



Streamlined OS & Driver Installation

A comprehensive guide for IT professionals on preparing, installing, and configuring Windows 10, ensuring optimal performance and security.

Pre-Installation Essentials



Data Backup

Safeguard all critical data by backing it up to external drives or cloud storage before starting the installation.



License Verification

Confirm you possess a valid Windows 10 license key or digital entitlement for activation.



System Requirements

Ensure your system meets the minimum specifications for Windows 10, including CPU, RAM, and disk space.



Driver Collection

Gather all necessary device drivers and essential software for a smooth post-installation setup.

Crafting Your Windows 10 Installation Media

Leverage Microsoft's official Media Creation Tool to prepare a bootable USB drive for a seamless Windows 10 installation.

Download Tool

Obtain the Media Creation Tool from the official Microsoft website.

Run & Select

Execute the tool, choosing "Create installation media" and specifying language, edition, and 64-bit architecture.

Prepare USB

Use a blank USB flash drive (at least 8 GB) to ensure a clean creation process.

Automated Creation

The tool will automatically download and create your bootable Windows 10 USB drive.

Advanced Installation Media Techniques

Bootable DVD Creation

If a USB is not feasible, create a bootable DVD from the Windows 10 ISO file for installation.



USB Formatting & Compatibility

Utilize Disk Management or `'diskpart'` to format your USB drive as FAT32, ensuring compatibility with both BIOS and UEFI systems.

Handling Large Files

For `'install.wim'` files exceeding 4GB, use the DISM tool to split them for FAT32 compatibility.

Active Partition

Ensure the USB partition is marked as active to enable proper booting.

BIOS/UEFI Configuration for First Boot

1

Insert Media

Plug the bootable USB into the target computer.

2

Access BIOS/UEFI

Restart the PC and press the designated key (e.g., F2, F10, DEL) to enter the BIOS/UEFI setup.

3

Set Boot Order

Prioritize the USB drive as the first boot device in the boot options.

4

Secure Boot Adjustment

Disable Secure Boot if necessary, especially for older or custom installations.

5

Save & Reboot

Save changes and restart the computer to initiate the Windows Setup.

Initiating Windows 10 Setup

Walk through the initial setup screens to begin the Windows 10 installation process.

1 Regional Settings

Choose your preferred language, time, and keyboard layout on the setup screen.

2 Start Installation

Click the "Install Now" button to proceed.

3 Product Key Entry

Enter your Windows 10 product key, or select "I don't have a product key" if using a digital license.

4 License Acceptance

Review and accept the license terms, then choose "Custom: Install Windows only (advanced)".

Disk Partitioning and Formatting



Select Target Drive

Identify and select the specific drive where Windows 10 will be installed.

Advanced Options

Utilize "Drive options (advanced)" to delete existing partitions for a clean installation, or create and format new ones as needed.

⊗ **Important Warning:** Formatting selected partitions will permanently delete all data stored on them. Ensure data backup is complete.

Core Installation & Initial Setup

User Account Setup

File Copy & Install

Windows will copy necessary files and begin the installation, with multiple restarts possible.

Create your user account, opting for a Microsoft Account or a local account (use Shift+F10 to bypass network for local account).

1

2

3

4

Regional & Network

Follow prompts to configure your region, keyboard, and network connections.

Privacy Settings

Adjust privacy and user experience preferences to your liking.

Post-Installation: Refinement and Security

Optimize your freshly installed Windows 10 with essential drivers and the latest system updates.



Driver Installation

Install device drivers manually or leverage Windows Update for an automated process. Consider tools like Driver Booster for efficiency.



Windows Update

Immediately run Windows Update to download and apply all critical patches and security fixes for system stability.



System Configuration

Tailor system settings and install your essential productivity software and applications.

Key Takeaways & Best Practices

- **Data First:** Always backup your data before commencing any installation.
- **Official Media:** Use Microsoft's Media Creation Tool for reliable installation media.
- **Boot Order:** Verify BIOS/UEFI boot order and settings before starting the install.
- **Stay Updated:** Keep Windows updated post-installation for optimal security and performance.
- **Digital Link:** Link your digital license to a Microsoft account for simplified future activations.