Key Takeaways

- **KMODE_EXCEPTION_NOT_HANDLED** is a common Blue Screen of Death (BSOD) error in Windows, often linked to driver or memory issues.
- Updating Windows, drivers, or even running diagnostic tools can help solve the issue.
- Hardware problems, malware, and corrupted system files can also be key culprits. Tools like <u>MiniTool</u> <u>Power Data Recovery</u> can assist in recovering data lost due to crashes.
- Specific steps tailored for HP users are included due to recurring reports of this issue on HP devices.

Step-by-Step Guide to Solve "KMODE_EXCEPTION_NOT_HANDLED" BSOD

This guide will walk you through various troubleshooting steps to fix the

KMODE_EXCEPTION_NOT_HANDLED BSOD issue, which is a commonly reported error fault followed by an "unexpected kernel-mode trap." The steps range from basic OS updates to more advanced techniques like registry changes and hardware tests.

1. Run Windows Update and Install All Updates

Installing all the latest updates ensures that any known bug, including ones causing BSOD issues like the **KMODE_EXCEPTION_NOT_HANDLED** error, is fixed.

Steps:

- 1. Open the Start Menu.
- 2. Search for Windows Update and click Check for updates.
- 3. Install **all available** updates. Be sure you also install optional updates for drivers.

Note: Some updates may fix system errors that directly cause crashes.

2. Run Memory Diagnostics to Detect RAM Issues

Faulty RAM can often trigger BSOD errors like **KMODE_EXCEPTION_NOT_HANDLED**. Running a memory test can diagnose if the error stems from your system's memory.

Steps:

- 1. Press Windows + S and type Windows Memory Diagnostic.
- 2. Select the option to **Restart now and check for problems**.
- 3. Let the system run the diagnostic checks. Any detected memory issues will be displayed post-reboot.

Expert Tip: Intermittent system crashes are more frequently associated with faulty memory sticks. Always test both individual RAM sticks and different slots.

3. Update Device Drivers

Outdated or corrupted hardware drivers are frequently the reason for the **KMODE_EXCEPTION_NOT_HANDLED** error. This step ensures compatibility between the Windows OS and your device's hardware.

Steps:

- 1. Open Device Manager by pressing Windows + X and selecting it from the menu.
- 2. Right-click on each device under Display Adapters, Network Adapters, and Sound, then select Update driver -> Search automatically for drivers.
- Alternatively, tools like <u>EaseUS DriverHandy</u> can automatically detect and update outdated drivers, ensuring seamless compatibility.

Expert Tip: Prioritize updating network card and graphics drivers as these are frequent culprits for the error.

4. Disable Fast Startup

Disabling Fast Startup is a good troubleshooting step since this feature can cause driver conflicts that crash your system upon boot.

Steps:

- 1. Open Control Panel > Power Options.
- 2. Click Choose what the power buttons do.
- 3. Uncheck Turn on fast startup (recommended) under Shutdown settings, and click Save changes.

Note: This may slightly increase boot times but can resolve conflict-based crashes.

5. Check for Malware and Viruses

Malware and rootkits impacting critical system files are another leading cause of BSOD errors.

Steps:

- 1. Open your antivirus program and run a Full Scan.
- 2. Enable boot sector and MBR scanning in your antivirus settings.
- 3. If unable to boot into Windows, use a bootable antivirus tool such as the one from <u>Kaspersky Rescue</u> <u>Disk</u>.

Expert Tip: Certain multi-layered malware defenses, if not configured correctly, can also conflict with legitimate driver operations, causing this error.

6. Use System File Checker (SFC) to Repair Corrupted System Files

Windows System File Checker can automatically repair critical system files corrupted by drivers, software bugs, or malware infections.

Steps:

- 1. Open Command Prompt as Administrator.
- 2. Type: sfc /scannow and press Enter.
- 3. Let the process complete and follow any on-screen instructions.

Note: This will replace any corrupted or mismatched files that could cause system instability or crashes.

7. Reset BIOS to Default Settings

Overclocked or incorrectly configured BIOS settings may lead to system instability and BSOD errors like **KMODE_EXCEPTION_NOT_HANDLED**.

Steps:

- 1. Reboot your computer and press the appropriate function key (commonly F2, F12, or Del) to enter your BIOS settings.
- 2. Look for an option labeled Load factory defaults or Reset BIOS settings to default.
- 3. Save and exit.

Expert Insight: Overclocking hardware can provide performance boosts but it's also more prone to system crashes—especially when voltage settings aren't synced properly.

8. Ensure Proper Hardware Installation

Improper seating of internal components (such as RAM or the CPU) can generate the **KMODE_EXCEPTION_NOT_HANDLED**.

Steps:

- 1. Power down your PC and disconnect from the power source.
- 2. Open your case and ensure all internal components RAM, GPUs, power connectors are seated firmly.

Expert Tip: When engaging peripherals, be cautious of electrostatic discharge (ESD), which can damage components.

9. Run Diagnostic Tests on Hardware

Running software-based diagnostics for each piece of internal hardware will help pinpoint specific failing components.

Steps:

- 1. Use <u>MemTest86</u> to test memory.
- 2. Run hard drive diagnostics from your hard drive's manufacturer (e.g., SeaTools for Seagate devices).
- 3. Use <u>HWiNFO</u> for detailed system health monitoring.

Hardware failure, if diagnosed, will need component replacement.

10. Disable Tamper Protection and Edit Windows Registry (For HP Users)

For HP users, disabling certain Windows Defender features can sometimes prevent conflicts causing this BSOD issue.

Steps:

- 1. Go to **Windows Security** > **Virus & threat protection** > **Manage settings**.
- 2. Disable Tamper Protection.
- 3. Then, open **Registry Editor** (regedit) and navigate to
- HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Windows Defender.
- 4. Create a new DWORD named DisableAntiSpyware, and set its value to 1.

Expert Warning: Misuse of the Windows Registry can cause serious system issues. Always back up your registry before making changes.

11. Use System Restore to Revert to a Working Version (For HP Users)

If you recently made changes or installed software, restoring your system to a previously working state can resolve the issue without losing all your data.

Steps:

- 1. Open System Restore by searching for "Create a restore point."
- 2. Select a restore point from before the error occurred.
- 3. Follow the on-screen instructions to complete the process.

Expert Insight: After restoring your system, review the event logs for any potential software clashes that might have caused the issue.

Frequently Asked Questions

What causes the "KMODE_EXCEPTION_NOT_HANDLED" error?

This error is often triggered by outdated system drivers, corrupted system files, or hardware faults (especially connected to RAM, CPU or GPU).

Can faulty RAM cause the "KMODE_EXCEPTION_NOT_HANDLED" error?

Yes, faulty or improperly seated RAM can definitely be a culprit. Running diagnostic tools like MemTest86 helps confirm if RAM is the issue.

How can drivers cause BSOD errors?

Outdated, incompatible or corrupted device drivers can fail to communicate with Windows correctly, which results in the system throwing a BSOD like **KMODE_EXCEPTION_NOT_HANDLED**.

Is it safe to disable Windows Fast Startup?

Yes, completely safe. Disabling Fast Startup can help avoid driver sync issues but may increase boot times slightly.

Can malware really cause the KMODE_EXCEPTION_NOT_HANDLED error?

Absolutely. Certain malware, especially rootkits or other deep-level infections, can corrupt kernel operations and trigger this exact error. Regular system scans and keeping antivirus updated is crucial.

Following all steps closely should help you resolve the KMODE_EXCEPTION_NOT_HANDLED error efficiently. If the issue persists, consider hardware replacement or contacting a qualified professional for deeper diagnostics.