

## Laboratorio 3.3: Configuración de SSTP Client con certificados Windows.

**Objetivos: Configurar un SSTP client con certificados en Windows.** 

 Paso 1: Para empezar suponiendo que ya los certificados y el servidor SSTP están configurados Procederemos a Exportar el certificado y nos aseguramos que el Type del mismo sea PKCS12 y digitamos un password para el mismo.





• Paso 2: Una vez exportado nos dirigimos hacia la opción File allí veremos nuestro certificado y los descargaremos o arrastraremos en una ubicación a su preferencia.





• Paso 3: Una vez descargado abrimos el CMD o Símbolo de sistema digitamos mmc luego damos Enter.

Administrator: C:\Windows\system32\cmd.exe Microsoft Windows [Uersion 6.1.7601] Copyright (c) 2009 Microsoft Corporation. C:\Users\Administrador>mmc	All rights reserved.		construto Home	Centos
G: NUSEPS (Hdministrador)	Console1 - [Console Root]	es Window Help	IX-II., Laboratorio New F7Tronk Inquefa	Ver
trafico bienvenida Proyecto Proxies trafico bienvenida Proyecto Proxies beed for Speed Mo TeamViewer 13 TeamViewer 13 Stype Stype	Console Root	Name The	ere are no items to show in this view.	Cons



• **Paso 4:** Luego le damos a la opción File y damos click en Add/Remove Snap-in una vez hecho se nos abrirá una ventana.

🚡 Console2 - [Console Root]		
File Action View Favorites Window	Help	_
- New	Ctrl+N	
Open	Ctrl+O	
Save	Ctrl+S	
Save As		I here are no items to show in this view.
Add/Remove Snap-in 🔫	Ctrl+M	
Options		
1 C:\Users\\Desktop\Console1		
2 C:\Windows\system32\certmgr		
3 C:\Windows\system32\WF		
4 C:\Windows\system32\compmgmt		
Exit		
Enables you to add snap-ins to or remove them fro	m the snap-ir	n console.



 Paso 5: En la siguiente ventana vamos a seleccionar la parte de certificados para agregarlo a nuestro sanp le damos a add y nos mostrara otra ventana para que seleccionemos a que cuenta del equipo será asignada y seleccionaremos Computer account.

Add or Remove Snap-ins					×
You can select snap-ins for t extensible snap-ins, you can Available snap-ins: Snap-in an ActiveX Control	his console from th configure which e Vendor Microsoft Cor	iose xter	available on yo nsions are enabl	ur computer and configure the s ed. Selected snap-ins: Console Root	Edit Extensions
Authorization Manager Certificates Component Services Computer Managem Device Manager Disk Management Event Viewer Folder Group Policy Object Group Policy Object IP Security Monitor Link to Web Address	Microsoft Cor Microsoft Cor	H	Add >		Move Up Move Down
Description: The Certificates snap-in allo	ows you to browse	the	contents of the	certificate stores for yourself,	a service, or a computer.



This snap-in will always manage certificates for: My user account Service account Computer account
<ul> <li>My user account</li> <li>Service account</li> <li>Computer account</li> </ul>
<ul> <li>Service account</li> <li>Computer account</li> </ul>
<ul> <li>Service account</li> <li>Computer account</li> </ul>
· · · · · · · · · · · · · · · · · · ·
< Back Next > Cancel

Nota: si la maquina esta en un dominio por defecto le asumirá la cuenta del usuario o user account.



• Paso 6: Le damos a Finish, y veremos nuestro certificado seleccionado, procedemos a dar ok.

elect Computer	×
Select the computer you war	nt this snap-in to manage.
This snap-in will always ma	nage:
Ocal computer: (the computer: (the computer)	computer this console is running on)
C Another computer:	Browse
Allow the selected cor only applies if you save	nputer to be changed when launching from the command line. This e the console.
	ŧ
	Kack Finish Cancel

Authorization Manager Certificates Component Services Computer Managem Device Manager Disk Management Event Viewer Folder Group Policy Object IP Security Monitor IP Security Policy M Link to Web Address	Microsoft Cor Microsoft Cor		Add >	Certificates (Local Computer,	Remove Move Up Move Down
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• Paso 7: Una vez terminado el paso anterior nos dirigimos a Trusted Root Certifícate le damos click derecho y le abrirá un ventana de opción la cual le daremos a la opción importar.

ᡖ Consol	e2 - [Console Root	\Certifi	cates (Local Computer)\Trus	ted Root C	ertification Authorities\Certificates]	
🚡 File Action View Favorites Window Help						
🗢 🔿	🖄 📰 🗎 🗖		? 🗊			
📔 Consc	ole Root		Issued To		Issued By	Expiration Date
🔺 🙀 Ce	ertificates (Local Co	mpute	🔄 AddTrust External CA R	oot	AddTrust External CA Root	5/30/2020
	Personal		👼 Baltimore CyberTrust R	oot	Baltimore CyberTrust Root	5/12/2025
	Trusted Root Cert	ificatic	Certification Authority of	of WoSign	Certification Authority of WoSign	8/7/2039
. 🗝	Certificated	All Ta	sks	Imn	ort	6/11/2027
	Interprise II		jkj /	L CH	Cercum musced Network CA	12/31/2029
	Trusted Dub	View	►	ertificat	Class 3 Public Primary Certificatio	8/1/2028
	Untrusted Co	New V	Window from Here	ion Au	COMODO RSA Certification Auth	1/18/2038
	Third-Party I			soft C	Copyright (c) 1997 Microsoft Corp.	12/30/1999
	Trusted Peor	New T	Faskpad View	: CA	DigiCert Assured ID Root CA	11/9/2031
⊳ 🖆	Other People	Refres	h		DigiCert Global Root CA	11/9/2031
⊳ 🗂	Certificate E	Evnort			DigiCert Global Root G2	1/15/2038
▷	Smart Card	Lypon	L LISU.	EV Ro	DigiCert High Assurance EV Root	11/9/2031
⊳ 📫	Trusted Devi	Help			DST Root CA X3	9/30/2021
			🔄 D-TRUST Root Class 3 C	A 2 2009	D-TRUST Root Class 3 CA 2 2009	11/5/2029
			📮 Entrust Root Certificatio	n Auth	Entrust Root Certification Authority	11/27/2026
			📮 Entrust Root Certificatio	n Auth	Entrust Root Certification Authori	12/7/2030
			Entrust.net Certification	Author	Entrust.net Certification Authority	7/24/2029
			👼 Equifax Secure Certifica	te Auth	Equifax Secure Certificate Authority	8/22/2018



Paso 8: Una vez completado el paso anterior se nos abrirá una Ventana, en donde empezaremos a importar nuestro certificado le damos click al botón **browse** y nos abrirá otra ventana la cual nos dice que ubiquemos nuestro certificado en el equipo. *Nota en el tipo de archivo favor seleccionar* Personal Information Exchange.

Certificate Import Wizard		23		Friendly Name	Status	Certificate T 🖌	Act
File to Import Specify the file you want	t to import.			The USERTrust Net DigiCert Baltimore WoSign			Cer
File name:		Browse	-	Certum Certum Trusted Ne VeriSign Class 3 Pu			
Note: More than one ce	rtificate can be stored in a single I	file in the following formats:		Microsoft Timesta			
Personal Informati	open					×	Ŋ
Cryptographic Mes	🕒 🗢 🔰 🕨 Certificate:	5		✓ 4y Search Cert	tificates	Q	
Microsoft Serialize	Organize   New folder						
	🔆 Favorites	Name		Date mod	lified	Туре	
	🧮 Desktop	🌛 cert_export_servidor.pem_	0	8/28/201	8 6:50 PM	Personal Info	
Learn more about <u>certifica</u>	🕦 Downloads 🐏 Recent Places 🧊 Libraries	†					
: CA GlobalS 2 Certification Go Dade Certificate Auth Go Dade	New Computer Seano Consulting (C: OVD RW Drive (D:) Sean CD Drive (F:)						
Global Root GTE Cyt gnedCA Metaspl nticode(tm) Ro Microso	👊 Network	•				4	
Authority Microsc Certificate Auth Microsc Certificate Auth Microsc	File nar	me: cert_export_servidor.pern_0		<ul> <li>Personal Info</li> <li>X.509 Certific</li> <li>Personal Info</li> </ul>	ormation E ate (*.cer; ormation E	ixchange 🔻	*.p12)



Paso 9: Una vez seleccionado nos pedirá el **password** que le pusimos a nuestro certificado al momento de exportarlo.

Certificate Import Wizard
<b>Password</b> To maintain security, the private key was protected with a password.
Type the password for the private key. Password:
Enable strong private key protection. You will be prompted every time the private key is used by an application if you enable this option.
Mark this key as exportable. This will allow you to back up or transport your keys at a later time.
Include all extended properties.
Learn more about <u>protecting private keys</u>
< Back Next > Cancel



Aquí nos muestra nuestro certificado ya exportado.

🚡 Console2 - [Console Root\Certifi	cates (Local Computer)\Trusted Root (	Certification Authorities\Certificates]	
🚟 File Action View Favorite	s Window Help		
🗢 🔿 🖄 🖬 🛣 🕅	1 🔒 🛛 🖬		
Console Root	Issued To	Issued By	Expiration Da
Certificates (Local Compute	<b>%</b> 142.93.195.42 <b>~~~~</b>	142.93.195.42	8/18/2019
Personal	🛱 AddTrust External CA Root	AddTrust External CA Root	5/30/2020
Irusted Root Certificatio	🔄 Baltimore CyberTrust Root	Baltimore CyberTrust Root	5/12/2025
Enterprise Trust	🔄 Certification Authority of WoSign	Certification Authority of WoSign	8/7/2039
Interprise Hust Interprise Hust Interprise Hust	🔄 Certum CA	Certum CA	6/11/2027
Find the second seco	🔄 Certum Trusted Network CA	Certum Trusted Network CA	12/31/2029
Untrusted Certificates	🔄 Class 3 Public Primary Certificat	Class 3 Public Primary Certification A	Authority
Third-Party Root Certific	🔄 COMODO RSA Certification Au	COMODO RSA Certification Auth	1/18/2038
Trusted People	🔄 Copyright (c) 1997 Microsoft C	Copyright (c) 1997 Microsoft Corp.	12/30/1999
🔈 🚞 Other People	🔄 DigiCert Assured ID Root CA	DigiCert Assured ID Root CA	11/9/2031
🔈 🧮 Certificate Enrollment R	🔄 DigiCert Global Root CA	DigiCert Global Root CA	11/9/2031
Smart Card Trusted Roo	🔄 DigiCert Global Root G2	DigiCert Global Root G2	1/15/2038
Trusted Devices	🔄 DigiCert High Assurance EV Ro	DigiCert High Assurance EV Root	11/9/2031
	🔄 DST Root CA X3	DST Root CA X3	9/30/2021
	🔄 🖾 D-TRUST Root Class 3 CA 2 2009	D-TRUST Root Class 3 CA 2 2009	11/5/2029



**Paso 10: Luego** creamos nuestra Interface SSTP muy parecida a la antes creada para L2TP/IPsec lo único variante seria modificar el tipo que seria SSTP, damos OK y luego configuramos nuestro usuario y password SSTP para conectarnos y damos a **connect**.

GODONTO Properties
General Options Security Networking Sharing
Type of VPN:
Layer 2 Tunneling Protocol with IPsec (L2TP/IPSec)
Automatic Point to Point Tunneling Protocol (PPTP) Layer 2 Tunneling Protocol with IPsec (L2TP/IPSec) Secure Socket Tunneling Protocol (SSTP)
Use Extensible Authentication Protocol (EAP)
· · · · · · · · · · · · · · · · · · ·
Properties
Allow these protocols
Unencrypted password (PAP)
Challenge Handshake Authentication Protocol (CHAP)
Microsoft CHAP Version 2 (MS-CHAP v2)
Automatically use my Windows logon name and password (and domain, if any)
OK Cancel

Connect G	
User name:	Curso
Password:	
Domain:	142.93.195.42
Save this i Me onl	user name and password for the following users; y a who uses this computer
Connect	Cancel Properties Help

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Paso 11: Si todos los pasos anteriores fueron correctos se nos mostrara el tunnel de la siguiente forma, nuestra conexión establecida SSTP con certificados digitales de 2048 bit y encriptación aes 2564

				© Curso@142.93.195.42:8292 (MikroTik) - WinBox v6.42.6 on CHR (x86_64)		
etwork and Internet   Network Connections			Session Settings Dashboard			
nection	Rename this connection View	status of this connection De	5	C Safe Mode	Session: 142.93.195.42.8292	
	GODONTO Cloud WAN Miniport (SSTP) -	L2TP Cloud Disconnect WAN Minip		A Quick Set	Certificates Certificates SCEP Servers SCEP RA Requests OTP CRL	
	Mikrotik-curso Disconnected WAN Miniport (PPTP)	Mr. Home Disconnecti WAN Minip		♀ Wireless ♀ Bridge ■ PPP	Interface PPPoE Servers Secrets Profiles Active Connections L2TP Secrets	
n	Templaris Disconnected	VirtualBox H Disabled		°t¦e Mesh	Name         / Type         Actual MTU         L2 MTU         Tx         ▼           DR         ≪ > <sstp:curso>         SSTP Server Binding         1500         0 b</sstp:curso>	
on ini-Card	GODONTO Status			፼ IP ► ⊘ MPLS ►	l t	
	General Details Connection IPv4 Connectivity: No network access IPv6 Connectivity: No network access Media State: Connected Duration: 00:00:43			🔀 Routing । ▷ ∰ System . ▷		
				Queues		
				Files		
				📄 Log		
				🧟 Radius		
				🗶 Tools 🔹 🗅		
	Details			📰 New Terminal	•	
				S Dude	1 item out of 3	
	Activity			📃 Make Supout.rif		
	Sept	Received		🕜 Manual		
	2018			S New WinBox		
	Bytes: 140,924	273		📕 Exit		
	Compression: 0 %	0%		_		
	Errors: 0	I 0	lŏ			
	Properties Disconnect Diagnose		WinB			
		Close	erOS			
			Rout		♦ 1 item	