

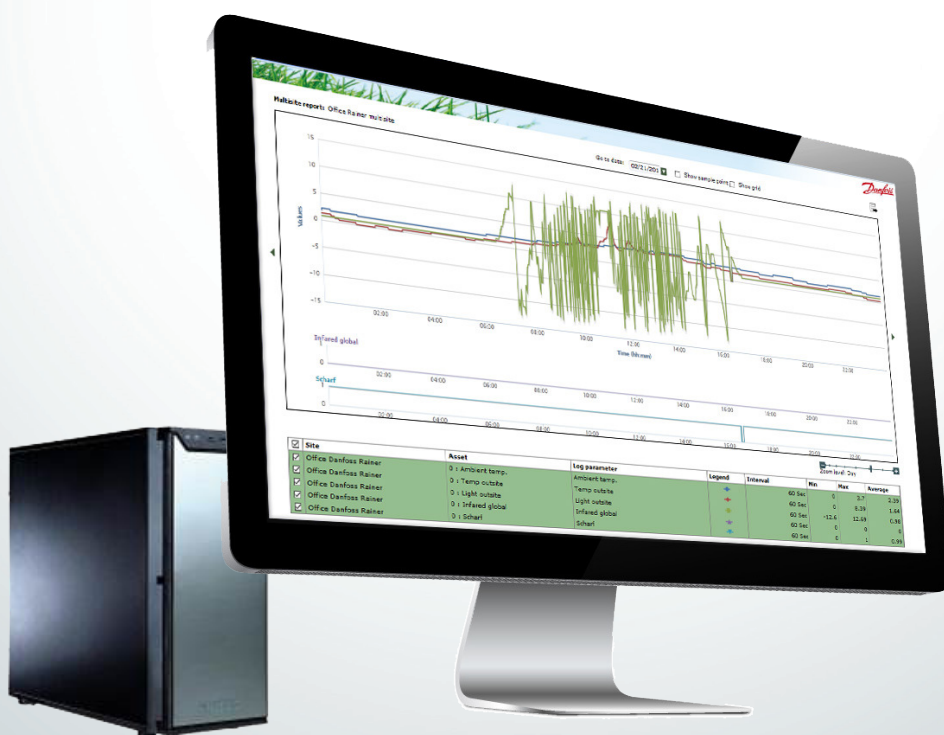
ENGINEERING
TOMORROW

Danfoss

User Guide

Enterprise Manager AK-EM 800

ADAP-KOOL® Refrigeration Control System



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Document history

Document	Notes
USCO.PI.R1.G1.02	First document release
USCO.PI.R1.G2.02	Minor updates
USCO.PI.R1.G3.02	Updates. v. 1.21
USCO.PI.R1.G4.02	Updates. v. 1.31
USCO.PI.R1.G5.02	Updates. v. 2.01
USCO.PI.R1.G6.02	Updates. v. 2.11
USCO.PI.R1.G7.02	Updates. v. 2.21
USCO.PI.R1.G8.02	Updates. v. 2.23
USCO.PI.R1.G9.02	Updates. v. 2.24

Introduction

The AK-EM 800 is an Enterprise Management solution from Danfoss for the food retail industry. The AK-EM 800 is a multi-user, multi-site server PC application which provides alarm management and automatic data collection, together with reporting features.

This document is designed to guide you through the installation of your AK-EM 800. This guide will also cover the installation of the included AKM agent, which is required to support legacy Danfoss control devices (described later in this guide).

Target PC and software specifications

The minimum computer specification is detailed below. AK-EM 800 can run on a real and also on a virtual server. Database and application can be installed on different machines, but both machines must be in the same local area.

Product	Configuration	Load factor	Details
AK-EM 800 Server (same for AKM-Agent)	Hardware	<50 networks	<ul style="list-style-type: none"> • Processor - i3 OR i5 • RAM - 6 GB or above • Storage - 300GB or above
		>50 networks	<ul style="list-style-type: none"> • Processor - i5 OR i7 OR above • RAM - 12 GB or above • Storage - 1 TB or above
	Software	<50 networks	<ul style="list-style-type: none"> • Windows 7 64 bit / Windows Server OS 64 bit (<i>AK-EM 800 only</i>) • Tomcat memory - 4 GB
		>50 networks	<ul style="list-style-type: none"> • Windows 7 Enterprise 64 bit / Windows Server 2008 R2 or Above (64 bit) (<i>AK-EM 800 only</i>) • Tomcat memory - 4 GB or above
Client Computer Configuration	Browser	<ul style="list-style-type: none"> • Mozilla Firefox 39.0 or higher • IE 11 	
	Screen resolution	• 1024*768	
	RAM	• 2 GB or above	

Front End	Versions Supported
AK-SC 255	2.211 or higher
AK-SC 355	3.091 or higher
AK-SM 800	8.011 or higher
AKM	7.41

System Layout

Direct connection (AKM agent not required)

The AK-EM 800 provides a direct communications connection path to AK-System Manager 800 series of front end controllers. AKM agent installation not required when using the AK-SM 800 series.

In addition, the Danfoss AK-SC 255/AK-SC 355 (see minimum software specs in table opposite) are also supported via direct connect path.

Legacy support (AKM agent required)

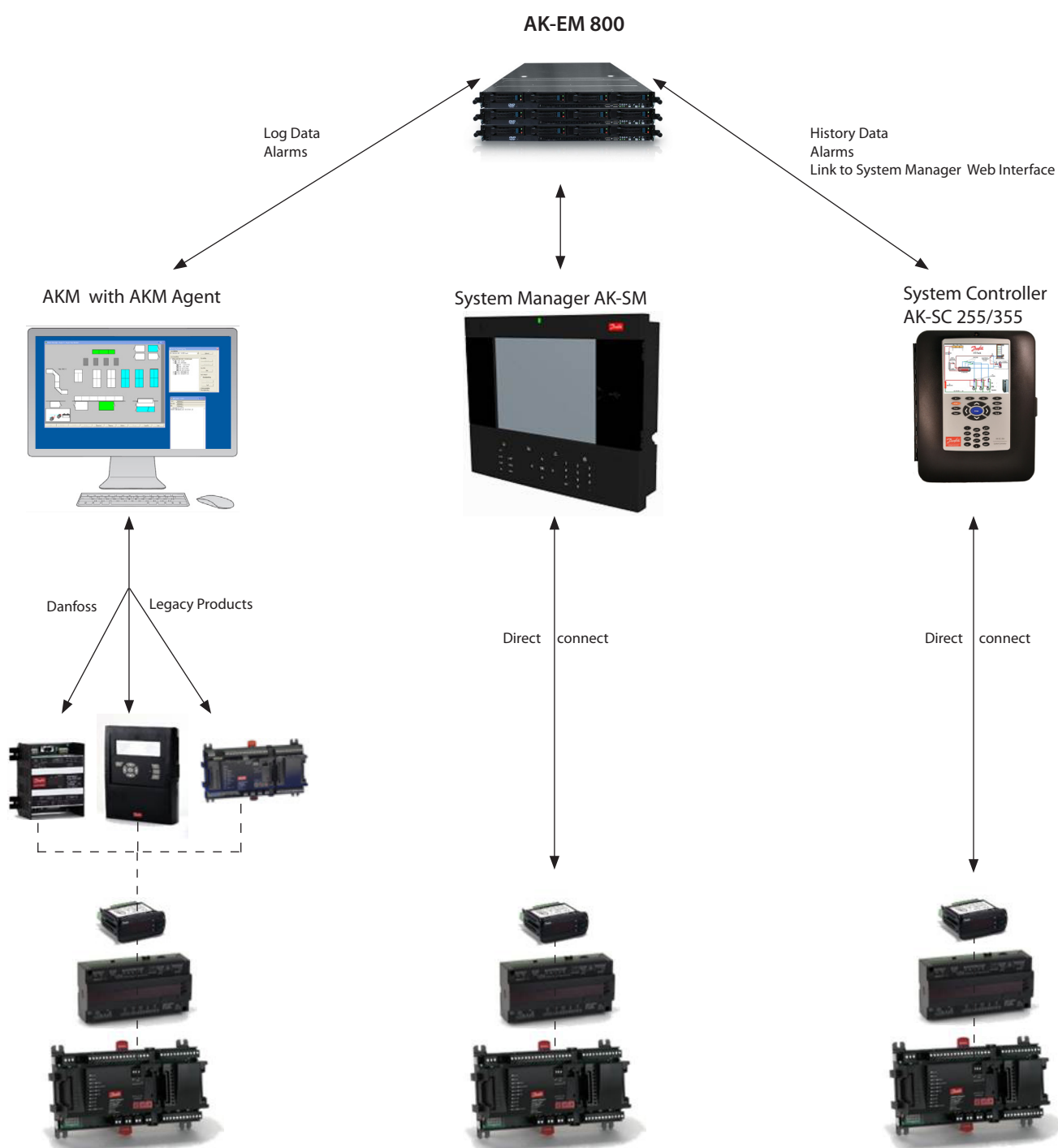
For applications that use AK-SM 720, AK-SM 350, AKA Gateways, and the Danfoss m2 (known as legacy systems), it is still possible to connect to the AK-EM 800, via the use of the AKM-Agent. The use of the AKM agent allows for alarms and history logs from these systems to be synchronized between the existing AKM PC installation and the AK-EM 800.

Under this application the AK-EM 800 is connected and communicates to an installed AKM agent, which must be installed on designated AKM PC. There can be more than one AKM PC installation that communicates to the AK-EM 800. Each AKM PC will require installation of the AKM agent.

Direct connection AK-SC 255 /AK-SC 355 / AK-SM 8xx

Front End	Versions Supported
AK-SC 255	2.211 or higher
AK-SC 355	3.091 or higher
AK-SM 800	8.011 or higher
AKM	7.41

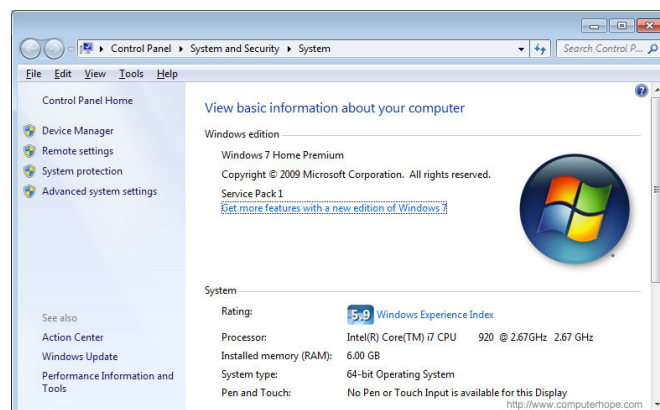
The following picture describes the System Layout.



Installation of AK-EM 800

Up to max. 50 sites the installation can be done on one single PC. Above 50 sites a distributed installation (application and database on 2 different PC's) is strongly recommended.

To explain how to make a distributed installation and also how to make upgrades, please check the document "AK-EM 800 installation guide"



Login to AK-EM 800



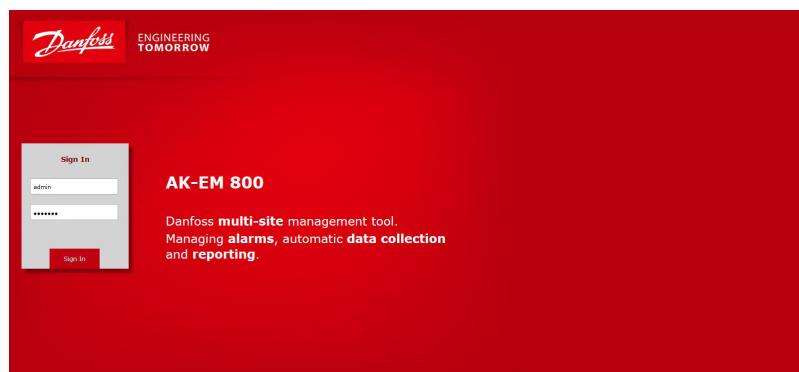
The AK-EM 800 installation creates a Desktop icon. Use the icon or type in your browser

http://ipaddress:8080/AKEM_800

Ipaddress is from the actual AK-EM 800 system

Default Log on name: **admin**

Default Password: **danfoss**



At the first login the user will then be prompted to change the password.

New password must be 7 to 15 characters. (numbers and letters)
Spaces are allowed.

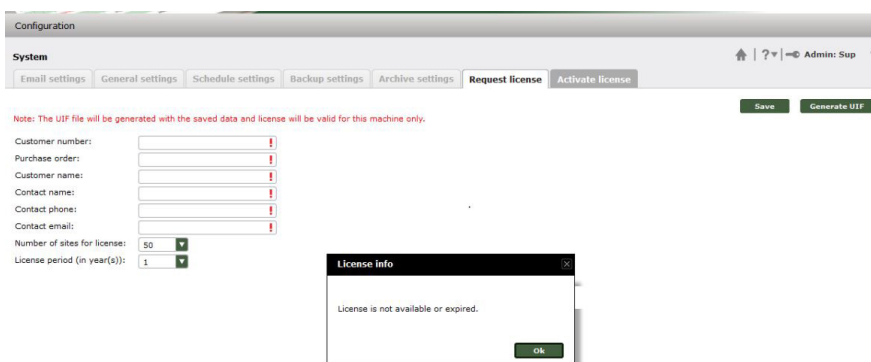
Please change your password.

New password:

Retype new password:

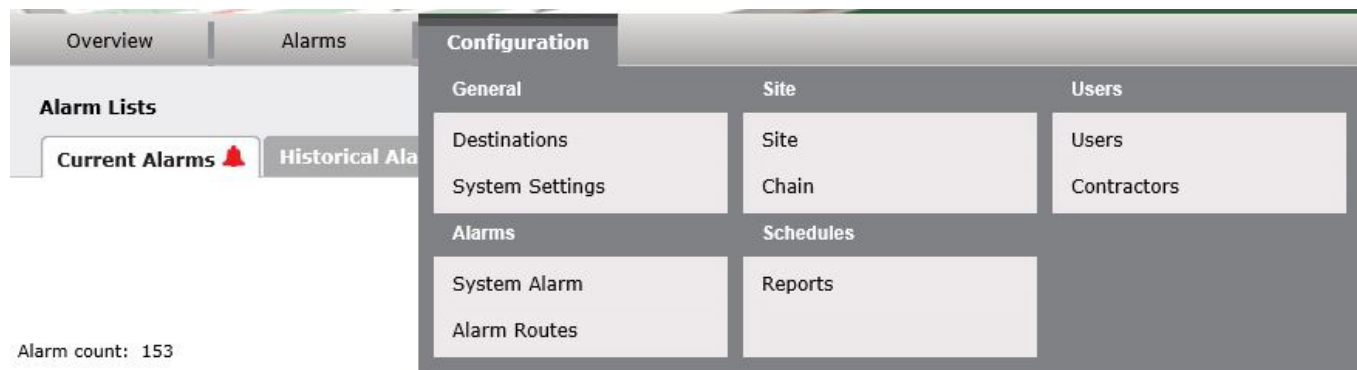
Save

If AK-EM 800 is not licensed, a license is required (see chapter require license) and AK-EM 800 will start in following window. It is not possible to use AK-EM 800, before the license is activated.



Layout

AK-EM 800 is using Mega drop-down selection.
Main fields are Overview, Alarms and Configuration.
Mouse over will present the Sub menus.



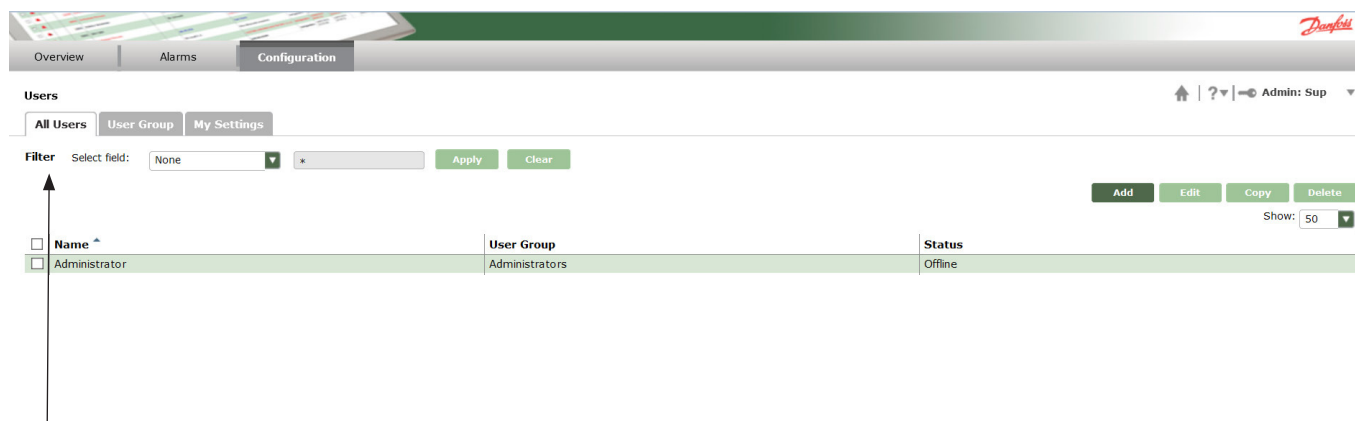
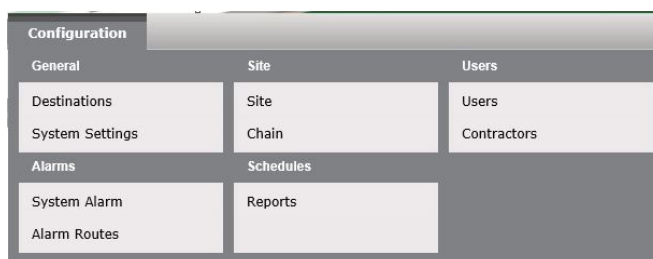
On the top right corner there are three quick links buttons.



Function layout & filter

Each function is separated into 1 or more pages.

Select Configuration -> Users -> Users

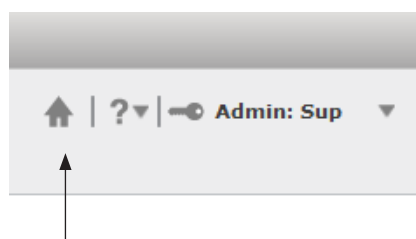


A filter might be available if relevant

Quick Links

There are three quick links in the top right corner of the screen.

If the Home button is pressed – it would lead to the function defined as the home page for that user.

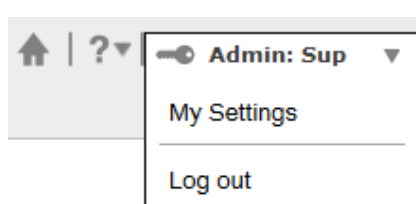


If the Help button is pressed – it would open a new menu with two options.

If the Help option is chosen the User Guide for the AK-EM 800 will be opened in a separate browser tab



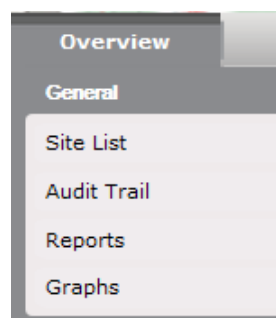
If the "My Settings" option is chosen it will lead you to the User settings page for the user who is logged on.



Overview

The Overview menu is where you work with History data.

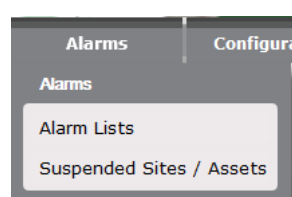
- Site List – A list of all created sites and possibility to collect logs
- Audit Trail – A list of significant events in the EM 800 system
- Reports – For viewing collected logs and making reports
- Graphs – Create graphs and save them as a report



Alarms

The Alarms menu is where you can manage received alarms.

- Alarm Lists – For managing received alarms
- Suspended Sites / Assets – For suspending alarms from a site or assets



Configuration

The Configuration menu is where you setup the AK-EM 800

General

- Destinations – For adding E-mail and Text message receivers
- System Settings – For Email server settings, General settings, Folder setting for scheduled report saving, Backup settings, Archive settings, requesting and activation of the license

Alarm

- System Alarm – For changing priority settings for system alarms
- Alarm Routes – For making changes in the alarm forwarding rules

Site

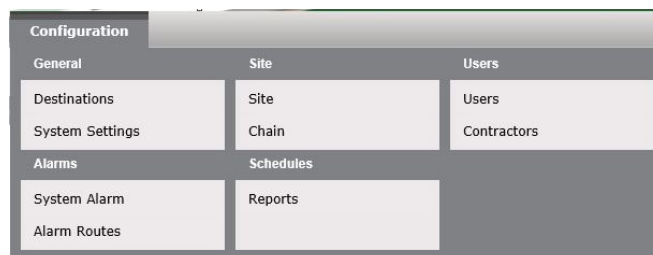
- Site – For adding / changing sites
- Chain – For adding / changing chain details

Users

- Users – For adding / changing user details
- Contractors – For adding / changing contractors details

Schedules

- Reports – To setup send reports on recurrent basis



Destinations

This is where the destinations are added. These destinations can be used for various functions like Report forwarding, Alarm forwarding etc.

Forwarding is supporting only Email

Select Configuration -> Destinations -> Email

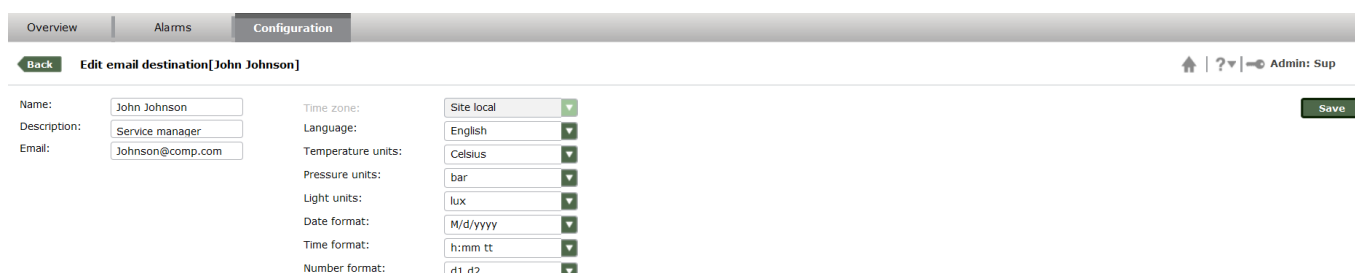
Press "Manage"



For adding a new entry select the "Add" button

Adding a Destination

1. All the fields in this column are required fields and must be filled out. Today it's not possible to change Time zone. That's for future releases only.
2. The selections in this field can be made according to preferences
3. When all required settings have been made the entry must be saved

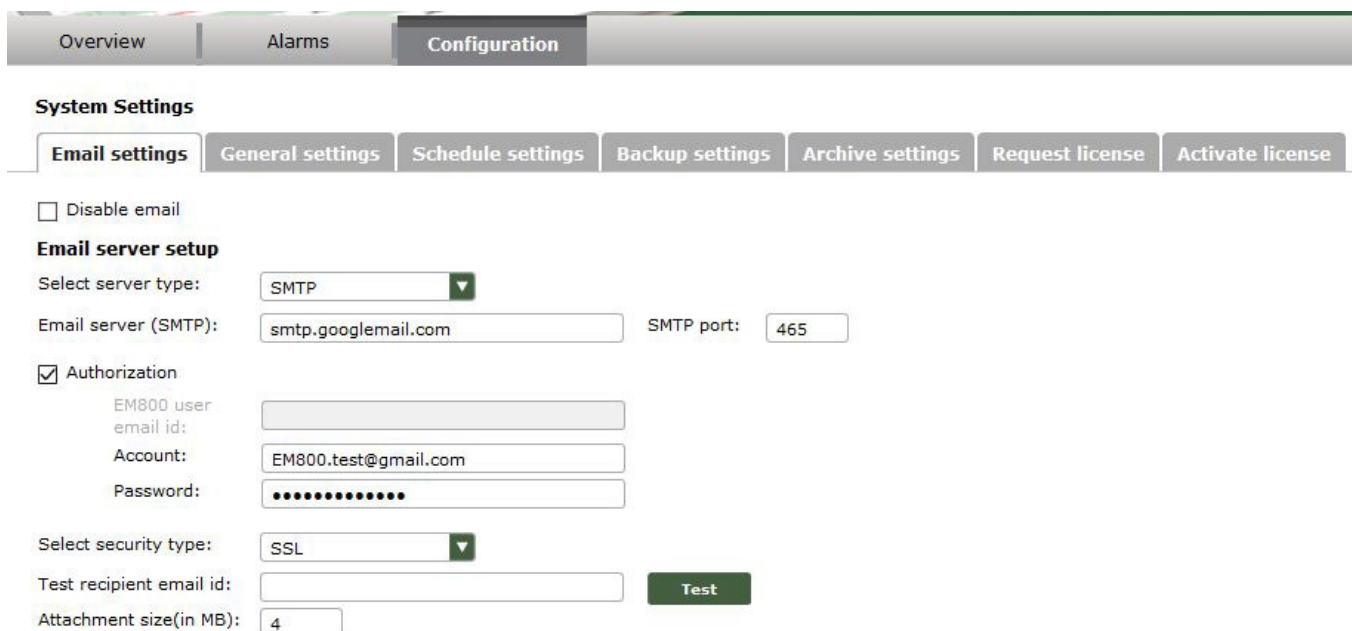


System Settings

This is where settings related to the AK-EM 800 must be entered.

In system settings the user can add/change settings for Email, general details, schedules, backup, archive and licensing.

Select Configuration -> System Settings



System Settings

Email settings | General settings | Schedule settings | Backup settings | Archive settings | Request license | Activate license

☐ Disable email

Email server setup

Select server type: SMTP

Email server (SMTP): smtp.googlemail.com SMTP port: 465

☒ Authorization

EM800 user email id:

Account: EM800.test@gmail.com

Password:

Select security type: SSL

Test recipient email id: Test

Attachment size(in MB): 4

1. Select which type of server is used
2. Add server details (e.g. Gmail, GMX,...)
3. If the server only allows authorized users this tick mark must be selected and details added
4. To test the entered details a Test mail can be sent to verify if entered settings are correct

It is possible to use the following type of Email servers:

1. No security type
2. SSL Encrypted SMTP Server
3. TLS Encrypted SMTP Server
4. Unauthorized SMTP Server
5. Microsoft Exchange 2010 Server.
 - a. If the Exchange server is chosen the fields above will be different but intuitive.
 - b. Exchange server only supports https not http

General Settings

This is where settings related to alarms are entered.

Select Configuration -> System Settings -> General Settings

Auto acknowledge inactive alarms:

If an alarm should be acknowledged automatically when it is inactive. The alarm will acknowledge the alarm in the front end as well (except AKM sites).

Alarm repeat count duration

When this setting is enabled with a time value, the AK-EM 800 system will monitor every alarm and add a counter detail, which shows how many times this alarm has occurred within the time set here since the last alarm has been received.

Example:

If the value here is set to 1 hour and an alarm is received at 7:00 Then AK-EM 800 will see how many times that alarm has been received from 6:00 to 7:00. (see picture Alarm repeat count). Even if the time now is 9:00 it will still calculate from 6:00 to 7:00, because the last time it received this alarm was at 7:00.

Allowable logdata gap (in minutes)

Will ignore data gaps in logs > XX minutes. Max. time is 1440 minutes.

Dependent on the front end and the usage of the controller data gaps are possible. If this is the case and the user is not interested to get a system alarm for any data gap, this value should be adjusted.

License notification period (in days)

When the license will expire, the user will get on every logon a notification (min 14 days, max 60 days before expiring)

Synchronize SC/SM time zone offset

AK-EM 800 is able to synchronize the time zone offset of AK- SC 255/AK-SC 355 and the SM800 series based on server time

Synchronize SC/SM clock

AK-EM 800 is able to synchronize the clock of AK-SC 255/AK-SC 355 and the AK-SM 800 series based on server time.

Generate system alarm for routing failure:

Enables/disables AK-EM 800 to create system alarms in case of alarm routing issues

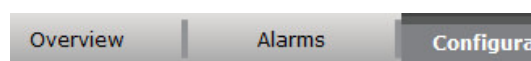
Start log collection for newly added parameters

In case new logs were added in the front end and the user wants to collect them automatically set this parameter to YES. The user will still be informed with the system alarm "conflict" if logs are changed

Schedule Settings (for reports)

Select Configuration -> System Settings -> Schedule Settings

In the schedule report section the user will be able to send a report as an attachment to an Email. But he will also be able to save a report on a scheduled basis in a free selectable folder. This can be a local folder on the AK-EM 800 server, but also a network drive.



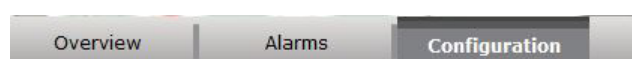
System Settings



Auto acknowledge inactive alarms:	<input type="text" value="Yes"/>
Alarm repeat count duration:	<input type="text" value="6 Hours"/>
Allowable logdata gap (in minutes):	<input type="text" value="60"/>
License notification period (in Days):	<input type="text" value="60"/>
Synchronize SC/SM time zone offset:	<input type="text" value="No"/>
Synchronize SC/SM clock:	<input type="text" value="No"/>
Generate system alarm for routing failure:	<input type="text" value="Yes"/>
Start log collection for newly added parameters:	<input type="text" value="No"/>

"Alarm repeat count"

Count	Lim
1	Alar
1	Alar
2	Alar
1	Alar
1	Alar
1	Alar
1	Alar
2	Alar
2	Alar
1	Alar
1	Alar
3	Alar
2	Alar
1	Alar



System



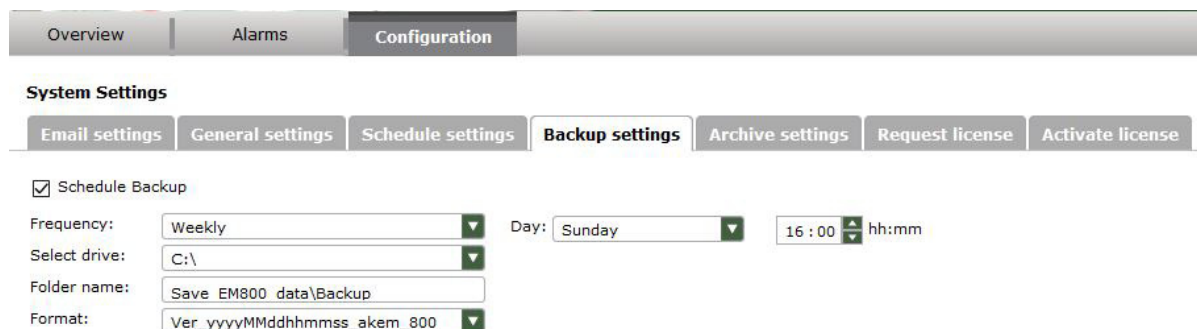
Select drive :	<input type="text" value="C:\"/>
Folder name:	<input type="text" value="Danfoss\AKEM_800\Re"/>

Backup Settings

Select Configuration -> System Settings -> Backup Settings

This feature allows the Superadmin to create a manual or scheduled backup of the system.

The Superadmin has all rights at any time, and can not be deleted (default:admin/danfoss). There are several functions reserved for Superadmin only like report schedule settings, backup, archiving and licensing and alarm clear in one go without acknowledge.



The screenshot shows the 'Configuration' tab selected in the top navigation bar. Under 'System Settings', the 'Backup settings' sub-tab is active. The 'Schedule Backup' checkbox is checked. The configuration fields are as follows:

- Frequency: Weekly
- Select drive: C:\
- Folder name: Save EM800_data\Backup
- Format: Ver_yyyyMMddhhmmss_akem_800
- Day: Sunday
- Time: 16:00 hh:mm

This backup is always a complete database dump and not an incremental one.

The user can create a schedule on a daily, weekly or monthly basis (Attention! AK-EM 800 will NOT delete any old backup file).

To create such a backup, the Superadmin must select time, folder name the format and if the user likes to compress the backup file. If everything is selected, he must save his selection or he can make a backup on demand only (press backup now) In that case he will get a message and his selection is not saved

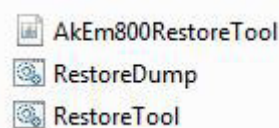


Restore

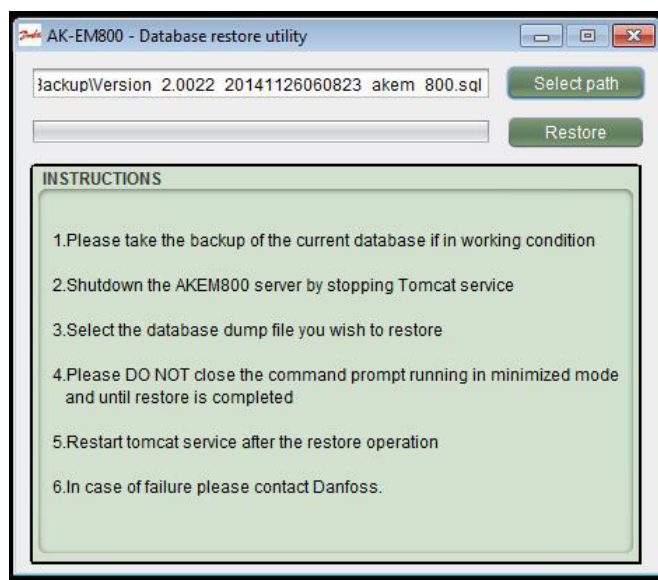
To restore a backup to AK-EM 800 you can use the SQL order (if known) or a tool, which comes together with AK-EM 800.

The tool is available in the subfolder named "RestoreTool" in the AK-EM_800 folder.

The folder contains an executable JAR file and two batch files. Please start the batch "RestoreTool" and follow the instructions.

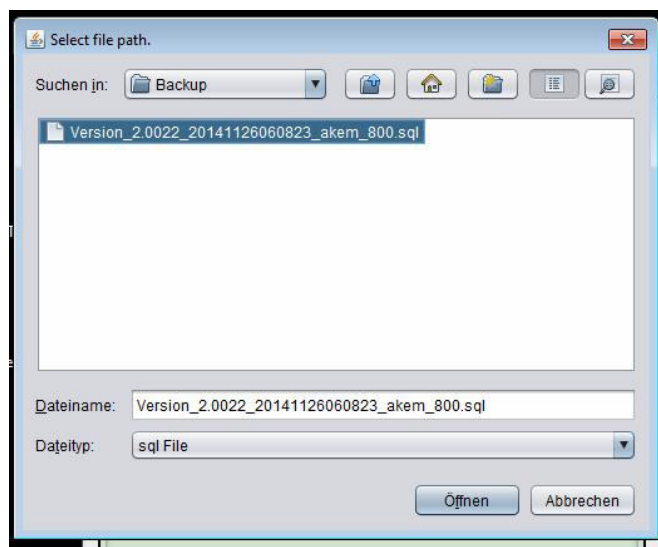


It's important to stop the Tomcat service (see installation guide)



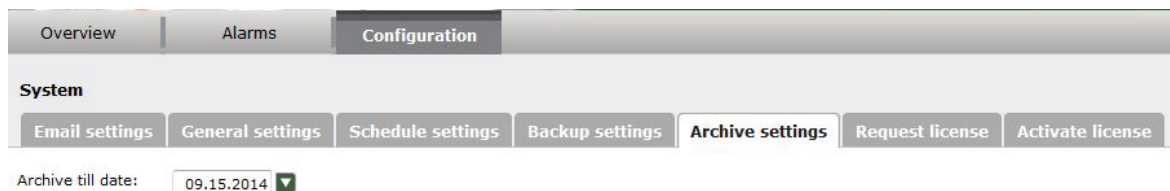
Select the backup file (press select path) and afterwards press the Restore button. Dependent on size of the file it will take several minutes.

If finished, restart the Tomcat service.



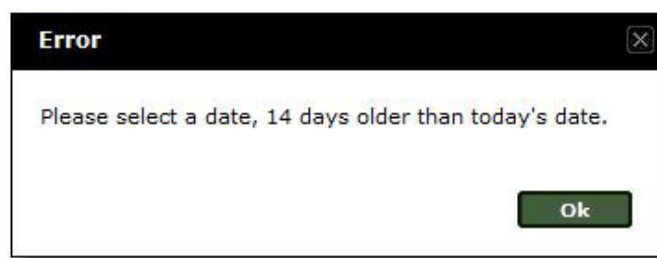
Archive Settings

Select Configuration -> System Settings -> Archive Settings



This feature allows the Superadmin to archive (zip) the database. This action will move all data in a different database. They are still visible, but it will take more time to present the data in a report. It is only possible to archive data which are 14day old or older. If the user selects e.g. yesterday, he will get an error message. It is not possible to schedule the archive.

To create an archive, the Superadmin must select a data in the past (min. 14 days old) and press the archive now button.



Request license

Select Configuration -> System Settings -> Request license

System Settings

Email settings General settings Schedule settings Backup settings Archive settings **Request license** Activate license

Note:

In order for your AK-EM 800 to function correctly a suitable valid license needs to be installed.

Use this screen to generate a User Identification File (UIF), which will be used by Danfoss to generate your unique AK-EM 800 license.

After entering your details you must press Save. Then you need to press Generate UIF to create the file to be sent to Danfoss for processing at el_licensing@danfoss.com.

Danfoss customer number:	<input type="text" value="Danfoss"/>
Danfoss purchase order:	<input type="text" value="123ABC"/>
Customer name:	<input type="text" value="ABC123456789"/>
Contact name:	<input type="text" value="Mr. Danfoss"/>
Contact phone:	<input type="text" value="+123456789"/>
Contact email:	<input type="text" value="danfoss@em800.com"/>
Store number:	<input type="text" value="RMDemo"/>
Post code:	<input type="text" value="46569"/>
Number of sites for license:	<input type="text" value="500"/> ▼
License period (in year(s)):	<input type="text" value="5"/> ▼

AK-EM 800 Version 2.0.1 and higher introduces a new licensing model. A valid license must be purchased from Danfoss in order to operate your AK-EM 800. The license model offers the ability to only pay for functionality or number of sites you require. Please contact your Danfoss sales representative for full descriptions of the different license options.

In order to create a unique license (based on your PC/Server hardware credentials) and paid level of functionality, a custom file is required to be generated within your EM800 and mailed to the Danfoss license office. Once Danfoss receives this information, a unique license will be generated by Danfoss and sent back for activation within your AK-EM 800. Upon activation of the license, functionality and site capacity will be unlocked for the duration defined at the time of license creation. The following section describes the overall workflow.

Workflow:

1. Download and install AK-EM 800 software from [Danfoss.com](http://food-retail.danfoss.com/knowledge-center/software/ak-em-800/) (<http://food-retail.danfoss.com/knowledge-center/software/ak-em-800/>)
2. Fill in all fields (all of them are mandatory)
3. Press the save button(will be confirmed by a popup window "User information saved successfully")
4. Press the "Generate UIF" button. (UIF = user information file).
Depended on your browser the user is forced to save the file in a directory of his choice.

The file contains unique information based on the install server or PC hardware and user details previously entered.

```
{"Host Id":"invalid","Contact
name":"User","No. of sites":"500","Purchase
order":"KB00001","Email":"user@danfoss.
com","Customer number":"3150141092","Customer
name":"Danfoss NAM","Primary contact":
"3150141092", "OS_Platform":"2","License
period in years":"5"}
```

When the UIF file is created, forward it to el_licensing@danfoss.com

Danfoss will process the UIF file and will respond with a license file, which has been generated based on the specific hardware and license purchase previously entered. The license file has the extension .lic (e.g. 3_ disksn=S13TJ90S104587.lic) (e.g. 3_ disksn=S13TJ90S104587.lic)

The following section will describe how to deploy the .lic file send by Danfoss.

Activate license

The Superadmin starts AK-EM 800 1st time (default credentials admin/danfoss) or restarts his updated AK-EM 800. If no license is ordered, he can see only following screen. ("License is not available or expired")

Configuration

System

Admin: Sup

Request license

Activate license

Save

Generate UIF

Note: The UIF file will be generated with the saved data and license will be valid for this machine only.

Customer number:

Purchase order:

Customer name:

Contact name:

Contact phone:

Contact email:

Number of sites for license: 50

License period (in year(s)): 1

License info

License is not available or expired.

Ok

For license entry or updates the user should select Configuration
-> System Settings -> Activate license

Overview

Alarms

Configuration

System

Admin: Sup

Activate license

Register

Danfoss contact number: +4574882222

Danfoss Email: elicense@danfoss.com

Paste license:

To activate the received license, open the file with a text editor (e.g. Notepad) and copy the complete content in the clipboard (mark all then copy) and paste it in the "Paste license box on AK-EM 800.

Overview

Alarms

Configuration

System

Admin: Sup

Activate license

Register

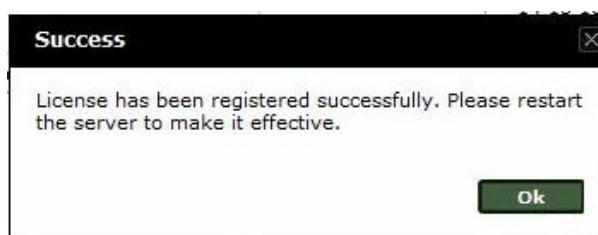
Danfoss contact number: +4574882222

Danfoss Email: elicense@danfoss.com

Paste license:

```
LICENSE danfoss_as ak-em800 2.0 01-jan-2200 single
hostid=diskn=S13T390S104587 options="1 2 3 4 5 6 7 8 9
10 11 12 13
14 15 1000" _ck=c6ad4fcd
sig="60PG4580H2DBC7CQK94JCNF2TUN05FF72V
Fh6TE08A13CG1JTW5Q2HGMF7KJG362SRG7RKRSA0"
LICENSE danfoss_as ak-em800 2.0 30-sep-2019 single
hostid=diskn=S13T390S104587 options="1 2 3 4 5 6 7 8 9
10 11 12 13
14 15 1000" _ck=e56ae005a
sig="60PG45046SEXCGKUEGSPSTD8JWFT6UJBBN
UST822M0DG078897J0Y2E2SDAYXSEGPWF1HAJAG"
LICENSE danfoss_as ak-em800 2.0 30-sep-2019 single
hostid=diskn=S13T390S104587 options="16 17"
_ck=e56ae0060 sig="60P
G4580Q9AHK553JYX6USEGQXX0D6HBRM52KG6S08A3SAJER
SSB5JJA1XC31WRRBDC73T
PUN50"
```

Press now the "Register" button and the Superadmin should get following message:



Now the Superadmin can see the license details and the Expire date.

Overview

Alarms

Configuration

System Settings

Email settings

General settings

Schedule settings

Backup settings

Archive settings

Request license

Activate license

Note:
 In order to activate your AK-EM800, please open the license file which Danfoss has issued and copy the file contents.
 Paste the contents in the box below and then press the Register button.
 The EM-800 will validate the license matches your computer profile.
 If the computer is different from the one that the UIF was generated the license will not work.

Danfoss contact number: +4574882222
 Danfoss Email: el_licensing@danfoss.com

Paste license:

Feature name	Type	Expiry date
Base license	Complete access	31/12/2020
Food quality reports : Temperature quality	Complete access	31/12/2020
Food quality reports : HACCP	Complete access	31/12/2020
Web services	Complete access	31/12/2020

System Alarm Settings

In addition to alarms from the Danfoss front end controllers, the AK-EM 800 can generate System alarms and warning messages that can be sent by the AK-EM 800 System. And on this page it is possible to choose the severity of them.

Select Configuration -> Alarms -> System Alarm

Overview

Alarms

Configuration

System Alarm

Admin: Sup

Save

System alarms and warnings ^	Priority	Action code
AKM system alarm	Normal	15
Alarm from unknown site	Normal	15
Alarm routing failed	Normal	15
Backup/Archive error	Normal	15
Change in System Manager	Normal	15
Error while communicating with front end	Normal	15
License expired	Normal	15
Log data collection failure	Normal	15
Log data gap found	Normal	15
Log/Asset conflict	Normal	15
Low disk space	Normal	15
No contact from site	Normal	15
Report routing failed for some destinations	Normal	15
Scan failure	Normal	15
Schedule error	Normal	15
Version change at Site	Normal	15

The priority can be chosen from Normal to Critical
And an appropriate Action code can also be chosen from 1-15

The Priority can be used in the current alarm screen as a sorting criteria.

The Action code can be used for alarm forwarding. (see chapter alarm routes)

Or the particular alarm type can be disabled.

Alarm Routes

This is where you setup alarm forwarding rules by E-mail to previously created Destinations.

There is a list of all ready created rules which can be used to copy from or completely new rules can be created.

Select Configuration -> Alarms -> Alarm Routes

Overview

Alarms

Configuration

Alarm Routes

Admin: Sup

Add Edit Copy Delete Done

Rule name ^	Active	No. of sites	No. of receiver
<input type="checkbox"/> Weekend Service Mobile	No	2	1
<input type="checkbox"/> Service mobile	Yes	2	1

Show: 50

For adding a Routing rule, click on the "Add" option.

Alarm routes (continued)

First the sites that this rule should be used for must be selected.

The screenshot shows the 'Add alarm route rule' configuration page with the 'Site Selection' tab active. The 'Name' field contains 'Service mobile'. Below the tabs, there is a 'Filter' field and an 'Apply' button. The 'Available sites' section shows a tree structure with 'Uncategorized' expanded, revealing 'SYSTEM ALARM SITE'. The 'Selected sites' section is empty, displaying 'No items to show.' Green arrows at the bottom indicate the flow between the available and selected sites.

1. Define a name for the rule
2. Choose the sites
3. Assign by clicking on the green "Right" arrow.

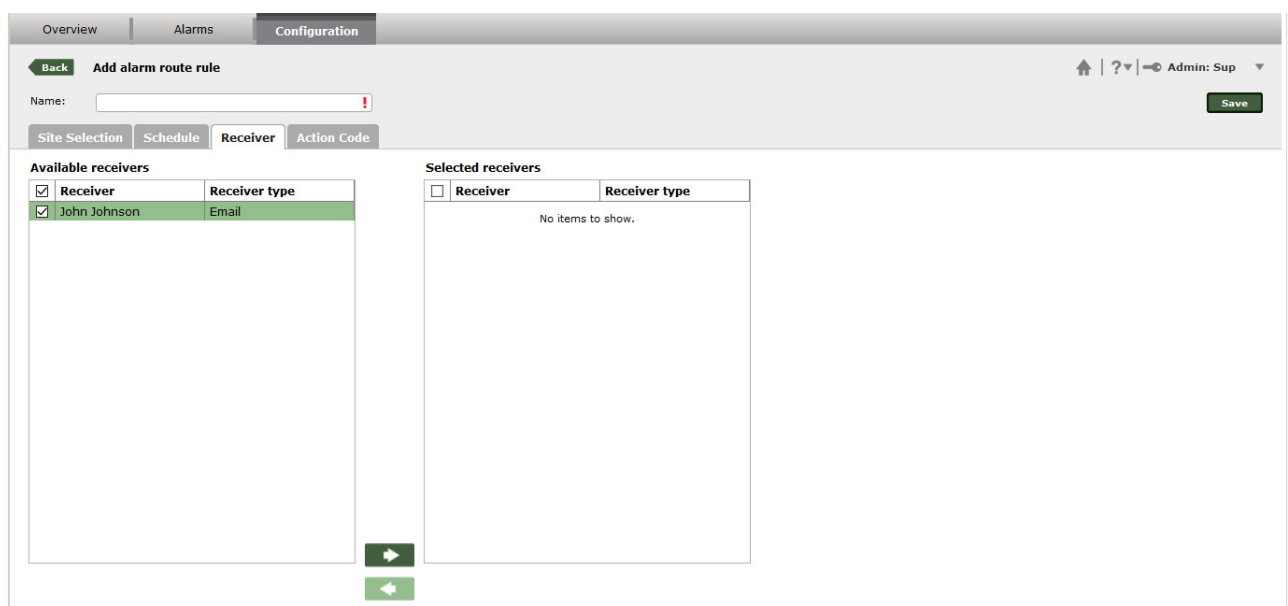
Then a schedule for when this rule should be affective must be defined

The screenshot shows the 'Add alarm route rule' configuration page with the 'Schedule' tab active. The 'Daily schedule' section shows a calendar grid for the week of Monday to Sunday. A blue text overlay says 'You can also select all days'. An 'Edit' button is visible. A 'Schedule for Monday' dialog is open, showing time selection fields. The 'Time' section has three rows of 'From' and 'To' time pickers. The 'Apply time to' section has checkboxes for Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, and Sunday. The 'Monday' and 'Friday' checkboxes are checked.

1. Press the edit button or double click on a specific day and make the necessary selection for the schedule. The time values can be from 00:00 to 23:59
2. When done save the values to the time table by pressing OK

Third step in creating a forwarding rule is to select the recipients of the alarm

1. Choose the correct receiver among available destinations
2. Add it by clicking on the green "Right" arrow.



Overview | Alarms | Configuration

[Back](#) Add alarm route rule Admin: Sup [Save](#)

Name:

[Site Selection](#) [Schedule](#) [Receiver](#) [Action Code](#)

Available receivers

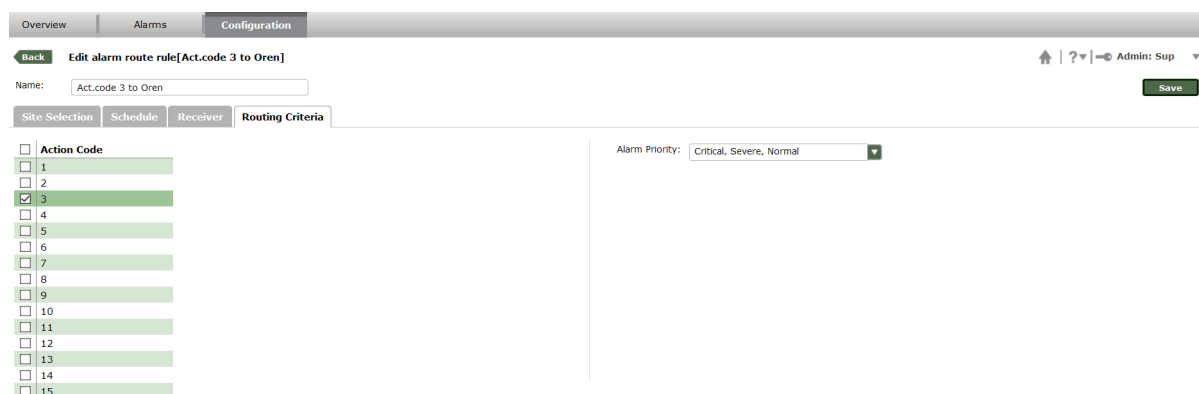
<input checked="" type="checkbox"/>	Receiver	Receiver type
<input checked="" type="checkbox"/>	John Johnson	Email

Selected receivers

<input type="checkbox"/>	Receiver	Receiver type
No items to show.		

[→](#) [←](#)

Select the Action codes and the alarm priority for which this rule should be effective for and save the routing rule.



Overview | Alarms | Configuration

[Back](#) Edit alarm route rule[Act.code 3 to Oren] Admin: Sup [Save](#)

Name:

[Site Selection](#) [Schedule](#) [Receiver](#) [Routing Criteria](#)

Action Code

<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input checked="" type="checkbox"/>	3
<input type="checkbox"/>	4
<input type="checkbox"/>	5
<input type="checkbox"/>	6
<input type="checkbox"/>	7
<input type="checkbox"/>	8
<input type="checkbox"/>	9
<input type="checkbox"/>	10
<input type="checkbox"/>	11
<input type="checkbox"/>	12
<input type="checkbox"/>	13
<input type="checkbox"/>	14
<input type="checkbox"/>	15

Alarm Priority:

E-Mail

If all settings are made correctly an e-mail will be sent with the following alarm details.

Panel GW

--- **High t.alarm**

EKC 204

2013-03-03 16:59:19.0

Log Id	1380
Priority	Normal
Alarm Reason	--- High t.alarm
Action Code	actionCode14
Unit Id	
Trip Value	
Alarm settings	
Active at	03/03/2013
Received at	03/03/2013
Cancelled at	
Duration	
Acknowledged at	
Acknowledged by	
Cleared at	
Cleared by	

Chains









Select Configuration -> Site -> Chain

Supporting multiple customers (Chains) is possible with the AK-EM 800. The following section describes how to configure store chains.

For adding a new Chain, click on the "Add" option.

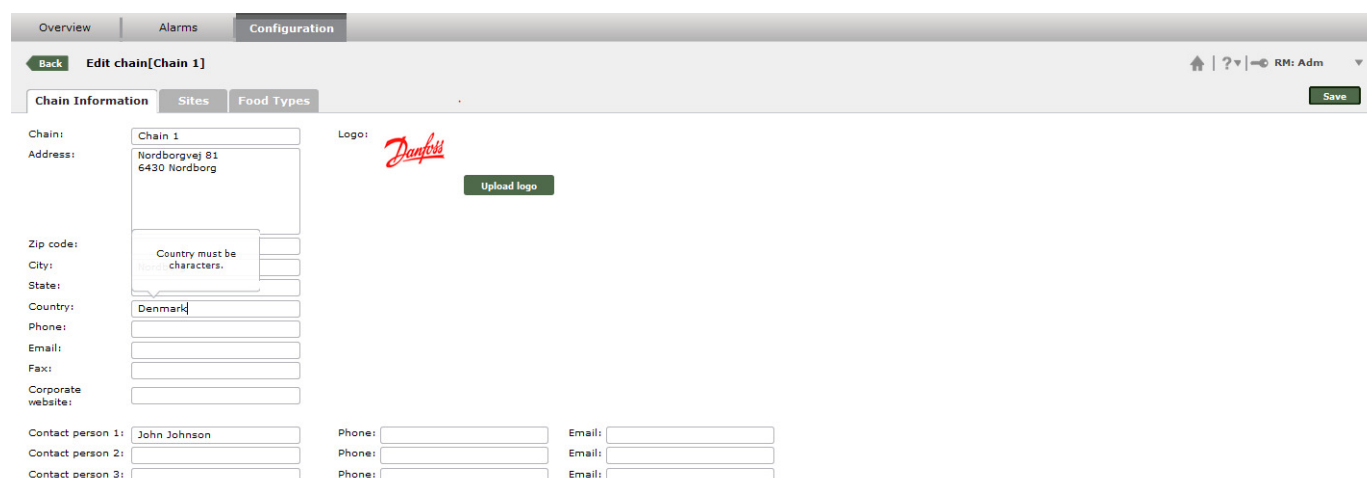
This is where the Chains are managed. Once a Chain has been created they can be associated with sites and reports can be made based on the Chain information

A new chain can be added or existing ones can be modified by clicking the manage button.

Overview		Alarms	Configuration
Chain		   	
		   	Show: <input type="text" value="50"/>
<input type="checkbox"/> Chain *	No. of sites		
<input type="checkbox"/> Chain 1	3		
<input type="checkbox"/> Chain 2	0		
<input type="checkbox"/> Chain 3	0		

Adding a Chain


First the contact details must be added



Overview | Alarms | **Configuration**

[Back](#) Edit chain[Chain 1] RM: Adm [Save](#)

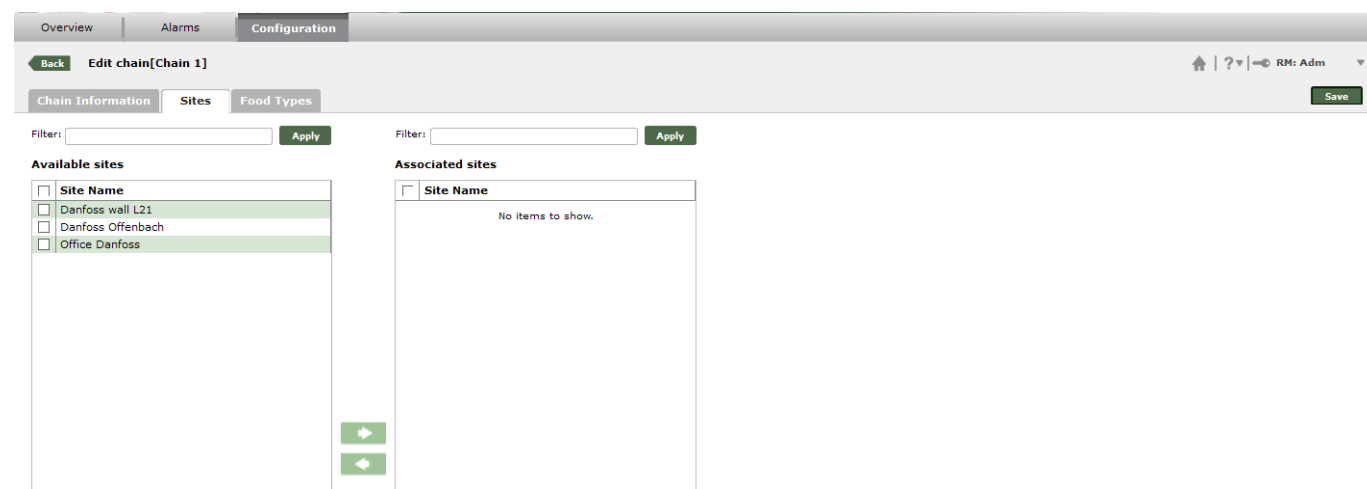
Chain Information | **Sites** | Food Types

Chain: Chain 1
 Address: Nordborgvej 81
 6430 Nordborg
 Zip code:
 City:
 State:
 Country: Denmark
 Phone:
 Email:
 Fax:
 Corporate website:
 Logo:  [Upload logo](#)
 Contact person 1: John Johnson Phone: Email:
 Contact person 2: Phone: Email:
 Contact person 3: Phone: Email:

Then the sites must be associated for the chain if they are available and not associated.

The association can also be done later when a site is created.

1. Select which sites to add to this chain
2. Add them by clicking on the green "Right" arrow.



Overview | Alarms | **Configuration**

[Back](#) Edit chain[Chain 1] RM: Adm [Save](#)

Chain Information | **Sites** | Food Types

Filter: [Apply](#) Filter: [Apply](#)

Available sites

<input type="checkbox"/>	Site Name
<input type="checkbox"/>	Danfoss wall L21
<input type="checkbox"/>	Danfoss Offenbach
<input type="checkbox"/>	Office Danfoss

Associated sites

<input type="checkbox"/>	Site Name
No items to show.	

[→](#) [←](#)

Once the site have been added, the Food types used at this site must be created if HACCP and TQ reports are required.

The Food types are later used when configuring HACCP parameters.

1. For adding a new food type, click on the "Add" option.
2. Add the necessary details for the entry and save it by pressing "Done". Recommendation: Add the limit also to the Food type name. That makes the limits visible on all settings. (special characters like a / are not allowed for the food type name)

Overview | Alarms | Configuration

Back Edit chain[Danfoss] Admin: Sup

Chain Information | Sites | Food Types Save

Note : Food type(s) having asset(s) associated will not be deleted.

Food type	Lower limit	Upper limit
<input type="checkbox"/> HT (4 to 8)	4°C	8°C
<input type="checkbox"/> LT (-23 to -21)	-23°C	-21°C
<input checked="" type="checkbox"/> MT (1 to 3)	1°C	3°C

Add food type

.val shall be entered as 0.val. Valid range: -999 to 999

Food type name: LT (-23 to -21)

Lower limit: -23 °C

Upper limit: -21 °C

Save Cancel

3. When all food types have been added the entries must be saved by pressing "Done".

4. Save the Chain entry by clicking the Save button.

Note: It's not possible to delete a food type, as long it's associated with an asset.

Overview | Alarms | Configuration

Back Add chain Admin: Sup

Chain information | Sites | Food types Save

PKS Super Store

Food type	Lower limit	Upper limit
<input type="checkbox"/> Frozen Chicken	-20	-16
<input type="checkbox"/> Dairy	2	6
<input type="checkbox"/> Milk	2	6
<input type="checkbox"/> Fresh Chicken	2	6

Show: 50

Site

Select Configuration -> Site -> Site

This is where the existing sites are listed, and new ones can be added by clicking the manage button.

For adding a new Site, click on the "Add" option.



The screenshot shows the 'Configuration' tab with the 'Site' sub-tab selected. At the top right, there are navigation icons and a user profile 'Admin: Sup'. Below this is a 'Filter' section with a 'Select field:' dropdown set to 'None', an 'Apply' button, and a 'Clear' button. To the right of the filter are four buttons: 'Add', 'Edit', 'Delete', and 'Refresh sites'. Below these buttons is a table with columns: Name, Site number, Chain, System, SW version, IP address, Port, and Status. The table is currently empty. A 'Show: 50' dropdown is located to the right of the table headers.

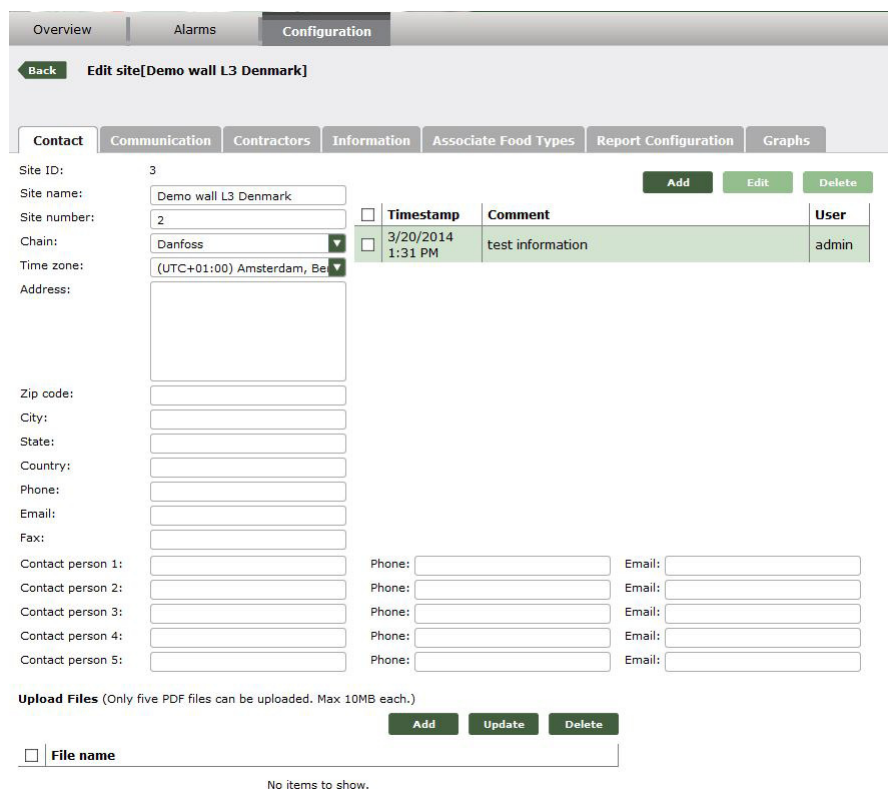
It's also possible to edit, delete or refresh an existing site.

Select one site to edit.

Select one or more sites to delete or refresh sites. A refresh can be needed, if multiple changes are done on site. E.g. a slave is added to a master unit.

Adding a site

Enter the name and the other details for the new Site entry



The screenshot shows the 'Add site' form. At the top, there's a 'Back' button and the title 'Edit site[Demo wall L3 Denmark]'. Below this are several tabs: 'Contact', 'Communication', 'Contractors', 'Information', 'Associate Food Types', 'Report Configuration', and 'Graphs'. The 'Contact' tab is active. The form contains the following fields: Site ID (3), Site name (Demo wall L3 Denmark), Site number (2), Chain (Danfoss), Time zone ((UTC+01:00) Amsterdam, Be), Address (empty), Zip code (empty), City (empty), State (empty), Country (empty), Phone (empty), Email (empty), Fax (empty), Contact person 1 (empty), Contact person 2 (empty), Contact person 3 (empty), Contact person 4 (empty), Contact person 5 (empty), Phone (empty), Email (empty), and a 'Timestamp' field with a date/time picker (3/20/2014 1:31 PM) and a 'Comment' field (test information). There are 'Add', 'Edit', and 'Delete' buttons at the top right of the form. Below the form is an 'Upload Files' section with a note: '(Only five PDF files can be uploaded. Max 10MB each.)'. It includes 'Add', 'Update', and 'Delete' buttons. At the bottom, there's a 'File name' field and a 'No items to show.' message.

Enter the name and the other details for the new Site entry.

Comments and PDF's can be added to a site. Max. 5 PDF's with max. 10MByte per PDF are possible. Comments are not limited.

Choosing a chain, timezone and site name are mandatory.

Adding an AK-SM 800 series or an AK-SC 355 site

1. Select AK-SM 8xx, AK-SC 255 or AK-SC 355 as System Type
2. Insert IP address and Alarm Port for the unit, and verify that there is a successful connection by pressing the test button (add user name and password for this test)
3. Define how often the site connection should be scanned. This is to "ping" the front end or the AKM agent. If there is no response a system alarm will appear in the alarm list. This action is dependent on the contract between monitoring center and end-user. A typical value is once per day.
4. The cap period is the time frame where the AK-EM 800 expects to get an alarm from front.
Example:
AK-SM 850 sends test alarms every 3 hours and the cap period is 4 hours. The cap time will be reset every time a test alarm is received. Otherwise a system alarm will appear in the current alarm list.
5. Select how often history log data should be collected from the site.
6. Type in user name and password of the unit. This is needed for write actions to the unit.

Adding a new AKM Site

1. Select AKM as System Type
2. Type the connection details for the AKM Agent, and verify that there is a successful connection to the AKM database.
3. Define how often the connection to the AKM agent should be scanned. Recommendation: This Scan interval makes only sense for one site. If the agent is handling several sites it's enough to scan the agent only once.
4. The cap period is the time frame where the AK-EM 800 expects to get an alarm from an AKM site.
Example:
To create frequently test alarms for AKM a SM720 can be programmed to send I'm alive alarms.
5. Choose what type of data is collected from this site. If only log an extra entry for alarm will be available.
6. Select how often history log data should be collected from AKM site. Recommendation for AKM. As AKM is collecting data only once per day, it makes no sense to use for AKM a shorter interval in AK-EM 800
7. Once there is a successful connection, retrieve all the networks in AKM to choose the one for this site.

Overview | Alarms | **Configuration**

[Back](#) Edit site[Demowall Denmark]

Contact | **Communication** | Contractors | Information | Conflicts

Site ID: 3
System type: AK-SM8XX

IP address: 188.180.111.35:80 [Test](#)
Alarm port: 3001
Scan interval: 01 : 00 hh:mm
I am alive cap period: 0 hour

Log setup

Log collection interval: 6 hour
Log collection start time: 00 : 00 hh:mm

System manager logon details

User name: Supervisor
Password:

AKM 1
IP address: 192.168.2.8:8080 [Test](#)
Alarm port: 3001
Scan interval: 12 : 00 hh:mm
Supported data: Logs

AKM 2
IP address: [Test](#)
Alarm port: [Test](#)
Scan interval: 00 : 00 hh:mm
Supported data: Alarms

Overview | Alarms | **Configuration**

[Back](#) Edit site[ALEPA Kilo (stopped)]

Contact | **Communication** | Contractors | Information | Conflicts | Associate Food Types | Report Configuration | Graphs

Site ID: 29
System type: AKM

AKM 1
IP address: 192.168.2.8:8080 [Test](#)
Alarm port: 3001
Scan interval: 00 : 00 hh:mm
I am alive cap period: 0 hour
Supported data: Logs,alarms

Log setup

Log collection interval: 0 hour
Log collection start time: 00 : 00 hh:mm

List of selected AKM front ends for the site

[Get networks](#)

Front end name	Address on AKM

- When the networks have been scanned, they will be on the left side. And must be selected. Once the selection is done, the selection must be saved. Remember to add both master and slaves.

Get networks

Select front ends

Available front ends

	Front end name	Address on AKM
<input type="checkbox"/>	Site 1	000:000:023:12
<input type="checkbox"/>	Site 2	000:000:027:12
<input type="checkbox"/>	Site 3	000:000:043:12
<input type="checkbox"/>	Site 4	000:000:134:12
<input type="checkbox"/>		000:000:139:12
<input type="checkbox"/>		000:000:167:12
<input type="checkbox"/>		000:000:174:12
<input type="checkbox"/>		000:000:191:12
<input type="checkbox"/>		20:1:
<input type="checkbox"/>		21:1:
<input type="checkbox"/>		0:254:25
<input type="checkbox"/>		11:1:
<input type="checkbox"/>		11:1:
<input type="checkbox"/>		11:1:

→

←

Selected front ends

	Front end name	Address on AKM
<input type="checkbox"/>	Site 82	10:1:1

Scanning AKM done successfully.

Save

Cancel

The contractor details can be added and the entry can be saved.

When saved, AK-EM 800 will retrieve asset and log details for the site.

Back Add site

Contact

Communication

Contractors

Refrigeration contractors

Contractor: Coolio

Working hours: Day/night

Contractor: Select contractor

Working hours: Night

Other contractors

Contractor: Electrify

Working hours: Day

Contractor: Select contractor

Working hours: Night

Save

Site: Panel GW added successfully.Would you like to receive the configuration data of the site?

Ok

Cancel

Receiving configuration data for Panel GW

Data type	Status
Asset information	Complete
Log definitions	Complete

Uploading Done: 100%

Close

AK-EM 800

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Once a site has been added and asset details and log definitions has been retrieved some extra functions will be available

Information page

- Gives details about the assets and logs configured on the site

Conflicts

- Gives information about any conflicts with this site

A conflict is detected, if there is any difference between the AK-SM 800 database and the unit on site is detected. E.g. new or deleted history logs,...

Associate food types

- Gives the possibility to add assets to defined food types

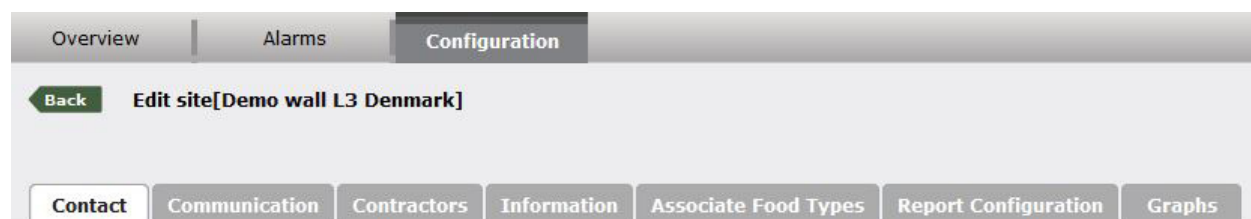
Report configuration

Possibility to create the conditions for

- HACCP reports
- TQ reports

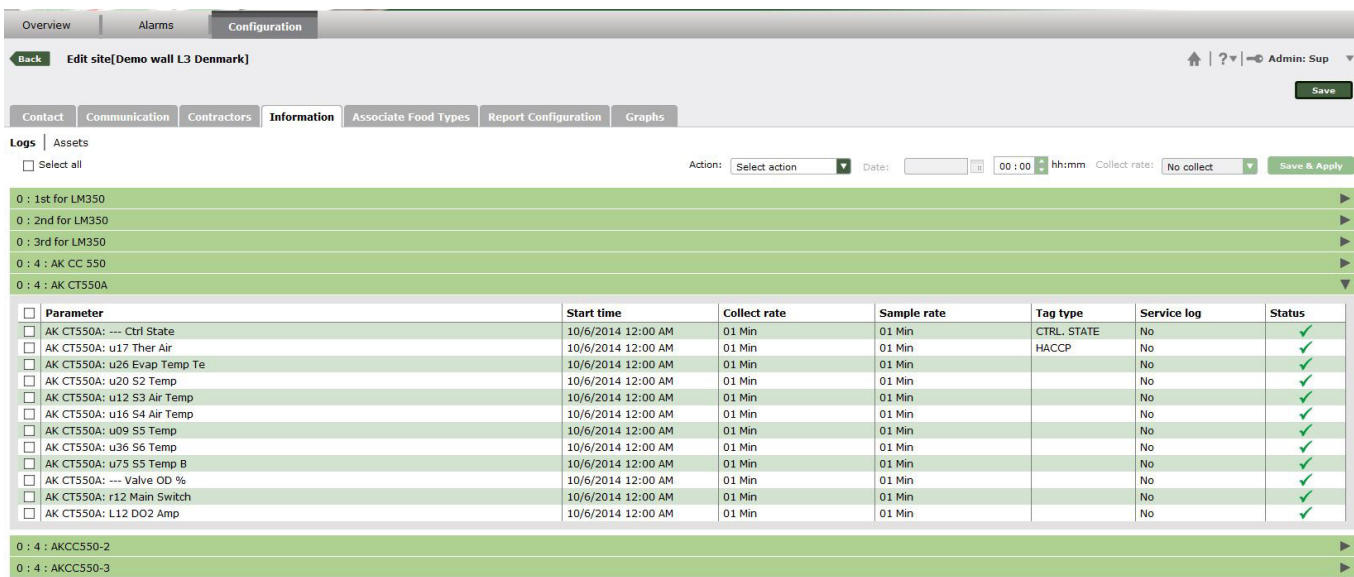
Graphs

- Easy way to view graphs for the selected site



Site Information

On the Site information page it is possible to see the details that has been uploaded to the AK-EM 800 system, and the status e.g. a new log has been added to the system.



Overview | Alarms | Configuration

Back Edit site[Demo wall L3 Denmark] Admin: Sup

Contact | Communication | Contractors | Information | Associate Food Types | Report Configuration | Graphs

Logs | Assets

Select all

Action: Select action Date: 00:00 hh:mm Collect rate: No collect Save & Apply

Parameter	Start time	Collect rate	Sample rate	Tag type	Service log	Status
AK CT550A: --- Ctr1 State	10/6/2014 12:00 AM	01 Min	01 Min	CTRL. STATE	No	✓
AK CT550A: u17 Ther Air	10/6/2014 12:00 AM	01 Min	01 Min	HACCP	No	✓
AK CT550A: u26 Evap Temp Te	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: u20 S2 Temp	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: u12 S3 Air Temp	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: u16 S4 Air Temp	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: u09 S5 Temp	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: u36 S6 Temp	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: u75 S5 Temp B	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: --- Valve OD %	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: r12 Main Switch	10/6/2014 12:00 AM	01 Min	01 Min		No	✓
AK CT550A: L12 DO2 Amp	10/6/2014 12:00 AM	01 Min	01 Min		No	✓

0 : 4 : AKCC550-2

0 : 4 : AKCC550-3

The user is able to enable only logs he likes to retrieve from a site. By default, nothing is selected, but all logs are collected.

In addition the user can change the collect rate (e.g. from site a 1 minute log is selected, but if a 10 minute log is good enough, the user can change the rate from here.)

1. Select the logs for the new sample rate (or select all)
2. Choose "Collect rate" in the "Action" drop down box.
3. Set the new sample rate in the "Collect rate" drop down box
4. Press the "Save & Apply" button

It is also possible to recollect data in case of data gaps.

1. Select the logs to recollect (or select all)
2. Choose "Start time" in the "Action" drop down box.
3. Set data and time
4. Press the "Save & Apply" button

If the user like to do both in one go, he should choose "Both" in the "Action" drop down box.

Conflict

The Conflicts page is only presented if there is a conflict between the known details and the newly updated details, e.g. if log definition has been changed or a new asset is added etc.

Select the assets or parameters and press the Accept button to accept the changes

If a log has been deleted in the front end, the previously collected data for these assets will not be deleted.

Likewise if new parameters have been added in a log, they will also be collected, even though the user doesn't accept the changes first.

The screenshot shows the 'Conflicts' tab in the 'Configuration' section. It displays a table of conflicts between assets and logs. The table has columns: Asset, Log, Info, Status, and Details. There is an 'Accept' button at the top right of the table.

Asset	Log	Info	Status	Details
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : r12 Main switch	New	Add conflict	Log added
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : --- Def. Start	New	Add conflict	Log added
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : --- EKC State	New	Add conflict	Log added
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : u17 Ther. air	New	Add conflict	Log added
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : u12 S3 air temp.	New	Add conflict	Log added
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : u16 S4 air temp.	New	Add conflict	Log added
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : u09 S5 temp.	New	Add conflict	Log added
<input type="checkbox"/> 0:0:0 - EKC 204	EKC 204 007 : u10 DI1 status	New	Add conflict	Log added

Food type Associations

If a site has been assigned to a chain and Food type data is available it is possible to make HACCP reports for that site.

1. Select the food type
2. Choose the controller that must be assigned to the chosen food type
3. Assign by clicking on the green "Right" arrow.

The screenshot shows the 'Associate Food Types' tab in the 'Configuration' section. It displays a form for selecting food types and associating them with assets. The form includes a 'Food type' dropdown, a 'Selected food type' field, and a 'Filters' dropdown. Below the form are two tables: 'Available assets' and 'Selected assets'. There are green arrows for moving assets between the two tables.

Asset	Food type	Asset
<input type="checkbox"/> 0 : 4 : AK CT550A	<input type="checkbox"/> Low temp	0 : 4 : AK CT550A
<input type="checkbox"/> 0 : 4 : LM350	<input type="checkbox"/> Low temp	0 : 4 : AKCC550-2
<input type="checkbox"/> 0 : 4 : AKCC550-3	<input type="checkbox"/> Low temp	0 : 4 : AK CC 550
<input type="checkbox"/> 0 : 4 : AKCC550-2	<input type="checkbox"/> Cheese	0 : Roomtemp
<input type="checkbox"/> 0 : 4 : AK CC 550	<input type="checkbox"/> Low temp	0 : 4 : AKCC550-3
<input type="checkbox"/> 0 : AK-SM8XX		
<input type="checkbox"/> 0 : FAN temperature		
<input type="checkbox"/> 0 : Temp in wall		
<input type="checkbox"/> 0 : For APP test		
<input type="checkbox"/> 0 : L3		
<input type="checkbox"/> 0 : 4 : LM350		
<input type="checkbox"/> 0 : 4 : Dark 1 AA		

Report Configuration (HACCP and TQ)

Once the food types have been correctly assigned, it is time to select the parameters that must be added to the report.

1. Choose the Tag type: Temperature, Defrost and Main Switch signal

For HACCP or Temp quality sensor use e.g. "u12 S3 air", "u36 S6 Temp"

For Defrost signal use:

- a. CTRL.STATE if the controller value delivers (parameter EKC State or Ctrl.State) 1,4,14 or 15 for defrost
if not available use
- b. REG.CONDITION (parameter Reg.Cond)if value delivers 4 or 5
if not available use
- c. Defrost State e.g. "u60 Def. relay or Defrost state". Value should be 1

For main switch signal use:

CTRL.STATE if the controller value delivers (parameter EKC State or Ctrl.State) 10,4,14 or 15 for defrost

if not available use

MAINSWITCH(2) (parameter r12 Mainswitch) controller delivers value 0 (0=off,1=On)

if not available use

MAINSWITCH(3) (parameter r12 Mainswitch) controller delivers

value -1 or 0 (0=off,1=On,-1>manual)

Report: HACCP

Tag type: HACCP

Filter:

Available

☐ 0 : Rod

CTRL. STATE
REG. CONDITION
DEFROST STATE
MAIN SWITCH(2)
MAIN SWITCH(3)

Report: TEMP QUALITY

Tag type: CTRL. STATE

Filter:

Available

☐ 0 : LM

CTRL. STATE
REG. CONDITION
DEFROST STATE
MAIN SWITCH(2)
MAIN SWITCH(3)
TEMP QUALITY

2. Select the parameter

Note: These parameter must be logged

3. Add them to the "Selected" list and save

Example: HACCP configuration

Overview | Alarms | Configuration

Back Edit site[Rainer homeoffice]

Contact | Communication | Contractors | Information | Associate Food Types | Report Configuration | Graphs

Report: HACCP

Tag type: HACCP

Filter: All

Note: Please save configuration on this tab before navigating to other tabs.

Apply

Available

☐ 0 : 7 : AK-CC550 Lab 88

☐ 0 : 7 : AK-CC550 Lab 87

☐ 0 : 7 : AK-CC550 Lab 86

☐ 0 : 7 : AK-CC550 Lab 85

☐ 0 : 7 : AK-CC550 Lab 84

☐ 0 : 7 : AK-CC550 Lab 83

☐ 0 : 7 : AK-CC550 Lab 82

☐ 0 : 7 : AK-CC550 Lab 81

☐ 0 : 7 : AK-CC550 Lab 80

☐ 0 : 6 : AK-CC550 Lab 53

☐ 0 : 6 : AK-CC550 Lab 52

☐ 0 : 6 : AK-CC550 Lab 51

☐ 0 : 6 : AK-CC550 Lab 50

☐ 0 : 6 : AK-CC550 Lab 49

☐ 0 : 6 : AK-CC550 Lab 48

Selected

Asset	Log parameter	Tag Name	Eng. u...
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 61	AK-CC550 Lab 61: u17 Ther Air	HACCP	degc
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 62	AK-CC550 Lab 62: u17 Ther Air	HACCP	degc
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 63	AK-CC550 Lab 63: u17 Ther Air	HACCP	degc
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 64	AK-CC550 Lab 64: u17 Ther Air	HACCP	degc
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 65	AK-CC550 Lab 65: u17 Ther Air	HACCP	degc
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 66	AK-CC550 Lab 66: u17 Ther Air	HACCP	degc
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 67	AK-CC550 Lab 67: u17 Ther Air	HACCP	degc
<input type="checkbox"/> 0 : 6 : AK-CC550 Lab 68	AK-CC550 Lab 68: u17 Ther Air	HACCP	degc

Example: TQ configuration

Overview
Alarms
Configuration

Back
Edit site[Rainer homeoffice]

Contact
Communication
Contractors
Information
Associate Food Types
Report Configuration
Graphs

Report: TEMP QUALITY
Tag type: CTRL. STATE
Filter:
All
Apply

Note: Please save configuration on this tab before navigating to other tabs.

Available

- ☐ 0 : 7 : AK-CC550 Lab 88
- ☐ 0 : 7 : AK-CC550 Lab 87
- ☐ 0 : 7 : AK-CC550 Lab 86
- ☐ 0 : 7 : AK-CC550 Lab 85
- ☐ 0 : 7 : AK-CC550 Lab 84
- ☐ 0 : 7 : AK-CC550 Lab 83
- ☐ 0 : 7 : AK-CC550 Lab 82
- ☐ 0 : 7 : AK-CC550 Lab 81
- ☐ 0 : 7 : AK-CC550 Lab 80
- ☐ 0 : 6 : AK-CC550 Lab 53
- ☐ 0 : 6 : AK-CC550 Lab 52
- ☐ 0 : 6 : AK-CC550 Lab 51
- ☐ 0 : 6 : AK-CC550 Lab 50
- ☐ 0 : 6 : AK-CC550 Lab 49
- ☐ 0 : 6 : AK-CC550 Lab 48

Selected

<input type="checkbox"/>	Asset	Log parameter	Tag Name	Eng. u...
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 56	AK-CC550 Lab 56: u17 Ther Air	TEMP QUALITY	degc
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 57	AK-CC550 Lab 57: u17 Ther Air	TEMP QUALITY	degc
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 58	AK-CC550 Lab 58: u17 Ther Air	TEMP QUALITY	degc
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 59	AK-CC550 Lab 59: u17 Ther Air	TEMP QUALITY	degc
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 60	AK-CC550 Lab 60: u17 Ther Air	TEMP QUALITY	degc
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 61	AK-CC550 Lab 61: u17 Ther Air	TEMP QUALITY	degc
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 62	AK-CC550 Lab 62: u17 Ther Air	TEMP QUALITY	degc
<input type="checkbox"/>	0 : 6 : AK-CC550 Lab 63	AK-CC550 Lab 63: u17 Ther Air	TEMP QUALITY	degc

Graphs

- see custom graphing

Users

Select Configuration -> Users -> Users

The users function is divided into 3 pages

All users

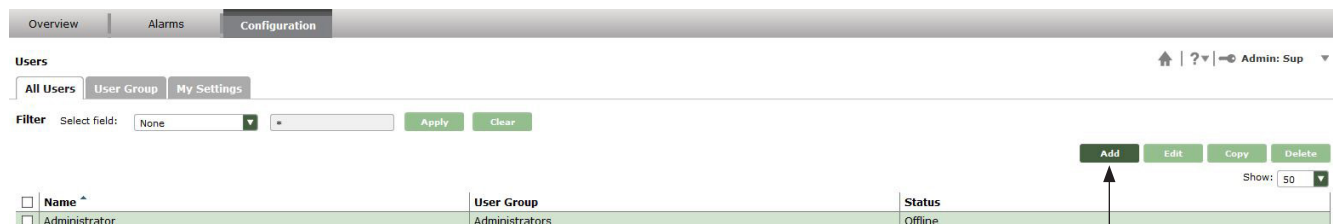
– List of existing users with managing functions

User group

– List of defined user groups with managing functions

My Settings

– Settings for the user that is logged in



For adding a user, click on the "Add" option.

All Users page

There are by default 4 users created

Super Administrator

– This user has all rights at any time, and can not be deleted

(admin/danfoss)

Administrator

– This user has all rights by default but can be altered

(administrator/danfoss)

User

– This user has all rights except write access to the "Configuration" menu **(user/danfoss)**

Guest

– This user can view everything but not change anything **(guest/danfoss)**

Adding a user

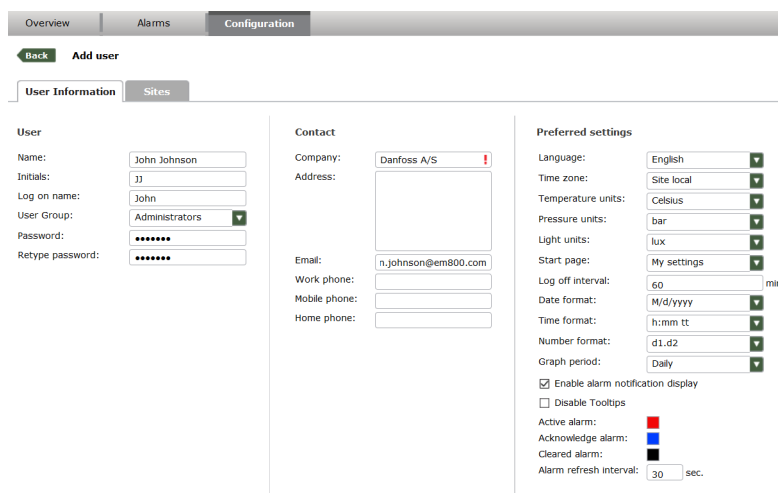
Some of the fields are mandatory and marked with a red "!"

Log on name can't be changed later and User Group association can't be changed by the user himself.
To disable the auto log off function, set the "Log off interval" to zero.

If the user has forgotten his password, the Superadmin will be able to reset the user to the default password "danfoss"

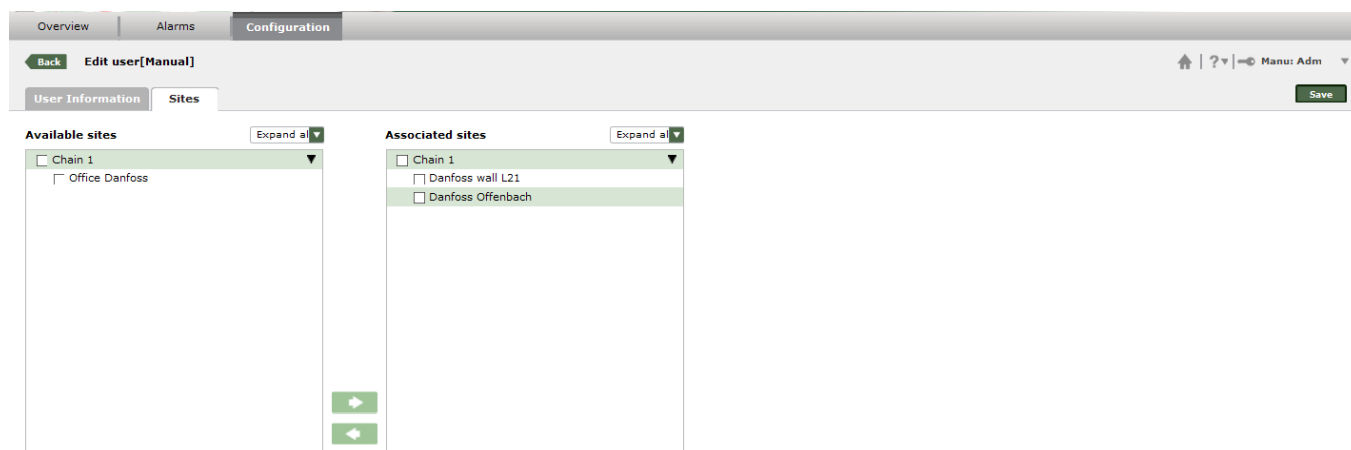
Following languages are supported

- English
- German
- Portuguese
- Portuguese (Brazil)
- Russian
- Spanish (Mexico)
- Spanish
- Dutch
- French
- Italian
- Chinese



Site association to a user

1. Select which site to associate to selected user
2. Assign them by clicking on the "Right" arrow.
3. When all the settings have been made the new user can be created by pressing the Save button in the top right corner



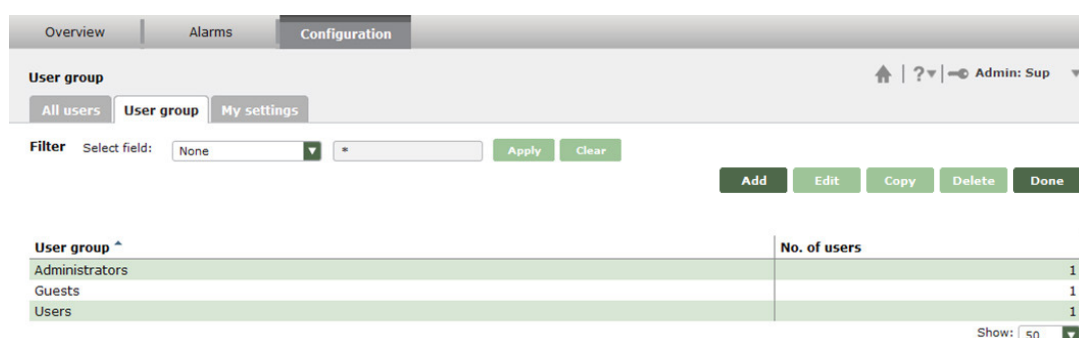
User Groups page

This is where user groups can be added or existing User groups can be changed.

There are 4 User groups by default with different restrictions.

Super admin, Administrators, Users and Guests.

1. For adding a User group, click on "Manage" and select the "Add" option.



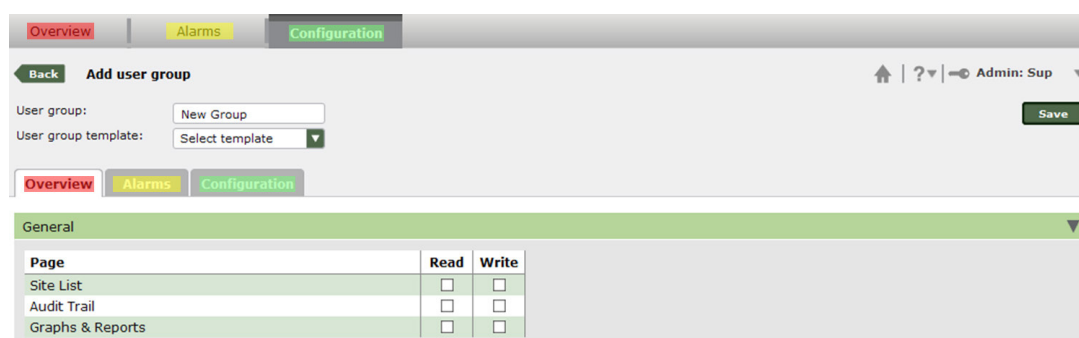
User group	No. of users
Administrators	1
Guests	1
Users	1

Adding a new user group

When creating a new "User group" the admin must decide what pages the new User group must have read and write access to.

There are three tabs, where each of them represents a menu group. In every menu group the admin can choose the read or write access for each page.

1. The name for the new menu group must be entered here
2. If required the new group can be based on of the already existing user groups.
3. Assign rights



Page	Read	Write
Site List	<input type="checkbox"/>	<input type="checkbox"/>
Audit Trail	<input type="checkbox"/>	<input type="checkbox"/>
Graphs & Reports	<input type="checkbox"/>	<input type="checkbox"/>

Read access will let the user view information for the respective page

Write access will let the user change information for the respective page

Contractors

Select Configuration -> Users -> Contractors

A contractor is the person that has the technical knowledge regarding the installation, and will be the one to contact if something has to be changed on the installation.

For adding a Contractor, click on "Manage" and select the "Add" option.

When the Contractor informations has been added, the entry must be saved.

When creating a site entry in the system, the contractors can be assigned for that site.

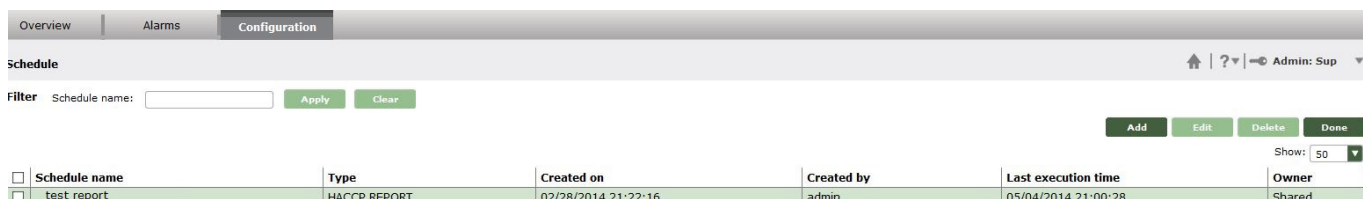
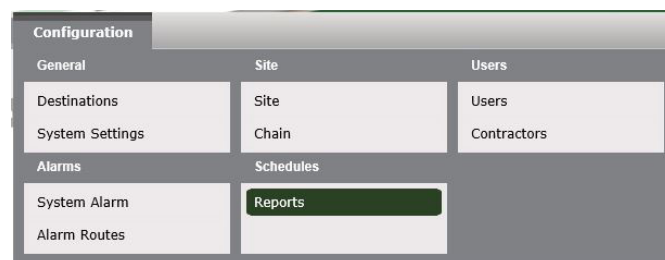
Choose which type of contractor it is

Scheduled Reports

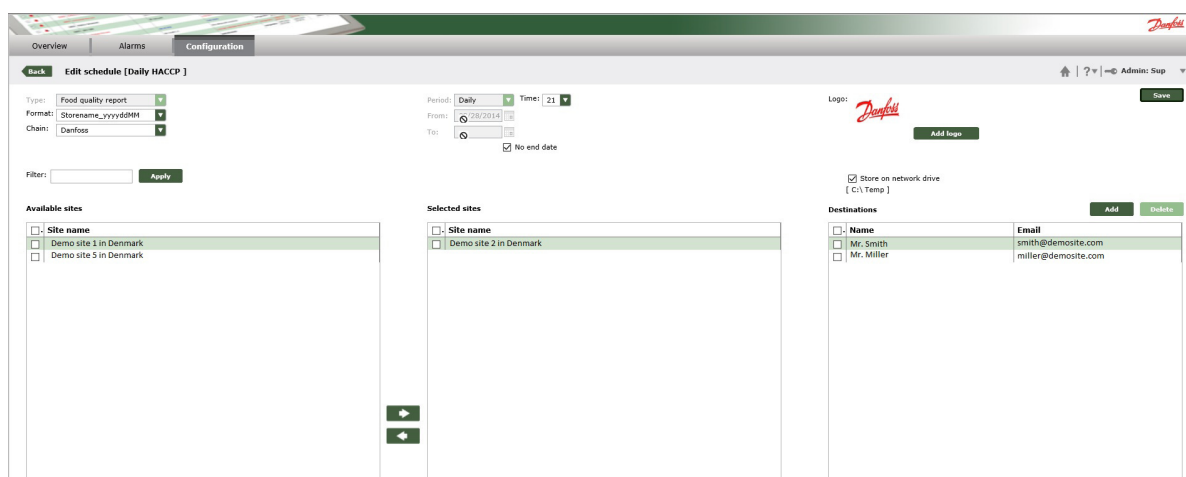
Select Configuration -> Schedules -> Reports

A scheduled report is today a HACCP or TQ report you like to forward on a frequently basis to one or more Email addresses.

To add a reports click on "Add". As usual Manage opens also the menu to edit or delete an existing schedule.



To schedule a HACCP report, the store must been setup before with food types, association of food types and the HACCP configuration (see corresponding chapter). Insert also the report type (today only HACCP and Temperature Quality are available), the format of the file name and the chain. Afterwards, you have to the select one or more sites (from available to selected sites) and the Email destinations. The destinations are defined before under menu configuration – destination.



The user can select, if the report should run for a period only (from to) or if the report should have no end date. Select also the time when the report will be send out.

There is also a possibility to store the HACCP PDF on a network drive. The location can be defined in the system settings. (Configuration – System settings – Schedule settings)

As usual, a logo for the report can be selected.

After finishing all details, the report must be saved. A message box will appear and allows the user to give the schedule a name and also if the report will be shared with other users or not.

Afterwards the report is listed in the overview

Overview Alarms Configuration					
Schedule					
Filter	Schedule name:	<input type="text"/>	<input type="button" value="Apply"/>	<input type="button" value="Clear"/>	
					<input type="button" value="Add"/> <input type="button" value="Edit"/> <input type="button" value="Delete"/> <input type="button" value="Done"/>
					Show: 50
<input type="checkbox"/>	Schedule name	Type	Created on	Created by	Last execution time
<input type="checkbox"/>	test report	HACCP REPORT	02/28/2014 21:22:16	admin	05/04/2014 21:00:28
					Owner
					Shared

The user can see the name of the report, when it was created and also when it was last time executed.

The result should be a report with a PDF attachment. The PDF contains HACCP data (see example below)

<

Site history collection report

AK-EM 800 is able to send logs as CSV or TXT attachment by Mail.

1. Select type "Site history collection report"
2. Select the file format
3. Select the chain
4. Select the site(s) for the export

The user can choose, if he wants to have the report

1. Daily:

Select Start date and send time

Period: Time:

From:

To:

☒ No end date

2. Weekly

Select Start date, Day of the week and send time

Period: Time:

From:

To:

☒ No end date

3. Monthly

Select start date, date of the month and send time

Period: Time:

From:

To:

☒ No end date

Interval:

Interval dropdown menu:

- 01 Min
- 01 Min
- 02 Min
- 10 Min
- 30 Min
- 1 Hr

Selected sites:

☐ Site

Calendar for Sep 2016:

S	M	T	W	T	F	S
28	29	30	31	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	1

Buttons: Today, Cancel

The use can also select the interval. E.g. If the log in in mute interval, but the user needs it different in the CSV or TXT file, he is able to change the interval here. If the logs are in different intervals, they will be aligned. Selectable intervals are 1, 2, 10, 30 and 60 minutes.

The format can be chosen between TXT or CSV.

The rest is identical with all other reports.

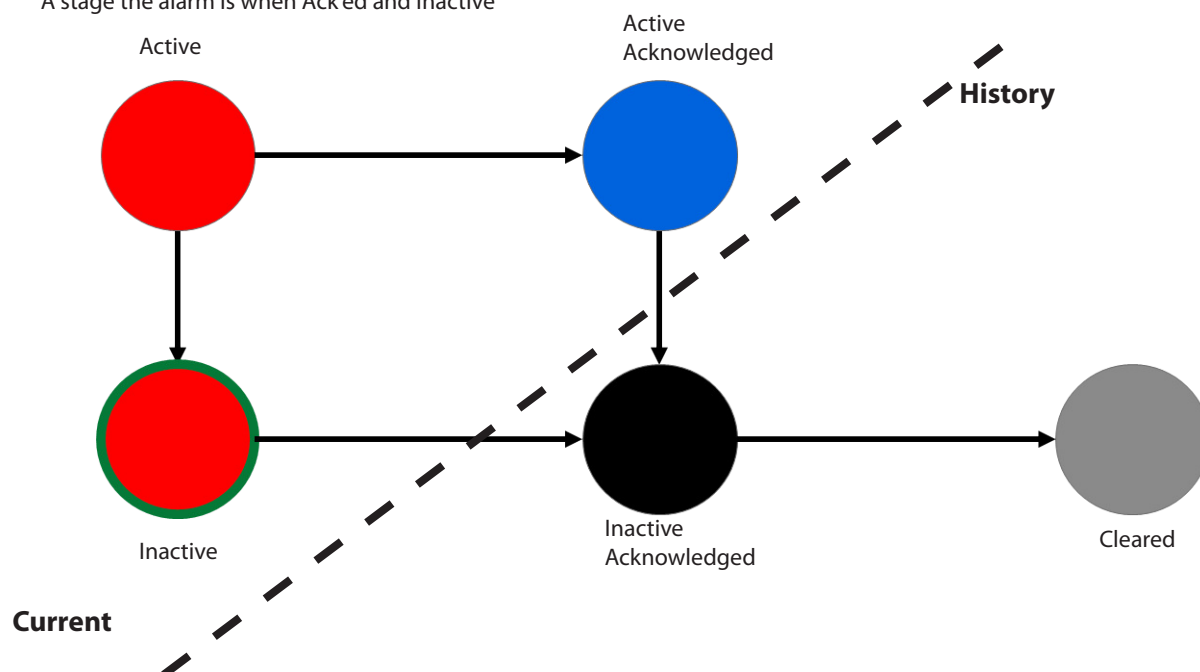
Report format:

☒ Store on network drive

Alarms

The graphic below describes the work flow of an alarm and how it's handled in AK-EM 800.

Active: An alarm situation is present on site
 Inactive: An alarm situation is not present on site
 Acknowledged: A User has accepted this alarm
 Cleared: A stage the alarm is when Ack'd and Inactive



Alarm Lists

Select Alarm -> Alarm Lists

The Alarm Lists function contains 2 pages by default, Current Alarms and Historical Alarms, where the alarms which are not acknowledged will be listed in the Current alarms list.

If the alarm has been acknowledged by a user it will be shown with a tick mark in the "Ack" column and the colour for that alarm will change according to the settings for the logged in user.

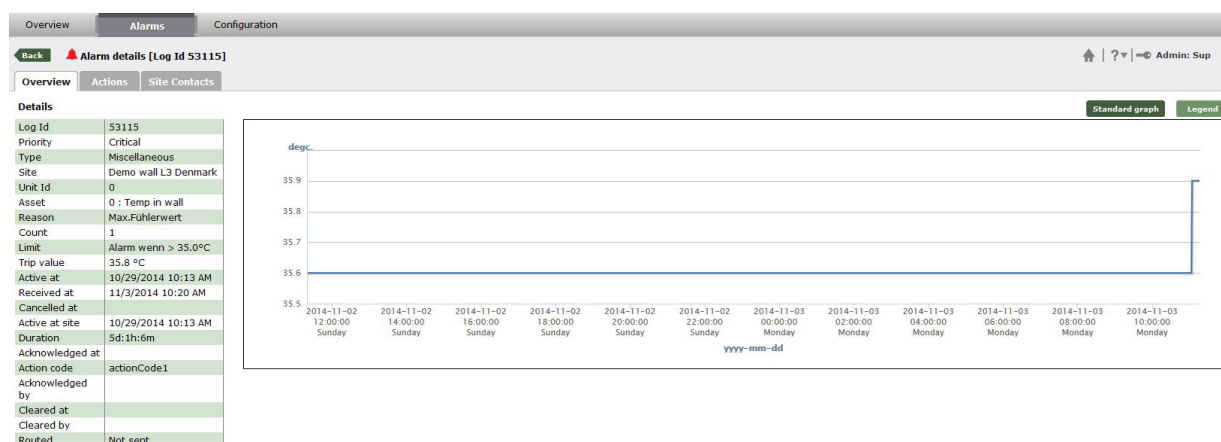
When cancelled and acknowledged it will be moved to Historical alarms.

An alarm can be acknowledged and cleared by selecting it and choosing one of the available options.

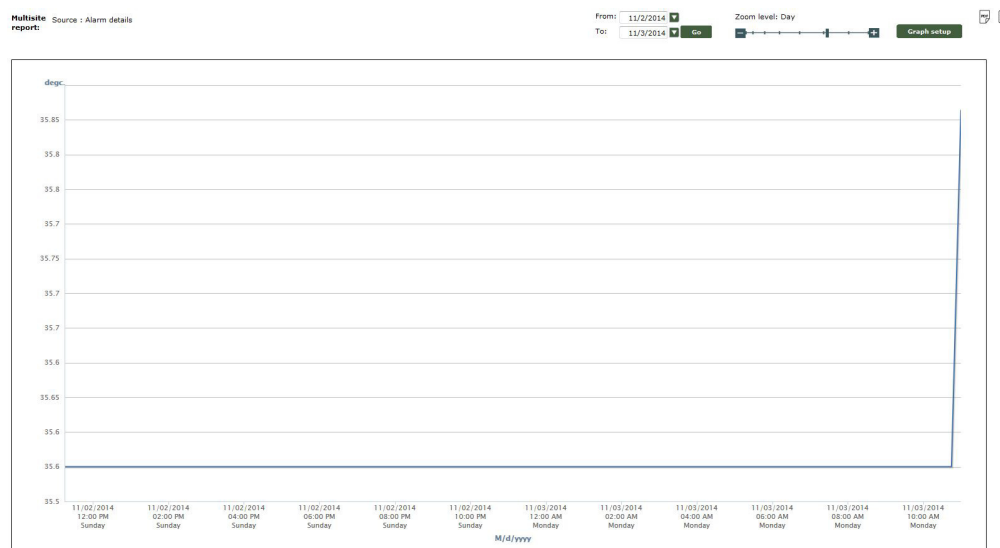
Reorganizing of columns is possible by drag&drop of the headlines

Overview Alarms Configuration															
Alarm Lists															
Current Alarms Historical Alarms															
Filter Acknowledge Clear Save setting															
Alarm count: 11															
St...	Ack.	Log Id	Site	U...	Asset	Reason	Type	Received at *	Active at site	Tri...	Priority	C...	Cancelled at	Cleared at	Ackno...
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125264	Manuell Fiek 1K	0	3 : Manuell Fiek 1K	Max Def Time	R	08-11-2013 09:35:05	08-11-2013 09:33:04	OK	Normal	1	08-11-2013 09:3	08-11-2013 09:38:09	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125263	Manuell Fiek 1K	0	3 : 1-planned 1K9B	Max Def Time	R	08-11-2013 09:34:54	08-11-2013 09:32:47	OK	Normal	1	08-11-2013 09:3	08-11-2013 09:37:53	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125262	Manuell Fiek 1K	0	0 : AK-SM850	Test Alarm	R	08-11-2013 08:18:25	08-11-2013 08:00:00	OK	Normal	1	08-11-2013 08:0	08-11-2013 08:00:35	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125261	Manuell Fiek 1K	0	0 : AK-SM850	Test Alarm	R	08-11-2013 07:51:39	08-11-2013 07:32:02	OK	Normal	1	08-11-2013 07:3	08-11-2013 07:32:35	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123997	Manuell Fiek 1K	0	0 : AK-SM850	I/O Comm error	R	06-11-2013 14:34:14	06-11-2013 14:32:53	OffLn	Normal	6			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123996	Manuell Fiek 1K	0	0 : AK-SM850	I/O Comm error	R	06-11-2013 14:22:16	06-11-2013 14:20:44	OffLn	Normal	5			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123995	Manuell Fiek 1K	0	0 : AK-SM850	I/O Comm error	R	06-11-2013 14:22:05	06-11-2013 14:20:44	OffLn	Normal	4			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123990	Manuell Fiek 1K	0	0 : AK-SM850	DNS failure	R	06-11-2013 13:16:53	06-11-2013 13:15:44	Trip	Normal	1			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123984	Manuell Fiek 1K	0	0 : AK-SM850	High sensor value	R	06-11-2013 12:07:33	06-11-2013 12:06:18	25.9 °	Critical	1			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123978	Manuell Fiek 1K	0	0 : AK-SM850	Test Alarm	R	06-11-2013 11:00:39	06-11-2013 10:59:46	Trip	Normal	2			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123873	Manuell Fiek 1K	0	0 : AK-SM850	DNS failure	R	03-11-2013 19:47:46	03-11-2013 19:47:16	Trip	Normal	1			

Press Ok to get the log(s) presented. The graph will show, what's available in the database. In parallel EM800 logs into the frontend and collects the newest data. This will take a few seconds, before updated data are presented.



If the resolution of the graph is not good enough, or the user needs to see data from previous time he should press the button "Standard graph". The user is now able to change the timeframe or export the graph to PDF/XML.



In the Actions page it is possible to see already written comments and add new comments

1. To add a new comment press the Add action button

2. Select action

3. Add comment

4. Save entry by pressing OK

Overview Alarms Configuration			
Back Alarm details [Log Id 3786] Admin: Sup			
Overview Actions Site contacts			
Add action			
Date and time	Action	Comment	User
03/04/2013 09:30:43	Under Investigation	Service Tech. is on the way to site	admin : Administrator
03/04/2013 09:30:27	Called Store	The store owner has been informed	admin : Administrator

Add alarm handling action

Add action: Called Store

Comment:

Ok

Cancel

On the Site contacts page it is possible to see all entered details about the Site and Contractors, so the monitoring company can take quick action.

Overview Alarms Configuration			
Back Alarm details [Log Id 1558]			
Overview Actions Site Contacts			
Site contact info		Contractor contact info	
Name	Office Danfoss	Working hours	Day/night
Address		Name	Contractor all
City		Type	Refrigeration
Zip code		Address	Mad Clause Vej 12
Contact person 1		Zip code	
Phone 1		Contact person 1	John Johnson
Email 1		Phone 1	+1 123456789
Contact person 2		Email 1	john@johnson.com
Phone 2		Contact person 2	
Email 2		Phone 2	
Contact person 3		Email 2	
Phone 3		Contact person 3	
Email 3		Phone 3	
		Email 3	

Filtered Alarm Lists

It is also possible to make filtered alarm lists

To make a filtered list, press the filter option

Overview

Alarms

Configuration

Alarm Lists

Current Alarms

Historical Alarms

Filter

Acknowledge

Clear

Save setting

Alarm count: 11

St...	Ack.	Log Id	Site	U...	Asset	Reason	Type	Received at *	Active at site	Tri...	Priority	C...	Cancelled at	Cleared at	Ackno...	Note	Con...
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125264		0	0 : 3 : Manuell Fisk 1K	--- Max Def Time	R	08-11-2013 09:35:05	08-11-2013 09:33:04	OK	Normal	1	08-11-2013 09:3	08-11-2013 09:38:09			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125263		0	0 : 3 : 1-plansd 1K9B	--- Max Def Time	R	08-11-2013 09:34:54	08-11-2013 09:32:47	OK	Normal	1	08-11-2013 09:3	08-11-2013 09:37:53			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	125262		0	0 : AK-SM850	Test Alarm	R	08-11-2013 08:18:25	08-11-2013 08:00:00	OK	Normal	1	08-11-2013 08:0	08-11-2013 08:00:35			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125261		0	0 : AK-SM850	Test Alarm	R	08-11-2013 07:51:39	08-11-2013 07:32:02	OK	Normal	1	08-11-2013 07:3	08-11-2013 07:32:35			
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123997		0	0 : AK-SM850	I/O Comm error	R	06-11-2013 14:34:14	06-11-2013 14:32:53	OffLn	Normal	6					
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123996		0	0 : AK-SM850	I/O Comm error	R	06-11-2013 14:22:16	06-11-2013 14:20:44	OffLn	Normal	5					
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123995		0	0 : AK-SM850	I/O Comm error	R	06-11-2013 14:22:05	06-11-2013 14:20:44	OffLn	Normal	4					

Active at	08-11-2013 08:00:00
Cleared by	Danfoss Office
Limit	Alarm if ON
Action code	actionCode1
Routed	23-11-45823 01:32:13

It is possible to open an existing filter settings, or create a new filter.

When choosing the different filter settings they can be edited or left as they are.

If a filter already has been made and saved, it can be chosen in the list.

To filter on a specific chain level
Which type of alarms you want to see

It is also possible to filter on a specific column e.g. Site name.

Filter

Filter on Current alarms

Select favourite:

Filter name:

Chain: All chain

Type: Refrigeration, HVAC, Lighting, Sy

Received at: From: 00 : 00 hh:mm To: 00 : 00 hh:mm

Column 1: None *

Column 2: None *

Apply

Clear

Save as favourite

Close

To enable the filtered view press Apply

If required the filter can be saved and opened later.

A quicker way to make a filter is also possible.
If an alarm is already selected and then the "Filter" button is pressed, there will be some pre-selected values in the filter already.

Overview | Alarms | Configuration

Alarm Lists

Current Alarms ▲ Historical Alarms

Alarm count: 27

Filter

Filter on Current alarms

Select favourite:

Filter name:

Chain:

Type:

Received at: From: 08-11-2012 14:49 To: 08-11-2012 23:59

Column1:

Column2:

Apply Clear Save as favourite Close

Type	Received at	Active at site	Tri...	Priority	C...	Cancelled at	Cleared at	Ackno...	Note	Con...
R	08-11-2013 14:49:26	08-11-2013 14:48:31	23.4 *	Critical	1					
R	08-11-2013 14:49:08	08-11-2013 14:47:44	Trip	Normal	1					
R	08-11-2013 14:49:04	08-11-2013 14:47:35	OnLn	Normal	7	08-11-2013 14:4	08-11-2013 14:48:16			
R	08-11-2013 14:48:54	08-11-2013 14:47:35	OnLn	Normal	6	08-11-2013 14:4	08-11-2013 14:48:16			
R	08-11-2013 14:48:43	08-11-2013 14:47:35	Start	Normal	5	08-11-2013 14:4	08-11-2013 14:48:16			
R	08-11-2013 14:48:33	08-11-2013 14:47:35	OnLn	Normal	4	08-11-2013 14:4	08-11-2013 14:48:16			
R	08-11-2013 14:48:23	08-11-2013 14:40:12	Start	Normal	3	08-11-2013 14:4	08-11-2013 14:44:22			
R	08-11-2013 14:48:12	08-11-2013 14:40:12	Start	Normal	2	08-11-2013 14:4	08-11-2013 14:44:22			
R	08-11-2013 14:48:02	08-11-2013 14:40:12	Start	Normal	1	08-11-2013 14:4	08-11-2013 14:44:22			
R	08-11-2013 14:47:52	08-11-2013 14:37:41	OK	Normal	1	08-11-2013 14:4	08-11-2013 14:42:44			
R	08-11-2013 14:47:50	08-11-2013 14:37:09	OK	Normal	2	08-11-2013 14:3	08-11-2013 14:37:53			
R	08-11-2013 14:20:13	08-11-2013 14:00:49	Trip	Normal	1					
R	08-11-2013 13:13:37	08-11-2013 13:13:37		Normal	0					
R	08-11-2013 12:04:02	08-11-2013 12:01:26	OK	Normal	2	08-11-2013 12:0	08-11-2013 12:02:10			
R	08-11-2013 12:03:59	08-11-2013 12:00:01	OK	Normal	1	08-11-2013 12:0	08-11-2013 12:00:34			

When the filter has been applied a new page with the filtered alarms will be present where the filter settings can be seen as well.

Overview | Alarms | Configuration

Alarm Lists

Current Alarms Historical Alarms **History Alarm Filter1**

Historical Alarms Filter

Favourite: History Alarm Filter1 Type: Refrigeration , HVAC , Lighting , Energy Meter , System , Miscellaneous

Received at: From: 0:0 To: 0:0 Chain: --

Column1: Site Nordbo Column2: --

Alarm count: 107

Edit filter Save setting

St...	Ack.	Log Id	Site	U...	Asset	Reason	Type	Received at	Active at site	Tri...	Priority	C...	Cancelled at	Cleared at	Ackno...	Note	Con...
<input type="checkbox"/>	<input checked="" type="checkbox"/>	125166	Nordborg L3	0	AK-SM850	Test Alarm	R	07-11-2013 12:00:28	07-11-2013 12:00:02	OK	Normal	1	07-11-2013 12:0	07-11-2013 12:00:36	AK-EM800		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123962	Nordborg L3	0	AK-SM850	Test Alarm	R	06-11-2013 12:00:26	06-11-2013 12:00:00	OK	Normal	1	06-11-2013 12:0	06-11-2013 12:00:34	AK-EM800		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123946	Nordborg L3	0	AK-SM850	Test Alarm	R	05-11-2013 12:00:23	05-11-2013 12:00:00	OK	Normal	1	05-11-2013 12:0	05-11-2013 12:00:33	AK-EM800		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123899	Nordborg L3	0	AK-SM850	Test Alarm	R	04-11-2013 12:00:29	04-11-2013 12:00:02	OK	Normal	1	04-11-2013 12:0	04-11-2013 12:00:35	AK-EM800		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123872	Nordborg L3	0	AK-SM850	Test Alarm	R	03-11-2013 19:47:26	03-11-2013 19:47:15	OK	Normal	1	03-11-2013 19:4	03-11-2013 19:47:54	AK-EM800		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123866	Nordborg L3	0	AK-SM850	Test Alarm	R	03-11-2013 12:00:25	03-11-2013 12:00:01	OK	Normal	1	03-11-2013 12:0	03-11-2013 12:00:35	AK-EM800		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123842	Nordborg L3	0	AK-SM850	Test Alarm	R	02-11-2013 12:00:31	02-11-2013 12:00:02	OK	Normal	1	02-11-2013 12:0	02-11-2013 12:00:36	AK-EM800		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	123827	Nordborg L3	0	AK-SM850	Test Alarm	R	01-11-2013 12:00:29	01-11-2013 12:00:00	OK	Normal	1	01-11-2013 12:0	01-11-2013 12:00:34	AK-EM800		

Suspended Alarms

Select Alarm -> Suspended sites / Assets

From the AK-EM 800 system, it is possible to suspend the alarms received from a Chain, site or an asset.

To add a new suspension rule click on Manage and press "Add"

Overview | **Alarms** | Configuration

Suspended sites

Filter Select field: None * Apply Clear

Add Edit End Done

Site	Chain	No. of assets	Suspension start	Duration (DD:HH:MM)	User	Comment
No items to show.						

Show: 50

1. Select the duration for the suspension
2. Select which site or asset should be suspended
3. Add a comment and Save

Overview | **Alarms** | Configuration

Back Add alarm suspension

From: 06/09/2013 10:00 hh:mm To: 06/11/2013 13:00 hh:mm Save

Filter: Apply

Available assets Expand all

- Chain 1
 - Danfoss wall L21
 - 0 : AK PC 781
 - 0 : Suction AA
 - 0 : L3
 - 0 : Roomtemp
 - 0 : Temp in wall
 - 0 : AK-SC355
 - Danfoss Offenbach
 - Office Danfoss

Selected assets Expand all

- Chain 1
 - Danfoss wall L21
 - 0 : AK CC 550

Comment: Controller beeing replaced

When a suspension has been added it will be shown in the list.

It is also possible to see more details about that particular suspension, e.g. the amount of time left before the suspension is cancelled.

The entry in the list will automatically be deleted from the list when the suspension is over.

To stop suspension before time, select the correct suspension line and press the End button.

Overview | **Alarms** | Configuration

Back Edit alarm suspension[Panel GW]

Filter Select field: None * Apply Clear

Add Edit End Done

Site	Chain	No. of assets	Suspension start	Duration (DD:HH:MM)	User	Comment
Panel GW	Coop	1 of 13	09:02:00 03/07/2013	01:14:58	admin : Administrator	

Show: 50

Overview

Site Lists

Select Overview -> General -> Site Lists

The Site list is a list of complete entries in the AK-EM 800 system and can be filtered according to need as well.

From this list it is possible to do a manual collection of logs.

To start a manual collection of logs, press manage, choose a site and press the "Collect logs" button.

Overview Alarms Configuration											
Site List											
<div> <div>Filter</div> <div>Select field: Name demo</div> <div>Apply Clear</div> <div>Include service logs</div> <div>Collect logs Cancel collection Save setting</div> <div>Show: 50</div> </div>											
<input type="checkbox"/> Name ^	Chain	System	Alarm cou...	Suspend...	Last collection time	Log status	Comm. status	IP address	Last contacted time	Time since last coll...	Conn...
<input type="checkbox"/> Demowall Denmark	Danfoss	AK-SM8XX	3	0	26/01/2016 16:05	Ok	Ok	188.180.111.35:80	26/01/2016 16:09	40m	➔

Like in the alarm list also here it is possible to rearrange the list by drag & drop the column of press right mouse button on the headline. Press the save setting button to get the same picture on next logon.

- ✓ Name
- ✓ Chain
- ✓ System
- ✓ Alarm count
- ✓ Suspended assets
- ✓ Last collection time
- ✓ Log status
- ✓ Comm. status
- ✓ IP address
- ✓ Last contacted time
- ✓ Time since last collection
- ✓ Connect

Audit Trail

The Audit trail is where all actions made in the AK-EM 800 system is saved.

Audit trail can't be deleted, but archived (see archive section under configuration/system setting)

To show archived data as well, enable the "show archived data" checkbox.

The user can filter on all columns and export the result to PDF

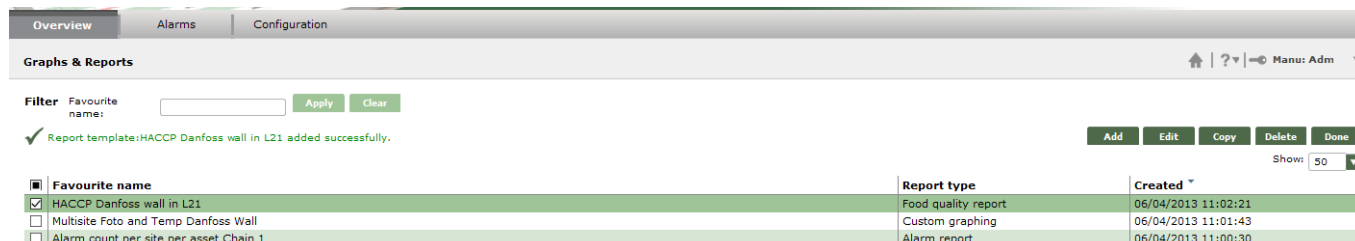
Overview Alarms Configuration				
Audit Trail				
<div> <div>Filter</div> <div>Duration</div> <div>From: 00:00 hh:mm</div> <div>To: 00:00 hh:mm</div> <div>Column: None</div> <div>Apply Clear</div> <div>Show only archived data</div> </div>				
Log Id	Date & time	Log on Id & name	Page name	Action
35728	26/01/2016 16:00	admin:Administrator	Login	Administrator logged into AK-EM800.
35727	26/01/2016 16:00	admin:Administrator	Login	Administrator logged out of AK-EM800.

Reports

Select Overview -> General -> Reports

It is possible to present historical data in different ways in the AK-EM 800. This is done in the Graphs & Report function. It is possible to save favourite reports which can be opened for quick access to specific data.

To add a new report type or view data choose the "Add" option.



Favourite name	Report type	Created
<input checked="" type="checkbox"/> HACCP Danfoss wall in L21	Food quality report	06/04/2013 11:02:21
<input type="checkbox"/> Multisite Foto and Temp Danfoss Wall	Custom graphing	06/04/2013 11:01:43
<input type="checkbox"/> Alarm count per site per asset Chain 1	Alarm report	06/04/2013 11:00:30

Any report can be exported to Excel and/or PDF

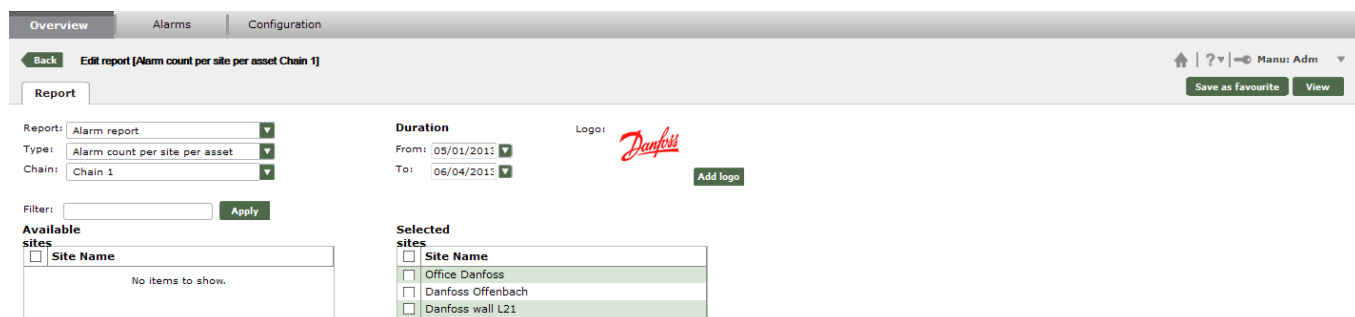
Alarm Report

Select report "Alarm report" first.

Afterwards the user can decide between 3 different evaluations:

1. Alarm count per site per asset (shows the asset name and the store name and the alarm count. The one with the most alarm is on top)
2. Alarm count per site (shows site and alarm count presented in a table and a pie chart)
3. Alarm count per reason (shows reason and alarm count presented in a table and a pie chart)

1. Select the chain to make the report for
2. Select the duration for the alarms to be included in the report
3. Select the sites to be included in the report and either save this as a favourite or view to create the report.




The Alarm Report will be opened in a new window, with a list sorted after the amount of alarms received pr. asset from the selected sites within the selected chain.




Alarm count per site per asset		
Chain: Danfoss		
Duration	From: 01/06/2015	To: 15/07/2015
Site name	Asset name	Total alarm co...
Demowall Denmark	0 : Lightsensor	987
Rainer homeoffice SM850	0 : Lightsensor	260
Demowall Denmark	0 : AK-SM8XX	236
Demowall Denmark	0 : 4 : AK CC 550	147
Demowall Denmark	0 : 4 : AK CT550A	131
Rainer homeoffice SM850	0 : AK-SM8XX	123
Demowall Denmark	0 : Temp in wall	93
Danfoss Of Serverraum	0 : AK-SM8XX	45
Rainer homeoffice SM850	0 : Stromzähler	38
Rainer homeoffice SM850	0 : Stromzähler	38
Rainer homeoffice SM850	0 : Stromzähler	36
Rainer homeoffice SM850	0 : 6 : AK-CC750 AA2a	29
Demowall Denmark	0 : 4 : AKCC550-3	27
Demowall Denmark	0 : 4 : AKCC550-2	26
Rainer homeoffice SM850	0 : Lightsensor	24

By double clicking on one of the lines it is possible to see further details for that particular asset



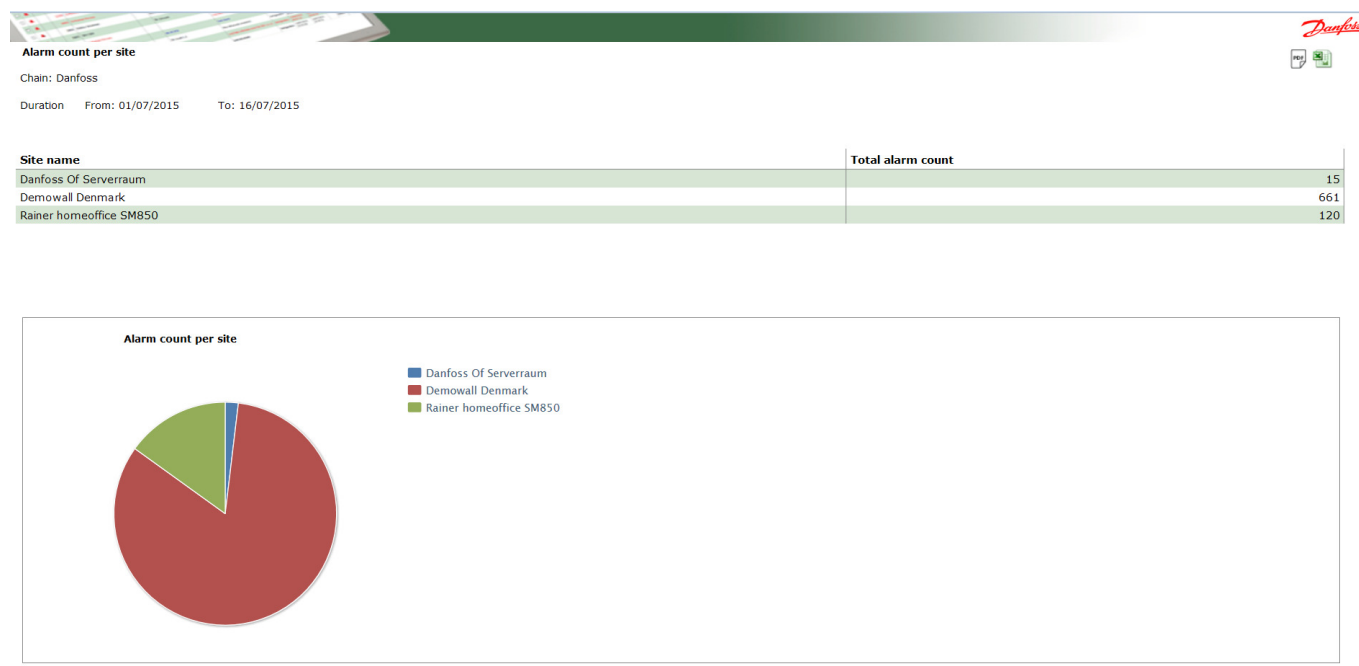
St...	Ack.	Log Id	Site	Unit ...	Asset	Reason	Type	Active at	Received at	Trip value	Priority	Count	Note	Link
✖	✓	60661	Demowall Denmark	0	0 : Lightsensor	Max.Fühlerwert	M	08/06/2015 10:24	08/06/2015 15:58	1171.1 Lx	Normal	0		➔
✖	✓	60666	Demowall Denmark	0	0 : Lightsensor	Max.Fühlerwert	M	08/06/2015 10:08	08/06/2015 15:59	1179.7 Lx	Normal	0		➔
✖	✓	60667	Demowall Denmark	0	0 : Lightsensor	Max.Fühlerwert	M	08/06/2015 09:54	08/06/2015 15:59	1188.3 Lx	Normal	0		➔
✖	✓	60678	Demowall Denmark	0	0 : Lightsensor	Max.Fühlerwert	M	08/06/2015	08/06/2015	1181.9 Lx	Normal	0		➔

By double clicking again on one of the alarms, more details can be seen.



Alarm details[Log Id60661]	
Overview	Actions
Details	
Log Id	60661
Priority	Normal
Type	Miscellaneous
Site	Demowall Denmark
Unit Id	0
Asset	0 : Lightsensor
Reason	Max.Fühlerwert
Count	0
Limit	Alarm wenn > 500.5Lx
Trip value	1171.1 Lx
Active at	08/06/2015 10:24
Received at	08/06/2015 15:58
Cancelled at	08/06/2015 15:26
Active at site	08/06/2015 10:24
Duration	5h:2m
Acknowledged at	08/06/2015 15:58
Action code	Action code 1
Acknowledged by	AK-EM800
Cleared at	08/06/2015 15:26
Cleared by	Demowall Denmark
Routed	Not sent

Alarm count per site



Alarm count per site details (click on pie chart or double click on line)

[Back](#) **Alarm count per site**

Chain: Danfoss

Duration From: 01/07/2015 To: 16/07/2015

Site name	Asset name	Total alarm co...
Demowall Denmark	0:Lightsensor	443
Demowall Denmark	0:AK-SM8XX	90
Demowall Denmark	0:4:2:AK CC 550	53
Demowall Denmark	0:4:10:AK CT550A	47
Demowall Denmark	0:4:6:AKCC550-2	16
Demowall Denmark	0:4:7:AKCC550-3	10
Demowall Denmark	0:Temp in wall	2

More details by click on the line

[Back](#) **Alarm count per site**

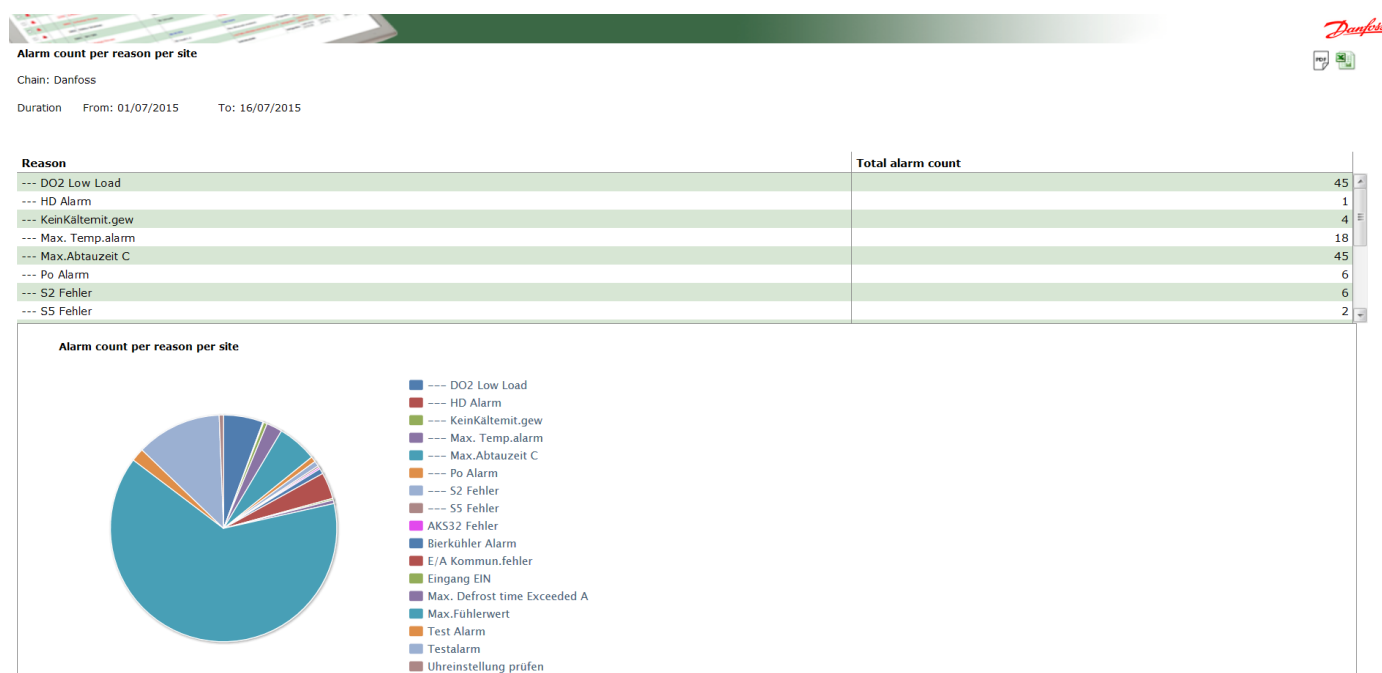
Site name: Demowall Denmark

Chain: Danfoss

Duration From: 01/07/2015 To: 16/07/2015

St...	Ack.	Log Id	Site	Unit ...	Asset	Reason	Type	Active at	Received at	Trip value	Priority	Count	Note	Link
		65740	Demowall Denmark	0	0:Lightsensor	Max.Fühlerwert	M	01/07/2015 06:59	01/07/2015 07:44	749,2 Lx	Normal	0		
		65742	Demowall Denmark	0	0:Lightsensor	Max.Fühlerwert	M	01/07/2015 07:44	01/07/2015 07:48	749,2 Lx	Normal	0		
		65743	Demowall Denmark	0	0:Lightsensor	Max.Fühlerwert	M	01/07/2015 07:47	01/07/2015 07:50	747,0 Lx	Normal	0		

Alarm count per reason per site



Alarm count per reason details (click on pie chart or double click on line)

Chain: Danfoss

Duration From: 01/07/2015 To: 16/07/2015

Site name	Total alarm count
Rainer homeoffice SM850	63
Demowall Denmark	445

More details by click on the line

Chain: Danfoss

Duration From: 01/07/2015 To: 16/07/2015

St...	Ack.	Log Id	Site	Unit ...	Asset	Reason	Type	Active at	Received at...	Trip value	Priority	Count	Note	Link
✖	✓	67510	Demowall Denmark	0	0:Temp in wall	Max.Fühlerwert	M	08/07/2015 09:41	13/07/2015 09:49	36,5 °C	Critical	0		➔
✖	✓	67511	Demowall Denmark	0	0:Lightsensor	Max.Fühlerwert	M	08/07/2015 09:41	08/07/2015 09:46	676,0 Lx	Normal	0		➔
✖	✓	67509	Demowall Denmark	0	0:Lightsensor	Max.Fühlerwert	M	08/07/2015	08/07/2015	695,3 Lx	Normal	0		➔

Utility meter

This report is not available for AKM sites.
Select Overview -> Reports -> Utility meter

To present collected log data as bar chart select "Utility meter" as report and type

1. Select the chain to make the report for
2. Select the utility meter(s)
3. Select the time frame (e.g. a year)

Overview
Alarms
Configuration

Back
Create report

Admin: Sup

Reports

Save as favourite
View

Report: Utility meter report
Type: Utility meter report
Chain: Test site
Filter:
Apply

Duration
From: 01/01/2015
To: 31/12/2015

Logo:

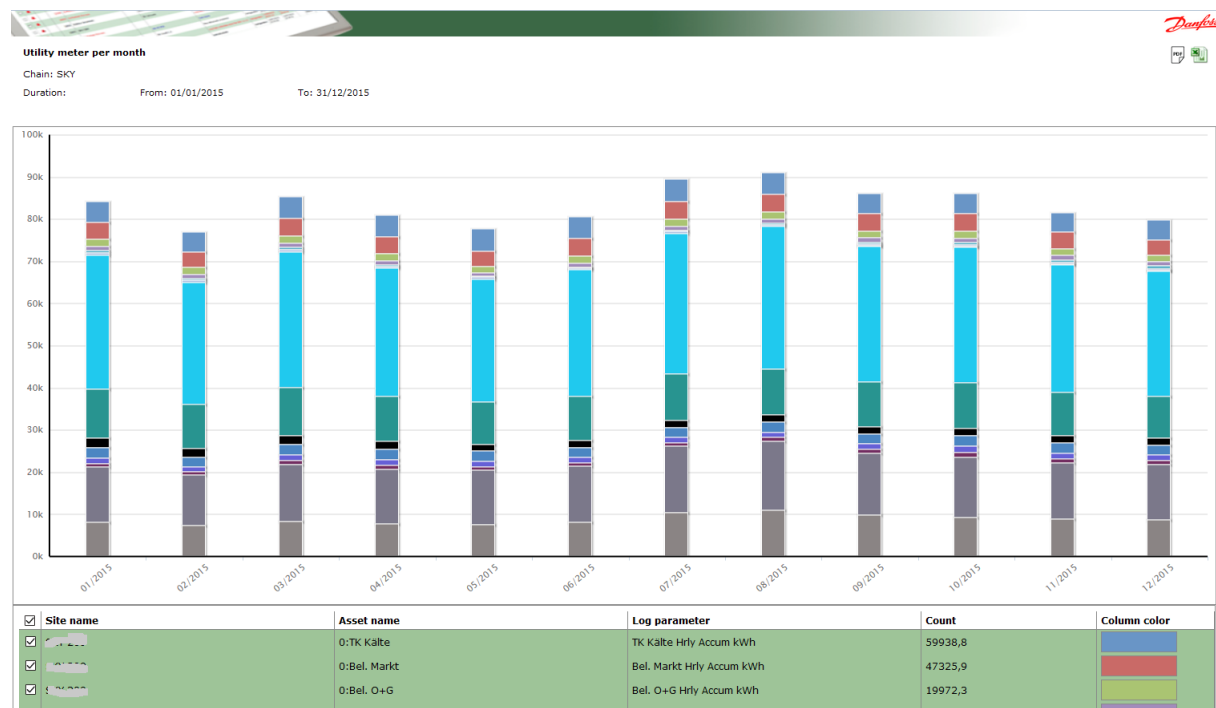
Add logo

Available

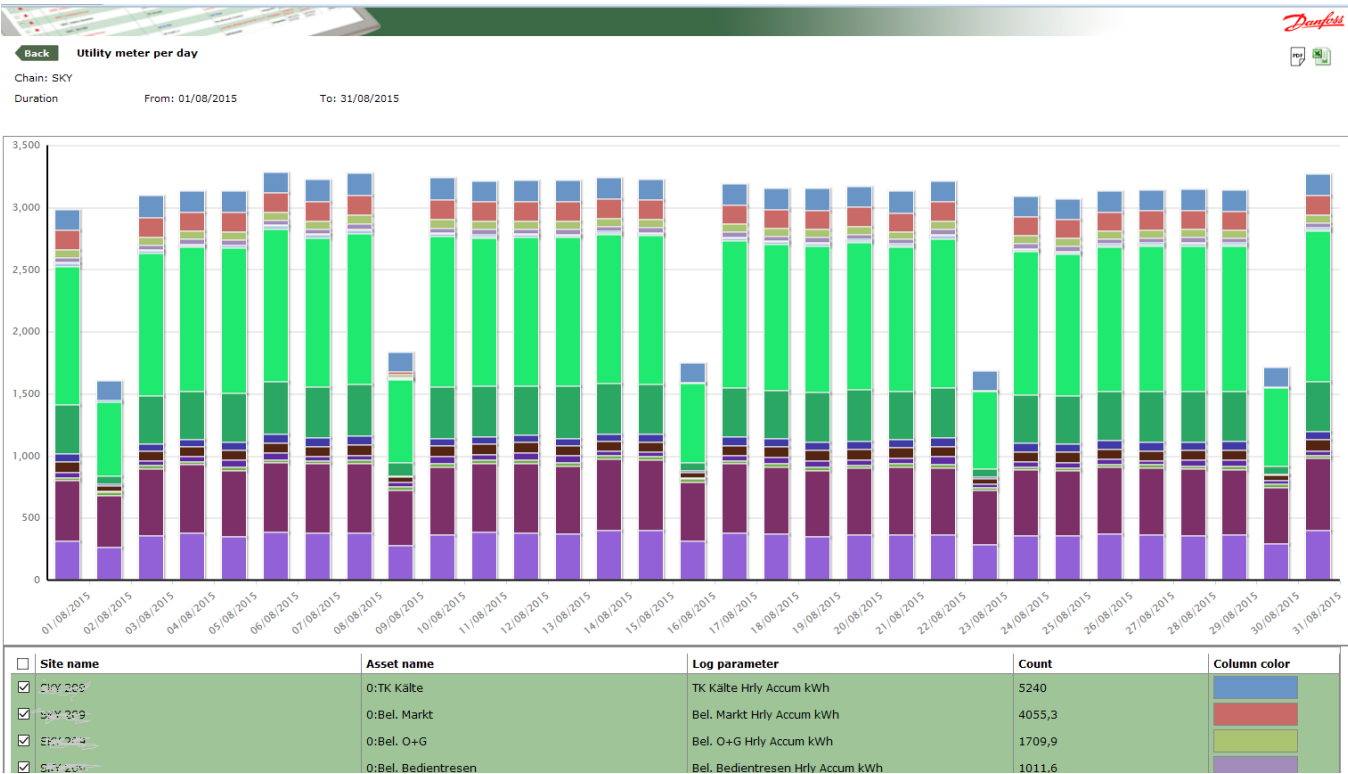
Selected

Site	Asset	Log parameter	Type	Engineering units
<input type="checkbox"/> test site 1	0:Backer	Backer Hrly Accum kWh	Analog	kw
<input type="checkbox"/> test site 2	0:Backöfen	Backöfen Hrly Accum kWh	Analog	kw
<input type="checkbox"/> test site 3	0:Bel. O+G	Bel. O+G Hrly Accum kWh	Analog	kw
	0:Meter 18	Meter 18 Hrly Accum kWh	Analog	kw
	0:Meter 19	Meter 19 Hrly Accum kWh	Analog	kw
	0:Meter 20	Meter 20 Hrly Accum kWh	Analog	kw
	0:Meter 24	Meter 24 Hrly Accum kWh	Analog	kw
	0:NK Kalte	NK Kalte Hrly Accum kWh	Analog	kw

Press view and all selected utility meters are presented with monthly values. The legend below show also the consumption for the selected period.



A click on one of the bar graphs drills down into a daily view



Position the mouse over a field to get the details.

The report can be exported to Excel and also as a PDF.

Graphs

"Select Overview -> Graphs"

To present collected log data as a curve select "Custom Graphing"
as Report type

1. Select the chain to make the report for
2. Select from when the curve should be drawn
3. Select the parameters to be included in the report and either save this as a favourite or view to create the report.

OverviewAlarmsConfiguration

Graphs

Chain: Danfoss

Duration

From: 08-11-2011

To: 09-11-2011

Add logs

Filter:

Available

☐ Put Varsefeld
☐ Danfoss Hünxe Rainer homeoffice
☐ Nordborg L3
☐ 0 : L3

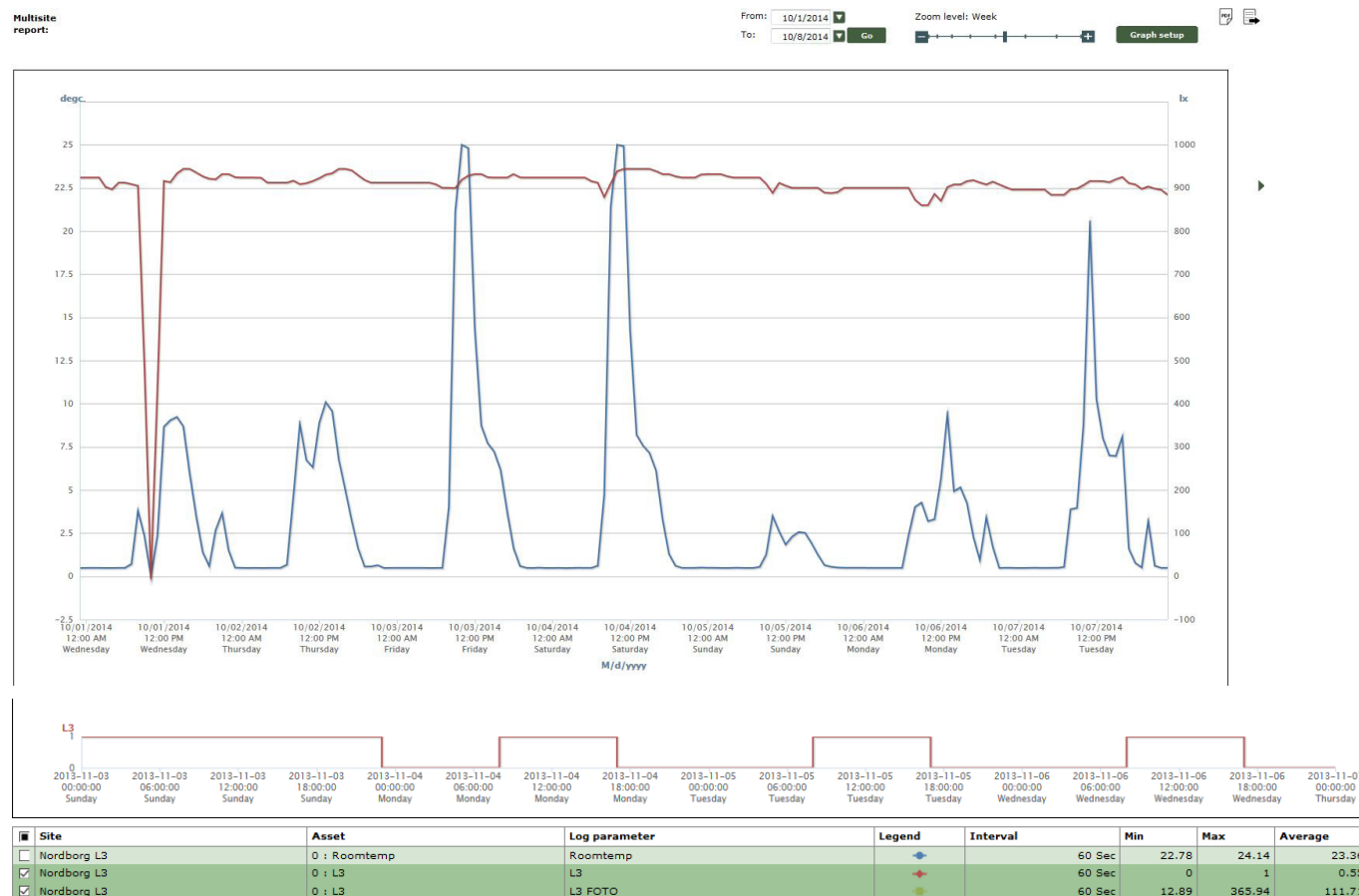
Selected (Digital: 1 Analog: 2)

Site	Asset	Log parameter	Type
<input type="checkbox"/> Nordborg L3	0 : L3	L3 FOTO	Analog
<input type="checkbox"/> Nordborg L3	0 : Roomtemp	Roomtemp	Analog
<input type="checkbox"/> Nordborg L3	0 : L3	L3	Digital

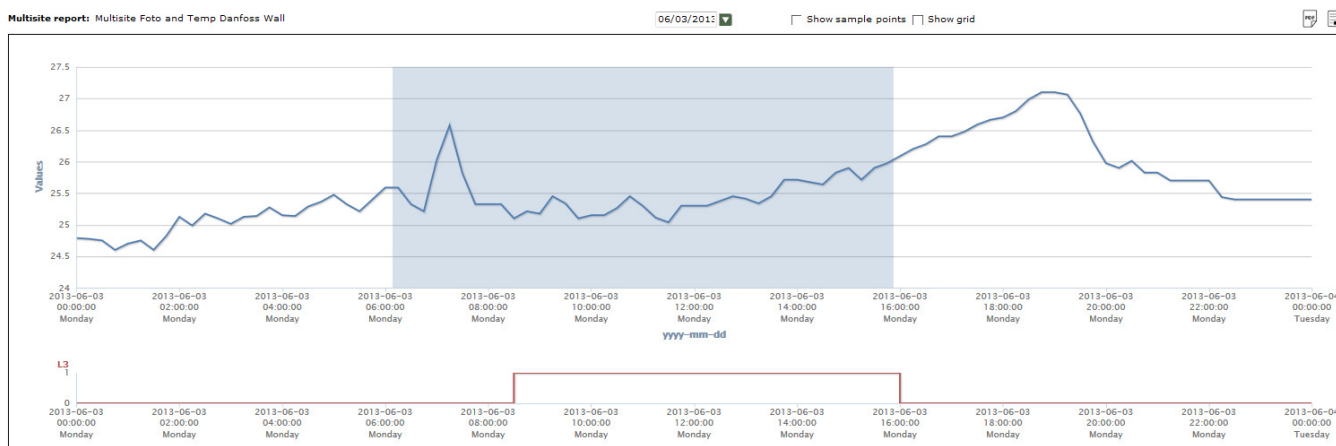
A curve will be drawn where the Y-axis is scaled according to the max. and min. values for the selected parameters

It is possible to select or deselect the parameters to be drawn. If Min. and Max. values are changed the graph will automatically be scaled.

Dependent on values a dual axis graph will be presented automatically.



It is possible to Zoom into a specific area by clicking on the graph and drag the mouse to mark the area to Zoom into.

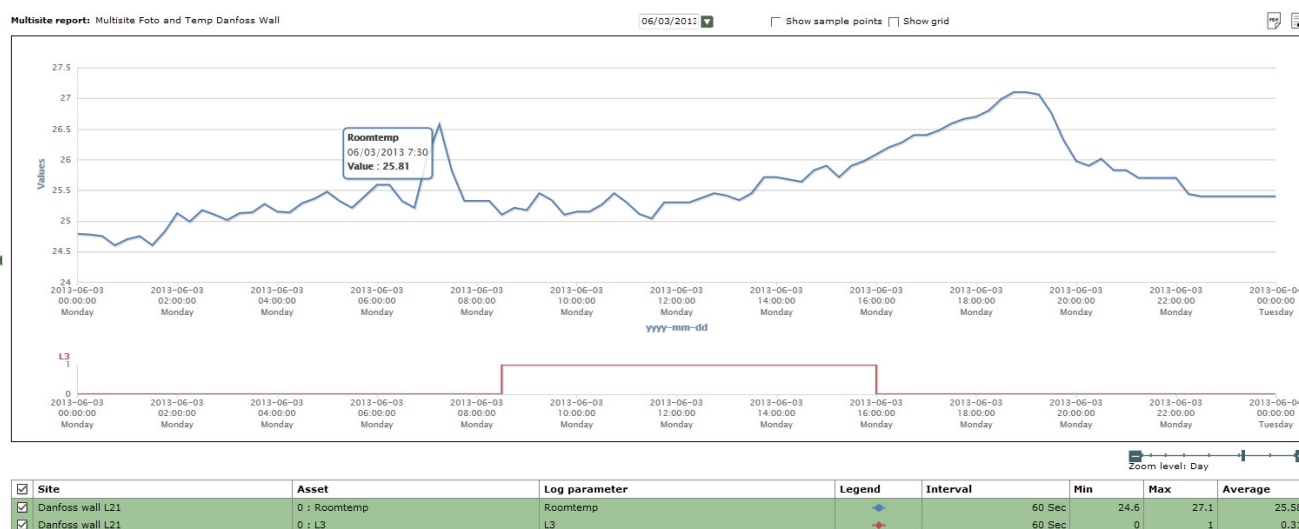


To move to the previous or next period for the selected Zoom level the arrows to either sides can be used.



Or the Zoom level can be used to zoom into a predefined period.

If a digital parameter is selected it will be drawn just below the analog curve, with a different scale.



The duration of the graph can be changed.

From: 03-11-2013 To: 07-11-2013 Go

The scale of the graph can be changed. Press the button "Graph setup"

Graph setup

Scale

☒ Manual

Max: 350 Min: 10

☐ Show sample points

☐ Show grid

☒ Show legend table

Yes No

HACCP Report

The HACCP Report can only be made if the Food type association and HACCP Configuration has already been done.

1. Select the site to make the report for
2. Select the day to make the HACCP report for and either save this as a favourite or view to create the report.

Overview

Alarms

Configuration

Back

Edit report [HACCP Danfoss wall in L21]

Home

Help

Menu: Adm

Save as favourite

View

Report

Report: Food quality report

Type: HACCP

Chain: Chain 1

Site: Danfoss wall L21

Duration

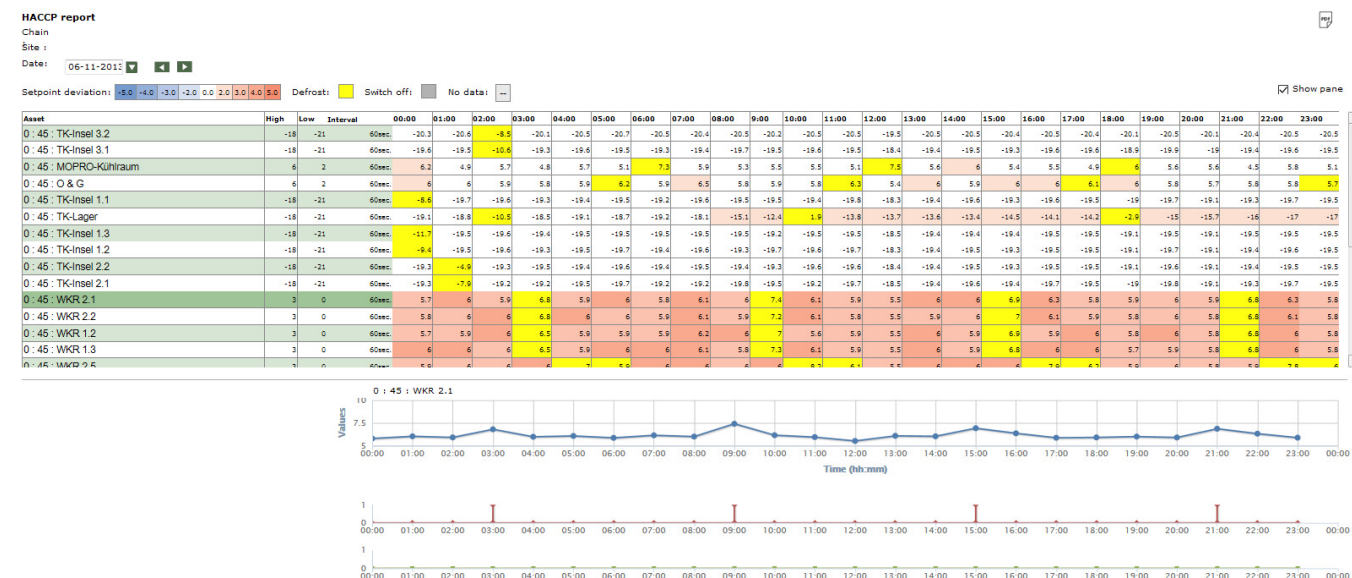
From: 06/03/2012

Logo:

Add logo

The HACCP Report will be opened in a new window, with a list of all the configured parameters.

1. To see more details press the Show Pane option
2. When a parameter is chosen the curves for it will be present just below.



TQ (Temperature Quality) report

The TQ Report can only be made if the Report configuration (see site configuration) has already been done. In difference to the HACCP report, the TQ report will take the set point and not the food type as reference to present the colors.

1. Select the site to make the report for
2. Select the day to make the TQ report for and either save this as a favorite or view to create the report

The TQ Report will be opened in a new window (or dependent on your browser setting in a new tab), with a list of all the configured parameters.

1. To see more details press the Show Pane option
2. When a parameter is chosen the curves for it will be present just below.

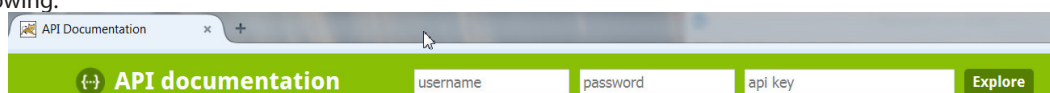
Asset	Set Point	Interval	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
0 : 3 : 4-plansd 1K21A	0.5	600 sec.	1	1.1	--	1.2	2.8	1	1	1.1	1	1.2	1.2	1	0.8	1.1	3.9	0.8	1.1	0.8	1.3	1.1	1.1	0.9	3.4	--
0 : 3 : 4-plansd 1K21B	1.0	600 sec.	1.3	1.5	--	1.5	2.2	1.4	1.4	1.3	1.5	1.4	1.6	1.6	1.3	1.3	2.5	1.2	1.3	1.1	1.4	1.5	1.4	1.6	2.3	--
0 : 3 : 4-plansd 1K21C	1.0	600 sec.	1.3	1.4	--	1.5	2.2	0.8	1.3	1.4	1.3	1.2	1.4	1.2	1.2	1.3	2.2	1.3	1.2	1	1.2	1.2	1.2	1.2	2.5	--
0 : 3 : 4-plansd 1K21D	5.0	600 sec.	4.9	5.1	--	5	5.4	5.1	5.1	5.1	4.8	5.3	4.8	5.6	5.1	5.6	4.7	5.3	4.8	5.3	4.8	5.5	4.8	5.6	4.8	--
0 : 3 : 4-plansd 1K21E	5.0	600 sec.	5.1	5.6	--	5.3	5.2	5.1	5.3	5	4.6	5.3	4.9	5.2	5.1	5.4	4.6	5.2	4.9	4.9	5	5	5.1	5.2	5.3	--
0 : 3 : 4-plansd 1K22A	5.0	600 sec.	5.5	5.5	--	5.3	5.1	5.5	5.8	5.3	5.6	5.3	5.5	5.4	4.9	5.2	5.5	4.9	5.2	5.2	5.5	5	5.2	5.5	5	--
0 : 3 : 4-plansd 1K22B	5.0	600 sec.	5.5	5	--	5.1	5.2	5	4.6	5.2	4.8	4.6	4.9	5.3	4.7	5	4.5	5.1	5	5	4.6	4.8	4.5	5.2	4.4	--
0 : 3 : 4-plansd 1K22C	5.0	600 sec.	5.4	4.9	--	5.3	5.3	5.1	5	5.5	4.8	5	5	5.2	5.1	4.6	5.1	4.9	4.8	5.2	5	4.8	5.4	5	5.2	--
0 : 3 : 6-plansd 1K23A	5.0	600 sec.	6.1	5.7	--	6	6	5.6	6.2	5.6	5.8	6.5	6.4	6.2	6	5.8	6.2	6.1	6.3	5.9	5.9	6	6	6.1	5.7	--
0 : 3 : 6-plansd 1K23B	5.0	600 sec.	5.5	5.6	--	6.1	5.5	5.9	5.6	6	5.4	6	5.6	6	5.5	5.9	5.7	5.9	5.8	6.1	5.6	5.9	6	5.8	--	--
0 : 3 : 6-plansd 1K34	0.5	600 sec.	1.1	3	--	1.3	0.7	0.9	2.5	2	1	1.1	1.1	1.1	0.9	1	1.1	1	3.1	0.9	1.2	1.2	1	1.2	1	--
0 : 3 : 6-plansd 1K16A	5.0	600 sec.	5.5	5.8	--	5.9	5.7	5.9	5.5	6	6	5.6	5.5	5.9	5.9	6	5.7	5.8	5.8	6	5.7	6	6.2	5.9	5.8	--
0 : 3 : 6-plansd 1K16B	5.0	600 sec.	5.7	6	--	6	5.5	6	5.6	6	6	5.5	5.5	5.5	5.9	5.8	5.8	5.1	5.6	5.6	5.7	5.7	6	5.6	5.6	--
0 : 3 : 6-plansd 1K16C	5.0	600 sec.	5.4	5.8	--	5.8	5.5	5.9	6	5.6	5.8	5.8	5.6	5.7	6	5.4	5.6	5.8	5.9	5.4	5.8	5.9	6.4	5.6	5.6	--
0 : 3 : Manueli Fisk 1K	0.5	600 sec.	1.4	1.1	--	1.3	2.7	1	1.1	1	1.8	1.6	2.4	2.5	1.6	1.1	1.1	1.1	1.7	1.7	1.5	2.7	1.1	7.4	19.6	--
0 : 3 : 1-plansd 1K9A	2.0	600 sec.	2.4	2.2	--	2.3	2.5	2.4	2.4	2.4	2.3	4.1	2.4	2.3	2.2	2.1	2	2.2	2	2	4	2.2	2.7	2.4	2.4	--
0 : 3 : 1-plansd 1K9B	1.9	600 sec.	2.7	2.5	--	3	2.4	2.5	2.2	2.5	2.6	5	7.6	2.9	2.4	2.5	2.3	2.5	2.3	2.3	4.5	7	2.3	2.4	2.5	--
0 : 3 : 1-plansd 1K9C	2.0	600 sec.	2.4	2.7	--	3	2.3	2.2	2.2	2.7	2.8	5.8	8.1	2.9	2.5	3.1	3.2	2.8	3.4	2.7	5.5	8.7	2.9	2.9	3.4	--
0 : 3 : 3-plansd 1K10	6.0	600 sec.	5.2	5.3	--	5.6	5.5	5.5	5.5	5.2	5.5	5.6	5.4	5.2	5.2	5.2	5.1	5.3	5.3	5.5	5.4	5.4	5.4	5.1	--	--
0 : 3 : Kyril Mejeri 1K2	5.0	600 sec.	5.9	5.9	--	6.1	5.9	5.9	5.9	6.2	6.9	5.7	7.4	6.1	6	6.3	6	6	6.2	8.1	6	6	6.1	5.8	--	--
0 : 3 : Kyril Mejeri 1K2	5.0	600 sec.	5.8	5.8	--	6.1	5.8	6	6	6.2	6.3	6	6.7	6	5.8	5.9	6	6	5.8	5.8	7	6.1	5.9	6	5.9	--
0 : 3 : Kyril Fisk 1K3	0.0	600 sec.	1.9	1	--	2	1.4	0.6	0.4	1.3	1.6	2	1.7	2.2	1.8	1.7	1.7	1.7	0.8	0.8	1.1	2.2	1.6	2	1.2	--
0 : 3 : 1K4 Kyrilum	2.0	600 sec.	3	3.4	--	2.8	2.9	3	2.9	3	3.7	3.1	2.9	2.8	2.7	3.1	3.1	2.7	4.3	3.1	2.2	2.9	2.7	2.9	2.8	--
0 : 3 : 1K5 Kyrilum Grön	5.0	600 sec.	6	6	--	6.4	6	5.8	5.8	6	6	6	6	6.5	5.9	5.9	5.9	5.9	6.2	6	6	6.5	6.1	5.9	5.9	--
0 : 3 : Kyril Deli 1K6	1.0	600 sec.	2.4	2.4	--	2.6	3.6	2	2.4	2.2	2.4	2.5	2.8	2.3	3.6	2	2	2.2	2.3	2	2.1	2.5	3.9	2.7	2.4	--
0 : 4 : 1K30A Frysskåp	-26.0	600 sec.	-12.9	-14.8	--	-25	-24.9	-24.9	-24.3	-12	-17.6	-24.8	-25.2	-24.9	-24.9	-25.1	-24.9	-25.1	-25	-25.3	-25	-24.9	-25	-25.4	-25	--
0 : 4 : 1K30B Frysskåp	-26.0	600 sec.	-12.9	-14.4	--	-25	-25.6	-25.1	-25.3	-13.2	-16.9	-24.2	-24.9	-24.8	-25.1	-25.1	-24.7	-24.2	-25.2	-25.2	-25.3	-24.8	-25	-25.1	--	--
0 : 4 : 1K30C Frysskåp	-26.0	600 sec.	-13.9	-13	--	-24.7	-25.2	-24.9	-24.4	-12	-14.8	-23.9	-24.8	-25.3	-25.1	-24.4	-24.8	-24.8	-25.1	-25.2	-25.4	-25	-24.8	-25.6	-25.3	--
0 : 4 : 1K30D Frysskåp	-26.0	600 sec.	-12.7	-4.7	--	-23.8	-24.3	-24.4	-24.7	-12.9	-4	-20.7	-22.7	-23.3	-23.7	-23.9	-23.6	-23.6	-24	-23.9	-23	-23.2	-23.5	-23.8	-23.9	--
0 : 4 : 1K28 Frysskåp	-23.0	600 sec.	-21.8	-21.6	--	-21.8	-21.8	-21.8	-22	-22.2	-17.2	-21	-21.8	-22	-21.8	-22	-21.7	-22	-22	-20.8	-20.1	-21.5	-15.3	-20	-21.8	--
0 : 4 : 1K31 Frysskåp	-26.0	600 sec.	-24.9	-24.2	--	-25.2	-25	-24.8	-24.4	-24.8	-14.1	-23.6	-23.7	-25	-24.9	-24.7	-24.9	-24.3	-11.9	-23.2	-24.3	-25.2	-24.8	-25.1	-25.1	--
0 : 5 : Kyril Aftall 2K1	6.0	600 sec.	7	7	--	6.8	6.9	6.9	7.1	7	7	7.4	7	6.9	6.9	6.9	6.9	6.9	7.1	7.8	7	6.9	6.9	7.1	6.8	--

Webservice with API

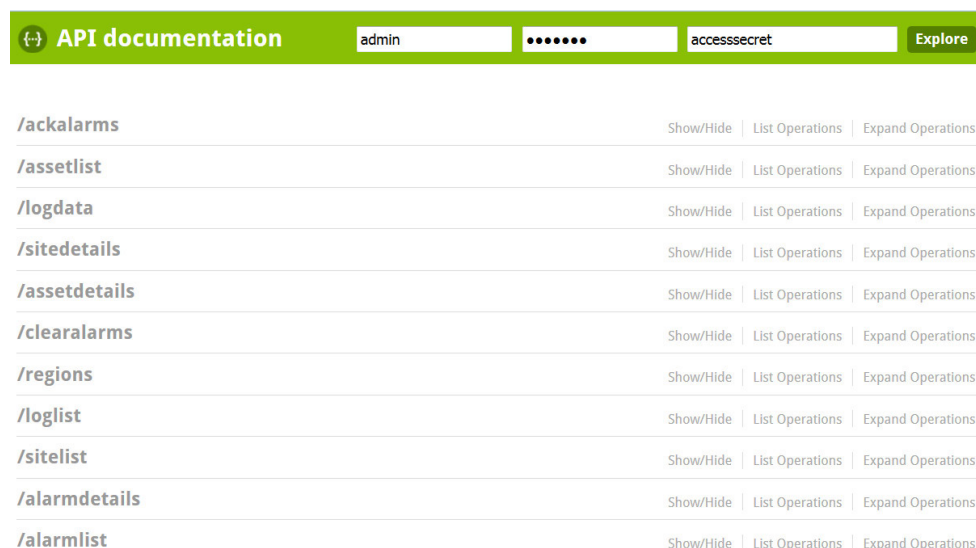
AK-EM 800 is able to exchange data with other systems. If this is needed the customer has to order an extra license called Webservice. AK-EM 800 is using API's (application programming interface) to allow the user to get data out of the AK-EM 800 database.

The documentation is embedded in the AK-EM 800 itself. Instead of using the link to AK-EM800 like http://localhost:8080/AK_EM800 (localhost is here only a placeholder if AK_EM 800 is called on the machine where it's installed) use following link. <http://localhost:8080/mws>.

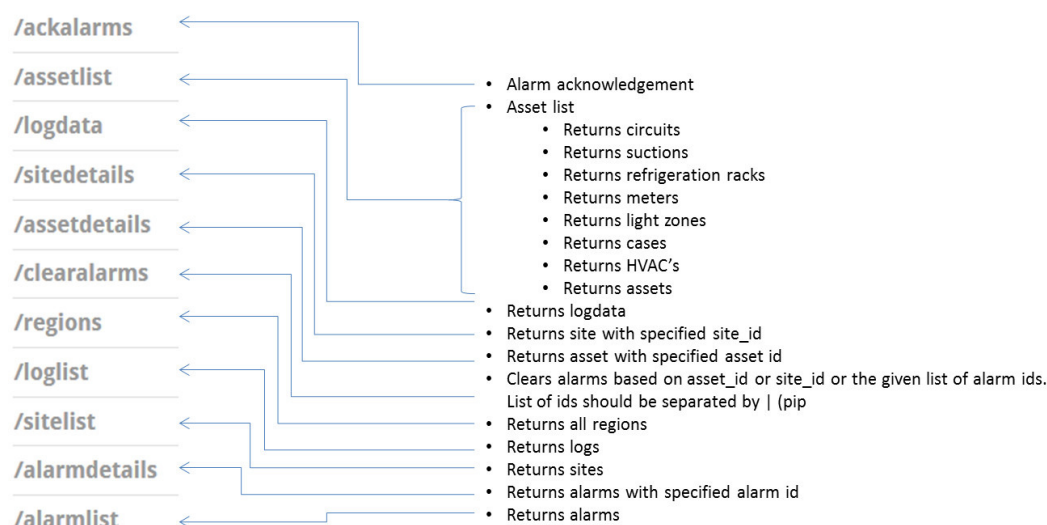
The browser should show following:



A user can in his user group associated to be part of Webservices. Type in username, password and as API key "accesssecret" to get following screen.



The listed lines are displaying the commands, which are available today.



The documentation allows also to test commands. Click on one of the commands (e.g. on /sitelist). A new line will be visible.

/sitelist

Show/Hide | List Operations | Expand Operations

GET /sitelist

Returns sites

Click on get, to see more details.

/sitelist

Show/Hide List Operations Expand Operations

GET /sitelist

Returns sites

Response Class

Model	Model Schema
-------	--------------

List[void]

Response Content Type

application/json ▼

Parameters

Parameter	Value	Description	Data Type
count	<input type="text"/>	num of sites to be returned, default 100	int
start_index	<input type="text"/>	start index of sites	int
compress	<input type="button" value="v"/>	compress response	boolean
details	<input type="button" value="v"/>	detailed response	boolean
region_id	<input type="text"/>	region id	int

Try it out!

Now click on the button "Try it out" to get the results of this command.

Try it out!

[Hide Response](#)

Request URL

```
/mws/0/sitelist
```

Response Body

```
{
  "total": 43,
  "errorCode": 0,
  "sitelist": [
    {
      "system_type": "AK-SM8XX",
      "region_id": 2,
      "site_number": 1,
      "site_id": 2,
      "site_name": "office SM850"
    },
    {
      "system_type": "AK-SM8XX",
      "region_id": 2,
      "site_number": 2,
      "site_id": 3,
      "site_name": "Demowall Denmark"
    }
  ]
}
```

This works for all commands. In some of them are mandatory fields which have to be filled in. The needed information needs to be copied from another command.

E.g. the site Id in the picture above is needed in other commands to get alarms from a particular site.

The following table shows, how to order the additional license.

Sites	Order no.
1	080Z4107
50	080Z4108
250	080Z4109
500	080Z4110

Appendix

Time zone settings

Time zone handling at AK-EM 800	Option selected by the user		
	UTC	User Local Time (will be detected via Browser)	Site Local Time
Database handling	UTC	UTC	UTC
Site List	UTC	User Local	Site Local
Audit Trail	UTC	User Local	EM800 Local
Graph and Reports Template creation date	UTC	User Local	EM800 Local
Graph/HACCP view	Site Local	Site Local	Site Local
Alarm List			
Alarms from sites	UTC	User Local	Site Local
AK-EM 800 System alarms that do not belong to any site	UTC	User Local	EM800 Local
Suspended Site/Assets	Site Local	Site Local	Site Local
Destinations	--	--	--
System Settings	--	--	--
Alarm Routes/ Email routing	Site Local	Site Local	Site Local
System Alarms	--	--	--
Users	--	--	--
Contractors	--	--	--
Site	--	--	--
Chain	--	--	--
Export to XML	UTC	UTC	UTC
Export to PDF	The timestamp appearing on Export will be same as the time stamp user is viewing on AK-EM 800.		

