

# Nedap security AeosServer

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## 1 Document Versions

Version	Date	Name	Change
<b>1.0</b>	2019-01-30	JA	Document Created.

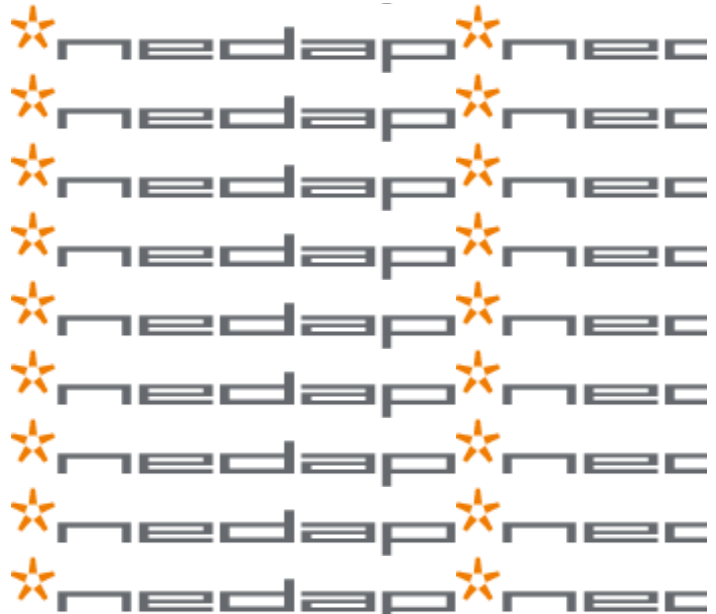
## 2 Referenced Documents

Document	Version	Description
<b>Driver Project Requirements (DDK-PR)</b>	1.0	The Nedap security AeosServer driver must conform to all the requirements detailed in this document.
<b>Driver Connection and Online States Requirements (DDK-DC)</b>	1.0	The Nedap security AeosServer driver must conform to all requirements in this document detailed in the section: <a href="#">Device Connection and Online States</a>



### 3 Manufacturer

**Name** Nedap security



**Website** <http://www.nedapsecurity.com>

**Description** Nedap designs solutions to fit customers' needs rather than offering predefined systems. That's why our product development is determined not by technology, but by the way it's used every day. This customer-focused approach lead us to develop the first software-based security management platform – AEOS.

## 4 IPSecurityCenter Versions

The driver must be compatible with the following IPSecurityCenter versions:

IPSecurityCenter Version	Supported
5.x	<input checked="" type="checkbox"/>

## 5 Operating Systems

### 5.1 Client Side Functionality

Operating Systems	Supported
Windows 7 64 bit	<input checked="" type="checkbox"/>

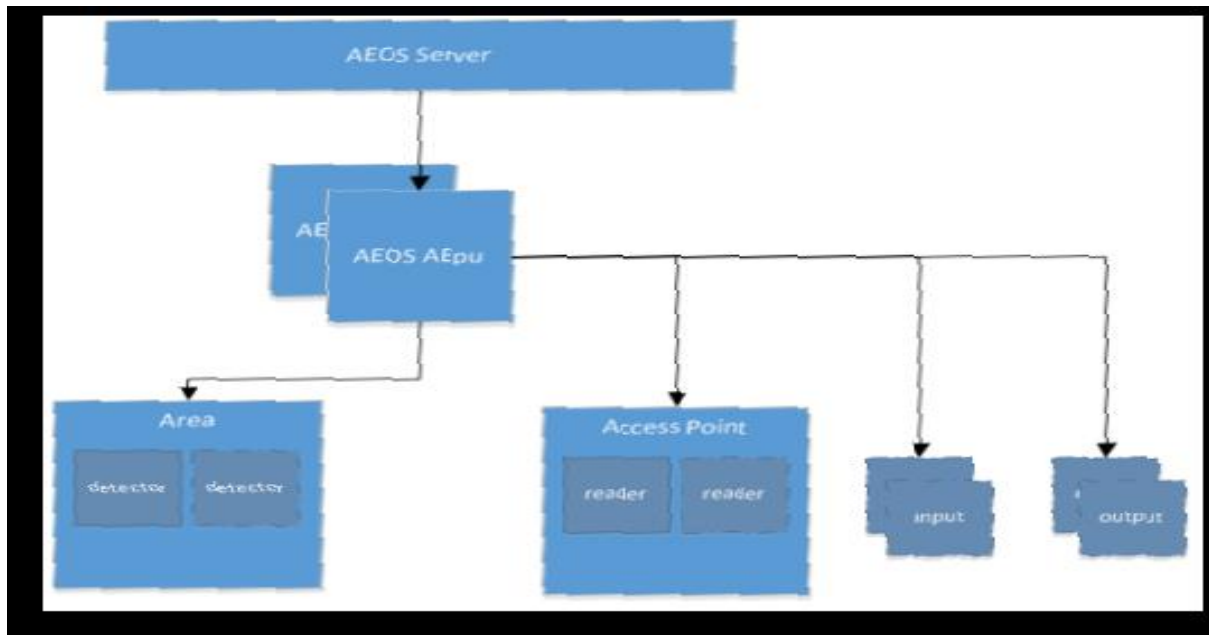
### 5.2 Server Side Functionality

Operating Systems	Supported
Windows Server 2008 R2	<input checked="" type="checkbox"/>
Windows Server 2012	<input checked="" type="checkbox"/>

## 6 Models / Firmware Versions

Model	Versions	SDK
<b>AEOS version 3.1.5</b>	AEOS version 3.1.5	AEOS Socket Interface 2.38 \ AEOS Webservice Feb 2016

## 7 Hardware Configurations



## 8 Driver Package

The driver package is named: `cnl_ipsc_nedapsecurity_aeosserver_[BUILD-VERSION].ipsc`



## 9 Driver Features

### 9.1 AeosServer

#### 9.1.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	None



### **9.1.2 Video**

This device does not support video.

### 9.1.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

Name	Type	Description	Default Value & Ranges
<b>Image Store</b>	string	Location to store badge images	Default: Min: Max:
<b>Socket Interface Port</b>	int	AEOS Socket Interface port number.	Default: 8035 Min: 0 Max: 65535
<b>Child Devices State Update Delay</b>	int	Time delay in milliseconds after the Server device goes Online to ensure the child devices set to a right state.	Default: 2000 Min: Max:
<b>Child Devices Custom State Update Delay</b>	int	Time delay in milliseconds before updating the child devices current State.	Default: 1000 Min: Max:
<b>Heartbeat Timeout</b>	int	AEOS server heartbeat timeout interval in seconds.	Default: 120 Min: 60 Max: 65536
<b>IP</b>	string	AEOS server IP address or hostname.	Default: Min: Max:
<b>Web Service Port</b>	int	AEOS Web Service port number.	Default: 8443 Min: 0 Max: 65535
<b>Send Command Timeout</b>	int	Maximum time in milliseconds to receive a server response after sending a command.	Default: 5000 Min: 1000 Max:

## 9.1.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

### 9.1.4.1 Get Badge Info

Retrieves badge details for a specific badge

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Badge Number</b>	string	Unique badge number.	Default: Min: Max:
<b>Badge Type Identifier</b>	long	Badge Type Identifier.	Default: Min: Max:

### 9.1.4.2 Get Carrier Info

Retrieves information about a person

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Last Name</b>	string	Last name of the person. Passing a blank name will return all the carriers in the system.	Default: Min: Max:

### 9.1.4.3 Get Carrier Image

Retrieves the images attached to a carrier.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Id of the carrier whose image is to be retrieved.	Default: Min: Max:

#### 9.1.4.4 Add Template To Carrier

Add template to carrier.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique carrier Id	Default: Min: Max:
<b>Date From</b>	DateTime	Start Date of the Template.	Default: Min: Max:
<b>Date Until</b>	DateTime	End date of the Template.	Default: Min: Max:
<b>Enabled</b>	bool	Determines whether the Template is enabled.	Default: Min: Max:
<b>Template Id</b>	long	Template id defined in the system.	Default: Min: Max:

#### 9.1.4.5 Add Entrance Group To Carrier

Add entrance group to carrier

Returns bool.

#### Performance

The method must complete within 2 seconds.

### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique carrier ID.	Default: Min: Max:
<b>Date From</b>	DateTime	Start Date of the Entrance group.	Default: Min: Max:
<b>Date Until</b>	DateTime	End date of the Entrance group.	Default: Min: Max:
<b>Enabled</b>	bool	Determines whether the Entrance Group is enabled.	Default: Min: Max:
<b>Entrance Group Id</b>	long	Entrance Group ID defined in the system.	Default: Min: Max:
<b>Day Time Schedule Id</b>	long	day\time schedule defined in the system. Id	Default: Min: Max:

#### 9.1.4.6 *Get Carrier Authorizations*

Fires events providing current carrier authorizations: templates, entrances or entrance groups depending on the Authorization type provided.

Returns bool.

### Performance

The method must complete within 2 seconds.

### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique carrier Id.	Default: Min: Max:

<b>Authorization Type</b>	AuthorizationType	Template, Entrance or Entrance group	Default: Min: Max:
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#### 9.1.4.7 *Enable Authorization for Carrier*

Enable or disable either template, entrance or entrance group authorization for a carrier.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
<b>Authorization Type</b>	AuthorizationType	Template, Entrance or Entrance group	Default: Min: Max:
<b>Authorization Id</b>	long	Unique Id for the authorization.	Default: Min: Max:
<b>Carrier Id</b>	long	Unique carrier Id.	Default: Min: Max:
<b>Enable</b>	bool	Enable or disable the authorization.	Default: Min: Max:

#### 9.1.4.8 *Get Templates*

Raises Template Information event for each template in the system.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
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#### 9.1.4.9 Create Visit

Creates a visit for carrier using start and end date, template and contact person.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Visitor Id</b>	long	Unique visitor Id.	Default: Min: Max:
<b>BeginVisit</b>	DateTime	Start time of the visit.	Default: Min: Max:
<b>End Visit</b>	DateTime	End time of the visit.	Default: Min: Max:
<b>ContactPersonId</b>	long	Id of the contact Person.	Default: Min: Max:
<b>Template Enabled</b>	bool	Enable the template when creating a visit.	Default: Min: Max:
<b>Template Id</b>	long	Unique Template ID	Default: Min: Max:
<b>Entrance Id</b>	long	Unique Entrance Id	Default: Min: Max:
<b>Entrance Group Id</b>	long	Unique Entrance group ID.	Default: Min: Max:

#### 9.1.4.10 Remove Carrier

Removes a carrier.

Returns bool.

## Performance

The method must complete within 2 seconds.

## Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique carrier Id.	Default: Min: Max:
<b>Carrier Category</b>	CarrierType	Type of the carrier.	Default: Min: Max:

### 9.1.4.11 Create Carrier

Creates a carrier of specific type (e.g. visitor) and assigns them to the specified template and schedule.

Returns bool.

## Performance

The method must complete within 2 seconds.

## Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Category</b>	CarrierType	Type of the Carrier.	Default: Min: Max:
<b>First Name</b>	string	First name of the carrier item.	Default: Min: Max:
<b>Last Name</b>	string	Last Name of the carrier item.	Default: Min: Max:
<b>Title</b>	string	Title of the carrier item.	Default: Min: Max:
<b>PhoneNumber</b>	string	Carrier phone number.	Default: Min: Max:



	string	Email	Default: Carrier Email address. Min: Max:
	string	Gender	Default: Carrier Gender. Min: Max:
<b>Arrival Date Time</b>	DateTime	Date of the arrival.	Default: Min: Max:
	long	ContactId	Default: Contact person Id Min: Max:

#### 9.1.4.12 Add Entrance To Carrier

Add entrance to carrier

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique carrier ID.	Default: Min: Max:
<b>Date From</b>	DateTime	Start Date of the Entrance group.	Default: Min: Max:
<b>Date Until</b>	DateTime	End date of the Entrance group.	Default: Min: Max:
<b>Enabled</b>	bool	Determines whether the Entrance is enabled.	Default: Min: Max:
<b>Entrance Id</b>	long	Entrance ID defined in the system	Default: Min: Max:

<b>Day Time Schedule Id</b>	long	Day\time schedule defined in the system.	Default: Min: Max:
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#### 9.1.4.13 Remove Authorization From Carrier

Removes a template, entrance or entrance group from carrier.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique Carrier Id	Default: Min: Max:
<b>Authorization Type</b>	AuthorizationType	Template, Entrance or Entrance group	Default: Min: Max:
<b>Authorization Id</b>	long	Unique Id for the authorization.	Default: Min: Max:

#### 9.1.4.14 Get Badge Identifier Types

Get badge ID types available. Each badge ID type will raise Badge Identifier Type event.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
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#### 9.1.4.15 Get Carrier Info by Id

Retrieves information about a person

Returns bool.

## Performance

The method must complete within 2 seconds.

## Parameters

Name	Type	Description	Default Value and Ranges
ID	long	Carrier Id.	Default: 0 Min: Max:

### 9.1.4.16 *Get Day Time Schedules*

Raises an event for each schedule in the system

Returns bool.

## Performance

The method must complete within 2 seconds.

## Parameters

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

### 9.1.4.17 *Get Entrance Groups*

Raises Entrance Group Information event for each entrance group in the system.

Returns bool.

## Performance

The method must complete within 2 seconds.

## Parameters

Name	Type	Description	Default Value and Ranges
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### 9.1.4.18 *Get Entrances*

Raises Entrance Information event for each entrance in the system.

Returns bool.

## Performance

The method must complete within 2 seconds.

## Parameters

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

#### 9.1.4.19 *Enable Access During Holidays For Carrier*

Enable or disable access during holidays for a carrier (all Authorization types are affected).

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique Carrier Id	Default: Min: Max:
<b>Enable</b>	bool	Enable or disable access.	Default: Min: Max:

#### 9.1.4.20 *Block Carrier*

Blocks a carrier.

Returns bool.

#### Performance

The method must complete within 2 seconds.

#### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique carrier Id.	Default: Min: Max:
<b>Block Reason Id</b>	long	Block reason identifier.	Default: Min: Max:

#### 9.1.4.21 *Unblock Carrier*

Unblocks a carrier.

Returns bool.

### Performance

The method must complete within 2 seconds.

### Parameters

Name	Type	Description	Default Value and Ranges
<b>Carrier Id</b>	long	Unique carrier Id.	Default: Min: Max:

#### 9.1.4.22 Block Badge

Blocks a badge.

Returns bool.

### Performance

The method must complete within 2 seconds.

### Parameters

Name	Type	Description	Default Value and Ranges
<b>Badge Number</b>	string	Unique badge number.	Default: Min: Max:
<b>Badge Type Identifier</b>	long	Badge Type Identifier.	Default: Min: Max:
<b>Block Reason Id</b>	long	Block reason identifier.	Default: Min: Max:

#### 9.1.4.23 Unblock Badge

Unblocks a badge.

Returns bool.

### Performance

The method must complete within 2 seconds.

### Parameters

Name	Type	Description	Default Value and Ranges
<b>Badge Number</b>	string	Unique badge number.	Default: Min: Max:
<b>Badge Type Identifier</b>	long	Badge Type Identifier.	Default: Min: Max:

#### 9.1.4.24 *Get Block Reasons*

Get block reasons to be used when blocking carrier or badge . Each reason will raise Block Reason event.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
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### 9.1.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

#### 9.1.5.1 Unknown Event

Event is received that is not known by AEOS

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
Raw	string	Raw

#### 9.1.5.2 Generic

Generic Event

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
Event Type	ErrorCode	Type of the event.
Service Name	string	ServiceName
Additional Info	string	Additional Information about the event like Badge info.

#### 9.1.5.3 Carrier Info

Raised in response to carrier information request

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
ID	long	Carrier ID
Carrier Type	CarrierType	Carrier Type
Last Name	string	Last name
Middle Name	string	Middle name

<b>Title</b>	string	Title
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#### 9.1.5.4 *Carrier Template Info*

Raised in response to Get Carrier Authorizations request

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
<b>Authorization Id</b>	long	Unique Id given for the authorization.
<b>Carrier ID</b>	long	ID of the carrier
<b>Template Id</b>	long	Unique template Id of the carrier.
<b>DateFrom</b>	DateTime	From date authorization is valid.
<b>Date Until</b>	DateTime	Last valid date for this authorization.
<b>Enabled</b>	bool	Determines whether this authorization is enabled
<b>Access During Holidays</b>	bool	Specify whether carrier is authorized during holidays.

#### 9.1.5.5 *Carrier Image*

Returns a carrier image as response to GetCarrierImages method.

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
<b>Image URL</b>	string	URL to image
<b>Carrier ID</b>	long	ID of the carrier

#### 9.1.5.6 *Carrier Entrance Info*

Raised in response to Get Carrier Authorizations request

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties



Name	Type	Description
<b>Authorization Id</b>	long	Unique Id given for the authorization.
<b>Carrier ID</b>	long	ID of the carrier
<b>Entrance ID</b>	long	ID of the Entrance
<b>DateFrom</b>	DateTime	From date authorization is valid.
<b>Date Until</b>	DateTime	Last valid date for this authorization.
<b>Day Time Schedule Id</b>	long	Day\time schedule defined in the system.
<b>Enabled</b>	bool	Determines whether this authorization is enabled
<b>Access During Holidays</b>	bool	Specify whether this authorization is valid during holidays.

#### 9.1.5.7 *Carrier Entrance Group Info*

Raised in response to Get Carrier Authorizations request

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>Authorization Id</b>	long	Unique Id given for the authorization.
<b>Carrier ID</b>	long	ID of the carrier
<b>Entrance Group ID</b>	long	ID of the Entrance Group
<b>DateFrom</b>	DateTime	From date authorization is valid.
<b>Date Until</b>	DateTime	Last valid date for this authorization.
<b>Day Time Schedule Id</b>	long	Day\time schedule defined in the system.
<b>Enabled</b>	bool	Determines whether this authorization is enabled.
<b>Access During Holidays</b>	bool	Specify whether this authorization is valid during holidays.

#### 9.1.5.8 *Badge Rejected*

Badge rejected by a non-AE pack device

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Badge ID	string	ID of the Badge
Reason	string	Badge rejected by a non-AE pack device

#### 9.1.5.9 Guard Missed Demarcation Point

Indicates that the guard has arrived at a demarcation point which differs from the expected demarcation point.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Tour Name	string	Name of Guard Tour
Expected Point Name	string	Check point name missed out.
Actual Point Name	string	Check point arrived.
Carrier Last Name	string	Carrier last name.
Carrier Initials	string	Carrier initials.
CarrierMiddle Name	string	Carrier middle name.
Carrier Title	string	Carrier title.

#### 9.1.5.10 Badge Info

Raised in response to Badge information request

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Badge Number	string	BadgeNumber
Identifier Type Id	long	Identifier type
Carrier Id	long	Carrier associated to the badge

<b>Carrier Type</b>	CarrierType	Carrier Type
<b>Unit</b>	long	Unit
<b>Status</b>	CarrierState	Status if it is a badge.

#### 9.1.5.11 *Guard Tour State Changed*

Raised when the state of a guard tour changes

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
<b>Tour Name</b>	string	Name of Guard Tour
<b>State</b>	GuardTourStates	State of the guard tour
<b>Carrier Last Name</b>	string	Carrier last name.
<b>Carrier Initials</b>	string	Carrier initials.
<b>CarrierMiddle Name</b>	string	Carrier middle name.
<b>Carrier Title</b>	string	Carrier title.

#### 9.1.5.12 *Guard Tour Too Fast or Slow*

Raised when a guard arrives at a point faster or slower than expected

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
<b>Tour Name</b>	string	Name of Guard Tour
<b>State</b>	GuardFastOrSlowState	State of the guard tour
<b>Point Name</b>	string	Check point name.
<b>Carrier Last Name</b>	string	Carrier last name.
<b>Carrier Initials</b>	string	Carrier initials.
<b>CarrierMiddle Name</b>	string	Carrier middle name.
<b>Carrier Title</b>	string	Carrier title.

### 9.1.5.13 Total Guard Tour Too Fast or Slow

Indicates that the total tour has been faster or slower than expected

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Tour Name	string	Name of Guard Tour
State	GuardFastOrSlowState	State of the guard tour
Carrier Last Name	string	Carrier last name.
Carrier Initials	string	Carrier initials.
CarrierMiddle Name	string	Carrier middle name.
Carrier Title	string	Carrier title.

### 9.1.5.14 Template Information

Raised when templates have been requested by Get Templates method.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
ID	long	ID of the Template.
Name	string	Name of the template

### 9.1.5.15 Device Disconnected

Device has been disconnected from the Aepu.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Service Key	string	Service key of the device which got disconnected.

#### 9.1.5.16 Badge Identifier Type

Badge Identifier Type available. Raised as a result of Get Badge Identifier Types method.

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
ID	long	Identifier type ID.
Name	string	Identifier Type name
Identification Type	string	Type of the identification.

#### 9.1.5.17 Entrance Information

Raised when entrances have been requested by Get Entrances method.

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
ID	long	ID of the entrance.
Name	string	Name of the entrance

#### 9.1.5.18 Entrance Group Information

Raised when entrance groups have been requested by Get Entrance Groups method.

##### Performance

The driver must be able to handle 4000 events per hour.

##### Event Properties

Name	Type	Description
ID	long	ID of the entrance group.
Name	string	Name of the entrance group

#### 9.1.5.19 Day Time Schedule Details

Raised when schedules have been requested.

##### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>ID</b>	long	ID of the day\time schedule defined in the system.
<b>Name</b>	string	Name of the day\time schedule

#### 9.1.5.20 Information

Information Event

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>Text</b>	string	Information text.

#### 9.1.5.21 Block Reason

Raises as the response for GetBlockReasons method.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>ID</b>	long	ID of the Template.
<b>Description</b>	string	Description of the reason.

#### 9.1.5.22 Block Reason

Raises as the response for GetBlockReasons method.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>ID</b>	long	ID of the Template.

<b>Description</b>	string	Description of the reason.
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## 9.2 AeosAccessPoint

### 9.2.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	None



## 9.2.2 Video

This device does not support video.

### 9.2.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

Name	Type	Description	Default Value & Ranges
<b>Access Point Type</b>	string	Type of Access Point .	Default: Min: Max:

## 9.2.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

### 9.2.4.1 *Grant Access In*

Unlocks door in the in-direction for doors with two readers

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Type	Default Value and Ranges
------	------	-------------	------	--------------------------

### 9.2.4.2 *Grant Access Out*

Unlocks door in out-direction for doors with two readers

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Type	Default Value and Ranges
------	------	-------------	------	--------------------------

### 9.2.4.3 *Set To Normal*

Set Access Point to status 'Normal'

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Type	Default Value and Ranges
------	------	-------------	------	--------------------------

## 9.2.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

### 9.2.5.1 Door Forced

Door has been forced / Direct Door Alarm

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
State	AlarmState	State

### 9.2.5.2 Door Open Too Long

Door Open Too Long

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
State	AlarmState	State

### 9.2.5.3 Lock Supervisor State

Raised when sabotage is detected

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
State	LockSupervisorState	State

### 9.2.5.4 Manual Unlock

Manual unlock starts or stops

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
State	AlarmState	State

#### 9.2.5.5 Access Granted

Authorized badge has been used to access

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Badge Number	string	Unique badge number
Direction	AccessDirection	Direction of the access.
Identifier Type	string	Identifier type.
Carrier Last Name	string	Carrier last name.
Carrier Initials	string	Carrier initials.
Carrier Middle Name	string	Carrier middle name.
Carrier Title	string	Carrier title.
Extra Info	string	Extra information comes in the reserved field.

#### 9.2.5.6 Access Denied

Unauthorized badge has been presented to Access Point

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Badge Number	string	Unique badge number
Direction	AccessDirection	Direction of the access.
Reason	BadgeStatusTypes	Reason for the rejection of the badge.
Verification Alarm	bool	Verification Alarm
Identifier Type	string	Badge Identifier type.
Carrier Last Name	string	Carrier last name.

<b>Carrier Initials</b>	string	Carrier initials.
<b>Carrier Middle Name</b>	string	Carrier middle name.
<b>Carrier Title</b>	string	Carrier title.
<b>Extra Info</b>	string	Extra information comes in the reserved field.

#### 9.2.5.7 *Input Sabotage*

Input Sabotage detected on the Access Point

##### **Performance**

The driver must be able to handle 4000 events per hour.

##### **Event Properties**

Name	Type	Description
<b>State</b>	AlarmState	Open / Shortcut / End

#### 9.2.5.8 *Automatic Unlock State*

Unlock output is been activated by the Automatic Unlock Schedule

##### **Performance**

The driver must be able to handle 4000 events per hour.

##### **Event Properties**

Name	Type	Description
<b>State</b>	AlarmState	Open / Shortcut / End

#### 9.2.5.9 *Emergency Unlock*

Emergency unlock detected

##### **Performance**

The driver must be able to handle 4000 events per hour.

##### **Event Properties**

Name	Type	Description
<b>State</b>	AlarmState	Open / Shortcut / End

#### 9.2.5.10 *Anti-Passback Granted*

APB failed, in case of soft APB Access granted

##### **Performance**

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Badge Number	string	Unique badge number
Direction	AccessDirection	Direction of the access.
Identifier Type	string	Badge Identifier type.
Carrier Last Name	string	Carrier last name.
Carrier Initials	string	Carrier initials.
Carrier Middle Name	string	Carrier middle name.
Carrier Title	string	Carrier title.

#### 9.2.5.11 *Anti-Passback Carrier Reset*

APB level for one person is been by reset from the AEOS server

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Badge Number	string	Unique badge number
Direction	AccessDirection	Direction of the access.
Identifier Type	string	Badge Identifier type.
Carrier Last Name	string	Carrier last name.
Carrier Initials	string	Carrier initials.
Carrier Middle Name	string	Carrier middle name.
Carrier Title	string	Carrier title.

#### 9.2.5.12 *Door Opened*

Door contact input activated at Access Point

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Active	bool	State of the door.

### 9.2.5.13 Door Unlocked

Unlock relay is activated from Access Point

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Active	bool	State of the door.

### 9.2.5.14 Invalid Verification

Verification is invalid by 3rd Party

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
Badge Number	string	Unique badge number
Direction	AccessDirection	Direction of the access.
Identifier Type	string	Badge Identifier type.
Carrier Last Name	string	Carrier last name.
Carrier Initials	string	Carrier initials.
Carrier Middle Name	string	Carrier middle name.
Carrier Title	string	Carrier title.

### 9.2.5.15 Invalid Verifier

Invalid verifier

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties



Name	Type	Description
<b>Badge Number</b>	string	Unique badge number
<b>Direction</b>	AccessDirection	Direction of the access.
<b>Identifier Type</b>	string	Identifier type.
<b>Carrier Last Name</b>	string	Carrier last name.
<b>Carrier Initials</b>	string	Carrier initials.
<b>Carrier Middle Name</b>	string	Carrier middle name.
<b>Carrier Title</b>	string	Carrier title.

#### 9.2.5.16 *Verification Alarm*

Raised by 3rd party verification

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>Badge Number</b>	string	Unique badge number
<b>Direction</b>	AccessDirection	Direction of the access.
<b>Identifier Type</b>	string	Identifier type.
<b>Carrier Last Name</b>	string	Carrier last name.
<b>Carrier Initials</b>	string	Carrier initials.
<b>Carrier Middle Name</b>	string	Carrier middle name.
<b>Carrier Title</b>	string	Carrier title.

#### 9.2.5.17 *Access Granted Manually*

Raised when access is manually provided

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>Badge Number</b>	string	Unique badge number

<b>Direction</b>	AccessDirection	Direction of the access.
<b>Identifier Type</b>	string	Identifier type.
<b>Carrier Last Name</b>	string	Carrier last name.
<b>Carrier Initials</b>	string	Carrier initials.
<b>Carrier Middle Name</b>	string	Carrier middle name.
<b>Carrier Title</b>	string	Carrier title.

### 9.2.5.18 Power Issue

Raised when a power issue is detected

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>Description</b>	PowerIssueTypes	Description

### 9.2.5.19 Generic Access

Raised when a generic event not defined in IPSC is raised.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
<b>ServiceName</b>	string	Name of the service.
<b>Event Type</b>	ErrorCode	Type of the event.
<b>Additional Info</b>	string	Additional Information about the event.

## 9.2.6 Built-In Interfaces

This section provides details of built-in interfaces that are implemented on this device. Full details of these interfaces can be found in the DDK documentation.

Interface	Description
<b>ILockableDoor</b>	Interface for a door that can be locked
<b>IGrantAccess</b>	Device that supports granting access

## 9.3 AEOS AEpu

### 9.3.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	None

### 9.3.2 Video

This device does not support video.

### 9.3.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

### 9.3.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

### 9.3.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

## 9.4 AeosToggle

### 9.4.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	None



#### **9.4.2 Video**

This device does not support video.

### 9.4.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

## 9.4.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

### 9.4.4.1 *On*

Activate the toggle

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

### 9.4.4.2 *Off*

Reset the toggle

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

### 9.4.4.3 *Toggle*

Set the toggle to active and then reset

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

## 9.4.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

### 9.4.5.1 Toggle State Change

State of the Toggle changes.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
State	InputOutputState	Normal / Shortcut

## 9.5 AeosInput

### 9.5.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	None

## 9.5.2 Video

This device does not support video.

### 9.5.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

#### 9.5.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).



## 9.5.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

### 9.5.5.1 Input State Change

State of the Input guard changes.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
State	InputOutputState	Normal / Shortcut

### 9.5.5.2 Threshold Alarm

State of the Threshold alarm changes.

#### Performance

The driver must be able to handle 4000 events per hour.

#### Event Properties

Name	Type	Description
State	AlarmState	Normal / Shortcut

## 9.6 AeosRemoteOutput

### 9.6.1 Device Connection and Online States

The full requirements for these features can be found in the [Device Connection and Online States Requirements](#)

Feature	
<b>DC1.0 Device Online Status</b>	None
<b>DC2.0 Authentication</b>	None

## 9.6.2 Video

This device does not support video.

### 9.6.3 Properties

General requirements for properties can be found in [Driver Project Requirements](#).

Name	Type	Description	Default Value & Ranges
<b>Pulse Time</b>	int	The duration in milliseconds a pulse state remains active (default 1000).	Default: 1000 Min: Max:

## 9.6.4 Methods

General requirements for methods can be found in [Driver Project Requirements](#).

### 9.6.4.1 *Pulse Reset*

Toggle the on state for a period of time

This method is exposed as an operator action.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

### 9.6.4.2 *On*

Set the state to On of an Remote output

This method is exposed as an operator action.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

### 9.6.4.3 *Off*

Set the state to Off of an Remote output

This method is exposed as an operator action.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

#### 9.6.4.4 *Pulse Set*

Toggle the off state for a period of time

This method is exposed as an operator action.

Returns bool.

#### **Performance**

The method must complete within 2 seconds.

#### **Parameters**

Name	Type	Description	Default Value and Ranges
------	------	-------------	--------------------------

## 9.6.5 Events

General requirements for events can be found in [Driver Project Requirements](#).

### 9.6.5.1 *Output State Change*

State of the Output changes.

#### **Performance**

The driver must be able to handle 4000 events per hour.

#### **Event Properties**

Name	Type	Description
State	InputOutputState	Normal / Shortcut

## **10 Installation**

### **10.1 Prerequisites**

There is no SDK to install for this integration.



## 10.2 Driver Installation

- Start the IPSecurityCenter™ client and any supporting services
- Open the Device Driver Manager from the System Configuration
- Click the ***Install*** button
- Select the Nedap security AeosServer Driver Package in the Open file dialog
- Wait for the driver to be uploaded

The driver packages should be listed in the Device Driver Manager.

Additional Installation Details

### 10.2.1 Device Configuration

- Right click in a folder (e.g. Devices) in the System Configuration: **New** → **Device On** → **Server**
- Click **Next** on the introduction
- Select **Nedap security** in the **Device Manufacturer** list
- Select **AeosServer** in the Available Devices list
- Click **Next** to enter the device details: Enter the Nedap security AeosServer hostname or IP address, the port (use 0 to use the default port), and user name and password if integrated security is not being used.
- Click **Next** and **Finish** to add the device.
- Enable the device to bring it online.

#### Additional Configuration Details

##### Default Ports:

- Nedap Aeos socket interface - TCP: 803
- Nedap Aeos Web service - TCP: 8443

##### Additional Notes

- Current version of the driver does not include Areas and Intrusion support. If any of these behavioral components found in the Aesop system, it will not be shown as child devices but will be logged in the loupe logs. But all the events raised by the Aeos on these components will be reported as Generic events on device server object.
- Access Point “Normal state” is driven by logical input “Norm” which brings back the Access point to a state which can accept Badge, Manual Unlock, and provide access inputs. IPSC shows Access point state online for this state.
- “Grant Access In” \ “Grant Access Out” server methods only support on TNK Access points with two readers.
- Prior to do blocking\unblocking carriers or badges, makesure to obtain valid list of reason codes using the “GetBlockReasons” method.

##### Known Issues and Limitations

- Driver only supports Online authorization scheme and does not support Offline, Loxs and SOAA authorizations.
- Driver does provide explicit methods to edit authorizations for templates, entrances and entrance groups except enable\disable function. To edit other parameters requires delete existing authorization and adding it again.
- Aepu child device online state will not be refreshed when the child device is re-enabled due to API limitation.

- Cannot set the Input Inhibited state when going online or device is re-enabled due to API limitation.

## 10.2.2 Driver Compatibility

The following devices are known to be incompatible with the Nedap security AeosServer.

Model
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