

# ACMReport User Manual

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## About ACMReports

ACMReports is open source freeware software distributes on MIT License.

It is an example of integrated 3<sup>rd</sup> party utility for Avigilon Control Manager (ACM). It generate work time reports from transaction database. This report could be customized in order to implement solution for enter and exit control in the facilities.

ACMReports connect to ACM, select the first entrance and the last exit events for specified door(s). Match them with user and give the report for a day in PDF file.

## Download

Source code: <https://github.com/knave2000/ACMReports/>

## ACM Configuration

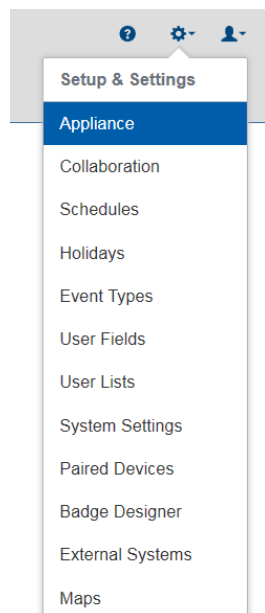
ACM should be already installed and configured.

<http://avigilon.com/support-and-downloads/for-software/acm/downloads/>

## Open database port

Some additional configuration is required.

Select “Appliance” from “Setup & Settings” menu.



Open access for external connection to Transaction database.

Put port number into the field “Transactions Connect Port”. 5432 – default port for PostgreSQL.

## Appliance: Edit

Appliance Access Ports Backups Logs Software Update About

Appliance Name: acm

System Name: acm.local

Host Name: acm.local

Name Server: 192.168.1.1

Time Server: 192.168.1.1

Time Zone: UTC

☐ Enable Remote TCP/IP Management

Authorization Code:

Splunk URL:

APB reset Reboot Appliance Shutdown Appliance

09/05/2017 00:05:29

Set Date/Time

Stored Transactions: 1000000

Hardware Type: Professional

Web Server Port: 443

Alarm Gateway Port:

Edge Listen Port:

LDAP Connect Port:

Transactions Connect Port: 5432

Mercury Client Port:

☐ Mercury Require TLS

SMTP Server:

SMTP Port:

SMTP Host Name:

☐ Use Start TLS

☐ Use TLS

SMTP Mail From:

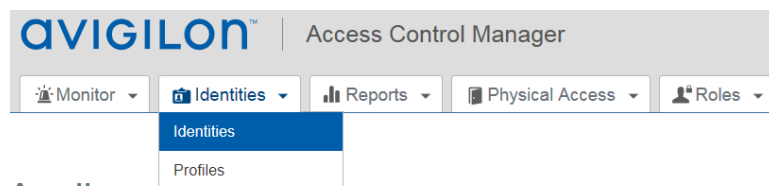
SMTP User:

SMTP Password: .....

### Add new user

Add new Identity that will be used by ACMReports.

Go to "Identities" menu.



### Appliance: Edit

Click "Add Identity" button.

Identities Profiles

## Identity Search

Last Name: Starts With

First Name: Starts With

Internal Number:

Group:

Search Field:  Search Value: Starts With

[Add Criteria](#) [Clear Search](#) [Search](#) [And](#)

[+ Add Identity](#)

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

[+ Add Identity](#) [+ Create New Report](#)

In the bottom of form in “Account Information”:

- Give login name (postgresql – for example)
- Give password for this login
- Confirm the password
- Put the mark in checkbox “Allow Remote Access?”
- Select “Indefinite” in “Inactivity Timer”

This Identity do not require tokens.

### Account Information:

Remote Authentication? <input type="checkbox"/>	<input type="text"/>
Remote Domain: <input type="text"/>	Login: <input type="text"/>
Record Modification: 08/30/2017 19:22:06 +000	Password: <input type="text"/>
Inactivity Timer: Indefinite	Confirm: <input type="text"/>
Maximum Active Token: <input type="text"/>	Allow Remote Access? <input checked="" type="checkbox"/>

Give “Admin” role to created Identity.

To do this open “Roles” tab, select “Admin” in “Available” box and click on “Right arrow” button. Click “Save” button at the end.

Identities

Profiles

# Identity: Roles

Identity

Roles

Tokens

Groups

Capture

Photos

Badge

Timed Access

**Identity** Postgres, SQL

**Available**


ACM Verify Administrator  
ACM Verify User  
Enrollment Operator  
Identities View Only  
Identities View/Edit  
Monitoring Operator  
Monitoring Supervisor  
Personal Bad  
Personal Good  
Super Admin


**Members**

Admin

▶

◀

 Save

 Cancel Changes

## Time settings

Check the time settings. All panels and ACM appliance should be synchronized and have the correct timezones.

Select Timezone for appliance and set the current time. Button “Now” synchronized the time with workstation over web browser.

## Appliance: Edit

Appliance Access Ports Backups Logs Software Update About

Appliance Name: acm

System Name: acm.local

Host Name: acm.local

Name Server: 192.168.1.1

Time Server: 192.168.1.1

Time Zone: Europe - Moscow

☒ Enable Remote TCP/IP Management

Authorization Code:

Splunk URL:

APB reset Reboot Appliance Shutdown Appliance

09/05/2017 00:25:22

Set Date/Time

Stored Transactions: September 2017

Hardware Type:

Web Server Port:

Alarm Gateway Port:

Edge Listen Port:

LDAP Connect Port:

Transactions Connect Port:

Mercury Client Port:

SMTP Server:

SMTP Port:

SMTP Host Name: Now

☐ Use Start TLS

☐ Use TLS

SMTP Mail From:

SMTP User: admin

SMTP Password: .....

Su Mo Tu We Th Fr Sa

1 2

3 4 5 6 7 8 9

10 11 12 13 14 15 16

17 18 19 20 21 22 23

24 25 26 27 28 29 30

Time 00:00:00

Hour

Minute

Second

Done

Go to "Physical Access", Select "Panel" and appropriate panel name (click on "EP1501" link for this example).

Monitor Identities Reports Physical Access Roles

Doors Panels Areas EOL Resistance Mercury LED Modes Card Formats

## Panels

Criteria: Appliance: Installed: Search

Add Panel

Name	Installed	Appliance	Vendor	Communications	Power	Tamper	Battery	Delete
EP1501	✓	acm	Mercury Security	■	■	■	■	■

Add Panel

Legend: ■ Normal | ■ Trouble | ■ Alarm | ■ Masked

■ Communications | ■ Power | ■ Tamper | ■ Battery

Check the timezone settings for each panel and save them.

Doors
Panels
Areas
EOL Resistance
Mercury LED Modes
Card Formats

## Panel: Edit

Status
Configure
Host
Subpanels
Macros
Triggers
Access Levels
Events

Name: EP1501
Physical Location:
Appliance: acm
Vendor: Mercury Security
☒ Installed
Model: 1501
Timezone: Europe - Moscow

### Allocate space:

Credentials: 100000
Events: 40000
Version: 1

Save
 Cancel Changes
 Add Panel
 Show Policy

## Select the Events and Door

ACMReport could be configured to use specific Events and Sources from ACM.

Go to monitor mode in ACM, emulate entrance and leaving events by using access cards (tokens) for different users. Catch up the event name and source name for these transactions.

AVIGILON™ Access Control Manager								
<div> Monitor Identities Reports Physical Access Roles </div>								
<div> Events Search Alarms Verification HW Status Maps </div>								
<div> Pause Clear Live Video Recorded Video Notes Instructions Identity History Save Settings Select Columns </div>								
Icon	Priority	Panel Time	Event Name	Source	Last Name	First Name	Internal Token No	Messages
	200	08/30/2017 17:59:24 +0000	Operator has logged in	Administrator, System	Administrator	System		
	140	08/30/2017 17:59:08 +0000	Door closed	door-A				
	140	08/30/2017 17:59:08 +0000	NORMAL Forced door	door-A				
	20	08/30/2017 17:59:02 +0000	Door opened	door-A				
	10	08/30/2017 17:59:02 +0000	Forced door	door-A				
	200	08/30/2017 17:58:45 +0000	Rex Pressed, Non-verified	door-A				rex 1
	140	08/30/2017 17:58:30 +0000	Door closed	door-A				
	20	08/30/2017 17:58:26 +0000	Door opened	door-A				
	100	08/30/2017 17:58:23 +0000	Local Grant	door-A	Ivanova	Olga	494	
	140	08/30/2017 17:58:11 +0000	Door closed	door-A				
	20	08/30/2017 17:58:06 +0000	Door opened	door-A				
	100	08/30/2017 17:58:03 +0000	Local Grant	door-A	Ivanova	Olga	494	
	200	08/30/2017 17:51:34 +0000	Operator has logged in	Administrator, System	Administrator	System		
	20	08/30/2017 17:07:00 +0000	Invalid Operator ID					

For example Event name = "Local Grand", Source name = "entrance". This will be enter event.

For exit event the Event name = "Local Grand" as well, and Source name = "door-A" will be the same.

This mean one door is used to enter and exit from the facility.

If there is a group of doors to enter all of them should have some common part in Source name. For example: entrance-A, entrance-B, entrance-C. In this case, all of them could be joined by common name "entrance" in ACMReport settings.

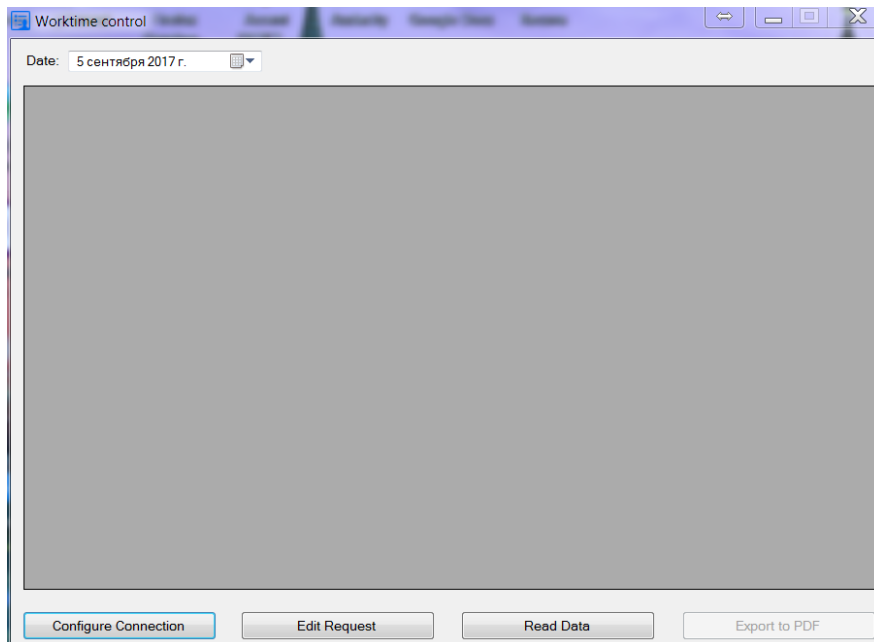
The same for Event name.

Any type of events of sources could be used.

REX event could be used as well. But as soon this event could not be verified in ACMReport it will not have the exit time.

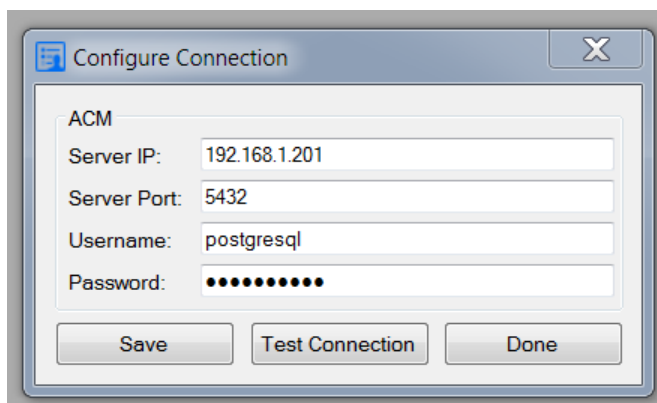
## ACMReport configuration

Start ACMReport.exe



### Configure connection

Click on “Configure Connection” button.



Enter ACM Server IP address, port number (which was selected above).

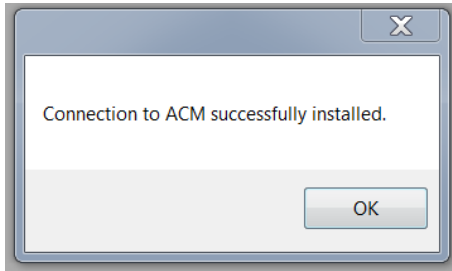
Username previously created Identity.

Password is the password for that Identity.

To check the connection with ACM click “Test Connection” button.



If everything is working confirmation message appears.



Click “Save” button and then “Done” to close the dialog window.

All ACMReports settings are user specific. They are saving personally for each Windows user in hidden folder.

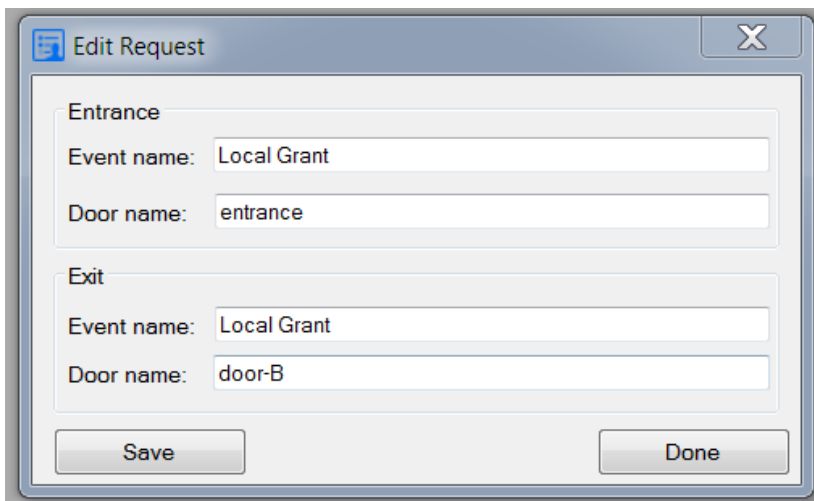
`%userprofile%\appdata\local or`

`%userprofile%\Local Settings\Application Data`

Depending on which version of Windows it is running.

### Edit Request

Click on “Edit Request” button.



In this example “entrance” is common name for 3 doors: entrance-A, entrance-B and entrance-C.

#### Rules for fields:

- All fields are case sensitive.
- Special character will be filtered out.
- Spaces not removed. Pay attention on spaces at the end of string.
- Any part of field will be used as template.

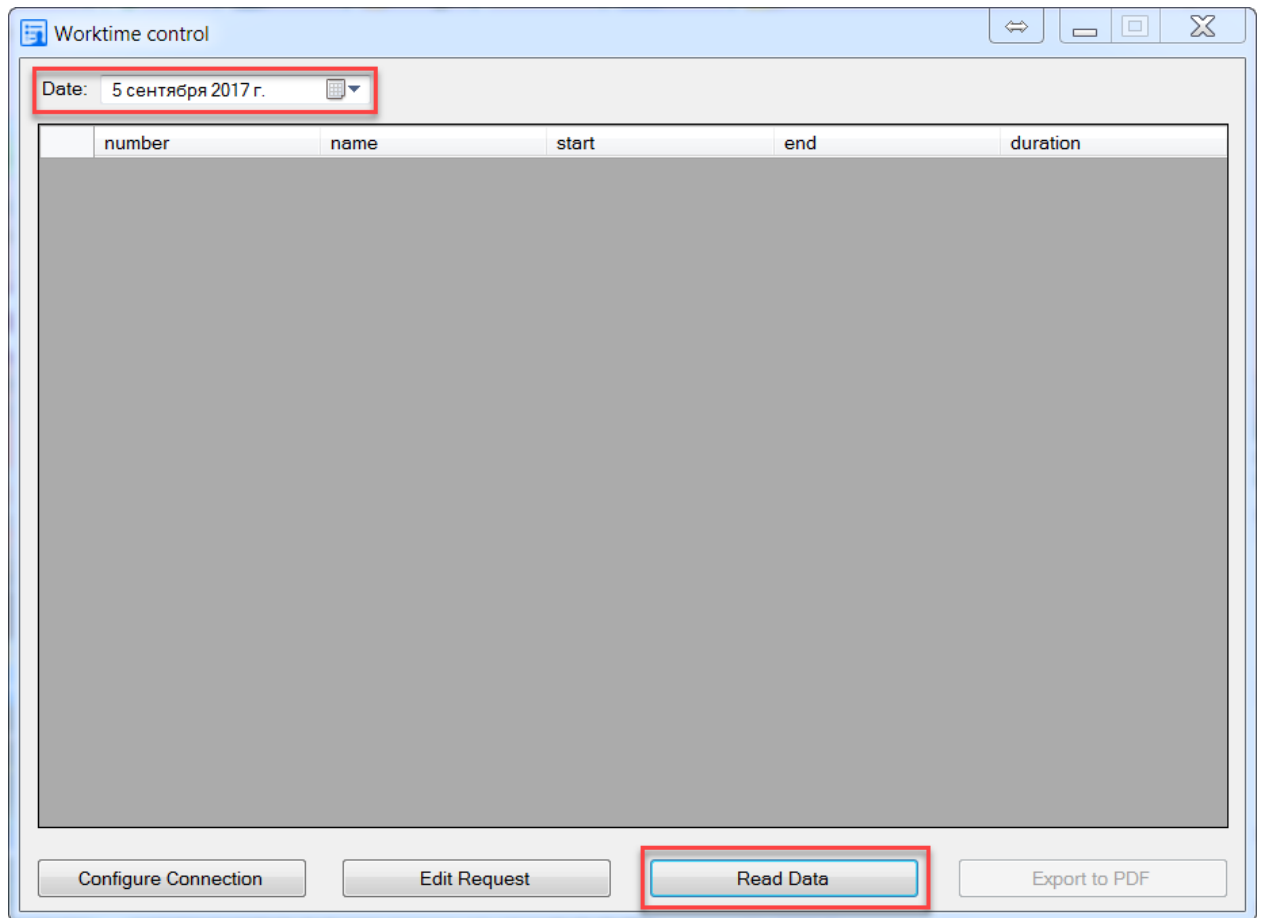
Template example:

“Local Grant”: “Local”, “ocal Gra”, “Grant”

Click “Save” and “Done” buttons.

## Read Data

Select the date for work time report in the top left part of main window.




Click “Read Data”.

Information will be received from ACM transaction database using Request settings.

If the result is empty, the hidden button “Export to PDF” keeps inactive.

If the result is not empty “Export to PDF” button will be activated.

Date: 30 августа 2017 г. 


	number	name	start	end	duration
▶	1	Ivanova, Olga	30.08.2017 3:39	30.08.2017 21:09	17:30:08

Configure Connection Edit Request Read Data Export to PDF

## Export to Microsoft Word or Excel

Select specific row(s) and press “Ctrl-C” to copy them in Clipboard.

Worktime control

Date: 30 августа 2017 г. 

	number	name	start	end	duration
▶	1	Ivanova, Olga	30.08.2017 3:39	30.08.2017 21:09	17:30:08

Ctrl-C

Configure Connection Edit Request Read Data Export to PDF

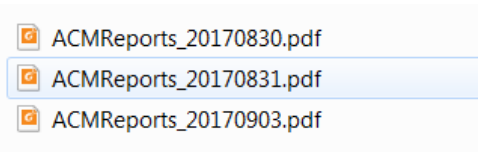
Click on the left top space in table to select all elements.

To paste the copied result from Clipboard into Word or Excel use “Ctrl-V”.

## Export in PDF

Click on “Export to PDF” button to save the current report in PDF file and open it in installed PDF Viewer.

After the first time of saving pdf file the folder “Reports” will be created in ACMReport folder. All PDF files will be stored there.



File format for PDF files: **ACMReport\_YYYYMMDD.pdf**

Where YYYYMMDD is the selected date for report.

четверг, 31 августа 2017

#	Name	Start	End	Duration
1	Ivanova, Olga	30.08.2017 3:39:20	30.08.2017 21:09:28	17:30:08

## Known issues

1. Night shifted staff could not be calculated in the right way. If the person enter into facility in one day and exit in another day the information in Report will not be complete.
2. Localization is required.

## Credentials

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## License

MIT License

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