# DigiCert® PKI Platform

Intune SCEP

June, 2022



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### Introduction

Microsoft Intune provides mobile device management and mobile application capabilities that let you determine the data different users in your organization can access. The integrated data protection and compliance capabilities define what users can do with the data within Microsoft Office and other mobile apps.

Integrating Microsoft Intune with DigiCert PKI Platform allows you to generate digital certificates that provide the trust without any usernames, passwords, or additional hardware tokens. In addition, DigiCert PKI Platform provides quick deployment and easy management and offers industry leading security that is unmatched by in-house PKI solutions.

The integration be accomplished using the Intune NDES connector (which implements DigiCert PKI Web Services APIs), and/or using Microsoft APIs.

The following tables shows the types of certificates that can be issued along with the integration method(s) for that type certificate.

Table 1	Certificate	Type	Integration	Method
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DigiCert Certificate Type	Microsoft Profile Type	Integration Method with DigiCert PKI Platform	Notes
Device Authentication	SCEP certificate	Microsoft API	This is a cloud-to-cloud integration.
	PKCS certificate	Microsoft NDES Connector	NDES connector runs on a Microsoft server machine that you host.
User Client Authentication	SCEP certificate	Microsoft API	This is a cloud-to-cloud integration.
	PKCS certificate	Microsoft NDES Connector	NDES connector runs on a Microsoft server machine that you host.
	SCEP certificate	Microsoft API	This is a cloud-to-cloud integration.

DigiCert Certificate Type	Microsoft Profile Type	Integration Method with DigiCert PKI Platform	Notes
S/MIME (Digital Signature only)			
	PKCS certificate	Microsoft NDES Connector	NDES connector runs on a Microsoft server machine that you host.
S/MIME (Encryption only)	PKCS imported certificate	Microsoft NDES (PFX) Connector	Intune does not support new enrollments/renewals of S/MIME escrowed certificates.
			This solution feature recovers previously issued S/MIME key/certificate in PKCS12 format with associated password and imports into Intune for onward provisioning.
Secure Email (S/MIME Signing and Encryption)	PKCS imported certificate	Microsoft NDES (PFX) Connector	Intune does not support new enrollments/renewals of S/MIME escrowed certificates.
			This solution feature recovers previously issued S/MIME key/certificate in
			PKCS12 format with associated password and imports into Intune for onward provisioning.

This document covers Microsoft Profile SCEP certificate types integrated using Microsoft APIs.

This document helps you integrate Microsoft Intune with DigiCert PKI Platform 8.20 to issue end-entity certificates to mobile devices for client authentication.

## **Prerequisites**

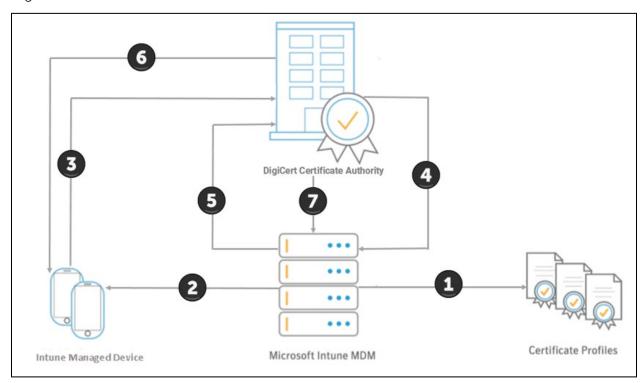
- Your Microsoft Azure tenant has Azure Active Directory services is enabled.
- Your Microsoft Intune account is configured for <u>Intune MDM Authority</u>.
- Your Microsoft Intune account is configured with an <u>Apple MDM Push Certificate</u>, if you will issue certificates to an Apple iOS device.

Your DigiCert PKI Platform account is enabled with the following DigiCert Certificate
Profile Templates and that you have at least one Seat allocated to the appropriate
Seat Pool for the type of certificate you want to issue:

DigiCert certificate Profile Template	Seat Pool Type
Generic Device Authentication for Intune	Device
Client Authentication for Intune	User
S/MIME (Digital Signature only) for Intune	User

## **Integration Overview**

The following illustration explains how Microsoft Endpoint Manager integrates with DigiCert PKI Platform via SCEP.



- 1. The Intune Administrator creates certificate templates in Microsoft Intune corresponding to the profiles created in DigiCert PKI Platform.
- 2. Microsoft Intune deploys the Device Configuration profiles (Trusted Certificate & SCEP types) to the specified group of endpoint devices.
- 3. DigiCert Certificate Authority validates the request with Intune.

- 4. Microsoft Intune provides the validation response to DigiCert PKI Platform SCEP service.
- 5. DigiCert Certificate Authority issues the certificate to the requesting device.
- 6. Finally, DigiCert Certificate Authority provides the confirmation message to Intune.

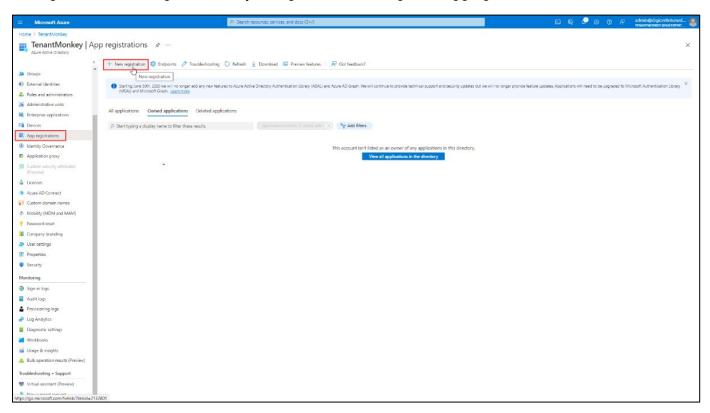
### Azure Active Directory App registration

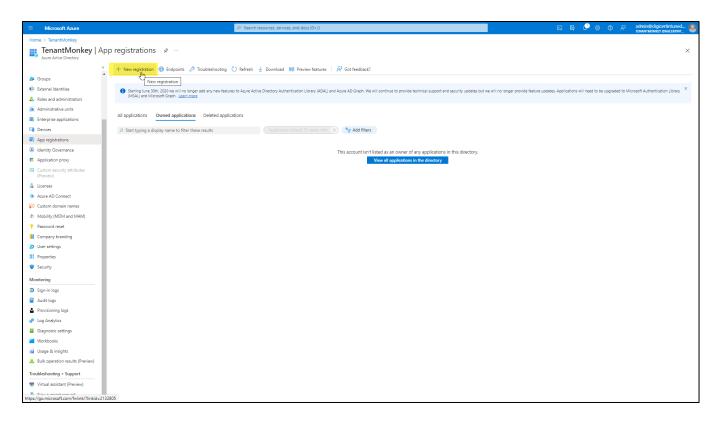
Create an application registration that DigiCert PKI Platform SCEP Service uses to communicate to Intune via APIs.

The goal of this procedure is to obtain **Application (client) ID**, **Client secret**, and **Tenant Name** which will be used to configure a DigiCert Certificate Profile in DigiCert PKI Manager.

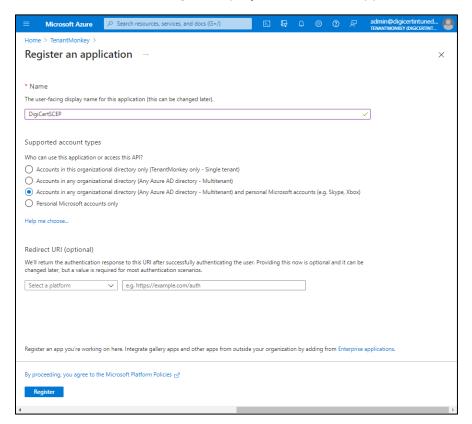
- 1. In the <u>Azure portal</u>, search for or select **Azure Active Directory** from any page.
- 2. Select App registrations, and then select New registration.

Note: If you create many DigiCert Certificate Profiles using Azure Auth, you can reuse this app registration for each profile, or you can create and use separate app registrations for higher security and granular auditing and logging.



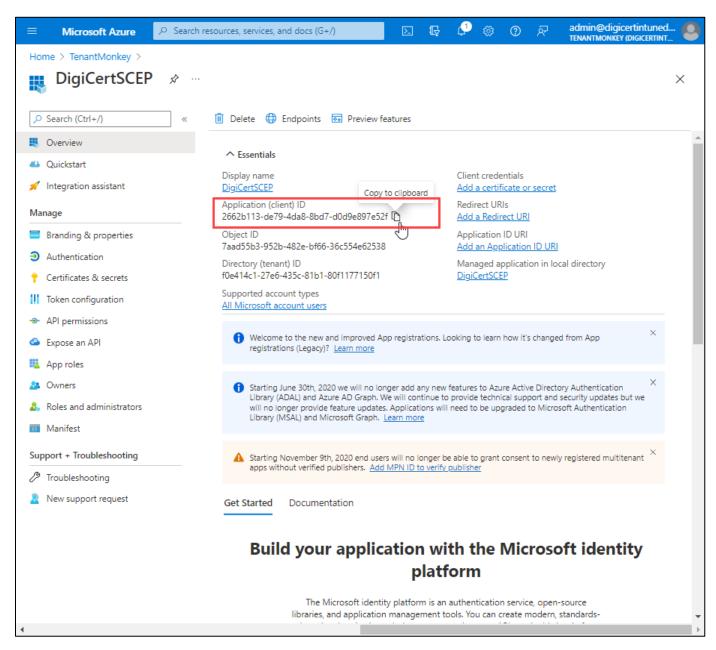


3. In the Name field, enter a meaningful display name for the application. Click Register.

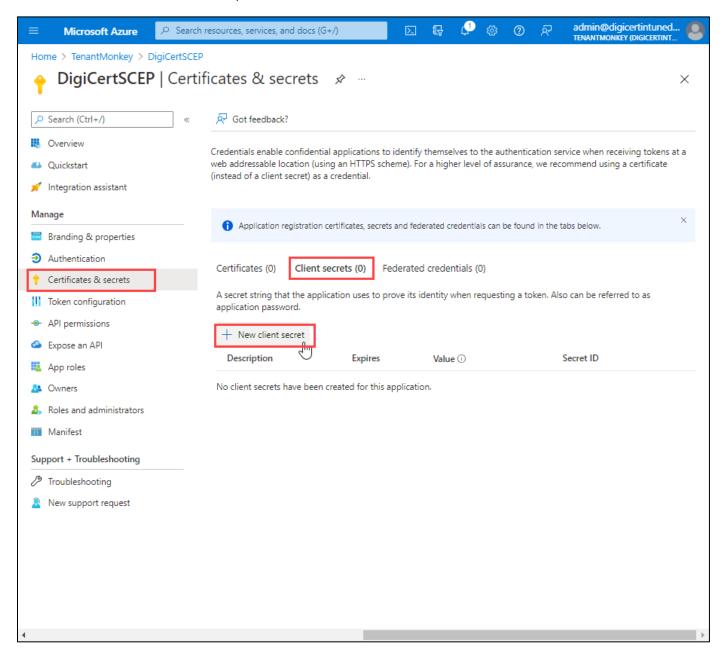


4. Copy and save the Application (client) ID value in a secure file for later use.

**Application (client) ID** will be used later when configuriing the DigiCert Certificate Profile in DigiCert PKI Manager.

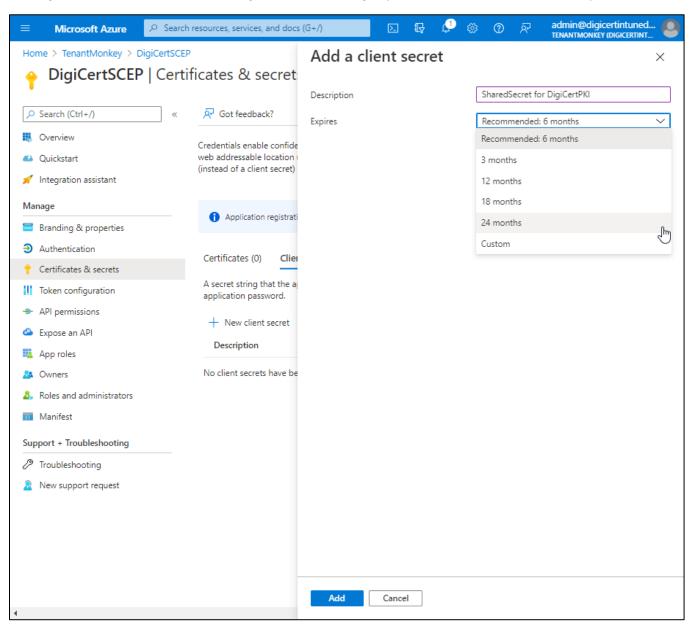


5. Select Certificates & secrets, and then select New client secret.



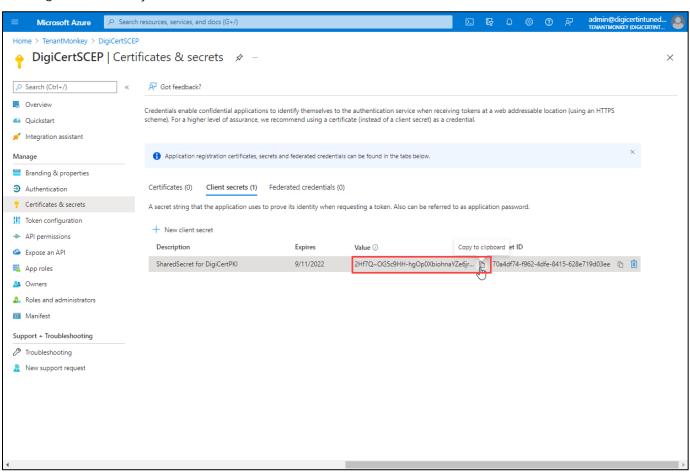
6. Enter a Description and select the desired expiration period for the client secret. Click Add.

Note: A new client secret will need to be created prior to expiration and updated in the DigiCert Certificate Profile in DigiCert PKI Manager portal to avoid service interruption.

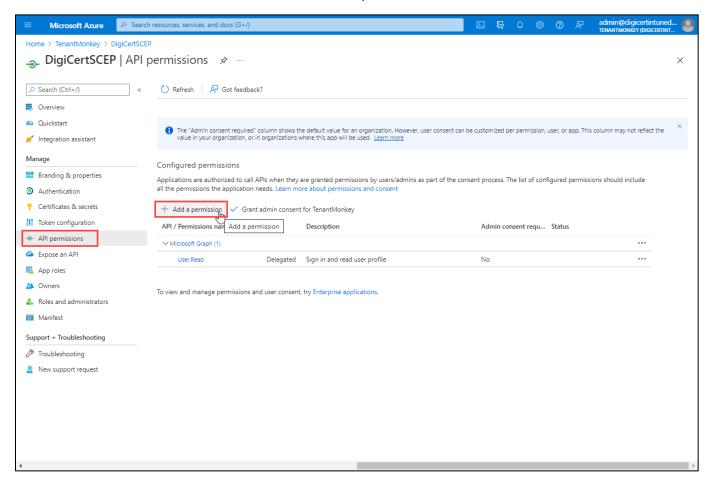


7. Copy and save the client secret Value in the same secure file as the previously saved Application (client) ID. **Client secret** will be used later when configuriing the DigiCert Certificate Profile in DigiCert PKI Manager.

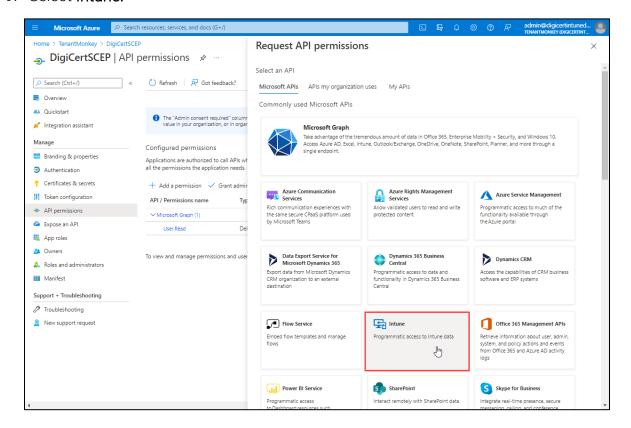
Note: The client secret Value cannot be viewed again once this view is closed. If you forget the value, you need to create a new client secret.



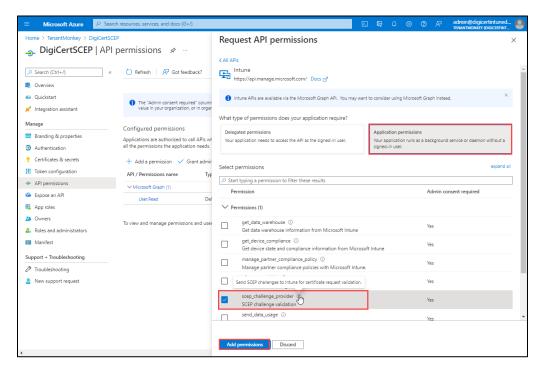
8. Select API Permissions, and then select Add a permission.



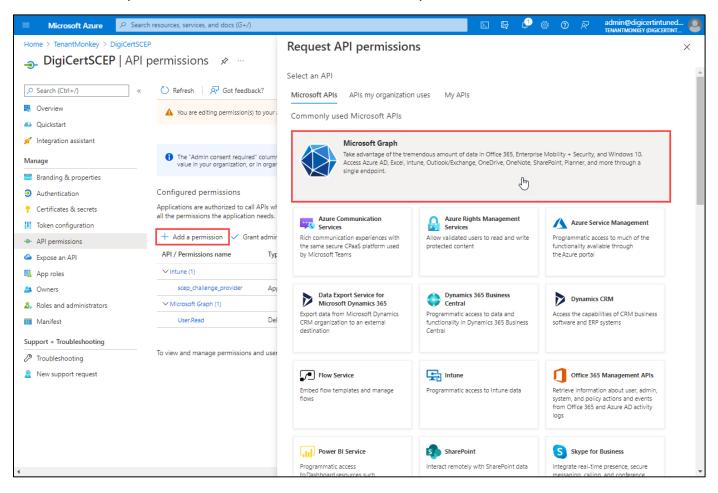
9. Select Intune.



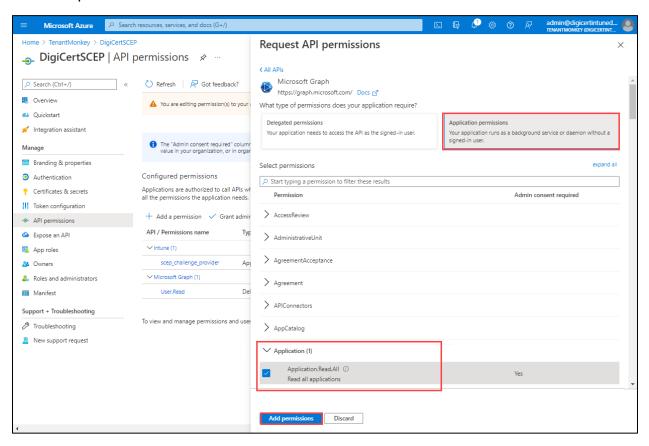
10. Select **Application permissions**, then select **scep\_challenge\_provider**. Select **Add permissions**.



11. Select Add a permission, and then select Microsoft Graph.



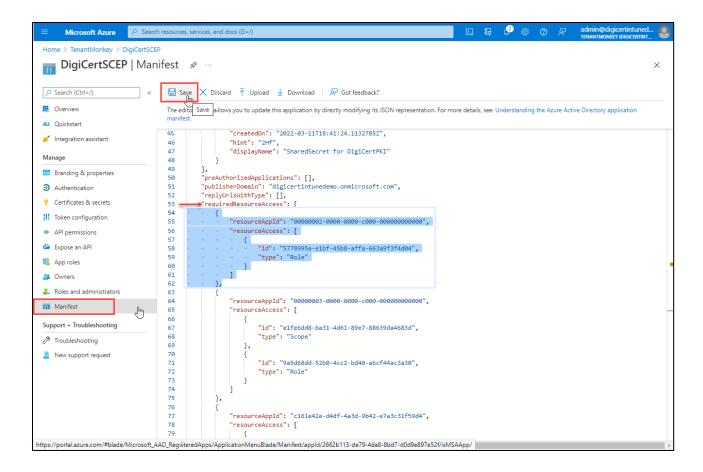
12. Select **Application permissions**, expand **Application**, check **Application**.**Read.All**, and then **Add permissions**.



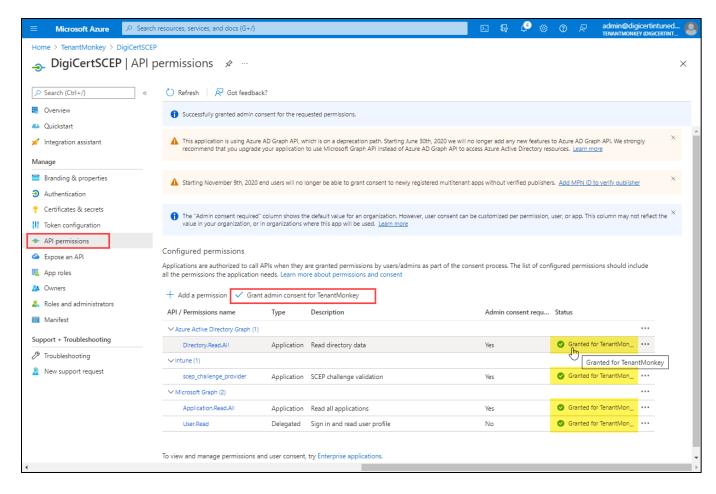
13. Select **Manifest** to modify and directly update the application JSON representation to enable **Azure AD Graph** API.

Note: Currently this integration also depends on the **Azure AD Graph** API, which is on a deprecation path and cannot be configured using the "Request API permission" GUI workflow. It is recommended that you download and save a backup of the Manifest JSON file prior to making any changes.

In the application manifest locate the "requiredResourceAccess" array and insert the following object as-is (which represents the Azure AD Graph API application role permissions), as shown in the screenshot and **Save**.



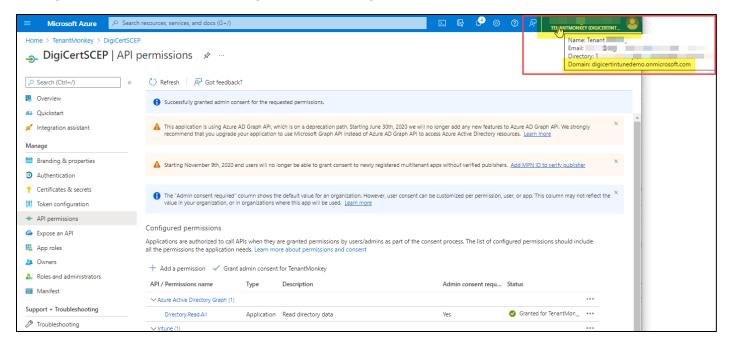
14. Select API permissions, and then select Grant admin consent for <TenantName>.



The app registration process in Azure AD is complete.

15. In the Azure Portal, in the upper right-hand corner, hovering over your user account displays the account details.

Note the **Azure account Domain** and save this as your *Tenant Name* along with the *Application (client) ID* and *Client secret*, as they will be used later when configuring the DigiCert Certificate Profile in DigiCert PKI Manager.



# Intune Device Profile and DigiCert Certificate Profile configurations for certificate use-cases

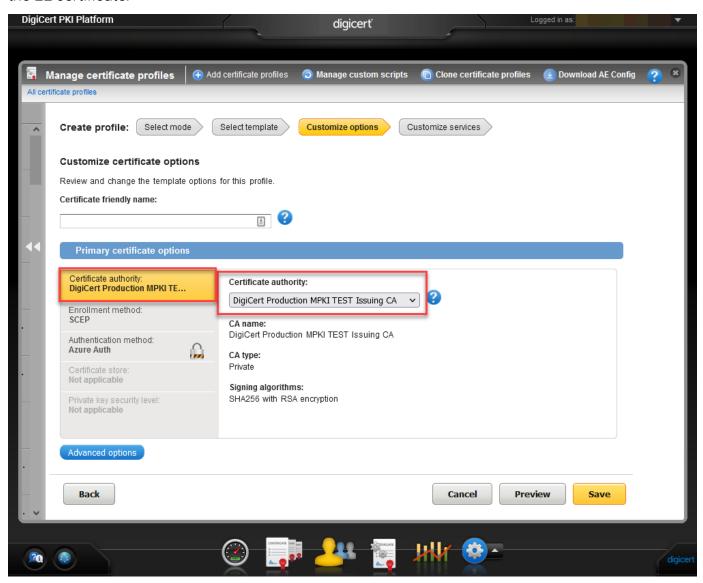
### Intune Trusted Certificate profile

The goal of this procedure is to provide the entire CA certificate chain to the targeted device platform(s).

When configuring a certificate profile in DigiCert PKI Manager, you will configure the issuer certificate authority (CA) that issues the end entity (EE) certificate to your target device or user. In addition to configuring the Intune Device Configuration profile for the SCEP certificate type, you will need to create one or more Trusted Certificate profiles for each certificate in the CA hierarchy that you are using. If you use an Online Root Issuing CA, then you will only need to create a Trusted Certificate Profile for that Root CA. If you have a multi-tier CA hierarchy, then you will also create a Trusted Certificate profile for each intermediate CA in the certificate hierarchy. Common CA hierarchies consist of a Root CA and a subordinate Intermediate Issuer CA.

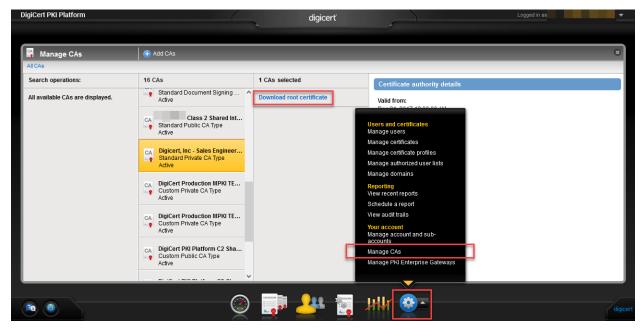
Download the CA certificates from DigiCert PKI Manager.

The DigiCert certificate profile configuration determines what CA you are using to issue the EE certificate.

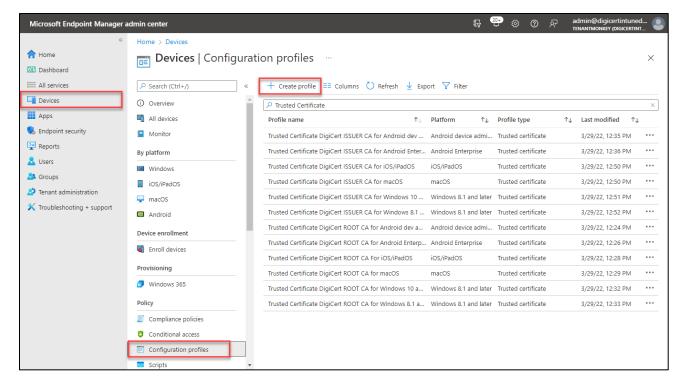


Download CA certificate files from DigiCert PKI Manager Manage CAs.

Note: The example shows **Download root certificate**. You should also **Download intermediate certificates** as appropriate to your specific CA hierarchy.



1. In <u>Microsoft Endpoint Manager admin center</u>, select **Devices**, and then select **Configuration profiles**, and then **Create profile** 



2. Configure the desired platform of the devices that will receive the profile and select Trusted Certificate from the drop-down or from the Templates list. For detailed steps refer to Create trusted certificate profiles in Microsoft Intune | Microsoft Docs.

Note: When configuring **Windows** platform devices **Destination Store**, select **Root** store for Root CA and Intermediate store for Intermediate/Issuer CA.

### **SCEP Certificate Configuration**

The goal of this procedure is to configure a **DigiCert Certificate Profile** which will work in conjunction with an **Intune Device configuration profile**.

DigiCert Certificate Profile Template	Seat Pool Type
Generic Device Authentication for Intune	Device
Client Authentication for Intune	User
S/MIME (Digital Signature only) for Intune	User

In all cases configure the DigiCert Certificate Profile with:

- Enrollment Method: SCEP
- Authentication Method: Azure Auth

For **Azure Auth** settings, use the values obtained in Azure Active Directory App registration for:

- Application (client) ID
- Client secret
- Tenant Domain Name

Once the DigiCert Certificate Profile is created, you will configure a corresponding Intune Device configuration profile with the required values, settings, and the **DigiCert SCEP URL** for the specific certificate profile.

Note: The format of the SCEP URL that is consumed by the targeted device platforms varies.

The following table describes the form of the SCEP URL to be used by Intune supported device platforms:

Table 2 SCEP URL Form

Target Device Platform	DigiCert SCEP Service Endpoint URL Form	Example
iOS/iPadOS Android macOS	Use the default SCEP service endpoint as displayed in the DigiCert Certificate Profile  http:// <host>/scep/&lt; Certificate Profile OID&gt;/cgi-bin/pkiclient.exe</host>	http://pki-scep.symauth.com/scep/2.16.840.1.113733.1.16.1.4.nn.n.n.nnnnnnnn/cgi-bin/pkiclient.exe
Windows (User Store)	HTTPS required      Do not include     "/pkiclient.exe" in URL  https:// <host>/scep/<certificate.profile.oid>/cgibin</certificate.profile.oid></host>	https://pki-scep.symauth.com/scep/2.16.840.1.113733.1.16.1.4. nn.n.n.nnnnnnnn/cgi-bin
Windows (Computer Store)	HTTPS supported but not required      Do not include     "/pkiclient.exe" in URL  http:// <host>/scep/<certificate.profile.oid>/cgi-bin  or  https://<host>/scep/<certificate.profile.oid>/cgi-bin  bin</certificate.profile.oid></host></certificate.profile.oid></host>	http://pki- scep.symauth.com/scep/2.16.840.1.113733.1.16.1.4. nn.n.n.nnnnnnnn/cgi-bin  Or https://pki- scep.symauth.com/scep/2.16.840.1.113733.1.16.1.4. nn.n.n.nnnnnnnnn/cgi-bin

Other DigiCert PKI use-case specific information can be found in the following sections and should be used in conjunction with Microsoft docs <u>Use SCEP certificate profiles with Microsoft Intune | Microsoft Docs</u>.

The general workflow for creating an Intune Device configuration profile consists of the following sections:

- 1. Basics
- 2. Configuration settings
- 3. Assignments
- 4. Applicability Rules (Applies to Windows 10/11 only)

The following sections in this guide focus on the **Configuration settings** which determine the certificate details that work in conjunction with the corresponding DigiCert Certificate Profile

For other non-certificate related aspects, refer to Microsoft Documentation.

- Configure device settings | Microsoft Docs
- Create and assign SCEP certificate profiles in Intune | Microsoft Docs
- Assign user and device profiles in Microsoft Intune | Microsoft Docs
- Applicability Rules | Microsoft Docs

#### **Device Authentication**

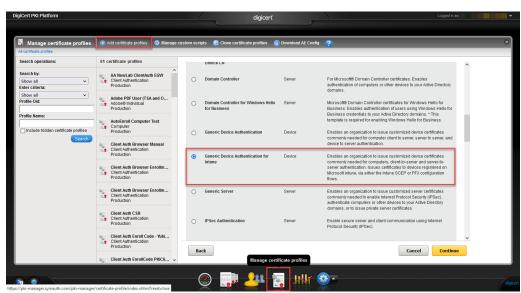
Device certificates contain identity information commonly needed for computer client to server, server to server, and device to server authentication. This type of certificate is issued from DigiCert PKI Platform using the Certificate Profile Template **Generic Device Authentication for Intune** which consumes Seats from your accounts Device Seat Pool.

The following is just an example of a typical certificate configuration and may not meet your specific application requirements.

You should configure the profiles to meet the technical x.509 certificate profile requirements of your 3<sup>rd</sup>-party relying PKI application as well as abiding by any other IT practices, conventions, and certificate policies.

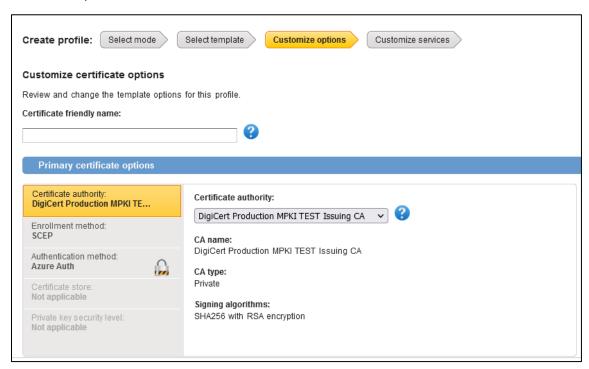
### DigiCert Certificate Profile

1. In DigiCert PKI Manager select Manage certificate templates, then Add certificate profiles, and select Generic Device Authentication for Intune template.

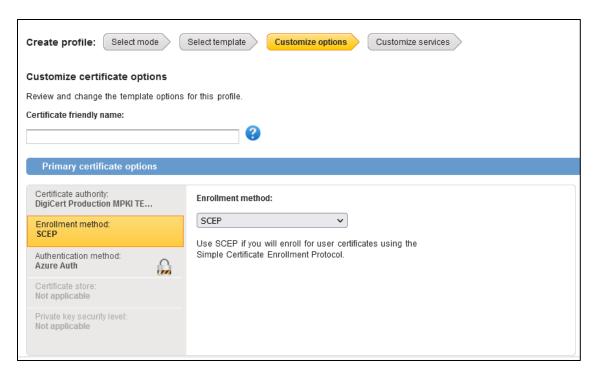


2. Enter a Certificate friendly name. In Primary certificate options, select the Certificate authority.

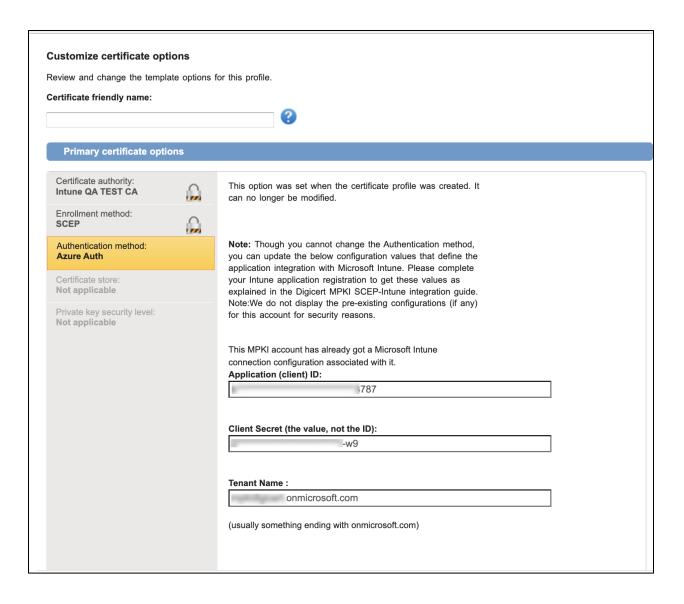
Note: The **CA Name** is the Issuer CA you download when configuring **Intune Trusted Certificate profile**.



3. Select Enrollment method: SCEP.



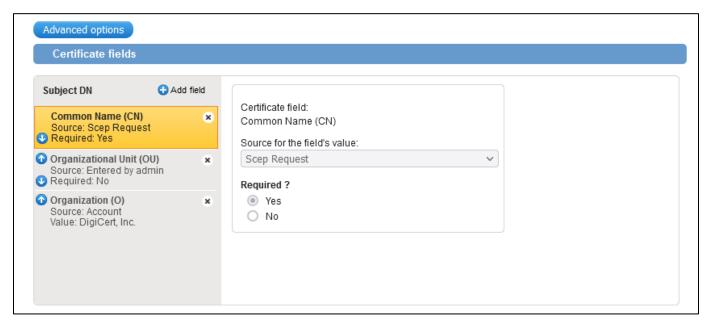
4. Select **Authentication method: Azure Auth**, and then enter the values you obtained in **Azure Active Directory App registration**.



5. In **Certificate fields**, configure the **Subject DN** to meet your application and policy requirements.

Note that for any value source which is set for SCEP request, the value will need to be configured to be populated in the Intune Device configuration profile.

In this example the Common Name (CN) component will be submitted in the SCEP request as a unique device identifier value as configured in the corresponding Intune Device configuration profile.

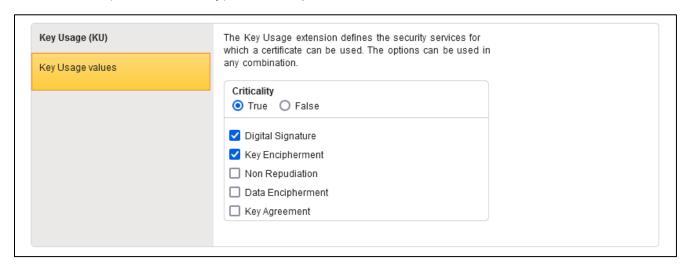


6. Including a **SubjectAltName** (SAN) is optional, although many relying PKI applications can make use of a SAN value.

Note that for any value source which is set for SCEP request, the value will need to be configured to be populated in the Intune Device configuration profile.



7. Configure the **Key Usage (KU)** to meet your application and policy requirements. This example shows the typical settings for client device authentication.



8. Configure the **Extended Key Usage (EKU)** to meet your application and policy requirements.

This example shows the typical settings for client device authentication.

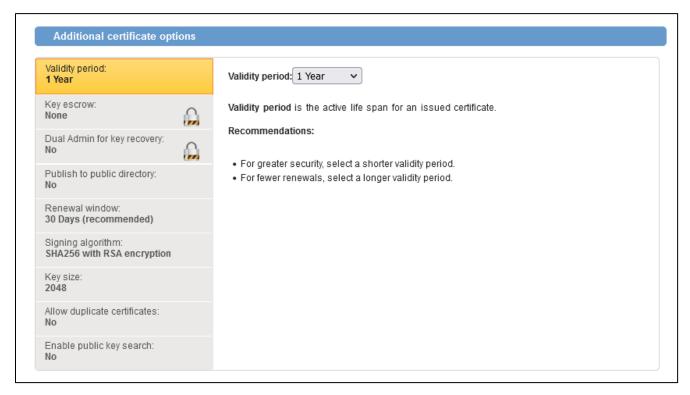
Extended Key Usage (EKU)	The Extended Key Usage extension indicates how a certificate's public key can be used.
Extended Key Usage values	EKU Criticality
	○ True
	✓ Client Authentication (1.3.6.1.5.5.7.3.2)
	☐ IPSec IKE-Intermediate (1.3.6.1.5.5.8.2.2)
	☐ IPSec IKE (1.3.6.1.5.5.7.3.17)
	☐ Signing KDC Responses (1.3.6.1.5.2.3.5)

9. Configure the **Additional Extensions** to meet your application and policy requirements. Subject Key Identifier is a standard certificate extension that can be useful to your relying application use-case. The DigiCert extensions while useful are not required.



10. Configure the **Additional certificate options** to meet your application and policy requirements.

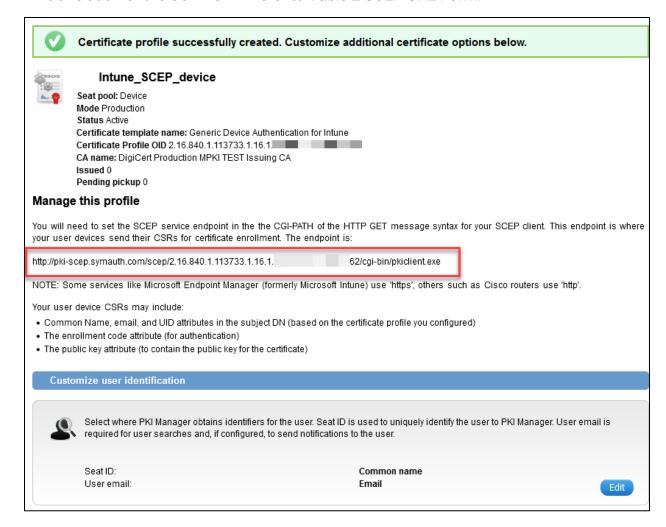
Note the Validity period and Key size as you will configure these settings in the Intune Device configuration profile.



11. Upon saving the profile, copy the SCEP service endpoint URL.

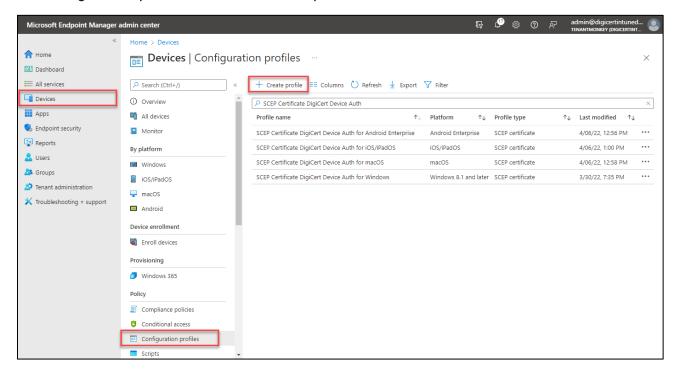
The SCEP URL will be used later when configuring the Intune Device configuration profile.

Note: Intune Device configuration profiles for Windows platform devices require translation of the SCEP URL. Refer to **Table 2 SCEP URL Form.** 



### Microsoft Device Configuration Profile

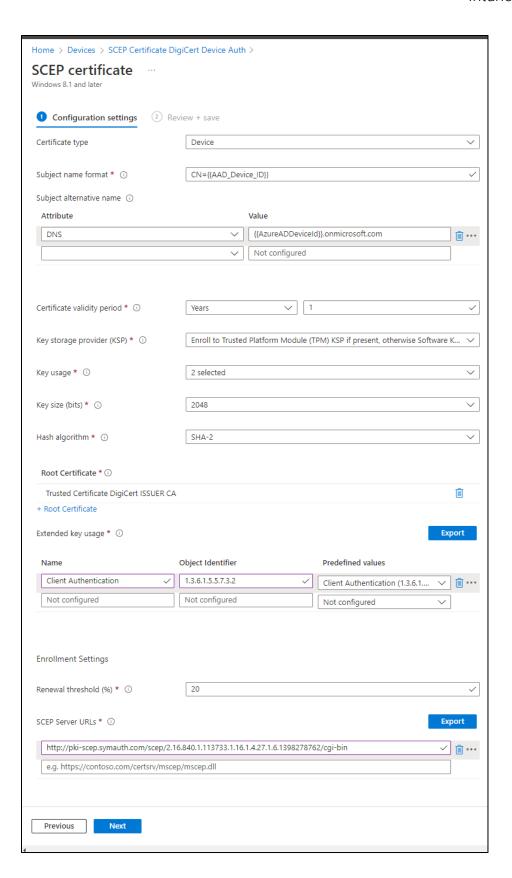
1. In <u>Microsoft Endpoint Manager admin center</u>, select **Devices**, and then select **Configuration profiles**, and then **Create profile**.



- 2. Configure the desired platform of the devices that will receive the profile and select SCEP Certificate from the drop-down or from the Templates list.
- 3. For **Configuration Settings**, configure settings and values to match your corresponding DigiCert Certificate Profile.

Setting	Comments
Certificate type: Device	Corresponds to the DigiCert Profile Type and Seat Pool Type of "Device".  Depending on the platform OS behavior, determines the storage location of the key/certificate on the target device platform.
Subject name format	Include attributes/values that are will be sourced in the SCEP request by the DigiCert Certificate Profile.
Subject alternative name	Include attributes/values that are will be sourced in the SCEP request by the DigiCert Certificate Profile.
Certificate validity period	Match with the DigiCert Certificate Profile configuration.
Key storage provider (KSP)	Only determines the target platform behavior.

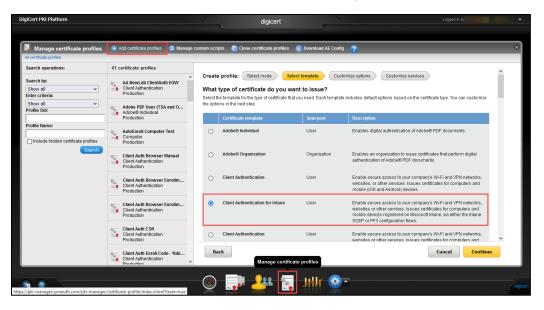
Setting	Comments
Key usage	The certificate issued by DigiCert will contain the Key usage (typically, Digital Signature, Key Encipherment) as set in the DigiCert Certificate Profile regardless of the Microsoft configuration setting.
	However, this setting may also influence how the target platform OS enforces key flags settings and usages on that device and therefore it is recommended that the setting match the intended purpose in the DigiCert Certificate Profile configuration.
Key size	Match with the DigiCert Certificate Profile configuration.
Hash algorithm	Select the strongest level of security that the connecting devices support.
Root certificate	This should be the CA Certificate that issues the end-entity as configured in the DigiCert Certificate Profile.
	If you are using a multi-tier CA certificate hierarchy then you should select the Issuer CA certificate file.
	See Intune Trusted Certificate profile.
Extended key usage	The certificate issued by DigiCert will contain the Extended key usage as set in the DigiCert Certificate Profile regardless of Microsoft configuration setting.
	However, this setting may also influence how the target platform OS enforces key flags settings and usages on that device and therefore it is recommended that the setting match the intended purpose in the DigiCert Certificate Profile configuration.
Renewal threshold (%)	This value should be tuned to match the Renewal window setting in the DigiCert Certificate Profile.
SCEP Server URL	For proper formatting refer to Table 2 SCEP URL Form.



# **User Client Authentication**

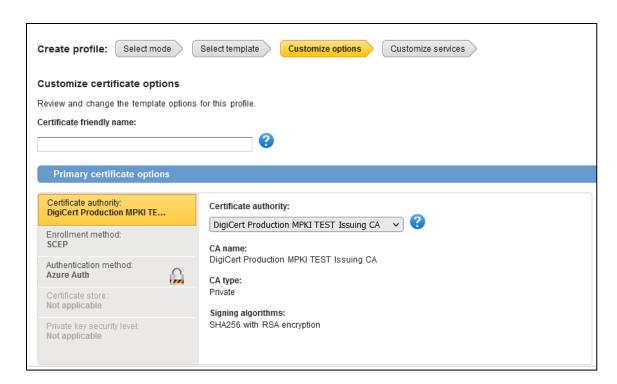
# DigiCert Certificate Profile

1. In DigiCert PKI Manager select Manage certificate Templates, then Add certificate profiles, and select Client Authentication for Intune template.

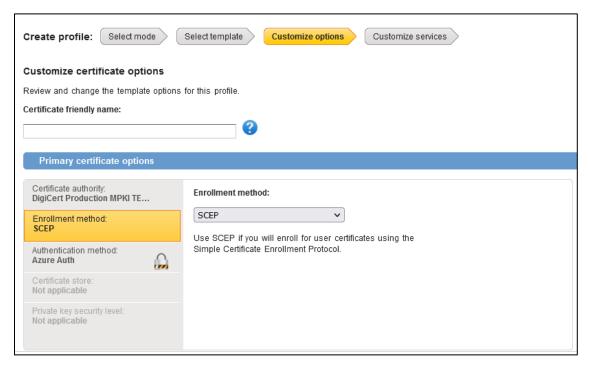


2. Enter a **Certificate friendly name**, and in **Primary certificate options** select the **Certificate authority**.

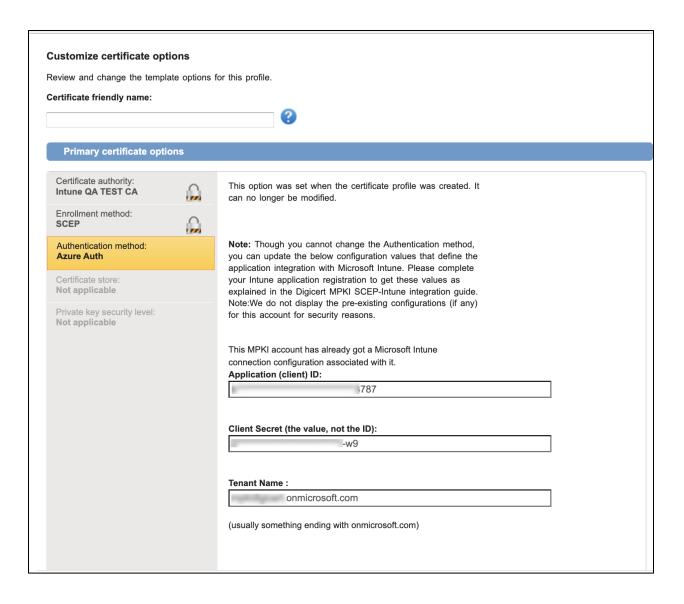
Note: The **CA Name** is the Issuer CA you download when configuring **Intune Trusted Certificate profile**.



3. Select Enrollment method: SCEP



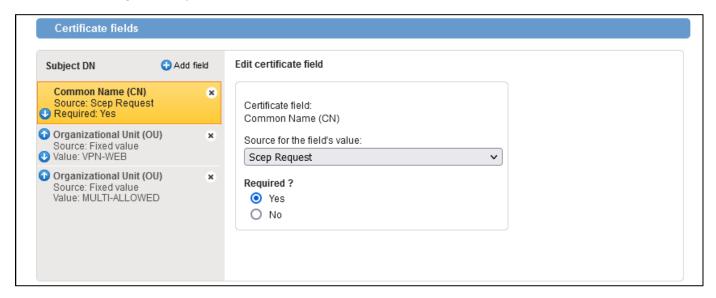
4. Select **Authentication method**: **Azure Auth**, and then enter the values you obtained in **Azure Active Directory App registration**.



5. In **Certificate fields**, configure the **Subject DN** to meet your application and policy requirements.

Note that for any value source which is set for SCEP request, the value will need to be configured to be populated in the Intune Device configuration profile.

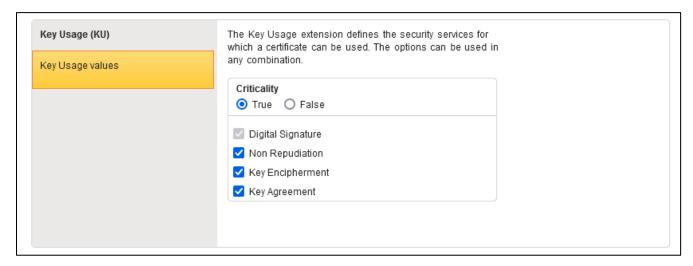
In this example the Common Name (CN) component will be submitted in the SCEP request as a unique device identifier value as configured in the corresponding Intune Device configuration profile.



- 6. Including a **SubjectAltName** (SAN) is optional, although many relying PKI applications can make use of a SAN value.
  - Note that for any value source which is set for SCEP request, the value will need to be configured to be populated in the Intune Device configuration profile.



7. Configure the **Key Usage (KU)** to meet your application and policy requirements. This example shows the typical settings for user client authentication.



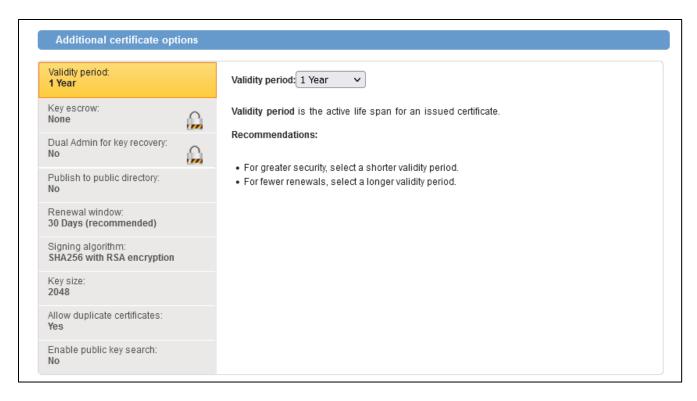
8. Configure the **Extended Key Usage (EKU)** to meet your application and policy requirements.

This example shows the typical settings for user client authentication.



9. Configure the **Additional certificate options** to meet your application and policy requirements.

Note the Validity period and Key size as you will configure these settings in the Intune Device configuration profile.



10. Upon saving the profile, copy the SCEP service endpoint URL.

The SCEP URL will be used later when configuring the Intune Device configuration profile.

Note: Intune Device configuration profiles for Windows platform devices require translation of the SCEP URL. Refer to **Table 2 SCEP URL Form.** 



#### Intune\_SCEP\_user

Seat pool: User Mode Production Status Active

Certificate template name: Client Authentication for Intune

Certificate Profile OID 2.16.840.1.113733.1.16.1.

CA name: DigiCert Production MPKI TEST Issuing CA

Issued 0

Pending pickup 0

#### Manage this profile

You will need to set the SCEP service endpoint in the the CGI-PATH of the HTTP GET message syntax for your SCEP client. This endpoint is where your user devices send their CSRs for certificate enrollment. The endpoint is:

http://pki-scep.symauth.com/scep/2.16.840.1.113733.1.16.1.

NOTE: Some services like Microsoft Endpoint Manager (formerly Microsoft Intune) use 'https', others such as Cisco routers use 'http'.

Your user device CSRs may include:

- . Common Name, email, and UID attributes in the subject DN (based on the certificate profile you configured)
- . The enrollment code attribute (for authentication)
- . The public key attribute (to contain the public key for the certificate)

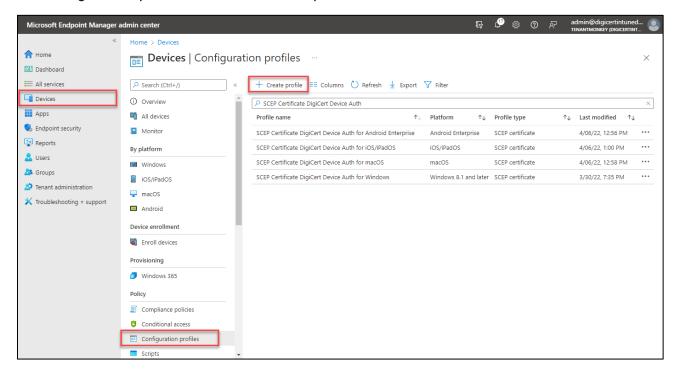
#### Customize user identification



Select where PKI Manager obtains identifiers for the user. Seat ID is used to uniquely identify the user to PKI Manager. User email is required for user searches and, if configured, to send notifications to the user.

## Microsoft Device Configuration Profile

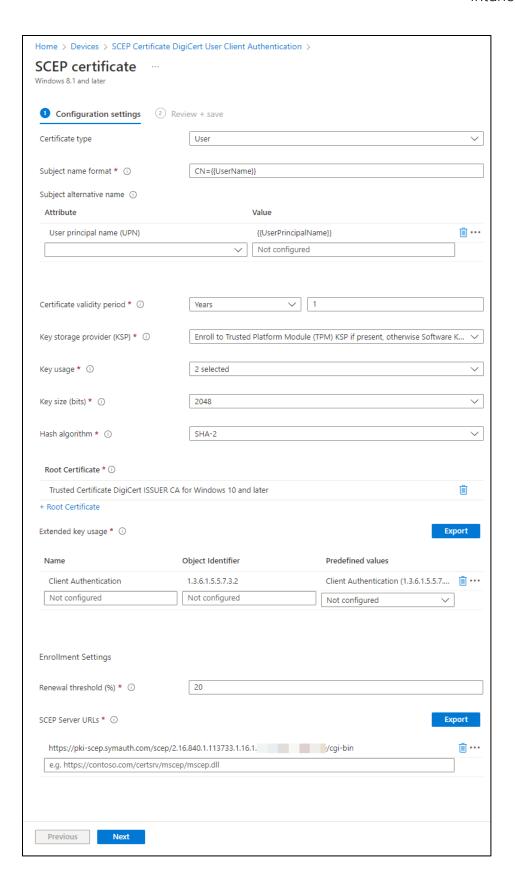
1. In <u>Microsoft Endpoint Manager admin center</u>, select **Devices**, and then select **Configuration profiles**, and then **Create profile**.



- 2. Configure the desired platform of the devices that will receive the profile and select SCEP Certificate from the drop-down or from the Templates list.
- 3. For **Configuration Settings**, configure settings and values to match your corresponding DigiCert Certificate Profile.

Setting	Comments
Certificate type: User	Corresponds to the DigiCert Profile Type and Seat Pool Type of "User".  Depending on the platform OS behavior, determines the storage location of the key/certificate on the target device platform.
Subject name format	Include attributes/values that are will be sourced in the SCEP request by the DigiCert Certificate Profile.
Subject alternative name	Include attributes/values that are will be sourced in the SCEP request by the DigiCert Certificate Profile.
Certificate validity period	Match with the DigiCert Certificate Profile configuration.
Key storage provider (KSP)	Only determines the target platform behavior.

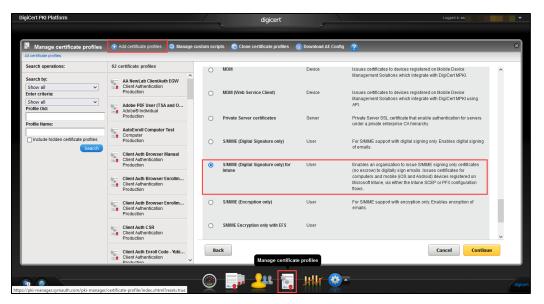
Setting	Comments
Key usage	The certificate issued by DigiCert will contain the Key usage (typically, Digital Signature, Non Repudiation, Key Encipherment, Key Agreement) as set in the DigiCert Certificate Profile regardless of the Microsoft configuration setting.
	However, this setting may also influence how the target platform OS enforces key flags settings and usages on that device and therefore it is recommended that the setting match the intended purpose in the DigiCert Certificate Profile configuration.
Key size	Match with the DigiCert Certificate Profile configuration.
Hash algorithm	Select the strongest level of security that the connecting devices support.
Root certificate	This should be the CA Certificate that issues the end-entity as configured in the DigiCert Certificate Profile.
	If you are using a multi-tier CA certificate hierarchy then you should select the Issuer CA certificate file.
_	See Intune Trusted Certificate profile.
Extended key usage	The certificate issued by DigiCert will contain the Extended key usage as set in the DigiCert Certificate Profile regardless of Microsoft configuration setting.
	However, this setting may also influence how the target platform OS enforces key flags settings and usages on that device and therefore it is recommended that the setting match the intended purpose in the DigiCert Certificate Profile configuration.
Renewal threshold (%)	This value should be tuned to match the Renewal window setting in the DigiCert Certificate Profile.
SCEP Server URL	For proper formatting refer to Table 2 SCEP URL Form



# S/MIME (Digital Signature only) for Intune

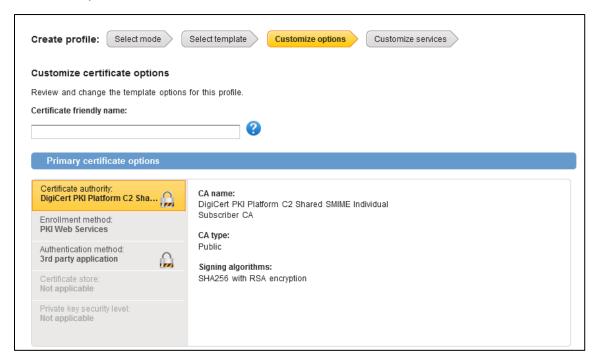
### DigiCert Certificate Profile

1. In DigiCert PKI Manager select Manage certificate Templates, then Add certificate profiles, and select S/MIME (Digital Signature only) for Intune template.

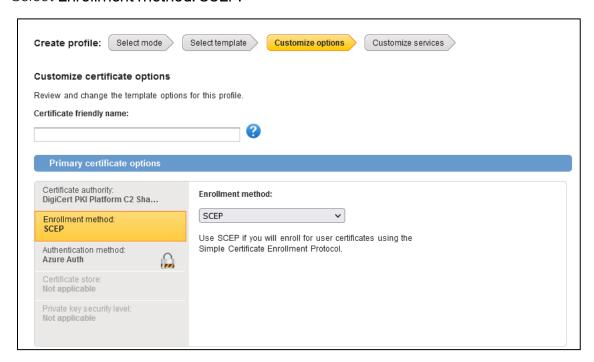


2. Enter a Certificate friendly name.

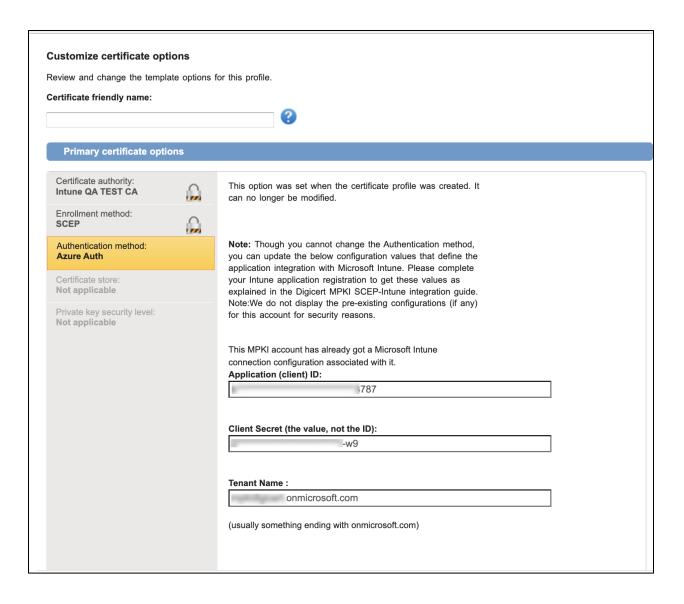
Note: The **CA Name** is the Issuer CA you download when configuring **Intune Trusted Certificate profile**.



3. Select Enrollment method: SCEP.



4. Select **Authentication method: Azure Auth**, and then enter the values you obtained in **Azure Active Directory App registration**.



5. In **Certificate fields**, configure the **Subject DN** to meet your application and policy requirements.

Note that for any value source which is set for SCEP request, the value will need to be configured to be populated in the Intune Device configuration profile. In this example the Common Name (CN) component will be submitted in the SCEP request as a unique device identifier value as configured in the corresponding Intune Device configuration profile.



6. Including a **SubjectAltName** (SAN) is optional, although many relying PKI applications can make use of a SAN value.

Note that for any value source which is set for SCEP request, the value will need to be configured to be populated in the Intune Device configuration profile.

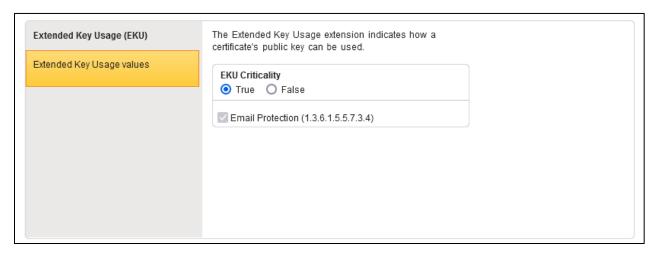


7. Configure the **Key Usage (KU)** to meet your application and policy requirements. This example shows the typical settings for user S/MIME digital signature.



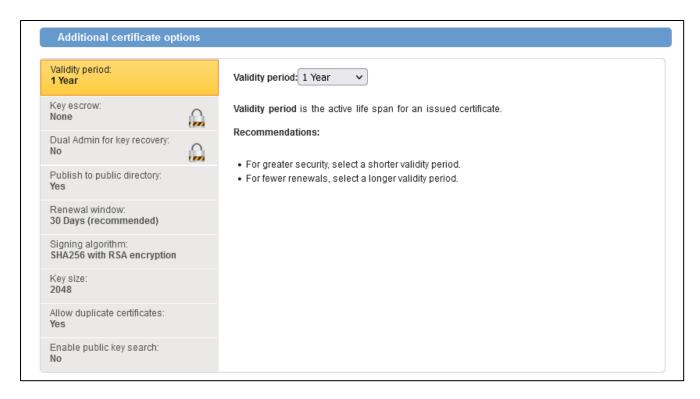
8. Configure the **Extended Key Usage (EKU)** to meet your application and policy requirements.

This example shows the typical settings for user S/MIME digital signature.



9. Configure the **Additional certificate options** to meet your application and policy requirements.

Note the Validity period and Key size as you will configure these settings in the Intune Device configuration profile.



10. Upon saving the profile, copy the SCEP service endpoint URL.

The SCEP URL will be used later when configuring the Intune Device configuration profile.

Note: Intune Device configuration profiles for Windows platform devices require translation of the SCEP URL. Refer to **Table 2 SCEP URL Form.** 



# Certificate profile successfully created. Customize additional certificate options below.



#### Intune\_SCEP\_SMIME\_DigitalSignature

Seat pool: User Mode Production Status Active

Certificate template name: S/MIME (Digital Signature only) for Intune

Certificate Profile OID 2.16.840.1.113733.1.16.1

CA name: DigiCert PKI Platform C2 Shared SMIME Individual Subscriber CA

Issued 0

Pending pickup 0

#### Manage this profile

You will need to set the SCEP service endpoint in the the CGI-PATH of the HTTP GET message syntax for your SCEP client. This endpoint is where your user devices send their CSRs for certificate enrollment. The endpoint is:

http://pki-scep.symauth.com/scep/2.16.840.1.113733.1.16.1.

0/cgi-bin/pkiclient.exe

NOTE: Some services like Microsoft Endpoint Manager (formerly Microsoft Intune) use 'https', others such as Cisco routers use 'http'.

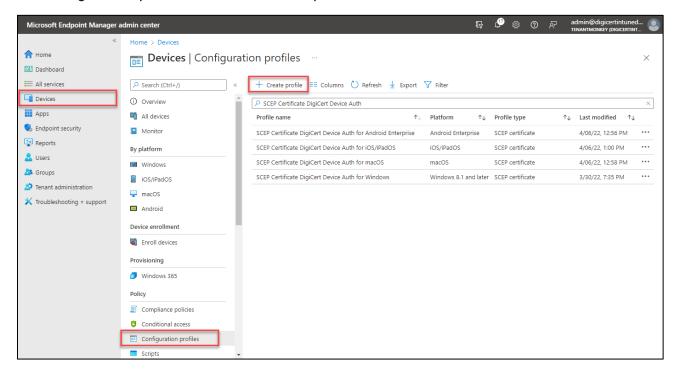
Your user device CSRs may include:

- · Common Name, email, and UID attributes in the subject DN (based on the certificate profile you configured)
- . The enrollment code attribute (for authentication)
- . The public key attribute (to contain the public key for the certificate)

Customize user identification

# Microsoft Device Configuration Profile

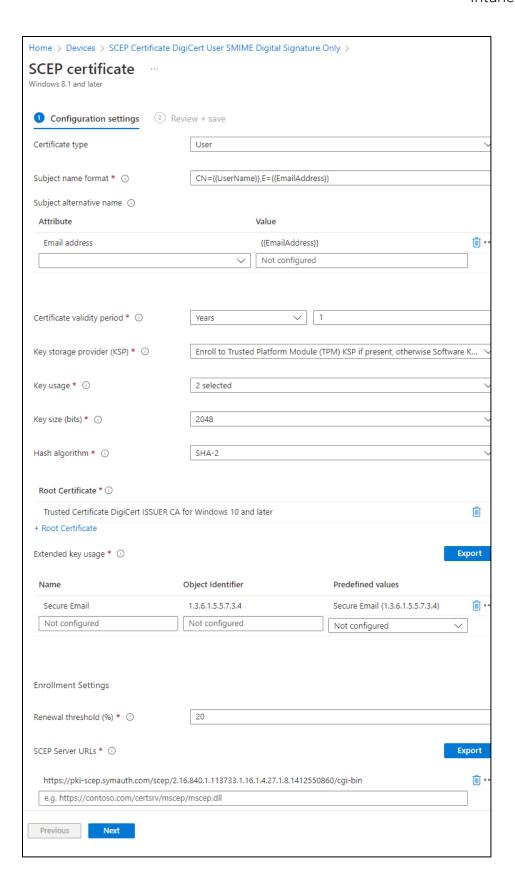
1. In <u>Microsoft Endpoint Manager admin center</u>, select **Devices**, and then select **Configuration profiles**, and then **Create profile**.



- 2. Configure the desired platform of the devices that will receive the profile and select SCEP Certificate from the drop-down or from the Templates list.
- 3. For **Configuration Settings**, configure settings and values to match your corresponding DigiCert Certificate Profile.

Setting	Comments
Certificate type: User	Corresponds to the DigiCert Profile Type and Seat Pool Type of "User".  Depending on the platform OS behavior, determines the storage location of the key/certificate on the target device platform.
Subject name format	Include attributes/values that are will be sourced in the SCEP request by the DigiCert Certificate Profile.
Subject alternative name	Include attributes/values that are will be sourced in the SCEP request by the DigiCert Certificate Profile.
Certificate validity period	Match with the DigiCert Certificate Profile configuration.
Key storage provider (KSP)	Only determines the target platform behavior.

Setting	Comments
Key usage	The certificate issued by DigiCert will contain the Key usage (typically, Digital Signature, Non Repudiation) as set in the DigiCert Certificate Profile regardless of the Microsoft configuration setting.
	However, this setting may also influence how the target platform OS enforces key flags settings and usages on that device and therefore it is recommended that the setting match the intended purpose in the DigiCert Certificate Profile configuration.
Key size	Match with the DigiCert Certificate Profile configuration.
Hash algorithm	Select the strongest level of security that the connecting devices support.
Root certificate	This should be the CA Certificate that issues the end-entity as configured in the DigiCert Certificate Profile.
	If you are using a multi-tier CA certificate hierarchy then you should select the Issuer CA certificate file.
	See Intune Trusted Certificate profile.
Extended key usage	The certificate issued by DigiCert will contain the Extended key usage as set in the DigiCert Certificate Profile regardless of Microsoft configuration setting.
	However, this setting may also influence how the target platform OS enforces key flags settings and usages on that device and therefore it is recommended that the setting match the intended purpose in the DigiCert Certificate Profile configuration.
Renewal threshold (%)	This value should be tuned to match the Renewal window setting in the DigiCert Certificate Profile.
SCEP Server URL	For proper formatting refer to Table 2 SCEP URL Form



# Joining a Device to Intune MDM

- Enroll devices in Microsoft Intune | Microsoft Docs
  - o Enroll Android devices | Microsoft Docs
  - o Set up enrollment for macOS devices in Intune | Microsoft Docs
  - o MDM enrollment of Windows 10-based devices | Microsoft Docs

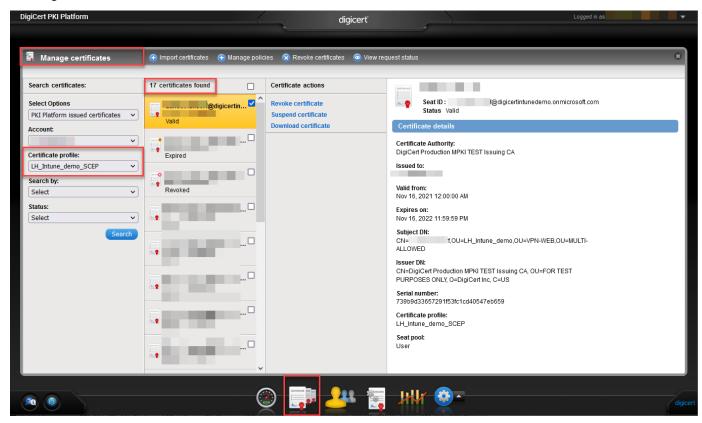
# Verify Certificate Issuance details in DigiCert PKI Platform

Issued certificates can be verified in **DigiCert PKI Manager** by viewing the certificate profile in **Manage certificate profiles** or by using search certificates in **Manage** certificates.

### Manage certificate profiles



### Manage certificates



# Revocation of Certificates in Intune

There are many scenarios where certificates that were provisioned by Intune are then removed and revoked.

#### See Remove SCEP and PKCS certificates in Microsoft Intune | Microsoft Docs

With DigiCert/Intune SCEP integrations which communicate via the Azure Active Directory App registration, Intune maintains a list of certificates to be revoked. The DigiCert PKI Platform fetches the revocation list for all the tenants at a frequent interval, as part of an asynchronous process, which will revoke all the certificates from the retrieved list. The revoked status of the certificate is then available via DigiCert Validation Services (CRL/OCSP), once the revocation process is complete.