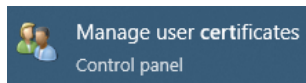
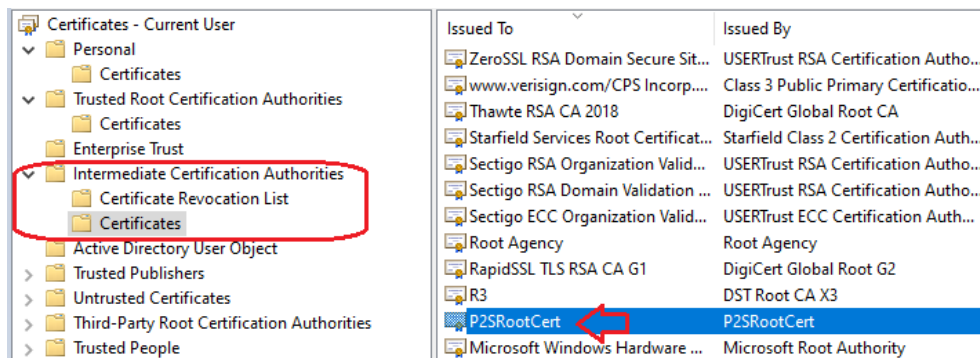
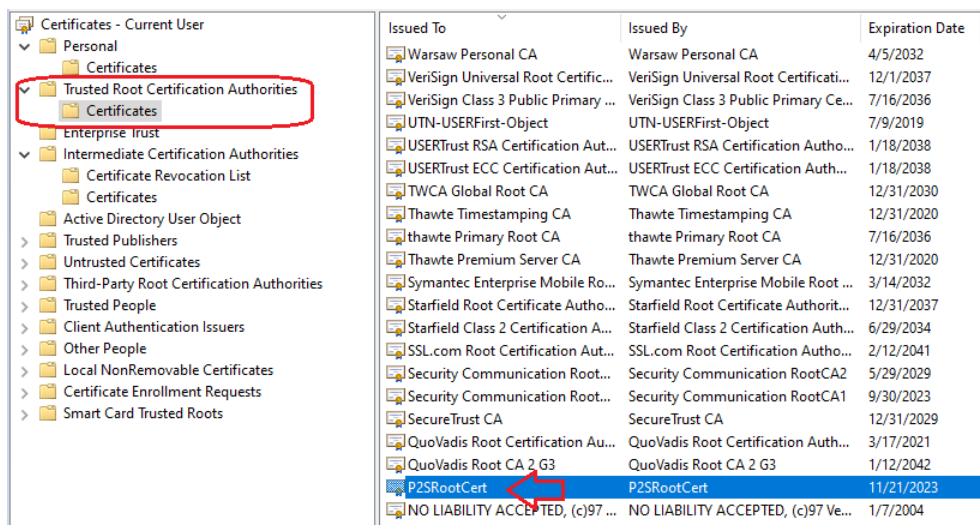
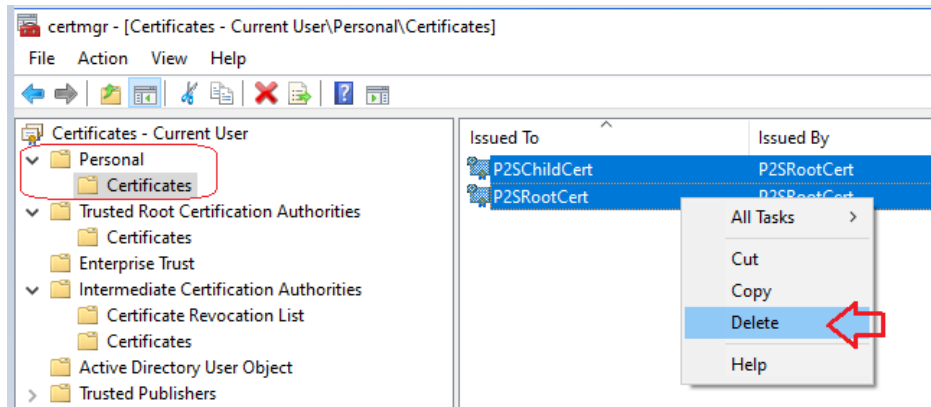


Antes de Criar Novos Certificados, **exclua os que já foram criados**

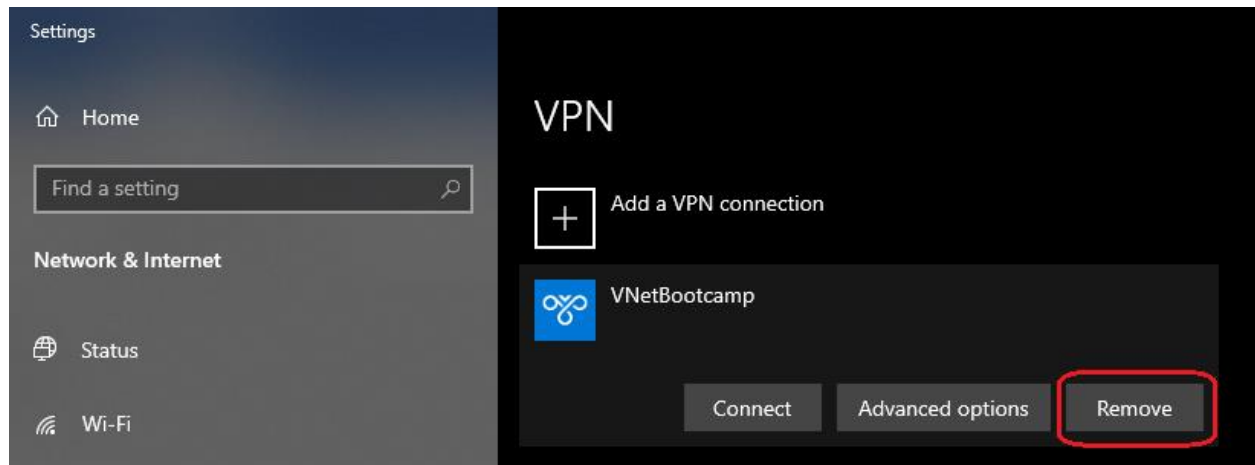
Acesse o Gerenciador de Certificado do Windows:



Verifique nestas 03 pastas e **exclua de todas:**

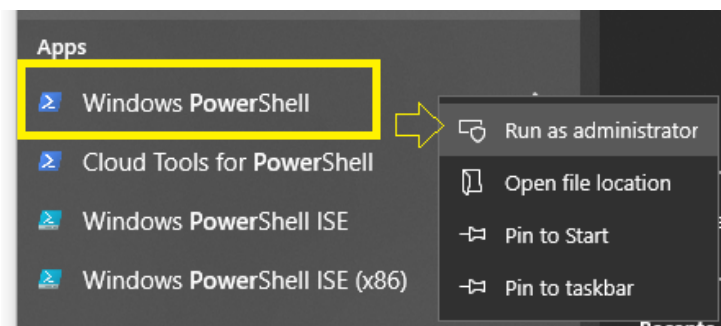


Remova aplicativo da VPN caso já exista:



Criar um Certificado Raiz (Root) Autoassinado

Abra o **PowerShell** no modo Administrador



```
$cert = New-SelfSignedCertificate -Type Custom -KeySpec Signature `
-Subject "CN=P2SRootCert" -KeyExportPolicy Exportable `
-HashAlgorithm sha256 -KeyLength 2048 `
-CertStoreLocation "Cert:\CurrentUser\My" -KeyUsageProperty Sign -KeyUsage CertSign
```

► **COPIE** o Código acima, **COLE** no terminal do PowerShell e pressione **ENTER**:

```
Administrator: Windows PowerShell

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

Loading personal and system profiles took 2326ms.
PS C:\Windows\system32> $cert = New-SelfSignedCertificate -Type Custom -KeySpec Signature `
>> -Subject "CN=P2SRootCert" -KeyExportPolicy Exportable `
>> -HashAlgorithm sha256 -KeyLength 2048 `
>> -CertStoreLocation "Cert:\CurrentUser\My" -KeyUsageProperty Sign -KeyUsage CertSign
>>
PS C:\Windows\system32>
```

Mantenha essa tela aberta para o próximo comando!

Gerar um Certificado do Cliente (Child)

```
New-SelfSignedCertificate -Type Custom -DnsName P2SChildCert -KeySpec Signature `
-Subject "CN=P2SChildCert" -KeyExportPolicy Exportable `
-HashAlgorithm sha256 -KeyLength 2048 `
-CertStoreLocation "Cert:\CurrentUser\My" `
-Signer $cert -TextExtension @("2.5.29.37={text}1.3.6.1.5.5.7.3.2")
```

► **COPIE** o Código acima, **COLE** no terminal do PowerShell e pressione **ENTER**:

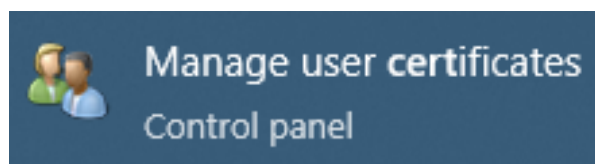
```
PS C:\Windows\system32> New-SelfSignedCertificate -Type Custom -DnsName P2SChildCert -KeySpec Signature `
>> -Subject "CN=P2SChildCert" -KeyExportPolicy Exportable `
>> -HashAlgorithm sha256 -KeyLength 2048 `
>> -CertStoreLocation "Cert:\CurrentUser\My" `
>> -Signer $cert -TextExtension @("2.5.29.37={text}1.3.6.1.5.5.7.3.2")
>>

PSParentPath: Microsoft.PowerShell.Security\Certificate::CurrentUser\My

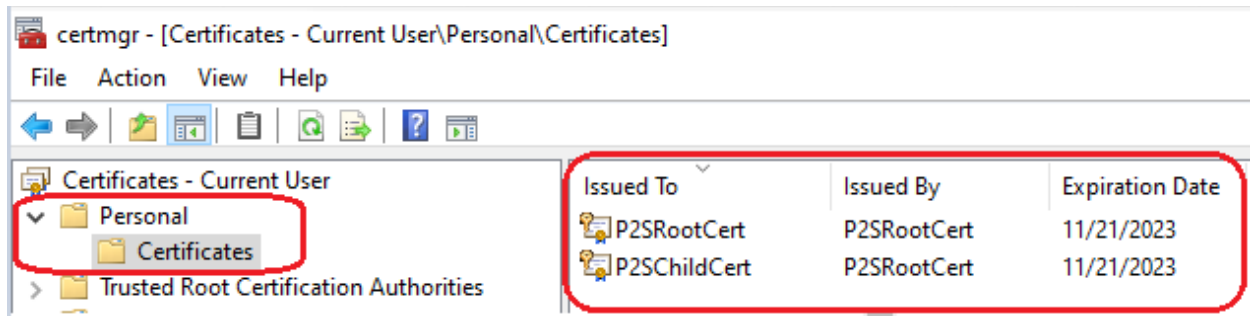
Thumbprint                               Subject
-----
EF607ED9272D8DF7A78D19E2990737FA087EB556  CN=P2SChildCert

PS C:\Windows\system32>
```

► Acesse o **Gerenciados de Certificados**



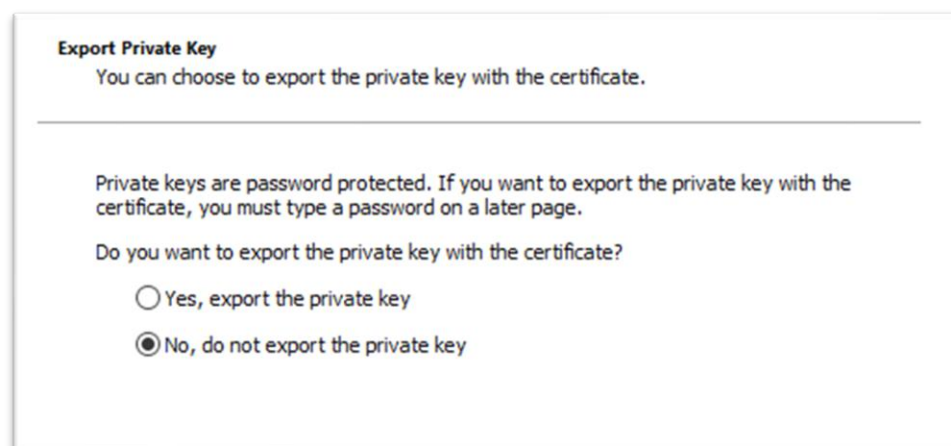
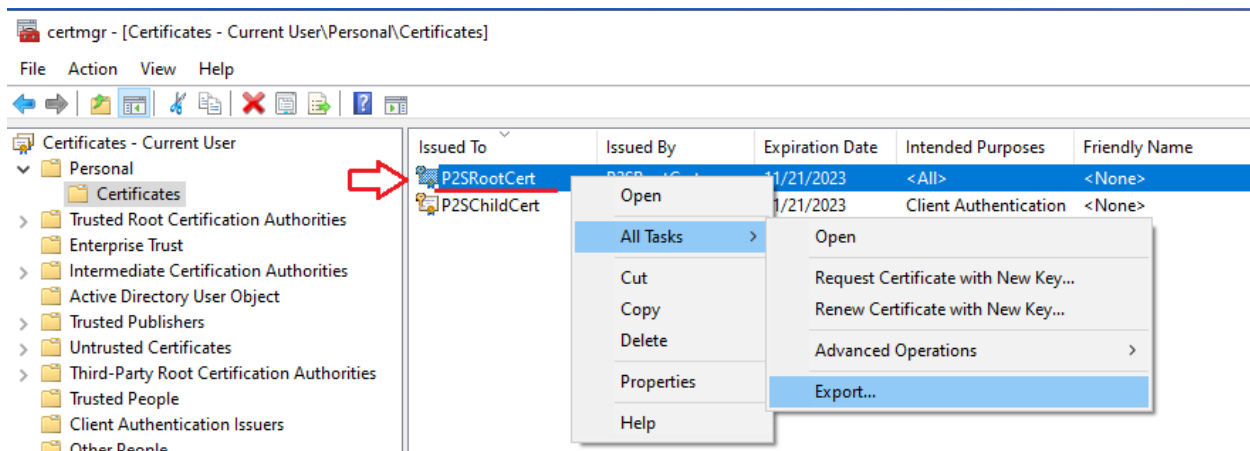
Observe que tanto o certificado “Root” quanto o certificado “Child”, foram criados.



Nos passos à seguir, iremos exportar para um arquivo, tanto o certificado **root**...

...quanto o **child** (esse será o certificado “cliente”)

Exportar Certificado Raiz [root] (.cer)



Select the format you want to use:

- ☐ DER encoded binary X.509 (.CER)
- ☒ 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
 - ☐ Enable certificate privacy
- ☐ Microsoft Serialized Certificate Store (.SST)

File to Export

Specify the name of the file you want to export

File name:

C:\Temp\Azure VPN Certificates\P2SRootCert.cer

Browse...

Completing the Certificate Export Wizard

You have successfully completed the Certificate Export wizard.

You have specified the following settings:

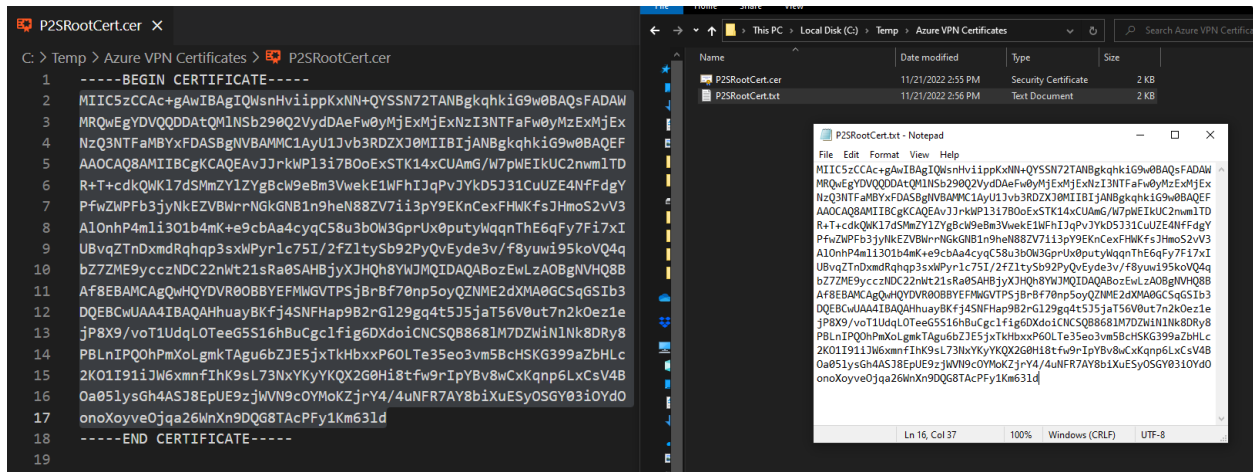
File Name	C:\Temp\Azure VPN Certificates\P2SRootCert.cer
Export Keys	No
Include all certificates in the certification path	No
File Format	Base64 Encoded X.509 (*.cer)

Finish

Cancel

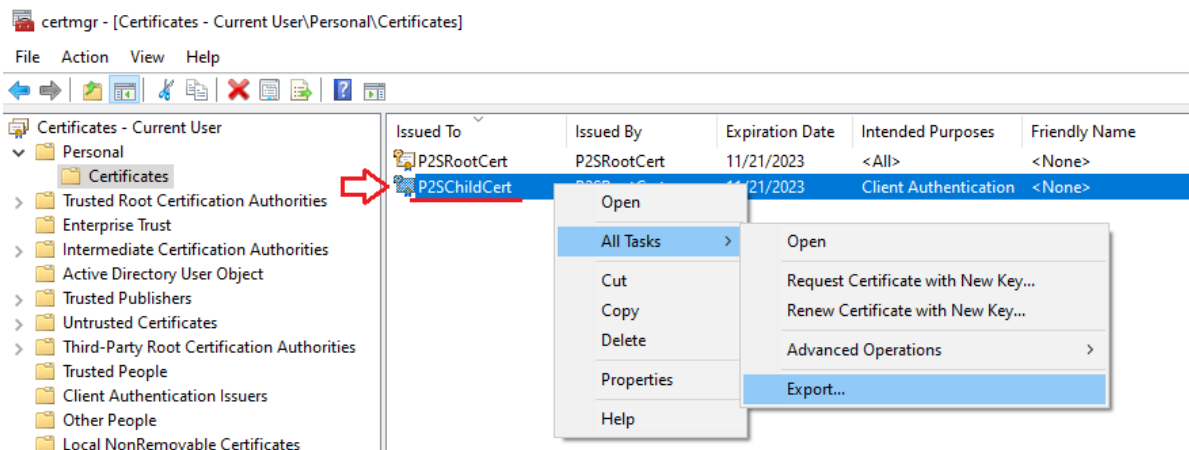
Abra o arquivo no Visual Code ou no Notepad++ e copie conteúdo para um arquivo TXT.

Essa chave pública, será usada na configuração da Virtual Network Gateway na Azure!



Você ignorar essa etapa acima e copiar o conteúdo do arquivo direto do VS Code | Notepad 😊

Exportar o certificado do cliente



Select the format you want to use:

- ☐ DER encoded binary X.509 (.CER)
- ☐ 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
 - ☒ Enable certificate privacy
- ☐ Microsoft Serialized Certificate Store (.SST)

► Senha: azurebootcamp

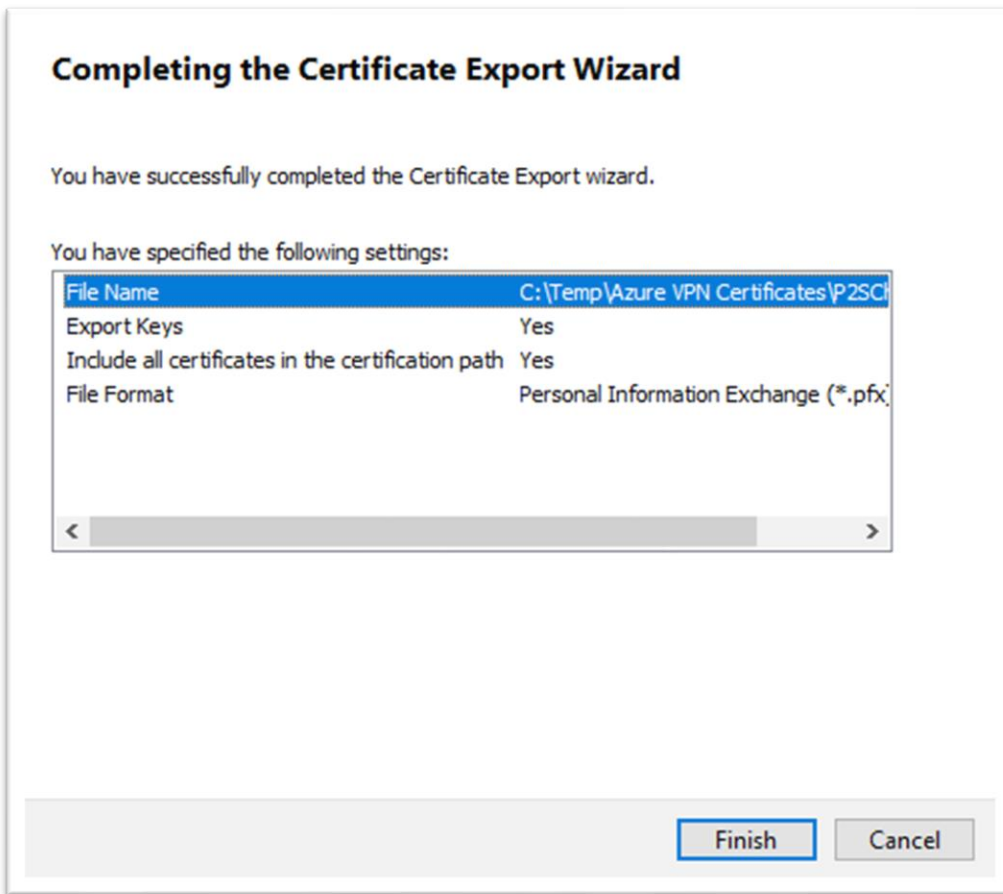
☒ Password: azurebootcamp

Confirm password: azurebootcamp

Encryption: TripleDES-SHA1 ▼

File to Export
Specify the name of the file you want to export

File name:



Na **Azure**, configure o “point-to-site”

Save
 Discard
 Delete
 Download VPN client

Address pool *

172.16.0.0/24

Tunnel type

IKEv2 and SSTP (SSL)

Authentication type

Azure certificate

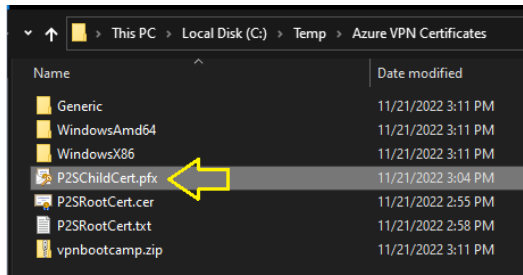
Root certificates

Name	Public certificate data
P2SRootCert	MIIC5zCCAc+gAwIBAgIQWsnHviippKxNN+QYSSN72TANBgqhkiC ...
	...

O passo a seguir só é necessário em **máquinas que não tenha o certificado cliente**.

Neste caso, como criamos ambos certificados, *não é necessário o procedimento!*

Instale o certificado cliente



Store Location

☒ Current User

☐ Local Machine

To continue, click Next.

Password:

azurebootcamp

☒ Display Password

Import options:

☐ 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.

☐ Protect private key using virtualized-based security(Non-exportable)

☒ Include all extended properties.

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:

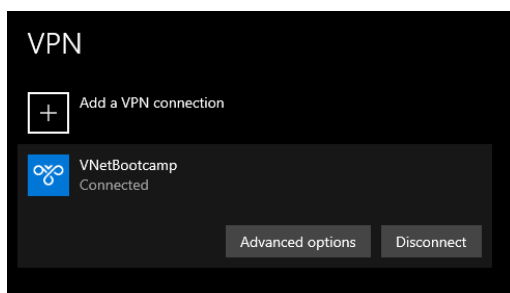
Browse...

Agora, só baixar, instalar, executar e se conectar! 🚀

Point-to-site configuration ☆ ...



Baixar e extrair os arquivos que farão a instalação do cliente da VPN.



Azure Documentation:

[Generate and export certificates for P2S: PowerShell - Azure VPN Gateway | Microsoft Learn](#)