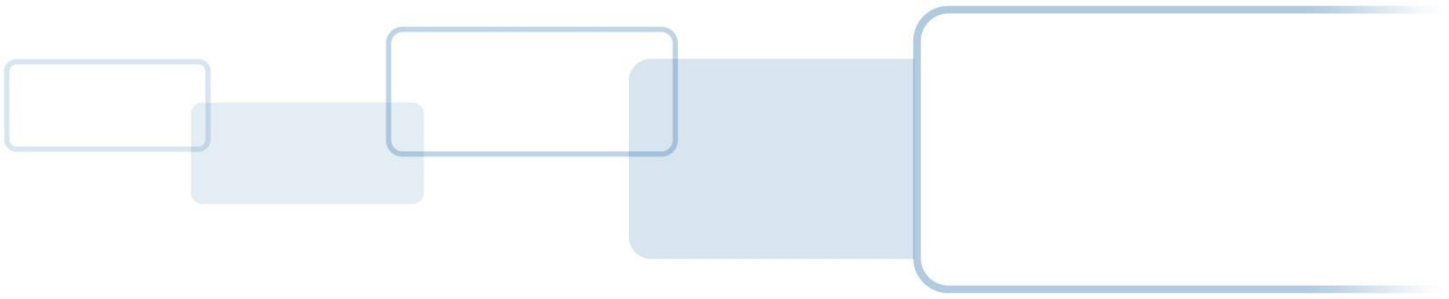
HID SiPass Installation and Configuration Guide

Siemens - Mobile Access Portal Integration

v 1.7 | November 06, 2020



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19-11-2018	Neerav Mittal	1.1	Created Document
20-03-2019	Neerav Mittal	1.2	Updated document to include Credential Profile changes
15-04-2019	Sonu Singal	1.3	Updated document to include Database Access permission section and added MSSQL server 2016 pre-requisite
17-04-2019	Sonu Singal	1.4	Updated document to change the log level configuration. Section 3.6
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13-01-2020	Chirag Seksaria	1.6	Updated document to include subscription changes, migration process. Section 4
06-11-2020	Chirag Seksaria	1.7	Updated document to include detailed explanation with pictures to identify all the config file properties

Related Document(s)

Reference	Author	Version	HID PS Reference	Description

Table of Contents

1 Introduction

1.1 Scope

The scope of this document is to provide step by step details on how to install and configure the SiPass Mobile Access Portal Integration. The respective installer includes support two for the two HID Mobile Access environments:

- HID SIS Portal (Perpetual) and
- HID Origo Portal (Subscription) HID Origo Portal.

By default, the integration is configured to support the HID Origo Portal environment. Note: The former environment is now End of Services as of the 30 September 2020 and future releases of this integration may no longer include support for both.

1.2 Audience

The target audience for this installation and configuration guide include:

- Siemens Product Management.
- HID Global Partner Services and Global Accounts.

1.3 Pre-requisites

Below is the list of pre-requisites that must be installed prior to the installation of HID SiPass Adapter

- Windows 10 or Windows 2016 Server machine,
- SiPass integrated v2.76,
- An active organisation in the HID Origo (or HID SIS) Portal environment,
- Microsoft SQL Server 2017 Express
- SQL LocalDB 2016

2 Installation

The following steps are required when installing the SiPass HID Adapter.

1. Install SQL LocalDB 2016 on the host intended to run the adapter.

   Note: The setup file is available as part of the SiPass HID Adapter installer package.

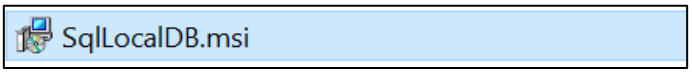


Figure 1: SQL LocalDB 2016

2. Using Windows explorer, navigate to the SiPass HID Adapater installer and launch the **SiPass HID Adapter** installer.

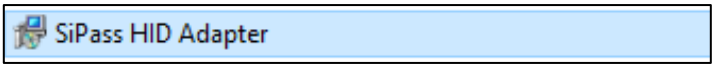


Figure 2: SiPass HID Adapter

3. Click **Next**

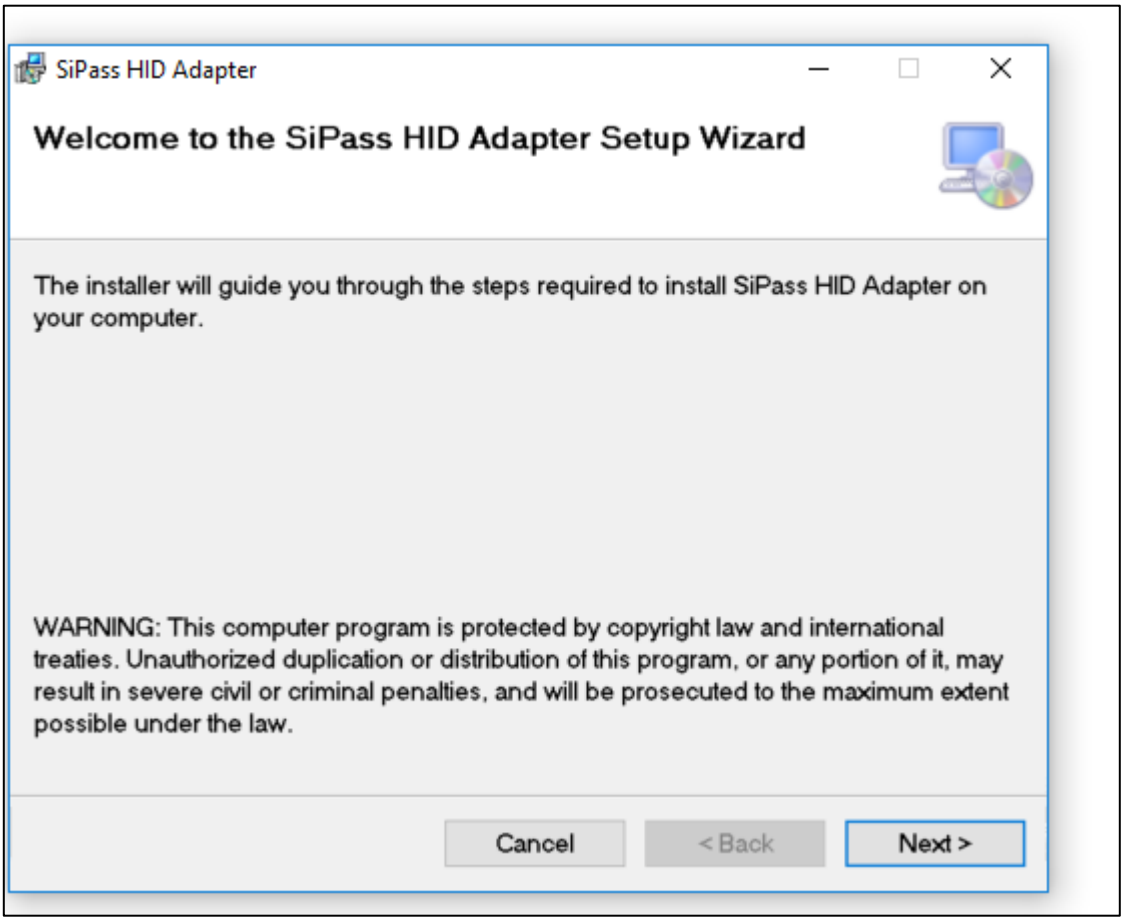


Figure 3: Installation Wizard -1

4. Click **Next**

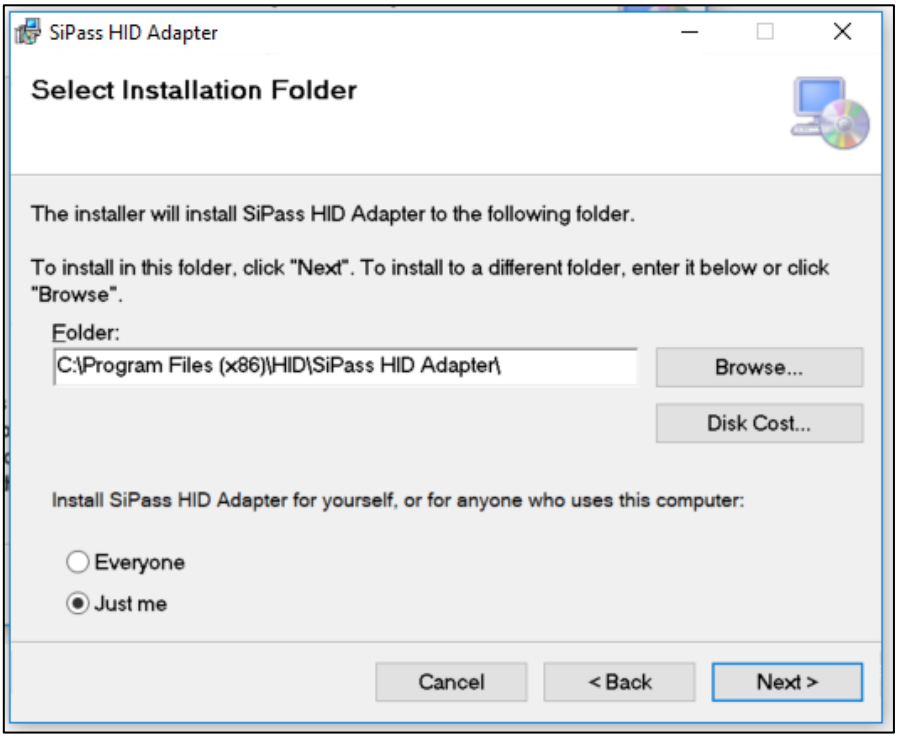


Figure 4: Installation Wizard -2

5. Click **Next**

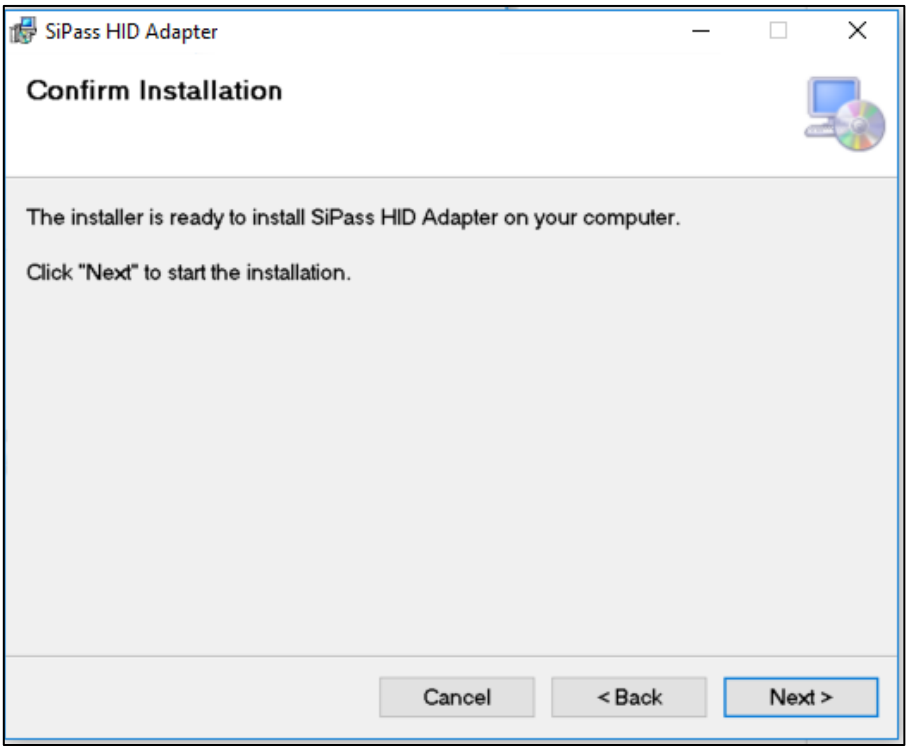


Figure 5: Installation Confirmation

6. The installation is now complete.

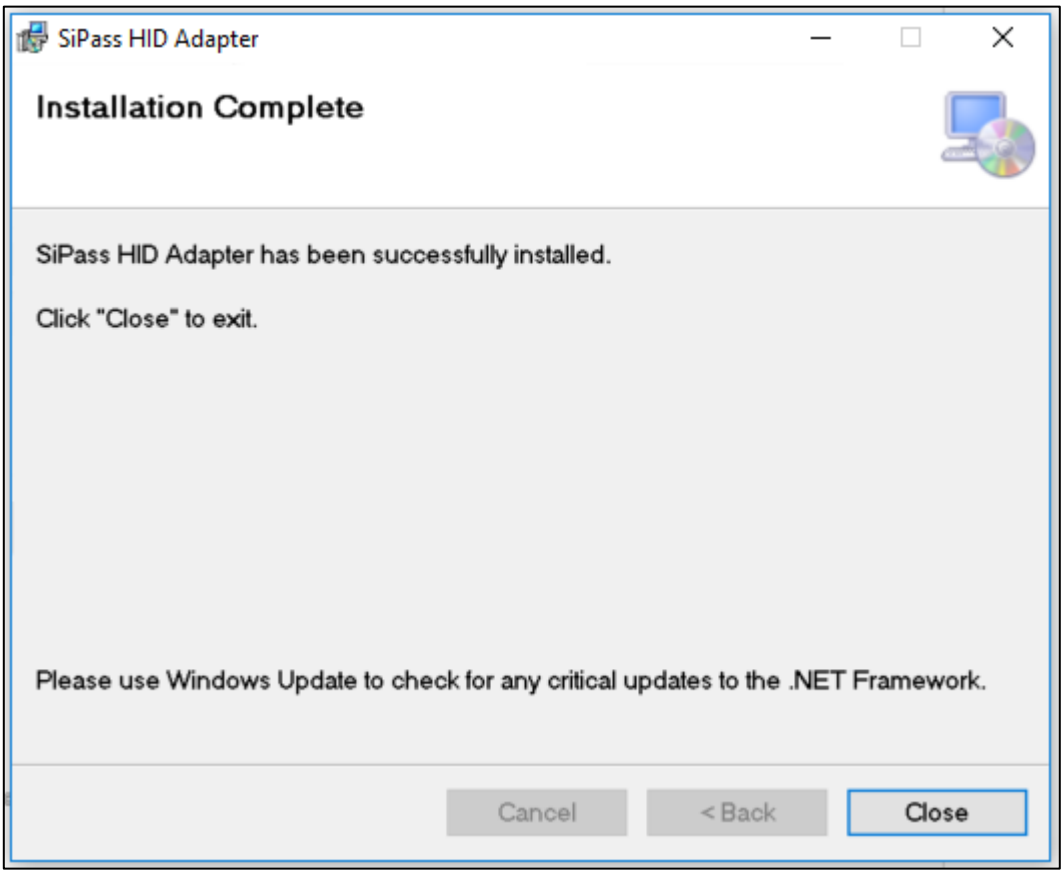


Figure 6: Installation Complete

7. Launch the Windows Services Manager (services.msc) and confirm that a new Windows service has been added to the Services list:.

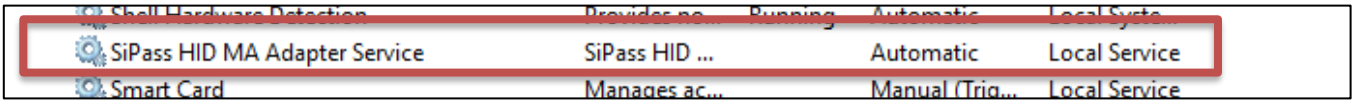


Figure 7: Service added

8. By default, the new service runs as a Local Service. It needs to run as a Windows user with administrator rights. The following steps describe how to make this amendment:
    i. Right-click the new service and select **Properties**
    ii. Select the Log On tab

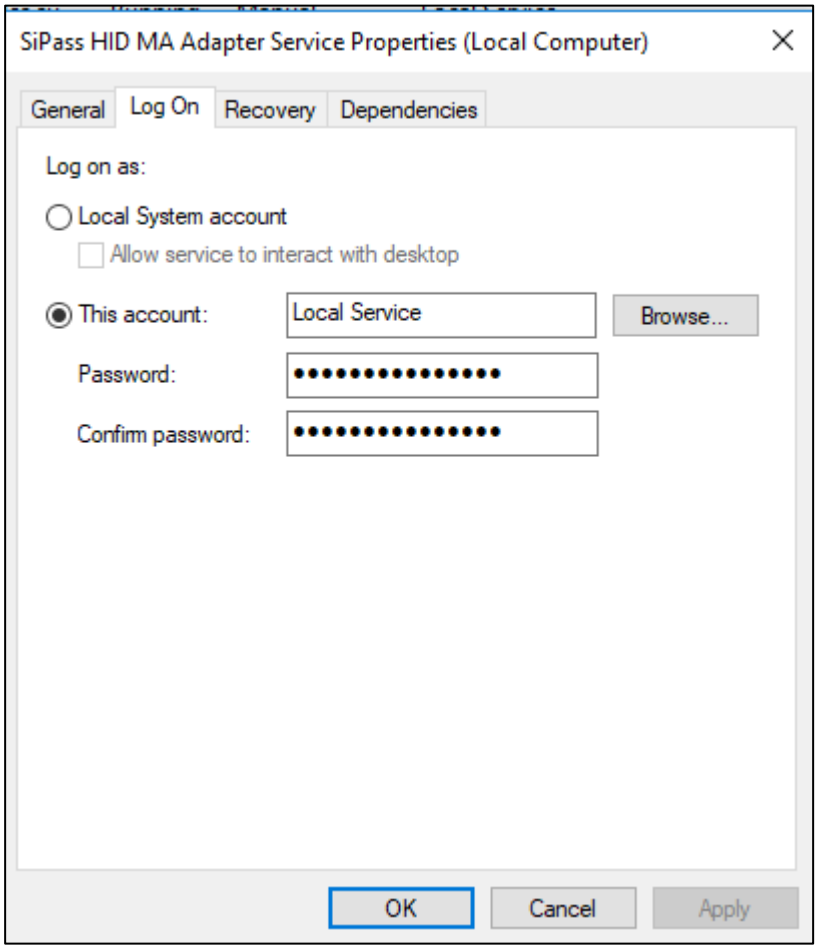


Figure 8: Log On Tab

    iii. Select **Browse** and select a Windows user with **Administrator** rights.
    iv. Click OK and confirm that the change has taken affect.

3 Configuration

3.1 Grant Database File Permissions

To configure the new service with the relevant database, the **Administrator** user set in the previous step needs to be given permissions to the database files. The following are the steps required to configure these permissions.

1. Using Windows explorer, navigate to the folder where the new SiPass Adapter has been installed (default location - **C:\Program Files (x86)\HID\SiPass HID Adapter**):

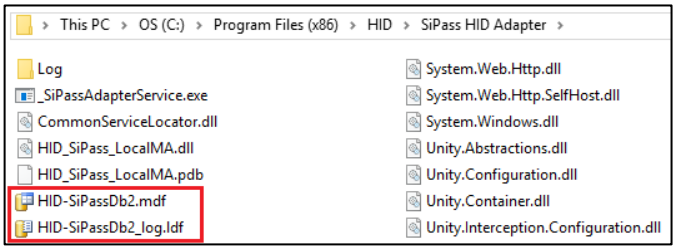


Figure 9: Database location and files

2. Right-click the “HID-SiPassDb2.mdf” file and select **Properties.**
3. Go to **Security** Tab.
4. Locate the **Administrator** user (set in the previous steps) under the “Group or username” section.
    i. If the user is listed, grant the user “Full Control” permissions...
    ii. If the user is not listed, click Edit and then Add the **Administrator** user by assigning “Full Control” permissions to user.

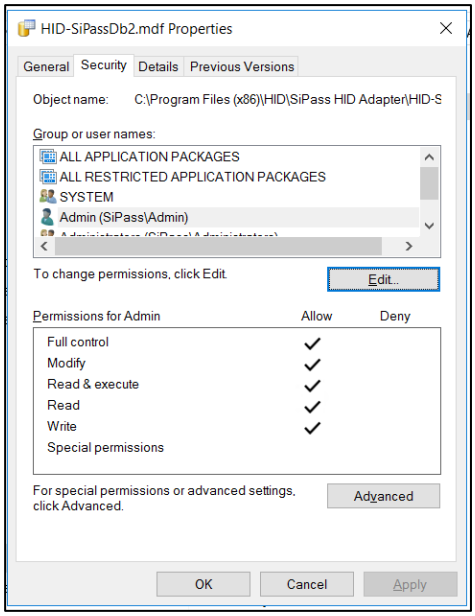


Figure 10: Properties Tab

5. Repeat the above steps for the “HID-SiPassDb2_log.ldf” file.

3.2 Configuring SiPass Adapter Properties

To run the SiPass Adapter service successfully, certain properties need to be configured. Below are the details of the properties and steps to configure these.

1. Using Windows explorer, navigate to the folder where the SiPass Adapter has been installed (default location - **C:\Program Files (x86)\HID\SiPass HID Adapter**).
2. Open the **SiPassAdapterService.exe.config** using any file editor.
3. Under the appSettings section configure the following properties:

```
<appSettings>
  <add key="ServerThumbprint" value="ServerThumbprint" />
  <add key="ClientCertificatePrincipalName" value="sipass_server_name" />
  <add key="username" value="sipass_username" />
  <add key="password" value="sipass_password" />
  <add key="serverName" value="sipass_server_name" />
  <add key="clientId" value="hid_client_id" />
  <add key="clientSecret" value="hid_client_secret"
  <add key="HrApiHostUrl" value="https://sipass_server_name:8745" />
  <add key="environment" value="PROD" />
  <add key="pollingTime" value="5" />
  <add key="ApiTimeout" value="180" />
  <add key="ApiVersion" value="2.0"/> <!--either 1.0 or 2.0-->
  <add key ="ApplicationId" value="HID-SIEMENS-SIPASS"/> <!--required only if ApiVersion = 2.0-->
  <add key="HeaderMediaType" value="application/hal+json" />
  <add key="AuditMessageMaxRows" value="50" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
</appSettings>
```

Figure 11: Configuration Properties

- ServerThumbprint – To set this value follow the following steps:
  - Login to the SiPass integrated Configuration Client,
  - Navigate to System Tab → Client Configuration → Save Server Thumbprint →

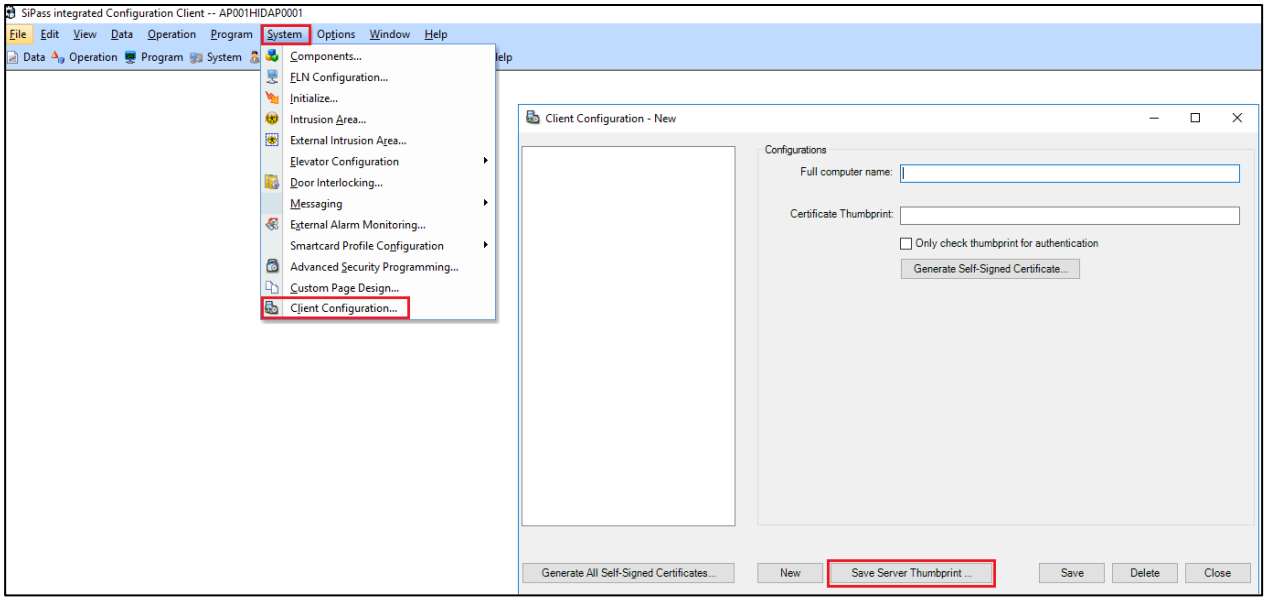


Figure 12: ServerThumbprint

- Save this file locally e.g. 'ServerThumprint.txt'.
- Open this file with a file editor,

- Copy the contents from this file i.e. 'ServerThumprint.txt' and paste the content into the following field:

```
<add key="ServerThumbprint" value="ServerThumbprint" />
```

- ClientCertificatePrincipalName
  - Launch the Windows System properties i.e. Windows key + Pause/Break key on the keyboard.
  - Click on System protection → Computer Name tab → Full computer name

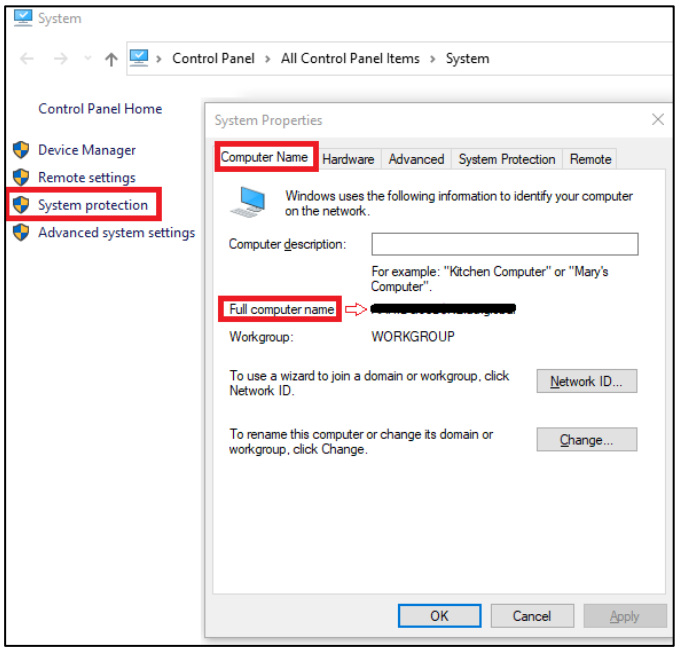


Figure 13: System Properties

  - Copy the content from the Full computer name field and paste this value into the following field:

```
<add key="ClientCertificatePrincipalName" value="sipass_server_name" />
```

- username
  - Enter the SiPass Integrated Workstation login username into the following field:

```
<add key="username" value="sipass_username" />
```

- password
  - Enter the SiPass Integrated Workstation login password into the following field:

```
<add key="password" value="sipass_password" />
```

- serverName
  - Copy the value used for 'ClientCertificatePrincipalName' into the following field:

```
<add key="serverName" value="sipass_server_name" />
```


- clientId
  - Login to the [HID Origo Management Portal (https://portal.origo.hidglobal.com/).]
  - Click on the top-right menu (denoted by the 3 vertical dots) and select Organization Administration.
  - Scroll to the bottom of the page to the System Accounts section:

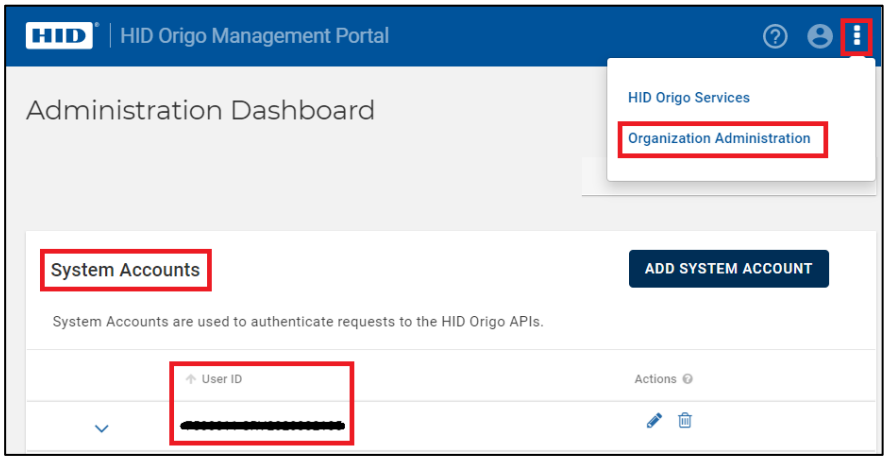


Figure 14: Organization Administration

  - Copy the User ID from above and paste into the following field:

```
<add key="clientId" value="hid_client_id" />
```

- clientSecret
  - The clientSecret will be the password set for the above User ID in the HID Origo Management Portal. Note: If you are unsure of this value, please reset this through the Management Portal.
  - Enter the password value into the following field:

```
<add key="clientSecret" value="hid_client_secret"
```

- HrApiHostUrl
  - Copy the value used for 'ClientCertificatePrincipalName' into the 'HrApiHostUrl' value field prefixed with 'https://' and appending port 8745 to the end e.g. https://<FQDN>:8745

```
<add key="HrApiHostUrl" value="https://sipass_server_name:8745" />
```

- environment
  - The default value for this property should be **PROD**. Note: If the adapter is being used against the HID Origo Pre-Production or HID Origo Partner Integration Environment, then set this value to **TEST**. This property should only be changed from the default value when development testing is being undertaken by HID Global Partner Services or Siemens Product Management.
- ApiVersion
  - This property value should be set to **2.0** indicating the integration of the 2.0 version API in use with the HID Origo Portal.
- ApplicationId
  - This property value should be set to **HID-SIEMENS-SIPASS**. Note: This property should only be modified to an alternative value when instructed by HID Global Partner Services.

Important: [*On installation, default value set for 'Environment' is '**PROD**' and 'ApiVersion' is '**2.0**'*]

Important: [*On installation, default value set for '*ApplicationId' *is '**HID-SIEMENS-SIPASS**'. This is only applicable if the API version used is 2.0]*

Important: [*The '**clientID**' and '**clientSecret**' values will vary from one end user organization to another and will be site specific. In the case of an end user organization using the HID SIS Portal, when the API has been enabled against that respective organization, the ability to define System Accounts (User ID/Password) becomes available under the Administration tab. The same values should be set here to allow the adapter to authenticate to the Portal API. If the end user organization is using the HID Origo Management Portal, values for these should be obtained from the Administration Dashboard.]*

Important: [*Whenever '**SiPassAdapterService.exe.config**' file values are changed; the SiPass Adapter Service requires a restart to load respective values into the service*]

3.3 Import HID Mobile Access Tab

1. Launch the SiPass Integrated Configuration Client.
2. Under **System → Custom Page Design**
3. Click on **Import Pages** to launch the Custom Page Designer:

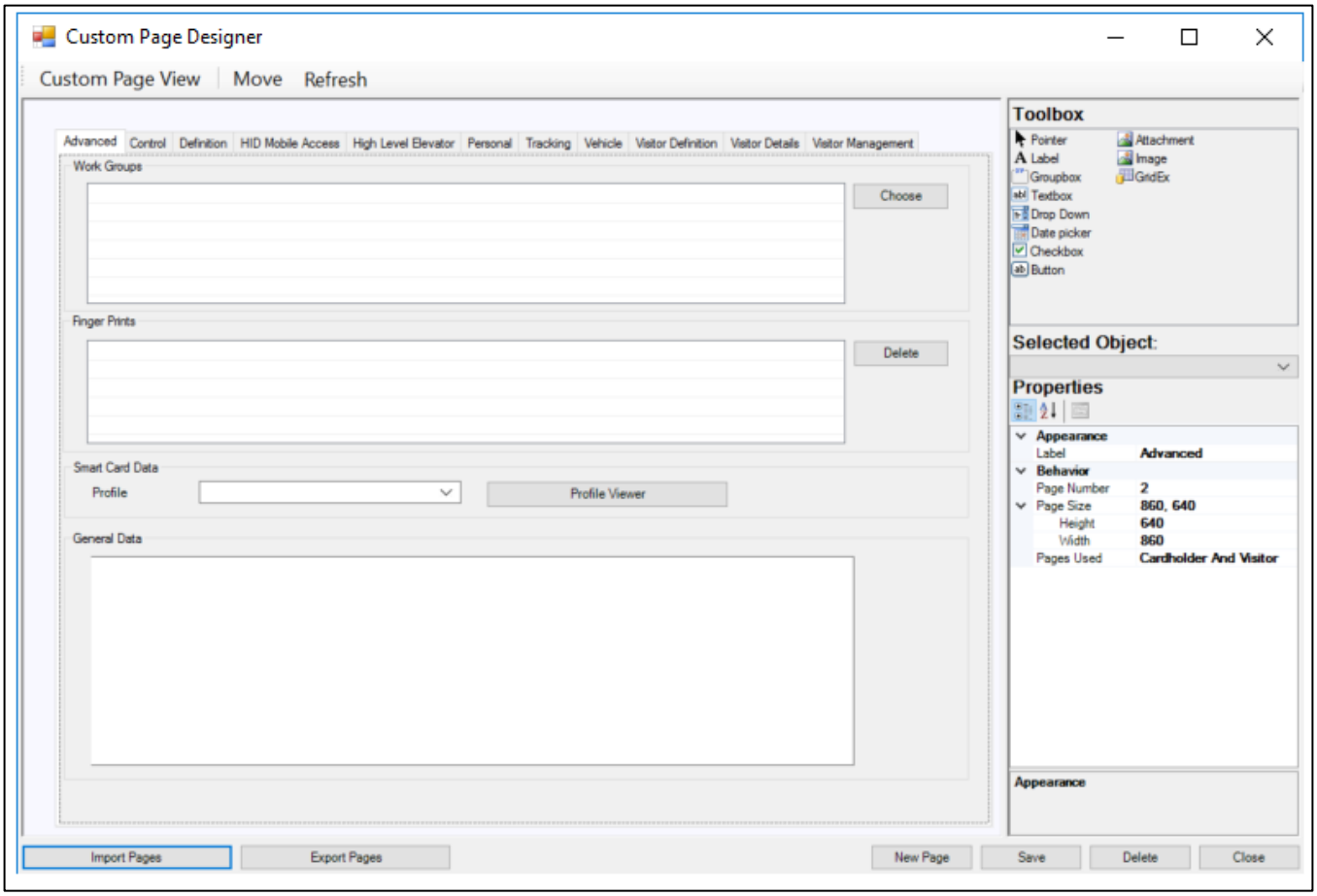
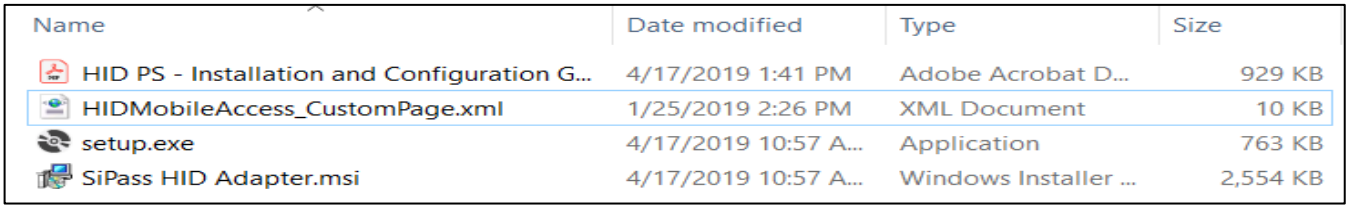


Figure 15: Importing Custom Page

4. Using Windows explorer, navigate to the SiPass HID Adapter installer and select the **HIDMobileAccess_Custom Page,xml** provided with the installer:



5. Launch the **SiPass integrated Operation Client**,

6. Confirm that the **HID Mobile Access** tab is now visible under the Cardholder record:

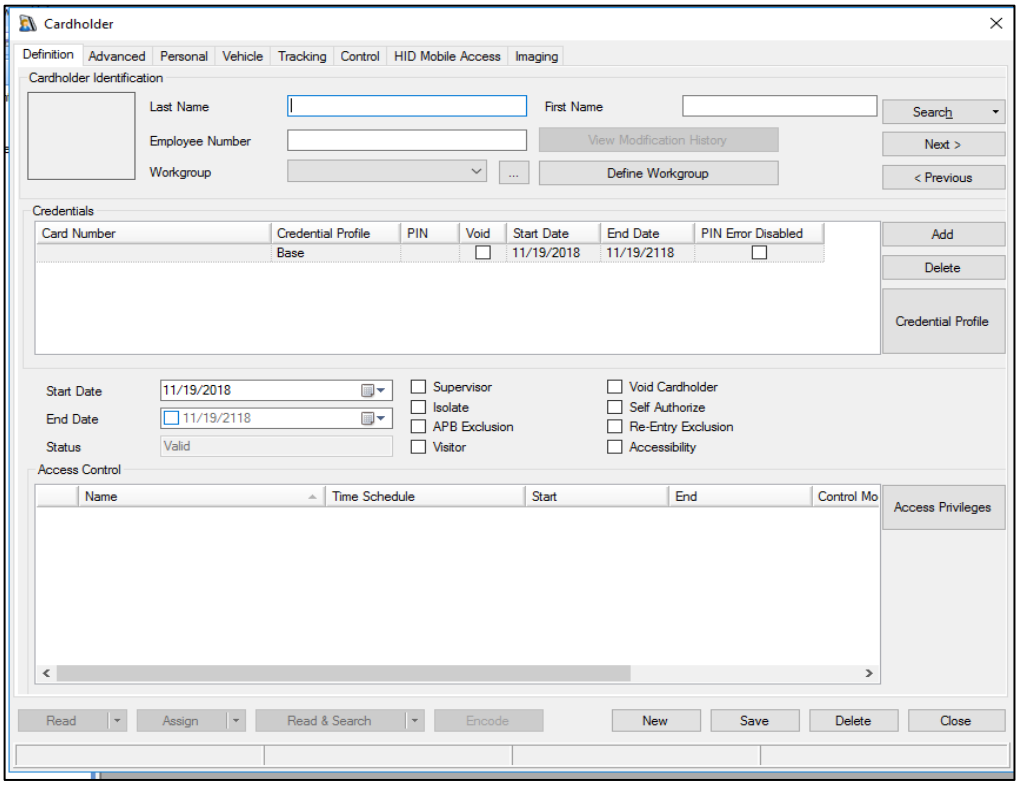


Figure 16: Custom Page Imported Successfully

7. Select the HID Mobile Access table and confirm that the following fields are visible:

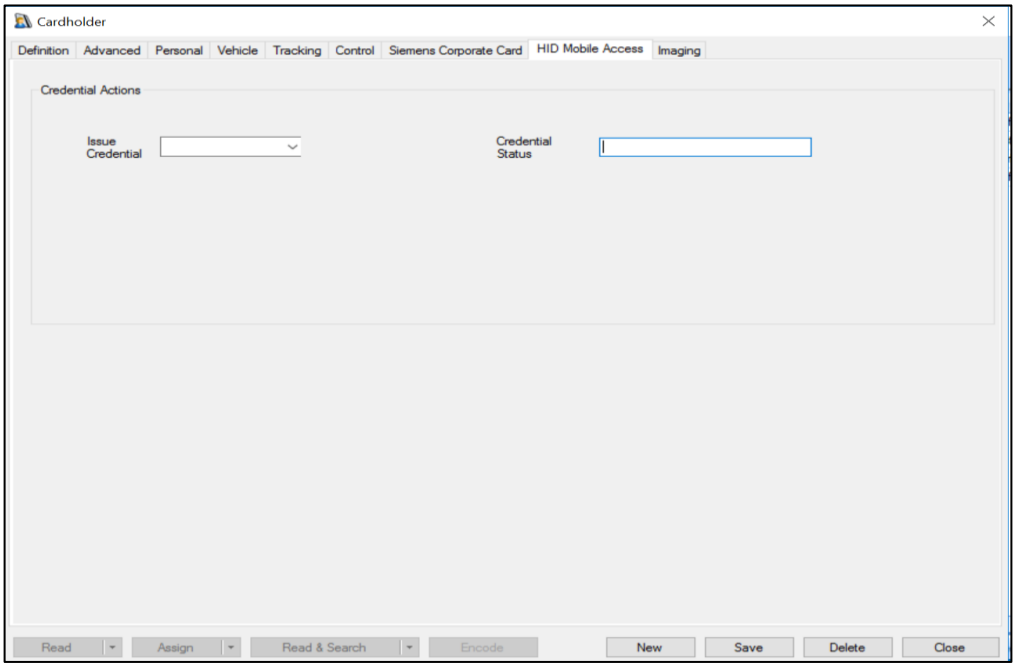


Figure 17: Imported Custom Page

3.4 Add New Credential Profile

1. Launch the **SiPass integrated Operation Client.**
2. Launch the **Cardholder** Screen,
3. Click on the **Credential Profile** button:

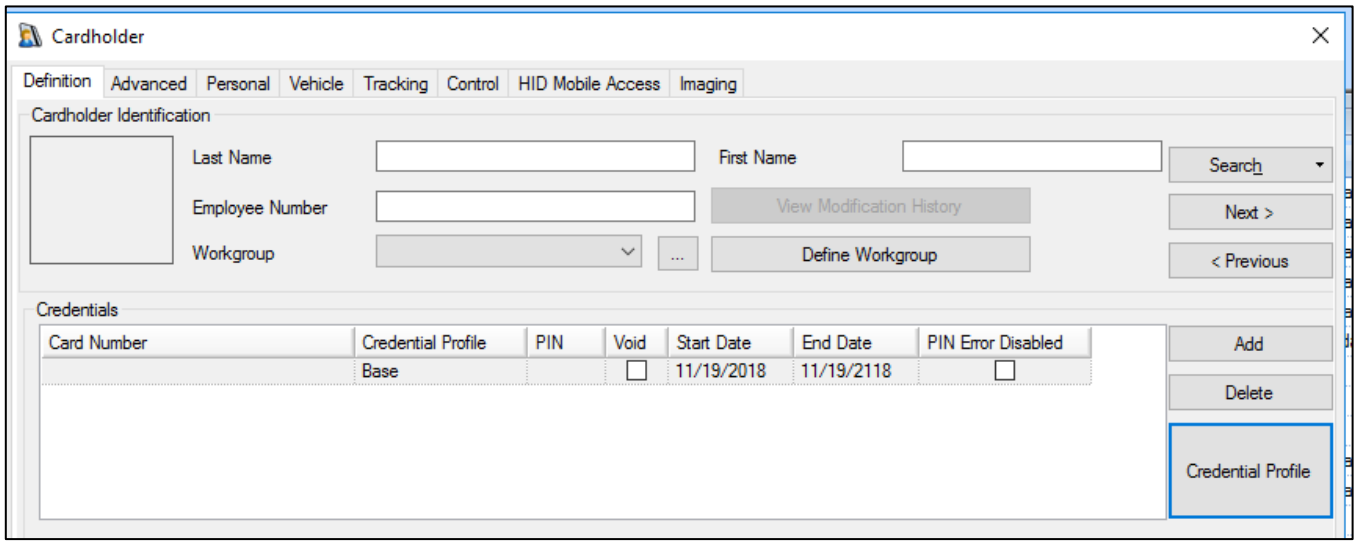


Figure 18: Credential Profile

4. Add a new **Credential Profile** with Name matching the corresponding part number from the HID Origo Management Portal that you intend to issue. When viewing the list of available Mobile IDs in the HID Origo Management Portal, this is referred to as the Part number API. Note: It is important that both values match exactly. If they do not match, then Mobile credential issuance is likely to fail.

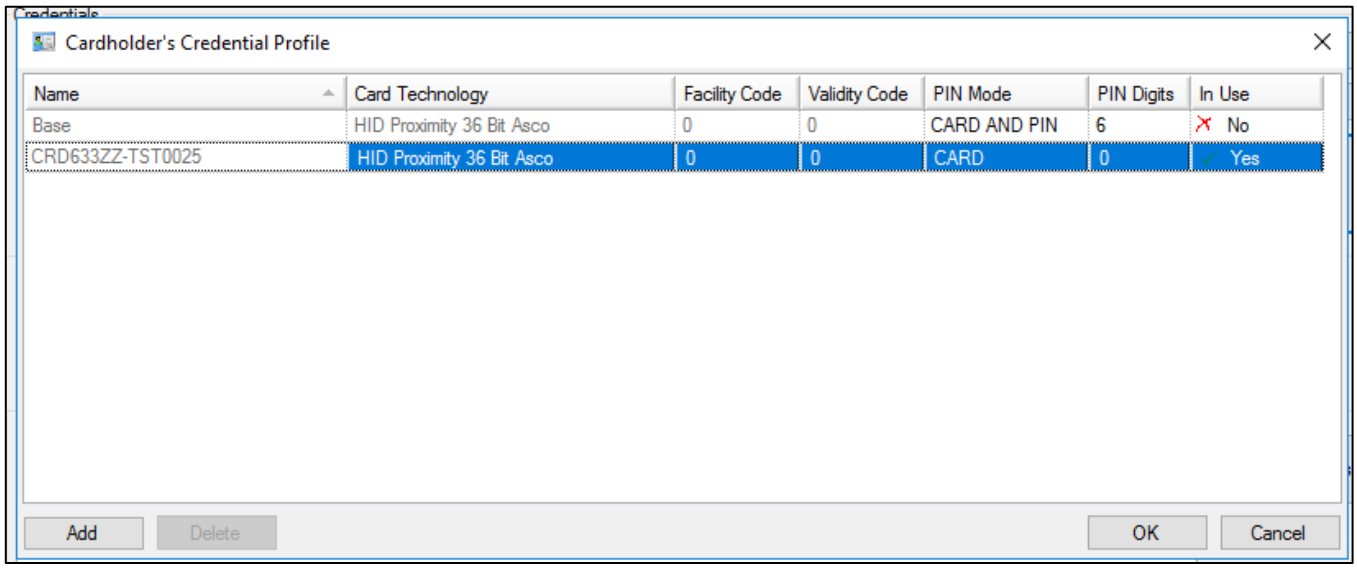


Figure 19: Add new credential profile

3.5 Configure Dropdown in HID Mobile Access Tab

1. Launch the SiPass integrated Operation Client.
2. In the **Navigation** pane, expand **Imported Data:**

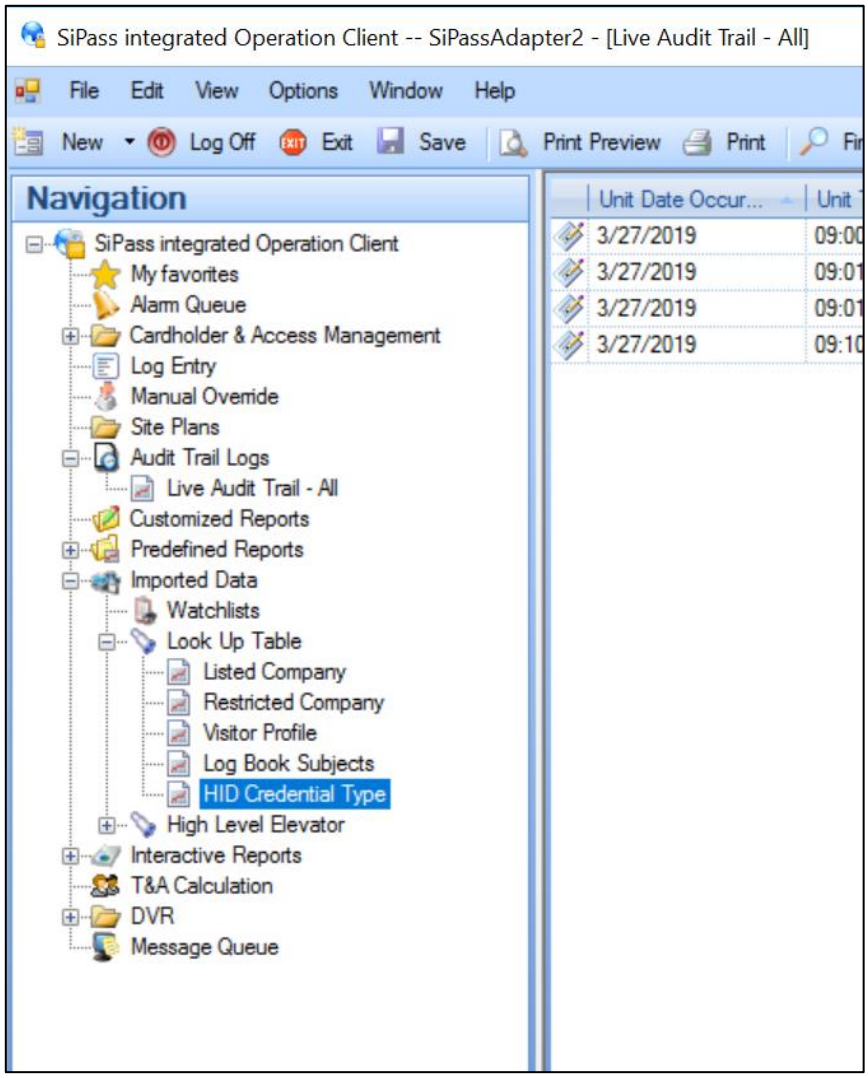


Figure 20: Configure Dropdown

3. Select **HID Credential Type**.
4. Add the Credential Profile names in Column 1 as shown below:

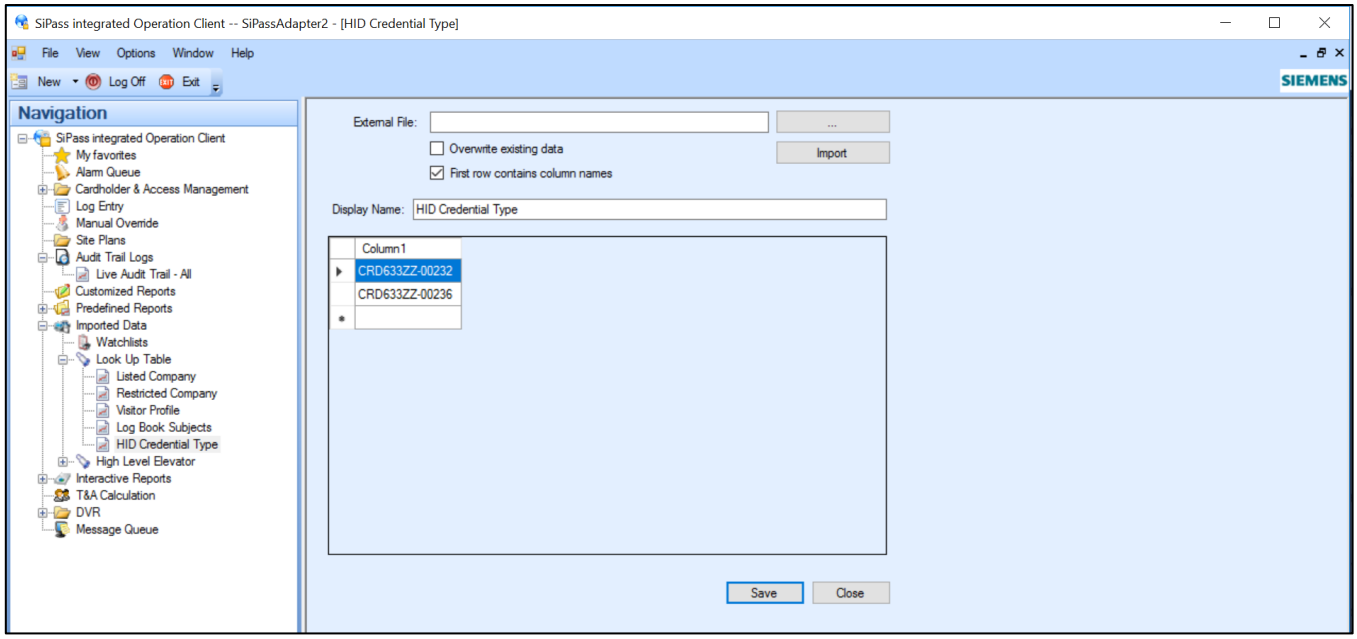


Figure 21: Add Credential Profile Names

Important: [*Email ID and Part number are mandatory fields to be entered/selected while adding a cardholder for the SiPass Adapter Service to process the MobileID for the respective cardholder. If these are not available, then issuance of the Mobile credential is likely to fail.*]

3.6 Configuring SiPass Adapter Logging level

By default, the log level of the HID SiPass Adapter is set to “INFO” (informational messages that highlight the progress of the application at coarse-grained level) and logs can be found under “**C:\Program Files (x86)\HID\SiPass HID Adapter\Log**”.

1. For fine-grained informational events that are most useful to debug an application, modify the log4net.config file as follows:Using Windows explorer, navigate to the folder where the SiPass Adapter has been installed (default location - **C:\Program Files (x86)\HID\SiPass HID Adapter**).
2. Open the **log4net.config** file in a file editor,
3. Update level value to “DEBUG”:

```
<root>
    <level value="DEBUG" />
    <appender-ref ref="Console" />
    <appender-ref ref="RollingFile" />
</root>
```

4. Use Windows Services Manager (services.msc) to restart the SiPass Adapter Service.

4 Release Notes

4.1 Credential Status Field

SN	Action	MA Portal	SiPass - Credential Status Field
1	Issuance of an invitation code	Invitation Active	ISSUING + Part Number
2	Invitation code is actioned by the cardholder	Invitation Code Redeemed	
3	When the credential container is created	Ready for Mobile ID	
4	Credential Status on MA portal	Delivering Mobile ID…	
5	When the Invitation Code expires	Invitation Expired	EXPIRED CREDENTIAL
6	When the credential is delivered	Mobile ID Delivered	ISSUED + Part Number
7	When the credential is triggered for delete	Revoking Mobile ID…	REVOKED
8	When credential is deleted	Mobile ID Revoked	
9	Credential issuance but no email address supplied (Only part number selected)	(Not Applicable)	FAILED
10	Credential issuance but email address already exists in Portal	(Not Applicable)	FAILED
11	General communication error during issuance	(Not Applicable)	FAILED

4.2 Employee Number

Within the HID Origo Management Portal, organisations may define enrolment settings to define which fields are required as part of the Mobile credential issuance. When fields are set as mandatory, these fields must be captured for the cardholder prior to issuing that cardholder a Mobile credential.

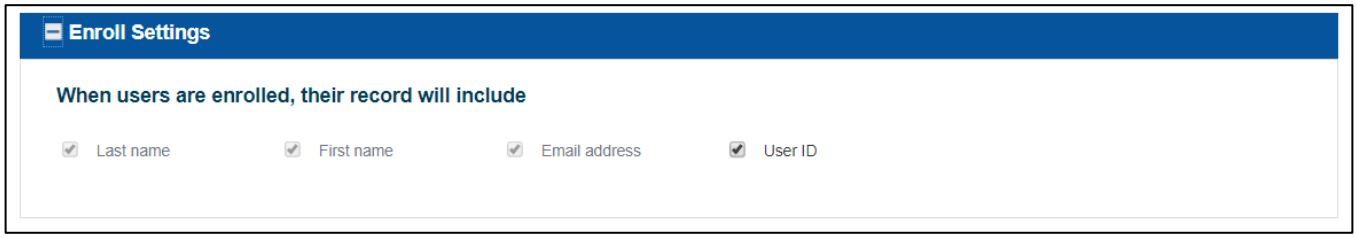


Figure 22: Enroll Settings

Important: [*Employee number is not mandatory*]

By default, to issue Mobile credentials through HID Origo, the cardholder must have First name, Last name and Email address set i.e. mandatory fields. If the User ID field is set as mandatory within the settings of that organisation under the HID Origo Management Portal, then the cardholder Employee number field becomes mandatory. For such organisations that choose to have the User ID captured in the HID Origo Management Portal, if the Employee number is not set within SiPass integrated prior to issuance, then Mobile credential issuance will fail.

4.3 Subscription License

The following sections are additional considerations and configuration items that should be noted if the end user organization is using HID Origo/Subscription user licenses:

HID Global have introduced a new service for the fulfilment of Mobile Identities as part of their HID Origo offering. HID Origo user licenses are available as part of a subscription. The subscription model ensures that the customers are provided with an unlimited number of Mobile credentials for the duration of the subscription to cover the needs of their user base.

This release of the SiPass HID Adapter provides the following level of support for HID Origo Portal (subscription model):

1. Supports credential issuance,
2. Supports credential revocation,
3. Does not handle license state management i.e. will not notify SiPass or the end user of the current status of the subscription or licenses,
4. Does not check the available user licenses prior to user creation,
5. Does not include any period state handling i.e. notifying SiPass or the end user if the subscription has not yet started or lapsed.

4.4 Migration Process – SIS Portal to Origo Portal

Plan for End-User Organization Migrations to Support HID Mobile Identities

The below is a recommended process for migrating end-user's organizations from the legacy HID SIS Portal to the HID Origo Portal. The following process only applies to customers who are not already on the HID Origo Portal environment.

1. Update End-Users existing software with new HID Origo Mobile Identities integrated solution that provides support for both HID Origo X and 2.X API
2. End User is on 1.X API
3. Place Subscription order for End-User Organization to migrate from Perpetual to Subscription
4. End-User organization is migrated from to HID Origo Mobile Identities Platform
5. Update configuration in HID Mobile Identities Custom integrated solution so end-user is now using 2.X API

Important: [*API 1.0 on the HID Origo Mobile Identities Platform should only be used temporarily to migrate users over to the new organization. Technology Partners must migrate to the 2.0 API to continue to receive new fixes and features.*]

4.5 Subscription Configuration Parameters

4.5.1 Configuring SiPass Adapter Properties - SiPassAdapterService.exe.config

- To run the service successfully, certain properties need to be configured.
  - API version = 2.0
  - Application Id = **HID-SIEMENS-SIPASS** (By default the value will be available in the file)
- Below are the steps to configure these properties

1. Go to the folder where SiPass Adapter has been installed (Default Location - C:\Program Files (x86)\HID\SiPass HID Adapter)
2. Open SiPassAdapterService.exe.config
3. Under the appSettings section configure the properties

```
<appSettings>
  <add key="ServerThumbprint" value="ServerThumbprint" />
  <add key="ClientCertificatePrincipalName" value="sipass_server_name" />
  <add key="username" value="sipass_username" />
  <add key="password" value="sipass_password" />
  <add key="serverName" value="sipass_server_name" />
  <add key="clientId" value="hid_client_id" />
  <add key="clientSecret" value="hid_client_secret"
  <add key="HrApiHostUrl" value="https://sipass_server_name:8745" />
  <add key="environment" value="PROD" />
  <add key="pollingTime" value="5" />
  <add key="ApiTimeout" value="180" />
  <add key="ApiVersion" value="2.0"/> <!--either 1.0 or 2.0-->
  <add key ="ApplicationId" value="HID-SIEMENS-SIPASS"/> <!--required only if ApiVersion = 2.0-->
  <add key="HeaderMediaType" value="application/hal+json" />
  <add key="AuditMessageMaxRows" value="50" />
  <add key="ClientSettingsProvider.ServiceUri" value="" />
</appSettings>
```

Figure 23: Configuration Properties

4.5.2 Configuring SiPass Operation Client - Adding credential profile

- **Important**: [*Once migrated from SIS portal (Perpetual) to HID Origo portal (Subscription), part-number name may change on the HID Origo Portal*.
- Post migration, if there are new part-numbers updated on the portal, then add the respective part number in ‘Credential Profile’ and ‘Configuring dropdown’ in **SiPass Operation Client** as shown in 3.4 and 3.5 section above.]

5 Glossary

Acronym	Description
Card Number	The serial number identifying the HID Mobile Access Mobile ID
HID Mobile Access SIS Portal	A Web Portal that allows end user administrators to configure Mobile Devices and manage the Mobile IDs
HID Mobile Access SIS Portal API (Perpetual)	The Web Service interface for the HID Mobile Access SIS Portal
HID Origo Mobile Access Portal (Subscription)	A Web Portal that allows end user administrators to create users, configure Mobile Devices and manage the Mobile IDs
HID Origo Mobile Access Portal API	A cloud API that provides the integration interface to the HID Origo platform and will replace the HID Mobile Access API 2.0+
HID SiPass Mobile Access Service	A custom application developed by the HID Professional Services team to manage the lifecycle management between the SiPass System and HID Mobile Access SIS Portal
Invitation Code	A hexadecimal code sent to new users to initiate the Mobile ID registration and assignment process for the SiPass User
Credential Profile	In SiPass, the Credential Profile represents a User's Credential
Mobile ID	In HID Mobile Access, a Mobile ID represents a Mobile Credential assigned to the Mobile User that is stored on Mobile Device
Cardholder	A user in SiPass system being issued a Mobile ID
Part Number	A Part Number refers to a type of Mobile ID available for issuance for a given organization. One organization may have one or many Part Numbers available for selection. The Part Numbers available for an organization are listed in the 'Available Mobile IDs' section in the portal. Each Part Number has a reference, such as 'MOBILE-ID_FTPN_1000' or 'CRD633ZZ-01234', which is referenced when requesting issuance of Mobile IDs.
Application Id	Application Id (Application Identifier) is provided once an application has been certified through HID
API Version	Application Programming Interface version
Expired Credential	Cardholder sent a credential through invitation code. Credential status will change as 'Expired credential' if the cardholder does not redeem the invitation code and the code expires.
Revoked Credential	Cardholder issued with a credential. Credential status will change as 'Revoked', if the operator deletes the credential for a user.

6 Trademarks

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