

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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ONE. DEPLOYMENT IMAGE

A. Prerequisites

II ISO tools

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

III Get related packages

Learn "[Attachment: OS](#)" and view the "[Windows 11](#)" item.

1. System installation package

- 1.1. Prepare: [en-us_windows_11_business_editions_version_22h2_x64_dvd_17a08ce3.iso](#)
- 1.2. Unzip to: [D:\en-us_windows_11_business_editions_version_22h2_x64_dvd_17a08c](#)
- 1.3. After decompression is complete, change the directory [en-us_windows_11_business_editions_version_22h2_x64_dvd_17a08c](#) change to [D:\OS11](#)
- 1.4. All scripts and all paths are set to [D:\OS11](#) as the image source.

2. Language pack

- 2.1. Download language pack: [22621.1.220506-1250.ni_release_amd64fre_CLIENT_LOF_PACKAGES_OEM.iso](#)
- 2.2. Select any website and open:

• [https://uupdump.net](#)

• [https://uup.ee](#)

2.2.1. After opening, search for keywords: [22621.382](#), select from the search results: [Windows 11, version 22H2 \(22621.382\)](#)
[amd64](#)

2.2.2. After opening, select "[All files](#)";
- Yi's Solutions, v1.0
- Page 1 of 31

2.2.3. Search the green part in the "All Files" page and download:

2.2.3.1. Applies to: Install.wim (1 item)

2.2.3.1.1. Media

2.2.3.2. Applies to: WinRE.wim, none yet

2.2.3.3. Applies to: Boot.wim, none yet

2.2.4. After downloading all the files, scroll to the bottom of the page, download and run "Generate Rename Script (Windows)"

2.3. 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;

3. InBox Apps

3.1. Learn "Add languages to a Windows 11 image"

3.2. Download: 22621.1778.230511-2102.ni_release_svc_prod3_amd64fre_InboxApps.iso

3.3. Download: 22621.1.220506-1250.ni_release_amd64fre_InboxApps.iso finally, extract the following files and save them to the desktop:

3.3.1. Microsoft.HEVCVideoExtension_8wekyb3d8bbwe.x64.appx

3.3.2. Microsoft.HEVCVideoExtension_8wekyb3d8bbwe.x64.xml

3.4. 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;

I. When running the PS command line:

1. Optional "Terminal" or "PowerShell ISE", if "Terminal" is not installed, please go to: <https://github.com/microsoft/terminal/releases> After downloading;
2. 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

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

B. Language Pack: Extraction

II Prepare the language pack

Mount 22621.1.220506-1250.ni_release_amd64fre_CLIENT_LOF_PACKAGES_OEM.iso or unzipped to any location;

III Execute the extract command

- 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](#), [Github](#))

```
$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_OC\WinPE-FontSupport-zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\lp.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-securestartup_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-atbroker_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-audiocore_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-audiodrivers_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-enhancedstorage_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-narrator_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-scripting_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-speech-tts_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-srh_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-srt_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-wds-tools_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-wmi_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-appxdeployment_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-appxpackaging_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-storagewmi_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-wifi_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-windowsupdate_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-rejuv_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-opcservices_zh-CN.cab"
    "Windows Preinstallation Environment\x64\WinPE_OC\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_OC\WinPE-FontSupport-zh-CN.cab"

```

```

"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\lp.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\WinPE-Setup_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\WINPE-SETUP-CLIENT_zh-CN.CAB"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-securestartup_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-atbroker_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-audiocore_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-audiodrivers_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-enhancedstorage_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-narrator_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-scripting_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-speech-tts_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-srh_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-srt_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-wds-tools_zh-CN.cab"
"Windows Preinstallation Environment\x64\WinPE_OC\zh-CN\winpe-wmi_zh-CN.cab"
)
Extract_Language -Package $Language -SaveTo "D:\OS11_Custom\Boot\Boot\Language\zh-CN" -NewPath $ISO

```

C. Customize the deployment image

II Custom deployment image: Install.wim

1. View Install.wim details

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
}

```

2. Specify the path to mount Install.wim

```
New-Item -Path "D:\OS11_Custom\Install\Install\Mount" -ItemType directory -ea SilentlyContinue
```

LOOP OPERATING AREA, START,

3. Start mounting Install.wim

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,

3.1. Custom deployment image: WinRE.wim

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"](#).

3.1.1. View WinRE.wim details

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
}
```

3.1.2. Specify the path to mount WinRE.wim

```
New-Item -Path "D:\OS11_Custom\Install\WinRE\Mount" -ItemType directory -ea SilentlyContinue
```

3.1.3. Start mounting WinRE.wim

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"
```

3.1.4. Language pack

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

3.1.4.1. Language pack: add

Copy the code or view the source file: [WinRE.Instl.lang.ps1](#) ([Local](#), [Github](#))

```
$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
        }
    }
}
```

3.1.4.2. Components

3.1.4.2.1. View

```
Get-WindowsPackage -Path "D:\OS11_Custom\Install\WinRE\Mount" | Out-GridView
```

3.1.4.2.2. Export to csv

```
$SaveTo = "D:\OS11_Custom\Install\WinRE\Report.$(Get-Date -Format
"yyyyMMddHHmmss").csv"
Get-WindowsPackage -Path "D:\OS11_Custom\Install\WinRE\Mount" | Export-CSV -
NoType -Path $SaveTo
Write-host $SaveTo -ForegroundColor Green
```

3.1.5. Update, optional

3.1.6. Driver, optional

3.1.7. Save image

```
Save-WindowsImage -Path "D:\OS11_Custom\Install\WinRE\Mount"
```

3.1.8. Unmount image

```
Dismount-WindowsImage -Path "D:\OS11_Custom\Install\WinRE\Mount" -Discard
```

3.1.9. After rebuilding WinRE.wim, the file size can be reduced

Copy the code or view the source file: [WinRE.Rebuild.ps1](#) ([Local](#), [Github](#))

```

$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
}

```

3.1.10. Backup WinRE.wim

Copy the code or view the source file: [WinRE.Backup.ps1](#) ([Local](#), [Github](#))

```

$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

```

3.1.11. Replace WinRE.wim within the Install.wim image

- After each mount Install.wim "[Replace WinRE.wim](#)";
- Learn "[Get all index numbers of Install.wim and replace the old WinRE.wim](#)".

[Process the files in the Install.wim image and end.](#)

4. Language pack

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

4.1. Language pack: add

Copy the code or view the source file: [Install.Instl.lang.ps1](#) ([Local](#), [Github](#))

```

$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
  }
}
}

```

4.2. Components

4.2.1. View

```
Get-WindowsPackage -Path "D:\OS11_Custom\Install\Install\Mount" | Out-GridView
```

4.2.2. Export to csv

```

$SaveTo = "D:\OS11_Custom\Install\Install\Report.$(Get-Date -Format "yyyyMMddHHmmss").csv"
Get-WindowsPackage -Path "D:\OS11_Custom\Install\Install\Mount" | Export-CSV -NoType -Path $SaveTo
Write-host $SaveTo -ForegroundColor Green

```

5. InBox Apps

5.1. Learn "Attachment: inBox Apps"

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

5.2. InBox Apps: Installed

5.2.1. View

```
Get-AppXProvisionedPackage -Path "D:\OS11_Custom\Install\Install\Mount" | Out-GridView
```

5.2.2. 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

```

5.3. Remove all installed pre-applications

Copy the code or view the source file: [Install.InBox.Appx.Clear.all.ps1](#) ([Local](#), [Github](#))

```

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
    }
}

```

5.4. Language Markers: Understanding

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.

5.5. Language tag: adding method

5.5.1. Execute "**Language Pack:Add**"

5.5.2. 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:

5.5.2.1. **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**

5.5.2.2. **Manual download**

5.5.2.2.1. **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>

5.5.2.2.2. **Open the website: <https://store.rg-adguard.net>**

5.5.2.2.2.1. Search keywords:

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

5.5.2.2.2.2. Search 22621 content in the web page, search results:

**Microsoft.LanguageExperiencePackzh-CN_22621.*.
neutral_8wekyb3d8bbwe.appx**

5.5.2.2.2.3. After downloading, save it to the

D:\OS11_Custom\Install\Install\InBox.Appx directory and rename it:
LanguageExperiencePack.zh-cn.Neutral.Appx

5.5.2.3. **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
```

5.5.2.4. Get installed UWP apps

5.5.2.4.1. View

```
Get-AppXProvisionedPackage -Path "D:\OS11_Custom\Install\Install\Mount" | Out-GridView
```

5.5.2.4.2. 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
```

5.6. InBox Apps: Install

5.6.1. Mount or decompress the InBox Apps installation file

Mount [22621.1.220506-1250.ni_release_amd64fre_InboxApps.iso](#) or extract to any location;

5.6.2. After executing the installation command, install InBox Apps to: Install.wim

- [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](#), [Github](#))

```
$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.WebplImageExtension";
"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.WebplImageExtension";
"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.WebplImageExtension"; File = "Microsoft.WebplImageExtension_8wekyb3d8bbwe.x64.appx";
    License = "Microsoft.WebplImageExtension_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
    }
}
}

```

5.7. Language tag: delete

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](#), [Github](#))

```
$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
        }
    }
}
}

```

5.8. InBox Apps: optimization

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
```

6. Update

- 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.

6.1. Initial version

6.1.1. How to download

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>

6.1.1.1. After opening, search for keywords: [22621.382](#), select from the search results: [Windows 11, version 22H2 \(22621.382\) amd64](#)

6.1.1.2. After opening, select "All files";

6.1.1.3. Search for: [KB5016632](#) in the "All Files" page, download:

- [Windows11.0-KB5016632-x64.cab](#)
- [Windows11.0-KB5016632-x64.psf](#)

6.1.1.4. Merging cumulative updates

6.1.1.4.1. Go to <https://github.com/abbodi1406/WHd/tree/master/scripts> After downloading [PSFX_Repack_6.zip](#)

6.1.1.4.2. After downloading, unzip it to: [D:\PSFX_Repack_6](#)

6.1.1.4.3. Copy [Windows11.0-KB5016632-x64.cab](#), [Windows11.0-KB5016632-x64.psfx](#) to:
[D:\PSFX_Repack_6](#)

6.1.1.4.4. After running: [psfx2cab_GUI.cmd](#), you will get a new file:

[Windows11.0-KB5016632-x64-full_psfx.cab](#)

6.1.1.4.5. Save [Windows11.0-KB5016632-x64-full_psfx.cab](#) to:

[D:\OS11_Custom\Install\Install\Update\Windows11.0-KB5016632-x64-full_psfx.cab](#)

6.1.2. Add

```
$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
```

6.2. Other Version

6.2.1. How to download

Check out "[Windows 11 version 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](#)", Save to:

[D:\OS11_Custom\Install\Install\Update\windoOS11.0-kb5030219-x64_659d407821da654d564a3108bf493594bd143ab1.msu](#)

6.2.2. Add

```
$KBPath = "D:\OS11_Custom\Install\Install\Update\windoOS11.0-kb5030219-x64_659d407821da654d564a3108bf493594bd143ab1.msu"
Add-WindowsPackage -Path "D:\OS11_Custom\Install\Install\Mount" -PackagePath $KBPath
```

6.3. Solidify Updated, optional

```
Dism /Image:"D:\OS11_Custom\Install\Install\Mount" /cleanup-image /StartComponentCleanup
```

6.3.1. Clean components after curing and updating, optional

```
$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
    }
}
```

7. Driver, optional

8. Health

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
```

9. Replace WinRE.wim

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
```

10. Save image

```
Save-WindowsImage -Path "D:\OS11_Custom\Install\Install\Mount"
```

11. Unmount image

```
Dismount-WindowsImage -Path "D:\OS11_Custom\Install\Install\Mount" -Discard
```

LOOP OPERATING AREA, END.

12. How to batch replace WinRE.wim in all index numbers in Install.wim

12.1. Obtain WimLib

After going to the official website of <https://wimlib.net>, select a different version: [arm64](#), [x64](#), [x86](#), and extract it to: [D:Wimlib](#) after downloading

12.2. How to extract and update WinRE.wim in Install.wim

12.2.1. Extract the WinRE.wim file Install.wim from Install.wim

Copy the code or view the source file: Install.WinRE.Extract ([Local](#), [Github](#))

```
$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-imageex.exe" -ArgumentList $Arguments -wait -nonewwindow
```

12.2.2. Get all index numbers of Install.wim and replace the old WinRE.wim

Copy the code or view the source file: [Install.WinRE.Replace.wim.ps1](#) ([Local](#), [Github](#))

```
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-image.exe" -ArgumentList $Arguments -wait -nonewwindow
    Write-Host "  Finish`n" -ForegroundColor Green
  }
}

```

13. Rebuilding Install.wim reduces file size

Copy the code or view the source file: [Install.Rebuild.wim.ps1](#) ([Local](#), [Github](#))

```

$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
}

```

III Custom deployment image: boot.wim

1. View Boot.wim details

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
}

```

2. Specify the path to mount Boot.wim

```

New-Item -Path "D:\OS11_Custom\Boot\Boot\Mount" -ItemType directory -ea SilentlyContinue

```

3. Start mounting Boot.wim

Default index number: 2

```

$Index = "2"
Mount-WindowsImage -ImagePath "D:\OS11\sources\boot.wim" -Index $Index -Path "D:\OS11_Custom\Boot\Boot\Mount"

```

4. Language pack

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

4.1. Language pack: add

Copy the code or view the source file: [Boot.Instl.lang.ps1](#) ([Local](#), [Github](#))

```
$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
}
}
```

4.2. Components

4.2.1. View

```
Get-WindowsPackage -Path "D:\OS11_Custom\Boot\Boot\Mount" | Out-GridView
```

4.2.2. Export to csv

```
$SaveTo = "D:\OS11_Custom\Boot\Boot\Report.$(Get-Date -Format "yyyyMMddHHmmss").csv"
Get-WindowsPackage -Path "D:\OS11_Custom\Boot\Boot\Mount" | Export-CSV -NoType -Path $SaveTo
Write-host $SaveTo -ForegroundColor Green
```

4.3. Language: Repair

4.3.1. Extract

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:

- 4.3.1.1. [arunres.dll.mui](#)
- 4.3.1.2. [spwizres.dll.mui](#)
- 4.3.1.3. [w32uires.dll.mui](#)

4.3.2. Copy

Copy the extracted files to: [D:\OS11_Custom\Boot\Boot\Mount\sources\zh-CN](#)

4.4. Language packs: sync to ISO installer

```
Copy-Item -Path "D:\OS11_Custom\Boot\Boot\Mount\sources\zh-CN" -Destination "D:\OS11\sources\zh-CN" -Recurse -Force
```

4.5. Regenerate Lang.ini

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.

4.5.1. Regenerate the mounted directory 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"
```

4.5.2. After regenerating lang.ini, sync to the installer

```
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"
```

5. Update, optional

6. Drive, optional

7. Other

7.1. Bypass TPM

Copy the code or view the source file: [Boot.Bypass.TPM.ps1](#) ([Local](#), [Github](#))

```
$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
```

8. Save image

```
Save-WindowsImage -Path "D:\OS11_Custom\Boot\Boot\Mount"
```

9. Unmount image

```
Dismount-WindowsImage -Path "D:\OS11_Custom\Boot\Boot\Mount" -Discard
```

D. ISO

II Generate 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](#), [Github](#))

```
$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
```

III Bypass TPM installation check

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.

TWO. KNOWN ISSUES

None yet

THREE. COMPONENTS: COMPARISON

Changes after installing new language pack, component list:

SN	TYPE	COMPONENT: ORIGINAL	COMPONENT: CHANGES AFTER INSTALLING "SIMPLIFIED CHINESE - CHINA" LANGUAGE PACK
1	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
2	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
3	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
4	LanguagePack		Microsoft-Windows-Client-LanguagePack-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.382
5	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
6	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
7	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
8	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
9	FeaturePack	Microsoft-Windows-FodMetadata-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-FodMetadata-Package~31bf3856ad364e35~amd64~~10.0.22621.1
10	Foundation	Microsoft-Windows-Foundation-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Foundation-Package~31bf3856ad364e35~amd64~~10.0.22621.1
11	OnDemandPack	Microsoft-Windows-Hello-Face-Package~31bf3856ad364e35~amd64~~10.0.22621.317	Microsoft-Windows-Hello-Face-Package~31bf3856ad364e35~amd64~~10.0.22621.317
12	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
13	OnDemandPack		Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~zh-CN~11.0.22621.1
14	OnDemandPack	Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~~11.0.22621.1	Microsoft-Windows-InternetExplorer-Optional-Package~31bf3856ad364e35~amd64~~11.0.22621.1
15	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
16	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
17	OnDemandPack		Microsoft-Windows-LanguageFeatures-Basic-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1

SN	TYPE	COMPONENT: ORIGINAL	COMPONENT: CHANGES AFTER INSTALLING "SIMPLIFIED CHINESE - CHINA" LANGUAGE PACK
18	OnDemandPack		Microsoft-Windows-LanguageFeatures-Fonts-Hans-Package~31bf3856ad364e35~amd64~~10.0.22621.1
19	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
20	OnDemandPack		Microsoft-Windows-LanguageFeatures-Handwriting-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.317
21	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
22	OnDemandPack		Microsoft-Windows-LanguageFeatures-OCR-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1
23	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
24	OnDemandPack		Microsoft-Windows-LanguageFeatures-Speech-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1
25	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
26	OnDemandPack		Microsoft-Windows-LanguageFeatures-TextToSpeech-zh-cn-Package~31bf3856ad364e35~amd64~~10.0.22621.1
27	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
28	OnDemandPack		Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.317
29	OnDemandPack	Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~~10.0.22621.382	Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~amd64~~10.0.22621.382
30	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
31	OnDemandPack		Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1
32	OnDemandPack	Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~wow64~~10.0.22621.1	Microsoft-Windows-MediaPlayer-Package~31bf3856ad364e35~wow64~~10.0.22621.1
33	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
34	OnDemandPack		Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1
35	OnDemandPack	Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.1

SN	TYPE	COMPONENT: ORIGINAL	COMPONENT: CHANGES AFTER INSTALLING "SIMPLIFIED CHINESE - CHINA" LANGUAGE PACK
36	OnDemandPack	Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1	Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1
37	OnDemandPack		Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1
38	OnDemandPack	Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1	Microsoft-Windows-Notepad-System-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1
39	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
40	OnDemandPack		Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1
41	OnDemandPack	Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
42	OnDemandPack	Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1	Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1
43	OnDemandPack		Microsoft-Windows-PowerShell-ISE-FOD-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1
44	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
45	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
46	OnDemandPack		Microsoft-Windows-Printing-PMCPPC-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1
47	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
48	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
49	OnDemandPack		Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1
50	OnDemandPack	Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~amd64~~10.0.22621.1
51	OnDemandPack	Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1	Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1
52	OnDemandPack		Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1
53	OnDemandPack	Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~wow64~~10.0.22621.1	Microsoft-Windows-StepsRecorder-Package~31bf3856ad364e35~wow64~~10.0.22621.1

SN	TYPE	COMPONENT: ORIGINAL	COMPONENT: CHANGES AFTER INSTALLING "SIMPLIFIED CHINESE - CHINA" LANGUAGE PACK
54	OnDemandPack	Microsoft-Windows-TabletPCMath-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-TabletPCMath-Package~31bf3856ad364e35~amd64~~10.0.22621.1
55	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
56	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
57	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
58	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
59	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
60	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
61	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
62	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
63	OnDemandPack	Microsoft-Windows-Wifi-Client-Intel-Netwns64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Intel-Netwns64-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
64	OnDemandPack	Microsoft-Windows-Wifi-Client-Intel-Netwsw00-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Intel-Netwsw00-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
65	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
66	OnDemandPack	Microsoft-Windows-Wifi-Client-Intel-Netwtw04-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Intel-Netwtw04-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
67	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
68	OnDemandPack	Microsoft-Windows-Wifi-Client-Intel-Netwtw08-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Intel-Netwtw08-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
69	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
70	OnDemandPack	Microsoft-Windows-Wifi-Client-Marvel-Mrvlpcie8897-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Marvel-Mrvlpcie8897-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
71	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

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72	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
73	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
74	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
75	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
76	OnDemandPack	Microsoft-Windows-Wifi-Client-Realtek-Rtl8192se-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Realtek-Rtl8192se-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
77	OnDemandPack	Microsoft-Windows-Wifi-Client-Realtek-Rtl819xp-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Realtek-Rtl819xp-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
78	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
79	OnDemandPack	Microsoft-Windows-Wifi-Client-Realtek-Rtlwlan-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Realtek-Rtlwlan-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
80	OnDemandPack	Microsoft-Windows-Wifi-Client-Realtek-Rtlwlan01-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Realtek-Rtlwlan01-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
81	OnDemandPack	Microsoft-Windows-Wifi-Client-Realtek-Rtlwlan13-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1	Microsoft-Windows-Wifi-Client-Realtek-Rtlwlan13-FOD-Package~31bf3856ad364e35~amd64~~10.0.22621.1
82	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
83	OnDemandPack		Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1
84	OnDemandPack	Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.382	Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.382
85	OnDemandPack	Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1	Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1
86	OnDemandPack		Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1
87	OnDemandPack	Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1	Microsoft-Windows-WMIC-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1
88	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
89	OnDemandPack		Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~zh-CN~10.0.22621.1

SN	TYPE	COMPONENT: ORIGINAL	COMPONENT: CHANGES AFTER INSTALLING "SIMPLIFIED CHINESE - CHINA" LANGUAGE PACK
90	OnDemandPack	Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.317	Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~amd64~~10.0.22621.317
91	OnDemandPack	Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1	Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~en-US~10.0.22621.1
92	OnDemandPack		Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~zh-CN~10.0.22621.1
93	OnDemandPack	Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1	Microsoft-Windows-WordPad-FoD-Package~31bf3856ad364e35~wow64~~10.0.22621.1
94	OnDemandPack	OpenSSH-Client-Package~31bf3856ad364e35~amd64~~10.0.22621.1	OpenSSH-Client-Package~31bf3856ad364e35~amd64~~10.0.22621.1
95	Update	Package_for_DotNetRollup_481~31bf3856ad364e35~amd64~~10.0.9065.6	Package_for_DotNetRollup_481~31bf3856ad364e35~amd64~~10.0.9065.6
96	SecurityUpdate	Package_for_RollupFix~31bf3856ad364e35~amd64~~22621.382.1.13	Package_for_RollupFix~31bf3856ad364e35~amd64~~22621.382.1.13
97	SecurityUpdate	Package_for_ServicingStack_378~31bf3856ad364e35~amd64~~22621.378.1.0	Package_for_ServicingStack_378~31bf3856ad364e35~amd64~~22621.378.1.0