Certificates

- How to Add the SAN to the Certificate Request

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certutil -setreg policy\EditFlags +EDITF_ATTRIBUTESUBJECTALTNAME2

net stop certsvc & net start certsvc

1. Using `certreq.exe` with a Configuration File

This method involves creating an `.inf` file to define the certificate request details.

Steps:

1. Create a configuration file (e.g., `request.inf`) with the following content:

   Plaintext

   Copy code

   ```
   [NewRequest]
   Subject = "CN=example.com"
   KeySpec = 1
   KeyLength = 2048
   Exportable = TRUE
   MachineKeySet = TRUE
   SMIME = FALSE
   PrivateKeyArchive = FALSE
   UserProtected = FALSE
   UseExistingKeySet = FALSE
   ```

```
ProviderName = "Microsoft RSA SChannel Cryptographic Provider"
ProviderType = 12
RequestType = PKCS10
KeyUsage = 0xa0

[Extensions]
2.5.29.17 = "{text}"
_continue_ = "DNS=example.com&DNS=www.example.com&DNS=api.example.com"
```

2. Run the following PowerShell command:

   Powershell

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   ```
   certreq -new request.inf request.csr
   ```

   This generates a Certificate Signing Request (CSR) file (`request.csr`).
3. Submit the CSR to your Certificate Authority (CA) to obtain the certificate.

2. Using the `Get-Certificate` Cmdlet

This method works if you have access to an Active Directory Certificate Services (AD CS) CA.

Example Script:

Powershell

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```
$SANs = @("DNS=example.com", "DNS=www.example.com", "DNS=api.example.com")
$CertRequest = @{
    DnsName = $SANs
    CertStoreLocation = "Cert:\LocalMachine\My"
    Template = "WebServer"  # Replace with your CA's template name
    CA = "CA_SERVER_NAME\CA_NAME"  # Replace with your CA details
}

Get-Certificate @CertRequest
```

This will request and install the SAN certificate directly from the specified CA.

3. Using a Custom PowerShell Script

You can also use a script to automate the process of generating a CSR with SANs. For example:

Powershell

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```
$SANs = @("DNS=example.com", "DNS=www.example.com", "DNS=api.example.com")
$Subject = "CN=example.com"
$CertFile = "C:\Path\To\request.csr"

$Config = @"
[NewRequest]
Subject = "$Subject"
KeySpec = 1
KeyLength = 2048
Exportable = TRUE
MachineKeySet = TRUE
RequestType = PKCS10
KeyUsage = 0xa0

[Extensions]
2.5.29.17 = "{text}"
_continue_ = "$(($SANs -join '&'))"
"@

Set-Content -Path "C:\Path\To\request.inf" -Value $Config
certreq -new "C:\Path\To\request.inf" $CertFile
```

This script dynamically generates the `.inf` file and creates the CSR.