



## CHAPTER 5

# Deploying Cisco UC Integration for Microsoft Lync to Client Computers

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## Installation Notes

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## Removing Cisco Unified Video Advantage

If Cisco Unified Video Advantage is installed on a client computer, you must uninstall it before you can install Cisco UC Integration for Microsoft Lync. If you do not uninstall Cisco Unified Video Advantage, you are prompted to do so during the Cisco UC Integration for Microsoft Lync installation.



**Tip**

If you are performing a mass deployment of Cisco UC Integration for Microsoft Lync, you can use a software deployment tool to silently uninstall Cisco Unified Video Advantage from client computers prior to the installation.

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## Time Required to Install

If the computer on which you are installing Cisco UC Integration for Microsoft Lync does not already have Microsoft .NET installed, the Cisco UC Integration for Microsoft Lync installer installs Microsoft .NET. This will result in a longer installation time.

## Installing Cisco Systems Network Protocol

When you install Cisco UC Integration for Microsoft Lync on Windows Vista or Windows 7, you might be prompted to install Cisco Systems Network Protocol device software. Install this software.

If you do not install this software, you cannot place video calls if you set your Cisco UC Integration for Microsoft Lync to use your desk phone for phone calls.

## Installing Cisco UC Integration for Microsoft Lync Using MSI

The video components of Cisco Unified Client Services Framework require Microsoft Visual C++ 2005 version 8.0.59193 or later. Microsoft Visual C++ 2005 must be installed before you install Cisco UC Integration for Microsoft Lync, if you are using MSI to install.

Microsoft provides a Microsoft Visual C++ 2005 redistributable package, `vcredist_x86.exe`. You can download this package from the following links:

- <http://go.microsoft.com/fwlink/?LinkId=169360>
- <http://www.microsoft.com/downloads/details.aspx?familyid=766a6af7-ec73-40ff-b072-9112bab119c2&displaylang=en>

To see the command line options, execute the following command:

```
vcredist_x86.exe /?
```

The Microsoft Visual C++ 2008 redistributable package is not compatible with Cisco Unified Client Services Framework: the Microsoft Visual C++ 2005 package is required.

## Installing the Microsoft Visual C++ 2005 Redistributable Package

You can use an MSI file to install the Microsoft Visual C++ 2005 redistributable package. Extract the files `vcredist.msi` and `vcredis1.cab` from `vcredist_x86.exe` to a temporary folder. Use the following command line option:

```
vcredist_x86.exe /C /T:<full-path-to-folder>
```

### Example

```
vcredist_x86.exe /C /T:C:\VCRedist
```

Use the extracted files to install Microsoft Visual C++ 2005.

## Using Translation Patterns Instead of Application Dialing Rules

Cisco UC Integration for Microsoft Lync is easiest to install with Cisco Unified Communications Manager Release 7.0 or later, although you can install it with Cisco Unified Communications Manager Release 6.1(3) or later.

Cisco Unified Communications Manager Release 7.0 and later support +E.164 phone numbers. Cisco recommends that you use +E.164 phone numbers with Cisco UC Integration for Microsoft Lync, so that outgoing calls are easier to set up.

If you are using Cisco Unified Communications Manager Release 7.0 or later, Cisco recommends that you use translation patterns to set up outbound calls, rather than application dialing rules.

If you use application dialing rules, you must apply a Cisco Options Package (COP) file. You must restart Cisco Unified Communications Manager services when you update the rules. If you use translation patterns, the rules are dynamically applied, and you do not need to restart services.

For detailed information on translation patterns, see the Cisco Unified Communications Manager Administration online help, or the *Cisco Unified Communications Manager Administration Guide*:

[http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html)

## About Deploying Cisco UC Integration for Microsoft Lync



### Note

Before you deploy Cisco UC Integration for Microsoft Lync to the computers of your users, ensure that there are no other applications that depend on Cisco Unified Client Services Framework installed on the computers.

The Cisco UC Integration for Microsoft Lync installation application installs the following components:

- User interface for Cisco UC Integration for Microsoft Lync.
- The client-related components of the Client Services Framework.
- (Optional) Click to Call functionality.

The Cisco UC Integration for Microsoft Lync application is provided in two separate installation formats as follows:

- Cisco UC Integration for Microsoft Lync executable file.
- Cisco UC Integration for Microsoft Lync Windows Installer (MSI) file.

This section describes the installation formats and the deployment options.

- [Prerequisite Software for Client Computers, page 5-3](#)
- [Executable File, page 5-4](#)
- [Windows Installer \(MSI\) File, page 5-4](#)
- [Deployment Options, page 5-4](#)

## Prerequisite Software for Client Computers

Cisco UC Integration for Microsoft Lync requires the following software:

- Microsoft .NET Framework 3.5 Service Pack 1 (installer stub)
- Microsoft Visual C++ 2005 Redistributable Package (x86)

The executable file includes the prerequisite software. The MSI file does not include any of the prerequisite software. The prerequisite software is available from the Microsoft website.

**Related Topics**

- [Executable File, page 5-4](#)
- [Windows Installer \(MSI\) File, page 5-4](#)

## Executable File

Users can run the executable file on their own computers. The executable file includes the prerequisite software for Cisco UC Integration for Microsoft Lync.

The executable file checks if the prerequisite software is installed on the computer and if not, it automatically installs the prerequisites. To save time during the installation process, we recommend that you install the prerequisite software before you install Cisco UC Integration for Microsoft Lync. All of the prerequisite software is available from the Microsoft website.

**Note**

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If the minimum required version of .NET Framework is not installed on the computer, Cisco UC Integration for Microsoft Lync runs the installer stub provided for that application. The installer stub downloads the .NET Framework software from the Microsoft website. This action requires Internet access and takes a considerable amount of time. We recommend that you install Microsoft .NET Framework 3.5 Service Pack 1 before the Cisco UC Integration for Microsoft Lync installation to save time and avoid any internet access issues. For more information about the minimum required version of .NET Framework, see the *Release Notes for Cisco UC Integration for Microsoft Lync*:

[http://www.cisco.com/en/US/products/ps11390/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps11390/prod_release_notes_list.html)

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**Related Topics**

[Prerequisite Software for Client Computers, page 5-3](#)

## Windows Installer (MSI) File

You can use a software management system to push the Windows Installer (MSI) file to the computers of your users. The MSI file does not contain any of the prerequisite software that is required for Cisco UC Integration for Microsoft Lync.

**Note**

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If you choose to install the MSI file, you must install the prerequisite software prior to installing Cisco UC Integration for Microsoft Lync.

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**Related Topics**

[Prerequisite Software for Client Computers, page 5-3](#)

## Deployment Options

You can deploy the Cisco UC Integration for Microsoft Lync installation application in one of the following ways:

- [Automated Mass Deployment, page 5-5](#)
- [Standalone Installation, page 5-5](#)

## Automated Mass Deployment

The mass deployment options for installing Cisco UC Integration for Microsoft Lync are as follows:

- Use Active Directory Group Policy. You can use group policy to deploy administrator configuration settings.
- Use a software management system, for example, Altiris Deployment Solution, Microsoft System Center Configuration Manager (SCCM), and so on.
- Use a self-extracting executable with a batch script. You can use the batch script to deploy administrator configuration settings.

### Related Topics

- [Deploying the Cisco UC Integration for Microsoft Lync MSI with Group Policy, page 5-5](#)
- [Deploying the Cisco UC Integration for Microsoft Lync MSI or Executable File from a Command, page 5-6](#)

## Standalone Installation

You can provide the Cisco UC Integration for Microsoft Lync executable file or MSI to your users or individual client computers. Users can install the application on their own computers. You can deploy the administrator configuration settings.



### Note

We strongly recommend that you use the executable file for standalone installations.

# Deploying the Cisco UC Integration for Microsoft Lync MSI with Group Policy

### Before You Begin

Ensure that all the computers or users on which you want to install Cisco UC Integration for Microsoft Lync are in the same domain.

### Procedure

- Step 1** On the domain server, execute the following command to start the Group Policy Management Console:  
**gpmc.msc**
- Step 2** Expand the forest that contains the domain to which you want to deploy, then expand the domain.
- Step 3** Right-click **Group Policy Objects**, then select **New**.
- Step 4** Create a new group policy object.
- Step 5** Select the new group policy object in the GPMC console tree.
- Step 6** (Optional) To verify that you can deploy to one user with the new group policy object, deploy a desktop wallpaper image to one user or computer as follows:
  - a. Specify a user or computer to which you want to deploy the desktop wallpaper image in the Scope tab.

- b. Right-click the group policy object in the GPMC console tree, then select **Edit**.
- c. Select **User Configuration > Policies > Administrative Templates > Desktop > Desktop** in Group Policy Management Editor.
- d. Double-click the **Desktop Wallpaper** setting.
- e. Set the setting to **Enabled**, and specify other details for the desktop wallpaper.
- f. To refresh the group policy for the user or computer, execute the following command on the computer that is affected by the group policy change:  
**gpupdate /force**
- g. Verify that the desktop wallpaper image is updated on the computer affected by the group policy change.

- Step 7** Specify the users or computers to which you want to deploy in the Scope tab of the new group policy object.
- Step 8** Right-click the group policy object in the GPMC console tree, then select **Edit**.
- Step 9** Select **User Configuration** or **Computer Configuration**, then **Policies > Software Settings** in Group Policy Management Editor.
- Step 10** Right-click **Software installation**, then select **New > Package**.
- Step 11** Select the MSI file that you want to install.
- Step 12** Select **Assigned** in the Deploy Software dialog box, then select **OK**.

The MSI file appears in the details pane.

The MSI file is pushed to each computer the next time that the computer updates policy settings.

The next time that the computer is restarted, the changes that you deployed in the Computer Configuration section of the group policy object are applied before the log-in screen is displayed on the computer.

Any changes that you deployed in the User Configuration section are applied after the user logs in to the domain. An information window displays descriptions of the changes as they are being made.

## Deploying the Cisco UC Integration for Microsoft Lync MSI or Executable File from a Command

You can use commands to install Cisco UC Integration for Microsoft Lync. You can use either the **msiexec** command, or the **CiscoUCIntegrationTMforMicrosoftLyncK9.exe** command. You can also specify features to install with Cisco UC Integration for Microsoft Lync.

- [Using the msiexec Command, page 5-6](#)
- [Using the CiscoUCIntegrationTMforMicrosoftLyncK9.exe Command, page 5-7](#)
- [Features Available with Cisco UC Integration for Microsoft Lync, page 5-7](#)

### Using the msiexec Command

The syntax required for the **msiexec** command is as follows:

```
msiexec /i MSI-filename /q [ADDLOCAL="feature1[,...[feature9]]"]
```

**Note**

- If you do not specify the ADDLOCAL argument, all features are selected.
- Do not enter spaces in the list of features.
- The feature names are case sensitive.
- The syntax above specifies a silent installation.

For example, to install Cisco UC Integration for Microsoft Lync with the click-to-call feature for Microsoft Excel and Microsoft Word, use the following command:

```
msiexec /i CiscoUCIntegrationTMforMicrosoftLyncK9.msi /q  
ADDLOCAL="CUCIMOC,ClicktoCall,Word,Excel"
```

**Related Topics**

[Features Available with Cisco UC Integration for Microsoft Lync, page 5-7](#)

## Using the CiscoUCIntegrationTMforMicrosoftLyncK9.exe Command

The syntax required for the **CiscoUCIntegrationTMforMicrosoftLyncK9.exe** command is as follows:

```
CiscoUCIntegrationTMforMicrosoftLyncK9.exe /s [/v]/q ADDLOCAL=\ "feature1[,...[feature9]]\""
```

For example, to install Cisco UC Integration for Microsoft Lync with the click-to-call feature for Microsoft Excel and Microsoft Word, use the following command:

```
CiscoUCIntegrationTMforMicrosoftLyncK9.exe /s /v"/q  
ADDLOCAL=\ "CUCIMOC,ClicktoCall,Word,Excel\""
```

**Note**

- If you do not specify the ADDLOCAL argument, all features are selected.
- Do not enter spaces in the list of features.
- The feature names are case sensitive.
- The syntax above specifies a silent installation.

**Related Topics**

[Features Available with Cisco UC Integration for Microsoft Lync, page 5-7](#)

## Features Available with Cisco UC Integration for Microsoft Lync

[Table 5-1](#) lists the features that you can select when you install Cisco UC Integration for Microsoft Lync from a command.

**Table 5-1** *Features Available to Install with Cisco UC Integration for Microsoft Lync*

Feature Name	Description
CUCIMOC	Cisco UC Integration for Microsoft Lync.
ClicktoCall	The Application Programming Interface (API) that the click-to-call features use is also installed if you select this feature.
Excel	Click-to-call features for Microsoft Excel. <sup>1</sup>
InternetExplorer	Click-to-call features for Microsoft Internet Explorer. <sup>1</sup>
Outlook	Click-to-call features for Microsoft Outlook. <sup>1</sup>
PowerPoint	Click-to-call features for Microsoft PowerPoint. <sup>1</sup>
Word	Click-to-call features for Microsoft Word. <sup>1</sup>
Firefox	Click-to-call features for Mozilla Firefox. <sup>1</sup>
SmartTags	Smart Tag call menu options in Microsoft Office. <sup>1</sup>

1. If you select this feature, the ClicktoCall feature is also selected automatically.

**Related Topics**

- [Using the msixexec Command, page 5-6](#)
- [Using the CiscoUCIntegrationTMforMicrosoftLyncK9.exe Command, page 5-7](#)

## Upgrading Cisco UC Integration for Microsoft Lync




To upgrade Cisco UC Integration for Microsoft Lync, you do not need to uninstall Cisco UC Integration for Microsoft Lync. When you install a newer version, the installation application uninstalls the previous version of Cisco UC Integration for Microsoft Lync, then installs the new version.

When you install a newer version of Cisco UC Integration for Microsoft Lync, the registry key settings on the client computer are not changed.



# Information to Provide to Users After Installation

When your installation of Cisco UC Integration for Microsoft Lync is complete, you can provide the information in the following table to your users:

Provide...	Explanation
Sign-in information.	Depending on whether or not the phone service, voicemail service, contact service, and meeting service credentials are synchronized, users might need to select  in the Cisco UC pane and enter their credentials for each service. For more information, see <a href="#">Specifying Account Credential Synchronization Registry Settings, page 4-8</a> .
Instructions for using the application.	Provide users with information about how to access the online help, as follows: <ol style="list-style-type: none"> <li>1. Microsoft Lync: Select the menu arrow in  in the Microsoft Lync window. Microsoft Office Communicator: Select  in the title bar.</li> <li>2. Select <b>Tools &gt; FAQ on Cisco UC</b>.</li> </ol> You can also provide users with the <i>Frequently Asked Questions: Cisco UC Integration for Microsoft Lync</i> , which contains the same information as the online help.
Information about how to tune computers for maximum video performance.	<p><b>Setting the CPU Speed to Maximum Performance</b></p> <p>The power settings of your computer, particularly a laptop, can affect the video capabilities of your system. The power settings allow users to reduce CPU speed and performance to save battery life. This can also reduce the video capabilities of a computer. For optimum video performance, you should set the power scheme to the maximum performance to ensure that the CPU speed is also operating at maximum performance.</p> <ol style="list-style-type: none"> <li>1. Open the power options in your Control Panel.</li> <li>2. Select the highest possible power plan or scheme.</li> </ol> <p><b>Setting Your Graphics Hardware to Full Acceleration</b></p> <ol style="list-style-type: none"> <li>1. Open the display tool in your Control Panel.</li> <li>2. Set the hardware acceleration slider to full.</li> </ol> <p><b>Note</b> To support this setting, you may need to update the driver for your video adapter. For information about how to obtain an updated driver for your video adapter, contact the manufacturer of your video adapter or the manufacturer of your computer.</p>
Internal company support for the application.	Provide your users with the names of people to contact for assistance if they encounter problems with the application.
Tip regarding the removal of a protective strip from the camera lens.	Some personal computers with built-in cameras are shipped with a protective plastic strip over the lens. To avoid issues with poor video quality, users must remove the plastic strip from the lens.

