# **Enabling Contact Manager Directories for Cisco Finesse Agents**

### **Applies to:**

Imagicle UC Suite ver. 2019.3.1 or newer

### **Description:**

This article has been prepared in order to describe how Imagicle Contact Manager solution can be implemented in a Cisco UCCX-based and a generic contact center environment, where operators are equipped with CTI-enabled Cisco IP Phones and Cisco Finesse agent's bar, or other third-party web-enabled CRM/ERP applications/agent's bar.

#### **Requirements:**

- Imagicle UC Suite Server must be reachable through a FQDN
- The UCCX/UCCE and the Imagicle UC Suite servers must be on the same site, this means that the domain's name's suffix must be the same. For example, if the UCCX/UCCE's domain is *uccx.mycustomer.com*, the Imagicle server's domain must be *ucs.mycustomer.com* and not *ucs.notmycustomer.com*. If the UCCX/UCCE and the Imagicle servers don't respect this rule, the authentication of Call Recording gadget won't properly work.
- A valid Digital Certificate must be available

#### How-to:

### **Application and Scope**

Imagicle Contact Manager is the solution that centralizes and synchronizes company directories, providing fast searches, click to call and caller ID on phone, web, mobile and Cisco Jabber.

When a Cisco UCCX contact center solution is in place, it could happen that relevant operators need to access to above directories and services.

Integration of Imagicle Contact Manager gadget into Finesse gives the users the possibility to place a call, perform a transfer / blind transfer via Contact Manager gadget (Finesse supported versions are from 11.6.1 up to 12.5) directly within Finesse.

Note: For UCCX 12.5 you need to install Imagicle UC Suite Winter 2021 or following

### Integration and allowed operations

### **Placing a Call**

When there is no active and no call is being activated, it is possible to start a new call from contacts, as in picture below:



It is possible to also start a call from a contact, as in picture below:

IIIIIII Supervisor B OP (operatorb) - Extension 1091 CISCO ⊗ Not Ready → 03:03:09	Sign Out
Manage Team Team Data Queue Data Manage Customer Manage Recordings Speedy (La157) Speedy (149)	
🐛 Make a New Call	
Imagicle Speedy	
Contact details Bianca Albina	
primary extension 1234	
custom int 1 48956451254 1234	
custom int. 2 R&D	
custom int'3 7898465412	
directory Local contacts	
Copyright 2010-2019 Imagicle Spa	imagicle
© 2010-2018 Cisco Systems, Inc. All rights reserved. Cisco Finesse v11.6(2)	Send Error Report 😗

### Transferring a Call

During an active call, is possible to perform a consultation/blind transfer from contacts, as in picture below:

IIIIIII       Supervisor B OP (operatorb) - Extension 1091         CISCO       Not Ready - 03:04:36	Sign Out
Manage Team Team Data Queue Data Manage Customer Manage Recordings Speedy (La157) Speedy (149)	
🕅 00:08   1090 III Keypad III Hold L* Consult * Direct Transfer	
Imagicle Speedy	
Imagicle Speedy Enterprise Contacts	B
ADVANCED SEARCH	
Q Search contact	
SEARCHING LOCAL CONTACTS	
✓ Local contacts (4)	
Bianca Albina	🛄 🖳 💟 之 📩
Agente asd	primary extension 1234 custom int 1 48956451254 custom int 3 7898465412
Dan Marino	
Ciccio Pasticcio	
Copyright 2010-2019 Imagicle Spa	imagicle
© 2010-2018 Cisco Systems, Inc. All rights reserved. Cisco Finesse v11.6(2)	Send Error Report (?)

Similarly, during an active call, is also possible to perform a consultation/blind transfer directly from a specific contact, as in the following picture:

IIIIII       Supervisor B OP (operatorb) - Extension 1091         CISCO       Not Ready - 03:06:34	Sign Out
Manage Team Team Data Queue Data Manage Customer Manage Recordings Speedy (La157) Speedy (149)	
02:06   1090 III Keypad III Hold L* Consult • Direct Transfer	End
Imagicle Speedy	
Contact details	
primary extension 1234	
custom int 1 48956451254 💟 💽	
custom int. 2 R&D 4895(1)51254	
custom int'3 7898465412	
directory Local contacts	
Copyright 2010-2019 Imagicle Spa	imagicle
© 2010-2018 Cisco Systems, Inc. All rights reserved. Cisco Finesse v11.6(2)	Send Error Report 🛞
javascript.consultationCallTo('48956451254')	

**NOTE: Blind Transfer** 

Blind transfer is only available for from UCCX version 11.6.1 or newer.

In the previous versions, the icon is enabled by default and can be optionally disabled with a proper configuration

#### **Dialed number**

Actual dialed number, both when calling and transferring, differs from the displayed number and is generated (by Imagicle Application Suite) according to Jabber. As a result, the Outgoing Prefix is included according to the option "Use prefix for calls made through Cisco Jabber Desktop" value, reported in picture below.

Outgoing calls		•
Prefix	0	✓Use default settings
TAPI events include the prefix	. 3	Use default settings
ECC-CURRI callbacks include the prefix	0	✓Use default settings
Call recording callbacks include the prefix	. 🕤	✓Use default settings
Use prefix for calls made through Cisco Jabber Desktop	Ø 🕄	Use default settings
Suffix	0	✓Use default settings

### **Cisco/Imagicle Architecture**

Calls from/to Cisco agents are routed through UCCX distribution engine, using preferred algorithm. Finesse web client is configured with a specific internal "Workflow" which is triggered upon call answering. This workflow invokes itself an "Action" item in charge of sending an HTTP POST message (REST API) to Imagicle server, including agent's extension number and agent ID (agent ID currently not supported). When Imagicle server receives HTTP message, it immediately triggers BiB Call Recording on agent's phone and relevant RTP/sRTP streams are generated toward Imagicle server.

### **Configuring Finesse for Contact Manager Directories**

#### Configuration on Cisco Finesse: adding Contact Manager Gadget

To add Contact Manager gadget into Cisco Finesse agents panel, it is required to access to Cisco Finesse administrative page and head to "Desktop Layout", in XML editing window, and locate <tabs> node. Here, it is required to add a child <tab> node, as follows:

```
<tab>
<id>{iD}</id>
<label>{idbel-gadget}</label>
<columns>
<gadgets>
<gadgets>ttp://{ias-fqdn}/fw/Apps/Speedy/WebAPI/Administration/FinesseXml</gadget>
</gadgets>
</columns>
</columns>
</columns>
```

#### Replace following placeholder:

- {un-id-senza-spazi}
- *{ias-*fqdn*}*: FQDN (and not **IP ADDRESS**) used by Finesse to reach Imagice Server. Please mind that this should be coherent with the certificate loaded on IAS IIS.
- {label-gadget}: this is the string visible into Finesse Operators' navbar.

Manage Team Team Data Queue Data Manage Customer Manage Recordings Speedy (La157)

### **Configuration on IAS**

By default in Cisco Finesse environment, Contact Manager gadget enables the following capabilities: call, consultation and blind transfer. It is possible to configure such allowed capabilities into the *Apps/ApplicationSuite/Settings/Finesse.ini config file*:

[Settings] Capabilities=MAKE\_CALL, TRANSFER, TRANSFER\_SST

It is possible to configure gadget title, specifying it into *Apps/ApplicationSuite/Settings/Finesse.ini*, configuration file; by default its title is "Imagicle Contacts":

[Settings] SpeedyGadgetTitle=Contatti ACME

isco 📵	Not Ready 🔻	48:25			
Manage Team	Team Data	Queue Data	Manage Customer	Manage Recordings	Speedy (La157)
Make a	New Call				
ontatti ACM	E				
Cor	icle Speedy Enter 1tacts	prise			
					ADVANCED SEARCH
<b>Q</b> Searc	h contact				
SEARCHING ALL	DIRECTORIES				
All directories					
✓ Prova (2)	)				
Copyright 2010-20	19 Imagicle Spa				

It is possible to configure query string sent to Contact Manager gadget in *Apps/ApplicationSuite/Settings/Finesse.ini* configuraton file. Query string specified in settings is appended to ?*AppMode=Finesse&Capabilities=*MAKE\_CALL, TRANSFER,TRANSFER\_SST. By default, setting is "&HideLocalContaccts=0":

[Settings] SpeedyParameters=&HideLocalContaccts=1&LastNameFirst=1

Contact Manager gadget must be accessible via HTTPS, using a trusted certificate.

Note:

Any modification to the above parameters requires Finesse cache to be cleared, as specified in next paragraph.

### **Known Limitations**

1. In the time frame (usually very short) between the click for an action (makeCall / transfer) and the reception of the

7/9

telephone status change, buttons are not disabled. So, in case of slowdowns, user could be led to click multiple times (and each action could fail);

- 2. In UCCX versions prior to 11.6.1, blind transfer is not available (this must be disabled manually from config file)
- 3. Phones used by Finesse operators must be able to dial the same numbers as Jabber Clients.

#### Troubleshooting

#### Gadget not reachable

In case of the following error:

rt] (rt] (r. Supervisor A OP (operatora) - Extension 1090 CISCO entertimedy + 00.37	Sign Out
Manage Ream Ream Data Cauceo Data Manage Rocondaga: Speedy (1.4157) Speedy (1.4157)	
🔍 Make a New Call	
Imagice Speedy	
<u>م</u>	
The webpage at https://192.164.150.140/jabber/speedy/AppMode Presset&opabilities MAKE CALL FRANSPER TRANSPER TRANSPER ST 64164.localContexts to might be temporarily down or it may have moved permanently to a new web address.	
2 2019-316 Closs Systems, Inc. Al sights reserved. Closs Tensor v11.6(2)	Send Error Report (7)

Check and make sure that:

- IIS is started
- Contact Manager (https://{ias-url}/gadgets/contactmanager) gadget is:
  - reachable from client PC where Finesse is open;
  - accessible via HTTPS and that certificate is valid and trusted;
- Workaround: from client PC, open the link in a browser and accept the certificate.
- If still can't load the page, press F12 or right-click on Reload browser button and select "empty cache and hard reload"

Also check that your Cisco domains are added in Imagicle UCX Suite IIS trusted sources, otherwise the Imagicle gadget doesn't work and you get an error message as below sample:

![](_page_7_Figure_16.jpeg)

More details are available here.

#### **Issues with Finesse cache**

In order to clear cache, please login to Finesse and press F12 to realod page and clean cache.

Then display source code of Finesse web page by hitting <CTRL> + U or other browser-specific hotkey. You will get a page similar to below screenshot:

🕞 🖬 Elements Console Sources Network Performance Memory Application Security	Audits	O 6 🛆 3
Page Filesystem Overrides Content scripts Snippets	shindig-containjs?c=1&debug=1 jabberwerx.js core:rpcjs?con0a2c0e79acd9ce ifr?container=dn%2FFinesseXml ×	» 🖻 II 🚓 🗄 🕆 🖬 💋
* D top	1	▼ Threads
▼		Main
* in desktop		contentScriptDialog.html
assets/is		iabbar html
ciscowidgets		jabber html
* in container		jabber.nomi
l 7locale=en US		▶ Watch
F 🖿 is		* Call Stack
Im theme/finesse		Not paused
thirdparty		* Scope
padgets/is		Netenned
► C uccx115.imagicletv.com:7443		Not puised
LPFrame (contentScriptDialog.html)		w Breakpoints
En finesse gadget 0 (fr)		No breakpoints
E ☐ finesse gadget 1 (fr)		XHR/fetch Breakpoints
F T finesse gadget 2 (ifr)		DOM Breakpoints
E ☐ finesse padget 3 (ifr)		h Global Listeners
F Interse parter 4 (fr)		P Global Listeriers
► ☐ finesse gadget 6 (ifr)		Event Listener Breakpoints
▼ ☐ finesse gadget 7 (ifr)		
top/finesse_gadget_6 (ifr)		
x Di narinate		
ifr2container_default8mid=78mocache=08country=US8Jang_en8wiew_default8mfmch=964008up_hort	tearer115	
concat?container=clefe.dt%coschet=http%34%2F%2Fias.imanicle.com%2F6x%2F4nos%2FSneed;%2FWeb4	DPK/2544min	
Contract contains - octain tagloget - incpriorinter ner nationgreaterinter inner rippinter operatives in contained		
E ☐ tuppel-frame (uccv115/manicletv.com/)		
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Console What's New		
🖻 🛇   top 🔹 🐨   Filter	Default levels *	
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2019-04-23T14:37:32.515 +02:00: : uccx115.imagicletv.com: Apr 23 2019 14:37:32.527 +0200: Header	r : [ClientServices] NasterPublishersubscribeNode() - Attempting to subscribe to node '/finesse/api/Team/1/Users'	finesse.is?nocache=1556022655084:13091
2019-04-23T14:37:32.537 +02:00: : uccx115.imagicletv.com: Apr 23 2019 14:37:32.549 +0200: Header	r : [ClientServices] NasterPublishersubscribeNode() - Subscribed to node '/finesse/api/Team/1/Users'	finesse.is?nocache=1556022655084:13091
2019-04-23T14:37:32.568 +02:00: : uccx115.imagicletv.com: Apr 23 2019 14:37:32.580 +0200: TeamPr	erformance : onresize(): [ currentHeight=1201[ currentWidth=1880][windowHeight=126][windowHidth=1880]	concat?container=def_1556022655084:13291
<pre>wcalled GetSyncInterfaceLabelResource</pre>		common.is:177
Imaks.Common.trace@common.js:177		
> [Deprecation] Synchronous XMLHttpRequest on the main thread is deprecated because of its detri	imental effects to the end user's experience. For more help, check <u>https://xhr.spec.whatwg.org/</u> .	jquery.min.js:5
. [Deprecation] Synchronous XMLHttpRequest on the main thread is deprecated because of its detri	imental effects to the end user's experience. For more help, check <u>https://xhr.spec.whatug.org/</u> .	jquery.min.js:5
vcalled GetSyncInterfaceLabelResource		common.js:177
Imails.Common.trace @ common.js:177		
Refused to apply style from 'https://uccxll5.imagicletv.com/8445/gadgets/proxy2container=defaul' stylesheet MINE type, and strict MINE checking is enabled.	tägedget=_context=link&url=httn%35%27%27192.168.4.35%2Ffn%32FfinesseTest%2Fgedget.css' because its MIME type ('text/html') is not a supported	:8445/gadgets/ifr?co.icletv.com%348445:1
2019-04-23T14:38:30.550 +02:00: : uccx115.imagicletv.com: Apr 23 2019 14:38:30.562 +0200: Header	r : Client: 2019-04-23T12:38:30.5452, Server: 2019-04-23T12:38:30.5572, Drift: 12ms, Network Latency (round trip): 9ms	finesse.js?nocache=1556022655084:13091
>		

Seek for "finesse\_gadget\_n" including Contact Manager and copy the URL available into "gadgets" folder.

Open another browser tab and paste above URL, replacing "nocache=0" with "nocache=1". Then hit Enter to execute the URL.

#### Gadget debug from client side

It is possible to perform debug for the Finesse API and Contact Manager gadget integration, by using developing tools in the browser used for Finesse Contact Manager gadget.

- Open browser developer tools;
- head to console;
- to filter only logs related to the Finesse Contact Manager gadget communications, apply the following filter:

/FinesseApiClient|MessageManager/