



Nymi Band 4 HID Seos

User Guide

September 28, 2026

Version 3.3

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Revision history

Version	Date	Revision history
1.0	June 14, 2020	Initial version
1.1	September 17, 2020	Corrections
2.0	October 8, 2025	Information added to determine if a Nymi Band 4 supports Seos or Legic. Removed general Nymi Band 4 information that can be found in the User Guide.
3.0	October 20, 2025	Added Physical access and limitation sections
3.1	December 12, 2025	Minor layout update to the document
3.2	December 20, 2025	Updated serial number decoding for Seos & Legic SIM card.
3.3	September 28, 2026	Fixed heading section 2.4

1 Overview

This guide provides information about using and managing the Nymi Band in HID Seos enabled physical access application environment. It contains workflow information and troubleshooting information that helps you to set up and use the Nymi Band within a HID ecosystem.

For general information relating to the use of the Nymi Band, please refer to the Nymi Band 4 User Guide.

Prerequisites

The following components need to be available:

1. Nymi Band 4
2. Laptop provided by Nymi to allow local enrollment of the Nymi Bands using the Nymi Band Application (NBA) software.
3. CP1000 (Omnikey 5427UE) USB encoder provided by HID, configured to work with Nymi Bands.

The general workflow of a Seos-enabled Nymi Band is shown below.



Figure 1.1 - Nymi Band workflow for HID Seos physical access applications

Note: This document strictly pertains to the Nymi Band 3.0 Beta program and is meant for deploying Seos in small Proof-Of-Concept (POC) and pilot projects only.

1.1. Supported Nymi Bands

The Nymi Band must contain a SIM card to support HID Seos or Legic Advant. The Nymi Band serial number can be used to determine if the Nymi Band contains a SIM card, as shown in Figure 1.1.

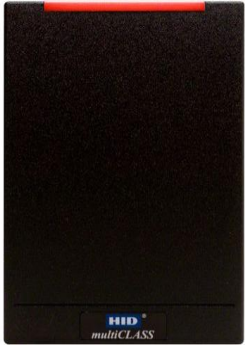


Figure 1.1: Decoding the Nymi Band 4 Serial Number.

1.2. Supported HID Readers

The following HID access control readers have been qualified to work with the Seos enabled Nymi Band. Ensure that the HID readers are set up with the RF settings that match the CP1000 encoder.

HID Reader	Description	Reference
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HID multiCLASS SE RP40	multiCLASS SE® readers simplify migration from legacy technologies with support 125 kHz for HID Prox	
HID iCLASS SE R40	iCLASS SE® R40 is part of HID Global's iCLASS SE platform for adaptable, interoperable access control.	

Note: Most supported readers indicate **iCLASS SE** on the front nameplate of the reader.

2 HID Seos Credential Enrollment

2.1. AsureID and Encoder Setup

To set up AsureID, follow the quick start guide that came with the CP1000 encoder, or follow the steps provided in the AsureID User Guide (PLT-01485). The CP1000 encoder is provided by HID to operate with the Nymi Band. The AsureID **licence key** is printed on the CP1000 encoder quick start guide on page 4, provided by HID. This licence key is used with AsureID for online activation. The initial AsureID credentials are:

- UserID: `admin`
- password: `admin`

During the first-time setup of CP1000 encoder, a prompt appears to **provide new admin keys for encoder**. Do the following:

1. Create a passphrase.
2. Generate and save random keys.
3. Save a copy of the three keys in case the encoder needs to be securely restored at some later date.

For more information, see the [HID AsureID Guide](#).

2.2. Loading Encoder Keys and Credits in AsureID

Install iClass SE encoder configuration package (refer to the HID AsureID User Guide).

- Connect CP1000 encoder.
- Launch AsureID, choose **Work Order Manager** application.
- Select **File > Upload Encoder Configuration Package**.

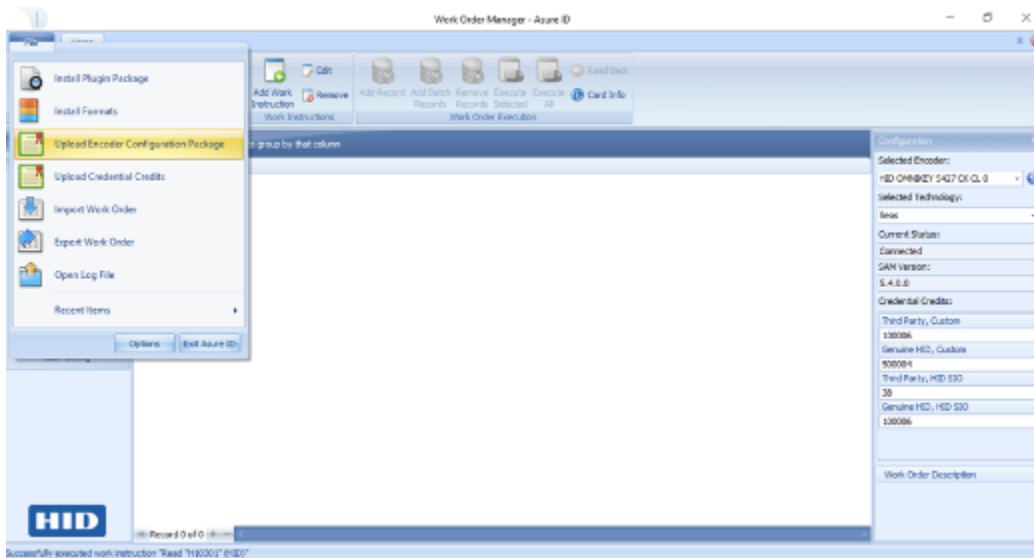


Figure 2.1 - Uploading encoder configuration package

2.3. Configuring CP1000 Encoder Settings for Nymi Band 4.0

Note: This step is not required for use with Nymi Band 3.0

Use the following settings to configure the CP1000 encoder for the Nymi Band.

1. Connect the CP1000 encoder
2. With appropriate drivers installed, open the **Encoder Management** console in a web browser at the default address <http://192.168.63.99>
3. Navigate to the Contactless Config > Polling tab, and then

1. **Check ISO/IEC 14443 Type A**, and deselect all other protocols.
4. Navigate to the Contactless Config > ISO14443A tab, and then
 1. Modify **register 10** with the **value 03**.
5. Select the **System Config** tab
 1. Click **Apply Changes**.
 2. Click **Store Changes**.
 3. Click **Reboot System**.



Figure 2.2 - Configuring CP1000 encoder protocol settings

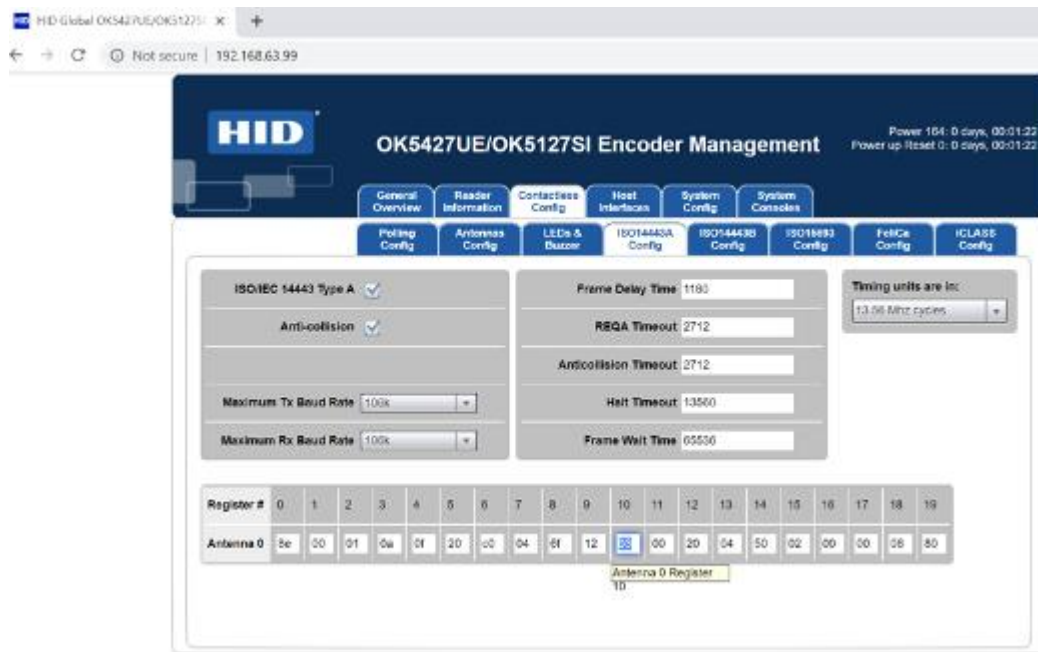


Figure 2.3 - Configuring CP1000 encoder RF settings

2.4. Creating a Work Order in AsureID

To create a word order in AsureID follow these steps:

1. Connect CP1000 encoder.
2. Launch AsureID, choose **Work Order Manager**.
3. From the overhead menu click **New > Seos**, then **OK**.
4. In the Seos encoding window click **Next**.
 1. Select **HID Access Application**
 2. Select **Write**
 3. Select **credential type format** (e.g., H10301)
 4. Then click **Next**
5. On the **Define Format Parameters** screen, assign appropriate facility code and card ID rules, and then click **Next**.
6. In the **Key Selection** step, select appropriate GDF, ADF, and SO keys, and then click **Next**.
7. Click **Finish**, then save and name the template for later use.

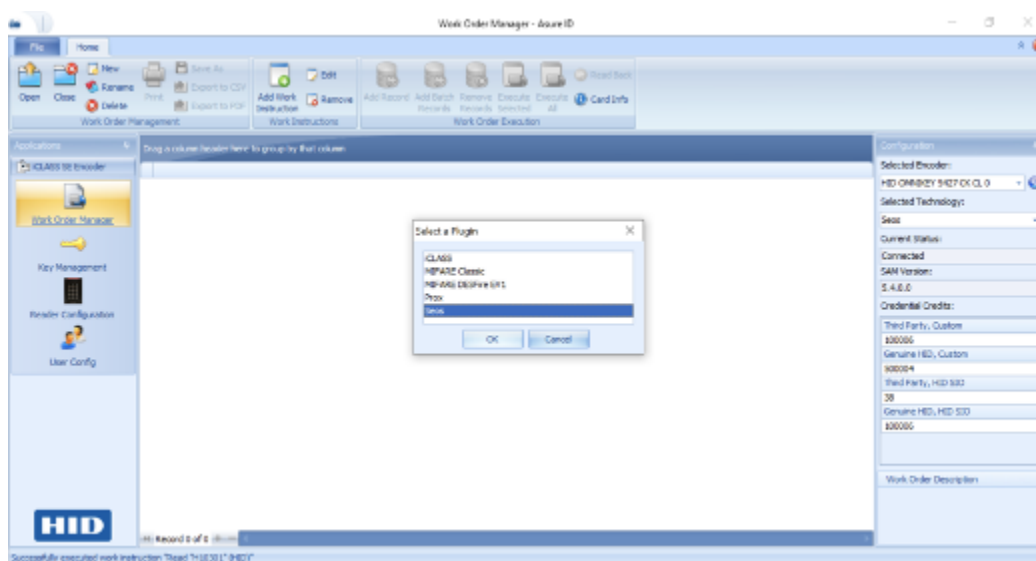


Figure 2.4 - Creating a seos work order

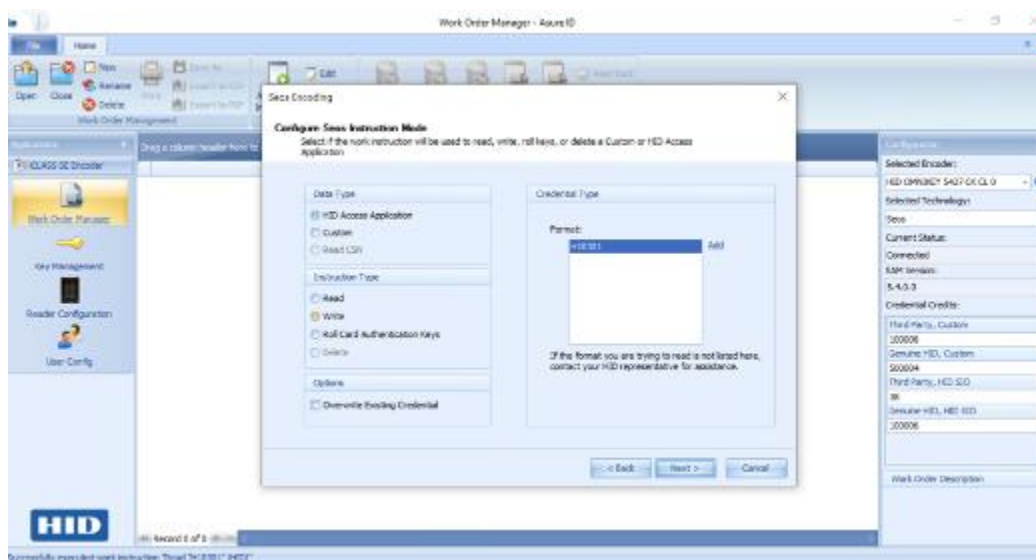


Figure 2.5 - Work order configuration, Seos instruction mode

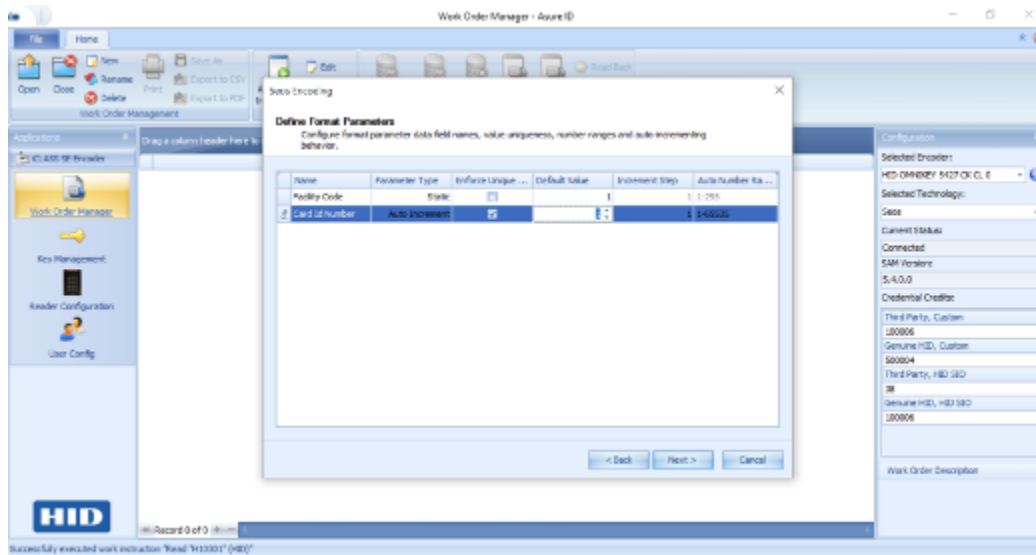


Figure 2.6 - Work order configuration, define format parameters

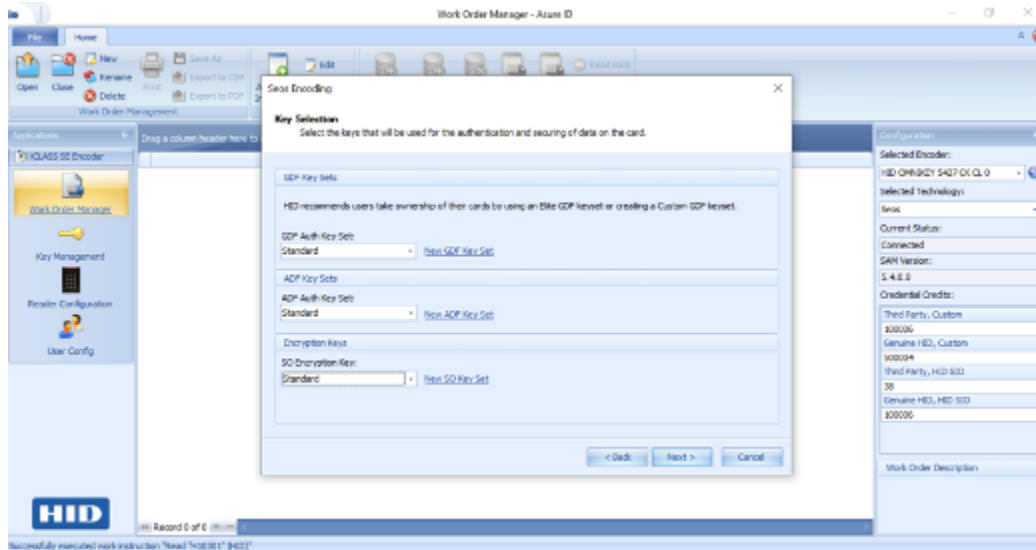


Figure 2.7 - Work order configuration, key selection

2.5. Encoding Nymi Band Seos Credential (Card ID + Facility ID) in AzureID

Following these steps to encode the Nymi Band Seos credentials:

1. Ensure that the Nymi Band is unenrolled and on the Nymi Band charger.

Alternatively, an enrolled Nymi Band can be encoded if worn on the user's wrist after having been authenticated.

2. Connect CP1000 encoder and launchASUREID.
3. InASUREID, select **Work Order Manager** and open the previously saved Work Order to encode Nymi Band.
4. Select appropriate entry from list (e.g., Facility Code 10, Card Number 7).
5. Place Nymi Band onto the encoder with the display facing the top side of the encoder.
6. Click **Execute Selected**.
7. A pop-up window with the encoding status is displayed. Wait for the encoding to complete.
8. The Nymi Band can now be enrolled and used to register the Nymi Band's **Facility Code** and **Card Number** with the access control system.

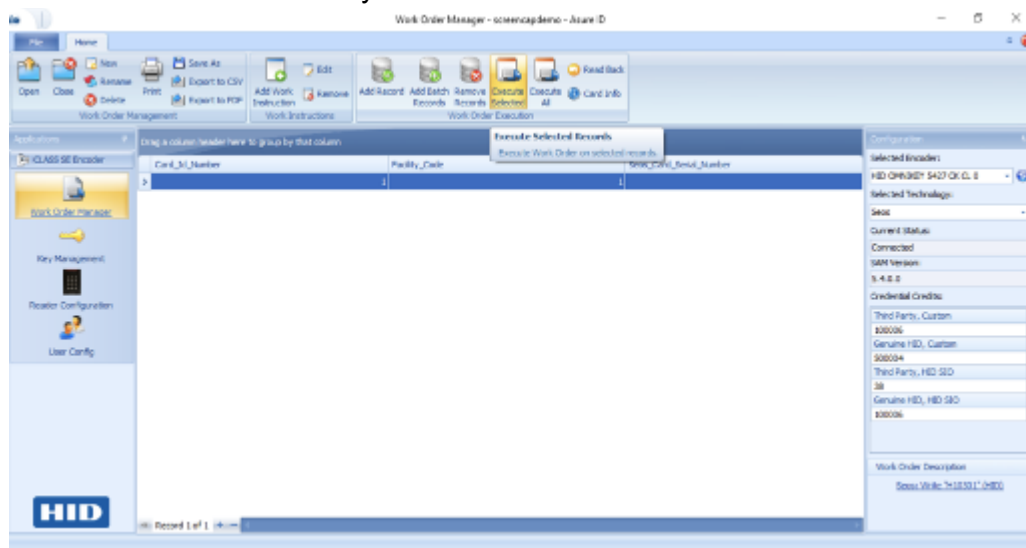


Figure 2.8 - Work order execution

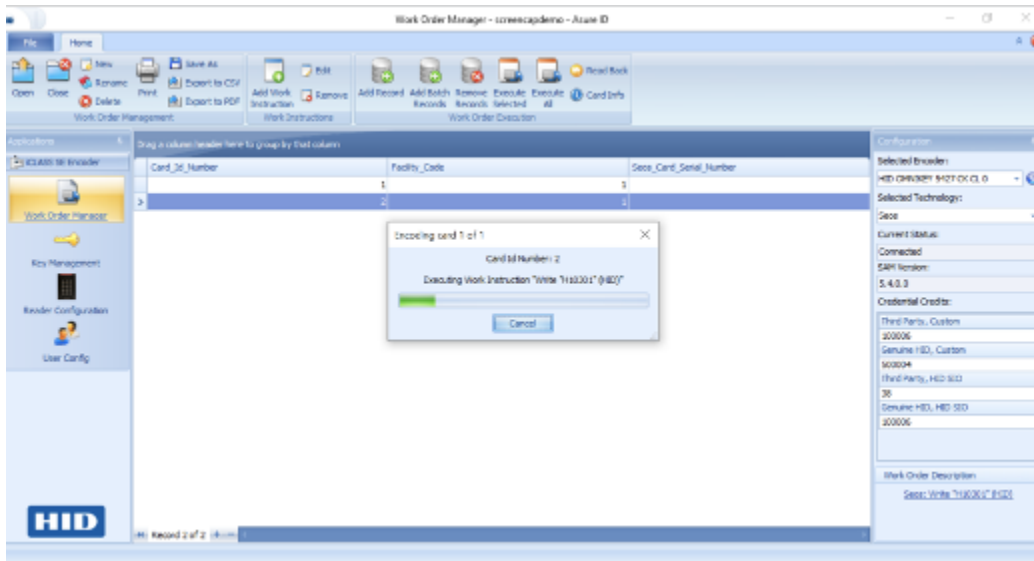


Figure 2.9 - Work order execution, in progress

2.5.1. Read Back Nymi Band Seos credential

To confirm the Facility Code and Card Number on the Nymi Band, with a work order open, click a record to highlight it, then click the **Read Back** button.

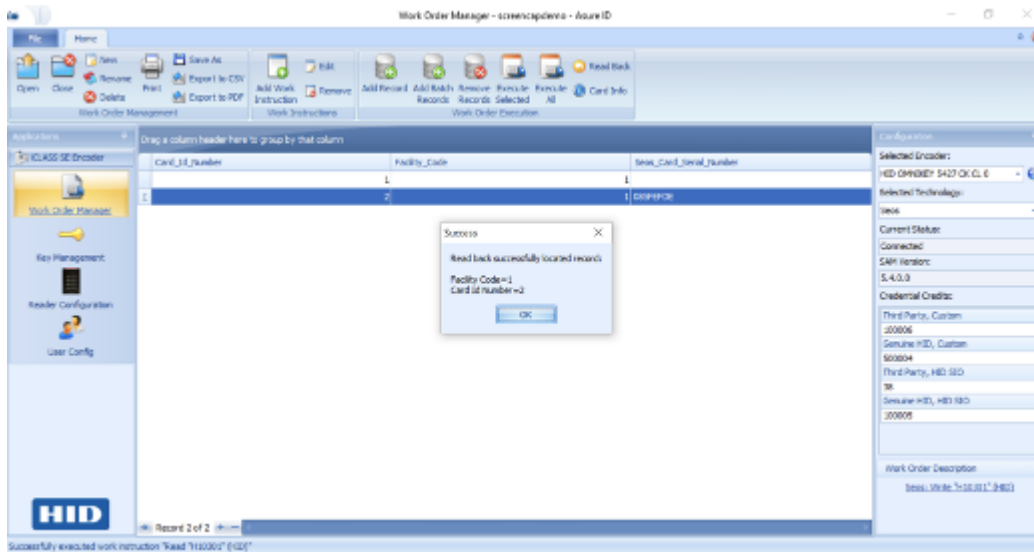


Figure 2.10 - Card credential read back

2.5.2. Re-encoding Nymi Band Seos credential

Overwriting the Seos credential with a new Facility Code and Card Number is possible by creating a work order (section 3.4), with **Overwrite Existing Credential** enabled in the **Options** section of the work order.

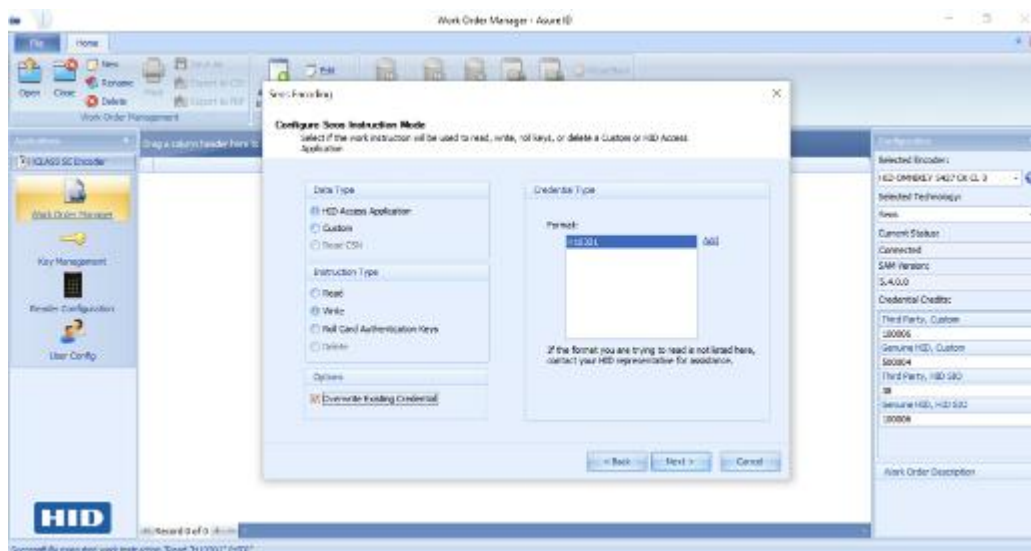


Figure 2.11 - Work order configuration, overwrite existing credential

2.5.3. Rolling Seos keys on a Nymi Band

If keys have been changed previously and need to be written with the standard key set, or the work order requires that the keys be rolled, a **Roll Keys** work order may be created and executed.

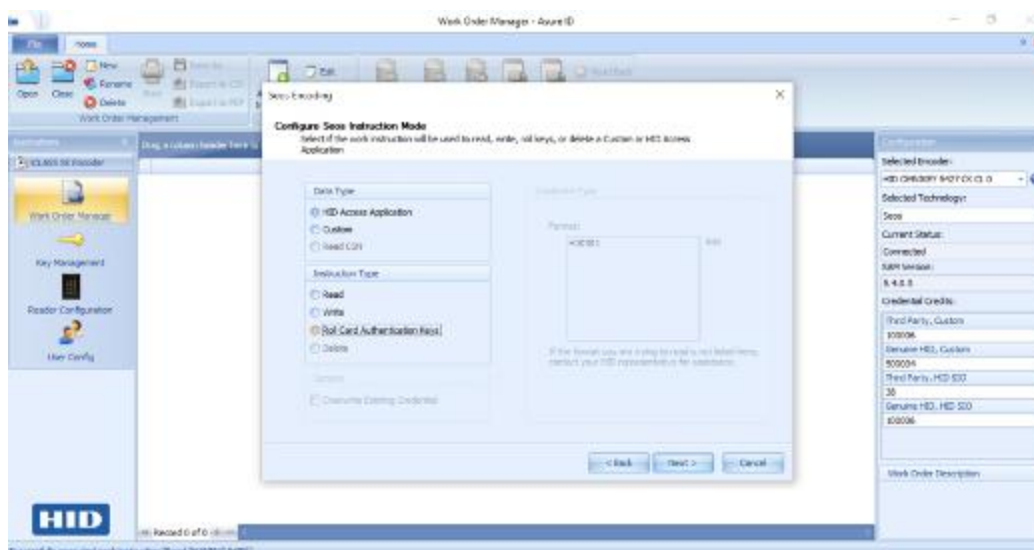


Figure 2.12 - Work order configuration, roll card keys

2.6. Configuring the Readers with Elite Keys

If applicable, to configure a mobile-ready iClass SE door reader with Elite keys, power cycle the reader and apply the reader configuration card within five seconds of powering on the reader.

3.0. Using Band for Physical Access

The physical access feature is active when the enrolled Nymi Band is in an authenticated state. In addition, if the Nymi Band is unbound and, on a charge, supporting credential encoding, the physical access feature is available.

1. Tap and hold the face of the Nymi Band to the center of the HID Seos reader.
2. Hold the Nymi Band in place for a minimum of one second until the reader shows a purple light, then green and sounds two beeps.

If the reader shows green light (no purple light) and beeps only once, remove the Nymi Band from the reader and try again.

Note: You can retry the tap and hold process multiple times if there is a 2 second wait period between taps.

3.1. Pilot / Security Limitations

To ease Seos encoding with Nymi Band 3.0, *unenrolled* Nymi Bands can be encoded with Seos credentials when connected to a charger. Once the enrollment is completed, this feature is disabled.

Note that while enrolled, the Seos credential is only made available when the Nymi Band is authenticated on the enrolled user's wrist.



