




# AI-03274 Dell Latitude 7390 Boot External NVME

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 Tags	Project
 Created time	@December 15, 2025 9:55 AM

I have a Dell Latitude 7390 2-1 running on Windows11, NVME 512 in external USB C enclosure, create a procedure (multiboot without harming Windows11) on how to install Windows Server 216 and Ubuntu for home lab experiment. I want to disconnect the external drive and then use 7390 as normal desktop with Windows 11

Got it — you want a **clean, non-intrusive multiboot setup** where your Dell Latitude 7390 stays untouched with Windows 11, and your external NVMe (USB-C enclosure) hosts Windows Server 2016 and Ubuntu for lab experiments. Here's a **step-by-step procedure** that ensures isolation and reversibility:

## Preparation

- **Hardware:** Dell Latitude 7390 2-in-1, external NVMe SSD (512 GB in USB-C enclosure).
- **Software:** Windows Server 2016 ISO, Ubuntu ISO, Rufus or Ventoy (for bootable USB creation).
- **Goal:** External drive hosts Server 2016 + Ubuntu. Internal drive remains Windows 11 only.

## Safety Principles

- Never touch the internal NVMe/SSD containing Windows 11.
- Always verify installation targets before proceeding.

- Disconnect the internal drive if paranoid (optional, but safer).
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## Procedure

### 1. Prepare Bootable Media

- Download **Windows Server 2016 ISO** and **Ubuntu ISO**.
- Use **Rufus** or **Ventoy** to create a bootable USB stick with both ISOs (Ventoy is easier for multi-ISO).

### 2. Partition External NVMe

- Plug in the external NVMe.
- In Windows 11, open **Disk Management**:
  - Delete existing partitions (if safe).
  - Create two primary partitions:
    - **Partition A**: ~250 GB NTFS (for Windows Server 2016).
    - **Partition B**: ~250 GB ext4 (for Ubuntu).
- Leave EFI System Partition (~500 MB FAT32) for bootloader.

### 3. Install Windows Server 2016

- Boot from USB (press **F12** at Dell startup → select boot device).
- Choose **Custom Install**.
- Select **Partition A** on external NVMe.
- Install Windows Server 2016 normally.
- Ensure bootloader installs to external drive (check advanced options).

### 4. Install Ubuntu

- Boot again from USB, select Ubuntu ISO.
- During installation:
  - Choose **Something Else** option.

- Select **Partition B** (ext4) for root `/`.
- Use EFI partition on external NVMe for bootloader.
- Confirm installer does **not** touch internal Windows 11 disk.

## 5. Verify Bootloader

- Both OSes should now share GRUB (Ubuntu bootloader) on external NVMe.
- GRUB will list Ubuntu + Windows Server.
- Internal Windows 11 remains untouched.

## 6. Usage Workflow

- **Normal desktop mode:** Disconnect external NVMe → Dell boots straight into Windows 11.
- **Lab mode:** Connect external NVMe → F12 → boot from external → GRUB menu → choose Ubuntu or Windows Server 2016.

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## Notes & Best Practices

- **BIOS Settings:** Ensure USB boot is enabled. Secure Boot may need to be disabled for Ubuntu.
- **Isolation:** Always double-check disk selection during install. Internal disk should remain unmodified.
- **Performance:** External NVMe over USB-C is fast enough for lab workloads, but not identical to internal PCIe speeds.
- **Recovery:** If bootloader accidentally overwrites internal disk, use Windows 11 recovery USB to repair boot.

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✓ With this setup, your Latitude 7390 acts as a **dual personality machine:**

- **Disconnected external NVMe → pure Windows 11 desktop.**
  - **Connected external NVMe → lab environment with Server 2016 + Ubuntu.**
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Would you like me to also draft a **partition layout diagram** (EFI + NTFS + ext4) so you can visually confirm before proceeding?