Windows 11 22H2

Detailed explanation of how to package multi-language production process offline in Windows 11 22H2. In this article, the production is divided into multiple parts.

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## **[deployment image](#_top)**

### **[Prerequisites](#_Custom_deployment_image)**

#### [**ISO tools**](#_PREREQUISITES)

Use a software that can edit ISO files, such as: PowerISO, DAEMON Tools, ISO Workshop;

#### [**Get related packages**](#_PREREQUISITES)

Learn "Attachment: OS" and view the "Windows 11" item.

##### [**System installation package**](#_PREREQUISITES)

* 1. Prepare: en-us\_windows\_11\_business\_editions\_version\_22h2\_x64\_dvd\_17a08ce3.iso
  2. Unzip to: D:\en-us\_windows\_11\_business\_editions\_version\_22h2\_x64\_dvd\_17a08c
  3. After decompression is complete, change the directory en-us\_windows\_11\_business\_editions\_version\_22h2\_x64\_dvd\_17a08c change to D:\OS11
  4. All scripts and all paths are set to D:\OS11 as the image source.

##### [**Language pack**](#_PREREQUISITES)

* 1. Download language pack: [22621.1.220506-1250.ni\_release\_amd64fre\_CLIENT\_LOF\_PACKAGES\_OEM.iso](https://software-static.download.prss.microsoft.com/dbazure/988969d5-f34g-4e03-ac9d-1f9786c66749/22621.1.220506-1250.ni_release_amd64fre_CLIENT_LOF_PACKAGES_OEM.iso)
  2. Select any website and open:
* <https://uupdump.net>
* <https://uup.ee>
  + 1. After opening, search for keywords: 22621.382, select from the search results: Windows 11, version 22H2 (22621.382) amd64
    2. After opening, select "All files";
    3. Search the green part in the "All Files" page and download:
       1. Applies to: Install.wim（ 1 item ）
          1. Media
       2. Applies to: WinRE.wim, none yet
       3. Applies to: Boot.wim, none yet
    4. After downloading all the files, scroll to the bottom of the page, download and run "Generate Rename Script (Windows)"
  1. Use ISO editing software, edit 22621.1.220506-1250.ni\_release\_amd64fre\_CLIENT\_LOF\_PACKAGES\_OEM.iso, and add the downloaded file to the [ISO]:\LanguagesAndOptionalFeatures directory;

1. [**InBox Apps**](#_PREREQUISITES)
   1. Learn "[Add languages to a Windows 11 image](https://learn.microsoft.com/en-us/azure/virtual-desktop/windows-11-language-packs)"
   2. Download: [22621.1778.230511-2102.ni\_release\_svc\_prod3\_amd64fre\_InboxApps.iso](https://software-static.download.prss.microsoft.com/dbazure/888969d5-f34g-4e03-ac9d-1f9786c66749/22621.1778.230511-2102.ni_release_svc_prod3_amd64fre_InboxApps.iso)
   3. Download: [22621.1.220506-1250.ni\_release\_amd64fre\_InboxApps.iso](https://software-static.download.prss.microsoft.com/dbazure/988969d5-f34g-4e03-ac9d-1f9786c66749/22621.1.220506-1250.ni_release_amd64fre_InboxApps.iso) finally, extract the following files and save them to the desktop:
      1. Microsoft.HEVCVideoExtension\_8wekyb3d8bbwe.x64.appx
      2. Microsoft.HEVCVideoExtension\_8wekyb3d8bbwe.x64.xml
   4. Use the ISO editing tool to edit 22621.1778.230511-2102.ni\_release\_svc\_prod3\_amd64fre\_InboxApps.iso and add the extracted files to the [ISO]:\packages directory;
2. When running the PS command line:
3. Optional "Terminal" or "PowerShell ISE", if "Terminal" is not installed, please go to: <https://github.com/microsoft/terminal/releases> After downloading;
4. Open "Terminal" or "PowerShell ISE" as administrator, it is recommended to set the PowerShell execution policy: bypass, PS command line:

Set-ExecutionPolicy -ExecutionPolicy Bypass -Force

1. In this article, PS command line, green part, please copy it, paste it into the "Terminal" dialog box, press Enter and start running;
2. When there is .ps1, right-click the file and select Run with PowerShell, or copy the path and paste it into Terminal to run.

### **[Language Pack: Extraction](#_Custom_deployment_image)**

1. [**Prepare the language pack**](#_2、提取所需语言包)

Mount 22621.1.220506-1250.ni\_release\_amd64fre\_CLIENT\_LOF\_PACKAGES\_OEM.iso or unzipped to any location;

1. [**Execute the extract command**](#_2、提取所需语言包)

* Extraction language: Chinese Simplified - China
* Language tag: zh-CN
* Extract language packs for scopes: Install.wim, Boot.wim, WinRE.wim
* Auto = automatically search all local disks, default;
* Customize the path, for example, specify the E drive: $ISO = "E:\"

Copy the code or view the source file: Extract.ps1 ( [Local](Code/Extract.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Extract.ps1) )

$ISO = "Auto"

Function Extract\_Language

{

param

(

$Package,

$SaveTo,

$NewPath

)

New-Item -Path $SaveTo -ItemType Directory -ErrorAction SilentlyContinue | Out-Null

if ($NewPath -eq "Auto") {

Get-PSDrive -PSProvider FileSystem -ErrorAction SilentlyContinue | ForEach-Object {

ForEach ($item in $Language) {

$TempFilePath = Join-Path -Path $\_.Root -ChildPath $item -ErrorAction SilentlyContinue

if (Test-Path $TempFilePath -PathType Leaf) {

Write-host "`n Find: " -NoNewLine; Write-host $TempFilePath -ForegroundColor Green

Write-host " Copy to: " -NoNewLine; Write-host $SaveTo

Copy-Item -Path $TempFilePath -Destination $SaveTo -Force

}

}

}

} else {

ForEach ($item in $Language) {

$TempFilePath = Join-Path -Path $NewPath -ChildPath $item -ErrorAction SilentlyContinue

Write-host "`n Find: " -NoNewline; Write-host $TempFilePath -ForegroundColor Green

if (Test-Path $TempFilePath -PathType Leaf) {

Write-host " Copy to: " -NoNewLine; Write-host $SaveTo

Copy-Item -Path $TempFilePath -Destination $SaveTo -Force

} else {

Write-host " Not found"

}

}

}

Write-host "`n Verify the language pack file"

ForEach ($item in $Package) {

$Path = "$($SaveTo)\$([IO.Path]::GetFileName($item))"

if (Test-Path $Path -PathType Leaf) {

Write-host " Discover: " -NoNewLine

Write-host $Path -ForegroundColor Green

} else {

Write-host " Not found: " -NoNewLine

Write-host $Path -ForegroundColor Red

}

}

}

$Language = @(

"LanguagesAndOptionalFeatures\Microsoft-Windows-LanguageFeatures-Fonts-Hans-Package~31bf3856ad364e35~AMD64~~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-Client-Language-Pack\_x64\_zh-CN.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-LanguageFeatures-Basic-zh-CN-Package~31bf3856ad364e35~AMD64~~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-LanguageFeatures-Handwriting-zh-CN-Package~31bf3856ad364e35~AMD64~~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-LanguageFeatures-OCR-zh-CN-Package~31bf3856ad364e35~AMD64~~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-LanguageFeatures-Speech-zh-CN-Package~31bf3856ad364e35~AMD64~~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-LanguageFeatures-TextToSpeech-zh-CN-Package~31bf3856ad364e35~AMD64~~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-MediaPlayer-Package-AMD64-zh-CN.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-MediaPlayer-Package-wow64-zh-CN.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~wow64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"

"LanguagesAndOptionalFeatures\Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"

)

Extract\_Language -Package $Language -SaveTo "D:\OS11\_Custom\Install\Install\Language\zh-CN" -NewPath $ISO

$Language = @(

"Windows Preinstallation Environment\x64\WinPE\_OCs\WinPE-FontSupport-zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\lp.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-securestartup\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-atbroker\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-audiocore\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-audiodrivers\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-enhancedstorage\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-narrator\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-scripting\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-speech-tts\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-srh\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-srt\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-wds-tools\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-wmi\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-appxdeployment\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-appxpackaging\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-storagewmi\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-wifi\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-windowsupdate\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-rejuv\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-opcservices\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-hta\_zh-CN.cab"

)

Extract\_Language -Package $Language -SaveTo "D:\OS11\_Custom\Install\WinRE\Language\zh-CN" -NewPath $ISO

$Language = @(

"Windows Preinstallation Environment\x64\WinPE\_OCs\WinPE-FontSupport-zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\lp.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\WinPE-Setup\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\WINPE-SETUP-CLIENT\_zh-CN.CAB"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-securestartup\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-atbroker\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-audiocore\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-audiodrivers\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-enhancedstorage\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-narrator\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-scripting\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-speech-tts\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-srh\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-srt\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-wds-tools\_zh-CN.cab"

"Windows Preinstallation Environment\x64\WinPE\_OCs\zh-CN\winpe-wmi\_zh-CN.cab"

)

Extract\_Language -Package $Language -SaveTo "D:\OS11\_Custom\Boot\Boot\Language\zh-CN" -NewPath $ISO

### **[Customize the deployment image](#_Custom_deployment_image)**

#### **[Custom deployment image: Install.wim](#_INSTALL_LANGUAGE_PACK)**

##### [**View Install.wim details**](#_3.1__)

Image name, image description, image size, architecture, version, index number, etc.

$ViewFile = "D:\OS11\Sources\Install.wim"

Get-WindowsImage -ImagePath $ViewFile | Foreach-Object {

Get-WindowsImage -ImagePath $ViewFile -index $\_.ImageIndex

}

##### **[Specify the path to mount Install.wim](#_3.1__)**

New-Item -Path "D:\OS11\_Custom\Install\Install\Mount" -ItemType directory -ea SilentlyContinue

**LOOP OPERATING AREA, START,**

1. [**Start mounting Install.wim**](#_3.1__)

Default index number: 1

$Index = "1"

Mount-WindowsImage -ImagePath "D:\OS11\sources\install.wim" -Index $Index -Path "D:\OS11\_Custom\Install\Install\Mount"

PROCESS FILES WITHIN THE INSTALL.WIM IMAGE, OPTIONALLY, START,

###### **[Custom deployment image: WinRE.wim](#_3.1__)**

WARNING:

* WinRE.wim is a file within the Install.wim image;
* When Install.wim has multiple index numbers, only process any WinRE.wim;
* Synchronize to all index numbers to reduce the size of Install.wim; learn "[How to batch replace WinRE.wim in all index numbers in Install.wim](#_如何批量替换_Install.wim_里的所有索引号里的)".
  + 1. [**View WinRE.wim details**](#_3.1.2.1__)

Image name, image description, image size, architecture, version, index number, etc.

$ViewFile = "D:\OS11\_Custom\Install\Install\Mount\Windows\System32\Recovery\WinRE.wim"

Get-WindowsImage -ImagePath $ViewFile | Foreach-Object {

Get-WindowsImage -ImagePath $ViewFile -index $\_.ImageIndex

}

* + 1. [**Specify the path to mount WinRE.wim**](#_3.1.2.1__)

New-Item -Path "D:\OS11\_Custom\Install\WinRE\Mount" -ItemType directory -ea SilentlyContinue

* + 1. [**Start mounting WinRE.wim**](#_3.1.2.1__)

Default index number: 1

$Index = "1"

Mount-WindowsImage -ImagePath "D:\OS11\_Custom\Install\Install\Mount\Windows\System32\Recovery\WinRE.wim" -Index $Index -Path "D:\OS11\_Custom\Install\WinRE\Mount"

* + 1. **[Language pack](#_3.1.2.1__)**

Automatically install language packs: Match by component. After successful matching, install the corresponding local language pack file.

* + - 1. **[Language pack: add](#_Language_pack)**

Copy the code or view the source file: WinRE.Instl.lang.ps1 ( [Local](Code/Install/WinRE/WinRE.Instl.lang.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/WinRE/WinRE.Instl.lang.ps1) )

$Mount = "D:\OS11\_Custom\Install\WinRE\Mount"

$Sources = "D:\OS11\_Custom\Install\WinRE\Language\zh-CN"

$Initl\_install\_Language\_Component = @()

Get-WindowsPackage -Path $Mount | ForEach-Object {

$Initl\_install\_Language\_Component += $\_.PackageName

}

Add-WindowsPackage -Path $Mount -PackagePath "$($Sources)\WinPE-FontSupport-zh-CN.cab"

$Language\_List = @(

@{ Match = "\*WinPE-LanguagePack-Package\*"; File = "lp.cab"; }

@{ Match = "\*SecureStartup\*"; File = "winpe-securestartup\_zh-CN.cab"; }

@{ Match = "\*ATBroker\*"; File = "winpe-atbroker\_zh-CN.cab"; }

@{ Match = "\*AudioCore\*"; File = "winpe-audiocore\_zh-CN.cab"; }

@{ Match = "\*AudioDrivers\*"; File = "winpe-audiodrivers\_zh-CN.cab"; }

@{ Match = "\*EnhancedStorage\*"; File = "winpe-enhancedstorage\_zh-CN.cab"; }

@{ Match = "\*Narrator\*"; File = "winpe-narrator\_zh-CN.cab"; }

@{ Match = "\*scripting\*"; File = "winpe-scripting\_zh-CN.cab"; }

@{ Match = "\*Speech-TTS\*"; File = "winpe-speech-tts\_zh-CN.cab"; }

@{ Match = "\*srh\*"; File = "winpe-srh\_zh-CN.cab"; }

@{ Match = "\*srt\*"; File = "winpe-srt\_zh-CN.cab"; }

@{ Match = "\*wds-tools\*"; File = "winpe-wds-tools\_zh-CN.cab"; }

@{ Match = "\*-WMI-Package\*"; File = "winpe-wmi\_zh-CN.cab"; }

@{ Match = "\*WinPE-AppxPackaging\*"; File = "winpe-appxpackaging\_zh-CN.cab"; }

@{ Match = "\*StorageWMI\*"; File = "winpe-storagewmi\_zh-CN.cab"; }

@{ Match = "\*WiFi\*"; File = "winpe-wifi\_zh-CN.cab"; }

@{ Match = "\*rejuv\*"; File = "winpe-rejuv\_zh-CN.cab"; }

@{ Match = "\*opcservices\*"; File = "winpe-opcservices\_zh-CN.cab"; }

@{ Match = "\*hta\*"; File = "winpe-hta\_zh-CN.cab"; }

)

ForEach ($Rule in $Language\_List) {

Write-host "`n Rule name: $($Rule.Match)" -ForegroundColor Yellow; Write-host " $('-' \* 80)"

ForEach ($Component in $Initl\_install\_Language\_Component) {

if ($Component -like "\*$($Rule.Match)\*") {

Write-host " Component name: " -NoNewline

Write-host $Component -ForegroundColor Green

Write-host " Language pack file: " -NoNewline

Write-host $Rule.File -ForegroundColor Green

Write-Host " Installing ".PadRight(22) -NoNewline

try {

Add-WindowsPackage -Path $Mount -PackagePath "$($Sources)\$($Rule.File)" | Out-Null

Write-host "Finish" -ForegroundColor Green

} catch {

Write-host "Failed" -ForegroundColor Red

}

break

}

}

}

* + - 1. **Offline image language: change**
         1. **Change default language, regional settings, and other international settings**

Dism /Image:"D:\OS11\_Custom\Install\WinRE\Mount" /Set-AllIntl:zh-CN

* + - * 1. **View available language settings**

Dism /Image:"D:\OS11\_Custom\Install\WinRE\Mount" /Get-Intl

* + - 1. **[Components](#_Language_pack)**
         1. [**View**](#_Components_2)

Get-WindowsPackage -Path "D:\OS11\_Custom\Install\WinRE\Mount" | Out-GridView

* + - * 1. [**Export to csv**](#_Components_2)

$SaveTo = "D:\OS11\_Custom\Install\WinRE\Report.$(Get-Date -Format "yyyyMMddHHmmss").csv"

Get-WindowsPackage -Path "D:\OS11\_Custom\Install\WinRE\Mount" | Export-CSV -NoType -Path $SaveTo

Write-host $SaveTo -ForegroundColor Green

* + 1. [**Update, optional**](#_3.1.2.1__)
    2. [**Driver, optional**](#_3.1.2.1__)
    3. [**Save image**](#_3.1.2.1__)

Save-WindowsImage -Path "D:\OS11\_Custom\Install\WinRE\Mount"

* + 1. [**Unmount image**](#_3.1.2.1__)

Dismount-WindowsImage -Path "D:\OS11\_Custom\Install\WinRE\Mount" -Discard

* + 1. [**After rebuilding WinRE.wim, the file size can be reduced**](#_3.1.2.1__)

Copy the code or view the source file: WinRE.Rebuild.ps1 ( [Local](Code/Install/WinRE/WinRE.Rebuild.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/WinRE/WinRE.Rebuild.ps1) )

$FileName = "D:\OS11\_Custom\Install\Install\Mount\Windows\System32\Recovery\WinRE.wim"

Get-WindowsImage -ImagePath $Filename -ErrorAction SilentlyContinue | ForEach-Object {

Write-Host " Image name: " -NoNewline

Write-Host $\_.ImageName -ForegroundColor Yellow

Write-Host " The index number: " -NoNewline

Write-Host $\_.ImageIndex -ForegroundColor Yellow

Write-Host "`n Rebuild".PadRight(28) -NoNewline

Export-WindowsImage -SourceImagePath $Filename -SourceIndex $\_.ImageIndex -DestinationImagePath "$($FileName).New" -CompressionType max

Write-Host "Finish`n" -ForegroundColor Green

}

if (Test-Path "$($FileName).New" -PathType Leaf) {

Remove-Item -Path $Filename

Move-Item -Path "$($FileName).New" -Destination $Filename

Write-Host "Finish" -ForegroundColor Green

} else {

Write-host "Failed" -ForegroundColor Red

}

* + 1. [**Backup WinRE.wim**](#_3.1.2.1__)

Copy the code or view the source file: WinRE.Backup.ps1 ( [Local](Code/Install/WinRE/WinRE.Backup.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/WinRE/WinRE.Backup.ps1) )

$WimLibPath = "D:\OS11\_Custom\Install\Install\Update\Winlib"

$FileName = "D:\OS11\_Custom\Install\Install\Mount\Windows\System32\Recovery\WinRE.wim"

New-Item -Path $WimLibPath -ItemType Directory -ea SilentlyContinue

Copy-Item -Path $FileName -Destination $WimLibPath -Force

* + 1. [**Replace WinRE.wim within the Install.wim image**](#_3.1.2.1__)
* After each mount Install.wim "[Replace WinRE.wim](#_替换_WinRE.wim)";
* Learn "[Get all index numbers of Install.wim and replace the old WinRE.wim](#_获取_Install.wim_所有索引号后并替换旧的)".

Process the files in the Install.wim image and end.

##### **[Language pack](#_3.1__)**

Automatically install language packs: Match by component. After successful matching, install the corresponding local language pack file.

###### **[Language pack: add](#_After_executing_the_1)**

Copy the code or view the source file: Install.Instl.lang.ps1 ( [Local](Code/Install/Install.Instl.lang.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/Install.Instl.lang.ps1) )

$Mount = "D:\OS11\_Custom\Install\Install\Mount"

$Sources = "D:\OS11\_Custom\Install\Install\Language\zh-CN"

$Initl\_install\_Language\_Component = @()

Get-WindowsPackage -Path $Mount | ForEach-Object {

$Initl\_install\_Language\_Component += $\_.PackageName

}

Add-WindowsPackage -Path $Mount -PackagePath "$($Sources)\Microsoft-Windows-LanguageFeatures-Fonts-Hans-Package~31bf3856ad364e35~amd64~~.cab"

$Language\_List = @(

@{ Match = "\*Client-LanguagePack-Package\*"; File = "Microsoft-Windows-Client-Language-Pack\_x64\_zh-CN.cab"; }

@{ Match = "\*LanguageFeatures-Basic\*"; File = "Microsoft-Windows-LanguageFeatures-Basic-zh-CN-Package~31bf3856ad364e35~amd64~~.cab"; }

@{ Match = "\*Handwriting\*"; File = "Microsoft-Windows-LanguageFeatures-Handwriting-zh-CN-Package~31bf3856ad364e35~amd64~~.cab"; }

@{ Match = "\*OCR\*"; File = "Microsoft-Windows-LanguageFeatures-OCR-zh-CN-Package~31bf3856ad364e35~amd64~~.cab"; }

@{ Match = "\*LanguageFeatures-Speech\*"; File = "Microsoft-Windows-LanguageFeatures-Speech-zh-CN-Package~31bf3856ad364e35~amd64~~.cab"; }

@{ Match = "\*TextToSpeech\*"; File = "Microsoft-Windows-LanguageFeatures-TextToSpeech-zh-CN-Package~31bf3856ad364e35~amd64~~.cab"; }

@{ Match = "\*InternetExplorer\*"; File = "Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"; }

@{ Match = "\*Notepad\*amd64\*"; File = "Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"; }

@{ Match = "\*Notepad\*wow64\*"; File = "Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"; }

@{ Match = "\*MediaPlayer\*amd64\*"; File = "Microsoft-Windows-MediaPlayer-Package-AMD64-zh-CN.cab"; }

@{ Match = "\*MediaPlayer\*wow64\*"; File = "Microsoft-Windows-MediaPlayer-Package-wow64-zh-CN.cab"; }

@{ Match = "\*PowerShell\*amd64\*"; File = "Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~amd64~zh-CN~.cab"; }

@{ Match = "\*PowerShell\*wow64\*"; File = "Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"; }

@{ Match = "\*Printing\*PMCPPC\*amd64\*"; File = "Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"; }

@{ Match = "\*StepsRecorder\*amd64\*"; File = "Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~zh-CN~.cab"; }

@{ Match = "\*StepsRecorder\*wow64\*"; File = "Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~wow64~zh-CN~.cab"; }

@{ Match = "\*WMIC\*FoD\*Package\*amd64\*"; File = "Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~AMD64~zh-CN~.cab"; }

@{ Match = "\*WMIC\*FoD\*Package\*wow64\*"; File = "Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"; }

@{ Match = "\*WordPad\*amd64\*"; File = "Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~zh-CN~.cab"; }

@{ Match = "\*WordPad\*wow64\*"; File = "Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~zh-CN~.cab"; }

)

ForEach ($Rule in $Language\_List) {

Write-host "`n Rule name: $($Rule.Match)" -ForegroundColor Yellow; Write-host " $('-' \* 80)"

ForEach ($Component in $Initl\_install\_Language\_Component) {

if ($Component -like "\*$($Rule.Match)\*") {

Write-host " Component name: " -NoNewline

Write-host $Component -ForegroundColor Green

Write-host " Language pack file: " -NoNewline

Write-host $Rule.File -ForegroundColor Green

Write-Host " Installing ".PadRight(22) -NoNewline

try {

Add-WindowsPackage -Path $Mount -PackagePath "$($Sources)\$($Rule.File)" | Out-Null

Write-host "Finish" -ForegroundColor Green

} catch {

Write-host "Failed" -ForegroundColor Red

}

break

}

}

}

###### **Offline image language: change**

* Starting Windows 11, the [default System UI Language](https://learn.microsoft.com/en-us/windows/win32/intl/user-interface-language-management) set by DISM is left unaltered on all editions except for Home edition. For [all commercial editions](https://www.microsoft.com/windowsforbusiness/compare) the language chosen during the Out-of-Box Experience (OOBE) is set as the [System Preferred UI language](https://learn.microsoft.com/en-us/windows/win32/intl/user-interface-language-management) and Windows will be displayed in this language and for Home edition the language chosen at OOBE will continue to be the default System UI Language.
* As of Windows 10, version 2004, if an .appx-based Language Experience Pack (LXP) backed language is passed as an argument then the language will be set as the System Preferred UI language and its parent language will be set as the Default System UI language. In prior versions only .cab based language packs were supported.
  + 1. **Change default language, regional settings, and other international settings**

Dism /Image:"D:\OS11\_Custom\Install\Install\Mount" /Set-AllIntl:zh-CN

* + 1. **View available language settings**

Dism /Image:"D:\OS11\_Custom\Install\Install\Mount" /Get-Intl

###### **[Components](#_After_executing_the_1)**

* + 1. [**View**](#_Components_1)

Get-WindowsPackage -Path "D:\OS11\_Custom\Install\Install\Mount" | Out-GridView

* + 1. [**Export to csv**](#_Components_1)

$SaveTo = "D:\OS11\_Custom\Install\Install\Report.$(Get-Date -Format "yyyyMMddHHmmss").csv"

Get-WindowsPackage -Path "D:\OS11\_Custom\Install\Install\Mount" | Export-CSV -NoType -Path $SaveTo

Write-host $SaveTo -ForegroundColor Green

##### [**InBox Apps**](#_3.1__)

###### [**Learn "Attachment: inBox Apps"**](#_InBox_Apps)

Learn about pre-installed apps for different operating systems, app store connections.

###### **[InBox Apps: Installed](#_InBox_Apps)**

* + 1. [**View**](#_InBox_Apps:_Installed)

Get-AppXProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" | Out-GridView

* + 1. [**Export to Csv**](#_InBox_Apps:_Installed)

$SaveTo = "D:\OS11\_Custom\Install\Install\Report.$(Get-Date -Format "yyyyMMddHHmmss").csv"

Get-AppXProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" | Export-CSV -NoType -Path $SaveTo

Write-host $SaveTo -ForegroundColor Green

###### [**Remove all installed pre-applications**](#_InBox_Apps)

Copy the code or view the source file: Install.InBox.Appx.Clear.all.ps1 ( [Local](Code/Install/Install.InBox.Appx.Clear.all.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/Install.InBox.Appx.Clear.all.ps1) )

Get-AppXProvisionedPackage -path "D:\OS11\_Custom\Install\Install\Mount" -ErrorAction SilentlyContinue | ForEach-Object {

Write-host "`n $($\_.DisplayName)"

Write-Host " Deleting ".PadRight(22) -NoNewline

try {

Remove-AppxProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" -PackageName $\_.PackageName -ErrorAction SilentlyContinue | Out-Null

Write-host "Finish" -ForegroundColor Green

} catch {

Write-host "Failed" -ForegroundColor Red

}

}

###### [**Language Markers: Understanding**](#_InBox_Apps)

Before learning about language tags, first understand the list of languages available in the ZuneMusic app: en-us, en-gb, as-in, az-latn-az, bs-latn-ba, bn-in, cs-cz, cy-gb, ar-sa, de-de, af-za, am-et, da-dk, el-gr, es-es, es-mx, ca-es, ca-es-valencia, eu-es, fi-fi, bg-bg, ga-ie, et-ee, gl-es, gu-in, gd-gb, fil-ph, fr-ca, fr-fr, hy-am, fa-ir, hu-hu, id-id, it-it, ja-jp, hr-hr, ka-ge, is-is, he-il, hi-in, kk-kz, lo-la, km-kh, lt-lt, kn-in, kok-in, ko-kr, mk-mk, lv-lv, ms-my, mi-nz, mr-in, mt-mt, ne-np, nl-nl, nb-no, ml-in, nn-no, lb-lu, or-in, ro-ro, sk-sk, ru-ru, pl-pl, quz-pe, pt-br, pt-pt, sq-al, ta-in, th-th, sv-se, pa-in, sr-cyrl-ba, sr-cyrl-rs, sr-latn-rs, ur-pk, ug-cn, tr-tr, uk-ua, tt-ru, zh-cn, vi-vn, uz-latn-uz, sl-si, zh-tw, te-in

**View installed languages for offline images**

Dism /Image:"D:\OS11\_Custom\Install\Install\Mount" /Get-Intl

View results for installed languages: en-US, zh-CN, When installing the ZuneMusic app, the installer will match "Installed Languages" and automatically filter the list of uninstalled languages, which is the language tag.

###### [**Language tag: adding method**](#_InBox_Apps)

* + 1. Execute "[Language Pack:Add](#_Language_pack:_add)"
    2. Install “Local Language Experience Packages (LXPs)”

Microsoft officially provides the Local Language Experience Package (LXPS) installation file for Windows 10. It will no longer be provided for Windows 11. To obtain the offline installation package:

* + - 1. **Download using the Windows Local Language Experience Packs (LXPs) Downloader**

learn: <https://github.com/ilikeyi/LXPs>

After downloading, save to: D:\OS11\_Custom\Install\Install\InBox.Appx, file format:LanguageExperiencePack.zh-CN.Neutral.Appx

* + - 1. **Manual download** 
         1. **View "Attachment: LXPs"**

Waiting to download Local Language Experience Packs (LXPs) for "Simplified Chinese - China", language tag: zh-CN, application ID: 9NRMNT6GMZ70, website link: https://www.microsoft.com/store/productId/9NRMNT6GMZ70

* + - * 1. **Open the website:** [**https://store.rg-adguard.net**](https://store.rg-adguard.net)

Search keywords:

https://www.microsoft.com/store/productId/9NRMNT6GMZ70

Search 22621 content in the web page, search results: Microsoft.LanguageExperiencePackzh-CN\_22621.\*. neutral\_\_8wekyb3d8bbwe.appx

After downloading, save it to the D:\OS11\_Custom\Install\Install\InBox.Appx directory and rename it: LanguageExperiencePack.zh-cn.Neutral.Appx

* + - 1. **Execute the installation command to install the local language experience package (LXPs)**

After understanding how to add language tags and obtaining LanguageExperiencePack.zh-cn.Neutral, execute the installation command:

Add-AppxProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" -PackagePath "D:\OS11\_Custom\Install\Install\InBox.appx\LanguageExperiencePack.zh-cn.Neutral.appx" -SkipLicense

* + - 1. **Get installed UWP apps**
         1. View

Get-AppXProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" | Out-GridView

* + - * 1. Export to Csv

$SaveTo = "D:\OS11\_Custom\Install\Install\Report.$(Get-Date -Format "yyyyMMddHHmmss").csv"

Get-AppXProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" | Export-CSV -NoType -Path $SaveTo

Write-host $SaveTo -ForegroundColor Green

###### **[InBox Apps: Install](#_InBox_Apps)**

* + 1. [**Mount or decompress the InBox Apps installation file**](#_InBox_Apps:_Install)

Mount 22621.1.220506-1250.ni\_release\_amd64fre\_InboxApps.iso or extract to any location;

* + 1. [**After executing the installation command, install InBox Apps to: Install.wim**](#_InBox_Apps:_Install)
* Auto = Automatically search all local disks, default;
* Custom path, e.g. specify F drive: $ISO = "F:\packages"

Copy the code or view the source file: Install.Inst.InBox.Appx.ps1 ( [Local](Code/Install/Install.Inst.InBox.Appx.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/Install.Inst.InBox.Appx.ps1) )

$ISO = "Auto"

$Mount = "D:\OS11\_Custom\Install\Install\Mount"

try {

Write-host "`n Offline image version: " -NoNewline

$Current\_Edition\_Version = (Get-WindowsEdition -Path $Mount).Edition

Write-Host $Current\_Edition\_Version -ForegroundColor Green

} catch {

Write-Host "Error" -ForegroundColor Red

Write-Host " $($\_)" -ForegroundColor Yellow

return

}

$Pre\_Config\_Rules = @(

@{

Name = @(

"Core"; "CoreN"; "CoreSingleLanguage";

)

Apps = @(

"Microsoft.UI.Xaml.2.3"; "Microsoft.UI.Xaml.2.4"; "Microsoft.UI.Xaml.2.7"; "Microsoft.NET.Native.Framework.2.2"; "Microsoft.NET.Native.Runtime.2.2"; "Microsoft.VCLibs.140.00"; "Microsoft.VCLibs.140.00.UWPDesktop"; "Microsoft.HEIFImageExtension"; "Microsoft.HEVCVideoExtension"; "Microsoft.SecHealthUI"; "Microsoft.VP9VideoExtensions"; "Microsoft.WebpImageExtension"; "Microsoft.WindowsStore"; "Microsoft.GamingApp"; "Microsoft.Sticky.Notes"; "Microsoft.Paint"; "Microsoft.PowerAutomateDesktop"; "Microsoft.ScreenSketch"; "Microsoft.WindowsNotepad"; "Microsoft.WindowsTerminal"; "Clipchamp.Clipchamp"; "Microsoft.Solitaire.Collection"; "Microsoft.WindowsAlarms"; "Microsoft.WindowsFeedbackHub"; "Microsoft.WindowsMaps"; "Microsoft.ZuneMusic"; "Microsoft.BingNews"; "Microsoft.DesktopAppInstaller"; "Microsoft.WindowsCamera"; "Microsoft.Getstarted"; "Microsoft.Cortana"; "Microsoft.BingWeather"; "Microsoft.GetHelp"; "Microsoft.MicrosoftOfficeHub"; "Microsoft.People"; "Microsoft.StorePurchaseApp"; "Microsoft.Todos"; "Microsoft.WebMediaExtensions"; "Microsoft.Windows.Photos"; "Microsoft.WindowsCalculator"; "Microsoft.Windows.CommunicationsApps"; "Microsoft.WindowsSoundRecorder"; "Microsoft.Xbox.TCUI"; "Microsoft.XboxGameOverlay"; "Microsoft.XboxGamingOverlay"; "Microsoft.XboxIdentityProvider"; "Microsoft.XboxSpeechToTextOverlay"; "Microsoft.YourPhone"; "Microsoft.ZuneVideo"; "MicrosoftCorporationII.QuickAssist"; "MicrosoftWindows.Client.WebExperience"; "Microsoft.RawImageExtension"; "MicrosoftCorporationII.MicrosoftFamily";

)

}

@{

Name = @(

"Education"; "Professional"; "ProfessionalEducation"; "ProfessionalWorkstation"; "Enterprise"; "IoTEnterprise"; "ServerRdsh";

)

Apps = @(

"Microsoft.UI.Xaml.2.3"; "Microsoft.UI.Xaml.2.4"; "Microsoft.UI.Xaml.2.7"; "Microsoft.NET.Native.Framework.2.2"; "Microsoft.NET.Native.Runtime.2.2"; "Microsoft.VCLibs.140.00"; "Microsoft.VCLibs.140.00.UWPDesktop"; "Microsoft.HEIFImageExtension"; "Microsoft.HEVCVideoExtension"; "Microsoft.SecHealthUI"; "Microsoft.VP9VideoExtensions"; "Microsoft.WebpImageExtension"; "Microsoft.WindowsStore"; "Microsoft.GamingApp"; "Microsoft.Sticky.Notes"; "Microsoft.Paint"; "Microsoft.PowerAutomateDesktop"; "Microsoft.ScreenSketch"; "Microsoft.WindowsNotepad"; "Microsoft.WindowsTerminal"; "Clipchamp.Clipchamp"; "Microsoft.Solitaire.Collection"; "Microsoft.WindowsAlarms"; "Microsoft.WindowsFeedbackHub"; "Microsoft.WindowsMaps"; "Microsoft.ZuneMusic"; "Microsoft.BingNews"; "Microsoft.DesktopAppInstaller"; "Microsoft.WindowsCamera"; "Microsoft.Getstarted"; "Microsoft.Cortana"; "Microsoft.BingWeather"; "Microsoft.GetHelp"; "Microsoft.MicrosoftOfficeHub"; "Microsoft.People"; "Microsoft.StorePurchaseApp"; "Microsoft.Todos"; "Microsoft.WebMediaExtensions"; "Microsoft.Windows.Photos"; "Microsoft.WindowsCalculator"; "Microsoft.Windows.CommunicationsApps"; "Microsoft.WindowsSoundRecorder"; "Microsoft.Xbox.TCUI"; "Microsoft.XboxGameOverlay"; "Microsoft.XboxGamingOverlay"; "Microsoft.XboxIdentityProvider"; "Microsoft.XboxSpeechToTextOverlay"; "Microsoft.YourPhone"; "Microsoft.ZuneVideo"; "MicrosoftCorporationII.QuickAssist"; "MicrosoftWindows.Client.WebExperience"; "Microsoft.RawImageExtension";

)

}

@{

Name = @(

"EnterpriseN"; "EnterpriseGN"; "EnterpriseSN"; "ProfessionalN"; "EducationN"; "ProfessionalWorkstationN"; "ProfessionalEducationN"; "CloudN"; "CloudEN"; "CloudEditionN"; "CloudEditionLN"; "StarterN";

)

Apps = @(

"Microsoft.UI.Xaml.2.3"; "Microsoft.UI.Xaml.2.4"; "Microsoft.UI.Xaml.2.7"; "Microsoft.NET.Native.Framework.2.2"; "Microsoft.NET.Native.Runtime.2.2"; "Microsoft.VCLibs.140.00"; "Microsoft.VCLibs.140.00.UWPDesktop"; "Microsoft.SecHealthUI"; "Microsoft.WindowsStore"; "Microsoft.Sticky.Notes"; "Microsoft.Paint"; "Microsoft.PowerAutomateDesktop"; "Microsoft.ScreenSketch"; "Microsoft.WindowsNotepad"; "Microsoft.WindowsTerminal"; "Clipchamp.Clipchamp"; "Microsoft.Solitaire.Collection"; "Microsoft.WindowsAlarms"; "Microsoft.WindowsFeedbackHub"; "Microsoft.WindowsMaps"; "Microsoft.BingNews"; "Microsoft.DesktopAppInstaller"; "Microsoft.WindowsCamera"; "Microsoft.Getstarted"; "Microsoft.Cortana"; "Microsoft.BingWeather"; "Microsoft.GetHelp"; "Microsoft.MicrosoftOfficeHub"; "Microsoft.People"; "Microsoft.StorePurchaseApp"; "Microsoft.Todos"; "Microsoft.Windows.Photos"; "Microsoft.WindowsCalculator"; "Microsoft.Windows.CommunicationsApps"; "Microsoft.XboxGameOverlay"; "Microsoft.XboxIdentityProvider"; "Microsoft.XboxSpeechToTextOverlay"; "Microsoft.YourPhone"; "MicrosoftCorporationII.QuickAssist"; "MicrosoftWindows.Client.WebExperience";

)

}

)

$Allow\_Install\_App = @()

ForEach ($item in $Pre\_Config\_Rules) {

if ($item.Name -contains $Current\_Edition\_Version) {

Write-host "`n Match to: "-NoNewline

Write-host $Current\_Edition\_Version -ForegroundColor Green

$Allow\_Install\_App = $item.Apps

break

}

}

Write-host "`n The app to install ( $($Allow\_Install\_App.Count) item )" -ForegroundColor Yellow

Write-host " $('-' \* 80)"

ForEach ($item in $Allow\_Install\_App) {

Write-host " $($item)" -ForegroundColor Green

}

$InBoxApps = @(

@{ Name = "Microsoft.UI.Xaml.2.3"; File = "Microsoft.UI.Xaml.x64.2.3.appx"; License = ""; }

@{ Name = "Microsoft.UI.Xaml.2.4"; File = "Microsoft.UI.Xaml.x64.2.4.appx"; License = ""; }

@{ Name = "Microsoft.UI.Xaml.2.7"; File = "Microsoft.UI.Xaml.x64.2.7.appx"; License = ""; }

@{ Name = "Microsoft.NET.Native.Framework.2.2"; File = "Microsoft.NET.Native.Framework.x64.2.2.appx"; License = ""; }

@{ Name = "Microsoft.NET.Native.Runtime.2.2"; File = "Microsoft.NET.Native.Runtime.x64.2.2.appx"; License = ""; }

@{ Name = "Microsoft.VCLibs.140.00"; File = "Microsoft.VCLibs.x64.14.00.appx"; License = ""; }

@{ Name = "Microsoft.VCLibs.140.00.UWPDesktop"; File = "Microsoft.VCLibs.x64.14.00.UWPDesktop.appx"; License = ""; }

@{ Name = "Microsoft.WindowsStore"; File = "Microsoft.WindowsStore\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.WindowsStore\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.HEIFImageExtension"; File = "Microsoft.HEIFImageExtension\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.HEIFImageExtension\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.HEVCVideoExtension"; File = "Microsoft.HEVCVideoExtension\_8wekyb3d8bbwe.x64.appx"; License = "Microsoft.HEVCVideoExtension\_8wekyb3d8bbwe.x64.xml"; }

@{ Name = "Microsoft.SecHealthUI"; File = "Microsoft.SecHealthUI\_8wekyb3d8bbwe.x64.appx"; License = "Microsoft.SecHealthUI\_8wekyb3d8bbwe.x64.xml"; }

@{ Name = "Microsoft.VP9VideoExtensions"; File = "Microsoft.VP9VideoExtensions\_8wekyb3d8bbwe.x64.appx"; License = "Microsoft.VP9VideoExtensions\_8wekyb3d8bbwe.x64.xml"; }

@{ Name = "Microsoft.WebpImageExtension"; File = "Microsoft.WebpImageExtension\_8wekyb3d8bbwe.x64.appx"; License = "Microsoft.WebpImageExtension\_8wekyb3d8bbwe.x64.xml"; }

@{ Name = "Microsoft.GamingApp"; File = "Microsoft.GamingApp\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.GamingApp\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Sticky.Notes"; File = "Microsoft.MicrosoftStickyNotes\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.MicrosoftStickyNotes\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Paint"; File = "Microsoft.Paint\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.Paint\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.PowerAutomateDesktop"; File = "Microsoft.PowerAutomateDesktop\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.PowerAutomateDesktop\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.ScreenSketch"; File = "Microsoft.ScreenSketch\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.ScreenSketch\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsNotepad"; File = "Microsoft.WindowsNotepad\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.WindowsNotepad\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsTerminal"; File = "Microsoft.WindowsTerminal\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.WindowsTerminal\_8wekyb3d8bbwe.xml"; }

@{ Name = "Clipchamp.Clipchamp"; File = "Clipchamp.Clipchamp\_yxz26nhyzhsrt.msixbundle"; License = "Clipchamp.Clipchamp\_yxz26nhyzhsrt.xml"; }

@{ Name = "Microsoft.Solitaire.Collection"; File = "Microsoft.MicrosoftSolitaireCollection\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.MicrosoftSolitaireCollection\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsAlarms"; File = "Microsoft.WindowsAlarms\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.WindowsAlarms\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsFeedbackHub"; File = "Microsoft.WindowsFeedbackHub\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.WindowsFeedbackHub\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsMaps"; File = "Microsoft.WindowsMaps\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.WindowsMaps\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.ZuneMusic"; File = "Microsoft.ZuneMusic\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.ZuneMusic\_8wekyb3d8bbwe.xml"; }

@{ Name = "MicrosoftCorporationII.MicrosoftFamily"; File = "MicrosoftCorporationII.MicrosoftFamily\_8wekyb3d8bbwe.msixbundle"; License = "MicrosoftCorporationII.MicrosoftFamily\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.BingNews"; File = "Microsoft.BingNews\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.BingNews\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.DesktopAppInstaller"; File = "Microsoft.DesktopAppInstaller\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.DesktopAppInstaller\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsCamera"; File = "Microsoft.WindowsCamera\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.WindowsCamera\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Getstarted"; File = "Microsoft.Getstarted\_8wekyb3d8bbwe.msixbundle"; License = "Microsoft.Getstarted\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Cortana"; File = "Microsoft.CortanaApp\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.CortanaApp\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.BingWeather"; File = "Microsoft.BingWeather\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.BingWeather\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.GetHelp"; File = "Microsoft.GetHelp\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.GetHelp\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.MicrosoftOfficeHub"; File = "Microsoft.MicrosoftOfficeHub\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.MicrosoftOfficeHub\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.People"; File = "Microsoft.People\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.People\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.StorePurchaseApp"; File = "Microsoft.StorePurchaseApp\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.StorePurchaseApp\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Todos"; File = "Microsoft.Todos\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.Todos\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WebMediaExtensions"; File = "Microsoft.WebMediaExtensions\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.WebMediaExtensions\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Windows.Photos"; File = "Microsoft.Windows.Photos\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.Windows.Photos\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsCalculator"; File = "Microsoft.WindowsCalculator\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.WindowsCalculator\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Windows.CommunicationsApps"; File = "Microsoft.WindowsCommunicationsApps\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.WindowsCommunicationsApps\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.WindowsSoundRecorder"; File = "Microsoft.WindowsSoundRecorder\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.WindowsSoundRecorder\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.Xbox.TCUI"; File = "Microsoft.Xbox.TCUI\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.Xbox.TCUI\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.XboxGameOverlay"; File = "Microsoft.XboxGameOverlay\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.XboxGameOverlay\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.XboxGamingOverlay"; File = "Microsoft.XboxGamingOverlay\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.XboxGamingOverlay\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.XboxIdentityProvider"; File = "Microsoft.XboxIdentityProvider\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.XboxIdentityProvider\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.XboxSpeechToTextOverlay"; File = "Microsoft.XboxSpeechToTextOverlay\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.XboxSpeechToTextOverlay\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.YourPhone"; File = "Microsoft.YourPhone\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.YourPhone\_8wekyb3d8bbwe.xml"; }

@{ Name = "Microsoft.ZuneVideo"; File = "Microsoft.ZuneVideo\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.ZuneVideo\_8wekyb3d8bbwe.xml"; }

@{ Name = "MicrosoftCorporationII.QuickAssist"; File = "MicrosoftCorporationII.QuickAssist\_8wekyb3d8bbwe.appxbundle"; License = "MicrosoftCorporationII.QuickAssist\_8wekyb3d8bbwe.xml"; }

@{ Name = "MicrosoftWindows.Client.WebExperience"; File = "MicrosoftWindows.Client.WebExperience\_cw5n1h2txyewy.appxbundle"; License = "MicrosoftWindows.Client.WebExperience\_cw5n1h2txyewy.xml"; }

@{ Name = "Microsoft.RawImageExtension"; File = "Microsoft.RawImageExtension\_8wekyb3d8bbwe.appxbundle"; License = "Microsoft.RawImageExtension\_8wekyb3d8bbwe.xml"; }

)

Function Install\_Appx

{

param

(

$File,

$License

)

Write-host " $('-' \* 80)"

Write-host " Installing: " -NoNewline

Write-host $File -ForegroundColor Yellow

if (Test-Path -Path $File -PathType Leaf) {

if (Test-Path -Path $License -PathType Leaf) {

Write-host " License: " -NoNewline

Write-host $License -ForegroundColor Yellow

Write-host " With License".PadRight(22) -NoNewline -ForegroundColor Green

Write-host " Installing".PadRight(22) -NoNewline

try {

Add-AppxProvisionedPackage -Path $Mount -PackagePath $File -LicensePath $License -ErrorAction SilentlyContinue | Out-Null

Write-Host "Done" -ForegroundColor Green

} catch {

Write-Host "Failed" -ForegroundColor Red

Write-Host " $($\_)" -ForegroundColor Yellow

}

} else {

Write-host " No License".PadRight(22) -NoNewline -ForegroundColor Red

Write-host " Installing".PadRight(22) -NoNewline

try {

Add-AppxProvisionedPackage -Path $Mount -PackagePath $File -SkipLicense -ErrorAction SilentlyContinue | Out-Null

Write-Host "Done" -ForegroundColor Green

} catch {

Write-Host "Failed" -ForegroundColor Red

Write-Host " $($\_)" -ForegroundColor Yellow

}

}

} else {

Write-host " The installation package does not exist" -ForegroundColor Red

}

}

ForEach ($Rule in $InBoxApps) {

Write-host "`n Name: " -NoNewline

Write-host $Rule.Name -ForegroundColor Yellow

Write-host " $('-' \* 80)"

if($Allow\_Install\_App -contains $Rule.Name) {

Write-host " Search for apps: " -NoNewline

Write-host $Rule.File -ForegroundColor Yellow

Write-host " Search for License: " -NoNewline

Write-host $Rule.File -ForegroundColor Yellow

if ($ISO -eq "Auto") {

Get-PSDrive -PSProvider FileSystem -ErrorAction SilentlyContinue | ForEach-Object {

$AppPath = Join-Path -Path $\_.Root -ChildPath "packages\$($Rule.File)" -ErrorAction SilentlyContinue

$LicensePath = Join-Path -Path $\_.Root -ChildPath "packages\$($Rule.License)" -ErrorAction SilentlyContinue

if (Test-Path $AppPath -PathType Leaf) {

Write-host " $('-' \* 80)"

Write-host " Discover apps: " -NoNewLine

Write-host $AppPath -ForegroundColor Green

if (Test-Path $LicensePath -PathType Leaf) {

Write-host " Discover License: " -NoNewLine

Write-host $LicensePath -ForegroundColor Green

} else {

Write-host " License: " -NoNewLine

Write-host "Not found" -ForegroundColor Red

}

Install\_Appx -File $AppPath -License $LicensePath

return

}

}

} else {

Install\_Appx -File "$($ISO)\$($Rule.File)" -License "$($ISO)\$($Rule.License)"

}

} else {

Write-host " Skip the installation" -ForegroundColor Red

}

}

* 1. [**Language tag: delete**](#_InBox_Apps)

After completing the installation of the InBox Apps application, the language tag is no longer important and can be deleted or not deleted. Delete "Local Language Experience Package (LXPs), Simplified Chinese - China)" and uniquely identify the language tag: zh-CN, can be changed to other language tag.

Copy the code or view the source file: Install.Clear.Flag.ps1 ( [Local](Code/Install/Install.Clear.Flag.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/Install.Clear.Flag.ps1) )

$Lang = "zh-CN"

Get-AppXProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" | Foreach-object {

if ($\_.DisplayName -Like "\*LanguageExperiencePack\*$($Lang)\*") {

Write-host " $($\_.DisplayName)"

Write-Host " Deleting ".PadRight(22) -NoNewline

try {

Remove-AppxProvisionedPackage -Path "D:\OS11\_Custom\Install\Install\Mount" -PackageName $\_.PackageName -ErrorAction SilentlyContinue | Out-Null

Write-host "Finish" -ForegroundColor Green

} catch {

Write-host "Failed" -ForegroundColor Red

}

}

}

###### [**InBox Apps: optimization**](#_InBox_Apps)

After the app is installed, provisioning the Appx package should be optimized to reduce the app's disk usage by replacing identical files with hard links, only for offline images.

Dism /Image:"D:\OS11\_Custom\Install\Install\Mount" /Optimize-ProvisionedAppxPackages

##### **[Update](#_3.1__)**

It is recommended that you download the latest version, which provides cumulative updates of the initial version to solve the problem of refreshing the "Component" status after reinstalling the same version number.

###### **[Initial version](#_更新)**

* + 1. [**How to download**](#_Initial_version)

Cumulative update KB5016632 can no longer be searched from <https://www.catalog.update.microsoft.com/Search.aspx?q=KB5016632>. For other download methods, select any website and open it:

* <https://uupdump.net>
* <https://uup.ee>
  + - 1. After opening, search for keywords: 22621.382, select from the search results: Windows 11, version 22H2 (22621.382) amd64
      2. After opening, select "All files";
      3. Search for: KB5016632 in the "All Files" page, download:
* Windows11.0-KB5016632-x64.cab
* Windows11.0-KB5016632-x64.psf
  + - 1. Merging cumulative updates
         1. Go to <https://github.com/abbodi1406/WHD/tree/master/scripts> After downloading [PSFX\_Repack\_6.zip](https://github.com/abbodi1406/WHD/raw/master/scripts/PSFX_Repack_6.zip)
         2. After downloading, unzip it to: D:\PSFX\_Repack\_6
         3. Copy Windows11.0-KB5016632-x64.cab, Windows11.0-KB5016632-x64.psf to: D:\PSFX\_Repack\_6
         4. After running: psfx2cab\_GUI.cmd, you will get a new file:

**Windows11.0-KB5016632-x64-full\_psfx.cab**

* + - * 1. Save Windows11.0-KB5016632-x64-full\_psfx.cab to:

D:\OS11\_Custom\Install\Install\Update\Windows11.0-KB5016632-x64-full\_psfx.cab

* + 1. [**Add**](#_Initial_version)

$KBPath = "D:\OS11\_Custom\Install\Install\Update\Windows11.0-KB5016632-x64-full\_psfx.cab"

Add-WindowsPackage -Path "D:\OS11\_Custom\Install\Install\Mount" -PackagePath $KBPath

###### **[Other Version](#_更新)**

* + 1. [**How to download**](#_Other_Version)

Check out "[Windows 11 version information](https://learn.microsoft.com/en-us/windows/release-health/windows11-release-information)”, for example, to download the cumulative update: KB5030219, go to the download page: <https://www.catalog.update.microsoft.com/Search.aspx?q=KB5030219> or "[Direct download](https://catalog.sf.dl.delivery.mp.microsoft.com/filestreamingservice/files/b82b3f6d-17e2-46d5-998a-893deb622e0a/public/windows11.0-kb5030219-x64_659d407821da654d564a3108bf493594bd143ab1.msu)", Save to:

D:\OS11\_Custom\Install\Install\Update\windoOS11.0-kb5030219-x64\_659d407821da654d564a3108bf493594bd143ab1.msu

* + 1. [**Add**](#_Other_Version)

$KBPath = "D:\OS11\_Custom\Install\Install\Update\windoOS11.0-kb5030219-x64\_659d407821da654d564a3108bf493594bd143ab1.msu"

Add-WindowsPackage -Path "D:\OS11\_Custom\Install\Install\Mount" -PackagePath $KBPath

###### **[Solidify Updated, optional](#_更新)**

Dism /Image:"D:\OS11\_Custom\Install\Install\Mount" /cleanup-image /StartComponentCleanup

* + 1. [**Clean components after curing and updating, optional**](#_固化更新，可选项)

$Mount = "D:\OS11\_Custom\Install\Install\Mount"

Get-WindowsPackage -Path $Mount -ErrorAction SilentlyContinue | ForEach-Object {

if ($\_.PackageState -eq "Superseded") {

Write-Host " $($\_.PackageName)" -ForegroundColor Green

Remove-WindowsPackage -Path $Mount -PackageName $\_.PackageName | Out-Null

}

}

##### [**Driver**, optional](#_3.1__)

##### [**Health**](#_3.1__)

Before saving, check whether it is damaged. If the health status is abnormal, stop saving.

Repair-WindowsImage -Path "D:\OS11\_Custom\Install\Install\Mount" -ScanHealth

##### **[Replace WinRE.wim](#_3.1__)**

WinRE.wim in all index numbers in Install.wim has been replaced in batches. Please skip this step.

$WinRE = "D:\OS11\_Custom\Install\Install\Update\Winlib\WinRE.wim"

$CopyTo = "D:\OS11\_Custom\Install\Install\Mount\Windows\System32\Recovery"

Copy-Item -Path $WinRE -Destination $CopyTo -Force

##### [**Save image**](#_3.1__)

Save-WindowsImage -Path "D:\OS11\_Custom\Install\Install\Mount"

##### [**Unmount image**](#_3.1__)

Dismount-WindowsImage -Path "D:\OS11\_Custom\Install\Install\Mount" -Discard

**LOOP OPERATING AREA, END.**

##### **[How to batch replace WinRE.wim in all index numbers in Install.wim](#_3.1__)**

###### [**Obtain WimLib**](#_How_to_batch)

After going to the official website of <https://wimlib.net>, select a different version: [arm64](https://wimlib.net/downloads/wimlib-1.14.3-windows-aarch64-bin.zip), [x64](https://wimlib.net/downloads/wimlib-1.14.3-windows-x86_64-bin.zip), [x86](https://wimlib.net/downloads/wimlib-1.14.3-windows-i686-bin.zip), and extract it to: D:Wimlib after downloading

###### **[How to extract and update WinRE.wim in Install.wim](#_如何批量替换_Install.wim_里的所有索引号里的)**

* + 1. [**Extract the WinRE.wim file Install.wim from Install.wim**](#_How_to_extract)

Copy the code or view the source file: Install.WinRE.Extract ( [Local](Code/Install/Install.WinRE.Extract.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/Install.WinRE.Extract.ps1) )

$Arguments = @(

"extract",

"D:\OS11\sources\install.wim", "1",

"\Windows\System32\Recovery\Winre.wim",

"--dest-dir=""D:\OS11\_Custom\Install\Install\Update\Winlib"""

)

New-Item -Path "D:\OS11\_Custom\Install\Install\Update\Winlib" -ItemType Directory -ea SilentlyContinue

Start-Process -FilePath "d:\wimlib\wimlib-imagex.exe" -ArgumentList $Arguments -wait -nonewwindow

* + 1. **[Get all index numbers of Install.wim and replace the old WinRE.wim](#_How_to_extract)**

Copy the code or view the source file: Install.WinRE.Replace.wim.ps1 ( [Local](Code/Install/Install.WinRE.Replace.wim.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/Install.WinRE.Replace.wim.ps1) )

Get-WindowsImage -ImagePath "D:\OS11\sources\install.wim" -ErrorAction SilentlyContinue | ForEach-Object {

Write-Host " Image name: " -NoNewline

Write-Host $\_.ImageName -ForegroundColor Yellow

Write-Host " The index number: " -NoNewline

Write-Host $\_.ImageIndex -ForegroundColor Yellow

Write-Host "`n Replacement "

$Arguments = @(

"update",

"D:\OS11\sources\install.wim", $\_.ImageIndex,

"--command=""add 'D:\OS11\_Custom\Install\Install\Update\Winlib\WinRE.wim' '\Windows\System32\Recovery\WinRe.wim'"""

)

Start-Process -FilePath "d:\wimlib\wimlib-imagex.exe" -ArgumentList $Arguments -wait -nonewwindow

Write-Host " Finish`n" -ForegroundColor Green

}

##### [**Rebuilding Install.wim reduces file size**](#_3.1__)

Copy the code or view the source file: Install.Rebuild.wim.ps1 ( [Local](Code/Install/Install.Rebuild.wim.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Install/Install.Rebuild.wim.ps1) )

$InstallWim = "D:\OS11\sources\install.wim"

Get-WindowsImage -ImagePath $InstallWim -ErrorAction SilentlyContinue | ForEach-Object {

Write-Host " Image name: " -NoNewline

Write-Host $\_.ImageName -ForegroundColor Yellow

Write-Host " The index number: " -NoNewline

Write-Host $\_.ImageIndex -ForegroundColor Yellow

Write-Host "`n Under reconstruction".PadRight(28) -NoNewline

Export-WindowsImage -SourceImagePath $InstallWim -SourceIndex $\_.ImageIndex -DestinationImagePath "$($InstallWim).New" -CompressionType max | Out-Null

Write-Host "Finish`n" -ForegroundColor Green

}

if (Test-Path "$($InstallWim).New" -PathType Leaf) {

Remove-Item -Path $InstallWim

Move-Item -Path "$($InstallWim).New" -Destination $InstallWim

Write-Host "Finish" -ForegroundColor Green

} else {

Write-host "Failed" -ForegroundColor Red

}

#### **[Custom deployment image: boot.wim](#_INSTALL_LANGUAGE_PACK)**

##### [**View Boot.wim details**](#_Install_the_language)

Image name, image description, image size, architecture, version, index number, etc.

$ViewFile = "D:\OS11\Sources\Boot.wim"

Get-WindowsImage -ImagePath $ViewFile | Foreach-Object {

Get-WindowsImage -ImagePath $ViewFile -index $\_.ImageIndex

}

##### [**Specify the path to mount Boot.wim**](#_Install_the_language)

New-Item -Path "D:\OS11\_Custom\Boot\Boot\Mount" -ItemType directory -ea SilentlyContinue

1. [**Start mounting Boot.wim**](#_Install_the_language)

Default index number: 2

$Index = "2"

Mount-WindowsImage -ImagePath "D:\OS11\sources\boot.wim" -Index $Index -Path "D:\OS11\_Custom\Boot\Boot\Mount"

##### **[Language pack](#_Install_the_language)**

Automatically install language packs: Match by component. After successful matching, install the corresponding local language pack file.

###### [**Language pack: add**](#_After_executing_the)

Copy the code or view the source file: Boot.Instl.lang.ps1 ( [Local](Code/Boot/Boot.Instl.lang.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Boot/Boot.Instl.lang.ps1) )

$Mount = "D:\OS11\_Custom\Boot\Boot\Mount"

$Sources = "D:\OS11\_Custom\Boot\Boot\Language\zh-CN"

$Initl\_install\_Language\_Component = @()

Get-WindowsPackage -Path $Mount | ForEach-Object {

$Initl\_install\_Language\_Component += $\_.PackageName

}

Add-WindowsPackage -Path $Mount -PackagePath "$($Sources)\WinPE-FontSupport-zh-CN.cab"

$Language\_List = @(

@{ Match = "\*WinPE\*Setup\*Client\*Package\*"; File = "WINPE-SETUP-CLIENT\_zh-CN.CAB"; }

@{ Match = "\*WinPE\*Setup\*Package\*"; File = "WinPE-Setup\_zh-CN.cab"; }

@{ Match = "\*WinPE-LanguagePack-Package\*"; File = "lp.cab"; }

@{ Match = "\*SecureStartup\*"; File = "winpe-securestartup\_zh-CN.cab"; }

@{ Match = "\*ATBroker\*"; File = "winpe-atbroker\_zh-CN.cab"; }

@{ Match = "\*AudioCore\*"; File = "winpe-audiocore\_zh-CN.cab"; }

@{ Match = "\*AudioDrivers\*"; File = "winpe-audiodrivers\_zh-CN.cab"; }

@{ Match = "\*EnhancedStorage\*"; File = "winpe-enhancedstorage\_zh-CN.cab"; }

@{ Match = "\*Narrator\*"; File = "winpe-narrator\_zh-CN.cab"; }

@{ Match = "\*scripting\*"; File = "winpe-scripting\_zh-CN.cab"; }

@{ Match = "\*Speech-TTS\*"; File = "winpe-speech-tts\_zh-CN.cab"; }

@{ Match = "\*srh\*"; File = "winpe-srh\_zh-CN.cab"; }

@{ Match = "\*srt\*"; File = "winpe-srt\_zh-CN.cab"; }

@{ Match = "\*wds-tools\*"; File = "winpe-wds-tools\_zh-CN.cab"; }

@{ Match = "\*-WMI-Package\*"; File = "winpe-wmi\_zh-CN.cab"; }

)

ForEach ($Rule in $Language\_List) {

Write-host "`n Rule name: $($Rule.Match)" -ForegroundColor Yellow; Write-host " $('-' \* 80)"

ForEach ($Component in $Initl\_install\_Language\_Component) {

if ($Component -like "\*$($Rule.Match)\*") {

Write-host " Component name: " -NoNewline

Write-host $Component -ForegroundColor Green

Write-host " Language pack file: " -NoNewline

Write-host $Rule.File -ForegroundColor Green

Write-Host " Installing ".PadRight(22) -NoNewline

try {

Add-WindowsPackage -Path $Mount -PackagePath "$($Sources)\$($Rule.File)" | Out-Null

Write-host "Finish" -ForegroundColor Green

} catch {

Write-host "Failed" -ForegroundColor Red

}

break

}

}

}

###### **Offline image language: change**

* + 1. **Change default language, regional settings, and other international settings**

Dism /Image:"D:\OS11\_Custom\Boot\Boot\Mount" /Set-AllIntl:zh-CN

* + 1. **View available language settings**

Dism /Image:"D:\OS11\_Custom\Boot\Boot\Mount" /Get-Intl

###### **[Components](#_After_executing_the)**

* + 1. [**View**](#_Components)

Get-WindowsPackage -Path "D:\OS11\_Custom\Boot\Boot\Mount" | Out-GridView

* + 1. [**Export** to **csv**](#_Components)

$SaveTo = "D:\OS11\_Custom\Boot\Boot\Report.$(Get-Date -Format "yyyyMMddHHmmss").csv"

Get-WindowsPackage -Path "D:\OS11\_Custom\Boot\Boot\Mount" | Export-CSV -NoType -Path $SaveTo

Write-host $SaveTo -ForegroundColor Green

###### **[Language: Repair](#_After_executing_the)**

* + 1. [**Extract**](#_Language:_Repair)

Open: D:\OS11\_Custom\Install\Install\Language\zh-CN\Microsoft-Windows-Client-Language-Pack\_x64\_zh-CN.cab, enter the directory: Setup\sources\zh-cn\cli, and copy the following files to the deskto:

* + - 1. arunres.dll.mui
      2. spwizres.dll.mui
      3. w32uires.dll.mui
    1. [**Copy**](#_Language:_Repair)

Copy the extracted files to: D:\OS11\_Custom\Boot\Boot\Mount\sources\zh-CN

###### **[Language packs: sync to ISO installer](#_After_executing_the)**

Copy-Item -Path "D:\OS11\_Custom\Boot\Boot\Mount\sources\zh-CN" -Destination "D:\OS11\sources\zh-CN" -Recurse -Force

###### **[Regenerate Lang.ini](#_After_executing_the)**

After regeneration, you can adjust the "Installation Interface", the order when selecting "Language", open lang.ini, the default preferred value = 3, non-default value = 2.

* + 1. [**Regenerate the mounted directory lang.ini**](#_Regenerate_Lang.ini)

Regenerated Lang.ini file location: D:\en-us\_windows\_server\_2022\_x64\_dvd\_620d7eac\_Custom\Boot\Boot\Mount\Sources\lang.ini

Dism /image:"D:\OS11\_Custom\Boot\Boot\Mount" /gen-langini /distribution:"D:\OS11\_Custom\Boot\Boot\Mount"

* + 1. [**After regenerating lang.ini, sync to the installer**](#_Regenerate_Lang.ini)

Regenerated Lang.ini file location: D:\en-us\_windows\_server\_2022\_x64\_dvd\_620d7eac\Sources\lang.ini

Dism /image:"D:\OS11\_Custom\Boot\Boot\Mount" /gen-langini /distribution:"D:\OS11"

##### [**Update, optional**](#_Install_the_language)

##### [Drive, optional](#_Install_the_language)

##### **[Other](#_Install_the_language)**

###### [**Bypass TPM**](#_Other)

Copy the code or view the source file: Boot.Bypass.TPM.ps1 ( [Local](Code/Boot/Boot.Bypass.TPM.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/Boot/Boot.Bypass.TPM.ps1) )

$RegSystem = "D:\OS11\_Custom\Boot\Boot\Mount\Windows\System32\Config\SYSTEM"

$RandomGuid = [guid]::NewGuid()

Write-Host " HKLM:\$($RandomGuid)"

New-PSDrive -PSProvider Registry -Name OtherTasksTPM -Root HKLM -ErrorAction SilentlyContinue | Out-Null

Start-Process reg -ArgumentList "Load ""HKLM\$($RandomGuid)"" ""$($RegSystem)""" -Wait -WindowStyle Hidden -ErrorAction SilentlyContinue

New-Item "HKLM:\$($RandomGuid)\Setup\LabConfig" -force -ea SilentlyContinue | Out-Null

New-ItemProperty -LiteralPath "HKLM:\$($RandomGuid)\Setup\LabConfig" -Name "BypassCPUCheck" -Value 1 -PropertyType DWord -Force -ea SilentlyContinue | Out-Null

New-ItemProperty -LiteralPath "HKLM:\$($RandomGuid)\Setup\LabConfig" -Name "BypassStorageCheck" -Value 1 -PropertyType DWord -Force -ea SilentlyContinue | Out-Null

New-ItemProperty -LiteralPath "HKLM:\$($RandomGuid)\Setup\LabConfig" -Name "BypassRAMCheck" -Value 1 -PropertyType DWord -Force -ea SilentlyContinue | Out-Null

New-ItemProperty -LiteralPath "HKLM:\$($RandomGuid)\Setup\LabConfig" -Name "BypassTPMCheck" -Value 1 -PropertyType DWord -Force -ea SilentlyContinue | Out-Null

New-ItemProperty -LiteralPath "HKLM:\$($RandomGuid)\Setup\LabConfig" -Name "BypassSecureBootCheck" -Value 1 -PropertyType DWord -Force -ea SilentlyContinue | Out-Null

[gc]::collect()

Start-Process reg -ArgumentList "unload ""HKLM\$($RandomGuid)""" -Wait -WindowStyle Hidden -ErrorAction SilentlyContinue

Remove-PSDrive -Name OtherTasksTPM

##### [**Save image**](#_Install_the_language)

Save-WindowsImage -Path "D:\OS11\_Custom\Boot\Boot\Mount"

##### [**Unmount image**](#_Install_the_language)

Dismount-WindowsImage -Path "D:\OS11\_Custom\Boot\Boot\Mount" -Discard

### **[ISO](#_Custom_deployment_image)**

#### [**Generate ISO**](#_4、生成_ISO)

1. After downloading oscdimg, save it to: C:\Windows\System32 directory, save it in another path, or please enter the absolute location of OScdimg.exe;
2. Use the oscdimg command line to generate an ISO file and save it to: D:\OS11.iso

Copy the code or view the source file: ISO.ps1 ( [Local](Code/ISO.ps1), [Github](https://github.com/ilikeyi/solutions/blob/main/_Documents/Attachment/OS.11/22H2/Code/ISO.ps1) )

$ISO = "D:\OS11"

$Volume = "OS11"

$SaveTo = "D:\OS11.iso"

$Arguments = @("-m", "-o", "-u2", "-udfver102", "-l""$($Volume)""", "-bootdata:2#p0,e,b""$($ISO)\boot\etfsboot.com""#pEF,e,b""$($ISO)\efi\microsoft\boot\efisys.bin""", $ISO, $SaveTo)

Start-Process -FilePath "OSCdimg.exe" -ArgumentList $Arguments -wait -nonewwindow

#### [**Bypass TPM installation check**](#_4、生成_ISO)

1. Learn about: <https://github.com/AveYo/MediaCreationTool.bat/tree/main/bypass11> and download: Quick\_11\_iso\_esd\_wim\_TPM\_toggle.bat
2. Drag the D:\OS11.iso file to Quick\_11\_iso\_esd\_wim\_TPM\_toggle.bat, and "add" or "delete" the TPM installation check function in reverse order.

## **[Known issues](#_top)**

None yet

## **[Components: Comparison](#_top)**

Changes after installing new language pack, component list:

| Sn | Type | Component: Original | Component: Changes after installing "Simplified Chinese - China" language pack |
| --- | --- | --- | --- |
|  | OnDemandPack | Microsoft-OneCore-ApplicationModel-Sync-Desktop-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.317 | Microsoft-OneCore-ApplicationModel-Sync-Desktop-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.317 |
|  | OnDemandPack | Microsoft-OneCore-DirectX-Database-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-OneCore-DirectX-Database-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | LanguagePack | Microsoft-Windows-Client-LanguagePack-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.382 | Microsoft-Windows-Client-LanguagePack-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.382 |
|  | LanguagePack |  | Microsoft-Windows-Client-LanguagePack-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.382 |
|  | OnDemandPack | Microsoft-Windows-Ethernet-Client-Intel-E1i68x64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Ethernet-Client-Intel-E1i68x64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Ethernet-Client-Intel-E2f68-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Ethernet-Client-Intel-E2f68-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Ethernet-Client-Realtek-Rtcx21x64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Ethernet-Client-Realtek-Rtcx21x64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Ethernet-Client-Vmware-Vmxnet3-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Ethernet-Client-Vmware-Vmxnet3-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | FeaturePack | Microsoft-Windows-FodMetadata-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-FodMetadata-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | Foundation | Microsoft-Windows-Foundation-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Foundation-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Hello-Face-Package~31bf3856ad364e35~amd64~~10.0.22621.317 | Microsoft-Windows-Hello-Face-Package~31bf3856ad364e35~amd64~~10.0.22621.317 |
|  | OnDemandPack | Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~en-US~11.0.22621.1 | Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~en-US~11.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~zh-CN~11.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~~11.0.22621.1 | Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~~11.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Kernel-LA57-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.382 | Microsoft-Windows-Kernel-LA57-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.382 |
|  | OnDemandPack | Microsoft-Windows-LanguageFeatures-Basic-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-LanguageFeatures-Basic-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-LanguageFeatures-Basic-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-LanguageFeatures-Fonts-Hans-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-LanguageFeatures-Handwriting-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-LanguageFeatures-Handwriting-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-LanguageFeatures-Handwriting-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.317 |
|  | OnDemandPack | Microsoft-Windows-LanguageFeatures-OCR-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-LanguageFeatures-OCR-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-LanguageFeatures-OCR-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-LanguageFeatures-Speech-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-LanguageFeatures-Speech-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-LanguageFeatures-Speech-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-LanguageFeatures-TextToSpeech-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-LanguageFeatures-TextToSpeech-en-us-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-LanguageFeatures-TextToSpeech-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.317 | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.317 |
|  | OnDemandPack |  | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.317 |
|  | OnDemandPack | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~~10.0.22621.382 | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~~10.0.22621.382 |
|  | OnDemandPack | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1 | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~wow64~~10.0.22621.1 | Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~wow64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 | Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 | Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1 |
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|  | OnDemandPack |  | Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~~10.0.22621.1 | Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 | Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 | Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-TabletPCMath-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-TabletPCMath-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wallpaper-Content-Extended-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wallpaper-Content-Extended-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Broadcom-Bcmpciedhd63-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Broadcom-Bcmpciedhd63-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Broadcom-Bcmwl63a-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Broadcom-Bcmwl63a-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Broadcom-Bcmwl63al-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Broadcom-Bcmwl63al-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Intel-Netwbw02-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Intel-Netwbw02-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Intel-Netwew00-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Intel-Netwew00-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Intel-Netwew01-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Intel-Netwew01-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Intel-Netwlv64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Intel-Netwlv64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Intel-Netwtw02-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Intel-Netwtw02-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Intel-Netwtw06-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Intel-Netwtw06-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Intel-Netwtw10-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Intel-Netwtw10-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Qualcomm-Athw8x-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Qualcomm-Athw8x-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Qualcomm-Athwnx-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Qualcomm-Athwnx-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Qualcomm-Qcamain10x64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Qualcomm-Qcamain10x64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Ralink-Netr28x-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Ralink-Netr28x-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Realtek-Rtl8187se-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Realtek-Rtl8187se-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Realtek-Rtl85n64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Realtek-Rtl85n64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
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|  | OnDemandPack | Microsoft-Windows-Wifi-Client-Realtek-Rtwlane13-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | Microsoft-Windows-Wifi-Client-Realtek-Rtwlane13-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 | Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.382 | Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.382 |
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|  | OnDemandPack | Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1 | Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~en-US~10.0.22621.1 |
|  | OnDemandPack |  | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.317 | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.317 |
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|  | OnDemandPack |  | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1 |
|  | OnDemandPack | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1 | Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1 |
|  | OnDemandPack | OpenSSH-Client-Package~31bf3856ad364e35~amd64~~10.0.22621.1 | OpenSSH-Client-Package~31bf3856ad364e35~amd64~~10.0.22621.1 |
|  | Update | Package\_for\_DotNetRollup\_481~31bf3856ad364e35~amd64~~10.0.9065.6 | Package\_for\_DotNetRollup\_481~31bf3856ad364e35~amd64~~10.0.9065.6 |
|  | SecurityUpdate | Package\_for\_RollupFix~31bf3856ad364e35~amd64~~22621.382.1.13 | Package\_for\_RollupFix~31bf3856ad364e35~amd64~~22621.382.1.13 |
|  | SecurityUpdate | Package\_for\_ServicingStack\_378~31bf3856ad364e35~amd64~~22621.378.1.0 | Package\_for\_ServicingStack\_378~31bf3856ad364e35~amd64~~22621.378.1.0 |