

OEM Preinstallation Guide for Office 2205 OPK

For Windows 10 and Windows 11

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Abstract

This guide provides information for licensed original equipment manufacturers (OEMs) to use the Office Deployment Tool to preinstall Office on to devices that are running the latest version of the Windows® 10 or Windows® 11 operating system.

Document history

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OEM Preinstallation Guide for Office 2205 OPK (AFOLB/DA)

Introduction

As an OEM, you can preinstall Office on devices that run supported versions of the Windows operating system.

In addition to preinstalling the apps, you can also have tiles appear on the Windows Start screen for each of the apps. The tiles appear in a designated area for Microsoft apps.

By preinstalling the apps and displaying tiles for the apps on the Start screen, you provide your customers with a Windows installation that is Office-ready from the start.

To preinstall Office, perform the following steps:

1. [Obtain the Office Deployment Tool](#)
2. [Prepare the Office installation source](#)
3. [Create the configuration.xml file for the Office Deployment Tool](#)
4. [Use the Office Deployment Tool to install Office](#)
5. [Display the Office apps on the Windows Start menu](#)
6. [Configure the setup experience for the user](#)

Steps 4, 5, and 6 must be run on each device or on one device that will be used to create a master image.

1. Obtain the Office Deployment Tool

The Office Deployment Tool is command-line tool used to install Office. The setup.exe file installs Office as specified in the configuration XML file. The configuration XML file can be used to change the product ID, language, apps, etc. installed. The setup.exe file and sample configuration XML files are included in the OPK.

2. Prepare the Office .img files

The OPK includes an Office .img file for each language. You can copy the Office .img files (by extracting the files from within the image) to any file location, such as a network share, a USB device, or a folder on the device where you plan to install Office.

If you plan to install multiple languages, extract and copy the contents of the .img files for each language to a single folder, choosing to overwrite any conflicting files if prompted. This will both simplify the process and reduce installation time.

These extracted installation files include both 32-bit and 64-bit Office. Optionally, if only installing one edition of Office, the installation file size may be reduced by removing files for the unused edition. For example, if only installing for 64-bit Office, the 32-bit content can be safely removed. The 32-bit filenames start with "stream.x86" and are found in the \office\data\{version number}\ folder.

Multilanguage OPK

Starting with OPK 2205, Microsoft will release a multilanguage OPK in addition to the individual language OPKs. The multilanguage OPK is released as a .iso file. The install and configuration process is the same as with the individual language OPK .img files.

3. Create the configuration.xml file for the Office Deployment Tool

The settings that the Office Deployment Tool uses to install Office are contained in an XML file which can be edited in any text editor (such as Notepad). In this document, the XML used to configure these settings will be referred to as configuration.xml, but you don't have to use that name when installing.

For Windows 10:

A sample configuration file, named **ConfigureM365_Win10.xml**, is part of the OPK. This XML file is configured to silently install Microsoft 365 Family in English from a hypothetical network share named [\\server\share](#).

For Windows 11:

A sample configuration file, named **ConfigureM365_Win11.xml**, is part of the OPK. This XML file is configured to silently install Microsoft 365 Family in English from a hypothetical network share named [\\server\share](#). There are multiple sample configuration files included with the OPK. **ConfigureM365_Win11.xml** should be used with this preinstallation guide for consumer Office installation on Windows 11 builds.

Specify the location of the Office .img files

In the configuration file, use the `SourcePath` attribute to specify the location of the Office .img file(s). If the Office .img files are on a network share called `\\server\share`, your configuration.xml file would include a line like the following example:

```
<Add SourcePath="\\server\share" OfficeClientEdition="64">
```

If the `setup.exe` file and the Office .img files are in the same folder, you don't need to include the `SourcePath` attribute in your configuration.xml file. The Office .img files are extracted into an Office folder.

Note: If using the multilanguage .iso OPK, use the `SourcePath` attribute to specify the location of the mounted Office .iso file.

Specify the edition of Office to install – 32-bit or 64-bit

In the configuration file, use the `OfficeClientEdition` attribute to specify which bit type of Office to install. 64-bit Office is to be installed for 64-bit Windows devices with minimum RAM of 4GB. 32-bit Office is for 32-bit Windows devices. The following configuration.xml file example is set to install 64-bit Office:

```
<Add SourcePath="\\server\share" OfficeClientEdition="64">
```

Specify the Office product to install

The Product ID in the configuration.xml file specifies which product is installed on the device, which defines the collection of apps available to the customer. The default Product ID specified in the configuration file is **O365HomePremRetail**. If the customer enters a key for another product, Office will trigger a SKU conversion and will automatically be configured as the product associated with that key.

When pre-installing Office onto a device, it may be pre-bundled with a specific Office SKU (i.e. a PC that has an Office entitlement associated with the Windows binding through AFO or Digital Attach). In pre-bundle scenarios, you may configure the Office installation to the SKU you are pre-bundling with the device. This improves the customer activation experience but is not required. To do this, you will need to edit the Product ID in the configuration.xml file. By default, the Product ID is:

<Product ID="O365HomePremRetail">

You can change the ID to the following depending on the attachment or bundled SKU:

Product ID	Product Name and Version	Product ID
26013	Microsoft® 365 Personal (AFOLB)	O365HomePremRetail
26014	Microsoft® 365 Personal EM (AFOLB)	O365HomePremRetail
26015	Microsoft® 365 Family (AFOLB)	O365HomePremRetail
26016	Microsoft® 365 Family EM (AFOLB)	O365HomePremRetail
28630	Microsoft® Office Home and Student 2019 (AFOLB)	HomeStudent2019Retail
28629	Microsoft® Office Home and Student 2019 (EM) (AFOLB)	HomeStudent2019Retail
28628	Microsoft® Office Home and Business 2019 (AFOLB)	HomeBusiness2019Retail
28632	Microsoft® Office Professional 2019 (AFOLB)	Professional2019Retail
29389	Microsoft® Office Home and Student 2021 (AFOLB)	HomeStudent2021Retail
29388	Microsoft® Office Home and Student 2021 (EM) (AFOLB)	HomeStudent2021Retail
29390	Microsoft® Office Home and Business 2021 (AFOLB)	HomeBusiness2021Retail
29386	Microsoft® Office Professional 2021 (AFOLB)	Professional2021Retail

Part Number	Product Name and Version	Product ID
AAD-76845	Microsoft 365 Personal -DA-MSA-PI-Opt	O365HomePremRetail
AAD-76846	Microsoft 365 Personal -DA-MSA-EM-PI-Opt	O365HomePremRetail
AAD-76847	Microsoft 365 Family -DA-MSA-PI-Opt	O365HomePremRetail
AAD-76848	Microsoft 365 Family -DA-MSA-EM-PI-Opt	O365HomePremRetail
AAL-51778	Microsoft Office Home & Student 2019 -DA-MSA	HomeStudent2019Retail
AAL-51775	Microsoft Office Home & Student 2019 -DA-MSA-EM	HomeStudent2019Retail
AAL-51777	Microsoft Office Home & Business 2019 -DA-MSA	HomeBusiness2019Retail
AAL-51776	Microsoft Office Professional 2019 -DA-MSA	Professional2019Retail
AAL-51808	Microsoft Office Home & Student 2021 -DA-MSA	HomeStudent2021Retail

AAL-51807	Microsoft Office Home & Student 2021 -DA-MSA-EM	HomeStudent2021Retail
AAL-51795	Microsoft Office Home & Business 2021 -DA-MSA	HomeBusiness2021Retail
AAL-51804	Microsoft Office Professional 2021 -DA-MSA	Professional2021Retail

After changing the Product ID, proceed with the rest of installation as normal.

This should only be done if the device will be pre-bundled with a Product SKU other than Microsoft 365 Family/Personal. If you are not sure, leave the Product ID as O365HomePremRetail.

For more information about configuration file settings, see [Reference for Click-to-Run configuration.xml file](#).

Specify which Office languages to install

The sample configuration files included with the OPK are configured to install Office in English (en-us). To install a different language, change the value of the ID attribute for the Language element. The ID attribute is a string based on the language-tagging conventions of RFC 3066. The pattern *language-region* is used, where language is an ISO-639 language code, and region is an IS 3166-1 country or region identifier (examples: en-us, fr-fr, es-es).

For example, if you want to install the German version of Office, your configuration.xml file would include the following:

```
<Language ID="de-de" />
```

If you want to install multiple languages, add a line for each language in your configuration.xml file. For example, if you want to install English, Spanish, and German, your configuration.xml file would include the following:

```
<Product ID="O365HomePremRetail">
  <Language ID="en-us" />
  <Language ID="es-es" />
  <Language ID="de-de" />
</Product>
```

Installation of multiple languages will fail if the language files are not found in the location specified by the SourcePath attribute in the configuration.xml file. All languages referenced in the .xml file must be in the same location. If you are using the multilanguage .iso OPK and the correct location of the file is specified by the SourcePath attribute, you can reference any

language in the configuration.xml. If you are using the individual .img OPKs, make sure files for all languages referenced in the configuration.xml are at the location specified by the SourcePath attribute.

Starting with OPK 2110, three new standalone languages have been added to the Office OPK: French (Canada) – fr-ca, Spanish (Mexico) – es-mx, English (United Kingdom) – en-gb.

Some languages, such as Basque, require special installation instructions. For more information, see [Downloading and installing Office Language Interfaces](#).

By default, all installed Office languages remain on the device. If you want only the Office language that matches the Windows display language to remain, but have all other Office languages removed, you can configure that. For more information, see [Removing installed languages that aren't needed](#).

Office theme setting

The new "Use system setting" theme setting is now officially supported in Office. This setting allows Office to follow the system "Light" or "Dark" setting on Windows. "Light" uses the Colorful theme; "Dark" uses the Black theme.

- If the user has not explicitly chosen a theme, "Use system setting" will be the new default.
- If the user manually selects "Use system setting," the setting will roam to other devices.
 - On Windows 8 or older builds of Office 2016, we will fall back to Colorful since there is no dark mode.
 - Office 2013 and earlier read from a different theming setting are not affected by this.

Add Microsoft OneNote Standalone Installer and Bypass Key

For Windows 10:

No change from previous OPKs. A free version of OneNote is still included with Windows 10.

For Windows 11:

Starting with the 2106 OPK for Windows 11, a free Microsoft OneNote SKU and bypass key will be installed with Office. This change is reflected in the sample configuration file **ConfigureM365_Win11.xml** included with the ODT:

```
<Product ID="OneNoteFreeRetail" PIDKEY="XN9Q3-RDV2X-Y4BRC-Q8MP2-7CFGB">  
  <Language ID="en-us" />
```

```
<ExcludeApp ID="OneDrive" />
</Product>
```

The OneNote app will be automatically licensed by the bypass key for Microsoft OneNote. If the Office suite is uninstalled, Microsoft OneNote will remain installed on the device. If Microsoft OneNote is uninstalled, the Office suite will remain on the device.

Microsoft Teams Configuration with the Office OPK

Microsoft Teams is included in Office 2021 products. In the future, Microsoft Teams will also be installed with Microsoft 365 consumer products. Microsoft Teams will continue to be installed with Microsoft 365 Apps for enterprise.

Microsoft Teams for Consumer Devices

On Windows 11 devices, Microsoft Teams should be **excluded** from consumer Office installations because Microsoft Teams is already included in box with Windows 11. Failing to exclude Microsoft Teams from consumer installations will result in a negative user experience. The following change to exclude Teams is reflected in the ConfigureM365_Win11.xml included with the ODT:

```
<ExcludeApp ID="Teams" />
```

On Windows 10 devices, Microsoft Teams can be installed by the consumer ODT.

Microsoft Teams with Microsoft 365 Apps

Microsoft Teams is included with the O365ProPlusRetail SKU. Teams installation software will be preinstalled with the Office OPK if included in the SKU, but the actual installation of Teams into the user profile will happen when the user signs into the newly created profile. The user will not see the Teams app tile until they sign into the user profile. Once the user signs in, they will not have to take any action to install Teams.

Refer to the following documentation for instructions and configuration options: <https://docs.microsoft.com/en-us/deployoffice/teams-install>.

Using the OPK for Commercial Customers

There may be instances where you would like to use the OPK for processes such as Auto-Pilot. This is permitted only if the PC will be distributed to a commercial customer that requires Microsoft 365 Apps (previously named Office 365 ProPlus). This is not

allowed for any distribution to consumer customers. If you are unsure, then the Product ID in the configuration.xml must be set to the default: O365HomePremRetail.

To prepare a device for commercial, there are a couple factors to consider: which SKU, which bit edition (64/32), and which channel to set updates to, i.e. SAC (Semi Annual Channel vs Monthly Channel). If a partner has ordered custom PCs, e.g. make-to-order, you should check with them to understand which configurations they prefer.

If you plan to manufacture PCs and then ship them when customers order, e.g. make-to-stock, the following configurations should be set. If your partner is unsure of the configuration, we would recommend the following:

SKU	Microsoft 365 Apps
Bit Edition	64-bit
Update Channel	Current

Generally, installing for commercial customers is similar to consumer customers but with a few exceptions:

1. In configuration XML files, as mentioned above, OfficeClientEdition should be 64.
2. Change the SKU from O365HomePremRetail to an enterprise SKU, i.e. O365ProPlusRetail.
3. Set the Update Channel by inserting Channel="Current".
4. By default, the ODT installs all Office apps, so you will have to exclude any apps the customer does not wish to have on their device.

```
<Configuration>
  <Add SourcePath="\\Server\Share\" OfficeClientEdition="64" Channel="Current">
    <Product ID="O365ProPlusRetail">
      <Language ID="en-us" />
      <ExcludeApp ID="OneDrive" />
      <ExcludeApp ID="Groove" />
      <ExcludeApp ID="Lync" />
      <ExcludeApp ID="Bing" />
    </Product>
  </Add>
```

```
<!-- <Display Level="None" /> -->
</Configuration>
```

Update Channel

Current
Monthly Enterprise
Semi-Annual Channel

Syntax

Channel="Current" (is default, recommended)
Channel="MonthlyEnterprise"
Channel="SemiAnnual"

Additionally, for Commercial customers, you will want to run the following script "oemsetup.OEMSMB.1234.cmd". After this script is run, Office will show an authentication dialog asking them to sign in with their AAD instead of the consumer first run experience. We highly recommend the user signs in with their assigned organization ID and not create an ID in this instance. After this is complete the user will be able to start using Office.

Microsoft 365 Enterprise SKU to Product ID mapping

Support document: <https://docs.microsoft.com/en-us/office365/troubleshoot/administration/product-ids-supported-office-deployment-click-to-run>

Microsoft 365 SKU	Product ID
Microsoft 365 Apps	O365ProPlusRetail
Microsoft 365 E3	O365ProPlusRetail
Microsoft 365 E5	O365ProPlusRetail
Microsoft 365 Business Basic/Standard/Premium	O365BusinessRetail
Office Small Business Premium	O365BusinessRetail

SKU Conversion Experience

If a user activates an Office SKU that has a different set of apps than the Office SKU preinstalled on the device, Office will trigger a SKU-to-SKU conversion. If needed, additional apps in the licensed SKU will be downloaded in the background within 24-48 hours.

Specify the Display Level

If you desire to have Office installed in the background (no visual sign of progress), then specify the following DisplayLevel element in the configuration file:

```
...
    </Product>
  </Add>
  <Display Level="None" />
</Configuration>
```

Low-cost device configuration

To preserve space on low cost 32GB storage devices and some 64GB storage devices, policy allows installing Word, Excel, and PowerPoint apps only. This can be done with a configuration file for 32-bit Office that excludes all apps except Word, Excel, and PowerPoint. Sample XMLs for this configuration are provided, named ConfigureM365WXP32_Win11.xml and ConfigureM365WXP32_Win10.xml.

Follow this guidance to install Office optimized for your device's specifications:

Required exception configurations:

1. If 32GB of storage or less, 32-bit and WXP-only is required. This configuration maximizes free space available on the device.
2. **For Windows 10 devices only:** If the device has an ARM64 processor, a 32-bit install is required. These apps are optimized for the best performance on ARM64 processors.

Optional exception configurations:

3. If the device has less than 4GB of RAM, OEMs may optionally install 32-bit clients. Low memory devices will not benefit from 64-bit installs, and OEMs may elect to install 32-bit clients to maximize available user storage.

Device	Pre-install	Required?
2GB RAM / 32GB Storage	Office 32-bit; Word, Excel, PowerPoint Only	Yes
4GB RAM / 32GB Storage	Office 32-bit; Word, Excel, PowerPoint Only	Yes

2GB RAM / 64GB Storage	Office 32-bit; full M365 suite	Recommended
4GB RAM / 64GB Storage (and higher)	Office 64-bit; full M365 suite	Recommended*
[Windows 10 only] ARM64 Device >32GB Storage	Office 32-bit; full suite	Yes

*Note: Install 64-bit Office on Windows 11 4GB RAM/64GB Storage (and higher) devices (both intel- and ARM- based devices).

For Windows 11 devices, see section titled “Add Microsoft OneNote Standalone Installer and Bypass Key” to install a free version of OneNote. A free version of OneNote is included on Windows 10 devices.

[Instructions for Office on Windows S Mode devices that are not yet locked](#)

This section previously documented how to install Office on a device prior to enabling S Mode. Special instructions are no longer required for these devices. The Office installation process is the same for S Mode and non-S Mode devices.

[Office Setup for CTA \(China Type Approval\) Devices](#)

See appendix section.

4. [Use the Office Deployment Tool to install Office](#)

To install Office on the device, run the following command from an elevated (as administrator) command prompt:

```
setup.exe /configure configuration.xml
```

If needed, provide the path to the setup.exe and configuration.xml files. Ensure your XML filename matches what you use in the command. For example, if the setup.exe file is in a folder on the C:\ drive, but the install_office.xml file is on a network share, you would use a command like the following example:

```
C:\odt\setup.exe /configure \\server\share\install_office.xml
```

Installation time depends primarily on the speed of the device itself.

The Office Deployment Tool will return a code of 0 if the installation is successful and a non-zero code if there is an installation error.

5. Display the Office apps on the Windows Start menu

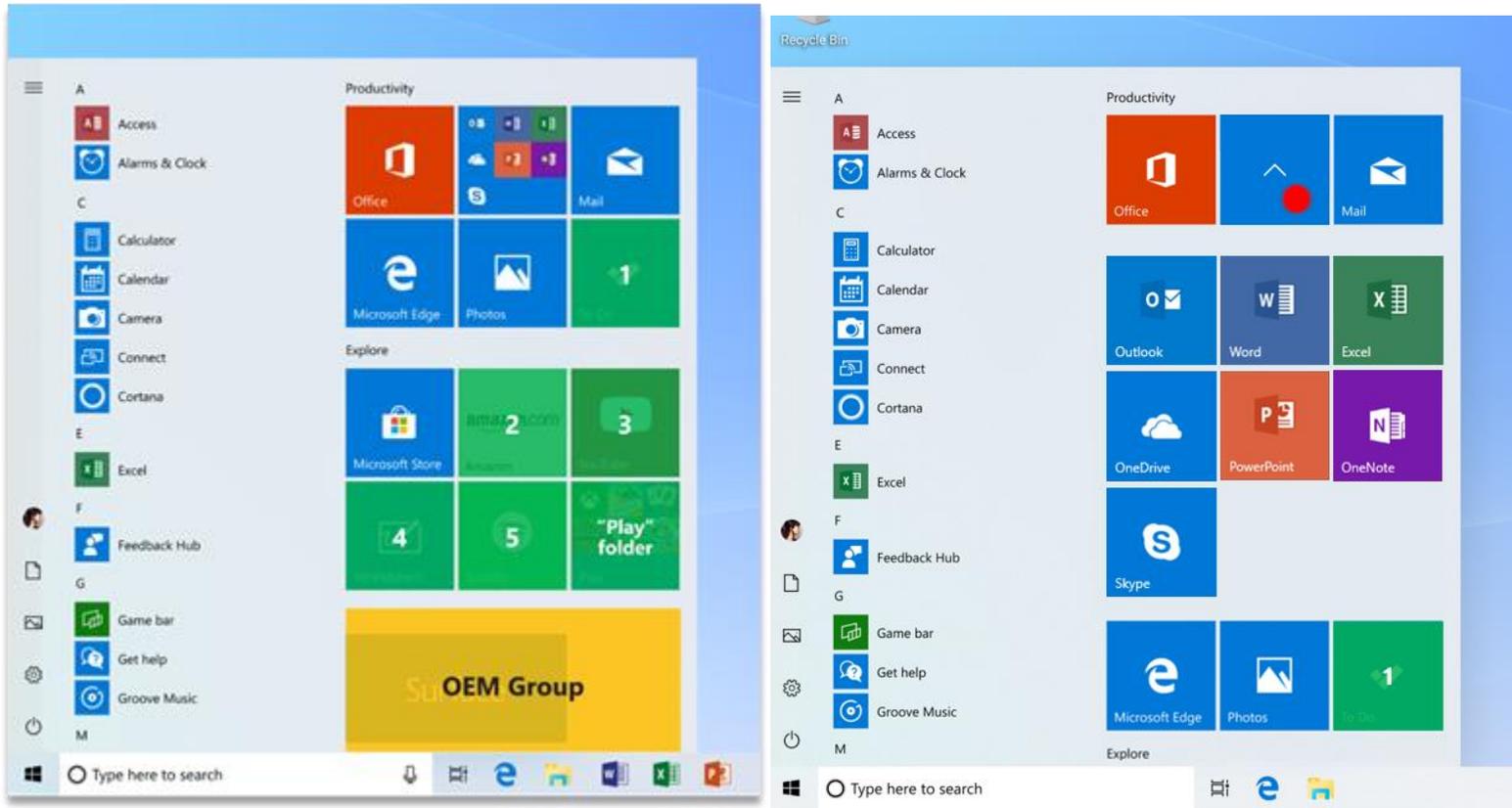
For Windows 10:

To customize the Start menu, create a LayoutModification.xml file. This XML file controls the layout of the Start menu and the tiles that appear there. To learn more, see:

- [Access via the collaborate link under NDA](#)
- [Customize the Start Layout](#) Public information on Microsoft Docs that fully describes how you can customize the Start layout using LayoutModification.xml as of Windows 10, build 1709. This page will be updated once Windows 10, build 1803 reaches general availability.

The general guidance is do not add any Office-related tags to LayoutModification.xml. Windows will automatically detect the Office installation and add it to the Start layout. This is important because there are different ways Office will appear in the Start Layout depending on the type of Office installed. For example, on Low Cost Devices the Start Layout will only open the rich Win32 Word, Excel, and PowerPoint applications if selected by a user. If a user selects the Outlook app we will open a link directing them to Outlook.com. In this instance, it will decrease the complexity for you to specify which versions of Office are installed on the device. Therefore, if you have any of these tags related to Office in the LayoutModification.xml file, you should remove them:

- `<AppendOfficeSuite />`
- `<AppendOfficeSuiteChoice />`
- `<AppendDownloadOfficeTile />`



For Windows 11:

Windows will automatically detect the Office installation and automatically pin the Word, Excel, PowerPoint, and OneNote C2R apps to the Start layout. There is no action needed by the OEM to pin the Office apps to Start.

6. Configure the setup experience for the user

After you install Office on the device, you also need to configure the setup experience for the user. This is the experience the user sees when opening an Office app for the first time on the device. This also is intended to ensure that Office is properly licensed and activated.

Using oemsetup.cmd script to configure the setup experience

To configure the setup experience for the user, you need to make some changes to the registry. To make these registry changes, you run a script named oemsetup.cmd while in Audit mode. After this script is run, the image can be sysprepped and generalized.

The oemsetup.cmd script is available in the same location as the Office OPK Pre-installation Guide on the [Device Partner Center](#).

From an elevated command prompt, run the following command:

```
oemsetup.cmd Mode=<mode> Referral=<referral ID>
```

The Mode setting will control the experience the user sees when opening an Office app for the first time on the device. The Referral setting is used to attribute Office activation to the OEM.

The Mode setting is required. The Referral ID is a four- to seven- digit number that can be used to track and attribute Office incentive programs to registered OEMs.

Setup mode	Description
OEM	<p>In this mode, a customer can choose to try, buy, or activate Office with an existing account, PIN, or product key.</p> <p>This mode doesn't support Activation for Office (AFO) or Digital Attach. Therefore, if you choose this mode, you need to provide the customer with an Activation Card, formerly called a product key card or a Microsoft Product Identifier (MPI) card if Office is being sold with the device.</p>
OEMTA (Required for AFO/DA devices, recommended for all other devices)	<p>This mode supports the try, buy, or activate experience of the OEM mode as well as supporting AFO and Digital Attach.</p> <p>This mode supports Office activation through the device's Windows product key or digital attachment, which means the customer won't need to enter a 5x5 product key code.</p>

	<p>This AFO/DA setting will require the customer to have an Internet connection and an activated copy of Windows. AFO is not supported on Windows 7.</p> <p>Starting with the 20H2 OPK, the OEMTA regkey persists, even if no binding is found. Office will fall back to "try, buy, activate" if no binding is found and will again try to look for a binding on the next session boot.</p>
OEMPIPC	<p>This mode supports the PIPC model (Office 2019 Perpetual). It supports activation of the 5x5 that comes with the device.</p> <p>The customer needs to enter a 5x5 key manually into the product key UI for activation.</p>
DisableAppAutoInstall	<p>This mode supports the installation on low cost device or low spec devices.</p> <p>When installing Word, Excel, PowerPoint 32-bit only for these devices, use this regkey to prevent auto-install of additional apps that user may be entitled to. Users may manually install their other apps if desired.</p>
N/A (not fixed)	<p>This mode supports the new next PIPC model (Office 2019 Perpetual with Office 365 Solo upsell path).</p> <p>The customer needs to sign in with a Microsoft account on OOBE and then enter a 5x5 key manually into the product key UI for activation.</p>

For example, if you want to use OEMTA mode and the referral ID is 7014, you would use the following command:

```
Oemsetup.cmd Mode=OEMTA Referral=7014.
```

Note: The script also supports passing the parameters through file naming. For example, to use file naming to pass the above parameters, you would rename and run the cmd file as follows:

```
Oemsetup.OEMTA.7014.cmd
```

For MAR partners: MAR partners are required to include the Referral Tracking Code (RTC). The RTC for MAR partners is 7032 and the installation mode is OEM. You must use the RTC to unlock the trial mode for Office using the oemsetup command script included in the Office OPK.

Oemsetup.OEM.7032.cmd

Persisting after Push-Button Reset

For oemsetup.cmd to persist after a Push-button-reset or recovery, registry keys used must be saved. This can be accomplished through push-button reset extensibility scripts or other standard methods. A recovery script is included as part of the pre-installation kit that can be used to create these extensibility scripts. This script must be run with the same parameters as the original setup.

Scripts set the following registry locations

Processor Architecture	Registry location	Type	Purpose
X64, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\16.0\Common\OEM\OOBE	REG_SZ	Used to add a GUID hardware ID used during trial activation
X86	HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Office\16.0\Common\OEM\OOBE	REG_SZ	Used to add a GUID hardware ID used during trial activation
X64, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\16.0\Common\OEM\OOBEMode	REG_SZ	Used to set the OOBE Mode- default is OEM
X86	HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Office\16.0\Common\OEM\OOBEMode	REG_SZ	Used to set the OOBE Mode- default is OEM
X64, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\OfficeSoftwareProtectionPlatform\ReferralData	REG_DWORD	Used to set the referral ID as per the OEM
X86	HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\OfficeSoftwareProtectionPlatform\ReferralData	REG_DWORD	Used to set the referral ID as per the OEM
X64, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\C20CDB00F	REG_SZ	Temporary: Used to set a clue for Get Office that this device is a Windows 10 S device.

X86	HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Microsoft\Windows\CurrentVersion\C20CDB00F	REG_SZ	Temporary: Used to set a clue for Get Office that this device is a Windows 10 S device.
X64, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Microsoft\Windows\CurrentVersion\Run [TeamsMachineInstaller]	REG_SZ	Used to maintain Teams for M365 Apps installations.
X86	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run [TeamsMachineInstaller]	REG_SZ	Used to maintain Teams for M365 Apps installations.
X64, X86, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\ClickToRun\OOBExpress	REG_SZ	Used to set the OOBE Express mode. **This should only be set on Windows 11 devices**
X64, X86, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WindowsUpdate\Orchestrator\UScheduler_Oobe\OfficeClickToRun\CmdLine	REG_EXPAND_SZ	Used to define the updater used for OOBE Update. **This should only be set on Windows 11 devices**
X64, X86, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WindowsUpdate\Orchestrator\UScheduler_Oobe\OfficeClickToRun\startArg	REG_SZ	Used to define the arguments passed to the updater for OOBE Update. **This should only be set on Windows 11 devices**
X64, X86, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\WindowsUpdate\Orchestrator\UScheduler_Oobe\OfficeClickToRun\updaterClientMetadata	REG_SZ	Used to define metadata for the Windows Express updater. **This should only be set on Windows 11 devices**
X64, X86, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\ClickToRun\Configuration\UpdatesDisabledReason	REG_SZ	Used to configure specific behavior for CTA devices **CHINA CTA DEVICES ONLY: This should only be set on CTA Windows 11 devices**

These registry keys need to be maintained after a Push-button-reset or recovery. This can be accomplished through push-button reset extensibility scripts or other standard methods. A recovery script is included as part of the pre-installation kit that can be used to create these extensibility scripts. This script must be run with the same parameters as the original setup.

Maintaining OEM referral code post Push Button Reset (PBR)

In the scenario where a user has an AFO or DA device (not activated) and conducts a PBR, the referral ID needs to persist. We recommend that you set the following registry keys when you conduct a scan state image. This way we ensure that when the user is reverted to their scan state you will receive credit when they activate their AFO/DA device.

X64, ARM64	HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\OfficeSoftwareProt ectionPlatform\ReferralData	REG_DWORD	Used to set the referral ID as per the OEM
X86	HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\Of ficeSoftwareProtectionPlatform\ReferralData	REG_DWORD	Used to set the referral ID as per the OEM

Appendix

This appendix contains the following information:

1. [Downloading and installing Office Language Interfaces](#)
2. [Removing installed languages that aren't needed](#)
3. Office setup for CTA devices

Downloading and installing Office Language Interfaces

Some markets may require additional Office languages beyond the standard set of fully localized languages, such as Basque (eu-es), Catalan (ca-es), or Galician (gl-es). These languages must be installed alongside a fully localized language (i.e. en-us, es-es).

NOTE: Not all Office apps are available in these extended languages. In addition, extended languages are not included in the scope of language cleanup like core languages are. This is expected.

To install these languages, there are two requirements:

1. You must use the Office Deployment Tool to download the installation files for these languages from the Office Content Delivery Network (CDN) on the Internet.
2. The build version and edition of these languages must match the build version and edition of the other fully localized languages.

For example, you may want an Office installation in Spanish (es-es) and Basque (eu-es). The Spanish installation files are available in the Spanish .img file as part of the OPK. To obtain the Basque installation files, you need to use the Office Deployment Tool to download them from the CDN.

The build version can be determined by looking at the folder where the Office .img files are located. Under the `Office\Data` folder, there is folder with the build version. For example, `Office\Data\16.0.7571.2122`.

In this case, you need to make sure the Spanish and the Basque installation files are both the same 16.0.7571.2122 version. Do not mix different build versions.

To use the Office Deployment Tool to download these languages, you need to specify the following in your configuration.xml file:

- `SourcePath` -- the location of where to download the files
- `Version` -- the Office build that you want to download
- `OfficeClientEdition` – 32-bit or 64-bit edition
- `Language ID` -- the languages that you want to download

NOTE: The Language ID follows a standard language + culture code convention (ll-cc).

For example, the following configuration.xml file could be used to download version 16.0.7571.2122 of 64-bit Office in Spanish, Basque, Galician, and Catalan to the `C:\Temp` folder.

```
<Configuration>
  <Add SourcePath="C:\Temp\" Version="16.0.7571.2122" OfficeClientEdition="64">
    <Product ID="O365HomePremRetail">
```

```
        <Language ID="es-es" />
        <Language ID="eu-es" />
        <Language ID="ca-es" />
        <Language ID="gl-es" />
    </Product>
</Add>
</Configuration>
```

To download the language files, run the following command from an elevated command prompt:

```
setup.exe /download configuration.xml
```

If needed, provide the path to the setup.exe and configuration.xml files.

The time it takes to download these files depends primarily on the speed of the network connection.

As mentioned in [Prepare the Office .img files](#), you can copy all the language files to the same location. Then, modify the configuration.xml file to specify all the languages that you want to install from that location.

Removing installed languages that aren't needed

By default, all installed Office languages remain on the device. If you want only the Office language that matches the Windows display language to remain, but have all other Office languages removed, you can configure that.

If you configure this, when the device is first booted, Office attempts to match the Windows display language to one of the installed Office languages. If a match is found, all other Office languages are marked for silent removal at the next update opportunity. This removal occurs asynchronously and won't cause a delay in the initial boot of the device.

To configure the removal of languages that aren't needed, create an XML file. This XML file is used as an "answer file" to tell the System Preparation (Sysprep) tool to remove the languages during the initial boot of the device if an appropriate match is found. For more information about Sysprep, see [Sysprep \(System Preparation\) Overview](#).

Use the following example to create your XML file. A sample unattend.xml file is also provided in the OPK.

```

<?xml version="1.0" encoding="utf-8"?> <unattend
xmlns="urn:schemas-microsoft-com:unattend">
  <settings pass="oobeSystem">
    <component name="Microsoft-Windows-Shell-Setup" processorArchitecture="amd64"
publicKeyToken="31bf3856ad364e35" language="neutral" versionScope="NonSxS"
xmlns:wcm="http://schemas.microsoft.com/WMIconfig/2002/State"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
      <FirstLogonCommands>
        <SynchronousCommand wcm:action="add">
          <Description>Office Culture Refresh</Description>
          <Order>1</Order>
          <CommandLine>"%COMMONPROGRAMFILES%\Microsoft
Shared\ClickToRun\OfficeClickToRun.exe" scenario=CULTUREREFRESH
RemoveNonClientCultures=True displaylevel=False</CommandLine>
        </SynchronousCommand>
      </FirstLogonCommands>
    </component>
  </settings>
</unattend>

```

The key part of the XML file is the `CommandLine` section. The following table explains the parts of the `CommandLine` section.

CommandLine part	Description
"%COMMONPROGRAMFILES%\Microsoft Shared\ClickToRun\OfficeClickToRun.exe"	Run the Click-to-Run client for Office from where it has been installed locally.
scenario=CULTUREREFRESH	Compare the Windows display language to the installed Office languages. If a match is found, switch the Office language to that match.
RemoveNonClientCultures=True	If a language match is found, remove the other remaining Office languages, if any, at the next update opportunity.

```
displaylevel=False
```

Perform the removal silently. That is, don't display an error to the user if something goes wrong.

After you create the file and save it as unattend.xml in the Sysprep folder, run the following command from an elevated command prompt to have Sysprep apply the settings in the XML file.

```
sysprep /oobe /generalize /unattend:c:\windows\system32\sysprep\unattend.xml
```

For more information, see [Sysprep Command-Line Options](#).

Office Setup for CTA (China Type Approval) Devices

China Type Approval (CTA) is the regulatory certification for any cellular devices shipping in China. Devices preinstalled with Windows that are distributed into China with a mobile broadband module must be CTA certified. For CTA devices, set registry key SetRegionSpecificPrivacyAccessPolicy to "zh" and make sure the regkey is marked to persist across device resets (see Windows CTA guidance).

CTA devices may not automatically download Office automatic updates until user consent is granted. Follow these two steps to disable Office Auto-updates and allow user to re-enable.

1. Disable Office updates in configuration.xml file by adding this **Updates** element.

```
<Configuration>
```

```
<Add SourcePath="\\Server\Share" OfficeClientEdition="64">
```

```
<Product ID="O365HomePremRetail">
```

```
<Language ID="en-us" />
```

```
<ExcludeApp ID="OneDrive" />
```

```
<ExcludeApp ID="Teams" />
```

```
</Product>
```

```
<Product ID="OneNoteFreeRetail" PIDKEY="XN9Q3-RDV2X-Y4BRC-Q8MP2-7CFGB">  
  <Language ID="en-us" />  
</Product>  
</Add>  
<Updates Enabled="FALSE" />  
</Configuration>
```

2. Set registry key to indicate updates are disabled on device and allow user to re-enable

The script "oemsetup.CTAUpdatesDisabled.cmd" included in the OPK will set the correct registration on the device. Run this script on CTA device after Office installation has completed.

User Experience Validation

A separate document titled "2205 OPK – Final Screenshots to OEMs" outlines the customer user experiences provided by the 2205 OPK. To verify these scenarios, the PC needs to be set up in accordance with the Office Preinstallation Guide.

Note: Microsoft accounts and Office Product Keys may be required to complete these scenarios.

New Office OOBE Experience Rolling Out in 2022

Microsoft has redesigned Office OOBE experiences that will be rolling out starting in 2022. The first phase of these experiences is documented in "OPK Screenshots to OEMs – OTA Updates Spring 22" (found on DPC). OEMs may or may not see the new experiences during testing.

Registry Settings

In the Office Preinstallation Guide, there is a section entitled "Configure the setup experience for the user." The OEM can use the registry to determine the experience a customer will see on their new machine.

For reference: oemsetup.cmd Mode=OEMPIPC

OEM

For the most up to date Office OOBE flows, please refer to the document titled "#### OPK – Final Screenshots to OEMs", # representing the most recent OPK version. This should be available on DPC.