# HID® Linq™ Cloud User Guide

HID Linq Release: 1.2.5 PLT-07202, A.3 June 2025





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#### **Contacts**

For technical support, please visit: https://support.hidglobal.com.

#### What's new

Date	Description	Revision
June 2025	Updated for HID Linq Cloud software version v1.2.5.	A.3

A complete list of revisions is available in Revision history.



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# Section 01 Introduction





#### 1.1 Document purpose

This document provides information on how to connect to HID Signo™ readers, search and apply device Configuration Identifiers (Configuration IDs), and update HID Signo reader firmware within HID® Ling™ Cloud.

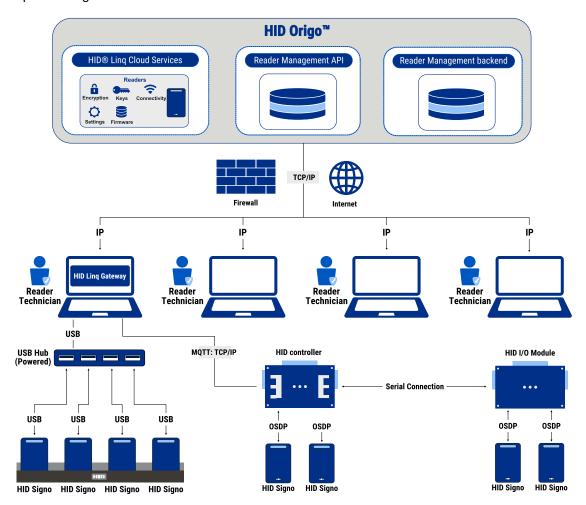
#### 1.2 Intended audience

This document is intended for **Reader Manager Portal Administrators**, and **Reader Technicians** performing the following tasks:

- Connecting to HID Signo readers via the HID Signo Provisioning Accessory or HID Signo Programming Stand or HID controllers.
- · Updating Signo reader firmware and configurations via USB.

# 1.3 HID Ling overview

HID® Linq™ Cloud is a browser-based service, hosted by HID Origo™, that enables the configuration and firmware update of multiple HID Signo™ readers via controller or serial connection.



HID Linq Cloud uses HID Origo device management services to access a library of reader Configuration IDs and reader firmware update files.



The main components of the HID Ling solution are:

- HID Linq Cloud: A browser-based service which connects to HID Signo readers via HID controllers, or directly via serial connections. HID Linq allows you to search known Configuration IDs and push them to connected HID Signo readers (via OSDP), and to perform reader firmware updates (when available).
- Linq Gateway: A utility app that provides a secure connection between HID Linq and HID Signo readers. If you are connecting via a HID controller, additional set up is required to establish a secure connection.
- HID Origo Management Portal: A managed service that allows access to HID Reader Manager™ to manage users
  and securely issue or revoke Mobile IDs to the user's mobile device. All organizational accounts set up on the HID
  Origo Management Portal have access to the HID Reader Manager service by default. The service allows Reader
  Technicians to use HID Ling Cloud with HID Signo readers.
- · HID Signo readers: HID Ling Cloud is compatible with:
  - HID Signo 20, 20K, 40, and 40K readers
  - · HID Signo Decor
  - · HID Signo PIV Contact
  - · HID Signo Mechanical Keypad
  - HID Vento™

## 1.4 System requirements

- · Windows 10 64-bit Enterprise Edition 21H22 or newer.
- Windows 11 64-bit Enterprise Edition 21H22.
- · Web browser (Google Chrome recommended).

Note: HID Linq Cloud can also be used on a Windows VM for the infield update of HID Signo readers via HID Controller.

#### 1.4.1 Hardware requirements

Caution: When connecting the reader via USB-C, DO NOT connect the reader to an external power source.

Important: It is best practice to use a powered USB hub when connecting a single reader, over a direct connection to the computers USB port.

HID Signo Programming Stand (SIGNO-STAND-4) to connect up to four HID Signo readers to your PC.

**Note:** Four USB-C to USB-A cables included. Contact your HID Sales representative to order the HID Signo Programming Stand.

- USB-C to USB-A cable(s) (if not ordering the HID Signo Programming Stand).
- Externally powered USB 3.0 hub for use with the HID Signo Programming Stand.

Important: The hub must be externally powered, and able to provide a minimum of 500 mA per port.



# 1.4.2 Version information

Software	Version
HID Linq Cloud	1.2.5
HID Linq Gateway installer	2025.2.0.0
HID Origo Management Portal	8.36.0

# 1.4.3 Signo reader firmware updates

<b>Current Firmware version</b>	Target Firmware Version
R10.0.10.4	R10.0.10.4 (Re-apply latest firmware version)
R10.0.9.1	R10.0.10.4 (Upgrade)
R10.0.8.5	
R10.0.7.5	
R10.0.5.7	
R10.0.5.6	
R10.0.4.2	
R10.0.3.1	
R10.0.3.0	
R10.0.2.5	
R10.0.2.4	
R10.0.2.2	
R10.0.1.7	
R10.0.1.3	
R10.0.0.31	

Note: HID Linq Cloud always supports firmware updates to the latest HID Signo reader firmware version.



### 1.4.4 Supported HID controllers and I/O modules

The listed HID® Mercury™ and HID® Aero® controllers and Serial Input/Output (SIO) modules are supported for use with HID Ling.

**Note:** HID Linq Cloud only works with HID controllers and SIO modules with the following minimum firmware versions.

Controllers	Minimum firmware version	
Mercury LP1501	2.0.0.1366	
Mercury LP1502	2.0.0.1366	
Mercury LP2500	2.0.0.1366	
Mercury LP4502	2.0.0.1366	
Mercury MP1501	2.0.0.1366	
Mercury MP1502	2.0.0.1366	
Mercury MP2500	2.0.0.1366	
Mercury MP4502	2.0.0.1366	
Aero X1100	2.0.0.1366	
Aero x1100A	2.0.0.1366	
Serial Input/Output modules		
Mercury MR50-S3	3.22.8	
Mercury MR52-S3	3.22.8	
Mercury MR52-S3B	3.22.8	
Aero X100	3.22.8	
Aero X100A	3.22.8	

Caution: Firmware upgrade via HID controllers is not supported. It will be supported in an upcoming release.

#### Note:

- Only HID Signo readers connected to HID controllers via OSDP version 2.0 are supported. Readers connected via Wiegand are not support by HID Linq. Please use HID Reader Manager™ to configure readers connected via Wiegand.
- OSDP V1 is not supported.
- S2 boards are not supported for the update of readers via HID Ling Cloud.
- · Only Authentic HID controllers are supported.
- In order to connect to HID Signo readers, Linq Gateway must also be installed on any PC used to remotely access HID Linq.
- You will need your HID Linq username and password, together with the IP address of the PC running Linq Gateway during the controller set up.

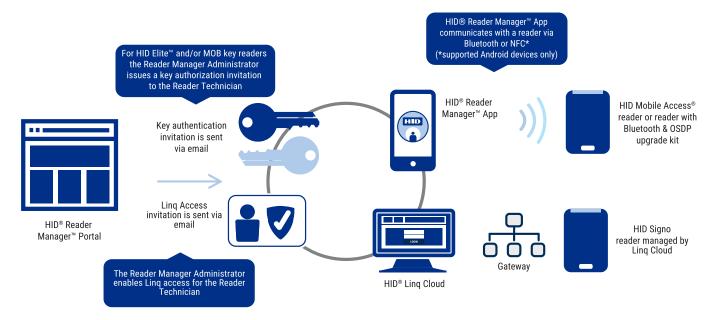
# Section 02 Access HID Ling Cloud





# 2.1 Access HID Linq Cloud

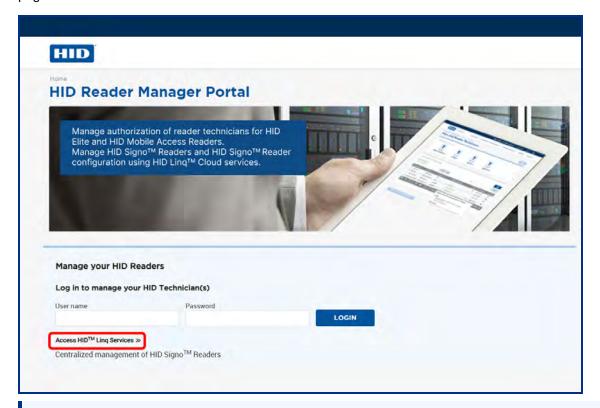
Access to HID Linq Cloud is enabled in the HID Reader Manager Portal. When an organization is on-boarded in HID Origo, a Reader Manager Portal Administrator is enabled for that organization.





# 2.2 Access HID Ling as Reader Manager Portal Administrator

The Reader Manager Portal Administrator can access HID Linq Cloud via the URL on the **Reader Manager Portal login** page.



#### Note:

- Reader Manager Portal Administrators can log into HID Linq using their HID Reader Manager Portal username and password.
- Log in issues may occur when the HID Linq Cloud password does not sync with the HID Reader Manager Portal.
   Reset your password in the HID Reader Manager app if this occurs.

#### 2.3 User roles

User Role	Description
Reader Manager Portal Administrator	<ul> <li>On board and manage Reader Technicians</li> <li>Configuration and management of readers</li> <li>Authorize keysets for Reader Technicians</li> </ul>
Reader Technician	<ul><li>Configuration and management of readers</li><li>HID key access (issued by the Reader Manager Portal Administrator)</li></ul>

#### Note:

- There is no limit to the number of Reader Manager Portal Administrator or Reader Technician users in HID Ling.
- To enroll a Reader Technician, see 2.4 Enable Ling for Reader Technicians for more information.
- For information on adding Reader Manager Portal Administrators and Reader Technicians, see *HID Reader Manager Portal Administration Guide* (PLT-06368).



### 2.4 Enable Ling for Reader Technicians

The Reader Manager Portal Administrator can enroll Reader Technicians to their assigned organizations. To add new users, or an existing Reader Technician account to an organization, the Reader Manager Portal Administrator must log in to their HID Reader Manager account and select **Enable Linq** for the Reader Technician account.

Once Linq has been enabled, the Reader Technician will receive an email with the Linq Cloud login URL. To log in the Reader Technician must use their HID Reader Manager account credentials.

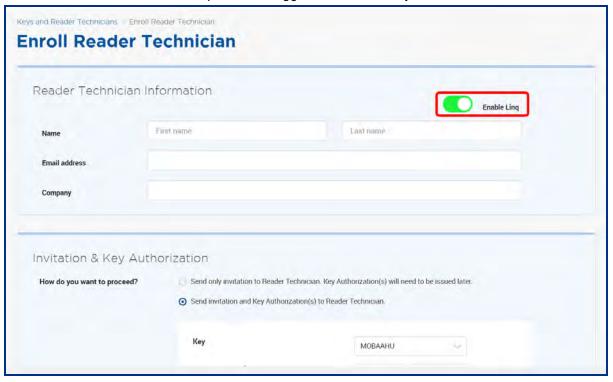
**Note:** The Reader Technician must download and register on the HID Reader Manager App and complete activation before they can be enrolled.

#### Who can enable Ling for Reader Technicians?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	No

#### 2.4.1 Enable Ling for new Reader Technicians

- 1. Log in to the HID Origo Management portal using your HID Origo Management Portal Administrator account.
- 2. Navigate to the HID Reader Manager Portal.
- 3. Add the Reader Technician to the portal and toggle the Enable Ling switch to ON.



4. Click ENROLL.

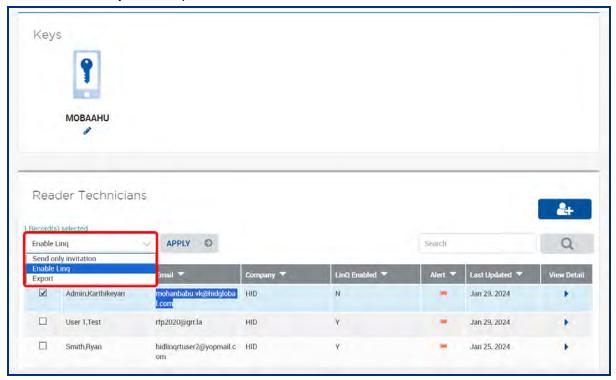
Note: The Linq Enabled column will change display Y.

5. The Reader Technician will receive an email with the URL for HID Linq Cloud.



# 2.4.2 Enable Linq for existing Reader Technicians

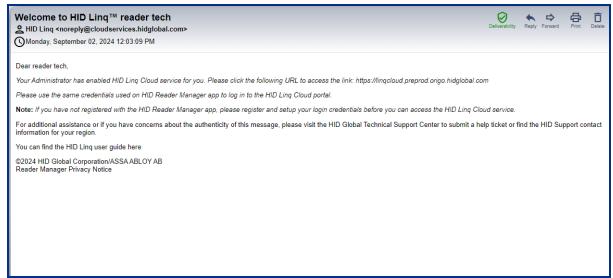
- 1. Log in to the HID Origo Management portal using your HID Origo Management Portal Administrator account.
- 2. Navigate to the HID Reader Manager Portal.
- 3. Check the box of the required Reader Technician.
- 4. Select Enable Linq in the drop-down menu.



5. Click **APPLY** and click **YES** in the pop-up window.

Note: The Ling Enabled column will change from N to Y.

6. The user will receive an email with the URL for HID Linq Cloud.



For more information, see HID Reader Manager Portal Administration Guide (PLT-06368).

# Section 03 Download and install HID Ling Gateway





# 3.1 HID Ling Gateway

Installing, setting up and running HID Linq Gateway is required to provide secure connection between HID Linq Cloud and connected HID Signo readers. HID Linq Gateway can run as an application, or as a service depending on your security requirements.

#### Who can download, set up and run HID Linq Gateway?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes

# 3.2 Download HID Ling Gateway

To download HID Ling Gateway, log in to HID Ling Cloud.

#### Note:

- When logging in to the HID Linq Cloud portal, Reader Manager Portal Administrators and Reader Technicians
  are required to accept the Terms of Service.
- A link to HID Ling Cloud will be sent to the email address used to register you as a Reader Technician.
- Your session will log off after 60 minutes. If you are logged off during a reader firmware update, reader configuration update, or during a reader configuration reset, the operation will continue.
- If you are logged out during an operation, log back in. If the operation has not completed, the progress notification will be shown. Rediscover the readers to check their status if no progress notification is shown.

To log in and accept the Terms of Service:

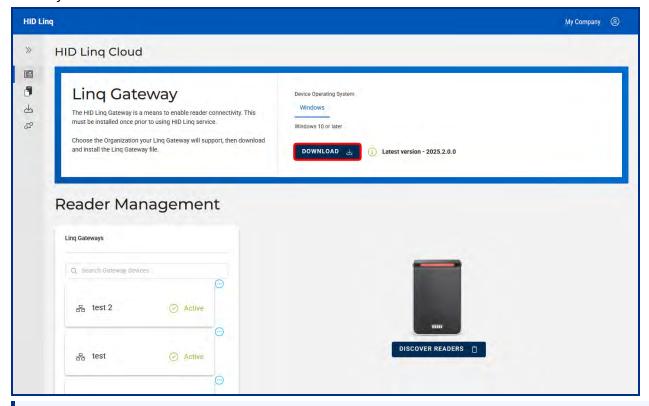
- 1. Open the HID Ling Cloud portal.
- 2. Enter your E-Mail Id and Password.

Note: Use your HID Reader Manager credentials to log in.

- 3. Check the I have read, understand & agree to HID Global Corporation Origo Terms of Service box.
- 4. Click CONTINUE.
- 5. Select the required Organization.



6. Click the **DOWNLOAD** button and click **DOWNLOAD** in the pop up window to begin downloading HID Linq Gateway.



#### Note:

- Run the HID Ling Gateway installer within 1 hour of downloading HID Ling Gateway.
- The latest HID Linq Gateway version available is displayed next to the **DOWNLOAD** button.



# 3.3 Install HID Ling Gateway

The HID Linq Gateway is software that must be installed to your machine and provides a secure connection between HID Linq Cloud and connected HID Signo readers. HID Linq Gateway can only be downloaded to a Windows OS and requires a minimum of Windows 10 or newer.

#### Important:

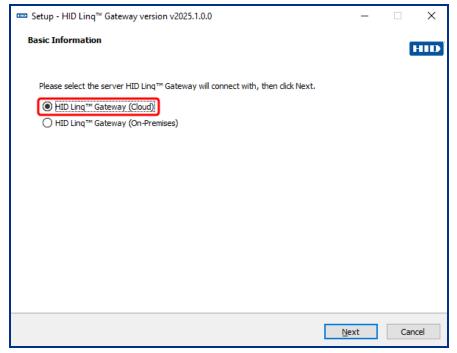
- To connect to HID Signo readers, HID Linq Gateway must be installed on any PC used to remotely access HID Ling.
- For security reasons, the org-meta.json file metadata expires after 1 hour. The HID Linq Gateway must be installed within 1 hour of downloading the zip file. If not, it must be deleted and downloaded again.

#### Note:

- Only one instance of HID Linq Gateway can be installable per PC. If you download a new version, you must uninstall and delete the previous version, before installing the newest download.
- The following steps only apply to the first download of HID Ling Gateway.
- 1. Navigate to your **Downloads** folder.
- 2. Extract the files from the download-gateway-files.zip folder.

Note: It is recommended to use a file extraction software.

- 3. Double-click the HID Client Reader Bridge.exe file to launch the installation wizard.
- 4. Select HID Linq™ (Cloud) and click Next.



- 5. Click Browse and select the org-meta.json file.
- 6. Click Next.
- 7. Follow the on-screen prompts.
- 8. Click Finish to complete the installation.



#### 3.4 HID Ling Gateway setup

To discover your connected readers, you must first set up your HID Linq Gateway.

#### Note:

- The HID Ling Cloud Gateway is referenced by the host name of the machine it is downloaded on by default. See
   3.7 Rename a Gateway to change the name of your HID Ling Gateway.
- The following steps only apply to the first download of HID Ling Gateway.

To connect to your HID Ling Gateway:

- 1. Navigate to C:\Program Files\HID Global\HID Linq™ Gateway\2025.2.0.0.
- 2. Double click Gateway.exe.

Note: You can also navigate to your desktop and double click the Gateway.exe - Shortcut.

3. Create a master password at initial log in.

#### Note:

- You will need to create a password at initial startup. Save your password in a secure location.
- If you forget your master password, you must uninstall HID Linq Gateway, delete the HID Linq Gateway
  folder from C:\ProgramData\HID Global, delete the previously downloaded Linq Gateway Zip file, and
  repeat the download process again. The password cannot be reset.
- 4. Exit the **Gateway.exe** in the system tray.
- 5. Double click **Configuration.exe** and the **HID Linq Gateway Manager** window will appear. You can **Select a security profile** or **Manage HID panels** here.

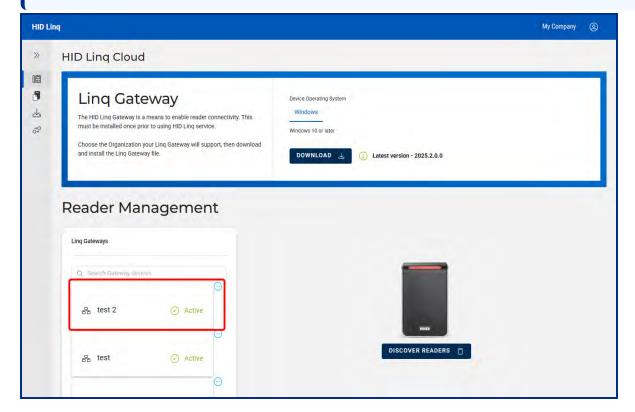
#### Note:

- HID Linq Gateway onboarding is automatic. Once completed, the HID Linq Gateway icon will be visible in the system tray.
- The HID Linq Gateway uses the security Normal Profile by default and runs as an application. To change
  the HID Linq Gateway to the Relaxed Profile and run it as a service, see 10.2 Change the HID Linq
  Gateway security profile for more information.



6. Navigate to the Readers tab in HID Linq Cloud and check for your HID Linq Gateway.

**Note:** Enter your host name in the **Search Gateway devices** search bar to find it if multiple HID Linq Gateways are visible.



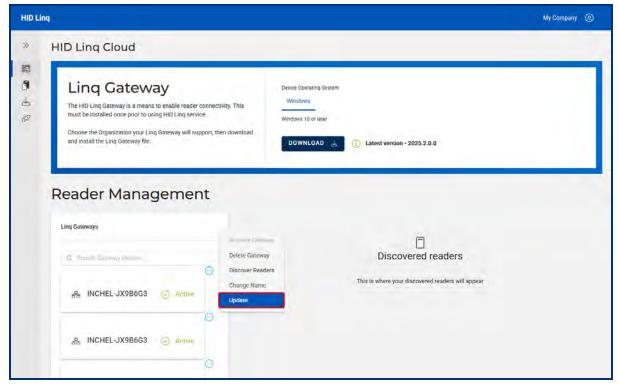


# 3.5 Update HID Linq Gateway

Updating HID Linq Gateway allows in field updates to your existing HID Linq Gateway without uninstalling your current version and downloading the new version.

**Note:** Stop the HID Linq Gateway before running the HID Linq Gateway delta installer. In **Normal Profile** mode, the HID Linq Gateway must be restarted manually after the update. In **Relaxed Profile** mode, the HID Linq Gateway starts automatically after the update.

- 1. Navigate to the Readers tab.
- 2. Click the icon of the required gateway.
- 3. Click Update.



- 4. Navigate to your **Downloads** folder.
- 5. Extract the files from the download-delta-gateway-files.zip folder.

Note: It is recommended to use a file extraction software.

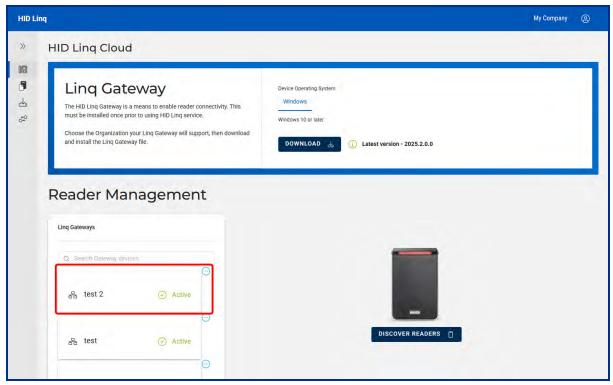
- 6. Double-click the HID Client Reader Bridge Update\_2025.2.0.0.exe file to launch the installation wizard.
- 7. Click Install.
- 8. Click Finish once the installation wizard has finished.



# 3.6 Select an existing gateway

To select an existing gateway:

- 1. Navigate to the Readers tab.
- 2. Select the required HID Linq Gateway.



**Note:** If you are connected to a remote gateway that is using the default **Normal** security profile, the creator of that gateway must manually restart the gateway, if the PC it is running on is powered off at any time. To restart a gateway, see **3.4 HID Ling Gateway setup** for more information.

# 3.7 Rename a Gateway

**Note:** The HID Linq Cloud Gateway is referenced by the host name of the machine it is downloaded on by default. See **3.7 Rename a Gateway** to change the name of your HID Linq Gateway.

- 1. Navigate to the Readers tab.
- 2. Click the icon of the required gateway.
- 3. Click Change Name.
- 4. Enter the new gateway name.

Note: Gateway names are limited to letters, numbers, hyphens, and underscores.

5. Click SAVE.



# 3.8 Uninstall Ling Gateway

Note: If you forget your HID Linq Cloud Gateway master password, you will need to uninstall HID Linq Gateway.

Follow the standard Windows uninstall process to remove Linq Gateway:

- 1. Click **Start** and locate the app or program in the displayed list.
- 2. Click on the app, then select Uninstall.

Note: Alternatively, navigate to C:\Program Files\HID Global\HID Linq™ Gateway\Installer and double click the uninstall.exe

- 3. Follow the on-screen instructions.
- 4. Navigate to C:\ProgramData\HID Global and delete the HID Linq™ Gateway folder.

**Note:** You may need to set Windows File Explorer to display hidden files to see and access the **Program Data** folder.

# Section 04

Connect to HID Signo readers via the HID Signo Programming Stand





#### 4.1 Overview

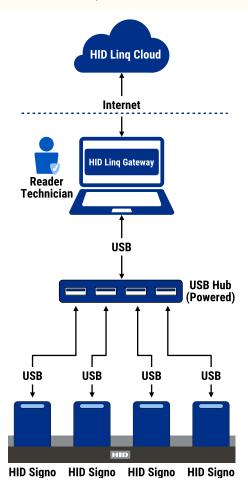
This section explains the required steps to connect a single, or multiple HID Signo readers to the PC using the HID Signo Programming Stand allowing the system installer to configure the reader(s) on a bench before installation.

**Note:** The maximum recommended number of readers per hub is four. The maximum recommended number of hubs per PC is two.

In summary, the following steps need to be taken:

- 1. Disconnect the power supply from the reader(s).
- 2. Plug a HID Signo Provisioning Accessory into each reader.
- 3. Place the reader(s) on the HID Signo Gang Stand.
- 4. Connect each reader to a powered USB hub (not supplied).
- 5. Connect the serial cable to serial adapter module.
- 6. Connect the USB hub to a spare USB port on your PC.

Caution: When connecting the reader via USB-C, DO NOT connect the reader to an external power source.





# 4.2 Connect to HID Signo readers via the HID Signo Programming Stand

WARNING: DO NOT CONNECT THE ADAPTER OR CABLE WHILE THE READER IS POWERED ON.

Note: For more information, including images, refer to the HID Signo Programming Stand Install Guide (PLT-07195).

#### Who can connect HID Signo readers to the HID Signo Programming Stand?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	Yes	Yes

To connect HID Signo readers via the HID Signo Programming Stand:

- 1. Disconnect the power supply from the HID Signo reader(s).
- 2. Remove the grommet from the back of the HID Signo reader(s) to access the adapter port.

**Note:** Keep the grommet(s) in a safe place as each must be replaced following the removal of the Signo Provisioning Accessory.

- 3. Connect each Signo Provisioning Accessory.
- 4. Place the HID Signo reader(s) on the Signo Programming Stand.

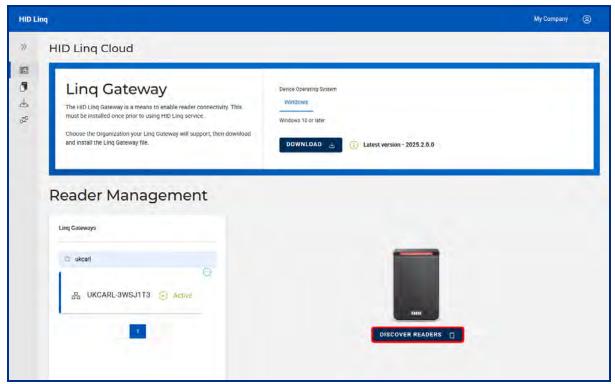
#### Note:

- If the reader is fitted with a mounting plate, remove the mounting plate before placing the reader on the stand.
- For readers with a pluggable pigtail, remove the pigtail before placing the reader on the stand.
- For readers with a non-removable pigtail, to prevent short circuits ensure that the wires are separated before inserting the Signo Provisioning Accessory and applying power via the USB-C.
- 5. Insert a USB-C to USB-A cable (not supplied) into each Signo Provisioning Accessory.
- 6. Insert each USB-C to USB-A cable into the powered USB hub.
- 7. Connect the USB hub to a spare USB port on your PC.
- 8. Connect the USB hub to a 12v power supply.

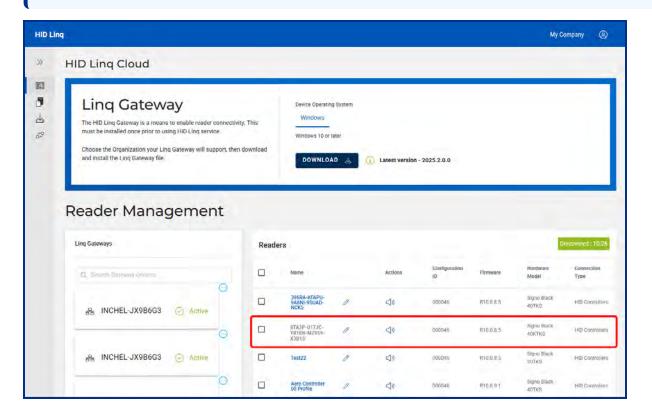
**Caution:** When connecting the reader via USB-C, DO NOT connect the reader directly to an external power source.

9. In HID Ling, navigate to the Readers tab and connect to the required Gateway.

10. Click **DISCOVER READERS** to confirm it is visible.



**Note:** You must have authorization to the HID Signo reader administration key to perform any reader operations. If you do not have access, the reader will appear greyed out. Contact your Reader Manager Administrator for reader authorization.





# 4.3 Disconnect HID Signo reader(s)

Note: For more information, including images, refer to the HID Signo Programming Stand Install Guide (PLT-07195)

- 1. Power off the USB hub.
- 2. Disconnect the USB-C cable from each Signo Provisioning Accessory.
- 3. Remove the Signo Provisioning Accessory module from each HID Signo reader adapter port.

Note: Carefully use a flat head screwdriver to release the Signo Provisioning Accessory.

4. Re-insert the grommet into the adapter port on the back of each HID Signo reader.

Important: Failure to replace the grommet correctly will void the IP rating for the reader.

# Section 05 Connect to HID Signo readers via HID controllers





#### 5.1 Connect to a controller

This section explains the required steps to set up a HID Mercury LP controller to enable communication with HID Linq Cloud. HID Mercury MP series controllers and HID Aero controllers are compatible with HID Linq Cloud and the process to connect them is the same. For images of the HID Mercury and HID Aero controller DIP switches, please see **B.2 HID Controller DIP switches**.

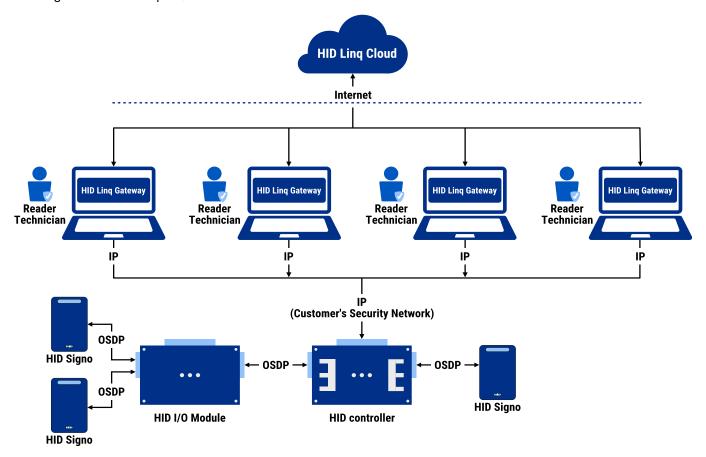
#### Note:

- HID Ling Gateway and the controller must be on the same network. Perform a ping to make sure the PC can see
  the controller. HID Ling Gateway will can discover and communicate with a controller in the same network as
  your access control solution is deployed.
- HID Ling Gateway must be able to reach HID Ling Cloud services over the network.
- There is no limit to the recommended number of controllers per PC.
- · Each controller is limited to a single gateway.

Important: If the controller and reader use different power sources, ensure that both are grounded by connecting them together.

In summary, the following steps need to be taken:

- 1. Use HID Ling Gateway Manager to discover the controller on your local network.
- 2. Generate a secure certificate in HID Ling Cloud.
- 3. Upload the certificate to the controller via the web configuration page.
- 4. Configure the HID Ling MQTT broker.





# 5.2 Connect a controller to HID Ling

This is a single operation per controller to establish a connection. Once completed, any HID Signo readers connected to the controller via OSDP will be available in HID Linq, allowing remote configuration of operational readers at a customer's site.

#### Note:

- Reader Technicians with a physical access to the controller, and Reader Technicians connected via a common gateway can configure the readers connected to a controller.
- · HID Linq Cloud does not support two readers on the same OSDP bus (multi-drop OSDP connection).

#### Who can connect a controller to HID Ling?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	Yes	Yes

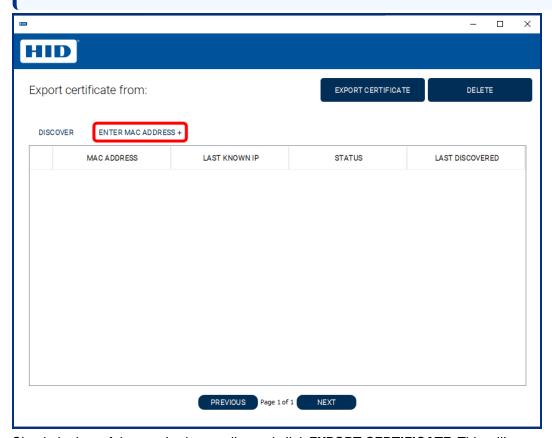
#### 5.2.1 Generate a secure certificate

- 1. Navigate to C:\Program Files\HID Global\Linq™ Gateway\2025.2.0.0.
- 2. Double-click Configuration.exe to launch Linq Gateway Manager.
- 3. If HID Linq Gateway is in the Normal security profile, enter the master password.
- 4. Click Manage HID Mercury panels. The welcome screen is displayed with a summary of the steps required.
- 5. Click **BEGIN** to continue.



6. Click **DISCOVER**. HID Linq Gateway Manager will scan the network using mDNS and display any compatible controllers found.

**Note:** Alternatively, click **ENTER MAC ADDRESS+** and directly enter the MAC address, if known. Click **Add Controller** to confirm.



- 7. Check the box of the required controller and click **EXPORT CERTIFICATE**. This will generate a **.PEM** secure certificate.
- 8. Click **DOWNLOAD ZIP** to download it to your PC.

Note: Extract the Zip file once it has downloaded.

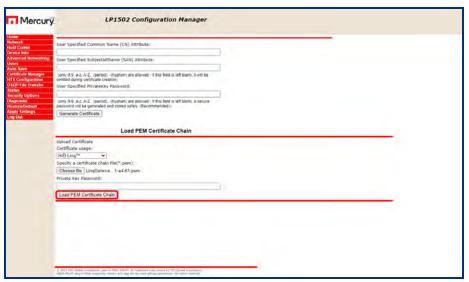


#### 5.2.2 Upload the secure certificate to the controller

- 1. Search the IP address of the HID control panel in your web browser.
- 2. Log in to the panel.

#### Note:

- The default credentials are admin/password.
- You may be required to toggle DIP Switch 1. See 5.2.3 Prepare the controller for more information.
- 3. Navigate to Certificate Manager in the left-hand menu.
- Under the Load PEM Certificate Chain section, click the Certificate Usage drop down menu and select HID Linq™.
- Click Choose File and navigate to the location of the .PEM secure certificate downloaded in 5.2.1 Generate a secure certificate.
- 6. Click Load PEM Certificate Chain.



Note: Once loaded, the Certificate Information is displayed.

 Navigate to HTS Configuration in the left-hand menu and add the following Linq Gateway information in the HID Linq™ Configuration section:

Field	Enter
Connection String	The IP address of the PC running your HID Linq Gateway, and the default port number 8885. For example ssl://193.186.0.123:8885

#### Note:

The default credentials are:

• Username: username

Password: password

8. Click **Configure HID Linq Client** to save. At this point, both HID Linq Gateway and the controller should have a trusted communication channel set up. It should now be possible to discover HID Signo readers connected to the controller via OSDP in HID Linq Cloud.

Note: Repeat these steps for each connected controller.



#### 5.2.3 Prepare the controller

Caution: Firmware upgrade via HID controllers is not supported. It will be supported in an upcoming release.

#### **Important:**

- When using an LP1502 panel, jumper switch J7 must be set to PASS when the input voltage is 12v.
- When using a MR52-S3 SIO board, jumper switch J1 must be set to Passed Through (PT) when the input voltage
  is 12v.
- If the input voltage (VIN) is greater than 20v DC, switch both J7 and J1 to **12V**. Failure to do so may result in damage to the reader.
- See B.1 Corresponding HID controller manuals for the relevant HID Linq control panel installation and specification manuals for more information.
- 1. Open a web browser and navigate to the IP address of the controller.
- 2. When prompted, log in using your credentials.

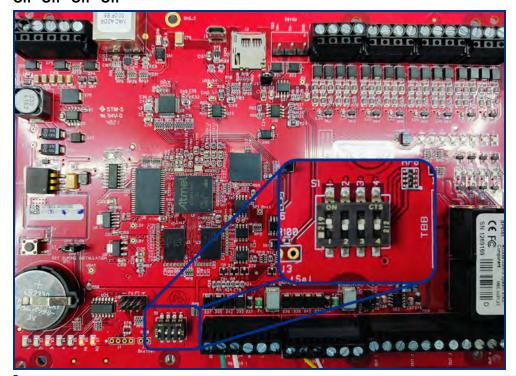
#### Note:

The default credentials for HID controllers are:

- Username: admin
- · Password: password

If the default credentials do not work, toggle the S1: DIP Switch 1 to OFF and ON.

- 3. To prove that you have physical access to the controller and are not attempting to access the device from a remote location, set the **S1: DIP Switch 1** to the following sequence:
  - On Off Off Off



Note: For alternative controller dip switch locations, see B.2 HID Controller DIP switches.

4. The controller is now ready to receive the secure certificate.

# Section 06 Reader discovery





### 6.1 Reader discovery

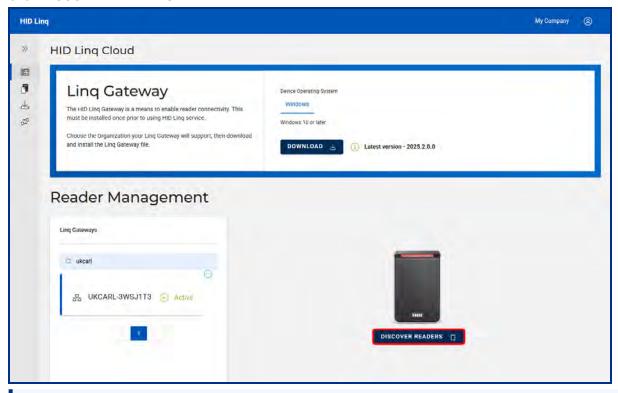
Discover the readers connected to your HID Linq Gateway to manage them.

### Who can discover a reader?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	N/A	N/A

### Note:

- Reader discovery is a manual operation. Automated discovery will be featured in a future release.
- It is recommended to perform a reader discovery every time a reader is physically connected or disconnected.
- It is recommended to perform a reader discovery after a period of inactivity or if your machine is powered off at any time.
- 1. Navigate to the Readers tab.
- 2. Select the required HID Ling Gateway.
- 3. Click DISCOVER READERS.



**Note:** The list of readers connected to the required gateway will appear. To refresh the list of readers, click the icon of the required gateway and select **Discover Readers**.



### 6.2 Locate a connected reader

The locate reader function allows users to physically locate a reader. With multiple readers connected via the HID Signo Provisioning Accessory, or readers installed on the premises, you can individually identify a specific reader before performing a firmware update, pushing a Configuration ID, or resetting the reader to its default configuration settings.

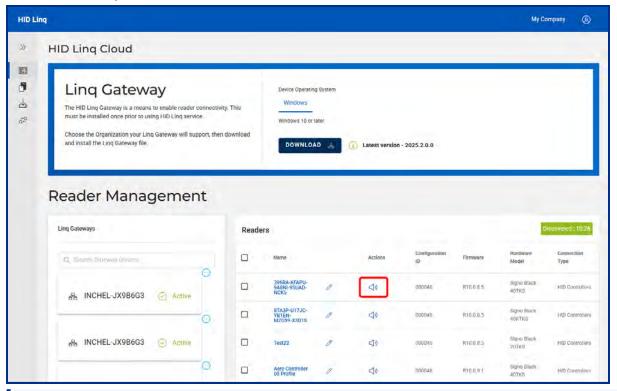
### Who can locate a connected reader?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	No	No

There are two ways to locate a connected reader:

### Reader list view

- 1. Navigate to the Readers tab.
- 2. Select the required HID Ling Gateway.
- 3. Click (1) on the required reader in the reader list.

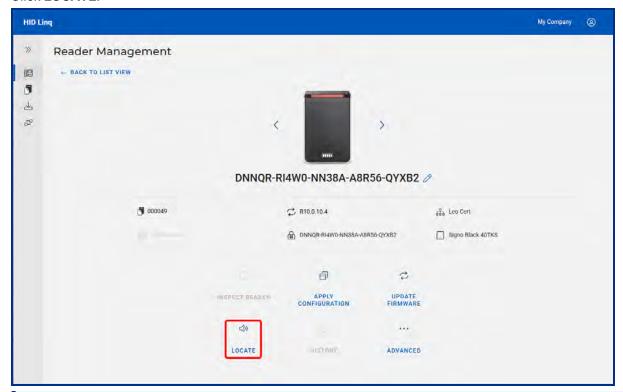


**Note:** The HID Linq Gateway reader list view **Discovered** time is indicated in green. This is the last time a reader discovery was made for the HID Linq Gateway displayed.



### **Carousel view**

- 1. Navigate to the Readers tab.
- 2. Select the required HID Linq Gateway.
- 3. Click the name of the required reader.
- 4. Click LOCATE.



Note: The reader will emit an audible beep, and the LED will flash green.

### 6.3 Reader information

In the reader carousel view, it shows the following information about the reader:

- Reader name (Default reader UUID or Friendly Name)
- · Current configuration ID
- Current firmware version
- Gateway
- · Reader model

Note: All items that are grayed out are not currently supported in HID Linq Cloud v1.2.5.



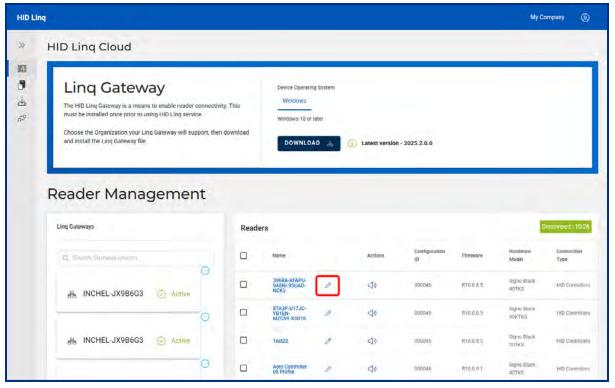
### 6.4 Update reader friendly name

The reader name can be changed from the default to a user friendly name from the reader list view, or the carousel view. The default name is the reader Universally Unique Identifier (UUID).

**Note:** The reader friendly name must be alphanumeric and limited to 50 characters. Hyphen (-) is the only special character allowed.

### **Reader List View**

- 1. Navigate to the reader list view.
- 2. Click the button of the required reader.



3. Enter a Reader Name (friendly name).

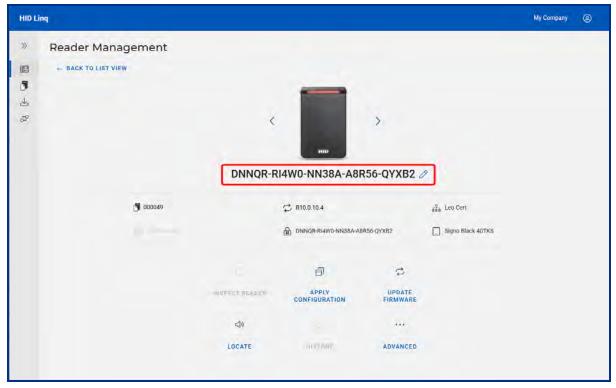
**Note:** Alternatively, click **RESET TO DEFAULT NAME** (reader UUID) to return the **Reader Name** (friendly name) to the default name.

4. Click SAVE.



### **Carousel view**

- 1. Navigate to the carousel view of the required reader.
- 2. Click the // button.



3. Enter a friendly name.

**Note:** Alternatively, click **RESET TO DEFAULT NAME** (UUID) to return the **Reader Name (friendly name)** to the default name.

4. Click SAVE.

# Section 07 Update reader firmware





### 7.1 Update reader firmware

Upgrading your HID Signo reader(s) firmware keeps them up to date with the latest features and security updates from HID. It is best practice to keep your HID Signo reader firmware up to date. When updating the reader firmware, you can re-apply the same firmware version, or upgrade to the latest firmware version. Readers connected via a controller will be restricted from selection in the firmware update process.

Caution: Firmware upgrade via HID controllers is not supported. It will be supported in an upcoming release.

### Who can update reader firmware?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	Yes	Yes

### Important:

- · Readers will not function during firmware updates.
- HID Linq Cloud can only update readers with firmware version 10.0.0.31 or newer. Contact HID Support for
  assistance if your reader firmware is older than 10.0.0.31. See 1.4.3 Signo reader firmware updates for current
  and target firmware versions.

### Note:

- An active connection to HID Ling Cloud is required to update reader firmware.
- Do not disconnect the reader or remove the power supply until after the firmware update is complete. While a firmware update can be retried, it is possible that an interrupted firmware update may render the reader unusable and may void the warranty. If you encounter issues, contact HID technical support for assistance.
- A reader connected via USB takes approximately 8-12 minutes to complete.
- When updating multiple readers in parallel, the time to update each reader is the same.
- It is not possible to downgrade reader firmware.
- 1. Navigate to the Readers tab.
- 2. Select the required HID Ling Gateway.
- 3. Select the required connected device.



### 4. Click UPDATE FIRMWARE.



5. Select the latest firmware version from the Available Firmware Versions list.

Note: Only the latest firmware can be re-applied to a reader that already has the latest firmware version.

6. Click UPDATE FIRMWARE and confirm YES, UPDATE FIRMWARE VERSION in the pop-up window.

Important: Do not disconnect or power off the reader during the firmware update process.

**Note:** Click **CLOSE** to close the window (the process will continue in the background). The **Firmware Update** status bar will be displayed on the main page.

7. Click **DISCOVER READERS** to refresh the changes to the reader firmware.

Firmware update	Result
Success	If the firmware update is successful, re-discover the readers to see the changes to the readers.
Fail	Firmware update failed. Attempt the update again or contact HID Technical Support if the firmware update continues to fail.
Partial update	After a partial update, the reader will still be discoverable. You can repeat the update process, but other reader operations will not be available until a successful firmware update is complete. Contact HID Technical Support if the firmware continues to partially update.

Note: If the reader is damaged, it will no longer be discoverable. Contact HID Customer Support.



### 7.2 Update multiple reader firmware

Caution: Firmware upgrade via HID controllers is not supported. It will be supported in an upcoming release.

When updating the reader firmware, you can upgrade to the latest firmware version. Upgrading your HID Signo readers firmware keeps them up to date with the latest features and security updates from HID. It is best practice to keep your HID Signo reader firmware up to date.

### Important:

- Readers will not function during firmware updates.
- HID Linq Cloud can only update readers with firmware version 10.0.0.31 or newer. Contact HID Support for
  assistance if your reader firmware is older than 10.0.0.31. See 1.4.3 Signo reader firmware updates for current
  and target firmware versions.

### Note:

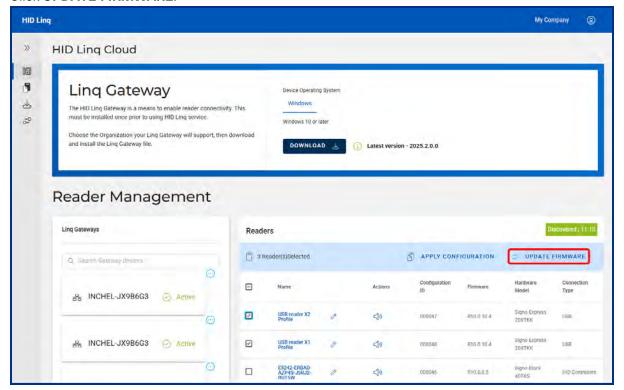
- An active connection to HID Ling Cloud is required to update reader firmware.
- HID Signo<sup>™</sup> Vento reader firmware can be updated with HID Ling Cloud.
- Do not disconnect the reader or remove the power supply until after the firmware update is complete. While a
  firmware update can be retried, it is possible that an interrupted firmware update may render the reader
  unusable and may void the warranty. If you encounter issues reach out to HID Technical Support for further
  assistance.
- A reader connected via USB takes approximately 8 minutes to complete.
- · When updating multiple readers in parallel, the time to update each reader is the same.
- It is not possible to downgrade reader firmware.
- Multiple readers will be updated in a group. The group will be displayed in the progress bar. Multiple groups of readers can be updated at the same time. See 7.2.1 Reader grouping for more information.
- 1. Navigate to the Readers tab.
- 2. Select the required HID Ling Gateway.
- 3. Check the box of the required connected devices.

### Note:

- Up to four readers connected via USB, can be updated at any one time.
- · All selected readers must have the same current firmware version.
- All selected readers can only be updated to the latest firmware version.
- If any reader in the list cannot be updated to the desired version, HID Linq will display a notification and not attempt the update for that individual reader.
- Once the update process is complete, the status of each reader will be refreshed to show the version of the firmware installed.



4. Click UPDATE FIRMWARE.



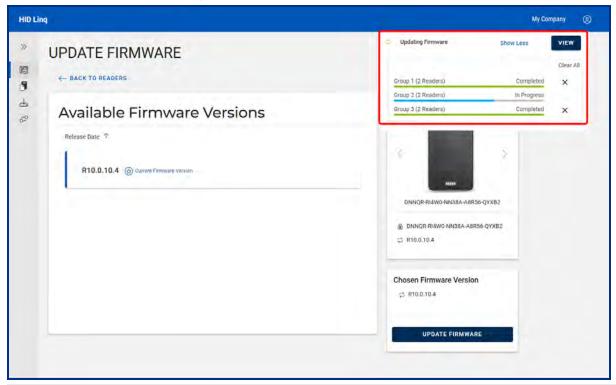
5. Select the latest firmware version from the Available Firmware Versions list.

Note: Only the latest firmware can be re-applied to a reader that already has the latest firmware version.

6. Click UPDATE FIRMWARE and confirm YES, UPDATE FIRMWARE VERSION in the pop-up window.

Important: Do not disconnect or power off the reader during the firmware update process.

7. Click **CLOSE** to close the window (the process will continue in the background). The **Firmware Update** status bar will be displayed on the main page.

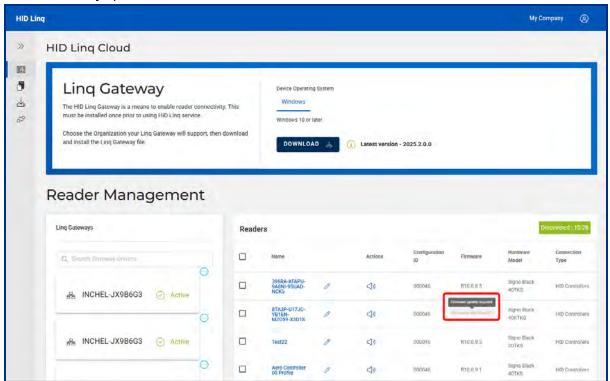


Firmware update	Result
Success	If the firmware update is successful.
Fail	Firmware update failed. Attempt the update again or contact HID Technical Support if the firmware update continues to fail.
Partial update	After a partial update, the reader will still be discoverable. You can repeat the update process, but other reader operations will not be available until a successful firmware update is complete. Contact HID Customer Technical Support if the firmware continues to partially update.

Note: If the reader is damaged, it will no longer be discoverable. Contact HID Technical Support.



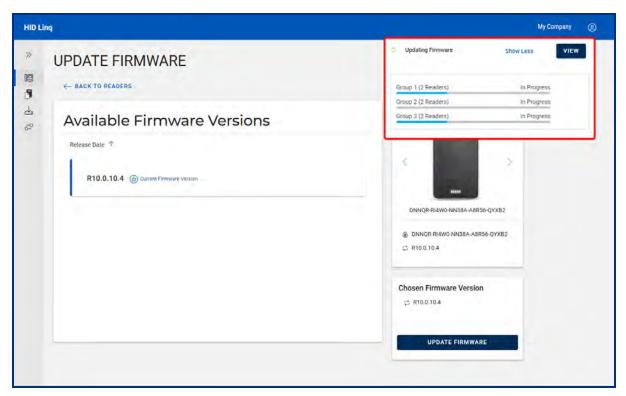
If a reader firmware update fails, the reader is still discoverable on the connected Linq Gateway. The reader firmware version will be shown as the latest version highlighted in orange, to indicate that the reader firmware update was partially successful. You must update the reader firmware again. No other reader operations can be performed until the reader has successfully updated.





### 7.2.1 Reader grouping

HID Linq Cloud will group one or more readers when performing a firmware update. You can then go back and select another reader, or group of readers to be updated. HID Linq Cloud will then group those readers separately to the first group.



This allows you to update readers with the same current firmware versions.

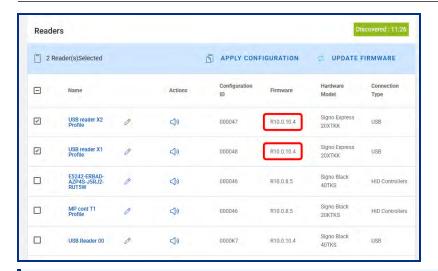
### For example:

Reader	<b>Current Firmware version</b>	Target Firmware Version
A,B,C	R10.0.7.5	R10.0.10.4 (Upgrade)
D,E,F	R10.0.4.2	
G,H,I	R10.0.3.1	

Readers **D**, **E** and **F** are at the same firmware version. You can only select them together to update them simultaneously. This would result in them being grouped as **Group 1**.

Readers **G**, **H** and **I** are at the same firmware version. You can only select them together to update them simultaneously. This would result in them being grouped as **Group 2**.



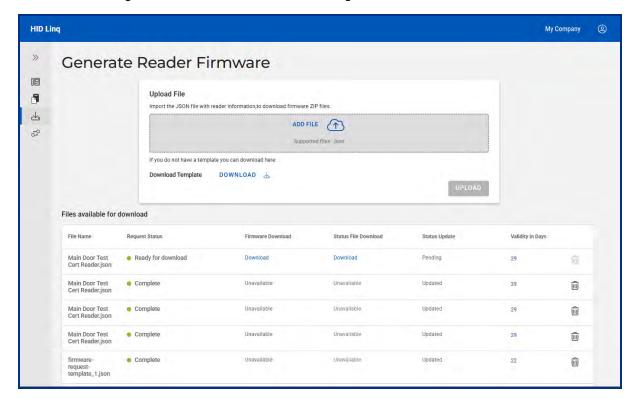


### Note:

- · All selected readers must have the same current firmware version.
- · All selected readers can only be updated to the latest firmware version.

### 7.3 Generate a reader firmware file

HID Linq Cloud allows you to generate HID Signo reader specific firmware files upon request from an authorized user. These firmware files can be applied to the respective readers via OSDP-FTP from the OEM partners access control software with integrated controllers. This is done through the Build Firmware tab.



Please see HID Linq Cloud Reader Firmware File Generation Application Note (PLT-08314) for more information.

# Section 08 Reader Configuration





### 8.1 Search and apply a Configuration

The Configuration ID specifies the complete, or a subset of reader configuration. Users with access to HID Origo services have access to a library of reader Configuration IDs. Each reader Configuration ID has a unique six character identifier.

Reader Configuration IDs are created in HID Origo by an organization, and only members of that organization can access its Configuration IDs. Users can search the required Configuration ID using:

- · Configuration ID
- Name
- Status

The search defaults to Configuration IDs owned by the user when searching using the configuration name or status. The user can deselect this option, which will display other configurations that match the search criteria if the user is authorized to access them.

Applying a Configuration ID allows you to manage a reader's visual, audio, and performance characteristics. Configuration IDs can be applied before, or after installation of a reader.

### Who can search and apply a Configuration ID?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	Yes	Yes

### Note:

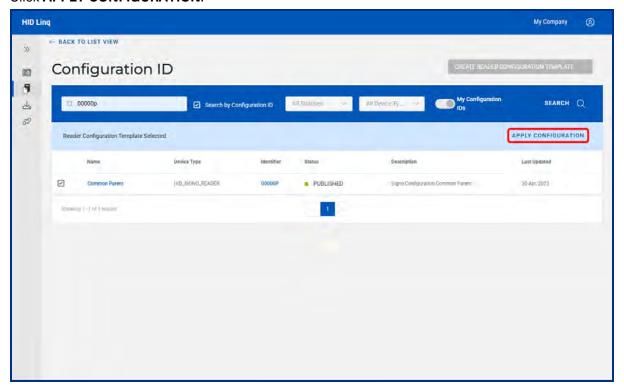
- Reader Manager Portal Administrators, and Reader Technicians can apply a Configuration ID to a reader.
- The Apply Configuration option is currently unavailable for HID Signo Vento readers.
- The Apply Configuration option is currently unavailable for readers with a firmware version greater than 10.0.10.4.
- Readers will not function when applying Configuration IDs. Readers connected to HID controllers should only be updated outside of work hours.
- Searching for a Configuration ID by name is limited to starting characters only.
- · Searches are limited to 5000 results.
- Typical search time for a configuration takes at most 15 seconds.
- 1. Navigate to the Configuration ID tab.
- 2. Enter the required Configuration ID into the Search by Configuration ID search bar and click SEARCH.

**Note:** To search for a configuration by its name, see **8.2 Searching for configurations by name** for more information.

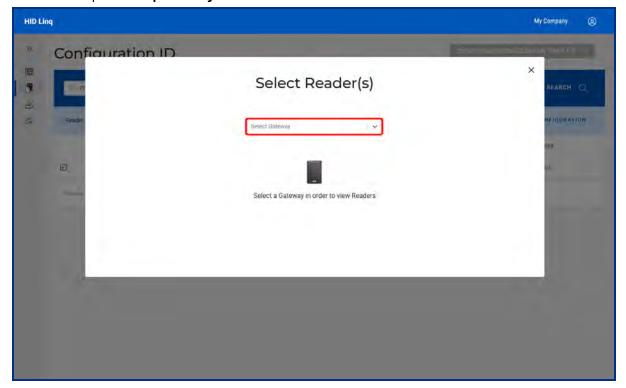
3. Check the box of the required Configuration ID.



### 4. Click APPLY CONFIGURATION.



5. Select the required Linq Gateway.



- 6. Check the box of the required connected device(s).
- 7. Click APPLY.
- 8. HID Linq will check that the Configuration ID is compatible with the reader.

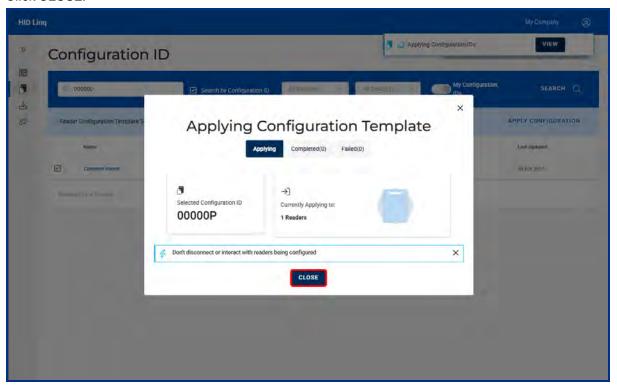


### Important: If the APPLY CONFIGURATION warning notice appears, read the message before clicking CONTINUE.

9. Click START APPLYING CONFIGURATION. Progress is displayed.

**Note:** Click **CLOSE** to close the window (the process will continue in the background). The **Applying Configuration** status bar will be displayed on the main page.

10. Click CLOSE.



### 8.1.1 Update multiple reader Configuration IDs

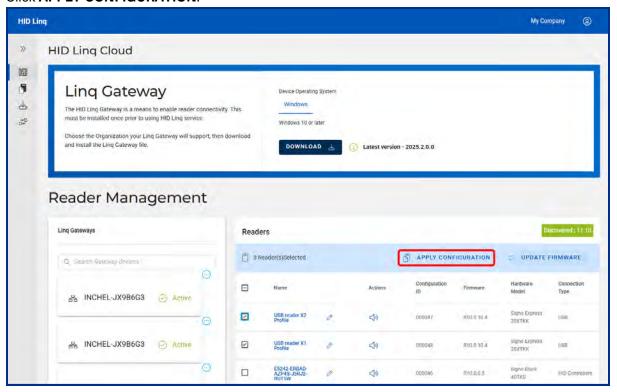
- 1. Navigate to the Readers tab.
- 2. Select the required HID Ling Gateway.
- 3. Check the box of the required connected devices.

### Note:

- All selected readers can only be updated to a single Configuration ID.
- Once the update process is complete, the Configuration ID of each reader is displayed in the reader list view.



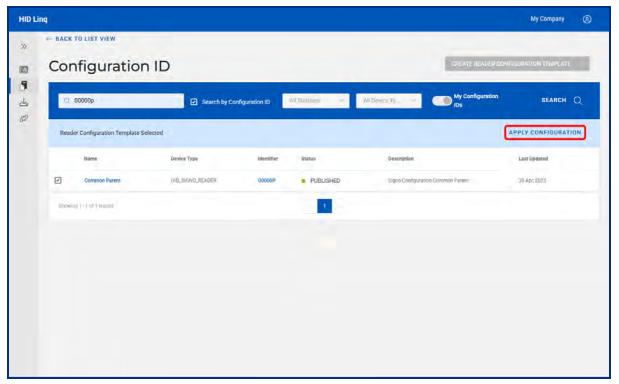
4. Click APPLY CONFIGURATION.



5. Enter the required Configuration ID into the Search by Configuration ID search bar and click SEARCH.

**Note:** To search for a configuration by its name, see **8.2 Searching for configurations by name** for more information.

- 6. Check the box of the required **Configuration ID**.
- 7. Click APPLY CONFIGURATION.





- 8. Click START APPLYING CONFIGURATION.
- 9. Click CLOSE.

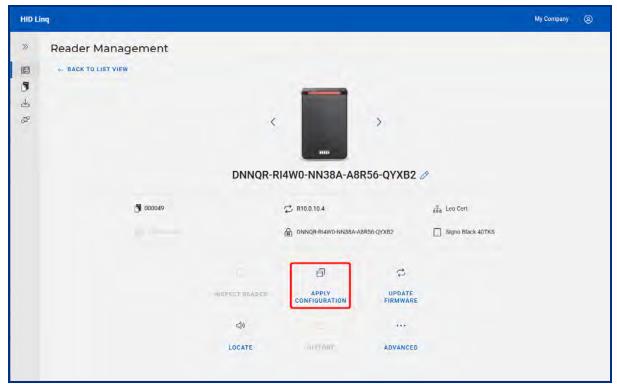
Note: The Configuration ID update status is displayed on the main screen. Click VIEW to see the progress.

### 8.1.2 Update single reader Configuration ID

- 1. Navigate to the Readers tab.
- 2. Select the required HID Ling Gateway.
- 3. Select the required reader.

**Note:** Once the update process is complete, the Configuration ID of each reader is displayed in the reader list view.

4. Click APPLY CONFIGURATION.



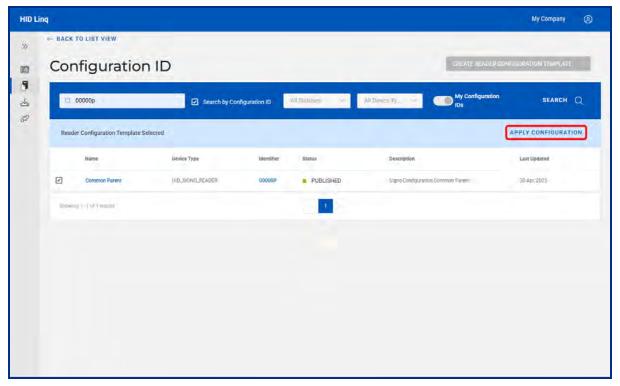
5. Enter the required Configuration ID into the Search by Configuration ID search bar and click SEARCH.

**Note:** To search for a configuration by its name, see **8.2 Searching for configurations by name** for more information.

6. Check the box of the required Configuration ID.



### 7. Click APPLY CONFIGURATION.



- 8. Click START APPLYING CONFIGURATION.
- 9. Click CLOSE.

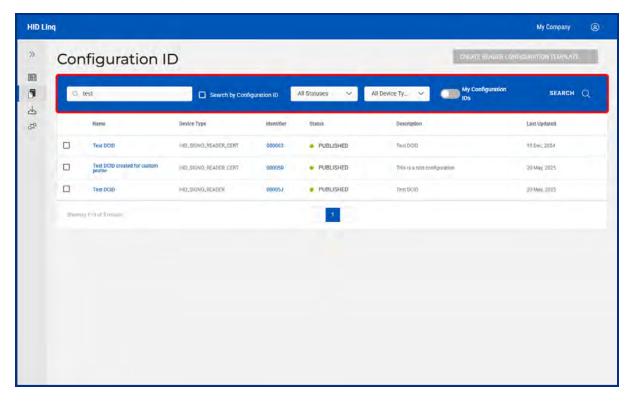
Note: The Configuration ID update status is displayed on the main screen. Click VIEW to see the progress.



### 8.2 Searching for configurations by name

You can search for a configuration ID by name. The search word you use must match the first word of the name of the Configuration ID.

For example: to find a Configuration ID called Test DCID, you must search the word test.



By default, HID Linq will only return results of configurations created by the current user. To find configurations created by another member of the same organization, toggle the **Show my Configuration IDs** switch to off.

### 8.2.1 Configuration ID special cases

- Users can search configurations using a direct Configuration ID, or by the starting characters of the Configuration ID name.
- · Users can search by status.
- Only published or publishable configurations can be applied to a reader.
- A maximum of 5000 configurations will appear in the search.
- Only 10 configurations will appear per page in the search.
- Users can only select one configuration at a time.
- Creating a new Configuration ID will be available in future releases.

### Section 09

Reset a device to the default configuration





### 9.1 To reset a device to default configuration

Users can reset a reader to its default configuration. If a reader has been configured with an Elite key, that key will be removed from the reader. The key reference can be modified, and the reader can be configured with a different Elite key.

### Who can reset a device to default configuration?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	No	No

A reader configuration might be reset to:

- · Push a new configuration.
- Put the reader back to Standard from Elite profile.
- · Troubleshoot.

### Note:

- The credential profile of a reader is set before shipping and cannot be changed. The Configuration ID selected by HID Ling will match the default configuration for the credential profile of the reader.
- · Resetting the device to its default configuration does not affect the reader firmware version.
- The reader needs to have the latest firmware version to enable this feature.
- · You can only select one reader at a time to be reset.
- If the operation fails, please contact HID Technical Support.
- Some reader profiles are not supported for this operation. See E.1 Error and warning messages for more information.
- 1. Navigate to the Readers tab.
- 2. Select the required HID Ling Gateway.



3. Select the required connected device and click ADVANCED.



- 4. Click RESET.
- 5. Click START APPLYING CONFIGURATION.
- 6. Click CLOSE.

### 9.1.1 Supported reader profiles

Currently the reset operation is only supported for the following profiles:

- Standard
- Custom

See E.1 Error and warning messages

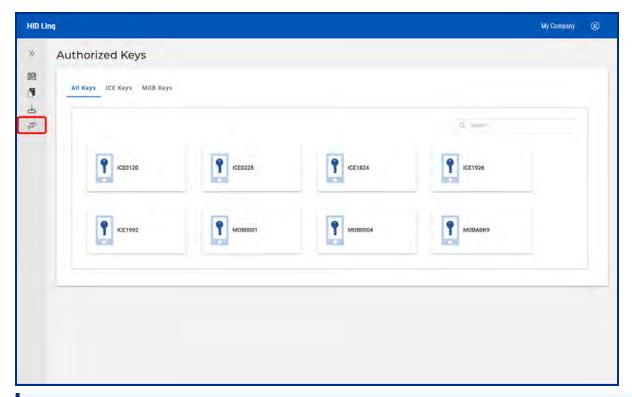
## Section 10 Administration





### 10.1 Authorized keys

Click the Authorized Key tab in the left-hand menu to view the authorized keys in HID Linq Cloud.



**Note:** HID Reader Manager administrators can view and edit all HID keys (ICE and MOB) associated to their organization in the HID Reader Manager app.



### 10.2 Change the HID Linq Gateway security profile

The HID Linq Gateway has two security profiles:

Security Profile	Behavior
Normal	HID Ling Gateway runs as an application and will require manually restarting every time the PC is powered off.
Relaxed	HID Ling Gateway runs as a service and does not require a manual restart every time the PC is powered off.

Note: It is recommended to use the Normal security profile as it is more secure.

### Who can change the HID Ling Gateway security profile?

	Reader Manager Portal Administrator	Reader Technician
Permission	Yes	Yes
Multiple reader capability	N/A	N/A

**Note:** Please see **C.4 Security profiles** for more information on the two security profiles before changing the security profile.

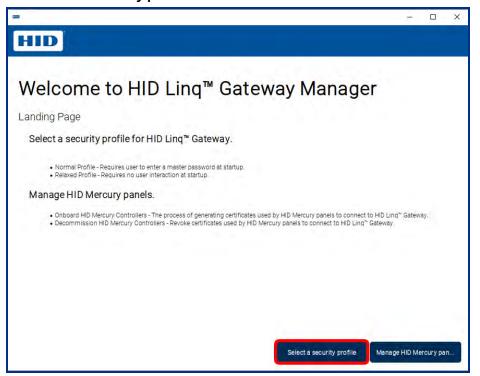
### To change security profiles from Normal to Relaxed:

**Note:** For optimal performance, it is recommended to not to switch between security profiles during operation. Please consult your organizations security recommendations and select the appropriate security profile.

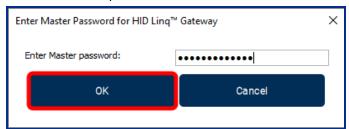
- 1. Navigate to C:\Program Files\HID Global\HID Linq™ Gateway\2025.2.0.0.
- 2. Double click Configuration.exe.
- 3. Enter the master password.



4. Click Select a security profile.



- 5. Click Enable Relaxed Profile.
- 6. Enter the master password and click OK.



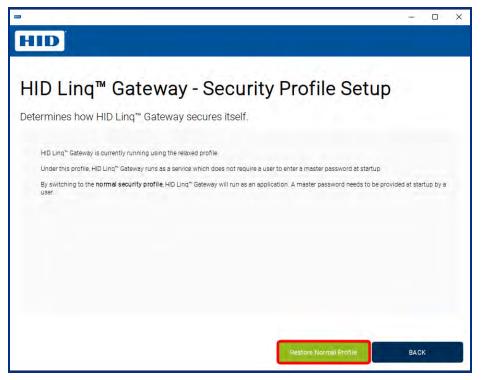
7. Click OK to finish.

### To change security profiles from Relaxed to Normal:

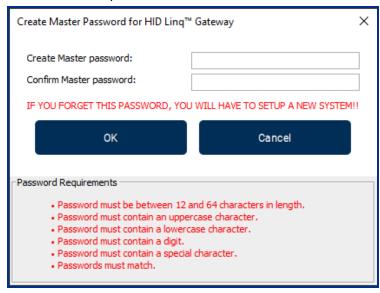
- 1. Navigate to C:\Program Files\HID Global\HID Linq™ Gateway\2025.2.0.0.
- 2. Double click Configuration.exe.
- 3. Click Select a security profile.



4. Click Restore Normal Profile.



5. Enter the master password and click **OK**.



6. Click OK to finish.

### 10.3 Restart HID Ling Gateway

The HID Linq Gateway can be restarted from the Windows system tray when HID Linq Cloud is in the Normal security profile.





**Note:** If HID Linq Gateway is running in the relaxed profile, you must stop or restart the service in Windows Services.

### 10.4 Change organization

Reader Technicians associated with multiple Organizations can switch between organizations in HID Linq.

Important: Changing your organization requires you to uninstall your current HID Linq Gateway and perform the setup again. See 3.8 Uninstall Linq Gateway

- 1. Click the Profile icon in the header.
- 2. Click Organizations.
- 3. Select the required Organization.

### 10.5 Sign out

- 1. Click the Profile icon in the header.
- 2. Click SIGN OUT.

# Appendix A Configuration IDs





### A.1 Configuration ID overview

Users with access to Origo services have access to a library of reader Configuration IDs. Each reader Configuration ID has a unique six character identifier.

Reader Configuration IDs support an inheritance capability. When creating a new reader Configuration ID, this allows a parent Configuration ID to be referenced that specifies a set of starting values, (which can be a small set or a complete listing of all available attributes such as the factory defaults) so that the subset of configuration values in the new Configuration ID, can be changed to what is needed.

When a Configuration ID in its own definition, or through inheritance, specifies the complete reader configuration, it is referred to as a Full Configuration ID. When a Configuration ID specifies a subset of values, it is referred to as a Delta Configuration ID:

- **Delta Configuration ID:** changes just the required attributes, leaving everything else at its current value. Past configurations values can be maintained or modified where needed.
- Full Configuration ID: sets the value of every attribute regardless of their previous values.

**Note:** When an Elite Key is used to protect the reader (referred to as the SNMP Key) and the Configuration ID being applied contains a main key reference to the standard key, the Elite Key value in the reader will not change. This maintains the security of the reader and only permits those with rights to that Elite key to configure the device. The main key of the reader can be changed from one Elite Key to another Elite Key when the user has rights to both keys.

### A.1.1 Reader Configuration ID status

Status Transition flow	Description
Draft	The reader Configuration ID is in a fully editable state.
Publishable	The reader Configuration ID is in a test state.
Published	The reader Configuration ID is locked. It can be used to configure any attached reader.
Deactivated	The reader Configuration ID is archived and no longer usable.



### **A.2 Common Configuration IDs**

The below Configuration IDs are universal and can be uploaded to a HID Signo reader.

### **A.2.1 Full Configuration IDs**

Note: Full Configuration IDs contain all reader configuration settings and keys.

Configuration ID	Description
00039R	Default configuration of a Seos® profile reader. This Configuration ID can be applied to any HID Signo reader.
00000P	Default configuration of a Standard profile reader. This Configuration ID can be applied to a Standard or Custom profile reader
0005PU	Default configuration of a Custom profile reader. This Configuration ID can only be applied to a Custom profile reader.

### **A.2.2 Delta Configuration IDs**

**Note:** Delta Configuration IDs contain one specific reader configuration setting, or a limited number of reader configuration settings.

Configuration ID	Description
00416J	Turn off Bluetooth Low Energy (LE). Mobile credentials will not work.
00416P	Turn on Bluetooth Low Energy.
007T4R	Set the LED to blue. For HID Signo 20K and 40K readers, this Configuration ID will also set the keypad backlight to blue.
00G9L2	Set the LED to red. For HID Signo 20K and 40K readers, this Configuration ID will also set the keypad backlight to red.
007UP7	Disables I'm Alive.
007UPC	I'm Alive (with a default of 60 seconds).
0095W6	Disables anti-passback.
009HUP	Enables anti-passback (with a setting of 1 second).
00BX6X	Enables anti-passback (with a setting of 10 seconds).

# Appendix B HID Controller information





### **B.1 Corresponding HID controller manuals**

Mercury controllers	Installation manual
LP1501	HID Mercury LP1501 Controller Installation and Specifications (PLT-05243)
LP1502	HID Mercury LP1502 Controller Installation and Specifications (PLT-05244)
LP2500	HID Mercury LP2500 Controller Installation and Specifications (PLT-05245)
LP4502	HID Mercury LP4502 Controller Installation and Specifications (PLT-05246)
MP1501	HID Mercury MP1501 Controller Installation and Specifications (PLT-07669)
MP1502	HID Mercury MP1502 Controller Installation and Specifications (PLT-07611)
MP2500	HID Mercury MP2500 Controller Installation and Specifications (PLT-07667)
MP4502	HID Mercury MP4502 Controller Installation and Specifications (PLT-07612)

Aero controllers	Installation manual
X1100	HID Aero X1100 Installation Guide (PLT-04233)
X1100A	



# **B.2 HID Controller DIP switches**

To prove that you have physical access to the controller and are not attempting to access the device from a remote location, set the **S1: DIP Switch 1** to the following sequence:

On - Off - Off - Off

# **HID Aero controller**



# **HID Mercury MP series controller**



# Appendix C

HID Linq Gateway secure deployment





# **C.1 Installation**

#### **Download from official sources**

Only download HID Linq Gateway from official HID sources.

Important: Do not download HID Ling Gateway from a third-party as it may be compromised.

#### **Check digital signature**

To check the authenticity of the download file:

- 1. Navigate to your **Downloads** folder.
- 2. Right-click the file and select Properties.
- 3. Navigate to the Digital Signatures tab.
- 4. Make sure there is a valid HID Corporation Ltd signature.

# **Update Windows**

Make sure that your Windows operating system is up to date before downloading HID Linq Gateway, to help avoid potential vulnerabilities that could be exploited by malicious software.

#### **Antivirus scan**

Use a reputable antivirus software to make sure that your system is free from any malware or threats before downloading HID Ling Gateway.

#### System restore point

Create a system restore point, so that you have a stable system state to refer to if there are any problems during the installation of HID Linq Gateway.

## **Installation process**

For the installation process, see 3.3 Install HID Ling Gateway.

# **User account control**

Windows may give User Account Control (UAC) warnings during the installation process. Only verify and proceed if you initiated the installation process.



#### Firewall settings

HID Linq Gateway may require network access for certain features. Check that your Windows firewall settings allow HID Linq Gateway to communicate securely over the network.

Note: You may be required to Allow an app through the firewall in the Windows Firewall & network protection tab.

#### **Internet resources**

If the following services are blocked, HID Ling Gateway will not work as expected.

URL	Description
https://*.*.hidglobal.com/*	Used by HID Origo Services API
https://a3p6nbw5omi6ja-ats.iot.us-east-1.amazonaws.com	Used by HID Origo Services API

#### **Ports**

If the following services are blocked, HID Ling Gateway will not work as expected.

Port	Description	Configurable
8885	Listens for connections from HID Panels	No

Port 8885 is listed above in the context of secure deployment of HID Linq Gateway. See for more details.

# **C.2 Running HID Linq Gateway**

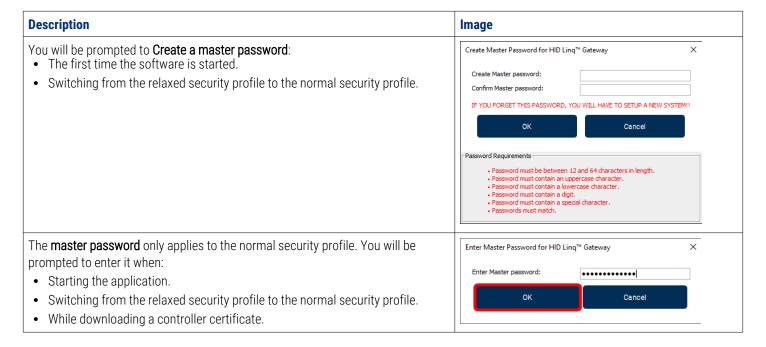
**Note:** HID Linq Gateway and the HID panel must be on the same network. Perform a ping to make sure the PC can see the HID panel.

Gateway.exe	Allows HID Ling to communicate with readers connected via USB to the local PC.
Configuration.exe	Allows configuration of HID Linq Gateway security profiles.



# **C.3 Passwords**

Important: If you forget your master password, you must uninstall HID Linq Gateway, delete the downloads and Zip file, and repeat the download process again. The password cannot be reset.



# **C.4 Security profiles**

There are two security profiles available for HID Linq Cloud. See the following to select your required security profile.

Security profile	Description
Normal	<ul> <li>Data is secured using a master password. The password is not stored so the software relies on the user to provide it, so it can access the data needed to function.</li> <li>The software must run using the same operating system account. No other user of the computer will be able to use the software.</li> <li>Service that allows browsers to detect that HID Linq is running through a websocket.</li> <li>Application that helps facilitate communication between HID Linq and readers.</li> </ul>
Relaxed	<ul> <li>Data is secured using a master password. The master password is cached encrypted on the PC. Any user of the computer can run the software without entering the master password.</li> <li>Any operating system user can run HID Linq.</li> <li>Service that allows browsers to detect that HID Linq is running through a websocket.</li> <li>Application that helps facilitate communication between HID Linq and readers.</li> </ul>



# **C.5 Updates and maintenance**

- Keep HID Linq Gateway updated to ensure optimal performance and security.
- Perform regular maintenance tasks like scanning for malware, updating software, and backing up important data to maintain the security and integrity of your system.

# **C.6 User support**

Contact the **Technical Support** team for further assistance if required.

# Appendix D

Performance





# **D.1 Performance**

The table below shows the approximate times for individual and multiple reader operations via USB or HID controller and SIO modules.

#### Note:

- · Performance measured in a controlled environment.
- Search time for configuration takes 12-15 seconds based on the configuration ID and other search parameters.

# **USB**

No. of readers	Discovery time	Configuration ID update time	Firmware upgrade time
1	16s	52s	13m
8	22s	4m	20m 10s

# **HID controller and SIO modules**

Controller to SIO baud rate	Controller to reader port baud rate	Discovery time	Configuration ID update time	Firmware upgrade time
38400	9600	31s	Not Supported	Not supported
38400	38400	25s	7m 51s	Not supported
115200	115200	21s	5m 54s	Not supported

# Error and warning messages





# **E.1 Error and warning messages**

Please contact HID technical support for further information on error and warning messages.

Functionality	Message	Description	Message type	Actions
Login	Your Sign-in details are incorrect. Please try again with valid credentials	Invalid username/password	Error	HID Linq Cloud uses your HID Reader Manager Portal credentials for login. If you forget your password, you must reset your HID Reader Manager Portal credentials.
Login	User is not associated with any Organization.	The user is not associated with an Organization.	Error	Enroll the user to the Organization in the HID Origo Management Portal. Please contact HID Technical Support.
Linq Gateway Download	This version of the Gateway is intended only for new installations. If you already have Gateway installed and running, using this will reset any existing connection settings.	This download is intended for new installations of HID Linq Gateway, primarily for first-time users.	Info	The user can proceed with the download if they are a first-time user, or to perform a new installation.
Linq Gateway Update (Delta installer)	Delta installer downloaded successfully. Please exit Linq Gateway before starting the update.	Ling Gateway must be closed before the user can update to the latest version.	Info	Exit HID Linq Gateway from the system tray in Secure Mode. Stop HID Linq Gateway in Windows Services in Relaxed Mode.
Linq Gateway	Unable to process request currently. Please retry later.	The application failed to load list of available HID Linq Gateways. Failure due to API response.	Error	Try again. If unsuccessful, contact HID Technical Support.
Reader Discovery	Failed to discover one or more of connected readers.	The HID Linq Gateway detected a reader on a port but was unable to complete the discovery process successfully. A retry typically resolves this issue.	Error	Try the discovery process again. If you are still unsuccessful after multiple attempts, contact HID Technical Support.
Reader Discovery	The operation was interrupted due to Linq gateway shutdown.	Reader discovery interrupted due to a HID Linq Gateway shutdown. Make sure it is running and try again.	Error	<ol> <li>Check if HID Linq Gateway is running in the Windows system tray.</li> <li>Navigate to the HID Linq Gateway installed folder and run the HID Linq Gateway application and enter the master password set during installation.</li> </ol>



Functionality	Message	Description	Message type	Actions
Reader Discovery	Reader discovery requires the latest Linq Gateway version. Please upgrade.	The user receives this message if the installed HID Linq Gateway version is less than 2025.1.0.0.	Info/ restriction	<ul> <li>Follow the steps:         <ul> <li>Uninstall the existing HID Linq Gateway version.</li> <li>Navigate to</li></ul></li></ul>
Reader Discovery	You are not authorized to perform this action.	The user receives this message while performing reader discovery and hovering over a disabled reader in the <b>Reader list view</b> . It indicates that the reader belongs to a different organization and configuration changes, resets, and firmware updates are restricted.	Tool tip	Only manage readers from your organization.
Reader Discovery	Access restricted - You do not have access to the keyset required to configure the reader	The user receives this message while performing reader discovery and hovering over a disabled reader in <b>Reader list view</b> , it indicates that the Reader Technician doesn't have the required key access to configure the reader.	Tool tip	Verify that the user has the required key access to configure the reader and perform firmware updates.
Reader Discovery	Reader information is unavailable. Please contact HID Technical Support for assistance.	The discovered reader information is not available in Ling Cloud.	Tool tip	Contact HID Technical Support with the reader information.
Locate Reader	Reader with id %s is not connected		Error	Check reader connectivity and try again.
Locate Reader	Unable to process the locate reader request for reader with id %s	Occurs when there is a timeout response if the reader is not responding.	Warning	
Reset reader	Reader is busy with an update. Please retry once update is complete.	The selected reader is currently undergoing a firmware update, or configuration changes.	Warning	Wait until the update is finished and try again.
Reset Reader	The reset operation is currently not supported for this reader profile.	Reset operation is supported only for standard profile readers.	Info/ restriction	HID Linq Cloud does not currently support the reset operation for specific reader profiles (Seos, Smart, Signo Express). This restriction will be removed in the future.



Functionality	Message	Description	Message type	Actions
Apply Configuration	Applying this configuration to selected readers will change the OSDP protocol version to V1. The readers could go offline with impact to operation.	A warning message to the user applying a Configuration ID that changes the OSDP protocol from V2 to V1.	Warning	HID Linq Cloud will not block configuration that changes the OSDP protocol from V2 to V1 which impacts the in-field management of the readers using HID Linq Cloud.
Apply Configuration	Apply configuration failed. Selected readers currently being updated with same configuration. Please retry after some time.	Error message when same or different user tries to apply configuration to a reader which already has a configuration request initiated through different tool (say RM app) to same reader / Configuration ID.	Error	Wait some time and try again.
Apply Configuration	Apply configuration failed. Configuration profile is higher than the reader profile.	The chosen configuration profile and the profile of the target readers are incompatible.	Error	Choose a configuration profile that is compatible with the target reader and try again. Please contact HID Technical Support if unsuccessful.
Apply Configuration	Currently unable to get the requested configuration from HID Origo. Please retry later.	A service required by HID Linq Cloud could be down and unable to generate the encrypted configuration.	Error	Try again. Contact HID Technical Support if unsuccessful.
Apply Configuration & Reset Reader	Requested operation cannot be executed on Vento reader.	There are currently restrictions on applying configurations, resetting and FW upgrades to Vento readers.	Info/ restriction	
Apply Configuration & Reset Reader	Key roll was successful. One or more configuration not applied successfully. Please retry. Contact HID customer support on repeated failure.	Some configurations were not applied to the reader. The user can see the new configuration (Partial Configuration ID) created with configuration parameters that are successfully applied.	Warning	Re-apply the same Configuration ID. If unsuccessful, contact HID Technical Support.
Apply Configuration & Reset Reader	Key roll failed. Few configurations are applied successfully. Please retry. Contact HID customer support on repeated failure.	Key rolling for the reader failed. Some configurations were not applied to the reader. The user cannot apply any other Configuration ID until the key roll is successful.	Error	Re-apply the same Configuration ID. If unsuccessful, contact HID Technical Support.
Apply Configuration & Reset Reader	Key roll and apply configuration failed. Please retry. Contact HID customer support on repeated failure.	Key roll and configuration update failed. The user cannot apply another Configuration ID until key roll is successful.	Error	Re-apply the same Configuration ID. If unsuccessful, contact HID Technical Support.



Functionality	Message	Description	Message type	Actions
Apply Configuration & Reset Reader	Applying this configuration to selected readers will change the communication protocol to Wiegand. Linq will no longer be able to manage these readers over OSDP.	A warning message to the user applying a Configuration ID that changes the communication protocol from OSDP to Wiegand.	Warning	HID Linq Cloud will not block configurations that change the controller communication protocol which impacts the in-field management of the readers using HID Linq Cloud.
Firmware Update	Firmware update completed with partial success.	One or more readers have failed in the firmware update process.	Warning	Try again. Contact HID Technical Support if unsuccessful.
Firmware Update	Firmware updated failed.	Firmware update failed for the selected reader/readers.	Warning	
Build Firmware	Please Upload JSON File Format	Reader information must be included in the firmware-request-template.json file	Error	Download the firmware- request-template.json file and input the relevant reader information (Reader Extended ID).
Build Firmware	You do not have permission to download this file, as it is generated for another user.	The user is trying to download a generated firmware file or status file requested by another user.	Error	The user can only download firmware and status files that they have generated.
Build Firmware	Invalid status file	The user is attempting to upload a status file with a modified file name. The status file name contains the Request ID.	Error	Download the status file again and do not change the file name. Update the reader status and upload the new status file to HID Linq Cloud.
Missing Attributes: Apply Config, Reset & F/W Upgrade	Missing firmware version for one or more of the selected readers. Please perform reader discovery and retry.		Error	
Missing Attributes: Apply Config, Reset & F/W Upgrade	Readers not found. Please perform reader discovery.		Error	
Missing Attributes: Apply Config, Reset & F/W Upgrade	Missing software version for one or more of the selected readers. Please perform reader discovery and retry.		Error	
Missing Attributes: Apply Config, Reset & F/W Upgrade	Missing Engine ID & Username for one or more of the selected readers. Please perform reader discovery and retry.		Error	



Functionality	Message	Description	Message type	Actions
Missing Attributes: Apply Config, Reset & F/W Upgrade	One or more of the selected readers not found. Please perform reader discovery and retry.		Error	
Generic Exception:	Requested resource is restricted and requires authentication.	The user's current authorization level does not provide the necessary privileges to access the requested resource.	Error	Contact the Reader Manager Administrator for access to the restricted resource.
Generic Exception:	User does not have permission to access this resource.	The user does not have the necessary access rights to access the resource (such as Configuration ID), so the operation cannot be completed successfully.	Error	Contact the Reader Manager Administrator for further instructions.
Generic Exception:	Specified Action could not be initiated as the device is not connected with IoT.	The selected reader is disconnected from the HID Ling Gateway.	Error	Verify that the device is physically connected. Perform reader discovery on the required HID Ling Gateway.

# Appendix F

Logs





# F.1 Logs

When contacting HID Technical Support, you will need access to HID Linq Cloud logs. These can be found by navigating to C:\ProgramData\HID Global\HID Linq™ Gateway\logs.



# **Revision history**

Date	Description	Revision
June 2025	Updated for HID Linq Cloud software version v1.2.5.	A.3
March 2025	Updated for HID Linq Cloud software version v1.2.0.	A.2
November 2024	Updated for HID Linq Cloud software version v1.1.0.	A.1
September 2024	Initial release.	A.0



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