



Configuring the IP Phone Service and XML Display Service

After installing the Cisco Unified CallConnector for Microsoft Dynamics CRM Server, the administrator may choose to configure the IP Phone Lookup Service. The two main features of the IP Phone Lookup Service for the Cisco Unified CallConnector for Microsoft Dynamics CRM are a lookup service and an Extensible Markup Language (XML) display on the Cisco Unified IP Phone.

The lookup service allows you to perform a manual lookup against the Cisco Unified CallConnector for Microsoft Dynamics CRM database from the Cisco Unified IP Phone by searching for a Microsoft CRM contact name. Information about the contact is then displayed on the XML display of the IP phone.

The XML display feature provides a window push to the IP phone display when the incoming caller ID uniquely matches a contact.



Note

To use the IP Phone Lookup Service features for the Cisco Unified CallConnector for Microsoft Dynamics CRM, you must have a Cisco Unified IP Phone with an XML-capable display.

Follow the steps below to configure each of the services. Each service operates independently, so you can configure the lookup service feature or the XML display feature.

Step 1 Configure the IP Phone Lookup Service.

The IP Phone Lookup Service is located in the IPPhoneService directory inside the Cisco Unified CallConnector for Microsoft Dynamics CRM Server installation directory. Inside this directory is a file called web.config that contains the settings for the following:

```
<appSettings>
<!-- <add key="CRMLoginInfoEnc" /> -->
<add key="CRMLoginUsername" value="Administrator" />
<add key="CRMLoginPassword" value="pass@word1" />
<add key="CRMLoginDomain" value="CRM" />
<add key="CRMServiceURL" value="http://triton:5555/MSCRMServices/2006/CrmService.aspx" />
<add key="CRMSearchEntitiesXMLDoc" value="C:\Program Files\Cisco Systems\Cisco Unified CRM
Connector Server\IPPhoneService\CRMSearchEntities.xml" />
</appSettings>
```

The five main settings are:

- **CRMLoginUsername**—Stores the username to perform lookups
- **CRMLoginPassword**—Stores the password corresponding to CRMLoginUsername
- **CRMLoginDomain**—Domain of the user specified in CRMLoginUsername

- **CRMServiceURL**—URL to the CrmService.aspx page
- **CRMSearchEntitiesXMLDoc**—Full path to the CRMSearchEntities.xml file (located in the IPPhoneService directory)

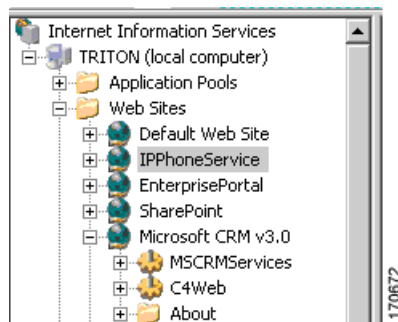
- Step 2** Verify that the CRMServiceURL and CRMSearchEntitiesXMLDoc values are correct. The user specified in CRMLoginUsername, CRMLoginPassword, and CRMLoginDomain must be a user that has access to perform searches in Cisco Unified CRM. If you do not want to store plain text passwords in this file, you can do the following:
- Save the plain text version of the file with the username, password, and domain specified.
 - Continue with the remaining configuration steps below.
 - After everything is working, open a Web browser to the Web page `http://triton:5351/EncryptInfo.aspx` (the specific URL depends on your local configuration) and you will see an encrypted string that represents the username, login, and domain.
 - Specify this string as the value for the key “CRMLoginInfoEnc,” and remove the CRMLoginUsername, CRMLoginPassword, and CRMLoginDomain keys. Also make sure you uncomment the CRMLoginInfoEnc key.

- Step 3** Configure a virtual directory or a virtual site for the IPPhoneService.

In the IIS Administration tool, create a virtual directory or a virtual site for the IPPhoneService to respond on. This virtual directory can be located in any website hosted on the server, and can be called any name.

This example creates a virtual site called “IPPhoneService” on port 5351. A virtual site is the preferred mechanism because it ensures that the configuration of the IPPhoneService is not affected by other configuration values in the host site if you are using a virtual directory. If you choose a virtual directory, ensure you are able to see the output of the C4Lookup.aspx page, as shown in [Figure 31](#), before proceeding.

Figure 31 IP Phone Service IIS Virtual Directory

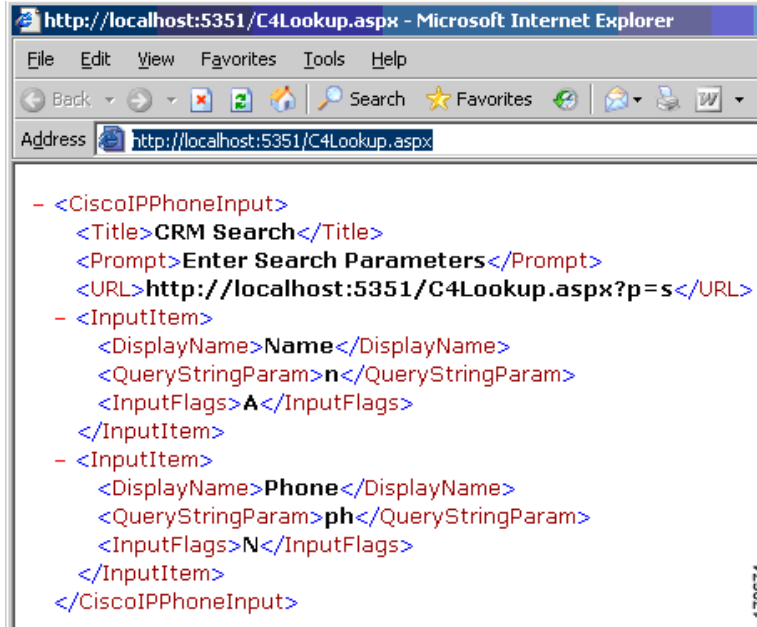


Set the access properties for the virtual directory to “Read” and “Run Scripts.” The user is now able to test the configuration by opening a Web browser and specifying the following URL:

`http://triton:5351/C4LookupService/C4Lookup.aspx`

The exact URL depends on how you configured the virtual directory. You should see a response similar to [Figure 32](#).

Figure 32 Testing the IP Phone Service URL



- Step 4** (Optional) Configure the service in Cisco Unified Communications Manager or Cisco Unified Communications Manager Express.

When configuring the IP Phone Lookup Service in Cisco Unified Communications Manager or Cisco Unified Communications Manager Express, use the path to the virtual directory or site created in the previous step. For example:

http://triton:5351/C4LookupService/C4Lookup.aspx

where “triton” is the hostname of the server hosting the lookup service, in this case, the Microsoft CRM server. The virtual directory or virtual site responds to requests on port 5351. See the [Cisco Unified Communications Manager](#) or [Cisco Unified Communications Manager Express technical documentation](#) for detailed instructions on how to configure and publish the IP Phone Lookup Service.

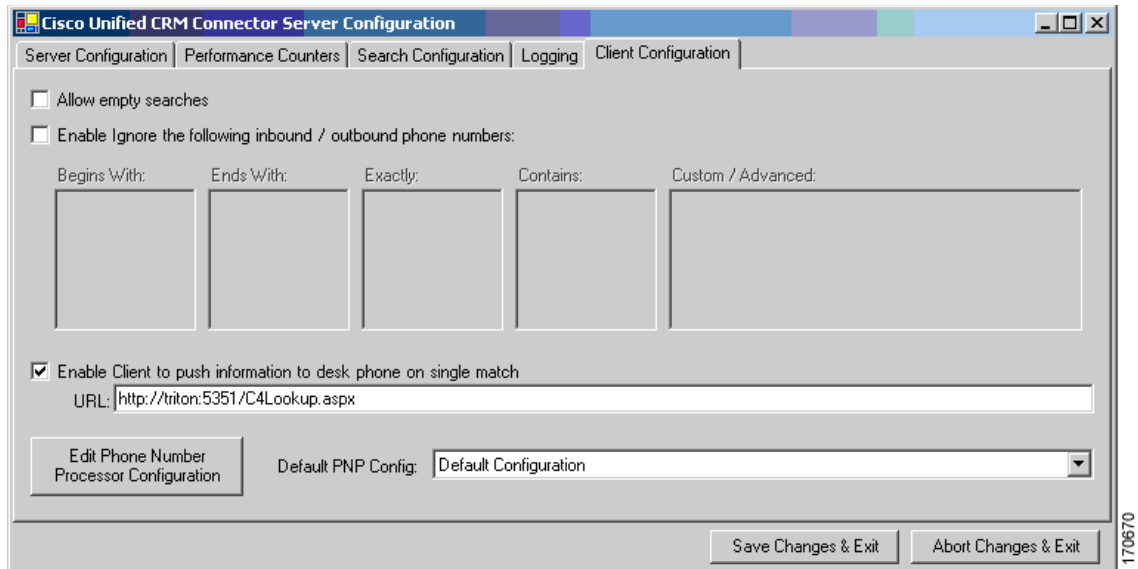
- Step 5** Configure the XML display.

To enable the XML display on the IP phone for users of the Cisco Unified CallConnector for Microsoft Dynamics CRM, configure the server component to allow this. In the server component configuration wizard, go to the Client Configuration tab, as shown in [Figure 33](#).

Enable and specify the path to the IP Phone Lookup Service; for example:

http://triton:5351/C4LookupService/C4Lookup.aspx

Figure 33 Server Configuration Window—Client Configuration Tab: Cisco Unified CallConnector for Microsoft Dynamics CRM



Step 6 (Optional) Customize the information to display on the IP phone.

Edit the CRMSearchEntities.xml file to specify what entities to search and what information to present on the information window on the IP phone display. This customization is an advanced step and is not required to display the default IP Phone service.

What to Do Next

You are now ready to 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).