



CCNA

Converged Communication Network Applications Pty Ltd

CCNA Communication Framework

"Patent Pending" - Australian Patent Application No 2009904883

User Guide

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Converged Communication Network Applications (CCNA) Pty Ltd

PO BOX 463

North Sydney

NSW 2059

Australia.

<http://ccna.com.au>

Technical Support:

<http://ccna.com.au/web/en/contact>

software@ccna.com.au

This guide is frequently updated to reflect changes in the product. The latest version can always be downloaded from <http://ccna.com.au>. This guide is prepared for Communication Framework Version 1.0 for Windows XP SP3, Vista & Windows 7, Mac OS 10.5+ and Ubuntu/Linux

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Introduction

Congratulations and thank you for downloading CCNA's "Communication Framework" Suite of Applications. Communication Framework is a suite of simple yet powerful desktop Unified Communication Applications which enable you the ability to Click to Communicate (Dial, Conference, Video* & SMS*) from your desktop environment to individuals both internal and external of your organisation.

- Communication Framework Suite of Applications includes:
 - Communication Framework Client
 - Communication Framework Console
 - Communication Framework Companion Tools –
 - A suite of business tools to enhance the Communication Framework experience
- Communication Framework can work with any desktop application including:
 - Microsoft, IBM and Novell Email and productivity applications
 - Web browsers
 - Skype
 - Google applications
 - Instant Messaging Applications and more.

Communication Framework is simple to install and use. This guide provides an overview of the capabilities of Communication Framework Client and how to use.

System Requirements

Please make sure that the computer which you plan to install Communication framework meets the minimum system requirements for the program to run:

Operating System	Windows XP SP3 (32 bit), Windows Vista SP1, Windows 7, Mac OS10, Linux OS's
Internet Explorer	Version 6, 7 or 8
Java Version	Version 1.6 or higher

Section 1: Overview

Communication Framework Suite of Applications (*“Patent Pending” - Australian Patent Application No [2009904883](#)*) are versatile and cost effective inbound and outbound desktop Unified Communication Solutions. Simple to install and use, Communication Framework is a feature rich application which provides users the ability to:

- 1) **Search** local and external databases to resolve names to phone numbers from any application on your desktop for inbound and outbound communication functions
- 2) **Initiate Outbound communications** (call, conference, video, SMS) with an individual, supplier or company via your existing enterprise communication solutions, controlled and initiated from your users desktop Communication Framework applications.

Any unique text based user identifying information (name, email address, employee id, phone number and more) from any desktop application across OS platforms which include Microsoft Windows, Apple Mac OS and Linux platforms can be used to initiate the communication.

- 3) **Application Sequencing** provides the ability to launch subsequent applications in conjunction or after the initial call
- 4) Provide **inbound caller notification**. When a known caller contacts you, Communication Framework resolves the caller’s phone number to a name and email address and utilizes this information to initiate a desktop Search from previous correspondence from the caller and screen pop previous email correspondence from that user to provide you caller intelligence.

Desktop search engines include Google Desktop and Windows 7 indexing tool.

- 5) **Application Linkage** either
 - a. Retrieves information based on a Communication Framework action. E.g. Communication Framework can retrieve the presence status of a user during a search of the user from the corporate database
 - b. Passes user details to another application such as a CRM application, webpage form

Communication Framework includes 2 additional components which are:

1. *CF Gadgets* are shortcuts to customer, vendor or CCNA built business and communication functions such as:
 - a. Communication Tools
 - b. Websites Shortcuts
 - c. Application Executables
2. *CF Companion Tools* are software tools that either complement
 - a. Communication Framework’s function (e.g. Outbound Dialer Application) or
 - b. The communication environment (e.g. PBX to LDAP synchronization)

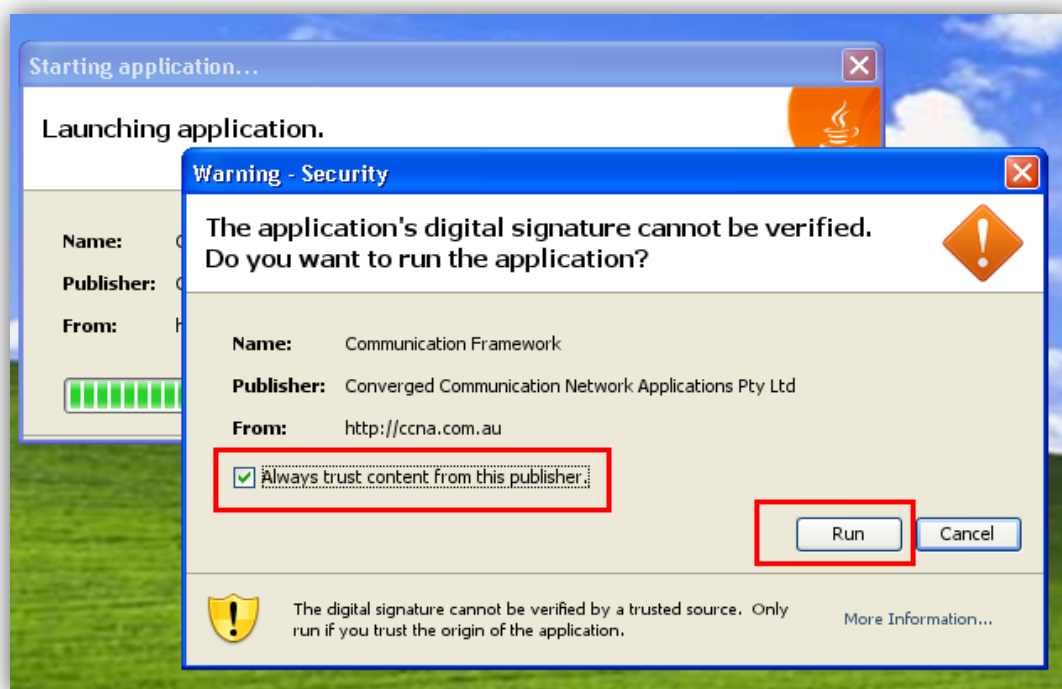
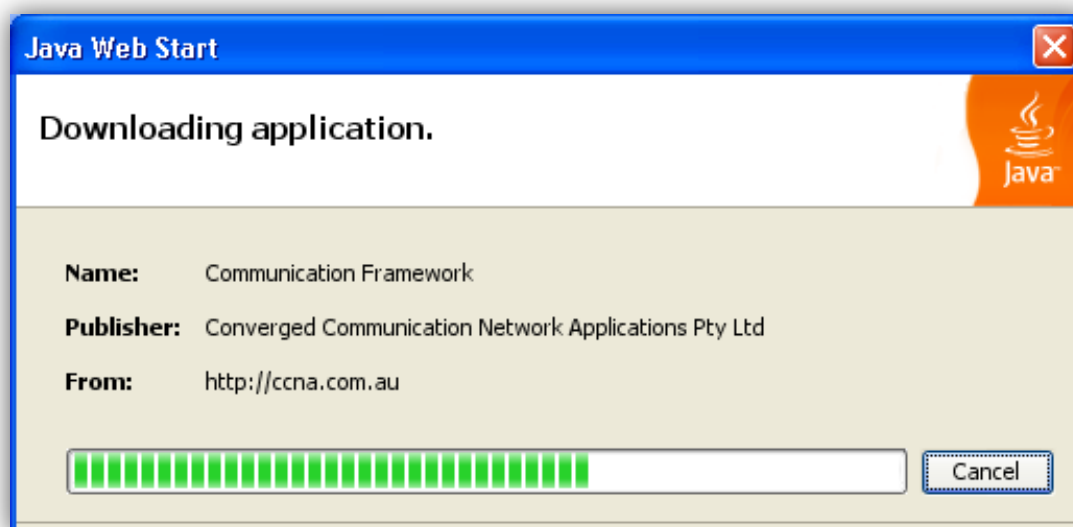


To achieve inbound caller notification intelligence, your desktop must be running a desktop search engine application and your PBX (Telephony System) may require specific licenses. Please ask your administrator for further assistance on this feature.

Section 2: Install Communication Framework

Communication Framework requires Java version 1.6 or above installed on your computer, please click [verify Java version](#) to check the version on your computer if you are not sure. This can be checked via the control panel

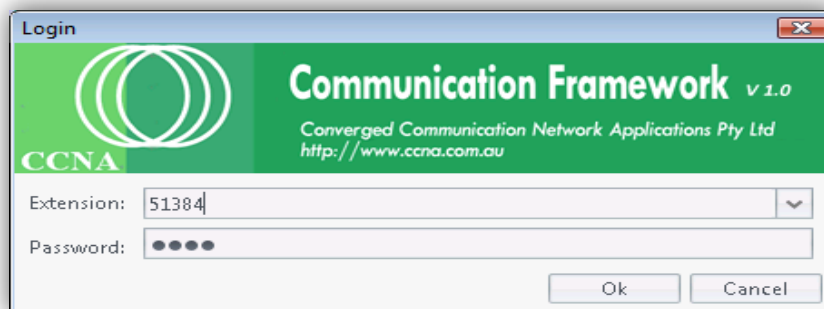
Open the Internet Explorer and go to the **Communication Framework installation link** sent by your IT Support Administrator, if your web browser downloads a jnlp file on your computer, double click on the file to start install.




- ***“Always trust content from this publisher” must be selected.***

Section 3: Start Communication Framework

The first time you start Communication framework, you are asked to enter your extension number or Login details and associated password. This information is encrypted and saved within your computer so next time you start Communication Framework Applications without re-enter them.



	<p><i>Avaya CM User : enter your phone extension and password</i></p> <p><i>Avaya SCS User: enter your phone extension and SIP password</i></p> <p><i>Cisco Call Manager User: enter your web dialler username and password</i></p> <p><i>Please consultate your administrator about login details if you're not sure.</i></p>
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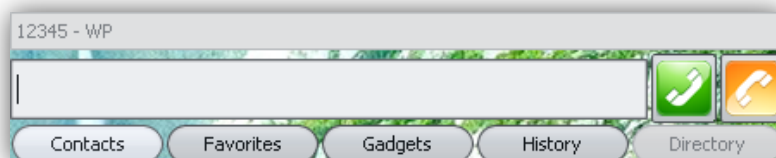
Notes: Communication Framework can be started from desktop shortcut icon or Program Menu shortcut after the first time installation.

Section 4: Communication Framework Client User Interface

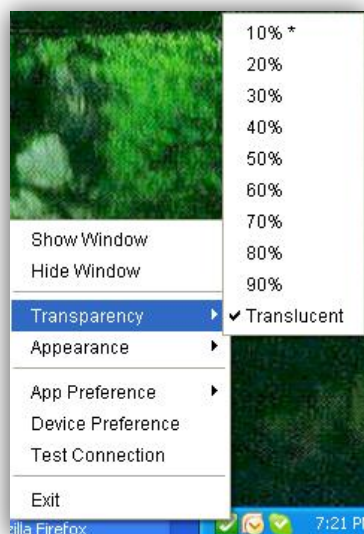
Communication Framework has a number of simple desktop user interfaces which are categorised as either outbound or inbound & outbound based on the user function and connectivity to the PBX.

Communication Framework Client - Idle Mode

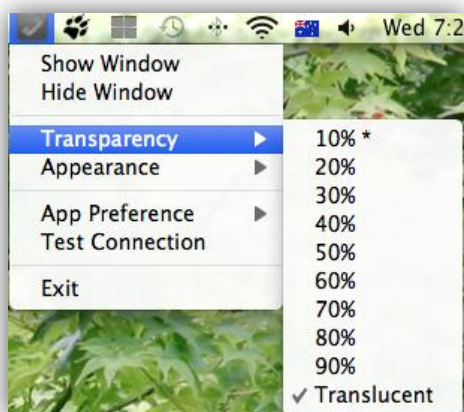
When you are not using Communication Framework, it hibernates, where the application becomes transparent on your desktop and does not disturb your normal operation until it is required.



You can adjust the level of transparency for idle mode operation to suit your preference. Transparency can be adjusted by right mouse clicking the Communication Framework ICON in your toolbar, click on Transparent and adjusting the level to suit your preference.



For Mac OS the Communication Framework icon is also located on the taskbar, but you need to left mouse click on it to open the menu, and then adjust the transparency level as you preferred.

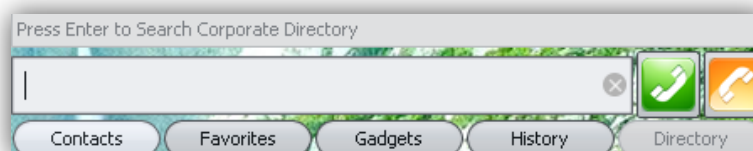


Communication Framework Client - Active Mode

When using Communication Framework for searching names, history lookup and/or outbound communications, Communication Framework moves to the foreground of your desktop applications for easy actioning of Communicating with individuals.

You can simply

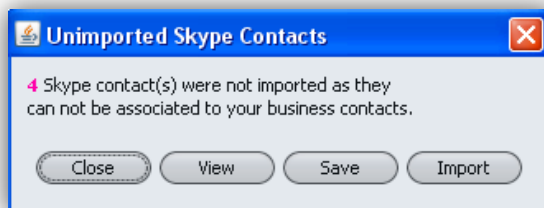
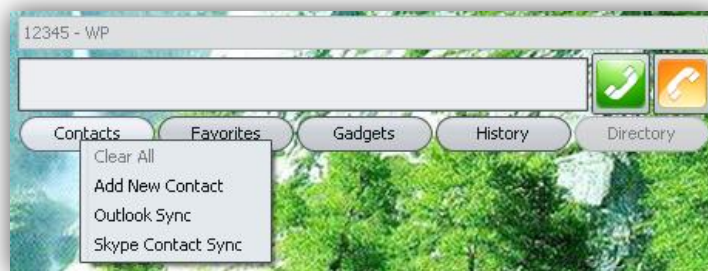
1. Choose one of the actions buttons (Contacts, Favourites, History or Directory)
2. Copy and paste information to the input window or
3. Enter details (Name, Number, other unique text based unique user information) into the input window search and then communicate with the user associate to the number
4. Press enter or the dial button to launch communications



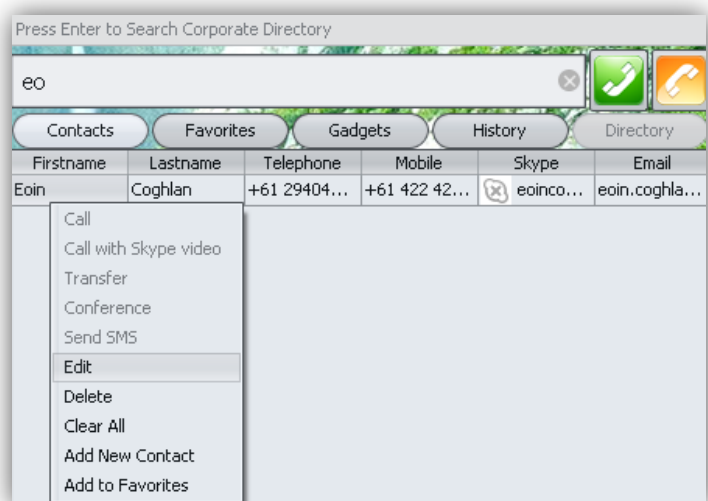
Section 5: Manage Contacts

1) Import and Export Contacts

- a. You can import contacts from your email application. Open Communication Framework, Right mouse click on the “Contacts” and choose “Outlook Sync”.
- b. Skype contacts can also be imported or synchronized with your current CF contacts by selecting “Skype Contact Sync”. Business contacts are imported by default; this is determined by checking the Skype contacts against you Outlook contacts; for non business contacts choices are given: they can be view in a popup window, or save to a text file on your desktop, or imported to your CF contacts.



- 2) Editing, adding, deleting and clearing Contacts within your Contacts or Favourites tab. To open the menu firstly left click on a contact's first name or last name to select, then right click to open the menu from where you can take actions.
- Editing – Select **Edit** from the menu. You can change existing contacts' name, phone, email etc.
 - Adding – Select **Add New Contact** from the menu. Type in the information for a new contact and click Save. You can also copy contacts from Directory or Favorites tabs to Contacts tab by selecting **Add to Contacts** from the menu. Contacts in the Contacts tab can also copied to Favorites tab.
 - Deleting – Select **Delete** from the menu.
 - Clearing – Select **Clear All**. All contacts will be deleted within the selected tab.



- 3) History provides a list of previous calls and the number that was called. This can be used for troubleshooting to ensure the correct number was dialled.

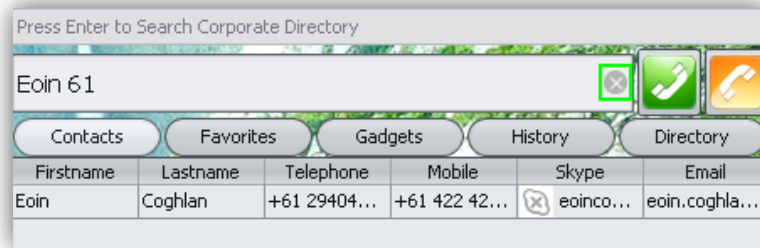
Section 6: Search & Outbound Communications

This section reviews search and outbound communication capabilities of Communication Framework.

1) Search and Communicate

Communication Framework is an effective local and corporate directory search tool for general and advanced users.



1. To search local contacts, select Contacts or Favorites tab and type in something relate to that contact to search. E.g., type in part of the contact' name, phone or email. This local search narrows the results as you type in more. E.g., type in Eoin 65. To clear the input, just simply click on the **x** on the right of the input.



2. To search in to corporate directory when you are connect to it, select the Directory tab, type in first name and/or last name, or full email address and press <Enter> key.

Additionally you can highlight user's details within any application and copy the information (e.g., name, email, phone number); it will be automatically copied to Communication Framework.

If you copy user details to Communication Framework, to perform a search or to dial the number, you are required to:

3. If it is a phone number, press <Enter>, or click the green phone icon  to make a call.
4. If the user is a local contact, press the "Contacts" button  or
5. Press <Enter> to perform a Corporate Directory search.
6. Double click on the Contact's number to make a call.



Corporate Directory Search

You must either press enter after entering the details of a user in the input window to perform a external Corporate Directory Search

If multiple phone number exist after performing a search for a user, to call the user on the preferred phone number, double click the number you wish to call. I.e. Office, mobile or other number

2) Click to Communicate

Communication Framework offers numerous methods of communications which include; audio call, conference call, video call & SMS. These communication services are initiated via your desktop via the following methods:

1. Enter the user details or phone number directly into the Communication Framework input window

2. Choose a contacts phone number within the Contacts, Favourites, History or Directory buttons
3. Menu Dial – After you have selected (highlighted) a users details in an application, right mouse click on the details and in the menu which appears select dial
4. Copy – Copy the users details “Cntl C” into Communication Framework and hit enter or press the dial button within Communication Framework
5. Embedded Hyperlink *cfcall*: function – Some applications shall have communication framework Hyperlink *cfcall*: feature embedded in the application so you only require clicking on the *cfcall*: feature to initiate the call between your extension and the enabled phone number.
6. Click to Dial from Google Applications – Highlight the name in Google Talk or Google Wave and either
 - i. Copy the details to Communication Framework and hit enter
 - ii. Copy the details to Communication Framework by performing a Cntl C
 - iii. Highlight the details and right mouse click on the details and hit the dial button in the menu in Internet Explorer.



Communication Services

The communication service available to you depends on the connection to your corporate PBX and its version.

3) Click to SMS

If your organisation has a SMS gateway which is interoperable with Communication Framework, you can click on a user’s mobile number and “Send SMS”. A SMS window shall appear where you can enter the SMS information and then press the send button

Section 7: Inbound Caller Notification

Communication Framework provides incoming call notification by way of a screen pop once Communication Framework is able to resolve the inbound phone number to a name or email address.

An initial window shall appear with the phone number and if Communication Framework can resolve the phone number to the name of the caller, Communication Framework shall show this as well.



To access previous email correspondence from the caller, click on the window and the search engine application (Google, Windows 7 or other) shall list previous correspondence from that caller. The search items within the search engine Screen Pop up window is configured within the search engine. Google Desktop Search engine by default shows the last 6 emails from the caller

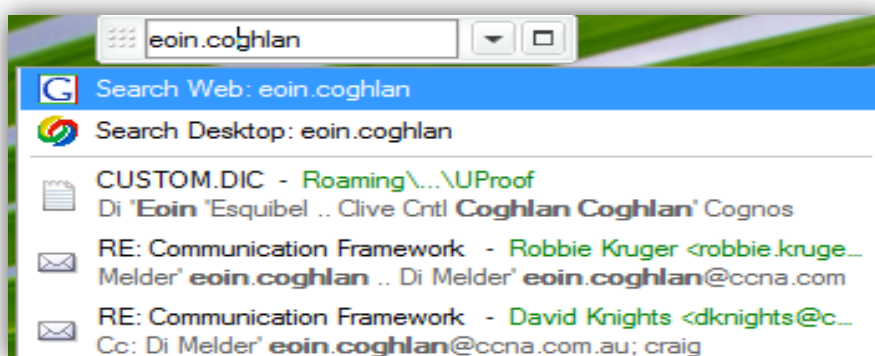



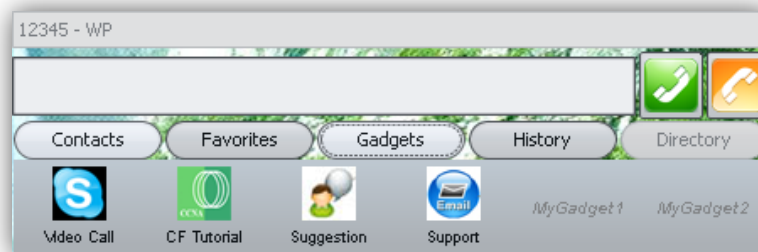
Diagram: Google Desktop, Caller Intelligence Pop-Up Window

	<p>Caller notification works with</p> <ul style="list-style-type: none"> • Avaya Communication Manager – You require CMAPI licenses per user on AES(Application Enablement Services) and DMCC for ACM • Nortel SCS – Version 3+ • Nortel CS1K –TR87 & AST licenses (SIP Signalling Server), CCT licenses or ACE solution • Cisco Unified Call Manager with Cisco CTI Server <p>You also require “Enable Caller Notification Screen Pop” to be selected in the user setting within the toolbar icon</p>
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Section 8: Using Gadgets

CF Gadgets are shortcuts to customer, vendor or CCNA built business and communication functions such as:

1. Communication Tools
2. Websites Shortcuts
3. Application Executables



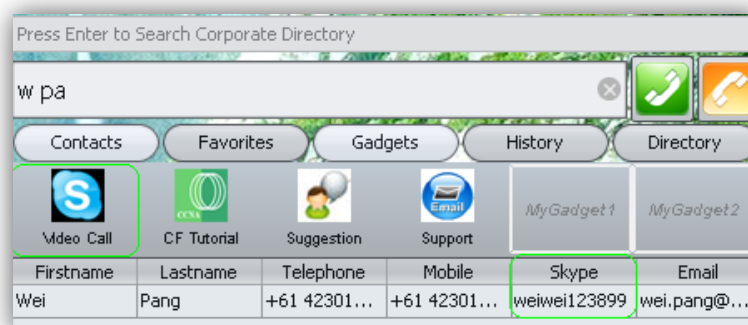
Note: Press the “Gadgets” button to show the Gadget Window

Gadgets can be built for most business and user operations. Accessing and activating gadgets is based upon the type of gadget.

Examples:

Launch Skype Video:

After you initiated an audio call with an individual, you can press the **Video Call Gadget** to launch a video ONLY call with that individual. The Skype Video call shall be muted to ensure audio quality via the PBX environment. **The users Skype id must be available in the contact details**



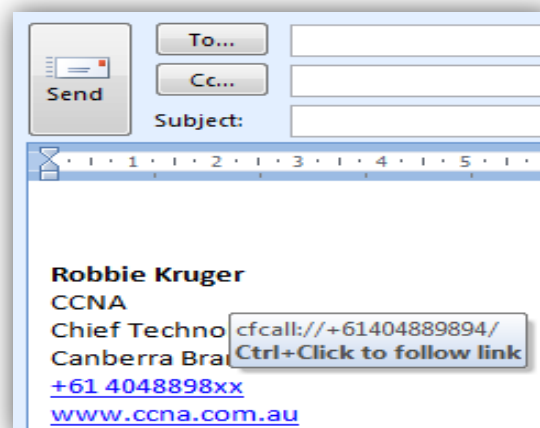
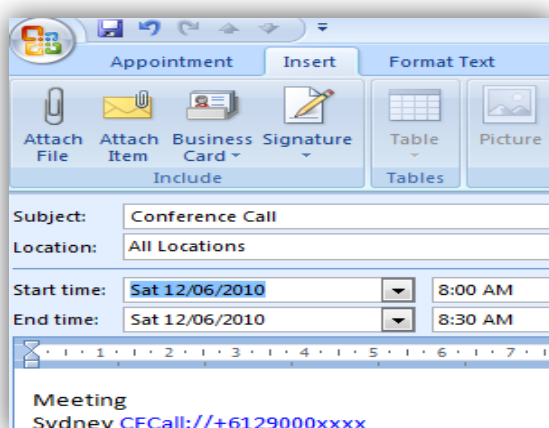
Launching a Website Request:

Websites are classified into 2 components.


1. Launch a generic website, such as CF online video tutorial <http://ccna.com.au/home/en/node/39>
2. Intelligent intranet website.
 - a. Communication Framework passes customer defined filter user information to a website to load the website with user defined information. Examples include:
 - i. Rostering websites
 - ii. Billing customers (i.e. for law firms)

Section 9: Hyperlink “cfcall://” Mode

Applications such as Outlook (Email and Calendar) may have an embedded Communication Framework `cfcall://` hyperlink extension embedded within the phone number. The Communication Framework `cfcall://` hyperlink is used to initiate communications as a web service. Click on the `cfcall:` Hyperlink extension and the call shall be initiated from your extension to the number associated within the `cfcall: //` function.



Example of a phone number that has been `cfcall://` enabled within a Calendar invite and an example of `cfcall://` enabling an email signature for simple “Click to dial”

	<p>Web enabled <code>cfcall://</code> Hyperlink</p> <p><i>If your company has a web portal or single webpage contains staffs contacts, <code>cfcall://</code> will be a great feature to add to the html page, it enables the staff to click on the phone number link to dial.</i></p> <p>e.g. <code>+614048898xx</code></p>
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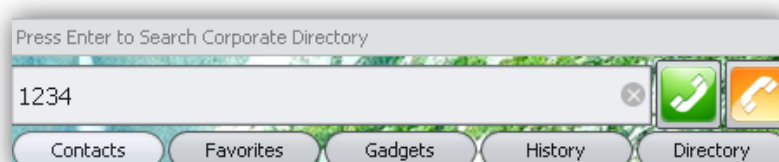
Section 10: Testing

This section runs through a few tests to ensure satisfactory user operation across multiple applications including:

1. Test connectivity to the PBX (Telephony System) and Directory
2. Perform a user search
 - a. Local Directory (Contacts Button)
 - b. Corporate Directory
3. Dialling
 - a. Phone numbers
 - b. From the tabs (Contacts favourites, history or directory)
 - c. Email Address
 - d. *cfcall://* Communication Framework Hyperlink extension
 - e. Webpage Phone numbers and information
4. Caller Notification (Requires CTI Integration)
 - a. On an inbound call, a caller notification screen pop up window shall appear with the caller's phone number. IF CF can resolve to a name, the pop up window shall include the caller's name
5. Skype Video
 - a. If Skype is loaded and you have another Skype address, either add the Skype address to your contacts or favourites or type the Skype id into the input area and press the Skype Gadget button to launch Video ONLY Skype call

1. Make a call using a phone number

Enter the phone number into Communication Frameworks input window and press enter or press the green dial button. Try this for internal and external phone numbers



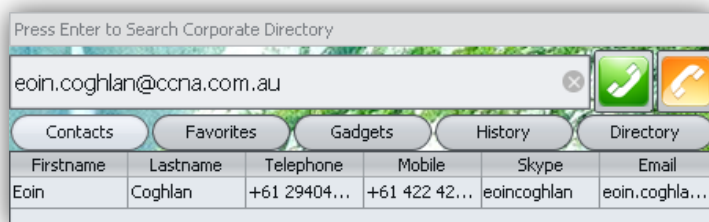
2. Make call from Contacts, Favourites and History

- Click on the Favourites or History button; a list of contacts will be displayed.
- Right click on the contact to Call.
- Double click on the number in the contact to call.

3. Make a call via email

- Open your Email application
- Select the sender's email address. Depending on your email application either
 - Copy the details by pressing Cntl C and the information shall be copied to Communication Framework. Press enter to search for their phone number in the corporate directory or if in your local or favourites contacts, choose either tab

- If you are using a hosted messaging application, highlight the user details, right mouse click on their name and press dial. The Dial item should be appear in the context menu

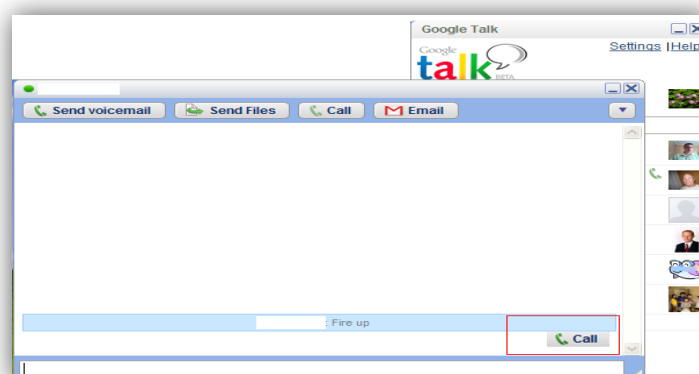


4. Shortcut key

- **Ctrl+C** to copy any text inside an application

5. Make call from Google Talk

- If you have installed Google talk, you can initiate a call from Google talk (deskphone to deskphone).
- The name of the contact in Google talk must appear as the full name or the contact when using a unique avatar.



6. Use Communication Framework call: Web Link Extension Function

You can configure numbers such as your email signature phone number or Calender phone number invites for users to simple click to dial by either

- Adding the [cfcall://+61404xxxxxx/](tel:+61404xxxxxx) as a hyperlink to a number or name

Section 11: Application & Error Messages

Communication Framework displays system and error messages in the Information Window of the User Interface to inform the user of current operational states. The messages are broken into 2 sections. System and Error Messages.

Application Messages

Application messages advise the user of the operational state of Communication Framework.

- Network Connected – system tray popup message showing “Test Connection” result
- Network Disconnected – system tray popup message showing “Test Connection” result
- LDAP Search Not Enabled – system tray popup message showing “Test Connection” result
- LDAP Connected – system tray popup message showing “Test Connection” result
- LDAP Search Completed – status bar message
- Contact Import Completed – status bar message
- Starting Skype Video Call – status bar message
- Call <phone number>

Error Messages

Error messages advise the user of the operational failures that have occurred whilst performing an action with the PBX, database or connection to other applications.

- Error while Querying LDAP Server – status bar message
- Invalid Phone Number – status bar message
- Call Failed - Active Call Exists – status bar message
- Call Failed - Invalid Credentials – status bar message
- Call Failed - Number or Extension Invalid – status bar message
- Call Failed - Invalid Session – status bar message
- Call Failed - Switch Not Reachable – status bar message
- Call Failed - Missing Resources – status bar message
- Call Failed - Could Not Connect To PBX – status bar message
- Transfer Failed - No Active Call Exists – status bar message

Section 12: Troubleshooting

This section reviews common help requests associated with Communication Framework and is broken into the following troubleshooting categories:

- Registration and Activation
- System Connections
- Searching
- Dialling
- Inbound Caller Notification
- Contacts

Complete and updated list of help and resolutions are available online at <http://www.ccna.com.au>

Communication Framework Registration and Activation	
Slow response	When registering Communication Framework, does the connection bar move? If no, the registration server may be down. Try again later. Your license key could be incorrect or expired
Error on registration	Are you entering the correct information including registration key, user name, password and company name which is associated to the registration key
License Expired	See your administrator to renew your organisations Communication Framework yearly license

System Connections	
Connection to the PBX (Telephone System)	Test the connecting between Communication Framework and the PBX. Was there a successful connection Are all the settings correct? Please ask your administrator to check
Connection to the Directory Database	Test the connecting between your PC and the Directory Database. Was there a successful connection Are all the settings correct? Please ask your administrator to check

Searching	
No local contact results	Check there are names in the Favourites and Contacts tabs. If no users are added, please add one and test or import contacts from outlook and test again.
No Corporate Directory Results	Is there a connection between the desktop and corporate directory. Use the test connection tool to ensure there is connectivity
Unable to resolve names, email addresses	When a name or other unique user text based information cannot be resolved to a phone number, check that contacts are in your favourites or contacts list and if performing a corporate database search, test the database connection from the connection tool located when you right mouse click on the communication framework icon in the toolbar. Ask your administrator if there is a filter on the database that may restrict or remove the ability to see the results of the search

Dialling Troubleshooting	
Making calls	Is the problem isolated to internal, external or any calls?

	Check all your user settings including country code, digit to access outside line and NDD
	Ensure you have entered your extension into the user settings
	Check the history to confirm the correct number was dialled to confirm the correct number was dialled and try the dialled number directly with the phone
	If no calls are working check the connection between the desktop and the PBX
Hyperlink CFCall:	Is the Hyperlink in the format of cfcall://xxxxxxx where x is the phone number.
	International numbers require the + in front of the country code or the full IDD number

Inbound Caller Notification

No Screen Pop	Has Caller notification been enabled in the settings window
	Does the PBX (Telephone System) Communication Framework is connecting to have the right licenses or application installed to process caller notification. Check with you administrator
	Do you have a desktop search engine application installed which Communication Framework requires to connect too for caller notification screen pop
	Check the connection between your desktop and the PBX

Contacts

Duplicate Contacts	You may require removing a single incident of a user or the complete contacts list and importing from outlook contacts again. Right mouse click on the user and delete the user or clear the complete list
Edit user details	Right mouse click on a name within your contacts and favourites tab, choose edit and then you can edit their details

Communication Framework Operations

Cannot Change the Transparency level	Your graphics card may not support this functionality. Please try on another PC
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