



**How to obtain certificates for
VPN connections (Site to Site,
GVC, L2TP)**

**KNOWLEDGE
DATABASE**

How to obtain certificates for VPN connections (Site to Site, GVC, L2TP)

Using digital certificates for authentication instead of preshared keys in VPNs is considered more secure. In SonicWall UTM devices, digital certificates are one way of authenticating two peer devices to establish an IPsec VPN tunnel. The other is IKE using preshared key. The KB article describes the method to configure WAN GroupVPN and Global VPN Clients (GVC) to use digital certificates for authentication before establishing an IPsec VPN tunnel.

Features of IKE Authentication with Certificates in SonicWall WAN GroupVPN and GVC.

- A digital certificate either obtained from a third party CA (like Verisign) or from a private CA (like Microsoft CA or OpenSSL) must be used for this configuration. Self-signed certificates are not supported.
- In the SonicWall, the administrator has the option to create a Certificate Signing Request (CSR) and get it signed by a CA or import a signed certificate in the PKCS#12 format (.pfx or .p12 extension). When importing a signed certificate into the GVC client, it must be in the PKCS#12 format (.pfx or .p12 extension).
- Both peers must trust the issuer of the certificate. In other words, the CA certificate of the user certificate must be imported into the SonicWall as well as the remote GVC client.
- If a certificate has already been imported into the SonicWall signed by a 3rd party CA (for example, Verisign), this can be selected in the WAN GroupVPN. The CA certificate must be imported into the GVC client.
- SonicWall supports digital certificates issued by different CAs to be imported into the SonicWall UTM device and the remote GVC client. SonicWall also supports forcing both peers to use certificates issued by the same CA.

RESOLUTION:

The certificate signing process described here is using a Windows Server 2008 CA. To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificate request, refer this Microsoft article: [How to configure a CA to accept a SAN attribute from a certificate request](#)

- [Create a Certificate Signing Request \(CSR\) in the SonicWall](#)
- [Get the CSR signed from the Windows Server Certificate Enrollment Web Services](#)
 - [Obtain a certificate to use in WAN GroupVPN configuration](#)
 - [Download the CA certificate for the signed certificate](#)
 - [Obtain a certificate for GVC clients.](#)

Create a Certificate Signing Request (CSR) in the SonicWall

Login to the SonicWall management GUI
 Navigate to the **System | Certificate** page.
 Click on **New Signing Request** to create a similar CSR as under
 Click on **Generate** to save.
 Refresh the page.
 Click on the download button to download the CSR.

Generate Certificate Signing Request

Certificate Alias:

Country:

State:

Locality, City, or County:

Company or Organization:

Department:

Group:

Team:

Common Name:

Subject Distinguished Name:

Subject Alternative Name (Optional):

Domain Name:

Subject Key Type:

Subject Key Size:

Ready

- Dashboard
- System
 - Status
 - Licenses
 - Administration
 - Certificates
 - Time
 - Schedules
 - Settings
 - Packet Monitor

System /

Certificates

Certificates and Certificate Requests

View Style: All certificates Imported certificates and requests Built-in certificates Include expired built-in certificates

#	Certificate	Type	Validated	Expires	Details	Configure
<input type="checkbox"/>	1 WANGroupVPN	Pending request				
<input type="checkbox"/>	2 hal-2010-SERVER2K8-CA	CA certificate		Sep 5 18:44:33 2016 GMT		

```

WANGroupVPN.p10 - Notepad
File Edit Format View Help
-----BEGIN CERTIFICATE REQUEST-----
MIIBvDCCASUCAQAuDELMAkGA1UEBhMCU4xcZAJBgNVBAGTAkRBMQwwCgYDVQQH
EwVCTFIxDTALBgNVBAoTBFNOV0VwxFzAVBgNVBAMTDnNvbml1bGF1LmNvb2F5
MA0GCSqGSIb3DQEBAAQAA4GNADCBiQKBggQD00ZQj1s6tcw9B4AggE1tw+/Z7AptQ
XoAAKenaoA6qk2Lk3HtMXJF71I/x6MuxNEKK1h/+7vamhR+s7jdpV6+EsQj87ky8
6waM8ap3Tsox19MeYI3DHqrGnE3csfQ1IwrqgP1SPtCnwKL+iTSMkMuNLcnTp2BH
2jm4QDqsk8VwbwIDAQABoCwwKgyJKoZiIhvcNAQkOMR0wGzAZBgNVHREEjAqgg5z
b25pY2xhy15sb2NhbDANBgkqhkiG9w0BAQQAFAA0BgQBFZnTCPIBcwAyyuEGNXE3w
JvukmCMZdERp76a61BHNvjzv9Zvw+q9MdeUMSjn1URUj9t78JEN6fxyoDL7uDSNe
8YIxpnz4CbfgaPR76HPyER2pg+ITUAJCGx4xBC5n03r11z2YhN5Ja1+1r+84QD6n
5mzzCtDbuLy21o9Z31034w==-----END CERTIFICATE REQUEST-----
  
```

Obtain a certificate using the Windows Server Certificate Enrollment Web Services

Obtain a certificate to use in WAN GroupVPN configuration

Open a browser and navigate to the Microsoft Windows Certificate Enrollment page: <http://CertSrv>
 When prompted for authentication, enter username and password of Administrator.

Click on **Request a certificate**

Click on **advanced certificate request**.

Copy the contents of CSR in the Saved Request box.

Select Administrator under Certificate Template. Note: **User** or **Web Server** template also could be selected.

Under Attributes, either enter **san:dns=yourdomainname.com** or **san:email=<local-part@domain.com>**. Note: To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificate request, refer this Microsoft article: [How to configure a CA to accept a SAN attribute from a certificate request](#)

Click on Submit and you will taken to the next page.

On this page click on **Download certificate** or **Download certificate chain** to save the signed certificate to disk.

Microsoft Active Directory Certificate Services – hal-2010-SERVER2k8-CA [Home](#)

Welcome

Use this Web site to request a certificate for your Web browser, e-mail client, or other program. By using a certificate, you can verify your identity to people you communicate with over the Web, sign and encrypt messages, and, depending upon the type of certificate you request, perform other security tasks.

You can also use this Web site to download a certificate authority (CA) certificate, certificate chain, or certificate revocation list (CRL), or to view the status of a pending request.

For more information about Active Directory Certificate Services, see [Active Directory Certificate Services Documentation](#).

Select a task:

- [Request a certificate](#) ←
- [View the status of a pending certificate request](#)
- [Download a CA certificate, certificate chain, or CRL](#)

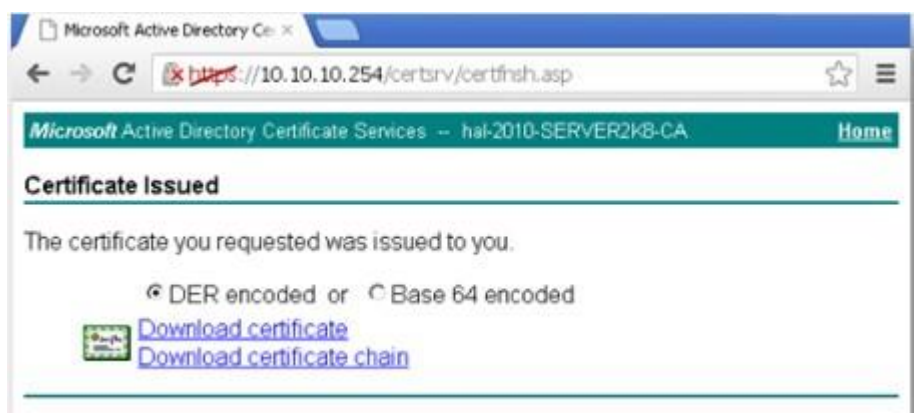
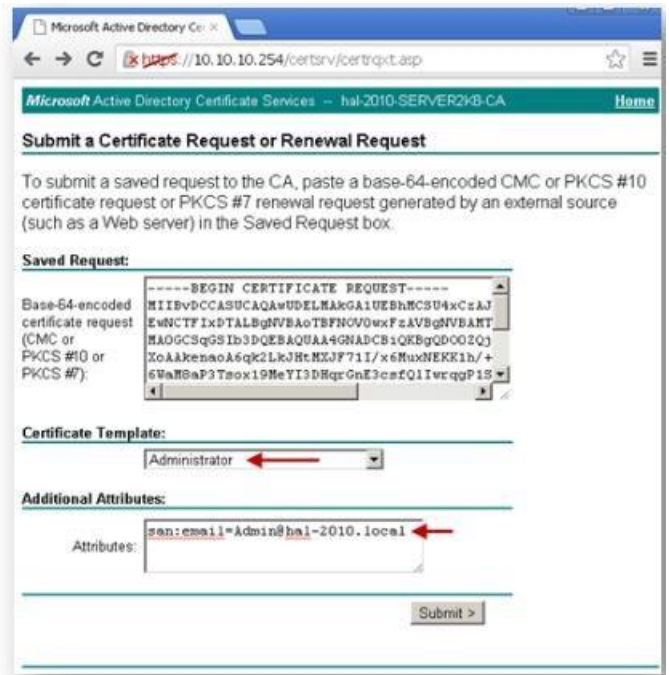
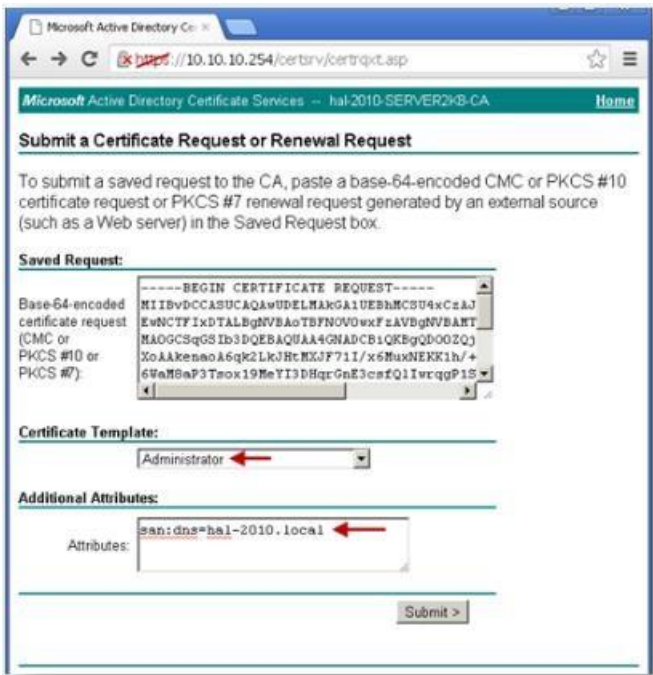
Microsoft Active Directory Certificate Services – hal-2010-SERVER2k8-CA [Home](#)

Request a Certificate

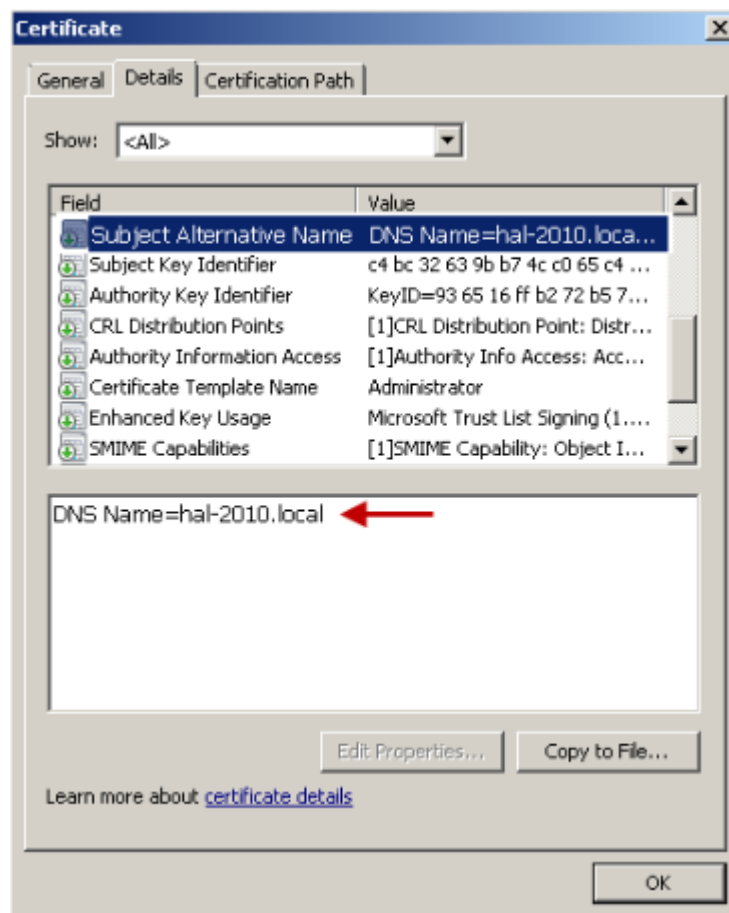
Select the certificate type:

- [User Certificate](#)

Or, submit an [advanced certificate request](#). ←



Below is an example of a signed certificate's Subject Alternative Name (SAN):



Download the CA certificate for the signed certificate.

Navigate to the Microsoft Windows Certificate Enrollment page: <http://CertSrv>
 Click on **Download a CA certificate....**

On the next page, click on **Download CA certificate** and save the certificate to disk.

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA Home

Welcome

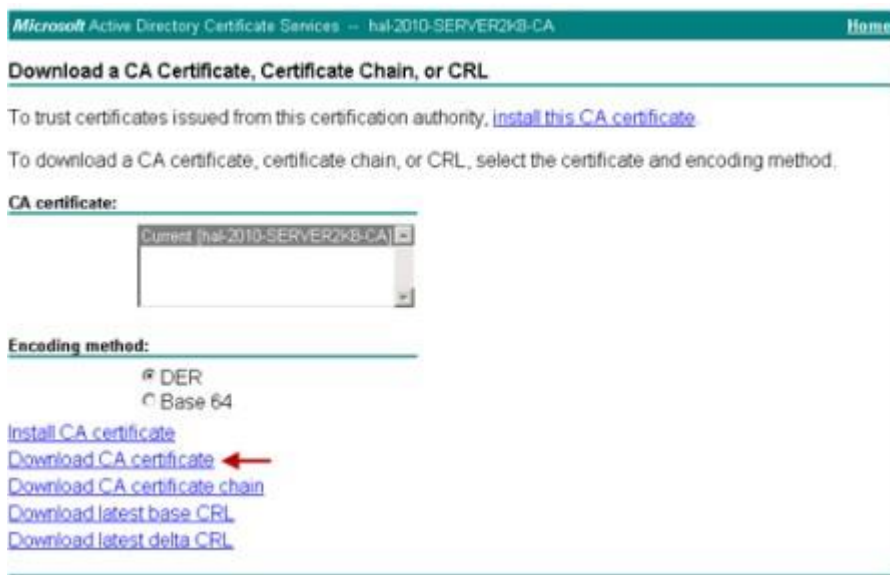
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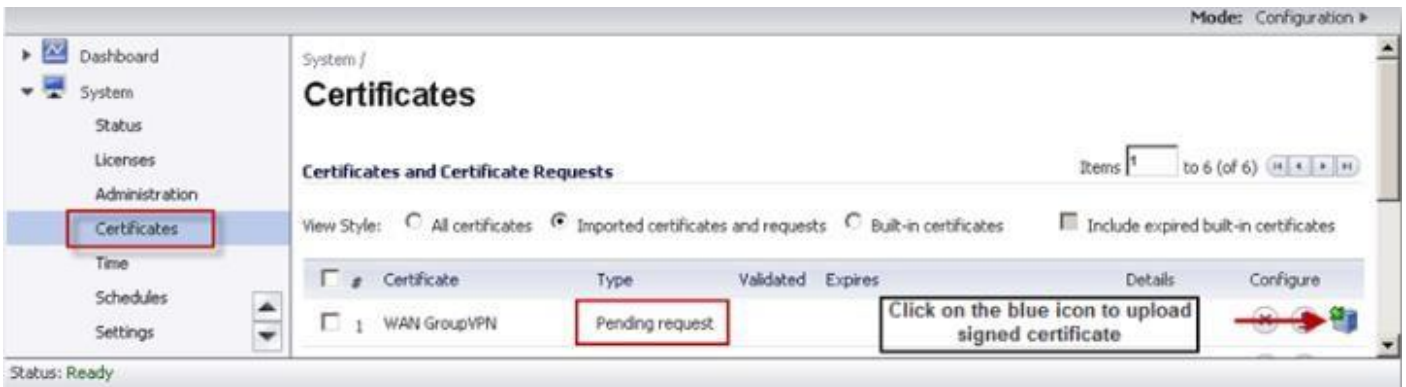
For more information about Active Directory Certificate Services, see [Active Directory Certificate Services Documentation](#).

Select a task:

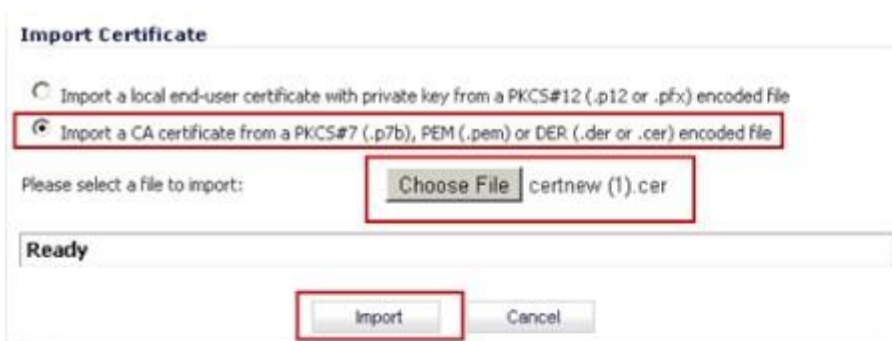
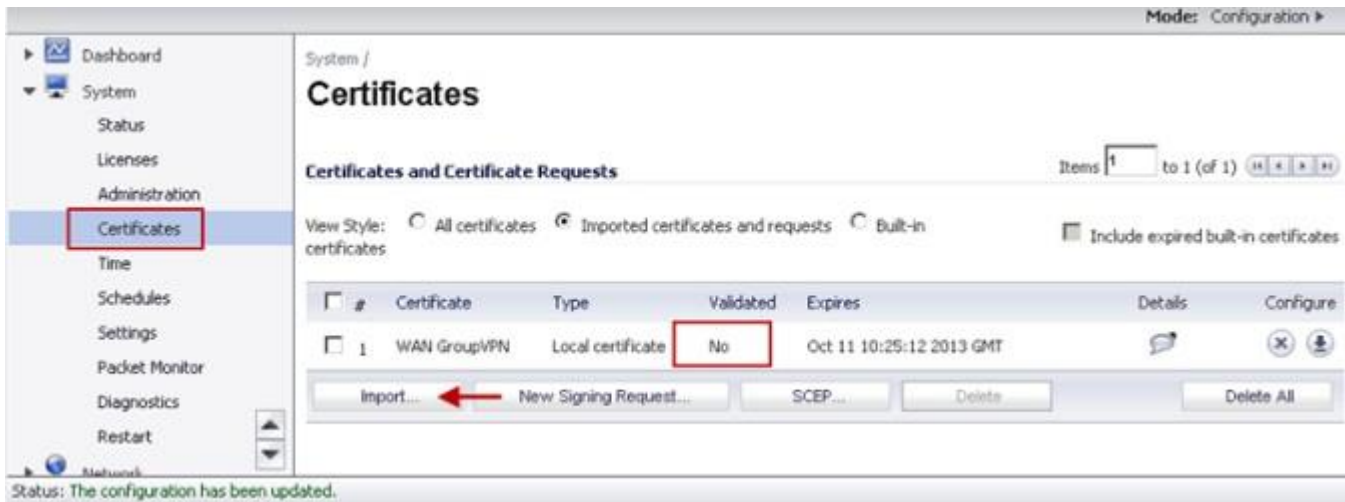
- [Request a certificate](#)
- [View the status of a pending certificate request](#)
- [Download a CA certificate, certificate chain, or CRL](#)



Upload the signed certificate into the SonicWall via the upload button of the CSR pending request.



To establish trust and complete the validation of the signed certificate, import the CA certificate



Obtain a certificate for GVC clients.

- Navigate to the Microsoft Windows Certificate Enrollment page: *http:///CertSrv*
- When prompted for authentication, enter username and password of a Domain User.
- Click on **Request a certificate**
- Click on **advanced certificate request**.
- Select **Administrator** or **User** under **Certificate Template**.

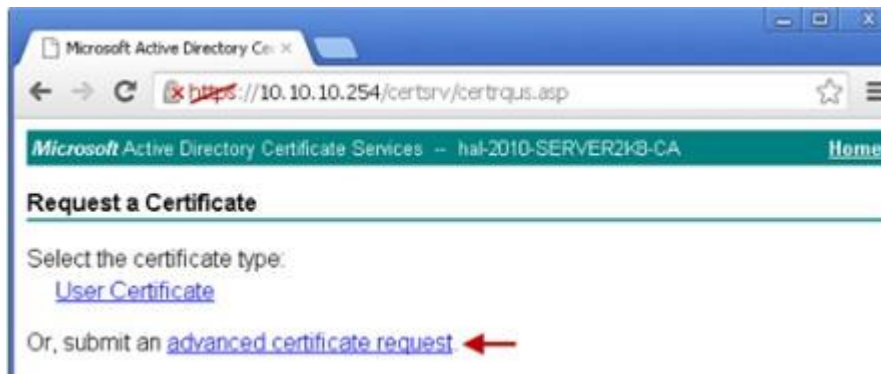
Note:

For Site to Site VPN or GVC, a certificate with **Key Usage**, if present, must have **Digital Signature** and/or **Non-Repudiation** and **Extended Key Usage (EKU)**, if present, with **Client Authentication** seems to work.

If, on the other hand, using L2TP/IPSec VPN, make sure, if **Key Usage** is present, to use **Digital Signature** and/or **Non-Repudiation**. The **Extended Key Usage (EKU)** field SHOULD NOT be used but, if present, may have **Encrypted File System (1.3.6.1.4.1.311.10.3.4)** and/or **IP Security End System (1.3.6.1.5.5.8.2.1)**.

- Under **Attributes**, either enter **san:dns=yourdomainname.com** or **san=email=<local-part@domain.com>**. Note: To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificate request.
- Click on **Submit** and you will taken to the next page.
- On this page click on **Download certificate** or **Download certificate chain** to save the signed certificate to disk.





Certificate Template:

User

Key Options:

Create new key set Use existing key set

CSP: Microsoft Enhanced Cryptographic Provider v1.0

Key Usage: Exchange

Key Size: 1024 Min: 384 Max: 10384 (common key sizes: 512 1024 2048 4096 8192 16384)

Automatic key container name User specified key container name

Mark keys as exportable

Enable strong private key protection

Additional Options:

Request Format: CMC PKCS10

Hash Algorithm: sha1 Only used to sign request.

Save request

Attributes: san:dns=hal-2010.local

Friendly Name:

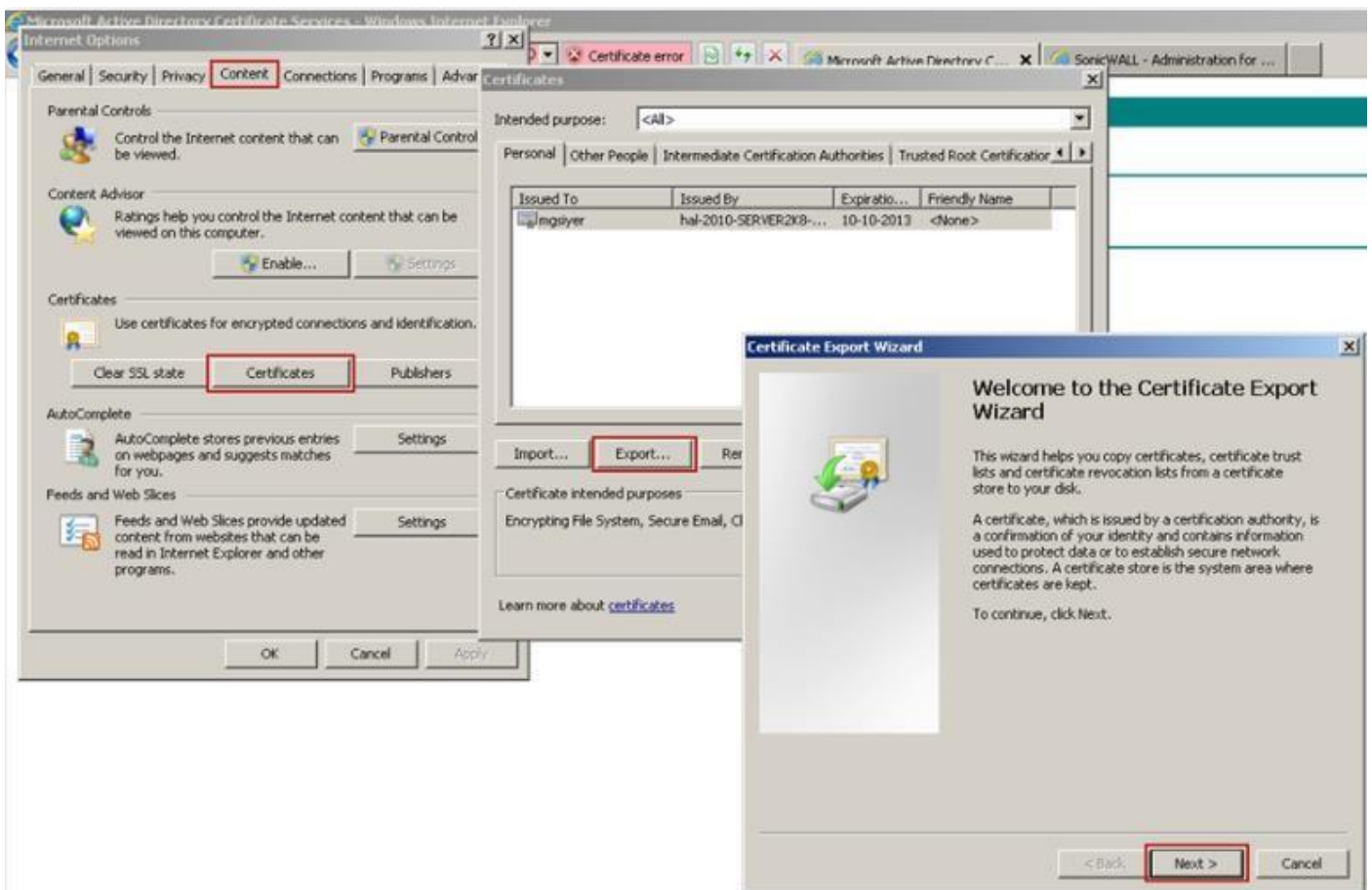
Submit >

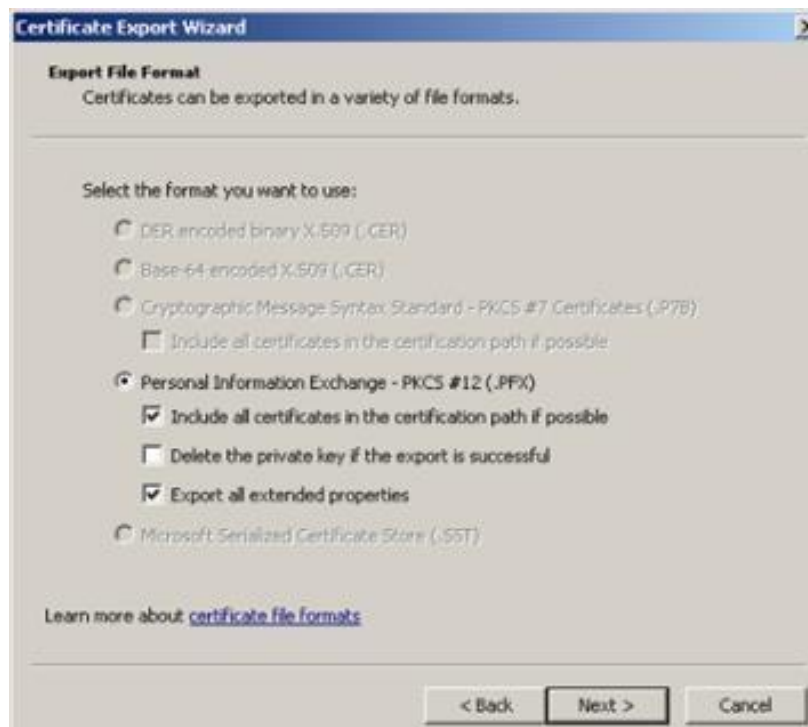


The signed certificate will be installed within the browser.



Export the certificate with its private key from the browser.







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[MySonicWall](#)

[Secure Mobile Access](#)

[Secure Wireless](#)

How to obtain certificates for VPN connections (Site to Site, GVC, L2TP)

 05/15/2019  1178  17232

DESCRIPTION:

Using digital certificates for authentication instead of preshared keys in VPNs is considered more secure. In SonicWall UTM devices, digital certificates are one way of authenticating two peer devices to establish an IPsec VPN tunnel. The other is IKE using preshared key. The KB article describes the method to configure WAN GroupVPN and Global VPN Clients (GVC) to use digital certificates for authentication before establishing an IPsec VPN tunnel.

Features of IKE Authentication with Certificates in SonicWall WAN GroupVPN and GVC.

- A digital certificate either obtained from a third party CA (like Verisign) or from a private CA (like Microsoft CA or OpenSSL) must be used for this configuration. Self-signed certificates are not supported.
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- Both peers must trust the issuer of the certificate. In other words, the CA certificate of the user certificate must be imported into the SonicWall as well as the remote GVC client.
- If a certificate has already been imported into the SonicWall signed by a 3rd party CA (for example, Versign), this can be selected in the WAN GroupVPN. The CA certificate must be imported into the GVC client.
- SonicWall supports digital certificates issued by different CAs to be imported into the SonicWall UTM device and the remote GVC client. SonicWall also supports forcing both peers to use certificates issued by the same CA.

RESOLUTION:

The certificate signing process described here is using a Windows Server 2008 CA. To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificate request, refer this Microsoft article: [How to configure a CA to accept a SAN attribute from a certificate request](#)

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Create a Certificate Signing Request (CSR) in the SonicWall

Login to the SonicWall management GUI

Navigate to the **System | Certificate** page.

Click on **New Signing Request** to create a similar CSR as under

Click on **Generate** to save.

Refresh the page.

Click on the download button to download the CSR.

Generate Certificate Signing Request

Certificate Alias:

Country:

State:

Locality, City, or County:

Company or Organization:

Department:

Group:

Team:

Common Name:

Subject Distinguished Name:

Subject Alternative Name (Optional):

Domain Name:

Subject Key Type: RSA

Subject Key Size:

Ready

System /

Certificates

Certificates and Certificate Requests

View Style: All certificates Imported certificates and requests Built-in certificates Include expired certificates

<input type="checkbox"/>	#	Certificate	Type	Validated	Expires
<input type="checkbox"/>	1	WANGroupVPN	Pending request		
<input type="checkbox"/>	2	hal-2010-SERVER2K8-CA	CA certificate		Sep 5 18:44:33 2016 GMT



```

-----BEGIN CERTIFICATE REQUEST-----
MIIBvDCCASUCAQAwUDELMAkGA1UEBhMCNU4xCzAJBgNVBAGTAKtBMQwwCgYDVQOH
EwNCTFIxDTALBgnVBAAoTBFNOV0wxZAVBgNVBAMTDnNvbmljbGFjLmV2FjFsMIGF
MA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQD00ZQj1s6tcw9B4AggEitw+/Z7AptQ
XoAAkenaoA6qk2LkJHtMXJF71I/x6MuxNEKK1h/+7vamhR+s7jdpV6+EsQj87Ky8
6waM8aP3Tsox19MeYI3DHqrGnE3csfQlIwrqgP1SPtCnWKL+itSMKMuNLcnTp2BH
2jm4QDqsK8VvbWIDAQABoCwwKgYJKoZIhvcNAQkOMR0wGzAZBgNVHREEEjAqgg5z
b25pY2xhyi5sb2NhbDANBgkqhkiG9w0BAQQFAA0BgQ8fZntCPIBCwAyYuEGNXE3W
JvukmCMZdERp76a6iBHNvjzv9Zvw+q9MdeUMSjn1URuj9t78JEN6fxyoDL7udsNe
8YIxpnz4CbfgaPR76HPyER2pg+ITUAJGgX4XBC5n03r1lzZYhN5Ja1+lR+84QD6n
5mzzCtDbuLy2l09Z310J4w==-----END CERTIFICATE REQUEST-----
  
```

Obtain a certificate using the Windows Server Certificate Enrollment Web Services

Obtain a certificate to use in WAN GroupVPN configuration

Open a browser and navigate to the Microsoft Windows Certificate Enrollment page: <http://CertSrv>

When prompted for authentication, enter username and password of Administrator.

Click on **Request a certificate**

Click on **advanced certificate request**.

Copy the contents of CSR in the Saved Request box.

Select Administrator under Certificate Template. Note: **User** or **Web Server** template also could be selected.

Under Attributes, either enter **san:dns=yourdomainname.com** or **san:email=<local-**

part@domain.com]. Note: To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificate request, refer this Microsoft article: [How to configure a CA to accept a SAN attribute from a certificate request](#)

Click on Submit and you will taken to the next page.

On this page click on **Download certificate** or **Download certificate chain** to save the signed certificate to disk.

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA

[Home](#)

Welcome

Use this Web site to request a certificate for your Web browser, e-mail client, or other program. By using a certificate, you can verify your identity to people you communicate with over the Web, sign and encrypt messages, and, depending upon the type of certificate you request, perform other security tasks.

You can also use this Web site to download a certificate authority (CA) certificate, certificate chain, or certificate revocation list (CRL), or to view the status of a pending request.

For more information about Active Directory Certificate Services, see [Active Directory Certificate Services Documentation](#).

Select a task:

[Request a certificate](#) ←

[View the status of a pending certificate request](#)

[Download a CA certificate, certificate chain, or CRL](#)

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA

[Home](#)

Request a Certificate

Select the certificate type:

[User Certificate](#)

Or, submit an [advanced certificate request](#). ←

Microsoft Active Directory Certificate Services - ha1-2010-SERVER2K8-CA Home

Submit a Certificate Request or Renewal Request

To submit a saved request to the CA, paste a base-64-encoded CMC or PKCS #10 certificate request or PKCS #7 renewal request generated by an external source (such as a Web server) in the Saved Request box.

Saved Request:

Base-64-encoded certificate request (CMC or PKCS #10 or PKCS #7):

```
-----BEGIN CERTIFICATE REQUEST-----
MIIBvDCCASUCAQAuUDELMAkGA1UEBhMCSU4xCzAJ
EwNCTFExDTALBgNVBaoTFNOVOwxFzAVBgNVBAMT
NAOGCSqGSIb3DQEBAQUAA4GNADCB1QKBgQD0OZQJ
XoAAkenaoA6qk2LkJHtMKJF71I/x6MuxNEKK1h/+
6WaM8aP3Tsox19MeYI3DHqrGnE3csfQ1IvrqgP1S
```

Certificate Template:

Administrator

Additional Attributes:

Attributes: san:dns=ha1-2010.local

Submit >

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA [Home](#)

Submit a Certificate Request or Renewal Request

To submit a saved request to the CA, paste a base-64-encoded CMC or PKCS #10 certificate request or PKCS #7 renewal request generated by an external source (such as a Web server) in the Saved Request box.

Saved Request:

Base-64-encoded certificate request (CMC or PKCS #10 or PKCS #7):

```
-----BEGIN CERTIFICATE REQUEST-----
MIIBvDCCASUCAQAwUDELMAkGA1UEBhMCSU4xCzAJ
EwNCTFIxDTALBgNVBAAoTBFNOV0wxFzAVBgNVBANT
MAOGCSqGSIb3DQEBAQUAA4GNADCBiQKBgQD0OZQJ
XoAAkenaoA6qk2LkJHtMXJF71I/x6MuxNEKK1h/+
6VaM8aP3Tsox19MeYI3DHqrGnE3csfQ1IvrqgP1S
-----
```

Certificate Template:

Administrator

Additional Attributes:


Attributes: san:email=Admin@hal-2010.local

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA [Home](#)

Certificate Issued

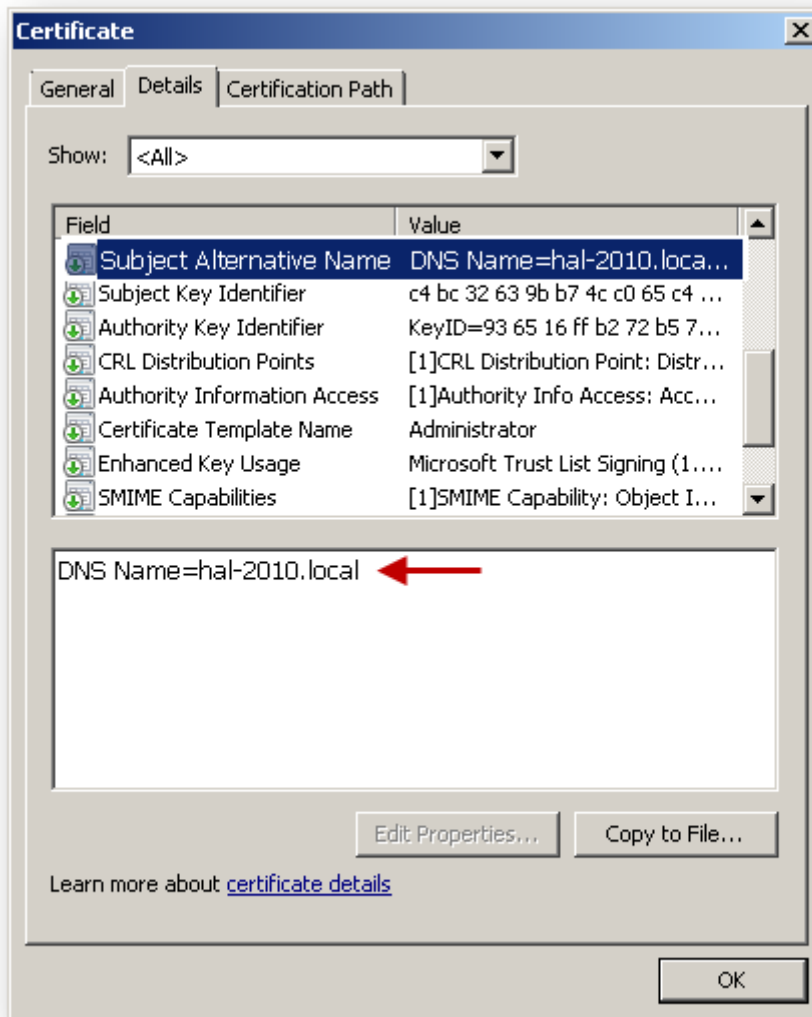
The certificate you requested was issued to you.

DER encoded or Base 64 encoded

 [Download certificate](#)

[Download certificate chain](#)

Below is an example of a signed certificate's Subject Alternative Name (SAN):



Download the CA certificate for the signed certificate.

Navigate to the Microsoft Windows Certificate Enrollment page: <http://CertSrv>

Click on **Download a CA certificate....**

On the next page, click on **Download CA certificate** and save the certificate to disk.

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA [Home](#)

Welcome

Use this Web site to request a certificate for your Web browser, e-mail client, or other program. By using a certificate, you can verify your identity to people you communicate with over the Web, sign and encrypt messages, and, depending upon the type of certificate you request, perform other security tasks.

You can also use this Web site to download a certificate authority (CA) certificate, certificate chain, or certificate revocation list (CRL), or to view the status of a pending request.

For more information about Active Directory Certificate Services, see [Active Directory Certificate Services Documentation](#).

Select a task:

[Request a certificate](#)

[View the status of a pending certificate request](#)

[Download a CA certificate, certificate chain, or CRL](#) ←

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA [Home](#)

Download a CA Certificate, Certificate Chain, or CRL

To trust certificates issued from this certification authority, [install this CA certificate](#).

To download a CA certificate, certificate chain, or CRL, select the certificate and encoding method.

CA certificate:

Current [hal-2010-SERVER2K8-CA]

Encoding method:

- DER
 Base 64

[Install CA certificate](#)

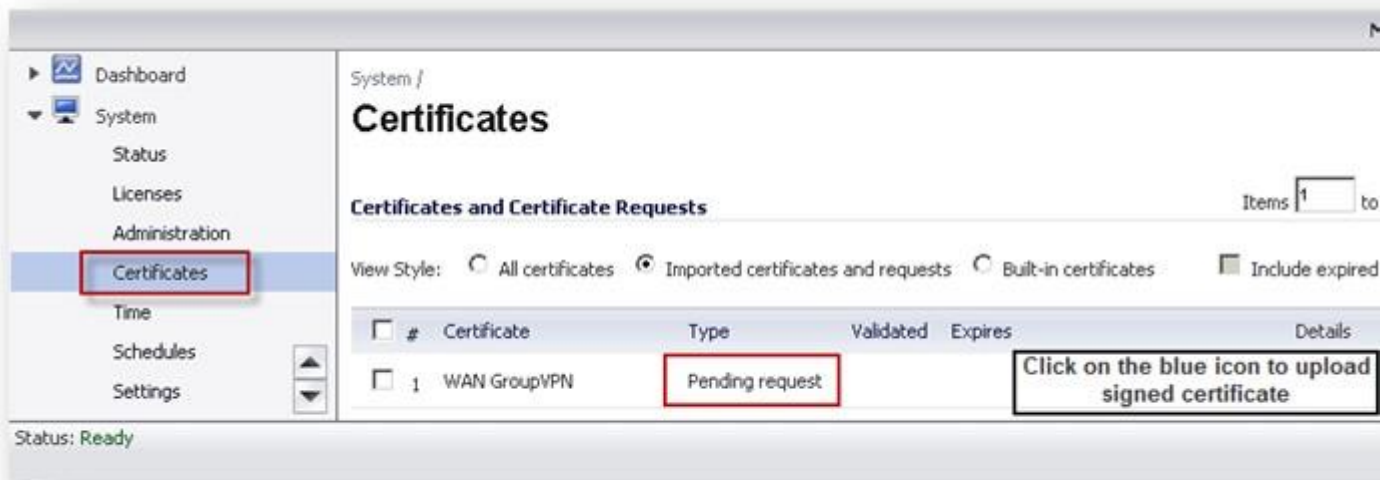
[Download CA certificate](#) ←

[Download CA certificate chain](#)

[Download latest base CRL](#)

[Download latest delta CRL](#)

Upload the signed certificate into the SonicWall via the upload button of the CSR pending request.



To establish trust and complete the validation of the signed certificate, import the CA certificate

Mode: Con

System /

Certificates

Certificates and Certificate Requests Items 1 to 1 (of 1)

View Style: All certificates Imported certificates and requests Built-in Include expired built-in certificates

<input type="checkbox"/>	#	Certificate	Type	Validated	Expires	Details
<input type="checkbox"/>	1	WAN GroupVPN	Local certificate	No	Oct 11 10:25:12 2013 GMT	

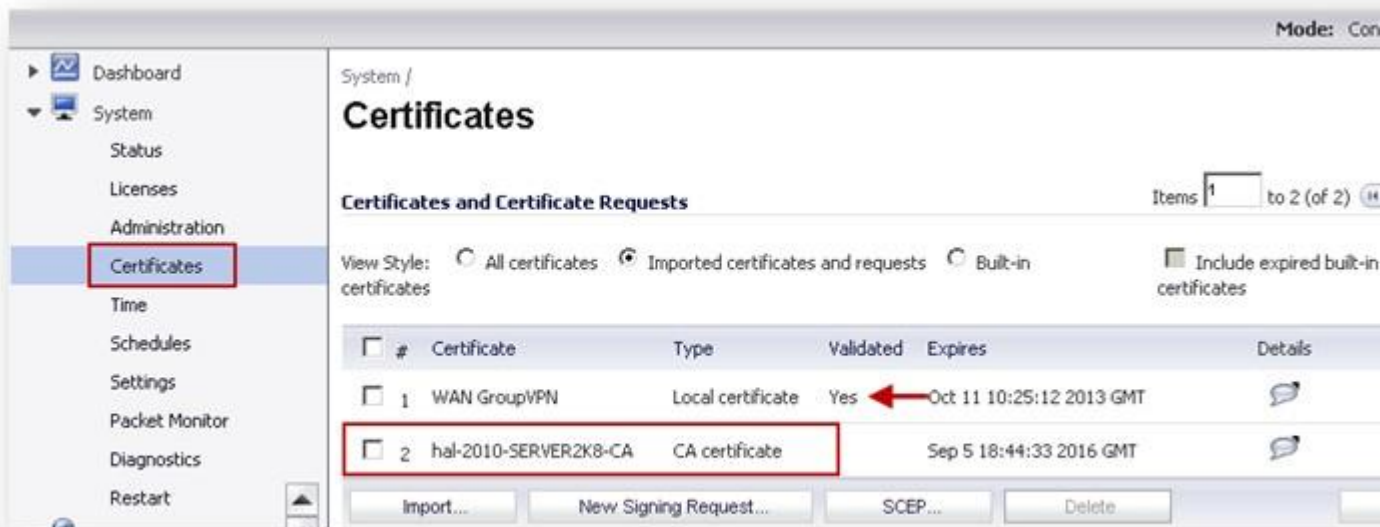
Status: The configuration has been updated.

Import Certificate

Import a local end-user certificate with private key from a PKCS#12 (.p12 or .pfx) encoded file
 Import a CA certificate from a PKCS#7 (.p7b), PEM (.pem) or DER (.der or .cer) encoded file

Please select a file to import: certnew (1).cer

Ready



Obtain a certificate for GVC clients.

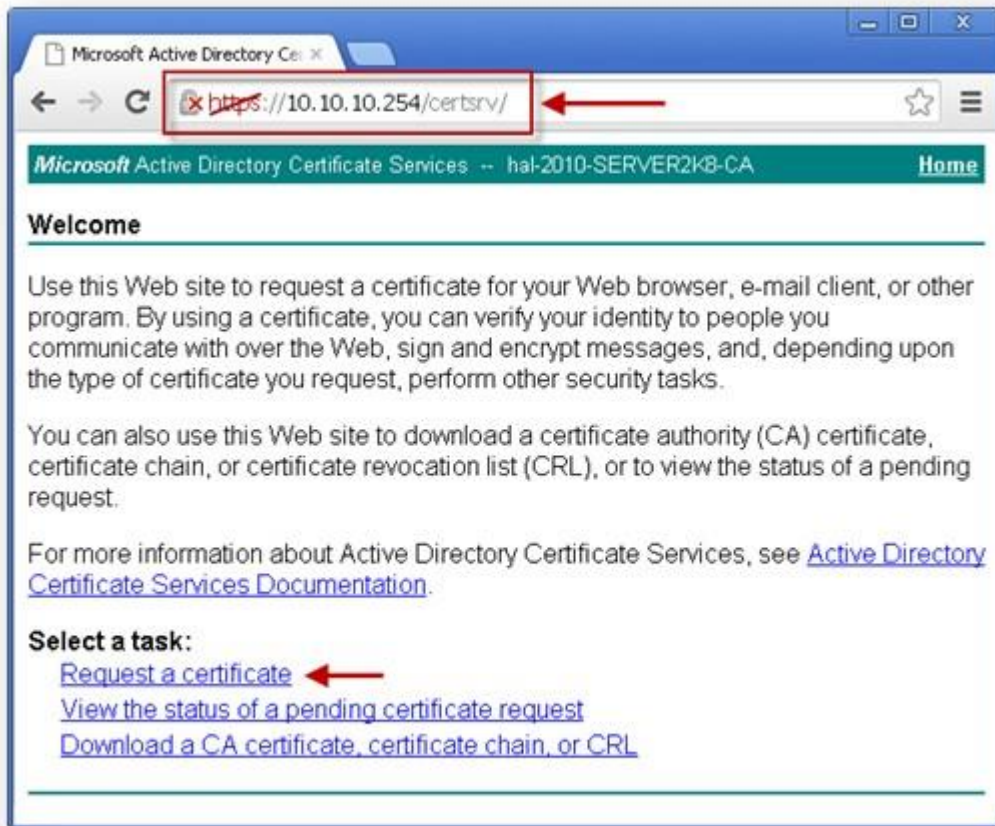
- Navigate to the Microsoft Windows Certificate Enrollment page: <http://CertSrv>
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- Click on **Request a certificate**
- Click on **advanced certificate request**.
- Select **Administrator** or **User** under **Certificate Template**.

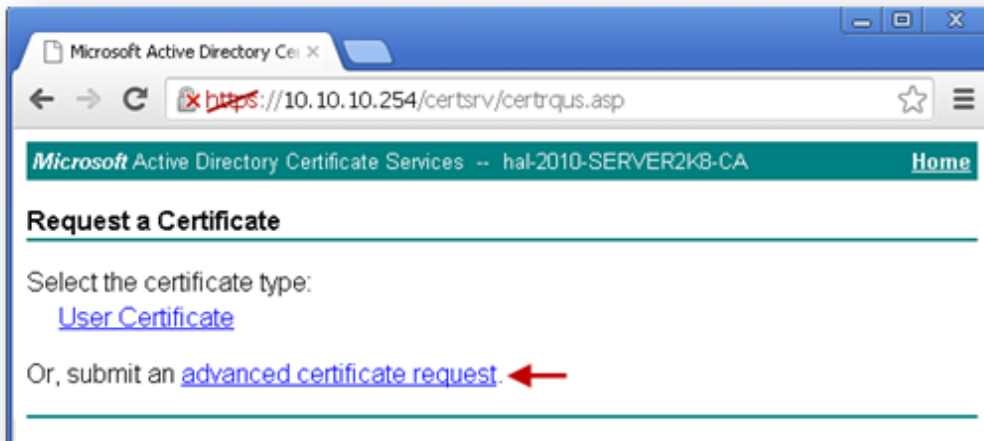
Note:

For Site to Site VPN or GVC, a certificate with **Key Usage**, if present, must have **Digital Signature** and/or **Non-Repudiation** and **Extended Key Usage (EKU)**, if present, with **Client Authentication** seems to work.

If, on the other hand, using L2TP/IPSec VPN, make sure, if **Key Usage** is present, to use **Digital Signature** and/or **Non-Repudiation**. The **Extended Key Usage (EKU)** field SHOULD NOT be used but, if present, may have **Encrypted File System (1.3.6.1.4.1.311.10.3.4)** and/or **IP Security End System (1.3.6.1.5.5.8.2.1)**.

- Under **Attributes**, either enter **san:dns=yourdomainname.com** or **san:email=<local-part@domain.com>**. Note: To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificate request.
- Click on **Submit** and you will be taken to the next page.
- On this page click on **Download certificate** or **Download certificate chain** to save the signed certificate to disk.





Certificate Template:

User

Key Options:

Create new key set Use existing key set

CSP: Microsoft Enhanced Cryptographic Provider v1.0

Key Usage: Exchange

Key Size: 1024 Min: 384 Max: 16384 (common key sizes: 512 1024 2048 4096 8192 16384)

Automatic key container name User specified key container name

Mark keys as exportable ←

Enable strong private key protection

Additional Options:

Request Format: CMC PKCS10

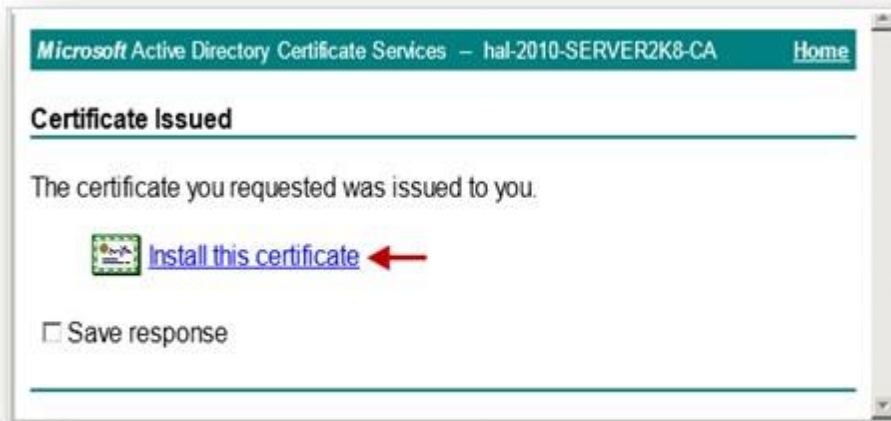
Hash Algorithm: sha1
Only used to sign request.

Save request

Attributes: san: dns=hal-2010.local ←

Friendly Name:

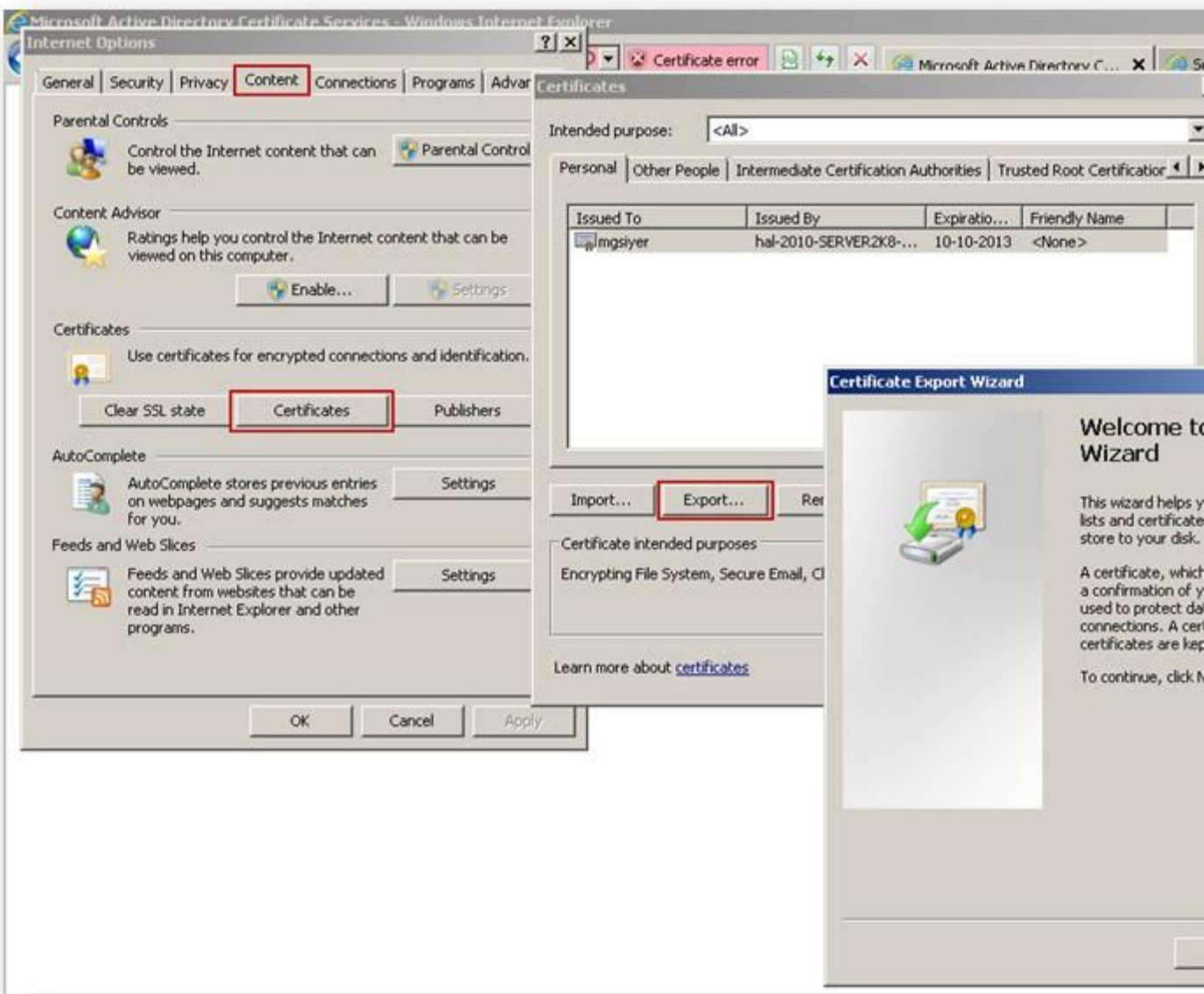
Submit >



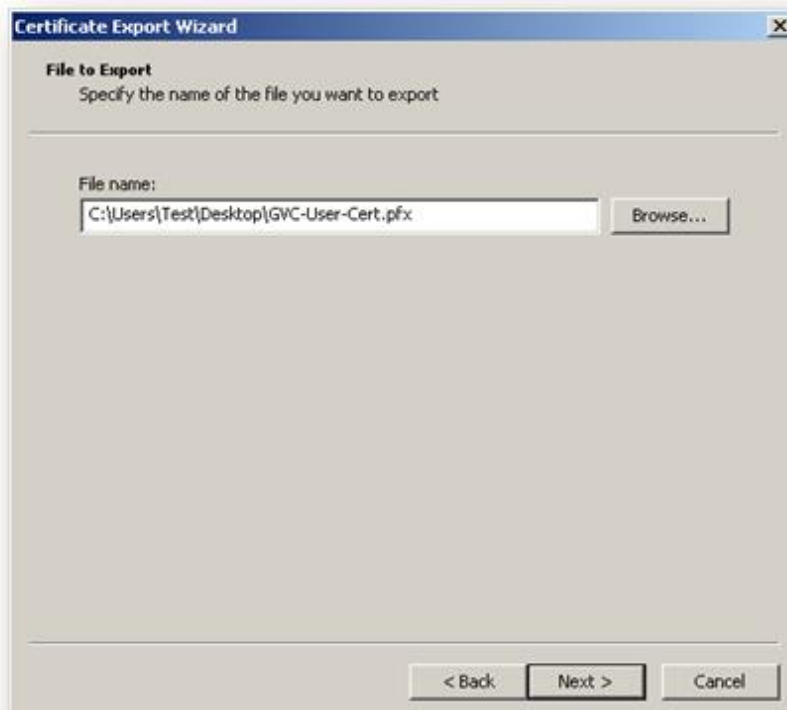
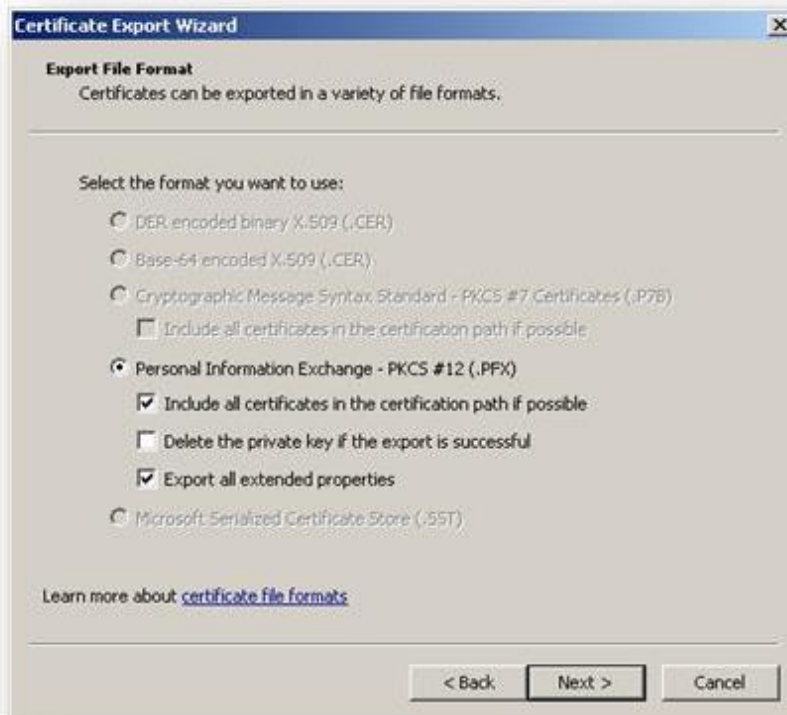
The signed certificate will be installed within the browser.



Export the certificate with its private key from the browser.









RESOLUTION FOR SONICOS 6.5 AND LATER

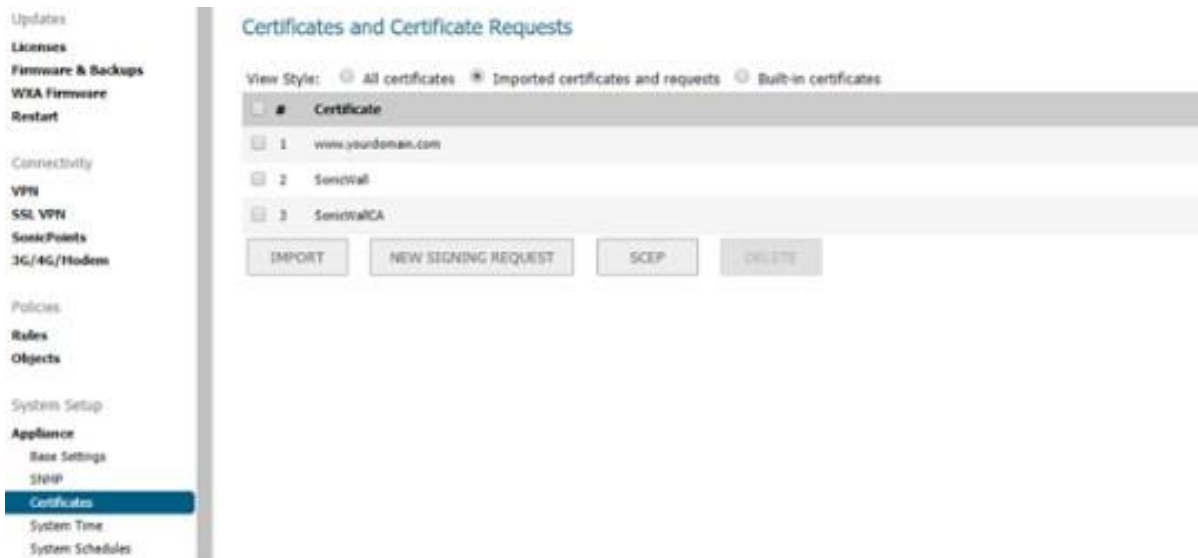
SonicOS 6.5 was released September 2017. This release includes significant user interface changes and many new features that are different from the SonicOS 6.2 and earlier firmware. The below resolution is for customers using SonicOS 6.5 and later firmware.

The certificate signing process described here is using a Windows Server 2008 CA. To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificate request, refer this Microsoft article: [How to configure a CA to accept a SAN attribute from a certificate request](#)

- [Create a Certificate Signing Request \(CSR\) in the SonicWall](#)
- [Get the CSR signed from the Windows Server Certificate Enrollment Web Services](#)
 - [Obtain a certificate to use in WAN GroupVPN configuration](#)
 - [Download the CA certificate for the signed certificate](#)
 - [Obtain a certificate for GVCclients.](#)

Create a Certificate Signing Request (CSR) in the SonicWall

Login to the SonicWall management GUI
Navigate to the **Manage | Appliance | Certificates**.



Click on **New Signing Request** to create a similar CSR as under
Click on **Generate** to save.
Refresh the page.

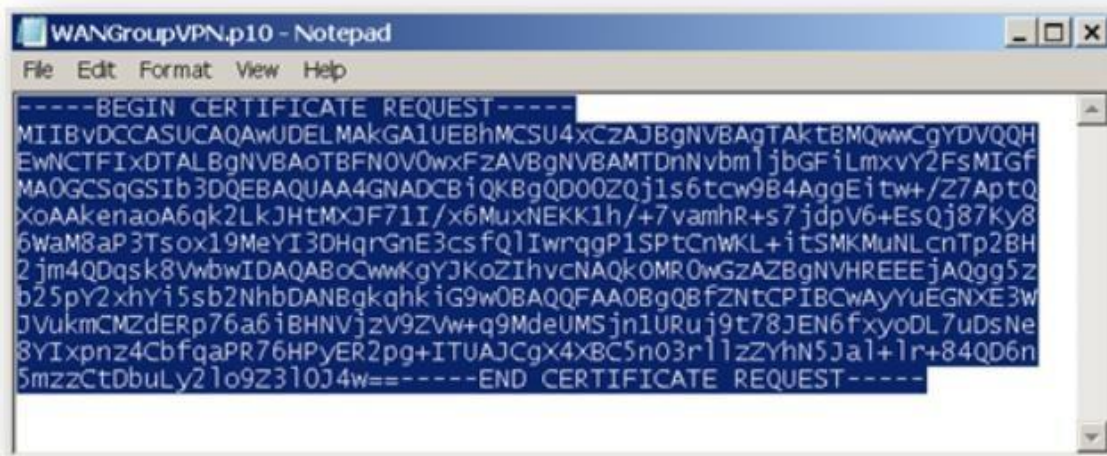
Generate Certificate Signing Request

Certificate Alias:	WANGroupVPN
Country	INDIA (IN)
State	KA
Locality, City, or County	BLR
Company or Organization	SNWL
Department	
Group	
Team	
Common Name	hal-2010.local
Subject Distinguished Name:	C=IN;ST=KA;L=BLR;O=SNWL;CN=hal-2010.local
Subject Alternative Name (Optional):	
Domain Name	
Signature algorithm:	SHA256
Subject Key Type:	RSA
Subject Key Size/Curve:	1024 bits

Ready

GENERATE CANCEL

Click on the download button to download the CSR.



Welcome

Use this Web site to request a certificate for your Web browser, e-mail client, or other program. By using a certificate, you can verify your identity to people you communicate with over the Web, sign and encrypt messages, and, depending upon the type of certificate you request, perform other security tasks.

You can also use this Web site to download a certificate authority (CA) certificate, certificate chain, or certificate revocation list (CRL), or to view the status of a pending request.

For more information about Active Directory Certificate Services, see [Active Directory Certificate Services Documentation](#).

Select a task:

- [Request a certificate](#) ←
- [View the status of a pending certificate request](#)
- [Download a CA certificate, certificate chain, or CRL](#)

Request a Certificate

Select the certificate type:

[User Certificate](#)

Or, submit an [advanced certificate request](#).

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA [Home](#)

Submit a Certificate Request or Renewal Request

To submit a saved request to the CA, paste a base-64-encoded CMC or PKCS #10 certificate request or PKCS #7 renewal request generated by an external source (such as a Web server) in the Saved Request box.

Saved Request:

Base-64-encoded certificate request (CMC or PKCS #10 or PKCS #7):

```

-----BEGIN CERTIFICATE REQUEST-----
MIIBvDCCASUCAQAwUDELMAkGA1UEBhMCSU4xCzAJ
EwNCTFIxDTALBgNVBaoTBFNOV0wxPzAVBgNVBANT
MAOGCSqGSIb3DQEBAQUAA4GNADCB1QKBgQD0OZQj
XoAAkenaoA6qk2LkJHt.MXJF71I/x6MuxNEKK1h/+
6WaM8aP3Tsox19MeYI3DHqrGnE3csfQ1IvrqgP1S
  
```

Certificate Template:

Administrator

Additional Attributes:

Attributes: san:dns=hal-2010.local

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2k8-CA [Home](#)

Submit a Certificate Request or Renewal Request

To submit a saved request to the CA, paste a base-64-encoded CMC or PKCS #10 certificate request or PKCS #7 renewal request generated by an external source (such as a Web server) in the Saved Request box.

Saved Request:

Base-64-encoded certificate request (CMC or PKCS #10 or PKCS #7):

```
-----BEGIN CERTIFICATE REQUEST-----
MIIBvDCCASUCAQAeUDELMAkGA1UEBhMCSU4xCzAJ
EwNCTFIxDTALBgNVBAoTBFNOVOwxFzAVBgNVBANT
MAOGCSqGSIb3DQEBAQUAA4GNADCBiQKBgQDOOZQJ
XoAAkenaoA6qk2LkJHtNXJF71I/x6MuxNEKK1h/+
6VaN8aP3Tsox19MeYI3DBqrGnE3csfQ1IvrqgP1S
```

Certificate Template:

Administrator

Additional Attributes:



Attributes: san:email=Admin@hal-2010.local

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2k8-CA [Home](#)

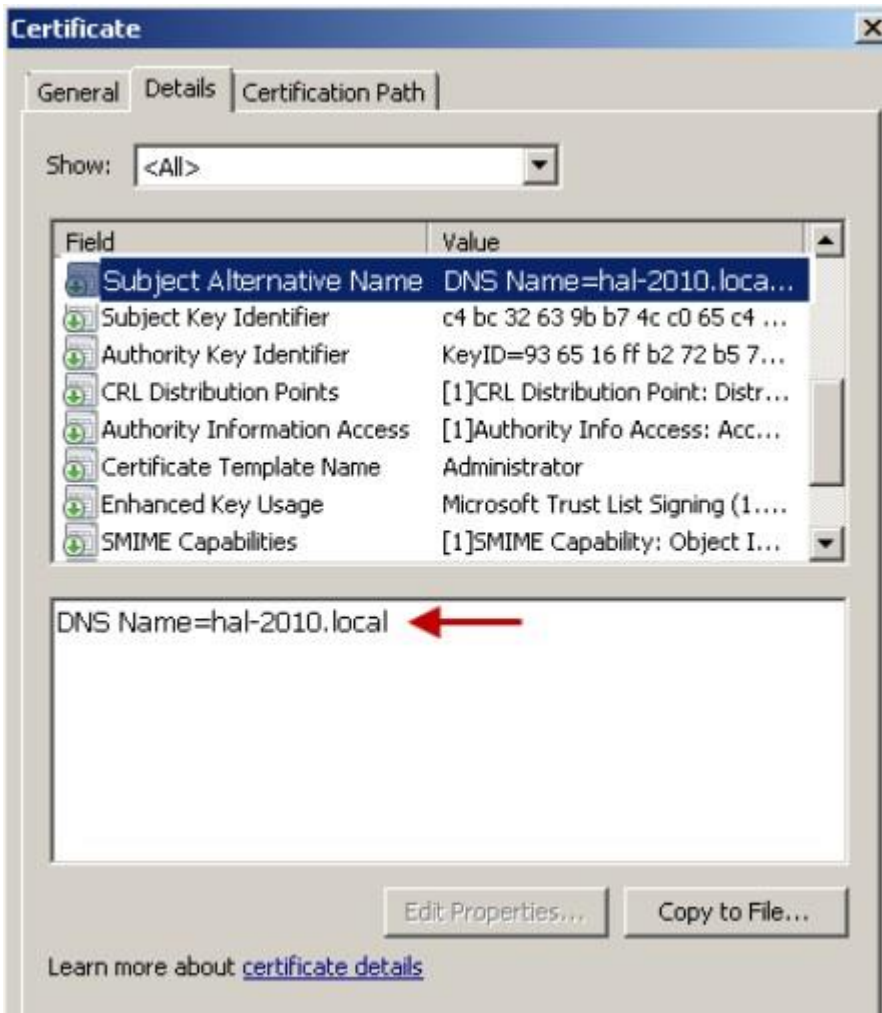
Certificate Issued

The certificate you requested was issued to you.

DER encoded or Base 64 encoded

 [Download certificate](#)
 [Download certificate chain](#)

Below is an example of a signed certificate's Subject Alternative Name (SAN):



Download the CA certificate for the signed certificate.

Navigate to the Microsoft Windows Certificate Enrollment page: <http://CertSrv>

Click on **Download a CA certificate....**

On the next page, click on **Download CA certificate** and save the certificate to disk.

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA

[Home](#)

Welcome

Use this Web site to request a certificate for your Web browser, e-mail client, or other program. By using a certificate, you can verify your identity to people you communicate with over the Web, sign and encrypt messages, and, depending upon the type of certificate you request, perform other security tasks.

You can also use this Web site to download a certificate authority (CA) certificate, certificate chain, or certificate revocation list (CRL), or to view the status of a pending request.

For more information about Active Directory Certificate Services, see [Active Directory Certificate Services Documentation](#).

Select a task:

[Request a certificate](#)

[View the status of a pending certificate request](#)

[Download a CA certificate, certificate chain, or CRL](#) ←

Microsoft Active Directory Certificate Services -- hal-2010-SERVER2K8-CA [Home](#)

Download a CA Certificate, Certificate Chain, or CRL

To trust certificates issued from this certification authority, [install this CA certificate](#).

To download a CA certificate, certificate chain, or CRL, select the certificate and encoding method.

CA certificate:

Current [hal-2010-SERVER2K8-CA] ▾

Encoding method:

DER
 Base 64

[Install CA certificate](#)
[Download CA certificate](#) ←
[Download CA certificate chain](#)
[Download latest base CRL](#)
[Download latest delta CRL](#)

Upload the signed certificate into the SonicWall via the upload button of the CSR pending request.

Certificates and Certificate Requests

View Style: All certificates Imported certificates and requests Built-in certificates Include expired built-in certificates

#	Certificate	Type	Validated	Expires	Details	Configure
1	www.yourdomain.com	Pending request				
2	WANGroupVPN	Pending request				
3	SonicWall	Local certificate	Yes	Aug 16 18:08:00 2018 GMT		

Upload Certificate - Google Chrome

https://10.10.10.1/certSignUpload.html

Upload Signed Certificate for Signing Request

Name: WAN GroupVPN
Subject Distinguished Name: C=IN;ST=KA;L=BLR;O=SNWL;CN=hal-2010.local
Subject Key Identifier: 0x930493642C9CB76D955064506F002BC4403E32C7
Status: Request Generated

Please select a file to upload: certnew.cer
 File should be PEM (.pem) or DER (.der or .cer) encoded

Ready

To establish trust and complete the validation of the signed certificate, import the CA certificate

Certificates and Certificate Requests

View Style: All certificates Imported certificates and requests Built-in certificates Include expired built-in certificates

#	Certificate	Type	Validated	Expires
1	www.yourdomain.com	Pending request		
2	WANGroupVPN	Pending request		
3	SonicWall	Local certificate	Yes	Aug 16 18:08:00 2018 GMT
4	SonicWallCA	CA certificate		Aug 16 17:44:00 2017 GMT

Import Certificate - Google Chrome

Not secure | https://10.61.130.57/certimport.html

SONICWALL® Network Security Appliance

Import Certificate

Import a local end-user certificate with private key from a PKCS#12 (.p12 or .pfx) encoded file
 Import a CA certificate from a PKCS#7 (.p7s), PEM (.pem) or DER (.der or .cer) encoded file

Certificate Name:

Certificate Management Password:

Please select a file to import: No file chosen

Ready

Import Certificate

- Import a local end-user certificate with private key from a PKCS#12 (.p12 or .pfx) encoded file
 Import a CA certificate from a PKCS#7 (.p7b), PEM (.pem) or DER (.der or .cer) encoded file

Please select a file to import:

 certnew (1).cer

Ready

Obtain a certificate for GVC clients.

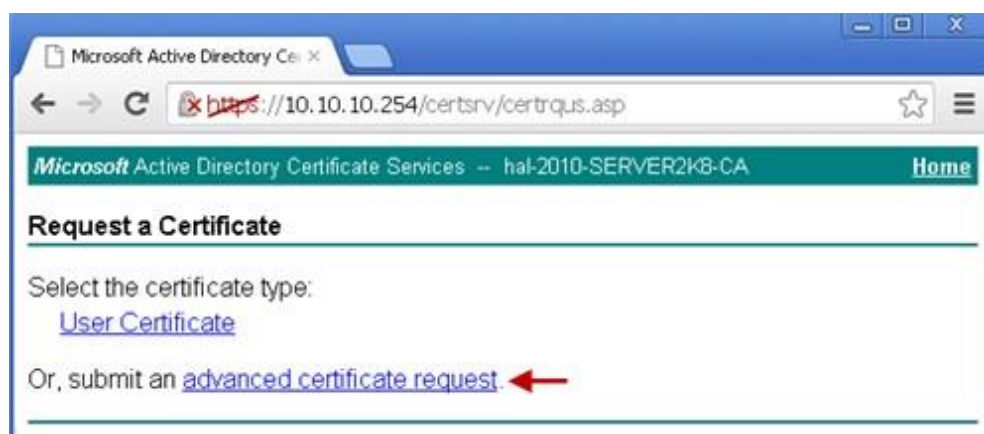
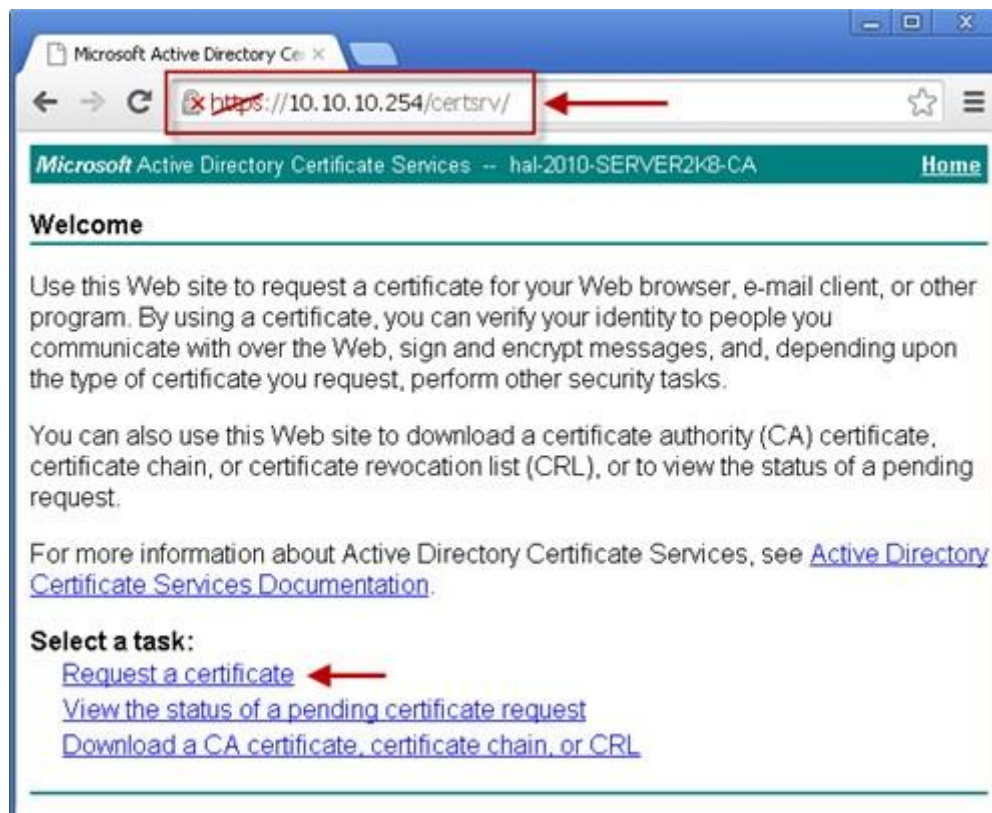
- Navigate to the Microsoft Windows Certificate Enrollment page: <http://CertSrv>
- When prompted for authentication, enter username and password of a Domain User.
- Click on **Request a certificate**
- Click on **advanced certificate request**.
- Select **Administrator** or **User** under **Certificate Template**.

Note:

For Site to Site VPN or GVC, a certificate with **Key Usage**, if present, must have **Digital Signature** and/or **Non-Repudiation** and **Extended Key Usage (EKU)**, if present, with **Client Authentication** seems to work.

If, on the other hand, using L2TP/IPSec VPN, make sure, if **Key Usage** is present, to use **Digital Signature** and/or **Non-Repudiation**. The **Extended Key Usage (EKU)** field SHOULD NOT be used but, if present, may have **Encrypted File System (1.3.6.1.4.1.311.10.3.4)** and/or **IP Security End System (1.3.6.1.5.5.8.2.1)**.

- Under **Attributes**, either enter **san:dns=yourdomainname.com** or **san:email=<local-part@domain.com>**. Note: To configure a Microsoft CA to accept a Subject Alternative Name attribute from a certificaterequest.
- Click on **Submit** and you will taken to the next page.
- On this page click on **Download certificate** or **Download certificate chain** to save the signed certificate to disk.



Certificate Template:

User

Key Options:

Create new key set Use existing key set

CSP: Microsoft Enhanced Cryptographic Provider v1.0

Key Usage: Exchange

Key Size: 1024 Min: 384 Max: 16384 (common key sizes: 512 1024 2048 4096 8192 16384)

Automatic key container name User specified key container name

Mark keys as exportable ←

Enable strong private key protection

Additional Options:

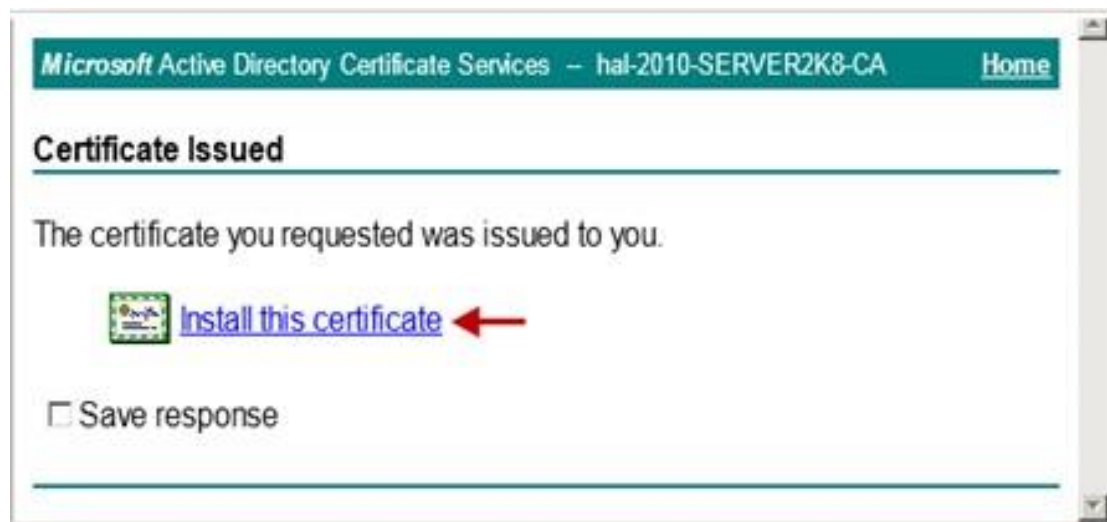
Request Format: CMC PKCS10

Hash Algorithm: sha1
Only used to sign request.

Save request

Attributes: san:dns=hal-2010.local ←

Friendly Name:



The signed certificate will be installed within the browser.



Export the certificate with its private key from the browser.

