

Dell Latitude E6420 – Troubleshooting Notes (Clean Text Version)

1. BIOS Error on Startup

Error Messages:

- “Invalid configuration information — please run SETUP program.”
- “Time-of-day not set — please run Setup program.”

Cause:

These errors appear when the **CMOS battery** (the small battery that powers BIOS memory) has died. When this happens, BIOS settings reset and the system loses date/time information.

Immediate Fix:

- Press **F2** to enter BIOS Setup.
- Set the correct **date and time**.
- Save changes and reboot.

Long-Term Fix:

- Replace the **CMOS battery** to prevent the error from returning every time the laptop is powered on.

Warning:

Opening a laptop can damage sensitive hardware. Always check Dell's official documentation before attempting repairs.

2. Inside the BIOS (After Pressing F2)

The BIOS screen allows low-level configuration of hardware before the OS loads.

Notes:

- BIOS is accessed by pressing **F2** at the Dell logo.
- Used for fixing boot issues, changing boot order, or restoring defaults.

- If a BIOS password is set and unknown, full access is restricted.

Battery Information:

- Primary battery showing **0%**
- Health status: **Moderate / Communication Error**

Boot Sequence / Date & Time:

- Verified settings
- Adjusted date/time
- Admin password unknown (not required for basic changes)

Motherboard Note:

- There is a jumper pin that bridges two pins — used for BIOS reset on some models.
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3. Windows Recovery Environment (WinRE)

Advanced Options → Troubleshoot → Advanced Options

Startup Repair:

- System attempted repairs
- Checked disk for errors
- Attempted repairs failed
- Error log: `D:\Windows\System32\Logfiles\Srt\SrtTrail.txt`

System Restore:

- No restore points available

System Image Recovery:

- Not usable (no image available)
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4. Command Prompt Troubleshooting

Initial Commands

- `bootrec /fixboot` → Attempted

- `bootrec /fixmbr` → Operation completed successfully

Common Issues Encountered

“Access Denied” when running boot commands.

Fix: Assign a Drive Letter to the EFI Partition

1. `diskpart`
2. `list disk`
3. `select disk 0`
4. `list vol`
5. Identify EFI partition (100–500MB, FAT32)
6. `select vol X`
7. `assign letter=V:`
8. Exit Diskpart

Run boot commands again using the new drive letter.

5. Boot Sector Repair

Bootsect Commands

- `bootsect /nt60 sys`
- `bootsect /nt60 all /force`

These commands update the boot sector and help bypass “Access Denied” errors.

6. Rebuilding the BCD (Boot Configuration Data)

Final Commands

1. `bootrec /rebuildbcd`
2. Select the Windows installation
3. Navigate to boot folder:
 - `C:`
 - `cd boot`
 - If path not found: try `D:` then `cd boot`

4. Remove file protections:
 - `attrib bcd -s -h -r`
5. Rename corrupted BCD:
 - `ren bcd bcd.old`
6. Rebuild again:
 - `bootrec /rebuildbcd`
7. Add installation to boot list → type **Y**

Final Step:

- Exit → Turn off PC
 - Remove USB recovery media
 - Boot system normally
 - “The operation completed successfully” confirms the boot records were fixed.
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Wi-Fi Connectivity Issue

Symptoms

- Network icon shows **globe / Earth icon**
- Indicates **No Internet** (NCSI: Network Connectivity Status Indicator)

Troubleshooting Steps

1. Right-click the globe icon → open Network Flyout
2. Select **Troubleshoot problems**
3. Network Adapter Troubleshooter shows warnings:
 - Wireless capability is turned off
 - Network cable unplugged or broken (not relevant for Wi-Fi)

Fix

- Toggle the **physical Wi-Fi switch** on the right side of the laptop
- Rerun troubleshooter → issue resolved
- Open **Network & Internet Settings**
- Select Wi-Fi network
- Enter secure password
- Connect successfully

Verification

- Tested DNS by reaching out to a Google server
 - Internet connection confirmed working
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