

XPressEntry

XPressEntry / Avigilon Alta Integration Guide

By



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Purpose

The XPressEntry integration with the Avigilon Alta access control system is a middleware solution that synchronizes access control data into XPressEntry for mobile credential validation and mustering.

The integration retrieves and synchronizes the following data types from Avigilon Alta to XPressEntry:

- Users / Cardholders – User profile information including name and photo
- Badges – Badge credentials and assignments
- Access Information – Access groups and device permissions
- Activity Data – Historical and real-time badge-scan events pulled from Avigilon Alta

Prerequisites

Before configuring the integration, ensure the following are available:

- Alta Access with the API Integration License enabled — the integration uses the Avigilon Alta cloud (SPACE) API.
- Avigilon Alta version 11.50 or later. XPressEntry has been tested on version 11.50; for other versions, contact Telaeris to confirm compatibility.
- An Avigilon Alta administrator user account — the username (email) and password for API access, recorded and stored securely.
- XPressEntry installed and running.
- Outbound HTTPS (TCP 443) connectivity from the XPressEntry server to the Avigilon Alta cloud API endpoint, plus the XPressEntry server-to-handheld ports (default 30000 and 30001) open on the local network.

Order of Operations

Complete the integration in the following order:

1. Set up Avigilon Alta to enable API access (API Integration License and an administrator user account).
2. Enable Data Manager synchronization in XPressEntry.
3. Perform the initial full sync and verify the imported data.
4. Configure XPressEntry handheld readers and doors.
5. Scan a credential on a handheld to validate functionality.

Configuring Avigilon Alta

Enabling API Access

- Avigilon Alta uses its cloud (SPACE) API for integration. No separate API key is generated — XPressEntry authenticates using an **administrator account's email and password**.
- Confirm the Alta organization has the **API Integration License enabled**. If it is not active, contact your Avigilon Alta administrator or Telaeris.

Devices and Readers in Avigilon Alta

No virtual readers need to be created in Avigilon Alta. XPressEntry pulls device and reader data directly from Alta:

- All **Entries** configured in Avigilon Alta are synchronized to XPressEntry as **Readers**.
- A **Door** is created automatically in XPressEntry for each synchronized **Reader**.
- Handheld stations and their entry/exit readers are configured on the XPressEntry side after the first sync (see the Doors section).

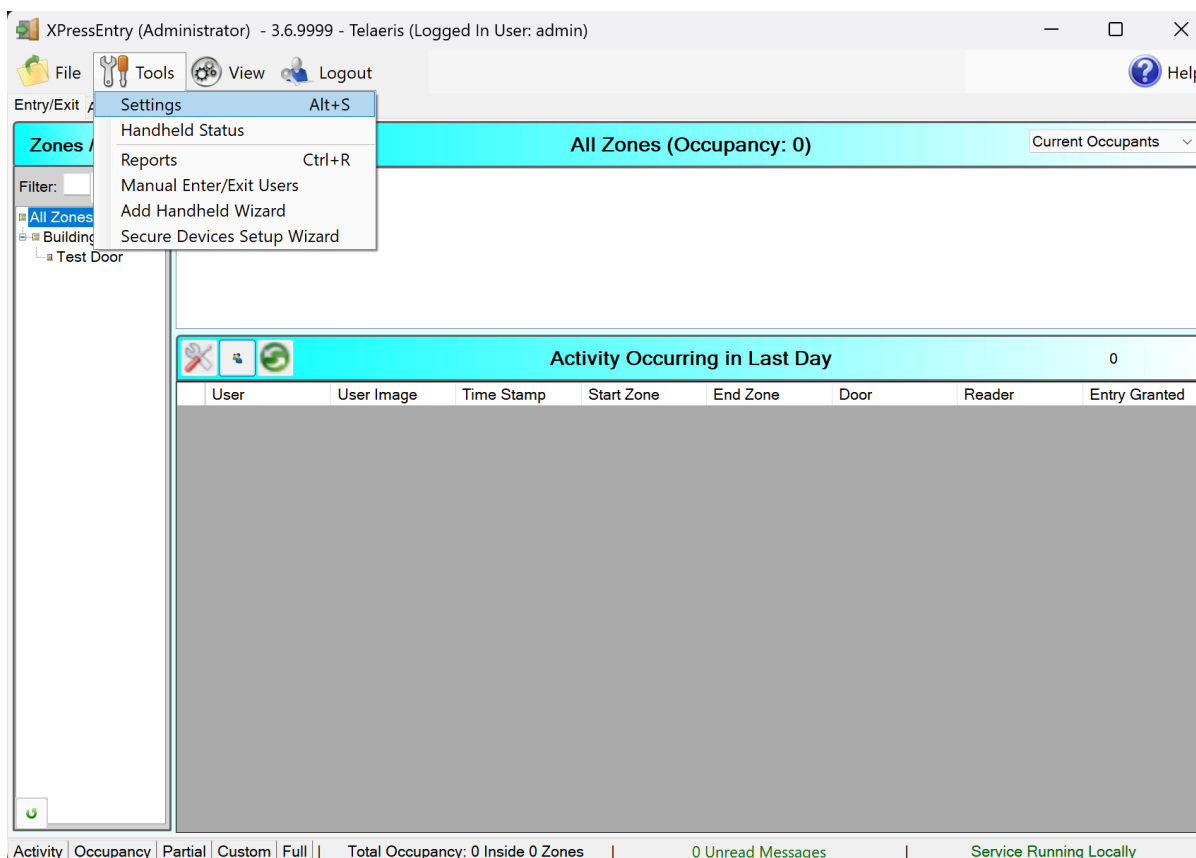
Administrator User for the Integration

- Use an existing Avigilon Alta administrator account or create a dedicated user with administrator rights for the XPressEntry integration.
- Administrator rights are required so the integration can read users, badges, access groups, readers, and zones.
- Record the user's email (username) and password — these are entered in the XPressEntry Data Manager settings.

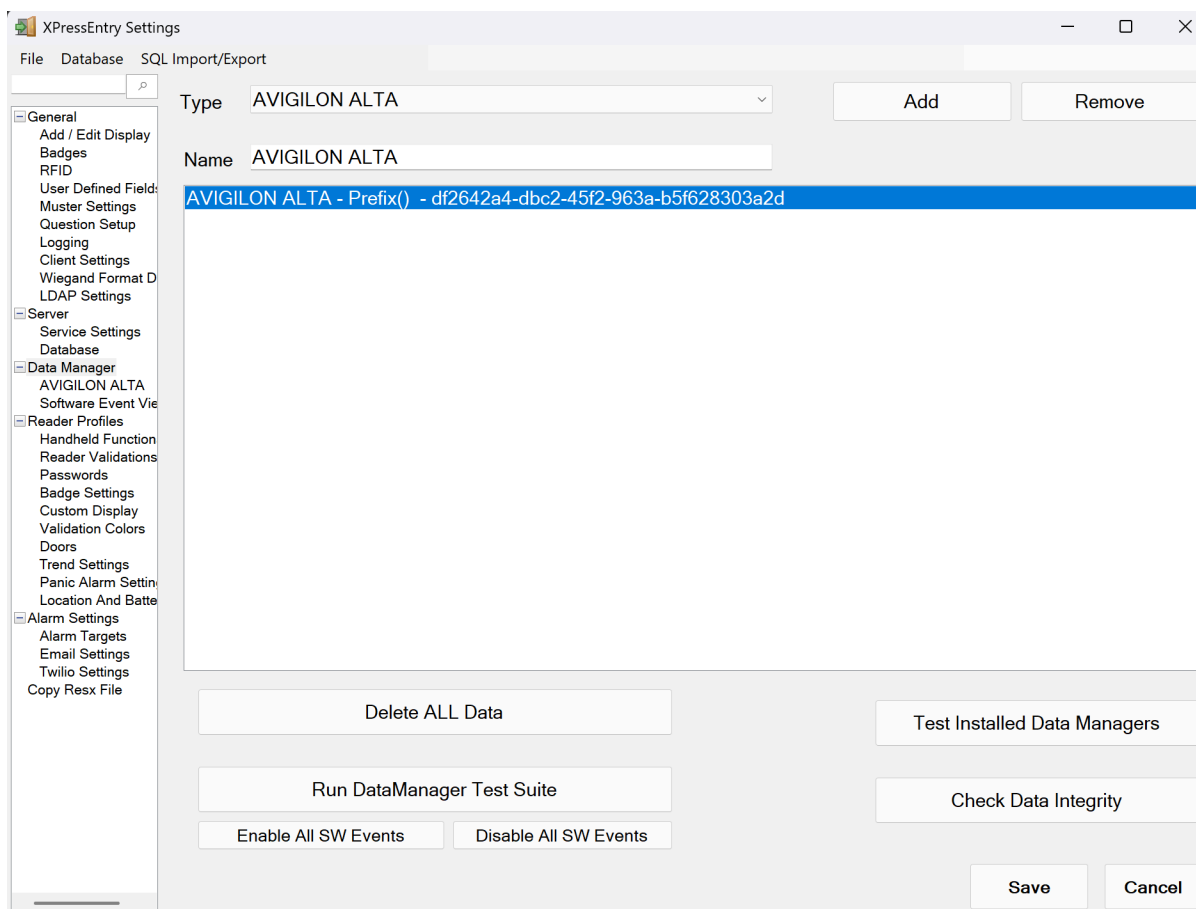
XPressEntry Configuration

Step 1: Add the Data Manager

1. In XPressEntry, go to **Tools > Settings** (Ctrl+S) and select the **Data Manager** tab.



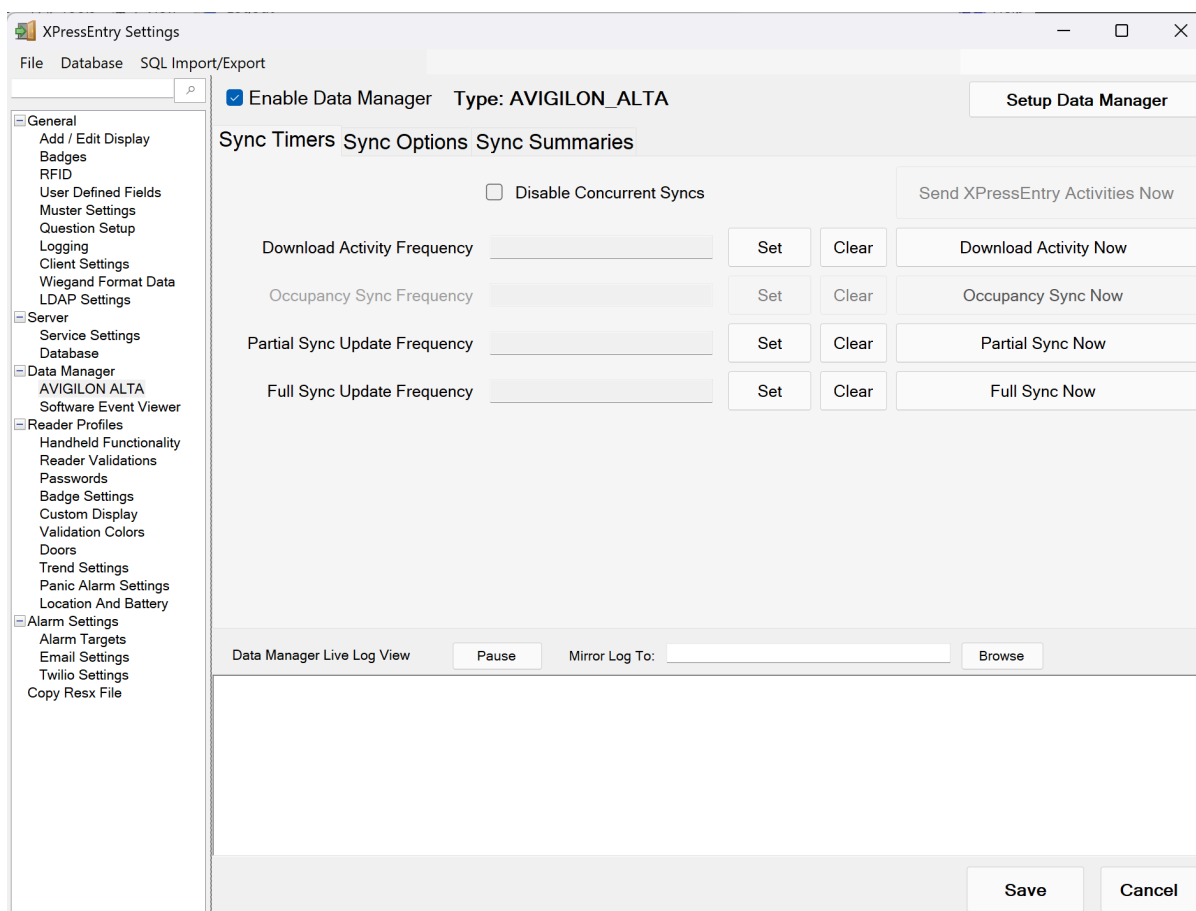
2. Set **Type** to **Avigilon Alta** from the dropdown and click **Add**.



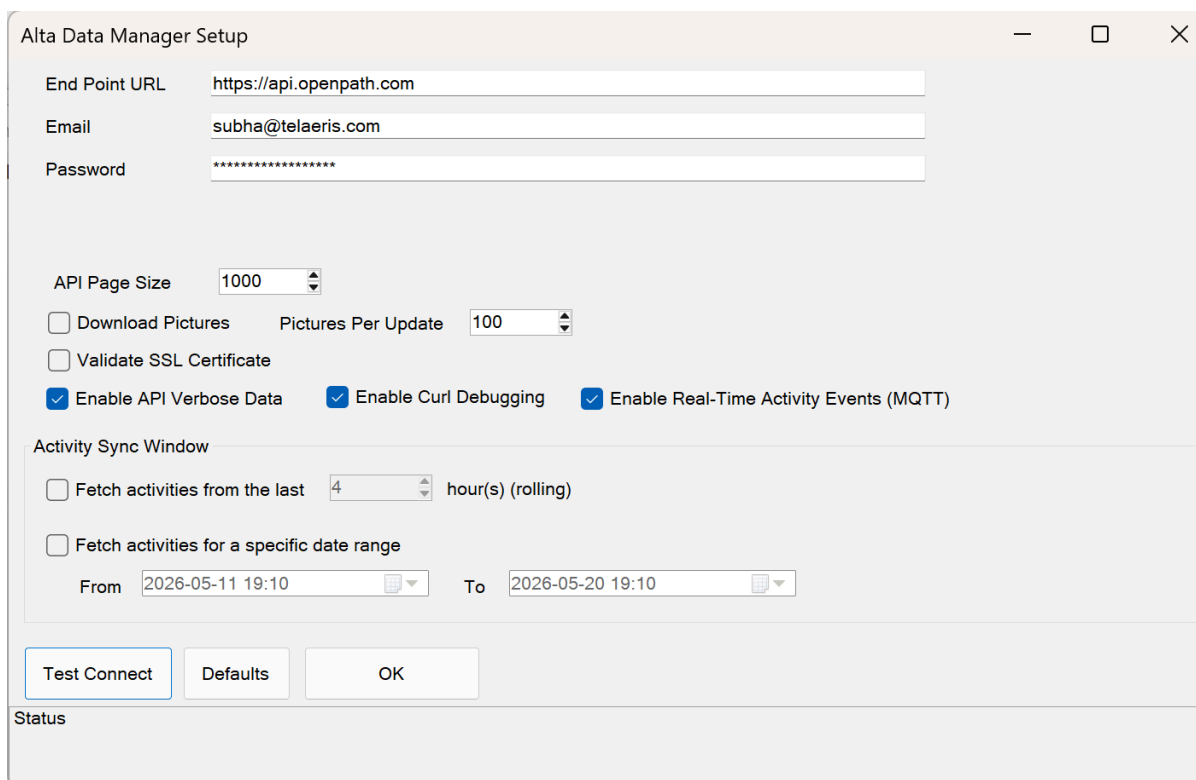
3. **Click Save.** A new **"DISABLED-Avigilon Alta"** tab appears in the side menu.

Step 2: Connect to the API

1. **Select** the new Avigilon Alta tab.
2. **Check Enable Data Manager** and click **Setup Data Manager**.



3. Enter the following connection details:
 - **End Point URL** – the URL of the Avigilon Alta cloud API.
 - **Email** – the email (username) of the Avigilon Alta administrator user.
 - **Password** – the password for that administrator user.
 - **Download Pictures** – when checked, user photos are synced from Avigilon Alta.
 - **Enable API Verbose Data** – enables detailed logging in the Data Manager live log view and XPressEntry server logs (optional).
 - **Enable Curl Debugging** – with API Verbose Data enabled, generates API requests in cURL format for command-line testing; enable only when troubleshooting (optional).
 - **Enable Real Time Activity Events** – listen for and apply badge-scan events from Avigilon Alta in real time over MQTT (optional).
 - **Fetch Activity Sync From Last X Hours** – when Activity Sync runs, fetch badge-scan activities from the past X hours.
 - **Fetch Activities For a Specific Date Range** – fetch badge-scan activities for a chosen date range.



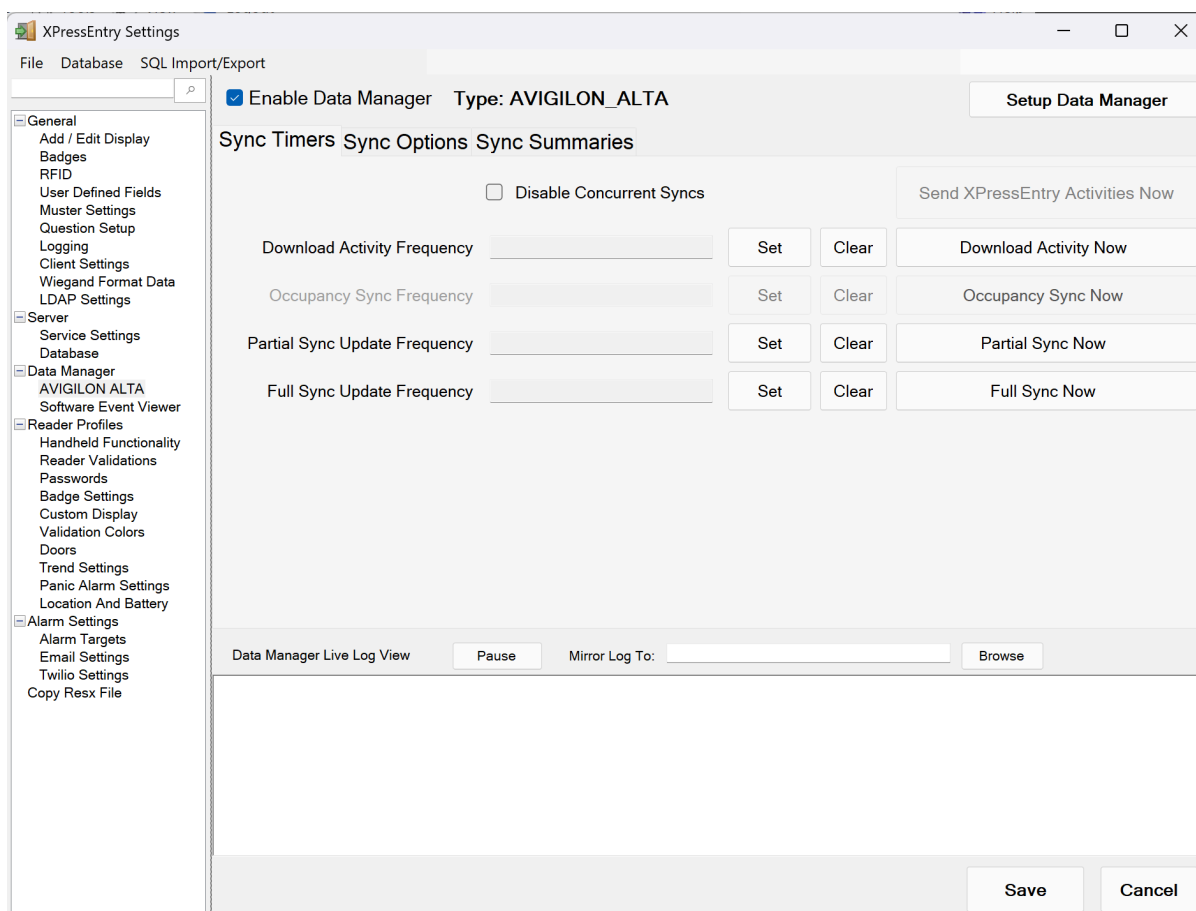
The image shows a screenshot of the 'Alta Data Manager Setup' window. It contains the following fields and options:

- End Point URL:**
- Email:**
- Password:**
- API Page Size:**
- ☐ **Download Pictures** **Pictures Per Update:**
- ☐ **Validate SSL Certificate**
- ☒ **Enable API Verbose Data** ☒ **Enable Curl Debugging** ☒ **Enable Real-Time Activity Events (MQTT)**
- Activity Sync Window**
 - ☐ **Fetch activities from the last** **hour(s) (rolling)**
 - ☐ **Fetch activities for a specific date range**
 - From:**
 - To:**
- Buttons:**
- Status:** (Empty text area)

4. **Click Test Connect** to verify the connection. On success, the result window displays "Connection Success!"; any error appears in the same window.
5. **Click OK** to close the setup form, then click **Save**.

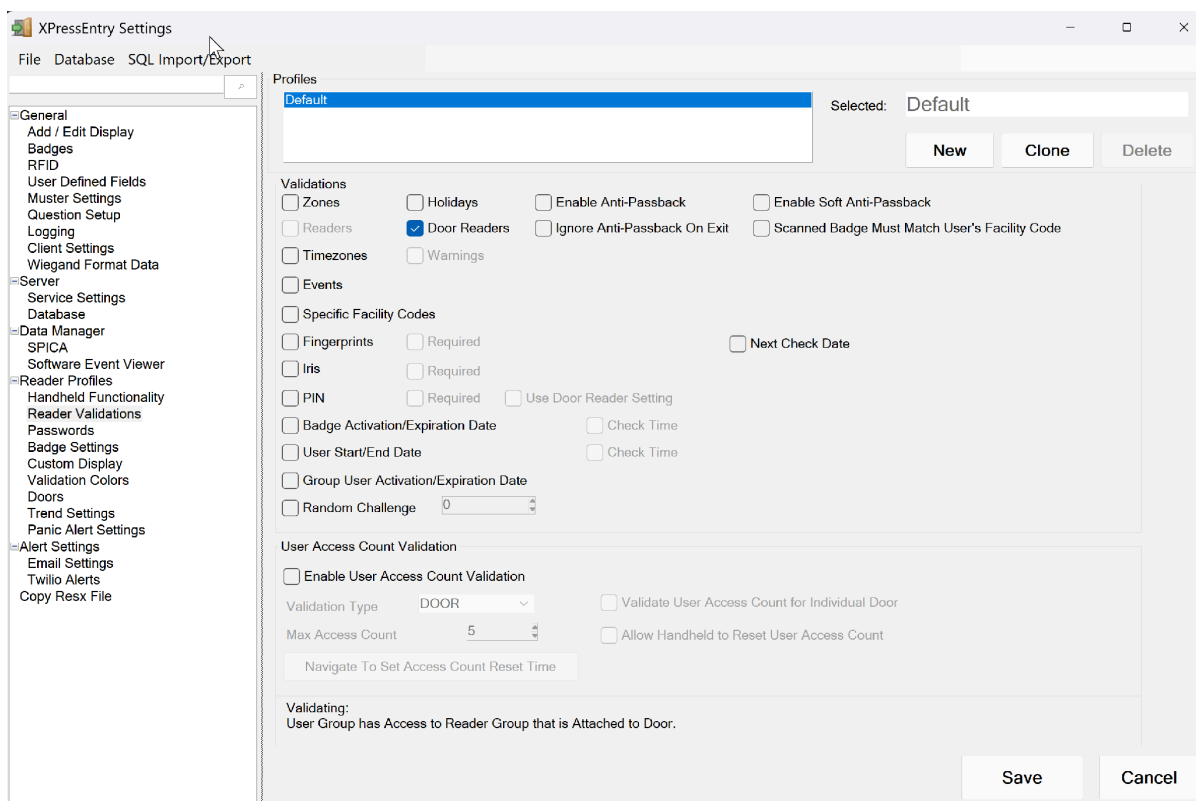
Step 3: Configure Sync Timers

1. Under the Sync Timers tab, configure the following:
 - **Full Sync** – pulls all relevant records (Users, Badges, Groups, Readers, Zones, Timezones); recommended daily at a low-usage time (e.g., 2:00 AM).
 - **Partial Sync** – pulls Doors, Access Groups, and Timezones (excludes cardholders); recommended every 30 minutes.
 - **Activity Sync** – pulls historical badge-scan activities from Avigilon Alta (controlled by the Fetch Activity settings above).
2. **Click Set** next to each frequency, choose the interval, then click **Save**.



Reader Validations

1. Go to **Tools > Settings > Reader Validations** (under the Reader Profiles tab).
2. At minimum, **enable Door Readers**; other validations may be enabled as needed.
 - Note: Door Readers are checked so the handheld only accepts scans from users with permission on the mapped reader.
3. **Click Save.**



Data Configuration / Sync Check

This section is optional. Use it to confirm that data has synchronized correctly.

Users and Badges

After a full sync, User Profiles, Photos, Badge Credentials, and Access Rights are available in XPressEntry.

Example user in Avigilon Alta:

TPSB_Telaeris

? ⋮ ST

Users

Import users

Batch actions ▾						Search		Q	+	↓	≡
☐	FIRST NAME	LAST NAME	FULL NAME	EMAIL	NICKNAMES	ACCESS GROUP	SITES				
	Filter	Filter	Unfilterable	Filter	Unfilterable	Filter	Filter				
☐	Sreejith	Kalaripparambath	Sreejith Kalarippara...	sreejith@telaeris.com	--	All Access (+1)	Telaer	Filter	Filter	Filter	Filter
☐	Kelly	Lim	Kelly Lim	kelly.lim@telaeris.com	--	All Access	--	Filter	Filter	Filter	Filter
☐	Chris	Stotts	Chris Stotts	cstotts@telaeris.com	--	All Access	--	Filter	Filter	Filter	Filter
☐	Subha	Thonakkod	Subha Thonakkod	subha@telaeris.com	--	All Access (+1)	--	Filter	Filter	Filter	Filter
1-4 of 4 items (4 total) 100 / Page ▾											

Same user in XPressEntry:

XPressEntry (Administrator) - 3.6.9999 - Telaeris (Logged In User: admin)

File Tools View Logout Entry/Exit

Entry/Exit Activity History Add/Edit Info Logs

Filter

Administrator, Company
Kalaripparambath, Sreejith
Lim, Kelly
Stotts, Chris
Thonakkod, Subha

Users Logins Companies Groups Zones Doors Readers Roles User Profiles Timezones Muster Sites

User Groups Zones Timezones Vehicle Types Contact Info UDFs

First Name Last Name MI
Sreejith Kalaripparambath

Company

Emp ID

Zone

Start Date 02/05 12:00:00 AM

End Date 08/05 12:00:00 AM

User Profile

Create Login

Photo FP

Change Crop Delete

Last Access
Zone:
Reader:

Badges (2) Add Badge Delete Badge View History Print Badge

Badge	Activated Date	Expired Date	Invalid	Badge Type
04A1B2C3D4E5F6	01/01 12:00:00 AM	01/31 12:00:00 AM		
1231	02/01 12:00:00 AM	02/01 12:00:00 AM		

External Record:30006703

Add New Delete Save Cancel

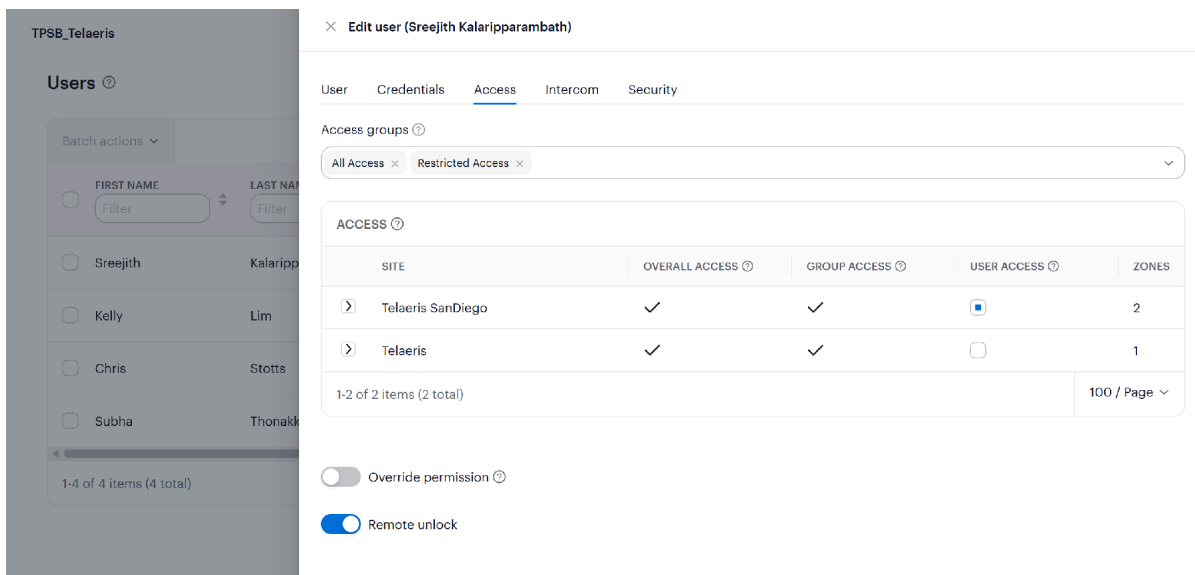
Time to Read 5 Records: 0.08 seconds

Activity Occupancy Partial Custom Full Total Occupancy: 0 Inside 0 Zones 0 Unread Messages Service Running Locally

User Permission

Direct Access Groups and Device Permissions of a user are combined and added to User Permissions in the User tab in XPressEntry.

Direct Access Groups and Device Permissions in Avigilon Alta:



Edit user (Sreejith Kalarippambath)

User Credentials **Access** Interroom Security

Access groups ⓘ

All Access × Restricted Access ×

ACCESS ⓘ

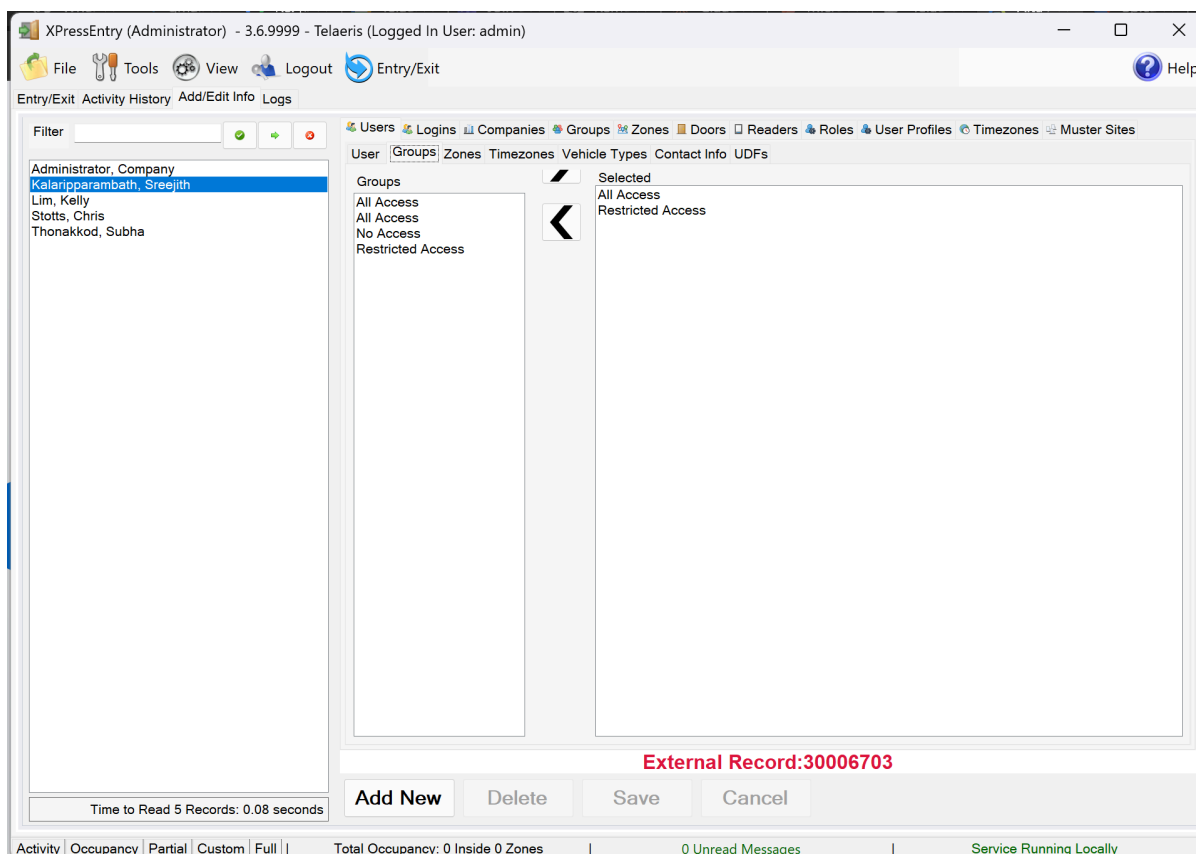
SITE	OVERALL ACCESS ⓘ	GROUP ACCESS ⓘ	USER ACCESS ⓘ	ZONES
Telaeris SanDiego	✓	✓	☒	2
Telaeris	✓	✓	☐	1

1-2 of 2 items (2 total) 100 / Page ▾

☐ Override permission ⓘ

☒ Remote unlock

User Permission under the User tab in XPressEntry:



Access Groups

Access groups synchronized from Avigilon Alta, with associated readers and permission mappings, appear under Groups in XPressEntry.

Example access group in Avigilon Alta:

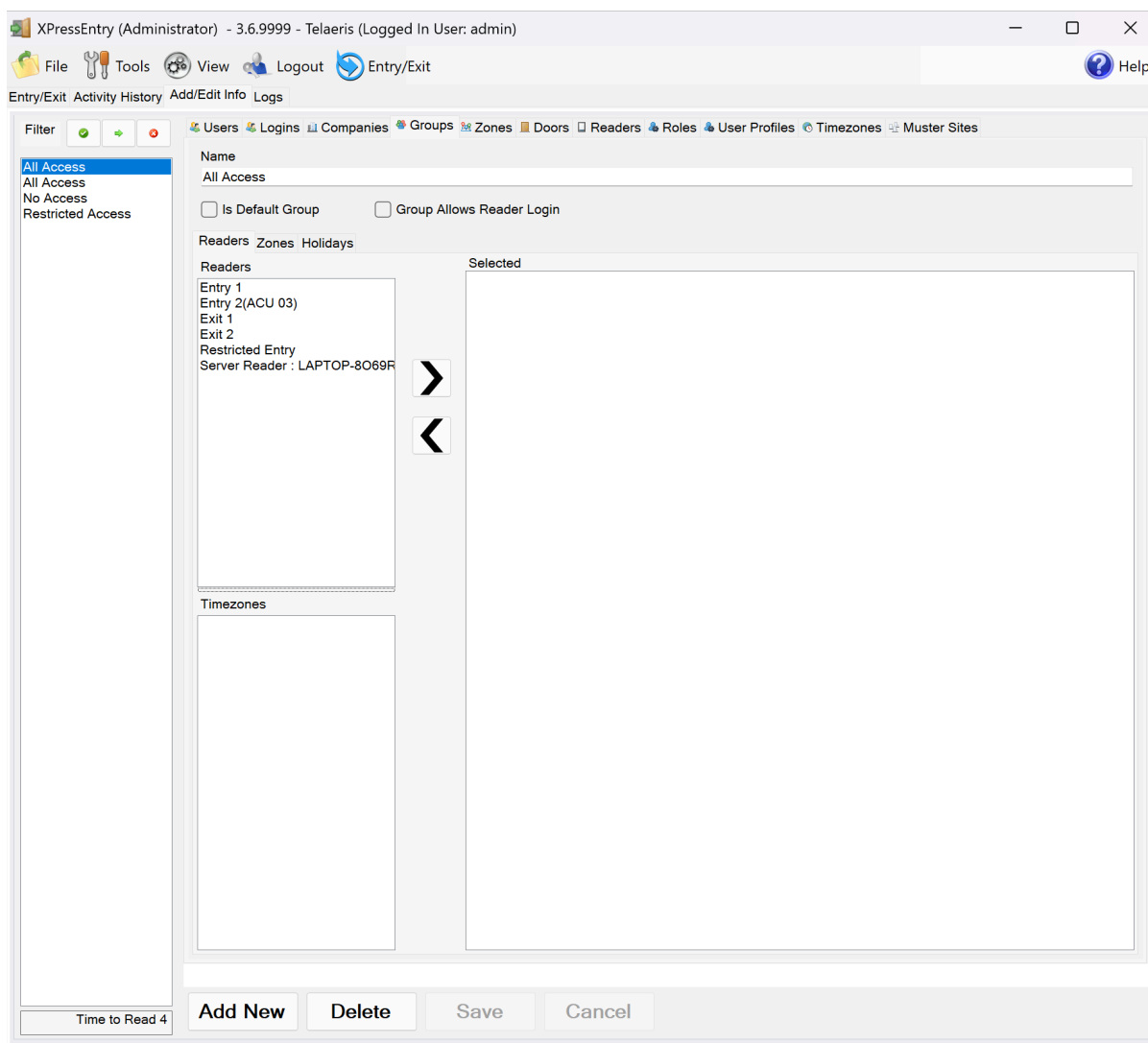
TPSB_Telaeris ST

Access groups

ACCESS GROUP NAME	DESCRIPTION	USER COUNT	SITES	BADGE TEMPLATE NAME	BADGE PREVIEW
All Access	--	4	Telaeris SanDiego	--	--
Restricted Access	Restricted Access	2	--	--	--

1-2 of 2 items (2 total) 100 / Page

Synchronized group in XPressEntry:



Readers

All Entries from the Avigilon Alta system are mapped as Readers in XPressEntry.

Entries in Avigilon Alta:

Entries

ENTRIES					Search	+	↓	≡
NAME	ZONE	CONTROLLER	DEFAULT STATE	SCHEDULE				
Filter	Filter	Filter	Filter	Filter				
Entry 1	Inside	ACU 2	Standard Security	Always				
Entry 2(ACU 03)	Inside	ACU 03	Convenience	--				
Exit 1	Out	ACU 01	Convenience	Always				
Exit 2	Out	ACU 01	Convenience	Always				
Restricted Entry	Restricted Zone (ACU 03)	ACU 01	Strict Security	Always				
1-5 of 5 items (5 total)					100 / Page			

Synchronized Reader in XPressEntry:

XPressEntry (Administrator) - 3.6.9999 - Telaeris (Logged In User: admin)

File Tools View Logout Entry/Exit

Entry/Exit Activity History Add/Edit Info Logs

Filter

Handhelds

Server Reader : LAPTOP-8069RQGV

Time to Read 1 Records: 0.03 seconds

Readers

Entry 1
Entry 2(ACU 03)
Exit 1
Exit 2
Restricted Entry

Time to Read 5 Records: 0.22 seconds

Name
Entry 1

Doors

Profile

GUID

External Muster Reader

X

☐ Is External Muster Reader

External Muster Zone

Card and Pin Mode

CARD ONLY

Create Reader Credential

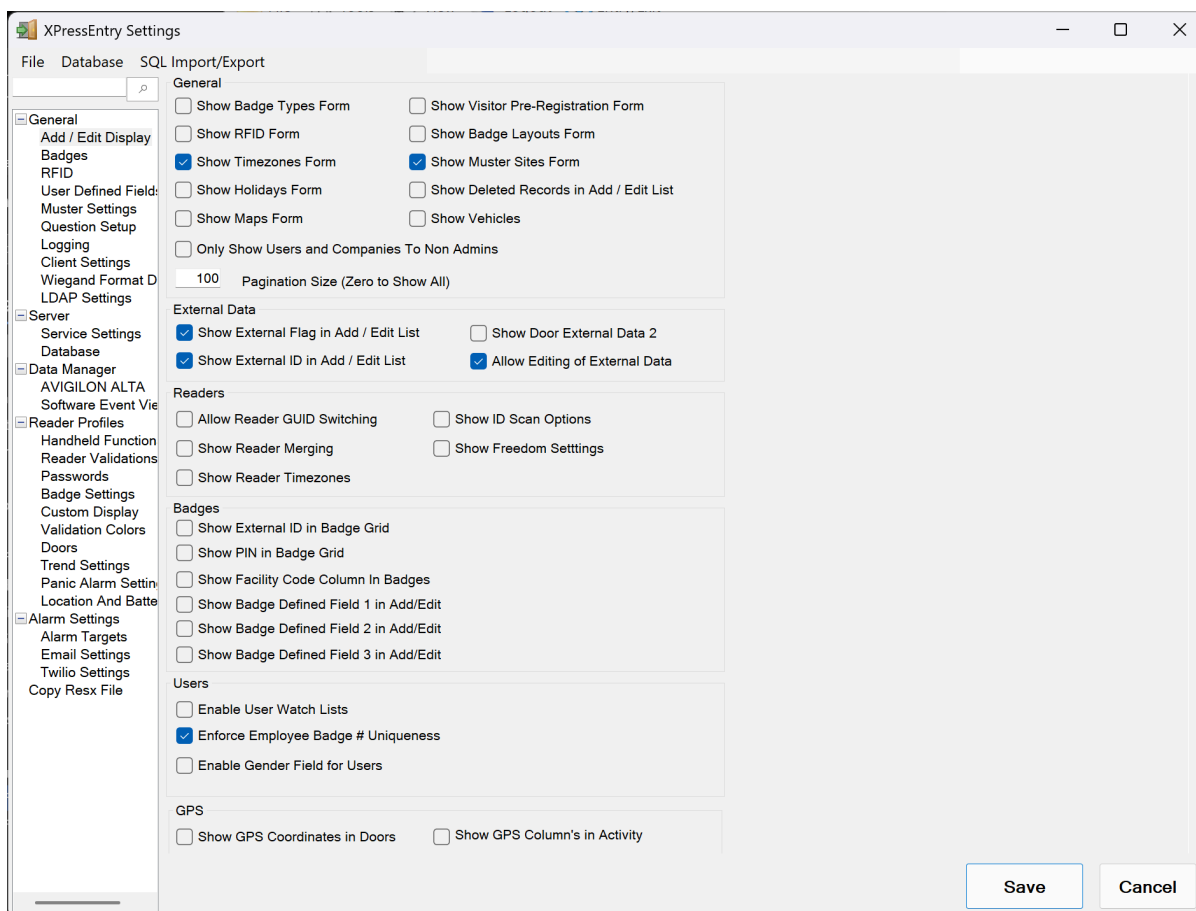
External Record:852724

Add New Delete Save Cancel

Activity Occupancy Partial Custom Full | Total Occupancy: 0 Inside 0 Zones | 0 Unread Messages | Service Running Locally

Doors

External data is read-only by default. To edit doors and zones, first enable **Tools > Settings > General > Add/Edit Display > Allow Editing of External Data**.



Readers are synchronized automatically from Avigilon Alta Entries. Create a door in XPressEntry for each handheld station, then configure each door as follows:

1. **Start Zone** – set manually after the first full sync; the zone where users begin before scanning.
2. **End Zone** – set manually after the first full sync; where users are placed after scanning in entry mode (in exit mode, users move from the end zone back to the start zone).
3. **External Entry Reader / External Exit Reader** – set from the Readers synchronized from Avigilon Alta; the External Entry Reader is assigned automatically from the Reader created with the door.

Badge Activities in Avigilon Alta:

TPSB_Telaeris

Add filter

Search

BROWSER TIME	DEVICE TIME	CATEGORY	EVENT	RESULT	DEVICE	USER	USER ORG	CREDENTIAL TYPE	CREDENTIAL DETAIL	ENTRY / R
Filter	Filter	Filter	F...	Fil...	Fil...	F...	Filter	Filter	Filter	Filter
May 23, 2026 2:16:56 am GMT+5:30	May 22, 2026 1:46:56 pm PDT	Entry	Entry Unlock	Denied	Reader - San Diego	Ivan Lau	TPSB_Telaeris	Card: Openpath/MIFARE (CSN) - Fast	C469A004	Entry - St
May 23, 2026 2:16:14 am GMT+5:30	May 22, 2026 1:46:14 pm PDT	Entry	Entry Unlock	Granted	Reader - San Diego	Ivan Lau	TPSB_Telaeris	Card: Openpath/MIFARE (CSN) - Fast	C469A004	Entry - St
May 23, 2026 2:15:36 am GMT+5:30	May 22, 2026 1:45:36 pm PDT	Entry	Entry Unlock	Denied	Reader - San Diego	Ivan Lau	TPSB_Telaeris	Card: Openpath/MIFARE (CSN) - Fast	C469A004	Entry - St
May 23, 2026	May 22, 2026		Entry		Reader -	Ivan				

1-30 of 30 items (30 total)

200 / Page

Activity History in XPressEntry:

XPressEntry (Administrator) - 3.6.9999 - Telaeris (Logged In User: admin)

File Tools View Logout Entry/Exit Muster

Entry/Exit Muster Activity History Add/Edit Info Logs

Activity Filters: Record Count: 28 Max # Records: 1000

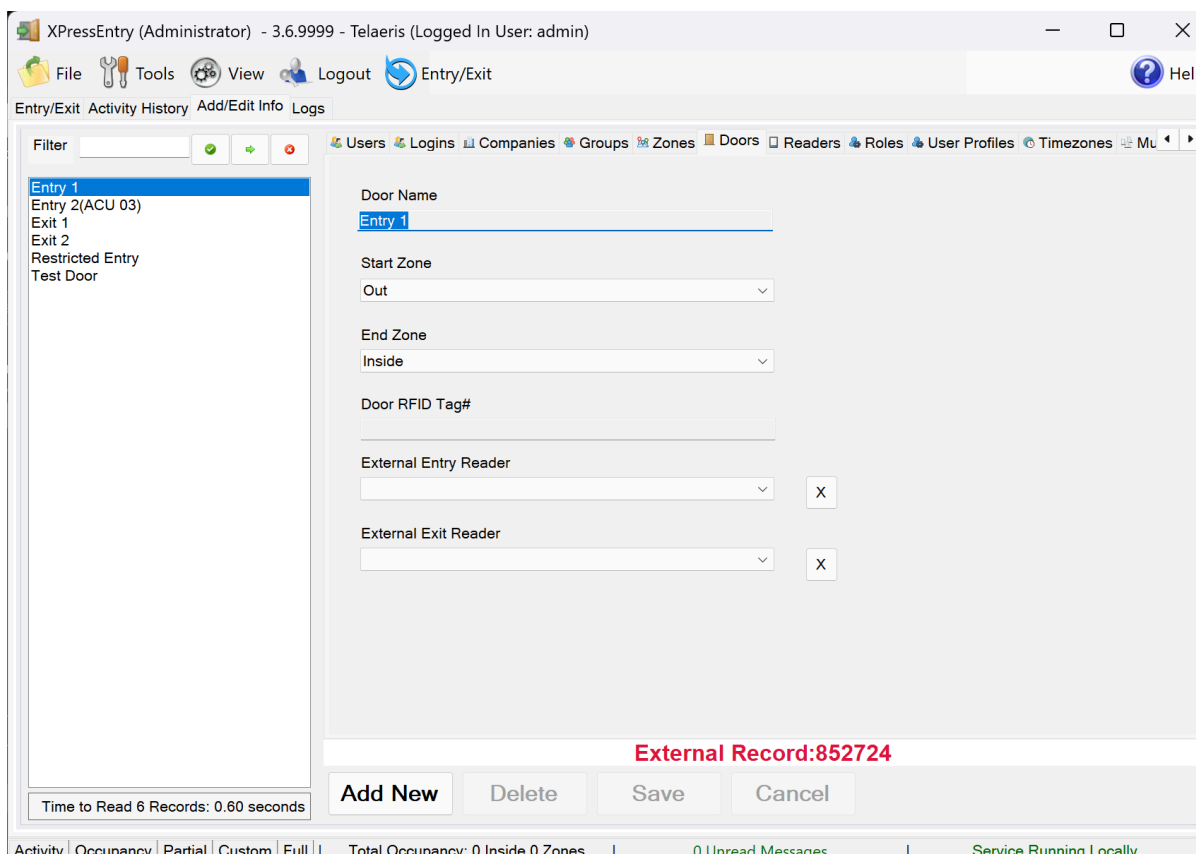
Access Granted	User	Badge #	Employee #	Door	Reader	Direction	Start Zone	End Zone	Company	Timestamp	Attachments	Reason
True	Lau, Ivan	925788686600437760		Entry - SD	Server Reader - L	Entering	Inside	Inside		5/23/2026 1:37 PM	0	Manual Entry
True	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/22/2026 1:32 AM	0	Granted (1Fa Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/22/2026 12:43 AM	0	Denied (Override Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/22/2026 12:28 AM	0	Denied (Override Unlock)
True	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:28 AM	0	Granted (1Fa Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:27 AM	0	Denied (Override Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:26 AM	0	Denied (Override Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:26 AM	0	Denied (Override Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:25 AM	0	Denied (Override Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:25 AM	0	Denied (Override Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:22 AM	0	Denied (Override Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:22 AM	0	Denied (Override Unlock)
True	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:20 AM	0	Granted (Override Unlocked)
True	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:20 AM	0	Granted (Override Unlocked)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:19 AM	0	Denied (Override Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:19 AM	0	Denied (Override Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:11 AM	0	Denied (Override Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:11 AM	0	Denied (1Fa Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:07 AM	0	Denied (Override Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:05 AM	0	Denied (Override Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/20/2026 12:05 AM	0	Denied (Override Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/19/2026 11:04 PM	0	Denied (1Fa Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/19/2026 9:28 PM	0	Denied (1Fa Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/19/2026 9:19 PM	0	Denied (1Fa Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/19/2026 9:18 PM	0	Denied (1Fa Unlock)
False	Lau, Ivan	925788686600437760		Entry - SD	Entry - SD	Entering	Inside	Inside		5/13/2026 4:11 AM	0	Denied (1Fa Unlock)
False	Lau, Ivan	C469A004		Entry - SD	Entry - SD	Entering	Inside	Inside		5/13/2026 4:09 AM	0	Denied (1Fa Unlock)

Search

Entries/Exit: Show Delete

Activity | Occupancy | Partial | Custom | Full | Total Occupancy: 2 Inside 1 Zone | Service Running Locally

Example Door in XPressEntry:



Best Practices

Follow these recommendations to maintain a stable connection and reliable operation:

- Daily Full Sync – schedule a full sync daily (e.g., 2:00 AM) to ensure data consistency.
- Door Setup – create a door in XPressEntry for each handheld station, and set each door's Start and End zones manually after the first full sync.
- Zone Configuration – properly configure hazard areas, muster points, and outside locations for accurate occupancy tracking.
- API Logging – enable "Enable API Verbose Data" during initial setup and troubleshooting.
- Connection Monitoring – after saving settings, confirm the Data Manager is connected before relying on the integration.
- Real-Time Updates – enable "Enable Real Time Activity Events" to receive badge-scan events from Avigilon Alta in real time (uses MQTT).

Troubleshooting

Connectivity Issues

- Verify the End Point URL is correct and the XPressEntry server has outbound HTTPS access to the Avigilon Alta cloud API.
- Confirm the Avigilon Alta user has administrator rights and the API Integration License is active.
- Check that the administrator email and password are entered correctly (no extra whitespace); use Test Connect to confirm a "Connection Success!" result.
- Enable "Enable API Verbose Data" (and "Enable Curl Debugging" if needed) to capture detailed error messages.

Sync Problems

- Run a manual Full Sync Now to re-synchronize XPressEntry with Avigilon Alta.
- If expected badge activities are missing, verify the Activity Sync timer and the Fetch Activity settings (last X hours or date range).
- Check network connectivity and firewall rules between the XPressEntry server and the Avigilon Alta cloud API endpoint (outbound HTTPS).
- Confirm only one sync runs at a time; very frequent intervals can cause contention.

Real-Time Update Failures

- Confirm "Enable Real Time Activity Events" is checked and the real-time (MQTT) connection is established.
- Check that firewall rules allow outbound MQTT traffic from the XPressEntry server.

Summary

The XPressEntry integration with Avigilon Alta provides a reliable solution for mobile access control management, synchronizing users, badges, access groups, readers, and zones from Avigilon Alta for credential validation and mustering on handheld devices.