



## **Installation Guide for Click to Call Release 8.0**

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# CHAPTER 1

## Architecture of Click to Call in a Cisco Unified Communications System

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- [Overview of Click to Call, page 1-1](#)
- [Click to Call Executable Files, page 1-2](#)
- [Architecture of Click to Call, page 1-3](#)
- [Synchronization of the Roaming Profile, page 1-3](#)
- [Click to Call in Complex Virtualized Environments, page 1-4](#)

### Overview of Click to Call

Click to Call enables you to place calls from within your applications, or from your clipboard. Click to Call includes a series of plug-ins that work with your applications, multiple DLL files, and several executable files.

You can install Click to Call directly on the computers of your users, or you can publish Click to Call in a virtualized environment, such as Citrix XenApp.

# Click to Call Executable Files

Table 1-1 lists the Click to Call executable files.

**Table 1-1** Click to Call Executable Files



| Filename                 | Description   |
|--------------------------|---|
| CiscoCallApplication.exe | This executable file enables you to do the following: <ul style="list-style-type: none"> <li>Place calls to numbers and contacts in your applications.</li> <li>Displays the Call with Edit dialog box. Use this dialog box to place calls to numbers on your clipboard. You can use the keyboard shortcut Ctrl+Alt+D to open this dialog box.</li> <li>Place calls to numbers with the tel protocol. You can place a call to any number that is formatted as follows:<br/>tel:&lt;number&gt;</li> <li>View your call history.</li> </ul>   |
| clicktocall.exe          | This is the Click to Call configuration application. This executable file enables you to do the following: <ul style="list-style-type: none"> <li>Double-click  in your notification area of your Windows taskbar to open the Call with Edit dialog box.</li> <li>Right-click  to open a menu that enables you to configure Click to Call, set your preferences, select a phone to use with Click to Call, call a number from your call history, open the Click to Call online help, and more.</li> </ul> |
| ProblemReportingTool.exe | This executable file enables you to run the Problem Reporting Tool. This tool collects logs and information from your system if something unexpected occurs, or if an application crashes. The tool compresses these logs up and puts the compressed file on the desktop.   |

Table 1-2 lists the default locations for the Click to Call executable files.

**Table 1-2** Location of Click to Call Executable Files

| Processor Architecture | Location   |
|------------------------|--|
| 32-bit                 | C:\Program Files\Cisco Systems\Click to Call       |
| 64-bit                 | C:\Program Files (x86)\Cisco Systems\Click to Call |



## Note

When you deploy Click to Call in a virtualized environment, the path to the executable files must be the same on every server in the virtualized domain, regardless whether the domain comprises 32-bit and 64-bit servers. For example, if your domain comprises a mixture of 32-bit and 64-bit servers, you must modify the default installation path for one or other server type during the Click to Call installation to ensure that the path to the executable files is the same for all servers.

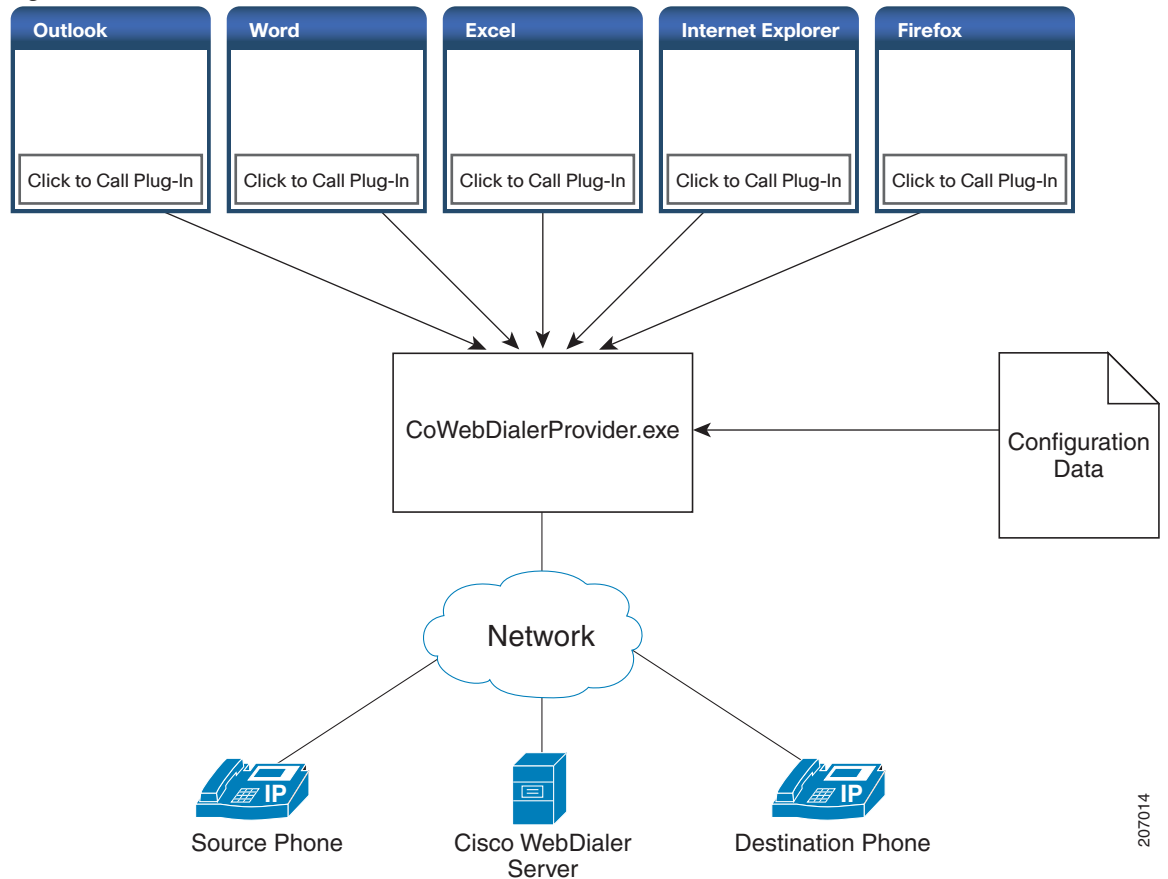
# Architecture of Click to Call

The Click to Call architecture is designed to support both local installations of Click to Call, and deployments of Click to Call in virtualized environments.

The Click to Call architecture includes plug-ins for each of the applications that Click to Call supports. The Click to Call assembly, called `CoWebDialerProvider.exe`, reads the Click to Call configuration data, creates calls, displays notification windows, and writes the history of calls to the roaming profile of the user in the `%APPDATA%` folder.

Figure 1-1 illustrates the Click to Call architecture.

**Figure 1-1** Click to Call Architecture



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## Synchronization of the Roaming Profile

The Click to Call configuration data, call history, and logs are stored in the `%APPDATA%` folder of the user, also referred to as the roaming profile. If Click to Call is installed locally, the files are synchronized across the Click to Call plug-ins.

In a virtualized environment, these files might not be synchronized. If the files are not synchronized, users might see incomplete call history, or might need to specify their Click to Call configuration more than once.

For more information about how to implement roaming profiles in a Citrix environment, go to the following URL:

<http://support.citrix.com/article/CTX120285>

## Click to Call in Complex Virtualized Environments

This guide describes the Click to Call architecture, and how Click to Call works. If you integrate Click to Call with a complex virtualized environment, and you experience unexpected behavior in Click to Call, ensure that you understand how Click to Call works. Group policies, firewalls, proxies, or other features of your virtualized environment might cause unexpected behavior in Click to Call.





## CHAPTER 2

# Configuring Cisco Unified Communications Manager for Click to Call

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- [Activating Cisco WebDialer on Cisco Unified Communications Manager, page 2-1](#)
- [Verifying that Cisco WebDialer Is Running, page 2-2](#)
- [Verifying the CTI Manager is Running on Cisco Unified Communications Manager, page 2-2](#)
- [Verifying the CCMCIP Service is Running on Cisco Unified Communications Manager, page 2-3](#)
- [Verifying the Correct Phone Devices are Associated with the User, page 2-3](#)
- [How to Configure Application Dialing Rules, page 2-4](#)
- [How to Configure Proxy Access to Cisco Unified Communications Manager, page 2-6](#)

## Activating Cisco WebDialer on Cisco Unified Communications Manager



### Note

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The Click to Call application uses the SOAP interface to interact with the WebDialer servlet on Cisco Unified Communications Manager. Because the Click to Call application does not use the HTTP interface, the application does not interact with the Redirector servlet.

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### Procedure

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- Step 1** Select **Cisco Unified Serviceability > Tools > Service Activation**.
  - Step 2** Select the Cisco Unified Communications Manager server from the server drop-down list.
  - Step 3** In CTI Services, check **Cisco WebDialer Web Service**.
  - Step 4** Select **Save**.
- 

### What To Do Next

- [Verifying that Cisco WebDialer Is Running, page 2-2](#)

## Verifying that Cisco WebDialer Is Running

### Procedure

- 
- Step 1** Start a browser.
- Step 2** Access the URL of the WebDialer on the Cisco Unified Communications Manager server.  
You can access the URL structured as follows:  
`https://<IP-address-of-Cisco Unified Communications Manager-server>/webdialer/Webdialer`  
For example, access:  
`https://209.165.200.225/webdialer/Webdialer`  
If the Sign in to Cisco WebDialer window is displayed, the WebDialer service is running.



### Tip

If you sign in to the WebDialer service, you can test the service. You can see which devices are assigned to you, and place calls.

---

### What To Do Next

- [Verifying the CTI Manager is Running on Cisco Unified Communications Manager, page 2-2](#)

## Verifying the CTI Manager is Running on Cisco Unified Communications Manager

The CTI Manager must be running on Cisco Unified Communications Manager for Click to Call to function properly.

### Procedure

- 
- Step 1** Select **Cisco Unified Serviceability > Tools > Control Center - Feature Services**.
- Step 2** Select the Cisco Unified Communications Manager server from the server drop-down list.
- Step 3** In CM Services, verify that **Cisco CTIManager** is running.
- 

### What To Do Next

- [Verifying the CCMCIP Service is Running on Cisco Unified Communications Manager, page 2-3](#)

## Verifying the CCMCIP Service is Running on Cisco Unified Communications Manager

Click to Call retrieves the phone type for the user from the CCMCIP (Cisco CallManager Cisco IP Phone Services) service, and displays the phone type on the Phone Preferences screen in the Click to Call application. Because the CCMCIP service only runs on Cisco Unified Communications Manager release 6.x or later, this procedure is only applicable if you are running this Cisco Unified Communications Manager release.

### Procedure

---

- Step 1** Select **Cisco Unified Serviceability > Tools > Control Center - Network Services**.
  - Step 2** Select the Cisco Unified Communications Manager server from the server drop-down list.
  - Step 3** In CM Services, verify that **Cisco CallManager Cisco IP Phone Services** is running.
- 

### What To Do Next

- [Verifying the Correct Phone Devices are Associated with the User, page 2-3](#)

## Verifying the Correct Phone Devices are Associated with the User

You need to verify that the correct phone devices are associated with the user on Cisco Unified Communications Manager. If a phone device is not correctly associated with the user on Cisco Unified Communications Manager, the phone is not listed on the Phone Preferences screen in the Click to Call application.

### Procedure

---

- Step 1** Select **Cisco Unified CM Administration > User Management > End User**.
- Step 2** Select Find.
- Step 3** Select the appropriate user ID.
- Step 4** In the Device Association section, verify the correct devices are listed in the Controlled Devices window.



### Note

If you need to associate a phone device with the user, select **Device Association**. Consult the Cisco Unified Communications Manager online help for further information.

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### What To Do Next

- [How to Configure Application Dialing Rules, page 2-4](#)

# How to Configure Application Dialing Rules

You can configure dialing rules for applications, such as Cisco WebDialer, that automatically strip numbers from, or add numbers to, a phone number that a user dials. For example, you can use dialing rules to automatically prefix a digit to a phone number to provide access to an outside line.

You configure application dialing rules on Cisco Unified Communications Manager from **Cisco Unified CM Administration > Call Routing > Dial Rules > Application Dial Rules**.



## Note

The Click to Call application cannot use application dialing rules with releases of Cisco Unified Communications Manager earlier than 6.x. To use application dialing rules with the Click to Call application, upgrade Cisco Unified Communications Manager to 6.x or later.

This section provides a brief description of application dialing rules. For detailed information on configuring the application dialing rules on Cisco Unified Communications Manager, refer to the following documents:

- The "Application Dial Rules Configuration" section in the *Cisco Unified Communications Manager Administration Guide* at the following URL:  
[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)
- The "Dial Plans" section in the *Cisco Unified Communications Manager Solution Reference Network Design* at the following URL:  
[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_implementation\\_design\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_implementation_design_guides_list.html)
- [Sample Application Dial Plan](#), page 2-4
- [Configuring Cisco WebDialer to Automatically Use Application Dialing Rules on Cisco Unified Communications Manager](#), page 2-6

## Sample Application Dial Plan

Table 2-1 shows a basic application dial plan for off-net local, national and international dialling for an enterprise telephony system.



## Note

Cisco Unified Communications Manager release 7.x introduces support for application dialing rules that contain the "+" sign to represent the international dialing access code.

**Table 2-1** Sample Application Dialing Rules

| Name/Description          | Number Begins With | Number of Digits | Total Digits to be Removed | Prefix with Pattern |
|---------------------------|--------------------|------------------|----------------------------|---------------------|
| International 12 Digit    | +                  | 12               | 1                          | 9011                |
| International 13 Digit    | +                  | 13               | 1                          | 9011                |
| International 14 Digit    | +                  | 14               | 1                          | 9011                |
| International 15 Digit    | +                  | 15               | 1                          | 9011                |
| Local 7 Digit<br>XXX-XXXX |                    | 7                |                            | 9                   |

| Name/Description                     | Number Begins With | Number of Digits | Total Digits to be Removed | Prefix with Pattern |
|--------------------------------------|--------------------|------------------|----------------------------|---------------------|
| Local 10 Digit<br>(510) XXX-XXXX     | 510                | 10               | 3                          | 9                   |
| National 10 Digit<br>(XXX) XXX-XXXX  |                    | 10               | 0                          | 91                  |
| National 11 Digit<br>1(XXX) XXX-XXXX |                    | 11               |                            | 9                   |

In the sample application dial plan in [Table 2-1](#), 9 represents the off-net access code for outside dialing. For domestic calls, you append the appropriate quantity of digits to the off-net access code to call either a local number or a national (long-distance) number. In each international dialing rule, you replace the “+” with the off-net access code and the appropriate international dialing access code.

The following application dialing rules are configured in [Table 2-1](#):

- Any international number, the application dialing rule removes “+” from the number, and prepends the off-net access code 9 and the international dialing access code 011 to the remaining digits.
- Any local seven digit number, the application dialing rule prepends the off-net access code 9.
- Any local ten digit number that begins with 510, the application dialing rule removes 510 from the number and prepends the off-net access code 9 to the remaining digits.
- Any national ten digit number, the application dialing rule prepends the digits 91.
- Any national eleven digit number beginning with 1, the application dialing rule prepends the off-net access code 9.

If the Number Begins With field is blank, you leave the number of initial digits open that you wish to apply to the dialing rule. For example, the initial digits 1, 1408, or 1408526 will each match the dialled number 14085264000.

You must configure the application dialing rule list in order of priority. Cisco Unified Communications Manager applies the *first* dialing rule match that it finds for the dialled number in the dialing rule list; it does not attempt to find the best match in the list. For example, if you configure the dialing rule conditions listed below, on receipt of the dialled number 14085264000, Cisco Unified Communications Manager will ignore dialing rule 1, and apply dialing rule 2 because it is the first match. Although dialing rule 3 is the best match, Cisco Unified Communications Manager ignores any subsequent rules in the list after finding the first match.

1. Begins with 9 and is 8 digits long, then do X.
2. Begins with 1 and is 11 digits long, then do Y.
3. Begins with 1408 and is 11 digits long, then do Z.



#### Note

You can also configure directory lookup rules on Cisco Unified Communications Manager. Directory lookup rules transform the number the user dials into a directory number. For further information, refer to the *Cisco Unified Communications Manager Administration Guide* at the following URL:

[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)

**Related Topics**

- [Configuring Cisco WebDialer to Automatically Use Application Dialing Rules on Cisco Unified Communications Manager, page 2-6](#)
- [Dialing Rule Tab Deactivation, page 4-2](#)

## Configuring Cisco WebDialer to Automatically Use Application Dialing Rules on Cisco Unified Communications Manager

You can configure the Cisco WebDialer service to automatically apply the application dialing rules that are configured on Cisco Unified Communications Manager.

**Procedure**

- 
- Step 1** Select **Cisco Unified CM Administration > System > Service Parameters**.
  - Step 2** Select the Cisco Unified Communications Manager server from the Server menu.
  - Step 3** Select the Cisco WebDialer Web Service from the Service menu.
  - Step 4** Select **True** for the Apply Application Dial Rules on Dial parameter.
  - Step 5** Select **True** for the Apply Application Dial Rules on SOAP Dial parameter.
  - Step 6** Restart the Cisco WebDialer service.
- 

**Related Topics**

- [Sample Application Dial Plan, page 2-4](#)

**What To Do Next**

- [Automatically Populating the Cisco Unified Communications Manager Server Address and Username, page 3-1](#)

## How to Configure Proxy Access to Cisco Unified Communications Manager

Click to Call uses the system proxy settings that are configured for the client computer to access Cisco Unified Communications Manager. If a computer is configured to use a proxy server, the proxy settings may prevent users from connecting to the Cisco Unified Communications Manager.

- [Bypassing the Proxy Server, page 2-7](#)
- [Configuring Proxy Server Access, page 2-7](#)

## Bypassing the Proxy Server

### Procedure

---

- Step 1** Select **Start > Control Panel > Internet Options**.
  - Step 2** Select the **Connections** tab, then select **LAN Settings**.
  - Step 3** Select **Bypass proxy server for local addresses**.
  - Step 4** Select **Advanced**.
  - Step 5** Enter the IP address or hostname of the Cisco Unified Communications Manager server in the Exceptions field.
  - Step 6** Select **OK**.
- 

### Related Topics

- [Configuring Proxy Server Access, page 2-7](#)

## Configuring Proxy Server Access

Click to Call supports proxy server access as follows:

- If a proxy server is enabled that allows anonymous connections, Click to Call can successfully connect to Cisco Unified Communications Manager. No further action is required from the user.
- If a proxy server is enabled that uses basic or digest proxy authentication, Click to Call uses the Internet Explorer or Windows credentials to authenticate with the proxy server. Users can select to remember the credentials for future use when they enter the credentials in Internet Explorer or in the pop-up dialog that prompts them for the user credentials after they make a call.
- If a proxy server is enabled that uses NTLM authentication, Click to Call can successfully connect to Cisco Unified Communications Manager. No further action is required from the user. In this situation, Click to Call only works with Microsoft-based proxy servers.



### Note

Click to Call communicates with Cisco Unified Communications Manager via an SSL tunnel through HTTPS. For all proxy server access, you must configure your proxy server to allow SSL tunnels through port 8443.

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### Related Topics

- [Bypassing the Proxy Server, page 2-7](#)







## CHAPTER 3

# Automatically Populating the Cisco Unified Communications Manager Server Address and Username

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- [Distribution Options, page 3-1](#)
- [Location of Registry Value Names, page 3-2](#)
- [Registry Value Names for Click to Call, page 3-2](#)
- [Distributing the Server Address Using Registry Key Push, page 3-5](#)
- [Distributing the Server Address Using the Group Policy Feature on Microsoft Active Directory, page 3-6](#)

## Distribution Options

You can distribute the Cisco Unified Communications Manager server address to your Click to Call user base using one of the following options:

- Create a registry file that contains the Cisco Unified Communications Manager CCMCIP and the WebDialer service addresses, and push this registry file to the Click to Call user base using a remote desktop management tool. To do this, you can use a software management system, for example, Altiris Deployment Solution, Microsoft System Center Configuration Manager (SCCM), and so on.



### Note

In the registry file you can also enable the discovery of the username value from the client computer. If username discovery is enabled, Click to Call populates the username field on the application with the username value with which the user logs into the client computer.



### Note

CCMCIP is a service that runs on all Cisco Unified Communications Manager nodes in a cluster. The CCMCIP service address that you configure can be the IP address of any Cisco Unified Communications Manager node in a cluster. However, to avoid routing unnecessary traffic to the publisher node, and potentially overloading the publisher node, we recommend that you configure the IP address of a *subscriber* node for the CCMCIP service address.

- Use the Microsoft Active Directory Group Policy to automatically configure the Cisco Unified Communications Manager server address for the user on the Click to Call application.
- Provide your users with their Cisco Unified Communications Manager server address information, and each user must manually enter their Cisco Unified Communications Manager server address in the Preferences screen on Click to Call following installation.

## Location of Registry Value Names

### Procedure

- 
- Step 1** Execute the following command to start the Registry Editor application:
- regedit**
- Step 2** If the registry key HKEY\_CURRENT\_USER\Software\Policies\Cisco\Unified Communications does not exist already, create the following keys in the HKEY\_CURRENT\_USER\Software\Policies key:
1. Cisco
  2. Cisco\Unified Communications
- Step 3** Create the registry value names you require in the HKEY\_CURRENT\_USER\Software\Policies\Cisco\Unified Communications key.

[Table 3-1](#) lists the registry value names you can use. Create the value names as string values.

---

## Registry Value Names for Click to Call

All of the registry value names in [Table 3-1](#) are string values.

**Table 3-1** Registry Value Names for Click to Call

| Value Name      | Description   |
|-----------------|---|
| CCMCIPServer    | Enter the IP address or server name of the Cisco Unified Communications Manager server.   |
| WebDialerServer | If the Cisco WebDialer service is running on a different server to the CCMCIP service, enter the server name of the Cisco Unified Communications Manager that is running the WebDialer service.<br><br><b>Note</b> The server name must match the name on the Cisco Unified Communications Manager certificate. For more information, see <a href="#">Installing the Cisco Unified Communications Manager Certificate</a> , page 5-4. |

**Table 3-1 Registry Value Names for Click to Call**

| <b>Value Name</b>                   | <b>Description</b>  |
|-------------------------------------|---|
| UseDefaultWindowsUserName           | To enable or disable the discovery of the Click to Call username value from the client computer, set this value as follows: <ul style="list-style-type: none"> <li>• 0: The Click to Call username is not populated.</li> <li>• 1: The Click to Call username is discovered from the client computer and populated in the User Name field in the Click to Call Preferences dialog box.</li> </ul>   |
| OverrideLocalCCMCIPServerSetting    | Enter one of the following values: <ul style="list-style-type: none"> <li>• 0: The user can edit the CCMCIP Service field on the application.</li> <li>• 1: The user cannot edit the CCMCIP Service field.</li> </ul>   |
| OverrideLocalWebDialerServerSetting | Enter one of the following values: <ul style="list-style-type: none"> <li>• 0: The user can edit the WebDialer Service field on the application.</li> <li>• 1: The user cannot edit the WebDialer Service field.</li> </ul>   |
| OverrideLocalUsernameSetting        | Enter one of the following values: <ul style="list-style-type: none"> <li>• 0: The user cannot edit the User Name field in the Click to Call Preferences dialog box. If you specify 0 and specify 1 for UseDefaultWindowsUserName registry value name, the User Name field is set to the Windows username and the user cannot edit it.</li> <li>• 1: The user can modify the User Name field in the Click to Call Preferences dialog box.</li> </ul>                        |
| UseEncryptedCredentials             | Specify how you want to encrypt the Cisco Unified Communications Manager password. Enter one of the following values: <ul style="list-style-type: none"> <li>• 0: The password is stored with obfuscation in the form of base-64 encoding. Specify this value if you want this installation of Click to Call to be compatible with previous installations, and with the Phone Designer application.</li> <li>• 1: The password is encrypted before it is stored.</li> </ul> |
| ResetProtocolHandlers               | Specify whether applications other than Click to Call can set themselves as the default application to handle calls to the tel protocol. Enter one of the following values: <ul style="list-style-type: none"> <li>• 0: Any application that has registered for control of the tel protocol can reset the tel protocol.</li> <li>• 1: Only clicktocall.exe can reset the tel protocol to Click to Call, when Click to Call is started.</li> </ul>                           |

**Table 3-1 Registry Value Names for Click to Call**

| Value Name                          | Description   |
|-------------------------------------|---|
| DisableCommunicator                 | <p>Specify whether to allow the Click to Call communicator.exe process to run. Click to Call includes a communicator.exe process. This is used to avoid issues with systems that have Microsoft Office Communicator installed.</p> <p>Microsoft Office Communicator checks if another communicator process is running and, if there is, Microsoft Office Communicator does not start. For SharePoint Smart Tags to work in Internet Explorer, a communicator.exe process must be running. If you do not have Microsoft Office Communicator running, then the Click to Call communicator.exe process enables the SharePoint Smart Tags to work.</p> <p>Enter one of the following values:</p> <ul style="list-style-type: none"> <li>• 0: Allows the Click to Call communicator.exe to run.</li> <li>• 1: Does not allow the Click to Call communicator.exe to run. Enter this value if your user base has Microsoft Office Communicator installed.</li> </ul> |
| DisplayPreferencesOnStartup         | <p>Specify whether the Click to Call Preferences dialog box is displayed automatically when you start the Click to Call configuration application.</p> <p>Enter one of the following values:</p> <ul style="list-style-type: none"> <li>• 0: Does not display the Click to Call Preferences dialog box.</li> <li>• 1: Displays the Click to Call Preferences dialog box when the Click to Call configuration application is started.</li> </ul>   |
| AllowSystemTray                     | <p>Specify whether Click to Call is added to Windows taskbar when you close the Click to Call Preferences dialog box.</p> <p>Enter one of the following values:</p> <ul style="list-style-type: none"> <li>• 0: Does not add Click to Call to the Windows taskbar. The Click to Call configuration application closes when you close the Click to Call Preferences dialog box.</li> <li>• 1: Adds Click to Call to the Windows taskbar.</li> </ul>  |
| \Dial Rules\OutsideLine             | Enter the number that is required to access an outside line, for example, 9.  |
| \Dial Rules\InternationalPrefix     | Enter the international prefix that is required to make a call outside of the country, for example, 00.   |
| \Dial Rules\DialingCodeConfigurable | <p>Enter one of the following values:</p> <ul style="list-style-type: none"> <li>• 0: The user cannot overwrite the dialing code setting in the application.</li> <li>• 1: The user can overwrite the dialing code setting in the application.</li> </ul>   |

# Distributing the Server Address Using Registry Key Push

## Before You Begin

For this procedure you require a remote desktop management tool to push the registry key to your Click to Call user base.

## Procedure

**Step 1** Using a text editor, create a registry file called **CiscoUnifiedCommunicationsWidgetsConfig.reg**.

**Step 2** Ensure that **CiscoUnifiedCommunicationsWidgetsConfig.reg** contains the following text:

```
Windows Registry Editor Version 5.00

[HKEY_CURRENT_USER\Software\Policies\Cisco]

[HKEY_CURRENT_USER\Software\Policies\Cisco\Unified Communications]
"CCMCIPServer"="NY CUCM"
"WebDialerServer"="NY WEBDIALER"
"OverrideLocalCCMCIPServerSetting"="0"
"OverrideLocalWebDialerServerSetting"="0"
"UseDefaultWindowsUserName"="1"
"UseEncryptedCredentials"="0"
"ResetProtocolHandlers"="1"
"DisableCommunicator"="0"
"DisplayPreferencesOnStartup"="0"
"AllowSystemTray"="1"
[HKEY_CURRENT_USER\Software\Policies\Cisco\Unified Communications\Dial Rules]
"OutsideLine"="9"
"InternationalPrefix"="00"
"DialingCodeConfigurable"="1"
```



**Note** Lines 2 and 4 in the text are empty to make it easier to read the text.

**Step 3** In **CiscoUnifiedCommunicationsWidgetsConfig.reg**, enter values for the registry value names as described in [Table 3-1](#).

**Step 4** Save the **CiscoUnifiedCommunicationsWidgetsConfig.reg** file.

**Step 5** Use a remote desktop management tool to push the **CiscoUnifiedCommunicationsWidgetsConfig.reg** to your Click to Call user base.

**Step 6** Download the application installer file.

**Step 7** Distribute the installer file to the Click to Call user base.

## What To Do Next

- [Downloading the Installer Package, page 5-1](#)

## Related Topics

- [Dialing Rule Tab Deactivation, page 4-2](#)

# Distributing the Server Address Using the Group Policy Feature on Microsoft Active Directory

You can use the group policy functionality on Microsoft Active Directory to automatically configure the Cisco Unified Communications Manager server address for the user on the Click to Call application. The group policy functionality allows you to create a Group Policy Object (GPO) that contains registry settings that are written to the registry for the current user. Microsoft Active Directory will automatically distribute this GPO to the organizational unit(s) or domain that are associated with the GPO.

In the case of the Click to Call application, you create a GPO that contains the Cisco Unified Communications Manager server address settings. When this GPO is automatically distributed, the Cisco Unified Communications Manager server address is written to the registry for the current user. The server address is automatically configured at user login, or when the user receives the next automatic update from Microsoft Active Directory.

This section only provides a high level overview of the tasks required to configure the GPO for the Click to Call application. It is assumed that you have prerequisite knowledge of configuring GPO on Microsoft Active Directory.

If you are have no prior knowledge of configuring GPO on Active Directory, refer to the Active Directory documentation at the following URLs:

- Active Directory 2003: <http://technet2.microsoft.com/windowsserver/en/technologies/featured/ad/default.mspx>
- Active Directory 2008: <http://technet2.microsoft.com/windowsserver2008/en/library/>



## Note

The GUI for configuring a GPO differs between Active Directory version 2003 and version 2008.

## Before You Begin

On the software download site, navigate to the Cisco Unified Communications Widgets page in the Voice Software Downloads section, and locate and download the **Click to Call.adm** file. If you cannot locate the file, request it from your Cisco representative. The software download site is available at the URL:

<http://tools.cisco.com/support/downloads/go/Model.x?mdfid=282281061>

## Procedure

- Step 1** Create a GPO for the Click to Call application, called for example 'ClicktoCall'. You need to create a GPO *per* Cisco Unified Communications Manager server (if you are administering more than one server).
- Step 2** Open the ClicktoCall GPO in the Group Policy Object Editor.
- Step 3** Add the administrative template **Click to Call.adm** (supplied to you at application installer download) to the ClicktoCall GPO.
- Step 4** Select the WebDialer Service Group Policy item under the **Cisco Unified Communications > Click-To-Call** folder in the location where the administrative templates are stored (this location varies depending on the Active Directory version you are using).
- Step 5** Select the **Enabled** option to enable the WebDialer Service Group Policy item.
- Step 6** Configure the following properties for the WebDialer Service Group Policy item:
  - Enter the Web Dialer server name or IP address.

- Check **Override local setting**. This setting is used to override any previous Web Dialer server name or IP address value manually configured on the local machine of the user.
- Step 7** Select the Device Query Service Group Policy item under the **Cisco Unified Communications > Click-To-Call** folder in the location where the administrative templates are stored (this location varies depending on the Active Directory version you are using).
- Step 8** Select the **Enabled** option to enable the Device Query Service Group Policy item.
- Step 9** Configure the following properties for the Device Query Service Group Policy item:
- Enter the Device Query server name or IP address.
  - Check **Override local setting**. This setting is used to override any previous Cisco Unified Communications Manager server name or IP address value manually configured on the local machine of the user.
- Step 10** Apply the ClicktoCall GPO to the highest organization unit, or organization units, or domain that includes your entire Click to Call user base.
- Step 11** If required, refine the ClicktoCall GPO association to a sub-set of users within the organization unit, or organization units, or domain based using the security group filtering feature.
- 

#### What To Do Next

- [Downloading the Installer Package, page 5-1](#)







## CHAPTER 4

# Additional Configuration

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Revised: June 17, 2010

- [Microsoft Office Smart Tag Call Menu Deactivation, page 4-1](#)
- [Dialing Rule Tab Deactivation, page 4-2](#)

## Microsoft Office Smart Tag Call Menu Deactivation

When you install Click to Call, the Smart Tag call menu options in Microsoft Office are disabled during the installation process. This disables the menu options that allow users to make calls from Microsoft Office to the Microsoft Office Communicator application using Smart Tags. Microsoft Office Communicator is an application from which you can make phone calls, and send instant messages.

You can also disable the Smart Tag call menu options in Microsoft Office using the registry keys. You can distribute the registry keys in a GPO, or you can edit the registry settings directly on the local machine of a user. The registry keys for both options are provided below.



### Note

In the registry keys, the values 11.0, 12.0, and 14.0 refer to the different versions of Microsoft Office; 11.0 refers to Microsoft Office 2003, 12.0 refers to Microsoft Office 2007, and 14.0 refers to Microsoft Office 2010.

---

These are the registry keys that you distribute using a GPO:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Office\14.0\Common\PersonaMenu]
"Phone"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Office\12.0\Common\PersonaMenu]
"Phone"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Office\11.0\Common\PersonaMenu]
"Phone"=dword:00000000
```

These are the registry keys that you set directly on the local machine of a user:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\14.0\Common\PersonaMenu]
"Phone"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\12.0\Common\PersonaMenu]
"Phone"=dword:00000000
```

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Office\11.0\Common\PersonaMenu]
"Phone"=dword:00000000
```

To enable the Smart Tag call menu options in Microsoft Office again, you set the values of the registry keys described above to “1”.

## Dialing Rule Tab Deactivation

You can enable or disable the Dialing Rules tab on the Click to Call application using the registry keys. If the Dialing Rules tab is disabled, the user cannot edit the values on the tab. By default the Dialing Rules tab is enabled.

You can enable or disable the Dialing Rules tab from the following registry path:  
HKEY\_CURRENT\_USER\Software\Policies\Cisco\Unified Communications\Dial Rules\.

Edit the value of the **DialingCodeConfigurable** registry key as follows:

- 0 = The Dialing Rules tab is disabled.
- 1 = The Dialing Rules tab is enabled.

The format of the **DialingCodeConfigurable** registry key value must be a DWORD.

From this registry file, you can also push out values for the outside line and the international prefix on the Dialing Rules tab. In the registry file, edit the value of the following parameters:

- **OutsideLine** - The number required to access an outside line. The format of this value must be a STRING.
- **InternationalPrefix** - The number required to dial outside of the country. The format of this value must be a STRING.



### Note

- If you are running Cisco Unified Communications Manager release 6.x, we recommend that you configure the **OutsideLine** and the **InternationalPrefix** values in the registry file, and then disable the Dialing Rules tab in the registry file using the **DialingCodeConfigurable** registry key. Click to Call then sends the **OutsideLine** and the **InternationalPrefix** values to Cisco Unified Communications Manager.
- If you are running Cisco Unified Communications Manager release 7.x, you can disable the Dialing Rules tab using the **DialingCodeConfigurable** registry key *without* configuring the **OutsideLine** and the **InternationalPrefix** values, once you have configured Click to Call to process international calls correctly:
  - You must configure the application dialing rules on Cisco Unified Communications Manager to process international calls.
  - When using Click to Call, the user must select the “+” for international calls.

### Related Topics

- [How to Configure Application Dialing Rules, page 2-4](#)



## CHAPTER 5

# Deploying the Click to Call Application

---

Revised: June 17, 2010

- [Downloading the Installer Package, page 5-1](#)
- [Deployment Options, page 5-2](#)
- [Distributing the Installer Package, page 5-3](#)
- [Installing the Application, page 5-3](#)
- [Installing the Cisco Unified Communications Manager Certificate, page 5-4](#)
- [Upgrading the Application, page 5-5](#)
- [Providing Information to Your Users, page 5-5](#)

## Downloading the Installer Package

You must register for an account on Cisco.com to access the software download site:

<http://tools.cisco.com/support/downloads/go/Model.x?mdfid=282281061>

On the download site, search for or navigate to the Click to Call node. Locate and download the installer package that suits your needs. The Click to Call application is provided in two separate installation formats as follows:

- [Click to Call Executable File, page 5-1](#)
- [Click to Call MSI File, page 5-2](#)

## Click to Call Executable File

Users can run the executable file on their own computers. The executable file includes the prerequisite software for installing the application, as follows:

- Microsoft .Net Framework 3.5 Service Pack 1 (installer stub)
- Microsoft Visual C++ 2008 Service Pack 1 Redistributable Package (x86)

Click to Call 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 in advance of installing Click to Call. All of the prerequisite software is available from the Microsoft website.

**Note**

---

If the minimum required version of .Net Framework is not installed on the computer, Click to Call 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 in advance of the Click to Call installation to save time and avoid any internet access issues.

---

**What To Do Next**

- [Deployment Options, page 5-2](#)

## Click to Call MSI File

You can use a software management system to push the MSI file to the computers of your users. The MSI file does not contain any of the prerequisite software that is required for Click to Call.

**Note**

---

If you choose to install the MSI file, you must install the prerequisite software prior to installing Click to Call.

---

The prerequisite software that you must install prior to installing the Click to Call MSI file is:

- Microsoft .Net Framework 3.5 Service Pack 1
- Microsoft Visual C++ 2008 Service Pack 1 Redistributable Package (x86)

The prerequisite software is available from the Microsoft website.

**What To Do Next**

- [Deployment Options, page 5-2](#)

## Deployment Options

You can deploy the Click to Call installation application in one of the following ways:

- [Automated Mass Deployment, page 5-2](#)
- [Standalone Installation, page 5-3](#)

## Automated Mass Deployment

The mass deployment options for installing Click to Call 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.

**What To Do Next**

- [Distributing the Installer Package, page 5-3](#)

## Standalone Installation

You can install Click to Call on each individual client computer or users can install Click to Call on their own computers. You deploy the administrator configuration settings.

**Note**

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

**What To Do Next**

- [Distributing the Installer Package, page 5-3](#)

## Distributing the Installer Package

The distribution options for the installer package are described in the following table:

| To..   | Do This   |
|--|---|
| Deploy the executable to a shared location (such as a web server) where users can access it. | <p>Push the installer (with administrator privileges) so that users can complete the installation (run the installer and follow the installation wizard).</p> <p>Provide your users with a link to the <i>User Guide for Click to Call</i> at:</p> <p><a href="http://www.cisco.com/en/US/products/ps9829/products_user_guide_list.html">http://www.cisco.com/en/US/products/ps9829/products_user_guide_list.html</a></p> |
| Deploy the executable directly to the client computer.                                       | <p>Perform the installation operation directly on a client computer while logged in as the administrator.</p> <p>Note that your users require administrator privileges to allow them to install the application directly on their client PC.</p>  |

**What To Do Next**

- [Installing the Application, page 5-3](#)

## Installing the Application

For information on installing the Click to Call application on a local computer, please refer to the *User Guide for Click to Call*.

The default install path for the Click to Call application is: C:\Program Files\Cisco Systems\Click to Call.

**Note**

If you upgrade to a different version of Microsoft Office, you must reinstall Click to Call.

**What To Do Next**

- [Installing the Cisco Unified Communications Manager Certificate, page 5-4](#)

**Related Topics**

- [Upgrading the Application, page 5-5](#)
- [Providing Information to Your Users, page 5-5](#)

## Server Reboots

If you install Click to Call on a server, you may be prompted to reboot the server when the installation is complete. Provided you installed all of the prerequisite software prior to installing Click to Call, a system reboot is not critical for Click to Call to function correctly.

# Installing the Cisco Unified Communications Manager Certificate

You must install the Cisco Unified Communications Manager certificate in the Trusted Root Certification Authorities folder on every client computer that is running Click to Call. You can install the certificate as follows:

- At the local machine level, so that the certificate is available to all users of the machine.
- At the current user level, so that the certificate is available to that user only.

**Tip**

You can deploy the certificate to your Click to Call user base using your preferred deployment method. For example, you can use a tool such as the Microsoft Certificate Manager Tool to install the certificate by running the following command:

```
certmgr /add /c example.cer /s /r localMachine root
```

The following procedure describes how to install the certificate to a local account.

**Procedure**

- 
- Step 1** Select **Start > Control Panel > Internet Options**, then select the **Content** tab.
  - Step 2** Select **Certificates**.
  - Step 3** Select the **Trusted Root Certification Authorities** tab.
  - Step 4** Select **Import**.
  - Step 5** Follow the steps in the Certificate Import Wizard to import the certificate ensuring that you install the certificate to the Trusted Root Certification Authorities folder rather than the default folder.
- 

**Note**

Ensure that the value of the WebDialer Service field in the Click to Call Preferences dialog box matches the name of the Cisco Unified Communications Manager server in the certificate, not the IP address of the Cisco Unified Communications Manager server.

---

**What To Do Next**

- [Providing Information to Your Users, page 5-5](#)

**Related Topics**

- [Security Alerts or Certificate Warnings, page 7-5](#)

## Upgrading the Application

**Procedure**

- 
- Step 1** Download the latest available Click to Call software from the software download site:  
<http://tools.cisco.com/support/downloads/go/Model.x?mdfid=282281061>
- Step 2** Distribute the updated installer package.
- Step 3** Tell your users to follow the steps in the *User Guide for Click to Call* for installing and upgrading the application.
- 

**Related Topics**

- [Distributing the Installer Package, page 5-3](#)
- [Automatically Populating the Cisco Unified Communications Manager Server Address and Username, page 3-1](#)

## Providing Information to Your Users

| Provide...  | Explanation   |
|---|---|
| Information about client hardware and software requirements | Provide your users with the PC requirements, the Cisco Unified IP Phone and the desktop application requirements.   |
| Instructions for installing and setting up the application  | Provide your users with the <i>User Guide for Click to Call</i> . Direct users to read the first section for installation information.  |
| Login information   | Provide your users with their Cisco Unified Communications Manager passwords.<br><br>If you are not automatically populating the Cisco Unified Communications Manager username value, provide your users with their Cisco Unified Communications Manager usernames. |

| Provide...  | Explanation   |
|---|---|
| Server address information  | <p>If you are not automatically populating the Cisco Unified Communications Manager server address value, provide your users with their Cisco Unified Communications Manager CCMCIP server address and the WebDialer server name.</p> <p><b>Note</b> The value of the WebDialer Service field in the Click to Call Preferences dialog box must match the name on the installed Cisco Unified Communications Manager certificate, not the IP address of the Cisco Unified Communications Manager server.</p> |
| Instructions for using the application  | Provide users with the <i>User Guide for Click to Call</i> . Remind users to use the online help that is embedded in the application.   |
| Instructions for enabling the Click to Call menu options on Internet Explorer | The Click to Call menu options are not available in Internet Explorer until the user starts the Click to Call configuration application for the first time. To do this, select <b>Start &gt; All Programs &gt; Click to Call &gt; Click to Call Configuration</b> .   |
| Internal company support for the application                                  | Provide your users with the names of people to contact for assistance when they encounter problems with the application.  |

#### Related Topics

- [Automatically Populating the Cisco Unified Communications Manager Server Address and Username, page 3-1](#)
- [Installing the Cisco Unified Communications Manager Certificate, page 5-4](#)





## CHAPTER 6

# Deploying Click to Call in a Citrix Virtualized Environment

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Revised: June 17, 2010

- [Before You Deploy Click to Call in a Virtualized Environment, page 6-1](#)
- [Publishing Click to Call with Citrix XenApp, page 6-2](#)
- [Synchronization Considerations, page 6-2](#)

## Before You Deploy Click to Call in a Virtualized Environment

Before you deploy Click to Call to users in a virtualized environment like Citrix, consider the following:

- You must install Click to Call on the same servers as the applications that you want Click to Call to work with. For example, if you want your Microsoft Excel users to be able to use Click to Call, you must install Click to Call on the same server as the Excel application.
- You must install Click to Call in the same directory on every server in the virtualized domain. For example, if the Citrix environment comprises a mixture of 32-bit and 64-bit servers, you must modify the installation path during the Click to Call installation procedure to ensure that the installation path to Click to Call is the same on every server.
- You must publish the Click to Call application if you want your users to be able to change their preferences more than once, select a phone to use with Click to Call, call a number from your call history, and so on. To publish Click to Call, you must publish the file `clicktocall.exe`.
- If you publish an application that already has Click to Call installed, it is not essential to publish Click to Call separately to your users. However, if you do not publish Click to Call, users can only specify their Click to Call configuration once, cannot select a phone to use with Click to Call, cannot call a number from your call history, and so on.

If you do not want to publish Click to Call, but you want your users to be able to specify their configuration more than once, you can install Click to Call on the computers of your users. In this case, the user profiles must be synchronized with the terminal service user profiles.

- If you want your users to only use the Call with Edit dialog box part of the Click to Call functionality, you can publish the file `CiscoCallApp.exe`.
- The behavior of Click to Call depends on how the user profiles are configured. For more information about this topic, see [Synchronization Considerations, page 6-2.](#)

# Publishing Click to Call with Citrix XenApp

You can publish Click to Call to your users in several ways. [Table 6-1](#) lists some of the available options.

**Table 6-1** *Click to Call Publication Options with Citrix XenApp*

| Publishing Method  | Description  |
|--|--|
| Server desktop   | You publish a full desktop to your users. Processing occurs on the server. The applications for your users, and Click to Call, are installed on the server.  |
| Seamless Click to Call phone, configuration, and other functionality | You publish individual applications to your users, and you want to make phone, configuration, and other functions available to your users.<br><br>To do this, you publish an application that already has Click to Call installed, then you publish clicktocall.exe.   |
| Seamless Click to Call phone functionality only                      | You publish individual applications to your users, and you want to make phone functions available to your users from within your applications. To do this, you publish an application that already has Click to Call installed.<br><br>Users do not get the wider range of configuration functions, and other functions. |
| Seamless Call with Edit dialog box only                              | You publish individual applications to your users, and you want to make minimal phone functions available to your users. To do this, you can publish CiscoCallApp.exe.   |
| Streamed application   | This is not supported for Click to Call.   |

For more information about publication options, see [Before You Deploy Click to Call in a Virtualized Environment, page 6-1](#). For more information about the functionality that is associated with clicktocall.exe, see [Click to Call Executable Files, page 1-2](#).

## Synchronization Considerations

The Click to Call configuration data, call history, and logs are stored in the roaming profile of the user. The roaming profile is contained in the %APPDATA% folder of the user. If Click to Call is installed locally, the Click to Call configuration files are synchronized across the Click to Call plug-ins. In a virtualized environment, depending on the configuration, you need to consider how the roaming profile of the user is synchronized.

If you publish a full desktop to your users, there are no synchronization issues. If your Citrix environment has several applications that use Click to Call, the applications are installed on separate servers, and the roaming profiles are not synchronized, then the configuration details, call history, and so on, of the user, might not be the same in all applications.

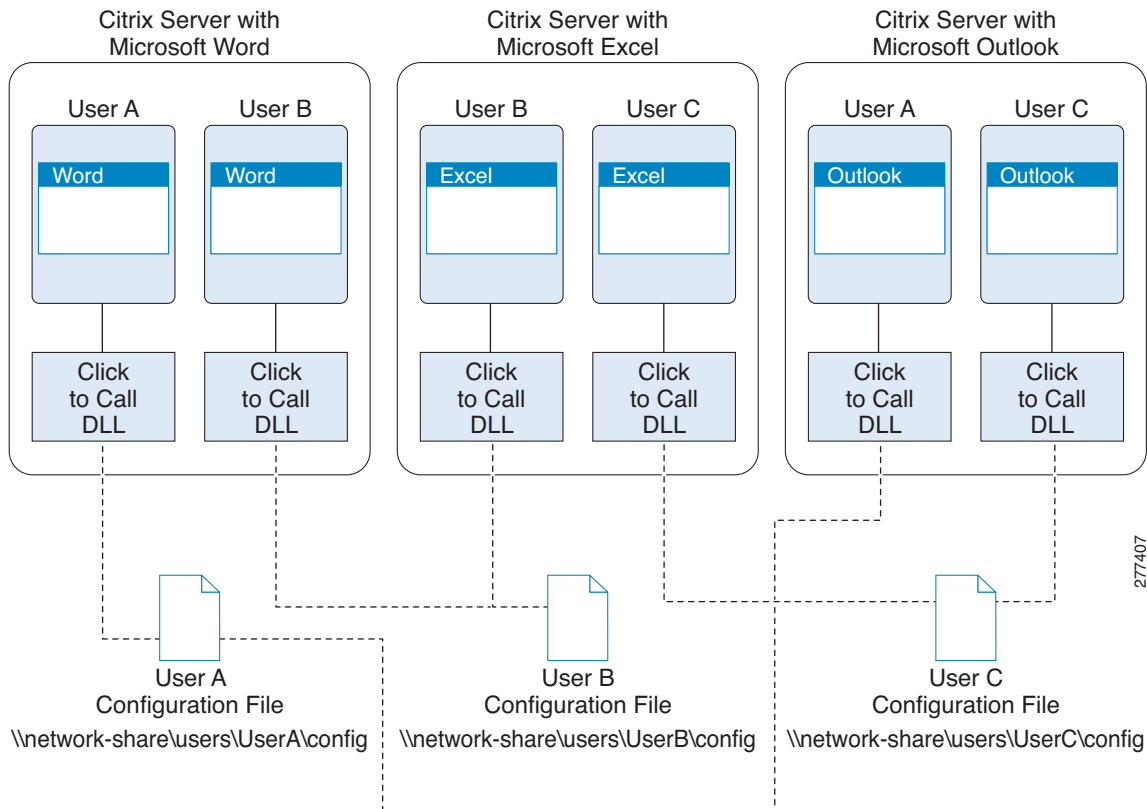
To resolve these synchronization issues, you must consider what kind of synchronization you want to implement in your Citrix environment. For more information about how to implement user profiles in a Citrix environment, go to the following URL:

<http://support.citrix.com/article/CTX120285>

In a virtualized deployment such as Citrix, Click to Call interacts with servers and applications as shown in

Figure 6-1 shows a Citrix environment where three servers host Microsoft Word, Excel, and Outlook. Users A, B, and C have their configuration files stored on a network share. In this configuration there are fewer synchronization issues.

**Figure 6-1** Click to Call in a Citrix Environment Using Folder Redirection



## Click to Call Icon

The default location of the Click to Call icon  is:

**32-bit Processor:** C:\Program Files\Cisco Systems\Click to Call\icon\ClickToCall.ico

**64-bit Processor:** C:\Program Files (x86)\Cisco Systems\Click to Call\icon\ClickToCall.ico





# CHAPTER 7

## Troubleshooting Click to Call

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Revised: June 17, 2010

- [Configuration Files, page 7-1](#)
- [Log Files, page 7-2](#)
- [Creating Problem Reports, page 7-2](#)
- [Error Messages, page 7-3](#)
- [Security Alerts or Certificate Warnings, page 7-5](#)
- [Known Issues, page 7-5](#)
- [Troubleshooting Citrix Issues, page 7-6](#)

### Configuration Files

The Click to Call configuration and log files are located in the following folders:

- Windows XP: <drive>:\Documents and Settings\<Windows-user-account-name>\Application Data\Cisco\Click to Call
- Windows Vista and Windows 7:  
<drive>:\Users\<Windows-user-account-name>\AppData\Roaming\Cisco\Click to Call

[Table 7-1](#) describes the Click to Call configuration files.

**Table 7-1**      **Click to Call Configuration File Descriptions**

| Configuration Files and Folders        | Description                       |
|--|-----------------------------------|
| \Data\Outbound folder                  | Outbound call log for the user    |
| \Log folder                            | Application log files             |
| clicktocall.xml file                   | Application settings for the user |
| ClickToCallPhones.xml file             | List of unsupported phone models  |
| ..\Cisco Unified Communications folder | Encrypted credentials file        |

#### Related Topics

- [Log Files, page 7-2](#)

# Log Files

The following table lists the log files that are stored in the Click to Call log folder:

| Filename   | Contains Logs Relating To...   |
|--|--|
| CiscoCallApplication.log   | Phone functionality.   |
| ClickToCallMain.log  | Quick launch area of the taskbar and the configuration dialog box.   |
| CommunicatorProcess.log  | The SharePoint communicator process.   |
| EXCEL.exe.log<br>OUTLOOK.exe.log<br>POWERPOINT.exe.log<br>WORD.exe.log<br>InternetExplorer.exe.log | Functions that are available when you right-click to use Click to Call.<br>Also, Smart Tags for Outlook and Internet Explorer. |

The following log files are also available:

- %TEMP%\ClickToCallInstall.log: Contains the installation application log file.
- %C2CInstallDir%\logging\Fusion: Contains Microsoft assembly binding logging.

Each log file rolls over when the maximum file size is reached, for example, clicktocall.log.1, clicktocall.log.2 and so on. The maximum number of log files is ten. Each log file stores up to 100KB of logged data.

The Click to Call installer log file is called **install.log** and is also located in the **C:\Program Files\Cisco Systems\Click to Call** folder.

## Related Topics

- [Configuration Files, page 7-1](#)

# Creating Problem Reports

If a user encounters a problem with Click to Call, the user can create a problem report. The user can enter a description of the problem, and this is included in an automatically-generated report. The report contains logs and other data that can help to analyze the problem.

If Click to Call is installed locally, the report is saved to the desktop of the user. The user can send this file to the system administrator.

If Click to Call is made available in a virtualized environment, the report is saved to the desktop folder of the user on the Citrix server. The system administrator must retrieve the report from this location.

To run the problem reporting tool, do one of the following:

- Windows XP users—Select **Start > Programs > Cisco Click to Call > Problem Reporting Tool**.
- Other Windows users—Select **Start > All Programs > Cisco Click to Call > Problem Reporting Tool**.
- Citrix users—Sign into Citrix XenApp and select **Problem Reporting Tool**. If your users do not have the problem reporting tool available, you must publish it to your users.

## Related Topics

- [Click to Call Executable Files, page 1-2](#)

- [Publishing Click to Call with Citrix XenApp, page 6-2](#)

## Error Messages

Table 7-2 shows the error messages that can be displayed on the Click to Call application, and describes a recommended action for each error message.

**Table 7-2** *Click to Call Error Messages and Recommended Actions*

| Error Displayed  | Recommended Action  |
|--|---|
| A directory error occurred. Please contact your phone administrator  | <ul style="list-style-type: none"> <li>• The Cisco Unified Communications Manager directory service may be down.</li> <li>• Allow a short time lapse and retry your connection. If the error occurs again, contact your Cisco Unified Communications Manager system administrator.</li> </ul> |
| A service error occurred. Retry the call. If the problem persists, please contact your phone administrator | <ul style="list-style-type: none"> <li>• An internal error occurred in the WebDialer application.</li> <li>• Contact your Cisco Unified Communications Manager system administrator.</li> </ul>   |
| Click to Call cannot find Cisco IP Communicator. Please ensure it is running or select another phone       | <ul style="list-style-type: none"> <li>• Ask the user to verify that their Cisco IP Communicator soft phone is running properly, or to select a phone to use with the Click to Call application.</li> </ul>   |
| Click to Call is not fully configured  | <ul style="list-style-type: none"> <li>• One or more mandatory fields in the Login screen have been left blank.</li> <li>• Ask the user to enter the missing information in the Login screen, and retry the login.</li> </ul>   |
| Destination cannot be reached  | <ul style="list-style-type: none"> <li>• The user dialed the wrong number, or you have not applied the correct dialing rules.</li> <li>• Check that the Cisco WebDialer service is configured to use the application dialing rules on Cisco Unified Communications Manager.</li> </ul>        |
| Login failed. Please make sure your user name and password are correct                                     | <ul style="list-style-type: none"> <li>• Provide the user with the correct username and password for the Cisco Unified Communications Manager server.</li> <li>• Ask the user to enter this username and password in the Login screen, and retry the login.</li> </ul>                        |
| No phone is available. Please contact your phone administrator   | <ul style="list-style-type: none"> <li>• Ask the user to verify and refresh the phone preferences in the Phones screen of the Click to Call Preferences.</li> </ul>   |
| No phone has been selected for use with Click to Call. Please select a phone                               | <ul style="list-style-type: none"> <li>• The user has no phone selected to use with the Click to Call application.</li> <li>• Ask the user to select a phone to use with the application from the Click to Call.</li> </ul>   |
| Proxy authentication rights could not be found. Please contact your phone administrator                    | <ul style="list-style-type: none"> <li>• This is an error sent from the Cisco WebDialer service. Contact your Cisco Unified Communications Manager system administrator.</li> </ul>   |

Table 7-2 Click to Call Error Messages and Recommended Actions

| Error Displayed   | Recommended Action   |
|---|--|
| Service is temporarily unavailable. Retry the call. If the problem persists, please contact your phone administrator                        | <ul style="list-style-type: none"> <li>• The Cisco Unified Communications Manager service is overloaded because it has reached its throttling limit of two concurrent sessions.</li> <li>• Allow a short time lapse and retry your connection. If the error occurs again, contact your Cisco Unified Communications Manager system administrator.</li> </ul>                     |
| The service is overloaded. Retry the call. If the problem persists, please contact your phone administrator                                 | <ul style="list-style-type: none"> <li>• The Cisco Unified Communications Manager service is overloaded because it has reached its throttling limit of two concurrent sessions.</li> <li>• Allow a short time lapse and retry your connection. If the error occurs again, contact your Cisco Unified Communications Manager system administrator.</li> </ul>                     |
| The URL you requested is not available. Please contact your phone administrator   | <ul style="list-style-type: none"> <li>• Provide the user with the correct Cisco Web Dialer and/or Device Query service IP address.</li> <li>• Ask the users to enter this information in the Login screen, and retry the login.</li> </ul>  |
| The XML command is not available in the request. Please contact your phone administrator  | <ul style="list-style-type: none"> <li>• This is an error sent from the Cisco WebDialer service. Contact your Cisco Unified Communications Manager system administrator.</li> </ul>  |
| <Number> cannot be converted to a valid phone number  | <ul style="list-style-type: none"> <li>• The phone number the user has entered is invalid.</li> <li>• Ask the user to edit the phone number and try to make the call.</li> </ul>   |
| The maximum phone number length is 32 digits  | <ul style="list-style-type: none"> <li>• The phone number the user has entered is too long.</li> <li>• Ask the user to edit the phone number and try to make the call.</li> </ul>  |
| Invalid XML command. Please contact your phone administrator  | <ul style="list-style-type: none"> <li>• This is an error sent from the Cisco WebDialer service. Contact your Cisco Unified Communications Manager system administrator.</li> </ul>  |
| Cisco WebDialer service cannot be found. Please ensure you entered the correct address  | <ul style="list-style-type: none"> <li>• Provide the user with the correct Webdialer server address.</li> <li>• Ask the user to enter this server address in the Login screen, and retry the login.</li> </ul>   |
| The call failed. Please ensure you are logged into your Extension Mobility device. If the problem persists contact your phone administrator | <ul style="list-style-type: none"> <li>• There is a call request already in progress on the phone device, or the the Cisco WebDialer service could not get a line on the phone device from the CTI.</li> <li>• Allow a short time lapse and retry your connection. If the error occurs again, contact your Cisco Unified Communications Manager system administrator.</li> </ul> |
| There is no configuration available, please enter your details in the next configuration window   | <ul style="list-style-type: none"> <li>• Ask the user to select OK to close the error message. The Click to Call Preferences dialog box is displayed automatically. Ask the user to enter the appropriate configuration details for their phone in the dialog box.</li> </ul>  |



# Security Alerts or Certificate Warnings

**Problem** You must install the Cisco Unified Communications Manager certificate in the Trusted Root Certification Authorities folder on every client computer that is running Click to Call. If the certificate is not installed in the Trusted Root Certification Authorities folder, a Security Alert window is displayed every time the user tries to use Click to Call. The Security Alert window displays the following message:

This page requires a secure connection which includes server authentication.

The Certificate Issuer for this site is untrusted or unknown. Do you wish to proceed?

**Solution** To install the security certificate, perform the following steps:

1. In the Security Alert window, select **View Certificate**.
2. In the Certificate window, select **Install Certificate**.
3. Select **Next**.
4. Select **Place all certificates in the following store** and select **Browse**.
5. Select **Trusted Root Certification Authorities** and select **OK**.
6. Select **Next** and accept the remaining defaults to complete the Certificate Import Wizard.

## Related Topics

- [Installing the Cisco Unified Communications Manager Certificate, page 5-4](#)

## Known Issues

### Application Fails to Start

**Problem** After the user installs Click to Call, the application fails to start and an error is displayed.

**Solution** Provide the appropriate workaround to your users:

- 
- Step 1** Do one of the following:
- Windows XP:** Under the Start menu, select **Regional and Language Options** in the Control Panel.
- Windows Vista:** Under the Start menu, select **Regional and Language Options** in the Control Panel, then select the **Formats** tab.
- Windows 7:** Under the Start menu, select **Clock, Language, and Region** in the Control Panel, select **Region and Language**, then select the **Formats** tab.
- Step 2** Change the locale from your locale to a different locale in the Current Format menu. For example, if your locale is **English (United States)**, change to a different locale, such as **English (United Kingdom)**.
- Step 3** Select **OK**.
- Step 4** Change the locale back to your locale, for example, **English (United States)**.
- Step 5** Select **OK**.
-

## Click to Call Menu Items Are Not Removed From Internet Explorer After Uninstall

**Problem** When you uninstall Click to Call, the Click to Call menu items are not removed from Internet Explorer.

### **Solution**

To resolve this issue, remove the following registry keys:

HKEY\_CURRENT\_USER\Software\Microsoft\Internet Explorer\MenuExt\Ca&ll

HKEY\_CURRENT\_USER\Software\Microsoft\Internet Explorer\MenuExt\Call with E&dit

If there are multiple users of the system, you must also remove the above registry keys for every user located under HKEY\_USERS.

## Microsoft Persona Menu Is Not Displayed In Microsoft Applications

**Problem** The Persona menu is not displayed in Microsoft Outlook and SharePoint applications and therefore the Additional Actions menu is not displayed.

**Solution** To resolve this issue for Microsoft Office 2003 and 2007 installations, set the value of the following registry key on the user profile to 1:

**Microsoft Office 2003 Installations:** Software\Policies\Microsoft\Office\11.0\Outlook\IM\Enabled

**Microsoft Office 2007 Installations:** Software\Policies\Microsoft\Office\12.0\Outlook\IM\Enabled

You can distribute the registry key to users using a Group Policy Object (GPO).

If you are using Microsoft Office 2010, when you click on the online status indicator next to a contact in Outlook or SharePoint, a contact card is displayed instead of the Persona menu. The Additional Actions menu is only available from the Persona menu. This is expected behavior.

### **Related Topics**

- [Distributing the Server Address Using the Group Policy Feature on Microsoft Active Directory, page 3-6](#)

## Troubleshooting Citrix Issues

If you encounter a problem with Click to Call in a Citrix environment, perform the following basic troubleshooting tasks:

1. Check that the Click to Call registry keys are configured appropriately.
2. Check if the Click to Call plug-ins are present on the server where the problem occurs.
3. If the problem relates to Microsoft Office, check that:
  - The macro security is configured appropriately.
  - The COM add-in is enabled.

4. Check if the environment contains a mix of 32-bit and 64-bit servers. In this situation, if a user launched the Click to Call configuration from a 64-bit server, then accessed Internet Explorer from a 32-bit server, there will be a conflict in the paths in the user profile. If this is the case, you need to reinstall Click to Call on the different servers, ensuring that the installation path to the executable files is the same on every server.

**Related Topics**

- [Creating Problem Reports, page 7-2](#)

