Aanvraag/Installatie servercertificaat Windows via MMC

Disclaimer:

Het aanmaken van een PKCS#10 bestand kan op vele manieren. Bekijk hiervoor de documentatie van de leverancier van uw server. Dit document kan als voorbeeld worden gebruikt voor het aanmaken van een PKCS#10 bestand. En als voorbeeld voor het installeren van het servercertificaat dat u heeft ontvangen. Aan de inhoud van dit document kunnen geen rechten worden ontleend.

- 1. Genereren PKCS-10 via MMC
- 2. Installeren servercertificaat via MMC
- 3. Controles
- 4. Exporteren van het certificaat via PFX

1. Genereren PKCS-10 via MMC

MMC Prepareren



Voeg Certificaatmodule toe

		Console1 - [Console Root]
🚡 File	Action View Favorites Window Help	
*	New Ctrl+N Open Ctrl+O Save Ctrl+S Save As Save As	There are no items to show in this vi
	Add/Remove Snap-in Ctrl+M Options	
	1 C:\Windows\\compmgmt.msc 2 C:\Windows\\services.msc	
F	3 C:\Windows\\lusrmgr.msc 4 C:\Windows\\dnsmgmt.msc	
	Exit	



Kies ComputerAccount

a	Console1 - [Console Root]	
File Action View F	Certificates snap-in	of snap-ins.
Console Root	This snap-in will always manage certificates for:	Edit Exte
	Service account Office account Office account	Ren
		Mov
		Move
		Advan
	< Becky Next > Cancel	a computer
		ок

NB: Is deze optie er niet, start MMC dan als Administrator

6	Console1 - [Console	e Rootl
File Action View F	Select Computer	x
Console Root	Select the computer you want this snap-in to manage. This snap-in <u>will always manage</u>	of sna
	Local computer: the computer this console is running on)	Cu
	O Another computer:	Browse
	Allow the selected computer to be changed when launching from only applies if you save the console.	the command line. This
	< Book	Finish Cancel a cor



De aanvraag starten



6	Console1 - [Console Root\Certificates (Local Computer)\Personal\Certificates]
File Action View Favor	- 🗖
Console Root Certificates (Local Comput Personal Certificates Certificates Certificates Certificates Certificate Certificate Certificate Certificate Certificate Certificate Certificates Certificate Certificate Certificates Certificate	Before You Begin The following steps will help you install certificates, which are digital credentials used to connect to wireled networks, protect content, establish identity, and do other security-related tasks. Before requesting a certificate, verify the following: Your computer is connected to the network You have credentials that can be used to verify your right to obtain the certificate
< III Personal store contains 1 certificate	Next Cance



File	Action View Favor	
		Certificate Enrollment
Con:	sole Root	
4 🖓 🤇	Certificates (Local Compu	Custom request
4	Personal	custom request
	Certificates	Chora an option from the list below and configure the cattificate options as required
Þ	Trusted Root Certificat	chose an option nom the list below and conligure the certaincate options as required.
P	Enterprise Trust	
Þ	Intermediate Certificat	Template: (No template) CNG key
Þ	Trusted Publishers	Suppress default extensions
0	Untrusted Certificates	
Þ	Third-Party Root Certif	Request format: () PKCS #10
Þ	Trusted People	O CMC
Þ	Client Authentication	
Þ	Other People	Note: Key archival is not available for certificates based on a custom certificate request, even when this
Þ	Remote Desktop	option is specified in the certificate template.
Þ	Certificate Enrollment	
P	Smart Card Trusted Ro	
Þ	Trusted Devices	
Þ	Web Hosting	
(ш	Net Ca



File Action View Favor	Certificate Enrollment		
Console Root	Certificate Information Click Next to use the options alread request, and then click Next.	y selected for this template, or click Details to cr	ustomize the certificate Details ^
Untrusted Certificates Third-Party Root Certif Trusted People Client Authentication I Other People Remote Desktop Certificate Enrollment	The following options describe Key usage: Application policies: Validity period (days):	e the uses and validity period that apply to this t	Properties
Smart Card Trusted Ro Trusted Devices Web Hosting			Next Cance

De benodigde opties invullen





Hier is een voorbeeldnaam ingevuld

Vul in bovenstaande scherm (Subject) de volgende waarden in:

-Common Name

(Voer in het eerste scherm de velden in. Bij "Common Name" moet dezelfde naam opgegeven worden als de systeemnaam (FQDN) op het aanvraagformulier)

- -Organization
- -Organizational Unit
- -Locality (Woonplaats)
- -State (Provincie)
- -Country

Let op: geen afkortingen gebruiken

En vul bij Private Key het volgende in:



NB: Hier is Private Key aangevinkt als exportable. Dit geeft u de mogelijkheid om het servercertificaat te verspreiden onder andere werkplekken in het domein, of als backup.

PKCS-10 bestand genereren en opslaan.



2. Installeren servercertificaat via MMC

MMC Prepareren

Start MMC



Voeg Certificaatmodule toe

5		Console1 - [Console Root]
🚡 Fil	e Action View Favorites Window Help	
*	New Ctrl+N Open Ctrl+O Save Ctrl+S Save As Ctrl+S	There are no items to show in this vi
	Add/Remove Snap-in Ctrl+M Options	
	1 C:\Windows\\compmgmt.msc 2 C:\Windows\\services.msc	
A	3 C:\Windows\\lusrmgr.msc 4 C:\Windows\\dnsmgmt.msc	
	Exit	



Kies ComputerAccount

<u>ه</u>	Console1 - [Console Root]	
File Action View File	Certificates snap-in	of snap-ins.
Console Root	This snap-in will always manage certificates for: O My user account O Service account © Computer account	Edit Exte
		Mov
		Advar
	Recky Next > Cancel	a computer
		ок

NB: Is deze optie er niet, start MMC dan als Administrator

Add or Romovo Spap in	C	and the second se
Select Computer	×	
Select the computer you want this snap-in to manage. This snap-in will always manage Local computer: the computer this console is running on)		Ed
Another computer: Allow the selected computer to be changed when launching from the comonly applies if you save the console.	Browse	
< <u>B</u> ack Finis	Cancel	a co
	Select the computer you want this snap-in to manage. This snap-in will abways manage Local computer: the computer this console is running on) Another computer: Allow the selected computer to be changed when launching from the console only applies if you save the console. 	Select the computer you want this snap-in to manage. This snap-in will abways manage Local computer: the computer this console is running on Another computer: Allow the selected computer to be changed when launching from the command line. This only applies if you save the console.



De installatie

Klik met de rechtermuisknop op Certificates en Kies All Tasks/Import

🚡 Console1 - [Console Root\Certifi	icates (Local Computer)\Personal\Cert	ificates]			
File Action View Favorite	s Window Help				_ 8 ×
Console Root	Issued To	Issued By	Expiration Date	Intende	Actions
Certificates (Local Compute Personal	There	are no items to show in this view.			Certificates 🔺
Certificates					More Actions
Trusted Root Certification					
Interprise Trust					
Trusted Publishers					
Untrusted Certificates					
Trusted People					
Remote Desktop					
Certificate Enrollment R Smart Card Trusted Room					
Final Condition of the second residence of the second rescond residence of the second residence of		All Tasks Req	uest New Certificat	e	
		Refresh	ort		
		View 🕨 Adv	anced Operations		
		Arrange Icons			
		Line up Icons			
		Help			
4	٠ III			•	
Add a certificate to a store					

Zoek het gewenste bestand en klik Next

Certi	ificate Import Wizard	×
F	ile to Import Specify the file you want to import.	
-		
	File name:	
	C:\ uzi-sc-20220101.cer Browse	
	Note: More than one certificate can be stored in a single file in the following formats:	
	Personal Information Exchange- PKCS #12 (.PFX,.P12)	
	Cryptographic Message Syntax Standard- PKCS #7 Certificates (.P7B)	
	Microsoft Serialized Certificate Store (.SST)	
Le	earn more about <u>certificate file formats</u>	
	< Back Next > Cance	el

Klik Next

Certificate Import Wizard
Certificate Store Certificate stores are system areas where certificates are kept.
Windows can automatically select a certificate store, or you can specify a location for the certificate.
 Automatically select the certificate store based on the type of certificate
Place all certificates in the following store
Certificate store:
Personal Browse
Learn more about <u>certificate stores</u>
< Back Next > Cancel

Klik Finish

-

Certificate Import Wizard		—X —		
	Completing the Certificate Import Wizard The certificate will be imported after you click Finish.			
	You have specified the follo	wing settings:		
	Certificate Store Selected	Automatically determined by t		
	File Name	C:\p7p;		
	•	>		
	< Back	Finish Cancel		

Na installatie zal het certificaat zichtbaar met een sleutel, ten teken dat het correspondeert met de eerder gemaakt private key (PKCS)

🐻 Console1 - [Console Root\Certifi	icates (Local Computer)\Personal\C	[ertificates]				
File Action View Favorite	File Action View Favorites Window Help					
Console Root	Issued To	Issued By	Expiration Date	Intende	Actions	
Certificates (Local Compute)	🙀 uzi-certificaat	UZI-register	2022-12-25	Server A	Certificates 🔺	
Certificates	₩				More Actions	
Trusted Root Certification						
Intermediate Certification						
Trusted Publishers						
Untrusted Certificates						
Inird-Party Kool Certified Trusted People						
Remote Desktop						
Certificate Enrollment R						
Smart Card Trusted Rool						
p Indsteu Devices						
4 III +	· · · · · · · · · · · · · · · · · · ·			•	<u> </u>	
Personal store contains 1 certificate.						

Mocht het certificaat niet werken dan ontbreken mogelijk de keten-certificaten. Deze staan op: <u>https://www.zorgcsp.nl/ca-certificaten</u>

3. Controles

Dubbelklik op het certificaat, onderstaande tabbladen zult u te zien moeten krijgen.

🐖 Certificate	\times
General Details Certification Path	
Certificate Information	ŗ
This certificate is intended for the following purpose(s):	
 2. 16. 528. 1. 1007.99. 12 2. 16. 528. 1. 1007.98.4 All application policies 	
* Refer to the certification authority's statement for details.	
Issued to: TEST UZI-register Private Server CA G1	
Issued by: TEST Zorg CSP Level 2 Private Services CA G1	
Valid from 16/03/2017 to 12/11/2028	
$\ref{eq: product}$ You have a private key that corresponds to this certificate.	
Issuer <u>S</u> tatement	
ОК	

<u> C</u> erti	ficate				×
General	Details	Certification Pat	h		
Show:	<all></all>		~		
Field Ve Se Sig Sig Va Va Sa	rsion nature al nature ha uer iid from iid to hiect	er gorithm ash algorithm	Value V3 51f64d630b85c0 sha256RSA sha256 TEST Zorg CSP I Thursday, 16 Ma Sunday, 12 Nov TEST 1171-registr	003 .evel 2 Private arch 2017 11: ember 2028 0 er Private Serv	~
		Ę	dit Properties	Copy to File	
				OK	(

💼 Certificate	×
General Details Certification Path	
Certification path TEST Zorg CSP Private Root CA G1 TEST Zorg CSP Level 2 Private Services CA G1 TEST UZI-register Private Server CA G1	
<u>V</u> iew Certificate	
<u>C</u> ertificate status:	
This certificate is OK.	
ОК	:

4. Het exporteren van het servercertificaat naar PFX

Het servercertificaat is nu geïnstalleerd. Dit servercertificaat bevat zowel de publieke als de private sleutel. U kunt dit exporteren naar PFX. In dit hoofdstuk staat beschreven hoe dit moet. Voorwaarde hierbij is wel dat het servercertificaat correct is geïnstalleerd.

Start de MMC op en ga naar de map in Certificates (Local Computer) -> Personal -> Certificates.

Klik met de rechtermuisknop op het betreffende certificaat en kies voor All Tasks -> Export...



De Export Wizard verschijnt. Klik op "Next".



Selecteer "Yes, export the private key". Dit betekent dat de private sleutel wordt meegenomen in het export bestand.

LET OP! Zonder de private sleutel kan het servercertificaat niet gebruikt worden. Klik daarna op "Next".

Certificate Export Wizard	×			
Export Private Key				
Tou can choose to export the private key with the certificate.				
Private keys are password protected. If you want to export the private key with the certificate, you must type a password on a later page.				
Do you want to export the private key with the certificate?				
 Yes, export the private key 				
O No, do not export the private key				
Learn more about <u>exporting private keys</u>				
< Back Next > Cancel				

Selecteer de hieronder getoonde opties.

LET OP! Haal het vinkje weg dat staat bij "Delete the private key if the export is successful". De private key moet u straks nogmaals exporteren voor archivering op de server.

Klik vervolgens op "Next".

ertificate Export Wizard	×			
Export File Format				
Certificates can be exported in a variety of file formats.				
Select the format you want to use:				
C DER encoded binary X.509 (,CER)				
C Base-64 encoded X.509 (.CER)				
○ Cryptographic Message Syntax Standard - PKCS #7 Certificates (, P7B)				
Include all certificates in the certification path if possible				
Personal Information Exchange - PKCS #12 (.PFX)				
Include all certificates in the certification path if possible				
Delete the private key if the export is successful				
Export all extended properties				
O Microsoft Serialized Certificate Store (,SST)				
Learn more about certificate file formats				
< Back Next > Cance				

Voer hier het wachtwoord in om het servercertificaat te beveiligen. Dit wachtwoord moet u bij het importen van het servercertificaat invoeren.

Certificate Export Wizard		×
Password		
To maintain security, you must protect the	private key by using a pass	word.
Type and confirm a password.		
Password:		
••••		
Type and confirm password (mandatory):	
••••		
	< Back Next >	Cancel

Kies bij 'Browse' de locatie waar het PFX bestand opgeslagen moet worden. Zorg dat in de bestandsnaam de volledige FQDN staat. Klik daarna op "Next".

Certificate Export Wizard					×
File to Export Specify the name of the file	you want to e	xport			
File name:	l.pfx			Browse	
<u></u>					
		< Back	Next >	> Cano	el

Controleer of alle settings correct zijn gekozen en klik op "Finish".

Certificate Export Wizard		×
	Completing the Certificate Export Wizard	
	You have successfully completed the Certificate Export wizard. You have specified the following settings:	
	File Name c: \psnc Export Keys Yes Include all certificates in the certification path Yes File Format Persona	
	∢ ▶	
	< Back Finish Cancel	

Vervolgens krijgt u een melding betreft het succesvol exporteren en klikt u op "OK".

Het installeren van het servercertificaat in PFX formaat

Ga in de "MMC" naar "Certificates (Local Computer) -> Personal -> Certificates" en klik vervolgens met de rechtermuisknop op Certificates, selecteer "All Tasks" en vervolgens "Import...".

Image: Second secon	tificates - Current User\Personal\Certificates]
← ● 2 □ □ □ ● Image: Console Root Issued To ▲ Issued By Expiral Actions □ □ Certificates - Current L □ □ TEST UZI-register Server CA G2 6/27/2 Certificates	Window Help
Console Root Security	
Generates - Contentes - C	ed To A Issued By Expiral Actions
	www.nenk.testsbv-z.ni TEST 021-register Server CA G2 6/2//2 Certificates
Intermediate Certifie Intermediate Certif	All Tasks Import Refresh Advanced Operations > Export List View > Arrange Icons > Line up Icons Help

De Certificate Import Wizard wordt gestart. Klik op "Next".



Selecteer bij "Browse" het PFX bestand en klik op "Next".

Certificate Import Wizard		×
File to Import		
Specify the file you want to import.		
File name:		
C:\bsnopvragen.cibgtest.nl.pfx		Browse
Note: More than one certificate can be sto	red in a single file in the fo	ollowing formats:
Personal Information Exchange - PKCS #	12 (.PFX,.P12)	
Cryptographic Message Syntax Standar	d- PKCS #7 Certificates (.	P 7 B)
Microsoft Serialized Certificate Store (.S	ST)	
Learn more about certificate file formats		
	< Back Next	> Cancel

Voer het wachtwoord in wat u in hoofdstuk 6 heeft opgegeven.

LET OP! Indien er geen vinkje bij "Mark this key as exportable. This will allow you to back up or transport your keys at a later time." staat kan het geïnstalleerde certificaat niet meer worden geëxporteerd naar een nieuw PFX bestand.

Certificate Import Wizard	×
Password	
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	

Kies voor: "Automatically select the certificate store based on the type of certificate." Hiermee worden zowel de bovenliggende certificaatniveaus (bijv. Root CA) en het servercertificaat op de juiste plaats opgeslagen.

ertificate Import Wizard	2			
Certificate Store				
Certificate stores are system areas where certificates are kept.				
Windows can automatically select a certificate store, or you can specify a location for the certificate.				
Automatically select the certificate store based on the type of certificate				
C Place all certificates in the following store				
Certificate store;	1			
Personal Browse				
Learn more about <u>certificate stores</u>				
< Back Next > Can	cel			

Controleer of de juiste instellingen zijn gekozen en klik daarna op "Finish".

Certificate Import Wizard		×	
	Completing the Certificate Import Wizard The certificate will be imported after you click Finish. You have specified the following settings:		
	Certificate Store Selected	Automatically determined by t	
	Content	PFX	
	File Name	C:\bsnopvragen.cibgtest.nl.p	
	•		
	< Park	Einich Cancol	
		Finish Cancel	

Het importeren is voltooid op de betreffende server.

