

XPressEntry / Nedap AEOS Revision 11/15/2023

For use with the XPressEntry Mobile Access Control System

By



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Purpose

This document is intended to instruct system administrators on how to synchronize an XPressEntry system with the Nedap AEOS access control system.

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. Setup AEOS SOAP API for Data Synchronization
- 2. Setup AEOS SocketInterface and/or ipBadge (for Events)
- 3. Setup **Readers/Panels/etc.** in 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 🔤	anagement	Administration	Authorisation	Person	Vehicle	Entrance	Configuration	Monitor		
Menu	System	1 properties								
Filters	Maintai	n system propertie	s							
Maintenance	Visible	rows: 245								
Devices	Numbe	r ▲ Name					Value			
Events & alarms	40.00	033-30 - 1	peraun upuare milere		A VISICUIS.		· · · · · · · · · · · · · · · · · · ·			
Departments	43.04	0SS-S0 - I	Default update interv	al in hours fo	or employees.					
Work locations	43.05	055-50 - 1	Default update interv	al in hours fo	or contractors					
Labels	43.06	0SS-S0 - I	Maximum number of	day/time sch	edules on ca	ď	1			
Free fields	43.07	0SS-S0 - I	Maximum number of	DayTime-per	riods in sched	ule	1			
(Do)activate maintanance med	43.08	0SS-S0 - I	Maximum number of	intervals in a	a DayTime-pe	riod	1			
Block reasons	43.09	055-50 - I	Maximum number of	authorisation	ns per carrier	(0 = unlimited)	0			
Entrance unlock reasons	44.01	Alarm han	dler							
Identifiers	44.02	Graphical a	ilarm handler							
Favourites	44.03	Anti pass b	ack							
Notification	44.04	Contractor	management							
Settings	44.05	Countgrou	p in zones (except ne	utral)						
System properties	44.06	Counting n	novements (Strip tick	et)			✓			
Maintain thumbnails	44.08	Guard tour								
Auto block	44.10	Maximum (presence time							
Archive	44.11	Multiple tin	nezones							
Badges	44.12	Special or	invisible badges							
Import carrier	44.13	Rule engin	e							
Faces	44.14	CMS RP int	egration							
Tucco	44.15	Soap Webs	Service				2			
Personal	44.16	Security le	vels							
My Tasks	44.17	Translation	mode							
My Queries	44.18	Units						🔪 make s	ure this is check	ked.
My Favourites	44.19	Extended v	endor management							
	44.20	Vendor ma	nagement & permits							
	44.21	Verification	PIN-code							
	44.22	Visit mana	gement							
	44.23	Violation &	blacklist manageme	nt						
	44.30	Enrollment	Bioscript fingerprint							
	44.31	Document	scanner							
	44.32	Enrollment	Hitachi fingervein							
	44.33	Enrollment	Kosmos weight							
	44.34	Enrollment	Sagem fingerprint							
	44.36	Enable bior	metric API							
	44.37	4 eyes veri	fication							
	44.38	Lockers 2								
	44.39	LoXS locke	rs							
	Print	To file								

Follow the instructions from section 1 in the installed **AEOS_WebService_E.pdf** in the AEOS doc directory.

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 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.

Setup AEOS Readers and Access Levels

Setup the Entrances and Authorizations in the AEOS system. This can typically be delayed until a later date but is nice to have before you start synchronizing data.

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**).

XPressEr	ntry - 3.5.6413	- Telaeris (Lo	ogged In User:	Administrator, Co	mpany)				-	- 0	×
File 🚺	Tools	View	u 🔥 Logo	ut 🕅 Muste	r					?	Help
Entry/Exit Mu	Settings	Al	t+S listory M	Messages Add/Edit	Info Logs						
Zone	Handheld	Status	0			All Zones (Oc	cupancy: 7)		C	Current Occupa	nts 🗸
Filter:	Reports Manual Er Add Hand Sate 1 2 (0) Gate 2 3 (0) Gate 3	Ctr Inter/Exit Use Iheld Wizar	I+R II, Monie rs iterdet. 0 in e in 2c udge #: 4 Company: Marshal, 4 Entered: 0 Time in 2c Badge #: 4 Company:	za 7//1106 157 157 Sampl Iames 16/04 05 168 Sampl	Banderas, An Entered. 07/1 Time In Zone: Badge #: D65 Company: Sat Gheller, Heny Entered. 50322 Time In Zone: Badge #: 922 Company: Sat	torio 105 945 904 273 mpl.	Jenkins, Winford Entered. 10/26 02 Time In Zone. 619 Badge #. F9BA3E Company: Sampl. Kemp, Mark Entered. 05/29 03 Time In Zone. 273 Badge #. 453 Company: Sampl.		looney, George Intered: 10/26 10 adge #: 25344A ompany: Sampl		
		8	. 0		Ac	tivity Occurrir	ng in Last Day	,		0	
			ser	User Image	Time Stamp	Start Zone	End Zone	Door	Reader	Entry Grante	ed
		Ве	ell, Monica		07/11 06:25:27	Outside	Building 1	Main Gate 1	Handheld 4	True	
		Gi	ale, Sarah	0	07/11 06:24:47	Outside	Building 1	Main Gate 1	Handheld 4	True	
		Pe	ennington, Ma	8	07/11 06:24:03	Outside	Building 1	Main Gate 1	Handheld 4	ACCESS DE	NI
		Gi	ale, Sarah	0	07/11 05:13:51	Outside	Building 1	Main Gate 1	Handheld 4	True	
Activity Occ	upancy Partial	Full	Total Occupa	ancy: 7 Inside 1 Zor	ne	0 Unread N	/lessages	1	Service Running	Locally	

Data Manager

MPressEntry Settings		- 🗆 X
I result y Settings File Database SQL Import/Export General Add / Edit Display Badges RFID User Defined Fields Muster Settings Question Setup Logging Client Settings Wiegand Format Data Server Service Settings Database Data Manager AEOS Software Event Viewer	P AEOS Name AEOS AEOS - Prefix()	Add Remove Prefix
 □ Reader Profiles Handheld Functionality Reader Validations Passwords Badge Settings Custom Display Validation Colors Doors Trend Settings △ Alert Settings Twilio Alerts 		
		Sanity Check Data
		Save Cancel

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 AEOS's data manager.
 - b. Enable Data Manager Must be checked to enable Nedap AEOS Synchronization.
- 3. IMPORTANT NOTE: After any change on the AEOS Setup Page or the Data Manager view, you MUST hit Save for it to apply.

Setup Data Manager

1 XPressEntry Settings						-	- 0	×
File Database SQL Import/Export								
م	🗹 Enable Data Manager	Type: AE	os			Setup D)ata Mana	ger
General Add / Edit Display Badges	Sync Timers Sync Optic	ons				<u> </u>		
RFID User Defined Fields Muster Settings		Disable	Concurrent Syncs			Send XPressEn	try Activities	3 Now
Logging Client Settings	Download Activity Frequency			Set	Clear	Download A	Activity Now	
Wiegand Format Data Server Service Settings	Occupancy Sync Frequency			Set	Clear	Occupancy	Sync Now	
Database	Partial Sync Update Frequency			Set	Clear	Partial S	ync Now	
AEOS Software Event Viewer Reader Profiles	Full Sync Update Frequency			Set	Clear	Full Syr	nc Now	
Handheld Functionality Reader Validations Passwords	Custom Sync Update Frequency		Set	Clear	Custom S			
Badge Settings Custom Display Validation Colors Doors								
Trend Settings Alert Settings Email Settings	Data Manager Live Log View	Pause	Mirror Log To:				Browse	
Twilio Alerts	DEBUG. DataManagers Restarted							
						Save	Ca	ncel

- 1. Click on 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 we are looking at to determine whether a cardholder has entered the facility.
 - g. Enable User Paging: Keep this checked unless you have a tiny 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 we can't determine the proper area from AEOS.
- 3. To test whether the SOAP API is functioning, hit **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!

Server:	nedap.ad.telaeris.com	Socket Interface	IP Badge Mappings Idenifier Types Employee Visitor Contractor
Port:	8443	Add Socket	Interface Click this text to see the prefix mappings for the identifier Send to
User:	admin		types or find them in the accesspoint descriptions manual.
Password:	•••••	AEPU IP:	nedap.ad.telaeris.com Port: 8036
Socket Port:	8035	AEPU Name:	nedap ad telaeris com
APB Events:	1015	Lisername	nedap
	Enable User Paging	Password:	
	Page Size 100	Drefu	
Events Lleer 9	Search Limit 5	Preix	
Developed 5		Card Type	DESFIRE V
Download H Process Lis	Pictures in User Events		
Auto Assig	n Areas to Doors		
Outside Area:	Outside		
Inside Area			
maide Area.			
Default Identifie for Unknown	cards:		
🔽 TCP Interfa	ace Verbose 🔽 SOAP Verbose Log		
Use IPBad	ge for Activites 🛛 Vse Sockets for Activites		
IPBadge Fa	all Back to Socket Interface		
Test Connec	t Defaults OK		
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.

	—LŽ 🔄 Enable Data Manager Type: AE	OS		Setup Data Manager
General Add / Edit Display	Sync Timers Sync Options			
Badges	Syne miners Syne Options			
RFID User Defined Fields	Disable	Concurrent		Send XPressEntry Activities Nov
Muster Settings		Syncs		Centra Ar ressently Activities No
Question Setup				
Logging	Download Activity Frequency	Set	Clear	Download Activity Now
Client Settings				
Vilegand Format Data	Occupancy Sync Frequency	Set	Clear	Occupancy Sync Now
Service Settings				
Database	Partial Sync Update	Set	Cloar	Partial Sync New
Data Manager	Frequency	Jei	Cical	T altial Sync Now
AEOS				
Beader Profiles	Full Sync Update Frequency	Set	Clear	Full Sync Now
Handheld Functionality	Custom Suns Lindato			
Reader Validations	Frequency	Set	Clear	Custom Sync Now
Passwords	Trequency			
Badge Settings				
Validation Colors				
Doors				
Trend Settings				
Alert Settings	Data Manager Live Log View Pause	Mirror Log To:		Browse
Email Settings				
Twillo Alerts				

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:
 - o Zones
 - o Readers
 - o Doors
 - \circ BadgeType
 - o Groups
 - Group/Reader Mappings
- Occupancy Sync If the option Pull DataManager 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 DataManager Activities into XPressEntry option is checked in Sync Options.

Data Mappings

Here we define what tables in AEOS map to which tables in XPressEntry.

- 1. AEOS \rightarrow XPressEntry
- 2. Person/Visitor/Contractor \rightarrow Users
- 3. Token \rightarrow Badges
- 4. Entrance \rightarrow Door
- 5. Access Point \rightarrow Reader

XPressEntry Handheld Readers / Doors

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

Readers

There are three types of Readers in XPressEntry:

- 1. **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.
- 2. **Readers** Logical readers used to assign access control privileges from external systems. In the case of AEOS, they should **correspond to Access Points.**
- **3. Doors** Entrances and their permissions from AEOS are mapped into XPressEntry as doors.
- 4. **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 we need to map for XPressEntry are 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.



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

filter:	0	•	8	🍇 Users 🚊 Companies 👋 Groups 🧏 Zones 📕 Door	s 🗌 Readers 🞄 F	Roles 🔊 Timezones	🛍 Badge 1
ain Gate 1				Door Name			
ain Gate 2 ain Gate 3				Main Gate 1			
				Start Zone			
	Ν			Outside	~ ~	These	must be
	15			End Zone			set
				Building 1	~		
				Door RFID Tag#			
				External Entry Reader			
				Main Gate Entry	× x •	These	will be se
				External Exit Reader		to the	name of
				Main Gate Entry	× x •	the e	ntrance
						_	
				Add New Delete Save	Cancel		

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: <u>XPressEntry Android Documentation</u>.

Setup XPressEntry to Push Badge Activities to AE

AEOS needs to have an InterfaceServer object setup to receive Events.

- 1. Make sure that the **Event Generation Allowed** checkbox is enabled. Each Interface server 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			File Database SQL Import/Export
InterfaceServer.1 (Service:InterfaceServer)		🗢 🛛 🖉 Enable Data Manager Type: AEOS
Name Port number User name	Value 8036 nedap	Units	 General Add / Edit Display Badges RFID User Defined Fields Sync Timers Sync Options ♥ Pull DataManager Occupancy
Password RML Command connection allowed Event connection allowed Event connection monitor enabled			Muster Settings Default Outside Zone Question Setup Logging Client Settings
Event connection monitor timeout AEpu filter definition Carrier name resolving enabled AEpu filter enabled Delegate state event subscriptions Event generation allowed Identifier type for incoming events	300 empty	\$	Wiegand Format Data Image: Construction of the second
Event date format Use SSL Use SSL dient auth Enable message logging Events enabled Tags	Local Date	Default - Loc	Handheld Functionality Reader Validations Passwords Badge Settings Custom Display Validation Colors Doors Event Processing Loop Limit 10 \$
Initialization priority	50	1-100	i rena 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

🛒 XPressEntry Settings				_		×
File Database SQL Import/Export						
	🦻 🧧 Enable Data Manager Type: AEOS		Setup) Data	Manag	jer
General						
Badges	Sync Timers Sync Options					
RFID	Pull DataManager Occupancy Event Processing Retry Co	ount	3			•
Muster Settings	Default Outside Zone					~
Question Setup Logging	✓ Pull Data Manager Activities into XPressEntry DMPrefix					
Client Settings Wiegand Format Data	Push XPressEntry Activities to Data Manager					
Server	Send Activities Petry Count 2	never				~
Database						
Data Manager AFOS	✓ Watch Tables via Software Events					
Software Event Viewer	Enable Message Queue					
Handheld Functionality	Message Queue Name \Private\$\DataManagerEvent					
Reader Validations Passwords Badge Settings Custom Display	Event Processing Loop Limit 10					
Validation Colors Doors Trend Settings	Clear Data Manager Settings Clear External D)ata				
☐ Alert Settings Email Settings Twilic Alerts	Data Manager Live Log View Pause Mirror Log To:			В	rowse	

To get Events into XPressEntry, enable the **Watch Tables via Software Events** option. When you hit **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 **AEPU** where the doors are mapped. All XPressEntry doors need to be set up on the same **AEPU**.
- 2. Send socket interface events for specific card types in AEOS.

a AEOS	3) ACOS Darboard x 6 New Tab x +
← → C ▲ Not secure 4	###//10.10.12126443/#cos/
aeos 🛛	nagement Administration Authorisation Person Vehicle Entrance Configuration Monitor
Menu	Search
Visitor Employee	Employee
Announce Search Delete Edit Issue identifier Issue replacement Withdraw identifier Withdraw and block identifier Block identifier Unblock identifier	Last name 2005 Date until Midde name 2/19/2023 0:51 File Gende Gende Gende Gende Gende Gende File Gende Gen
Shared functions Identifier	Contact
	Contact person Clear Telephone no.
Personal	Computer Type Free Field Category
My Tasks My Queries My Favourites	CPU Installed vestor Image: CPU Speed Int CPU Speed Int 1225685 CPU Type String Image: CPU Type String CPS Color Image: CPU Type String
	Category 2
	Multi Lookup Pield
	Authorization
	Template Always everywhere v 🚺 Access during holidays 🗌 >>
	Identification
	Identifier type DESFIRE Identifier x 15512 Cardholder ID data will not automatically update in XPressEntry
	Verification
	Type Date" 27/9/2023 T ··· T Date" 27/9/2023 T ···

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

ᅷ Nedap AE	OS Data Manager				-		Х
Contor	nedan ad telaeris com	Socket Interface	IP Badge Mappings Idenifier Types Employee Visitor Cont	ractor			
Server:	1604p.au.telaelis.com		Click this taxt to see the prefix manpings for the	e identifier			
Port:	0443	Add Socket	Interface Use of the press mappings for the types or find them in the accesspoint description	ons manual.	Send Acces	to ss Points	
User:	admin						
Password:	•••••	AEPU IP:	nedap.ad.telaeris.com Port: 8036	8			
Socket Port:	8035	AEPU Name:	nedap.ad.telaeris.com				
APB Events:	1015	Username:	nedap				
	Enable User Paging	Password:	•••••				
	Page Size 100	Prefix					
Events User S	Search Limit 5	Card Type	DESFIRE				
🔽 Download I	Pictures in User Events						
Process Us	sers in Badge Issue Events						
🗹 Auto Assig	n Areas to Doors						
Outside Area:	Outside ~						
Inside Area:	Inside ~						
Default Identifi for Unknown	er Type Cards:						
🔽 TCP Interfa	ace Verbose 🔽 SOAP Verbose Log						
Use IPBad	ge for Activites 🔽 Use Sockets for Activites						
IPBadge F	all Back to Socket Interface						
Test Connec	t Defaults OK						
Status							

- 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

📩 Nedap AE	OS Data Manager		-	×
Server:	nedap.ad.telaeris.com	Socket Interface P Badge Mappings Idenifier Types Employee Visitor Contractor		
Port	8443	Add ipBadge Mapping Activity Timeout(seconds) 600		
User:	admin			
Password		ENTRY V A		
Socket Dort	8035	Door		
	1015	Door A SCII		
APB Events:	Dis Crable Lleer Desing	IP Address/Hostname Port		
	Enable User Paging	nedap.ad.telaeris.com		
	Page Size	Prefix Pad to Length with 0's		
Events User S	Search Limit 5	0000		
Download I	Pictures in User Events			
Process Us	sers in Badge Issue Events			
🗸 Auto Assig	n Areas to Doors			
Outside Area:	Outside	×		
Inside Area	Insido			
	Inside			
Default Identifi for Unknown	er Type I Cards:	✓		
TCP Interfa	ace Verbose 🛛 🔽 SOAP Verbose L	g		
Use IPBad	ge for Activites Use Sockets for A	ctivites		
IPBadge F	all Back to Socket Interface			
Test Connec	ct Defaults OK	1		
atus				

- 1. Pick 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 up as **Generic**.

	Maintain identifier types						المربية ا	ar hora Kanada 1 ki	
e	Visible rows: 4						2001 14	er type identic 1 v	
	Name +	Identifier type	Custome	Series	Printable	Tokenge Print rec Use en	Input Settings	AEServer Settings	
arms	X DESETRE	Generic		Generic -	No				
5	X Generic Wiegand 26	Wiegand	155	Wiegand 25	No		Sub type 11	Identifier type	Bcd
ns	X Mifare CSN	Mifare		CSN	No				
	× □ w26G	Generic		Generic -	No	-	Data type filter	n identifier should be created from the	e raw badge data
		Clement		Contract - an	110				<u> </u>
							- Radas pursher	Identifier minimum value	1
maintenance mode							bodge fullber		·
ock reasons							Format Bcd v 🤅 Numeric	Offex	
								Identifier maximum value	
ypes							Bit position 0		and a second sec
n identifiers								Sub type	11
							Length 0 digits		And and a second s
								Customer code type	AlphaNumeric
							Customer code		recorded a
							Exect code	Contrast and broth	0
								Customer code length	U
er							Format Asci-AlphaNumeric ~		
							And a second		
							Bit position 0		
	-						Length 0 bytes		
							Contraction of the second structures		
							Target Identifier		
							Type Generic v		
							Contraction of the Contraction o		
							Reverse bytes		
			_	_	_				
	Generic								
	Name* DESFIRE		Ider	tification Type	BCD	w.	Encode		
	Sub type* 11		Ide	ntifier length*	4	L. L.	external I		
	Customer code type* Alpha numer	0	Identifier mi	nimum value*	1	I	Print rei	Ok Cancel	
	Customer code length 0		Identifier ma	ximum value*	99999999	A	leading ze		

3. Each IP badge interface needs a unique port.

- **a.** Entry \rightarrow Entry: **11020**
- b. Exit \rightarrow Exit: **11021**
- 4. Go to door itself and set up the badge types it will accept at the door. Under 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

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. (i.e. 600 sec, etc.)

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 DataManager Activities into XPressEntry**.
- To just get occupancy, check the **Pull DataManager Occupancy** option.
- If you don't care about occupancy, don't check either and don't check the Watch Tables via Software Events option.

Audit Log Data Changes

AEOS can be configured to send Carrier and Badge changes to XPressEntry so it can get live updates.