

For IT professionals: Deployment guide for Microsoft Office 2010

Microsoft Corporation

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Abstract

This book contains information about how to install, configure, and upgrade to Microsoft Office 2010. The audience for this book includes IT generalists, IT operations, help desk and deployment staff, IT messaging administrators, consultants, and other IT professionals.

The content in this book is a copy of selected content in the Office 2010 Resource Kit technical library (http://go.microsoft.com/fwlink/?LinkId=181453) as of the publication date. For the most current content, see the technical library on the Web.

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Getting help

Every effort has been made to ensure the accuracy of this book. This content is also available online in the Office System TechNet Library, so if you run into problems you can check for updates at:

http://technet.microsoft.com/office

If you do not find your answer in our online content, you can send an e-mail message to the Microsoft Office System and Servers content team at:

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If your question is about Microsoft Office products, and not about the content of this book, please search the Microsoft Help and Support Center or the Microsoft Knowledge Base at:

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Configuring and deploying Office 2010

This section provides how-to information for specific deployment tasks, such as customizing the installation, and installing Microsoft Office 2010 on users' computers. It also provides information about the new licensing options for Office 2010, including instructions for configuring the infrastructure for volume licensing and activation.

In this section:

Article	Description
Configure and deploy volume activation of Office 2010	Provides information and procedures to help you plan the volume activation of Office 2010.
Prepare the infrastructure for Office 2010	Provides information and procedures to create a network installation point for the deployment of Office 2010.
Customize the installation for Office 2010	Provides information and procedures for customizing the Office 2010 installation, including customizing Setup options, configuring user settings, configuring silent installations, and importing Setup customization files. This section also includes information and procedures for customizing Outlook and Microsoft SharePoint Workspace 2010.
Deploy Office 2010	Provides information and procedures for running Setup for Office 2010, precaching the local installation source, and deploying to users who are not administrators.

Configure and deploy volume activation of Office 2010

Once you complete the volume activation planning phase for your organization, the next step is to deploy the volume activation methods you have chosen. This section describes how to deploy volume activation.

In this section:

Article	Description
Deploy volume activation of Office 2010	Provides information about how to deploy Volume License editions of Microsoft Office 2010 through Office Activation Technologies.
Tools to configure client computers in Office 2010	Describes the tools available for configuring and testing Volume License editions of Office 2010 through Office Activation Technologies.
Volume activation quick start guide for Office 2010	Provides information and procedures to quickly activate Volume License editions of Office 2010 through Office Activation Technologies.

See Also

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

Deploy volume activation of Office 2010

This article describes how to deploy Office Activation Technologies. Before you read this article, we recommend that you read Volume activation overview for Office 2010 (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx) and Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829dcfecbb917dc4(Office.14).aspx). For additional planning resources, see "Evaluate Client Connectivity" in Volume Activation for Windows Planning Guide (http://go.microsoft.com/fwlink/?LinkId=183041).

In this article:

- Prepare and configure the Office 2010 client
- Prepare and configure the KMS host
- **Configure DNS**
- **Deploy Visio 2010**
- Post-deployment

Prepare and configure the Office 2010 client

You must decide whether each computer in your organization is to be activated by using Key Management Service (KMS) or Multiple Activation Key (MAK). The product key that is installed on the computer indicates whether Microsoft Office 2010 is to activate through KMS or MAK. This section describes how to enter the product key.



Important:

If you deploy an image or create a virtual machine (VM), you must rearm the installation of Office 2010 before you capture the image or VM. For more information, see Rearm the Office 2010 installation later in this article.

KMS clients

In the 2007 Microsoft Office system and previous versions of Microsoft Office, you had to enter a product key when you deployed Office. If you use Key Management Service (KMS), you do not have to do this for Office 2010, because all volume license editions of Office 2010 have a KMS client key preinstalled.

Important

By default, Microsoft Visio 2010 is preinstalled with the Microsoft Visio Premium 2010 KMS client key, which enables all the features that are available for Visio Premium 2010. If your license agreement with Microsoft is for Visio Standard 2010 or Visio Professional 2010, you must enter the appropriate KMS client key as described in Deploy Visio 2010 later in this article.

Only one key must be installed and activated on the Office 2010 KMS host to activate all volume license editions of Office 2010 KMS clients. If the Office 2010 KMS host is installed and configured, KMS activation occurs transparently to the user when an Office 2010 client first installs.

For additional configuration options, such as how to specify the KMS host name on the KMS client, see Tools to configure client computers in Office 2010.

MAK clients

If you use Multiple Activation Key (MAK), you must enter the MAK key by using one of the following supported methods:

- Before you deploy Office 2010
 - Office Customization Tool (OCT)
 - Config.xml file
- After you deploy Office 2010
 - Volume Activation Management Tool (VAMT) 2.0
 - The Backstage view
 - The ospp.vbs script

Important:

Because different products require different MAK keys, you should first verify that the MAK key for the product is correct.

Office Customization Tool (OCT)

To enter a MAK by using the OCT, follow these steps:

- 1. In the **Type a valid 25-character volume license key with no spaces** field, enter the MAK key (five sets of five numbers or characters), and then press ENTER.
- 2. After making any other necessary changes in the OCT, save the .msp file.

Remember that you do not have to enter a product key in the OCT if you are using KMS activation. For more information about the OCT, see Customize Setup before installing Office 2010.

Config.xml file

To enter a MAK by using the Config.xml file, follow these steps:

1. Add the following line to the Config.xml file:

<PIDKEY Value="AAAAABBBBBCCCCCDDDDDEEEEE" />

Where AAAAABBBBCCCCCDDDDDEEEEE is the 25-character product key.

2. To apply the settings in Config.xml, at a command prompt, type the following command, and then press ENTER:

Setup.exe /config <path of Config.xml file>

You do not have to enter the MAK key in the Config.xml file if you are using KMS activation. For more information about how to use the Config.xml file, see Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

Volume Activation Management Tool

Volume Activation Management Tool (VAMT) 2.0 is the recommended method if you need to change the product key on Office 2010 clients after installation. For additional information, see the Help file in VAMT 2.0 (http://go.microsoft.com/fwlink/?LinkId=183042). Perform the following steps:

- Add the computer to the VAMT 2.0 view.
- Under Product Keys, add a MAK key.
- Right-click the computer name, and then select Install Product Key.

The Backstage view

This method lets you change the product key on one computer at a time. If you want to change multiple computers, follow these steps:

- 1. Open an Office 2010 application.
- 2. Click the File tab.
- Click Help.
- 4. Click Change Product Key and enter the product key.



An administrator can create a registry key that allows a standard user (a user who is not an administrator) to apply a MAK key and activate an Office 2010 application. This means that a standard user can switch a KMS client to MAK activation, manually activate a computer, and, if it is necessary, replace an existing MAK with a new MAK key. By default, all volume license editions of Office 2010 disable this behavior. To enable this behavior, add the following line to the Config.xml file:

<Setting Id="USEROPERATIONS" Value="1" />

Or, you can set the following registry key to enable or disable standard user (a user who is not an administrator) activation:

HKEY LOCAL MACHINE\SOFTWARE\Microsoft\OfficeSoftwareProtectionPlatform]

Enable Standard User Activation: "UserOperations"=dword:00000001 Disable Standard User Activation: "UserOperations"=dword:00000000 (Office 2010 volume license products default setting)

The ospp.vbs script

For information about how to enter a product key by using the ospp.vbs script, see Tools to configure client computers in Office 2010.

Rearm the Office 2010 installation

There is a 25-day grace period from the time of installation of KMS clients before notifications to activate are displayed to the user. If you want to deploy an image, you must rearm your Office 2010 installation before you capture the image. Rearming is important for these reasons:

- The grace timer is reset to 30 days of grace.
- The grace timer is frozen.
 - If you do not rearm, users see notification dialog boxes at the time that the image is deployed, instead of 25-days after deployment. The 25-day grace period allows ample time for a KMS host to be found and activation to succeed. If activation is successful, users do not see notifications to activate.

- The client machine ID (CMID) is reset.
 - The KMS host counts the number of unique clients based on the CMID.
 - Use the command **ospp.vbs /dcmid** to check the CMID.

Rearm is also recommended for MAK deployment. If you are deploying Office 2010 configured for MAK activation, and you did not remotely activate for end-users through VAMT 2.0 or ospp.vbs, users will see an activation dialog box the first time that an Office 2010 application starts. The activation dialog box is slightly different 25 days after installation. Also, users might immediately see a red title bar if Office 2010 had not been rearmed before image capture.

To rearm your Office 2010 installation

- 1. Make sure all Office 2010 applications are closed.
- 2. Open an elevated command prompt.
- 3. Go to %installdir%\%Program Files%\Common Files\Microsoft Shared\OfficeSoftwareProtectionPlatform. If you installed the 32-bit edition of Office 2010 on a 64-bit operating system, %Program Files% is the Program Files (x86) folder.
- 4. Run ospprearm.exe. If you see a message that indicates success, you are ready for image capture.



Important:

Do not open an Office application, ospp.vbs, or anything related to Office 2010. Doing so starts the grace timer.

5. Capture the image or save the VM.

Prepare and configure the KMS host

This section contains information about how to prepare and configure the Office 2010 KMS host to enable Office 2010 clients to activate through KMS.



Important:

At minimum, membership in the Administrators group of the KMS host server is required to prepare and configure the KMS host.

Set up and activate the KMS host

Only the following operating systems can serve as the Office 2010 KMS host:

- Windows Server 2003 or with any service packs
- Volume license editions of Windows 7
- Windows Server 2008 R2



Important:

The KMS host key for Office 2010 is not specific to a particular operating system. It is designed to be used on any of the operating systems mentioned earlier. This includes both 32-bit and 64bit editions.

The following operating systems are not supported as the Office 2010 KMS host:

- Windows Vista or with any service packs
- Windows Server 2008 or with any service packs

For more information, see <u>Volume Activation 2.0 for Windows Vista and Windows Server 2008</u> (http://go.microsoft.com/fwlink/?LinkId=151726).

Co-hosting with a Windows KMS host

If currently you have a Windows KMS host running on an operating system that supports an Office KMS host, we recommend that you use the same computer as your Office KMS host. You still need to run the steps in the following sections to install and activate an Office 2010 KMS host key. For more information, see Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx).

To activate a KMS host on Windows Server 2003

- If you do not have Key Management Service (KMS) 1.2 on Windows Server 2003, follow the
 instructions specified in Microsoft Knowledge Base article <u>968915</u>: An update is available that
 installs Key Management Service (KMS) 1.2 for Windows Server 2003 Service Pack 2 (SP2)
 and for later versions of Windows Server 2003 (http://go.microsoft.com/fwlink/?LinkId=183046).
- 2. To download and run KeyManagementServiceHost.exe, see <u>Microsoft Office 2010 KMS Host License Pack</u> (http://go.microsoft.com/fwlink/?LinkID=169244).
- 3. When prompted, enter your KMS host key.
- 4. When prompted, continue with the activation. If your KMS host does not have an Internet connection, see <u>To activate a KMS host by telephone</u> later in this article.
- 5. If you have a firewall enabled, open TCP port 1688, which is the default port number.

To activate a KMS host on Windows 7 or Windows Server 2008 R2

- On the <u>Microsoft Office 2010 KMS Host License Pack</u>
 (http://go.microsoft.com/fwlink/?LinkID=169244) Web site, download and then run KeyManagementServiceHost.exe.
- 2. When prompted, enter your KMS host key.
- 3. When prompted, continue with the activation. If your KMS host does not have an Internet connection, see <u>To activate a KMS host by telephone</u> later in this article.
- 4. If you have a firewall enabled, follow these steps to enable KMS through the firewall:
 - a. In Control Panel, open Windows Firewall.
 - b. Click the Allow a program through Windows Firewall link.
 - c. Click the Change Settings button.
 - d. Select the **Key Management Service** check box, and then click **OK**.

Activating a KMS host by telephone

If your KMS host does not have an Internet connection, you can activate the KMS host by telephone.

To activate a KMS host by telephone

1. Run the following command under C:\Windows\system32. The result is the installation ID for Office 2010. You will type this installation ID number into the telephone in Step 3.

cscript slmgr.vbs /dti bfe7a195-4f8f-4f0b-a622-cf13c7d16864



The bfe7a195-4f8f-4f0b-a622-cf13c7d16864 value is the Office 2010 activation ID. Therefore, paste this value exactly as shown. We recommend pasting this number into Notepad, and then breaking the number up into six groups of six numbers.

1. Run slui.exe 4, and then call the telephone number displayed.



Note:

Ignore the installation ID shown in the dialog box. This is for Windows.

- 2. As you are prompted, enter each group of six numbers. This is the installation ID for Office 2010 that you obtained in Step 1.
- 3. When you hear the response, write down the numbers.
- Run cscript slmgr.vbs /atp xxxxxxxxxxx bfe7a195-4f8f-4f0b-a622-cf13c7d16864, where xxxxxxxxxx is the confirmation ID that you receive by telephone (there should be 48 numbers).



Note:

The bfe7a195-4f8f-4f0b-a622-cf13c7d16864 value is the Office 2010 activation ID. Therefore, paste this value exactly as shown.

5. You should see a message that the confirmation ID was successfully deposited.

Sppsvc state stopped error

Because the KMS host service automatically stops, you might encounter the following error when you run KeyManagementServiceHost.exe.

Error: The Software Protection Platform service is not running: sppsvc State: Stopped

If you receive this error, perform the following:

1. At the command prompt, type the following command, and then press ENTER:

net start sppsvc

2. Re-run KeyManagementServiceHost.exe.

Alternately, you can perform the following:

- Right-click My Computer and select Manage.
- 2. Under Services and Applications, select Software Protection Service.
- 3. Click **Start**, and then **OK** to start the service.
- 4. Re-run KeyManagementServiceHost.exe.

Manually install the Office 2010 KMS host key and activate

KeyManagementServiceHost.exe installs the Office 2010 KMS host license files on your KMS host. KeyManagementServiceHost.exe also prompts you for an Office 2010 KMS host key and attempts activation. If you did not enter the Office 2010 KMS host key correctly, run KeyManagementServiceHost.exe again.

The slmgr.vbs script

If you want to manually enter the Office 2010 KMS host key and activate it, use the slmgr.vbs script. For more information, see Configure the Office 2010 KMS host later in this article. Open an elevated command prompt, and then run the following commands:

slmgr.vbs /ipk <Office 2010 KMS host key> slmgr.vbs /ato <Office 2010 activation ID>

The Office 2010 activation ID is bfe7a195-4f8f-4f0b-a622-cf13c7d16864.

Configure the Office 2010 KMS host

The Software License Manager (slmgr.vbs) script is used to configure and retrieve volume activation information for the Office 2010 KMS host, in addition to the Windows host. For more information about this script, see "KMS Activation" in Windows Volume Activation Deployment Guide (http://go.microsoft.com/fwlink/?LinkId=183043).

The script can be run locally on the target computer or remotely from another computer. If a standard user runs slmgr.vbs, some license data might be missing or incorrect, and many operations are prohibited.

The slmgr.vbs script can use wscript.exe or cscript.exe, and administrators can specify which script engine to use. If no script engine is specified, slmgr.vbs runs by using the default script engine, wscript.exe. The cscript.exe script engine is recommended.

The Software Licensing Service must be restarted for any changes to take effect. To restart the Software Licensing Service, use the Microsoft Management Console (MMC) Services snap-in or run the following command:

net stop sppsvc && net start sppsvc

The slmgr.vbs script requires at least one parameter. If the script is run that has no parameters, it displays help information. The following table lists slmgr.vbs command-line options, and a description of each. Most of the parameters in the table configure the KMS host. However, the parameters **/sai** and **/sri** are passed to KMS clients after they make contact with the host. The general syntax of slmgr.vbs is as follows (assuming cscript.exe is the script engine that you are using):

cscript slmgr.vbs /parameter

cscript slmgr.vbs [ComputerName] [User] [Password] [Option]

ComputerName Name of remote computer. If a computer name is not passed local computer is used. **User** Account with required permission on remote computer.

Password Password for the account. If a user account and password are not passed, current credentials are used.

Option Options are shown in the following table.

Option	Description
/ipk [ProductKey]	Installs the product key for Windows (default) or other application identified by the product key.
/ato [ActivationID]	Activates the KMS host for Windows (default), or the application identified by the Activation ID when provided. The Office 2010 Activation ID is bfe7a195-4f8f-4f0b-a622-cf13c7d16864 .
/dlv [ActivationID]	Displays detailed license information for Windows (default), or the application identified by the Activation ID when provided. The Office 2010 Activation ID is bfe7a195-4f8f-4f0b-a622-cf13c7d16864.
/dli [ActivationID]	Displays license information for Windows (default), or the application identified by the application ID when provided. The Office 2010 Activation ID is bfe7a195-4f8f-4f0b-a622-cf13c7d16864 .
/upk [ActivationID]	Uninstalls the product key for Windows (default) or other application identified by the Activation ID when provided. The Office 2010 Activation ID is bfe7a195-4f8f-4f0b-a622-cf13c7d16864 .
	Caution: If you intend to uninstall the product key for Office 2010, for example, and inadvertently forget to enter the Activation ID, all installed product keys will be uninstalled, including the one for Windows.
/sprt [PortNumber]	Sets the TCP communications port on a KMS host. Replaces PortNumber with the TCP port number to use. The default setting is 1688 .
/cdns	Disables automatic DNS publishing by a KMS host.
/sdns	Enables automatic DNS publishing by the KMS host.
/cpri	Lowers the priority of KMS host processes.
/sai [ActivationInterval]	Changes how often a KMS client attempts to activate itself when it cannot find a KMS host. Replaces ActivationInterval with a number of minutes. The default setting is 120 .
/sri [RenewalInterval]	Changes how often a KMS client attempts to renew its activation by contacting a KMS host. Replaces RenewalInterval with a number of minutes. The default setting is 10080 (7 days). This setting overrides the local KMS client settings.

Verify successful activation of the Office KMS host

To verify that the Office 2010 KMS host key is successfully installed and activated, use the slmgr.vbs script. Open an elevated command prompt on the KMS host, type the following command, and then press ENTER:

cscript slmgr.vbs /dlv all

To view information only for Office 2010, specify the Activation ID after the **/dlv** parameter: cscript slmgr.vbs /dlv bfe7a195-4f8f-4f0b-a622-cf13c7d16864

The output should resemble the following:

```
Name: Microsoft Office 2010, KMSHost edition
Description: Microsoft Office 2010 KMS, VOLUME KMS channel
Activation ID: bfe7a195-4f8f-4f0b-a622-cf13c7d16864
Application ID: 59a52881-a989-479d-af46-f275c6370663
Extended PID: 55041-00096-199-000004-03-1033-7600.0000-3632009
Installation ID: 008585014214769124199722184000850026888810090785321136
Processor Certificate URL: http://go.microsoft.com/fwlink/?LinkID=88342
Machine Certificate URL: http://go.microsoft.com/fwlink/?LinkID=88343
Use License URL: http://go.microsoft.com/fwlink/?LinkID=88345
Product Key Certificate URL: http://go.microsoft.com/fwlink/?LinkID=88344
Partial Product Key: RP3HH
License Status: Licensed
Remaining Windows rearm count: 1
Trusted time: 12/29/2009 1:45:54 PM
Key Management Service is enabled on this computer
   Current count: 0
   Listening on Port: 1688
    DNS publishing enabled
    KMS priority: Normal
Key Management Service cumulative requests received from clients
   Total requests received: 0
    Failed requests received: 0
    Requests with License Status Unlicensed: 0
    Requests with License Status Licensed: 0
    Requests with License Status Initial grace period: 0
    Requests with License Status License expired or Hardware out of tolerance: 0
    Requests with License Status Non-genuine grace period: 0
    Requests with License Status Notification: 0
```

If the output shows "License Status: Licensed," the Office 2010 KMS host key is successfully installed and activated.

Once KMS clients send requests for activation, the current count is incremented. The current count must be 5 or greater before KMS clients activate. The maximum current count will be twice the activation threshold, or 10. Administrators can also check the KMS log that is in the Applications and Services Logs folder for event ID 12290, the ID for KMS-related activity. The KMS log records activation requests from KMS clients. Each event displays the name of the computer and the time stamp of each activation request.

Configure DNS

KMS hosts automatically publish their existence by creating service (SRV) resource records (RRs) on the DNS server. If there is only one KMS host and dynamic update, no action is required for the KMS host to create the SRV RR that publishes the KMS service location.

If there is more than one KMS host, only the first KMS host can create an SRV RR. Subsequent KMS hosts cannot change or update SRV RRs unless the default permissions on the DNS server are changed.

Changing the default permissions on the DNS server requires administrative rights in the domain, and the KMS hosts must all belong to the same Active Directory Domain Services (AD DS) domain. Create a global security group in AD DS for your KMS hosts. Add each KMS host to the new security group, and set the permissions on the DNS server to allow updates by members of the newly created security group.

For more information about how to configure DNS for the KMS host, see "Understanding KMS" in Customer Hosted Volume Activation Guide (http://go.microsoft.com/fwlink/?LinkId=187539).

Deploy Visio 2010

By default, Visio 2010 is preinstalled with the Visio Premium 2010 KMS client key, which enables all the features that are available for Visio Premium 2010. If you are licensed to use Visio Standard 2010 or Visio Professional 2010, you must install the appropriate KMS client key. Different features or applications are available depending on the type of key that is installed. This makes it easier for you to upgrade or downgrade without having to deploy a different product edition.

If you already deployed Visio 2010, you can remotely install the new KMS client key by using either of the following options:

- The ospp.vbs script For more information about ospp.vbs, see <u>Tools to configure client</u> computers in Office 2010.
- VAMT 2.0 This allows you to see which products are installed in each computer. If you see
 installations of Visio Premium 2010 in VAMT 2.0, you can remotely install the Visio Professional
 2010 or the Visio Standard 2010 KMS client key.

You must restart Visio 2010 for the new KMS client key to be recognized and the appropriate features enabled.

You can have the new KMS client key installed from a network share by entering the key in the Office Customization Tool (OCT). For more information, see <u>Customize Office 2010</u>.

If your license agreement with Microsoft is for Visio Standard 2010 or Visio Professional 2010, enter the appropriate KMS client key shown in the following table.

Visio edition	KMS client key
Visio Standard 2010	767HD-QGMWX-8QTDB-9G3R2-KHFGJ
Visio Professional 2010	7MCW8-VRQVK-G677T-PDJCM-Q8TCP
Visio Premium 2010	D9DWC-HPYVV-JGF4P-BTWQB-WX8BJ

Post-deployment

This section contains possible actions that might occur after Office 2010 deployment is completed.

Migrate an Office KMS host

After deployment of Office 2010, the network must undergo topology changes that require you to migrate your Office KMS host to another server on that network or on another network completely.

To migrate an Office KMS host

- Uninstall the Office KMS host key by running the following command: cscript C:\windows\system32\ sImgr /upk [ActivationID]
- Delete the record from the DNS as follows: open the DNS console, expand the _tcp node under domain.com, and then delete the _VLMCS record.
 Once you do this, the Office KMS host is uninstalled.
- 3. On the new server, install the product key for the Office KMS host by running the following command:
 - cscript C:\windows\system32\ slmgr /ipk [ProductKey]
- 4. Activate the Office KMS host by running the following command: cscript C:\windows\system32\sImgr.vbs /ato 86f3489b-e730-45ee-ad42-039a64c82ba4
- 5. After activation is complete, restart the Software Licensing Service and verify in the DNS that the record is created for the new KMS host server.
- 6. To verify that the Office KMS host is configured correctly, check the KMS activation request count to see whether it is increasing. On the KMS host, the current count is displayed by running the following command:

cscript C:\windows\system32\sImgr.vbs /dli

You can also check the Key Management Service log in the Applications and Services Logs folder for 12290 events, which is where activation requests from KMS clients are recorded. Each event displays the name of the computer and the time-stamp of the activation request.

See Also

<u>Volume activation overview for Office 2010</u> (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx)

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

Tools to configure client computers in Office 2010

<u>Troubleshoot volume activation for Office 2010</u> (http://technet.microsoft.com/library/976fc06b-faed-4682-b41f-4a19d8eb3302(Office.14).aspx)

<u>Plan KMS activation of Office 2010</u> (http://technet.microsoft.com/library/22fefb4f-4317-4f3c-8122-f86bde77f3f0(Office.14).aspx)

<u>Plan MAK independent activation of Office 2010</u> (http://technet.microsoft.com/library/61bb4ce1-1d5f-4596-bd7d-21f2b867b376(Office.14).aspx)

<u>Plan MAK proxy activation of Office 2010</u> (http://technet.microsoft.com/library/9194ac1f-7285-4db3-b801-0d0166d6f998(Office.14).aspx)

Office Volume Activation forum (http://go.microsoft.com/fwlink/?LinkId=180346)

Office IT Pro forums (http://go.microsoft.com/fwlink/?LinkId=180345)

Office Resource Kit Blog (http://go.microsoft.com/fwlink/?LinkId=195811)

Tools to configure client computers in Office 2010

This article describes how to use tools to configure and test Volume License editions of Microsoft Office 2010. Before you read this article, we recommend that you read Volume activation overview for Office 2010 (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx), Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx), and Deploy volume activation of Office 2010.

In this article:

- The ospp.vbs script
- VAMT 2.0

The ospp.vbs script

The Office Software Protection Platform script (ospp.vbs script) enables you to configure volume editions of Office 2010 client products. You must open a command prompt by using administrator permissions and navigate to the folder that contains the script. The script is located in the %installdir%\Program Files\Microsoft Office\Office14 folder. If you are running 32-bit Office 2010 on a 64-bit operating system, the script is located in the %installdir%\Program Files (x86)\Microsoft Office\Office14 folder.

Running ospp.vbs requires the cscript.exe script engine. To see the Help file, type the following command, and then press ENTER:

cscript ospp.vbs/?

The general syntax is as follows:

cscript ospp.vbs [Option:Value] [ComputerName] [User] [Password]

Option Specifies the option and value to use to activate a product, install or uninstall a product key, install and display license information, set Key Management Service (KMS) host name and port, and remove KMS host. The options and values are listed in the tables in this section.

ComputerName Name of the remote computer. If a computer name is not provided, the local computer is used.

User Account that has the required permission on the remote computer.

Password Password for the account. If a user account and password are not provided, the current credentials are used.

The following tables list the ospp.vbs options and values.

Global option	Description
/act	Activates installed Office 2010 product keys.
/inpkey:value	Installs a product key (replaces existing key) with user-provided product key. Value parameter required.

Global option	Description	
/unpkey:value	Uninstalls an installed product key with the last five digits of the product key to uninstall (as displayed by the /dstatus option). Value parameter required.	
/inslic:value	Installs a license with user-provided path of the .xrm-ms license. Value parameter required.	
/dstatus	Displays license information for installed product keys.	
/dstatusall	Displays license information for all installed licenses.	
/dinstid	Displays Installation ID for offline activation.	
/actcid:value	Activates product with user-provided Confirmation ID. Value parameter required.	
/puserops	Permits administrator-privileged license operations including Internet or telephone activation by standard users. This sets HKEY_LOCAL_MACHINE\Software\Microsoft\OfficeSoftwareProtectionPlatform\User Operations =dword:00000001.	
/duserops	Denies administrator-privileged license operations including Internet or telephone activation by standard users. This sets HKEY_LOCAL_MACHINE\Software\Microsoft\OfficeSoftwareProtectionPlatform\User Operations =dword:00000000.	
/ddescr:value	Displays the description for a user-provided error code. Value parameter applies.	

KMS client option	Description
/dhistorykms	Displays KMS client activation history.
/dcmid	Displays KMS client machine ID (CMID).
/sethst:value	Sets a KMS host name with a user-provided host name. Value parameter applies. This sets HKLM\Software\Microsoft\OfficeSoftwareProtectionPlatform\KeyManagementService Name (REG_SZ).
/setprt:value	Sets a KMS port with a user-provided port number. Value parameter applies. This sets HKLM\Software\Microsoft\OfficeSoftwareProtectionPlatform\KeyManagementService Port (REG_SZ).
/remhst	Removes KMS host name (sets port to default).

OSPPSVC option	Description
/osppsvcrestart	Restarts Office Software Protection Platform service.
/osppsvcauto	Sets Office Software Protection Platform service startup type to automatic. This is recommended for Windows XP computers so that KMS reactivation attempts occur even if Office is not running.

Scenarios that use ospp.vbs

The following scenarios assume that you are running ospp.vbs in an elevated command prompt.



Note:

Any changes that you make affect only the Office 2010 client products. You need to configure the Windows client separately by using the slmgr.vbs script. For more information about how to use slmgr.vbs, see Deploy volume activation of Office 2010.

To change the product key to a MAK key on a remote computer

1. If the remote computer is named contoso1, run the following command to enter the product key. This assumes that you have administrator credentials on the remote computer. If your credentials on the remote computer differ from your logon name and password, you must type your logon name and password at the command line, and then press ENTER:

cscript ospp.vbs /inpkey:xxxxx-xxxxx-xxxxx-xxxxx contoso1

2. To activate the remote computer, type the following command, and then press ENTER: cscript ospp.vbs /act contoso1

To diagnose KMS activation errors

1. If the computer has the KMS client key installed, check the licensing status. To do this, type the following command, and then press ENTER:

cscript ospp.vbs /dstatusall

- 2. To check the KMS activation history, type the following command, and then press ENTER: cscript ospp.vbs /dhistorykms
- 3. To trigger activation, type the following command, and then press ENTER: cscript ospp.vbs /act
- 4. Check the error message for error code 0xC004F042. If you see an error code in the notification dialog boxes shown to the users, you can also use that code to check the error message. To do this, type the following command, and then press ENTER:

cscript ospp.vbs /ddescr:0xC004F042

To set test KMS host name, and then set to auto-discovery

1. If you are testing a KMS host named kmstest.contoso.com, and you want to specify it in the KMS client, type the following command, and then press ENTER:

cscript ospp.vbs /sethst:kmstest.contoso.com



Note:

If you change the default port on the KMS host, you must run ospp.vbs with the /setprt

2. To trigger activation, type the following command, and then press ENTER:

cscript ospp.vbs /act

To check the KMS activation history to see whether the host was successfully contacted, type the following command, and then press ENTER:

cscript ospp.vbs /dhistorykms

4. Now you want this KMS client to use Domain Name System (DNS) for auto-discovery of the production KMS host. To remove the KMS host name, type the following command, and then press ENTER:

cscript ospp.vbs /remhst

Generally, you do not have to configure Office KMS clients if the Office KMS host was correctly set up and configured. The KMS client automatically searches for the KMS host by using DNS and attempts activation. The KMS service uses service (SRV) resource records (RR) in DNS to store and communicate the locations of KMS hosts.

By default, KMS hosts automatically publish the information that KMS clients need to find and connect to them by using DNS dynamic update protocol. By default, KMS clients query the DNS server for KMS service information.

You can manually configure KMS hosts and clients, depending on the network configuration and security requirements. For example, if the network environment does not use SRV records, you can manually configure a KMS client to use a specific KMS host. For more information about how to configure the KMS client, see The ospp.vbs script earlier in this article and Prepare and configure the Office 2010 client in Deploy volume activation of Office 2010. For more information about how to configure the KMS host, see Prepare and configure the KMS host in Deploy volume activation of Office 2010.

VAMT 2.0

The Volume Activation Management Tool (VAMT) 2.0 gives you a graphical user interface to manage volume activation. For more information, see Volume Activation Management Tool (VAMT) 2.0 (http://go.microsoft.com/fwlink/?LinkId=183042) and the Help file that is included with VAMT 2.0.

See Also

Volume activation overview for Office 2010 (http://technet.microsoft.com/library/0735c1f5-f874-41f1b9a9-dbea158524b2(Office.14).aspx)

Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829dcfecbb917dc4(Office.14).aspx)

Deploy volume activation of Office 2010

Troubleshoot volume activation for Office 2010 (http://technet.microsoft.com/library/976fc06b-faed-4682-b41f-4a19d8eb3302(Office.14).aspx)

<u>Plan KMS activation of Office 2010</u> (http://technet.microsoft.com/library/22fefb4f-4317-4f3c-8122-f86bde77f3f0(Office.14).aspx)

<u>Plan MAK independent activation of Office 2010</u> (http://technet.microsoft.com/library/61bb4ce1-1d5f-4596-bd7d-21f2b867b376(Office.14).aspx)

<u>Plan MAK proxy activation of Office 2010</u> (http://technet.microsoft.com/library/9194ac1f-7285-4db3-b801-0d0166d6f998(Office.14).aspx)

Office 2010 Volume Activation forum (http://go.microsoft.com/fwlink/?LinkId=180346)

Office 2010 forums (http://go.microsoft.com/fwlink/?LinkId=180345)

Volume activation quick start guide for Office 2010

This article is a quick start guide for activating Volume License editions of Microsoft Office 2010. The intended audience is IT administrators who are familiar with Windows volume activation and want to know which steps are required for volume activation of Office client products. If you are not familiar with volume activation, see Windows Volume Activation Planning Guide (http://go.microsoft.com/fwlink/?LinkId=183040), Plan for volume activation of Office 2010 (http://technet.microsoft.com/library/b41f7bc2-b7fa-43a3-963a-cf1c1ef8f331(Office.14).aspx), and Deploy volume activation of Office 2010.

Volume License editions of Office 2010 require activation. The activation technology is based on the Windows Software Protection Platform. If you are familiar with Windows Key Management Service (KMS) or Multiple Activation Key (MAK) activation, then you will be familiar with requirements for Office 2010 activation. The main focus of this article is on the differences between Windows and Office, in addition to the steps required to activate Office 2010.

In this article:

- Differences between Windows and Office activation
- Scenarios for Office 2010 volume activation
- Office 2010 volume activation methods
- Install and configure the KMS host
- Co-hosting an Office KMS host with a Windows KMS host

Differences between Windows and Office activation

Differences between Windows activation and Office activation with regard to both KMS and MAK are as follows:

- The activation threshold for the KMS host is five client computers. Five physical or virtual computers that have Office installed must request activation before KMS clients become activated.
- Only one KMS host key must be installed and activated on the Office KMS host. This KMS host can then activate all Office 2010 products with the KMS client key installed.
- When using slmgr.vbs commands on the KMS host, you must enter the Office 2010 activation ID (bfe7a195-4f8f-4f0b-a622-cf13c7d16864). For more information about the slmgr.vbs script, see Deploy volume activation of Office 2010.
- To ensure that the Office 2010 KMS host key is recognized, you must run KeyManagementServiceHost.exe to install the Office license files.

Note:

Each Office suite or product has its own MAK key. In addition, here are separate MAK keys for Microsoft Project 2010 and Microsoft Visio. For example, with a single MAK key you can activate all applications in the Microsoft Office Professional Plus 2010 suite, but you must enter separate MAK keys for Project 2010, Visio, or any of the Office Professional Plus 2010 suite products, such as Microsoft Word 2010 or Microsoft Excel 2010.

Scenarios for Office 2010 volume activation

Scenarios help users determine what best fits their current or proposed environment and to provide step-by-step guidance for activating the Volume License editions of Office 2010 software. The detailed steps for activation listed the scenarios apply to all Volume License editions of Office 2010 client products (Office Professional Plus 2010, Visio 2010, and Project 2010).

The scenarios are located in the following articles:

<u>Plan KMS activation of Office 2010</u> (http://technet.microsoft.com/library/22fefb4f-4317-4f3c-8122-f86bde77f3f0(Office.14).aspx)

<u>Plan MAK independent activation of Office 2010</u> (http://technet.microsoft.com/library/61bb4ce1-1d5f-4596-bd7d-21f2b867b376(Office.14).aspx)

Plan MAK proxy activation of Office 2010 (http://technet.microsoft.com/library/9194ac1f-7285-4db3-b801-0d0166d6f998(Office.14).aspx)

<u>Scenario: Core network - KMS activation of Office 2010</u> (http://technet.microsoft.com/library/48981ae0-6ae9-4710-ae35-e8746150ffa3(Office.14).aspx)

Scenario: Secure network - KMS or MAK activation of Office 2010

(http://technet.microsoft.com/library/faf4df6f-91a3-4ba3-b09e-811c179a7e62(Office.14).aspx)

Scenario: Roaming or disconnected computers - KMS or MAK activation of Office 2010

(http://technet.microsoft.com/library/2daa4365-c65d-4b40-a948-0f4da2a1e674(Office.14).aspx)

Scenario: Test or development lab - KMS or MAK activation of Office 2010

(http://technet.microsoft.com/library/0be3bb58-d0a3-4ab3-9efc-21d5d1bba229(Office.14).aspx)

Office 2010 volume activation methods

There are two methods for activating Volume License editions of Office 2010: Key Management Service (KMS) and Multiple Activation Key (MAK).

KMS activation

KMS enables clients to activate on the local network. To do this, administrators must first set up a KMS host (see Install and configure the KMS host). Office 2010 clients are preinstalled with a KMS client key. A user who is usually connected to the network can activate Office 2010 by connecting to the KMS host on the intranet. The activation process is invisible to the user and requires no user interaction. The computer that is running Office 2010 (the KMS client) can be configured for variable lengths of reactivation and renewal periods. If a KMS client fails to activate, the user will see notification messages 25 days after installation of Office 2010. If KMS clients are absent from the network for longer than 180 days after successful activation, users will see unlicensed notifications when they start Office 2010. However, there will be no functionality loss even if the licenses for KMS clients cannot be renewed. Upon successful activation, users no longer receive notifications.

MAK activation

If a KMS host is not available, the user can activate against Microsoft hosted activation servers, as long as the computer that is running Office 2010 uses a valid MAK key instead of the KMS client key. Administrators can change the product key from the KMS client key to the MAK key through the Office 2010 user interface (UI) or by using a script that calls OSPP WMI providers.

Install and configure the KMS host

Only the following operating systems can serve as the KMS host:

- Windows Server 2003 or later versions
- Volume License editions of Windows 7
- Windows Server 2008 R2

Important:

The KMS host key for Office 2010 is not specific to a particular operating system. It is designed to be used on any of the operating systems that were mentioned earlier, including both 32-bit and 64-bit editions.

The following operating systems are not supported as the KMS host:

- Windows Vista or a later version
- Windows Server 2008 including service packs

For more information, see <u>Volume Activation 2.0 for Windows Vista and Windows Server 2008</u> (http://go.microsoft.com/fwlink/?LinkId=151726).

Co-hosting an Office KMS host with a Windows KMS host

If currently you have a Windows KMS host running on an operating system that supports an Office KMS host, we recommend that you use the same computer for your Office KMS host. You still must perform the following steps to install and activate an Office 2010 KMS host key. For more information, see Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx).

To activate an Office KMS host on Windows Server 2003

- If you do not have Key Management Service (KMS) 1.2 installed on Windows Server 2003, follow the instructions specified in Microsoft Knowledge Base article <u>968915</u>: An update is available that installs Key Management Service (KMS) 1.2 for Windows Server 2003 Service Pack 2 (SP2) and for later versions of Windows Server 2003 (http://go.microsoft.com/fwlink/?LinkId=183046).
- 2. Download and run KeyManagementServiceHost.exe at Microsoft Office 2010 KMS Host License Pack (http://go.microsoft.com/fwlink/?LinkID=169244) Web site.
- 3. When prompted, enter your KMS host key.
- 4. When prompted, continue the activation process. If your KMS host does not have an Internet connection, see <u>To activate a KMS host by telephone</u> in <u>Deploy volume activation of Office</u> <u>2010</u> for instructions about how to activate the KMS host by telephone.
- 5. If you have a firewall enabled, open TCP port 1688. This is the default port number.

To activate an Office KMS host on Windows 7 or Windows Server 2008 R2

- 1. Download and run KeyManagementServiceHost.exe at Microsoft Office 2010 KMS Host License Pack (http://go.microsoft.com/fwlink/?LinkID=169244) Web site.
- 2. When prompted, enter your KMS host key.
- 3. When prompted, continue the activation process. If your KMS host does not have an Internet connection, see <u>To activate a KMS host by telephone</u> in <u>Deploy volume activation of Office 2010</u> for instructions about how to activate the KMS host by telephone.
- 4. If you have a firewall enabled, perform the following steps to enable KMS through the firewall:
 - a. In Control Panel, open Windows Firewall.
 - b. Click Allow a program or feature through Windows Firewall.
 - c. Click Change Settings.
 - d. Select the **Key Management Service** check box, and then click **OK**.

See Also

Volume activation overview for Office 2010 (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx)

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

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<u>Troubleshoot volume activation for Office 2010</u> (http://technet.microsoft.com/library/976fc06b-faed-4682-b41f-4a19d8eb3302(Office.14).aspx)

Office 2010 Volume Activation forum (http://go.microsoft.com/fwlink/?LinkId=180346)

Office 2010 forums (http://go.microsoft.com/fwlink/?LinkId=180345)

Prepare the infrastructure for Office 2010

This section provides information about how to create a network installation point by using the Microsoft Office 2010 source files.

In this section:

Article	Description
Create a network installation point for Office 2010	Provides information and procedures to create, replicate, and secure a network installation point for the deployment of Office 2010.

Create a network installation point for Office 2010

This article describes how to create, replicate, and secure a network installation point for the deployment of Microsoft Office 2010. Typically, this is the first step in a corporate deployment of Office 2010. To do this, you copy all the source files from the Office installation CD to a shared location on the network. Users run Setup from the network installation point, or you use the installation point as a starting place to create a hard-disk image or a custom CD or to distribute Office by using a software deployment tool, such as Microsoft System Center Configuration Manager 2010.

In this article:

- Create the network installation point
- Replicate the network installation point
- Secure the network installation point

Create the network installation point

Use the following procedure to create a network installation point.

To create a network installation point

1. Create a folder for the Office source files at a location that can be easily accessed on the server. For example:

\\server\share\Office14



Note:

Do not create the network installation point at the root of the server.

- 2. Insert the Office CD into your CD drive.
- 3. In Windows Explorer, select all the files and folders on the CD. Copy the CD contents to the folder on the network. This location becomes the network installation point.
- 4. If you deploy multiple language versions of Office 2010, copy each language pack that you want from the source media to the installation point. When you are prompted to overwrite duplicate Setup files, click No.



Note:

In Office 2010, core Setup files are shared among all Office products and language packs. Because these core Setup files are identical, there is no reason to overwrite the files if you add language packs, for example. Additionally, by not overwriting Setup files, the network installation point remains online and available to users while you add files.

5. If you deploy multiple Office 2010 products, copy those files from the CD to the installation point. When you are prompted to overwrite duplicate Setup files, click No.

- 6. If you create a Setup customization file (.msp file) for the installation, store the file in the Updates folder at the root of the installation point.
 - Or, you can enter the /adminfile option at the command prompt to specify a Setup customization file.
- 7. If users are installing Office 2010 after product updates are released, store those .msp files in the Updates folder.

The amount of space that is required on the network installation point varies by product and by language. The following table shows approximate space requirements for English versions of Office 2010 suites that are typically installed in enterprise organizations. These figures account for both the installed product and the installation files that are stored in the local installation source.

Product	Approximate space required
Microsoft Office Professional 2010	Approximately 3 gigabytes (GB)
Microsoft Office Professional Plus 2010	Approximately 3 GB

The installation point contains only one copy of the language-neutral core product. Each language that you add requires additional space only for the language-specific components.



Unlike in versions of Microsoft Office products earlier than the 2007 Microsoft Office system, in Office 2010 (and in the 2007 Office system) you do not create an administrative installation point by running Setup with the /a command-line option to extract compressed source files. In Office 2010 and in the 2007 Office system, all installations occur from the compressed source.

Replicate the network installation point

In many enterprise organizations, the network installation point is the location from which users first install Office. After Office 2010 is installed, users do not typically have to rely on the network source for tasks such as updating, modifying, or reinstalling Office. Setup automatically creates a local installation source on each user's computer. However, if the local source is corrupted or deleted, Setup returns to the original network source to re-create the local source on the user's computer.

We recommend that you replicate the network source to multiple locations for the following reasons:

- Availability If you create multiple network installation points (which can be in the same physical location), you help ensure that users always have access to a network source. Ideally, the duplicate network installation points are managed by Distributed File System (DFS) technologies and are transparent to users.
- Proximity to users Many companies have high-speed LAN networks that are connected to other subsidiaries or branch offices by much slower WAN connections. If you set up a duplicate network installation point at the remote locations, Office source files travel over the slow network connection only one time, and after that, users have access to a closer network source.

- Consistency If you create one network installation point with all the customizations that you want
 and then duplicate that installation point as needed, you help ensure that the same configuration is
 deployed throughout your organization.
- Flexibility If the primary network installation point installs a standard corporate configuration of
 Office 2010, regional offices can apply additional customizations to the replicated network
 installation points and can customize Office 2010 for their unique region-specific requirements.

To specify additional network sources

- 1. Start the Office Customization Tool (OCT) by running Setup with the **/admin** command-line option.
- In the Setup section, click Additional Network Sources, and then click Add. In the Add Network Server Entry dialog box, enter the path of the location where you plan to copy the network installation point, and then click OK.
 - You can add as many additional source locations as you want.
- 3. Save the Setup customization file (.msp file) that is generated by the OCT in the Updates folder at the root of the network installation point.
- 4. Copy the complete folder structure of the network installation point to the locations that you specified in the Setup customization file.
 - Users who install Office 2010 from any of these network installation points have access to the backup network sources. Setup checks these sources automatically when an alternative source is required.

Secure the network installation point

To help make the network installation point for Office more secure, follow these recommended best practices:

- Make sure that access to source files is read-only. (The Setup.xml and Package.xml files, such as ProPlusWW.xml for Microsoft Office Professional 2010, are digitally signed and cannot be modified.)
- Save all customization files that you create as read-only. These include Setup customization files and custom Config.xml files.
- If you are centralizing log files on the network, make sure that users have read/write permission to that location.
- Make sure that all users have administrative permissions before the users install Office 2010. You
 can do this by using your existing software deployment infrastructure.

As with any deployment of Office, test all the customizations and deployment in a non-production environment as part of the deployment pilot tests before you deploy Office 2010 to users in the organization.

See Also

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Customize the installation for Office 2010

This section provides information about the customization process and links to resources to help you customize a client installation of Microsoft Office 2010.

In this section:

Article	Description
Customization overview for Office 2010	Provides a summary of the customization tools and methods for Office 2010.
Customize setup for Office 2010	Provides information and procedures to help you customize the installation of Office 2010.
Customize specific features in Office 2010	Provides information and procedures to help you customize language setup and settings in Office 2010.
Configure security for Office 2010	Provides information and procedures to configure security settings for Office 2010 by using the Office Customization Tool (OCT) and Group Policy.
Configure Information Rights Management in Office 2010	Provides information and procedures to restrict permission to content documents and e-mail messages in Office 2010 by using Information Rights Management (IRM).
Configure Outlook 2010	Provides information and procedures to configure Microsoft Outlook 2010. This includes how to configure and use Outlook Anywhere, Cached Exchange Mode, and Microsoft Exchange Server send/receive settings.
Configure SharePoint Workspace 2010	Provides information and procedures to configure and customize Microsoft SharePoint Workspace 2010. This includes how to test SharePoint Workspace connections.

Customization overview for Office 2010

This article provides a summary of customization tools and methods for Microsoft Office 2010. To customize an installation of Office 2010, administrators can use the following tools: the Office Customization Tool (OCT), the Config.xml file, or the Setup command-line options.

To configure user and computer settings, administrators use either the OCT or Group Policy, depending on their business requirements. Administrators can use the OCT to provide initial default values. However, users can change the settings after Office is installed. To enforce settings, administrators must use Group Policy. For more information, see Configure user and computer settings.

In this article:

- Summary of customization methods
- Office Customization Tool
- Config.xml file
- Setup command-line options
- Configure user and computer settings
- Office 2010 licensing and activation
- Summary of client customization tasks

Summary of customization methods

The following table summarizes the customization methods for Office 2010 clients and describes the recommended scenarios for each method.

Tool or method	Scenario	Results
Use the Office Customization Tool (OCT) to create a Setup customization (.msp) file	The OCT is the recommended tool for most customizations. This includes the following: • Entering a volume license key and accepting the Microsoft Software License Terms. • Configuring the display level of the user interface.	Setup installs a default configuration on all computers to which the customization .msp file is applied. Users can modify most of the settings after the installation.
	 Customizing features and user settings. Customizing the default Microsoft Outlook 2010 profile and Outlook 2010 and Microsoft Exchange Server 2010 options. 	

Tool or method	Scenario	Results
	For more information, see Office Customization Tool.	
Edit the Config.xml file	The Config.xml file is used to configure most of the same options that you can configure by using the OCT, including some options that are not available in the OCT. The following options can only be configured in the Config.xml file: Specifying the path of the network installation point. Selecting which product to install. Configuring logging options. Specifying the location of the Setup customization .msp file and software updates. Specifying languages to install or remove. Specifying installation information, such as user name. Copying the local installation source to the user's computer without installing Office 2010. For more information, see	Setup installs the specified products and languages on all computers installed by using this Config.xml file. Settings that are specified in the Config.xml file take precedence over duplicate settings in a Setup customization .msp file.
	Config.xml file.	
Use Setup command-line options	Setup command-line options are available only for the following customizations: Running the OCT to create a Setup customization .msp file. Specifying the path of a specific Setup customization file or to the folder where you	Setup applies the customizations when it first installs Office 2010 or when it runs in maintenance mode. You cannot set Windows Installer properties on the command line.
	store Office 2010 customization files. • Specifying the Config.xml file	

Tool or method	Scenario	Results
	that Setup uses during the installation.	
	Modifying an existing installation.	
	Repairing a product.	
	Uninstalling a product.	
	For more information, see <u>Setup</u> <u>command-line options</u> .	
Use the Group Policy Object Editor Microsoft Management Console (MMC) snap-in to specify policy settings	Used to configure highly restricted or lightly managed configurations that you want to enforce for user and computer settings.	Administrators use Group Policy to define configurations one time, and then they rely on the operating system to enforce that state.
	For more information, see <u>Configuring user and computer</u> <u>settings by using Group Policy.</u>	Group Policy for computers is applied at computer startup and Group Policy for users is applied when users log on. Group Policy is also applied subsequently in the background periodically.

Office Customization Tool

The Office Customization Tool (OCT) is part of the Setup program and is the primary tool for most customizations. The OCT saves customizations in a Setup customization (.msp) file, which is applied at either Setup time or during a maintenance mode operation. After you create a network installation point and before you install Office 2010, use the OCT to customize the installation. To start the OCT, click Start, click Run, browse to the root of the network installation point that contains the Office 2010 source files, and type the following at the command prompt: setup.exe /admin. For example: \\server\share\Office14ProPlus\setup.exe /admin.

Administrators use the OCT to customize the following areas:

 Setup Used to specify default installation location and default organization name, additional network installation sources, the product key, end-user license agreement, display level, earlier versions of Office to remove, custom programs to run during installation, security settings, and Setup properties.

- Features Used to configure user settings and to customize how Office features are installed.
- Additional content Used to add or remove files, add or remove registry entries, and configure shortcuts.
- Outlook Used to customize a user's default Outlook profile, specify Exchange settings, add accounts, remove accounts and export settings, and specify Send\Receive groups.

For more information about how to use the OCT, see the following resources:

- Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)
- Customize Office 2010
- Customize Setup before installing Office 2010
- Configure user settings for Office 2010
- Configure feature installation states for Office 2010
- Configure Outlook 2010
- Import an Office 2010 Setup customization file

Administrators can also configure some installation options by using the Config.xml file.

Config.xml file

The Config.xml file is used to specify installation options, and it runs only during setup. You can use the Config.xml file to configure most of the same options that you can configure with the OCT, including a few additional options that are not available in the OCT. The Config.xml is not installed or cached on users' computers. The Config.xml file that is stored in the core product folders (core_product_folder_name.WW folder such as ProPlus.WW for Microsoft Office Professional Plus 2010) directs Setup to install that product. If the network installation point contains multiple Office 2010 products, you can use the /config command-line option when you run Setup.exe to specify the path of the Office 2010 product that you want to install; if you do this, it will prevent Setup from prompting you about which product to install. For more information about Setup commands, see Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx).

If you use both an OCT Setup customization (.msp) file and the Config.xml to customize the installation, the settings that you specify in Config.xml take precedence over those in the Setup customization file. The Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx) article provides detailed information about the installation options and indicates if a setting has a corresponding OCT setting.

You can also use the Config.xml file for maintenance operations such as adding or removing features, and repairs and uninstalls. To do this, you must run Setup again from the original source.

The following customizations can only be made by using the Config.xml file:

- Specifying the path of the network installation point.
- Selecting the products to install.

- Customizing Setup options, including logging, and the location of the Setup customization file and software updates.
- Specifying installation options, such as username.
- Copying the local installation source (LIS) to the user's computer without installing Office.
- Adding or removing languages from the installation.

Setup command-line options

Administrators can also use Setup.exe command-line options to perform the following tasks:

- Run the OCT to create a Setup customization (.msp) file.
- Specify a path of a specific Setup customization file or to the folder where you store Office 2010 customization files.
- Specify the Config.xml file that Setup uses during the installation.
- Run Setup in maintenance mode and make changes to an existing Office installation.
- Run Setup to repair the specified product from the user's computer.
- Run Setup to remove the specified product from the user's computer.

The following table lists the commands that Setup supports.

Command	Description
/admin	Runs the OCT to create or modify a Setup customization file (.msp file).
/adminfile [path]	Applies the specified Setup customization file to the installation and can be used only for initial installations. You can specify a path of a specific customization file (.msp file) or to the folder where you store customization files.
/config [path]	Specifies the Config.xml file that Setup uses during the installation. By default, the Config.xml file that is stored in the core product folder directs Setup to install that product. For example, the Config.xml file in the ProPlus.WW folder installs Office Professional Plus 2010.
/modify [ProductID]	Used with a modified Config.xml file to run Setup in maintenance mode and make changes to an existing Office installation. For example, you can use the /modify option to add or remove features. Look up the value of [ProductID] in the Setup.xml file for the product that you want to modify.
/repair [ProductID]	Runs Setup to repair the specified product from the user's computer. Look up the value of [ProductID] in the Setup.xml file for the product that you want to modify.
/uninstall [ProductID]	Runs Setup to remove the specified product from the user's computer. Look up the value of [ProductID] in the Setup.xml file for the product that you want to modify.

For more detailed information about Setup commands, see <u>Setup command-line options for Office 2010</u> (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx).

Configure user and computer settings

As mentioned previously, depending on whether administrators must enforce user settings or whether they want to allow users to modify the settings after the installation, administrators use either Group Policy or the OCT. The majority of the Group Policy and OCT settings for Office are user settings. Most of the Office policy settings have a corresponding OCT setting.

Group Policy and the OCT can be used to configure user and computer settings for the following Office applications:

- Microsoft Access 2010
- Microsoft Excel 2010
- Microsoft InfoPath 2010
- Microsoft Office 2010 System
- Microsoft OneNote 2010
- Microsoft Outlook 2010
- Microsoft PowerPoint 2010
- Microsoft Project 2010
- Microsoft Publisher 2010
- Microsoft SharePoint Designer 2010
- Microsoft SharePoint Workspace 2010
- Microsoft Visio 2010
- Microsoft Word 2010

Configuring user and computer settings by using Group Policy

Group Policy is an infrastructure that administrators can use to implement specific computing configurations for users and computers. Policy settings can also be applied to member servers and domain controllers within the scope of an Active Directory forest. Administrators use Group Policy to define configurations once and then rely on the operating system to enforce that state.

Group Policy settings are contained in Group Policy objects (GPOs), which are linked to selected Active Directory Domain Services (AD DS) containers — sites, domains, or organizational units (OUs). The settings within GPOs are evaluated by the affected targets using the AD DS hierarchical container structure.

The Group Policy infrastructure consists of a Group Policy engine and several individual extensions. These extensions are used to configure Group Policy settings, either by modifying the registry through the Administrative Templates extension, or by configuring Group Policy settings for security settings, software installation, folder redirection, Internet Explorer Maintenance, wireless network settings, and other areas. The Office policy settings are contained in Administrative Template (.adm or .admx and .adml) files.

To mandate Office settings configurations for users and computers, the administrator uses Group Policy, and the operating system enforces those policy settings. For example, use Group Policy to mandate security settings to help counter attacks that target e-mail and desktop documents. In an Active Directory-based environment, administrators apply policy settings to groups of users and computers in a site, domain, or OU to which a GPO is linked. True policy settings are written to the

approved registry key locations for policy, and these settings have access control list (ACL) restrictions that prevent non-administrator users from changing them. Administrators use Group Policy to create highly restricted or lightly managed desktop configurations, depending on their specific business and security requirements. Group Policy settings have precedence over OCT settings.

The following table lists the approved registry key locations for Group Policy settings. Users cannot change or disable these settings.

For computer policy settings	For user policy settings
HKLM\Software\Policies (the preferred location)	HKCU\Software\Policies (the preferred location)
HKLM\Software\Microsoft\Windows\CurrentVersion\Policies	HKCU\Software\Microsoft\Windows\CurrentVersio n\Policies

For Office 2010, user-specific policy settings are stored in the

HKEY_CURRENT_USER\Software\Policies\Microsoft\Office\14.0 subkey. Computer-specific policies are stored in the **HKEY_LOCAL_MACHINE\Software\Policies\Microsoft\Office\14.0** subkey. By default, both policy subkeys are locked to prevent users from modifying them.

Group Policy settings can be set to one of three states:

- Not configured The policy setting is not enforced.
- Enabled The policy setting is activated. Additional settings appear in the Properties page for some policy settings. These settings determine what happens when the policy setting is enforced.
- Disabled For most policy settings, the Disabled state enforces the opposite behavior to that of
 the Enabled state. For example, if Enabled forces a feature's state to Off, Disabled forces the
 feature's state to On.

For more information about using Group Policy, see <u>Enforce settings by using Group Policy in Office 2010</u>.

Configuring user and computer settings by using the Office Customization Tool

To specify initial default values of Office application settings for users and computers, administrators use the OCT to specify settings in a Setup customization .msp file. Users can modify most of the settings after the installation. This is because the OCT configures settings in publicly available portions of the registry, such as HKEY_CURRENT_USER\Software\Microsoft\Office\14.0 for user settings and HKEY_LOCAL_MACHINE\Software\Microsoft\Office\14.0 for computer settings.

OCT settings can be set to one of the following states:

- Not Configured The setting remains as it is.
- Enabled The setting is modified based on your choices in the Properties page for the setting.
- **Disabled** The setting is disabled. Disabling an option might be different from not configuring the option. See the description of the specific option for more information.

Office 2010 licensing and activation

Microsoft policy requires the activation of all editions of Office 2010 client software, including those obtained through a Volume Licensing program. This requirement applies to Office 2010 running on both physical computers and virtual computers. Activation is not required for any Office 2010 server products: Microsoft SharePoint Server 2010 and Microsoft Project Server 2010, or any version of Microsoft Exchange Server. In Office 2010, the activation method uses Office Activation Technologies, based on the Software Protection Platform introduced in Windows Vista and Windows Server 2008 families.

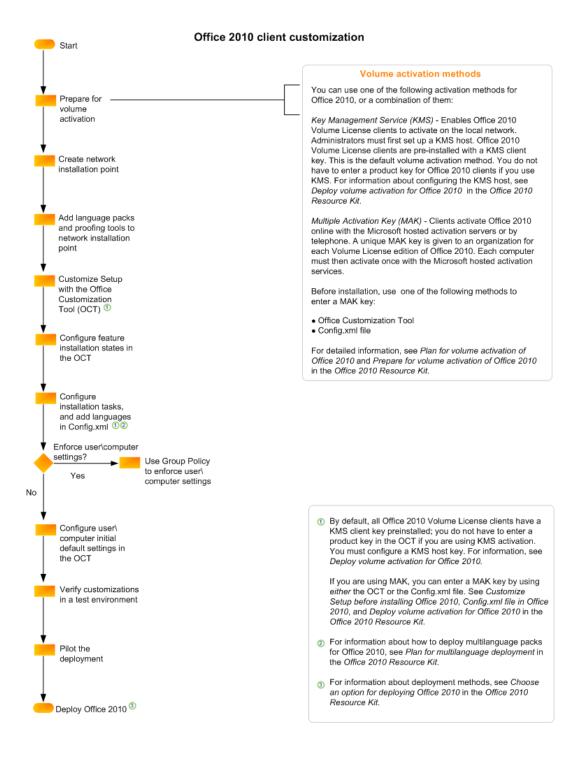
You can use the following methods to activate Office 2010 by using Office Activation Technologies, which are the same methods that are used for Windows Vista and later versions of Windows:

- Key Management Service (KMS). KMS uses a KMS host key to activate a KMS host computer and establish a local activation service in your environment. Office 2010 connects to the local KMS host for activation. Office 2010 enterprise deployments that are using Key Management Service (KMS) activation do not require a product key entry because all Volume License editions of Office 2010 have a KMS client key pre-installed. However, administrators must configure a KMS host computer with a KMS host key to be activated and to establish a local activation service in your environment. Office 2010 connects to the local KMS host for activation. KMS is the default option for Volume Licensed clients.
- Multiple Activation Key (MAK). With a MAK, clients activate Office 2010 online with the Microsoft
 hosted activation servers or by telephone. MAK is appropriate for organizations with computers that
 are not connected to the corporate network for long periods of time, such as portable computers. If
 you use the MAK method, Office 2010 must be installed with a MAK key instead of the default KMS
 client key used in Volume License editions of Office 2010. MAK activation by telephone will be
 supported later when the product releases (RTM).
- A combination of KMS and MAK.

For detailed information about licensing and activation of Office 2010 clients, we recommend that you read the following articles before you customize the installation: Volume activation overview for Office 2010 (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx), Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx), Volume activation quick start guide for Office 2010, Deploy volume activation of Office 2010, Tools to configure client computers in Office 2010.

Summary of client customization tasks

The following illustration summarizes the tasks to perform to customize an Office 2010 client installation. As with any software deployment, your Office 2010 client deployment plans must include testing in a non-production environment and conducting pilot tests with small groups of users before you deploy to all users in the organization.



The following resources provide information about planning and about customization tasks for Office 2010 client installations:

- Plan for volume activation of Office 2010 (http://technet.microsoft.com/library/b41f7bc2-b7fa-43a3-963a-cf1c1ef8f331(Office.14).aspx)
- Configure and deploy volume activation of Office 2010
- Prepare the infrastructure for Office 2010

- Plan for multilanguage deployment of Office 2010 (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a(Office.14).aspx)
- Customize setup for Office 2010
- Customize language setup and settings for Office 2010
- Configure Outlook 2010
- Choose an option for deploying Office 2010 (http://technet.microsoft.com/library/e68bd7d9-afa2-45ab-8788-fc7c68e6efb5(Office.14).aspx)

See Also

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx)

<u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

<u>Setup command-line options for Office 2010</u> (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx)

Enforce settings by using Group Policy in Office 2010

<u>Volume activation overview for Office 2010</u> (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx)

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

Deploy volume activation of Office 2010

Customize setup for Office 2010

This section provides information to help you customize an installation Microsoft Office 2010. In this section:

Article	Description
Customize Office 2010	Provides information and procedures to customize an installation of Office 2010.
Customize Setup before installing Office 2010	Provides information and procedures to customize Setup before installing Office 2010.
Configure feature installation states for Office 2010	Provides information and procedures to customize Setup to configure feature installation states.
Configure user settings for Office 2010	Provides information and procedures to configure Office 2010 user settings by using the Office Customization Tool (OCT).
Create different configurations of Office 2010 for different groups of users	Provides information and procedures to create unique configurations of Office 2010 for each group.
Import an Office 2010 Setup customization file	Provides information and procedures to import an OCT Setup customization file (.msp file) in Office 2010.
Configure a silent installation of Office 2010 by using Config.xml	Provides information and procedures for configuring a silent installation by using the Config.xml file.
Run arbitrary commands with installations of Office 2010	Provides information and procedures to customize Setup to run an arbitrary command or a lightweight executable to install an Office 2010 product.
Create custom configurations of Office 2010	Describes how to deploy an initial customized installation of Office 2010 to users in an organization.
View XML content from Office Customization Tool customization files	Provides a sample Microsoft Visual Basic script that administrators can use to view the settings that are stored in Setup customization .msp files.

Customize Office 2010

This article provides information and procedures to customize an installation of Microsoft Office 2010. After you create a network installation point, but before you install Office 2010, you can use the Office Customization Tool (OCT) to create a Setup customization file to configure the installation for users. You can use the OCT to alter the way that Setup performs the installation and to configure Office applications on the user's computer.

In Office 2010, two architecture-specific versions of the Office Customization Tool (OCT) are available: one for 32-bit Office 2010 and one for 64-bit Office 2010. The 64-bit version of the OCT supports 64-bit client editions of Office 2010, and provides the same user interface, capabilities, and configurable settings as the 32-bit version. You use the same command to run the 32-bit or 64-bit version of the OCT. For instance, if you want to run the 32-bit OCT, run the setup.exe /admin command line from the x86 (32-bit) folder as shown in the following example: \server\share\Office14\x86\setup.exe /admin. To run the 64-bit OCT, run the setup.exe /admin command line from the x64 (64-bit) folder. For more information about 64-bit Office 2010, see 64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).



Office 2010 does not support side-by-side installations of 64-bit and 32-bit Office, including across applications. For example, there is no support for side-by-side installations of the 2007 Office system 32-bit with Office 2010 64-bit, or for Microsoft SharePoint Workspace 2010 64-bit and Microsoft Excel 2010 32-bit. You cannot use the Office 2010 customization tools to configure side-by-side installations or customizations of 64-bit and 32-bit Office. For example, you cannot create a custom side-by-side installation with 64-bit Microsoft Office Professional 2010 and 32-bit Microsoft Visio 2010 single image. For more information about 64-bit Office, see 64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).

Customize Office

To customize Office by using the OCT

- 1. From the root of the network installation point, run the following command line to start the Office Customization Tool: \\server\share\setup.exe /admin.
- 2. In the **Select Product** dialog box, select a single product that you want to customize, and then click OK.
- 3. In the left pane, select an area of customization and customize the options available in the right pane. For example, to configure Setup to run quietly, select Licensing and user interface in the left pane, and then select **None** for **Display level** in the right pane.
- 4. When you finish making your customizations, select **Save As** in the **File** menu.
- 5. Specify a unique name for the file and save the file in the Updates folder of the network installation point.
- 6. Click Save.

When you run Setup.exe from the network installation point, Setup looks in the Updates folder for Setup customization files for the product that you are installing. Setup then applies your customizations to the installation.

The following articles provide more information about how to customize specific aspects of the installation:

- To customize the default behavior of Setup during installation, see <u>Customize Setup before</u> installing Office 2010.
- To customize which Office features are installed on the user's computer, see <u>Configure feature</u> installation states for Office 2010.
- To customize the user's default environment during installation, see <u>Configure user settings for</u> <u>Office 2010</u>.
- To configure Outlook options, see the <u>Configure Outlook 2010</u> articles.

For complete information about the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

The following customizations can only be made using the Config.xml file:

- Specifying the path of the network installation point.
- Selecting which product to install.
- Customizing Setup options such as logging and the location of the Setup customization file and software updates.
- Setting installation options such as user and company name.
- Copying the local installation source (LIS) to the user's computer without installing Office.
- Adding or removing languages from the installation.

For more information about how to use the Config.xml file, see <u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

See Also

<u>Setup architecture overview for Office 2010</u> (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

<u>Volume activation overview for Office 2010</u> (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx)

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

Volume activation quick start guide for Office 2010

Deploy volume activation of Office 2010

Customization overview for Office 2010

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

<u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx)

Import an Office 2010 Setup customization file

Customize Setup before installing Office 2010

This article provides required information and procedures to customize Setup before installing Microsoft Office 2010. In Office 2010 (as in the 2007 Microsoft Office system), Setup controls the complete installation. This includes processes that Windows Installer handled in Office versions earlier than the 2007 Office system. Customizing the default behavior of Setup lets you control the process — for example, to run the installation without user interaction, to handle the product key and the Microsoft Software License Terms on behalf of users, and to specify an organization name or a different installation location.

We recommend that you read the <u>Volume activation overview for Office 2010</u> (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx), <u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx), and <u>Configure and deploy volume activation of Office 2010</u> articles before customizing Setup.

In this article:

- Customize Setup
- Install Office silently

Customize Setup

To customize how Setup manages the installation process, use the Office Customization Tool (OCT) to create a Setup customization (.msp) file. Setup applies this file when users install Office on their computers.

To customize Office Setup

- Create a network installation point by copying all the files and folders from the Office CD to a folder on the network. For more information, see <u>Create a network installation point for Office</u> 2010.
- 2. From the root of the network installation point, run the following command line to start the Office Customization Tool:

setup.exe /admin

- 3. Select the product that you want to configure, and then click **OK**.
- 4. In the left pane, click Installation location and organization name.

- In the **Default installation path** box, enter the path of a default installation location on users' computers. You can enter a relative path that includes the folder keyword [ProgramFilesFolder].
- 6. In the **Organization name** box, enter a default organization name for all users who install Office with this customization file.
- 7. In the left pane, click **Additional network sources**, and then click **Add**.
- 8. In the **Network server** box, enter the path of any backup sources that you have created on the network. If neither the user's local installation source nor the original network installation point is available, Setup uses one of these replicated installation points for operations that require the source. You can add as many sources as you need.
- 9. In the left pane, click **Licensing and user interface**. The following options are available:
 - Use KMS client key A product key entry is not required for enterprise deployments that are using Key Management Service (KMS) activation because all Volume License editions of Office 2010 have a KMS client key pre-installed. KMS is one of the methods that are provided by Office Activation Technologies for activating products licensed under Microsoft Volume Licensing programs. Only a KMS host computer needs a KMS host key to be activated and to establish a local activation service in your environment. Office 2010 connects to the local KMS host for activation. By default, the Use KMS client key option is selected.
 - For more information about the licensing options for Office 2010, see <u>Volume activation</u> <u>overview for Office 2010</u> (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx). For information about how to configure the KMS host, see <u>Prepare and configure the KMS host</u> in <u>Deploy volume activation of Office 2010</u>.
 - Enter another product key You can enter a valid Multiple Activation Key (MAK) key in the OCT by using the Enter another product key entry. A MAK key is another method that Office Activation Technologies provide for activating products licensed under Microsoft Volume Licensing programs. With a MAK, clients activate Office 2010 online by using the Microsoft hosted activation servers or by telephone.
 - To use a MAK key, in the **Enter another product key** text box, enter the MAK key (twenty-five numbers or characters) without spaces. For more information about using a MAK key, see <u>Deploy volume activation of Office 2010</u>.
- 10. Select the I accept the terms in the License Agreement check box. When you provide this information in a Setup customization file, users are not prompted for a product key or Microsoft Software License Terms during the installation or the first time that they start an Office application.
- 11. In the right pane, set the **Display Level** to **Basic** or **None** to install Office quietly (without user interaction). More information about display settings is provided later in this article.



In enterprise deployments, we recommend that you set **Display level** to **None** to ensure that Setup runs silently, to prevent prompting users to enter information, and to prevent the installation from waiting for any user interaction, including when files are being used. Setting **Display Level** to **none** assumes that the **Suppress modal** and **Completion notice** options are silenced and that the Microsoft Software License Terms is accepted. Administrators must also make sure that no Office applications are running during an installation of Office 2010.

If you set **Display level** to **Basic** and select the **Suppress modal** option, users may be prompted if any Office files are being used. Setting Display level to None prevents prompting users in these cases. The Suppress modal option does not prevent files-in-use messages from displaying; only **Display level** set to **None** prevents their display.

12. Make any additional customizations. Click **Save** on the **File** menu, and then click save the Setup customization file in the Updates folder at the root of the network installation point.

Your customizations apply to any language version of the specified product that is available on the network installation point. Most customizations apply to the language-neutral core product. However, the feature tree in the tool also includes a subset of language-specific features. Customizations to language-specific features are applied when a user installs that language; otherwise, they are ignored.



Note:

Typically, you do not need to customize logging options. By default, Setup creates a standard log file and saves it as a text file in the %Temp% folder on the user's computer. If an installation fails, Setup creates a verbose log file, starting with the package that caused the failure, in the same location. To change logging options, open the Config.xml file in Notepad and modify the **Logging>** element. For more information, see Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

Install Office silently

When you deploy Office throughout an organization, you determine how much of the Setup user interface is displayed to users. By default, Setup runs interactively and gives users choices during the installation. If you are distributing a customized configuration, we recommend that you limit how much users interact with Setup. The installation continues with fewer interruptions, and your customizations are set by default for all users. For more information about display options, see Licensing and user interface (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-

24a66a531bb5.aspx#Licensing_and_user_interface) in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

If you are using a deployment tool such as Microsoft System Center Configuration Manager 2010 or Microsoft Systems Management Server (SMS) to deploy Office while users are not logged on to the network, set the display level to **None**, which installs Office without displaying any Setup user interface.



Note:

When you install Office silently, you must provide a valid product key. If the product key is missing, Setup logs an error and exits. As mentioned previously, if you are using KMS activation, a product key entry is not required because all Volume License editions of Office 2010 have a KMS client key pre-installed; however, if you are using MAK, you must enter the MAK key. If you do not accept the license terms on behalf of users, Setup does complete the installation. However, by installing Office silently, you have implicitly accepted the license terms.

The Windows Installer properties **DISPLAY** and **PIDKEY** do not work in Office 2010 (or in the 2007 Office system). Instead, in Office 2010 you customize Setup directly by specifying a display setting and specifying a product key in the OCT either by accepting the default option, Use KMS client key if you are using KMS validation, or by entering a MAK key in the Enter another product key textbox if you are using KMS, as described in Customize Setup.

Because Setup plays a more significant role in controlling the installation, many Windows Installer properties are no longer required. In fact, some Windows Installer properties are blocked and generate an error if you try to set them using the Office Customization Tool. For a complete list of the Setup properties that you can use with the Office 2010, and also a list of blocked or unsupported properties and their corresponding new mechanisms, see Setup properties in Office 2010 (http://technet.microsoft.com/library/41f07f9b-f0d0-489d-a185-d7b96f21f561(Office.14).aspx).

See Also

<u>Volume activation overview for Office 2010</u> (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx)

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

Configure and deploy volume activation of Office 2010

Tools to configure client computers in Office 2010

Deploy volume activation of Office 2010

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Customize Office 2010

Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

Setup properties in Office 2010 (http://technet.microsoft.com/library/41f07f9b-f0d0-489d-a185-d7b96f21f561(Office.14).aspx)

Setup architecture overview for Office 2010 (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

Configure feature installation states for Office 2010

After you create a network installation point but before you install Microsoft Office 2010, you can use the Office Customization Tool (OCT) to create a Setup customization file (.msp file) to configure the installation for users. You can use the OCT to change the default way that Office features are installed. You can set some features to be installed on the user's computer, some features to be installed only on first use, and some features not to be installed. You can even hide or lock features so that a user who runs Setup interactively cannot change what you have configured. For information about the network installation point, see Create a network installation point for Office 2010.

Configure installation states

Use the following procedure to configure feature installation states.

To configure Office feature installation states

- 1. To start the OCT, from the root of the network installation point, type the following at the command prompt: **setup.exe** /admin.
- 2. In the **Select Product** dialog box, select the product that you want to configure, and then click **OK**.
- 3. In the left navigation pane, locate Features, and then click Set feature installation states.
- 4. In the right navigation pane, expand the tree and select the feature that you want to customize. For example, if you opt not to install the Equation Editor, expand Microsoft Office and Office Tools, right-click Equation Editor, and then select the installation options Not Available, Hidden, and Locked. Setup does not install the Equation Editor and, if Setup is run interactively, this feature is not visible and the user cannot install it.
- 5. On the **File** menu, click **Save As**.
- 6. In the **Save As** dialog box, specify a path and file name for the Setup customization file, and then click **Save**.
- 7. On the File menu, click Exit.
- 8. Copy the Setup customization file to the Updates folder in the network installation point.

When you run Setup to install Office, Setup uses the customization file that it finds in the Updates folder and configures Office features according to your customizations.

The following table describes the available installation options.

Option	Description
Run from My Computer	Setup copies files and writes registry entries and shortcuts that are associated with the feature to the user's hard disk, and the feature (or application) runs on the user's computer.
Run all from My Computer	This option is the same as Run from My Computer , except that all child features that belong to the feature are also set to this state.
Installed on First Use	Setup leaves components for the feature and all of its child features in the local installation source until the user first attempts to use the feature, at which time the components are copied to the Office program folder on the user's local hard disk. Some features do not support Installed on First Use ; this option is not available for these features in the OCT.
Not Available	The components for the feature, and all of the child features that belong to that feature, are not installed on the user's computer.

Option	Description
Hidden	The feature and all of its child features do not appear in the feature tree when Setup runs interactively. Setup uses the default installation state, or the state specified in the customization file, to determine how to install the feature.
	• If you set the Hidden option for a specific feature by using the OCT or the Config.xml file during an initial installation of Office 2010, you cannot "unhide" that feature in the feature tree by using another Config.xml file or by applying a second .msp file after the initial installation. If you selected the Hidden option, the feature is not displayed in the feature tree during installation. The feature remains hidden. The feature will not be displayed in Add or Remove Programs (Change or Remove Programs in Windows XP or under the Programs and Features option in Windows Vista) in Control Panel if you opt to change your Office 2010 installation; it will not be displayed in the Office Setup feature installation tree under the Add or Remove Features option for Office 2010. However, you can unlock the feature to install and run it locally later by using an .msp file or a Config.xml file.
	If you set the Locked option for a feature by using the OCT or the Config.xml file during initial installation, that feature can be unlocked and installed locally by using an .msp file or a Config.xml file.
	For instance, you can edit the Config.xml file to modify the OptionState element as shown in the following example. This adds the OptionState element line to uninstall the feature (in this case, Microsoft Access) on a user's computer, and to set child features of the feature to the specified state.
	For more information about the Config.xml file, see Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).
	You can also use the OCT to create an .msp file to install the feature later. To do this, click Set feature installation states . In the right navigation pane, right-click a feature, and then set the feature installation state to Run all from My Computer .
Locked	The feature cannot be changed by the user during interactive Setup or maintenance mode.

Note

 The following subcomponents of Microsoft Publisher 2010 are not visible in the Setup feature installation state tree in Office 2010:

When you change the installation state of a feature, Setup might change the installation state of a parent or child feature to match. For more information, see the <u>Set feature installation states</u> (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-

24a66a531bb5.aspx#Set_feature_installation_states) section in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

As with any deployment of Office, make sure that you test customizations and deployment in a non-production environment before you deploy Office 2010 to users in the organization.

See Also

Create a network installation point for Office 2010

Customize Office 2010

<u>Setup architecture overview for Office 2010</u> (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

Configure user settings for Office 2010

After you create a network installation point but before you install the Microsoft Office 2010, you can use the Office Customization Tool (OCT) to create a Setup customization file (.msp file). Many user settings can be configured in the OCT to customize the user's environment. For example, you can use the OCT to configure the default settings for several AutoCorrect options in Microsoft Word 2010. When you configure a user setting, that setting is in place when the user first runs an Office application.

Note:

Configuring a user setting in this manner is not necessarily permanent; it merely establishes the initial default value for the setting. The user can modify most settings after Office is installed. If you have to enforce user settings and prevent users from changing the settings, use Group Policy.

In Office 2010, two architecture-specific versions of the Office Customization Tool (OCT) are available: one for 32-bit Office 2010 and one for 64-bit Office 2010. The 64-bit version of the OCT supports 64-bit client editions of Office 2010, and provides the same user interface, capabilities, and configurable settings as the 32-bit version. You use the same command to run the 32-bit or 64-bit version of the OCT. For instance, if you want to run the 32-bit OCT, run the setup.exe /admin command line from the x86 (32-bit) folder as shown in the following example: \server\share\Office14\x86\setup.exe /admin. To run the 64-bit OCT, run the setup.exe /admin command line from the x64 (64-bit) folder. For more information about 64-bit Office 2010, see 64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).

Configure user settings

Use the following procedure to configure user settings for Office 2010.

To configure user settings

- 1. To start the OCT, from the root of the network installation point, type the following at the command prompt: setup.exe /admin.
- 2. In the **Select Product** dialog box, select the product that you want to configure, and then click
- 3. In the left navigation pane, locate **Features**, and then click **Modify user settings**.
- 4. In the right navigation pane, expand the tree, and then click the product for which you want to configure settings.
- 5. In the **Settings** column, double-click the user setting that you want to configure. A **Properties** dialog box appears.
- 6. Select one of the following options, and then click **OK**.
 - **Not Configured** The setting remains as it is.
 - **Enabled** The setting is modified based on your choices in the **Properties** dialog box. If values are available for the setting, select the value that you want to use.
 - **Disabled** The setting is disabled. Note that disabling an option may be different from not configuring the option. See the description of the specific option for more information.



Note:

If you click Enabled to view the options for a setting and then click OK, Previous Setting, or Next Setting, the status changes to configured, even if you do not change the setting. Inadvertently configuring the setting with an empty hyperlink, path, or file name can cause errors. If you clicked Enabled and want to ignore your changes or avoid configuring the setting, click Cancel in the Properties dialog box for the setting. You can also return a setting to the Not Configured state by double-clicking the setting, selecting Not Configured, and clicking OK.

For example, to specify the default format in which you want users to save Word 2010 files, in the navigation pane expand Microsoft Word 2010, expand Word Options, and then click Save. In the list pane, in the Setting column, double-click Default file format. The Default file format Properties dialog box appears. Select Enabled, click the drop-down list arrow, click the file format that you want to specify, and then click **OK**.

7. If you want to preserve user settings from previous versions of Office, select the Migrate user settings check box.



Note:

If you modify user settings and also select the Migrate user settings check box, Setup first applies the modified settings and then migrates the user's existing custom settings, overwriting any conflicting settings.

- 8. On the File menu, click Save As.
- 9. Specify a path and file name for the Setup customization file, and then click **Save**.
- 10. On the File menu, click Exit.
- 11. Copy the Setup customization file to the Updates folder in the network installation point.

When you run Setup to install Office 2010, Setup uses the Setup customization file (.msp file) in the Updates folder and configures user settings.

See Also

Create a network installation point for Office 2010

Customize Office 2010

Setup architecture overview for Office 2010 (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Create different configurations of Office 2010 for different groups of users

This article provides required information and procedures to create different configurations of Microsoft Office 2010 for groups of users that have different requirements. You can create unique configurations of Office 2010 customized for each group by using one of the methods described in this article.

The first method uses the Office Customization Tool (OCT) to create a Setup customization .msp file for each group. You then use the command line to run Setup and specify the customization .msp file. The second method uses the Config.xml file and a Setup customization .msp file to customize the installation, and uses a separate installation folder that contains the Setup program and all the customization files for the installation. You then run Setup from that separate installation folder.

Typically, the first step in a corporate deployment of Office 2010 is to create a network installation point. You do this by copying all the source files from your Office CD to a shared location on the network. Users run Setup from the network installation point, or you use the installation point as a starting place to create a hard-disk image or a custom CD or to distribute Office by using a deployment management tool such as Microsoft System Center Configuration Manager. For more information, see Create a network installation point for Office 2010.

In this article:

- Create custom configurations for a group of users
- Create a custom configuration for a group of users by using a separate installation folder

Create custom configurations for a group of users

The method described in this section uses the OCT to create a unique Setup customization file (.msp file) for each group. Then you install Office for the users by specifying the customization file on the Setup command line.

To configure customizations for a group of users

- 1. Create a network installation point for Office. For more information, see <u>Create a network</u> installation point for Office 2010.
- 2. In the root of the network installation point, create a folder for your Setup customization files.



Note:

Do not put your customization files in the Updates folder. Setup automatically applies customization files that it finds in this folder during installation. Instead, you direct Setup to use only the customization file that you specify on the command line, as described in step 5.

- 3. Start the OCT by running Setup from the network installation point. Specify the /admin command-line option; for example, \\server\share\\setup.exe /admin. For more information, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).
- 4. Make the customizations that you want to use for the first group of users.
 - a. On the File menu, click Save.
 - b. Specify a unique name for the Setup customization file. Save the file in the folder that you created.
 - c. Repeat the process to create a unique Setup customization file for each group of users.
- 5. Run Setup for the users within each group. Specify the appropriate Setup customization file by using the /adminfile command-line option. For example, to install Office for users in the Accounting department, run \\server\share\setup.exe /adminfile \\server\share\custom\accounting.msp. For more information, see Run Setup from a network installation point.

Create a custom configuration for a group of users by using a separate installation folder

The method described in this section uses the Config.xml file and a Setup customization .msp file to create customizations for each group of users. It also uses a separate installation folder from the primary network installation point to store Setup.exe, Config.xml, Osetup.dll, and the Setup. customization .msp files. The remaining necessary installation files will be contained in the primary network installation folder for Office 2010. You run (or have users run) Setup from that separate installation folder.

The primary difference between the method described in this section and the preceding one is the use of the separate installation folder. The benefit of a separate installation folder for a group of users is that you (or the users in that group) can run Setup from that separate installation location and receive the customized configuration of the group without having to use complex commands and network paths with Setup.exe.

To create and install a custom configuration for a group of users by using a separate installation folder

- 1. Create a folder that is separate from the primary network installation folder for Office 2010. For example, GroupCustomOfficeInstallFolder.
- 2. Create a copy of Setup.exe, Config.xml, and Osetup.dll in the new folder. These files are in the primary network installation folder.
 - Setup.exe is located at the root of the folder. The Config.xml file and Osetup.dll are stored in

the core product folder: core product folder name.WW folder; for example, ProPlus.WW.

- 3. Using a text editor, open Config.xml and do the following:
 - Edit the Location attribute in the DistributionPoint element to get the Office 2010 installation files from the primary network installation folder, as shown in the following example. For information about Config.xml, see Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

```
<DistributionPoint Location=\\share\PrimaryOffice2010NetworkInstallationFolder />
```

If you used the OCT to create one or more Setup customization files (.msp files), edit the
 CheckForSUpdates and SUpdateLocation attributes in the SetupUpdates element in
 Config.xml as shown in the following example to enable Setup to find Setup customization
 files in the new folder. (By default, Setup looks for Setup customization files in the Updates
 folder, and then runs them in alphabetical order if there is more than one.)

```
<SetupUpdates
CheckForSUpdates="Yes"
SUpdateLocation="<\\share\GroupCustomOfficeInstallFolder\Updates>"
/>
```

Important

4. Run Setup.exe from the new GroupCustomOfficeInstallFolder folder. You can map a drive for users or run Setup from the command line, as shown in the following example.

 $\verb|\share| Group Custom Office Install Folder \verb|\setup.exe| \\$

You can use the Config.xml file to configure the following areas:

- Specify the path of the network installation point.
- Select which product to install.
- Customize Setup options, such as logging and the location of the Setup customization file and software updates.
- Add or remove languages from the installation.
- Set installation options, such as user name and company name.
- Copy the local installation source (LIS) to users' computers without installing Office.

For more information, see <u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

As with any Office deployment, test customizations and deployment in a nonproduction environment before you deploy Office to users in the organization.

See Also

<u>Setup architecture overview for Office 2010</u> (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx)

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Customize Office 2010

<u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

Import an Office 2010 Setup customization file

This article provides required information and procedures to import an Office Customization Tool (OCT) Setup customization file (.msp file) in Microsoft Office 2010.

In this article:

- Overview
- Import a Setup customization file
- Import languages to an existing installation

Overview

In Office 2010, two architecture-specific versions of the Office Customization Tool are available: one for 32-bit Office 2010 and one for 64-bit Office 2010. The 64-bit version of the OCT supports 64-bit client editions of Office 2010, and provides the same user interface, capabilities, and configurable settings as the 32-bit version.

You start the OCT by running the **setup.exe** /admin command at the command prompt from the root of the network installation point that contains the Office 2010 source files. (For more information, see Create a network installation point for Office 2010.) For example, run the following command line to start the OCT: \\server\share\Office14\setup.exe /admin. You use the same command to run the 32-bit or 64-bit version of the OCT. For instance, if you want to run the 32-bit OCT, run the **setup.exe** /admin command line from the x86 (32-bit) folder as shown in the following example: \\\server\share\Office14\x86\setup.exe /admin. To run the 64-bit OCT, run the **setup.exe** /admin command line from the x64 (64-bit) folder.

The OCT supports the importing of Setup customization files (.msp files):

- 32-bit .msp files can be imported into the 64-bit OCT, and then they can be used to customize 64bit Office 2010 products.
- 64-bit .msp files can be imported into the 32-bit OCT, and then they can be used to customize 32bit Office 2010 products.

Note

- Importing customization .msp files is intended for equivalent cross-architecture products only. You can import a 32-bit Microsoft Office Professional Plus 2010 customization .msp file into the 64-bit version of the OCT for a 64-bit Office Professional Plus 2010 .msp file. However, you cannot import a 32-bit Microsoft Word 2010 stand-alone customization .msp file into the 64-bit OCT for a 64-bit Office Professional Plus 2010 .msp file; doing so is prevented and displays an error message. For information about how to use the OCT to create a Setup customization file and about all the areas that you can configure with the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).
- You cannot import 2007 Microsoft Office system Setup customization files (.msp files) into the Office 2010 OCT.

The Import feature can also be used when you have created an initial Setup customization file (.msp file) for an Office 2010 product (for example, Microsoft Office Professional Plus 2010) and you later want to modify the installation to add language packs. In such cases, you first add the language packs to the network installation point that contains the Office product source files. Then, you run the OCT from the root of the network installation point and create a new Setup customization file for the same product, and import the original customization .msp file that you created previously for Microsoft Office Professional Plus 2010. For more information, see To import a customization .msp file to add languages to an existing installation.

Import a Setup customization file

Use the following procedure to import a Setup customization file (.msp file).

To import a Setup customization file

- 1. Start the OCT by typing **setup.exe /admin** at the command prompt from the root of the network installation point that contains the Office 2010 source files. For example:
 - \\server\share\Office14\setup.exe /admin
- 2. To import a customization .msp file, in the OCT, on the File menu, click Import.
- 3. In the **Open** dialog box, select the .msp file that you want to convert, and then click **Open** to start the conversion.
- 4. On the **File** menu, click **Save As**. Specify a unique name for the file and save the file in the Updates folder of the network installation point for the platform for which you imported the customization .msp file (either 32-bit or 64-bit). For example, if you imported a 32-bit customization .msp file for customizing a 64-bit installation of Office 2010, you would save the file in the Updates folder of the network installation point for 64-bit Office 2010.
- 5. Click Save.

Import languages to an existing installation

If you create a Setup customization file (.msp file) to customize the Office 2010 installation and later decide to add languages, you can use the **Import** option in the OCT to apply the language changes. Use the following procedure to import languages to an existing installation. This procedure uses Office Professional Plus 2010 as an example.

To import a customization .msp file to add languages to an existing installation

- Add the language packs that you want to use to the network installation point that contains the Office Professional Plus 2010 source files. For more information, see <u>Create a network</u> <u>installation point for Office 2010</u>.
- Run the OCT by typing setup.exe /admin at the command-line prompt from the root of the network installation point that contains the Office Professional Plus 2010 source files. For example:

\\server\share\Office14\setup.exe /admin

- 3. In the Select Product dialog box, click Create a new Setup customization file for the following product and then choose the same product for which you previously customized installation options, Microsoft Office Professional Plus 2010 in this example.
- 4. To import the original customization .msp file that you created previously for Microsoft Office Professional Plus 2010, on the File menu, click Import.
- 5. In the **Open** dialog box, select the .msp file that you want to update.
- 6. On the File menu, click Save As. Specify a unique name for the .msp file, and then click Save.



Note:

The Updates folder supports only one Setup customization .msp file. Therefore, if you import a Setup customization .msp file to add languages to an existing installation, we recommend that you replace your previous customization .msp file (the original .msp file) with the new customization .msp file that contains the language packs information.

7. Deploy and apply the updated Setup customization file .msp to users' computers.

To apply the Setup customization (.msp) file to existing installations, you must apply the .msp file directly to the user's computer. Users can apply the Setup customization .msp file by double-clicking the .msp file, or by running the **msiexec** command with the /p option as shown in the following example (using *custom.msp*): **msiexec.exe /p \\server\share\custom.msp**.

For more information about Windows Installer commands, see Windows Installer Command-Line Options (http://go.microsoft.com/fwlink/?LinkID=162945).

You can also use a deployment management program, such as Microsoft System Center Configuration Manager 2007, to deploy Setup customization files.

See Also

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Create a network installation point for Office 2010

Customize Office 2010

Customize Setup before installing Office 2010

Setup architecture overview for Office 2010 (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx)

Configure a silent installation of Office 2010 by using Config.xml

This article provides required information and procedures to configure a silent installation of Microsoft Office 2010 by using the Config.xml file. The Config.xml file is used to configure installation tasks and is used *only* when you run Setup. It is not installed or cached on users' computers. You can edit the Config.xml file to customize the installation. By default, the Config.xml file that is stored in the core product folders (*core_product_folder_name*.WW folder, for example, Enterprise.WW or Pro.WW) directs Setup to install that product. For example, the Config.xml file in the Pro.WW folder installs Microsoft Office Professional 2010.

Modify the Config.xml file to configure a silent installation

To configure a *silent installation* (unattended installation) of an Office 2010 product that requires no user interaction, modify the Config.xml file for the product that you are installing and set the **Display** element's **Level** attribute to "none" (**Display Level="none"**), and then save the Config.xml file, as shown in the following procedure. The **Display** element specifies the level of user interface that Setup displays to users.

To specify silent installation options in Config.xml

- 1. Open the Config.xml file for the Office product (such as Office Professional Plus 2010) that you are installing by using a text editor tool, such as Notepad.
- 2. Locate the line that contains the **Display** element, as shown in the following example:
 - <!-- <Display Level="full" CompletionNotice="yes" SuppressModal="no" AcceptEula="no" /> -->
- 3. Modify the **Display** element entry with the silent options that you want to use. Make sure that you remove the comment delimiters, "<!--" and "-->". For example, use the following syntax:
 - <Display Level="none" CompletionNotice="no" SuppressModal="yes"
 AcceptEula="yes" />
 - These options will direct Setup to run silently, prevent prompting users to enter information, and prevent the installation from waiting for any user interaction. For more information about the syntax and Config.xml, see **Display** element in <u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).
- 4. Save the Config.xml file.

Make sure that no Office applications are running when you install Office 2010. For example, to install Office Professional Plus 2010 after you modify the Config.xml file to specify silent installation options, use the following command:

\\server\share\setup.exe /config \\server\share\ProPlus.WW\config.xml

Where:

\\server\share is the path of the Office Professional Plus 2010 source files.

/config is a Setup command-line option that specifies the location of the Config.xml file. See Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx).

\\server\share\\ProPlus.\WW\config.xml is the location of your modified Config.xml file for Office Professional Plus 2010.



- If you use the Config.xml file to set silent installation options as in the previous example, you will also want to use the Office Customization Tool (OCT) to create a Setup customization file (.msp file) to configure additional installation customizations. For example, you can use the OCT to specify previous versions of Microsoft Office applications to keep or remove. You can also set feature installation states by using the OCT to change the default way in which Office features are installed. For a complete description of the areas that you can configure by using the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). The OCT is available with Volume Licensing editions of Office 2010 (and the 2007 Office system). To determine whether your Office 2010 installation is a Volume Licensing edition, check the Office 2010 installation disk to see whether it contains a folder named Admin. If the Admin folder exists, the disk is a Volume Licensing edition. If the Admin folder does not exist, the disk is a retail edition.
- You can also set silent installation options by using the OCT. For more information, see the Licensing and user interface (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Licensing_and_user_interface) section in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). (The Level attribute of the Display element in the Config.xml file is equivalent to the **Display Level** option in the OCT). In enterprise deployments, we recommend that you set the **Display Level** to **None** if using the OCT to ensure that Setup runs silently, to prevent prompting users to enter information, and to prevent the installation from waiting for any user interaction, including when files are being used. Setting the Display Level to None assumes that the Suppress modal and Completion notice options are silenced and that the I accept the terms in the License Agreement check box is selected. As noted previously, administrators must also make sure that no Office applications are running during an installation of Office 2010.

Run arbitrary commands with installations of Office 2010

By default, the Setup program for Microsoft Office 2010 installs one Office product at a time. You can use the chaining feature to customize Setup to run an arbitrary command or a lightweight executable that you want to run when this product is installed. To add an arbitrary command or a lightweight executable, you can use the **Add installations and run programs** feature in the Office Customization Tool (OCT) or the **Command** element in the Config.xml file. We recommend that you limit the use of **Add installations and run programs** and the **Command** element to running only lightweight executables or arbitrary commands that will not make changes to the computer or that do not require user input. For example, you can run a utility to copy logs or a command to launch a Welcome page at the end of installation.

The **Add installations and run programs** option in the OCT (command lines entered in the **Add Program Entry** and **Modify Program Entry** dialog boxes) and the **Command** element in the Config.xml file are intended to be used only for initial product installations and uninstallations. The commands are processed only during initial installations and uninstallations.

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Important:

Chaining is not as reliable as installing each product separately. For example, if you chain two installations together and one of the products fails or encounters an unexpected error, the primary installation and the chained installation might not finish successfully. Therefore, we do not recommend using the chaining approach. The recommended method for installing multiple products together is to use a deployment management program, such as Microsoft Systems Management Server or Microsoft System Center Configuration Manager 2007, or a third-party tool, instead of chaining.

In the following example, the OCT is used to add an arbitrary program to the installation.

To customize the primary installation to run a command

- 1. Create a network installation point that includes the product that you will install. For more information, see <u>Create a network installation point for Office 2010</u>.
- 2. Run the OCT by running Setup.exe from the root of the network installation point with the /admin command-line option. For example, run: \\server\share\Office14\setup.exe /admin.
- 3. In the **Select Product** dialog box, select the product that is the primary installation.
- In the left pane of the OCT, select Licensing and user interface. In the right pane, set Display level to None, enter the Product key, and select I accept the terms in the License Agreement.

For more information about "<u>Licensing and user interface</u> (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Licensing_and_user_interface)" and **Display level** options, see <u>Office Customization Tool in Office 2010</u> (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

- 5. In the left pane, select Add installations and run programs. In the right pane, click Add.
- 6. In the Add Program Entry dialog box, perform the following steps for the executable that is chained.
 - For Target, enter the fully qualified path of the executable file that you want to run after the primary installation. For example, enter \\server\\share\\Office14\\copylogs.bat.
 - For Arguments, enter the string of arguments to be passed to the executable. For example, enter: QuietArg="/q" Wait="30000".

For information about the **Command** element and supported attributes, see "Command element (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementCommand)" in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).



Note:

As mentioned previously, command lines entered in the Add Program Entry and Modify Program Entry dialog boxes are intended to be used only for initial installs and uninstalls. Command lines are processed only during initial installs and uninstalls.

Select the Run this program after the Office product has been installed option to run the program listed in the Target box after the Office installation is completed. This is the recommended option.

You can also select the Run this program before the Office product has been installed option if you want the program listed in the Target box to run before the Office installation starts. However, if the program does not terminate correctly, or if it restarts the computer, Office is not installed, and programs further down the list do not run.

- Click OK.
- 7. Make other customizations in the OCT as needed.
- 8. Save the Setup customization file (.msp file) with a unique name in the Updates folder of the network installation point.
- 9. Exit the OCT.

To install the product

1. Run Setup from the root of the network installation point. For example, if the primary product is Microsoft Office Professional Plus 2010, enter \\server\share\setup.exe

-or-

If you also used the Config.xml file to configure installation options in addition to the OCT setup customization .msp file customizations, run Setup from the root of the network installation point and specify the Config.xml file that you customized for the primary product. For example, if the primary product is Office Professional Plus 2010, enter:

\\server\share\setup.exe /config \\server\share\ProPlus.WW\config.xml

2. In the **Select Product** dialog box, select the primary product.

After Setup installs the primary product, it runs the arbitrary command or lightweight executable that you specified in the OCT.



💡 Tip:

You can put the customization files that you created in a location other than the Updates folder. Just add the /adminfile option to the Setup command lines in the procedures earlier in this section to specify the customization files to use. For more information about how to use Setup command-line options, see Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx).

How it works

The Setup program for the primary product follows the typical installation process. After that installation is complete, Setup runs the additional lightweight executable or arbitrary command that you specified in the OCT. Setup waits until each program is finished before it runs the next program.

It is important to run the primary Setup quietly. A chained Setup program cannot run if the primary Setup program is running interactively. You must run the primary Setup program with Display level set to **None**. We recommend that chained installations also be run with **Display level** set to **None**. And because you are running Setup quietly, you must enter the product key for each product in the OCT.

See Also

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

Run Setup from a network installation point

Create custom configurations of Office 2010

This article describes how to deploy an initial customized installation of Microsoft Office 2010 to users in your organization. This article also includes an example of a Config.xml file.

In this article:

- Office Customization Tool changes in Office 2010
- Creating a custom configuration
- Config.xml example

We recommend that you read the following articles before you customize the installation:

- Volume activation overview for Office 2010 (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx)
- Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)
- Deploy volume activation of Office 2010
- Tools to configure client computers in Office 2010
- Customization overview for Office 2010

Office Customization Tool changes in Office 2010

The Office Customization Tool (OCT), part of the Setup program, is the primary tool that is used to customize an Office 2010 client installation. It is included in Volume License versions of Office 2010 such as Microsoft Office Professional Plus 2010. Before you begin your customizations, you should be aware of the following changes in the Office 2010 OCT.

In Office 2010, two architecture-specific versions of the Office Customization Tool are available: one for 32-bit Office 2010 and one for 64-bit Office 2010. The 64-bit version of the OCT supports 64-bit client editions of Office 2010, and provides the same user interface, capabilities, and configurable settings as the 32-bit version.

The Office 2010 OCT supports the import of setup customization .msp files:

- 32-bit Office 2010 .msp files can be imported into the 64-bit OCT, and then they can be used to customize 64-bit Office 2010 products.
- 64-bit Office 2010 .msp files can be imported into the 32-bit OCT, and then they can be used to customize 32-bit Office 2010 products.

Note:

You can import a setup customization .msp file for equivalent cross-architecture products only. For example, you can import a 32-bit Microsoft Office Professional Plus 2010 customization .msp file into the 64-bit version of the OCT for a 64-bit Office Professional Plus 2010 .msp file. However, you cannot import a 32-bit Microsoft Word 2010 stand-alone customization .msp file into the 64-bit OCT for a 64-bit Microsoft Office Professional Plus 2010 .msp file; doing so is prevented and displays an error message. You cannot import 2007 Microsoft Office system Setup customization files (.msp files) into the Office 2010 OCT.

For more information about the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). For more information about the import feature, see Import an Office 2010 Setup customization file. For information about 64-bit Office 2010, see 64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).

Creating a custom configuration

The following table highlights the process of how to deploy a custom configuration.

Steps	References
Copy all the files and folders from the Office 2010 CD to a folder on the network or on your computer. For example, copy the files to \\server\share\Office14. Copy all the language packs and additional Office products that you want to deploy to the same network installation point. When you are prompted to overwrite duplicate Setup files, click No.	Create a network installation point for Office 2010
Use the Office Customization Tool (OCT) to customize Setup, and configure additional customizations and installation options. This creates a Setup customization file (.msp file). For a complete description of the areas that you can configure by using the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). A new Setup customization .msp file is created in the following example. 1. From the root of the network installation point that you created previously, run the following command-line option to start the OCT: setup.exe /admin. For example, use the following: \[\text{\sectup Setup Reduct diplog colect Create a page.} \]	Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a 0-a12c-4f7b-839c- 24a66a531bb5(Office.14).aspx) Deploy volume activation of Office 2010 Tools to configure client computers in Office 2010 Customize Setup before installing Office 2010 Configure feature installation states for Office 2010 Configure user settings for Office 2010 Configure Outlook 2010 Import an Office 2010 Setup customization
 In the Select Product dialog, select Create a new Setup customization file for the following product to create a new customization file (for example, for Office Professional Plus 2010 (32-bit)). Click OK. The OCT user interface is displayed, and you can then configure settings in the following areas: Setup, Features, Additional content, and Outlook. 	file
Customize Setup to specify how you want Setup to manage the installation. The Setup section of the	

Steps	References
OCT is used to configure options such as the default installation location, default organization name, additional network locations that contain the Office 2010 sources, product key, Microsoft Software License Terms, level of user interface to display, previous versions of Office to remove, and so on. The product key option depends on the Office 2010 licensing method that you use. The following options are available in Licensing and user interface :	
a. Use KMS client key A product key entry is not required for enterprise deployments that are using Key Management Service (KMS) activation because all Volume License editions of Office 2010 have a KMS client key preinstalled. KMS is one of the methods that are provided by Office Activation Technologies for activating products licensed under Microsoft Volume Licensing programs. Only a KMS host computer needs a KMS host key to be activated and to establish a local activation service in your environment. Office 2010 connects to the local KMS host for activation. Use KMS client key is the default. For information about how to configure the KMS host, see Prepare and configure the KMS host in Deploy volume activation of Office 2010.	
b. Enter another product key You can enter a valid Multiple Activation Key (MAK) key in the OCT by using the Enter another product key entry. A MAK key is another method that Office Activation Technologies provide for activating products licensed under Microsoft Volume Licensing programs. With a MAK, clients activate Office 2010 online by using the Microsoft hosted activation servers or by telephone. To use a MAK key, in the Enter another product key text box, enter the MAK key (twenty-five numbers or characters) without spaces. For more information about how to use a MAK key, see Deploy volume activation of Office 2010.	
Expand the Display level menu to set the behavior of the user interface during installation. In enterprise	

Steps References deployments, we recommend that you set **Display** level to None to ensure that Setup runs silently, to prevent prompting users to enter information, and to prevent the installation from waiting for any user interaction, including when files are being used. Setting Display Level to None assumes that the Suppress modal and Completion notice options are silenced and that the Microsoft Software License Terms is accepted. You can also configure display level options by using the Config.xml file; see Display element (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementDisplay) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx). You can also configure Office security settings if you want to provide an initial default configuration of security settings. For information, see Office security settings (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Office_security_settings) in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). Important: Although you can use the OCT to specify initial default security settings in a Setup customization file (.msp file), users can change the settings after installation. To enforce security settings, you must use Group Policy. For detailed information about how to plan for security settings, see Security overview for Office 2010 (http://technet.microsoft.com/library/6786907 8-71c6-45f5-aab0-0823c83aed54(Office.14).aspx) and Plan security for Office 2010 (http://technet.microsoft.com/library/c38e3e7 5-ce78-450f-96a9-4bf43637c456(Office.14).aspx).

For more detailed information, see <u>Customize Setup</u>

Steps	References
before installing Office 2010.	
 Use the Features section to configure feature installation states. For information, see <u>Configure</u> feature installation states for Office 2010. For each application that you want to add to the 	
installation, set its installation option to Run all from My Computer or Installed on First Use in the right pane. For example, to install Microsoft Outlook 2010, expand Microsoft Office and change the installation	
option for Microsoft Office Outlook to Run all from My Computer.	
For applications that you do not want to install, set the installation option to Not Available in the right pane. The application name is set to bold to show that you have changed its installation option.	
To prevent users from installing this application themselves, select the Hidden and Locked options. The symbols [H] and [L] are added to the application name to indicate that these options are set.	
Important If you set the Hidden option for a specific feature by using the OCT or the Config.xml file during an initial installation of the 2007 Office system, you cannot unhide that feature in the feature tree by using another Config.xml file or applying a second .msp customization file after the initial installation. This means that the feature is not displayed in the feature tree during installation. The feature remains hidden and you cannot reverse this. The feature will not be displayed in Add or Remove Programs (Change or Remove Programs) in Control Panel under the Add or Remove Features option for Microsoft Office 2010 (or under the Programs and Features option in Windows Vista). However, you can unlock the feature to install and run locally later by using an .msp	

If you set the **Locked** option for a feature by using the OCT or the Config.xml during initial installation, that feature can be unlocked and

Step	S	References
	installed locally by using an .msp customization file or a Config.xml file.	
	For example, you can customize the Config.xml file to modify the OptionState element and add the following line to uninstall the feature (Microsoft Access in this case) on the user's computer and set child features of the feature to the specified state:	
	OptionState Id="ACCESSFiles" State="Absent" Children="force" />	
	You can also use the OCT to create an .msp customization file to install the feature later by setting the feature installation state to Run All from My Computer on the Set feature installation states screen.	
	Use the Modify user settings section (under Features) to specify the user settings that you want to apply. For information, see <u>Configure user</u> settings for Office 2010.	
(Use the Modify user settings section to set the default values of Office application settings for users who install Office with this customization file.	
,	To configure an option, expand the tree on the left, and then click the user interface element that you want to configure. The configurable settings associated with that element appear on the right pane. You can specify one of the following options:	
	Not Configured The setting remains as it is.	
,	Enabled The setting is modified according to the selections that you make on the setting's Properties page.	
'	Disabled The setting is disabled. Note that disabling an option may differ from not configuring the option. See the description of the specific option for more information.	
	Note: Using the OCT to configure user settings establishes the initial default values for the settings. Users can modify most of the settings after Office is installed. If you want to enforce user settings, use Group Policy.	

Steps References You can also use Group Policy settings to mandate settings for Outlook. You can manage the following Outlook areas by using Group Policy: Specify the COM add-ins that are trusted. Customize cryptographic options. Configure Outlook Junk E-mail Filter settings. For information, see Configure junk e-mail settings in Outlook 2010. Configure the method that Outlook uses for security settings. Configure attachment settings. Configure programmatic security settings. Customize ActiveX options and custom forms settings. Disable folder home pages. 6. You can use the Additional content section of the OCT to configure the following options: Add files to, or remove files from, users' computers when Office is installed. For information, see Add files (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5.aspx#Add files) and Remove files (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5.aspx#Remove_files) in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). Add, modify, or remove registry entries on users' computers when Office is installed. For information, see Add registry entries (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5.aspx#Add_registry_entries) and Remove registry entries (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5.aspx#Remove_registry_entries) in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

Ste	ps	References
	Add shortcuts to files installed with Office 2010 or files that are already on the user's computer. For information, see Configure shortcuts (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Configure_shortcuts) in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).	
7.	You can use the Outlook section (<u>Outlook</u> (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Outlook) in <u>Office</u> Customization Tool in Office 2010) (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx) of the OCT to configure the following Outlook areas:	
	 Specify settings for Exchange accounts. You can configure users' Microsoft Exchange Server settings in a new or modified Outlook profile. For information, see Exchange settings (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#BKMK_ExchangeSettings) in Office Customization Tool in Office Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). 	
	Outlook Profile settings. You can customize a user's default Outlook profile, which is the set of values in the Windows registry that defines user-specific information. An Outlook profile can contain multiple e-mail accounts. Users can have multiple Outlook profiles, and the Office 2010 OCT provides support for adding multiple Outlook e-mail accounts. For information, see Outlook profile	
	(http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Outlook_profile) and Add Accounts (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#BKMK_AddAccounts) in Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-	

Step	os	References
	a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).	
	Include new Outlook e-mail accounts in the	
	user's profile. If you are adding or modifying an	
	Exchange account, you can configure additional	
	Exchange settings. For example, you can	
	configure Exchange Server offline use options,	
	the Outlook Anywhere feature, and you can	
	specify the Cache Mode option to configure	
	users' Outlook profiles to use a local copy of the	
	Exchange mailbox. For more information, see	
	Add Accounts	
	(http://technet.microsoft.com/library/8faae8a0-	
	a12c-4f7b-839c-	
	24a66a531bb5.aspx#BKMK_AddAccounts) and	
	the "Add Account and Account Settings dialog	
	box," and "Cached Mode" sections in Office	
	Customization Tool in Office 2010	
	(http://technet.microsoft.com/library/8faae8a0-	
	a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).	
	• Export settings to an Outlook profile file (.prf file).	
	For information, see Export Settings	
	(http://technet.microsoft.com/library/8faae8a0-	
	a12c-4f7b-839c-	
	24a66a531bb5.aspx#BKMK_ExportSettings) in Office Customization Tool in Office 2010	
	(http://technet.microsoft.com/library/8faae8a0-	
	a12c-4f7b-839c-24a66a531bb5(Office.14).aspx.	
	` ' '	
	 Define Send/Receive groups for Exchange accounts and folders, and specify the tasks that 	
	are performed on each group during a	
	Send/Receive operation in Outlook. A	
	Send/Receive group contains a collection of	
	Outlook accounts and folders. For information,	
	see Specify send receive groups	
	(http://technet.microsoft.com/library/8faae8a0-	
	a12c-4f7b-839c-	
	24a66a531bb5.aspx#Specify_send_receive_gro	
	ups) in Office Customization Tool in Office 2010	
	(http://technet.microsoft.com/library/8faae8a0-	
	a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).	
8.	When you complete your customizations, click Save	
	As on the File menu, specify a path and file name	
	for the Setup customization file, and then click Save .	

Steps	References
For initial installations, you can save the custom .msp file in the Updates folder on the network installation point. When Setup runs, it searches the Updates folder on the installation point for a customization file specific to the product that is being installed.	
 Note If you plan to deploy multiple Setup customization files (.msp files), you can place only one customization .msp file for each Office 2010 product that you are installing in the Updates folder for an initial installation. You must deploy the rest of the customization .msp files after the Office installation is completed. Only one Setup customization .msp file per product in the Updates folder is supported. The customization .msp files that you place in the Updates folder will be deployed first. Therefore, they must include any Setup customizations that cannot be changed after the installation, for example, the installation location. 	
If you do not put the customization file in the Updates folder, you can use the Setup command-line option /adminfile to specify the fully qualified path of the folder in which you store the custom .msp file. For example, setup.exe /adminfile \\server\share\myNewUpdatesFolder.	
You can also specify the location of the folder that contains your .msp files in the Config.xml file by using the SUpdateLocation attribute of the SetupUpdates element. For more information about SetupUpdates, see SetupUpdates (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementSetupUpdates) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-	
fed4-40da-a886- 95e596c3999e(Office.14).aspx).	
To specify installation options, such as the path of the network installation point, the product to install, and	Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71

Steps

custom setup options, and to specify the languages to install, use the Config.xml file that is located in the root of the product folder for the product that you are installing.

To edit the Config.xml file, use a text editor, such as Notepad.

 To modify the display options that users see during installation, locate the line in the Config.xml file that contains the **Display** element:

<!-- <Display Level="full"

CompletionNotice="yes" SuppressModal="no"

AcceptEula="no" /> -->

To prevent user intervention during the installation and to specify display options, you can modify the **Display** element information as shown in the following example:

<Display Level="none" CompletionNotice="no"
SuppressModal="yes" AcceptEula="yes" />

For information, see **Display**

(http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementDisplay) in Config.xml file in Office 2010

(http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

 To specify additional languages to install, use the AddLanguage elements and attributes in the Config.xml file.



- If you are adding more than one AddLanguage element, you must add the ShellTransform attribute of the AddLanguage element. This attribute specifies the language that Setup uses for the shell user interface.
- For example, to specify that Setup install full English, French, German, and Spanish language support with the user's default regional options language as the default installation language, you add the following AddLanguage elements and attributes in the Config.xml file:
- <AddLanguage Id="match"
 ShellTransform="yes"/> <AddLanguage
 Id="en-us" /> <AddLanguage Id="fr-fr" /> <AddLanguage Id="de-de" /> <AddLanguage

References

c-fed4-40da-a886-

95e596c3999e(Office.14).aspx)

Customize language setup and settings for Office 2010

Configure a silent installation of Office 2010 by using Config.xml

Steps		References
	For more information, see <u>Licensing and user interface</u> (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Licensing_and_user_interface) in <u>Office Customization Tool in Office 2010</u> (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). For information about volume activation, see	
	Volume activation overview for Office 2010 (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx) and Deploy volume activation of Office 2010.	
	A Multiple Activation Key (MAK) key is another method that Office Activation Technologies provide for activating products licensed under Microsoft Volume Licensing programs. By using a MAK, clients activate Office 2010 online by using Microsoft-hosted activation servers or by telephone. Administrators can use the Config.xml file or the OCT to enter a MAK key.	
	To enter a MAK key in the Config.xml file, you add the 25-character product key as shown in the following example, where AAAAABBBBCCCCCDDDDDEEEEE represents the product key:	
	<pidkey value="AAAAABBBBBCCCCCDDDDDEEEEE"></pidkey>	
	For more information, see PIDKEY (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementPIDKEY) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).	
•	Specify the fully qualified path of the folder on users' computers in which the product is installed. For information, see INSTALLLOCATION (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-	

Steps	References
95e596c3999e.aspx#ElementInstallLocation) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).	
 Specify logging options for Setup. For information, see <u>Logging</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886- 95e596c3999e.aspx#ElementLogging) in <u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx). 	
 Specify how the local installation source (LIS) is cached on the user's computer. For more information, see <u>LIS</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementLIS) in <u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx). 	
Set the user or company name for the user on whose computer the product is being installed. For information, see USERNAME (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementUSERNAME) and COMPANYNAME (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementCOMPANYNAME) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).	
You can use the Config.xml file to customize many of the same options that you can configure by using the Office Customization Tool, including some additional options that are not available in the OCT. For a complete description of the areas that you can	

Steps References configure in Config.xml, see Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71cfed4-40da-a886-95e596c3999e(Office.14).aspx). 3. When you complete the Config.xml customizations, save the Config.xml file. You can use the /config Setup command-line option to specify the location of the Config.xml file, as shown in the following example: \\server\share\setup.exe /config \\server\share\ProPlus.WW\config.xml For information about the /config Setup commandline option, see /config [path] (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731.aspx#BKMK config) in Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx). To see an example of a custom Config.xml file, see Config.xml example. To install Office 2010 on users' computers, you can use Precache the local installation source for one of the following approaches, depending on your Office 2010 particular environment and requirements: Run Setup from the local installation source Use the precached local installation source to install to install Office 2010 Office on users' computers. When you deploy Office Run Setup from a network installation point 2010, Setup creates a local installation source on Deploy Office 2010 to users who are not the user's computer — a copy of the compressed administrators source files for the Office product that you are Deploy Office 2010 by using System Center installing. After the files are copied to the user's Configuration Manager 2007 computer, Setup completes the installation from the Deploy Office 2010 by using System Center local installation source. To minimize the load on the Essentials 2010 network, you can deploy the local installation source to users' computers separately, before you deploy Deploy Office 2010 by using Group Policy Office. computer startup scripts To use this approach, perform the followings tasks: Distribute the local installation source to users. For information, see Precache the local installation source for Office 2010. Run Setup directly from the local installation source. For information, see Run Setup from the local installation source to install Office 2010. On the user's computer, run Setup.exe from the root

of the network installation point. For information, see

Steps		References
	Run Setup from a network installation point.	
•	To deploy Office to users who are not administrators of their computers, you can use one of the following methods.	
	Log on to the computer as an administrator and install Office 2010. For information, see <u>Logging on</u> as an administrator in <u>Deploy Office 2010 to users</u> who are not administrators.	
	-or-	
	Use an enterprise deployment method such as the following:	
	 Use Microsoft System Center Configuration Manager 2010. If you manage large numbers of clients in a complex or rapidly changing environment, System Center Configuration Manager 2010 is the recommended method for installing and maintaining Office 2010 in medium- and large-sized organizations. Configuration Manager 2010 offers sophisticated functionality, including inventory, scheduling, and reporting features. For information about deployment with System Center Configuration Manager 2010, see Deploy Office 2010 by using System Center Configuration Manager 2007. Use Microsoft System Center Essentials 2010 (Beta) to deploy Office 2010. System Center Essentials 2010 is a management solution that is designed for IT system administrators in medium-sized organizations that include up to 30 servers and 500 client computers. For information about deployment with System Center Essentials 2010, see Deploy Office 2010 by using System Center Essentials 2010. If you have deployed Active Directory and Group Policy in your organization, you can use Group Policy to assign computer startup scripts to deploy Office 2010. For information about deployment with Group Policy computer startup 	
	scripts, see <u>Deploy Office 2010 by using Group</u> <u>Policy computer startup scripts</u> .	

Config.xml example

The following example shows a Config.xml file for an installation of Microsoft Office Professional Plus 2010. The following options are used in this example:

- Display Level is set to turn off the Setup user interface, hide error messages and other dialog boxes, and accept the End-User License Agreement.
- Verbose logging is turned on (Logging Type value is set to verbose), and log files are stored in the Applnst folder.
- **INSTALLLOCATION** specifies the fully qualified path of the folder on the user's computer in which the product is installed.
- LIS SOURCELIST provides a list, separated by semicolons, of the network installation points that contain the installation files for the product. The equivalent option in the OCT is Additional network sources (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5.aspx#Additional_network_sources).
- Setting Id specifies the suppress reboot option (SETUP_REBOOT value is set to NEVER).
- **OptionState** element specifies to uninstall the feature (Access in this case) on the user's computer and sets child features of the feature to the same specified state.

See Also

<u>Setup architecture overview for Office 2010</u> (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

<u>Change users' configurations after installing Office 2010</u> (http://technet.microsoft.com/library/a99b682c-b3b7-448e-8280-0ce2e9a94229(Office.14).aspx)

Import an Office 2010 Setup customization file

View XML content from Office Customization Tool customization files

Administrators use the Office Customization Tool (OCT) to customize an installation of Microsoft Office 2010. The customizations are saved in a Setup customization file (.msp file) that uses Extensible Markup Language (XML) format. This article contains a sample Microsoft Visual Basic script that administrators can use to view the settings that are stored in Setup customization .msp files.

In this article:

- Windows Script Host overview
- ExtractOctXml.vbs script sample
- Running the script
- Viewing the XML contents from an .msp customization file

Windows Script Host overview

To run the script, use Windows Script Host (WSH), a language-independent scripting host for Windows Script-compatible scripting engines. WSH lets you run scripts from both the Windows desktop and the command prompt.

To run scripts from Windows, WScript.exe provides a Windows-based dialog box for setting script properties. To run scripts from the command prompt, CScript.exe provides command-line switches for setting script properties.

WSH provides drag-and-drop support for scripts. This means that you can drag files onto a WSH script. The file names are translated into arguments on the command line.

For more information about WSH, see the following resources on MSDN Web site:

- Windows Script Host Basics (http://go.microsoft.com/fwlink/?LinkId=100317)
- Running Your Scripts (http://go.microsoft.com/fwlink/?LinkId=100319)

ExtractOctXml.vbs script sample

The following sections provide a sample Visual Basic script, ExtractOctXml.vbs, and instructions for using the script to extract XML metadata from OCT .msp customization files.

To save the script sample, open a text editor, such as Notepad, and copy and paste the script code in this section to a file. Save the script file as ExtractOctXml.vbs.

- ' Utility to extract the metadata from an Office 2010 customization patch
- ' For use with Windows Scripting Host, CScript.exe or WScript.exe
- ' Copyright (c) Microsoft Corporation. All rights reserved.

Option Explicit

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```
Const msiOpenDatabaseModePatchFile = 32
Const msiOpenDatabaseModeReadOnly = 0
Const msiReadStreamBytes = 1
Const ForWriting = 2
Const TristateTrue = -1
Dim pathOCT Patch 'As String
Dim pathMetadataXml 'As String
Dim sMetadata 'As String
Dim wshShell 'As Wscript.Shell
Dim fso 'As FileSystemObject
Dim fileOutput 'As File
Dim sErrSection ' As String
sErrSection = "ArgCheck"
' Check arg count, and display help if argument not present or contains ?
Dim argCount:argCount = Wscript.Arguments.Count
 \texttt{If argCount} \, > \, 0 \, \, \texttt{Then If InStr(1, Wscript.Arguments(0), "?", vbTextCompare)} \, > \, 0 \, \, \texttt{Then argCount} \, = \, 0 \, \,
If (argCount = 0) Then
             Wscript.Echo "Office 2010 OCT Metadata Extract utility" &
                          vbNewLine & " You must supply the location of the Office 2010 customization patch " &
                          vbNewLine &
                          vbNewLine & "Copyright (C) Microsoft Corporation. All rights reserved."
             Wscript.Quit 1
Else
             pathOCT_Patch = Trim(Wscript.Arguments(0))
End If
sErrSection = "FSO"
 ' Create FileSystemObject and verify file exists
Set fso = CreateObject("Scripting.FileSystemObject") : CheckError
If Not fso.FileExists(pathOCT_Patch) Then Err = 2: CheckError
```

```
sErrSection = "WI"
' Connect to Windows Installer object
On Error Resume Next
Dim wi : Set wi = Nothing
Set wi = Wscript.CreateObject("WindowsInstaller.Installer") : CheckError
sErrSection = "Read Metadata"
' Open OCT patch and read the metadata stream
Dim wiStorage, vw, rec
Set wiStorage = wi.OpenDatabase(pathOCT Patch, msiOpenDatabaseModePatchFile) : CheckError
Set vw = wiStorage.OpenView("SELECT * FROM Streams WHERE `Name`='metadata' ") : CheckError
vw.Execute
Set rec = vw.Fetch
If Not rec Is Nothing Then
    sMetadata = rec.ReadStream(2, rec.DataSize(2), msiReadStreamBytes)
Else
   Wscript.Echo "No Metadata stream was found in this file: " & pathOCT_Patch
    Wscript.Quit 2
End If
Set wiStorage = Nothing
Set rec = Nothing: Set vw = Nothing
Set wi = Nothing
sErrSection = "Write Metadata"
^{\mbox{\tiny I}} Write the metadata stream to a temp file
Set wshShell = CreateObject("WScript.Shell") : CheckError
pathMetadataXml = wshShell.ExpandEnvironmentStrings("%temp%") & "\" &
fso.GetFileName(pathOCT_Patch) & ".xml"
Set fileOutput = fso.OpenTextFile(pathMetadataXml, ForWriting, True, -1) : CheckError
fileOutput.WriteLine sMetadata
fileOutput.Close
```

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```
Set fileOutput = Nothing: Set fso = Nothing
sErrSection = "Show Metadata"
' Launch Metadata in IE
wshShell.Run "iexplore.exe " & pathMetadataXml
Sub CheckError
Dim sMsg, errRec
   If Err = 0 Then Exit Sub
    sMsg = sErrSection & vbNewLine & Err.Source & " " & Hex(Err) & ": " & Err.Description
   If Not wi Is Nothing Then
    Set errRec = wi.LastErrorRecord
        If Not errRec Is Nothing Then sMsg = sMsg & vbNewLine & errRec.FormatText
   End If
   Wscript.Echo sMsg
   Wscript.Quit 2
End Sub
Sub NoMetadata
End Sub
```

Running the script

The ExtractOctXml.vbs file can be stored anywhere on your computer. To use the ExtractOctXml.vbs script, you can drag the OCT .msp customization file for which you want to see the configured settings and drop it on the script. The script extracts the metadata XML into the user's Temp folder as <name of the OCT update>.xml (for example, Access.MSP.xml). The XML file is then passed to Internet Explorer for viewing.

To run the script

- Use Windows Explorer to open the folder that contains the ExtractOctXml.vbs file.
- 2. Drag and drop a copy of the Setup customization .msp file that you want to view onto the ExtractOctXml.vbs that is displayed in the Windows Explorer window.
- 3. After the XML file opens, you can expand and collapse the various sections to view the settings contained in the .msp customization file.

The **<UserSettings>** element of the Access.MSP.xml metadata.xml file contains the user settings configured in the .msp customization file, and the **<Options>** element of the Access.MSP.xml metadata.xml file contains settings related to feature states.

To run the script by using the command line

- Click Start, click Run, and then type cmd.
- In the Command Prompt window, type:
 cscript <script path>\ExtractOCTXml.vbs <OCT MSP path and file name>
 -or-

wscript <script path>\ExtractOCTXml.vbs <OCT MSP path and file name>
The XML file is loaded in Internet Explorer for viewing.

Viewing the XML contents from an .msp customization file

The OCT uses settings (.opax) files to populate the **Modify user settings** user interface in the OCT and add the appropriate registry keys and values during the installation. Office 2010 settings .opax files are stored in the Admin folder that is located at the root of your Office 2010 source file location or CD.

The following table describes the top-level sections included in the .msp metadata.xml file.

Section	Description
<customization -="" basefolder="" platform=""></customization>	Provides the .msp customization file name and path information. These elements are used internally by the code. They do not represent the actual customizations.
<product id=""></product>	Provides information about the local installation source packages, installation state (such as Always installed), language MUI packages, product IDs, features and IDs, shortcuts, and upgradeable applications. These elements are used internally by the code. They do not represent the actual customizations.
<securityapps></securityapps>	Lists the applications that can have specific security locations as indicated in the drop-down list found in the Setup\Office Security settingsAdd the following paths to theTrusted Locations list area in the OCT. These elements are used internally by the code. They do not represent the actual customizations.
<securityappsettings></securityappsettings>	Lists the security settings that appear in the Setup\Office Security settings area in the OCT.

Section	Description
	Customizations to this list appear in the later < SecuritySettings > element.
	These elements are used internally by the code. They do not represent the actual customizations.
<securitypossiblesettingvalues></securitypossiblesettingvalues>	Lists the security options that are available for <securityappsettings>.</securityappsettings>
	These elements are used internally by the code. They do not represent the actual customizations.
<globalsettings></globalsettings>	Provides information about setup properties found in the Setup\Modify Setup properties section of the OCT.
<usersettings></usersettings>	Provides information and registry key data about any settings configured in the Features\Modify user settings section of the OCT.
<file></file>	Provides information about any files are added or removed by using the Additional content\Add files or Remove files options in the OCT.
<registry></registry>	Provides information about any registry keys added or removed by using the Additional content\Add registry entries or Remove registry entries options in the OCT.
<shortcuts></shortcuts>	Provides information about shortcuts added by using the Additional content\Configure shortcuts options in the OCT.
< nstall>	Provides information about the installation settings found in the Setup\Install location and organization name, Setup\Additional network sources, and Setup\Licensing and user interface options in the OCT.
<childinstalls></childinstalls>	Provides information about additional post- installation actions found in the Setup/Add installations and run programs options in the OCT.
<options></options>	Contains settings related to application feature states.
<securitysettings></securitysettings>	Provides information about changes that were made to the default security settings by using the Setup\Office security sections\Default security settings section of the OCT.

Section	Description
<securitytrustedlocations></securitytrustedlocations>	Provides information about Trusted locations added in the Setup\Office security settings options in the OCT (in the Add the following paths to the Trusted Locations list).
<securitycertificates></securitycertificates>	Provides information about certificates added in the Setup\Office security settings options in the OCT (in the Add the following digital certificates to the Trusted Publishers list).
<outlook></outlook>	Provides information about Outlook profile customization made in the Outlook options of the OCT.

The following example shows how to locate settings in the resulting XML file (Access.MSP.xml in this example) that opens in Internet Explorer when you run the ExtractOctXml.vbs script with an OCT .msp customization file.

Example

This example uses an Office 2010 .msp customization file. Only Microsoft Access 2010 is installed and the Microsoft Office Access 2007 file format is enabled. The **Default file format** user setting for Access is located in the **Microsoft Office Access 2010\Miscellaneous** node of the **Modify user settings** section of the OCT.

You can search the customization metadata.xml file, Access.MSP.xml, for the registry key or value, such as **Default file format**. Searching for "default file format" in this example would bring you to the following section of the Access.MSP.xml metadata.xml file:

```
<AddRegistries>
<AddRegistry root="HKCU" key="software\microsoft\office\14.0\access\settings" name="default
file format" emptykey="false" flags="0" type="2" value="12" guid="{39478C45-8DBA-403C-B4BB-
1F1D07CE85D7}" />
```

Use a text editor, such as Notepad, to open the Access 2010 .opax settings file, access14.opax (located at the root of your Office 2010 source file location, in the Admin folder). Search for the **DefaultFileFormat** string (which corresponds to the **Default file format** user setting). Doing so will show the following section of the access14.opax file:

```
<enum id="L empty87" valueName="Default File Format">
      <item displayName="$(string.L Access2007)">
        <value>
          <decimal value="12" />
        </value>
      </item>
      <item displayName="$(string.L_Access20022003)">
          <decimal value="10" />
        </value>
      <item displayName="$(string.L Access2000)">
        <value>
          <decimal value="9" />
        </value>
      </item>
    </enum>
  </elements>
</policy>
```

From this user setting information, you can determine the registry key for the setting (software\policies\microsoft\office\14.0\access\settings in this case) and the possible registry values. A **Default File Format** value of 12 sets the default file format to Access 2007, while a **Default File Format** of 10 sets the default file format to Access 2002-2003.

Using the information from the .opax file, you can see that the **Default File Format** key has a value of 12, which sets the default file format to Access 2007.

The following excerpts show some of the Access **Option id** values that are listed in the **<Options>** section of the Access.MSP.xml file in this example:

```
<Option id="ACCESSFiles" installState="3" />
<Option id="Access_PIA" installState="3" />
<Option id="AccessWizards" installState="3" />
<Option id="DeveloperWizards" installState="3" />
<Option id="AccessHelpFiles" installState="3" />
<Option id="AccessTemplatesIntl" installState="3" />
```

For more information about OptionState IDs, see OptionState Element (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementOptionState) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

See Also

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Customize specific features in Office 2010

This section provides how-to information for specific customization tasks, such as customizing language setup and settings, enforcing settings by using Group Policy, disabling user interface items and shortcut keys, and enabling the Microsoft SharePoint Server 2010 Colleague add-in for Microsoft Outlook 2010.

In this section:

Article	Description
Customize language setup and settings for Office 2010	Describes how to manage the distribution of multiple language versions when you deploy Microsoft Office 2010.
Customize the Office user interface in Office 2010	Provides resources to help you customize the Microsoft Office Fluent user interface (UI) in Office 2010.
Enforce settings by using Group Policy in Office 2010	Provides procedural information for using the Group Policy Management Console and the Group Policy Object Editor together with the Office 2010 Administrative Templates.
Disable user interface items and shortcut keys in Office 2010	Provides background and procedural information to disable user interface (UI) items and keyboard shortcuts in Office 2010 by using Group Policy.
Enable SharePoint Server 2010 Colleague in Outlook 2010	Describes how to configure Office 2010 client computers to enable the Microsoft SharePoint Server 2010 Colleague add-in for Microsoft Outlook 2010.

Customize language setup and settings for Office 2010

This article describes how to manage the distribution of multiple language versions when you deploy Microsoft Office 2010.

In this article:

- Overview
- Before you begin
- Deploy a default language version of Office
- Specify which languages to install
- Deploy different languages to different groups of users
- Identify installed languages
- Customize language settings
- Customize and install the Office 2010 Proofing Tools Kit

Overview

By default, Setup automatically installs the language version that matches the Windows user locale that is set on each user's computer. Or, you can override this default behavior and manage the distribution of multiple language versions more precisely. For example, you can:

- Install more than one language on a single computer.
- Specify which languages to install on users' computers, regardless of the language of the operating system, which is specified by user locale.
- Specify custom settings once and then apply them to all language versions that you deploy in your organization.
- Deploy different languages to different groups of users.
- Deploy the Microsoft Office 2010 Proofing Tools Kit for additional languages.

For more information, see Plan Setup (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a.aspx#BKMK_PlanSetup) in Plan for multilanguage deployment of Office 2010 (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a(Office.14).aspx).

When a user starts an Office 2010 application for the first time, Setup applies default settings that match the language installed on the computer and the language specified by the Windows user locale setting. However, you configure language settings by using Group Policy, the Office Customization Tool (OCT), or the Language Settings tool. For more information, see Plan customizations (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-

a4a81a17ee3a.aspx#BKMK_PlanCustomizations) in Plan for multilanguage deployment of Office 2010 (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a(Office.14).aspx).

If users will have to edit in a language or a companion proofing language that will not be installed, you can customize and install the Office 2010 Proofing Tools Kit. For more information, see Plan for proofing tools (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-

a4a81a17ee3a.aspx#BKMK_PlanProofingTools) in Plan for multilanguage deployment of Office 2010 (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a(Office.14).aspx).

Before you begin

To determine which of the following procedures to use for your deployment and which customizations that you might have to make, see Plan for multilanguage deployment of Office 2010 (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a(Office.14).aspx).

Deploy a default language version of Office

If users in your organization work with Office files that are in the same language, or in a language that matches the language of their operating system, you can deploy a default language version of Office.

The following steps are the same as the standard steps for deploying Office 2010 and included for testing. The only difference in the steps is that you must copy the language packs to the same network location as the installation files.

To deploy a default language version of Office to every client computer

- 1. Create a network installation point for the primary Office 2010 product by copying all the files and folders from the source media to a shared network location.
- 2. Copy all the files and folders from the source media for each language pack to the same network location, and when you are prompted to overwrite duplicate files, click **No**.
- 3. Use the Office Customization Tool (OCT) to configure the installation to match your organization's requirements.
 - Because most of the customizations apply to the core product, you do not typically have to customize each language separately. Setup applies your customizations during the installation regardless of the language being installed. For information about how to customize language settings, see Customize language settings.
 - Language packs that are obtained through a volume license agreement do not require a unique product key; only one volume license key is required for the installation.
- 4. On the Setup command line, specify the Config.xml file for the primary Office product that you are deploying.

For example, the following command line installs Microsoft Office Standard 2010 in any language:

\\server\share\Office14\Setup.exe /config \\server\share\Office14\Standard.WW\Config.xml

where **Office14** is the root of the network installation point.

5. Run Setup from the root of the network installation point.

Setup installs only the language-specific elements that are needed for the Office product that you are installing. Setup does not install the complete language pack unless you deploy the language pack as a separate product.

Specify which languages to install

If users in your organization work with Office files in more than one language, or if they need an Office language that does not match the language of their operating system, you can install all the languages they need at the same time.

The following steps are the same as the standard steps for deploying Office 2010 and included for testing. The only difference in the steps is that you must copy the language packs to the same network location as your installation files and edit the Config.xml file to specify which languages to install.

To specify one or more languages to install on a client computer

- 1. Create a network installation point for your primary Office 2010 product by copying all the files and folders from source media to a shared network location.
- 2. Copy all the files and folders from the source media for each language pack to the same network location, and when you are prompted to overwrite duplicate files, click **No**.
- In the core product folder for the product that you are installing, locate the Config.xml file.
 For example, if you are installing Office Standard 2010, find the Config.xml file in the Standard.WW folder.
- 4. Open the Config.xml file by using a text editor, such as Notepad.
- 5. Add the **<AddLanguage>** element.
- Set the value of the **Id** attribute to the language tag that corresponds to the language that you
 want to install. You can specify more than one language by including additional
 </dd>

 <AddLanguage> elements and attributes.
- 7. Specify which language to use for the Shell user interface (Shell UI) by setting the <ShellTransform> attribute of the <AddLanguage> element.

For example, to specify that Setup install both English and French, with English as the default installation language, add the following elements:

```
<AddLanguage Id="en-us" ShellTransform="yes"/> <AddLanguage Id="fr-fr" />
```

If you want the default installation language and the Shell UI to match the operating system language, and you also want every user to have Office in both English and French, the code in the Config.xml file looks as follows:

```
<AddLanguage Id="match" ShellTransform="yes"/>
<AddLanguage Id="en-us" />
<AddLanguage Id="fr-fr" />
```

You are required to specify a value for the **ShellTransform** attribute when you add more than one **<AddLanguage>** element. Skipping this step causes the installation to fail.

8. To specify that Setup also match the language of the user's Windows user locale, add another line in the Config.xml file:

```
<AddLanguage Id="match" />
```

In this case, Setup installs all specified languages plus the language that matches the user locale, if that language is different.

9. Save the Config.xml file.

- 10. Use the Office Customization Tool (OCT) to configure the installation to match your organization's requirements.
 - For information about how to customize language settings, see Customize language settings.
- 11. Run Setup.exe and specify the path of your modified Config.xml file.

Note that you must use a fully qualified path; for example: \\server\share\Office14\setup.exe /config\\server\\share\Office14\Standard.WW\Config.xml

where Office14 is the root of the network installation point.

Deploy different languages to different groups of users

You can give different groups of users different sets of Office languages. For example, a subsidiary based in Tokyo might have to work with Office Standard 2010 documents in English and Japanese, whereas users in the European subsidiary need English, French, and German. In this scenario, you create a unique Config.xml file for each group of users.

The following steps are the same as the standard steps for deploying the Office 2010 and included for testing. The only differences in the steps is that you must copy the language packs to the same network location as the installation files, create and edit the Config.xml file for each group to specify which languages to install, and then deploy the appropriate Config.xml file to the different groups.

To deploy different languages to different groups of users

- 1. In the core product folder for the product that you are installing, locate the Config.xml file. For example, if you are installing Office Standard 2010, find the Config.xml file in the Standard.WW folder.
- 2. Open the Config.xml file by using a text editor, such as Notepad.
- 3. Locate the <AddLanguage> element and specify the set of languages that you want to install for this user group, as described previously.



Note:

You must also set the **<Shell UI>** attribute of the **<AddLanguage>** element, as described previously.

- 4. Save the Config.xml file by using a unique file name.
- 5. Repeat these steps for the next user group.
- 6. Use the OCT to configure the installation to match your organization's requirements. For information about how to customize language settings, see Customize language settings.
- 7. Deploy Office to each group of users separately, and in each case specify the correct Config.xml file on the Setup command line. For example:

\\server\share\Office14\setup.exe /config\\server\share\Office14\Standard.WW\SubAConfig.xml, or \\server\share\Office14\setup.exe /config\\server\share\Office14\Standard.WW\SubBConfig.xml where **Office14** is the root of the network installation point.

Identify installed languages

You can view a list of languages installed for Office 2010 either during the initial installation or during a separate installation of a language pack at the following registry key, which displays the LCID for each enabled language:

HKCU\Software\Microsoft\Office\14.0\Common\LanguageResources\EnabledLanguages

You can view the user interface (UI) language and fallback languages at the following registry key:

HKCU\Software\Microsoft\Office\14.0\Common\LanguageResources

Although all applications in the Office 2010 use a shared set of registry data to determine their UI language, they do not necessarily all appear in the same UI language. Applications in the Office 2010 usually appear with the UI language indicated in the **UILanguage** entry of this registry key. But there are circumstances where this might not be the case. For example, some deployments might have Microsoft Word 2010 and Microsoft Excel 2010 installed in French, but another Office application installed in a different language. In this case, the other application will look at the **UIFallback** list in this registry key, and use the first language that works with its installed configuration.

Customize language settings

Use Group Policy to enforce language settings

Policies enforce default language settings. Users in your organization cannot permanently modify settings managed by policy. The settings are reapplied every time that the user logs on.

To use Group Policy to manage language settings

- 1. Copy the Office 2010 policy template files to your computer.
- 2. Under Computer Configuration or User Configuration in the console tree, right-click Administrative Templates.
- 3. Click Add/Remove Templates, and then click Add.
- 4. In the **Policy Templates** dialog box, click the template that you want to add, and then click **Open**.
- 5. After you add the templates that you want, click Close.
- 6. Open the Group Policy object (GPO) for which you want to set policy.
- Double-click Computer Configuration or User Configuration and expand the tree under Administrative Templates.
- Locate language-related policies in the Microsoft Office 2010 system\Language Settings node.
- 9. Select the languages that you want to use for each setting.
- 10. Save the GPO.

Use a Setup customization file to specify default language settings

You use the OCT to create a Setup customization file (.msp file) that Setup applies during the installation. Settings specified in the OCT are the default settings. Users can modify the settings after the installation.

To use the OCT to customize language settings

- 1. Start the OCT by running Setup with the /admin command-line option.
- On the Modify User Settings page, expand the tree to Microsoft Office 2010 system\Language Settings.
- 3. Open the folder that you want in the navigation pane. Double-click the setting in the right pane, select **Enable**, and then specify a value.
- 4. Save the Setup customization file in the Updates folder at the root of the network installation point.

Setup applies the file automatically when you install Office on users' computers.

For more information about how to use the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

Use the Language Preferences tool to modify language settings

If you are not enforcing language settings by policy, users who work in Office applications can use the Language Preferences tool to change their language preferences.

To change language preferences by using the Language Preferences tool

- On the Start menu, point to Programs, point to Microsoft Office, and then point to Microsoft Office 2010 Tools.
- 2. Click Microsoft Office 2010 Language Preferences.
- At the bottom of the Choose Editing Languages section, in the language list box, select the language that you want to be available for editing, and then click the Add button. Repeat this step for each editing language that you want to add.
- 4. In the **Choose Editing Languages** section, select the language that you most often use for Office applications and documents, and then click **Set as Default**.
- 5. In the **Choose Display and Help Languages** section, under **Display Language**, select the language that you want to use to view Office application buttons and tabs, and then click **Set as Default**.
- 6. Under **Help Language**, select the language that you want to use to view Office application Help, and then click **Set as Default**.
 - If you do not specify a language for Help, the online Help language uses the display language.

Note:

Users can enable functionality for working in languages that are not installed on the computer. For example, if you select Korean as an editing language, you enable Asian and Korean features in Word even if Korean proofing tools are not installed. You must enable support for that language in the operating system.

Customize and install the Office 2010 Proofing Tools Kit

This section covers how to customize and install Office 2010 Proofing Tools Kit.



Mote:

If you only need a few proofing languages, the installation of one or two language packs might provide all the proofing tool languages that you need. Each language version of Office 2010 includes proofing tools for a set of companion languages. For more information, see Plan for proofing tools (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98a4a81a17ee3a.aspx#BKMK PlanProofingTools) in Plan for multilanguage deployment of Office 2010 (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98a4a81a17ee3a(Office.14).aspx).

Customize the Office 2010 Proofing Tools Kit

You can specify which proofing tool languages to install by using the Proof.WW Setup file config.xml. For a list of the OptionState attributes and IDs to use, see Plan for proofing tools (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98a4a81a17ee3a.aspx#BKMK_PlanProofingTools) in Plan for multilanguage deployment of Office 2010 (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a(Office.14).aspx).

To customize Setup for proofing tools

- 1. In the ProofKit.WW folder, locate the Config.xml file.
- 2. Open the Config.xml file by using a text editor, such as Notepad.
- 3. For each set of proofing tools that you do not want to install, in the OptionState element, set the State attribute to Absent. For example, if you do not want Catalan proofing tools installed, use this syntax:

```
<OptionState Id="ProofingTools 1027" State="Absent" Children="force"/>
```

4. Set the State attribute for each set of proofing tools you want to deploy to Local (or Default or Advertise, if preferred). For example, to deploy Basque proofing tools, you can use this syntax:

```
<OptionState Id="ProofingTools 1069" State="Local" Children="force"/>
```

- 5. Save the Config.xml file.
- 6. Run Setup.exe, and then specify the path of your modified Config.xml file.

Note that you must use a fully qualified path; for example:

\\server\share\Office14\Proof.WW\setup.exe /config\\server\\share\Office14\Proof.WW\Config.xml

where **Office14** is the root of the network installation point.

Installing the Office Proofing Tools Kit 2010 on a single computer

If you have one or two users who need proofing tools, you can install proofing tools from the Office 2010 Proofing Tools Kit to individual computers.

To install the Office Proofing Tools Kit 2010 on a single computer

- 1. On the Office 2010 Proofing Tools Kit CD, run Setup.exe.
- 2. Read and accept the Microsoft Software License Terms, and then click **Continue**.
- 3. To install the proofing tools for all available languages, click **Install Now**. The installation will begin. Otherwise, to install individual languages, click **Customize**.
- 4. If you selected **Customize**, click the **File Location** and **User Information** tabs to change the information as needed. On the **Installation Options** tab, click the node (plus (+) sign) for the languages that you want to install, and then use the drop-down arrows to set the appropriate installation states.
- 5. Click Install.

See Also

<u>Plan for multilanguage deployment of Office 2010</u> (http://technet.microsoft.com/library/f458a0cb-a3a5-4d4a-9f98-a4a81a17ee3a(Office.14).aspx)

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Customize the Office user interface in Office 2010

This article provides resources to help you customize the Microsoft Office Fluent user interface (UI) in Microsoft Office 2010.

In the 2007 Office system, the Ribbon extensibility model was introduced. This was a new way to customize the Office Fluent UI and create custom tabs and groups that were specific to the users' needs. Office 2010 extends the span of the UI extensibility platform by providing support for customization of the new Microsoft Office Backstage view.

In this article:

- Customize the Backstage view
- Customize the ribbon, Quick Access Toolbar, and context menus

Customize the Backstage view

In Office 2010, the Office button is replaced by the **File** tab. The **File** tab brings you to the Backstage view. The Backstage view is customizable and lets organizations personalize the UI depending on their needs.

For information about how to use and customize the Backstage view, see the following resources:

Introduction to the Office 2010 Backstage View for Developers

(http://go.microsoft.com/fwlink/?LinkId=182189)

Customizing the Office 2010 Backstage View for Developers

(http://go.microsoft.com/fwlink/?LinkId=184245)

Customize the ribbon, Quick Access Toolbar, and context menus

In Office 2010, the Office Fluent UI is fully customizable. This includes the ribbon, the Quick Access Toolbar, and the built-in context menus. By using the same XML-based markup and callbacks, you can create context menus by updating Open XML Format files or by using add-ins that are created in Microsoft Visual Studio.

For information about how to use and customize the ribbon, the Quick Access Toolbar, or context menus, see the following resources:

Ribbon Extensibility in Office 2010: Tab Activation and Auto-Scaling

(http://go.microsoft.com/fwlink/?LinkID=184248&clcid=0x409)

Customizing Context Menus in Office 2010 (http://go.microsoft.com/fwlink/?LinkId=182186)

Targeting User Interface Solutions to the 2007 and 2010 Releases of Microsoft Office

(http://go.microsoft.com/fwlink/?LinkId=184298)

Deploying a Customized Ribbon and Quick Access Toolbar in Office 2010

(http://go.microsoft.com/fwlink/?LinkID=184247&clcid=0x409)

Enforce settings by using Group Policy in Office 2010

This article provides procedural information for using the Group Policy Management Console (GPMC) and the Group Policy Object Editor together with the Microsoft Office 2010 Administrative Templates to configure Office 2010.

In this article:

- Start GPMC
- Create a GPO
- Load Office 2010 Administrative Templates to a GPO
- Edit a GPO
- Link a GPO

The Group Policy Management Console and the Group Policy object editor are tools that you use to manage Group Policy. The Group Policy Management Console (GPMC) consists of a Microsoft Management Console (MMC) snap-in and a set of scriptable interfaces for managing Group Policy objects (but not Group Policy settings). Group Policy Object Editor, also a Microsoft Management Console, is used to edit the individual settings contained within each Group Policy object (GPO).

Before you can perform the procedures in this article, you must have already done the following:

- 1. Set up an Active Directory directory service and Group Policy infrastructure in your organization.
- 2. Installed GPMC.
- 3. Downloaded the Office 2010 Administrative Templates.

For more information, see <u>Group Policy overview for Office 2010</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx).

Start GPMC

Depending on the version of Windows that you are running, you will have GPMC on your computer, or you will have to download and install it. For more information, see <u>Group Policy overview for Office</u> <u>2010</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx).

To start GPMC

 Click Start, click Control Panel, click Administrative Tools, and then click Group Policy Management.

For more information about how to set Group Policy, see <u>Step-by-Step Guide to Understanding the Group Policy Feature Set</u> (http://go.microsoft.com/fwlink/?LinkId=78160).

Create a GPO

Group Policy settings are contained in GPOs, which are linked to selected Active Directory containers such as sites, domains, or organizational units (OUs) to enforce specific configurations. You can create

several GPOs, each with a specific set of configurations. For example, you might want to create a GPO named "Office 2010" that contains only settings for Office 2010 applications, or one named "Outlook 2010" for only Microsoft Outlook 2010 configurations.

To create a GPO

- Verify that you have the necessary permissions for the GPO:
 By default, only members of the Domain Admins, Enterprise Admins, Group Policy Creator Owners, and SYSTEM groups can create new GPOs. For more information, see "Delegating creation of GPOs" in the Group Policy Planning and Deployment Guide (http://go.microsoft.com/fwlink/?LinkId=182208).
- 2. Open GPMC.
- 3. In the console tree, right-click **Group Policy Objects** in the forest and domain in which you want to create a GPO. For example, navigate to *Forest name*, **Domains**, *Domain name*, **Group Policy Objects**.
- Click New.
- 5. In the **New GPO** dialog box, specify a name for the new GPO, and then click **OK**.

Load Office 2010 Administrative Templates to a GPO

To download the Office 2010 administrative templates, see Office 2010 Administrative Template files (ADM, ADMX, ADML) and Office Customization Tool (http://go.microsoft.com/fwlink/?LinkId=189316).

The policy settings are contained in several individual .adm, .admx, or .adml template files, depending on the version of Windows that you are running on your computer. Each .adm, .admx, or .adml file contains the policy settings for a single Office application. For example, outlk14.admx contains the policy settings for Outlook 2010, and Word14.admx contains the templates for Microsoft Word 2010. You can load one or more of these template files into GPOs that you have designated for Office 2010 configurations. For example, if you have created a GPO named "Office 2010 settings" to hold all of your Office 2010 configurations, load all of the administrative template files into that GPO. Or, if you have created a GPO named "Outlook 2010 settings" for only Outlook 2010 configurations, load only the outlk14.adm or outlk14.admx template file into that GPO.

To load the Office 2010 Administrative Templates (.adm files) to a GPO

- 1. Verify that you have the necessary permissions for the GPO: either **Edit settings** or **Edit settings**, **delete**, **and modify**.
 - For more information about permissions that are needed to manage Group Policy, see "Delegating administration of Group Policy" in the <u>Group policy Planning and Deployment Guide</u> (http://go.microsoft.com/fwlink/?LinkId=182208).
- In Group Policy Object Editor, right-click Administrative Templates in the Computer
 Configuration or User Configuration node, and then select Add/Remove Templates. A list
 of the Administrative Template files that are already added to the GPO is displayed.
- 3. To add another Administrative Template file, click **Add**, and then browse to the location where you have saved the Office 2010 Administrative Template files.
- 4. Select the file that you want to add, and then click **Open**. Repeat this step for each Administrative Template file that you want to add.

5. When you are finished adding the files to the GPO, click **Close**. You can then edit the added policy settings in the GPO.

If you use .admx and .adml files on computers that run at least Windows Vista or Windows Server 2008, you can store the .admx and .adml files in one of the following locations:

- An Administrative Templates central store in the Sysvol folder of the domain controller. The GPMC included with Windows Server 2008 always uses an Administrative Templates central store over the local versions of the Administrative Templates. This provides a replicated central storage location for domain Administrative Templates.
 - When you use a central store, the GPMC reads the entire set of Administrative Template files when you edit, model, or report on a GPO. Therefore, the GPMC must read these files from across the network. If you create an Administrative Templates central store, you should always connect the GPMC to the closest domain controller. The central store consists of the following:
 - A root-level folder, which contains all language-neutral .admx files. For example, create the root folder for the central store on your domain controller at this location:
 - %systemroot%\sysvol\domain\policies\PolicyDefinitions
 - Subfolders, which contain the language-specific .adml resource files. Create a subfolder of %systemroot%\sysvol\domain\policies\PolicyDefinitions for each language that you will use. For example, create a subfolder for United States English at this location:
 - %systemroot%\sysvol\domain\policies\PolicyDefinitions\EN-US
 - For more information about how to store and use the Administrative Templates from a central store, see "Group policy and sysvol" in the <u>Group Policy Planning and Deployment Guide</u> (http://go.microsoft.com/fwlink/?LinkId=182208).
- PolicyDefinitions folder in the local computer.
 - .admx files are stored in this location: %systemroot%\PolicyDefinitions
 - .adml files are stored in this location: %systemroot%\PolicyDefinitions\</l-cc>
 where Il-cc represents the language identifier, such as en-us for English United States

Group Policy Object Editor automatically reads all .admx files stored in the central store of the domain in which the GPO was created.

When there is no central store, Group Policy Object Editor reads the local versions of the .admx files used by the local GPO.

For more information about ADMX files, see <u>Managing Group Policy ADMX Files Step-by-Step Guide</u> (http://go.microsoft.com/fwlink/?LinkId=75124).

Edit a GPO

When you edit a GPO, you are opening the GPO and configuring policy settings within it. After editing a GPO, you apply the GPO to the Active Directory site, domain, or OU to enforce the GPO settings for that site, domain, or OU.

Important

- The default domain policy and default domain controllers policy are critical to the health of any domain. Do not edit the Default Domain Controller Policy or the Default Domain Policy GPOs, except in the following cases:
 - We recommend that you set account policy in the Default Domain Policy.
 - If you install applications on domain controllers that require modifications to User Rights or Audit Policies, the modifications must be made in the Default Domain Controllers Policy.

If you want to apply Group Policy settings to the entire domain, create a new GPO, link the GPO to the domain, and then create the settings in that GPO.

• To edit the *local* GPO: open Group Policy Object Editor by clicking **Start**, then click **Run**, type **gpedit.msc**, and then click **OK**. To edit the local GPO on another computer, type the following at the command prompt: **gpedit.msc/gpcomputer**: **<ComputerName>**.

To edit a GPO

- 1. Verify that you have the necessary permissions for the GPO: either **Edit settings** or **Edit settings**, **delete**, **and modify**.
 - For more information about permissions that are needed to manage Group Policy, see "Delegating administration of Group Policy" in the <u>Group policy Planning and Deployment Guide</u> (http://go.microsoft.com/fwlink/?LinkId=182208).
- 2. Open GPMC.
- In the console tree, double-click Group Policy Objects in the forest and domain that contain the GPO that you want to edit. This is located in Forest name, Domains, Domain name, Group Policy Objects.
- 4. Right-click the GPO that you want to modify, and then click **Edit**. This opens Group Policy Object Editor. Edit settings as appropriate in the Group Policy Object Editor console.

Link a GPO

By linking a GPO to an Active Directory site, domain, or OU, you are applying the configurations that you have made in that GPO to it, for all the users or computers it contains.

To link a GPO

- 1. Verify that you have the necessary permissions:
 - If you want to link an existing GPO to a site, domain, or OU, you must have Link GPOs
 permission on that site, domain, or OU. By default, only Domain Administrators and
 Enterprise Administrators have these permissions for domains and OUs, and only
 Enterprise Administrators and Domain Administrators of the forest root domain have these
 permissions for sites.
 - If you want to both create and link a GPO, you must have Link GPOs permissions on the
 domain or OU to which you want to link, and you must have permission to create GPOs in
 that domain. By default, only Domain Administrators, Enterprise Administrators, and Group
 Policy Creator owners have permission to create GPOs.

If you want to link a GPO to a site, notice that the Create and Link a GPO Here option is
not available for sites, because it is unclear in which domain to create the GPO. You must
first create a GPO in any domain in the forest, and then use the Link an Existing GPO
option to link the GPO to the site.

For more information about permissions that are needed to manage Group Policy, see "Delegating administration of Group Policy" in the <u>Group policy Planning and Deployment Guide</u> (http://go.microsoft.com/fwlink/?LinkId=182208).

- 2. Open GPMC.
- 3. In the console tree, locate the site, domain, or OU to which you want to link a GPO. These are located under *Forest name*, **Domains** or *Sites*, or *Site name*, *Domain name*, or *organizational unit name*.
- 4. To link an existing GPO, right-click the domain or organizational unit within the domain, and then click **Link an Existing GPO**. In the **Select GPO** dialog box, click the GPO that you want to link, and then click **OK**.

-or-

To link a new GPO, right-click the domain or OU in a domain, and then click **Create and Link a GPO Here**. In the **Name** box, type a name for the new GPO, and then click **OK**.

See Also

<u>Group Policy overview for Office 2010</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx)

<u>Planning for Group Policy in Office 2010</u> (http://technet.microsoft.com/library/83ff7b6a-6ad5-4abb-8edf-e97824e14af9(Office.14).aspx)

Disable user interface items and shortcut keys in Office 2010

Disable user interface items and shortcut keys in Office 2010

This article provides background and procedural information to disable user interface (UI) items and keyboard shortcuts in Microsoft Office 2010 by using Group Policy.

In this article:

- Using Group Policy to disable UI items and keyboard shortcuts
- Disabling commands by using control IDs
- Disabling shortcut keys by using virtual key codes
- Disabling predefined user interface items and shortcut keys

Before performing any of the procedures in this article, make sure that you have installed the Office 2010 Administrative Templates. For more information about how to download and install the Administrative Templates, see <u>Load Office 2010 Administrative Templates to a GPO</u> in <u>Enforce settings</u> by using Group Policy in Office 2010.

Using Group Policy to disable UI items and keyboard shortcuts

You can use Group Policy settings to disable commands and menu items for Office 2010 applications by specifying the toolbar control ID (TCID) for the Office 2010 controls. You can also disable keyboard shortcuts by setting the **Custom | Disable shortcut keys** policy setting and adding the *virtual key code* and *modifier* for the shortcut. A virtual key code is a hardware-independent number that uniquely identifies a key on the keyboard. A modifier is the value for a modifier key, such as **ALT**, **CONTROL**, or **SHIFT**.

The **Custom | Disable commands** and **Disable shortcut keys** policy settings are available for the following Office 2010 applications:

- Microsoft Access 2010
- Microsoft Excel 2010
- Microsoft Outlook 2010
- Microsoft PowerPoint 2010
- Microsoft Visio 2010
- Microsoft Word 2010

The **Custom | Disable commands** policy settings are also available for the following Office 2010 applications:

- Microsoft InfoPath 2010
- Microsoft Publisher 2010
- Microsoft SharePoint Designer 2010

Policy settings for the Office 2010 applications are accessed under the **User Configuration\Administrative Templates** node in Group Policy Object Editor. To disable user

interface items and shortcut keys, administrators can enable one of the following policy settings under the **Disable items in User Interface\Custom** node for an Office 2010 application:

- Disable commands Allows you to specify the control ID for the command that you want to
 disable. If you disable a TCID, that TCID is disabled everywhere the toolbar control is used. To
 disable a tab, you can disable the controls on the tab. For more information, see <u>Disabling</u>
 commands by using control IDs later in this article.
- Disable shortcut keys Allows you to specify the virtual key code and modifier (as key,modifier) for the keyboard shortcut you want to disable. Key is the value of a key (for example, K) in Windows, and modifier is the value of either a modifier key (such as ALT) or a combination of modifier keys in Windows. For more information, see <u>Disabling shortcut keys by using virtual key codes</u> later in this article.

Policy settings are also available for disabling *predefined* user interface items and shortcut keys for the Office 2010 applications. For more information, see <u>Disabling predefined user interface items and shortcut keys</u> later in this article.

Disabling commands by using control IDs

You must first obtain the control IDs for the Office 2010 application controls that you want to disable by using the custom **Disable commands** policy setting. For information about how to download files that list the control IDs for built-in controls in all applications that use the Office 2010 Office Fluent UI, see Office 2010 Help Files: Office Fluent User Interface Control Identifiers (http://go.microsoft.com/fwlink/?LinkId=181052).

For information about how to use Group Policy Object Editor from the Group Policy Management Console Microsoft Management Console (MMC) snap-in, see <u>Group Policy management tools</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79.aspx#GP_ManagementTools) in <u>Group Policy overview for Office 2010</u>

(http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx).

To disable commands by using control IDs

- Verify that you have the necessary security permissions for the GPO: either Edit settings or Edit settings, delete, and modify security. For more information about permissions that are needed to manage Group Policy, see "Delegating administration of Group Policy" in the Group Policy Planning and Deployment Guide (http://go.microsoft.com/fwlink/?LinkId=182208).
- In the Group Policy Object Editor console, expand User Configuration, expand Administrative Templates, and then expand the application for which you want to disable commands (for example, double-click Microsoft Excel 2010).
- 3. Click **Disable items in User Interface**, click **Custom**, double-click **Disable commands**, and then click **Enabled**.
- 4. Click **Show**. In the **Show Contents** dialog box, click **Add**, enter the control ID for the command that you want to disable in the **Add Item** dialog box, and then click **OK**.
 - For example, to disable the **Check for Updates** button in Excel (assuming you had previously added this command to the Excel Quick Access Toolbar), you would enter **9340** (the control ID for the **CheckForUpdates** control).
- 5. Click **OK**. In the **Disable commands** policy **Properties** page, click **OK**.

Disabling shortcut keys by using virtual key codes

The **Disable shortcut keys** policy setting under the **Disable items in user interface\Predefined** node includes several built-in shortcut keys that are listed by name. For example, you can disable **CTRL+K**, the shortcut for the **Hyperlink** command (**Insert** tab, **Links** group). For more information, see <u>Disabling predefined user interface items and shortcut keys</u> later in this article.

To disable other shortcut keys, you set the **Disable shortcut keys** policy setting under the **Disable items in User Interface\Custom** node and add the virtual key code and modifier for the user interface item that you want to disable. Key is the numeric value for a key (such as **V**) in Windows. Modifier is the value of either a modifier key such as **CONTROL**, or a combination of modifier keys in Windows.

The following resources provide information about Office 2010 combination shortcut keys, function keys, and other common shortcut keys, together with descriptions of their functionality. You need the shortcut key information to use the **Custom |Disable shortcut keys** policy settings.

- Keyboard shortcuts for Access (http://go.microsoft.com/fwlink/?LinkId=182281)
- Excel shortcut and function keys (http://go.microsoft.com/fwlink/?LinkId=182282)
- Keyboard shortcuts for Outlook (http://go.microsoft.com/fwlink/?LinkId=182283)
- Keyboard shortcuts for PowerPoint (http://go.microsoft.com/fwlink/?LinkId=182284)
- Keyboard shortcuts for Word (http://go.microsoft.com/fwlink/?LinkId=182285)
- Keyboard shortcuts for Visio (http://go.microsoft.com/fwlink/?LinkId=182286)

The following table provides information about keys and modifiers.

Key or modifier	Value (decimal)
ALT	18
CONTROL	17
SHIFT	16
A	65
В	66
С	67
D	68
Е	69
F	70
G	71
Н	72
I	73
J	74
К	75
L	76

Key or modifier	Value (decimal)
М	77
N	78
0	79
Р	80
Q	81
R	82
s	83
Т	84
U	85
V	86
w	87
X	88
Υ	89
Z	90

The following table lists the values for the function keys used by the system.

Function key	Value (decimal)
F1	112
F2	113
F3	114
F4	115
F5	116
F6	117
F7	118
F8	119
F9	120
F10	121
F11	122
F12	123

For a more comprehensive list of symbolic constant names, hexadecimal values, and mouse or keyboard equivalents for the virtual-key codes used by the system, see <u>Virtual-Key Codes</u> (http://go.microsoft.com/fwlink/?LinkId=182271).

To disable shortcut keys (Custom)

- Verify that you have the necessary security permissions for the GPO: either Edit settings or Edit settings, delete, and modify security. For more information about permissions that are needed to manage Group Policy, see "Delegating administration of Group Policy" in the Group Policy Planning and Deployment Guide (http://go.microsoft.com/fwlink/?LinkId=182208).
- In the Group Policy Object Editor console, expand User Configuration, expand Administrative Templates, and then expand the application for which you want to disable commands (for example, double-click Microsoft Excel 2010).
- Click Disable items in User Interface, click Custom, click Disable shortcut keys, and then click Enabled.
- 4. Click Show. In the Show Contents dialog box, click Add. In the Add Item dialog box, enter the values for the keyboard shortcut you want to disable as key,modifier, and then click OK. For example, to disable the shortcut keys ALT+F11 in Excel (which opens the Microsoft Visual Basic Editor, where you can create a macro), enter 122,18 in the Add Item dialog box (where F11 key = 122 and modifier = 18).



If there are multiple modifier keys for the keyboard shortcut, add the values of the modifier keys together to determine the modifier value to enter in Group Policy Object Editor console. For example, for the **ALT+SHIFT** combination, you would use the sum of their assigned values, 18+16 = 34.

5. Click **OK**. In the **Disable shortcut keys** policy **Properties** page, click **OK**

Disabling predefined user interface items and shortcut keys

Policy settings are also available to disable predefined user interface items and shortcut keys for the Office 2010 applications. These predefined policy settings for the Office 2010 applications are available in **User Configuration\Administrative Templates\<a processor application name>**, under the **Disable items in user interface\Predefined** node of Group Policy Object Editor. Policy settings for disabling user interface items are available for the following applications:

- Access 2010
- Excel 2010
- PowerPoint 2010
- Word 2010
- SharePoint Designer 2010
- Publisher 2010
- Visio 2010

To disable predefined commands

- Verify that you have the necessary security permissions for the GPO: either Edit settings or Edit settings, delete, and modify security. For more information about permissions that are needed to manage Group Policy, see "Delegating administration of Group Policy" in the Group Policy Planning and Deployment Guide (http://go.microsoft.com/fwlink/?LinkId=182208).
- In Group Policy Object Editor console, expand User Configuration, expand Administrative Templates, and then expand the application for which you want to disable commands (for example, double-click Microsoft Excel 2010).
- 3. Click **Disable items in User Interface**, click **Predefined**, double-click **Disable commands**, click **Enabled**, select the commands that you want to disable, and then click **OK**.

To disable predefined shortcut keys

- Verify that you have the necessary security permissions for the GPO: either Edit settings or Edit settings, delete, and modify security. For more information about permissions that are needed to manage Group Policy, see "Delegating administration of Group Policy" in the Group Policy Planning and Deployment Guide (http://go.microsoft.com/fwlink/?LinkId=182208).
- In Group Policy Object Editor console, expand User Configuration, expand Administrative Templates, and then expand the application for which you want to disable commands (for example, double-click Microsoft Excel 2010).
- 3. Click **Disable items in User Interface**, click **Predefined**, double-click **Disable shortcut keys**, click **Enabled**, select the shortcut keys that you want to disable, and then click **OK**.

See Also

<u>Group Policy overview for Office 2010</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx)

<u>Planning for Group Policy in Office 2010</u> (http://technet.microsoft.com/library/83ff7b6a-6ad5-4abb-8edf-e97824e14af9(Office.14).aspx)

Enforce settings by using Group Policy in Office 2010

Enable SharePoint Server 2010 Colleague in Outlook 2010

This article describes how to configure the Microsoft Office 2010 client to enable the Microsoft SharePoint Server 2010 Colleague add-in in Microsoft Outlook 2010.

In this article:

- Overview
- Before you begin
- Configure Colleagues for My Site

Overview

The SharePoint Server Colleague add-in in Microsoft Outlook 2010 scans the user's Sent Items folder to look for names and keywords along with the frequency of those names and keywords. The list of possible colleagues is updated periodically and stored under the user's profile on the user's local computer. This list is accessed by the **Add Colleagues** page on a user's SharePoint My Site Web site where they can choose the colleagues they want to add to their My Site. The user can approve or reject contact names and keywords before they are added to the **Ask Me About** Web Part.

By default, the Colleagues scan is turned on. You can disable this feature by using Group Policy. You can lock down the settings to customize the Colleagues scan by using the Office Group Policy Administrative template (Office14.adm). Or, you can configure default settings by using the Office Customization Tool (OCT), in which case users can change the setting from the configuration you deploy.

Before you begin

Before you start deployment, review Planning for Group Policy in Office 2010 (http://technet.microsoft.com/library/83ff7b6a-6ad5-4abb-8edf-e97824e14af9(Office.14).aspx), Planning overview for Outlook 2010 (http://technet.microsoft.com/library/9eabd5ec-3f76-4048-b98b-f11aa85cc544(Office.14).aspx), and Plan user profiles (SharePoint Server 2010) (http://go.microsoft.com/fwlink/?LinkId=182364).

Configure Colleagues for My Site

Use the following procedures to configure Colleagues settings. The first two procedures are for administrators to configure Colleagues by using Group Policy or the OCT. The third procedure describes how to deploy the My Site registry keys for users by using the OCT. You must deploy the My Site URL registry data for the Colleagues scan to work. The last procedure provides steps for users to turn off this feature in Outlook 2010.

To configure Colleagues by using Group Policy

1. In Group Policy, load the Office 2010 template (Office14.adm). Steps vary according to the version of Windows that you are running.

- 2. Open the Group Policy Management Console (GPMC). In the tree view, expand **Domains**, and then expand **Group Policy Objects**.
- 3. Right-click the policy object that you want, and then click **Edit**. The Group Policy Management Editor window opens.
- 4. In the tree view, expand User Configuration | Policies | Administrative Templates \ Classic Administrative Templates (ADM) \ Microsoft Office 2010 \ Server Settings \ SharePoint Server.
- 5. Double-click Enable Colleague Import Outlook Add-In to work with Microsoft SharePoint Server.
- 6. Select **Enabled** to enable the policy setting. Or, select **Disabled** to disable the policy.
- 7. Click OK.
- 8. If you enable the policy, you can also set other policies in this folder, such as **Maximum** number of recipients in an Outlook item to scan to determine the user's colleagues for recommendation and Minimum time before starting Colleague recommendation scan.
- 9. Save the Group Policy.

To configure Colleagues by using the Office Customization Tool

- 1. Start the OCT by running Setup with the /admin command-line option.
- 2. On the **Modify User Settings** page, expand the tree to **Microsoft Office 2010 system \Server Settings \ SharePoint Server**.
- 3. Double-click Enable Colleague Import Outlook Add-In to work with Microsoft SharePoint Server.
- Select Enabled to enable the policy setting. Or, select Disabled to disable the policy by default.
- 5. If you enable the policy, you can also set other policies in this folder, such as **Maximum** number of recipients in an Outlook item to scan to determine the user's colleagues for recommendation and Minimum time before starting Colleague recommendation scan.
- 6. Complete other Office 2010 configurations. On the **File** menu, click **Save** to create the customization file that you can deploy to users.

To set the My Site URL by using the OCT

- 1. Start the OCT by running Setup with the **/admin** command-line option.
- 2. In the Additional content area, click Add registry entries.
- 3. Click **Add** to add the registry entries shown in the following table.

Root	Data type	Key	Value name	Value data
HKEY_CURREN T_USER	REG _SZ	Software\Policies\Microsoft\Office\14.0\ common\Portal\Link Providers\MySiteHost	URL	Your My Site URL – for example, http://Office/

				MySite.
HKEY_CURREN T_USER	REG _SZ	Software\Policies\Microsoft\Office\14.0\ common\Portal\Link Providers\MySiteHost	Display Name	The name to display to the user – for example, <i>MySite</i> .

4. Complete other Office 2010 configurations. On the **File** menu, click **Save** to create the customization file that you can deploy to users.

To manually turn off Colleagues in Outlook 2010

- 1. In Outlook 2010, on the File tab, click Options.
- 2. In the Outlook Options dialog box, select Advanced.
- 3. In the Other section, clear the check box Allow analysis of sent e-mails to identify people you commonly e-mail and subjects you commonly discuss, and upload this information to the default SharePoint Server.
- 4. Click OK.

See Also

<u>Planning for Group Policy in Office 2010</u> (http://technet.microsoft.com/library/83ff7b6a-6ad5-4abb-8edf-e97824e14af9(Office.14).aspx)

<u>Planning overview for Outlook 2010</u> (http://technet.microsoft.com/library/9eabd5ec-3f76-4048-b98b-f11aa85cc544(Office.14).aspx)

<u>Plan user profiles (SharePoint Server 2010)</u> (http://technet.microsoft.com/library/3e61c238-cc09-4369-b8d3-f1150c1ae89b(Office.14).aspx)

Configure security for Office 2010

This article provides required information and procedures to configure security settings in Microsoft Office 2010 by using the Office Customization Tool (OCT) and Group Policy.

In this article:

- Process overview
- Before you begin
- Configure security settings by using the OCT
- Configure security settings by using Group Policy

Process overview

You can configure security settings by using the Office Customization Tool (OCT), and by using the Office 2010 Administrative Templates (.adm or admx files) with Group Policy. You can also configure some security settings in the Trust Center, which can be accessed through the user interface of every Office 2010 application. However, from an administration and deployment standpoint, Trust Center settings are useful only for troubleshooting installation and configuration problems on individual computers. The Trust Center cannot be used to deploy or centrally manage security settings.

When you use the OCT to configure security settings, the settings are not permanent. The OCT establishes the initial value for the setting. After Office 2010 is installed, users can use the Trust Center to modify some, but not all, security settings. If you must enforce and prevent users from changing security settings, use Group Policy.

Before you begin

Before you configure security settings, review the following information about planning, permissions, and tool requirements.

Plan security settings

You must complete the following steps in the security planning process before you configure security settings:

- Read <u>Security overview for Office 2010</u> (http://technet.microsoft.com/library/67869078-71c6-45f5-aab0-0823c83aed54(Office.14).aspx). This article describes the new security architecture in Office 2010 and explains how the new security features work together to help provide a layered defense. We recommend that you do not change any security settings until you understand how all of the security features work.
- Read <u>Understand security threats and countermeasures for Office 2010</u>
 (http://technet.microsoft.com/library/1d80acb0-5ca3-4c32-b2f4-e3e013c85cfc(Office.14).aspx). This article describes which security risks and threats are relevant to Office 2010. This article also helps you determine which of those security risks and threats pose a risk to the business assets or processes of your organization.

Read the planning articles in <u>Plan security for Office 2010</u>
 (http://technet.microsoft.com/library/c38e3e75-ce78-450f-96a9-4bf43637c456(Office.14).aspx).
 These articles describe the various security settings that you can use to customize Office 2010 security features.

Review required permissions

The following table lists the administrative credentials that are required to configure security settings by using various deployment and management tools.

To perform these actions	You must be a member of this group or groups
Run the OCT.	Administrators group on the local computer
Configure local Group Policy settings by using the Group Policy Object Editor.	Administrators group on the local computer
Configure domain-based Group Policy settings by using the Group Policy Management Console.	Domain Admins, Enterprise Admins, or Group Policy Creator Owners group

Tool prerequisites

You can use several different tools to configure security settings. Before you use these tools, make sure that you:

- Understand how to use the OCT to customize Office 2010. For more information about the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx) and Customization overview for Office 2010.
- Have created a network installation point from which you can run the OCT. For more information about network installation points, see <u>Create a network installation point for Office 2010</u>.
- Understand what Administrative Templates are (.adm or .admx files). For more information about Administrative Templates, see <u>Group Policy overview for Office 2010</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx).
- Have loaded the Office 2010 Administrative Templates into the Group Policy Object Editor or installed them onto a domain controller.

The OCT is available only with volume licensed versions of Office 2010 and the 2007 Microsoft Office system. To determine whether an Office 2010 installation is a volume licensed version, check the Office 2010 installation disk to see whether it contains a folder named Admin. If the Admin folder exists, the disk is a volume license edition. If the Admin folder does not exist, the disk is a retail edition.

Configure security settings by using the OCT

The following procedure shows how to use the OCT to configure security settings.

To use the OCT to configure security settings

- 1. Open a command prompt window and navigate to the root of the network installation point that contains the Office 2010 source files.
- 2. At the command prompt, type setup.exe /admin, and then press ENTER.

- 3. In the left pane of the OCT, click Office security settings.
- 4. Change the security settings that you want to configure in the right pane.

Configure security settings by using Group Policy

The following procedure shows how to use Group Policy to configure security settings.

To use Group Policy to configure security settings

- 1. If you want to change local Group Policy settings, open the Group Policy Object Editor.

 To do this, at the **Run** command, type gpedit.msc, and then press ENTER.
- 2. Or, open the Group Policy Management Editor on a domain controller if you want to change domain-based Group Policy settings.
 - To do this, open the Group Policy Management snap-in, right-click the Group Policy object (GPO) that you want to modify, and then click **Edit**.
- 3. In the Group Policy Object Editor tree or the Group Policy Management Editor tree, find the security setting that you want to change in one of the following locations:
 - User Configuration/Policies/Administrative Templates/Microsoft Access 2010/Application Settings/Security
 - User Configuration/Policies/Administrative Templates/Microsoft Excel 2010/Excel Options/Security
 - User Configuration/Policies/Administrative Templates/Microsoft InfoPath 2010/Security
 - User Configuration/Policies/Administrative Templates/Microsoft Office 2010/Security Settings
 - User Configuration/Policies/Administrative Templates/Microsoft OneNote 2010/OneNote Options/Security
 - User Configuration/Policies/Administrative Templates/Microsoft Outlook 2010/Security
 - User Configuration/Policies/Administrative Templates/Microsoft PowerPoint 2010/PowerPoint Options/Security
 - User Configuration/Policies/Administrative Templates/Microsoft Project 2010/Security
 - User Configuration/Policies/Administrative Templates/Microsoft Publisher 2010/Security
 - User Configuration/Policies/Administrative Templates/Microsoft Visio 2010/Visio Options/Security
 - User Configuration/Policies/Administrative Templates/Microsoft Word 2010/Word Options/Security
- 4. Double-click the security setting and make the changes that you want to make.



Tip:

If you cannot find the security setting that you want to change, try searching in the previously listed locations within the Computer Configuration/Policies/Administrative Templates node.

See Also

<u>Security overview for Office 2010</u> (http://technet.microsoft.com/library/67869078-71c6-45f5-aab0-0823c83aed54(Office.14).aspx)

Configure Information Rights Management in Office 2010

Users can restrict permission to content documents and e-mail messages in Microsoft Office 2010 by using Information Rights Management (IRM). You can configure IRM options in your organization to encrypt document properties for IRM content by using Group Policy or the Office Customization Tool (OCT).

In this article:

- Overview
- Before you begin
- Turn off Information Rights Management
- Configure automatic license caching for Outlook
- Enforce e-mail expiration
- Deploy rights policy templates

Overview

You can lock down many settings to customize IRM by using the Office Group Policy template (Office14.adm) and Outlook Group Policy template (Outlk14.adm). You can also use the Office Customization Tool (OCT) to configure default settings, which enables users to change the settings. The OCT settings are in corresponding locations on the **Modify user settings** page of the OCT. In addition, there are IRM configuration options that can only be configured by using registry key settings. For a list of IRM settings, see <u>Plan for Information Rights Management in Office 2010</u> (http://technet.microsoft.com/library/92a8dc04-47c7-4946-83ee-4c0ecaff440a(Office.14).aspx).

In Microsoft Outlook 2010, users can create and send e-mail messages that have restricted permission to help prevent messages from being forwarded, printed, or copied and pasted. Office 2010 documents, workbooks, and presentations that are attached to messages that have restricted permission are also automatically restricted.

As an Outlook administrator, you can configure several options for IRM e-mail, such as disabling IRM or configuring local license caching. You can also design custom IRM permissions for users, in addition to the default **Do Not Forward** permissions group. For more information, see Setting up Information Rights Management for Office 2010 (http://technet.microsoft.com/library/92a8dc04-47c7-4946-83ee-4c0ecaff440a(Office.14).aspx).

Before you begin

Before you start deployment, review Plan for Information Rights Management in Office 2010 (http://technet.microsoft.com/library/92a8dc04-47c7-4946-83ee-4c0ecaff440a(Office.14).aspx) to determine which settings that you might have to configure for IRM.

The Office 2010 and Outlook 2010 templates and other ADM files can be downloaded from the Microsoft Download Center. For more information about how to use the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

Turn off Information Rights Management

You can turn off IRM for all Microsoft Office applications. To turn off IRM in Outlook 2010, you must turn off IRM for all Microsoft Office applications. There is no separate option to turn off IRM only in Microsoft Outlook.

To turn off IRM in Office 2010 by using Group Policy

- 0.1. In Group Policy, load the Office 2010 template (Office14.adm) and go to User Configuration\Administrative Templates\Microsoft Office 2010\Manage Restricted Permissions.
- 2. Double-click Turn Off Information Rights Management User Interface.
- Click Enabled.
- 4. Click OK.

Configure automatic license caching for Outlook

By default, Outlook 2010 automatically downloads the IRM license for rights-managed e-mail when Outlook synchronizes with Exchange Server. You can configure Outlook 2010 to prevent license information from being cached locally so that users must connect to the network to retrieve license information to open rights-managed e-mail messages.

To disable automatic license caching for IRM by using Group Policy

- 5. 0.1. In Group Policy, load the Outlook 2010 template (Outlk14.adm) and go to **User** Configuration\Administrative Templates\Microsoft Outlook 2010\Miscellaneous.
- 2. Double-click **Do not download rights permission license information for IRM e-mail during Exchange folder sync.**
- 3. Click Enabled.
- 4. Click OK.

Enforce e-mail expiration

You can also use IRM to help enforce an e-mail expiration period that you configure for Outlook 2010. When a user specifies the number of days before a message expires with IRM enabled, the message cannot be accessed after the expiration period.

As an administrator, you can specify an expiration period for all Outlook e-mail messages in your organization. The expiration period is enforced only when users send rights-managed e-mail.

To configure an expiration period for e-mail messages by using Group Policy

- In Group Policy, load the Outlook 2010 template (Outlk14.adm) and go to User Configuration\Administrative Templates\Microsoft Outlook 2010\Outlook Options\Preferences\E-mail Options\Advanced E-mail Options.
- 2. Double-click When sending a message.
- 3. Click Enabled.
- 4. In the Messages expire after (days) box, enter a number of days.
- 5. Click OK.

Deploy rights policy templates

The IRM policy settings that are available in the Office Group Policy template (Office14.adm) can be configured to point to the location where the rights policy templates are stored (either locally or on an available server share).

To configure the IRM rights policy templates location in Group Policy

- In Group Policy, load the Office 2010 template (Office14.adm) and go to User Configuration\Administrative Templates\Microsoft Office 2010\Manage Restricted Permissions.
- 2. Double-click Specify Permission Policy Path.
- 3. Click Enabled.
- 4. In the **Enter path to policy templates for content permission** box, type the full path to the IRM permission policy templates.
- 5. Click OK.

See Also

<u>Plan for Information Rights Management in Office 2010</u> (http://technet.microsoft.com/library/92a8dc04-47c7-4946-83ee-4c0ecaff440a(Office.14).aspx)

Configure Outlook 2010

This section provides how-to information for configuring Microsoft Outlook 2010 with Microsoft Exchange Server account features, such as Outlook Anywhere, Cached Exchange Mode, Microsoft Exchange send/receive settings, and multiple Exchange accounts. It also provides information about how to configure security and protection features in Microsoft Outlook 2010 and how to customize Outlook profiles by using an Outlook Profile (.prf) file.

In this section:

Article	Description
Configure Outlook Anywhere in Outlook 2010	Describes the requirements and options for you to configure a group of Outlook user accounts to use Outlook Anywhere.
Configure Cached Exchange Mode in Outlook 2010	Describes how to configure Cached Exchange Mode for Microsoft Exchange Server e-mail accounts in Microsoft Outlook 2010.
Configure Exchange Server send/receive settings in Outlook 2010	Describes how to define Send/Receive groups for users' Microsoft Exchange Server accounts and folders and specify tasks that are performed on each group during a Send/Receive operation in Microsoft Outlook 2010.
Configure multiple Exchange accounts for Outlook 2010	Describes how to configure multiple Microsoft Exchange Server e-mail accounts for a Microsoft Outlook 2010 profile.
Configure security and protection in Outlook 2010	Describes how to configure e-mail security, protection, and privacy in Microsoft Outlook 2010.
Customize Outlook profiles by using an Outlook Profile (PRF) file	Describes how to use the Microsoft Outlook 2010 profile file (.prf) to quickly create MAPI profiles for users, how to edit the profiles, and how to apply the profiles.

Configure Outlook Anywhere in Outlook 2010

You can configure user accounts in Microsoft Outlook 2010 to connect to Microsoft Exchange Server 2003 or a later version over the Internet without using virtual private network (VPN) connections. This feature, which permits connection to an Exchange Server account by using Outlook Anywhere, enables Outlook users to access their Exchange Server accounts from the Internet when they travel or work outside the organization's firewall.

This article describes the requirements and options for you to configure a group of Outlook user accounts to use Outlook Anywhere. If you want to configure this feature on a single computer, see Use Outlook Anywhere to connect to your Exchange server without VPN (http://go.microsoft.com/fwlink/?LinkId=160586).

In this article:

- Overview
- Before you begin
- Use the OCT to configure Outlook Anywhere
- Use Group Policy to lock down Outlook Anywhere settings
- Verification

Overview

To configure Outlook 2010 with Outlook Anywhere as part of an Outlook deployment, you enable the option in the Office Customization Tool (OCT) and (optionally) specify additional settings, such as security-level requirements, to communicate with the Exchange Server computer. After you specify these options, you save the settings with other configurations in the Setup customization file (.msp file) that you use to deploy Outlook to users. For more information about the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

You can also lock down some Outlook Anywhere settings by using Group Policy. For more information about Outlook Anywhere Group Policy settings, see <u>Use Group Policy to lock down Outlook Anywhere settings</u> later in this article. For more information about Group Policy, see <u>Group Policy overview for Office 2010</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx) and <u>Enforce settings by using Group Policy in Office 2010</u>.

If your messaging server is Microsoft Exchange Server 2007 or Microsoft Exchange Server 2010, you can use the Outlook 2010 Autodiscover feature to automatically configure Outlook Anywhere. For more information about automatic account configuration, see Outlook Automatic Account Configuration (http://go.microsoft.com/fwlink/?LinkID=79065).

Outlook Anywhere was known as RPC over HTTP in earlier versions of Outlook.

Before you begin

- Before you start deployment, review <u>Planning overview for Outlook 2010</u>
 (http://technet.microsoft.com/library/9eabd5ec-3f76-4048-b98b-f11aa85cc544(Office.14).aspx) to determine the settings that you might have to configure for Outlook Anywhere.
- We recommend that the user accounts that you configure for Outlook Anywhere use Cached Exchange Mode. For more information about Cached Exchange Mode in Outlook, see <u>Plan an</u> <u>Exchange deployment in Outlook 2010</u> (http://technet.microsoft.com/library/7586f740-eef7-4ab4-8608-30b6af23c595(Office.14).aspx).
- Download the Group Policy Administrative templates (.adm files) for Outlook 2010. To download
 the template files, see Office 2010 Administrative Template files (ADM, ADMX, ADML) and Office
 Customization Tool (http://go.microsoft.com/fwlink/?LinkId=189316).
- Before you configure Outlook Anywhere for Outlook 2010 in an Exchange environment without the Autodiscover service, obtain the URL for the Exchange proxy server that is configured for Outlook Anywhere. This URL is available from the organization's Exchange administrator.

Use the OCT to configure Outlook Anywhere

Use this procedure to use the OCT to configure Outlook Anywhere.

To configure Outlook Anywhere by using the OCT

- 1. In the OCT, in the tree view, locate **Outlook**, and then click **Add accounts**. Click the Exchange account that you want to configure and then click **Modify**.
- 2. If you are defining a new Exchange Server computer for users, enter a value or replaceable parameter in **User Name**.
 - For example, you might specify =%UserName% to use the exact logon name for each user. This helps prevent user prompts when Outlook asks users to decide among several variations.
- 3. If you are defining a new Exchange Server computer, in the **Exchange Server** text box enter the name of the Exchange Server computer.
 - Skip steps 2 and 3 if you are configuring Outlook Anywhere for existing Exchange users who are not moving to a new Exchange Server computer.
- 4. Click More Settings.
- 5. In the Exchange Settings dialog box, select the Configure Outlook Anywhere check box and then select the Connect to Exchange Mailbox using HTTP check box.
- 6. In the text box that follows these check boxes, type the server name for the Outlook Anywhere proxy server.
 - Do not enter http:// or https:// as part of the name.
- 7. Decide whether you want users to connect through Secured Sockets Layer (SSL) only. If you want to support both server authentication and client authentication, select Mutually authenticate the session when the system connects with SSL and enter the principal name of the proxy server.
- 8. Select whether or not to reverse the default way in which Outlook decides which connection type to try first, LAN (TCP/IP) or Outlook Anywhere (HTTP). The default is LAN (TCP/IP) first,

then Outlook Anywhere (HTTP). If you expect users to connect when they are outside the corporate network more frequently than when they are inside the corporate network, we recommend that you configure Outlook to try Outlook Anywhere (HTTP) first.

- Select an authentication method from the drop-down list.
 The default method is Password Authentication (NTLM).
- 10. Click OK to return to the Exchange Settings dialog box, and then click Finish.
- 11. Complete other Outlook or Microsoft Office configurations, and on the **File** menu, click **Save** to create the customization file that you can deploy to users.

Use Group Policy to lock down Outlook Anywhere settings

Use this procedure to use Group Policy to lock down Outlook Anywhere.

To lock down Outlook Anywhere settings in the user interface by using Group Policy

- In the Group Policy Object Editor, load the Outlook 2010 Administrative template (Outlk14.adm).
- 2. To customize Cached Exchange Mode options, open the Group Policy Management Console (GPMC) and in the tree view expand **Domains** and then expand **Group Policy Objects**.
- 3. Right-click the policy object you want and click **Edit**. The Group Policy Management Editor window opens.
- 4. In the tree view, expand **User Configuration**, expand **Policies**, expand **Administrative Templates**, expand **Classic Administrative Templates** (ADM), expand **Microsoft Outlook 2010**, expand **Account Settings**, and then click **Exchange**.
- 5. In the reading pane, in the **Setting** column, double-click the policy that you want to set. For example, double-click **Configure Outlook Anywhere user interface options**.
- 6. Select Enabled.
- 7. Click an option in the Choose UI State when OS can support feature drop-down list.
- 8. Click OK.

Verification

After you have finished your configurations, apply the configurations in a test environment. In the test environment, open Outlook and verify that the configurations are applied as expected.

See Also

Exchange Server 2003 RPC over HTTP Deployment Scenarios (http://go.microsoft.com/fwlink/?LinkId=124051)

Deploying Outlook Anywhere (http://go.microsoft.com/fwlink/?LinkId=124053)

Configure Cached Exchange Mode in Outlook 2010

This article describes how to configure Cached Exchange Mode for Microsoft Exchange Server e-mail accounts in Microsoft Outlook 2010.

In this article:

- Overview
- Before you begin
- Configure Cached Exchange Mode
 - To configure Cached Exchange Mode settings by using the Office Customization Tool
 - To configure Cached Exchange Mode settings by using Group Policy
 - To configure a default .ost location by using Group Policy
 - To force upgrade of non-Unicode ANSI format .ost files to Unicode

Overview

When an Outlook 2010 account is configured to use Cached Exchange Mode, Outlook 2010 works from a local copy of a user's Exchange mailbox stored in an Offline Folder (.ost file) on the user's computer, and with the Offline Address Book (OAB). The cached mailbox and OAB are updated periodically from the Exchange Server computer.

Cached Exchange Mode can be configured for Exchange Server e-mail accounts only. Cached Exchange Mode is supported by all versions of Exchange Server with which Outlook 2010 can connect; that is, by Exchange Server 2003 or later versions.

If you do not configure Cached Exchange Mode options, the current state of Cached Exchange Mode does not change for existing profiles when Microsoft Outlook is upgraded to a new version. For example, if a user account was configured to use Cached Exchange Mode in Office Outlook 2003 or Microsoft Office Outlook 2007, Cached Exchange Mode remains enabled when the user upgrades the software to Outlook 2010. The location for new .ost or OAB files is the default location: For Windows XP, the location is %userprofile%\Local Settings\Application Data\Microsoft\Outlook; for Windows Vista and Windows 7, the location is %userprofile%\AppData\Local\Microsoft\Outlook.

You can configure several options for Cached Exchange Mode. These include the default .ost file location for users in your organization who do not already have .ost files for Cached Exchange Mode. If you do not specify a different .ost file location, Outlook creates an .ost file in the default location when users start Outlook in Cached Exchange Mode.

You can lock down the settings to customize Cached Exchange Mode by using the Outlook Group Policy Administrative template (Outlk14.adm). Or, you can configure default settings by using the Office Customization Tool (OCT), in which case users can change the settings. To download the Outlook 2010 administrative templates, see Office 2010 Administrative Template files (ADM, ADMX, ADML) and Office Customization Tool (http://go.microsoft.com/fwlink/?LinkId=189316). For more information about Group Policy, see Group Policy overview for Office 2010 (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx) and Enforce settings by using Group Policy in Office

<u>2010</u>. For more information about the OCT, see <u>Office Customization Tool in Office 2010</u> (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

Before you begin

Before you start deployment, review Plan an Exchange deployment in Outlook 2010 (http://technet.microsoft.com/library/7586f740-eef7-4ab4-8608-30b6af23c595(Office.14).aspx) and Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx) to determine which settings you might have to configure for Cached Exchange Mode.

If you migrate from an earlier version of Outlook with Cached Exchange Mode enabled, determine which format your users' .ost files are in (ANSI or Unicode). See How to determine the mode that Outlook 2003 is using for offline folder files (http://go.microsoft.com/fwlink/?LinkId=159924).

Configure Cached Exchange Mode

Use the following procedures to configure Cached Exchange Mode settings.

To configure Cached Exchange Mode settings by using the Office Customization Tool

- In the Office Customization Tool, in the tree view, locate Outlook, click Add Accounts. In the
 Account Name column of the reading pane list, click the account that you want to configure,
 and then click Modify. The Exchange Settings dialog box appears.
 - Note that in the tree view of the OCT you must click **Outlook Profile** and then select **Modify Profile** or **New Profile** to add an Exchange account and configure Exchange Server settings.
- To specify a new location for users' Outlook data files (.ost), in the Exchange Settings dialog box click More Settings, and then select Enable offline use. Enter a folder path and file name for the .ost file location. You can also enter a path in the Directory path to store the Offline Address Book files text box
- 3. To enable or disable Cached Exchange Mode, or to specify default download behavior when Cached Exchange Mode is enabled, click the **Cached Mode** tab.
- 4. Select Configure Cached Exchange Mode and then select the Use Cached Exchange Mode check box to enable Cached Exchange Mode for users. By default, Cached Exchange Mode is disabled if you do not select the Use Cached Exchange Mode check box.
- 5. If you enabled Cached Exchange Mode in step 4, select a default download option on the **Cached Mode** tab:
 - Download only headers Users see header information and the beginning of the
 message or item body (a 256-KB plain-text buffer of information). Full items can be
 downloaded later in several ways; for example, by double-clicking to open the message or
 by clicking Download the rest of this message now in the reading pane.
 - Download headers followed by the full item All headers are downloaded first, and then
 full items are downloaded. The download order might not be chronological. Outlook
 downloads headers followed by full items in the folder that the user is currently accessing,
 and then downloads headers followed by full items in folders that the user has recently
 viewed.

- Download full items Full items are downloaded. We recommend this option unless you
 have a slow network connection. The download order might not be chronological. Outlook
 downloads full items in the folder that the user is currently accessing, and then downloads
 full items in folders that the user has recently viewed.
- 6. To turn off Headers Only mode, select the **Download full items** option button and clear the **On slow connections**, **download only headers** check box. Downloading only headers is the default behavior when users have slow connections. There are scenarios in which Outlook perceives that users have slow connections when users' data throughput is fast, or vice versa. In these situations, you might want to set or clear this option.
- 7. Disable the downloading of shared non-mail folders as part of Cached Exchange Mode synchronizations to users' .ost files. By default, shared non-mail folders are downloaded. Downloading shared non-mail folders increases the size of users' .ost files.
- 8. Download Public Folder Favorites as part of Cached Exchange Mode synchronizations to users' .ost files. By default, Public Folder Favorites are not downloaded. As with shared non-mail folders, downloading Public Folder Favorites increases the size of users' .ost files. Also, synchronizing Public Folder Favorites causes additional network traffic that might be unwelcome for users who have slow connections.
- 9. If you have to enable shared mail folders that use Cached Exchange Mode, follow these steps:
 - a. In OCT, in the tree view, locate Additional Content and then click Add registry entries.
 - b. In the reading pane, click **Add**.
 - c. Enter the following information:

Root	Data type	Key	Value name	Val ue dat a
HKEY_Current _User	REG_ SZ	Software\Microsoft\Office\14.0\Outlook\ CachedMode	CacheOthers Mail	1

d. Click OK.

To configure Cached Exchange Mode settings by using Group Policy

- 1. In Group Policy, load the Outlook 2010 template (Outlk14.adm).
- 2. To customize Cached Exchange Mode options, open the Group Policy Management Console (GPMC) and in the tree view expand **Domains** and then expand **Group Policy Objects**.
- 3. Right-click the policy object that you want and then click **Edit**. The Group Policy Management Editor window opens.
- 4. In the tree view, expand User Configuration, expand Policies, expand Administrative Templates, expand Classic Administrative Templates (ADM), expand Microsoft Outlook 2010, expand Account Settings, and then click Exchange. You can also expand Exchange and then click Cached Exchange Mode.

- 5. In the reading pane, in the **Setting** column, double-click the policy that you want to set. For example, in the **Exchange** reading pane, double-click **Use Cached Exchange Mode for new and existing Outlook profiles**.
- 6. Select **Enabled** and select an option (if appropriate).
- 7. Click OK.

To configure a default .ost location by using Group Policy

- 1. In Group Policy, load the Outlook 2010 template (Outlk14.adm).
- 2. To configure a default .ost location, open the Group Policy Management Console (GPMC) and in the tree view expand **Domains** and then expand **Group Policy Objects**.
- 3. Right-click the policy object that you want and then click **Edit**. The Group Policy Management Editor window opens.
- 4. In the tree view, expand **User Configuration**, expand **Policies**, expand **Administrative Templates**, expand **Classic Administrative Templates** (ADM), expand **Microsoft Outlook 2010**, expand **Miscellaneous**, and then click **PST Settings**.
- 5. Double-click **Default location for OST files**.
- 6. Select **Enabled** to enable the policy setting.
- 7. In the **Default location for OST files** text box, enter the default location for .ost files. For example:
 - %userprofile%\Local Settings\Application Data\Microsoft\newfolder.
- 8. Click OK.

You can define a new default location for both Personal Outlook data files (.pst) and .ost files. After you click **PST Settings** in the tree view, click the **Default location for PST and OST files** setting in the reading pane.

To force upgrade of non-Unicode ANSI format .ost files to Unicode

- For users who have existing non-Unicode ANSI format .ost files, the following procedure does
 not upgrade ANSI .ost files to Unicode .ost files. The procedure merely creates a new Unicode
 .ost file for the user's profile, leaving the original ANSI .ost files alone.
- 2. To determine which format your users' .ost files are in (ANSI or Unicode), see How to determine the mode that Outlook 2007 or Outlook 2003 is using for offline folder files (http://go.microsoft.com/fwlink/?LinkId=159924).
- 3. In Group Policy, load the Outlook 2010 template (Outlk14.adm).
- 4. Open the Group Policy Management Console (GPMC) and in the tree view expand **Domains** and then expand **Group Policy Objects**.
- 5. Right-click the policy object that you want and then click **Edit**. The Group Policy Management Editor window opens.
- 6. In the tree view, expand **User Configuration**, expand **Policies**, expand **Administrative Templates**, expand **Classic Administrative Templates** (ADM), expand **Microsoft Outlook 2010**, expand **Account Settings**, and then expand **Exchange**.
- 7. Double-click Exchange Unicode Mode Ignore OST Format.

- 8. Select **Enabled** to enable the policy configuration.
- 9. In the Choose whether existing OST format determines mailbox mode drop-down list, click Create new OST if format doesn't match mode.
- 10. Click **OK**.
- 11. Double-click Exchange Unicode Mode Silent OST format change.
- 12. Select **Enabled** to enable the policy configuration, and then click **OK**.
- 13. Double-click Exchange Unicode Mode Turn off ANSI mode.
- 14. Select **Enabled** to enable the policy configuration, and then click **OK**.
- 15. In the tree view, expand **Miscellaneous**, click **PST Settings**, and in the reading pane double-click **Preferred PST Mode (Unicode/ANSI)**.
- 16. Select **Enabled**, in the **Choose a default format for new PSTs** drop-down list click **Enforce Unicode PST**, and then click **OK**.

See Also

<u>Plan an Exchange deployment in Outlook 2010</u> (http://technet.microsoft.com/library/7586f740-eef7-4ab4-8608-30b6af23c595(Office.14).aspx)

Configure Exchange Server send/receive settings in Outlook 2010

As part of a Microsoft Outlook 2010 deployment, you can define Send/Receive groups for users' Microsoft Exchange Server accounts and folders and specify tasks that are performed on each group during a Send/Receive operation in Outlook 2010.



Note:

This article is for Microsoft Outlook administrators. To configure Outlook send/receive settings on your computer, see Send/Receive groups (http://go.microsoft.com/fwlink/?LinkId=81363).

You configure these settings by using the Office Customization Tool (OCT). You cannot configure the settings by using the Group Policy feature. For more information about the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

In this article:

- Overview
- Before you begin
- Create and configure Send/Receive groups in Outlook 2010

Overview

Send/Receive groups contain one or more user e-mail accounts or folders in Outlook 2010. By default, the Send/Receive group All Accounts is preconfigured and is included with Outlook 2010. Users can specify different behavior for each group; for example, the frequency with which Outlook 2010 connects to the server to send and receive messages for the server, or how messages are processed when Outlook is online or offline.

You can configure and deploy Send/Receive settings for users' Exchange accounts. For example, you can specify the kinds of synchronization that will be performed on specific folders or on the Offline Address Book (OAB) when a Send/Receive operation is executed. You can also specify when a Send/Receive action for each Send/Receive group will ordinarily be performed and when the action will be performed when users are offline. For example, a Send/Receive group can be configured to synchronize every 10 minutes ordinarily and every 30 minutes when users are offline.

You can also configure download options for the OAB, such as whether to download updates to the OAB only since the last OAB download.

Before you begin

Before you start deployment, review Planning overview for Outlook 2010 (http://technet.microsoft.com/library/9eabd5ec-3f76-4048-b98b-f11aa85cc544(Office.14).aspx).

Create and configure Send/Receive groups in Outlook 2010

Use this procedure to create and configure Send/Receive groups for Exchange accounts and folders.

To create and configure Send/Receive groups for Exchange accounts and folders

- In the OCT, in the tree view, locate Outlook, and then click Specify Send/Receive groups.
- 2. In the reading pane, select Configure Send/Receive settings if it is not already selected.
- 3. Click New.
- 4. In the **New Group Name** text box, enter a name for the group, and then click **OK**.
- 5. Click Modify.
- 6. In the **Modify Group** dialog box, select options for the group, such as **Synchronize forms** during a Send/Receive operation.
- 7. In the list, click a folder and select **Include this folder in Send/Receive**.
- 8. Select download options for the folder. The download option is only relevant for folders that have the concept of headers, such as the Inbox, Outbox, Deleted Items, Sent Items, and Drafts folders:
 - Download headers only
 - Download complete item including attachments
 - Download only headers for items larger than n KB
- 9. Enter a size limit in kilobytes (KB). This setting applies only to accounts that are set up to use Exchange Server 2003, or later versions of Exchange Server.
- 10. In the list, click another folder to include the folder in this Send/Receive group, and select a download option.
- 11. Add all the folders that you want to include in this group, and then click **OK**.
- 12. Double-click a group in the **Group Name** list.
- 13. Select the options available in the **Modify Group** dialog box to specify Send/Receive behavior for the group, and then click **OK**.
- 14. In the Exchange Address Book section, select Download offline address book so that the OAB will be synchronized when this Send/Receive group is synchronized. This setting is configured for each Send/Receive group.
- 15. Click Address Book Settings.
- 16. Select options in the Modify Address Book Settings dialog box. These settings apply to all Send/Receive groups in this profile.
- 17. Click **OK**.

Configure multiple Exchange accounts for Outlook 2010

This article describes how to configure multiple Microsoft Exchange Server e-mail accounts for a Microsoft Outlook 2010 profile.

In this article:

- Overview
- Before you begin
- Add multiple Exchange accounts to a profile
- Modify or remove Exchange accounts on a profile

Overview

With Outlook 2010, you can add, modify, or remove multiple Exchange Server e-mail accounts to an Outlook profile the same way you can for other e-mail accounts by using the Office Customization Tool (OCT). Without any additional configuration, Outlook 2010 can connect to up to ten Exchange accounts from a single profile.

Individual users can add additional Exchange accounts to their Outlook 2010 profile within Outlook 2010. To do so, users can either click the **File** tab, click **Account Settings**, and then click **Add Account**, or use the Windows Control Panel Mail module. They can also remove Exchange accounts on their profile. For more information, see <u>Add or remove an e-mail account</u> (http://go.microsoft.com/fwlink/?LinkID=166193).

Warning

- Delegate accounts are not supported in profiles with multiple Exchange accounts. Users with delegate access to an account must keep that account in a separate profile from any other Exchange account.
- If you use the Exchange Server Security template to configure security options for Exchange accounts, the Security form settings for the first account added to the profile (the legacy account) will be used for all the accounts added to that profile.

Before you begin

Before you begin deployment, review Planning overview for Outlook 2010 (http://technet.microsoft.com/library/9eabd5ec-3f76-4048-b98b-f11aa85cc544(Office.14).aspx) and Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx) to determine which settings you might have to configure for the Exchange accounts. The following three articles describe how to configure specific Exchange account features by using the OCT.

- Configure Outlook Anywhere in Outlook 2010
- Configure Cached Exchange Mode in Outlook 2010
- Configure Exchange Server send/receive settings in Outlook 2010

Add multiple Exchange accounts to a profile

Use the following procedure to add multiple Exchange accounts to an Outlook profile.

To add multiple Exchange accounts to a profile

- 1. From the root of the network installation point, run the following command line to start the Office Customization Tool: \\server\share\setup.exe /admin
- To edit an existing customization file (.msp), in the Select Product dialog box, click Open an
 existing Setup customization file. Or to create a new customization file, select the Office
 suite that you want to customize, and then click OK.
- In the Outlook area, click Outlook profile. Select how you want to customize profiles for your users. To change an existing profile or to add a new profile, choose Modify Profile or New Profile.
- 4. To add and configure new and existing accounts, click **Add accounts**, and then click **Customize additional Outlook profile and account information**.
- 5. To add an Exchange account, click the **Add** button.
- 6. In the Add Accounts dialog box, select Exchange, and then click Next.
- 7. In the Exchange Settings dialog box, enter an account name and the name of the Exchange Server computer. If you want to identify the user by using a specific value, enter a User Name. Otherwise, leave the default %username% value for the User Name. Each user's account information in the Active Directory directory service will be automatically populated for the profile.
- 8. If you want to change an existing Exchange account in a user's profile, select the **Overwrite** existing Exchange accounts check box.
- 9. Click **More Settings** for additional Exchange configuration options such as Cached Exchange Mode and Outlook Anywhere, and then click **OK**.
- 10. When you are finished, click Finish.
- 11. To add an additional Exchange account, repeat steps 5-10.
- 12. If you are creating a new profile, add the Outlook Address Book account to the profile. This account allows you to use the Contacts folder in your Exchange mailbox as an address book when you create e-mail messages.
- 13. After you have finished all your customizations, save the customization file (.msp) and exit the OCT. Put the .msp file in the Office installation source \Updates folder. Install the Microsoft Office 2010 from the original installation source.

Modify or remove Exchange accounts on a profile

You can easily modify or remove an Exchange account from a profile by using almost the same procedure as previously described in <u>Add multiple Exchange accounts to a profile</u>. In step 5, highlight the Exchange account that you want to modify or remove from the profile, and then click either **Modify** to modify or **Remove** to remove the account. Then, finish your customizations and save the customization file (.msp).

See Also

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Configure Cached Exchange Mode in Outlook 2010

Configure Outlook Anywhere in Outlook 2010

Configure Exchange Server send/receive settings in Outlook 2010

Configure security and protection in Outlook 2010

This section describes how to configure e-mail security, protection, and privacy in Microsoft Outlook 2010.

In this section:

Article	Description
Manage trusted add-ins for Outlook 2010 (http://technet.microsoft.com/library/96604a08- 00aa-48dd-81dc-2d9379f474fe(Office.14).aspx)	Describes how to customize security settings by using Group Policy to specify COM add-ins to be trusted and to run without encountering the Microsoft Outlook object model blocks.
Configure junk e-mail settings in Outlook 2010	Describes how to create Junk E-mail Filter lists in Outlook 2010, and how to configure the Junk E-mail Filter and automatic picture download by using Group Policy or the Office Customization Tool (OCT).

Configure junk e-mail settings in Outlook 2010

This article describes how to create Junk E-mail Filter lists in Microsoft Outlook 2010, and how to configure the Junk E-mail Filter and automatic picture download by using Group Policy or the Office Customization Tool (OCT).

This article is for Outlook administrators. To learn more about how to configure junk e-mail settings in Outlook on your desktop, see Change the level of protection in the Junk E-Mail Filter (http://go.microsoft.com/fwlink/?LinkId=81273).

In this article:

- Overview
- Before you begin
- Create and deploy Junk E-mail Filter lists
- Configure the Junk E-mail Filter
- Configure automatic picture download

Overview

Microsoft Outlook 2010 provides features that can help users avoid receiving and reading junk e-mail messages that include the Junk E-mail Filter and the ability to disable automatic content download from external servers.

Junk e-mail filtering in Outlook 2010 includes Junk E-mail Filter lists and technology built into the software that helps determine whether an e-mail message should be treated as junk e-mail. You can create the following initial Junk E-mail Filter lists to deploy to users: lists for Safe Senders, Safe Recipients, and Blocked Senders.

The lists that you provide are default lists. If you deploy the lists by using Group Policy, users can change the lists during their Outlook session. When users restart Outlook, Group Policy will append the list by default or, if you have enabled **Overwrite or Append Junk Mail Import List**, their changes will be overwritten with the original list that you deployed. If you deploy the lists by using the OCT, users can customize and keep their customized lists as they use Outlook, to fine-tune the filters to work best for their messaging needs.

You can use Group Policy or the Office Customization Tool (OCT) to customize settings for the Junk E-mail Filter, and to disable automatic content download to meet the needs of your organization. For example, you can configure the Junk E-mail Filter to be more aggressive. However, that might also catch more legitimate messages. Rules that are not part of the junk e-mail management built into the software are not affected.

Before you begin

Review Plan for limiting junk e-mail in Outlook 2010 (http://technet.microsoft.com/library/0f5ba39c-0d39-4ffc-be4d-1222ddb63769(Office.14).aspx) to determine what settings to configure for the Junk E-mail Filter and automatic content download.

Create and deploy Junk E-mail Filter lists

To deploy Junk E-mail Filter lists, first create the lists on a test computer and then distribute the lists to users. You can distribute the lists by putting the lists on a network share. If you have remote users not connected to the domain, you can use the OCT to add the files by using the **Add files** option.

To create default Junk E-mail Filter lists

- 1. Install Outlook 2010 on a test computer.
- 2. Start Outlook 2010.
- 3. In Outlook 2010, on the Home tab, in the Delete group, click Junk and Junk E-mail Options.
- 4. On the Safe Senders tab, click Add.
- 5. Enter an e-mail address or domain name. For example: someone@exchange.example.com
- Click OK.
- 7. To add more e-mail addresses or domain names, repeat steps 3 through 6.
- 8. Click Export to file.
- 9. Enter a unique file name for the Safe Senders list, and then click **OK**.
- 10. Repeat steps 3 through 9 with the Safe Recipients tab and the Blocked Senders tab to create Safe Recipients and Blocked Senders lists. Be sure to specify a unique file name for each of the three lists.

Deploy Junk E-mail Filter lists for users by using the Office Customization Tool

- 1. Copy the three Junk E-mail Filter files that you created in the previous procedure to a network file share.
- 2. If you have remote users not connected to the domain, follow these steps.
 - a. In the OCT, click Add Files and then click Add.
 - b. In the **Add Files to** dialog box, select the three Junk E-mail Filter files that you created in the previous procedure.
 - Hold down the CONTROL or SHIFT key to select multiple files.
 - c. Click Add.
 - d. In the **Destination path on the user's computer** dialog box, enter the folder where you want to install the file on users' computers, and then click **OK**.
 - e. Click OK again.
- On the Modify User Settings page, under Microsoft Outlook 2010\Outlook
 Options\Preferences, click Junk Mail.
- 2. Double-click **Junk Mail Import List**, click **Enabled** and **OK** so that the setting is applied and Junk E-mail Filter lists are imported for users.
- 3. To overwrite existing Junk E-mail Filter lists with new lists, double-click **Overwrite or Append Junk Mail Import List**, click **Enabled** and then click **OK**.
- 4. To specify a path of each Junk E-mail Filter list, double-click the settings that correspond to each list (for example, **Specify path to Safe Senders**), click **Enabled** and enter a path and file name in the box (for example, in the **Specify path to Safe Senders** list).

- 5. Click **OK** or click **Next setting** to specify the path for another Junk E-mail Filter list.
- 6. Complete other Outlook 2010 or Office 2010 configurations, and on the **File** menu, click **Save** to create the customization file that you can deploy to users.

You can later change an existing Outlook 2010 installation to update the Junk E-mail Filter lists by following the procedure and including more recent Junk E-mail Filter files.

For more information about how to use the Office Customization Tool for configuring an Office installation to deploy files, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).

Configure the Junk E-mail Filter

You can lock down the settings to customize Junk E-mail Filter options by using the Outlook 2010 Group Policy template (Outlk14.adm). Or you can configure default settings by using the OCT. If this is the case, users can change the settings. The OCT settings are in corresponding locations on the **Modify user settings** page of the OCT.

If you decide to configure Junk E-mail Filter settings in the OCT, see the procedure *To configure Outlook Junk E-mail Filter settings in the Office Customization Tool* later in this article for an additional setting that must be configured.

Use the following procedure to configure Junk E-mail Filter options in Outlook. For the Junk E-mail Filter options that you can configure, see Plan for limiting junk e-mail in Outlook 2010 (http://technet.microsoft.com/library/0f5ba39c-0d39-4ffc-be4d-1222ddb63769(Office.14).aspx).

To configure Outlook Junk E-mail Filter settings in Group Policy

- In Group Policy, load the Outlook 2010 template (Outlk14.adm) and open User Configuration\Administrative Templates\Microsoft Outlook 2010\Outlook Options\Preferences\Junk E-mail.
- 2. Double-click the option that you want to configure. For example, double-click **Junk E-mail protection level**.
- 3. Click Enabled.
- 4. If appropriate, select a radio button for the option that you want to set, or select an option from a drop-down list.
- 5. Click OK.
- 6. To activate the Junk E-mail settings, you must set the Junk E-Mail Import list setting. You can do this by using the OCT.
 - f. In the OCT, on the **Modify user settings** page, under **Microsoft Outlook 2010\Outlook Options\Preferences\Junk E-mail**, double-click **Junk Mail Import list**.
 - g. Click Enabled.
 - h. Click OK.
 - i. Complete other Outlook 2010 or Microsoft Office 2010 configurations in the OCT, and on the **File** menu, click **Save** to create the customization file that you can deploy to users.

- To configure Outlook Junk E-mail Filter settings in the Office Customization Tool
 - 1. In the OCT, on the **Modify user settings** page, under **Microsoft Outlook 2010\Outlook Options\Preferences\Junk E-mail**, double-click **Junk Mail Import list**.
 - 2. Click Enabled.
 - Click OK.
 - 4. Double-click and set any other Junk E-mail options that you want to configure.
 - 5. Complete other Outlook 2010 or Microsoft Office 2010 configurations, and on the **File** menu, click **Save** to create the customization file that you can deploy to users.

Configure automatic picture download

To help protect users' privacy and to combat Web beacons—functionality embedded within items to detect when recipients have viewed an item—Outlook 2010 is configured by default to not automatically download pictures or other content from external servers on the Internet.

You can lock down the settings to customize automatic picture download by using the Outlook 2010 Group Policy template (Outlk14.adm). Or you can configure default settings by using the OCT. If this is the case, users can change the settings. The OCT settings are in corresponding locations on the **Modify user settings** page of the OCT.

- To configure options for automatic picture download behavior in Outlook by using Group Policy
 - 1. In Group Policy, load the Outlook 2010 template (Outlk14.adm).
 - 2. Under User Configuration\Administrative Templates\Microsoft Outlook 2010\Security, click Automatic Picture Download Settings.
 - 3. Double-click the option that you want to configure. For example, double-click **Do not permit** download of content from safe zones.
 - 4. Click Enabled.
 - 5. If appropriate, select a radio button for the option that you want to set, or select an option from a drop-down list.
 - 6. Click OK.
- To configure options for automatic picture download behavior in Outlook by using the Office Customization Tool
 - In the OCT, on the Modify user settings page, under Microsoft Outlook 2010\Security\Automatic Picture Download Settings, double-click the option that you want to configure. For example, double-click Include Intranet in Safe Zones for Automatic Picture Download.
 - 2. Select a radio button for the option that you want to set.
 - 3. Click OK.
 - 4. Complete other Outlook 2010 or Office 2010 configurations, and on the **File** menu, click **Save** to create the customization file that you can deploy to users.

See Also

<u>Plan for limiting junk e-mail in Outlook 2010</u> (http://technet.microsoft.com/library/0f5ba39c-0d39-4ffc-be4d-1222ddb63769(Office.14).aspx)

Customize Outlook profiles by using an Outlook Profile (PRF) file

The Microsoft Outlook 2010 profile file (.prf) allows you to quickly create Messaging Application Programming Interface (MAPI) profiles for users. By using a .prf file, you can set up new profiles for users or modify existing profiles without affecting other aspects of your installation. You can also manually edit a .prf file to customize Outlook 2010 to include Outlook settings or MAPI services that are not included in the Office Customization Tool (OCT) user interface.

In this article:

- Overview
- Before you begin
- Create a .prf file
- Manually edit a .prf file
- Apply a .prf file

Overview

As in earlier versions of Outlook, you can continue to use the .prf file to provide options for specifying additional Outlook settings or MAPI services and to verify account settings.

The Outlook 2010 .prf file format has changed but Microsoft Office Outlook 2007, Office Outlook 2003, and Outlook 2002 versions of the file will work with Outlook 2010. If you plan to make updates to the .prf file for the Outlook 2010 deployment, we recommend that you re-create the .prf file by using the Office Customization Tool (OCT), export the settings to a new .prf file, and use that file to specify the additional Outlook settings or MAPI services that you need.

Before you begin

Before you begin deployment, review Planning overview for Outlook 2010 (http://technet.microsoft.com/library/9eabd5ec-3f76-4048-b98b-f11aa85cc544(Office.14).aspx) to determine which settings you might want to configure by using a .prf file.

Procedures

To create an Outlook 2010 .prf file, you can configure profile settings by using the OCT, and then export the settings to a .prf file. This process creates a new Outlook 2010 .prf file that includes your specifications.

You can also specify profile settings by editing an existing .prf file manually by using a text editor. This existing .prf file might be one that you created by using the OCT, or a .prf file from an earlier version of Outlook. However, the .prf file format has changed in Outlook 2010. Therefore, we recommend that you re-create the older .prf file to prevent unexpected behavior.

Create a .prf file

To create a PRF file by using the Office Customization Tool

- 1. From the root of the network installation point, run the following command line to start the Office Customization Tool: \\server\share\setup.exe /admin
- 2. To edit an existing customization file (.msp), in the **Select Product** dialog box, click **Open an existing Setup customization file**. Or to create a new customization file, select the Office suite that you want to customize, and then click **OK**.
- 3. In the **Outlook** area, click **Outlook Profile**. Select how you want to customize profiles for users. To specify settings to be included in a .prf file, choose **Modify Profile** or **New Profile**.
- 4. To add and configure new accounts or to modify or remove existing accounts, click **Add** accounts, and then click **Customize additional Outlook profile and account information**.
- Once you complete the Outlook profile configurations, in the Outlook area, click Export settings.
- 6. Click the **Export Profile Settings** button to create a new .prf file. Enter a file name and the path on which to save the file, and then click **Save**.

Manually edit a .prf file

When you manually change a text file, you can introduce errors that cause Outlook to behave incorrectly. You should not edit and deploy a manually modified .prf file unless you have no other way to update user profiles. If possible, you should use the OCT to create and deploy .prf files.

To manually update a .prf file

- 1. Open the .prf file by using a text editor such as Notepad.
- 2. Make your changes or additions. By manually editing the .prf file, you can add any MAPI service that is supported by Outlook 2010. The .prf file includes detailed comments for each section that describe existing settings and options for modifying the file that has your updates. The file includes the seven sections shown in the following table.

Ocation	Description
Section	Description

Section 1 – Profile defaults

String identifiers found to the left of the equal sign (=) in this section (ProfileName, DefaultProfile, and so on) are defined in the .prf processor in Outlook and cannot be modified externally. These are default settings that are used to set up a user profile.

For example:

[General]
Custom=1
ProfileName=EveryAccount

An existing profile can be either overwritten or updated when a new .prf file is executed. Several settings control how the new settings are applied:

- The OverwriteProfile setting can be set to Yes, Append, or No. To update existing profiles, set the value to Append. This preserves the existing profile and updates the sections that have been changed. To overwrite existing profiles with a new profile, set the value to Yes. To prevent overwriting an existing profile, set the value to No.
- The ModifyDefaultProfileIfPresent setting can be set to True or False. When set to True, Outlook will modify the default profile even if the new and existing profile names are different.

Section 2 – Services in Profile This section includes the list of services to be configured in the client. The services are listed in the order in which they are added to the profile. Each service listed here is defined and referenced in Section 4. For example: [Service List] ;ServiceX=Microsoft Outlook Client ServiceEGS1=Exchange Global Section Service1=Microsoft Exchange Server You can add any MAPI service that is supported by Outlook 2010. The following services were supported in earlier versions of Outlook, and should not be added: MS Mail Symantec WinFax Lite AW Fax Section 3 - List of Internet Internet accounts can be POP or IMAP e-mail accounts. This section lists the Internet accounts that will be accounts defined and referenced in Section 5. For example: [Internet Account List] Account1=I Mail Account2=IMAP_I_Mail

Section 4 – Default values for each service

This is the section to which you can add properties or change existing property values for the services in the profile. MAPI profile properties are defined for services under each respective [ServiceN] heading. Valid Profile Property names are determined by the MAPI profile property mapping in Section 6.

For example:

[Service1]

OverwriteExistingService=No

UniqueService=Yes

MailboxName=%UserName%

To allow each service definition to be customized individually, you can duplicate default variables and values in Section 4 under the separate headings (Service1, Service2, and so on) for each service in the profile.

For each service to be updated, the

OverwriteExistingService setting can be set to Yes or No. Set the value to Yes so properties are re-created for that service. The default for OverwriteExistingService setting is No. If No is specified, the service will not be updated, even if new settings have been listed.

Section 5 – Values for each Internet account

This section defines values for the POP and IMAP e-mail accounts referenced in Section 3. Internet account properties are listed similarly to service properties, by using [AccountN] heading notations. Valid Profile Property names are determined by the MAPI profile property mapping in Section 7.

For example:

[Account1]

UniqueService=No

AccountName=POP Account

POP3Server=pop.mail.ms.com

Section 6 – Mapping for profile properties

You typically do not modify existing entries in Sections 6 and 7. These sections define mappings for information that is defined elsewhere in the file to registry key settings. However, if you define new services in the .prf file, you must add the appropriate mappings for those services to Sections 6 and 7.

Section 6 lists each service name that Outlook supports and the numeric MAPI profile property values that correspond to the registry keys that the Outlook .prf processor implements when storing the profile properties.

All values listed in Section 6 map directly to HKEY_CURRENT_USER\Software\Microsoft\Windows NT\CurrentVersion\Windows Messaging Subsystem\Profiles\ProfileName registry entries, where ProfileName is replaced by the name of the corresponding profile. When a service is added, a new GUID is created for it.

The Exchange sections have predefined GUIDs assigned because they are unique services. A service can have more than one section GUID. Therefore, the number of GUIDs in the registry does not always correspond to the number of services that Outlook has "registered."

Section 6 includes several mapping strings for profile properties. This makes the .prf file very flexible. If you know the specific property that you want to change, you can write a .prf file that has the appropriate properties in Section 6 and the appropriate corresponding property values in Section 4, which allows the property to be deployed.

Section 7 – Mapping for Internet account properties. DO NOT MODIFY.

This section corresponds to the mapping for the specified [AccountN] accounts in Section 5. There is a GUID in the Profile section (GUID 9375CFF0413111d3B88A00104B2A6676) that expands and lists DWORD data types. Each of these DWORD types corresponds to an Account in the .prf file. There might be more than one DWORD registry key per account. Therefore, as with Services, there is not a one-to-one mapping for Accounts.

The same registered property types are present here as are listed in Section 6, and the same notation is provided for MAPI profile property mapping. The separate sections (2, 4, 6 and 3, 5, 7) are an artifact of Internet Only (OMI) and Corporate Workgroup modes. Because OMI was stored in a different location in the registry for earlier versions of Outlook, and migration code depends on values being in a consistent format, you should not modify this section even if you are deploying updates for a version of Outlook later than Outlook 2000.

3. Once you have completed your changes, save the file. For instructions about how to apply the .prf file, see the following section, Apply a .prf file.

Apply a .prf file

You can apply a .prf file in several ways to update Outlook profiles.

To apply a .prf file by using the customization file

- 1. From the root of the network installation point, run the following command line to start the OCT: \\server\share\setup.exe /admin
- To edit an existing .msp file, in the Select Product dialog box, click Open an existing Setup customization file. Or to create a new customization file, select the Office suite that you want to customize, and then click OK.
- 3. In the Outlook area, click Outlook Profile. Select Apply PRF, and then browse to the file.
- 4. On the File menu, click Save to save the .msp file.
- 5. Exit the OCT.
- 6. Put the .msp file in the Office installation source \Updates folder.
- 7. Install Office 2010 from the original installation source.

To apply a .prf file by using other options

 Specify the .prf file as a command-line option for Outlook.exe to import a .prf file without prompting the user. For example: outlook.exe /importprf \\server1\share\outlook.prf. Specify the .prf file as a command-line option for Outlook.exe, but prompt the user before
importing the .prf file. For example: outlook.exe /promptimportprf \localfolder\outlook.prf. If
you put the specified .prf file in a shared folder on a network, the settings might not be applied if
the file is not found or is not available when Outlook runs.

See Also

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

<u>Planning overview for Outlook 2010</u> (http://technet.microsoft.com/library/9eabd5ec-3f76-4048-b98b-f11aa85cc544(Office.14).aspx)

Configure SharePoint Workspace 2010

This section provides information and procedures for installing, configuring, and testing Microsoft SharePoint Workspace 2010, a client to Microsoft SharePoint Server 2010 and Microsoft SharePoint Foundation 2010.

In this section:

Article	Description
Configure and customize SharePoint Workspace 2010	Provides information and procedures for installing and configuring SharePoint Workspace 2010, a client to SharePoint Server 2010 and SharePoint Foundation 2010.
Test SharePoint Workspace connections	Provides information and procedures for testing SharePoint Workspace 2010 connections to and synchronization with SharePoint Server 2010 and client peers.

Configure and customize SharePoint Workspace 2010

This article provides information about how to deploy Microsoft SharePoint Workspace 2010, a client to Microsoft SharePoint Server 2010 and Microsoft SharePoint Foundation 2010. SharePoint Workspace 2010 provides anytime interactive access to document libraries and lists at a designated SharePoint site, and provides options for creating Groove peer workspaces and Shared Folder workspaces.

SharePoint Workspace 2010 is included with Microsoft Office Professional Plus 2010.

For an overview of SharePoint Workspace 2010, see <u>SharePoint Workspace 2010 overview</u> (http://technet.microsoft.com/library/650cb781-4dbd-45ac-b8d3-2ce9b3a16600(Office.14).aspx).

In this article:

- Before you begin
- Review customization options for SharePoint Workspace 2010
- <u>Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office</u>
 <u>Customization Tool settings</u>
- Verify installation

Before you begin

Before you start deployment, address the following prerequisites:

- Confirm that your setup meets required hardware and software requirements, specified in <u>System requirements for Office 2010</u> (http://technet.microsoft.com/library/399026a3-007c-405a-a377-da7b0f7bf9de(Office.14).aspx).
- Address the planning steps in <u>Plan for SharePoint Workspace 2010</u>
 (http://technet.microsoft.com/library/e8a433c1-ea1f-4cf7-adc8-50972f58d465(Office.14).aspx).
- Confirm that Internet Explorer 6 or later versions are installed on client computers, with a 32-bit browser.
- Confirm that SharePoint Workspace port settings comply with the specifications in Plan for SharePoint Workspace 2010 (http://technet.microsoft.com/library/e8a433c1-ea1f-4cf7-adc8-50972f58d465(Office.14).aspx). SharePoint Workspace 2010 is installed with Windows Firewall turned on and exceptions enabled to support SharePoint Workspace server and client communications. To review or change these settings, open Control Panel, click System and Security, click Windows Firewall, click Change notification settings, and then change or review the settings.
- If you use Active Directory Domain Services (AD DS) and want to customize SharePoint
 Workspace deployment for Active Directory system group members, make sure that you have
 appropriate administrative permissions on the Active Directory system and identify the group to
 which you want to deploy SharePoint Workspace policies.
- Review customization options in <u>Review customization options for SharePoint Workspace 2010</u>, later in this article.

- If you are integrating SharePoint Workspace with SharePoint Server 2010 sites, prepare SharePoint Server 2010 as follows:
 - Open incoming port 80 to support client/server communications.
 - Consider configuring Secure Socket Layer for the SharePoint Server-SharePoint Workspace communications port. This configuration is strongly recommended, because no default encryption security is in place.
 - Enable File Synchronization via SOAP over HTTP Protocol to support SharePoint synchronization with SharePoint Workspace.
 - Install Remote Differential Compression (RDC) on SharePoint Server. RDC supports File Synchronization via SOAP over HTTP Protocol and optimizes performance during document transfer between SharePoint Workspace and SharePoint Server. To verify RDC status, open Windows Server Manager on the SharePoint Server system and then click Add Features. In the Add Features Wizard dialog box, make sure that the Remote Differential Compression check box is selected, click Next, and follow the Wizard instructions to install. Or, you can install RDC from a Command Prompt window by typing the following: servermanagercmd install rdc. For more information about RDC, see About Remote Differential Compression (http://go.microsoft.com/fwlink/?LinkId=162305).
 - Ensure that SharePoint Server site administrators enable offline availability: On the SharePoint
 Central Administration Web site, click Site Actions, click Site Settings, in the Site
 Administration section, click Search and offline availability, and in the Offline Client
 Availability section, select Yes. This lets SharePoint Workspace clients access the site.
 - Configure access control settings for designated SharePoint sites to enable access by SharePoint Workspace users and groups. For more information about how to configure access to SharePoint sites, see <u>Managing Site Groups and Permissions</u> (http://go.microsoft.com/fwlink/?LinkID=162300).

Review customization options for SharePoint Workspace 2010

Customizing the SharePoint Workspace installation enables you to decide how SharePoint Workspace will be deployed and used. The following sections describe options for customizing SharePoint Workspace 2010 installation.

Control use of Groove workspaces

This option lets you prevent Groove workspaces and Shared Folders from being used in SharePoint Workspace, thus limiting SharePoint Workspace usage to SharePoint workspaces exclusively. You can set this option by configuring an Office Customization Tool (OCT) setting during SharePoint Workspace installation or by deploying a Group Policy object (GPO), as described in Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office Customization Tool settings.

Enable IPv6

This option lets you enable IPv6 for SharePoint Workspace installation. You can set this option by configuring an OCT setting during SharePoint Workspace installation or by deploying a GPO, as described in <u>Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office Customization Tool settings</u>.

Prefer IPv4

This option lets you specify that IPv4 is preferred over IPv6 for SharePoint Workspace 2010 on client computers. You can set this option by configuring an OCT setting during SharePoint Workspace installation or by deploying a GPO, as described in Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office Customization Tool settings.

Remove legacy files and registry settings

This option removes previous installations of SharePoint Workspace (Microsoft Office Groove 2007). You can also use these tools if you have special requirements that can only be enabled or disabled through the Windows Registry. For example, you can remove a Office Groove 2007 device management registry setting. You can set this option by configuring an OCT setting or by deploying a GPO, as described in Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office Customization Tool settings.

Prevent Windows Search crawling for SharePoint Workspace

This option prevents crawling of SharePoint Workspace paths by Windows Search. Crawling (creation of indexes) for Windows Search 4.0 is enabled by default for the following SharePoint Workspace content:

- Metadata for SharePoint workspaces and Groove workspaces for SharePoint Workspace 2010
- Metadata for all Groove workspace tools for SharePoint Workspace 2010
- The following Groove workspace content for SharePoint Workspace 2010: discussions, documents,
 Notepad entries, chat transcripts, member messages, and custom lists.

Users can start Windows Search 4.0 from SharePoint Workspace by clicking **Search** on the **Home** tab of the ribbon, unless prevented from doing this by administrative policy. To block Windows Search from crawling and searching SharePoint Workspace content and to override any user search settings, you can configure a Group Policy object in the Active Directory system to customize a SharePoint Workspace 2010 installation. The GPO prevents crawling of SharePoint Workspace content, removes **Search** from the ribbon in SharePoint Workspace, and cleans the Windows Search index of any previously crawled SharePoint Workspace data.

For more information about Windows Search, see <u>Windows Search Administrator Guide</u> (http://go.microsoft.com/fwlink/?LinkID=164567) and <u>Windows Search IT Guides</u> (http://go.microsoft.com/fwlink/?LinkId=163450).

For information about how to use a Group Policy object to prevent Windows Search of content, see Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office Customization Tool settings.

Force Secure Socket Layer protection for external connections

This option requires all communication from SharePoint Workspace clients to SharePoint Server to be Secure Socket Layer (SSL)-encrypted. You can set this option by configuring a SharePoint Server GPO for SharePoint Workspace 2010 installation as described in Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office Customization Tool settings.

For information about how to use a GPO to require SSL, see Customize SharePoint Workspace 2010 by using Active Directory Group Policy objects or Office Customization Tool settings

Customize SharePoint Workspace in a managed environment

If you use Microsoft Groove Server 2010 to manage SharePoint Workspace, you can further customize installation to make administrative tasks easier. For example, you can use Group Policy to configure policy settings, such as a Microsoft Groove Server 2010 assignment, that apply to an organizational unit in Active Directory. Or, you can configure an Office Resource Kit setting to require SharePoint Workspace users to automatically configure SharePoint Workspace user accounts for management in an environment that does not include Active Directory. For more information about deploying SharePoint Workspace in a Groove Server-managed environment, see Deployment for Groove Server 2010 (http://technet.microsoft.com/library/8d7d33c2-3954-489b-ac82-49f7da119489(Office.14).aspx).

Customize SharePoint Workspace 2010 by using **Active Directory Group Policy objects or Office Customization Tool settings**

You can customize SharePoint Workspace installations by deploying Active Directory Group Policy objects (GPOs) or by including an Office Customization Tool (OCT) .msp file together with the SharePoint Workspace installation kit. The method that you choose depends on the following deployment conditions:

- If intended SharePoint Workspace clients are members of an in-house Active Directory group and are connected to the Windows domain, you can configure Active Directory GPOs to customize client installations, as described in To customize SharePoint Workspace installation through Active Directory Group Policy objects.
- If your organization does not use an Active Directory server or if intended SharePoint Workspace clients are outside your Windows domain, use OCT settings to customize installation as described in To customize SharePoint Workspace installation through Office Customization Tool settings.



Note:

Decide on one customization approach to help ensure a smooth deployment. Do not use both GPOs and OCT settings. For more information about these customization options, see Group Policy overview (Office system) (http://go.microsoft.com/fwlink/?LinkID=162307) and Office Customization Tool in the Office system (http://go.microsoft.com/fwlink/?LinkID=162306).

If you use Groove Server 2010 Manager to manage SharePoint Workspace clients, you can use a combination of Groove Server 2010 Manager policies and GPOs or OCT settings to customize SharePoint Workspace installations. For information about Groove Server 2010 Manager policies, see Deploying policies to SharePoint Workspace users (http://technet.microsoft.com/library/5edf15f7-0233-4cf3-a855-3a41d1a59e57(Office.14).aspx). For information about how to customize SharePoint Workspace in a Groove Server 2010-managed environment, see Deploy SharePoint Workspace 2010 (http://technet.microsoft.com/library/24ec9cec-361b-4862-b5c3-d7ad5650c425(Office.14).aspx).

To customize SharePoint Workspace installation through Active Directory Group Policy objects

- 1. Address the requirements in <u>Before you begin</u>.
- Determine which Group Policy object (GPO) that you need to customize SharePoint
 Workspace for the management environment, based on the information in Review
 customization options for SharePoint Workspace 2010.
- 3. From the Active Directory server, access the required policies by downloading the AdminTemplates.exe file for Office 2010, available at the Microsoft Download Center (http://go.microsoft.com/fwlink/?LinkID=162268).
- 4. Double-click the AdminTemplates.exe file to extract the Administrative template files that enable you to edit Group Policy settings that apply to an Active Directory unit. The spw14.admx file (or .adml file for language-specific versions) contains SharePoint Workspace-specific policies.
- 5. If you are using a Windows Server 2008 computer, copy the ADMX\ADML files to folders as follows:
 - a. Copy the ADMX files (.admx) to your computer's Policy Definitions folder (for example, <systemroot>\PolicyDefinitions).
 - b. Copy the ADML language-specific resource files (.adml) to the appropriate language folder, such as en-us; for example, <systemroot>\PolicyDefinitions\[MUIculture].
 For more information about Group Policy object editing requirements and steps, see
 Requirements for Editing Group Policy Objects Using ADMX Files
 - (http://go.microsoft.com/fwlink/?LinkId=164568) and Managing Group Policy ADMX Files
 Step-by-Step Guide (http://go.microsoft.com/fwlink/?LinkId=164569).
- 6. From the Active Directory server, use the Group Policy Management Console (GPMC), accessible from gpedit.msc in the Microsoft Management Console, to change the policy settings that are contained in the .adm files.
- 7. In the tree view, locate **Group Policy Objects**, click the policy that you want to configure, and then in the details pane fill in the required fields to enable or change the policy. See <u>Group Policy for SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/83adbed1-63bc-4662-92b7-79b708f961c5(Office.14).aspx) for more guidance.
- 8. When you are finished editing the GPO in the GPMC, save the policy settings. The policy settings are saved in the registry.pol file, which the Group Policy program uses to store registry-based policy settings made through the use of the Administrative template extension.

For more information about Group Policy technology and use, see <u>Group Policy overview (Office system)</u> (http://go.microsoft.com/fwlink/?LinkId=162307) and <u>Enforce settings by using Group Policy in the Office system (http://go.microsoft.com/fwlink/?LinkID=78176&clcid)</u>.

To customize SharePoint Workspace installation through Office Customization Tool settings

- 1. Address the requirements in <u>Before you begin</u>.
- 2. Determine how you want to customize SharePoint Workspace, based on the information in Review customization options for SharePoint Workspace 2010.

- You can run the Office Customization Tool (OCT) from the Start menu by clicking Run, typing cmd to open a command window, going to the Office 2010 installation directory, and typing setup/admin. This opens the OCT tool.
 - Or, you can download the OTC from the Office 2010 installation media.
- 4. In the OCT tree view, locate **Features**, and then click **Modify user settings**. In the navigation pane, click SharePoint Workspace, SharePoint Server, or Search Server, depending on the type of setting that you want to configure.
- In the list pane, double-click the setting that you require, and change its properties as needed.
 See Office Customization Tool settings for SharePoint Workspace 2010
 (http://technet.microsoft.com/library/43008de2-5eef-4de1-b0e1-19b7ceeb68f6(Office.14).aspx)
 for more guidance.
- 6. When you are finished, click the **File** drop-down menu and then click **Save** to save your updated settings in a Microsoft setup customization file (.msp). For example, enter **spw.msp** as a file name.
- 7. Include the .msp file in the SharePoint Workspace deployment.

For more information about how to use the OCT, see Office Customization Tool in the Office system (http://go.microsoft.com/fwlink/?LinkId=162306).

Verify installation

Test SharePoint Workspace connections and synchronization as described in <u>Test SharePoint</u> Workspace connections.

See Also

<u>SharePoint Workspace 2010 overview</u> (http://technet.microsoft.com/library/650cb781-4dbd-45ac-b8d3-2ce9b3a16600(Office.14).aspx)

<u>Plan for SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/e8a433c1-ea1f-4cf7-adc8-50972f58d465(Office.14).aspx)

<u>Deployment for Groove Server 2010</u> (http://technet.microsoft.com/library/8d7d33c2-3954-489b-ac82-49f7da119489(Office.14).aspx)

<u>Group Policy for SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/83adbed1-63bc-4662-92b7-79b708f961c5(Office.14).aspx)

Office Customization Tool settings for SharePoint Workspace 2010

(http://technet.microsoft.com/library/43008de2-5eef-4de1-b0e1-19b7ceeb68f6(Office.14).aspx)

Test SharePoint Workspace connections

This article provides information and procedures for testing SharePoint Workspace 2010 connections to and synchronization with SharePoint Server 2010 and client peers.

In this article:

- Before you begin
- Test SharePoint Workspace synchronization with SharePoint Server
- Test Groove workspace synchronization among peer clients

Before you begin

Before you start testing, address the following prerequisites:

- Choose a SharePoint Workspace 2010 deployment topology and plan accordingly, as described in <u>Plan for SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/e8a433c1-ea1f-4cf7-adc8-50972f58d465(Office.14).aspx).
- For a SharePoint Server 2010-based topology, prepare SharePoint Server 2010, as described in <u>Configure and customize SharePoint Workspace 2010</u>.
- Customize SharePoint Server 2010 deployment, as described in <u>Configure and customize</u> SharePoint Workspace 2010.
- Follow the organization's standard client software deployment processes to install Office 2010 or SharePoint Workspace 2010 on target user desktops.
- Identify two SharePoint Server 2010 sites to synchronize with a test SharePoint Workspace 2010 client. Make sure that you are a member of these sites to that you can create and edit site content.
- Identify test SharePoint Workspace 2010 clients inside and outside the local firewalls.

Test SharePoint Workspace synchronization with SharePoint Server

The following procedure provides guidance for validating connections and content synchronization between SharePoint Workspace 2010 and SharePoint Server 2010, in support of SharePoint workspaces.

To test SharePoint Workspace connections and synchronization

- 1. Create a SharePoint workspace from a SharePoint site as follows:
 - a. Start SharePoint Workspace 2010 on a test client.
 - Browse to a SharePoint Server 2010 Central Administration Web site from a test SharePoint Workspace 2010 client.
 - c. From the SharePoint Server site, click the **Site Actions** drop-down menu and then click **Sync to SharePoint Workspace**.

- d. To download all the Document libraries and List content on the site to the local test client, click **OK** from the **Sync to Computer** dialog box that appears. To download selected content, click **Configure** in the dialog box, select the document libraries and lists that you want to download, and then click **OK**. Within a few moments, a new SharePoint workspace will be downloaded to your computer. The new workspace contains a copy of the requested SharePoint lists and libraries which you can edit while your online or offline.
- e. Experiment with editing a document or list from the SharePoint workspace while you are online, and then save your changes. These edits and updates will be synchronized automatically with the document and list content on the SharePoint site.
- f. Disconnect from the Internet and experiment with update the content from an offline state, and then save your changes. When you return online, these edits and updates will be synchronized automatically with the document and list content on the SharePoint site.
- 2. Verify that the client updates are visible on the SharePoint site as follows:
 - a. Reconnect to the Internet and browse to the SharePoint site. Or, for quick browsing from the SharePoint workspace that contains the SharePoint site content, open the SharePoint workspace and then click the site link next to the **Contents** pane in the SharePoint workspace.
 - b. Select **View all content** from the **Site Actions** drop-down menu and navigate to the document or list that you changed from the SharePoint workspace.
 - Wait several moments or refresh the screen to see the updates that you made from the client.
- 3. To verify that SharePoint site updates are visible in the SharePoint workspace, follow these steps:
 - a. Browse to the SharePoint site and update a document or list that you have synchronized with content in the test SharePoint workspace.
 - b. Open the SharePoint workspace that you created on the test client.
 - c. Wait a few moments for the site content to appear in the workspace. Or, click the **Sync** tab in the ribbon, click the **Sync** drop-down menu, and then select either, **Sync Tool** to synchronize with the current document library or list, or **Sync Workspace** to synchronize with all the documents and libraries on the site.
- 4. You can test a similar procedure, initiated from a SharePoint Workspace test client, as follows:
 - a. Start SharePoint Workspace 2010 on a test client.
 - b. From the SharePoint Workspace Launchbar, on the **Home** tab, click the **New** drop-down menu, and then select **SharePoint Workspace**.
 - c. Enter the URL to a SharePoint site in the Location text box.
 - d. Click Configure to access the site and select the content that you want to download, and then click OK. Within a few moments, a new SharePoint workspace will be downloaded to your computer. The new workspace contains a copy of the requested SharePoint lists and libraries which you can edit while your online or offline.
 - e. Experiment with editing document or lists as described previously in this procedure.

For more information about how to create SharePoint workspaces and how to use SharePoint Workspace 2010, see the SharePoint Workspace 2010 product information at Microsoft Office Online (http://go.microsoft.com/fwlink/?LinkID=162269).

5. If a test step fails, see <u>Troubleshoot SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/ff6ae209-ceab-4dcb-b5f5-a9c582f92a40(Office.14).aspx), resolve the problem, and run the test again.

Test Groove workspace synchronization among peer clients

SharePoint Workspace supports peer connections for Groove workspace and Shared Folder workspace types. The following procedures explain how to validate Groove workspace and Shared Folder workspace connections and peer synchronization.

To test Groove workspace synchronization

- From SharePoint Workspace client 1, start SharePoint Workspace 2010, then create a Groove workspace in SharePoint Workspace by clicking the New drop-down menu on the Home tab on the Launch bar and then clicking Groove workspace. Accept the default tools and configuration. Then invite SharePoint Workspace client 2 to the workspace.
 For more information about how to use SharePoint Workspace 2010 and how to create Groove workspaces, see the product information at Microsoft Office Online (http://go.microsoft.com/fwlink/?LinkID=162269).
- 2. From SharePoint Workspace client 2, accept the invitation. When the accepted invitation download is complete, open the new Groove workspace, click the **New Documents** option on the **Home** tab, and then add a document that contains some test content.
- From client 1, click the **Documents** item in the **Contents** pane, check for the new content that
 you added in the previous step, and then edit the document. Client 2 appears in the workspace
 Members list.
- 4. From client 2, look for the client 1 update in the test document.
- 5. Repeat these steps to test connections and synchronization between clients inside and outside the corporate LAN and for clients who have made offline contributions.
- 6. If a test step fails, see <u>Troubleshoot SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/ff6ae209-ceab-4dcb-b5f5-a9c582f92a40(Office.14).aspx), resolve this problem, and run the test again.

To test Shared Folder synchronization

From SharePoint Workspace client 1, start SharePoint Workspace 2010, and then create a test
folder in the Windows file system. Then create a shared folder in SharePoint Workspace by
clicking the **New** drop-down menu on the **Home** tab on the Launch bar, clicking **Shared**Folder, and specifying the test folder. Now invite SharePoint Workspace client 2 to the
workspace.

For more information about how to create shared folders and how to use SharePoint Workspace 2010, see the SharePoint Workspace 2010 product information at Microsoft Office Online (http://go.microsoft.com/fwlink/?LinkID=162269).

- 2. From SharePoint Workspace client 2, accept the invitation. When the folder download is complete, you will see the new folder in the Windows file system on client 2 and client 2 will appear in the workspace Members list. Now add a document that contains some test content to the folder.
- 3. From client 1, check for new content in the folder and client 2 in the workspace Members list. Then edit the document.
- 4. From client 2, look for the client 1 update in the test document.
- 5. Repeat these steps to test connections and synchronization between clients inside and outside the corporate LAN and for clients who have made offline contributions.
- 6. If a test step fails, see <u>Troubleshoot SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/ff6ae209-ceab-4dcb-b5f5-a9c582f92a40(Office.14).aspx), resolve this problem, and run the test again.

SharePoint Workspace peer connections are often supported in a managed environment where Microsoft Groove Server is deployed onsite. For more information about how to deploy these workspace types in a managed environment, see Deploy SharePoint Workspace 2010 (http://technet.microsoft.com/library/24ec9cec-361b-4862-b5c3-d7ad5650c425(Office.14).aspx).

See Also

<u>Deploy SharePoint Workspace 2010</u> (http://technet.microsoft.com/library/24ec9cec-361b-4862-b5c3-d7ad5650c425(Office.14).aspx)

Deploy Office 2010

This section helps you deploy and configure Microsoft Office 2010. It includes information about deployment scenarios, step-by-step installation instructions, and various methods that you can use to deploy Office 2010. Before you deploy Office 2010, we recommend that you review the information in Planning the deployment of Office 2010 (http://technet.microsoft.com/library/a5f49323-59c6-4bb3-8b6e-87a6c25d7b06(Office.14).aspx).

In this section:

Article	Description
Run Setup from a network installation point	Provides information and procedures to run Setup and apply any customizations that you specify.
Precache the local installation source for Office 2010	Provides information and procedures to deploy the local installation source separately before you deploy Office 2010. (Setup creates a local installation source on the user's computer when you deploy Office 2010.)
Run Setup from the local installation source to install Office 2010	Provides information and procedures to run Setup directly from the local installation source.
Deploy Office 2010 to users who are not administrators	Provides information about how to install Office 2010 on computers where users lack administrative permissions.
Deploy Office 2010 with limited network capacity	Provides information about how to deploy Office 2010 in an environment that has limited network resources.
Deploy Office 2010 by running Setup from a network share	Provides information about how to run Setup from a network installation point to deploy Office 2010, and how to test in a nonproduction environment before you deploy to a production environment.
Deploy Office 2010 by using System Center Configuration Manager 2007	Provides detailed technical guidance on the processes and procedures when you use Microsoft System Center Configuration Manager 2007 to deploy Office 2010 in a medium- to large-sized organization.
Deploy Office 2010 by using System Center Essentials 2010	Provides detailed technical guidance on the processes and procedures when you use Microsoft System Center Essentials 2010 to deploy Office 2010 in a medium-sized organization.

Article	Description
Deploy Office 2010 by using Group Policy computer startup scripts	Provides detailed technical guidance on the processes and procedures when you use Group Policy to assign computer startup scripts to deploy Office 2010.
Deploy Office 2010 by using Microsoft Application Virtualization	Provides detailed technical guidance on the processes and procedures when you use Microsoft Application Virtualization (App-V) to deploy Office 2010 in a medium-sized organization.
Deploy Microsoft Silverlight with Office 2010	Provides information about how to install Microsoft Silverlight along with Microsoft Office 2010 to improve the information worker user experience with Office 2010.

Run Setup from a network installation point

After you create a network installation point for Microsoft Office 2010, you can install Office on a user's computer by running the Setup program. Setup handles all the installation functions for Office 2010. This includes applying any customizations that you specify.

For information about how to create a network installation point, see <u>Create a network installation point</u> for Office 2010.

Office 2010 introduces native 64-bit versions of Office products to take advantage of the larger capacity of 64-bit processors. This lets users work with much larger data sets than they previously could and to analyze and solve large computational problems. This additional capacity is only needed by Office users who require Microsoft Excel spreadsheets that are larger than 2 gigabyte (GB), for example. The 32-bit version of Office 2010 provides the same functionality and is also compatible with 32-bit add-ins, which is why Office 2010 installs the 32-bit version by default. The 64-bit Office client installs only on 64-bit editions of Windows Vista with Service Pack 1 and 64-bit editions of Windows Server 2008 with Service Pack 1. For more information, see 64-bit editions of Office 2010

(http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).

For information about how to customize the installation, see the following resources:

- Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)
- Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)
- Customize Office 2010
- Customize Setup before installing Office 2010

Install an Office 2010 product

Use the following procedure to install an Office 2010 product by running Setup from a network installation point.

To install an Office product

- If you created a Setup customization file (.msp file) by using the Office Customization Tool
 (OCT), copy the file to the Updates folder that is located in the root of the network installation
 point. For information about how to use the OCT, see Office Customization Tool in Office 2010
 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).
- To customize the Config.xml file, edit the copy of Config.xml that is located in the product folder on the network installation point. For example, the product folder for Microsoft Office Professional Plus 2010 is ProPlus.WW. For information about how to use the Config.xml file, see <u>Config.xml file in Office 2010</u> (http://technet.microsoft.com/library/e16af71c-fed4-40daa886-95e596c3999e(Office.14).aspx).
- Run Setup.exe from the root of the network installation point. Setup installs the product that
 resides in the network installation point and applies the customizations that you entered in the
 Config.xml file and in the Setup customization file.



Important:

If you want to install 64-bit Office 2010, run Setup.exe from the x64 folder. For example, navigate to the \server\share\Office14\x64 folder in the network installation point, and then double-click Setup.exe.

If there are multiple Office products on the network installation point, Setup prompts you to select the product that you want to install. You can also identify the product to install by using the /config command-line option to specify the Config.xml file that resides in the core product folder for that product. For example, to install Office Professional Plus 2010, run the following command: \\server\share\Office14\setup.exe /config \\server\share\Office14\ProPlus.WW\Config.xml

Setup installs the product associated with the Config.xml file that you specify without prompting you to select the product. For information about the /config setup command-line option, see /config [path] (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731.aspx#BKMK_config) in Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx).

For information about the setup process, see Setup architecture overview for Office 2010 (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx).

See Also

Create a network installation point for Office 2010

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx)

Precache the local installation source for Office 2010

When you deploy Microsoft Office 2010, Setup creates a local installation source on the user's computer — a copy of the compressed source files for the Office product that you install. After the files have been copied to the user's computer, Setup completes the installation from the local installation source. You can minimize the load on a network by deploying the local installation source separately, before you deploy Office.

Deploy the local installation source

Use the following procedure to deploy the local installation source before you deploy Office 2010.

To deploy the local installation source separately

- On the network installation point, open the Config.xml file in a text editor, such as Notepad. For information about the Config.xml file, see <u>Config.xml file in Office 2010</u>
 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

 By default, Config.xml is located in the core product folder for the Office product that you are installing. For example, if you install Microsoft Office Professional Plus 2010, open the Config.xml file in the ProPlus.WW folder.
- 2. Find the **LIS** element (**<LIS>**); remove the comment marks in the line by deleting the opening **<!--** and closing **-->** tags.
- 3. Set the **<CACHEACTION>** attribute to **"CacheOnly"**.

The line in Config.xml should look as shown in the following example.

```
<LIS CACHEACTION="CacheOnly" />
```

- 4. Save the Config.xml file.
- Run Setup.exe on users' computers; on the Setup command line, specify the path of the modified Config.xml file.

You must use a fully qualified path. For example: \\server\share\Office14\setup.exe /config \\server\share\Office14\ProPlus.WW\Config.xml

where Office 14 is the root of the network installation point.



If you precache the local installation source on users' computers and then later have to remove it, you can set the **<CACHEACTION>** attribute to **"RemoveCacheOnly"** and run Setup again. This setting works only if users have not yet installed Office.

Precaching lets most of the installation activity occur on the local computer instead of over the network. Precaching also lets you coordinate the upgrade to the new version. You can distribute the local installation source to groups of users over time and then schedule a concurrent installation throughout the organization without overtaxing the network.

To take full advantage of precaching the local installation source, use the Setup.exe file from the local cache and only pass in the optional files, the Setup customization file (.msp file), and the custom Config.xml file from a network installation source. You must use the fully qualified path of these files. If the share names contain spaces, use quotation marks around the paths as shown in the following example.

"C:\MSOCache\All Users\{10140000-0011-0000-0000-0000000FF1CE}-C\setup.exe" /adminfile "\\server\share\Office 14\mychanges\db_outlookonly.msp" /config "\\server\share\Office 14\ProPlus.WW\Config.xml"

where:

/adminfile specifies the location of the .msp file.

/config specifies the location of the customized Config.xml file.

Setup handles the creation and maintenance of the local installation source automatically. The default location is \MSOCache\All Users at the root of the drive on which Office is installed. In addition to installing Office from the local installation source, Setup uses the local installation source to repair, reinstall, or update Office later. If the local installation source is corrupted or deleted, Setup uses the original source on the network to repair or re-create it. For information about the /adminfile and /config setup command-line options, see /adminfile [path] (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731.aspx#BKMK_adminfile) and /config [path]

(http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731.aspx#BKMK_config) in Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx).



Note:

If you set the installation location for Office to another location (for example, by entering a new value for the INSTALLLOCATION attribute in Config.xml), Setup creates the local installation source at that location.

See Also

Setup architecture overview for Office 2010 (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

Run Setup from the local installation source to install Office 2010

Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

Create a network installation point for Office 2010

Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx)

Run Setup from the local installation source to install Office 2010

When you deploy Microsoft Office 2010 in your organization, Setup creates a local installation source on each user's computer, and then installs Office from that location. You can reduce the load on a network by separating these two parts of the installation process. First, run Setup to distribute the local installation source to users; later, run Setup again to complete the installation.

Because the local installation source also includes a copy of Setup, you can go one step further and run Setup directly from the local installation source, instead of running it over the network. This strategy lets you minimize the load on the network and still upgrade everyone to the new version at the same time.

- In this article:Run Setup
- MSOCache folder
- Office product download codes

Run Setup

To run Setup, you must identify the subfolder in MSOCache\All Users that contains the core product that you want to install. See MSOCache folder later in this article. Setup.exe is located in the same folder that contains the core product file rproduct_name>WW.msi, for example, ProPlusWW.msi. For example, for Microsoft Office Professional Plus 2010, the core product file is ProPlusWW.msi, and the folder that contains Setup.exe is {10140000-0011-0000-0000-0000000FF1CE}-drive. The folder includes files, such as the following:

- Office64WW.msi
- Office64WW.xml
- Ose.exe
- Osetup.dll
- OWOW64WW.cab
- ProPsWW.cab
- ProPlusWW.msi
- ProPlusWW.xml
- Pkeyconfig-office.xrm-ms
- Setup.exe
- Setup.xml

To run Setup from the local installation source

- Distribute the local installation to users.
 For information about this step, see <u>Precache the local installation source for Office 2010</u>.
- 2. Locate the download code for the Office product that you want to install. Download codes are

included in the Setup.xml file in the core product folder. For example, locate the line in Setup.xml that contains the **LocalCache** entry as in this example from Office Professional Plus 2010:

<LocalCache DownloadCode="{10140000-0011-0000-0000-0000000FF1CE}"
SkuComponentDirectory="ProPlus.WW">

3. Run Setup.exe from the subfolder in MSOCache\All Users that corresponds to the download code. You can use a relative path to point to the location of Setup.exe on each user's computer.

For example, if you deployed the local installation source for Microsoft Office Professional Plus 2010 on the C drive, use the following command line:

C:\MSOCache\All Users\{10140000-0011-0000-0000-0000000FF1CE}-C \setup.exe

You can send the Setup.exe command line to users by whatever means that you want — for example, in a log-in file or a batch file.

MSOCache folder

The default location of the local installation source is \MSOCache\All Users at the root of the drive on which Office is installed. Setup copies each package from the network installation point to a separate subfolder under MSOCache\All Users. The subfolder for the core product package includes a copy of Setup.exe that defaults to installing that product. Subfolders under MSOCache\All Users are named according to the download code for each package, instead of the folder naming convention used on the network installation point.

The letter appended to the end of each download code (-*C* in the previous example) indicates the drive on which the local installation source for that product is installed. If a user has installed multiple Office products on different drives, each drive contains a local installation source in the MSOCache\All Users folder. The drive letter in the download code enables Windows Installer to identify the correct location for the specified product.

In the precache scenario only, Setup also copies the Updates folder from the network installation point to the local installation source. You can store both Setup customization files (.msp files) and software update files (.msp files) in the Updates folder and automatically include them in the installation. You gain the benefits of an offline installation without losing any of your customizations.

Office product download codes

Download codes for each Office product can be found in the Setup.xml file in the core product folder. The line in the Setup.xml file for Office Professional Plus 2010 should look as shown in the following example:

<LocalCache DownloadCode="{10140000-0011-0000-0000-000000FF1CE}"
SkuComponentDirectory="ProPlus.WW">

See Also

Precache the local installation source for Office 2010

<u>Setup architecture overview for Office 2010</u> (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

Deploy Office 2010 to users who are not administrators

In the Windows environments that support the Microsoft Office 2010, by default, users have limited access to system areas of the computer. Because the Office Setup program writes to system areas of the operating system and the Windows registry, a user must have administrative permissions on the local computer to install Office.

To install Office 2010 on computers where users lack administrative permissions, you must run Setup in a context that provides it with administrative permissions. After Office is installed, users without administrative permissions can run all installed features, and can install features on demand.

In organizations where users are not the administrators of their computers, administrators can use the following ways to provide Office Setup with the appropriate permissions:

- Log on to the computer as an administrator and install Office 2010.
- Use a software management tool, such as Microsoft System Center Configuration Manager 2007, Microsoft System Center Essentials 2007, Systems Management Server (SMS) 2003, or a third-party software deployment tool.
- Deploy Office 2010 to computers by using Group Policy computer startup scripts.
- Use application virtualization.

After the initial installation is performed with administrative permissions, all later installations — including installation on demand and automatic repair of features — also run with those permissions.



Important:

Two general Windows policy settings that help install previous versions of Office are not supported in Office 2010 or in the 2007 Office system: the Windows Installer Always install with elevated privileges policy setting and the Enable user to use media source while elevated policy setting (these settings are in the Computer Configuration\Administrative Templates\Windows Components\Windows Installer node in Group Policy Object Editor). Setting the Always install with elevated privileges policy setting allows a user without administrative permissions to the computer to install any Windows Installer package. Similarly, setting the Enable user to use media source while elevated policy setting allows users without administrative permissions to install programs from a CD. In both cases, the installation runs with elevated privileges, and the user has unlimited access to system files and the registry. Setting either of these policy settings leaves the computer highly vulnerable, potentially allowing an attacker to run malicious code on the computer. Using these policy settings to allow a user who is not an administrator to install Office will not work with the 2010 or the 2007 version of Setup and is not supported in Office 2010 or in the 2007 Office system.

In this article:

- Logging on as an administrator
- Deploying Office by using Group Policy computer startup scripts
- Deploying Office by using Group Policy computer startup scripts
- Using application virtualization

Logging on as an administrator

You can install Office 2010 on a user's computer by logging on to the computer by using an administrator account. This provides the administrative permissions that you need for Office Setup to access restricted areas of the user's computer. Once Office is installed, users have no further need for administrative permissions to run Office applications.



Note:

For security reasons, applying a software update (.msp file) to an Office installation always requires administrative permissions, even if the original installation was performed with administrative permissions.

Using a software management tool

A software management tool, such as System Center Configuration Manager 2007 or SMS, can run Office Setup in an administrative context on the user's computer.

Administrators can also use System Center Essentials 2007 to deploy Office 2010 and the 2007 Office system. System Center Essentials 2007 is a management solution that was designed for IT system administrators in mid-sized organizations that include up to 30 servers and 500 client computers.

For more information, see Deploy Office 2010 by using System Center Configuration Manager 2007 and Deploy Office 2010 by using System Center Essentials 2010.

Deploying Office by using Group Policy computer startup scripts

Administrators can use Group Policy to assign computer startup scripts to deploy Office 2010 (and the 2007 Office system). Scripts can be written in any language that is supported by the client computer. Windows Script Host-supported languages, such as Microsoft Visual Basic Scripting Edition (VBScript) and Jscript, and command files are the most common. For more information, see Deploy Office 2010 by using Group Policy computer startup scripts.

Using application virtualization

Administrators can use Microsoft Application Virtualization (App-V) to deploy Office 2010. The application is published on a local client computer, and the application remains in a virtual environment. Applications run locally in a virtual environment, and are not installed on the local computer. For more information about virtualization types, technologies, and deployment methods, see Plan for virtualization for Office 2010 (http://technet.microsoft.com/library/75fe8f8b-e455-4c54-a516-8e6cce77664f(Office.14).aspx) and Deploy Office 2010 by using Microsoft Application Virtualization.

See Also

Deploy Office 2010 by using Group Policy computer startup scripts

Deploy Office 2010 by using System Center Configuration Manager 2007

Deploy Office 2010 by using System Center Essentials 2010

Plan for virtualization for Office 2010 (http://technet.microsoft.com/library/75fe8f8b-e455-4c54-a516-8e6cce77664f(Office.14).aspx)

Deploy Office 2010 by using Microsoft Application Virtualization

Deploy Office 2010 with limited network capacity

If you are deploying Microsoft Office 2010 in an environment that has limited network resources, the Setup architecture in Office 2010 lets you minimize the demand on the network and still ensure that all users install the new version at exactly the same time.

For example, your organization has distant branch offices that connect to the corporate network over a limited or expensive wide area network (WAN), or you have a higher-capacity corporate network that supports thousands of users. If you distribute Office 2010 by using a typical logon script, and 10,000 users access the network at the same time, they might have to wait too long for 500 MB of installation files to travel over the network.

In these kinds of environments, you can distribute the Office 2010 source files to users over time. Once your targeted user groups have a local installation source deployed on their computers, you can schedule a concurrent installation of Office without overtaxing the corporate network.

For information about customization for Office 2010 clients, we recommend that you read the following articles before you customize the installation: <u>Customization overview for Office 2010</u> and <u>Volume activation overview for Office 2010</u> (http://technet.microsoft.com/library/0735c1f5-f874-41f1-b9a9-dbea158524b2(Office.14).aspx).

In this article:

- Recommended solution
- How this solution works

Recommended solution

To distribute Office 2010 source files over time, follow these steps:

- 1. Create a network installation point for Office 2010
- 2. Customize Office 2010
- 3. Precache the local installation source for Office 2010
- 4. Run Setup from the local installation source to install Office 2010

How this solution works

This deployment strategy works because Setup always installs Office 2010 products in two stages. First, Setup copies all required installation files from the network installation point to a hidden folder on the local computer. Second, Setup calls Windows Installer to perform the installation from each user's local installation source. Separating these two phases of the process lets you manage the load on the network more efficiently.

You configure Office 2010 before you distribute the local installation source. To specify most user configuration options, you run the Office Customization Tool (OCT) to generate a Setup customization file (.msp file). We recommend that you store the customization file for initial installations in the Updates folder at the root of the network installation point. For information about how to customize the

installation by using the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx).



Note:

If you plan to deploy multiple Setup customization files (.msp files), you can place only one customization .msp file in the Updates folder for an initial installation. You must deploy the rest of the customization .msp files after the installation of Office 2010 is completed. Only one Setup customization file in the Updates folder is supported. The customization .msp file that you place in the Updates folder will be deployed first. Therefore, it must include any Setup customizations that cannot be changed after the installation (for example, the installation location).

For some customizations, such as specifying additional languages, you must edit the Config.xml file for the product that you are installing. You also edit the Config.xml file to specify that Setup deploy only the local source. For information about how to specify additional languages and how to use the Config.xml file, see Customize language setup and settings for Office 2010 and Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

When the customizations are complete, you run Setup to distribute the local installation source to one group of users at a time. You can use any distribution method, such as a logon script, a batch file, or an enterprise software deployment tool such as Microsoft Systems Management Server, Microsoft System Center Configuration Manager 2010, or a third-party tool. In the precache scenario only, Setup copies the Updates folder from the network installation point to the local source. All the customizations are included in the local source.

Setup also includes a copy of itself in the local installation source. After your targeted users have a local installation source on their computers, you can trigger Setup to run from the local source and complete the installation at the scheduled time. The installation, including application of the customizations and software updates, occurs locally without file transfers or any other activity over the network.



Note:

When Setup installs Office 2010 from the local installation source, it does not return to the original network installation point to look for new customization files or software updates. Only the files cached in the local installation source on the user's computer are applied. If you make additional customizations or add new software updates to the network installation point after you precache the local source, you must distribute them separately, after Office is installed.

See Also

Setup architecture overview for Office 2010 (http://technet.microsoft.com/library/f022a92a-2c32-44b7-996d-09e671a41e9c(Office.14).aspx)

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

Customization overview for Office 2010

Customize language setup and settings for Office 2010

Deploy Office 2010 by running Setup from a network share

This article provides information about how to run Setup from a network installation point to deploy Microsoft Office 2010. It also includes information about how to test in a nonproduction environment before you deploy to a production environment.

One of the options that organizations can use to deploy Office 2010 is to run Setup from a network installation point. A network installation point is a network shared folder that contains the Office 2010 source files, language packs, and any Setup customization (.msp) files that you want to deploy. If you are deploying Office 2010 after product updates are released, you can also store the updates in the Updates folder of the Office 2010 source so that users receive the updates with the product installation.

This article provides information about the test environment used to test the network share deployment method. It does not provide instructions for how to install the server and client computer operating systems. For more information, see Resources for configuring the test computers later in this article. In this article:

- Deploying in a test environment
- Running Setup from the network installation point

The Office 2010 activation method uses Office Activation Technologies, based on the Software Protection Platform introduced in Windows Vista and Windows Server 2008. Microsoft policy requires the activation of all editions of Office 2010 client software. When you prepare to deploy Office 2010 to your production environment, you need to decide which activation method to use:

- Key Management Service (KMS) This method uses a KMS host key to activate a KMS host computer and establish a local activation service in your environment. Office 2010 connects to the local KMS host for activation.
- Multiple Activation Key (MAK) With a MAK, clients activate Office 2010 online with the Microsoft hosted activation servers or by telephone.
- A combination of KMS and MAK.

Volume License editions of Office 2010 are preinstalled with a KMS client key. If you only need to verify that Office 2010 and the customizations that you configure are deployed to client computers in your test environment, you do not need to install a product key. Users will not see reminders to activate the first 25 days after installation. If Office is not activated by the 25th day of the 30-day grace period, dialog boxes inform the user that activation is required every time that an application is started. If you want to prepare a MAK deployment, you will need to enter your MAK key in the Office Customization Tool (OCT).

Office 2010 introduces native 64-bit versions of Office products to take advantage of the larger capacity of 64-bit processors. This lets users work with much larger data sets than they previously could and to analyze and solve large computational problems. This additional capacity is only needed by Office users who require Microsoft Excel spreadsheets that are larger than 2 gigabyte (GB), for example. The 32-bit version of Office 2010 provides the same functionality and is also compatible with 32-bit add-ins. This is why Office 2010 installs the 32-bit version by default. We recommend this option. For more

information, see <u>64-bit editions of Office 2010</u> (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).

Office 2010 includes two architecture-specific folders: one for 32-bit and one for 64-bit. Each of these folders contains the following:

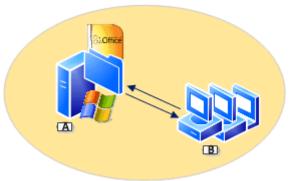
- A separate Config.xml file and Updates folder.
- An architecture-specific Office Customization Tool (OCT). The OCT files are located in the Admin folder for the x86 (32-bit) and x64 (64-bit) folders, respectively. The 64-bit version of the OCT provides the same user interface, capabilities, and configurable settings as the 32-bit version. Office 2010 introduces XML versions of OPA files: OPAX files (.opax) for nonlanguage-specific resources and OPAL files (.opal) for language-specific resources.

We recommend that you read the following articles before you customize Office 2010: Plan volume activation of Office 2010 (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx), Deploy volume activation of Office 2010, Customization overview for Office 2010, Create a network installation point for Office 2010, Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx), Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx), Customize Office 2010, and 64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).

Deploying in a test environment

To deploy Office 2010 by running Setup from a network installation point requires the use of a network shared folder for the network installation point, with access to the source files set as read-only.

The following graphic shows an example of a test network environment that has a server that runs Windows Server 2008 R2 with a shared folder (figure A), and client computers that are running Windows 7 (figure B).



Resources for configuring the test computers

The following resources provide information about Windows Server 2008 R2 and shared folders, and Windows 7:

- Install and Deploy Windows Server R2 (http://go.microsoft.com/fwlink/?LinkID=184708)
 - Shared folders (http://go.microsoft.com/fwlink/?LinkId=184710)
 - Share a Folder or Drive (http://go.microsoft.com/fwlink/?LinkId=184711)

- Set Permissions for Shared Folders (http://go.microsoft.com/fwlink/?LinkId=184712)
- Windows 7: Desktop deployment (http://go.microsoft.com/fwlink/?LinkID=184713)

In this section:

- Preparing the infrastructure
- Customizing the installation

Preparing the infrastructure

These instructions assume that you have installed the Windows Server 2008 R2 server and Windows 7 client computers, and you have configured a shared folder on the server.

To prepare the infrastructure for Office 2010 deployment, you create a network installation point on the network shared folder that you created previously, such as \\server\share. To do this, copy all the files and folders from the Office 2010 DVD to the shared folder on the network, and copy all the language packs that you want to deploy.

To create a network installation point

1. Create a folder for the Office source files at the network share location that you created previously. For example:

\\server\share\Office14



Note:

Do not create the network installation point at the root of the server.

- 2. Insert the Office DVD into the CD drive.
- 3. In Windows Explorer, select all the files and folders on the DVD. Copy the DVD contents to the folder on the network. This location becomes the network installation point.
- 4. If you deploy multiple language versions of Office 2010, copy each language pack that you want from the source media to the installation point. When you are prompted to overwrite duplicate Setup files, click No.



Note:

In Office 2010, core Setup files are shared among all Office products and language packs. Because these core Setup files are identical, there is no reason to overwrite the files if you add language packs, for example. Additionally, by not overwriting Setup files, the network installation point remains online and available to users while you add files.

5. If you deploy multiple Office 2010 products, copy those files from the DVD to the installation point. When you are prompted to overwrite duplicate Setup files, click No.

Note

In some enterprise organizations, the network installation point is the location from which users first install Office. After Office 2010 is installed, users do not typically have to rely on the network installation point to update, modify, or reinstall Office. Setup automatically creates a local installation source on each user's computer when it installs Office 2010. However, if the

local installation source is corrupted or deleted, Setup returns to the original network installation source to re-create the local source on the user's computer.

 We recommend that you replicate the network installation point to multiple locations for the following reasons:

You can specify additional network installation points by using the Office Customization Tool (OCT). For information, see To customize the installation and specify additional network sources.

To help secure the network installation point, we recommend the following:

- Ensure that access to the Office source files is read-only. (The Setup.xml and Package.xml files, such as ProPlusWW.xml for Office 2010, are digitally signed and cannot be modified.)
- Ensure that the file properties for the customization files that you create are set as read-only. These include Setup customization .msp files and custom Config.xml files.
- If you are centralizing log files on the network, make sure that users have read/write permission to that location.
- Make sure that all users who will install Office 2010 have administrative privileges.

Customizing the installation

You can use the OCT to customize Setup, and configure additional customizations and installation options. This creates a Setup customization file (.msp file). The OCT is the primary tool that administrators use to customize the installation of products in Office 2010. For a complete description of the areas that you can configure by using the OCT, see Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx). For step-by-step instructions for configuring customizations, see Create custom configurations of Office 2010.

When you complete the OCT customizations, store the Setup customization .msp file in the Updates folder at the root of the installation point. As mentioned previously, if you are installing Office 2010 after product updates are released, you can also store those .msp files in the Updates folder.

To customize the installation and specify additional network sources

- 1. From the root of the network installation point that you created previously, run the following command-line option to start the OCT: **setup.exe /admin**. For example, use the following: \\server\share\Office14\setup.exe /admin.
- In the Select Product dialog, select Create a new Setup customization file for the following product to create a new customization file (for example, for Microsoft Office Professional Plus 2010). Click OK.
 - The OCT user interface is displayed, and you can then configure settings in the following areas: **Setup**, **Features**, **Additional content**, and **Outlook**.
- Customize Setup to specify how you want Setup to manage the installation. The **Setup** section
 of the OCT is used to configure options such as the default installation location, default
 organization name, additional network locations that contain the Office 2010 sources, product
 key, Microsoft Software License Terms, level of user interface to display, previous versions of
 Office to remove.

Note:

The product key option depends on the Office 2010 licensing method that you use. For the purpose of testing and verifying that Setup installs Office 2010 and that customizations are applied to client computers, in this example, we accept the default option for volume activation, **Use KMS client key**.

The following options are available in Licensing and user interface:

- Use KMS client key Product key entry is not required for enterprise deployments that are using Key Management Service (KMS) activation because all Volume License editions of Office 2010 have a KMS client key preinstalled. KMS is one of the methods that are provided by Office Activation Technologies for activating products licensed under Microsoft Volume Licensing programs. Only a KMS host computer needs a KMS host key to be activated and to establish a local activation service in your environment. Office 2010 connects to the local KMS host for activation. Use KMS client key is the default. In this example, we accepted the default. For information about how to configure the KMS host, see Configure the Office 2010 KMS host in Deploy volume activation of Office 2010.
- Enter another product key You can enter a valid Multiple Activation Key (MAK) key in the OCT by using the Enter another product key entry. A MAK key is another method that Office Activation Technologies provide for activating products licensed under Microsoft Volume Licensing programs. By using a MAK, client computers activate Office 2010 online by using the Microsoft hosted activation servers or by telephone. If you choose to use a MAK key in your production environment, you would enter the MAK key (25 numbers or characters) without spaces in the Enter another product key text box. For more information about how to use a MAK key, see Deploy volume activation of Office 2010.
- Display level Expand the Display level menu to set the behavior of the user interface during installation. In enterprise deployments, we recommend that you set Display level to None to ensure that Setup runs silently, to prevent prompting users to enter information, and to prevent the installation from waiting for any user interaction, including when files are being used. Setting Display Level to None assumes that the Suppress modal and Completion notice options are silenced and that the Microsoft Software License Terms is accepted. As an alternative, you can also configure display level options by using the Config.xml file; see Display element (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementDisplay) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)
- 4. In the Setup section, click Additional Network Sources, and then click Add. In the Add Network Server Entry dialog box, enter the path of the location where you plan to copy the network installation point, and then click OK.
 - You can add as many additional source locations as you want.
- When you complete the customizations that you want to make, save the Setup customization .msp file that is generated by the OCT in the Updates folder at the root of the network installation point.

Note:

If you plan to deploy multiple Setup customization .msp files, you can place only one customization .msp file per product in the Updates folder for an initial installation. You must deploy the rest of the customization .msp files after the Office installation is complete. Only one Setup customization file for each Office 2010 product that you are installing in the Updates folder is supported. The customization .msp files that you place in the Updates folder will be deployed first. Therefore, they must include any Setup customizations that cannot be changed after the installation, for example, the installation location.

6. Copy the complete folder structure of the network installation point to the locations that you specified in the Setup customization .msp file.

Users who install Office 2010 from any of these network installation points have access to the backup network sources. Setup checks these sources automatically when an alternative source is required.

If you want to deploy additional languages for users who use Office in more than one language or for users who require an Office language that does not match the language of their operating system, you use the Config.xml file. The Config.xml file is used to configure installation tasks and is used only when you run Setup. Config.xml is not installed or cached on users' computers. Administrators can edit the Config.xml file to customize the installation. By default, the Config.xml file that is stored in the core product folders (core_product_folder_name.WW folder; for example, ProPlus.WW) directs Setup to install that product. For example, the Config.xml file in the ProPlus.WW folder installs Microsoft Office Professional Plus 2010.

For information about Config.xml, see Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx). For information about how to add languages, see Customize language setup and settings for Office 2010. In the following example, the Config.xml file is used to specify that Setup install both English and French, and to configure the default installation language and the Shell UI to match the operating system language.

To use Config.xml to customize the installation

- 1. In the core product folder for the product that you are installing, locate the Config.xml file. For example, if you are installing Office Professional Plus 2010, the Config.xml file is in the ProPlus.WW folder.
- 2. Open the Config.xml file by using a text editor, such as Notepad.
- 3. Add the AddLanguage element. For information about AddLanguage, see AddLanguage element (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e.aspx#ElementAddLanguage) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).
- 4. Set the value of the **Id** attribute to the language tag that corresponds to the language that you want to install. You can specify more than one language by including additional AddLanguage elements and attributes. If you use more than one language, you must also specify the language to use for the Shell user interface (Shell UI) by setting the ShellTransform attribute of the **AddLanguage** element. For a list of the language ID attributes in Office 2010, see

Language identifiers and OptionState Id values in Office 2010

(http://technet.microsoft.com/library/f5fee727-df49-4ef7-b073-dd6c08dfecfa(Office.14).aspx).

In this example, we set the default installation language and the Shell UI to match the operating system language, and specify that Setup install both English (en-us) and French (fr-fr). The syntax is as follows:

```
<AddLanguage Id="match" ShellTransform="yes"/> <AddLanguage Id="en-us" /> <AddLanguage Id="fr-fr" />
```

5. Save the Config.xml file.

Running Setup from the network installation point

The following procedure provides instructions for running Setup from the network installation point. Setup installs the product that resides in the network installation point and applies the customizations that you entered in the Setup customization .msp file and in the Config.xml file.

To run Setup from the network installation point

1. To run **Setup.exe** from the root of the network installation point, click **Start**, click **Run**, and type the following at the command prompt:

\\server\share\Office14\setup.exe

If there are multiple Office products on the network installation point, Setup prompts you to select the product that you want to install. You can also identify the product to install by using the **/config** command-line option to specify the Config.xml file that resides in the core product folder for that product. For example, to install Office Professional Plus 2010, run the following command:

\\server\share\Office14\setup.exe /config \\server\share\Office14\ProPlus.WW\Config.xml

Setup installs the product associated with the Config.xml file that you specify without prompting you to select the product. For information about the **/config** setup command-line option, see /config[path] (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-

3a2a2da8f731.aspx#BKMK_config) in Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx).

See Also

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

Deploy volume activation of Office 2010

Tools to configure client computers in Office 2010

Volume activation quick start guide for Office 2010

Customization overview for Office 2010

Create a network installation point for Office 2010

Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx)

Customize Office 2010

64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx)

Deploy Office 2010 by using System Center Configuration Manager 2007

This article provides detailed technical guidance on the processes and procedures when you use Microsoft System Center Configuration Manager 2007 to deploy Microsoft Office 2010 in a medium- to large-sized organization.

System Center Configuration Manager 2007 is the solution to comprehensively assess, deploy, and update the servers, clients, and devices across physical, virtual, distributed, and mobile environments. This article provides detailed technical guidance for specifically deploying Office 2010.

Although this article illustrates the test network environment used for helping to describe the process of deploying Office 2010 by using Configuration Manager 2007, it does not provide information about how to set up the test network infrastructure, such as the Active Directory directory service, Microsoft SQL Server, and System Center Configuration Manager 2007. For resources on how to set up the test infrastructure, see Resources for deploying the infrastructure later in this article.

In this article:

- Overview of the deployment process
- Deploying Office 2010 in a test environment
- Resources for deploying the infrastructure

Overview of the deployment process

Once you have the supporting infrastructure in place for Configuration Manager 2007, the process for deploying the Office Professional Plus 2010 involves creating and defining five primary areas:

- Collections
- Packages
- Programs
- Distribution points
- Advertisements

Collections Collections are groups of Configuration Manager 2007 resources, such as users, user groups, or computers, against which a software deployment is targeted. For more information about collections, see Collections Overview (http://go.microsoft.com/fwlink/?LinkId=145870).

Packages A package is the set of installation source files that Configuration Manager 2007 manages and distributes for software deployment. Some of the information that is included within the package is the distribution points and programs. For more information about packages, see About Packages (http://go.microsoft.com/fwlink/?LinkId=145871).

Programs Programs are part of the package configuration in Configuration Manager 2007. They contain any command-line switches and additional parameters to be run from the designated package source files, such as Setup.exe. For more information about programs, see About Programs (http://go.microsoft.com/fwlink/?Linkld=145872).

Distribution points Distribution points are Configuration Manager 2007 site systems that store designated packages for deployment to Configuration Manager 2007 clients. When the Configuration Manager 2007 client receives and processes a relevant advertisement, the client then contacts a distribution point to download the package and start the installation process. For more information about distribution points, see About Distribution Points (http://go.microsoft.com/fwlink/?LinkId=145873).

Advertisements Advertisements tie packages and programs together with collections, which enables administrators to target software deployment of specific or customized applications to collections of computers or users. An advertisement specifies a package and program, and the collection to which it will be advertised or deployed. For more information about advertisements, see About Advertisements (http://go.microsoft.com/fwlink/?LinkId=145875).

Deploying Office 2010 in a test environment

This section provides an illustration and description of the test network environment for the Configuration Manager 2007 infrastructure. It also includes procedural steps for deploying Microsoft Office Professional Plus 2010 by using Configuration Manager 2007.

Network environment

The test network environment for this article is shown in the following illustration.



All of the servers (A, B, and C) are running Windows Server 2008 and are members of the same domain (CPANDL.COM), including the client computers (D), which are running Windows 7 Professional. The applications and roles that each server is running, and the fully qualified domain name (FQDN) for each client computer, are listed as follows:

- A Active Directory, DNS, DHCP < DC. CPANDL. COM>
- B Microsoft SQL Server 2008 < SQLSRV.CPANDL.COM>
- C Configuration Manager 2007 SP2 (management point, distribution point) < SCCM.CPANDL.COM>
- D Windows 7 Professional, Configuration Manager 2007 client <W7C01.CPANDL.COM>



Note:

In this simple test network environment, the site server is performing multiple site system roles (such as management point and distribution point) simultaneously. However, we do not recommend this configuration for production sites that have large numbers of resources.

Procedural steps for deploying Office 2010 by using Configuration Manager 2007

In this example deployment scenario, detailed information is provided to deploy Office Professional Plus 2010 in the previously defined Configuration Manager 2007 test environment. By following these steps, you can use Configuration Manager 2007 to deploy a silent installation of Office Professional Plus 2010, in which the users do not interact with the installation process. In this example, the first step is to create a customization file for the silent installation of Office Professional Plus 2010.



Note:

In a production environment to minimize the load on the network, you can use Configuration Manager 2007 to deploy (precache) the local installation source of Office Professional Plus 2010 separately, before you deploy Office. Precaching allows most of the installation activity to occur on the local computer instead of over the network. Precaching also allows you to coordinate the upgrade to the new version. You can distribute the local installation source to groups of users over time and then schedule a simultaneous installation throughout the organization without over-taxing the network. For more information, see Precache the local installation source for Office 2010.

Create a Setup customization file for Office 2010

In Office Professional Plus 2010, Setup controls the complete installation. This includes processes that Windows Installer handled in Office versions earlier than the 2007 Office system. Customizing the default behavior of Setup lets you control the process. In this example, you customize the installation for a silent installation of Office Professional Plus 2010.

The Office Customization Tool (OCT) is used to create a Setup customization file (.msp file). Setup applies this file when Office is installed on the computers.



Note:

It is also possible to use the Config.xml file to configure a silent installation of Office Professional Plus 2010. For more information about how to use Config.xml, see Configure a silent installation of Office 2010 by using Config.xml.

To customize the installation

- 1. To customize Office Setup, use the command line setup.exe /admin to start the Office Customization Tool. In this example (using Configuration Manager 2007 to deploy the Office Professional Plus 2010), at a command prompt, run setup.exe /admin from the package source directory, \\SCCM\Office2010\Professional.
- 2. To ensure that Office Professional Plus 2010 is silently installed, modify and configure the settings as follows:
 - a. In the Licensing and user interface dialog box, set the Display Level to None, which will then enable the Suppress modal check box.
 - b. Verify that the Completion notice and No Cancel options are not selected.
 - c. Enter a valid 25-character volume license key in the Product Key box that is located under Licensing and user interface.
 - d. Select the I accept the terms in the License Agreement check box.

Save and name the newly created .msp file, and then put it in the \Updates folder for Office Professional Plus 2010 on the computer that contains the package source directory, which in this example is \\SCCM\Office2010\Professional\Updates\CustomFileOffice2010SilentInstall.MSP.

Caution:

During the initial installation of Office Professional Plus 2010 if there are multiple .msp files that are located in the Updates folder (the Setup customization file that was created by using the OCT), you need to ensure that the Setup customization file is the update applied at the beginning of the installation. This is performed by ensuring the desired .msp file is alphabetically first. In this example, if there were more than one .msp file, you would rename the file CustomFileOffice2010SilentInstall.MSP to 1_CustomFileOffice2010SilentInstall.MSP. For additional information about how to deploy updates during an initial installation of Office Professional Plus 2010, see Distribute product updates for the 2007 Office system (http://go.microsoft.com/fwlink/?LinkID=146924).

For additional information about how to customize the default behavior of Setup for Office Professional Plus 2010, see Customize Setup before installing Office 2010.

Create a collection

This section provides the details for using direct membership rules to create a collection in Configuration Manager 2007. This allows for selecting the computer resources of the targeted computers. For more information about the membership rules, including both query and direct, see About Membership Rules (http://go.microsoft.com/fwlink/?LinkId=145884).

To create a collection

- 1. To create a collection, in the Configuration Manager Console, navigate to System Center Configuration Manager / Site Database / Computer Management / Collections.
- 2. Right-click Collections, and then click New Collection. In the General dialog box of the New Collection Wizard, enter a name for the collection. In this example, it is named Target-Computers.
- 3. In the Membership Rules dialog box, click the computer icon, which opens the Create Direct Membership Rule Wizard. Click **Next**.
- In the Search for Resources dialog box, click the Resource class drop-down menu and select System Resource. Then, click the Attribute name drop-down menu and select Name. In the Value field enter %, and then click Next.
- 5. In the Collection Limiting dialog box, click the Browse button, select All Windows Workstation or Professional Systems, click OK, and then click Next.
- 6. In the **Select Resources** dialog box, select the check box for each of the targeted computer resources. In this example, TestComputer01 and TestComputer02 were selected. Click Next. In the Finished dialog box, click Finish. In the Membership Rules dialog box of the New Collection Wizard, click Next.
- 7. In the Advertisements dialog box, for now, do not assign an advertisement because it has not yet been created. Click Next. In the Security dialog box, accept the defaults, click Next, and then click Close.

The next step is to prepare the source directory for the package.

For more information about collections, see Collections in Configuration Manager (http://go.microsoft.com/fwlink/?LinkId=145886).

Prepare the package source directory

The package source folder contains all the files and subdirectories needed to run the programs in a package. In this example, the source directory is \\SCCM\Office2010\Professional, which contains a copy of the Office Professional Plus 2010 installation CD.



Note:

It is possible to reduce the size of the package file that is created by Configuration Manager 2007 by removing any additional files that are not needed (such as other programs within the Office suite that will not be deployed).

For information about multiple language deployments, see Customize language setup and settings for Office 2010.

For more information about package source directories, see How to Set Up a Package Source Directory (http://go.microsoft.com/fwlink/?LinkId=145890).

Create a package for Office 2010

The next step is to create a package, which will contain the specified parameters for installing the program, in this case Office Professional Plus 2010, and the location from where the package will be distributed, known as the distribution point, to the managed Configuration Manager 2007 clients. In this example, the steps are provided for creating a package manually. Once the package is created, you will create a distribution point for the package and a program that contains the setup and installation parameters for Office Professional Plus 2010.



Note:

Information for creating a package is included in this article to illustrate the process. Nevertheless, you can import a package definition file such as one for the Office Professional Plus 2010, which is Office 2007 SMS package definition file (.sms) (http://go.microsoft.com/fwlink/?LinkId=145893). You can use these files to automatically create the package details. To do so, right-click Packages, click New, and then click Package From **Definition**. You can then browse to the folder that contains the package definition file and select the relevant .sms file.

To create a package

- 1. To create a package, in the Configuration Manager Console, navigate to System Center Configuration Manager / Site Database / Computer Management / Software Distribution / Packages.
- 2. Right-click **Packages**, point to **New**, and then click **Package**.
- 3. In the **General** dialog box of the New Package Wizard, enter the Name, Version, Manufacturer, and Language. For example, Office, 2010, Microsoft, English (US).
- 4. In the **Data Source** dialog box, select **This package contains source files**. Click the **Set** button, and then enter the path for the location of the source files in the Source directory field. For this example, select the source directory location of the local drive, such as C:\Office2010\Professional, which contains a copy of the Office Enterprise 2007 installation CD.
- 5. Click **OK**, and then continue to click **Next** and accept the default settings in all of the following dialog boxes: Data Access, Distribution Settings, Reporting, and Security. In the Wizard Completed dialog box, click Close.

The package, in this example named *Microsoft Office 2010 English (US)*, is now created. The next step is to create a Configuration Manager 2007 program, which will contain the setup and installation parameters for the Office Professional Plus 2010.

Create a program that has setup and install parameters for Office 2010

This example provides the steps to create a program for the deployment of a silent installation of Office Professional Plus 2010, where the users do not interact with the installation process.

To create a program for the package

- 1. To create a program for the Office 2010 package, right-click Programs, point to New, and then click Program.
- 2. In the **General** dialog box, enter a name for the package in the **Name** field, which in this example is named Office 2010 silent installation. In the Command line field, in this example type setup.exe. Because the customization file, CustomFileOffice2010SilentInstall.MSP, was put in the \Updates folder, a command-line option is not needed to reference its location. For more information, see Setup command-line options for Office 2010 (http://technet.microsoft.com/library/0f489f42-4c01-41d1-8b52-3a2a2da8f731(Office.14).aspx). In the Run field, click the drop-down menu, and then select Hidden. In the After running field, verify the default of No action required is selected. Click **Next** and accept the defaults in the **Requirements** dialog box.
- 3. In the Environment dialog box, click the Program can run drop-down box and select Whether or not a user is logged on. This will enable Run with administrative rights for the Run mode. Leave the default for Drive mode to Runs with UNC name, and then click Next.
- In the Advanced dialog box, select the Suppress program notifications check box, and then click Next.



Note:

If you want users to be aware of the installation by way of a notification on their desktop computers, do not select Suppress program notifications.

- 5. In the Windows Installer dialog box, click Import, and then browse to the directory that contains the EnterpriseWW.msi file, which in this example is \\SCCM\Office2010\Professional\ProPlus.WW\ProPlusWW.msi. After selecting the .msi file, the Windows Installer product code and Windows Installer file fields are populated with the corresponding information associated with the selected .msi file. Click Next, and accept the default values in the MOM Maintenance Mode dialog box.
- 6. To view the **Summary** dialog box, click **Next**. To finish the process of creating the new program, click Next, which will then display the Wizard Completed dialog box. To exit from the New Program Wizard, click Close.

The next step is to select a distribution point for the package.

Select a distribution point

To use a server as a distribution point for providing packages to distribute packages to the client computers, you must first designate a site system as a distribution point. In this example, the single site server, named SCCM, was initially configured as both a management point and a distribution point.

To select a distribution point

- 1. To select a distribution point for the newly created package Microsoft Office 2010 English (US), right-click Distribution Points, click New Distribution Points, click Next, and then click the check box for the distribution point (in this example, SCCM). Click **Next**.
- 2. Upon completion of the New Distribution Points Wizard, click Close.

The next step is to advertise the package, Microsoft Office 2010 English (US), which now contains both the Configuration Manager 2007 distribution point and program information for deploying a silent installation of Office Professional Plus 2010. Before advertising the package, you should first verify that it was installed on the distribution point.

For more information about how to verify the status of a package, see How to View the Status of a Package (http://go.microsoft.com/fwlink/?LinkId=145898).

Create an advertisement of Office 2010 package

This example provides the steps to create an advertisement of the Office Professional Plus 2010 package.

To create an advertisement of the package

- 1. To create an advertisement, right-click **Advertisements**, point to **New**, and then click Advertisement. In the General dialog box of the New Advertisement Wizard, in Name field, enter Office 2010. Click the Browse button for the Package field, and then click on the package that you want to advertise, which in this example is Microsoft Office 2010 English (US). Click OK. Click the Browse button for the Collection field, click on the collection, which in this example is Target-Computers, click OK, and then click Next.
- 2. In the Schedule dialog box, enter the date and time in the Advertisement start time fields for when the advertisement will be available, and then click the asterisk button for Mandatory Assignments.
- 3. In the Assignment Schedule dialog box, click the Schedule button, and then enter the same date and time that you previously entered in the Advertisement start time fields in the Schedule dialog box. To return to the **Schedule** dialog box, click **OK**.
- 4. In the Schedule dialog box, select the check boxes for Enable Wake On LAN, Ignore maintenance windows when running program, and Allow system restart outside maintenance windows, and then click Next.



Note:

In your production environment, there might be policies in place that would require different selections than previously listed for the assignment schedule. For information about these options, see Advertisement Name Properties: Schedule Tab (http://go.microsoft.com/fwlink/?LinkId=145900).

5. Accept the default values on the **Distribution Points**, **Interaction**, **Security**, and **Summary** dialog boxes. Upon successful completion of the New Advertisement Wizard, click Close in the Wizard **Completed** dialog box.

The package will now be advertised to the targeted collection and the silent installation of Office Professional Plus 2010 will begin.

For information about how to monitor the status of the advertisement, see How to View the Status of an Advertisement (http://go.microsoft.com/fwlink/?LinkId=145901).

Resources for deploying the infrastructure

This section includes resources to help you understand and configure an infrastructure to test the deployment of Office Professional Plus 2010 by using Configuration Manager 2007.

Active Directory, DNS, DHCP

- Active Directory Domain Services for Windows Server 2008 (http://go.microsoft.com/fwlink/?LinkId=145922)
- Windows Server 2008 Step-by-Step Guide for DNS in Small Networks (http://go.microsoft.com/fwlink/?LinkId=145925)
- DNS Server (http://go.microsoft.com/fwlink/?LinkId=145928)
- <u>DHCP Server</u> (http://go.microsoft.com/fwlink/?LinkId=145931)

SQL Server 2008

- Installing SQL Server 2008 (SQL Server Video) (http://go.microsoft.com/fwlink/?LinkId=145934)
- <u>SQL Server 2008 Security Overview for Database Administrators</u> (http://go.microsoft.com/fwlink/?LinkId=145936)

System Center Configuration Manager 2007 SP2 (Management Point, Distribution Point)

- System Center Configuration Manager (SCCM) 2007 POC Installation Guidelines (http://go.microsoft.com/fwlink/?LinkId=145938)
- Configuration Manager Single Site Planning and Deployment (http://go.microsoft.com/fwlink/?LinkId=145939)

Windows Vista Enterprise, System Center Configuration Manager client

- Planning and Deploying Clients for Configuration Manager 2007 (http://go.microsoft.com/fwlink/?LinkId=145941)
- <u>Setup reference for Office 2010</u> (http://technet.microsoft.com/library/90614b54-333e-4048-ab83-ace91f768142(Office.14).aspx)
- How to obtain a volume license key for enterprise editions of Office 2007 and Office 2003 (http://go.microsoft.com/fwlink/?LinkId=145948)

Deploy Office 2010 by using System Center Essentials 2010

This article provides detailed technical guidance on the processes and procedures when you use Microsoft System Center Essentials 2010 to deploy Microsoft Office 2010 in a medium-sized organization.

System Center Essentials 2010 is an IT management solution that is designed for system administrators in medium-sized organizations that have up to 50 servers and 500 client computers. By using a unified console, IT administrators can easily secure, update, monitor, and track their entire IT environment. This article provides detailed technical guidance for specifically deploying Office 2010.

Although this article illustrates the test network environment used for helping to describe the process of deploying Office 2010 by using System Center Essentials 2010, it does not provide information about how to set up the test network infrastructure, such as the Active Directory directory service, Microsoft SQL Server, and System Center Essentials 2010. For resources on how to set up the test infrastructure, see Resources for deploying the infrastructure later in this article.

In this article:

- Deploying Office 2010 in a test environment
- Resources for deploying the infrastructure

Deploying Office 2010 in a test environment

This section provides an illustration and description of the test network environment for the System Center Essentials 2010 infrastructure. It also includes procedural steps for deploying Microsoft Office Professional 2010 by using System Center Essentials 2010.

Network environment

The test network environment for this article is shown in the following illustration.



All of the servers (A and B) are running Windows Server 2008 R2 and are members of the same domain (CPANDL.COM), including the client computers (C), which are running Windows 7

Professional. The applications and roles that each server is running, and the fully qualified domain name (FQDN) for each client computer, are listed as follows:

- A Active Directory, DNS, DHCP < DC.CPANDL.COM>
- B System Center Essentials 2010, SQL Server 2008 Enterprise Edition (SP1) <SCE.CPANDL.COM>
- C Windows 7 Professional, System Center Essentials 2010 client <W7C01.CPANDL.COM,</p> W7C02.CPANDL.COM, and W7C03.CPANDL.COM>

Procedural steps for deploying Office 2010 by using System Center Essentials 2010

In this example deployment scenario, detailed information is provided to deploy Office Professional 2010 in the previously defined System Center Essentials 2010 test environment. By following these steps, you can use System Center Essentials 2010 to deploy a silent installation of Office 2010, in which the users do not interact with the installation process. In this example, the first step is to create a customization file for the silent installation of Office 2010.

Create a Setup customization file for Office 2010

The program file to create a setup customization file for Office 2010 is run from the source directory that contains a copy of all the files from the Office CD. In this example, the source files were copied to \\SCE\Office2010\Professional.

In Office 2010, Setup controls the complete installation. This includes processes that Windows Installer handled in Office versions earlier than the 2007 Office system. Customizing the default behavior of Setup lets you control the process. In this example, you customize the installation for a silent installation of Office 2010.

The Office Customization Tool (OCT) is used to create a Setup customization file (.msp file). Setup applies this file when Office is installed on the computers.



Note:

It is also possible to use the Config.xml file to configure a silent installation of Office 2010. For more information about how to use Config.xml, see Configure a silent installation of Office 2010 by using Config.xml.

To customize the installation

- 1. To customize Office Setup, use the command line setup.exe /admin to start the Office Customization Tool. In this example (using System Center Essentials 2010 to deploy Office 2010), at a command prompt, run setup.exe /admin from the package source directory, \\SCE\Office2010\Professional.
- 2. To ensure that Office 2010 is silently installed, modify and configure the settings as follows:
 - a. In the Licensing and user interface dialog box, set the Display Level to None, which will then enable the Suppress modal check box.
 - b. Verify that the **Completion notice** and **No Cancel** options are not selected.
 - c. In this example, select the Enter another product key option located under Licensing and user interface, and then enter a valid Multiple Activation Key (MAK) key.
 - d. Select the I accept the terms in the License Agreement check box.

 Save and name the newly created .msp file, and then put it in the \Updates folder for Office 2010 on the computer that contains the source files, which in this example is \\SCE\Office2010\Professional\Updates\CustomFileOffice2010SilentInstall.MSP.

Caution:

During the initial installation of Office 2010 if there are multiple .msp files that are located in the Updates folder (the Setup customization file that was created by using the OCT), you need to ensure that the Setup customization file is the update applied at the beginning of the installation. This is performed by ensuring the desired .msp file is alphabetically first. In this example, if there was more than one .msp file, you would rename the file CustomFileOffice2010SilentInstall.MSP.

The next step is to use System Center Essentials 2010 to create a computer group that contains the computers on which Office 2010 will be installed.

Create a computer group

To create a new computer group that contains individually selected computers

- 1. In the System Center Essentials 2010 console, click **Computers**.
- 2. In the Computer Groups pane, click Create a Computer Group.
- in the Criteria drop-down box, select Select from a list, and then choose the computers on which
 Office 2010 will be installed. In this example, the following computers were selected:
 W7C01.CPANDL.COM, W7C02.CPANDL.COM, and W7C03.CPANDL.COM
- 4. In the **Computer group name** dialog box, enter a name for the new computer group, and then press ENTER. In this example, the name is *Office 2010*.

The next step is to create a new software deployment package of Office 2010 and then select the previously created group, *Office 2010*, for the computers on which Office 2010 will be installed.

Create and distribute a package for Office 2010

To create a software package

- 1. In the System Center Essentials 2010 console, click **Software**. In the Software Packages pane, in the **Tasks** area, click **Create new package** to start the New Software Package Wizard.
- 2. On the Setup File screen, select **Deploy a package from a setup file requiring additional folders**. In the **Folder location:** dialog box, click **Browse** and then select the directory that contains the Office 2010 source files, which in this example is C:\Office2010\Professional.
- 3. In the **Package setup file** dialog box, click **Browse**, and then select the **setup.exe** file for Office 2010, which in this example is located in the C:\Office2010\Professional folder. Click **Next**.
- 4. On the Package details screen in the **Package name** dialog box, enter a name for the package, which in this example is *Office2010Pro*. Then, in the **Package Description** dialog box, enter a descriptive name for the software package, which in this example is *Office-2010-Professional-SCE-Package*. Click **Next**.
- 5. On the Target System Types screen, verify the default of **No, this package is applicable to all my managed computers.** is selected, and then click **Next**.
- 6. On the Return Codes screen, accept the default return code of 0 (zero) to equal success, and then click **Next**.
- 7. On the Install/Uninstall Parameters screen, select No, and then click Next.

- 8. On the Summary screen, review the configured settings, and then click **Finish**. The progress bar for the software package creation will then appear.
- Once the package is created successfully, click Finish. The Add and Remove Approvals dialog box will appear, which will show a list of the available computer groups. Click the computer group of the computers on which Office 2010 will be installed, which in this example is Office 2010. Click OK.
- 10. The **Approval Progress** dialog box will appear with the message, "Approvals have been successfully applied." Click **Close**.

Verify package deployment status

The approved package will then be deployed to the computers within the selected computer group based on the configured settings for the package and how Automatic Updates is configured on the managed computers. In this example, because there was not a specific deadline set for the software package, the package was not configured as optional, and Automatic Updates is enabled on the managed computers, the software package for Office 2010 installation to begin at the specified time for Automatic Updates to be installed, which uses a daily basis at 3:00 A.M. For more information, see About Software Deployment in System Center Essentials (http://go.microsoft.com/fwlink/?LinkId=169715).

In the Software Packages pane, select the software package, which in this example is *Office2010Pro*, to monitor the status. Upon completion of installing Office 2010, the status will be listed as **Successful**.

Resources for deploying the infrastructure

This section includes resources to help you understand and configure an infrastructure to test the deployment of Office 2010 by using System Center Essentials 2010.

System Center Essentials 2010

- Deployment Guide for System Center Essentials 2010 Beta (http://go.microsoft.com/fwlink/?LinkId=171015)
- Microsoft System Center Essentials 2010 Beta (http://go.microsoft.com/fwlink/?LinkId=177542)

Active Directory, DNS, DHCP

- Active Directory Domain Services for Windows Server 2008 (http://go.microsoft.com/fwlink/?LinkId=145922)
- Windows Server 2008 Step-by-Step Guide for DNS in Small Networks (http://go.microsoft.com/fwlink/?LinkId=145925)
- DNS Server (http://go.microsoft.com/fwlink/?LinkId=145928)
- DHCP Server (http://go.microsoft.com/fwlink/?LinkId=145931)

SQL Server 2008

Installing SQL Server 2008 (SQL Server Video) (http://go.microsoft.com/fwlink/?LinkId=145934)

• <u>SQL Server 2008 Security Overview for Database Administrators</u> (http://go.microsoft.com/fwlink/?LinkId=145936)

Windows 7

Windows 7 Resources on Microsoft TechNet (http://go.microsoft.com/fwlink/?LinkId=177541)

Deploy Office 2010 by using Group Policy computer startup scripts

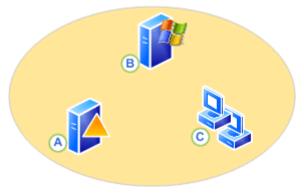
This article provides detailed technical guidance on the processes and procedures when you use Group Policy to assign computer startup scripts to deploy Microsoft Office 2010. A script can be written in any language that is supported by the client computer. Windows Script Host-supported languages, such as VBScript and Jscript, and command files, such as a batch file, are the most common.

Deploying Office 2010 in a test environment

This section provides an illustration and description of the test network environment for the Group Policy computer startup script infrastructure. It also includes procedural steps for deploying Microsoft Office Professional Plus 2010 by using a Group Policy computer startup script.

Network environment

The test network environment for this article is shown in the following illustration.



All of the servers (A and B) are running Windows Server 2008 R2 and are members of the same domain (CPANDL.COM), including the client computers (C), which are running Windows 7 Professional and Windows Vista. The fully qualified domain name (FQDN) for each client computer, the applications and roles that each server is running, the organizational unit (OU) with included computers, and the Group Policy object (GPO) are listed as follows:

- **A** *<DC.CPANDL.COM>* Active Directory, DNS, DHCP, GPO-*Office2010_GPO*, OU-*Office2010_OU*, *W7C01* and *WVC02* are members of the OU, *Office2010_OU*
- B <FS.CPANDL.COM> File Services, file share-\\FS\Office2010SourceFiles (Read Only access), file share-\\FS\Office2010LogFiles (Read Write access)
- **C** <*W7C01.CPANDL.COM and WVC02.CPANDL.COM>* Windows 7 Professional and Windows Vista Enterprise

Note:

Office2010 GPO is linked to Office2010 OU. This allows for the settings of the GPO to be assigned to the computer objects that are contained within the OU. To link a GPO to an OU use the MMC snap-in Group Policy Management.

Before you customize and deploy Office 2010 in your production environment, we recommend that you read the following articles: Plan volume activation of Office 2010

(http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx), Deploy volume activation of Office 2010, Customization overview for Office 2010, Create a network installation point for Office 2010, Office Customization Tool in Office 2010

(http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx), Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx), Customize Office 2010, and 64-bit editions of Office 2010 (http://technet.microsoft.com/library/faab55b2-bb6c-4636-811e-24f6939548d1(Office.14).aspx).

Customize Setup for Office 2010

The program file to create a setup customization file for Office 2010 is run from the source directory that contains a copy of all the files from the Office installation CD. In this example, the source files were copied to \\FS\Office2010SourceFiles.

In Office 2010, Setup controls the complete installation. This includes processes that Windows Installer handled in Office versions earlier than the 2007 Office system. Customizing the default behavior of Setup lets you control the process. In this example, you use the Config.xml file to customize the installation for a silent installation of Office 2010 and the Office Customization Tool (OCT) to customize the installation of Office 2010 products, such as specifying the volume license key and selecting which applications from Microsoft Office to install. Setup applies the customizations from both the config.xml and .msp file (created by using the OCT) when Office is installed on the computers.

To specify silent installation options in Config.xml

To configure a silent installation (unattended installation) of an Office 2010 product that requires no user interaction, modify the Config.xml file for the product that you are installing and set the **Display** element's Level attribute to "none" (Display Level="none"), and then save the Config.xml file, as shown in the following procedure. The **Display** element specifies the level of user interface that Setup displays to users.

- 1. Open the Config.xml file for the Office product, which in this example is Office Professional Plus 2010, that you are installing by using a text editor tool, such as Notepad. By default, the Config.xml file is located in the core products .WW folder, which in this example is \\FS\Office2010SourceFiles\ProPlus.WW.
- 2. Locate the line that contains the **Display** element, as shown in the following example:
 - <!-- <Display Level="full" CompletionNotice="yes" SuppressModal="no" AcceptEula="no" />
- 3. Modify the **Display** element entry with the silent options that you want to use. Make sure that you remove the comment delimiters, "<!--" and "-->". For example, use the following syntax:
 - <Display Level="none" CompletionNotice="no" SuppressModal="yes" AcceptEula="yes" /> These options will direct Setup to run silently, prevent prompting users to enter information, and prevent the installation from waiting for any user interaction. For more information about the syntax

and Config.xml, see Display element (http://technet.microsoft.com/library/e16af71c-fed4-40daa886-95e596c3999e.aspx#ElementDisplay) in Config.xml file in Office 2010 (http://technet.microsoft.com/library/e16af71c-fed4-40da-a886-95e596c3999e(Office.14).aspx).

4. Save the Config.xml file, which in this example is saved to \\FS\Office2010SourceFiles\ProPlus.WW.

To specify the volume license key and select which applications to install using the OCT

- 1. To customize Office Setup, use the command line setup.exe /admin to start the Office Customization Tool. In this example, at a command prompt, run setup.exe /admin from the package source directory, \FS\Office2010SourceFiles.
- 2. In this example, to enter the volume license key and select which applications to install, modify and configure the settings as follows:
- 3. Select the Enter another product key option located under Licensing and user interface, and then enter a valid Multiple Activation Key (MAK) key.



In this example, because the parameters for a silent installation were configured in the Config.xml file, it is not necessary to also configure them when using the OCT. This is because the customizations that you define in Config.xml take precedence over those in the customization file created by using the OCT.

- 4. Select the **Set feature installation** option located under **Features**, and then select which applications to install. In this example, to speed up the installation process, only Microsoft Word was selected.
 - For additional resources on some of the different parameters you can configure when you use the OCT, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0a12c-4f7b-839c-24a66a531bb5(Office.14).aspx), Configure feature installation states for Office 2010, and Configure user settings for Office 2010.
- 5. Save and name the newly created .msp file, and then put it in the \Updates folder for Office 2010 on the computer that contains the source files, which in this example is \\FS\Office2010SourceFiles\Updates\Office2010ProPlus.MSP.

Caution:

Only one Setup customization .msp file per product in the Updates folder is supported. If you are deploying an initial installation of Office 2010 and you also want to deploy Office 2010 software updates, such as service packs and hotfixes, Setup can apply the product updates as part of the installation process. You can place the Office 2010 product updates, which are applied after the installation is complete, in the Updates folder. For more information, see Office Customization Tool in Office 2010 (http://technet.microsoft.com/library/8faae8a0-a12c-4f7b-839c-24a66a531bb5(Office.14).aspx)

The next step is to configure the script on the domain controller, which in this example is DC.CPANDL.COM.

Configure script on domain controller

The process for configuring the script on the domain controller involves the following steps:

Copy script to startup folder for GPO.

- Add script to GPO.
- 3. Set maximum run time for startup script.



Warning:

Group Policy provides the ability to affect configurations across hundreds and even thousands of computers in an organization. Therefore, it is very important that you rigorously test all new Group Policy configurations or deployments in a test environment before you move them into your production environment. For detailed information about staging Group Policy deployments, see Staging Group Policy Deployments in the Group Policy Planning and Deployment Guide (http://go.microsoft.com/fwlink/?LinkID=182208&clcid=0x409).

Copy script to startup folder for GPO

This example includes a sample batch file script, which illustrates how to run Microsoft Office Setup.exe if the product is not already installed and log error or success to a centralized log file. The variables at the beginning of the script were modified for this test deployment scenario. For example, the product name of **ProPlus** with a prefix of **Office14** and the paths for the Office source files, \FS\Office2010SourceFiles, and log files, \FS\Office2010LogFiles, were added. This sample script was then copied to Notepad and saved with the file name of Office2010StartupScript.bat. The script file is then saved on the domain controller to the default directory of the GPO for startup scripts, which in this example is C:\Windows\SYSVOL\sysvol\adatum.com\Policies\{GUID of GPO}\Machine\Scripts\Startup.



Note:

The GUID representing the GPO can be found in the MMC snap-in Group Policy Management Editor by right-clicking the GPO, which in this example is Office2010_GPO, and then clicking **Properties**. The GUID is listed in the **Unique name** field.

setlocal REM Environment customization begins here. Modify variables below. REM Get ProductName from the Office product's core Setup.xml file, and then add "office14." as a prefix. set ProductName=Office14.PROPLUS REM Set DeployServer to a network-accessible location containing the Office source files. set DeployServer=\\FS\Office2010SourceFiles REM Set ConfigFile to the configuration file to be used for deployment (required) set ConfigFile=\\FS\Office2010SourceFiles\ProPlus.WW\config.xml REM Set LogLocation to a central directory to collect log files.

```
set LogLocation=\\FS\Office2010LogFiles
REM Deployment code begins here. Do not modify anything below this line.
IF NOT "%ProgramFiles(x86)%"=="" (goto ARP64) else (goto ARP86)
REM Operating system is X64. Check for 32 bit Office in emulated Wow6432 uninstall key
:ARP64
reg query
HKEY LOCAL MACHINE\SOFTWARE\WOW6432NODE\Microsoft\Windows\CurrentVersion\Uninstall\%ProductName
if NOT %errorlevel%==1 (goto End)
REM Check for 32 and 64 bit versions of Office 2010 in regular uninstall key.(Office 64bit
would also appear here on a 64bit OS)
:ARP86
reg query HKEY LOCAL MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\%ProductName%
if %errorlevel%==1 (goto DeployOffice) else (goto End)
REM If 1 returned, the product was not found. Run setup here.
:DeployOffice
start /wait %DeployServer%\setup.exe /config %ConfigFile%
echo %date% %time% Setup ended with error code %errorlevel%. >>
%LogLocation%\%computername%.txt
REM If 0 or other was returned, the product was found or another error occurred. Do nothing.
:End
Endlocal
```

Add script to GPO

To add the script to the GPO use the MMC snap-in **Group Policy Management Editor** and right-click **Startup** (GPO | Computer Configuration | Policies | Windows Settings | Scripts (Startup/Shutdown) | **Startup**), click **Properties**, **Add**, **Browse** and then highlight and select the script file, which in this example is *Office2010StartupScript.bat*.

Set maximum run time for startup script

By default, the system lets combined sets of scripts run for up to 600 seconds (10 minutes) only. Administrators can use a policy setting to adjust this interval to ensure the startup script completes running. The Maximum wait time for Group Policy scripts policy setting specifies how long the system waits for scripts applied by Group Policy to run. This setting limits the total time allowed for all logon, startup, and shutdown scripts applied by Group Policy to finish running. As with any Group Policy deployment, you must fully test your startup scripts in a staging environment before you deploy them to your production environment. Testing will help you determine the value to use for the Maximum wait time for Group Policy scripts policy for your particular network environment. Setting this value too low may cause the installation to terminate prematurely. There are factors that may affect this value, such as network speed, client computer hardware, and other scripts running on the client computer. By fully testing this policy setting, you can determine the appropriate value to use for your specific environment. In this example scenario the value for the Maximum wait time for Group Policy scripts policy setting was set to 0, which directs the system to wait until the scripts have finished, regardless of how long they take.

To change the value of the **Maximum wait time for Group Policy scripts** policy of the GPO, which in this example is *Office2010_GPO*, use the MMC snap-in **Group Policy Management Editor** and double-click **Maximum wait time for Group Policy scripts** (GPO | Computer Configuration | Policies | Administrative Templates | System | Scripts).

After the computer startup script policy changes that have been made to the GPO are applied to the targeted computers, which in this example are *W7C01.CPANDL.COM* and *WVC02.CPANDL.COM*, then the computer startup script will execute by a computer startup. Instead of waiting for the policy refresh from the domain controller to take place on the client computers, you can issue the following command line, gpupdate /force, at a command prompt on the client computers. You can use the Resultant Set of Policy (RSoP) MMC snap-in to verify that the computer policy setting for the computer startup script is present on the client computer.

Verify computer startup script status

In this example, script logging information is written to *computername.txt* file and saved to the network share, \\FS\Office2010LogFiles. A return code of 0 in the log file indicates that the installation completed successfully. A return code of 3010 indicates that a restart is required. For more information about other error codes for Windows Installer processes for Office products, see Microsoft Knowledge Base article 290158: List of error codes and error messages for Windows Installer processes in Office 2003 products and Office XP products (http://go.microsoft.com/fwlink/?LinkId=90981).

See Also

<u>Group Policy overview for Office 2010</u> (http://technet.microsoft.com/library/c8cec707-2afa-4964-b0f8-611e4709bd79(Office.14).aspx)

<u>Planning for Group Policy in Office 2010</u> (http://technet.microsoft.com/library/83ff7b6a-6ad5-4abb-8edf-e97824e14af9(Office.14).aspx)

<u>Group Policy Planning and Deployment Guide</u> (http://go.microsoft.com/fwlink/?LinkID=182208&clcid=0x409)

Scripts Extension Technical Reference (http://go.microsoft.com/fwlink/?LinkId=83122)

Windows Script Host (http://go.microsoft.com/fwlink/?LinkId=83247)

<u>Plan volume activation of Office 2010</u> (http://technet.microsoft.com/library/c6545579-4cca-4ad1-829d-cfecbb917dc4(Office.14).aspx)

Volume activation quick start guide for Office 2010

Deploy Office 2010 by using Microsoft Application Virtualization

This article provides detailed technical guidance on the processes and procedures when you use Microsoft Application Virtualization to deploy Microsoft Office 2010 in a medium-sized organization.

In this article:

- Overview of Application Virtualization
- Introduction to the deployment process
- Deploy Office 2010 in a test environment
- Resources to deploy the infrastructure

Overview of Application Virtualization

Microsoft Application Virtualization (App-V) is an enterprise-level application virtualization solution that enables you to deploy, update, and support applications as services in real time, on an as-needed basis. When you use App-V, you transform individual applications from locally installed products into centrally managed services. App-V is one of the six technologies that are part of the Microsoft Desktop Optimization Pack (MDOP) for volume customers.

Audience

The target audience for this article is IT professionals. These IT professionals could include network managers, consultants, and IT managers who work for or with a medium- to large-sized organization.

Prerequisites

Prior knowledge and experience will help users understand and apply the information in this article, specifically experience in the following areas:

Microsoft Visual C++ 2005 SP1 Redistributable Package

Application Virtualization

2007 Microsoft Office system or Office 2010

Introduction to the deployment process

Once you have the supporting infrastructure in place for App-V, the process to deploy Microsoft Office Professional Plus 2010 involves creating and defining the following primary areas:

- Sequencing packages
- Publishing packages
- Distribution Points
- Application Virtualization Desktop Client

Packages A package is the set of installation source files that Microsoft Application Virtualization manages and distributes for software deployment.

Sequencing Sequencing is the process of creating an application package by using the Microsoft Application Virtualization Sequencer. In this process, an application is monitored, its shortcuts are configured, and a sequenced application package is created that contains the .osd, .sft, .sprj, and .ico files.

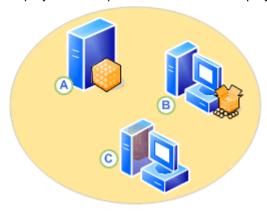
Publishing Publishing is the method of activating a software package on the server, to make it available for client computers or to deploy to users and groups.

Distribution Point A Distribution Point is the location that is enabled to stream a virtual application package to App-V clients.

Application Virtualization Desktop Client An Application Virtualization Desktop Client installs the necessary components so that the client computer can use virtual applications.

Deploy Office 2010 in a test environment

This section provides a diagram and description of the test network environment for a lightweight Application Virtualization infrastructure. It also includes procedural information about the steps to deploy Office Professional Plus 2010 by using Microsoft Application Virtualization. It does not cover extensive Office 2010 licensing explanations, generic App-V virtualization information, nor how App-V Office deployment compares to other Office deployment types.



In this diagram, server **(A)**, running Windows Server 2008, represents the Electronic Software Distribution (ESD) Server or App-V Management Server. The client computers **(B, C)** are running the same version of Windows. Client computer **(B)** is set up as the sequencing computer. Client computer **(C)** is the receiving computer for the virtualized application package.

Create a sequenced package for Office 2010

To create a sequenced application package for Office 2010, perform the following steps on the App-V Sequencer computer.

- Download Microsoft Office 2010 and place the installer on a temporary directory on the App-V Sequencer computer.
- 2. Install the Deployment Kit from a command line and specify the path of the associated Windows Installer (.msi) file together with the appropriate licensing parameters for the environment.

For example, type the following command, and then press ENTER:

msiexec /i OffVirt.msi PROPLUS=1



Note:

You must install the version of the Deployment Kit that matches the operating system architecture of your computer.

- 3. Open Windows Explorer, go to the Q:\ drive, and create an installation folder by using an 8.3 format, such as Temp123.xyz.
- 4. Create a directory on the sequencer computer that includes the name of the application. You will save the output of the sequencer to this directory.
- 5. To open Microsoft Application Virtualization Sequencer, from the **Start** menu, select **All Programs**, select Microsoft Application Virtualization, and then select Microsoft Application Virtualization Sequencer.
- 6. Click Create Package.
- 7. Create a name for the package.
- 8. Install to the new directory (for example, Q:\Temp123.xyz), and then click OK.
- 9. Click **Begin Monitoring** to monitor the installation phase.
- 10. Start Setup.exe for Office 2010.
- 11. At the Choose the installation that you want prompt, click Customize.



In the Office installation procedure, make sure that you select Install to hard disk drive if you want that feature installed.

- 12. On the File Location tab, configure the path to match the installation directory that you selected in step 4
- 13. Click Install.
- 14. After installation has finished, check the virtual applications during the monitoring launch stage. From the Start menu, select Run.
- 15. Enter the path of the executable virtual file to start the virtual application.

For example, to start Microsoft Word, type:

Q:\Temp123.xyz\Office14\WINWORD.EXE, and then click OK.



Note:

You must enter the actual path of the virtual application.

- 16. Start the application to create the primary feature block.
- 17. On the **Applications** page, click **Next**.
- 18. Select and start the preferred applications to generate the primary feature block for each application.



Note:

We do not recommend starting Microsoft OneNote, Microsoft Outlook, and Microsoft SharePoint Workspace because of their customizable settings. As well, we do not recommend that you press F1 for help in this step.

- Click Next.
- 20. After sequencing is finished, click **Finish**.
- 21. To save the package, click Package, and then click Save As.

Publish a sequenced package for Office 2010

To publish a sequenced package for Office 2010, perform the following steps on the ESD Server or the App-V Management Server.

- Open the App-V Management Console.
- 2. Start Administrative Tools, and then select Application-Virtualization Management Console.
- Expand server.net if it is necessary, and then select the Applications node.
- 4. Right-click **Applications**, and then select **Import Applications**.
- 5. Browse to **D:\Content\..**, and then double-click the new *.sprj file.
- 6. On the General page, click Next.
- 7. Select **Publish to User's Send to Menu**, and then click **Next**.
- 8. On the File Associations page, click Next.
- 9. On the Access Permissions page, click Add, and then type the name of the application.
- 10. In the Add/Edit User Group dialog box, navigate to the appropriate user group to access the application.
- 11. Click OK, and then click Next.
- 12. To complete the import wizard, click Finish.

Configure the client computer to run Office 2010

To configure the client computer to run Office 2010, follow these steps on the client computer.

- Install the Application Virtualization Desktop Client, if you have not already done so.
- 2. Download the Deployment Kit, and extract the executable file (.exe).
- 3. After you extract the executable file, an Offvirt.msi file is available.
- 4. Open an elevated command prompt. (To open an elevated command prompt, click Start, right-click Command Prompt, and then click Run as administrator.)
- 5. Browse the directory that contains the Offvirt.msi file that you extracted.
- 6. At the command prompt, type the following command and then press ENTER:

msiexec /i Offvirt.msi [licensing flags]



Note:

You must provide a correct licensing flag to correctly configure the Deployment Kit. Otherwise, functionality can be incorrect.

- 7. Deploy the virtual Office package.
- 8. To access the newly published application, log off the client computer, and then log on as a member of the user group to which the application was assigned during the publishing phase. The application will now be available to client computers at the designated shortcut locations.

Resources to deploy the infrastructure

The following resources can help you understand and configure an infrastructure to test the deployment of Office 2010 by using App-V.

- <u>Planning and Deployment Guide for the Application Virtualization System</u> (http://go.microsoft.com/fwlink/?LinkID=156611&clcid=0x409)
- SFTMIME Command Reference (http://go.microsoft.com/fwlink/?LinkID=186288&clcid=0x409)

See Also

Best Practices for the App-V Sequencer (http://go.microsoft.com/fwlink/?LinkId=188462)

Deploy Microsoft Silverlight with Office 2010

Microsoft Silverlight, a technology that works in the browser and on desktops, brings many Microsoft Office experiences to life with improved video, graphics, animations, and interactivity. We recommend that you install Microsoft Silverlight together with Microsoft Office 2010 to improve the user experience with Office 2010. Specifically, Silverlight enables a better online experience with Office.com, powers the Office 2010 interactive guides (available with Office 2010), improves the user experience of Microsoft SharePoint Server 2010, improves the performance of Office Web Companion applications, and helps with the process of uploading Office documents to cloud services. For more information about Silverlight, see the Microsoft Silverlight Web site (http://go.microsoft.com/fwlink/?LinkId=169258).

To deploy Silverlight together with Office 2010 in an enterprise environment, we recommend that you use a deployment and configuration management tool, such as Microsoft Systems Management Server 2003 or Microsoft System Center Configuration Manager 2007. This approach enables you to target specific users or systems, elevate user rights for installation, schedule the installation, specify user interaction levels, control restarts, and monitor and troubleshoot the deployment. Or, you can use one of the following methods to deploy Silverlight in an organization:

- Windows Server Update Services (WSUS) 3.0 SP1 WSUS enables administrators to deploy Silverlight and manage the updates for Silverlight to computers that are running Windows 2000 with Service Pack 4, Windows Server 2003, Windows XP with Service Pack 2, Windows Server 2008, and Windows Vista or later versions of Windows operating systems through the Microsoft Update client.
- Group Policy computer startup scripts This method can be used in an Active Directory
 directory service environment, in organizations that do not have a deployment and management
 tool such as System Center Configuration Manager 2007.
- Manual install options This method can be useful in organizations that do not have an Active
 Directory environment, or WSUS, SMS, or System Center Configuration Manager 2007
 infrastructure and use a separate means for software or updates distribution in the company, or
 want to deploy Silverlight to Apple clients.

For more information about system requirements, deployment methods, and instructions for Silverlight deployment, see <u>Silverlight Deployment Guide v2</u> (http://go.microsoft.com/fwlink/?LinkId=165403) and <u>Silverlight Administration</u> (http://go.microsoft.com/fwlink/?LinkId=165405). You can download all versions of Silverlight from the <u>Get Microsoft Silverlight</u> Web site (http://go.microsoft.com/fwlink/?LinkId=186985).

As with any deployment, we recommend that you fully test your Silverlight deployment and conduct pilot tests with small groups of users before you deploy Silverlight to users in the production environment. For more information about how to test your deployment, see <u>Silverlight Deployment Guide v2</u> (http://go.microsoft.com/fwlink/?LinkId=165403).