



Information to Add Windows 10 21H1 BaseWIMs, Language Packs and Features on Demand

WimAsAService

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Version 1.0

baseVISION

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1 Purpose of this document

This document will explain how to add Windows 10 21H1 content to WimAsAService for our on-premises customers.

The topics covered in this document are:

- 21H1 baseWIM implementation
- Language Packs
- Features on Demand

2 Overview

2.1 What's New

Microsoft released a new version of Windows 10 with the version number 21H1. The new version of Windows has exactly the same build number as it was in version 2004. This is not something new, since this was the same for 1903 and 1909 already. The build number for 21H1 is 19041 when you download it. That means that you will run into problems when importing the baseWIM into MDT. Once you install the 21H1 version of Windows the build number switches to 19043 during staging, which affects the installation steps of the language packs and features on demand. Within the task sequence, language packs and features on demand get installed according to the build number present at this step. Because the version 21H1 uses the exact same LP and FoD as 2004, you have to copy the folder containing the LP and FoD of 2004 and rename it to 19043.

2.2 Required scripts

The Required scripts are stored in the WimAsAServiceLogic folder.
Usually under E:\WimAsAServiceLogic.

The following scripts are provided to help adding the ISO files to WimAsAService. When importing files for a new Windows Version, you need to follow the order described below.

Order	Name	Description
1	AutoImportBaseWIM.ps1	Adds Multiple ISO files of the selected folder and its subfolders to MDT. The Version (007) of this Script is required since 1909 to import 21H1 properly. If you don't have this Version pleas contact us.
2	AutoImporterLanguagePacks.ps1	You don't have to add specific Language Packs for the Version 21H1 of Windows. A copy/rename task of the Language Packs is enough.
3	AutoImporterFeaturesOnDemand.ps1	You don't have to add specific Features on Demand for the Version 21H1 of Windows. A copy/rename task of the Features on Demand is enough.

3 Usage of the scripts

Attention: All these scripts need to be opened in a PowerShell ISE that is running with administrator permissions.

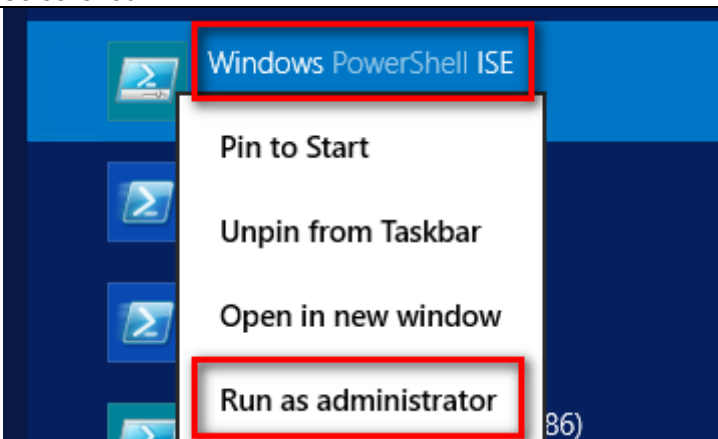

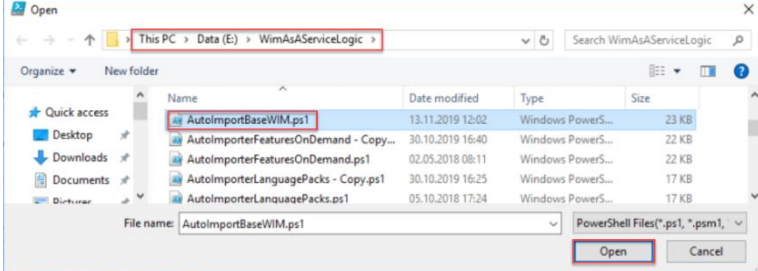
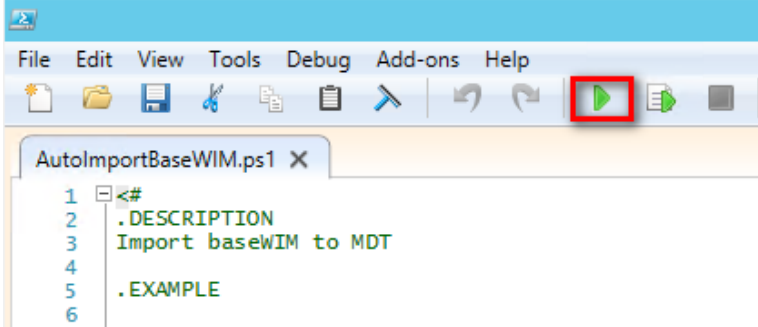
3.1 AutoImportBaseWIM.ps1

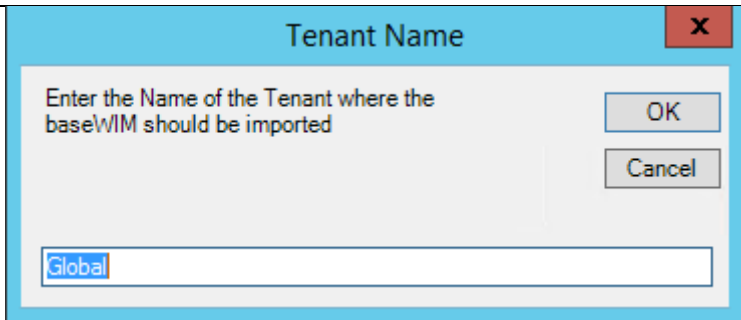
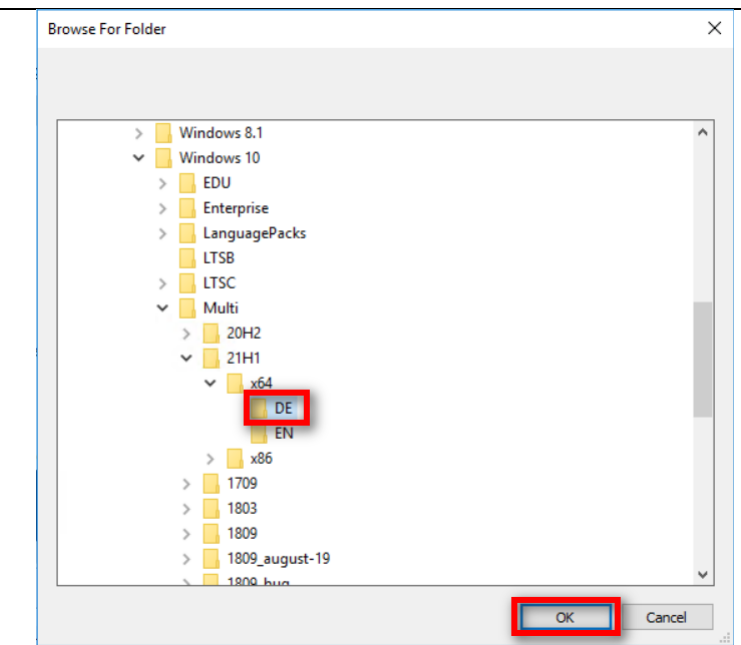
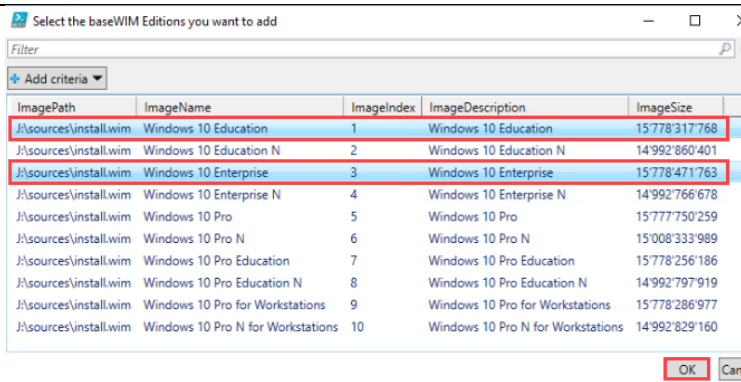
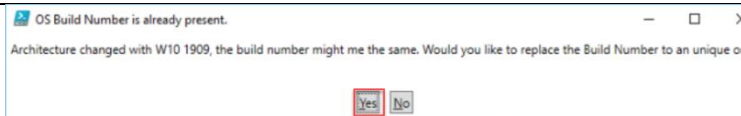
Attention: This script imports the baseWIM ISOs stored in the selected folders and all its subfolders. The choice of the folder should be well-considered and double importing of the same WIM should be prevented.

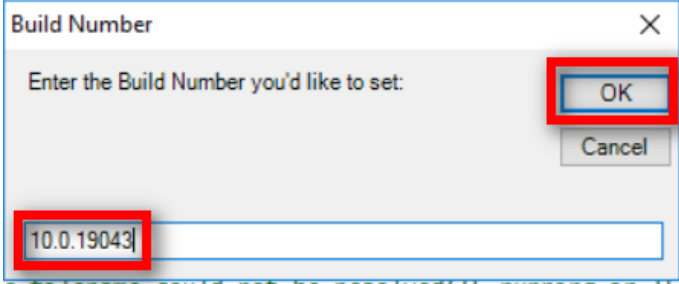
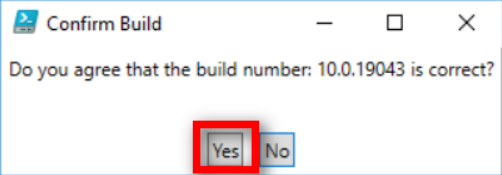
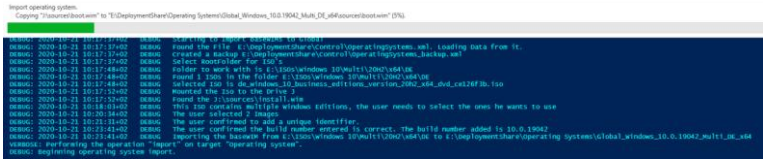
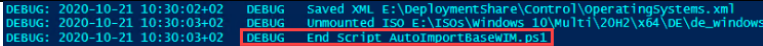
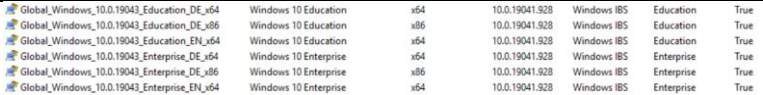

Attention: You have to execute these steps 4 Times to add 2 Languages for Example EN and DE in x64 and x86 Platform. Otherwise some ISOs will be skipped even if they are in the same folder.

This script writes to the following logfile:

"E:\WimAsAServiceLogic\Logos\AutoImportBaseWIM.log"

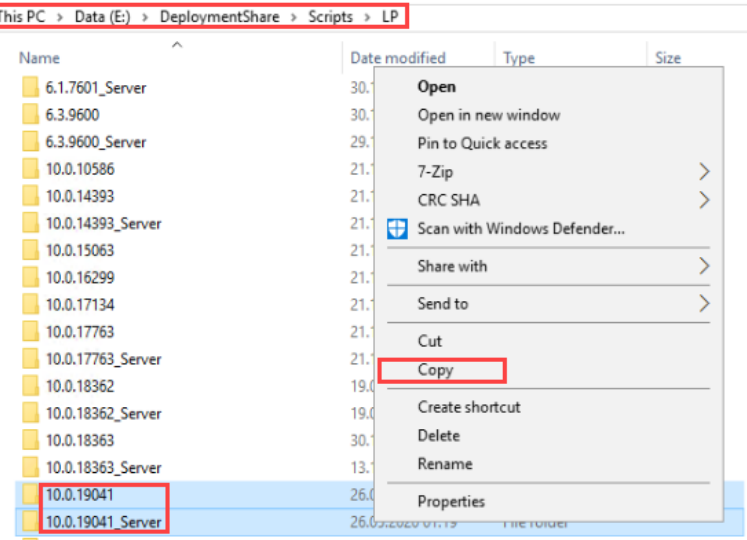
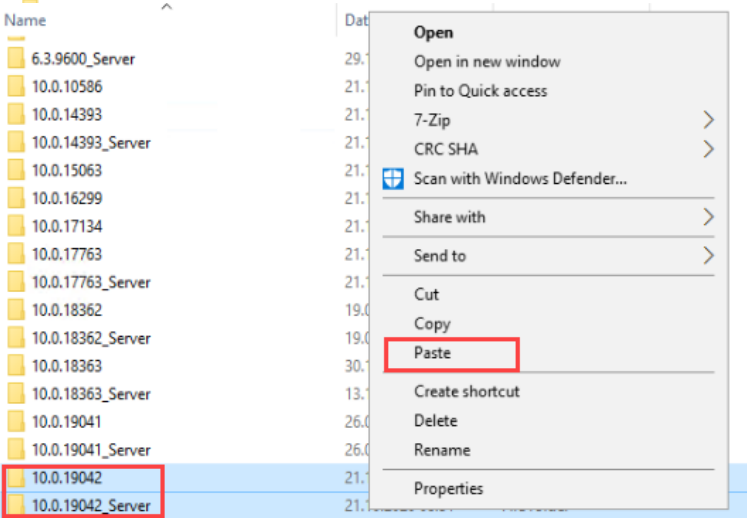
Step	Screenshot	Task
1.		Open PowerShell ISE with administrator privileges.
2.		Click on the "Open" button.
3.		Browse to your WimAsAServiceLogic folder and select "AutoImportBaseWIM.ps1". Click on the "Open" button.
4.		Click on the "Play" button.

5.		<p>Here you can tell the script for which tenant it should import the WIM files.</p> <p>“Global” grants all Tenants access to that baseWIM.</p> <p>If you want to restrict that baseWIM to one Tenant, enter its name here.</p> <p>When you’re ready to continue click on “OK”.</p> <p>Attention: On your screen this window/pop up could be covered by the ISE Window.</p>																																																							
6.		<p>Now browse to the folder that contains the ISO file for the Windows 10 21H1 baseWIM you want to add.</p> <p>When you’re ready to continue click on “OK”.</p> <p>Attention: Make sure to only have one multi-edition .iso is inside the folder. It might be that not both of it will be added to MDT if two .iso files are in the Folder.</p> <p>Attention: The script will also work with ISO files in subfolder of the selected folder. Not only with files in the directly selected folder.</p>																																																							
7.	 <table><thead><tr><th>ImagePath</th><th>ImageName</th><th>ImageIndex</th><th>ImageDescription</th><th>ImageSize</th></tr></thead><tbody><tr><td>J:\sources\install.wim</td><td>Windows 10 Education</td><td>1</td><td>Windows 10 Education</td><td>15778'317'768</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Education N</td><td>2</td><td>Windows 10 Education N</td><td>14'992'860'401</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Enterprise</td><td>3</td><td>Windows 10 Enterprise</td><td>15778'471'763</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Enterprise N</td><td>4</td><td>Windows 10 Enterprise N</td><td>14'992'766'678</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Pro</td><td>5</td><td>Windows 10 Pro</td><td>15777'750'259</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Pro N</td><td>6</td><td>Windows 10 Pro N</td><td>15'008'333'989</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Pro Education</td><td>7</td><td>Windows 10 Pro Education</td><td>15778'256'186</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Pro Education N</td><td>8</td><td>Windows 10 Pro Education N</td><td>14'992'797'919</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Pro for Workstations</td><td>9</td><td>Windows 10 Pro for Workstations</td><td>15778'286'977</td></tr><tr><td>J:\sources\install.wim</td><td>Windows 10 Pro N for Workstations</td><td>10</td><td>Windows 10 Pro N for Workstations</td><td>14'992'829'160</td></tr></tbody></table>	ImagePath	ImageName	ImageIndex	ImageDescription	ImageSize	J:\sources\install.wim	Windows 10 Education	1	Windows 10 Education	15778'317'768	J:\sources\install.wim	Windows 10 Education N	2	Windows 10 Education N	14'992'860'401	J:\sources\install.wim	Windows 10 Enterprise	3	Windows 10 Enterprise	15778'471'763	J:\sources\install.wim	Windows 10 Enterprise N	4	Windows 10 Enterprise N	14'992'766'678	J:\sources\install.wim	Windows 10 Pro	5	Windows 10 Pro	15777'750'259	J:\sources\install.wim	Windows 10 Pro N	6	Windows 10 Pro N	15'008'333'989	J:\sources\install.wim	Windows 10 Pro Education	7	Windows 10 Pro Education	15778'256'186	J:\sources\install.wim	Windows 10 Pro Education N	8	Windows 10 Pro Education N	14'992'797'919	J:\sources\install.wim	Windows 10 Pro for Workstations	9	Windows 10 Pro for Workstations	15778'286'977	J:\sources\install.wim	Windows 10 Pro N for Workstations	10	Windows 10 Pro N for Workstations	14'992'829'160	<p>Select the Editions according what you’d like to add to WimAsAService. Once doublechecked your selection, press “OK”.</p> <p>Note: Multiselecting is available for the Editions.</p>
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8.		<p>If the script verified that the build number is already present this pop-up appears. Choose to add a unique build number. But only if you’re sure you’d like to add it.</p>																																																							

9.		In the next Window the unique build number can be specified. Chose the build number the OS has after a clean installation. In case of Windows 10 21H1 it is "10.0.19043" . Note: The textfield is prefilled with the value the script gathered from the .iso file.
10.		Confirm you've entered the custom build number correctly with "Yes" . <i>Otherwise you can still correct the build number with a click on "No".</i>
11.		Next, the script imports all the install WIMs you selected to MDT. This will take some time please be patient. Additional information: The script is automatically mounting each ISO to a virtual CD-ROM Drive and is unmounting it again once it has imported the WIMs from it.
12.		Once the script has finished it will tell you.
13.		Check the Deployment Workbench under Global to see if you Operating Systems have been added properly. Note: Maybe you need to press "F5" to refresh the list.
14.		You can now log on to the WimAsAService website and add a new image type. Under "Select base WIM" you should now be able to find the WIM files you just added. Make sure that the unwanted OS are not in the selection.

3.2 AutoImporterLanguagePacks.ps1

This script is not needed for Windows 10 Version 21H1 because it has the same language packs as Version 2004. Once Windows 10 21H1 is installed it has the build number 19043. Because the task sequence searches for language packs with this build number, the old Language Pack folder of Windows 10 2004 can be copied. After the copy job you must adjust the name of the folder to the corresponding build number of 21H1 after staging.

Step	Screenshot	Task
15.		Navigate to the path "E:\DeploymentShare\Scripts\LP". In there select the folders containing the Language Packs and Feature on Demand from Windows 10/Server 2004. Right click it and select to copy those folders.
16.		Within the same folder select to paste the two folders copied before. After the copy job is done, make sure to rename it. It should have the same name as Windows 10/ Server 21H1 has after staging. "10.0.19043" or "10.0.19043_Server" for the Server OS.

3.3 AutoImporterFeaturesOnDemand.ps1

Skip this step because the features on demand are part of the Language Packs folder. You should have copied this folder already and renamed it with the according build number. Therefor this step is obsolete for this Windows build.

4 Version history

Wann	Version	Wer	Beschreibung
21.10.2020	0.1	NBO	First Version
30.10.2020	1.0	WBA	Review