  - **\*To restart a Windows service, use the following command (replace `[service_name]` with the actual service name):**

```
net stop [service_name]
net start [service_name]
```

To find the service name for a specific service on a Windows system, you can use the **sc query** command followed by the service display name or part of the name (case insensitive). Here's the command to find the service name:

```
sc query type= service | find "SERVICE_NAME: [partial_service_name]"

# For example:
sc query type= service | find "SERVICE_NAME: Spooler"
```

2. **\*\*Monitor resource usage (CPU, memory).**
    - \*Use the Windows Task Manager ( **Ctrl+Shift+Esc** ) to monitor CPU and memory usage.
  3. **\*\*Check logs for service failure details.**
    - \*Examine the Windows Event Viewer for service-related error logs.
  4. **\*\*Investigate underlying server issues.**
    - \*Review system logs for potential hardware or software issues.
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### **Warning**

Printer Not Responding

### **Info**

Check printer connections and power. Clear print queues and restart the print spooler service. Update or reinstall printer drivers if needed.

## **Troubleshooting Commands and Actions**

1. **\*\*Verify printer power and connectivity.**
  - \*Ensure the printer is powered on and connected to the computer.
2. **\*\*Clear print queues.**
  - \*To clear print queues on Windows, use the following command:

```
net stop spooler
del %systemroot%\System32\spool\printers\* /Q /F /S
net start spooler
```

3. **\*\*Restart the print spooler service.**
  - \*Use the following command to restart the print spooler service:

```
net stop spooler
net start spooler
```

4. **\*\*Update or reinstall printer drivers.**
    - \*Go to the printer manufacturer's website to download and install the latest drivers.
  5. **\*\*Test printing with a sample document.**
    - \*Print a test page or document to verify if the printer is responding.
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### **Warning**

User Account Locked Out

### **Info**

Unlock the user's account and investigate the cause of the lockout. Look for suspicious activity or multiple failed login attempts.

## Troubleshooting Commands and Actions

1. Unlock the user's account.
  - To unlock a user account on Windows, use the following command (replace [username] with the actual username):

```
net user [username] /active:yes
```

2. **\*\*Check logs for the source of the lockout.**
  - \*Review Windows Event Viewer or security logs for information on why the account was locked.

```
eventvwr.msc <- OPEN EventViewer
# Common Event IDs related to account lockouts include 4625 (failed logon) and 4740 (account lockout)
```

3. **\*\*Investigate unusual login attempts or security breaches.**
    - \*Look for multiple failed login attempts or any suspicious activity on the user's account.
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### **Warning**

## Website Not Accessible

### Info

Verify DNS settings, check the web server's status, and examine firewall rules. Investigate server-side or DNS-related issues for the website's inaccessibility.

## Troubleshooting Commands and Actions

1. **\*\*Check DNS settings and resolve any issues.**
  - **\*Use `nslookup` to check DNS resolution and identify DNS-related problems:**

```
nslookup [website_domain]
```

2. **\*\*Verify web server status and configurations.**
  - **\*Check if the web server is running and review its configuration settings.**
3. **\*\*Examine firewall rules and permissions.**
  - **\*Review firewall rules and ensure they allow traffic to the web server.**
4. **\*\*Investigate server logs for website-related errors.**
  - **\*Examine server logs for any errors or issues related to the website.**