

XPressEntry

XPressEntry / Nedap AEOS

Integration Guide

Revision 06/18/2026

For use with the
XPressEntry Mobile Access Control System

By



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Contents

Purpose	4
Requirements	4
Overall Order of Operations	4
Setting Up AEOS to Synchronize with XPressEntry	4
AEOS Classic	4
Create a User Account in AEOS	5
Set up AEOS Readers and Access Levels	6
Enable Synchronization in XPressEntry	6
Data Manager	6
Setup Data Manager	8
Initial Data Synchronization and Setup XPressEntry Data	9
Sync Timers	10
Data Mappings	11
XPressEntry Handheld Readers / Doors	11
Readers	11
Doors	11
Setup XPressEntry to Push Badge Activities to AEOS	13
Socket Events	15
IP Badge Mapping	17
Identifier Types	18
Event Settings	20
Employee / Visitor / Contractor	21
Activity Types	21
How to Set an Event Filter in AEOS	21
Creating Mandatory Response to User Actions	22
Best Practices	25
Troubleshooting	25
Connectivity Issues	25
Sync Problems	26
Real-Time Update Failures	26
Summary	26

Purpose

The XPressEntry integration with the Nedap AEOS access control system serves as a middleware solution that facilitates communication between handheld devices and the AEOS system. This integration enables seamless synchronization of access control data—including cardholders, badges, doors, and zones—along with real-time activity and occupancy monitoring. It supports entry, exit, and occupancy use cases across your facility. This document is intended to instruct system administrators on how to configure and complete the integration between an XPressEntry system and Nedap AEOS.

Requirements

It is assumed that a version of AEOS is installed on a server prior to integration with XPressEntry.

1. XPressEntry 3.5+
2. AEOS Version 2022.2.3+
 - a. SOAP interface must be installed.

Overall Order of Operations

1. Set up the AEOS SOAP API for data synchronization
2. Set up the AEOS Socket Interface and/or IP Badge (for events)
3. Set up Readers/Panels/etc. in the system to receive events
4. Enable Data Manager Synchronization from XPressEntry
5. Initial Data Synchronization and Setup XPressEntry Data
6. Set up XPressEntry Handheld Readers
7. Scan data on card reader and validate functionality

Setting Up AEOS to Synchronize with XPressEntry

AEOS Classic

1. Purchase license option **8019223**.
2. During the AEOS software installation, activate option **8019223 SOAP Webservice**.

aeos Management Administration Authorisation Person Vehicle Entrance Configuration Monitor

Menu System properties

Filters Maintain system properties

Maintenance Visible rows: 245

Devices

Events & alarms

Departments

Work locations

Labels

Free fields

Messages

(De)activate maintenance mode

Block reasons

Entrance unlock reasons

Identifiers

Favourites

Notification

Settings

System properties

Maintain thumbnails

Auto block

Archive

Badges

Import carrier

Reports

Faces

Personal


My Tasks

My Queries

My Favourites

Number ▲	Name	Value
43.03	OSS-SO - Default update interval in hours for visitors.	<input type="text"/>
43.04	OSS-SO - Default update interval in hours for employees.	<input type="text"/>
43.05	OSS-SO - Default update interval in hours for contractors.	<input type="text"/>
43.06	OSS-SO - Maximum number of day/time schedules on card	<input type="text" value="1"/>
43.07	OSS-SO - Maximum number of DayTime-periods in schedule	<input type="text" value="1"/>
43.08	OSS-SO - Maximum number of intervals in a DayTime-period	<input type="text" value="1"/>
43.09	OSS-SO - Maximum number of authorisations per carrier (0 = unlimited)	<input type="text" value="0"/>
44.01	Alarm handler	<input type="checkbox"/>
44.02	Graphical alarm handler	<input type="checkbox"/>
44.03	Anti pass back	<input type="checkbox"/>
44.04	Contractor management	<input type="checkbox"/>
44.05	Countgroup in zones (except neutral)	<input type="checkbox"/>
44.06	Counting movements (Strip ticket)	<input checked="" type="checkbox"/>
44.08	Guard tour	<input type="checkbox"/>
44.10	Maximum presence time	<input type="checkbox"/>
44.11	Multiple timezones	<input type="checkbox"/>
44.12	Special or invisible badges	<input type="checkbox"/>
44.13	Rule engine	<input type="checkbox"/>
44.14	CMS RP Integration	<input type="checkbox"/>
44.15	Soap Webservice	<input checked="" type="checkbox"/>
44.16	Security levels	<input type="checkbox"/>
44.17	Translation mode	<input type="checkbox"/>
44.18	Units	<input type="checkbox"/>
44.19	Extended vendor management	<input type="checkbox"/>
44.20	Vendor management & permits	<input type="checkbox"/>
44.21	Verification PIN-code	<input type="checkbox"/>
44.22	Visit management	<input type="checkbox"/>
44.23	Violation & blacklist management	<input type="checkbox"/>
44.30	Enrollment Bioscript fingerprint	<input type="checkbox"/>
44.31	Document scanner	<input type="checkbox"/>
44.32	Enrollment Hitachi fingervein	<input type="checkbox"/>
44.33	Enrollment Kosmos weight	<input type="checkbox"/>
44.34	Enrollment Sagem fingerprint	<input type="checkbox"/>
44.36	Enable biometric API	<input type="checkbox"/>
44.37	4 eyes verification	<input type="checkbox"/>
44.38	Lockers 2	<input type="checkbox"/>
44.39	LoXS lockers	<input type="checkbox"/>

Print... To file...

 make sure this is checked.

3. Follow the instructions from section 1 in the installed **AEOS_WebService_E.pdf** in the AEOS doc directory.
4. Make sure **port 8443** and **port 8035** are available from the XPressEntry server. Both can be set in **aeos.properties** and are required to enable the API. Additional ports may be required depending on what options are used for pushing activities from XPressEntry to AEOS.

Create a User Account in AEOS

Create a **User Account** in AEOS for API Access. This user should have the minimum required access to synchronize data with XPressEntry, which includes:

1. The ability to search all tables.
2. The following permissions:
 - a. Administration
 - b. Integrations
 - c. AEOS Webservice

- d. External Calls
3. The following functions for Events:
 - a. **Configuration, Socketconnection, Commands** – Enables the user that logs in through the socket connection to send commands to AEOS.
 - b. **Configuration, Socketconnection, Events** – Enables the user that logs in through the socket connection to retrieve the events of AEOS.

To create a new user, navigate to the Management tab, then select Users under System Users, and click New.

The screenshot shows the 'Maintain user' configuration page in the AEOS system. The 'User' tab is active, displaying the following fields and options:

- User name***: [Empty text box]
- Full name**: [Empty text box]
- Email**: [Empty text box]
- Password**: [Empty text box]
- Confirm password**: [Empty text box]
- Change password at next logon**:
- Inherit Workstation user settings**:
- User template**: [Empty dropdown menu]
- User role**: Administrator
- Language**: Browser (English)
- Disable language selection**:
- Account disabled**:
- Exceed License Limits**:
- No. of permitted sessions***: 1
- Session timeout (min.)**: [Empty text box]
- No. of permitted login attempts***: 0 (0 is unlimited)
- Disable account if not logged in for No. of days***: 90 (0 is unlimited)
- Disable visitor profile**:
- Disable employee profile**:
- Disable contractor profile**:
- Disable car profile**:
- Disable menu visitor announce**:
- Disable menu employee announce**:
- Disable menu contractor announce**:
- Disable menu car announce**:
- Visitor template filter**: [Empty dropdown menu]
- Employee template filter**: [Empty dropdown menu]
- Contractor template filter**: [Empty dropdown menu]
- Car template filter**: [Empty dropdown menu]
- Visitor key template filter**: [Empty dropdown menu]
- Employee key template filter**: [Empty dropdown menu]
- Contractor key template filter**: [Empty dropdown menu]
- Modification priority**: DEFAULT
- Entrance prio list**: [Empty dropdown menu]
- Barcode printer**: [Empty dropdown menu]
- Card printer**: [Empty dropdown menu]
- Receipt printer**: [Empty dropdown menu]
- Device reader**: [Empty dropdown menu]
- Alternative camera workst.**: [Empty dropdown menu]
- Alternative signature workst.**: [Empty dropdown menu]
- Locker Terminal filter**: [Empty dropdown menu]
- Face filter**: [Empty dropdown menu]
- Report filter**: [Empty dropdown menu]
- Security scenario filter**: [Empty dropdown menu]
- Printer filter**: [Empty dropdown menu]
- Carrier group filter**: [Empty dropdown menu]

Create a new user with the Administrator role

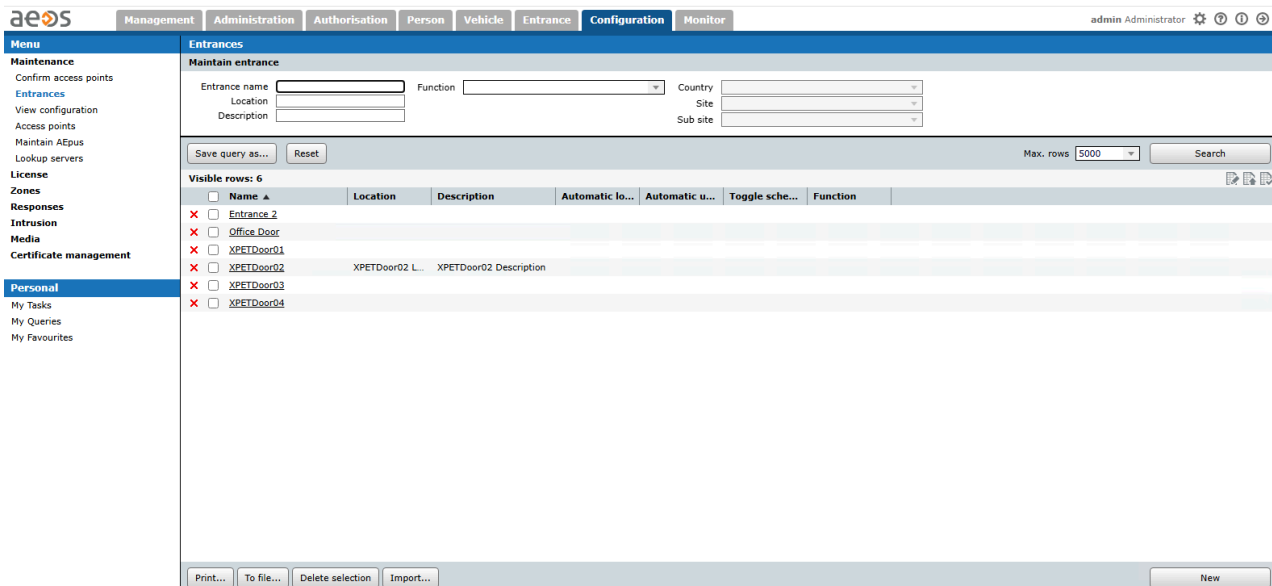
The screenshot shows the 'Maintain user' configuration page with a new user 'Telaeris' created. The 'User' tab is active, displaying the following fields and options:

- User name***: Telaeris
- Full name**: Telaeris Dev
- Email**: [Empty text box]
- Password**: [Masked text box]
- Confirm password**: [Masked text box]
- Change password at next logon**:
- Inherit Workstation user settings**:
- User template**: [Empty dropdown menu]
- User role**: Administrator
- Language**: Browser (English)
- Disable language selection**:
- Account disabled**:
- Exceed License Limits**:
- No. of permitted sessions***: 5
- Session timeout (min.)**: [Empty text box]
- No. of permitted login attempts***: 0 (0 is unlimited)
- Disable account if not logged in for No. of days***: 90 (0 is unlimited)
- Disable visitor profile**:
- Disable employee profile**:
- Disable contractor profile**:
- Disable car profile**:
- Disable menu visitor announce**:
- Disable menu employee announce**:
- Disable menu contractor announce**:
- Disable menu car announce**:
- Visitor template filter**: [Empty dropdown menu]
- Employee template filter**: [Empty dropdown menu]
- Contractor template filter**: [Empty dropdown menu]
- Car template filter**: [Empty dropdown menu]
- Visitor key template filter**: [Empty dropdown menu]
- Employee key template filter**: [Empty dropdown menu]
- Contractor key template filter**: [Empty dropdown menu]
- Modification priority**: DEFAULT
- Entrance prio list**: [Empty dropdown menu]
- Barcode printer**: [Empty dropdown menu]
- Card printer**: [Empty dropdown menu]
- Receipt printer**: [Empty dropdown menu]
- Device reader**: [Empty dropdown menu]
- Alternative camera workst.**: [Empty dropdown menu]
- Alternative signature workst.**: [Empty dropdown menu]
- Locker Terminal filter**: [Empty dropdown menu]
- Face filter**: [Empty dropdown menu]
- Report filter**: [Empty dropdown menu]
- Security scenario filter**: [Empty dropdown menu]
- Printer filter**: [Empty dropdown menu]
- Carrier group filter**: [Empty dropdown menu]

Set up AEOS Readers and Access Levels

Set up the Entrances and Authorizations in the AEOS system. This step can typically be deferred to a later stage, but configuring it before you begin synchronizing data is recommended.

Creating Entrances in AEOS



Creating Authorization Templates

For more help related to AEOS settings and configuration, please visit the [AEOS Technical WebHelp](#).

Enable Synchronization in XPressEntry

XPressEntry uses a module called **Data Manager** to synchronize all data with AEOS. From the main page of XPressEntry, go to XPressEntry > Settings (**ALT+S** or **Tools > Settings**).

XPRESSentry - 3.5.6413 - Telaeris (Logged In User: Administrator, Company)






File Tools View Logout Muster Help

Entry/Exit Mu Settings Alt+S History Messages Add/Edit Info Logs





Zone Handheld Status Reports Ctrl+R Manual Enter/Exit Users Add Handheld Wizard

Filter: All Zones (7) Building 1 (7) Main Gate 1 Building 2 (0) Main Gate 2 Building 3 (0) Main Gate 3

All Zones (Occupancy: 7) Current Occupants

 Bell, Monica Entered: 07/11 06:25:27... Time In Zone: 10:25:27... Badge #: 457 Company: Sampl...	 Banderas, Antonio Entered: 07/11 05:12:00... Time In Zone: 12:00:00... Badge #: D56945... Company: Sampl...	 Jenkins, Winford Entered: 10/26 02:19:00... Time In Zone: 619:00... Badge #: F9BA3F... Company: Sampl...	 Clooney, George Entered: 10/26 10:25:27... Time In Zone: 619:00... Badge #: 25344A... Company: Sampl...
 Marshall, James Entered: 06/04 05:27:11... Time In Zone: 271:11... Badge #: 468 Company: Sampl...	 Gheller, Henry Entered: 05/29 04:27:30... Time In Zone: 273:30... Badge #: 922 Company: Sampl...	 Kemp, Mark Entered: 05/29 03:27:30... Time In Zone: 273:30... Badge #: 453 Company: Sampl...	

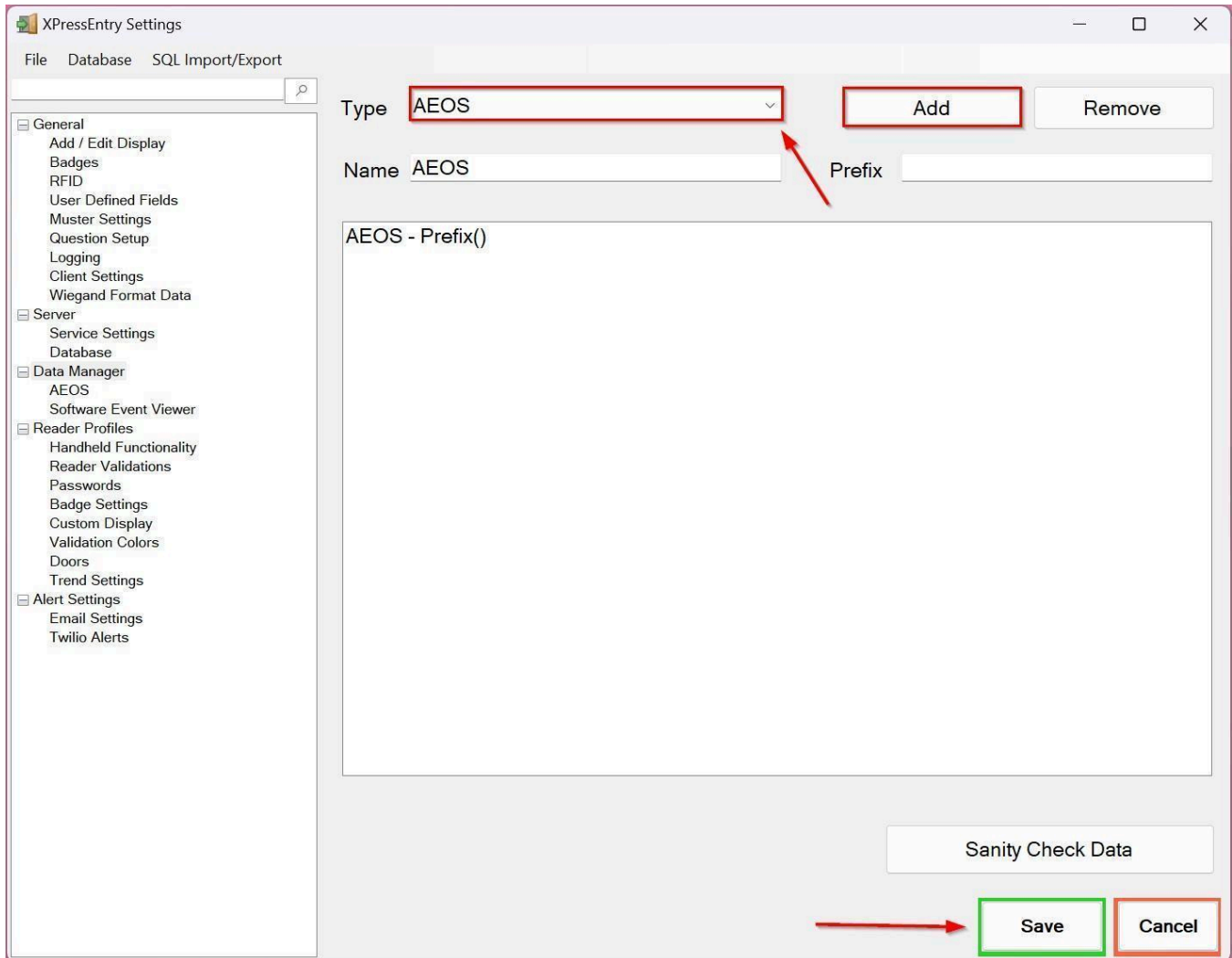
Activity Occurring in Last Day 0

User	User Image	Time Stamp	Start Zone	End Zone	Door	Reader	Entry Granted
Bell, Monica		07/11 06:25:27 ...	Outside	Building 1	Main Gate 1	Handheld 4	True
Gale, Sarah		07/11 06:24:47 ...	Outside	Building 1	Main Gate 1	Handheld 4	True
Pennington, Ma...		07/11 06:24:03 ...	Outside	Building 1	Main Gate 1	Handheld 4	ACCESS DENI...
Gale, Sarah		07/11 05:13:51 ...	Outside	Building 1	Main Gate 1	Handheld 4	True

Activity | Occupancy | Partial | Full | Total Occupancy: 7 Inside 1 Zone | 0 Unread Messages | Service Running Locally

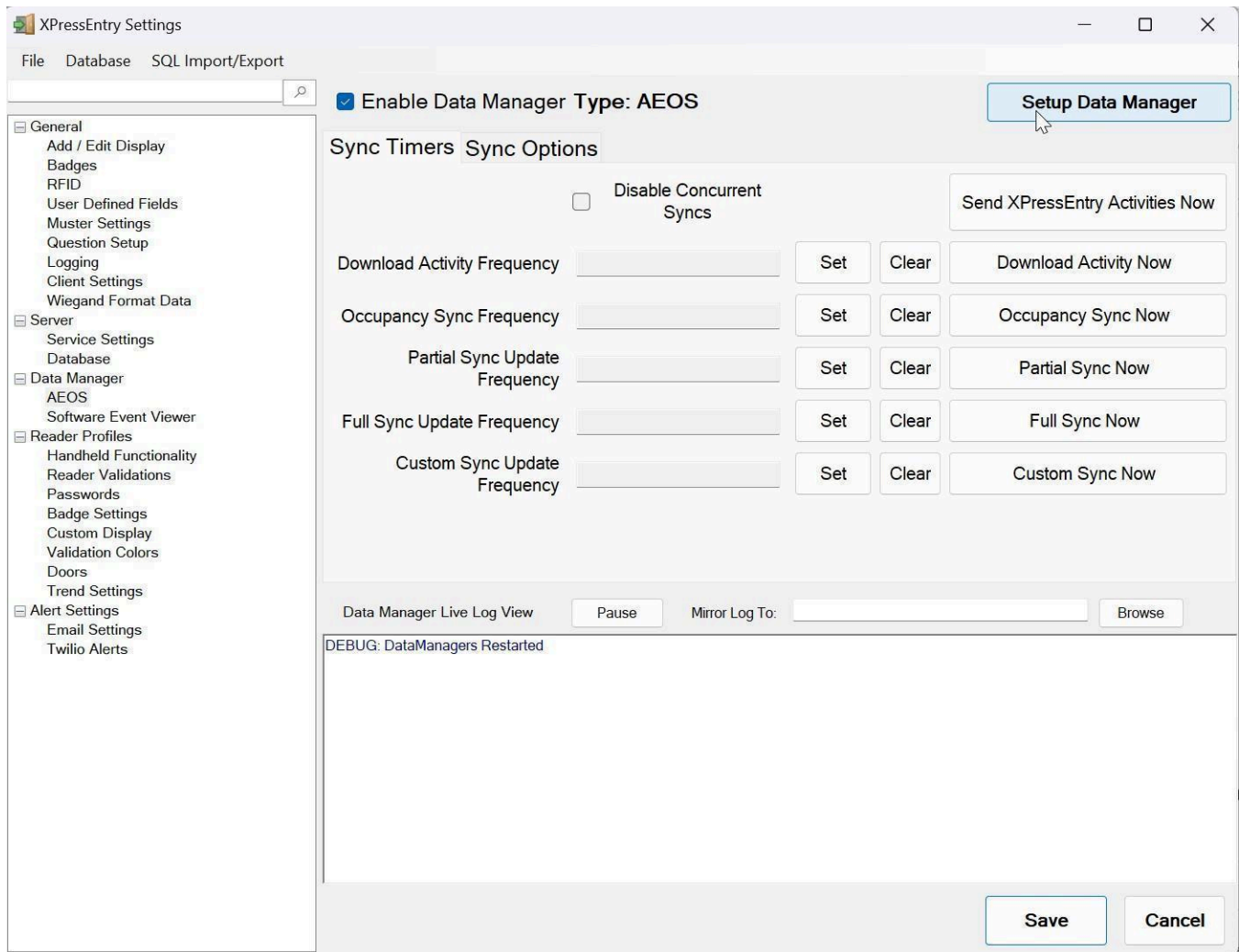
Data Manager

From the Settings page, select the Data Manager tab.



1. **Type** – This is the integration type. Select **AEOS** > **Add** > **Save**.
2. Go to **Data Manager** > **AEOS** in the sidebar menu.
 - a. **Setup Data Manager** – This sends you to the setup form for the AEOS Data Manager.
 - b. **Enable Data Manager** – Must be checked to enable Nedap AEOS synchronization.
3. **Important: After any change on the AEOS Setup page or the Data Manager view, you must click Save to apply the change.**

Setup Data Manager



1. Click **Setup Data Manager**. This will take you to the AEOS Data Manager Setup Form.
2. Ensure that the following fields are filled out:
 - a. **Server:** DNS or IP Address of the AEOS System.
 - b. **Port:** Typically, 8443.
 - c. **User:** Username in AEOS for the SOAP calls.
 - d. **Password:** Associated with username.
 - e. **Socket Port:** Typically, 8035.
 - i. Used for events.
 - f. **APB Events:** These are the valid access events used to determine whether a cardholder has entered the facility.
 - g. **Enable User Paging:** Keep this checked unless you have a very small system.
 - h. **Page Size:** The number of records on each paging request.
 - i. **Auto Assign Areas to Doors:** Check this if you want the **Outside Area** and **Inside Area** to be assigned to doors when XPressEntry can't determine the proper area from AEOS.

- To test whether the SOAP API is functioning, click Test Connect*. You should expect a response like **Connection Success! AEOS VERSION** in the Status field at the bottom of the form.

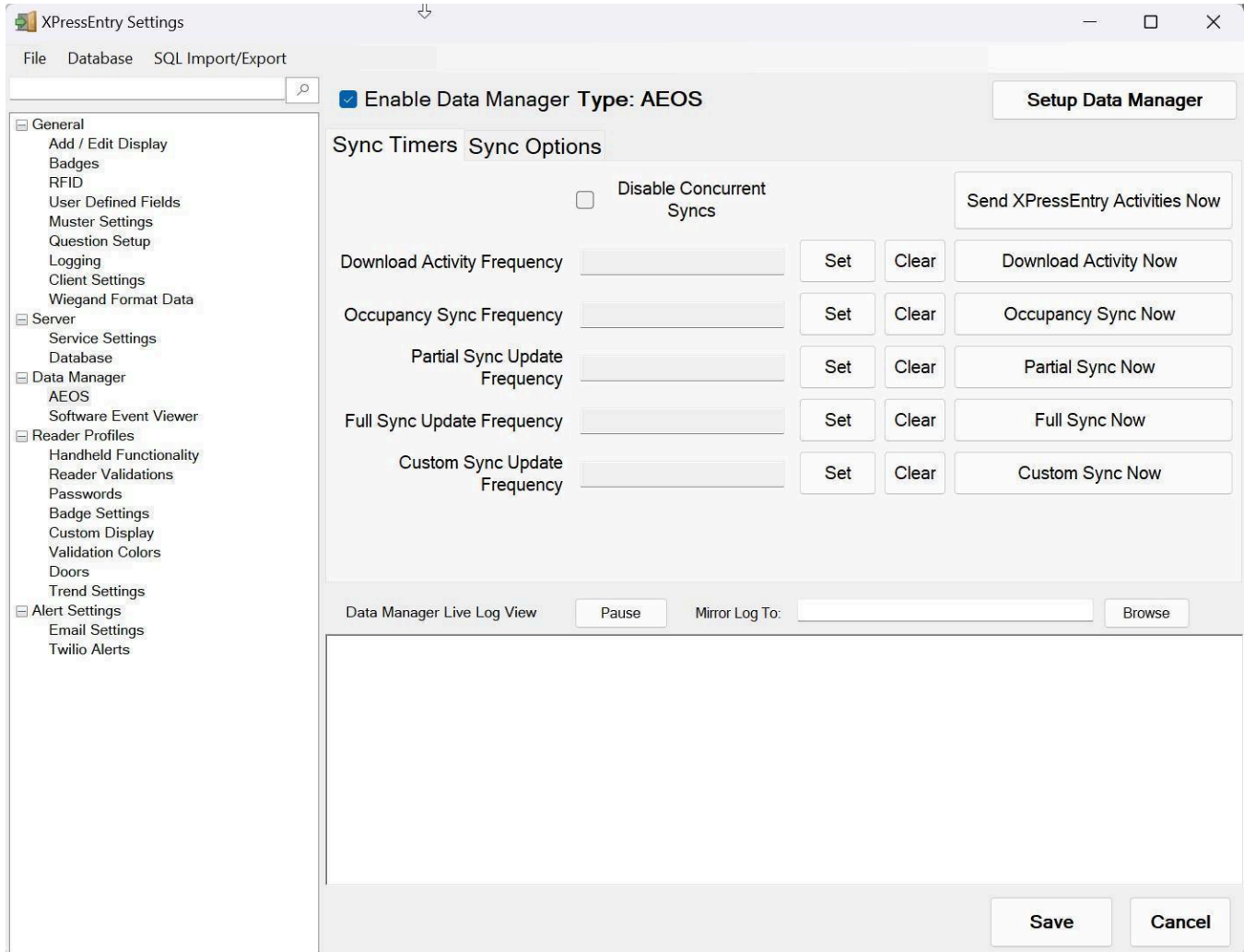
5:33:07 PM : Connection Success!

The screenshot shows the 'Nedap AEOS Data Manager' application window. The main configuration area on the left includes fields for Server (nedap2023.ad.telaeris.com), Port (8443), User (admin), Password (masked), Socket Port (8035), APB Events (1015), Page Size (100), and various checkboxes for user paging, auto-assigning areas, and logging. The 'Test Connect' button is highlighted. On the right, a 'Socket Interface' tab is active, showing a configuration for an AEPU IP (nedap2023.ad.telaeris.com) on port 8036, with fields for AEPU Name, Username (nedap), Password (masked), Prefix, and Card Type (DESFIRE). A status bar at the bottom left displays 'Status'.

*Note that this does not check the Socket Connection for Events.

Initial Data Synchronization and Setup XPressEntry Data

The next step is to synchronize the data from AEOS and set up intervals for synchronization.



Sync Timers

- **Full Sync Now** – Synchronizes all the data from the AEOS system, including cardholders, tokens, visitors, and contractors. It should include picture information for cardholders, and all the data from the Partial Sync.
- **Partial Sync Now** – Synchronizes the following tables used for overhead:
 - Zones
 - Readers
 - Doors
 - BadgeType
 - Groups
 - Group/Reader Mappings
- **Occupancy Sync** – If the option **Pull Data Manager Occupancy** is checked in Sync Options, this will synchronize the cardholders with their current location from AEOS.
- **Activity Sync** – Synchronizes the **Events** from AEOS. This only applies if the **Pull Data Manager Activities into XPressEntry** option is checked in Sync Options.

Data Mappings

The Data Mappings section defines how each AEOS table corresponds to a table in XPressEntry. The default mappings are as follows:

- **AEOS** → **XPressEntry**
- Person/Visitor/Contractor → Users
- Identifier → Badges
- Entrance → Door
- Access Point → Reader
- Entrance Zone → Zone

XPressEntry Handheld Readers / Doors

XPressEntry handheld authentication is done by two tables: Readers and Doors.

Readers

There are four types of Readers in XPressEntry:

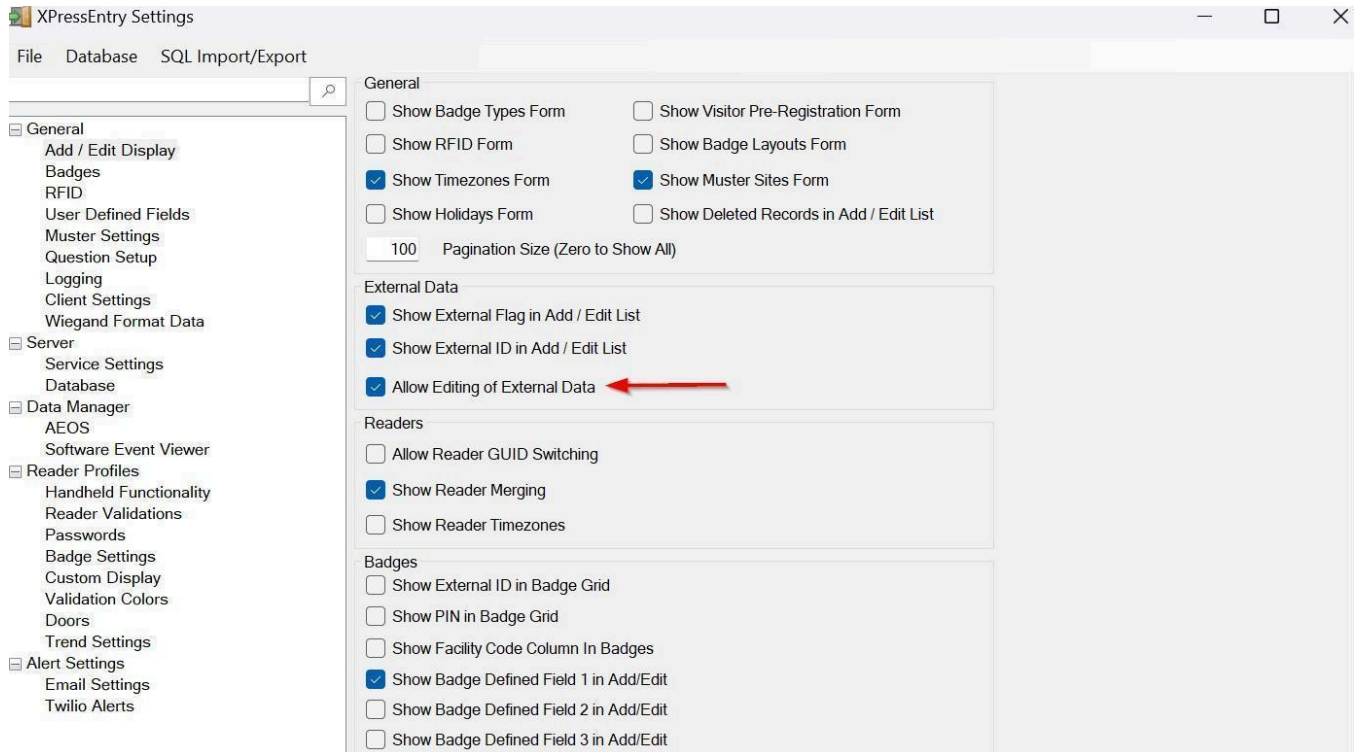
- **The Server Reader** – Used to assign badge activities from the server. This will likely be named *Server Reader: COMPUTER NAME* and have a 20–22-character GUID.
- **Readers** – Logical readers used to assign access control privileges from external systems. In the case of AEOS, they should **correspond to Access Points**.
- **Doors** – Entrances and their permissions from AEOS are mapped into XPressEntry as doors.
- **Handhelds** – The physical handheld devices. These are typically Android devices and have a GUID based on the physical machine.

Doors

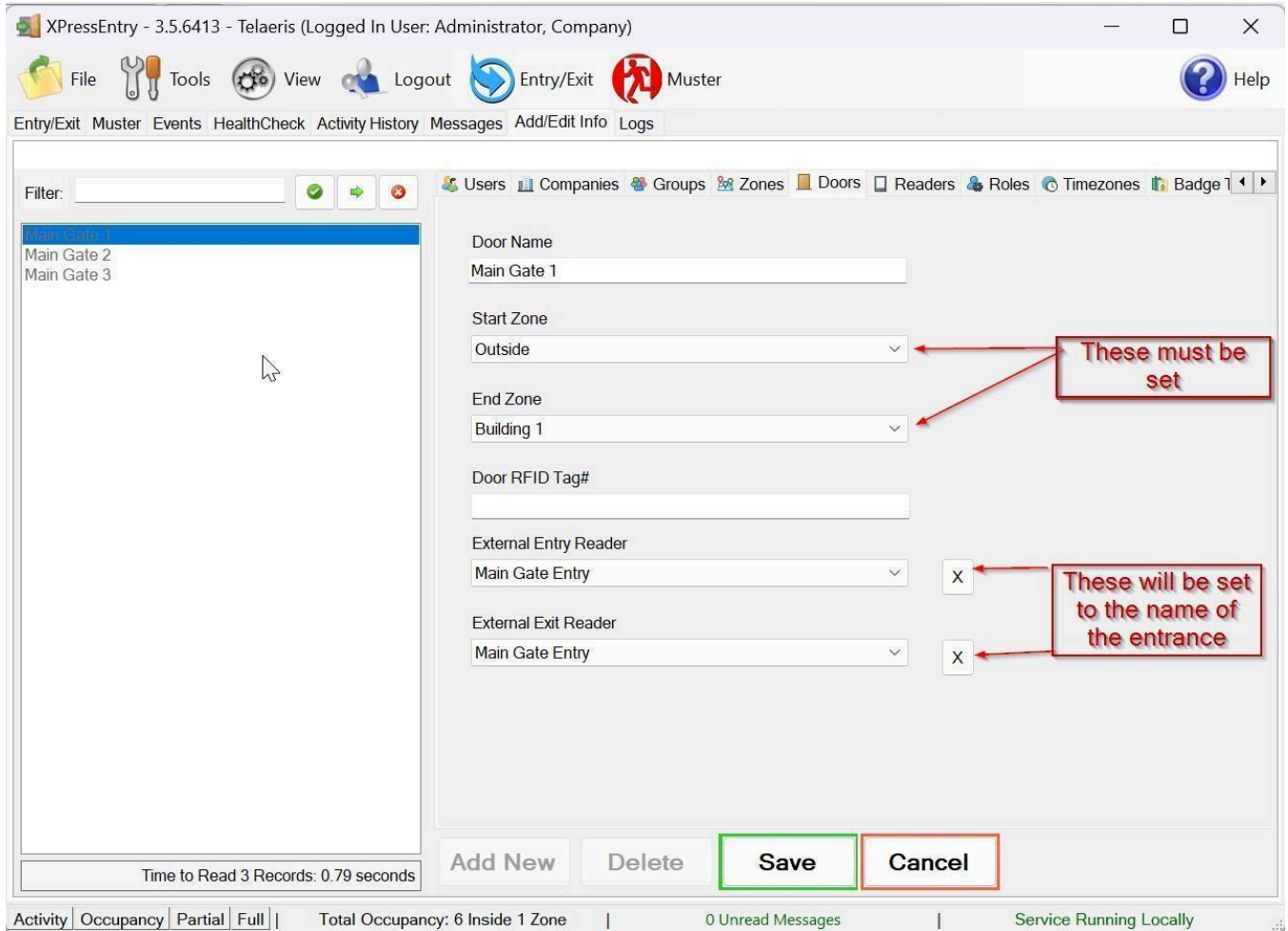
Doors are used by handhelds to dynamically assign permissions on a device. By default, the user is allowed to switch doors from the device. The devices use the permissions for the **External Entry/Exit Readers** assigned to the door to determine whether the cardholder has permission to scan at the reader.

For AEOS, carriers who are allowed at an Entrance will be allowed at the corresponding doors.

The final piece you need to map for XPressEntry is the Areas/Readers for each Door. To do this, you may need to enable the setting **Allow Editing of External Data** in **General > Add/Edit Display > External Data**.



You can then assign Door Areas/Readers from the XPressEntry interface, via **Add/Edit Info > Doors**.



If all Entrances are going to/from the **same area**, or if occupancy doesn't matter in your setup, you can choose the **Auto Assign Areas to Doors** option from the AEOS Data Manager Setup page. (See *Setup Data Manager* section).

For more information on setting up the handheld device and synchronizing with the XPressEntry Service, see the following document: [XPressEntry Android Documentation](#).

Setup XPressEntry to Push Badge Activities to AEOS

AEOS needs to have an **InterfaceServer** object set up to receive Events.

1. Make sure that the **Event Generation Allowed** checkbox is enabled. Each InterfaceServer can only serve one Identifier type.
2. Make sure the Data Manager option Push XPressEntry Activities to Data Manager is enabled under Sync Options.

Properties | InterfaceServer_1 (Service:InterfaceServer)

Name	Value	Units
Port number	8036	
User name	redap	
Password		
RMI Command connection allowed	<input checked="" type="checkbox"/>	
Event connection allowed	<input checked="" type="checkbox"/>	
Event connection monitor enabled	<input type="checkbox"/>	
Event connection monitor timeout	300	s
AEpu filter definition	empty	
Carrier name resolving enabled	<input type="checkbox"/>	
AEpu filter enabled	<input checked="" type="checkbox"/>	
Delegate state event subscriptions	<input checked="" type="checkbox"/>	
Event generation allowed	<input checked="" type="checkbox"/>	
Identifier type for incoming events	Generic (11)	
Event date format	Local Date	Default = Loc...
Use SSL	<input type="checkbox"/>	
Use SSL client auth	<input type="checkbox"/>	
Enable message logging	<input type="checkbox"/>	
Events enabled	<input type="checkbox"/>	
Tags		
Initialization priority	50	1-100

File Database SQL Import/Export

Enable Data Manager Type: AEOS

Sync Timers Sync Options

Pull DataManager Occupancy
Default Outside Zone [dropdown]

Pull Data Manager Activities into XPressEntry

Push XPressEntry Activities to Data Manager ←

Send Activities Retry Count [3]

Watch Tables via Software Events

Enable Message Queue

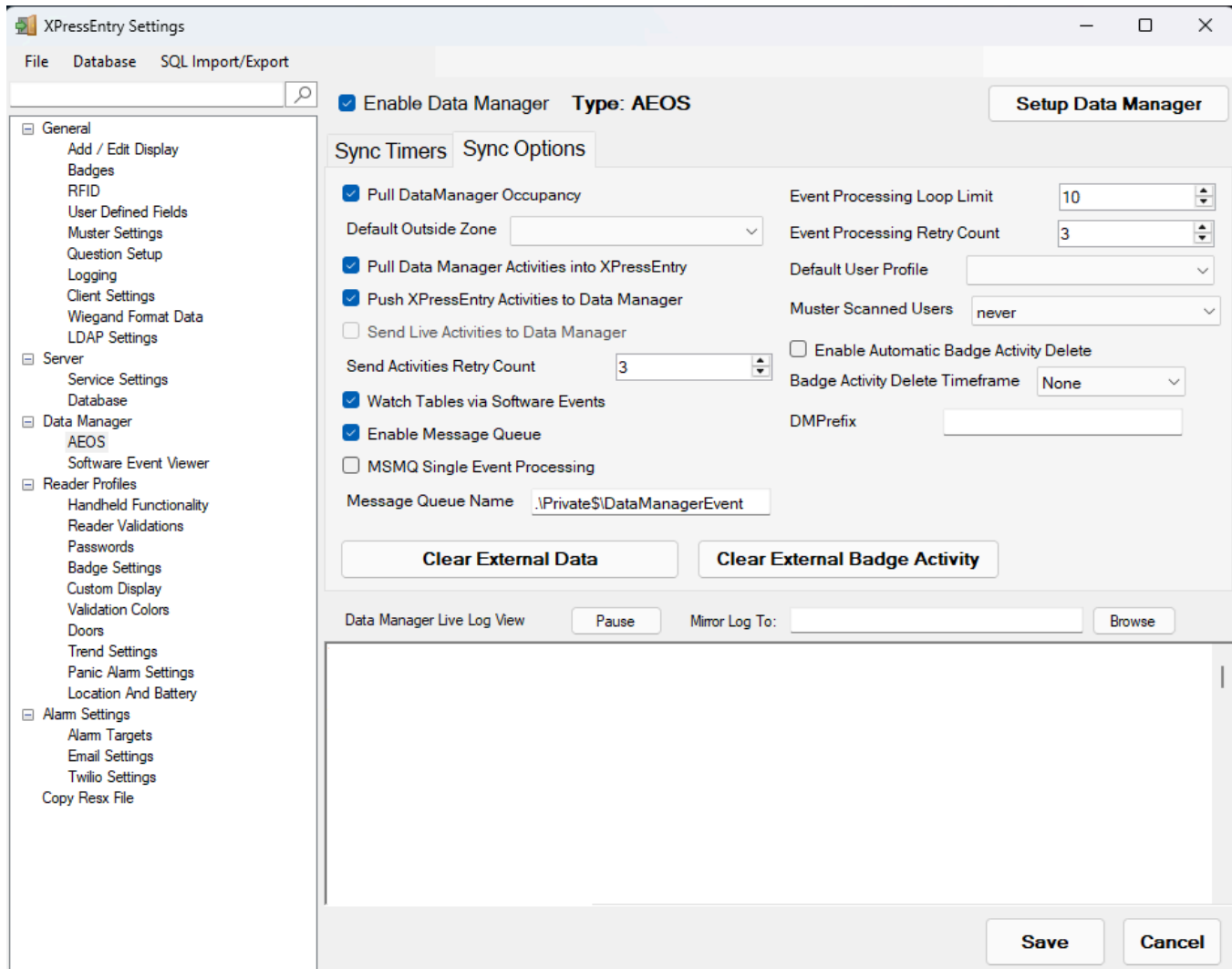
Message Queue Name .PrivateSDatamanagerEvent

Event Processing Loop Limit [10]

Clear Data Manager Settings

You can use either the **Socket Interface** or **IP Badge Interface** to send events. There are specific steps required both within AEOS and XPressEntry to set up either interface.

Socket Events



To get Events into XPressEntry, enable the **Watch Tables via Software Events** option. When you click **Save** on the Data Manager view, you should see something like the following in the log:

```
DEBUG: MSG:Response:acknowledgement=on; INFO: TCP Client  
Connected  
DEBUG: MSG:Status:connected to AEOS version 2022.2.3 built on  
2023-09-10 INFO: Starting Watching Tables
```

1. Send socket events to **AEP** where the doors are mapped. All XPressEntry doors need to be set up on the same **AEP**.
2. Send socket interface events for specific card types in AEOS.

The screenshot shows the AEOS dashboard with the 'Person' profile page. The 'Identification' section is highlighted with a red box, showing 'Identifier type: DESFIRE' and 'Identifier: 15512'. A red arrow points to the 'Identifier' field with the text 'Cardholder ID data will not automatically update in XPressEntry'.

3. Go to **Data Manager > AEOS > Set up Data Manager** and ensure Data Manager is set to **Socket Interface**.

The screenshot shows the Nedap AEOS Data Manager configuration window. The 'Socket Interface' tab is selected, showing configuration for AEPUs. The 'AEPU IP' is 'nedap2023.ad.telaeris.com' and 'Port' is '8036'. The 'AEPU Name' is 'nedap2023.ad.telaeris.com', 'Username' is 'nedap', and 'Card Type' is 'DESFIRE'.

4. You will need a separate **AEPU** for each badge type in each socket interface. Examples below:
 - a. Mifare
 - i. 00001212
 - b. Desfire
 - i. 0000

IP Badge Mapping

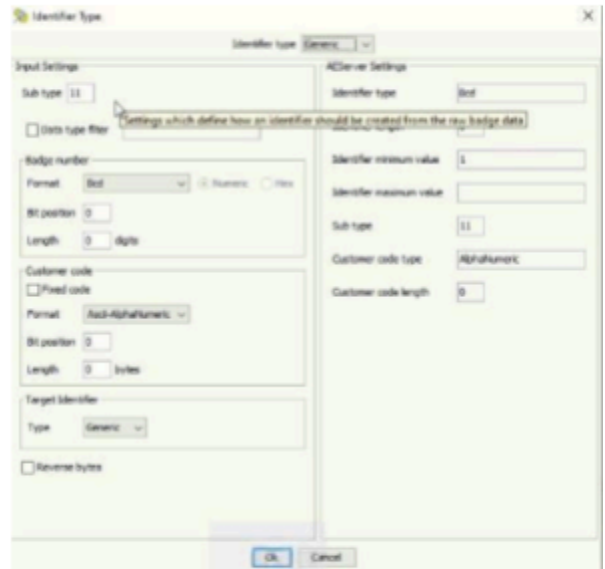
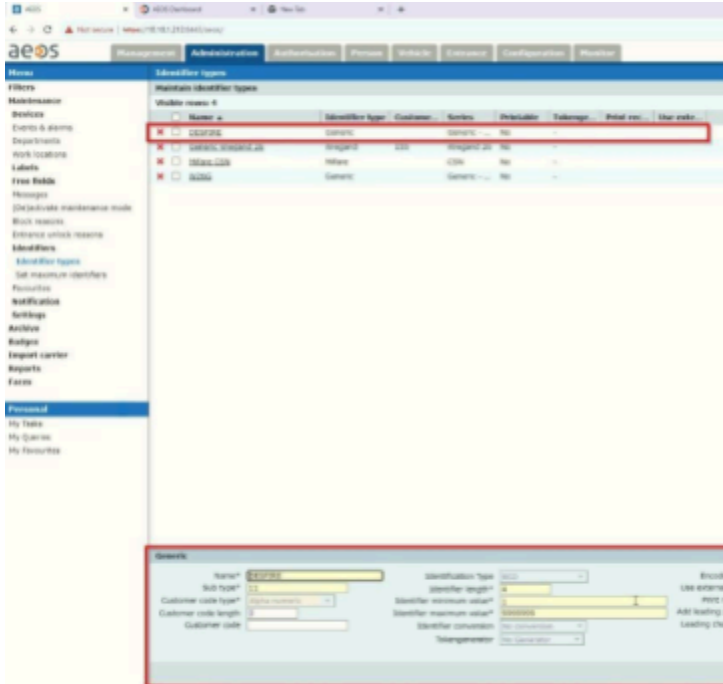
The screenshot shows the 'Nedap AEOS Data Manager' application window. The 'IP Badge Mappings' tab is active. On the left, there are configuration fields for the server (nedap2023.ad.telaeris.com), port (8443), user (admin), password (masked), socket port (8035), and APB events (1015). There are also checkboxes for 'Enable User Paging', 'Auto Assign Areas to Doors', and 'Pull Contact Person for Users'. At the bottom left, there are buttons for 'Test Connect', 'Defaults', and 'OK'. The main area shows a table for adding IP badge mappings. The first entry is for 'ENTRY' type, 'Test Door' door, with IP address 'nedap2023.ad.telaeris.com' and port '11020'. The prefix is '0000' and it is padded to length with 0's. The activity timeout is set to 600 seconds.

Type	Card Type
ENTRY	

Activity Timeout(seconds): 600

Door	IP Address/Hostname	Port	Prefix	Pad to Length with 0's
Test Door	nedap2023.ad.telaeris.com	11020	0000	0

1. Choose an arbitrary prefix in **Data Manager > AEOS > Set up Data Manager > IP Badge Mappings**.
2. You can create up to **3 IP badges** in AEOS. Set them up as **Generic**.



3. Each IP badge interface needs a unique port.
 - a. Entry → Entry: **11020**
 - b. Exit → Exit: **11021**
4. Go to the door itself and set up the badge types it will accept at the door. Under the same door type for different badge interfaces:
 - a. Primary:
 - i. Target identifier is what the badge type will be (i.e., Mifare)
 - ii. Prefix: 1212
 - iii. Data type filter (set by XPressEntry): 00001212
 1. 0000: generic id type
 2. 1212: Mifare
 - b. Secondary
 - i. Target identifier: Desfire
 - ii. Data type filter: 0000

The IP badge interface sends raw badge data live to AEOS; however, if you have a handheld that is offline, you may be sending old data to AEOS. There is an **activity timeout (seconds)** field that clears any badge types and will not send any badge types older than the set time (e.g., 600 sec).

Identifier Types

The screenshot shows the 'Nedap AEOS Data Manager' application window with the 'Identifier Types' tab selected. The left sidebar contains various configuration fields and checkboxes. The main area on the right displays a list of identifier types, with 'DESFIRE' checked. The status bar at the bottom is labeled 'Status'.

Server: nedap2023.ad.telaeris.com
Port: 8443
User: admin
Password: ●●●●●●●●●●
Socket Port: 8035
APB Events: 1015
 Enable User Paging
Page Size: 100
 Auto Assign Areas to Doors
Outside Area: Outside
Inside Area: Building
 Pull Contact Person for Users
Default Identifier Type for Unknown Cards:
 TCP Interface Verbose SOAP Verbose Log
 Use IPBadge for Activites Use Sockets for Activites
 IPBadge Fall Back to Socket Interface

Socket Interface IP Badge Mappings **Identifier Types** Event Settings Employee Visitor Contractor

DESFIRE

Test Connect Defaults OK

Status

Identifier Types show the list of badge types pulled from the AEOS system. A partial sync is needed to populate items in this list. From this list, you can choose the default identifier types.

The default identifier type you check here is used in the AEOS badge activity post function when there is no badge type tied to the scanned badge activity.

Event Settings

Server: nedap2025.ad.telaeris.com|

Port: 8443

User: admin

Password: ●●●●●●●●●●

Socket Port: 8035

APB Events: 1015

Enable User Paging

Page Size: 100

Auto Assign Areas to Doors

Outside Area:

Inside Area:

Pull Contact Person for Users

Default Identifier Type for Unknown Cards: Generic DESFIRE

TCP Interface Verbose SOAP Verbose Log

Use IPBadge for Activities Use Sockets for Activities

IPBadge Fall Back to Socket Interface

Test Connect Defaults OK

Socket Interface IP Badge Mappings Identifier Types **Event Settings** Employee Visitor Contractor

Event Filter

Enable Events Filter

Filter Name: EventsForTelaeris

User Search

Enable User Search with Name

Enable User Filter for Events

Events User Search Limit: 5

Modification Range Filter (Minutes): 1

Delete Users Only in Badge Delete Events

Extra Filters

Process Profile Update Events

Download Pictures in User Events

Process Users in Badge Issue Events

Update Badges in Carrier Events

Status

This setting controls how live event messages received from AEOS are processed.

- **Event Filter** – Limits the real-time events coming from AEOS. By default, XPressEntry listens to all events from the AEOS server; adding an event filter lets you control which specific events XPressEntry receives. To use this feature, first create an event filter in AEOS, then enter the same filter name in the File Name field in XPressEntry.
- **Enable Events Filter** – Filter which events are received from AEOS instead of receiving all events.
- **Filter Name** – The name of the event filter configured in AEOS.
- **User Search** – Used in older versions (below 2023.2.10) of Nedap to retrieve user details from received event messages. These filter options let you refine a user search using parameters such as user type and modification datetime, which is useful in systems with multiple users that have nearly identical names. The default option searches for a user via carrier ID and is used in the latest versions (implemented from AEOS version 2023.2.10 onward).
- **Enable User Filter for Events** – Filter event user lookups to a specific carrier type.
- **User Event Filter** – The carrier type to filter on — Visitor, Employee, or Contractor.
- **Enable User Search with Name** – Look up users by name instead of carrier ID during events.
- **Events User Search Limit** – Maximum number of users returned in a name-based search. Default 5.

- **Modification Range Filter (Minutes)** – Only process visitor updates modified within this many minutes of the event. Set to 0 to disable.
- **Delete Users Only in Badge Delete Events** – Only delete users when a badge is deleted, not when a carrier is deleted.

Extra Filters:

- **Process Profile Update Events** – Sync profile update events from AEOS to XPressEntry.
- **Download Pictures in User Events** – Download user photos from AEOS during event processing.
- **Process Users in Badge Issue Events** – Fetch full user details (photos, templates, and groups) during badge issue events.
- **Update Badges in Carrier Events** – Update badge information when carrier update events are received.

Employee / Visitor / Contractor

These tabs set field mappings for each user type, letting you map a specific field for visitors to the corresponding field on the XPressEntry user record.

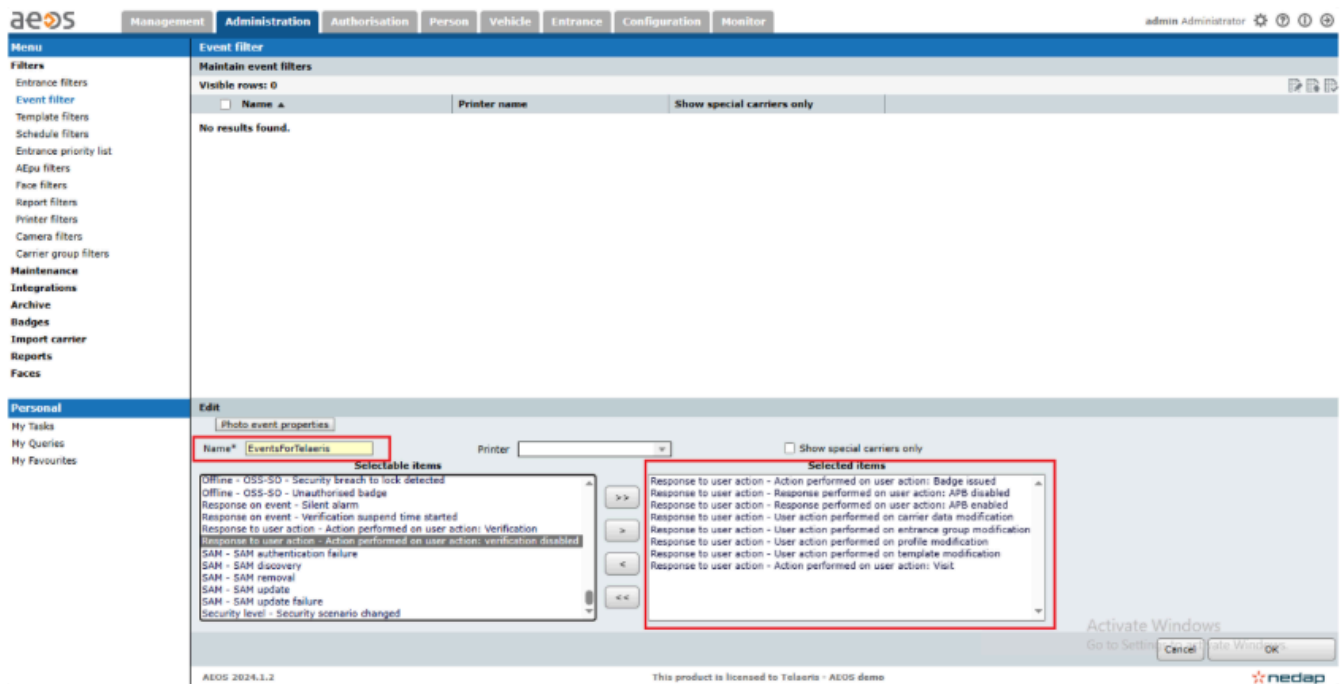
Activity Types

You can choose to get full activities from these events or just occupancy updates for your cardholders. In **XPressEntry Settings**, under **Data Manager > AEOS** you can select the following:

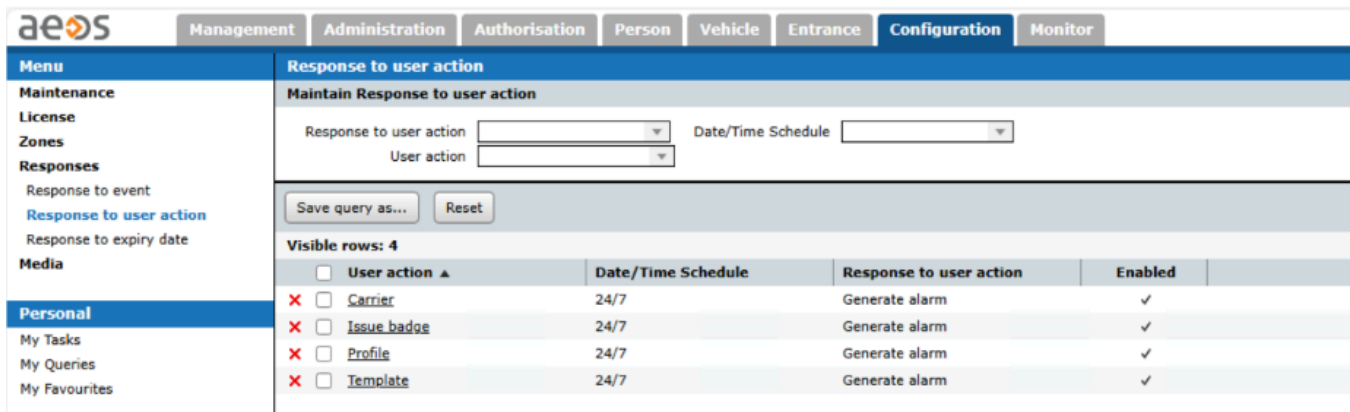
- To get full activities, check the **Pull Data Manager Activities into XPressEntry** option.
- To just get occupancy, check the **Pull Data Manager Occupancy** option.
- If occupancy is not required, leave both options unchecked, along with the **Watch Tables via Software Events** option.

How to Set an Event Filter in AEOS

1. On the AEOS server, go to Administration > Filter > Event Filter.
2. Click New to create a new event filter.
3. Enter a name for the Event Filter.
4. In the Selectable Items section, add the items that should be included in this event filter. Once these items are selected, XPressEntry will only receive the events related to the selected items. Make sure to add Response to User Action items, as shown in the reference image below.
5. Click OK to save the changes.



Creating Mandatory Response to User Actions



On AEOS, you also need to create the following Response to User Actions:

- Carrier
- Issue badge
- Template
- Profile

1. On the AEOS server, go to Configuration > Responses > Response to user action
2. Click New, then select a User Action (e.g., Profile)
3. Check the actions to execute when this user action is performed.

4. Click OK to save.

Response to user action
Edit Response to user action

Response: Generate alarm
User Action: Profile >>>
Date time schedule: [dropdown]
Enabled:

Response is executed when the following user action is performed

- Create
- Replace
- Update
- Delete

Notify: Person involved
Notify Contact Person:

Description: Profile
Default language: English
Message language: English
Text/Email subject: [text box]
Text/Email body: [text area]

You need to set some additional information on the Profile Response to user action.

1. Select Profile

Response to user action
Maintain Response to user action

Response to user action: [dropdown] Date/Time Schedule: [dropdown]
User action: [dropdown]

Save query as... Reset

Visible rows: 4

<input type="checkbox"/> User action ▲	Date/Time Schedule	Response to user action	Enabled
<input checked="" type="checkbox"/> Carrier	24/7	Generate alarm	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Issue badge	24/7	Generate alarm	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Profile	24/7	Generate alarm	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Template	24/7	Generate alarm	<input checked="" type="checkbox"/>

2. Select More

3. Add the required templates to be updated as groups in XPressEntry

4. Select the actions required

Response to user action
Edit Response to user action

Response: Generate alarm
User Action: Profile >>>
Date time schedule: 24/7
Enabled:

Response is executed when the following user action is performed

- Create
- Replace
- Update
- Delete

Notify: Person involved
Notify Contact Person:

Description: Profile
Default language: English
Message language: English
Text/Email subject: [text box]
Text/Email body: [text area]

Response to user action
Edit Profile Restriction Data

Template Type: Access control

Visible rows: 0

<input type="checkbox"/> Name ▲	Type
---------------------------------	------

Entrance groups Type: Access control

Visible rows: 0

<input type="checkbox"/> Name ▲	Type	Description	Region	Sub site	Organization
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Response to user action
Edit Profile Restriction Data

Template

Visible rows: 5

<input type="checkbox"/> Name ▲	Type
<input type="checkbox"/> Edinburgh General Access	Access control
<input type="checkbox"/> Edinburgh Visitor Access	Access control
<input type="checkbox"/> London General Access	Access control
<input type="checkbox"/> London Visitor Access	Access control
<input type="checkbox"/> Reading General Access	Access control

Response to user action

Edit Response to user action

Response: Generate alarm

User Action: Profile

Date time schedule: 24/7

Enabled:

Response is executed when the following user action is performed

Create

Replace

Update

Delete

Notify: Person involved

Notify Contact Person:

Description: Profile

Default language: English

Message language: English

Text/Email subject:

Text/Email body:

For more help related to AEOS settings, please visit the [AEOS Technical WebHelp](#).

Best Practices

Follow these recommendations to ensure a reliable integration:

- **Daily Full Sync** – Schedule a full sync during a low-usage window (e.g., 2:00 AM) to keep cardholder, badge, and permission data consistent.
- **Port Availability** – Confirm that port 8443 (SOAP) and port 8035 (socket) are reachable from the XPressEntry server before synchronizing.
- **Minimum-Privilege API User** – Use a dedicated AEOS user that has only the permissions required to synchronize data and retrieve events.
- **Save After Every Change** – After any change on the AEOS Setup page or the Data Manager view, click Save for it to take effect.
- **Zone and Door Configuration** – Assign the correct Areas/Readers to each door, or enable Auto Assign Areas to Doors, so occupancy is tracked accurately.
- **Connection Monitoring** – After saving, verify the log shows a successful socket connection (e.g., “connected to AEOS version...”) and that table watching has started.
- **Event Filtering** – Create an AEOS event filter to limit real-time traffic to the events XPressEntry actually needs.

Troubleshooting

Connectivity Issues

- Verify the AEOS SOAP service is running and reachable on port 8443.
- Confirm the API user has the required permissions (Administration, Integrations, AEOS WebService, and External Calls).
- Use Test Connect on the Setup Data Manager form; you should see “Connection Success! AEOS VERSION” in the Status field.
- Confirm the AEOS license option 8019223 (SOAP WebService) is activated.

Sync Problems

- Run Full Sync Now to re-synchronize all data from AEOS.

- Verify the Data Mappings align AEOS tables with the correct XPressEntry tables.
- For larger systems, confirm Enable User Paging is checked and adjust the Page Size.

Real-Time Update Failures

- Confirm the socket connection on port 8035 (note that Test Connect does not verify this).
- Ensure the Watch Tables via Software Events option is enabled and that you click Save.
- Verify the InterfaceServer object in AEOS has Event Generation Allowed enabled.
- Check that the event filter name in XPressEntry matches the filter configured in AEOS.

Summary

This document outlines the process for integrating XPressEntry with the Nedap AEOS access control system, enabling secure and efficient communication between handheld devices and the centralized platform. It covers the prerequisites and AEOS-side configuration—including the SOAP WebService, API user, and event interfaces—as well as step-by-step instructions for enabling Data Manager synchronization, mapping data, and configuring readers, doors, and events in XPressEntry. The integration supports entry, exit, and occupancy use cases while ensuring accurate data synchronization and proper mapping of users, zones, and activities across both systems.