MyID PIV

Version 12.10

Derived Credentials Configuration Guide

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Conventions used in this document

- Lists:
  - Numbered lists are used to show the steps involved in completing a task when the order is important.
  - Bulleted lists are used when the order is unimportant or to show alternatives.
- **Bold** is used for menu items and for labels.

  For example:
  - Record a valid email address in **'From' email address**.
  - Select **Save** from the **File** menu.
- *Italic* is used for emphasis:

  For example:
  - Copy the file *before* starting the installation.
  - Do *not* remove the files before you have backed them up.
- ***Bold and italic*** hyperlinks are used to identify the titles of other documents.

  For example: "See the ***Release Notes*** for further information."

  Unless otherwise explicitly stated, all referenced documentation is available on the product installation media.
- A `fixed width` font is used where the identification of spaces is important, including filenames, example SQL queries and any entries made directly into configuration files or the database.
- **Notes** are used to provide further information, including any prerequisites or configuration additional to the standard specifications.

  For example:

  Note: This issue only occurs if updating from a previous version.
- Warnings are used to indicate where failure to follow a particular instruction may result in either loss of data or the need to manually configure elements of the system.

  For example:

  Warning: You must take a backup of your database before making any changes to it.

Contents

1 Introduction

This document provides information on the support for MyID® Derived Credentials, including details on the following:

- Configuring the system to support the installation of derived credentials to mobile devices, and Microsoft Virtual Smart Cards.
- Requesting derived credentials through the MyID Self-Service Kiosk.

In this document, the words *mobile device* may refer either to a smartphone or a tablet.

2 Overview

Derived credentials are mobile- or VSC-based identities that are based on credentials already issued to a user.

The derived credentials may include: a recovered archived encryption certificate, allowing the user access to their email and so on; a set of new certificates; and a badge layout that can be displayed on a mobile device.

You can use derived credentials for the following:

- Email signing
- Email encryption
- Authentication (for example, logon to Windows)

Because the credentials are *derived* from the original credentials, you do not need to go through an enrollment process for the user to issue the derived credentials.

The lifetime of the original credentials do not affect the lifetime of the derived credentials; derived credentials are issued as new credentials with a lifetime determined by their credential profile.

Note: You cannot issue derived credentials to Windows Hello for Business using the method described in this guide; however, you *can* use the Derived Credentials Self-Service Portal instead. See the *Creating a Windows Hello credential profile* section in the ***Derived Credentials Self-Service Request Portal*** guide for details.

2.1 Deriving credentials from other systems

MyID also allows you to create derived credentials from cards issued by systems other than the current MyID system. You cannot recover archived encryption certificates from these systems, but you can create a derived identity with a new set of certificates. You can integrate your MyID system with the external system by using the Derived Credentials Notification Listener; this web service allows you to inform the MyID system of the following events:

- `CessationOfTrust` – the cardholder is no longer eligible for a PIV credential.
- `TransferOfTrust` – the credential has been replaced by a newer credential.
- `ChangeOfDetails` – the cardholder's details have changed.

See the ***Derived Credentials Notifications Listener API*** document for details

2.2 Required software

- MyID Self-Service Kiosk

  The Self-Service Kiosk allows you to request derived credentials.

  See the ***Self-Service Kiosk*** guide for details.

- MyID Identity Agent app

  For mobile-based derived credentials, you must have the MyID Identity Agent app installed on your mobile device. You can configure the Self-Service Kiosk to allow you to download the Identity Agent onto your mobile device.

  See the ***Mobile Identity Management*** guide for system requirements and details of configuring your system for mobile identities.

- Trusted Platform Module

  For Microsoft VSC-based derived credentials, you must have a PC with a Trusted Platform Module (TPM). See the ***Microsoft VSC Integration Guide*** for system requirements and details of configuring your system for Microsoft VSCs.

2.3 The derived credentials process

The process is as follows:

1. You collect and activate a smart card from MyID.

   Alternatively, you obtain a smart card from another system.

2. At the Self-Service Kiosk, insert your issued smart card.
3. If required, validate your fingerprints.
4. Request a derived credential based on your original credential.
5. Follow the collection procedure for the type of derived credential you need.

   For mobile identities:

   a. If you do not already have the MyID Identity Agent app, the Kiosk displays a QR code that allows you to download the app.

      You must configure the appropriate URLs for each mobile platform you are using – see the *Issuance Processes page (Operation Settings)* section in the ***Administration Guide*** for details of the **App Download URL** configuration options on the **Issuance Processes** page of the **Operation Settings** workflow.

      Note: You can configure MyID to display an alternative text-based URL that you can type in as an alternative to scanning the QR code. For details, contact customer support, quoting reference SUP-180.

   b. Open the MyID Identity Agent app and scan the displayed QR code.

   c. The MyID Identity Agent app downloads the certificates and badge layouts.

   d. Your device now contains a mobile identity derived from your original credentials.

   For Microsoft VSC-based derived credentials:

   a. If a one-time password is displayed on screen, take a note of this.

      Note: To make use of a logon code, the user must have a SAM account name, otherwise the Self-Service App is unable to target the job when the user logs into their workstation. You must also make sure that the **Allow Logon Codes** configuration option (on the **Logon** page of the **Security Settings** workflow) is set to Yes.

b. Check your email for instructions on installing the VSC on your PC.

   Note: The user must have an email address registered within MyID. For imported users with cards issued by another system, they must have an email address attribute mapping in their signing and encryption certificates, as otherwise MyID cannot send an email notification to initiate collection of a VSC.

6. The derived credentials can be managed by MyID independently of the original credential – you can disable or cancel them.

   Note: To renew or replace a derived credential, you must cancel the derived credential then repeat the original request process. This ensures all required derived credential verification steps take place.

7. After seven days, MyID performs a revocation check against the PIV Authentication certificate used during the request for derived credentials. If this certificate has been revoked, MyID revokes the derived credentials.

2.4 Derived credentials for unknown users

You can request derived credentials using cards that were not issued by the current MyID system, and that are held by users who are not in the MyID database.

When you request derived credentials using your card, if your DN does not match a user in the MyID database, a new user record is created within MyID with your details. The new user is created within the Derived Credentials top-level group, within a group with the name `Agency - XXXX`, where `XXXX` is your agency code. If possible, your photograph is extracted from the card and imported into the MyID user record.

Note, however, that facial biometrics and fingerprints are *not* extracted.

If it is not possible to extract the photograph from the card, the import continues, but the failure is noted in the MyID audit trail.

Note: In older versions of MyID, the original smart card was also added to the MyID database, and could be used to log on to MyID; however, this consumed an extra credential license, and was unlikely to be required by the majority of cardholders, so now the original smart card is added in a state that means it is not visible to end users, does not consume a credential license, and cannot be used to log on to MyID. If you want to use a smart card from another system to log on to MyID, you are recommended to use the Lifecycle API to import the card; see the *Importing operator credentials* section in the ***Lifecycle API*** guide.

2.5 FIPS 201-3 and derived credentials

MyID derived credentials comply with the requirements of FIPS 201-3 in the following ways.

FIPS 201-3 Compliance	MyID Derived Credentials
Identity Level of Assurance 3 (LOA3) – Remote Identity Collection	The applicant approaches the Self-Service Kiosk and inserts their PIV card.
Applicant Must Demonstrate Possession and Control of the Related PIV Card	The PIV card is validated to ensure that it has not been tampered with.
Applicant Must Demonstrate Possession and Control of the Related PIV Card	The applicant enters their PIN for PIV card authentication.

FIPS 201-3 Compliance	MyID Derived Credentials
The Applicant Shall Identify Himself/Herself Using a Biometric Sample That Can be Verified Against the Applicant's PIV Card	The applicant completes fingerprint verification.
Validate Identity Certificate to Federal Bridge	The PIV Auth Cert on the card is checked to ensure that it is valid and has not been revoked.
Promptly notify the cardholder of the binding of a derived PIV credential	MyID can notify the applicant by email that a request for derived credentials has been made. The email address can be retrieved, if available, from certificates on the PIV Card when using the MyID Self Service Kiosk. An email address can be added using synchronization to Active Directory to retrieve the information. MyID can be configured to reject derived credential requests where an email address is not present for the applicant in MyID.
Key Generation on FIPS 140-2 level 1 Software Cryptographic Module (iOS)	Certificates/keys are provisioned to a FIPS 140-2 validated credentials store on the mobile device.
7 Day Revocation Check if Card is Revoked Within 7 Days After Issuance of Derived Credentials	The applicant's original PIV card is validated 7 days after initial issuance of derived credentials.
All Communications Shall be Authenticated and Protected from Modification	Communication is secured during the derived credentials process.
The Issuer of the Derived PIV Credential Shall Implement a Process that Maintains a Link Between the Subscriber's PIV Card and the Derived PIV Credential to Enable the Issuer of the Latter Credential to Track the Status of the PIV Card in Order to Perform Timely Maintenance and Termination Activities in Response to Changes in the Status of the PIV Card.	The applicant's PIV card and derived credentials are linked to ensure that credentials can be managed effectively.
When invalidation occurs, the issuer shall notify the cardholder of the change	MyID can send an email notification to the credential owner when derived credentials are cancelled.

3 Configuring the system

This section provides information on configuring your MyID system to issue derived credentials.

3.1 Recovering archived certificates

To recover a certificate from an existing card, the user must have a certificate that:

- has been issued by the current MyID system.
- is issued to a current device.
- has archived keys.
- is issuable and recoverable to software.
- has a policy that is available on at least one credential profile available to the user.

3.2 Setting the configuration options

This section contains information on the MyID configuration options that control the way MyID issues derived credentials.

3.2.1 Determining which cards are available for derived credentials

You may want to configure your system to issue derived credentials only from cards that have been issued by specific federal agencies. To do this, you can match the agency code in the FASC-N.

To determine which cards you can use to request derived credentials:

1. From the **Configuration** category, select the **Operation Settings** workflow.
2. Click the **Certificates** tab.
3. Set the following options:
   - **Cards Allowed For Derivation**

     Set this option to a regular expression that will be matched against the ASCII version of the card's FASC-N to determine whether the card can be used to request derived credential. If the regular expression matches, the card can be used.

     For example:

     ```
     5400.+
     ```

     This example allows any card from the agency with code `5400` to be used. The agency code appears at the start of the ASCII FASC-N.

     Note: By default, this option is blank, which means that no cards can be used to request derived credentials. To allow all cards to be used, use the following regular expression:

     ```
     .+
     ```
4. Click **Save changes**.

Note: This option is also used to determine which PIV cards can be imported. See the *Setting the configuration options* section in the ***Importing PIV Cards*** guide for details.

3.2.2 Setting the credential check period

By default, seven days after MyID issues derived credentials, it checks the original credentials that were used to request the derived credentials. If, during this period, the original credentials became no longer valid (for example, if the smart card was canceled), MyID revokes the derived credentials.

The full device is canceled, not individual certificates on the device. If the device has archived certificates issued as derived credentials, these are also revoked, in addition to the authentication and signing certificates.

Note: MyID does not distinguish between the certificate being suspended or revoked; if it is on the CRL, it revokes the derived credentials.

The reason for cancellation is included in the audit information for troubleshooting purposes; this states that it was due to the PIV certificate being revoked. If your system is configured for device cancellation notifications, these are sent for the revoked derived credentials.

You must make sure that MyID can access the CRL. If the CRL is not available, MyID does not carry out any revocation, and logs the error in the audit trail. There may be a lag between the PIV issuer revoking the PIV credential and the CRL being updated and republished.

You must make sure that the PIV Issuer carries out PIV card revocation in appropriate situations; this feature relies on this step occurring to identify and trigger the revocation of derived credentials.

You can adjust the time period for the credential check.

Alternatively, you can configure MyID to repeat the revocation check at regular intervals. In this case, MyID checks the status of the original credentials at the specified interval until the issued derived credentials are canceled or have expired.

To configure the credential checks:

1. From the **Configuration** category, select **Operation Settings**.
2. On the **Certificates** tab, set the following:
   - **Derived credential revocation check offset** – set to the number of days after issuing derived credentials that you want MyID to check the original credentials.
   - **Derived Credential Revocation Check Interval** – set to the number of hours between repeated checks of the original credentials. By default this is `0`, which means that the check is not repeated.

     Note: If you set this option to a value greater than `0`, it overrides the **Derived credential revocation check offset** setting.
3. Click **Save changes**.

3.2.3 Configuring certificate OIDs checked on PIV cards

When a PIV card is presented to the derived credential kiosk, MyID verifies that the cardholder can perform two factor authentication with the PIV card, performing the PKI-AUTH check to verify the PIV-Authentication certificate.

Additionally, MyID verifies the Digital Signature certificate.

These certificate checks ensure that the certificate is valid and was issued from a CA that chains up to a root certificate in the `DerivedCredentialTrustedRoots` store.

It also checks that the end-user certificate contains the correct OID to mark it as a PIV-Authentication or Digital Signature certificate.

By default, MyID is configured with the OIDs required by FIPS201-2; however, you can change the OIDs if required (for example, for a CIV certificate).

To configure the OIDs:

1. From the **Configuration** category, select **Operation Settings**.
2. On the **Certificates** tab, set the following:
   - **Derived credential certificate OID** – set this to the OID to be checked on the PIV Authentication certificate.

     The default value is

     ```
     2.16.840.1.101.3.2.1.3.13
     ```
   - **Derived credential signing certificate OID** – set this to the a semicolon-delimited list of OIDs to be checked on the Digital Signature certificate.

     The default value is

     ```
     2.16.840.1.101.3.2.1.3.6;2.16.840.1.101.3.2.1.3.7;
     2.16.840.1.101.3.2.1.3.16
     ```
3. Click **Save changes**.

3.2.4 Determining whether fingerprints are required for derived credentials

By default, MyID requires biometric verification to collect derived credentials. The user's fingerprints are checked against the sample stored on the card; the biometric sample is not imported into MyID.

If the smart cards onto which you want to collect derived credentials does not support biometric verification (for example, VSCs) you must set this option to No.

You can switch this option on or off:

1. From the **Configuration** category, select **Operation Settings**.
2. On the **Biometrics** tab, set the following:
   - **Require fingerprints for derived credentials** – set this to Yes to require fingerprint verification to collect derived credentials, or No to allow the collection of derived credentials without fingerprint verification.
3. Click **Save changes**.

3.2.5 Updating MyID with the email address from the certificate

MyID can obtain an email address from a certificate on the deriving credential. You can configure whether to update the MyID record with this email address.

To set this option:

1. From the **Configuration** category, select the **Operation Settings** workflow.
2. Click the **Certificates** tab.

3. Set the following option:
   - **Update email address from derivation**

     Set this option to Yes to update the MyID record for the derived credential owner with the email address obtained from the certificate used for derivation.

     The default is No.
4. Click **Save changes**.

3.2.6 Limiting the lifetimes of derived credentials

You may want to configure your system to limit the lifetime of derived credentials to the lifetime of the certificate used to request them.

Note: Some CAs do not allow control over the time portion of the certificate expiry. When MyID sets the lifetime of the derived credential, the date is aligned with the lifetime of the deriving certificate, but the time may not match exactly, depending on the certificate authority being used.

To limit the lifetime of derived credentials:

1. From the **Configuration** category, select the **Operation Settings** workflow.
2. Click the **Certificates** tab.
3. Set the following option:
   - **Limit derived credential lifetime to deriving credential**

     Set this option to Yes to ensure that any derived credentials created do not exceed the lifetime of the deriving certificate. If the lifetime of the derived credential (as determined by the **Lifetime** setting in the credential profile or the **Maximum credential expiry date** set for the person) is greater than the lifetime of the certificate in the PIV Authentication container, the lifetime of the derived credential is lowered to match the expiry date of the deriving certificate.

     The default is No.
4. Click **Save changes**.

3.3 Granting access to the workflows

The system makes use of the following workflows:

- **Request Derived Credentials** – used in the Self-Service Kiosk to allow a cardholder to request a derived credential.
- **Cancel Credential** – used within MyID to cancel a mobile ID and revoke its certificates.
- **Enable / Disable ID** – used within MyID to enable or disable a mobile ID, and suspend or enable its certificates.
- **Unlock Credential** – used within MyID to retrieve an unlock code for an issued mobile ID.
- **Collect My Updates** – used by the Identity Agent app to obtain a mobile ID.

- **Issue Device** – used by the Identity Agent app to obtain a mobile ID.

  Note: The **Mobile Certificate Recovery**, **Collect My Updates**, and **Issue Device** workflows are not used within MyID or the Self-Service Kiosk; they are used to control access from a mobile device to the features of the web service.
- **Collect My Card** – used in the Self-Service App to collect VSCs.

Use the **Edit Roles** workflow to grant access for these workflows to the roles you want to be able to access them.

3.3.1 Role permissions

You must use the **Edit Roles** workflow to ensure that the roles used for derived credentials have the appropriate permissions.

The following roles are used for derived credentials:

- **Server Credentials**

  Make sure this role has access to the following:

  - **Request Derived Credentials (part 1)**
  - **Collect My Updates**
  - **Issue Device**
- **Derived Credential Owner**

  This role is used for unknown users who are imported into MyID. Make sure this role has access to the following:

  - **Request Derived Credentials (part 2)**
  - **Collect My Updates**.
  - **Issue Device**
  - **Collect My Card** – used for VSC collection
- **PIV Applicant**

  This role is used for existing MyID users. Make sure this role has access to the following:

  - **Request Derived Credentials (part 2)**
  - **Collect My Updates**
  - **Collect My Card** – used for VSC collection

  Alternatively, assign these permissions to a different role or roles – this allows you to lock down access to derived credentials to specific users.

  Note: To access the Self-Service Kiosk, the PIV Applicant role must have **Smart Card** as a logon method; you can set this using the **Edit Roles** workflow.

Note: Any roles applied to user accounts by the derived credentials process override any role restrictions in MyID.

3.3.2 Scope

When a mobile device user, for example a guard, requests the details for another mobile device user, the guard must have the correct scope within MyID to view the details of the other user; for example, the user must be in the same group as the guard if the guard has

Department scope.

3.4 Configuring the Certificate Authority

This section provides information about setting up the certificate authority to support the issuance of derived credentials.

3.4.1 Setting up the certificate attribute mappings

PIV derived credentials must follow the PIV specifications for the certificate policies issued to the derived credential.

As described in NIST SP800-157, PIV derived credentials require the Derived PIV Authentication certificate. The details for this policy are described in the *Common Policy Certificate and CRL Profile* document published by FPKIPA.

You must set up the attribute mappings for this policy using the **Edit Attributes** button in the **Certificate Authorities** workflow; for more information, see the integration guide for your certificate authority. The following table displays the required mappings:

Certificate Policy	FASC-N	UUID	NACI	User Principal Name	Email
Derived PIV Authentication	Not required	UUID (ASCII)	NACI Status	Not required	Not required

Additionally, as described in NIST SP800-157, the PIV Signing and PIV Encryption certificates may also be issued to the derived credential.

If your installation allows, the PIV Encryption certificate can be recovered to the derived credential; that is, the same PIV Encryption certificates can be shared between the PIV card and the derived credential.

3.4.2 Setting up the certificate checks

For the derived credential certificate checks to work, you must export the certificate authority's root certificate, then install this on your MyID application server.

Note: The RootCA certificate (the certificate authority's root certificate) must be trusted by the MyID application server. If it is not already a trusted certificate, add it to the Trusted Root Certificate Authority store for the local machine.

1. In the **Issued Certificates** on the CA, open any issued certificate.
2. On the **Certification Path** tab, select the top-level certificate.
3. Click **View Certificate**.
4. On the **Details** tab, click **Copy to File**.
5. Use the Certificate Export Wizard to export the certificate.

   Give the exported certificate the name `RootCA.cer`.
6. Copy the `RootCA.cer` file to the MyID application server.
7. Open a command prompt with Run as Administrator.
8. At the command line, type:

   ```
   certutil -addstore -f -Enterprise DerivedCredentialTrustedRoots
   RootCA.cer
   ```

3.5 Setting up the credential profiles for derived credentials

You must create new credential profiles for the derived credentials.

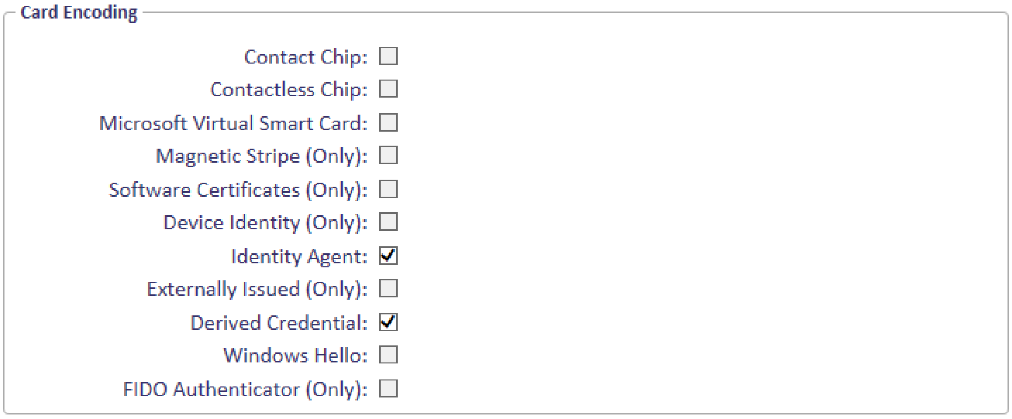
You must create at least one credential profile to contain the certificates that you want to issue to the derived credential. You may create as many of these credential profiles as you need; for example, you may want to create a credential profile for mobile devices and a credential profile for Microsoft VSCs.

If you are creating derived credentials from cards that were not issued by the current MyID system, you must create an additional credential profile to be used for importing the original credential into the system.

3.5.1 Creating an Identity Agent credential profile

To create a credential profile for issuing derived credentials to mobile devices:

1. From the **Configuration** category, select **Credential profiles**.
2. Click **New**.
3. Type a **Name** for the credential profile.
4. In **Card Encoding**, select **Identity Agent** and **Derived Credential**.



Card Encoding

Contact Chip: □
Contactless Chip: □
Microsoft Virtual Smart Card: □
Magnetic Stripe (Only): □
Software Certificates (Only): □
Device Identity (Only): □
Identity Agent: ☑
Externally Issued (Only): □
Derived Credential: ☑
Windows Hello: □
FIDO Authenticator (Only): □

5. In **Services**, make sure **MyID Logon** and **MyID Encryption** are selected.

   Note: If you select the **Identity Agent** option *after* you select the **Derived Credential** option, you cannot select the **Services** option; however, **MyID Logon** and **MyID Encryption** are automatically selected.
6. In **Issuance Settings**, in the **Mobile Device Restrictions** drop-down list, select one of the following:
   - **Any** – The mobile identity can be loaded onto any mobile.
   - **Known Mobiles** – The mobile identity can be loaded onto any mobile that has already been registered with MyID. See the *Setting up the Identity Agent credential profiles* section in the ***Mobile Identity Management*** document for details.
   - **My Mobiles Only** – The mobile identity can be loaded only onto mobiles associated with the user's account.
7. If you are issuing Identity Agent credentials for users associated with cards that were not issued by the current system, set the following option:
   - **Require Facial Biometrics** – Never Required.

8. For mobile derived credentials issued through an MDM, if you want to issue the credential to a device that is already issued to the target user, set the following option:
   - **Issue over Existing Credential** – set this option, and if the device is already issued to the target user, it is automatically canceled and then the new device issued. Existing signing certificates are revoked, but existing archived certificates are not revoked. If the device is issued to a different user, the collection fails.

     Note: The credential profile used for the existing issuance does not affect this behavior; existing credentials are overwritten only if the credential profile for the new credential has the **Issue over Existing Credential** option set.
9. In **Device Profiles**, from the **Card Format** drop-down list select **PIVDerivedCredential.xml**.

   Select a different option *only* if you have a customized data model that you must use for your system.
10. Click **Next**.
11. Select the certificates you want to make available.
    - For credential profiles that use a PIV data model, select the PIV containers for the certificates. You must select a signing certificate. To allow online unlocking, you must include a certificate in the PIV Card Authentication Certificate container.
    - For credential profiles that do not use a PIV data model, do not select any containers.

    All of the certificates you select here will be issued to your mobile device.

    You can select the archived and historic certificate options on this screen. See the *Selecting certificates* section of the ***Administration Guide*** for details of the **Issue new**, **Use existing**, and **Historic Only** options.
12. Click **Next** and proceed to the Select Roles screen.
13. Select the roles you want to be able to issue this credential profile, and the roles you want to be able to be issued this credential profile.

    Note: Any role to which you want to issue derived credentials must have the **Issue Device** option selected in the **Cards** category within the **Edit Roles** workflow.
14. Click **Next**.
15. Select the card layouts you want to make available to the mobile device.

    Badges based on these layouts will be transferred to the mobile device as part of the mobile ID. Note, however, that the reverse sides of the selected layouts (the `_back` layouts) will not be available on the mobile device.

    Note: You must select at least one card layout. If you do not want to display personalized badge information on the mobile device, create a card layout containing default artwork and no user information.
16. Select one of the layouts to be the default layout.

    This layout will be displayed by default when using the Identity Agent app, and will be used for phone-to-phone identity verification.
17. Click **Next**.
18. Type your **Comments** and complete the workflow.

3.5.2 Creating a VSC credential profile

To create a credential profile for issuing derived credentials as Microsoft VSCs:

1. From the **Configuration** category, select **Credential profiles**.
2. Click **New**.
3. Type a **Name** for the credential profile.
4. For the **Card Encoding**, select **Microsoft Virtual Smart Card** and **Derived Credential**.
5. In **Services**, make sure **MyID Logon** and **MyID Encryption** are selected.
6. In **Issuance Settings**, set the following options:
   - **Generate Code on Request** – select one of the following:
     - **None** – no logon code is generated.
     - **Simple Logon Code** – the logon code is generated using the complexity rules as defined by the **Simple Logon Code Complexity** configuration option.
     - **Complex Logon Code** – the logon code is generated using the complexity rules as defined by the **Complex Logon Code Complexity** configuration option on the **Auth Code** tab of the **Security Settings** workflow.

     Note: To be FIPS 201-3 compliant, you must select **Simple** or **Complex**. See the *Setting up logon codes* section in the ***Administration Guide*** for details of configuring the logon code complexity.
   - **Credential Group** – if you want to restrict users to have a single derived credential VSC, type an identifier here; for example:

     ```
     DC VSC
     ```

     If you set the **Active credential profiles per person** configuration option (on the **Issuance Processes** page of the **Operation Settings** workflow) to **One per credential group**, MyID ensures that the user can have only one credential with the same **Credential Group** name.
   - **Cancel Previously Issued Device**

     This option works in conjunction with the **Credential Group** setting. Select this option, and MyID cancels any previously-issued credentials instead of disabling them. When you collect the new VSC using the Self-Service App (and you have the **Erase Unused VSCs** permission for your role, as configured in the **Edit Roles** workflow) the Self-Service App will delete any of the canceled VSCs on your device.

   For more information on these options, see the *Working with credential profiles* section in the ***Administration Guide***.
7. Set the PIN to 16 numeric digits.

   This is required for FIPS 201-3 compliance.

   a. In **PIN Settings**, set the **Maximum PIN Length** and **Minimum PIN Length** options to 16.

   b. In **PIN Characters**, set **Numeric** to **Mandatory**, and **Lowercase**, **Uppercase**, and **Symbol** to **Not Allowed**.

8. In **Device Profiles**, from the **Card Format** drop-down list select **PIVDerivedCredential.xml**.

   Select a different option *only* if you have a customized data model that you must use for your system.

9. Set the **Requisite User Data** options.

   Note: This section appears only if you have selected the **Requisite User Data** option on the **Issuance Processes** tab of the **Operation Settings** workflow.

   This section contains a list of user attributes that must be present for this credential profile to be issued.

   For example, if your VSC derived credential is to be used for email signing, you must select **Email** from the list, and provide an appropriate certificate for email signing – only users who have the Email attribute mapped in their user account will be able to receive a derived credential VSC based on this credential profile.

   Similarly, if your VSC derived credential is to be used for Windows Logon, you must select **User Principal Name** from this list, and provide an appropriate certificate for logging on to Windows.

   For more information see the *Requisite User Data* section in the ***Administration Guide***.

10. Click **Next**.

11. Select the certificates you want to make available.

    - For credential profiles that use a PIV data model, select the PIV containers for the certificates. To allow online unlocking, you must include a certificate in the PIV Card Authentication Certificate container.
    - For credential profiles that do not use a PIV data model, do not select any containers.

    All of the certificates you select here will be issued to your VSC.

    You can select the archived and historic certificate options on this screen. See the *Selecting certificates* section of the ***Administration Guide*** for details of the **Issue new**, **Use existing**, and **Historic Only** options

12. Click **Next** and proceed to the Select Roles screen.

13. Select the roles you want to be able to issue this credential profile, and the roles you want to be able to be issued this credential profile.

    Note: Any role to which you want to issue derived credentials must have the following configured in the **Edit Roles** workflow:

    - Select the **Issue Device** option in the list of workflows.
    - Select the **Collect My Card** option in the list of workflows.
    - Select the **Password** option in the **Logon Methods**.

14. Click **Next**.

15. Click **Next**.

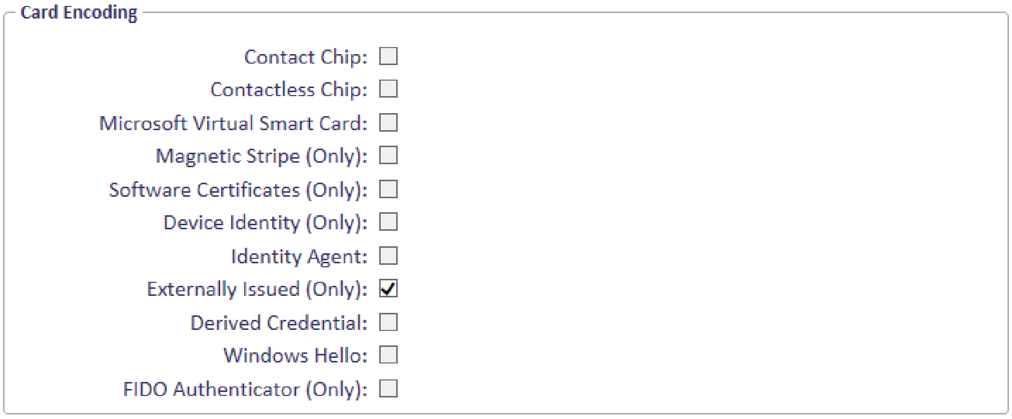
16. Type your **Comments** and complete the workflow.

3.5.3 Creating the imported credential profile

If you are creating a derived credential from a card that was not issued by the current MyID system, MyID will import the deriving credential into the MyID database. You must create a credential profile to be used for this imported smart card.

To create the imported credential profile:

1. From the **Configuration** category, select **Credential profiles**.
2. Click **New**.
3. Type a **Name** for the credential profile.
4. In **Card Encoding**, select **Externally Issued (Only)**.



Card Encoding

Contact Chip: □
Contactless Chip: □
Microsoft Virtual Smart Card: □
Magnetic Stripe (Only): □
Software Certificates (Only): □
Device Identity (Only): □
Identity Agent: □
Externally Issued (Only): ☑
Derived Credential: □
Windows Hello: □
FIDO Authenticator (Only): □

5. In **Services**, select **MyID Logon**.
6. Click **Next**.
7. On the Select Certificates screen, select an **Unmanaged** certificate profile.

   This certificate profile is used to contain the authorization certificate imported from the smart card.

   Note: You are strongly recommended to rename the Unmanaged policy to a name that indicates its use; for example, Imported PIV Card Authentication Certificate.

   If the unmanaged policy is already in use, MyID provides a second unmanaged policy called **Unmanaged Imported**; this policy is disabled by default, which means that you must enable it using the **Certificate Authorities** workflow. If both unmanaged policies are already in use, and you need further unmanaged policies, contact customer support quoting reference SUP-229 for assistance.

   Note: Do not use the unmanaged policy called **Imported Authentication** for this purpose.
8. Select the **Signing** option for the **Unmanaged** certificate profile.

   Note: If the option to select the **Signing** box is not selectable, in the **Certificate Authorities** workflow, edit the **Unmanaged** CA, and set the **Archive Keys** option for the policy to **Internal**.
9. Select the **Authentication Certificate** option from the **Container** drop-down list.
10. Click **Next**.

11. Select the roles you want to be able to issue and receive this credential profile.
12. Click **Next** and complete the workflow.

3.6 Configuring email notifications

You can configure MyID to send a notification to the credential owner when a derived credential is requested. This email message contains information on the owner, the certificate, and the job that was created for the request of the derived credential.

MyID also sends a cancellation email notification when a device has been canceled.

3.6.1 Setting up email

To set up MyID to enable email notifications, see the *Setting up email* section in the ***Advanced Configuration Guide***.

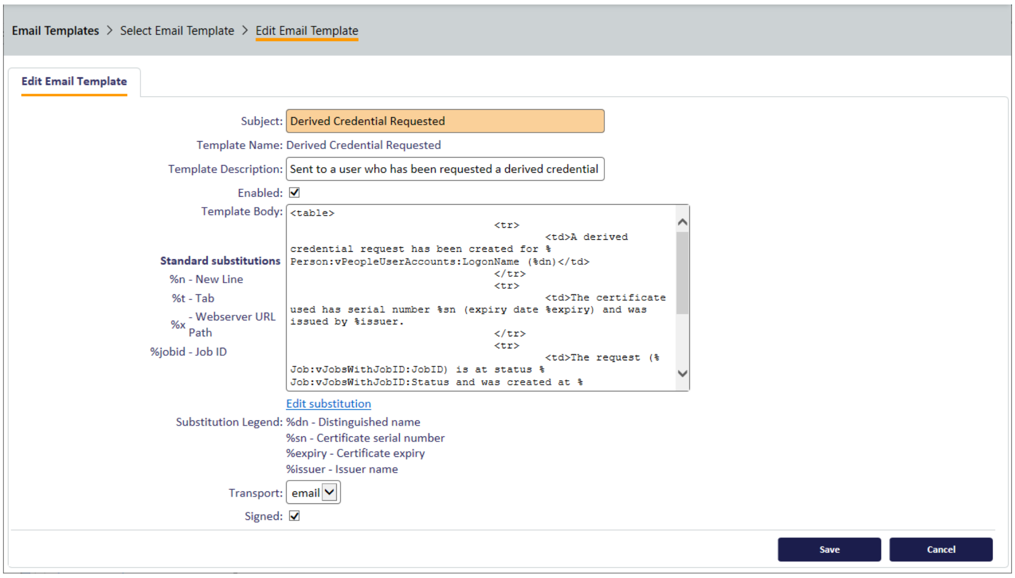
3.6.2 Editing the request email template

To edit the email template:

1. From the **Configuration** category, select **Email Templates**.

   You can also launch this workflow from the **Connections and Notifications** section of the **More** category in the MyID Operator Client. See the *Using Connections and Notifications workflows* section in the ***MyID Operator Client*** guide for details.

2. Select the **Derived Credential Requested** template, then click **Modify**.



Email Templates > Select Email Template > Edit Email Template

Edit Email Template

Subject: Derived Credential Requested

Template Name: Derived Credential Requested

Template Description: Sent to a user who has been requested a derived credential

Enabled: ☑

Template Body:

```
<table>
                                <tr>
                                        <td>A derived
credential request has been created for %
Person:vPeopleUserAccounts:LogonName (%dn)</td>
                                </tr>
                                <tr>
                                        <td>The certificate
used has serial number %sn (expiry date %expiry) and was
issued by %issuer.
                                </tr>
                                <tr>
                                        <td>The request (%
Job:vJobsWithJobID:JobID) is at status %
Job:vJobsWithJobID:Status and was created at %
```

Standard substitutions

%n - New Line

%t - Tab

%x - Webserver URL Path

%jobid - Job ID

Edit substitution

Substitution Legend: %dn - Distinguished name
%sn - Certificate serial number
%expiry - Certificate expiry
%issuer - Issuer name

Transport: email

Signed: ☑

3. Select the **Enabled** option to enable or disable the template.

   Disabling the template prevents the notifications from being sent.

4. Edit the **Template Body**.

   The body contains HTML text, and allows you to include codes in the template that are substituted for information about the request when the email is sent.

   You can use the following substitution codes:

   - `%dn` – Distinguished name.
   - `%sn` – Certificate serial number.
   - `%expiry` – Certificate expiry date.
   - `%issuer` – Issuer name
   - `%Person:vPeopleUserAccounts:LogonName` – Logon name of the credential owner.
   - `%Job:vJobsWithJobID:JobID` – ID of the request job.
   - `%Job:vJobsWithJobID:Status` – status of the request job.
   - `%Job:vJobsWithJobID:InitiationDate` – initiation date of the request job.
   - `%Job:vNewRequestEmailCodes:CredentialProfileName` – credential profile requested for the derived credential.

5. Click **Save**.

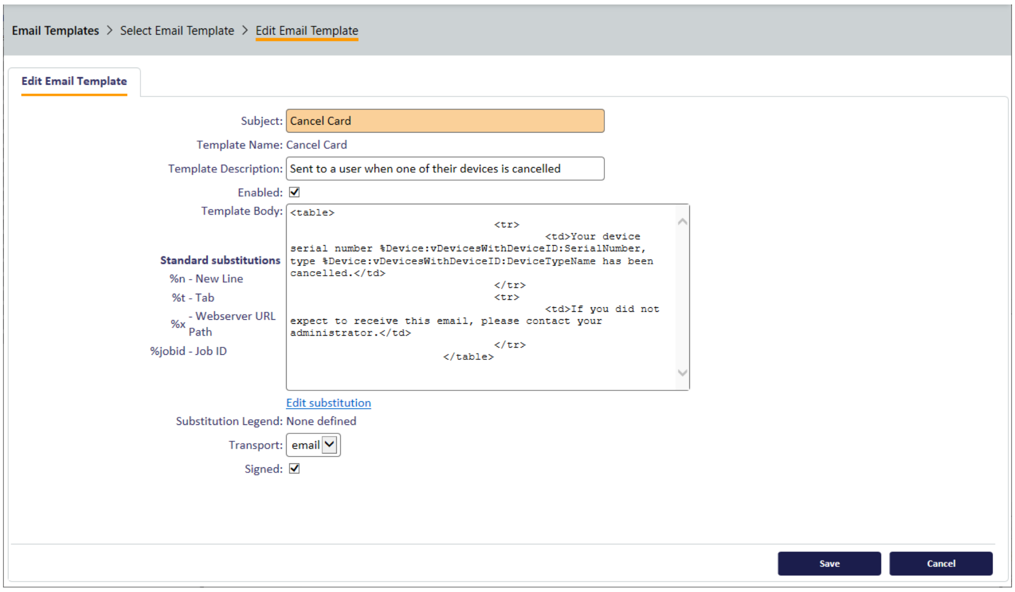
3.6.3 Editing the cancellation email template

To edit the email template:

1. From the **Configuration** category, select **Email Templates**.

   You can also launch this workflow from the **Connections and Notifications** section of the **More** category in the MyID Operator Client. See the *Using Connections and Notifications workflows* section in the ***MyID Operator Client*** guide for details.

2. Select the **Cancel Card** template, then click **Modify**.



Subject: Cancel Card

Template Name: Cancel Card

Template Description: Sent to a user when one of their devices is cancelled

Enabled: ☑

Template Body:

```
<table>
                                <tr>
                                        <td>Your device
serial number %Device:vDevicesWithDeviceID:SerialNumber,
type %Device:vDevicesWithDeviceID:DeviceTypeName has been
cancelled.</td>
                                </tr>
                                <tr>
                                        <td>If you did not
expect to receive this email, please contact your
administrator.</td>
                                </tr>
                        </table>
```

Substitution Legend: None defined

Transport: email

Signed: ☑

3. Select the **Enabled** option to enable or disable the template.

   Disabling the template prevents the notifications from being sent.

4. Edit the **Template Body**.

   The body contains HTML text, and allows you to include codes in the template that are substituted for information about the request when the email is sent.

   You can use the following substitution codes:

   - `%Device:vDevicesWithDeviceID:SerialNumber` – serial number of the canceled device.
   - `%Device:vDevicesWithDeviceID:DeviceTypeName` – type of the canceled device.

5. Click **Save**.

3.6.4 Obtaining the email address

If the user is unknown to MyID (that is, the original credential was issued by a different system):

- MyID sends the email notification to the address from the deriving certificate.

If the user is known to MyID (that is, there is already an account in MyID for the user):

- If the **Background update** configuration option is set, MyID obtains the email address from the directory, and sends the notification to that address.
- If the **Background update** configuration option is *not* set:

- If the **Update email address from derivation** configuration option is set, MyID attempts to obtain the email address from the deriving certificate and sends the notification to that address; it also updates the email address in the MyID account with the address from the certificate. If there is no email address in the certificate, it uses the email address in the MyID account.
- If the **Update email address from derivation** configuration option is *not* set, MyID sends the notification to the email address in the MyID account.

If MyID cannot obtain an email address from any source, it does not attempt to send an email notification.

3.6.5 Requiring an email address

You are recommended to configure the credential profile for the derived credential to require an email address.

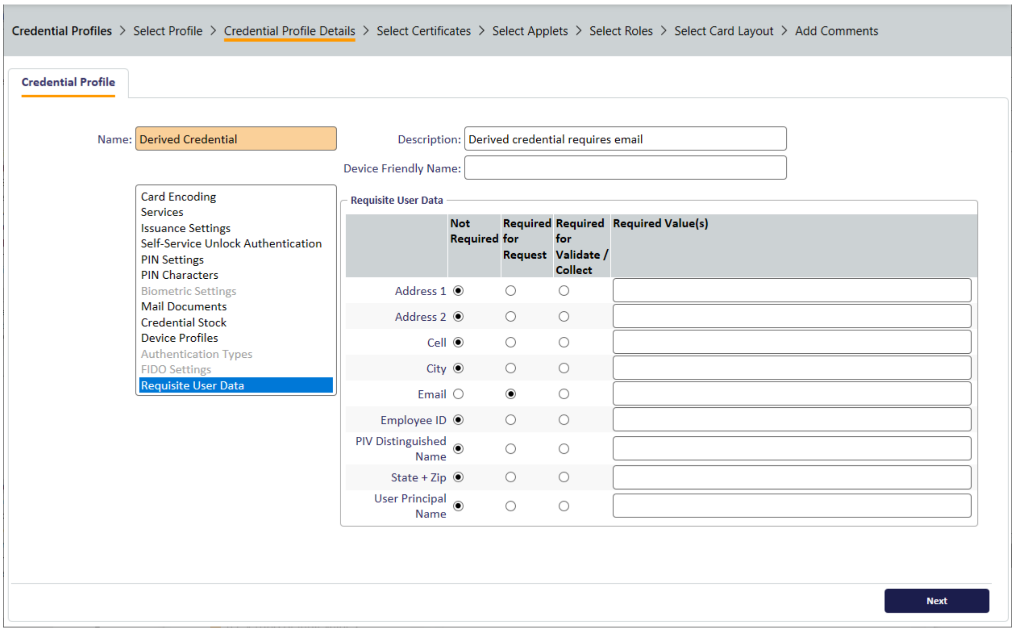
To require an email address:

1. From the **Configuration** category, select **Operation Settings**.

   You can also launch this workflow from the **Configuration Settings** section of the **More** category in the MyID Operator Client. See the *Using Configuration Settings workflows* section in the ***MyID Operator Client*** guide for details.
2. Click the Issuance Processes page.
3. Set the following option:
   - **Requisite User Data** – set this option to Yes.

     This option makes the Requisite User Data section appear in the Credential Profiles workflow.
4. Click **Save changes**.
5. From the **Configuration** category, select **Credential Profiles**.

   You can also launch this workflow from the **Credential Configuration** section of the **More** category in the MyID Operator Client. See the *Using Credential Configuration workflows* section in the ***MyID Operator Client*** guide for details.
6. Click **New** to create a new credential profile, or select an existing credential profile and select **Modify**.
7. Select the **Requisite User Data** option.



Name: Derived Credential

Description: Derived credential requires email

Device Friendly Name:

Requisite User Data

	Not Required	Required for Request	Required for Validate / Collect	Required Value(s)
Address 1	●	○	○	
Address 2	●	○	○	
Cell	●	○	○	
City	●	○	○	
Email	○	●	○	
Employee ID	●	○	○	
PIV Distinguished Name	●	○	○	
State + Zip	●	○	○	
User Principal Name	●	○	○	

8. Set the **Email** option to **Required for Request**.
9. Complete the rest of the credential profile configuration.

3.6.6 Updating the email address

If you set the **Update email address from derivation** option (on the **Certificates** page of the **Operation Settings** workflow) to Yes, if MyID obtains an email address from the deriving certificate, it updates the person's record within MyID with this address.

4 Requesting derived credentials

You can request derived credentials for your own mobile device or PC.

Collecting a mobile ID may take several minutes, depending on the complexity of the certificates and the speed of your network connection. If the collection fails due to network problems, you are recommended to use the **Cancel Credential** workflow to cancel the mobile ID, then request another mobile ID for the user.

Note: If you see any errors when requesting or collecting derived credentials, see the ***Error Code Reference*** document for possible explanations and solutions.

4.1 Requesting derived credentials using the Self-Service Kiosk

To request derived credentials for your own mobile device or PC, use the Self-Service Kiosk and follow the on-screen instructions.

You must run the Kiosk with the `/dc` command-line parameter. See the *Running the Self-Service Kiosk* section in the ***Self-Service Kiosk*** guide for details.

To issue a derived credential, the PIV card that you present to the kiosk must contain both the PIV Authentication certificate and the Digital Signature certificate.

Note: The email notification that is sent when you request derived credentials using the Self-Service Kiosk mentions only the PIV Authentication certificate, but both the PIV Authentication and Digital Signature certificates *are* used for the derived credential.

4.1.1 Setting the timeout for the PIN entry screen

By default, the PIN entry screen for derived credentials on the Self-Service Kiosk will time out after 120 seconds. If you want to change this value, you can edit the configuration file.

To edit the configuration file:

1. On the client PC, back up the `MyIDKiosk.exe.config` file in the following folder:

   ```
   C:\Program Files (x86)\Intercede\MyIDSelfServiceKiosk\
   ```

2. Using a text editor, open the `MyIDKiosk.exe.config` file.

   Note: Make the changes to the config file exactly as shown. The case is important.

3. Edit the `value` parameter in the following line:

   ```
   <add key="DerivedCredentialsPageTimeoutSeconds" value="120"/>
   ```

   If this line does not exist, you can add it to the `<appSettings>` section.

   For example:

   ```
   <add key="DerivedCredentialsPageTimeoutSeconds" value="60"/>
   ```

   This reduces the timeout to 60 seconds.

4. Save the configuration file.
5. Restart the Kiosk.