# 웹 서버를 사용하여 Jabber 문제 보고서(PRT) 로 그를 다운로드합니다.

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## 소개

이 문서에서는 Windows 시스템에서 웹 서버를 설정하는 방법과 Jabber PRT를 웹 서버로 전송하는 단계를 설명합니다.

## 사전 요구 사항

Cisco에서는 이러한 주제에 대해 알고 있는 것이 좋습니다.

- CUCM(Cisco Unified Communication Manager)
- Cisco Jabber

### 요구 사항

사용되는 구성 요소

이 문서의 정보는 다음 소프트웨어 버전을 기반으로 합니다.

CUCM 버전 - 12.5.1.13900-152 Cisco Jabber 버전 - 12.9.2.54247 XAMPP(웹 서버) 버전 - 7.4.10

이 문서의 정보는 특정 랩 환경의 디바이스를 토대로 작성되었습니다. 이 문서에 사용된 모든 디바 이스는 초기화된(기본) 컨피그레이션으로 시작되었습니다. 현재 네트워크가 작동 중인 경우 모든 명령의 잠재적인 영향을 미리 숙지하시기 바랍니다.

## 구성

네트워크 다이어그램

Cisco Jabber > Windows\_PC(웹서버 XAMPP 소프트웨어 포함)

### 설정

이러한 컨피그레이션 단계에서는 'Hypertext Transfer'(HTTP - 포트 80) 및 'Hypertext Transfer Protocol Secure'(HTTPS - 포트 443) 프로토콜을 사용하여 Jabber PRT를 웹 서버로 전송할 수 있 습니다.

1. Windows PC에 XAMPP 소프트웨어를 설치합니다.

2. XAMPP의 초기 구성

3. Windows 서버에 Jabber PRT를 저장할 '폴더'를 설정합니다.

4. "UC 서비스"를 생성하고 이를 CUCM의 "서비스 프로필"에 할당합니다.

5. Jabber 최종 사용자에게 "서비스 프로필"을 할당합니다.

6. Jabber 수집 - PRT

HTTPS(보안) 기반 웹 서버를 구성하려면 다음 단계를 추가로 구성하십시오.

7. XAMPP에서 "서버 키" 및 "CSR(Certificate Signing Request)"을 생성합니다. 8. CA(Certificate Authority)를 사용하여 CSR에 서명하고 CA 서명 인증서를 가져옵니다. 9. 인증서를 업로드하고 Apache 서비스를 재시작합니다. 10. "UC 서비스"에서 URL 수정 11. Jabber 수집 - PRT.

1. Windows PC에 XAMPP 소프트웨어를 설치합니다.

<u>여기</u>를 클릭하여 XAMPP 소프트웨어(Windows용)를<u>다운로드합니다</u>.

이 스크린샷에 설명된 단계는 Windows 시스템에 XAMPP를 설치하는 데 도움이 됩니다.



설치 마법사에서 Next(다음) 버튼을 클릭합니다.

0	Setup	X
Select Components		8
Select the components you want to Next when you are ready to contin	o install; clear the components you do nue.	o not want to install. Click
Apache MySQL FileZilla FTP Server Mercury Mail Serve Tomcat	r	
Program Languages     PHP     Perl     Program Languages     Program Languages     phpMyAdmin		
- Webalizer - Eake Sendmail		
XAMPP Installer	< Back	Next > Cancel

언급된 컴포넌트를 선택하고 다음(Next) 버튼을 클릭합니다.

8		Setup		- • ×
Installation f	older			ខ
Please, choose	a folder to install XAMPP			
Select a folder	C:\xampp	12		
XAMPP Installer		< Back	Next >	Cancel

설치 폴더를 선택하고 Next(다음) 버튼을 클릭합니다.

		Setup	X
Languag	e		ខា
XAMPP Co	ntrol Panel for Windo	vs supports different languages.	
Language	English	~	
XAMPP Instal	er	C Park D	
		< DOX	VEAL > CORCE

언어를 선택하고 Next(다음) 버튼을 클릭합니다.

٥	Setup	X
Bitnami for XAMPP		ເຊ
	Bitnami for XAMPP provides free Drupal, Joomlal, WordPress and source apps on top of your exist https://bitnami.com/xampp Learn more about Bitnami for XA	installers that can install I many other popular open ting XAMPP installation.
XAMPP Installer	< Back	Next > Cancel

Next(다음) 버튼을 클릭합니다.

8	Setup	×
Ready to Install		8
Setup is now ready to begin installing XAMPP	on your computer.	
VAMDD Tristaliar		
AMARY & GLORES	< Back	Next > Cancel

설치를 계속하려면 Next(다음) 버튼을 클릭합니다.



설치가 진행 중입니다.



Finish(마침) 버튼을 클릭합니다.

2. XAMPP의 초기 구성

관리자로 "XAMPP 제어판"을 엽니다.



관리자로 'XAMPP 제어판'을 실행하십시오.

Config(컨피그레이션) 버튼을 클릭합니다.

		XAMPP Co	ntrol Panel v	3.2.4 [Co	mpiled: Ju	in 5th 201	9]	- 🗆 X
ខ	XAJ	MPP Contro	Panel v3	.2.4				Config
Modules Service	Module	PID(s)	Port(s)	Actions				Netstat
	Apache			Start	Admin	Config	Logs	Shell
	MySQL			Start	Admin	Cenfig	Logs	Explorer
	FieZila			Start	Admin	Config	Logs	Services
	Mercury			Start	Admin	Config	Logs	😥 Help
	Torncat			Start	Admin	Config	Logs	Qut
7:21:47 P 7:21:47 P 7:21:47 P 7:21:47 P 7:21:47 P 7:21:47 P 7:21:47 P 7:21:47 P	M [main] M [main] M [main] M [main] M [main] M [main] M [main]	All prerequi Initializing M The MySQL The FileZilla The Mercur The Tomcat Starting Ch Control Pan	sites found Aodules . module is dis a module is dis y module is dis t module is dis eck-Timer rel Ready	abled abled abled				-

Config 버튼을 클릭합니다.

표시된 옵션을 선택하고 저장 버튼을 클릭합니다.

		VANADD	Configur	ation of Contr	ol Panel	- 🗆 ×	
	VA	AMPP Cor	Editor:				Conta
Hadden	~~	WEE COI	Browser (emoty a s	nustern default)			
Service	Module	PID(s)	name feated -	character meridiand		1	i Netstat
	Apache		Autostart of mod	ules			Shel
	MySQL		✓ Apache	Fiezila	Tomcat	ŧ	Carl Explorer
	FieZila		MySQL Calacted model	Mercury		th of the	5 Services
	Mercury		Control Panel.	res will be scarced	OT DEAL BUILD	an or one	😥 Help
	Torncat		Start Control I	Panel Minimized			Qut
7.21.47 P 7.21.47 P 7.21.47 P 7.21.47 P 7.21.47 P	M [main] M [main] M [main] M [main]	All prere Initializir The MyS The File	Check default	foutput window ports on startup iformation			^
7 21 47 P 7 21 47 P 7 21 47 P	M [main] M [main] M [main]	The Mer The Ton Starting	Change Li	nguage	Service and	Port Settings	
7.21.47 P	M [main]	Control I	User Defin	ed Files	Log (	Options	
				[	X Abort	√ <sup>2</sup> Save	~
1.4.25401144		ANNAL AND ANNAL					A.

언급된 컴포넌트를 선택하고 저장(Save) 버튼을 클릭합니다.

## 강조 표시된 "X" 버튼을 클릭하여 Apache 서비스를 시작합니다.

2	XAI	MPP Contro	ol Panel v3	.2.4				P Config
envice	Module	PID(s)	Port(s)	Actions				Netstat
×	Apache			Start	Admin	Config	Logs	Shell
	MySQL			Start	Admits	Config	Logs	Explorer
	FieZila			Start	Admin	Config	Logs	Services
	Mercury			Start	Admin	Config	Logs	😣 Help
	Tomcat			Start	Admin	Config	Logs	Quit
24:47 P 24:47 P 24:47 P 24:47 P 24:47 P 24:47 P	M [main] M [main] M [main] M [main] M [main]	All prerequi Initializing I The MySQI The FileZilli The Mercur The Tomca	sites found Modules L module is dis- a module is dis- ty module is dis- t module is dis-	abled abled abled				·

Apache 서비스를 시작합니다.

## Config(컨피그레이션) 버튼을 누르고 PHP를 클릭합니다.

83	XAM	IPP Contro	ol Panel v3	.2.4				/ Config	
Service	Module	PID(s)	Port(s)	Actions				Netstat	C
-	Apache			Start	Admin	Creat	- 1	Dil Shel	Date
E	MySQL			Start	Admin	C	Apache (http: Apache (http:	l.conf) I-ssl.conf)	
	FieZila			Start	Admin	C	Apache (http:	l-xampp.conf)	
	Mercury			Start	Admin	c	PHP (php.ini)		
	Tomcat			Clart	Admin		phpMyAdmin	(config.inc.php)	
7 24 47 P 7 24 47 P 7 24 47 P	M [main] M [main] M [main]	The MySQ The FileZill The Mercur	L module is dis a module is dis y module is dis	abled abled abled			<browse> (Ap <browse> (PF <browse> (ph</browse></browse></browse>	iache] IP] pMyAdmin]	
7 24 47 P 7 24 47 P 7 24 47 P 7 26 25 P 7 26 26 P	M [main] M [main] M [Apache] M [Apache]	The Tomca Starting Ch Control Par Installing s Successful	t module is dis eck-Timer hel Ready ervice	abled				•	9/10/

php 파일을 엽니다.

"upload\_max\_filesize" 값이 40M으로 설정되어 있는지 확인합니다.

<pre>File Edit Format View Help  ;; File Uploads ; Whether to a ; http://php.ne file_uploads=0e ; Temporary directory for HTTP uploaded files (will use system default if not ; specified). ; http://php.net/upload-tmp-dir upload_tmp_dir="C:\xampp\tmp" ; Maximum allowed size for uploaded files. ; http://php.net/upload-max-filesize upload_max_filesize=1000</pre>				php - Note	pad			
<pre>File Uploads ; File Uploads ; Whether to a ; http://php.ne file_uploads=00 ; Temporary directory for HTTP uploaded files (will use system default if not ; specified). ; http://php.net/upload-tmp-dir upload_tmp_dir="C:\xampp\tmp" ; Maximum allowed size for uploaded files. ; http://php.net/upload-max-filesize upload_max_filesize=""""""""""""""""""""""""""""""""""""</pre>	File Edit Format	View Help						
<pre>Figd what Maximum alowed  Find Next ; Whether to a ; http://php.ne file_uploads=0e Match gase Use @ Deecton</pre>	; File Uploads	1		Find	×			
<pre>; Whether to a: ; http://php.ne file_uploads=Or Match game Up @ Down ; Temporary directory for HTTP uploaded files (will use system default if not ; specified). ; http://php.net/upload-tmp-dir upload_tmp_dir="C:\xampp\tmp" ; Maximum allowed size for uploaded files. ; http://php.net/upload-max-filesize upload_max_filesize=100;</pre>		Figd what:	Maximum allow	ed	End Next			
<pre>; Temporary directory for HTTP uploaded files (will use system default if not ; specified). ; http://php.net/upload-tmp-dir upload_tmp_dir="C:\xampp\tmp" ; Maximum allowed size for uploaded files. ; http://php.net/upload-max-filesize upload_max_filesize=100</pre>	; Whether to a ; http://php.ne	-		Direction	Cancel			
<pre>; Temporary directory for HTTP uploaded files (will use system default if not ; specified). ; http://php.net/upload-tmp-dir upload_tmp_dir="C:\xampp\tmp" ; Maximum allowed size for uploaded files. ; http://php.net/upload-max-filesize upload_max_filesize=100;</pre>	TIE_opioads=or	Clearch						
<pre>; http://php.net/upload-tmp-dir upload_tmp_dir="C:\xampp\tmp" ; Maximum allowed size for uploaded files. ; http://php.net/upload-max-filesize upload_max_filesize=100</pre>	; Temporary dir ; specified).	ectory f	or HTTP up	loaded files (w	ill use sys	tem defaul	t if not	
; Maximum allowed size for uploaded files. ; http://php.net/upload-max-filesize upload_max_filesize=	; http://php.ne upload_tmp_dir=	<pre>rt/upload "C:\xamp</pre>	-tmp-dir p\tmp"					
; http://php.net/upload-max-filesize upload_max_filesize=100	; Maximum allow	ed size	for upload	ed files.				
oprosu_max_riresize_max	; http://php.ne	rt/upload	-max-files:	ize				
	oproad_max_Trre	A A A A A A A A A A A A A A A A A A A						
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upload\_max\_filesize 값을 40M으로 설정합니다.

Start 버튼을 클릭하여 Apache 서비스를 시작합니다.

		XAMPP Co	ontrol Panel v	3.2.4 [Co	mpiled: Ju	in 5th 201	9]	×
83	XAN	IPP Contro	ol Panel v3	.2.4				P Config
Modules Service	Module	PID(s)	Port(s)	Actions	-			🕜 Netstat
	Apache			Start	Admin	Config	Logs	Shell
	MySQL			Start	Admin	Config	Logs	Ca 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]	Starting Ch Control Pa Installing s Successful Attempting Status cha Attempting Status cha	eck-Timer nel Ready ervice! to start Apachinge detected: r to stop Apachinge detected: s	e service unning e service stopped				*

시작 버튼을 클릭하여 Apache 서비스를 시작합니다.

æ	XAM	IPP Contro	ol Panel v3.	2.4				Config
Modules Service	Module	PID(s)	Port(s)	Actions				les Netstat
1	Apache	4524	80, 443	Stop	Admin	Config	Logs	Shell
	MySQL			Start	Admin	Config	Logs	Explorer
	FieZila			Start	Admin	Config	Logs	Services
	Mercury			Start	Admin	Config	Logs	😣 Help
	Torricat			Start	Admin	Config	Logs	Quit
26:25 P	M [Apache M [Apache M [Apache	Installing s Successful Attempting	ervice It to start Apache	service				

3. Windows 서버에 Jabber PRT를 저장할 '폴더'를 설정합니다.

"C:\xampp\htdocs" 위치에 새 폴더 "JabberPRT"를 생성합니다. 이 폴더는 Jabber PRT를 저장하는 데 사용됩니다.

또한 이 스크린샷과 같이 PHP 스크립트를 만듭니다.

Come a state that the	When the set with the second set is the design of			Warman India
T T Inst	<ul> <li>C + Local Disk (C) + sampp + indocs</li> </ul>		4 Q	Desirin ne
r Favorites	Name	Date modified	Туре	Size
E Desktop	ashboard dashboard	10/13/2020 7:17 PM	File folder	
a Downloads		10/13/2020 7:17 PM	File folder	
1 Recent places	JabberPRT	10/13/2020 7:34 PM	File folder	
	🎉 webalizer	10/13/2020 7:17 PM	File folder	
This PC	😹 xampp	10/13/2020 7:17 PM	File folder	
he Desktop	applications	8/27/2019 7:02 AM	HTML Document	4.8(8
Documents	<ul> <li>bitnami</li> </ul>	8/27/2019 7:02 AM	Cascading Style S	1 KB
Downloads	E favicon	7/16/2015 0:32 AM	loon	31 KB
Music	index.php	7/16/2015 8:32 AM	PHP File	1.68
E Pictures	uploadprt.php	10/13/2020 7/33 PM	PHP File	1 KB
H Vidam		the Manual		
Lec 2	uploadprt	Lpnp - Notepad		
File Edit Form	at View Help			_
Netw <7php				~
Suploaddir ·	<pre>'C:\xampp\htdocs\JabberPRT\\';</pre>	and have a first		
Supload#11e	<pre>= Suploaddir . date( T_m_d_H_1_ d_file/f files/information </pre>	s) . Dasename(\$_FILES[	. 51b+11ename. ][	ame.];
The second	S TILELD FILES! ELDFILEDADE !!	the name I. PODIOBOTLIC		

Jabber의 PRT 로그를 저장할 폴더 위치를 지정합니다.

### > "C:\xampp\htdocs" 위치 내에 "uploadprt.php" 파일을 만들고 .php 파일 내에 이 줄을 씁니다

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

4. "UC 서비스"를 생성하고 이를 CUCM의 "서비스 프로필"에 할당합니다.

CUCM Administration(CUCM 관리) 웹 페이지에 로그인하고 User Management(사용자 관리) > User Settings(사용자 설정) > UC Service(UC 서비스)로 이동합니다.

새 UC 서비스를 생성합니다.

System • Call Routing • Media Resources • Advanced Features • Device • Application •	User Management · Bulk A	dministration	• Help •	
Alert : You have not configured a direct dial 911 pattern on that most multi-line telephone systems in the US have a dir Smart Software Licensing: The system is currently unregist Register with <u>Smart Software Manager</u> or Smart Software M and devices.	Application User End User User/Phone Add SIP Realm User Settings Sett-Provisioning	] •	unication Commission r ere for more informatic Credential Policy Default Credential Policy	ules ma n. maini n uso
<ul> <li>WARNING: No backup device is configured. This is required</li> <li>Emergency Notifications Paging is not configured. To configured please go to Cisco Unified CM Administration &gt; Advanced Fe</li> </ul>	Assen Presence Users to recover your sys ure Emergency Not atures > Emergence	ificatio v Notif	Role Access Control Group Application User CAPF Profile End User CAPF Profile UC Service	remi
<b>Cisco Unified CM Administration</b>			Service Profile User Profile User Group	

#### CUCM 관리 웹 페이지에서 'UC 서비스'를 엽니다.

"Jabber Client Configuration(jabber-config.xml)"을 선택하고 적절한 값을 선택합니다. 이 스크린샷과 같이 URL에 웹 서버 및 PHP 파일 세부사항을 제공합니다.

#### 섹션: 클라이언트

매개 변수: PrtLogServerURL

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

cisco p	Cisco U	nified CM Ac	iministration		11010		Navigation Cisco	Joified CM Admir admin	nistration 👻 About I L
System • Ca	all Routing +	Media Resources +	Advanced Features +	Device · Application ·	User Management •	Bulk Administration •	Help 🕶		
UC Service C	onfigurati	on					Related Links:	Back To Find/	List v
Save 🕽	Celete	Copy 👍 Add	New						
Status									
i Status: I	Ready					My Web-Server			
UC Service I	Information								
UC Service 1 Product Typ Name* Description	Type: Jabb e: Jabb Jabb	er Client Configura er erConfig	ation (jabber-config.x	ni)	$\left( \right)$	http://10.88.11.2	18:80/uploadp	ort.php	
Jabber Confi	iguration P	arameters							
Sect	tion		farameter	Parameter	Description	Value	10 E	Operations	
Client		PrtLogServerURL		Link to the script for	submitting PRT	218:80/uploadprt.php	Delete		
Not Sele	cted ~	Not Selected -	· · · · ·				Add B	Add Custom	
Sect	tion	··· Not Selected	Multipart Pa	ameter · · · ] [ Not Selected	Par	ameter Description	Value	Ope Add	erations

Jabber 클라이언트 구성(jabber-config.xml)에서 웹 서버의 세부 정보를 구성합니다.

User Management(사용자 관리) > User Settings(사용자 설정) > UC Service(UC 서비스)로 이동합니다.

#### 생성된 UC 서비스를 서비스 프로필에 할당합니다.

Induc Cisco Unified CM Administration					Navigation Cisco Unified CM /	Administr	
System  Call Routing  Media Resources  Advanced Features  Device	<ul> <li>Application +</li> </ul>	User Manage	ment - Bulk Ad	ministration •	edmin Help •	Abc	
Find and List Service Profiles		Applicat End Use	on User r			-	
Status		SIP Rea	im tings		Credential Policy Default	7	
Service Profiles (1 - 1 of 1)	Self-Provisioning Credential Po Assign Presence Users Role		Credential Policy Role	ierl			
Find Service Profiles where Name v begins with v	Find	Clear Filter 💠 🛥			Access Control Group Application User CAPF Profile		
CUCMOnivPRTServer	Description System Default Service				End User CAPF Profile UC Service		
Add New Select All Clear All Delete Selected					Service Profile		
					User Group User Rank		

CUCM Administration(CUCM 관리) 웹 페이지에서 'Service Profile(서비스 프로필)'을 엽니다.

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
Tertiary	<none> &gt;</none>
CTI Profile	) ————————————————————————————————————
Primary	cucm125 V
Secondary	<none> ~</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 J	abberConfig >
Mobile	abberConfig \vee
Save	Delete Copy Add New

생성된 Jabber 클라이언트 컨피그레이션을 '서비스 프로필'에 할당하고 Save(저장) 버튼을 클릭합니다.

#### 5. Jabber 최종 사용자에게 "서비스 프로필"을 할당합니다.

### 이 서비스 프로필이 Jabber 최종 사용자와 연결되었는지 확인합니다.

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 Configuration	n	Application User		Related Links
Saus V Dainta	Ja Addition	End User		
CURVER LUNG STIRLE	All you kee	User/Phone Add SIP Realm	•	
Service Settings		User Settings	•	
Home Cluster	Unified CM IM and Presence (Configure IM and Presence in the asso	Cit Self-Provisioning Assign Presence	) 9 Users CUCM IM and Presen	ce server)
UC Service Profile	Use System Default( "CUCMOnlyPRTServer" )	Details		
Device Information				
Controlled Devices Available Profiles	CSFAGENT1	Device Asso Line Appear	ociation rance Association	for Presence
		~		

Jabber 최종 사용자에게 서비스 프로필을 할당합니다.

#### 6. Jabber 수집 - PRT

Jabber PRT를 수집하려면 Jabber를 선택하고 "Generate PRT for selected(선택한 항목에 대해 PRT 생성)" 버튼을 클릭할 수 있습니다.

For Oscio Unified Communications Socioons       Jacking (Communications Socioons)       Jacking (Communications Socioons)         System C add Routing + Media Resources + Advanced Features + Device + Application + User Management + Bulk Administration + Help +       Related Links: Activel Logged In Device Report         Find and List Phones       Related Links: Activel Logged In Device Report       Related Links: Activel Logged In Device Report         Image: Add New Imagement + Bulk Administration + Help +       Related Links: Activel Logged In Device Report         Image: Add New Imagement + Bulk Administration + Help +       Related Links: Activel Logged In Device Report         Image: Add New Imagement + Bulk Administration + Help +       Related Links: Activel Logged In Device Report         Image: Add New Imagement + Bulk Administration + Help +       Related Links: Activel Logged In Device Report         Image: Add New Imagement + Bulk Administration + Help +       Related Links: Activel Links: Active	CISCO Lord	co Unified CM Ad	Iministr	ation					Navigation Cisc	to Unified CM Admin	istration	G
System • Cas Housing • Media Hessources • Achanolog Peakates • Device Application • Order Hereingerteins • Dick Hearingerteins • Dick Hearingerte	Call Da	dina a Mada Decentraria	Advanced E	-	-	alization as the	- Management	- 0.4.4		admin	About	Logoc
Find and List Phones       Related Links:       Activaly Logged In Device Repeat         Add Now       Add Now From Template       Select All       Clear All       Plotter Selected       Apply Config to Selected       Image: Clear All Clear All       Image: Clear All	System • Cas Hou	ning · Moda resources ·	Povalices re	asures • U	evice • htt	acason + Us	S Management	Buk As	ministration • Help •			and the second second
Add New Add New From Template     Select All      Clear All Clear	ind and List Pho	ones							Related Links: Active	y Loggod In David	e Rope	G
Status         I records found         Phone       (1 - 1 of 1)         Rows per Page         Ind Phone where Device Name <ul> <li>begins with </li> <li>Select item or enter search text</li> <li>Select item or enter search</li></ul>	Add New	a Add New From Template	Select All	Clear /	NI Dele	te Selected	Reset Selecte	d 2 A	pply Config to Selected	J Generate PRT	for Sele	cled
Status         Ind Fhone (1 - 1 of 1)       Rows per Page         Ind Phone where Device Name <ul> <li>begins with</li> <li>Select item or enter search text</li> <li>Select i</li></ul>	-			LAA.	Contraction of the second	0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-		A BOOK		2		
I records found       Phone       (1 - 1 of 1)       Rows per Page         Ind Phone where Device Name	status										_	
Rows per Page         Phone       (1 - 1 of 1)       Rows per Page         Find       Clear Filter       =         Select item or enter search text       Select item or enter search text       =         Device Name(Line)       Description       Device       Status       Last       Last       United CM       IPv4 Address       Copy         Or SEAGENTI       Default       SIP       Registered       Now       cucm125.ramebalaimp.com       10.201.251.189       Default	1 records four	and										
Rows per Page         Phone where       Device Name <ul> <li>begins with</li> <li>begins with</li> <li>select item or enter search text</li> <li>Select item or enter search text</li> <li>Clast</li> <li>Last</li> <li>Last</li> <li>Last</li> <li>Last</li> <li>Last</li> <li>Clast</li> <li< th=""><th>•</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>_</th><th></th></li<></ul>	•										_	
Device Name <ul> <li>begins with</li> <li>begins with</li> <li>Select item or enter search text</li> <li>Select item or enter search text</li> <li>Bevice Name(Line)</li> <li>Description</li> <li>Device Name(Line)</li> <li< th=""><th>Phone (1-)</th><th>1 of 1)</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>Rows p</th><th>er Pag</th><th>50 V</th></li<></ul>	Phone (1-)	1 of 1)								Rows p	er Pag	50 V
Prind     Device Name     V     Prind     Clear Filter     V       Device Name(Line)     Description     Device     Device     Status     Last     Last     United OH     IPv4 Address     Copy       Image: Status     CSEAGENT1     Default     SIP     Registered     Now     cucm125.ramebalaimp.com     10.201.251.189     Device	The second second	and a Maria			Incoler	at all		() more than	Marchine A. an			
Device Name(Line)         Description         Device Pool         Device Protocol         Status         Last Registered         Last Active         Unified CH         IPv4 Address         Copy           Image: Status         CSFAGEN11         Default         SIP         Registered         Now         cucm125.ramebalaimp.com         10.201.251.189         Image: SIP         Image: SIP         SIP         SIP         SIP         SIP         Copy         SIP         S	and the second se	Device Name	_	_	<   begins w	Select	item or enter s	Find	Clear Filter 🤤 🚥			
Device Rame(Lise)         Description         Device Protocol         Device Status         Last Registered         Last Active         Unified CH         IPv4 Address         Copy           Image: Copy Copy Copy Copy Copy Copy Copy Copy	Find Phone where					Dentry	item or enter a	Cortri text				
CSFAGENT1 Default SIP Registered Now cucm125.ramebalaimp.com 10.201.251.189	Find Phone where			Device	Device	Status	Last Registered	Last Active	Unified CH	3Pv4 Address	Сору	Super Copy
		Device Name(Line)	Description	Pool	Prococol						-	
Add New Add New From Template Select All Clear All Delete Selected Reset Selected Apply Config to Selected Generate PRT for Sele		Device Name(Line)	Description	Default	SIP	Registered	Now		cucm125.ramebalaimp.com	10.201.251.189	0	0

Jabber PRT를 수집합니다

웹 서버에서 Jabber PRT를 찾을 수 있습니다(위치는 PHP 스크립트로 구성됨).



웹 서버에는 다운로드한 Jabber PRT 파일이 포함되어 있습니다.

4			Capturing from	m Ethernet	0				- 0	×.,
File	Edit View Go	Capture Analyze Statis	tics Telephony Wireles	ss Tools H	Help					
1		2000		0.11						
-	AS 97 30 25		* * * = 4 4	· •• ==				-		
	p.addr == 10.201.251.189							- C - C -	Expression.	- +
No.	Time	Source	Destination	Protocol	Length	Info				1
1	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 Wir	
	541 32.153972	10.201.251.189	10.88.11.218	TCP	60	58578 + 80	[ACK]	Seq=1 Ack=	1 Win=5255	56
	542 32.164023	10.201.251.189	10.88.11.218	TCP	296	58578 - 88	[PSH,	ACK] Seq=1	Ack=1 Win	3=
	543 32.164564	10.88.11.218	10.201.251.189	HTTP	79	HTTP/1.1 10	0 Cont	tinue		
	544 32.165383	10.201.251.189	10.88.11.218	TCP	1514	58578 + 80	[ACK]	Seq=243 Ac	k=26 Win=5	52_
	545 32.165544	10.201.251.189	10.88.11.218	TCP	1514	58578 - 80	[ACK]	Seq=1703 A	ck=26 Win	-5-
	546 32.165546	10 201.251.189	10.88.11.218	TCP	1514	58578 + 80	[ACK]	Seq=3163 A	ck=26 Win-	-5
	547 32.165547	19.201.251.189	10.88. 1. 10	TEP	1514	58578 + 80	[ACK]	Seq=4623 A	ck=26 Win-	-5-
	548 32.165547	0 281 251 189	10.88. WEB	SERVER	R 1514	58578 + 80	[ACK]	Seq=6083 A	ck=26 Win-	-5-
	549 32.165548	TARBER DO	10.88.11.218	TCP	1514	58578 - 80	[ACK]	Seq=7543 A	ck=26 Win	-5-
	550 32.165548	10 201 351 180	10.88.11.218	TCP	1514	58578 - 80	[ACK]	Seq-9003 A	ck=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	
	552 32 165550	18 281 251 189	18 88 11 218	TCP	1514	58578 + 8A	FACK1	Senalitet.	Acka26 Mi	na V
DB	Frame 539: 66 byte	s on wire (528 bits).	66 bytes captured (	(528 bits)	on inte	erface 0				1
D B	Ethernet II, Src:	Cisco d1:42:c4 (e8:84	4:62:d1:42:c4), Dst:	Veware a5:	ef:fd (	00:50:56:a5	:ef:fd	(1)		
Þ 3	Internet Protocol	Version 4, Src: 10.2	1.251.189, Dst: 10.8	8.11.218			100000			1
<1							_			3
-							_			- local

PRT 전송 이벤트 중에 웹 서버에서 Wireshark 캡처를 실행하면 이 정보가 표시됩니다.

웹 서버의 Wireshark 캡처는 PRT 파일 트랜잭션을 표시합니다.

HTTPS(보안) 기반 웹 서버를 구성하려면 다음 단계를 추가로 구성하십시오.

CCM(Cisco CallManager) 컨피그레이션도 있습니다.

7. XAMPP에서 "서버 키" 및 "CSR(Certificate Signing Request)"을 생성합니다.

XAMPP 제어판(웹 서버)에서 Shell을 열고 openssl 명령을 입력하고 enter 키를 누릅니다.



XAMPP 제어판의 셸을 통해 openssl 명령을 실행합니다.

"genrsa -out server.key 2048" 명령을 실행하여 서버 키를 생성합니다.

File Home	C XAMPP Control Panel v3.2.4 [Compiled: Jun 5th 2019]	- 0 X
🐑 💿 • 🕇 📕	XAMPP Control Panel v3.2.4	Config 0
	Modules	Netstat
(12)	Administrator: XAMPP for Windows - openssi	Shell
Setting enviro Administrator	nment for using XAMPP for Vindows.	Explorer
I openss1 OpenSSL> OpenSSL>		Services
OpenSSL> genrs Generating #5#	a -out server.key 2048 private key, 2048 bit long modulus <2 primes>	😣 Help
· · · · · · · · · · · · · · · · · · ·	819991>	Quit
OpenSSL> OpenSSL> _		^
		<u> </u>

genrsa -out server.key 2048 명령을 실행합니다.

이 명령을 실행하여 CSR(Certificate Signing Request)을 생성합니다.

genrsa -out server.key 2048

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

다음 필드에 관련 정보를 입력합니다.

- 국가 이름.
- 시/도 이름입니다.
- 지역 이름.
- 조직 이름.
- 조직 구성 단위.
- 일반 이름.
- 이메일 주소.
- 추가 특성.

Administrator: XAMPP for Windows - openssl	X
OpenSSL> OpenSSL> genrsa -out server.key 2048 Generating RSA private key, 2048 bit long modulus (2 primes) 	
Country Name (2 letter code) [AU]:US State or Province Name (full name) [Some-State]:TX Locality Name (eg, city) []:RCDN Organization Name (eg, company) [Internet Widgits Pty Ltd]:CISCO Organizational Unit Name (eg, section) []:WEBSERVER Common Name (e.g. server FQDN or YOUR name) []:agent3.ramebalaimp.com Email Address []:agent3.ramebalaimp.com Please enter the following 'extra' attributes to be sent with your certificate request	
A challenge password []: An optional company name []:CISCO OpenSSL> OpenSSL>	~

웹 서버에 대한 CSR(Certificate Signing Request)을 생성합니다.

#### C:\xampp\



생성된 CSR(Certificate Signing Request) 위치

server.csr을 이 폴더 위치에 복사합니다.

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

A D B		ssi.csr			
File Home 5	Share View				
• • †	Cl\sampp\apache\conf\ssi.csr			v C	Search ssLcsr
* Favorites	Name	Date modified	Туре	Size	
Desktop Downloads Recent places	and server.	10/14/2020 1:00 PM	CSR File	2 KB	
1 This PC					
📬 Network					

CSR 파일을 새 폴더 위치에 복사합니다.

server.key 파일을 언급된 위치에 복사합니다.

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

Incomes Incomes	Manager Manager Andrew Manager Andre	
Service Module PID(s)	xampp X	
Administrator: XAMPP for Wi	Disk (C) 🔸 xampp 🖉 🖉	1
Setting environment for using XAMPP for Windown dininistratoreMcIBHT c:xxmpp monenessi opensesi opensesi p	Diak (C) • xampp         V         C         Starch xampp         A           op         10/15/2020 11:28         Windows Batch File         1 KB         1 KB           top         10/15/2020 11:28         Configuration sett.         1 KB         1 KB           tdat         10/13/2020 11:29         DAT File         161 KB         161 KB           10/13/2020 11:29         DAT File         161 KB         10/13/2020 11:29         KEY File         2 KB           y         10/14/2020 12:55         KEY File         2 KB         V         V           Satich Key           V           Oute modified           V           K	
An optional company name CI:CISCO OpenSSL> OpenSSL>		

server.key를 새 폴더 위치에 복사합니다.

8. CA(Certificate Authority)를 사용하여 CSR에 서명하고 CA 서명 인증서를 가져옵니다.

CA(LAB CA 서버 - ADFSCAIMP)에서 서명한 CSR(**server.csr**)을 가져오고 CA 서명 Webserver 인증서 "server**.crt**"를 가져옵니다.

#### 수신



**참고**: 인증서를 .cer 또는 .der가 아닌 .crt 형식으로 저장해야 합니다. 이 스크린샷은 Windows CA 서버를 사용하여(서명된 인증서를 다운로드할 때) .crt 형식으로 인증서를 저장하는 방법을 보여 줍니다

+ the standard state of the sta	,D + C  Ø Microsoft Active Directory ×	
Microsoft Active Directory Certificate Services - ADFSCAMP		
Certificate Issued		
The certificate you requested was issued to you.	Save As	×
Download certificate Download certificate chain	Organize   New folder  Name  Date modified  Type	111 · ()
	Quick access     Desktop     P     Downloads     P     Documents     C	,
	File name "jerver.ct" Save as type: Security Certificate	v v

CA(Certificate Authority) 서버에서 CSR에 서명하고 서명된 인증서를 가져옵니다.

a.	Certificate	×
Ger	neral Details Certification Path	
	Certificate Information	
	Windows does not have enough information to verify this certificate.	
	Issued to: agent3.ramebalaimp.com	2
	Issued by: ADFSCAIMP	
	Valid from 10/14/2020 to 10/14/2022	
L,		
	Install Certificate Issuer Statement	1.
	OK	
		_

서명된 인증서.

9. 인증서를 업로드하고 Apache 서비스를 재시작합니다.

이 위치에서 server.crt를 업로드합니다.

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

🚯 L 🕞 🚯 = L		ssi.crt					x
File Home Sha	are View						~ 0
🕑 🕘 🕶 1 📕 🖻	\xampp\apache\conf\ssl.crt			¥	C	Search ssl.crt	Q
🔆 Favorites	Name	Date modified	Туре	Size			
Desktop Downloads Recent places This PC	Server	10/14/2020 2-25 PM	Security Certificate		2 KB		
Network							

#### 서명된 인증서를 업로드합니다.

#### KEY/CSR/CERT를 업로드한 후 Apache 서비스를 재시작합니다.

ເສ	XAM	IPP Contro	ol Panel v3.	2.4				P Config
Service	Module	PID(s)	Port(s)	Actions				<ul> <li>Netstat</li> </ul>
1	Apache 104	10400 80,	80, 443	Stop	Admin	Config	Logs	Shell
	MySQL			Start	Admin	Config	Logs	Explore
	FileZilla Mercury Tomcat		Start	Admin Admin	Config Config	Logs	Service	
			Start			Logs	😥 Help	
			Start	Admin	Config	Logs	Qut	
21 23 P 21 23 P 21 23 P 21 23 P 21 23 P 21 27 P 21 49 P 26 20 P 26 20 P	M [main] M [main] M [main] M [main] M [Apache] M [Apache] M [Apache] M [Apache]	The Mercur The Tomca Starting Ch Control Par Attempting Attempting Status cha	ry module is disa t module is disa eck-Timer hel Ready to start Apache to start Apache to start Apache nge detected: ru	service service service nning				

Stop & Start(중지 및 시작) 버튼을 눌러 Apache 서비스를 재시작합니다.

CUCM에서 Tomcat 인증서가 동일한 CA에 의해 서명되었는지 확인합니다(여기서 CA 서버는 ADFSCAIMP임).

cisco For	co Unified Operating	Navig	pation Cisco Unified OS Administration 👻 G admin About Logo				
Show · Settings	Security      Software Upgrades	Services *	Help •				
Certificate List	Certificate Management						
Generate Self-	sign Certificate M Certificate Mana Certificate Revocation	agement 3 o	enerate CSR				
Status 5 records fo	PSEC Configuration und Bulk Certificate Management Session Management						
Certificate List	Cipher Management						Rows per Page 50 v
Find Certificate Li	st where Certificate V begin	is with ~ [tom	cat	Find Clear Filter	4 -		
CONTRACT		Туре	Кеу Туре	Distribution	Issued By	Expiration	Description
tomcat	cucm125.ramebalaimp.com	CA-signed	RSA	cucm125.ramebalaimp.com	ADFSCAIMP	10/14/2022	Certificate Signed by ADFSCAIMP
tomcat-ECDSA	cucm125-EC.ramebalaimp.com	Self-signed	EC	cucm125.ramebalaimp.com	cucm125-EC.ramebalaimp.com	07/31/2025	Self-signed certificate generated by system
tomcat-trust	ADFSCAIMP	Self-signed	RSA	ADFSCAIMP	ADFSCAIMP	05/28/2049	Signed Certificate
tomcat-trust	cucm125.ramebalaimp.com	CA-signed	RSA	cucm125.ramebalaimp.com	ADFSCAIMP	10/14/2022	Trust Certificate
tomcat-trust	cucm125-EC.ramebalaimo.com	Self-signed	EC	cucm125.ramebalaimp.com	cucm125-EC.ramebalaimp.com	07/31/2025	Trust Certificate
Generate Self-	igned Upload Certificate/Certific	cate chain G	enerate CSR				

#### 동일한 CA 서버에서 서명한 Tomcat 인증서

#### 10. "UC 서비스"에서 URL 수정

CUCM Administration(CUCM 관리) 웹 페이지에 로그인하고 User Management(사용자 관리) > User Settings(사용자 설정) > UC Service(UC 서비스)로 이동합니다.

이 UC 서비스 섹션에 표시된 대로 웹 서버 URL을 적절히 수정합니다.

#### 섹션: **클라이언트**

#### 매개 변수: PrtLogServerURL

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

cisco Unifie	ed CM Administration			Navigation Class United CH Admin admin					
System + Call Routing + Media	Resources · Advanced Features · Device	+ Application +	User Management + Bulk Administration + He						
UC Service Configuration					Related	Links: Back To Find/ListGo			
🔜 Save 🗶 Delete 🗋 Co	ey ciga Add New								
Status Status: Ready UC Service Information UC Service Type: Jabber Cl Product Type: Jabber Cl Product Type: Jabber Cl	lient Configuration (Jabber-config.xm	0	(	https://agent3.rameb	alaimp.com	in the webserver's certificate I Server in this URL.			
Description				<u></u>					
Section	Paramatar		Parameter Description			Operations			
Client v	PrtLogServerURL [ Not Selected	¥] 4]	Link to the script for submitting PRT	https://agent3.ramebalaim	E Delete	Add Custom			
Section Multipart Param			eter	Parameter Description	Value	Operations 1 Add			
Save Delete Copy	- Not Selected Not Selecte	d · · ) [ Not Se	lected = v	Parameter Description	TRUE	Add			

Jabber 클라이언트 구성(jabber-config.xml)에서 웹 서버의 세부 정보를 구성합니다.

#### 11. Jabber 수집 - PRT.

#### 그런 다음 CCM 페이지를 통해 PRT를 생성합니다.

cisco Fer Cisco	o Unified CM Administ	nation					Naviga	don Cisco Unified CM	in 1 At	ration Go rout Logou
System · Cat Routing	Reda Resources      Advanced Fe	stures . Device . Applicatio	n · User Nanagement	· Buk Administ	ration - Help -					
Find and List Phone	5						Related Links	Actively Logged In	Device P	leport - G
Add New and A	dd New From Template 🔠 Select All	Ciear Al 🙀 Delete Seie	cled P Reset Select	ed L Apply C	onfig to Selected			2 cm	erate PRT fo	r Selected
Phone (1 - 2 of Find Phone where De	f 2) nvice Name	~   begins with			d (Clear Filter)	\$ <b></b>			hows per	Page 50 -
0	Device Name(Line) *	Description Device Pool	Device Protocol	Status	Last Registered	Last Active	Unified CM	IPv4 Address	Copy	Buper Copy
	CSFAGENT1	Default	SIP	Registered	Now		cucm125.ramebalaimp.com	10.201.251.189	D	104
	camebala	Default	SIP	None	Never			None	Ð	07
Add New Add Ne	w from Template Select All C	Sear All Delete Selected	Reset Selected	pply Config to S	elected			Genera	te PRT for	Selected

Jabber PRT를 수집합니다

패킷 캡처에서 Jabber와 웹 서버 간의 트래픽이 TLS1.2(HTTPS-443)를 통해 암호화되었는지 확인할 수 있습니다.

웹 서버 IP: 10.88.11.218

Jabber PC IP: 10.201.251.189

4				WebServerPCAP-during-PRTcollection-secure_HTTS.pcapng
File Ed	It View Go	Capture Analyze Stati	istics Telephony Wirele	es Tools Help
4.10	4.4.1.15		TATER	0 B
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P. 800	F== 10.201.251.10			La La *) Opreson
No.	Time	Source	Destnation	Protocal Length brfs
55	2 25.577386	10.201.251.189	10.88.11.218	TCP 66 60547 + 443 [SYN] 5eg-8 kin+64248 Len+8 PSS=1468 kS=256 SACK_PERH=1
. 55	3 25,577543	10,88,11.218	10.201.251.189	TCP 66 443 + 68547 [SYN, ACK] Seq+0 Ack+1 kiln+8192 Len+0 MSS-1460 KS+256 SACK_PERH+1
. 55	4 25.577929	10.201.251.189	10.88.11.218	TCP 60 60547 + 443 [ACK] Seq=1 Ack=1 Win=525568 Len=0
55	5 25.578770	10,201.251.189	10.88,11.218	TLSv1.2 259 Client Hello
- 55	6 25.588939	10.85.11.218	10.201.251.189	TLSv1.2 1946 Server Hello, Certificate, Server Key Exchange, Server Hello Done
- 55	7 25.581511	10.201.251.109	10.88.11.218	TCP 60 60547 + 443 [ACK] Seq=206 Ack=1093 Win=525568 Len=0
56	8 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	TLSv1.2 105 Change Cipher Spec, Encrypted Handshake Message
56	2 25.633637	10.201.251.189	10.88.11.218	TLSv1.2 334 Application Data
. 56	3 25.652036	10.88.11.218	10.201.251.189	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 Len=1460 [TCP segment of a reassembled PDU]
56	5 25.653445	10.201.251.189	10.00.11.218	TCP 1514 60547 + 443 [ACK] Seq=2072 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
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]
56	7 25,653454	10,201.251.189	10.00.11.218	TCP 1514 60547 + 443 [ACK] Seq-4992 Ack-1998 Win-525312 Len-1460 [TCP segment of a reassembled PDU]
56	# 25.653455	10.201.251.189	10.08.11.210	TCP 1514 60547 + 443 [ACX] Seq=6452 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
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	0 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 PDU]
57	1 25.653458	10.201.251.189	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=10832 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
57	2 25.653459	10.201.251.189	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=12292 Ack=1998 Win=525312 Len=1468 [TCP segment of a reassembled PDU]
57	3 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	4 25.653497	10.88.11.218	10.201.251.189	TCP 54 443 + 68547 [ACX] Seq=1998 Ack=15212 kin=65536 Len=0
57	5 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	10.88.11.218	TLSv1.2 1514 Application Data [TCP segment of a reassembled POU]
57	7 25.654006	10.201.251.189	10.68.11.218	TCP 1514 60547 + 443 [ACK] Seq=18132 Ack=1998 Win=525312 Len=1468 [TCP segment of a reassembled PDU]
57	8 25.654007	10.201.251.109	10.85.11.218	TCP 1514 60547 + 443 [ACK] Seq=19592 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled PDU]
57	9 25.654009	10.201.251.189	10.88.11.215	TCP 1514 60547 + 443 [ACK] Seq=21052 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled POU]
58	0 25.654010	10.201.251.189	10.08.11.218	TCP 1514 00547 + 443 [ACK] Seq=22512 Ack=1998 Win=525312 Len=1460 [TCP segment of a reassembled POU]
58	1 25.654011	10.201.251.189	10.88.11.218	TCP 1514 60547 + 443 [ACK] Seq=23972 Ack=1998 Win=525312 Len=1468 [TCP segment of a reassembled POU]
		R - Fins has set		

웹 서버의 Wireshark 캡처는 PRT 파일 트랜잭션이 안전하게 발생했음을 보여줍니다.

#### 다음을 확인합니다.

웹 서버에서 Jabber PRT를 찾을 수 있습니다(위치는 PHP 스크립트로 구성됨).



웹 서버에는 다운로드한 Jabber PRT 파일이 포함되어 있습니다.

#### 문제 해결

현재 이 설정에 사용할 수 있는 특정 문제 해결 정보가 없습니다.

관련 정보

• <u>원격으로 PRT 로그 수집</u>

이 기사가 도움이 되었으면 합니다!

이 번역에 관하여

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