OSDCloud - OS Deployment

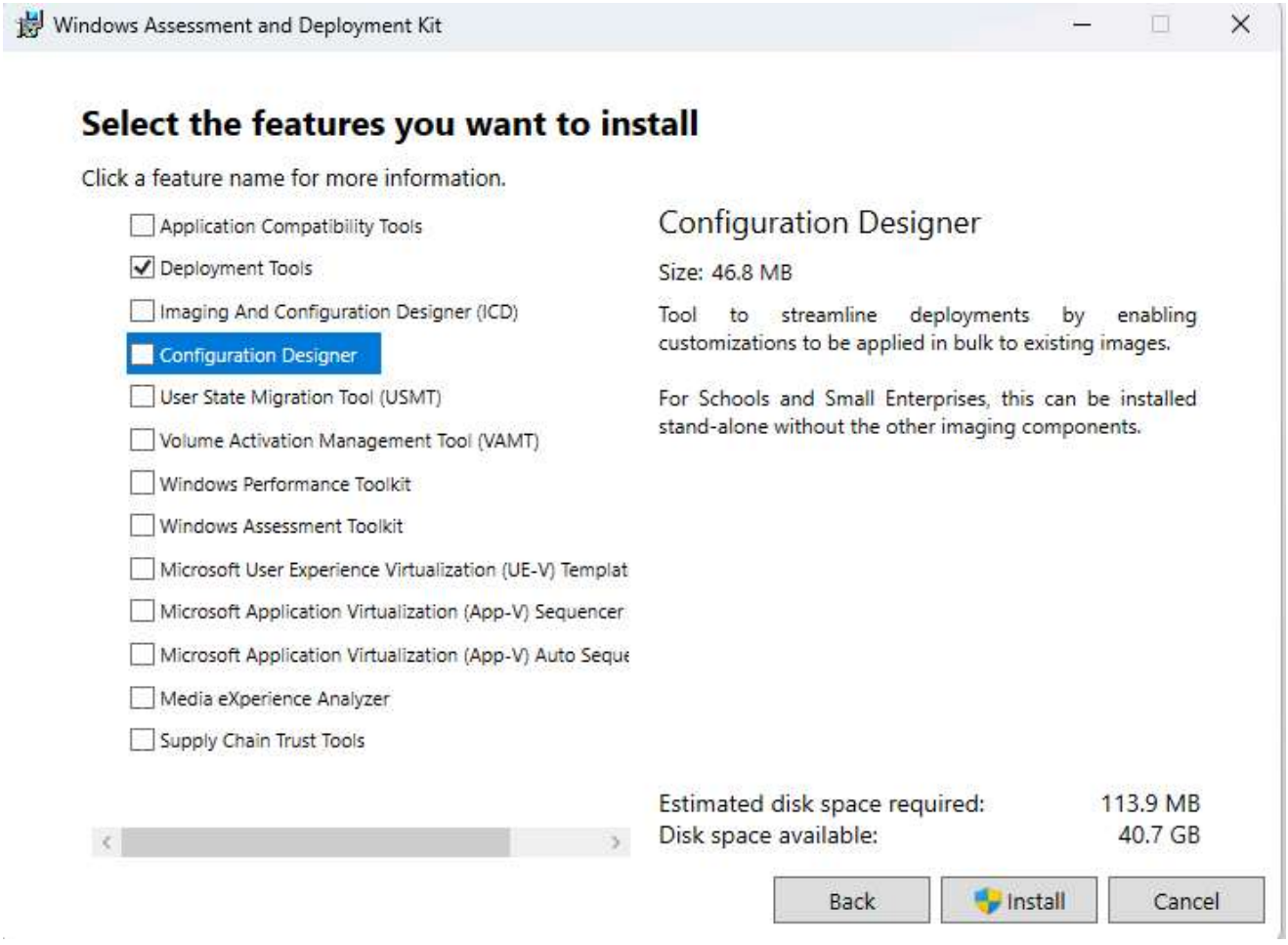
Introduction

This guide will show you how to implement OSDCloud into your enviroment for simple OS deployment

Steps

Pre-Reqs:

1. Install Windows ADK (Download and install the Windows ADK | Microsoft Learn) (Only need to select deployment tools)



2. Install WinPE Addon (Same link as above)

OSDCloud Initial Setup

1. Open Elevated Powershell
2. Install the OSD module

```
Install-Module OSD -Force
```

3. Create an OSD Template using below command
   This creates a template and sets the language and locale to UK english

   ```
   New-OSDCloudTemplate -Language en-gb -SetInputLocale en-gb
   ```

   The template is created under ProgramData\OSDCloud
4. Copy scripts to C:\ProgramData\OSDCloud\Config\Scripts\SetupComplete
   Putting them into the SetupComplete folder copies them to the C drive after the OS is deployed. The scripts must be either .cmd or use a .cmd to convert from a .txt to ps1 then run otherwise OSDCloud won't copy them
5. Create a workspace using below command
   This creates a workspace using the default template (The one you just created)

   ```
   New-OSDCloudWorkspace -WorkspacePath c:\OSDCloud\W11
   ```

6. Edit WinPE
   The below command edits the OSDCloud WinPE to create a zerotouch install that installs model specific drivers

   ```
   Edit-OSDCloudWinPE -CloudDriver * -StartOSDCloud "-OSVersion 'Windows 11' -OSBuild 25H2 -OSEdition Education -OSLanguage en-gb -OSActivation Volume -ZTI -Restart"
   ```

7. Once you see the below the process is complete

   ```
   ==========================================================================
   2025-04-01-193929 Create OSDCloud Workspace ISOs
   [19:39:29][New-WindowsAdkISO] Using existing c:\OSDCloud\MainBuild\Media\boot\etfsboot.com
   [19:39:29][New-WindowsAdkISO] Using existing c:\OSDCloud\MainBuild\Media\efi\microsoft\boot\efisys.bin
   [19:39:29][New-WindowsAdkISO] Using existing c:\OSDCloud\MainBuild\Media\efi\microsoft\boot\efisys_noprompt.bin
   [19:39:32][New-WindowsAdkISO] ISO created at C:\OSDCloud\MainBuild\OSDCloud.iso
   [19:39:33][New-WindowsAdkISO] ISO created at C:\OSDCloud\MainBuild\OSDCloud_NoPrompt.iso
   ==========================================
   2025-04-01-193933 Edit-OSDCloudWinPE Completed in 01 minutes 10 seconds
   PS C:\WINDOWS\system32>
   ```

8. In file explorer go to "**C:\OSDCloud\W11\Media\sources**" this is where the boot.wim is stored

The OSDCloud setup is now complete.

(Optional) USB Media Creation

If you need to use USB media e.g. for devices that don't have NICs and the USB adapters don't support PXE you can create them easily.

- set up OSDCloud on your device using the steps above
- download the script package and place in the OSDCloud folder structure
- run a slightly adapted version of the update command that also updates USB media

```
Edit-OSDCloudWinPE -CloudDriver * -StartOSDCloud "-OSVersion 'Windows 11' -OSBuild 25H2 -OSEdition Education -OSLanguage en-gb -OSActivation Volume -ZTI -Restart" -updateusb
```

- plug in a USB stick 8GB or larger
- run the command below to create the media

```
New-OSDCloudUSB
```

- select the disk number when prompted

Reference screenshots below show the process

```
PS C:\osdcloud\w11> Set-OSDCloudWorkspace C:\OSDCloud\W11\
C:\OSDCloud\W11\
PS C:\osdcloud\w11> Edit-OSDCloudWinPE -StartOSDCloud "-OSVersion 'Windows 11' -OSBuild 25H2 -OSEdition Education -OSLanguage
en-gb -OSActivation Volume -ZTI -Restart" -updateusb
[19/01/2026 11:45:16] Mounting C:\OSDCloud\W11\\Media\Sources\boot.wim
[19/01/2026 11:46:07] Copying C:\OSDCloud\W11\\Config to X:\OSDCloud\Config

           New File               3356        C:\OSDCloud\W11\Config\Scripts\SetupComplete\ap.txt
           New File                757        C:\OSDCloud\W11\Config\Scripts\SetupComplete\LaunchAP.cmd
           New File                 71        C:\OSDCloud\W11\Config\Scripts\SetupComplete\StartAP.txt
[19/01/2026 11:46:08] Startnet.cmd: Reset to defaults
```

```
PS C:\osdcloud\w11> new-osdcloudusb

DiskNumber BusType MediaType   SizeGB FriendlyName        Model            PartitionStyle Partitions
---------- ------- ---------   ------ ------------        -----            -------------- ----------
         1 USB     Unspecified     31 USB SanDisk 3.2Gen1  SanDisk 3.2Gen1 MBR                     2


Select a USB Disk by DiskNumber: 1
```

Revision #2

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