

Installing Cisco Unified CallConnector for Microsoft Dynamics CRM 3.0

This chapter describes how to install the Cisco Unified CallConnector for Microsoft Dynamics CRM 3.0 with the following software:

- Cisco Unified Communications Manager 4.0 or later
- Cisco Unified Communications Manager Express 3.2 or later
- Cisco Unified IPCC Express 4.0 or later

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Prerequisites

- If you are upgrading from a previous version of the Cisco Unified CallConnector for Microsoft Dynamics CRM (version 2.x), you must uninstall the old version before installing this version.
- If you are integrating with Cisco Unified Contact Center Express, you must follow the Cisco Unified Communications Manager installation steps as described in the Cisco Unified Communications Manager technical documentation, and then complete the "Integrating with Cisco Unified Contact Center Express" steps as described in the Cisco Unified Contact Center Express technical documentation process.
- Install, configure, and verify the proper operation of Cisco Telephony Application Programming Interface (Cisco TAPI) software must be before proceeding with the installation of the Cisco Unified CallConnector for Microsoft Dynamics CRM components.
- Install the Microsoft .NET Framework before proceeding with the Cisco Unified CallConnector for Microsoft Dynamics CRM installation.

Restrictions

• The installation process is supported by Virtual Network Computing (VNC) and other remote control desktop software, but is not supported by Terminal Services.

About Installing Cisco Unified CallConnector for Microsoft Dynamics CRM

Install and ensure operation of the Cisco Unified CallConnector for Microsoft Dynamics CRM server component on the Microsoft CRM server itself. To allow for maximum ease of installation during the client phase, install and ensure operation of the Cisco Unified CallConnector for Microsoft Dynamics CRM server component and service before installing clients because they will attempt to contact the Cisco Unified CallConnector for Microsoft Dynamics CRM server component during their own installation.



Note

Configure the Cisco TAPI client software properly and ensure it is running before proceeding with the installation of the Cisco Unified CallConnector for Microsoft Dynamics CRM software. Verify that you can monitor and control the end-user phone extension associated with the client PC. Failure to do so will cause problems during the Cisco Unified CallConnector for Microsoft Dynamics CRM installation. For more information about installing and configuring the Cisco TAPI software, see the Cisco Unified Communications Manager technical documentation.

Software Installation Order

You must install the Cisco Unified CallConnector for Microsoft Dynamics CRM server and client components in the following order:

- Cisco Unified CallConnector for Microsoft Dynamics CRM server component (installed on Microsoft CRM server)
- 2. Cisco Unified CallConnector for Microsoft Dynamics CRM client component (installed on all client PCs using the Cisco Unified CallConnector for Microsoft Dynamics CRM)

Installing the Cisco Unified CallConnector for Microsoft Dynamics CRM Server

Use the following steps to install the Cisco Unified CallConnector for Microsoft Dynamics CRM server.

- Step 1 Log in to your PC as administrator.
- Step 2 Locate and double-click the Setup.exe file for the Cisco Unified CallConnector for Microsoft Dynamics CRM Server installer (see Figure 1) to bring up the Setup Wizard (see Figure 2).

Figure 1 Server Setup.Exe File: Cisco Unified CallConnector for Microsoft Dynamics CRM

🔂C4ServerInstaller.msi	2,734 KB	Windows Installer P	10/12/2005 10:27 AM	
🔁 Setup.Exe	108 KB	Application	3/19/2003 1:03 AM	199
🎒 Setup. Ini	1 KB	Configuration Settings	10/12/2005 10:26 AM	6

Figure 2 Server Setup Wizard: Cisco Unified CallConnector for Microsoft Dynamics CRM

🚏 Cisco CRM Communications Connector Server
Welcome to the Cisco CRM Communications Connector Server Setup Wizard
The installer will guide you through the steps required to install Cisco CRM Communications Connector Server on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel < Back Next >

Step 3 Click Next.

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The License Agreement window appears (see Figure 3).

Figure 3	Server License Agreement Window: Cisco Unified CallConnector for
	Microsoft Dynamics CRM

😽 Cisco CRM Communications Con	nector Server		
License Agreement			
Please take a moment to read the licen Agree", then "Next". Otherwise click "(accept the terms below,	click ''l
Cisco CRM Com <u>End Us</u>	munications Con er License Agreem		
IMPORTANT: PLEASE AGREEMENT CAREFU OR USING CISCO OR C CONSTITUTES ACCEP	ILLY. DOWNLOA CISCO-SUPPLIED	DING, INSTALI SOFTWARE	
	O I <u>A</u> gree		
	Cancel	< <u>B</u> ack	lext >

Step 4 Select I Agree and click Next.

The Select Installation Folder window appears (see Figure 4).

Figure 4 Select Installation Folder Window: Cisco Unified CallConnector for Microsoft Dynamics CRM

🖁 Cisco CRM Communications Connector Server
Select Installation Folder
The installer will install Cisco CRM Communications Connector Server to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Eolder: C:\Program Files\Cisco Systems Inc\Cisco CRM Communications Cor <u>D</u> isk Cost
Install Cisco CRM Communications Connector Server for yourself, or for anyone who uses this computer:
O Everyone
O Just me
Cancel < <u>B</u> ack <u>Next</u> >

Step 5 Click Just me to specify yourself as administrator.

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Step 6Click Next to accept the default installation folder location (we recommend this).The Confirm Installation window appears (see Figure 5).

Figure 5 Server Installation Confirmation Window: Cisco Unified CallConnector for Microsoft Dynamics CRM

🔁 Cisco CRM Communications Connector Server	
Confirm Installation	
The installer is ready to install Cisco CRM Communications Connector Server on you	ur computer.
Click "Next" to start the installation.	
Cancel < <u>B</u> ack	Next >

Step 7 Confirm the installation by clicking Next.

After the files are copied, the Server Configuration Wizard appears.

Step 8 Configure the Server Configuration tab.

Figure 6 shows how this configuration dialog might appear after configuration, before configuring the phone number processors. In this example, "triton" is the Microsoft CRM server name and it runs on port 5555. Include the remainder of the path that you see in the example (specifically, /MSCRMServices/2006/CrmService.asmx).

Figure 6 Server Configuration Window—Server Configuration Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

🔜 Cisco Unified CRM Connector Server Configuration		
Server Configuration Performance Counters Search Configuration Logging Client Config	guration	
CRM Service URL: http://triton:5555/MSCRMServices/2006/CrmService.asmx		Test
Enable CRM KeepAlive Searches		
Domain:		
Username:		
Password:		
Delay (seconds): 300 🔹		
	Save Changes & Exit	Abort Changes & Exit

When you click the **Test** button next to the CRM Services URL, you may receive various responses. Figure 7 shows what you want to see. "The URL is Valid" means that the C4 Server Service successfully contacted the Microsoft CRM Web Services.

Figure 7 URL Is Valid Message

Suc	cess	X	
Th	e URL is	; Valid	
	ОК		2526
	OK		100000

Figure 8 shows a validation error. In this instance, the URL is probably not the correct location to the Microsoft CRM Web Services. Verify the URL and try again.

Figure 8 Validation Error Message: Cisco Unified CallConnector for Microsoft Dynamics CRM

Validation Error	N
The URL is NOT VALID.	
The result was ProtocolError.	
The request failed with HTTP status 401: Access Denied.	
This may be caused if the current user does not have access to the CRM directory path. (The CRM Connector Server Service may not be running as the same user - make sure you run Test when logged in as th same user that the service will run as.	-
	01014

Figure 9 shows a Simple Object Access Protocol (SOAP) error. This could indicate that the user installing the C4 Server Service does not have access to Microsoft CRM.

Figure 9 Validation Error Message: Cisco Unified CallConnector for Microsoft Dynamics CRM

Validation Error	
SOAP Server Application Faulted	
ОК	

Step 9 In the Server Configuration tab (see Figure 6) check or uncheck the Enable CRM Keepalive Searches field to enable or disable keepalive searches.

Use the keepalive feature to ensure that the Microsoft CRM server is continuously polled so that it does not drop objects from its cache, which could negatively affect a demonstration environment. You do not need to use this feature in a live deployment or production environment.

The remaining fields in the Server Configuration tab are:

- Domain—User domain to use when authenticating for performing keepalive searches.
- Username—Username to use when authenticating for performing keepalive searches.

Cisco Unified Customer Relations Management Connector 3.0

- **Password**—User password to use when authenticating for performing keepalive searches.
- **Delay**—Delay in seconds to wait after performing any search before initiating a keepalive search.

Step 10 Click OK.

Step 11 Click the Performance Counters tab.

The Performance Counters tab window appears (see Figure 10).

Figure 10 Server Configuration Window—Performance Counter Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

Server Configuration Performance Counters Search Configuration Logging Client Configuration	
 ✓ Enable Performance Counters ✓ Number of Clients ✓ Number of Remoting Calls ✓ Remoting calls per second ✓ Average time / SubSearch (seconds) ✓ Total Number of Search (seconds) ✓ Total Number of Searches ✓ Searches per second 	
Save Changes & Exit Abort Changes &	- 11

Step 12 In the Performance Counter tab, check or uncheck the Enable Performance Counters box to enable or disable performance monitor counters. To view these objects, add "C4.Server" as a counter within the Windows Performance Monitor, and select the objects to monitor.

The remaining fields in the Performance Counter tab are :

- Number of Clients—Number of clients that are currently connected.
- Number of Remoting Calls—Total number of client-initiated server requests.
- Remoting calls per second—Average number of client-initiated requests per second.
- Average time/Search (seconds)—Average time in seconds to complete a full search.
- Average time/SubSearch (seconds)—Average time in seconds to complete a search of any specific entity.
- Total Number of Searches—Total number of searches that have been performed.
- Number of Active Searches—Number of searches that are currently executing.
- Searches per second—Average number of searches per second.
- Step 13 Click the Search Configuration tab.

The Search Configuration window appears (see Figure 11).

The Search Configuration tab displays the entities and fields within Microsoft CRM that the Cisco Unified CallConnector for Microsoft Dynamics CRM will search to match the Caller ID or name to a customer record. You do not need to manipulate this file for initial program usage.

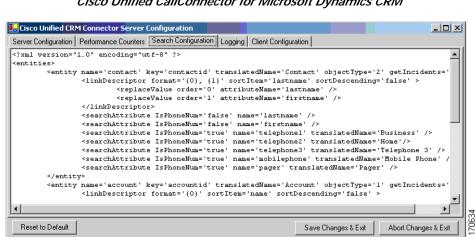


Figure 11 Server Configuration Window—Search Configuration Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

Step 14 Click the Logging tab.

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The Logging tab window appears (see Figure 12).

Figure 12 Server Configuration Window—Logging Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

	1 Connector Server Configuration
Server Configuration	Performance Counters Search Configuration Logging Client Configuration
🔽 Enable Server Log	gging
🔽 Log to File:	C4Server.{D:yyyy-MM-dd}.log
Logging Level:	Info 💌
Maximum	log file age (days): 10 😴
Maximum lo	g file size (Kbytes): 10000 😑
	Save Changes & Exit Abort Changes & Exit

The following describes the fields in the Logging tab:

- Enable Server Logging—Check or uncheck to enable or disable logging.
- Log to File—To log to a filename, check and type the filename.
- Logging Level—Sets the verbosity of the log file output.
- Maximum log file age—Maximum age in days of old (existing) log files. You must use dynamic filenames.
- Maximum log file size—Maximum approximate size in KB of any single log file.

Step 15 Click the Client Configuration tab.

The following describes the fields and buttons in the Client Configuration tab:

- **Ignore inbound/outbound phone numbers**—Allows you to specify phone numbers that the Cisco Unified CallConnector for Microsoft Dynamics CRM client should ignore when processing inbound and outbound phone numbers. The first four boxes allow you to specify numbers to ignore when the phone number either begins with, ends with, is exactly, or contains the specified digit strings. Only digits are allowed. The fifth box, "Custom/Advanced," allows you to specify regular expressions of phone number digit strings to ignore.
- Edit Phone Number Processor Configs—Click to configure the phone number processors.
- **Default PNP Config**—Default phone number processor configuration for clients with unspecified or invalid phone number processor configurations.

When you first configure the Cisco Unified CallConnector for Microsoft Dynamics CRM server component and enter the Phone Number Processor (PNP) Configuration window, you see a blank configuration area, as shown in Figure 13, because you must first create a new phone number processor configuration.

onfiguration:		▼ New Delete
Obtain a local outside line: Obtain a long-distance outside line: National Long Distance Prefix:		Phone Number Pattern Recognition Processing Prefilter: Pattern Recognizers (processed in order)
International Long Distance Prefix: Local Country Code: ow to dial		
+ Add Special Code Extensions: Local Phone Numbers: Long Distance Phone Numbers: International Phone Numbers: Unrecognized Phone Numbers:	Ask?	New Pattern:
+ - + - + - +	Exchanges:	Search Formats

Figure 13 Phone Number Processor Configuration Window—Disabled

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Step 16 In the Phone Number Processor Configuration window, click New to begin a new configuration. The New PNP Configuration window is shown in Figure 14.

Figure 14 New PNP Configuration Window

🖳 New PNP Configuration				
New Configuration Name:	Default Configuration			
	OK Cancel	- 10EM		

Step 17 In the New PNP Configuration window, enter a configuration name and click OK.

You can configure each client to use one of the multiple configurations that you have defined. You can define each additional configuration as a site, for use with branch or remote offices that have a different area code than the main business location where the Microsoft CRM server is located.

Step 18 The Phone Number Processor Configuration window appears, as shown in Figure 15. Some defaults are loaded based on the United States 10-digit dialing rules.

Phone Number Processor Configuration		
Configuration: Default Configuration		▼ New Delete
Access Codes		Phone Number Pattern Recognition
Obtain a local outside line: 9		Processing Prefilter: [^+0-9]
Obtain a long-distance outside line: 9		Pattern Recognizers (processed in order)
National Long Distance Prefix: 1		
International Long Distance Prefix: 011		
Local Country Code: 1		
How to dial		× ×
+ Add Special Coo	de Ask?	
Extensions: {ex}		New Pattern:
Local Phone Numbers: {out} {ac} {ex} {st}		
Long Distance Phone Numbers: {dout} {dp} {ac} {sn	}	Pattern Testing
International Phone Numbers: {dout} dp} (dp) {co		
Unrecognized Phone Numbers:	.	
Area Codes		
	Local Exchanges:	
		Search Formats
		│ ×+
	+ -	New Format:
Enable a Default Area Code:		Import Country-Specific Defaults Utilities
	ок	Cancel

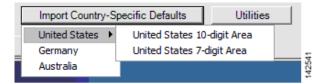
Figure 15 Phone Number Processor Configuration Window—Enabled

Step 19 Click the import defaults for your area. The supported configurations include the following:

- U.S. 10-digit dialing
- U.S. 7-digit dialing
- Germany
- Australia

All of these predefined configurations require additional custimization for your specific area. To import one of these configurations, click **Import Country-Specific Defaults** near the bottom of the dialog window, and select a configuration. Figure 16 shows the details of the lower right section of the Phone Number Processor Configuration window.

Figure 16 Dial Plan Templates





If you do this with a predefined configuration, it will be overwritten, and you will lose any custom dialing rules (specifically pattern recognizers and search formats).

Step 20 Configure the Phone Number Processor Configuration window, as shown in Figure 17. The values that you can configure in the Phone Number Processor Configuration window are described in Table 2.

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🖳 Phone Number Processor Configuration		
Configuration: Default Configuration		▼ New Delete
Access Codes		Phone Number Pattern Recognition
Obtain a local outside line: 9		Processing Prefilter: [^+x0-9]
Obtain a long-distance outside line: 9		Pattern Recognizers (processed in order)
National Long Distance Prefix: 1		(\++({LDOUT}?({LDP}))?{IDP})(? <cc>{LOCALCC})(?<rep>.+)</rep></cc>
International Long Distance Prefix: 011		(\+(({LDOUT}?({LDP}))?{IDP})(? <cc>{CCODES})(?<sn>\d+)&(? ({LDOUT}?({LDP}))?(?<ac>({LOCALACS}))(?<sn>(?<ex>\d{3}))</ex></sn></ac></sn></cc>
Local Country Code: 1		((LDOUT)?((LDP)))?(? <ac>((SPLITACS)))??<sn>(?<ex>((LDOUT)?((LDP)))?(?<ac>(d3))?<sn>(?<ex>(d3))?<st>(d2)?(?<ac>(d3)??<st>(d3)??<st>(d3)??<st>(d3)??<st>(d3)??<st>(d3)??<st>(d3)??<st>(d3)??<st>(d3)??<st>(d3)??</st></st></st></st></st></st></st></st></st></ac></st></ex></sn></ac></ex></sn></ac>
How to dial		
+ Add Special Code	Ask?	
Extensions: (ext)		New Pattern:
Local Phone Numbers: {out} {ac} {ex} {st}		*
Long Distance Phone Numbers: [{dout} {dp} {ac} {ex} {st}		Pattern Testing Test
International Phone Numbers: [dout] (dp) (dp) (cc) (sn)		
Unrecognized Phone Numbers:		
Area Codes		
	changes:	
407		
		Search Formats
		%{cc}%{ac}%{ex}%{st}%
		%{cc}%{%sn%}%
		%{ac}%{ex}%{st}%
		%{ext}%
+ - + - + - +	-	New Format:
I Enable a Default Area Code: 407		Import Country-Specific Defaults Utilities
0	<	Cancel
	<u> </u>	

Figure 17 Phone Number Processor Configuration Window—Example Configuration

Section	Configurable Values					
Access Codes	You can define five access codes. Their actual use is dictated by the values provided in the "How to dial" section, but their general use is described below. Each access code has a mnemonic associated with it, which is shown in curly braces.					
	• Obtain a local outside line {out}—Digit string that is typically dialed before placing local calls.					
	• Obtain a long-distance outside line {ldout}—Digit string typically dialed before placing local long-distance and international calls.					
	• National Long Distance Prefix {ldp}—Digit string typically dialed before the area code when placing long-distance and international calls.					
	• International Long Distance Prefix {idp}—Digit string that is typically dialed to indicate the call is international.					
	• Local Country Code {localcc}—Digit string representing the country the user is located in when users dial from another country.					
How to dial	Each box in this section defines how to dial a phone number after it is divided into parts (country code, area code, etc.). Typically, the values provided in each style phone number field are combinations of codes that are built into the program, although you could also provide numbers directly in each box. The codes that are available are the same codes shown in the Access Codes and Phone Number Pattern Recognition sections, plus one special code, "{}," which means all digits.					
	The "Ask?" check box next to each field tells the client whether to ask the user to verify the phone number before dialing when using click-to-dial, and when there is only one phone number for the requested click-to-dial contact.					
Area Codes	The values in these boxes are used by the "Phone Number Pattern Recognition" section to determine the accurate parts of each phone number, and to determine the style (local, long distance, etc.) of the phone number being processed. The exact way in which these area codes are used is determined by the Phone Number Pattern Recognition section, but the intended meaning of values in each box are:					
	Local—Values are considered local area codes.					
	• Long Distance—Values are considered long-distance area codes.					
	• Split Local/LD—Values are local and long distance area codes.					
	• Local Exchanges—For each area code in the "Split Local/LD" box, values are the local exchanges for that area code. Values in this box are maintained individually for each area code in the "Split Local/LD" box.					
	The Enable a Default Area Code check box allows the system to assign the user's local area code if it is not in the contact's record. If the area code is in the CRM contact record, then this field is not used during processing.					

Table 2 PNP Configuration Dialog

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Section	Configurable Values
Phone Number and Pattern Recognition	This area is what really allows the client to pick the parts of the phone number for efficient CRM searching and for accurate no-touch click-to-dial capability. It uses Microsoft .NET Regular Expressions to identify each part of the phone number. The patterns are used during both incoming and outgoing phone call detection for efficient CRM searches, and also click-to-dial.
	First, the phone number is filtered according to the prefilter. Anything that matches the prefilter is removed from the digit string being considered. Then, the digit string is tested with each pattern in order until a match is found.
	Each pattern must result in at least one named match for the following values:
	CC—Country code
	• AC—Area code
	• EX —Exchange
	• ST—Station
	• EXT —Extension
	• SN—Generic "subscriber number"
	The subscriber number may or may not follow the typical definition of a subscriber number; this value is more of a generic container.
	After a pattern is found that matches the digit string, and it is divided into its parts, one of two things occurs:
	• If the number is being processed for click-to-dial, the style of the phone number is determined by specific rules. The phone number is then dialed as specified in the "How to dial" section.
	• If the number is being processed for searching Cisco Unified CallConnector for Microsoft Dynamics CRM, it is formatted and searched according to the patterns specified in the "Search Formats" area.

Section	Configurable Values
Search Formats	Search formats allows the administrator to maximize efficiency and accuracy when searching Cisco Unified CallConnector for Microsoft Dynamics CRM. After a phone number is processed by the pattern recognizers, the list of search formats is processed in order until one is found in which all components of the search format can be provided. Each search format component is a code that matches the named match values detected by the pattern recognizers. Each matching value is then replaced with that portion of the phone number. There are two formats for each search component, using AC as an example:
	• {ac}—Replaces the "{ac}" with the area code detected from the phone number.
	• {%ac%}—Replaces the "{%ac%}" with the area code detected from the phone number with "%" symbols between each digit.
	The first format provides the most accurate searching, however, in some cases, may not find the correct records if there are other characters interspersed in the text stored in Cisco Unified CallConnector for Microsoft Dynamics CRM. This will not occur if Cisco Unified CallConnector for Microsoft Dynamics CRM users are diligent about how they enter phone numbers into the Cisco Unified CallConnector for Microsoft Dynamics CRM system. When other characters are interspersed in the text in Cisco Unified CallConnector for Microsoft Dynamics CRM, the "{% ac%}" format can help because it will still recognize those values, but probably also produces some results that are not true matches.

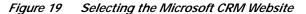
- Step 21 After completing the configuration, click **OK**.
- Step 22 Click OK again to finish the C4Server installation program.

The Cisco Unified CallConnector for Microsoft Dynamics CRM Server Service is now installed and starts automatically, as shown in Figure 18.

Figure 18	Windows Services
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Services							
File Action View	Help						
← → 🔳 🗗 🤄	∄ 🖫 😫 🕨 ■ 🗉 ■						
Services (Local)	Services (Local)						
	Cisco CRM Communications	Name 🔺	Description	Status	Startup Type	Log On As	^
Cisco CRM Communications Connector Server		Ati HotKey Poller			Manual	Local System	
		Automatic Updates	Enables th	Started	Automatic	Local System	
	Stop the service Restart the service	AutoUpdateServerService			Manual	Local System	
		Background Intelligent Transfer Service	Uses idle n		Manual	Local System	
	1	Cisco CRM Communications Connector Server		Started	Automatic	Local System	
	1	🙀 Cisco Systems, Inc. VPN Service		Started	Automatic	Local System	
	1	Cisco TAPI Proxy Server			Manual	Local System	
	1	ClipBook	Enables Cli		Manual	Local System	
		COM+ Event System	Supports S	Started	Manual	Local System	~
	Extended Standard	ABA					
	· / /						

Step 23 Next, the installation of the Cisco Unified CallConnector for Microsoft Dynamics CRM server component prompts you to choose which website to install the Independent Software Vendor (ISV) customizations into. Choose the Microsoft CRM 3.0 website from the drop-down list, as shown in Figure 19.



Select Microsoft CRM Web	
Microsoft CRM v3.0	
OK Cancel	170671

Step 24 After selecting the Microsoft CRM website, the installer displays a notification message, which advises you that the ISV customizations are installed, as shown in Figure 20, but you must manually remove the default customizations. Otherwise, you may receive unwanted buttons in the Cisco Unified CallConnector for Microsoft Dynamics CRM GUI, such as the Test button.

Figure 20 ISV Customization Message

Informati	on			×	
٩	mar	any i	ive been insta pre-defined N to appear.		
		OK			170673

You are now done with installation of the Cisco Unified CallConnector for Microsoft Dynamics CRM server components. Proceed to the "Installing the Cisco Unified CallConnector for Microsoft Dynamics CRM Client" section on page 27.

Installing the Cisco Unified CallConnector for Microsoft Dynamics CRM Client

Note

For maximum ease of configuration, install and verify the operation of the Cisco Unified CallConnector for Microsoft Dynamics CRM Server Service before installing clients.

Install the following software for the Cisco Unified CallConnector for Microsoft Dynamics CRM Client.

- Install one of the following:
 - Cisco Unified Communications Manager Telephony Application Programming Interface (Cisco Unified Communications Manager TAPI) Client (if integrating with Cisco Unified Communications Manager, with or without Cisco Unified IPCC Express integration)
 - Cisco Unified Communications Manager Express IOS TAPI Service Provider (Cisco IOSTSP) Client (if integrating with Cisco Unified Communications Manager Express). Obtain the latest version of this file from:

http://www.cisco.com/cgi-bin/Software/Tablebuild/doftp.pl?ftpfile=cisco/voice/ip-phone/ip-io stsp/CiscoIOSTSP1.3.zip&app=Tablebuild&status=showC2A

• Install Microsoft .NET Framework v1.1

Perform the following steps to install the Cisco Unified CallConnector for Microsoft Dynamics CRM Client with Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, and Cisco Unified IPCC Express.

- Step 1 Log in to your PC as administrator.
- Step 2 Locate and double-click the Setup.exe file for the Cisco Unified CallConnector for Microsoft Dynamics CRM Client installer (see Figure 21).

Figure 21 Cisco Unified CallConnector for Microsoft Dynamics CRM Client Installer Extracted Files

🔂 C4ClientInstaller.msi	2,402 KB	Windows Installer P	10/12/2005 10:27 AM	
🔁 Setup.Exe	108 KB	Application	3/19/2003 1:03 AM	8
📴 Setup. Ini	1 KB	Configuration Settings	10/12/2005 10:27 AM	<u>18</u>

The Cisco Unified CallConnector for Microsoft Dynamics CRM Client Setup Wizard appears (see Figure 22).

Figure 22 Client Setup Wizard: Cisco Unified CallConnector for Microsoft Dynamics CRM

🖶 Cisco CRM Communications Connector Client
Welcome to the Cisco CRM Communications Connector Client Setup Wizard
The installer will guide you through the steps required to install Cisco CRM Communications Connector Client on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel < Back Next >



The License Agreement dialog appears (see Figure 23).

Figure 23 License Agreement Window: Cisco Unified CallConnector for Microsoft Dynamics CRM Client

1	Cisco CRM Communications C	onnector Client				
Li	cense Agreement					
Please take a moment to read the license agreement now. If you accept the terms below, click "I Agree", then "Next". Otherwise click "Cancel".						
	Cisco CRM Communications Connector Client					
	IMPORTANT: PLEASE READ THIS END USER LICENSE AGREEMENT CAREFULLY. DOWNLOADING, INSTALLIN OR USING CISCO OR CISCO-SUPPLIED SOFTWARE CONSTITUTES ACCEPTANCE OF THIS AGREEMENT.					
	🔾 I Do Not Agree	⊙ I Agree				
		Cancel < Back Next >				

- Step 4 Select I Agree to accept the license agreement.
- Step 5 Click Next.

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The Select Installation Folder window appears (see Figure 24).

Figure 24 Select Installation Folder Window: Cisco Unified CallConnector for Microsoft Dynamics CRM Client

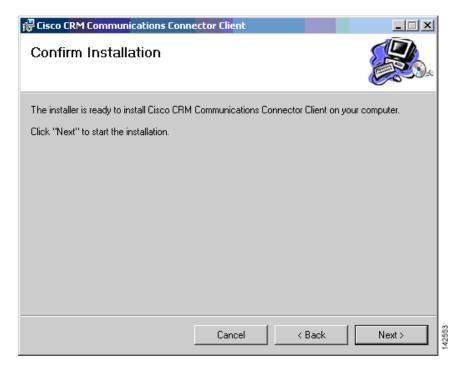
Cisco CRM Communications Connector Client					
Select Installation Folder					
The installer will install Cisco CRM Communications Connector Client to the following folder.					
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".					
Eolder:					
C:\Program Files\Cisco Systems Inc\Cisco CRM Communications Cor	Browse				
	Disk Cost				
Install Cisco CRM Communications Connector Client for yourself, or for any computer:	yone who uses this				
Just me					
Cancel < Back	Next >				

Step 6 Click Just me.

Step 7 Click Next to accept the default installation folder and confirm the installation.

The Confirm Installation window appears (see Figure 25).

Figure 25 Confirm Installation Window: Cisco Unified CallConnector for Microsoft Dynamics CRM Client



Step 8 Click Next to start the installation.

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The installation begins copying files. After the files are copied, the Cisco Unified CallConnector for Microsoft Dynamics CRMClient Configuration window appears, as shown in Figure 26.

Figure 26 Client Configuration Window — TAPI Configuration Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

🖳 Cisco CRM Communications Connector Client Configuration					
TAPI Configuration Ignore List RM Configuration Logging					
Select TAPI Line to Monitor:					
Line Name					
Intel(R) 537EP V9x DF PCI Modem WAN Miniport (L2TP) LPT1T					
IPCONF LINE H323 Line					
Cisco Line: [SEP000E836F0A56] (3000)					
Cisco Line: [SEP000E836F0A56] (3114)					
TAPI Lookup timeout (ms): 500 😴					
Ignore Outgoing Calls					
OK Cancel					

Step 9 Click the TAPI Configuration tab.

The TAPI Configuration tab allows you to specify the line to monitor for incoming and outgoing calls (see Figure 26). You can also specify to completely ignore either inbound or outbound calls (or both).

The TAPI Lookup timeout field specifies a value in milliseconds, after which time the Cisco Unified CallConnector for Microsoft Dynamics CRM client manually asks the provider for caller ID information if the TAPI client does not provide it. If the client frequently reports the wrong phone number (such as the internal voice-mail pilot extension), increasing this value may eliminate this.

Step 10 Click the **Ignore List** tab.

The Client Configuration window's Ignore List tab appears as shown in Figure 27.

The Ignore List tab allows you to specify phone numbers that the Cisco Unified CallConnector for Microsoft Dynamics CRM client should ignore when processing inbound and outbound phone numbers from the client side. The first four boxes allow you to specify numbers to ignore when the phone number either begins with, ends with, is exactly, or contains the specified digit strings. Only digits are allowed. The fifth box, "Custom/Advanced," allows you to specify regular expressions of phone number digit strings to ignore.

Figure 27 Client Configuration Window—Ignore List Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

Electric CRM Communications Connector Client Configuration							
TAPI Configuration Ignore List CRM Configuration Logging							
Enable Ignore the following inbound / outbound phone numbers:							
Enable Ignore the following inbound / outbound phone numbers: Begins With: Ends With: Exactly: Contains: Custom / Advanced:							
OK Cancel							

Step 11 Click the CRM Configuration tab.

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The Client Configuration window's CRM Configuration tab appears, as shown in Figure 28.

The CRM Connector Configuration tab allows you to specify server and login information for both the Cisco Unified CallConnector for Microsoft Dynamics CRM server and the Microsoft CRM server.

Figure 28 Client Configuration Window—CRM Configuration Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

🔚 Cisco CRM Communications Connector Client Configuration				
TAPI Configuration Ignore List CRM Configuration Logging				
Server Connection Parameters				
Cisco CRM Connector Server: 10.10.2.123				
CRM Connector Server Web Path: http://10.10.2.123/C4Web				
Login Domain:				
Login Name: crmuser				
Login Password: *****				
Connection Status: Connected Connect Disconnect				
Dial Plan Configuration:				
User Preferences Automatically create activity when only one match Automatically display record when only one match Automatically create activity on click-to-dial Allow Cached Searches Collapse Existing Search Windows				
OK Cancel				

Step 12 In the Cisco Unified CallConnector for Microsoft Dynamics CRM Server field, enter the hostname on which the Cisco Unified CallConnector for Microsoft Dynamics CRM server is installed. After initial configuration, when you change the value in this field, the value in the Cisco Unified CallConnector for Microsoft Dynamics CRM Server Web Path will be updated with the same value. Change this if the Cisco Unified CallConnector for Microsoft Dynamics CRM server Web components were installed on a different server or have a different access URL. The value in the Cisco Unified CallConnector for Microsoft Dynamics CRM Web Path must be a complete URL that points to the directory in which the C4Dial.aspx and C4Stub.aspx files are located.

- Note You must also include the port number the website is running on if it is not the default port 80. In the example shown in Figure 28, the hostname of the Microsoft CRM Server is "triton" and the Microsoft CRM website is running on port 5555. Failure to provide the custom port number (except port 80) will cause problems with the screen pops.
- Step 13 Configure the Login Domain, Login Name, and Login Password fields with your Microsoft CRM login information and click Connect.

If the connection is successful, the status will show Connected and the Dial Plan Configuration drop-down box will become enabled.

- Step 14 Select the appropriate Dial Plan Configuration (Phone Number Processor Configuration) based on geographic location and as provided for by the Cisco Unified CallConnector for Microsoft Dynamics CRM Server Service administrative configuration.
- Step 15 Click the **Logging** tab.

The Client Configuration window's Logging tab appears, as shown in Figure 29

The Logging tab allows you to configure how the client logs system events. Logging levels available include:

- Critical Errors
- Errors
- Warnings
- Info
- Debug
- Debug1 ... Debug 4

Each level includes messages from all previous levels. The "Critical Errors" level produces virtually no output, while the "Debug4" level produces copious output. We recommend using the setting "Warnings" for normal operation. Some messages (primarily relating to TAPI events) do not currently have message levels associated with them, and they are always logged.

You can collect the logging information in eiher a file or in a logging window. If you select Log to File, additional options relating to the filename and file aging become available. If you select Enable Log to Window, one additional option to control how many messages to display is available..

Figure 29 Client Configuration Window—Logging Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM

Cisco CRM Communications Connector Client Configuration	
TAPI Configuration Ignore List CRM Configuration Logging	
Enable Logging	
Logging Level: Warnings	
🔽 Log to File	
Filename: C4Client.{D:yyyy-MM-dd}.log	
Max Log File Age (days): 10 🚑	
Max Log File Size (Kbytes): 1024 🚔	
E Englis Lag Tableton	
Enable Log To Window Maximum Log Entries: 1000 -	
Maximum Log Entries: 1000	
OK Cancel	

Step 16 After completing the configuration, click **OK**.

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The final installation dialog appears, as shown in Figure 30.



The client is now installed and ready to run from the Start Menu.

What to Do Next

You can now either configure the IP phone lookup and XML display service (optional, see the "Configuring the IP Phone Service and XML Display Service" section on page 37) or integrate Cisco Unified CallConnector for Microsoft Dynamics CRM with Cisco Unified IPCC Express (see the "Integrating Cisco Unified CallConnector for Microsoft Dynamics CRM with Cisco Unified IPCC Express" section on page 41).