Esna's iLink is a plug-in for the Google Chrome web browser. It provides a means to place telephone calls to contacts directly from the browser. It also offers limited presence management through Google Talk.

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iLink Dialer and Presence Setup

This implementation utilizes TAPI to the Cisco UCM for direct call control (no SIP integration), and requires the iLink.crx extension installed on the client's PC Chrome web browser.

The UC Dialer provides the following:

- Click-to-dial actions from web pages
- Google Mail People widget dial support
- Dial directly from a Gmail Contact Card
- Enter number to dial from the browser
- Phone presence updates to Google Talk

Pre-Requisites

Ensure HTTPS routing is available to the Officelinx server (FQDN or IP public addressing is required for Google Apps integration).

**Hint:** iLink requires a SIP configuration as the minimum. A CTI setup is preferred to access all of the program's features.
Enabling SSL from the IIS

Introduction

Ensure that SSL is properly configured on the iLink server IIS site.

**Note:** Digital certificates encrypt data using Secure Sockets Layer (SSL) technology, the industry-standard method for protecting web communications. The SSL security protocol provides data encryption, server authentication, message integrity, and optional client authentication for a TCP/IP connection.

SSL is built into all major browsers and web servers. By installing a digital certificate, you enable your browser's SSL capabilities.

Requirements

<table>
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<th>VERSION</th>
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<tr>
<td>Cisco Unity Connection</td>
<td>8.5.1 ES 78 up to &lt;8.6</td>
</tr>
<tr>
<td></td>
<td>8.6.2 ES 20 or higher</td>
</tr>
<tr>
<td>Esna Cloudlink</td>
<td>9.0 or higher</td>
</tr>
</tbody>
</table>
Procedure

SSL configuration is done on the Microsoft Windows platform hosting the site. This guide is provided as a courtesy for those who wish to configure SSL with Officelinx. For further assistance, consult the professionals at Microsoft and its affiliates.

This example shows Windows Server 2008 with IIS 7.

1. From the Windows desktop, click **Start > All Programs > Administrative Tools > Server Manager**.
2. In the left hand-pane, open **Roles**, then **Web Server (IIS)**, and select **Internet Information Services (IIS) Manager**.
3. Under **Connections**, choose the web site. In the **Home** pane for the site, scroll down to the **IIS** section and double-click **Server Certificates**.

4. In the right-hand **Actions** pane, click **Create Certificate Request**.
5. Fill in the information for **Distinguished Name Properties**.

   - **Common name**: Enter the publicly accessible URL for the site.
   - **Organization**: Type the corporation name.
   - **Organizational unit**: Define the department for this certificate.
   - **City/locality**: Enter the location information.
   - **State/province**: Enter the location information.
   - **Country/region**: Enter the location information.

   Click **Next** when ready.

6. Choose the **Cryptographic service provider** and **Bit length** (2048 or better is recommended) required by the certifying agency.

   Click **Next**.

7. Enter the filename and path for the certificate request file.

   Click **Finish**.

8. Pass this file to the authority providing the certificate. Make sure that it has the correct file extension specified by the authority.

9. The certifying authority will return the certificate in another file.

   Save the certificate file on the computer's hard drive in a known location.
10. In the right-hand **Actions** pane, click **Complete Certificate Request**.

11. To **Specify Certificate Authority Response**, enter the path to and the filename of the certifying authority's response from step 9. Click the ellipsis button ... to browse for the file.

   Enter a user **Friendly name** to use when referring to this certificate.

   Click **OK** when finished. The certificate will be installed for the site.

Double-clicking on the **Server Certificates** icon brings up a list of the certificates installed on the server. The new certificate is listed using its **Friendly name**.

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**Cisco Environment Setup**

**Note**: iLink is supported on many brands of PBX. Cisco is provided here as a guide to administrators in setting up iLink with their own existing equipment.
1. Navigate to CUCM Web interface.

2. Log into CUCM.

3. Navigate to **User Management > Application Users**. Add a new user for the iLink TAPI connection.
4. Ensure that the user has enabled control of all devices on the system.

Also ensure that the user is added to all relevant CTI permission groups.

Click **Save**.

5. Download Cisco TAPI client (32 or 64-bit depending on your iLink Server OS).

---

**Note:** A list of supported TAPI devices can be found at [https://developer.cisco.com/web/tapi/wiki/-/wiki/Main/CTI+Supported+Devices](https://developer.cisco.com/web/tapi/wiki/-/wiki/Main/CTI+Supported+Devices)

---

**iLink Server Setup**

**Cisco**

**Note:** iLink is supported on many brands of PBX. Cisco is provided here as a guide to administrators in setting up iLink with their own existing equipment.

**Note:** There is a limit of 2500 monitored devices for CUCM per server in a cluster. Esna Cloudlink can only enable iLink functionality for this many users/devices concurrently on a single Esna Cloudlink server.

1. Download and run the installer. After installing the prerequisites, you are presented with the following screen. Enter the number of CUCM TAPI Service Providers (TSP) to install.
Specify the location where the program will be installed on the hard drive. Click **Next**.

2. Enter the previously configured user information and IP of your CTI Manager (CUCM). Click **Next**.

**Note:** If secure configuration is required, refer to the relevant Cisco documentation for additional setup information.
3. Accept the defaults. Click **Next**.

4. Once installation completes, you may be prompted to restart. Click **Yes**.
Esna Cloudlink

Make the following changes to the users on the Esna Cloudlink server.

1. Open Esna Cloudlink Admin. Go to **PBX > Mailbox Structure**.
2. Open the mailbox for each user and go to the **Advanced** tab.
3. In the **D.I.D. Trunk** field, enter the user’s DID number. This is the number that will be displayed in the Google People widget.

**Hint**: For larger sites with more clients, use the LDAP importer utility to have Esna Cloudlink read the user data from a file, rather than manually entering so much data. For more information, refer to LDAP Import Utility on page 399 of the Server Configuration Guide.

Chrome Browser Setup

This section covers the steps necessary to add the iLink extension to the Chrome web browser.

**Hint**: The site administrator can setup user or company profiles to automatically install and configure the extension. Refer to Google’s documentation at the address below for further details: [https://support.google.com/chrome/a/answer/1375694?hl=en](https://support.google.com/chrome/a/answer/1375694?hl=en)

1. Open the Chrome browser. Go to the Google Chrome web store at [https://chrome.google.com/webstore/category/home](https://chrome.google.com/webstore/category/home).
2. In the Search bar, type **Esna** and hit enter. Choose **Extensions** when prompted.
3. Select Esna iLink, and click **ADD TO CHROME** to install the extension.

![Esna iLink extension](image1)

4. When prompted, click **Add** to confirm the installation and proceed.

![Confirm Extension](image2)

5. When finished, the iLink icon will appear next to the address line. It will be gray, indicating that the browser is not yet connected and logged in to the Officelinx server.

![iLink icon](image3)

6. Click on the icon. At the prompt, enter the address of the web enabled Officelinx server (e.g. `user.yourcompany.com`).

Click **Save**.

![Server connection](image4)

7. iLink will contact the Google server and attempt to login using OAuth authentication. When prompted, click **Allow access** to grant iLink the necessary access permissions on the browser.

![Request for Permission](image5)

8. Once login has been successful, the iLink icon will change to indicate it is connected and ready.

![Connected iLink](image6)
Gmail Settings

When using Gmail with Esna Cloudlink or iLink, make the following changes to the settings in Gmail.

1. Launch Gmail and open the program’s Settings menu.

2. Click on the heading Chat. Scroll down to find Call Phones.

3. Click to Disable outbound voice calling.

4. Scroll down and click Save Changes.

iLink with Multiple Devices

A Cisco PBX allows the administrator to assign more than one device to an extension. Each device will ring when dialed by a caller. iLink supports all of these devices by allowing the user to choose which one to place calls through.

1. Once iLink has been successfully installed and logged in, click the iLink icon to the right of the browser address bar.

2. Click the arrow to open the list of available devices for your extension.
3. Click on the one that you wish to use as the iLink dialer.

In this example, there are 2 devices that share the extension 9876. Each is uniquely identified by its Device ID number. Consult your network administrator for details on finding the ID numbers for each of your devices. Once chosen, all calls made using iLink will be placed using that device. The selection can be changed at any time by repeating these three steps.

Device Descriptive Labels

You can use the Set extension labels menu item to change the name associated with a device. For each listed device, you can enter a more meaningful name to identify the unit. The operation of the device is not affected by this change.

Using iLink

iLink can place calls from within the Chrome browser in several ways.

- Click-to-dial.
- Enter a number.
- Through the Google People widget.
- Gmail Contact Card

Click-to-dial

On web pages that contain telephone numbers, iLink can locate those numbers and place a click-to-dial icon beside
Moving the mouse over the icon will cause it to change color. Click the icon to place a call to that number through the UC server.

1.905.707.9700

The call is placed immediately. Pick-up the desktop telephone handset and wait for the target to answer.

Note: Hovering the mouse over the number will change the color of the icon, and a pop up will appear that shows which device will be used to place the call.

Call the number with Esna iLink @ SEP8ZY7654X3WV[9876]
Entering a Number

A telephone call can also be placed by clicking on the iLink icon at the top of the browser window. This opens a window where a telephone number can be entered.

Internal extensions can also be entered here.
Enter the desired number. The system will display a number of options that match. Click on the one that is most correct to place the call.

**Note**: If your site requires a number to be entered to access an outside line, **DO NOT** include that number here. The UC server will automatically add it as needed.

**Note**: The options displayed and number dialed are controlled by the rules created for the Dial Plan Engine within Officelinx. Better rules lead to better matches and more accurate dialing. For more information, refer to International Dial Plan on page 661 in the Server Configuration Guide.
Google People Widget

Calls can also be placed from within Google Apps and Gmail. iLink adds an extension to the Google People widget that reads contact information from the Google contact list and from Officelinx. The information is displayed within an open email.

Click on the telephone icon beside a number to place a call to the contact.

Google Contact Card

Calls can be placed from within Gmail using a person's Contact Card. Hover the mouse over a contact in the inbox, or from within an open email, to open that person's Contact Card. Click on the iLink icon in the bottom right corner of the card to place a call to this contact.
Google Talk and Presence

**Warning:** Only one connection to Google Talk can be made. Either iLink Pro Desktop, the Web Gadget or iLink can communicate with Google Talk at one time. If more than one connection is made, conflicting signals may result in incorrect displays.

Personal presence through Google Talk is also supported by iLink. Once iLink is installed, Google Talk will display the user’s telephone presence (On The Phone), Google calendar (Meeting) and availability status for all other users to see.

When a user picks up their telephone receiver, their status in Google Talk will change from **Available** to **On The Phone**. The location display will also change to **On The Phone** for the duration of the call, reverting to its prior state when the call is complete.

If a user has setup a meeting in the Google calendar, and has set availability for the duration as **Unavailable**, that presence will be reflected in Google Talk. Meetings where the user is **Available** will not change the presence in Google Talk.

**Note:** Custom messages setup in Google Talk are maintained. When a user picks up the phone, or goes into a meeting, their presence will be modified accordingly. When the call or the meeting is over, the display will revert to the custom message.

Esna’s Cloud Licensing Engine

The Cloud Licensing Engine (CLE) allows administrators to monitor and adjust the usage of their iLink licenses. Users can be added or removed from the license.

1. To access the CLE, open a web browser and enter the address: https://manage1.esna.com/ucwcl/login.aspx.
2. If you are not currently logged in to a Google account, you will be prompted to login now.

   Enter the Google account details (email and password) of the user with the license manager authorization. This will
be the account setup with Esna when the service was originally created. Additional administrator accounts can be added by this user as required.

3. When prompted, click **Allow access** to continue.

4. The list of available client programs appears. To manage your iLink accounts, click that link.

![License manager: All products](image)

5. The **ILINK: License manager** page appears listing each of your corporate accounts.

   Click on the site you wish to manage. Click **Logout** to leave the License manager.

![ILINK: License manager: All sites](image)

**Site**: The name of the site is shown here. Click a site to open its details.

**Amount**: The number of licenses purchased for the site.

**In Use**: This shows the number of licenses that have been taken by users.
**Expiry:** The date on which the current license is set to expire.
6. All of the site users who have currently acquired a license are shown. Details of that license are also included.

Note: This list is populated by the system automatically based upon client usage to date.

Click the License manager link to return to the Accounts window.

![Esna iLink](erbmusic.com)

**Issued licenses**

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** Obtained licenses **

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<tr>
<td><a href="mailto:john@erbmusic.com">john@erbmusic.com</a></td>
<td>John Clayton</td>
<td>2012-12-13</td>
<td>True</td>
<td>False</td>
<td>False</td>
<td>Disable</td>
</tr>
<tr>
<td><a href="mailto:david@erbmusic.com">david@erbmusic.com</a></td>
<td>David Miles</td>
<td>2012-12-14</td>
<td>True</td>
<td>False</td>
<td>False</td>
<td>Disable</td>
</tr>
<tr>
<td><a href="mailto:admin@erbmusic.com">admin@erbmusic.com</a></td>
<td>admin Perry</td>
<td>2012-12-15</td>
<td>True</td>
<td>False</td>
<td>False</td>
<td>Disable</td>
</tr>
<tr>
<td><a href="mailto:john@erbmusic.com">john@erbmusic.com</a></td>
<td>John O'Grady</td>
<td>2012-12-16</td>
<td>True</td>
<td>False</td>
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</tr>
<tr>
<td><a href="mailto:jane@erbmusic.com">jane@erbmusic.com</a></td>
<td>Jane Porter</td>
<td>2012-12-17</td>
<td>True</td>
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<td>True</td>
<td>False</td>
<td>False</td>
<td>Disable</td>
</tr>
</tbody>
</table>

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**Account:** Displays the email address of each user who have obtained a license.

**Created:** Shows the date when the license was acquired.

**Licensed:** Displays whether a user's license is active (True or False).

**Disabled:** If the administrator has turned off the license for a user, it is displayed here.

**Evaluation:** If no licenses are available, then a user will be given a temporary, Evaluation license.

**Actions:** The administrator can disable or enable any account from this column. Disabling a user will free that license for others to use.

**Export:** Use this button to create a comma delimited (CSV) file containing the user details.

![CSV file](sample.png)

A CSV file can be opened and modified using any text editor (e.g. Windows Notepad, Microsoft Excel, MS Word).
**Managers**: Click this button to access the list of account managers. These are the users who have administrative control over each site.

![List of Managers]

Add a new Manager by clicking on the **Create** button, then enter the user details. Click **Save** when finished to add the new manager to the list.