# **Download Jabber Problem Report (PRT) Logs Using Web-Server.**

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# Introduction

This document describes how to setup a Web Server on a Windows machine and also has steps to transfer the Jabber PRT to a web server.

# Prerequisites

Cisco recommends that you have knowledge of these topics.

- Cisco Unified Communication Manager (CUCM)
- Cisco Jabber

## Requirements

### **Components Used**

The information in this document is based on these software versions:

CUCM version - 12.5.1.13900-152

Cisco Jabber version - 12.9.2.54247 XAMPP (Web Server) version - 7.4.10

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

# Configure

## **Network Diagram**

Cisco Jabber > Windows\_PC (with web-server XAMPP software)

## Configurations

These configuration steps help you to transfer the Jabber PRT to a web server using 'Hypertext Transfer' (HTTP - port 80) and also using 'Hypertext Transfer Protocol Secure' (HTTPS - port 443) Protocols.

- 1. XAMPP software installation on the Windows PC.
- 2. Initial configuration on XAMPP.
- 3. Setting up a 'Folder' to store the Jabber PRTs on the Windows server.
- 4. Create a "UC Service" and assign it to the "Service Profile" on the CUCM.
- 5. Assign the "Service Profile" to the Jabber End User.
- 6. Collecting the Jabber PRT.

If you want to configure HTTPS (secured) based Web-Server, please configure these additional steps.

- 7. Generate "Server Key" and "Certificate Signing Request" (CSR) on the XAMPP.
- 8. Sign the CSR using Certificate Authoriy (CA) and get the CA signed certificate.
- 9. Upload the certificate and restart the Apache service.
- 10. Modify the URL on the "UC Service"
- 11. Collecting the Jabber PRT.

### 1. XAMPP software installation on the Windows PC.

Download XAMPP software (for windows) by clicking here.

The steps mentioned in these screenshots help you in installing the XAMPP on the Windows machine.



Click the Next button in the setup wizard.

	Setup	X
Select Components		8
Select the components you want to Next when you are ready to conti	o install; clear the components you do nue.	not want to install. Click
<ul> <li>Server</li> <li>Apache</li> <li>MySQL</li> <li>FileZilla FTP Server</li> <li>Mercury Mail Serve</li> <li>Tomcat</li> <li>Program Languages</li> <li>PHP</li> <li>Perl</li> <li>Program Languages</li> <li>PhpMyAdmin</li> <li>Webalizer</li> <li>Fake Sendmail</li> </ul>	f	
XAMPP Installer	< Back	Next > Cancel

Select the mentioned components and click the Next button.

		Setup	-	. 🗆 X
Installation f	older			ន
Please, choose	a folder to install XAMPP			
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XAMPP Installer				
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Choose the installation folder and click the Next button.

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٥	Setup	X
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XAMPP Installer	< Badk	Next > Cancel

Click the Next button.

	Setup	×
Ready to Install		8
Setup is now ready to begin installing XAMP	P on your computer.	
XAMPP Installer	< Back	Next > Cancel

Click the Next button to proceed with installation.



Installation is in progress.



Click the Finish button.

## 2. Initial configuration on XAMPP.

Open "XAMPP Control Panel" as an Administrator.



Run the 'XAMPP Control Panel' as an administrator.

Click on the **Config** button.

8		XAMPP Co	ntrol Panel v	3.2.4 [Co	mpiled: Ju	in 5th 201	9]	- 🗆 X
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Modules Service	Module	PID(s)	Port(s)	Actions				Netstat
	Apache			Start	Admin	Config	Logs	Shell
	MySQL			Start	Admin	Config	Logs	Explorer
	FieZila			Start	Admin	Config	Logs	Services
	Mercury			Start	Admin	Config	Logs	Help
	Torncat			Start	Admin	Config	Logs	Qut
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Click on the Config button.

Select the marked options and click the **Save** button.

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Service	Module	PID(s)				11an	
	Apache		Autostart of mo	dules			Shell
	MySQL		Apache	Fiezila	Tomca	t	Carl Explorer
	FieZila		MySQL	Mercury			E Services
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1.	an family		000 000		soy .	officiency of	
					🗙 Abort	V Save	~
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Select the mentioned components and click the Save button.

Start the Apache service by clicking the highlighted " $\mathbf{X}$ " button.

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×	Apache			Start	Admin	Config	Logs	Shell
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	Mercury			Start	Admin	Config	Logs	😣 Help
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Start the Apache service.

# Press the **Config** button and click on **PHP**.

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Open the php file.

Ensure the "upload\_max\_filesize" value is set as 40M.

File Edit Format	View Help							
; File Uploads			Find	×	0			
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<pre>; nttp://pnp.n file_uploads=0 ; Temporary div ; specified). ; http://php.n upload_tmp_dir ; Maximum allow ; http://php.n upload_max_file</pre>	Match p rectory for rt/upload rC:\xamp rt/upload rt/upload	or HTTP up] -tmp-dir p\tmp" for uploade -max-filesi	O⊴e ® Down oaded files (w d files. ze	ill use syst	tem defa	ult if	f not	

Set the value of upload\_max\_filesize to 40M.

Start the Apache service by clicking the **Start** button.

8		XAMPP Co	ontrol Panel v.	3.2.4 [Co	mpiled: Ju	in 5th 201	9]	×
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Modules Service	Module	PID(s)	Port(s)	Actions	-			Netstat
	Apache			Start	Admin	Config	Logs	Shell
	MySQL			Start	Admin	Config	Logs	Explorer
	FieZila			Start	Admin	Config	Logs	Services
	Mercury			Start	Admin	Config	Logs	😣 Help
	Torncat			Start	Admin	Config	Logs	Quit
7 24 47 P 7 24 47 P 7 26 25 P 7 26 26 P 7 29 31 P 7 29 31 P 7 29 56 P 7 29 58 P	M [main] M [main] M [Apache] M [Apache] M [Apache] M [Apache] M [Apache] M [Apache]	Starting Ch Control Pa Installing s Successful Attempting Status cha Attempting Status cha	eck-Timer nel Ready ervice to start Apach nge detected: r to stop Apach nge detected: s	e service unning e service stopped				

Click the Start button to bring up the Apache service.

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~	Apache	4524	80, 443	Stop	Admin	Config	Logs	Shell
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	FieZila			Start	Admin	Config	Logs	Services
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26 25 P 26 26 P 29 31 P	M [Apache M [Apache M [Apache M [Apache	Installing s Successful Attempting Status cha	ervice It to start Apache nge detected m	service				,

Status messages display that the Apache service is running.

#### 3. Setting up a 'Folder' to store the Jabber PRTs on the Windows server.

Create a new folder "**JabberPRT**" inside the location "**C:\xampp\htdocs**". This folder is used to store the Jabber PRTs.

Also create a PHP script as shown in this screenshot.

THE H	Iome Share	View					Y
• •	🕆 👗 - This PC	> Local Disk (Ci) + xampp	htdocs		v č	Search Ht.	p
W Favorit	es	Name		Date modified	Туре	Size	6
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L Down	nloads			10/13/2020 7:17 PM	File folder		
12 Rece	nt places	JabberPRT		10/13/2020 7:34 PM	File folder		
		🌲 webalizer		10/13/2020 7:17 PM	File folder		
📭 This Pi	C	🗼 xampp		10/13/2020 7:17 PM	File folder		
he Desk	top	applications		8/27/2019 7:02 AM	HTML Document	4.83	
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Lec			upioaupritpri	p - rvotepad			
	File Edit Format	t View Help				_	
Netw	<pre><?php \$uploaddir = \$uploadfile = move_uploaded ?> </pre>	<pre>'C:\xampp\htdocs\)abb Suploaddir . date('' file(\$_FILES['zipFi</pre>	berPRT\\^; Y_m_d_H_1_s*) leName*][*tmp	) . basename(\$_FILES[ name`], \$uploadfile	'zipFileName'][ );	'name'])	

Specify the folder location to store the Jabber's PRT logs.

# Create a file "**uploadprt.php**" inside the location >> "**C:\xampp\htdocs**" and write these lines inside the .php file

 $<?php \uploaddir = 'C:\xampp\htdocs\JabberPRT\'; \uploadfile = \uploaddir . \ date('Y_m_d_H_i_s') . \\basename(\FILES['zipFileName']['name']); move_uploaded_file(\FILES['zipFileName']['tmp_name'], \uploadfile); ?>$ 

#### 4. Create a "UC Service" and assign it to the "Service Profile" on the CUCM.

Log in to the CUCM Administration web page and navigate : User Management > User Settings > UC Service.

Create a new UC Service.



Open 'UC Service' on the CUCM Administration web page.

Choose "Jabber Client Configuration (jabber-config.xml)" and choose appropriate values. Give the webserver and PHP file details in the URL as shown in this screenshot.

Section : Client

Parameter : PrtLogServerURL

#### Value : http://<WebServer\_IP/FQDN>:80/uploadprt.php

cisco	Cisc For Cit	sco Uni	fied CM A	dministrati	on		1000		Navigation Cisco	Unified CM Adr	ministration v
System •	Call Rout	ing •	Media Resources ·	Advanced Feature	s • De	vice · Application ·	User Management	Bulk Administration	Help •		
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Save	× De	iote [[	Copy 👍 Add	Now							
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(i) Statu	is: Ready							My Web-Server			
UC Servic	e Inform	nation									
UC Servic Product I Name* Description	n Type:	Jabbe Jabbe	r Client Configur r rConfig	ation (jabber-co	nfig.xml		(	- http://10.88.11	218:80/upload	prt.php	
Jabber Co	onfigura	tion Pa	rameters					、			
_	Section			Pacameter	-	Parameter	Description	Value		Operations	
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Configuring the Web Server's details in Jabber Client Configuration (jabber-config.xml).

Navigate : User Management > User Settings > UC Service.

#### Assign the created UC services to the Service Profile.

alude Cisco Unified CM Administration					Navigation Cisco Unified CM /	Administ
CISCO For Cisco Unified Communications Solutions	-		_		admin	Ab
System      Call Routing      Media Resources      Advanced Features      Device	* Application *	User Manage	ment · Bulk Ad	ministration •	• Help •	
Find and List Service Profiles		Applicati	on User			
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U 1 records tound		Sed-Pro	rsioning		Credential Policy	
Service Profiles (1 - 1 of 1)		Assign P	tesence Users	_	Role	er
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Name *	Description	n			End User CAPF Profile	
CUCMOnlyPRIServer			System Defaul	t Service	UC Service	
Add New Select All Clear All Delete Selected					Service Profile	
					User Profile User Group User Rank	

Open 'Service Profile' on the CUCM Administration web page.

cisco	Cisco Unified CM Administration For Cisco Unified Communications Solutions
System -	Call Routing  Media Resources  Advanced Features  Device  Application  User Management  Bulk Administration
Service Pro	ofile Configuration
Save	X Delete Copy 🖧 Add New
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CTI Profile	)
Primary	cucm125 V
Secondary	<none> Y</none>
Tertiary	<none> \v</none>
Video Con	ference Scheduling Portal Profile
Primary	<none> ~</none>
Secondary	<none> ~</none>
Tertiary	<none> ~</none>
Jabber Cli	ent Configuration (jabber-config.xml) Profile
Common	abberConfig ~
Desktop	abberConfig ~
Mobile	abberConfig ~
Save	Delete Copy Add New

Assign the created Jabber Client Configuration to the 'Service Profile' and click the Save button.

## 5. Assign the "Service profile" to the Jabber End User.

Ensure this **Service Profile** is associate to the Jabber **End User**.

cisco U For Cisco U	Inified CM Administration			Navigation Cis
System · Call Routing ·	Media Resources • Advanced Features • Device • Application •	User Management +	Bulk Administration •	Help +
End User Configuratio	n	Application User		Related Links
-	0	End User		
Save Delete	Add New Could Open	User/Phone Add SIP Realm	•	
Service Settings		User Settings	•	
Home Cluster		Self-Provisioning		
Enable User for	Unified CM IM and Presence (Configure IM and Presence in the association	Assign Presence	Users	
Include m	eeting information in presence(Requires Exchange Presence Gateway to	be configured on C	UCM IM and Presence	server)
UC Service Profile	Use System Default( "CUCMOnlyPRTServer" )	talls		
Device Information				
Controlled Devices	CSFAGENT1	6		
		Device Asso	ciation	
		Line Appear	ance Association fo	r Presence
A stable posts		×		
Available Profiles		^		
		100		

Assign the Service profile to the Jabber End User.

## 6. Collecting the Jabber - PRT.

For collecting the Jabber PRT, You can choose Jabber and click on the button "Generate PRT for selected".

diala	Cisco Unified CM Admini	stration		Navigation Cis	co Unified CM Administrat	on 🗸 Go
System - C	al Routing · Media Resources · Advance	ed Features • Device • Application	n · User Management	Bulk Administration      Help	admin About	Logout
Find and Lis	t Phones			Related Links: Active	ly Loggod In Device Ray	ort Go
Add New	Add New From Template	t All 🔛 Clear All 🙀 Delete Sele	cted 🎦 Reset Select	ed 🖉 Apply Config to Selected	J Generate PRT for Se	lected
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Add New	Add New From Template Select All	Clear All Delete Selected R	eset Selected Apply	Config to Selected	Generate PRT for S	elected

Collect the Jabber PRT.

You can find the Jabber PRT in the Web server (the location is configured in the PHP script).



The Web server contains the downloaded Jabber PRT file.

If you run a Wireshark capture on the Web Server during PRT transfer event, you see this information.

d.				Capturing fro	m Ethernet	D			- 0	X
File	Edit	View Go	Capture Analyze Statis	tics Telephony Wirele	ss Tools H	Help				
A	• £	010	※ 四 9 ※ ※ 留	T 🛓 🗐 🗐 🔍 Q	Q 11					
	addr=	= 10.201.251.18							Expression	+
No.		Time	Source	Destination	Protocol	Length	Info			1
r	539	32.153498	10.201.251.189	10.88.11.218	TCP	66	58578 + 80	[SYN]	Seq-0 Win-64240 Len-	0_
	540	32.153598	10.88.11.218	10.201.251.189	TCP	66	88 + 58578	[SYN,	ACK] Seq=0 Ack=1 Win	-
	541	32.153972	10.201.251.189	10.88.11.218	TCP	60	58578 + 80	[ACK]	Seq=1 Ack=1 Win=5255	6_
	542	32.164023	10.201.251.189	10.88.11.218	TCP	296	58578 + 88	[PSH,	ACK] Seq=1 Ack=1 Win	-
	543	32.164564	10.88.11.218	10.201.251.189	HTTP	79	HTTP/1.1 10	00 Con	tinue	
	544	32.165383	10.201.251.189	10.88.11.218	TCP	1514	58578 + 80	[ACK]	Seq=243 Ack=26 Win=5	2-
	545	32.165544	10.201.251.189	10.88.11.218	TCP	1514	58578 - 80	[ACK]	Seq=1703 Ack=26 Win=	5_
	546	32.165546	10 201.251.189	10.88.11.218	TCP	1514	58578 + 80	[ACK]	Seq=3163 Ack=26 Win=	5
	547	32.165547	19.201.251.189	10.88. 1. 10	TEP	1514	58578 + 80	[ACK]	Seq=4623 Ack=26 Win=	5_
	548	32.165547	0 281 251 189	18.88. WEB	SERVER	1514	58578 + 80	[ACK]	Seq=6083 Ack=26 Win=	5-
	549	32.165548	TARBER DO	10.88.11.218	TCP	1514	58578 - 80	[ACK]	Seg=7543 Ack=26 Win=	5_
	550	32.165548	10 201 361 100	10.88.11.218	TCP	1514	58578 - 80	[ACK]	Seg=9003 Ack=26 Win=	5
	551	32.165549	10.201.251.189	10.88.11.218	TCP	1514	58578 + 80	[ACK]	Seg=10463 Ack=26 Win	-
	552	32.165549	10.201.251.189	10.88.11.218	TCP	1514	58578 + 80	[ACK]	Seg=11923 Ack=26 Win	-
	553	32 165550	18 281 251 189	18 RR 11 21R	TCP	1514	58578 + 8A	CACK1	Senalitet Arka26 Min	
DF	rame	539: 66 byte	s on wire (528 bits)	, 66 bytes captured i	(528 bits)	on inte	erface 0			5.
DE	thern	et II, Src:	Cisco d1:42:c4 (e8:8	4:62:d1:42:c4), Dst:	Veware a5:	ef:fd (	00:50:56:a5	:ef:fo	d)	
P 3	Intern	et Protocol	Version 4, Src: 10.2	01.251.189, Dst: 10.0	88.11.218			1000000		1
<1						_		_		3

Wireshark capture on the Web server shows the PRT file transactions.

If you want to configure HTTPS (secured) based Web-Server, please configure these additional steps.

These steps help in installing Certificate Authority (CA) signed certificate on the WebServer and also, has

Cisco CallManager (CCM) configurations for transferring the Jabber PRT via TLS1.2.

## 7. Generate "Server Key" and "Certificate Signing Request" (CSR) on the XAMPP.

Open Shell in the XAMPP Control panel (webserver) and type openssl command and hit enter.



Run the command openssl via the Shell of the XAMPP Control panel.

Generate server key by running the command "genrsa -out server.key 2048".

File Home	XAMPP Control Panel v3.2.4 [Compiled: Jun 5th 2019]	- 0 X
🐑 💿 • 🕇 🎴	XAMPP Control Panel v3.2.4	Config 7
-	Administrator: XAMPP for Windows - openssl	Netstat
Setting enviro Administrator® # openss1 OpenSSL>	nment for using XAMPP for Vindows. AGENT3 c:\xampp	Explorer
OpenSSL> OpenSSL> genrs Generating RSH	a -out server.key 2048 private key, 2048 Dit long modulus (2 primes)	😧 Help
e is 65537 <0x OpenSSL> OpenSSL>	818881>	Qut
		v

Run the command genrsa -out server.key 2048

Generate a Certificate Signing Request (CSR) by running these commands.

#### genrsa -out server.key 2048

## req -new -sha1 -nodes -key server.key -out server.csr -days 0000

Provide the relevant info under these fields:

- Country Name.
- State or Province Name.
- Locality Name.
- Organization Name.
- Organizational Unit.
- Common Name.
- Email Address.
- Extra attributes.

Administrator: XAMPP for Windows - openssl	x
OpenSSL> OpenSSL> genrsa -out server.key 2048 Generating RSA private key, 2048 bit long modulus (2 primes) ******	^ 
.***** e is 65537 (0x010001) OpenSSL> OpenSSL> reg -new -sha1 -nodes -key server,key -out server,csr -days	9999
Ignoring "uays, not generating a certificate You are about to be asked to enter information that will be incorpora into your certificate request. What you are about to enter is what is called a Distinguished Name of There are quite a few fields but you can leave some blank For some fields there will be a default value, If you enter '.', the field will be left blank.	ated r a DN.
Country Name <2 letter code> [AU]:US State or Province Name <full name=""> [Some-State]:IX Locality Name <eg, city=""> []:RCDN Organization Name <eg, company=""> [Internet Widgits Pty Ltd]:CISCO Organizational Unit Name <eg, section=""> []:WEBSERVER Common Name <e.g. fqdn="" name="" or="" server="" your=""> []:agent3.ramebalaimp.com Email Address []:agent3.ramebalaimp.com</e.g.></eg,></eg,></eg,></full>	
Please enter the following 'extra' attributes to be sent with your certificate request A challenge password []: An optional company name []:CISCO	
OpenSSL>	*

Generate a Certificate Signing Request (CSR) for the Web Server.

You can find the CSR in this location.

C:\xampp\



Generated Certificate Signing Request (CSR) location.

Copy the server.csr to this folder location.

#### C:\xampp\apache\conf\ssl.csr

N D D = 1		ssi.csr			
File Home Shar	re View				
📀 💿 = 🕇 🚺 🖾	xampp\apache\conf\ssl.csr			v C	Search ssl.cr
* Favorites	Name	Date modified	Туре	Size	
Desktop Downloads Recent places	server	10/14/2020 1:00 PM	CSR File	2 108	
1 This PC					
Wetwork					

Copy the CSR file to a new folder location.

Copy the server.key file to the mentioned location:-

From C:\xampp\apache

To C:\xampp\apache\conf\ssl.key

1000es	I will Mathematical I	the second second second
Service Module PID(s)	xampp	- 0 X
Administrator: XAMPP for Wi	🛞 💮 👻 🕆 🏭 + This PC + Local Disk (C) + xampp v 🖒 🛛 Search xampp	Q
Setting environment for using XAMPP for Vindows Administrator#AGENT3 c:\xampp H openSSL> OpenSSL> OpenSSL> genrsa -out server.key 2040 Generating RSA private way.cvH8 bit long modul ***** e is 65537 (0x010001) OpenSSL>	Favorites         Name         Date modified         Type         Size           Desktop         10/13/2020 11:28         Windows Batch File         1 KB           Downloads         2         xempp-control         10/13/2020 11:28         Configuration sett         1 KB           Windows Batch File         10/13/2020 11:28         Configuration sett         1 KB           Winstall.dat         10/13/2020 11:29         DAT File         161 KB           Winstall         10/13/2020 11:29         Application         12,210 KB           Server.key         10/14/2020 12:55         KEY File         2 KB	
OpenSSL> req -new -shal -nodes -key server.key Ignoring -days: not generating a certificate You are about to be asked to enter information into your certificate request. What you are about to enter is what is called a There are guite a few fields but you can leave	↓         ↓	
For some fields there will be a default value. If you enter '.', the field will be left blank.	File Home Share View	× 0
Country Name (2 letter code) [AU]:US State or Province Mane (full name) [Some-State] Locality Name (eg. clty) [IRCDM Organizational Unit Name (eg. scetion) [I:VEDSE Connon Name (eg. server PQBM or YOUR name) [I: Enail Address [I:agent].rametalainp.com Please enter the following 'extra' attributes to be sent with your certificate request An optimal company name [I:CISCO OpenSSL)		A.

Copy the server.key to a new folder location.

## 8. Sign the CSR using Certificate Authority (CA) and get the CA signed certificate.

Get the CSR (**server.csr**) signed by the CA (LAB CA server - ADFSCAIMP) and get the CA-signed Webserver certificate "**server.crt**".



**Note**: Ensure you save the cert in .crt format (and not as .cer or .der). This screenshot shows how to save the cert in .crt format using the Windows CA server (when downloading the signed cert)

C () (S http://localhost/certsrv/certfinsh.asp	の * C / Ø Microsoft Active Directory ×	
Microsoft Active Directory Certificate Services - ADFSCAIMP		
Certificate Issued		
The certificate you requested was issued to you.	🗷 Save As	×
O DER encoded or Sase 64 encoded	← → · · ↑	<i>p</i>
Download certificate chain	Organize - New folder	lii • 📀
	A Name     Date modified     Type     No items match your search.     Downloads     P     Dournents     P     Coursents     P	Size
	File name "perver.crt" Save as type: Security Certificate	v V Cancel

Sign the CSR by Certificiate Authority (CA) server and get the signed certificate.

	Certificate
Seneral	Details Certification Path
1	Certificate Information
Withi	ndows does not have enough information to verify s certificate.
-	Issued to: agent3.ramebalaimp.com
	Issued by: ADFSCAIMP
	Valid from 10/14/2020 to 10/14/2022
	Install Certificate Issuer Statement
	OK

Signed Certificate.

9. Upload the certificate and restart the Apache service.

Upload the **server.crt** in this location.

#### C:\xampp\apache\conf\ssl.crt

🚯 l 🕞 🚯 = 1		ssi.crt					- • ×
File Home Sh	are View						~ 0
€ © • 1 💵	\xampp\apache\conf\ssl.crt			¥	C	Search ssl.crt	Q
🔆 Favorites	Name	Date modified	Туре	Size			
Desktop	Server	10/14/2020 2-25 PM	Security Certificate		2 KB		
1號 This PC							
Wetwork							
1 item							

Upload the signed certificate.

After uploading the KEY/CSR/CERT, restart the Apache service.

		XAMPP Co	ontrol Panel v3.	2.4 [Co	mpiled: Ju	in 5th 2019	9]		×
8	XAM	IPP Contr	ol Panel v3.	2.4				JP Con	fig
Modules Service	Module	PID(s)	Port(s)	Actions				Nets	tat
1	Apache	10400	80, 443	Stop	Admin	Config	Logs	Sh	el
	MySQL			Start	Admin	Config	Logs	Expla	orer
	FieZila		1	Start	Admin	Config	Loga	Servi	ices
	Mercury			Start	Admin	Config	Logs	😥 He	lp
	Tomcat			Start	Admin	Confg	Logs	Qu	it.
2.21.23 P 2.21.23 P 2.21.23 P 2.21.23 P 2.21.27 P 2.21.49 P 2.26.20 P 2.26.20 P	M [main] M [main] M [main] M [Apache] M [Apache] M [Apache] M [Apache]	The Mercu The Tomca Starting Ch Control Pa Attempting Attempting Attempting Status cha	ny module is disa at module is disal heck-Timer nel Ready to start Apache to start Apache to start Apache nge detected: ru	bled service service service					< m >

Restart the Apache service by pressing the Stop & Start button.

On the CUCM, ensure the **Tomcat** certificate is signed by the same CA (Here the CA server is ADFSCAIMP).

	Cisco Unified Communications	solutions					admin About Logo
Show · Settings	Security      Software Upgrades	· Services ·	Help 🕶				
Certificate List	Certificate Management						
Generate Self	-sign Certificate M Certificate Manu Certificate Revocation	igement Ge	menate CSR				
Status	PSEC Configuration	-					
5 records f	bunc Buk Certificate Management Session Management						
Certificate Lin	st Cipher Management						Rows per Page 50 V
	ist where Certificate V begin	tom:	at	Find Clear Filter			
Find Certificate L				Distribution	Issued By	Expiration	Description
Certificate C		Туре	Кеу Туре				
certificate t	cucm125.ramebalaimo.com	Type CA-signed	Key Type RSA	cucm125.ramebalaimp.com	ADFSCAIMP	10/14/2022	Certificate Signed by ADFSCAIMP
tomcat tomcat	cucm125.ramebalaimo.com	Type CA-signed Self-signed	Key Type RSA EC	cucm125.ramebalaimp.com cucm125.ramebalaimp.com	ADFSCAIMP cucm125-EC.ramebalaimp.com	10/14/2022 07/31/2025	Certificate Signed by ADFSCAIMP Self-signed certificate generated by system
tomcate tomcate tomcat-ECDSA tomcat-trust	sucm125.ramebalaimo.com sucm125.fc.ramebalaimo.com ADFSCAIMP	Type CA-signed Self-signed Self-signed	Key Type RSA EC RSA	cucm125.ramebalaimp.com cucm125.ramebalaimp.com ADFSCAIMP	ADFSCAIMP cucm125-EC.ramebalaimp.com ADFSCAIMP	10/14/2022 07/31/2025 05/28/2049	Certificate Signed by ADFSCAIMP Self-signed certificate generated by system Signed Certificate
tomcat tomcat tomcat-ECDSA tomcat-trust tomcat-trust	cucm125.ramebalaimo.com cucm125.FC.ramebalaimo.com ADFSCAIMP cucm125.ramebalaimo.com	Type CA-signed Self-signed Self-signed CA-signed	Key Type RSA EC RSA RSA	cucm125.ramebalaimp.com cucm125.ramebalaimp.com ADFSCAIMP cucm125.ramebalaimp.com	ADFSCAIMP cucm125-EC.ramebalaimp.com ADFSCAIMP ADFSCAIMP	10/14/2022 07/31/2025 05/28/2049 10/14/2022	Certificate Signed by ADFSCAIMP Self-signed certificate generated by system Signed Certificate Trust Certificate
tomcat tomcat tomcat-ECDSA tomcat-trust tomcat-trust tomcat-trust	cucm125.ramsbalaimo.com cucm125.FC.ramsbalaimo.com ADFSCAME cucm125.ramsbalaimo.com cucm125.FC.ramsbalaimo.com	Type CA-signed Self-signed Self-signed CA-signed Self-signed	Key Type RSA EC RSA RSA EC	cucm125.ramebalaimp.com cucm125.ramebalaimp.com ADFSCAIMP cucm125.ramebalaimp.com cucm125.ramebalaimp.com	ADFSCAIMP cucm125-EC.ramebalaimp.com ADFSCAIMP ADFSCAIMP cucm125-EC.ramebalaimp.com	10/14/2022 07/31/2025 05/28/2049 10/14/2022 07/31/2025	Certificate Signed by ADFSCAIMP Self-signed certificate generated by system Signed Certificate Trust Certificate Trust Certificate

Tomcat certificate signed by the same CA server.

#### 10. Modify the URL on the "UC Service"

Log in to the CUCM Administration web page and navigate : User Management > User Settings > UC Service.

Modify the Web Server URL accordingly as shown in this UC Service section.

Section : Client

#### Parameter : PrtLogServerURL

#### Value : https://<WebServer\_FQDN>:443/uploadprt.php

CISCO For Cisco Unified	ed CM Administration		Navipston Ciscs Unified CM Administration admin   About					
System • Call Routing • Media	Resources + Advanced Features + Device +	Application • User Management • Bulk Administration • He						
UC Service Configuration				Related Li	inks: Back To Find/List			
🔜 Save 🗶 Delete 🗋 Ca	ay ciga Add Serv							
Status Status: Ready			https://agent3.ram	ebalaimp.com:	443/uploadprt.php			
		(						
UC Service Information UC Service Type: Jabber C Product Type: Jabber Vame* JabberCo Orecracol	ient Configuration (Jabber-config.xml) Mg			<ul> <li>Since I have FQDN in used FQDN of WebSe</li> </ul>	the webserver's certificate I erver in this URL			
IC Service Information IC Service Type: Jabber Cl Product Type: Jabber Name <sup>4</sup> Jabber Obscription Jabber Configuration Param	ient Configuration (Jabber-config.xml) Mg weters		,	- Since I have FQDN in used FQDN of WebSe	the webserver's certificate I erver in this URL.			
UC Service Information SC Service Type: Jabber Cl Product Type: Jabber Name* Jabber Jabber Configuration Param Section Client	ient Configuration (jabber-config.xml) dig setters Perameter PrilogServerURL (- Not Selected	Parameter Description	https://agent3.ramebalain	- Since I have FQDN in used FQDN of WebSe	the webserver's certificate I erver in this URL. Commissions dd Custom			

Configuring the Web Server's details in Jabber Client Configuration (jabber-config.xml).

### 11. Collecting the Jabber - PRT.

After that, generate PRT via CCM page.

cisco	Cisco Unified	CM Administ	tions						Nevip	Cisco Unified Ch adm	Administ	ration V Go kout Logout
System *	Call Routing + Media Res	ources · Advanced Fe	estures · Device	· Application	User Management	· Buk Administ	ration = Help =					
Find and L	ist Phones								Related Links	Actively Logged In	Device P	Report - Go
Add Ne	w 🖓 Add New From 1	emplate III Select All	Citar Al	Delete Selecte	ed 🎦 Reset Selecte	nd 🔏 Apply C	onfig to Selected			2 cm	erate PRT fo	r Selected
Status -	ords found											
Phone	(1 - 2 of 2)										hows per	Page 50 -
Find Phone	where Device Name			I begins with	√ [Select item or en	Er search text	d Clear Filter	4				
D.	6	Nevice Name(Line) *	Description	Device Pool	Device Protocol	Ratus	Last Registered	Last Active	Unified CM	[Pv4 Address	Copy	Buper Copy
8	<u></u>	FAGENT1		Default	51P	Registered	Now		cucm125.ramebalaimp.com	10.201.251.189	Ð	104
	CBC	nabala		Default	SIP	None	Never			None	Ð	104
Add New	Add New From Tem	plate Select All	Clear All Dele	te Selected	Reset Selected A	oply Config to S	elected			Genera	te PRT fo	r Selected

Collect the Jabber PRT.

From the packet capture you can confirm that the traffic between Jabber and Web Server are encrypted via TLS1.2 (HTTPS-443):

Web server IP : 10.88.11.218 Jabber PC IP : 10.201.251.189

				WebServerPCAP-during-PRTcollection-secure_HTTS.pcapng
File Lo	st View Go	Capture Analyze Stati	stics Telephony Wireles	es Tools Help
	4.0	X 0 9 + + 5	TITOQQ	Q II
1 p.a5	+++10.201.251.18	19	And and a second se	🔯 🚞 🔹 Espression .
No.	Time	Source	Destruction	Protocal Length Snfo
55	12 25.577386	10.201.251.189	10.85.11.218	TCP 66 60547 + 443 [SYN] Seg-8 x(n+64248 Len+0 PSS-1468 xS+256 SACK PERH=1
55	53 25.577543	10,08,11,218	10,201,251,189	TCP 66 443 + 68547 [SYN, ACK] Seq=8 Ack+1 ulin+8192 Len+8 MS5-1468 US+256 SACK PERH+1
. 51	4 25.577929	10.201.251.189	10.88.11.218	TCP 60 60547 + 443 [ACK] Seg=1 Ack=1 Win=525568 Len=0
55	15 25.578770	10.201.251.189	20.08,11.210	TLSv1.2 259 Client Hello
55	16 25.580939	10.85.11.218	10.201.251.189	TLSv1.2 1946 Server Hello, Certificate, Server Key Exchange, Server Hello Done
-55	57 25.581511	10.201.251.189	10.88.11.218	TCP 60 60547 + 443 [ACK] Seq+206 Ack+1893 Win+525568 Len+0
- 54	18 25.625996	10.201.251.109	10.88.11.218	TLSv1.2 180 Client Key Exchange, Change Cipher Spec, Encrypted Handshake Message
56	1 25.632508	10.88.11.218	10.201.251.189	TLSv1.2 185 Change Cipher Spec, Encrypted Handshake Message
56	12 25.633637	10.201.251.189	10.88.11.218	TL5v1.2 334 Application Data
56	3 25.652036	10.88.11.218	10.201.251.389	TLSv1.2 108 Application Data
56	4 25.653286	10.201.251.109	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=612 Ack=1998 kin=525312 Lem=1460 [TCP segment of a reassembled PDU]
56	5 25.653445	10.201.251.189	10.08.11.218	TCP 1514 60547 + 443 [ACK] Seq-2072 Ack-1998 Win-525312 Len-1460 [TCP segment of a reassembled POU]
- 56	6 25.653452	10.201.251.189	10.68,11.218	TCP 1514 60547 + 443 [ACK] Seq=3532 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled POU]
51	7 25,653454	10.201.251.189	10.68,11.218	TCP 1514 60547 + 443 [ACK] Seq-4992 Ack-1998 Win-525312 Len-1460 [TCP segment of a reassembled PDU]
-56	18 25.653455	10.201.251.189	10.08.11.218	TCP 1514 60547 + 443 [ACK] Seq=6452 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled POU]
56	9 25.653456	10.201.251.109	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=7912 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled POU]
57	70 25.653457	10.201.251.189	10.08.11.218	TCP 1514 60547 + 443 [ACK] Seq=0372 Ack=1990 Win=525312 Len=1460 [TCP segment of a reassembled POU]
57	71 25.653458	10.201.251.109	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=10032 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
57	72 25.653459	10.201.251.189	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=12292 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
57	73 25.653468	10.201.251.189	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=13752 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
. 57	14 25.653497	10.88.11.218	10.201.251.189	TCP 54 443 + 60547 [ACK] Seq=1998 Ack=15212 kin=65536 Len=0
51	15 25.653859	10.201.251.109	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=15212 Ack=1990 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
- 57	6 25.654004	10.201.251.189	10.08.11.218	TLSv1.2 1514 Application Data [TCP segment of a reassembled PDU]
57	77 25.654006	10.201.251.189	10.68.11.218	TCP 1514 60547 + 443 [ACK] Seq-18132 Ack-1990 Win-525312 Len-1460 [TCP segment of a reassembled PDU]
57	78 25.654007	10.201.251.189	10.05.11.218	TCP 1514 60547 + 443 [ACK] Seq=19592 Ack=1990 kin=525312 Len=1460 [TCP segment of a reassembled PDU]
57	79 25.654009	10.201.251.189	10.88.11.215	TCP 1514 60547 + 443 [ACK] Seq=21052 Ack=1990 Win=525312 Len=1460 [TCP segment of a reassembled POU]
51	00 25.654010	10.201.251.189	10.08.11.218	TCP 1514 00547 + 443 [ACK] Seq=22512 Ack=1990 kin=525312 Len=1460 [TCP segment of a reassembled PDU]
54	11 25.654011	10.201.251.189	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=23972 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled POU]
		0 - Flor but cat		

Wireshark capture on the Web server shows the PRT file transactions happened securely.

# Verify

You can find the Jabber PRT in the Web server (the location is configured in the PHP script).



The Web server contains the downloaded Jabber PRT file.

# Troubleshoot

There is currently no specific troubleshooting information available for this configuration.

# **Related Information**

• Collect PRT Logs Remotely

I hope this article is helpful !