

# Niagara 4 Driver for Aktion User Guide

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# Change log

#### 4.8

• Build for 4.8.0.110

#### 4.9

• Build for 4.9.0.164

#### 4.10

• Build for 4.10.0.154



## **Driver Overview**

AKTION driver allows a communication with access control system AKTION using IP based proprietary protocol. The driver enables you to automatically discover project structure and listen events on card readers as well as directly to control doors.

The Tridium Niagara driver allows to connect to Aktion ACS via HTTP and UDP. This way the Aktion System could be upgraded with Niagara graphics or integrated with a variety of BMS protocols supported by Niagara.

This driver can be used in combination with OTIS driver for elevator dispatching management.

#### Key features:

- Connection via IP (proprietary protocol)
- Automatic discovering

#### Supported devices:

Aktion Access System

#### **Prerequisites for integration**

- 1. Correctly installed modules with the driver, see chapter "Installation" for more details.
- 2. Active license and certificate for the driver on the target platform, see chapter "Licensing" for more details.
- 3. JACE 8000 or PC with Tridium Supervisor 4 must be connected to internet.

#### Installation

Source files are available for download from SAFECONTROL license web (<u>https://license.safecontrol.cz</u>). Extract the **aktion.zip** archive and copy all included \*.jar files to your Niagara modules directory, which is typically **C:\Niagara\Niagara-4.x.xx.xx\modules**.

For correct behaviour it is necessary to install \*.jar files on the client platform (Workbench PC) as well as on the target platform (JACE8000 or Supervisor).

Note: Close the Niagara Workbench after inserting all the modules in the folder. Next time you start the Niagara Workbench the driver will be loaded in Niagara Workbench and will be immediately available for use.



### Licensing

Demo license is limited up to 90 days and purchased licenses are not time limited.

You can ask for license via SAFECONTROL license web (<u>https://license.safecontrol.cz</u>) or by sending e-mail to <u>sales@safecontrol.cz</u>. Purchased license will be generated via Niagara-Central license web where it will be available for download together with safecontrol.certificate file. You can also download license online in Niagara Workbench from license manager view, see picture bellow:

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Create	Import Export View Delete	Import View Delete

Figure 1: License import via License manager

#### Order codes

- DR-SC-AKTION-16 N4 Driver for Aktion access control system, max 16 readers
- DR-SC-AKTION-32
- N4 Driver for Aktion access control system, max 32 readers
  - **DR-SC-AKTION-64** N4 Driver for Aktion access control system, max **64** readers
  - DR-SC-AKTION-128 N4 Driver for Aktion access control system, max 128 readers

#### Basic config guide

- 1. Connect JACE 8000 or PC with Tridium Supervisor 4 to the internet.
- 2. Add new AktionNetwork to your Drivers node.
- 3. Correctly configure newly added AktionNetwork
- 4. Discover card readers.

For more in-depth help read following chapters.



## Setup guide

#### Connection

Connect your JACE 8000 or PC with Tridium Supervisor 4 to the network with Aktion server. Add new AktionNetwork under Drivers. Correctly fill address HTTP and user name and APIkey.

* Nav	Property Sheet	Property Sheet				
4L O X ONv Network	AktionNetwork (Aktion Network)					
	Status	(ok)				
In My Host:	Enabled	🔵 true				
My File System	Fault Cause					
My Modules	Health	Ok [13-Jan-21 1:17 PM CET]				
My Tools	Alarm Source Info	Alarm Source Info				
■ Platform	Monitor	Ping Monitor				
👻 🎽 Station	X Tuning Policies	Tuning Policy Map				
🐥 Alarm	Poll Scheduler	N Poll Scheduler				
👻 🖨 Config	👻 🧬 Http Config	Aktion Http Comm Config				
Services	Fault Cause					
Drivers	Address 172.20.8.126:80					
AktionNetwork	Connection Timeout 0 ms					
	User Name APInadstavba					
	api Key					
	👻 🖧 Udp Config	local:12345				
	📔 Fault Cause					
	Address local:12345					

Figure 2: AktionNetwork under Drivers node

#### **Discovering sensors**

Open AktionDeviceManager and click Discover button. Discovered sensors should appear in Discovered table. Drag all wanted sensors to station database.

Aktion Discovery						> =
Discovered						105 objects
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Database						871 object
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Figure 3: Discovered sensors



## Properties of Sensors and Actions on them

Every sensor has following properties:

Struktura - Broumov - B_1.NP	Chodba (Aktion Device)
Status	{ok}
🗎 Enabled	🔵 true 🤝
📔 Fault Cause	
🕨 🖵 Health	Ok [26-May-21 8:26 AM CEST]
Poll Frequency	Normal
Hw Struct Node Path	Struktura - Broumov - B_1.NP Chodba
Title	B_1.NP Chodba
Description	
🖉 🔕 Alarm	Aktion Alarm Device Ext
Event History	Aktion Event History
Last Event	0.00
Last Event Action Name	
Last Event Description	
Last Event Time Stamp	
Last User	
Last Card Id	
Upoor State	Closed
Last Direct Control	Unknown Command
Door Mode	
Last Direction	
Lift Access	
In2	- false
Communication O K	false
Communication Time	
A S Communication O K	false
A S Communication Time	
D M Communication O K	false
D M Communication Time	
Partial Actualization O K	false
Partial Actualization Time	
Full Actualization O K	🔴 false
Full Actualization Time	
Unauthorised Opening	🛑 false
Timeout	false
Timeout Alarm	false
Door Opened	false
	- false
Button Pressed	Taise
Tamper	talse
Relay On	false
📔 Relay Manual Control	🔴 false
Input Active	🔴 false

Figure 4: Example of properties on sensors



Every Sensor has defined these actions them:

Set Direct Control – Definition of the action to be done on relay. The meaning is:

- 1 = unblock one shot (for sensors and "switch on time" configured relay) / switch (for "switching mode" configured relay),
- 2 = unblock permanently ("switch on" permanently for relay),
- 3 = block (supported hw units with sensors, EXP, EXP2, EXT),
- 4 = standard mode on (supported hw units with sensors, EXP, EXP2, EXT).



Figure 5: Set direct control