White Paper for Access Control in Surveillance Station 7.2.2 and above

With AXIS Network Door Controller A1001



Table of Contents

Introduction	3
What Is Access Control?	
Why Does AXIS A1001 Work Better with Synology Surveillance Station?	
Configure AXIS A1001 before Installation	6
Install AXIS A1001 in Synology Surveillance Station 7.2.2 and above	10
Access Controllers	
Cardholders	
Access Rule	
Log Center	
Advanced	
Use Synology Door Monitor with AXIS A1001	22
Door Preview	
Desktop Shortcuts	
Door Viewer on Live View	
Door Viewer Operations	
Door Units on E-map	
More Applications	26
Action Rule	
Notification	
Before Upgrading to Surveillance Station 7.2.2 and Above	28
End of Support for Peer Connection	
Cardholder in Controllers with the Same Name	
Surveillance Station and AXIS Entry Manager Compatibility	30
User and Cardholder	
Identification type and door authentication	
Group and Access Rule	
Schedules	
Synchronization	

Introduction

What Is Access Control?

In the era of networking exploration, most of the electronic devices are being connected to the Internet so that users are capable of controlling all the devices remotely. Network camera is one of the examples when it comes to connecting things to the Internet. With the network connection as replacement of the coaxial cable using analog signals, the installation of surveillance camera becomes way easier than before.

Recently, manufacturers are trying to connect an independent access controller to the Internet so that they can communicate with the controller via the Internet. Access control has played an essential role in security deployment. However, it has always been an independent device from a security system. All the access management data would be recorded into another server for future revision. It contains the operation of access control at the reception, and whether a person has the privilege to be access granted. A set of access control system includes a database server, a card reader, door locks, and possibly a lock monitor and a REX (Requestto-exit) button. All the access privilege settings will be stored in the server and it controls whether a certain card has the privilege to open the door. Of course, the receptionist or a security guard can open the door, too.

From time to time, network / IT based companies are developing network door controllers with which administrators can easily operate the device via network interface, pretty much like how we did to the network cameras. In Surveillance Station 7.2.2 and above, Synology NAS is taken as an access control server communicating with AXIS A1001, so that all the access management operations can be conducted via the Surveillance Station interface.

Why Does AXIS A1001 Work Better with Synology Surveillance Station?



AXIS A1001 is known as the network door controller. It contains multiple analog I/O ports and with one Ethernet connection to the local network (www.axis.com). The rudiment of integrating AXIS A1001 into Surveillance Station is the combination of access management operations and the existing video source saved in the NAS. Surveillance Station retrieves the access log from AXIS A1001 and pairs them with related video sources so that administrators can easily review the access data with a related video source, consolidating and maximizing the value of stored access logs.

Below are some key values of using AXIS A1001 with Synology Surveillance Station.

- Easy to deploy and install with UPnP search in Surveillance Station
- Having one camera paired with one door to have a clear view when monitoring the door
- Intuitive user interface including the configurations of cardholder, schedule of door and access rules.
- Attaching photos and common information to cardholders so that administrators can check cardholder frauds
- More cardholder, log and controller are supported than AXIS Entry Manager. The number is up to 50000 cardholders and 60000 logs
- · Instant playback when clicking on the access logs
- Aligning with the design of Action Rule to have a customized behavior corresponding to events detected by AXIS A1001
- Supporting notifications from Surveillance Station with access control events

More details will be introduced in the following chapters. The table below shows the degree of support that can be achieved when AXIS A1001 is being paired with Surveillance Station:

System Spec	Axis Entry Manager	Surveillance Station	
Recommended maximum number of controller	33	As maximum camera number	
Maximum number of cardholders	400	50000	
Maximum number of offline events	30000	60000	
Maximum number of schedule	Unlimited	Unlimited	
Supported controller	Axis A1001	Axis A1001	
	Key features		
Access Management	 Cardholder management Photo of card holder Manual Lock / Unlock Extended grant time 		
Video Integration	Live event monitoring on videoRecording playback with related event		
Event & Alarm	 Valid Access Invalid Access Door Alarm Tamper detection 		

Adding access controllers to Surveillance Station requires installing additional Surveillance Device Licenses. Learn more about Device License Pack .

A1001 firmware 1.55 is only compatible with Surveillance Station 8.0 and above.

Configure AXIS A1001 before Installation

AXIS Door Controller A1001 is a network controller with multiple I/O ports embedded that connects analog devices such as magnetic door locks, lock monitors, and card readers to the Internet. An AXIS A1001 is able to connect up to two sets of doors, including door locks, lock monitors, card readers, REX buttons, and some other I/O devices.

Before installing the AXIS A1001 with Synology Surveillance Station, a few settings are required to be configured on its web user interface.

IP AXIS IP Utility			x
	Тур	pe to filter	×
Name	IP Address	Serial Number	
AXIS M1011 - 00408CA7B029	192.168.31.38	00408CA7B029	
AXIS M5014 - 00408CD832C2	192.168.31.43	00408CD832C2	
AXIS A1001 - ACCC8E14D404	192.168.24.121	ACCC8E14D404	
AXIS M3011 - 00408CB4A9F5	192.168.31.40	00408CB4A9F5	
AXIS M3011 - 00408C94CCCC	192.168.31.36	00408C94CCCC	
AXIS M3011 - 00408CB4A9F7	192.168.31.37	00408CB4A9F7	
AXIS M3011 - 00408CD613BA	192.168.31.41	00408CD613BA	
AXIS M1011 - 00408CA50741	192.168.31.39	00408CA50741	
•	III		Þ
8 devices		Interface 192.168.23.181	н

Use AXIS IP Utility to discover AXIS A1001 in your local network.

Log in to the web interface of AXIS A1001. The default username/password is **root**/**pass**.

AXIS Entry Manager ×		
← → C ☆ 192.168.24.121/we	ebapp/pacs/index.shtml?id=3	🖈 🤋 🌯 📆 🗉
	Authentication Required × The server http://192.168.24.121:80 requires a username and password. The server says: AXIS_ACCC8E14D404.	•
	User Name: Password:	
	Log In Cancel	

In the **Overview** page, basic information, such as IP address and firmware version, are displayed here. However, the statements highlighted in red inform you of the hardware settings in need of configuration. Click on **Hardware Configuration** for further configurations.

	anagement Alarm Log	Event Log	Reports	Setup	🕓 Engli
verview					
Product name	AXIS A1001 Network	Door Controller			
Controller name	Axis Door Controller				
MAC address	AC:CC:8E:14:D4:04				
IP address	192.168.0.100				
Firmware version	1.25.2				
Configuration	needed: This door control				
Configuration	work Door Control	lers in Syst	em		
Configuration i Manage Net Configuration i security issues,	twork Door Control needed: This door control activate the standalone m	lers in Syst er is not part of ode	t em 'a system w	th other controllers. To ke	eep using it at as a standalone controller and to avoid

In the Hardware Configuration page, you can either start new hardware configuration or import a hardware configuration file. To create a new hardware configuration, click **Start new hardware configuration**.

		AXIS Entry Manager
Overview Access Management	Alarm Log Event Log Reports Setup	🍼 English ;
Setup / Hardware Configu	iration	
Configuration status: The hord	ware on this controller is not configured	Information
👻 🛛 Import hardwars configuration	Configurat	new hardware configuration
		t hardware configuration

Assuming that there is only one door that needs to be configured, enter the name and select the number of doors that need to be configured here.

	Manager and the second second	and a Decide		
Jverview Access !	Management Alarm Log Ev	ent Log Reports Setup		S English :
Setup / Hardwai	re Configuration			
Set controlle	ar and door names		Information	
our controlle			information	
Network Door 0	Controller			
Name	Axis Door Controller			
Number of con	nected doors			
 1 Door 	Door			
O 2 Doors				
		Cancel Next		

In the step of **Configuring locks connected to this controller**, there will be a few settings that need to be configured.

Door monitor:		
Door monitor	Open circuit = Open door	
Cancel access time	once door is opened	
Access time	❷ 7	
Open too long time	9 30	
Pre-alarm time	9 10	
Lock 1:		
💿 12 V	Fail-secure	
O Relay	Relay open = Locked	
Lock 2:		
 None 		
○ 12 V		
Relay	Relay open = Locked	
Lock monitor:		
Lock monitor	Ock 1	
	Open circuit = Locked	
Supervised inputs:	Enable supervised inputs	

For most general settings, only the settings below need to be checked.

Access time: for how long (seconds) the door will be unlocked after the access being granted. (This setting can be modified afterwards.)

Open too long time: for how long (seconds) the door will be alarmed as open too long.

Pre-alarm time: for how long (seconds) before the actual alarm is occurred.

In Lock 1, if **Fail-secure** is chosen, the door will remain locked when the AXIS A1001 is offline. On the contrary, **Fail-safe** will keep the door open when AXIS A1001 is offline. If a lock monitor is installed, please tick the **Lock monitor** checkbox. Normally **Open circuit** will be set as locked.

When it comes to the reader configurations, it depends on the devices that will be used at the entrance and exit. For example, if a company is using a card reader for entrance and a REX button for exit, just select Entrance reader and Exit REX. After this configuration, you are good to finish the setup wizard.

Configure readers	connected to this co	ntroller	Information	
Entrance reader	Entrance reader protoco	d:		
	 Wiegand 	Single LED ᅌ		
	RS485 half duplex	OSDP 0		
	RS485 full duplex	OSDP 0		
Entrance REX	Entrance REX connectio	in:		
	Active low			
	🥹 🗌 REX does not unic	ock door		
Exit reader	Exit reader protocol:			
	 Wiegand 	Single LED 0		
	RS485 half duplex	OSDP 0		
	RS485 full duplex	OSDP 0		
Exit REX	REX connection:			
	Active low			
	😣 🗆 REV doos pot upla	ack door		

After clicking **Finish**, it will take a few seconds to proceed the configurations.

When the hardware configuration is complete, hardware pin chart can then be checked for the actual analog devices connection.

The Hardware Pin Chart is a reference for the actual connections of all the analog devices such as card readers, door locks, lock monitors, and some other I/O devices.



In this Pin Chart, the device wires are clearly marked. Connect all the devices to the AXIS A1001 correctly, and then the door controller is perfectly set.

After the initial hardware configuration is complete, you can install AXIS A1001 and configure the door controlling system directly with Surveillance Station.

Install AXIS A1001 in Synology Surveillance Station 7.2.2 and above

AXIS Door Controller A1001 is an add-on of Surveillance Station. Af first, you will need to go to **Add-ons** to enable the **AXIS Door Controller** add-on for further configuration.



Surveillance Station only supports standalone mode of AXIS A1001 based on AXIS' suggestion. Please confirm that the controller has not been connected to other controllers or under standalone mode before you add it.

Then, launch AXIS Door Controller, and click Add.

Name:	Axis A1001	
(P address:	10.13.23.44	
Port:	80	
Model:	A1001 👻	
Jsername:	root	
Password:	••••	
	Test Connection	

The wizard will go through all the settings. Enter the basic information of AXIS A1001, and then click **Next**. Use the UPnP search to find the AXIS A1001 connected to the local area network.

Each door configured in Surveillance Station can be further paired with an IP camera. In general, the paired camera will be monitoring the door so that any events happening at the door can be clearly recorded.

	Add Controller Wizard	
Door 1		
∧ General		
Name:	Door	
Set a paired camera	as a video source	
Camera:	Camera_1 💌	
∨ Admittance 🕧		
✓ Exit Permission	0	

To have the paired camera shown in the list of video sources, make sure the camera is added to Surveillance Station before going through the door controller settings. Select a preferred camera to pair with the door, and then click **Next**. The paired camera does not need to be an AXIS camera. With Surveillance Station, all supported cameras can be paired with the door controller. The paired camera can be changed by editing the controller again after completing the installation process.

Apart from pairing with camera, the configuration of authentication for admittance and exit permission of each door is required. In this page, you can decide when to use what kind of authentications to access. For example, a company requires the use of a card for access check at the entrance, and a REX button to exit. Thus, for the identification type at the entrance, **card number** or **card raw** is required. Multiple identification types are allowed here.

	Add Controller Wizard	
Door 1		
∨ General		
∧ Admittance ()		
PIN	Card number Car	d raw
Customize	🖉 Delete	
Custom Settings Al	l identifiers 👻	
⊿ 0 1 2 3 4 5 0	6 7 8 9 10 11 12 13 14 15 16 17	18 19 20 21 22 23
Sun		
Mon		
Tue		
Wed		
Thu		
Fri		
Sat Sat		
Previous		Next Cancel

AXIS A1001 needs to be synchronized with an NTP server to make sure the time is exactly correct.

	Add Controller Wizard	×
Advanced		
∧ Time Synchronization		
Network time server:	Surveillance Station	
Time zone:	(GMT+08:00) Taipei	
∧ Door 1		
Acess duration (sec.):	7	
Long access duration (sec.):	30	
Previous	Fir	nish Cancel

Also, the access duration can be configured. According to the differences of the needs, you can set the access duration separately for each door. Regarding Long access duration, it is a friendly configuration designed for the disabled. Set the time configuration and then click **Finish** to complete the adding process.

After the configuration is complete, a door unit is added to **AXIS Door Controller**.

Access Controllers	Cardhold	Axis Door Controller lers Access Rule Log Center Advanced	? — E X
Add Delete	Edit Enal	ble 🗸 Privilege	
All Status	1	Axis A1001 10.13.23.44 : 80	Door number: 1 🗸 🗸
Normal	1		
Disconnected	0		
Disabled	0		
Others	0		
			1 item(s) 🛛 🔿

There are five tabs in the application: Access Controllers, Cardholders, Access Rule, Log Center, and Advanced.

Access Controllers: overview of the door controller and more operations for the controllers.

Cardholders: operations for the cardholders, including add, edit, delete, and block.

Access Rule: add, edit, or delete access rules to be applied to cardholders.

Log Center: record event logs related to the door controller.

Advanced: configure advanced functions such as event logs and alarms.

Access Controllers

All the door controllers added to Surveillance Station will be shown in this tab. Moreover, you can view the basic information of every door with paired camera here and preview the paired camera just by clicking the door icon.

10	1	Axis Door Controller	P — 🗖 X
Access Controllers	Cardhold	lers Access Rule Log Center Advanced	
Add Delete	Edit Enat	ble - Privilege	
All Status	1	Axis A1001 10.13.23.44 : 80	Door number: 1
Normal	1	Model A1001	
Disconnected	0	Door	
Disabled	0	Door Paired camera: Camera_1	
Others	0		
			1 item(s)

Since AXIS A1001 is a separate device from Synology NAS, the data of Cardholder and Log will be synced during the installation.

To avoid potential risks, privilege settings for access control is also configurable here.

		Privilege			×
Save Hide Unauthorized					
Door	Account	Authorized	🖌 Manual Lock	🖌 Manual Unlock	✓ Manual Access
0001	Ivan Chang	\checkmark	\checkmark		
	Olivia Lin				

For those users in Surveillance Station, it is not necessary to grant them the privilege to control the door. Therefore, administrators can configure the authority of door controller by clicking **Privilege** on the toolbar.

Manual Lock, Unlock, and Access are unique and serious privileges for allowing certain users to manually lock / unlock / access the door. That is why these options are configured separately.

Cardholders

After adding the controller into Surveillance Station, cardholders can be added in Surveillance Station.

		Add Cardholder	×		
Access Co	Information				
Add D	First name:	Ivan			
All Status	Last name:	Chang		ıtil:	~
	Photo:	Delete Upload		1:07	
Normal	Description :	Surveillance Service		ıtil:	\sim
Expired	Employee NO.:	F11444		1:07	
	Department:	A15		ıtil:	~
Blocked	Title:	Project Manager		11:07	
	Extension:	756		ıtil:	\sim
	Email:	ivanchang@synology.com		11.07	
				ıtil: L1:07	~
				itil:	~
		Next	Cancel	item(s)	Ģ

Click **Add** to create a cardholder. The wizard includes configuration of Information, Credential and Access Rule.

Information includes many personal information like name, extension, email and even the photo. Fill up the column needed, and then click **Next**.

		Ado	l Cardholde	r		×		
Access Co	Credentials							
Add D	PIN:	5438						
All Status	Facility code:	28					ıtil:	\checkmark
	Card number:	10012832					1:07	
Normal	Card raw:	0034eef3		0			ıtil:	\sim
Expired	Retrieve last card scan:	Door - Enter	-	Retrieve			1:07	
	Valid from :	2016/07/11	III				ıtil:	~
Blocked	Valid until:	2016/11/25					1:07	
	Long access duration:	Enable	-				ıtil:	\sim
							1:07	
_							ıtil: L1:07	~
_							ıtil:	~
	Previous				Next	Cancel	item(s)	G

Credentials provides 4 credential configurations supported by AXIS A1001. Surveillance Station offers the retrieval of facility code, card numbers and rows from the last read on the card reader. After the reader reads the card provided and click **Retrieve**, the card number and row will be filled into its column. In this page validation period for cardholders can also be configured. Besides, if the cardholder is a disabled, long access duration can be enabled here to help pass in and out. Complete these credential configurations and then click **Next**. Access Rule provides the option to add a new access rule here directly if needed (Please see section "Access Rule"). If the access rule has already existed, just select the access rules that should be applied to this cardholder and then click **Finish** to complete the creation of this cardholder.

	Add Cardholder		× - = ×
Access Co	Access Rule		_
Add		≡↓ → 🔎 Search	
All Status	Access Rule	🗸 Арр	ly Itil: 🗸
100	Official Time		11:07
Normal			til: 🗸
Expired			itil:
Blocked			1:07
			itil: 11:07
			itil: 11:07
			ıtil: 🗸
	Previous	Next Can	cel item(s) C

In Surveillance Station, cardholders can be edited anytime, Just click **Edit**. If administrators wish to block / unblock certain users, click **Block** for further operations.

Administrators can of course delete a certain user; however, that specific user needs to be registered again via the whole cardholder adding wizard. Block function offers the flexibility to remain this user in the system and all the access logs will still remain in the system.

Access Rule

With Access Rule, you can set up rules to determine when and which door can be accessed. Access rules can be added directly in Surveillance Station with its intuitive user interface. Go to **Access Rule** tab and then click **Add**.

		Add Access Rule	×	
Acces:	Information			
Add	Name:	Office Time		
	Description:	From Mon. to Fri.		
		Next	Cancel	(s) Q

After filling up the basic information of the access rule **Next**. The configuration in Door page will decide which door to be applied to this access rule. For example, if the access rule is set as accessible on holidays, then it is not suitable for the doors which should be accessible only on workdays. Select the doors to apply this access rule, then click **Next**.

	Add Access Rule	×
Door		
	≡↓ - Ø Search	
Door	🗹 A	pply
Door	✓	

The next two steps are related to the configuration of time which the doors selected on the previous step can be accessed. Recurrence provides a setting mode based on week cycle. In the sample screenshot below, you can see the general workdays (from Monday through Friday) are selected, and Saturday and Sunday are removed. If there is a requirement of valid duration, it can also be configured here. Otherwise, this access rule would be valid forever after created. After the configuration is complete, click **Next**.

	Add Access Rule	×	D X
Recurre	ce		_
Valid from	2016/11/25		
Valid unt	2016/11/26		-
Active	Delete		
▲ 0 1 Sup	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23		
Mon			
Wed			
Thu			
Fri Sat			
Previous	Next	Cancel	(s) Q

Moreover, you can use the One Time settings to set up exceptions from the Recurrence schedule configuration. For example, if there is an event held in company on this weekend, the date can be added into **Addition Schedule** to allow the door to be accessed. In contrast, if there is an incentive tour held on this Monday, the date can be added to **Subtraction Schedule** to prohibit the door to be accessed.

✓	Enable schedule(s)									
	2016/08/20		00:00	-	~	2016/08/21	 23:59	-	+	
^	Subtraction Sch	edule								
•	Enable schedule(s)									
	2016/08/22		00:00	-	~	2016/08/26	 00:00	-		
	2016/12/26		00:00	-	~	2016/12/30	 00:00	-	+	

Surveillance Station provides multiple configurations for One Time schedule. It can be easily added or removed with the "+" or "-" buttons on the right hand side. Then click **Finish** to complete the creation of Access Rule.

Log Center

Log Center integrates all the event logs including the manual lock / unlock, cardholder block and all relevant events generated by AXIS A1001.



This tab provides different categories such as **Date**, **Status**, and **Controllers** so that administrators can easily find out the events that they are looking for. If an event is related to a door which is paired with a certain camera, click on the log icon to playback the recordings from the paired camera. A filter is also available for advanced search with **Source**, **Door**, **Status**, **Time interval**, and **Keywords**. The number of logs stored on AXIS A1001 can be up to 30,000, and Surveillance Station can store 60,000 logs for administrators.

Logs can be cleared and downloaded by clicking the buttons on the toolbar.

Advanced

In the **Advanced** tab, events are separated into two different columns, which are **Log Event** and **Log Alarm**.

	Axis Door Controller		P — 🗖
Access Controllers Ca	rdholders Access Rule Log Center Advanced		
Save Refresh			
Avic A1001	Event	🗹 Log Event	Log Alarm
AXI3 A1001	∧ Access Control		
	Access Granted		
	Access Taken	\checkmark	
	Access Not Taken	\checkmark	
	Access Denied	\checkmark	
	Access Control Duress	\checkmark	
	∧ Access Point		
	Access Point Enabled		
	∧ Configuration Change		
	Area Changed	✓	
	Area Removed	\checkmark	
	Door Changed	\checkmark	

Some of the events are locked to be **Log Event** because these events are greatly important in Surveillance Station, so they need to be logged. However, administrators can choose to enable or disable a certain event to be an event log. If administrators wish to take a certain event as a log alarm and mark them in the Log Center, check the **Log Alarm** for a certain event.

Those events that are checked with **Log Alarm** will be marked as alarms when they occurred.

Use Synology Door Monitor with AXIS A1001

There are two different ways to implement the door monitor in Surveillance Station with AXIS A1001. To have a quick preview of the door monitor, click on the door icon right after the configuration of AXIS Door Controllers.

Access Controllers	Cardholde	Axis Door Controller rs Access Rule Log Center Advanced	2 — C X	
Add Delete	Edit Enal	ble - Privilege	Preview - Door	7 — 🗖 X
All Status	1	Axis A1001	A A ICONT TO	
Normal	1	Model A1001		- 1
Discourse	0	MAC address 00:40:8C:EC		
Disconnected	U	Door		
Disabled	0	Door		
Others	0	Paired camera: Camera_1		
				A E
			ALL IS ALL ALL ALL	
				- A a

Door Preview

In the door previewer, administrators can check the access logs and their correspondent video sources. The access log tray can be expanded with more detailed information.



Desktop Shortcuts

Thanks to the desktop design in Surveillance Station 7, door units can be created as shortcuts on the desktop for easier management.



To create the shortcuts on the desktop, either right click on the door unit and select **Create desktop shortcut**, or drag and drop the items onto the desktop directly. To open up the Axis Door Controller application and focus on the specified controller at the same time, simply click the shortcuts on the desktop.

Door Viewer on Live View

Every time a door is created, a 1-channel layout will be created automatically. This layout contains only the door unit so that administrators can easily change the layout to check the access status and its paired video source.

However, if administrators wish to check the door status within Live View, a door unit can be dragged and dropped into a separated Live View layout. Note that if a door unit is put into a Live View layout, it will occupy at least one quarter of the whole layout and Surveillance Station will merge the cells automatically.

	Live Vie	w Layout Management		∎ ×
+ - =+ -	Name: My La	yout	Set as my default	
auto	E-Map: [None]	Fixed aspect ratio	
My Layout		16 2	5 36 49 64 🖬 🛤	
	Local Host			
	 " Camera_1 " Hunt - HLC-79 " Vivotek - FD81 " Vivotek - P271 " Vivotek - SD83 Camera Group E-Map Door 	KQ 35H-PIR 31 162	♥ 1 item(s) selected	
	Door	Interval (sec.)	: 10 🔻 Customize Pre	eview
			Save	leset

This is to ensure the readability of the door status so that the size of the embedded door viewer will not be too small to read.

Door Viewer Operations

When checking on the door viewer, there are various operations that can be controlled by the administrators and users with permission.



Lock: to permanently lock the door.

Unlock: to permanently unlock the door.

Access: to grant a temporary and anonymous access within the pre-configured access time.

Log: to open up another window for viewing full event logs.

There will be a status indicator on the upper right corner, with five different statuses. Administrators can check on the door statuses with different colors of indicators. If more details are needed, simply hover the indicator, and then a tooltip will show up.

Door Units on E-map

Door units can be seen on the e-map as well.



Surveillance Station offers three different statuses so that administrators can check on the statuses directly on the e-map. To have a direct preview of a certain door, simply click on the door icon on the e-map then the door preview will pop-out for further checking.

More Applications

AXIS Door Controller in Surveillance Station can be implemented with other useful applications such as **Action Rule** and **Notifications**.

7												Acti	ion	Rule	е											1	2	-		×
List	History		Ad	van	ced																									
Add	Delete		Edit	t	E	nat	ole -	•																						
· <u>·</u>	Door A Trigger	ları ed	m																											^
	Event								Т	he	alar	m of	f doo	or (C	oor] on	sei	rver	r (L	ocal	H	ost] wa	as t	rigg	ere	ed .			
	Action								F	lay	aud	lio p	atte	ern (Dog	bar	k] f	rom	i ca	mei	ra	[Ca	me	ra_:	1] 0	n s	erv	er		
									[Loc	al H	ost]	[1]	time	es er	very	[10][9	Sec	ond	(s)].								
	Action	typ	е						I	nte	rrup	tible	2																	
	Schedu	ıle																												
		0											11	12	13	14	15	16	5 1	7 1	8	19	20	21	22	2 2	3			
	Sun																													
	Mon																													
	Tue																													
	Wed																													
	Thu																													
	Fri																													
	Sat																													
																											11	item	(s)	G

Action Rule

Action Rule is a dedicated application for configuring an action corresponding to a triggered or scheduled event. By setting up an Action Rule properly, Surveillance Station will execute certain actions automatically. In **Action Rule**, door alarm trigger can be treated as an event. With this event triggered, Surveillance Station may carry out a certain action in response to that event. Take the action rule below as an example.

- Event: The alarm of door [Door] on server [Local host] was triggered.
- Action: Instruct camera [Camera_Door] on server [Local host] to move to preset position [door1] hold for [1] [minute(s)], and move to return position [Home].

This means whenever a door alarm is detected, either it is an open too long alarm or forced open alarm, the paired PTZ camera will go to the defined preset position to correspond to the event.

Notification

Surveillance Station supports push notifications via **SMS**, **E-mail**, and Synology mobile application **DS cam**.

S 🗃	Notification			2 - B X
Email SMS Push Service	e Settings Advanced			
Edit Edit Schedule - Get	Command Save		All	•
Surveillance Station	Event	🖌 Email	SMS	Mobile
Surveillance Station	✓ System			
DSM	✓ Camera			
	\checkmark I/O Module			
	✓ VisualStation			
	✓ Server			
	△ Access Control			
	Door connection lost	\checkmark		
	Door connection resumed			
	Access granted			
	Access denied			
	Door alarm triggered			
	Door tampering detected			
	Controller alarm logged			
	Controller case opened			
	✓ External Device			
				47 item(s)

Notification supports different messages from the Access Control, and the messages sent out to the administrators can be customized. Once an event is detected, Surveillance Station will notify the administrator with the selected methods.

Before Upgrading to Surveillance Station 7.2.2 and Above

If AXIS A1001 was installed in the older version of Surveillance Station, there are some information you need to know before upgrading Surveillance Station to version 7.2.2 and above.

End of Support for Peer Connection

To enhance the performance of AXIS Door Controller A1001, Surveillance Station 7.2.2 redesigned the pairing mechanism. Therefore, the old mechanism of AXIS Peer Connection is no longer supported. If the controller already installed was in peer connection mode, please activate standalone mode first for the controller to work normally in Surveillance Station 7.2.2 and above. If there is no idea whether the controller is in standalone mode, you can check out the information in AXIS Entry Manager.

ap i manage nothon boor bond	ollers in System			
System status of this controller Status This controller is in standalone mode. Deactivate standalone mode		Informatio Note: When a configuration if the added cont identification ty deleted and over	n controller is added to one has been done. E roller (Users, groups, pes for doors, and sc inwritten by the system	the system, it will keep its hardware but all access management settings or user-defined schedules, schedules for hedule-activated door states) will be m's access management settings.
Network door controllers in syst	em troller to system by IP or MAC address	Refresh list of	controllers	
Network door controllers in syst Add controllers to system from list Add con Name	em troller to system by IP or MAC address	Refresh list of MAC address	controllers Status	

Note: After you activate the standalone mode, the access rules related to the controller will need to be set up again.

Cardholder in Controllers with the Same Name

In the old version of Surveillance Station, the data of cardholders belong to each controller itself when the controllers are in standalone mode. However, in Surveillance Station 7.2.2 and above, cardholders are unified controlled by the Surveillance Station. Therefore, if there are multiple standalone controllers installed in the old version of Surveillance Station, to make sure each cardholder can be kept in Surveillance Station after upgrading to version 7.2.2, the system would automatically add suffix to name of the second cardholder which has the same name as another cardholder. For example, if controller A and B has cardholder John at the same time, there would be cardholder John and John_1 in the system after upgrading.

This behavior does not affect the access of the existing cardholder. There are some suggested methods depended on different situations can sync the cardholder if required. In the above example, if John and John_1 are not the same person, please modify the name of cardholder through the interface of Surveillance Station directly. If John and John_1 are the same person, please add John into the groups John_1 joined on controller B through AXIS Entry Manager, then delete John_1 through the interface of Surveillance Station.

Surveillance Station and AXIS Entry Manager Compatibility

We can modify users, schedules, groups, and doors via four modifiable settings in the AEM (AXIS Entry Manager). In all four settings, only the door hardware configuration and user information will be synchronized with Surveillance Station. For some settings, the configuration actions are performed one-way from Surveillance Station to A1001 so some of the original settings in A1001 will be overwritten by our system.

User and Cardholder

User information on A1001, will be synchronized with Surveillance Station Cardholder information when adding a new A1001 controller to Surveillance Station. Once the adding process is complete, the Cardholder information created in Surveillance Station will be synchronized back to all A1001 controllers to ensure Cardholder information in all controllers remains consistent. Unlike A1001, duplicate names are not allowed in Surveillance Station. During the process of retrieving User information from A1001, users with duplicate names and user information will be identified as the same person. Moreover, if there are more than one different user using the same name in A1001, an "_x" would be added after the name to separate them apart. Users can activate the synchronization process on their own via a button in Surveillance Station 8.0 and above.



User names will be modified if they share identical names.

Identification type and door authentication

The door identification settings in A1001 will be synchronized with the door authentication settings in Surveillance Station after adding A1001. Once a controller is added, synchronization process will be activated every 24 hours. The hardware configuration (REX or Reader) will be retrieved and the door authentication settings in Surveillance Station will be synchronized back to A1001 during the synchronization process.

Group and Access Rule

The Group on A1001, which is specified as Access Rule in Surveillance Station, will not be synchronized with Surveillance Station since Surveillance Station has not fully support schedule settings yet. The schedule settings can not be displayed properly on our user interface though the schedule settings have been retrieved.

Therefore, even if groups have been set and are working in A1001, none of them will be shown in Surveillance Station. If you would like to establish an access control system with Surveillance Station, we strongly advise you to clear the Groups in A1001 first to avoid asynchronization. Also, we recommend not modifying the Group in A1001 on the web-based interface after the creation of Access Rule in Surveillance Station.

Schedules

Access schedules cannot be synchronized with Surveillance Station as we do not provide the interface for displaying and editing access schedules directly. However, access schedules can still be created in A1001 when editing Access Rules and the authentication schedules of doors.

Synchronization

If the settings of A1001 were modified and you want to ensure system consistency, you can activate the synchronization process mentioned above by disabling and enabling the controller.

Adding one controller to more than one Surveillance Station is not recommended. Performing simultaneous synchronization with different Surveillance Stations may cause unexpected behavior on the controller.