# Installers Preparation and Windows 10 OS Installation

This guide covers the essential steps for preparing your system and performing a clean installation of Windows 10. Designed for IT technicians and installers, it emphasizes practices that ensure optimal performance and security.



## Pre-Installation Preparation

#### **Data Backup**

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

#### **System Requirements**

Confirm your system meets the minimum specifications: 1 GHz CPU, 1-2 GB RAM, and 20 GB free disk space.

#### **License Verification**

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

#### **Driver Collection**

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



## Creating Windows 10 Installation Media

The most straightforward method to create bootable Windows 10 installation media is by using Microsoft's official Media Creation Tool.

- Download the **Media Creation Tool** from Microsoft's official website.
- Prepare a USB flash drive (minimum 8 GB, preferably blank).
- Run MediaCreationTool.exe
  and select "Create
  installation media."

- Choose your preferred
  language, edition, and
  architecture (64-bit is
  generally recommended).
- The tool will then download
   Windows 10 files and create
   a bootable USB drive.

## Alternative Installation Media Options



#### **Bootable DVD Creation**

If a USB drive is not available, create a bootable DVD from an ISO file.



#### **USB Formatting (FAT32)**

Format the USB as FAT32 using Disk Management or `diskpart` for BIOS/UEFI compatibility.



#### **Large File Handling**

Split large install.wim files (>4GB) using the DISM tool to fit on FAT32 formatted drives.



#### **Active Partition**

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

### **BIOS/UEFI Configuration for Installation**



- Insert the bootable USB into the target PC.
- Access BIOS/UEFI setup (common keys: F2, F10, DEL during startup).
- Set the **USB drive as the first boot device** in the boot order.
- Disable Secure Boot if necessary, especially for legacy installs.
- Save changes and reboot to begin Windows Setup.

## Starting Windows 10 Installation

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#### **Setup Preferences**

Select your language, time format, and keyboard preferences on the initial setup screen.

#### **Initiate Install**

Click "Install Now" to proceed with the installation process.

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#### **Product Key Entry**

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

#### **License & Type**

Accept the license terms and choose "Custom: Install Windows only (advanced)" for a clean installation.

## Disk Partitioning and Formatting

Proper disk partitioning is crucial for a clean and efficient Windows 10 installation. This step involves preparing the hard drive for the operating system.

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#### **Data Loss Warning**

Be extremely careful: Formatting or deleting partitions will erase all data on the selected drive. Ensure backups are complete.

- Select the target drive where Windows 10 will be installed.
- Use "Drive options (advanced)" to delete existing partitions for a completely clean install.
- Create new partitions or format existing ones as needed to prepare the drive.

### **Installation Process and Initial Setup**



- Windows will copy files and install the OS, restarting multiple times during the process.
- Follow the prompts to configure your region, keyboard, and network settings.
- Create a user account, with options for a Microsoft Account or a local account (use Shift+F10 to bypass network requirements for a local account).
- Set your **privacy and experience preferences** to complete the initial setup.

## Post-Installation Configuration



#### **Driver Installation**

Install essential device drivers
manually or by running Windows
Update. Consider tools like Driver
Booster for efficiency.



#### **Windows Update**

Run Windows Update regularly to apply the latest patches and security fixes, ensuring system stability.



#### **System Settings**

Configure system settings to your preferences and install all necessary applications and software.



## Summary and Best Practices

- Backup Data: Always backup all important data before any installation.
- Official Tools: Use the official Microsoft Media Creation Tool for reliable installation media.
- BIOS/UEFI Check: Verify BIOS/UEFI boot order and settings prior to installation.
- **Stay Updated:** Keep Windows updated post-installation for security and performance.
- **Digital License Link:** Link your digital license to a Microsoft account for easy activation and re-installation.