

Collaboration Management Suite

User guide

Product revision

Software version: 1.3

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1. INTRODUCTION

Overview

- About Collaboration Management Suite
- Before you start
- Starting up Collaboration Management Suite
- Forgot password
- Register as new user
- Logout from Collaboration Management Suite
- First start up
- About the Home page, control panel

1.1 About Collaboration Management Suite

Overview

Collaboration Management Suite (CMGS) is a software application that gives an overview of all ClickShare Base Units installed within the company network. It is a server installed application on a physical PC or it runs as virtual machine connected to the network. The functionality can be accessed by users via a web browser based application from anywhere within the network. A user/admin may inspect and/or change a large set of data about the ClickShare Base units and Buttons without leaving their desk. This is especially useful in large corporations with many ClickShare Base Units installed across different sites.

The information provided includes:

- Health and status monitoring
- Schedule software updates and reboots
- User management and user notifications
- Device parameters management

An administrator can define different roles for different users. Depending on these roles, access to some function can be limited.

To realize the communication between the Collaboration Management Suite server and the Base Units, typical ports should be activated. For an overview of these ports, see "Used ports", page 75.

In order to diagnose connection problems between CMGS and the Base Units please see "Diagnose connection issues", page 24.

Supported Base Units

CMGS supports:

- CSE-800 with software version 01.00 or higher
- CSE-200 with software version 01.01 or higher
- CSM-1 with software version 01.02.00.0144 or higher
- CSC-1 with software version 01.05.00.0032 or higher

About user roles

Functionality	IT admin	Support	Key user
Base Units			
Grid	RW	RW	R
Add/remove/edit	RW	RW	-
Link to local webUI	R	R	R
Support & updates			
Buttons	R	R	R
Base Unit debug logging	RW	RW	RW
Download Base Unit logs	RW	RW	RW
Reboot Base Unit	RW	RW	RW
Software updates	RW	RW	-
Diagnose connection issues	RW	RW	RW
Configure			

Functionality	IT admin	Support	Key user
Clone configuration	RW	RW	-
Network integration	RW	RW	-
Wallpaper	RW	RW	RW
WebUI access via WiFi	RW	RW	-
Deploy Base Unit certificates	RW	RW	-
Users			
Grid	RW	R	-
Locations	RW	-	-
Scheduler	RW	RW	-
Scheduled jobs	RW	RW	R ¹
User preferences	RW	RW	RW
System settings	RW	-	-
System administration	RW	-	-
Logout	R	R	R

Collaboration Management Suite supports only one user with IT admin rights!

About the screenshots

The screenshots in this manual are given as an example. The CMGS version may be different, but the indicated functions on the screenshots are correct.

1.2 Before you start

Requirements

The Collaboration Management Suite application provides a browser-based user interface to the data and tools of the system. Before you start using the application, you need the following info:

- The URL of the Collaboration Management Suite application.
- The user name and password assigned to you.

The Recommended browsers are:

- Internet Explorer | 11.0.10240.17184 | Windows 10 Enterprise, v.10.0 (Build 10240)
- Google Chrome | 57.0.2987.98 | Windows 10 Enterprise, v.10.0 (Build 10240)
- Mozilla Firefox | 49.0.2 | Windows 10 Enterprise, v.10.0 (Build 10240)
- Safari on Mac | 9.1.1 (116016.17) | OS X El Capitan v. 10.11.5

1.3 Starting up Collaboration Management Suite

How to start up

1. Type the URL in the address line of your browser.

1. only reboot jobs are shown.

The login page is displayed.

Log in to ClickShare Management Suite

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Image 1-1
Login

2. Enter your E-mail address (1) and password (2).
Note: *Initial login credentials : user name = **admin@yourcompany.com** and password = **admin**.*
3. If you want to stay logged in, check the checkbox in front of *Remember me* (3).
Note: *Cookies has to be enabled before you can use this function.*
4. Read and accept the EULA by checking the check box in front of *I have read and accept the EULA*.
Note: *To read the EULA, click on the word **EULA** to open the link.*
5. Click **Login** (4).
Your login credentials are checked and if valid the home page opens.
6. If you forgot your password, click on *Forgot password* (5).
7. If you are a new user who wants access, click on *Register now* (6)

1.4 Forgot password

What to do when you forgot your password

1. Click on *Forgot password* (1).

Log in to ClickShare Management Suite

Username:

Password:

Remember me
 I have read and accept the EULA

[Forgot password](#)
[Register now](#)

(1)

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Reset user password

Username: (2)

[Back to login](#)

(3)

Image 1-2
Forgot password

2. Enter your E-mail address (2).
3. Click on **Reset password** (3).
4. Check your E-mail address (4).

1.5 Register as new user

What can be done?

A new user can request access to Collaboration Management Suite. This request will be sent to the system administrator who can confirm or reject the request. The user will be informed via E-mail.

How to register

1. On the login-logout page, click on *Register now* (1).

Log in to ClickShare Management Suite

Username:

Password:

Remember me

I have read and accept the EULA

[Forgot password](#)
[Register now](#)



New user account request

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Your name:

E-mail:

Language: (2)

Password: [Need help ?](#)

Confirm password:



Image 1-3

1. A registration page opens.
2. Enter the following data (2):
 - user name
 - E-mail address
 - Select your language by clicking on the drop down box and selecting the language out of the list.
 - Enter a password.
 - Reenter the password.
3. Click on **Register** (3).

1.6 Logout from Collaboration Management Suite

How to logout

1. Click on the logout symbol (upper right corner) next to the login name.

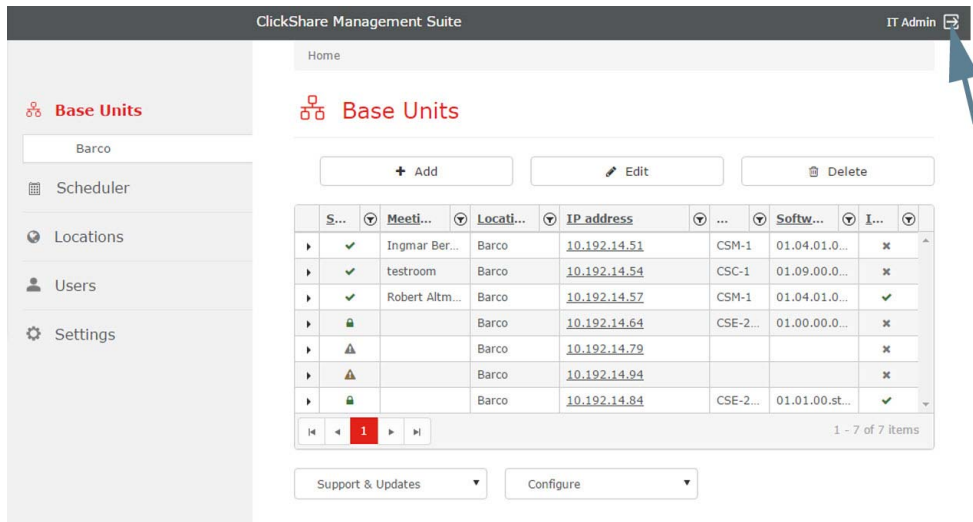


Image 1-4
Logout

1.7 First start up

About the setup wizard

When starting up the Collaboration Management Suite for the first time a *Setup wizard* will guide you through the setup process.

The following setup points are included:

- Network settings
- Notifications
- Security
- Overview

Once the wizard is started, fill out the necessary items and click **Next** to continue. Use the Back button to return one step.

Network settings

1. Fill out the Network settings.

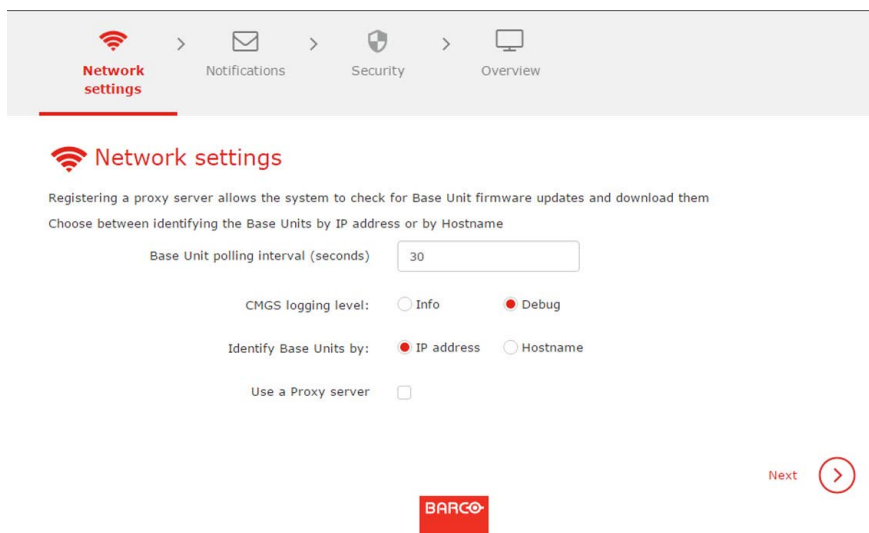


Image 1-5
Start wizard, network settings

The following settings can be filled out:

- The base unit polling interval in seconds
- CMGS logging level, Info or Debug
- The way to identify the Base Unit, IP address or Hostname
- The use of a Proxy server.

When a Proxy server is used, fill out the following information:

- Proxy server URL
- Proxy server port (optional)
- Username (optional)
- Password (optional)

2. Fill out the Notifications settings

Network settings > **Notifications** > Security > Overview

Notifications

Configure a SMTP server to register new users and to send notifications

IT admin name:

E-mail address:

SMTP server:

Port (Optional):

Username (Optional):

Password (Optional):

Use SSL/TLS: Yes No

Accept StartTLS: Yes No

Reject invalid SSL certificates: Yes No

BARCO

Image 1-6
Start wizard, notifications

The following settings can be filled out:

- IT admin name.
- E-mail address used to send E-mails.
- SMTP server address to send E-mails.
- Port (optional)
- Username (optional)
- Password (optional)
- SSL/TLS usage
- Accept startTLS
- Reject invalid SSL certificates

3. Fill out the Security settings.

1. Introduction

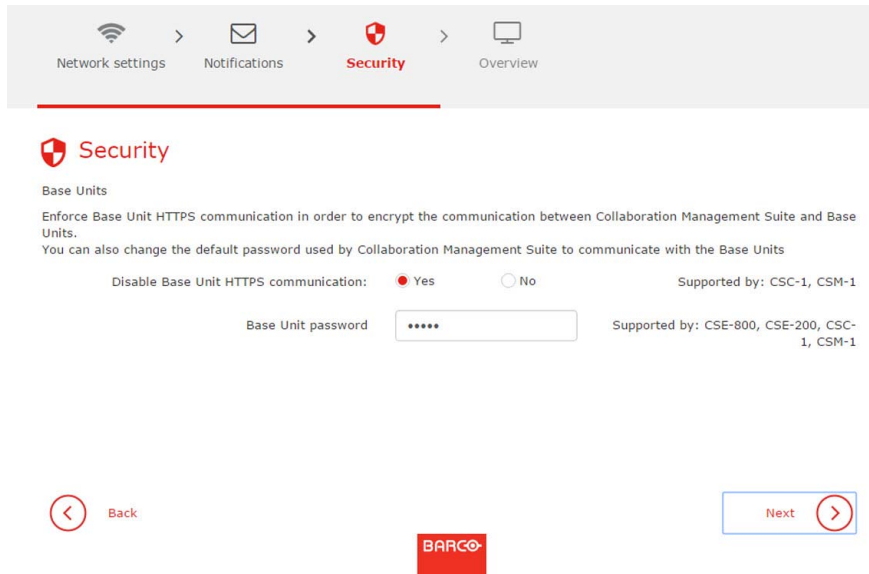


Image 1-7
Start wizard, security

The following settings can be set depending on the model type:

- Disabling the HTTPS communication.
- Base Unit password.

4. The overview page shows the settings which are set.
Click **Finish** to finalize the start wizard.

The Home page is displayed. The Collaboration Management Suite is ready for use. The control panel contains basic information about the Collaboration Management Suite, Base Units and users.

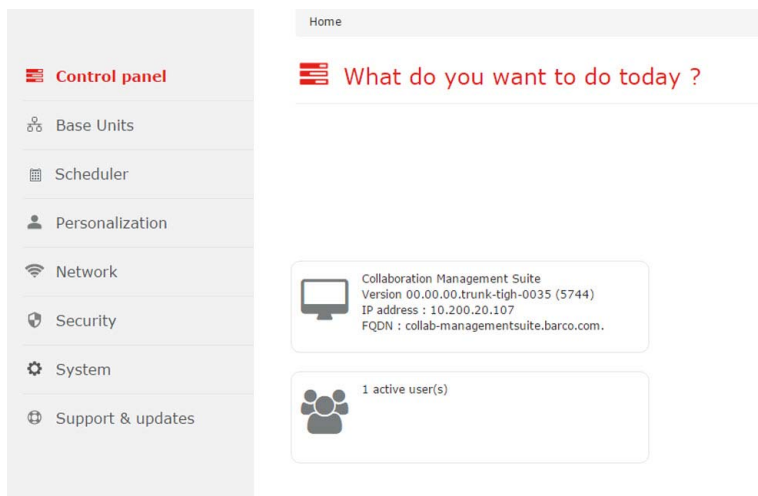


Image 1-8
Home page, control panel

1.8 About the Home page, control panel

Overview

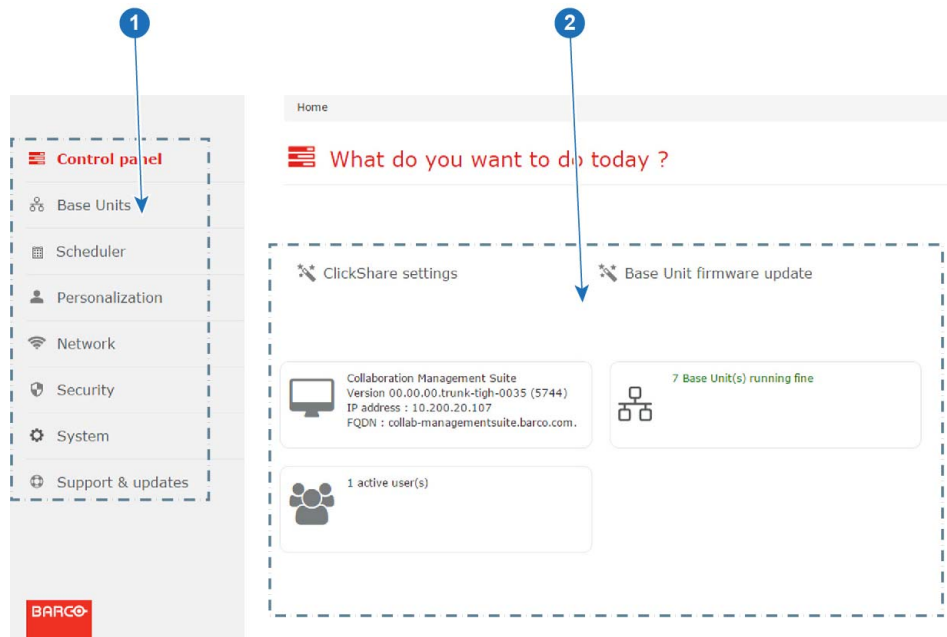


Image 1-9
Home page overview

Note: the control panel might contain also some discovered CSE-800 devices.

1 Menu pane.

The following main menus are available:

- Control panel
- Base Units
- Scheduler
- Personalization
- Network
- Security
- System
- Support & updates

2 Overview and selection pane.

Frequently used actions can be started from the control panel. After clicking on an action, you will be redirected to the corresponding web page or wizard step.

The following items may be displayed:

- ClickShare settings
- Base Unit firmware update
- Collaboration Management Suite overview
- Users overview
- Base Unit statuses
- New Base Units discovered

2. BASE UNITS PAGE



Depending on the user role, some may not be visible.

Overview

- About the Base Units page
- Auto discovering of Base Units
- Add new Base Unit
- Edit selected Base Unit
- Delete selected Base Unit
- Sorting and filtering
- Support and updates

2.1 About the Base Units page

Overview

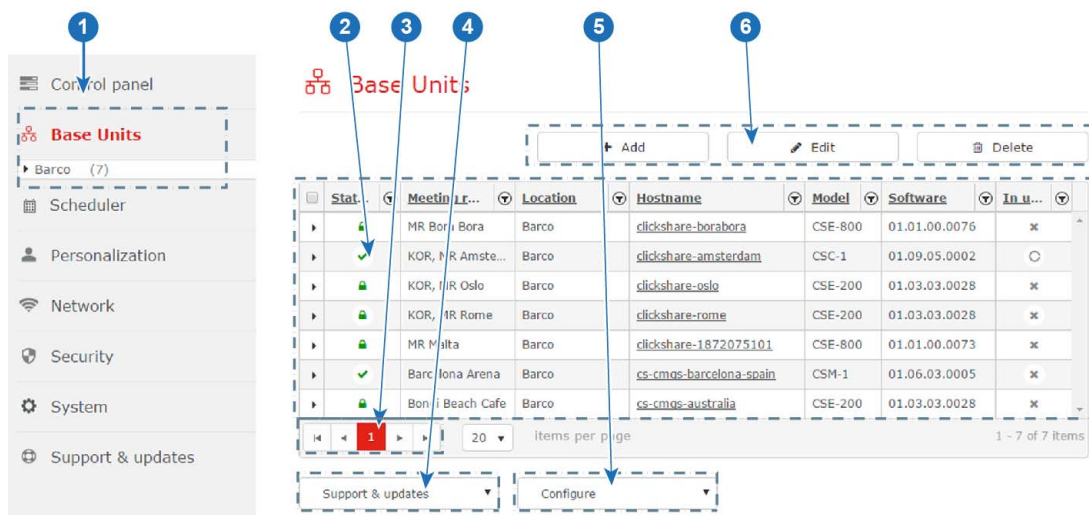


Image 2-1
Overview page

- 1 Menu pane. Selected menu is expanded and menu title is displayed in red. When different location are sub-locations are available, a tree will be shown.

The number behind the location indicates the number of Base Units in that location or sub location.

- 2 Overview Base Units of selected location branch.

The following information is displayed²:

- The "Status" column of the Base Units grid contains an icon that shows if the device is working properly or not:
 - Green check mark, or green lock: Device is working properly - all processes are running fine
 - Blue check mark: Device is in Network Standby mode
 - Orange triangle with exclamation mark: Device is running with warnings (something is wrong with non-critical processes)
 - Red triangle with exclamation mark: Device is running with errors (something is wrong with critical processes)
 - Yellow triangle with exclamation mark: Device is running with warnings (non-critical processes may not run properly)
 - Grey triangle with exclamation mark: Device is not available or not responding
- Meeting room name, automatically added when connection is established.
- Location, filled out while adding the Base Unit in Collaboration Management Suite.
- Hostname, automatically added when connection is established.
- Model, automatically added when connection is established.
- Software, automatically added when connection is established.

2. Base Units page

- The column "In use", of the Base Units grid, contains one of the following icons:
 - A gray 'x' for a Base Unit that is not connected to a source, not sharing, nor ready to share.
 - A gray circle, if the device is connected to a source, but not sharing.
 - A red spinning circle, if the device is connected to a source, and sharing.
 - nothing (empty), for devices unknown by CMGS, i.e. other than CSC-1, CSM-1, CSE-200, CSE-800
- 3 Page selection buttons. The added Base Units are displayed in pages.

To change a page, click on the arrow buttons next to the page indication or click in the page input field and select the desired page number.
- 4 Support and Update
 - Download Base Unit logs: to download the logging from a selected Base Unit.
 - Reboot Base Units: to reboot the selected Base Units.
 - Software update: to update the software of the selected Base Units.
 - Diagnose connection issues: to start the diagnostics of the selected Base Units.
- 5 Configure
 - Clone configuration: to clone the configuration from a selected Base Unit to multiple other Base Units of the same type.
 - Wallpaper: to change the wallpaper displayed by the Base Units
- 6 Tool bar to add, edit or delete a Base Unit on the page.

Base Unit details

The overview page contains a first column with arrows. Click on that arrow to view more details such as serial number, total uptime, hostname, SSID, frequency and channel. The details displayed depend on the current mode of the Base Unit. If a Base Unit is integrated into the Corporate Network (using EAP-TLS, EAP-TTLS, PEAP or WPA2-PSK) then specific details are displayed for each mode.

Base Unit selection

Click on a row to select the Base Unit. The row background turns into red. Multiple selection is possible by holding the CTRL button while selecting the desired rows. Or by clicking on the first row, holding down the SHIFT button and then clicking on the last one in the selection. All the Base Units in between the first selected and the last selected Base Unit are selected. Base Unit selection can also be done by clicking and holding down the left mouse button and dragging across the desired Base Units (this can also be done on mobile devices). All the Base Units can be selected by checking the check box from the top-left corner of the grid

About the status

CMGS can communicate with the Base Unit, the status can be either:

Green check mark

- Base Unit is OK. Communication protocol is HTTP.

Green lock

- Base Unit is OK. Communication protocol is HTTPS

Blue check mark

- Base Unit is in Network Standby mode (only for CSE-800)

Orange triangle

- Base Unit reports some problems with some processes that are not critical for sharing usage (meeting room usage)
 - WebUI Server not running
 - System Logging not running
 - Process Monitor not running
 - Job Scheduler not running
 - LED Control not running
 - Projector Control not running (only CSC-1, CSM-1)
 - Button Agent not running
 - DHCP Server not running
- CMGS was not able to enforce the CMGS user preference wrt. Base Unit HTTP/HTTPS communication
- CMGS was not able to enforce the Base Unit password requested by the CMGS user
- Base Unit is running a very old firmware version that does not allow CMGS communication; The user should update the firmware of the Base Unit manually.

Red triangle

2. Views differ with every account type

- the Base Unit reports some problems that prevent sharing
 - ClickShare Server
 - Config Manager
 - Graphics Server (not on CSE-200, CSE-800)
 - Device Daemon
 - DBus Daemon
 - Wifi Access Point Daemon
- CMGS determined that the added device is not a Base Unit hence should be removed from CMGS

Gray triangle

CMGS can not communicate with the device.

- Base Unit not connected to the network infrastructure
- Base Unit shut down or performing a reboot procedure
- network configuration preventing the communication between CMGS and the Base Unit : user should use the Diagnostics page to find out more details.

2.2 Auto discovering of Base Units



Only for CSE-800.

What can be done?

New CSE-800 Base Units on your network might be automatically detected if the Collaboration Management Suite has the default hostname, or if the user entered the correct Collaboration Management Suite hostname or IP address in the Base Unit Web UI, page *WiFi & Network* → *Services*. The Base Units are added to a discovered list and displayed on in the Control panel and then in the wizard that will add them in the Collaboration Management Suite list of available Base Units.

Auto discovery

1. On the *Control panel* page, click on the new Base Units message.

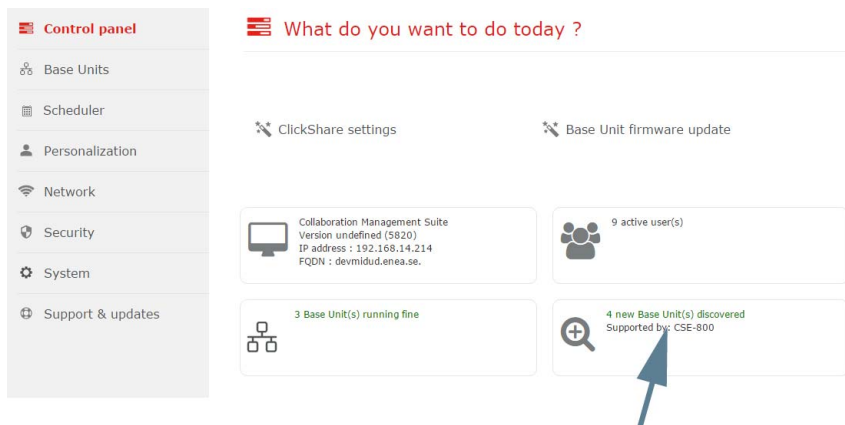


Image 2-2
Auto-discover Base Units

The Base Unit list is displayed and the Base units can be set up.

2. Select the Base Unit(s) to set up and click **Next**.

2. Base Units page

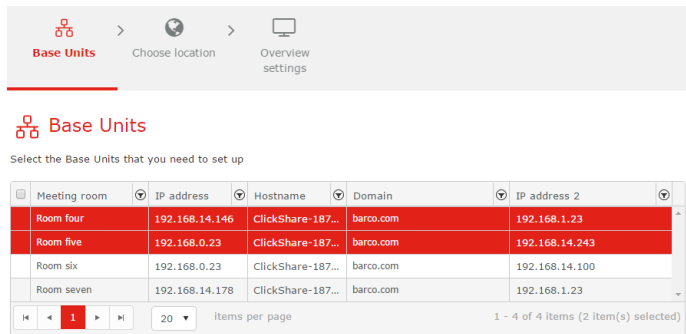


Image 2-3
Select Base Units

3. Select the *Location*. Click on the arrow to expand the list and select the desired location. Click **Next** to continue.

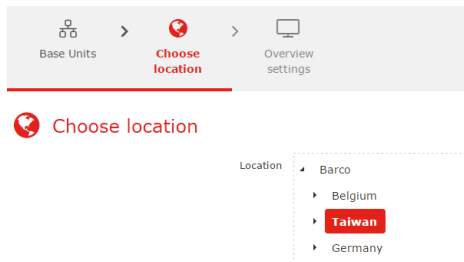


Image 2-4
Choose location

A confirmation message is displayed that x Base Units are added successfully.

4. Click **OK** to continue.

An overview of the settings is displayed.

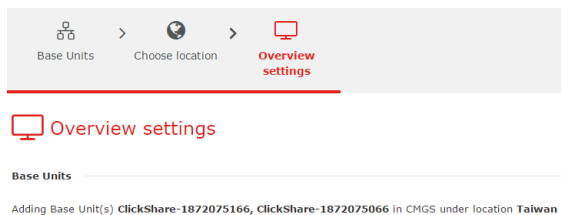


Image 2-5
Overview settings

5. Click **Finish**.

2.3 Add new Base Unit

About adding Base Units

New Base Units on the network can be added to the Collaboration Management Suite.

Auto-discovering is supported for CSE-800.

Add via the Base Units window

1. When the overview window is not open yet, click on **Base Units** in the menu bar.

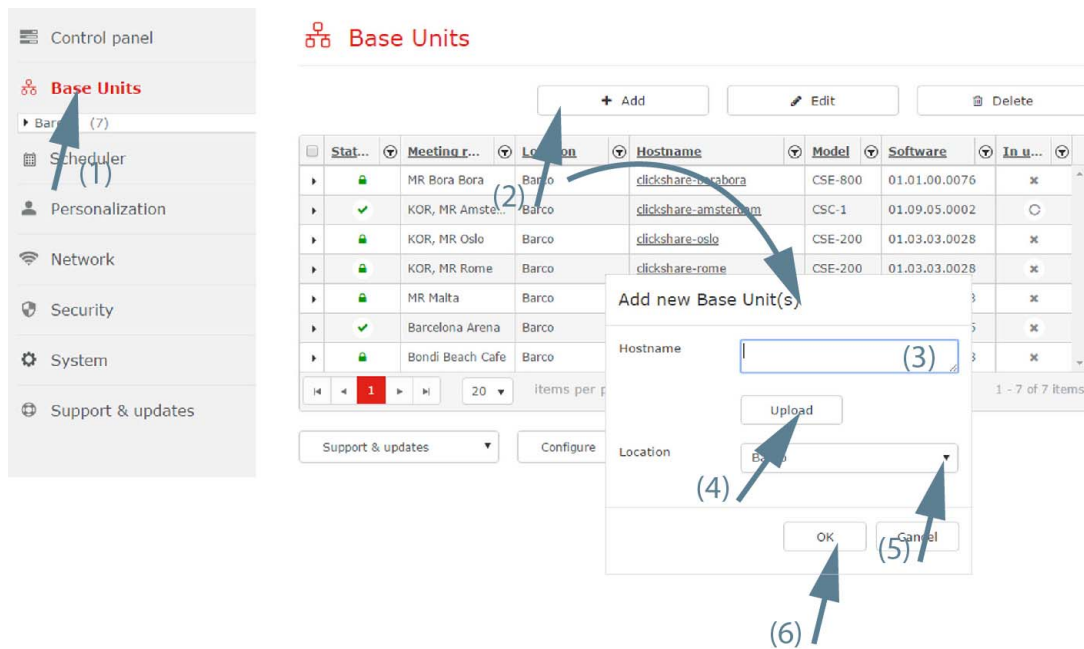


Image 2-6
Add Base Unit

An overview of the current coupled Base Units is shown.

2. Click on the “+ Add” button to add a Base Unit.

The *Add New Base Unit(s)* window opens.

3. Click in the input field next to *Hostname* (3) and enter the hostname or IP address or FQDNs (Fully Qualified Domain Names) of the Base Unit to be added. Multiple Base Units can be added at the same time by entering the different hostnames or IP addresses or FQDNs (Fully Qualified Domain Names) separated by a comma (there is no limitation in the number of Base Units). Or, if you have a text file where each line contains an IP address or hostname or FQDNs (Fully Qualified Domain Names) , click on **Upload** (4) and select this file and click on **Open**. After uploading information from file, Base Units must appear into *Hostname* field (no limitation in the number of Base Units).

Note: A *hostname* or *FQDNs* can have up to maximum 253 characters.

4. Select a location in the location tree (5). Click on the drop down box and select a branch or sub branch.
5. Click **OK** (6) to add the Base Unit(s) to the overview list.

Details of the added Base Unit(s) are acquired in about 30 seconds (only when the Base Unit polling interval and the CMGS database polling interval are not changed by the IT admin). The overview list will be updated.

The IT admin can choose between identifying Base Units by *IP address* or *Hostname* in *Network* → *WiFi & LAN settings* page.

2.4 Edit selected Base Unit

About editing a Base Unit

The location of a Base Unit can be changed to any location in the location tree.

How to edit

1. Select the Base Unit to edit (1).

2. Base Units page

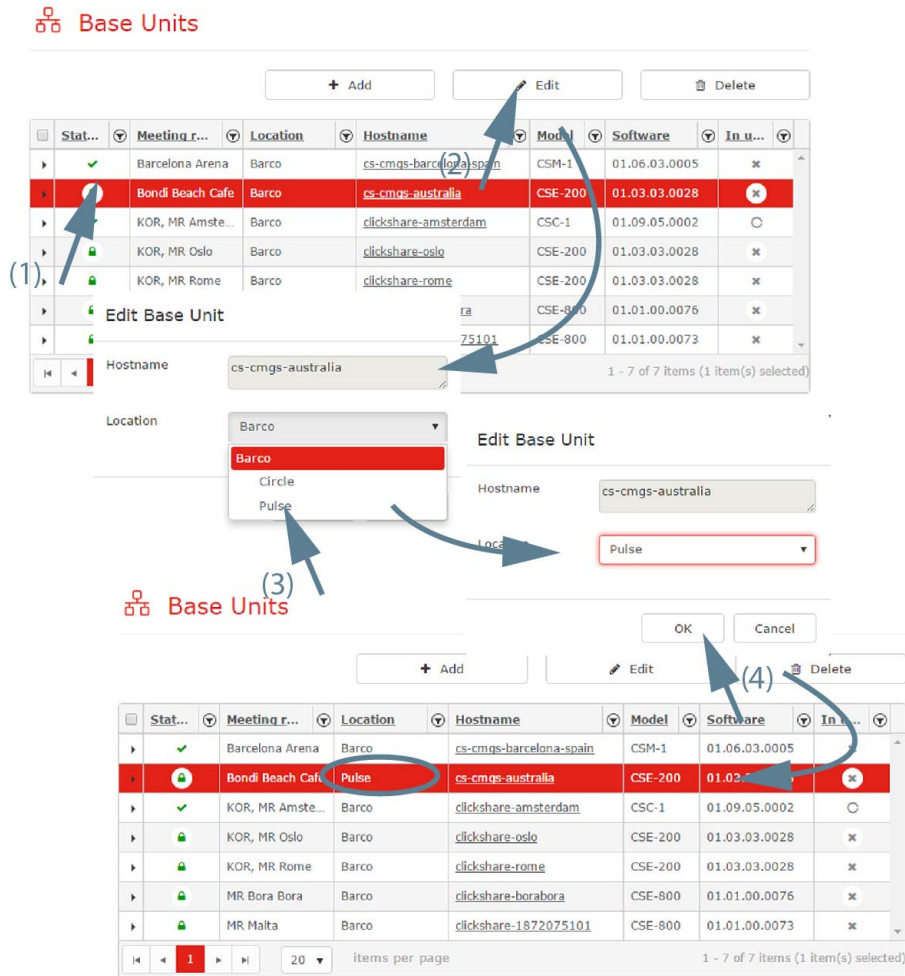


Image 2-7
Edit Base Unit

2. Click on the **Edit** button (2).

The *Edit Base Unit* window opens. The current location is indicated.

3. Click on the new desired location (3).

4. Click on **OK** (4).

The Base Unit is updated with the new location.

About changes in hostname or IP address

Changes can be made to the hostname or IP address directly on WebUI of the Base Unit. These changes are reflected in Collaboration Management Suite

How it works:

1. client manually adds Base Unit in CMGS by IP Address or Hostname or FQDN (no auto-discover support)
2. CMGS - Base Unit communication is done based on IP address and if this does not work, Hostname communication is tried.
3. If either communication is successful Base Unit information is updated in the CMGS database and it will be used from this moment on

Any change made to an IP address or hostname are automatically updated in CMGS.

2.5 Delete selected Base Unit

About deleting a Base Unit

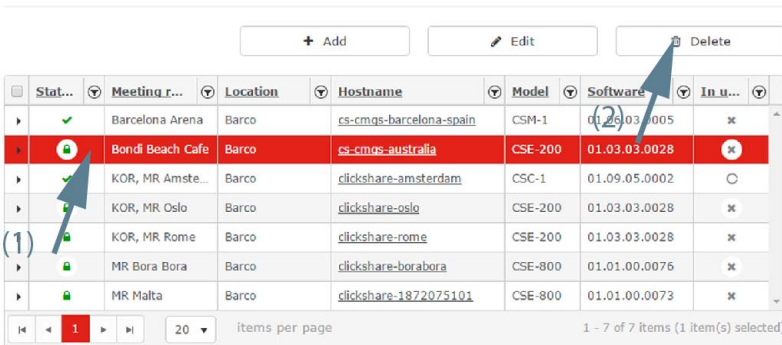
Multiple Base Units can be removed from Collaboration Management Suite at the same time.

How to delete

1. Select the Base Unit to delete.

To select multiple Base Units, click and drag the mouse over them or click on the first one, hold down the CTRL button and click on the last one. All Base Units in between are selected.

Base Units



The screenshot shows a table with columns: Stat..., Meeting r..., Location, Hostname, Model, Software, In u... The row for 'Bondi Beach Cafe' is selected. The 'Delete' button is highlighted with a blue arrow. A red box highlights the '1' in the pagination controls.

Stat...	Meeting r...	Location	Hostname	Model	Software	In u...
▶	✓	Barcelona Arena	Barco	cs-cmgs-barcelona-spain	CSM-1	01.03.03.0005
▶	🔒	Bondi Beach Cafe	Barco	cs-cmgs-australia	CSE-200	01.03.03.0028
▶	✓	KOR, MR Amste...	Barco	clickshare-amsterdam	CSC-1	01.09.05.0002
▶	✓	KOR, MR Oslo	Barco	clickshare-oslo	CSE-200	01.03.03.0028
▶	🔒	KOR, MR Rome	Barco	clickshare-rome	CSE-200	01.03.03.0028
▶	🔒	MR Bora Bora	Barco	clickshare-borabora	CSE-800	01.01.00.0076
▶	🔒	MR Malta	Barco	clickshare-1872075101	CSE-800	01.01.00.0073

Image 2-8
Delete Base Unit

2. Click on the **Delete** button.

A warning message appears to ask confirmation from the user: "Delete x Base Unit(s)".

3. Press **OK** to delete the Base Unit(s).

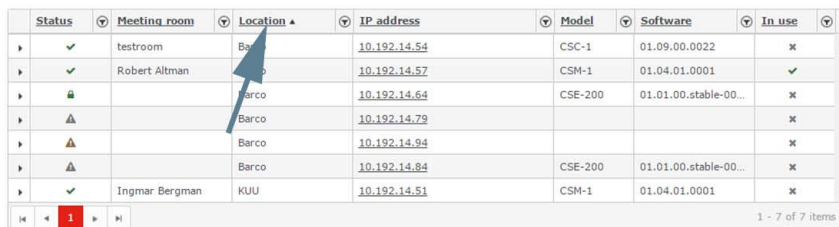
2.6 Sorting and filtering



Do not use one of the following characters in a sorting or filtering field : [, (,), \, +, *, ?

About sorting

The overview page can be sorted using any header of the overview page. Click on the header to sort the overview page in descending or ascending order. Click again on the header to change the order.



The screenshot shows a table with columns: Status, Meeting room, Location, IP address, Model, Software, In use. The 'Location' header is highlighted with a blue arrow.

Status	Meeting room	Location	IP address	Model	Software	In use
▶	✓	testroom	10.192.14.54	CSC-1	01.09.00.0022	✗
▶	✓	Robert Altman	10.192.14.57	CSM-1	01.04.01.0001	✓
▶	🔒	Barco	10.192.14.64	CSE-200	01.01.00.stable-00...	✗
▶	⚠	Barco	10.192.14.79			✗
▶	⚠	Barco	10.192.14.94			✗
▶	⚠	Barco	10.192.14.84	CSE-200	01.01.00.stable-00...	✗
▶	✓	Ingmar Bergman	10.192.14.51	CSM-1	01.04.01.0001	✗

Image 2-9
Sorting overview



The screenshot shows the same table as above, but the 'Location' header is now highlighted with a red background, indicating it is sorted.

Status	Meeting room	Location	IP address	Model	Software	In use
▶	✓	Ingmar Bergman	10.192.14.51	CSM-1	01.04.01.0001	✗
▶	✓	testroom	10.192.14.54	CSC-1	01.09.00.0022	✗
▶	✓	Robert Altman	10.192.14.57	CSM-1	01.04.01.0001	✓
▶	🔒	Barco	10.192.14.64	CSE-200	01.01.00.stable-00...	✗
▶	⚠	Barco	10.192.14.79			✗
▶	⚠	Barco	10.192.14.94			✗
▶	⚠	Barco	10.192.14.84	CSE-200	01.01.00.stable-00...	✗

About filtering via the overview page

The overview page can be filtered using the filter arrow next to each item in the header (1). Click on that arrow to open the filter window. Enter a search criterion (2–3). A search criterion can be any part of the name. Click **Filter** (4) to update the overview page. The filter arrow in the header gets a red background.

2. Base Units page

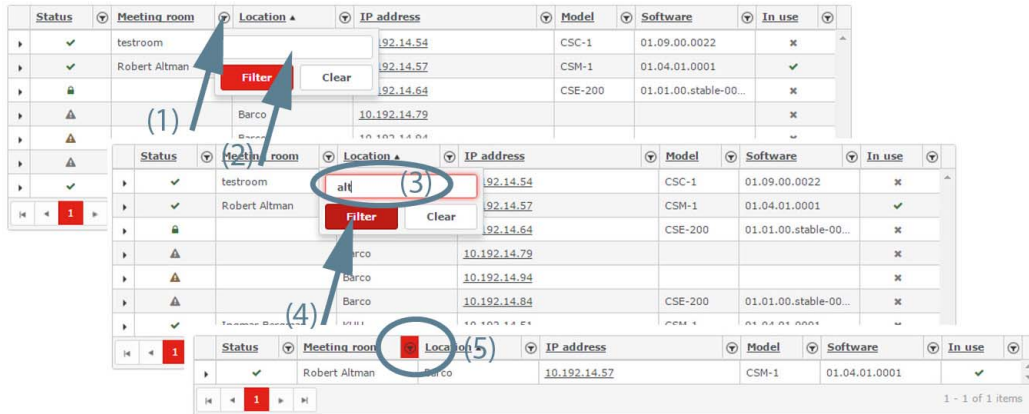


Image 2-10
Filtering overview

To clear the search filter, click on the filter arrow with red background to open the filter window and click on Clear.

About filtering via the location tree

Click on a branch of the location tree to filter the Base Units. Only those Base Unit located on that branch (and sub branches) are displayed.

Example: filter for 'KUU'. Click on the branch 'KUU' and the overview page displays only the Base Units located in 'KUU'.

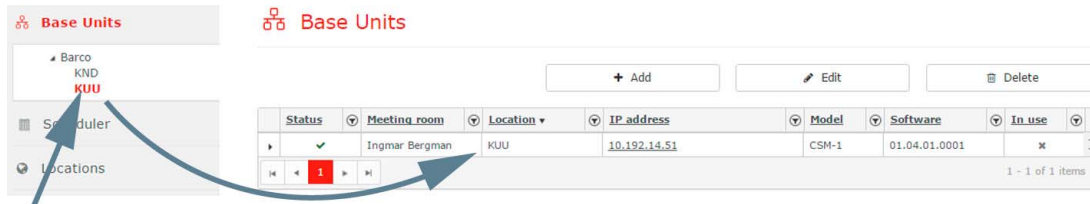


Image 2-11
Filtering via tree

2.7 Support and updates

Overview

- Download Base Unit log
- Reboot Base Units
- Software update
- Diagnose connection issues

2.7.1 Download Base Unit log

How to download

1. Select the Base Unit to download the logging (1). Multiple Base Units can be selected.

Base Units

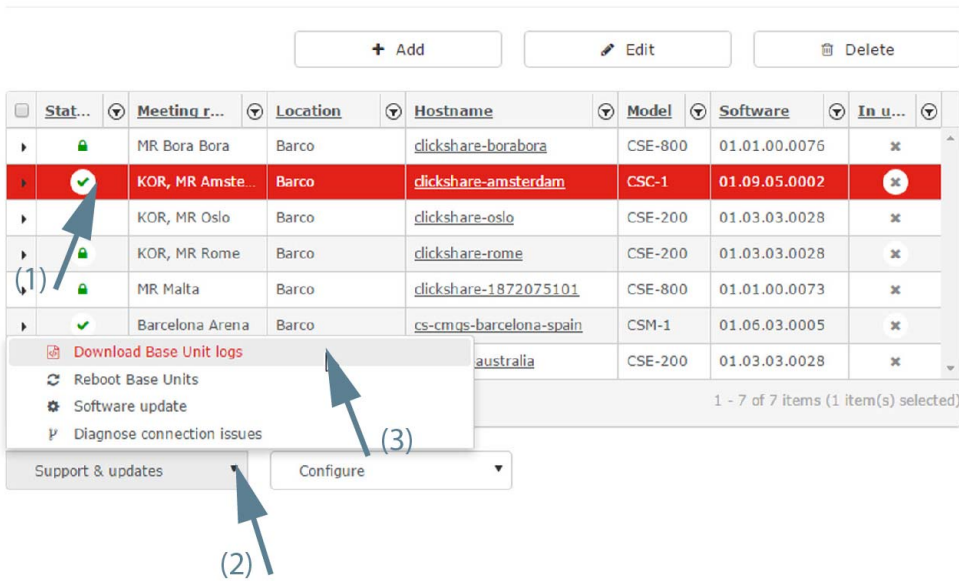


Image 2-12
Download Bas Unit logs

- Click on the drop down box *Support & Updates* (2) and select **Download Base Unit logs** (3).
A message is displayed: "Download Base Unit logs, please wait".
The logging file can be saved on your hard disk.

2.7.2 Reboot Base Units

How to reboot

- Select the Base Units to reboot.

Base Units

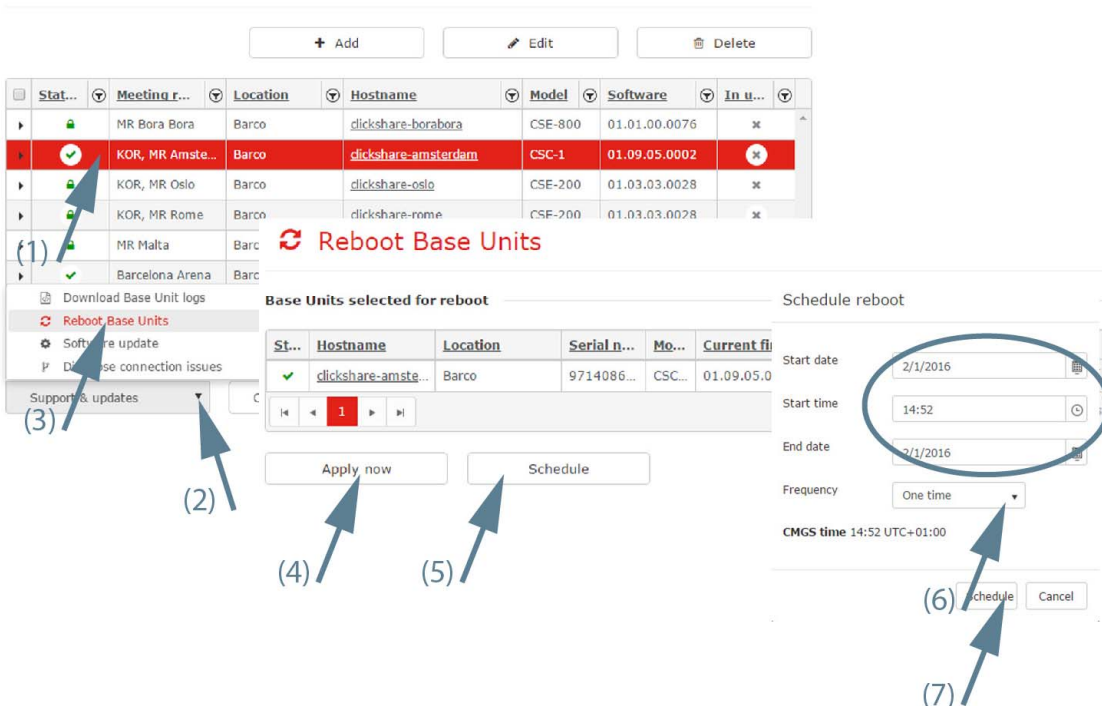


Image 2-13
Reboot Base Unit(s)

- Click on the drop down box *Support & Updates* (2) and select **Reboot Base Units** (3).
A *Reboot Base Unit* page opens with the overview of the selected Base Units.

- To reboot immediately, click **Apply now** (4).
To reboot on a later date, click **Schedule** (5). Fill out a date and time and click **Schedule** (7).
Note: A schedule frequency can be entered. The following choices are possible: one time, daily, weekly, monthly or yearly.

2.7.3 Software update

About software update

The firmware of a single Base Unit or of multiple Base Units can be updated with Collaboration Management Suite. The update can be executed immediately or it can be scheduled.

The Base Unit firmware must be loaded on the Collaboration Management Suite, prior the update. Collaboration Management Suite may directly download a firmware from Barco site, or the firmware may be uploaded to Collaboration Management Suite.



An update takes about 10 up to 20 minutes for a CSC-1, about 5 up to 10 minutes for a CSE-200/CSE-800 and 15 up to 30 minutes for a CSM-1.

How to update

- Select the Base Unit(s) to update (1). All the selected Base Units must be of the same type.

Base Units

The screenshot shows the 'Base Units' management interface. At the top, there are buttons for '+ Add', 'Edit', and 'Delete'. Below is a table of base units with columns for Status, Meeting room, Location, Hostname, Model, Software, and In use. The 'KOR, MR Oslo' unit is highlighted in red. A dropdown menu 'Support & updates' is open, showing options like 'Download Base Unit logs', 'Reboot Base Units', 'Software update', and 'Diagnose connection issues'. The 'Software update' option is selected, leading to the 'Select firmware' dialog. This dialog shows a table of available firmware versions for the selected model (CSE-200). The 'Date & Time' screen is then shown, where the user can choose to 'Apply now' or 'Schedule' the update. The 'Apply now' option is selected. The 'Date & Time' screen also shows the current date and time, and a calendar icon for selecting a specific date. A calendar for March 2017 is shown, with the 7th of March selected. The 'Start time' field is empty, and a warning message 'Please enter a job time' is displayed.

Image 2-14
Software updates

- Click on the drop down box *Support & Updates* (2) and click **Software Update** (3).

The Select firmware window opens.

The possible updates are displayed. If the firmware that you want is not in the list, click on **Firmwares** to go to the firmware page to download or upload this version. See Download firmware.

- Select the firmware version (4) and click **Next** to continue.
- To apply the firmware immediately, check the radio button in front of **Apply now** (5).
To schedule the update in the future, check the radio button in front of **Schedule**. To change the date, click on the calendar icon (6) and select the date (7). Enter the time (hh:mm) or click on the clock icon, then select a predefined time.
- Click **OK**.

Download firmware

- First select the desired device type from the drop down list before downloading or uploading a firmware.
The possible firmware for that model are displayed.
- On the firmware page, click on the download button next to the firmware you want to download.

2. Base Units page

Firmwares

Available disk space: _____
Used space: 1.7G / 5.9G

Download/Upload

CSE-200 Delete

Firmware	Model	Release d...	Releas...	Offici...	Status
01.01.00.0008	CSE-2...	18/02/2016		✓	Download
01.02.00.0001	CSE-2...	08/04/2016		✓	Download
01.02.01.0001	CSE-2...	02/05/2016		✓	Download
01.02.02.0003	CSE-2...	20/05/2016		✓	Download
01.03.00.0029	CSE-2...	29/07/2016		✓	Download
01.03.01.0005	CSE-2...	26/09/2016		✓	Download

10 Items per page

Firmwares

Available disk space: _____
Used space: 2.5G / 5.9G

Download/Upload

CSE-200 Delete

Firmware	Model	Release d...	Releas...	Offici...	Status
01.03.00.0029	CSE-2...	29/07/2016	ⓘ	✓	Available - Downloaded
01.03.01.0005	CSE-2...	26/09/2016	ⓘ	✓	Available - Downloaded
01.01.00.0008	CSE-2...	18/02/2016		✓	Download
01.02.00.0001	CSE-2...	08/04/2016		✓	Download
01.02.01.0001	CSE-2...	02/05/2016		✓	Download
01.02.02.0003	CSE-2...	20/05/2016		✓	Download

10 Items per page 1 - 6 of 6 items

Image 2-15
Firmware download

The download starts.

2.7.4 Diagnose connection issues

How to start the diagnose

1. Select the Base Unit(s) to diagnose (1).

Base Units

The screenshot shows the 'Base Units' management interface. At the top, there are buttons for '+ Add', 'Edit', and 'Delete'. Below is a table of base units with columns for Status, Meeting room, Location, Hostname, Model, Software, and In use. The 'KOR, MR Oslo' unit is selected and highlighted in red. A sidebar menu on the left contains options: 'Download Base Unit logs', 'Reboot Base Units', 'Software update', 'Diagnose connection issues', and 'Support & updates'. The 'Diagnose connection issues' window is open, showing a 'Devices' section with the IP address '10.201.114.83,clickshare-oslo' and a 'Diagnose' button. Below this are checkboxes for 'ping', 'request (HTTP)', 'request (HTTPS)', 'host', 'traceroute', and 'CMGS comm.'. The 'Status' section shows the IP address and hostname '10.201.114.83 / clickshare-oslo'. A detailed log is visible, showing a ping command and its response: 'PING 10.201.114.83 (10.201.114.83) 56(124) bytes of data. --- 10.201.114.83 ping statistics --- 20 packets transmitted, 0 received, 100% packet loss, time 19018ms'. A 'Save' button is at the bottom of the log.

Image 2-16
Diagnosis connection issues

2. Click on the drop down box *Support & Updates* (2) and click **Diagnose connection issues** (3).
The Diagnose connection issues window opens. The Device area gives an overview of the IP addresses of the selected Base Unit(s).
3. If the diagnosis is not started automatically, click on **Diagnose** to start the diagnose.
The diagnosis is executed and displayed in the status pane as follow: IP address/hostname Base Unit.
4. To open the diagnosis log, click on the arrow next to the status line.
To close the diagnosis log, click again on the arrow next to the status line.
5. To save the diagnosis log on your local drive, click on **Save**.

3. SCHEDULER



Only for IT admin and IT support users.

Overview

- Schedule a new job
- Edit a job
- Delete a job

About the scheduler

With the scheduler, software updates can be postponed until a certain time.

3.1 Schedule a new job

How to schedule

1. In the menu pane, click on **Scheduler** (a).

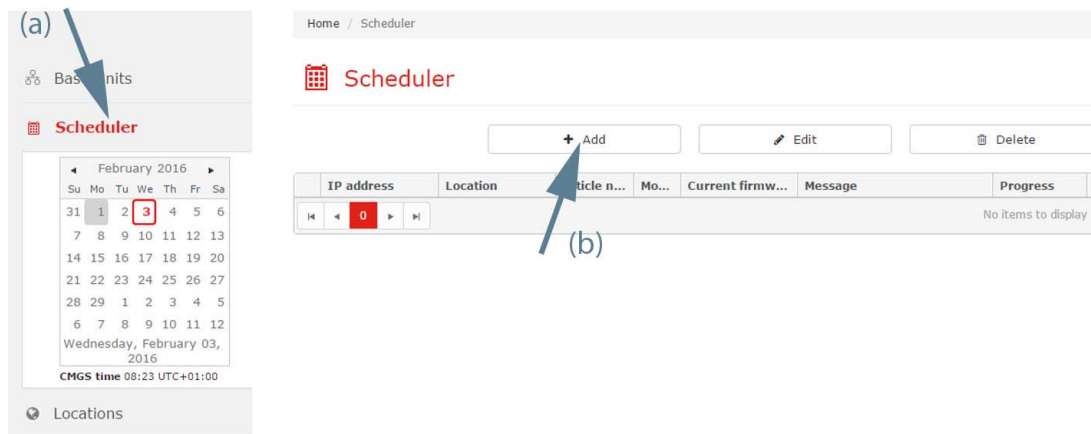


Image 3-1
Schedule new job

An overview of the scheduled jobs for the selected day is given. To see an overview for another day, click on a day in the calendar and if necessary, change the month. User is able to change month by clicking on the name of the current month. In order to view daily calendar user should click on the name of the current date, located in the bottom of the calendar.

Gray highlighted number represents the current day. Red surrounded number represents the schedule date.

2. Click on **Add** (b).

An information message is displayed to announce that the Base Units overview page will be displayed. Select *Support & Updates* and then choose either *Updates*.

3. Follow the instruction as given in "Software update", page 22 or "Reboot Base Units", page 21. To finalize the procedure, select on **Scheduler** instead of **Apply now**.
4. To change the date, click on the calendar icon and select the date. Enter the time (hh:mm) or click on the clock icon and select a predefined time.

3. Scheduler

a) To change the year and month, click on the left or right arrow key next to the month-year name (1).

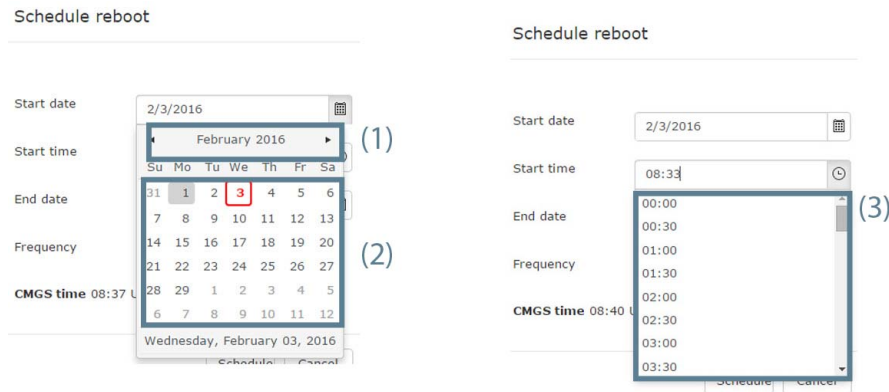


Image 3-2
Scheduler

b) To change the day, click on the desired day in the calendar (2).

c) To set the desired time comparing to the server time, click on the icon and select a predefined time (3).

5. Set the frequency.

6. Click **Schedule**.

The Scheduler overview page is displayed again with the new job filled out. The status of the job is scheduled or pending.

Scheduler

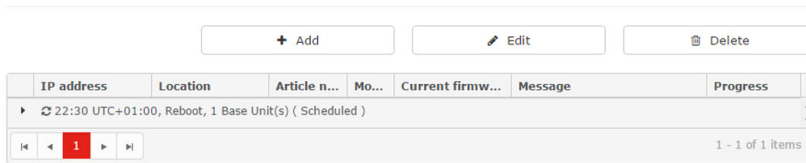


Image 3-3
Scheduler overview page

The calendar highlights the days a job is created.

3.2 Edit a job



A scheduled job can only be edited if the user has access rights to the location of all Base Units in the scheduled job.

What can be done?

A scheduled job can be moved in time to a new time slot.

How to edit

1. Go to the month and date where the job can be found (1) and select the job to be edited (2).

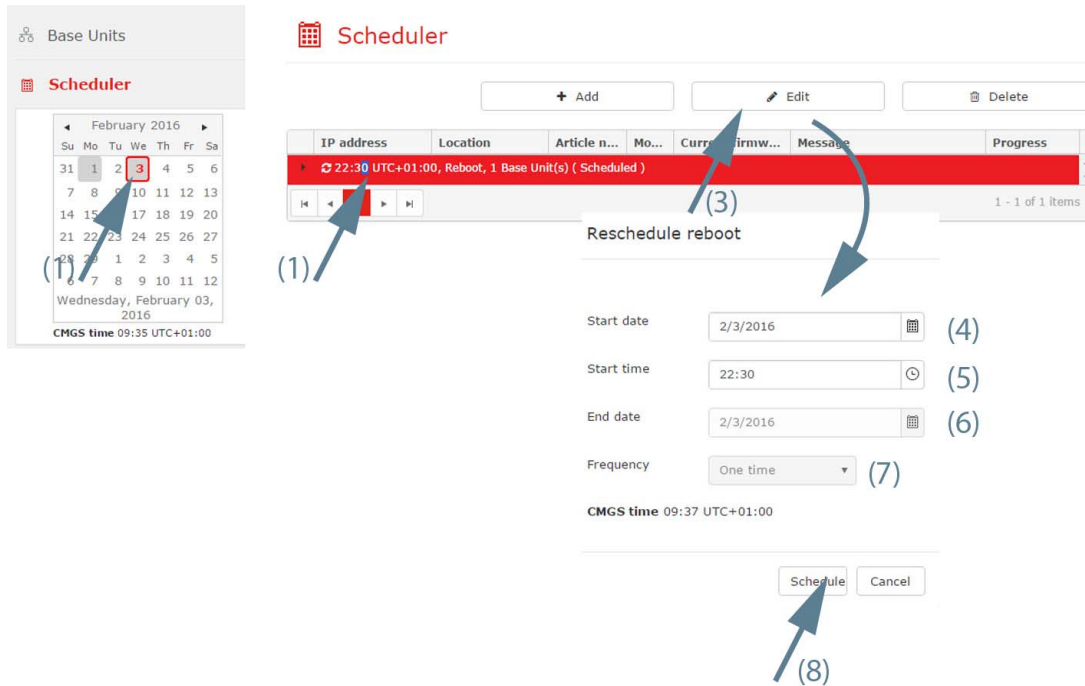


Image 3-4
Edit scheduled job

2. Click on **Edit** (3).

The *Reschedule* window opens.

3. Change the start date. To change the date, click on the calendar icon and select the new date (4).
4. Set the new time. Click in the input field and enter the new time or click on the icon and select the new time (5).
5. Change the end date. To change the date, click on the calendar icon and select the new date (6).
6. Change the frequency if necessary (7).
7. Click **Schedule** to reschedule the job (8).

3.3 Delete a job

What can be done?

A scheduled job can be removed from the execution list. If a job consists of updates on multiple Base Units all will be removed from the calendar.

Deleting a recurrent Base Units job will offer the user the choice to remove the whole series or just the selected occurrence.

How to remove

1. Go to the date of the job to be deleted (1) and select the job (2). (date means year/month/day)

3. Scheduler

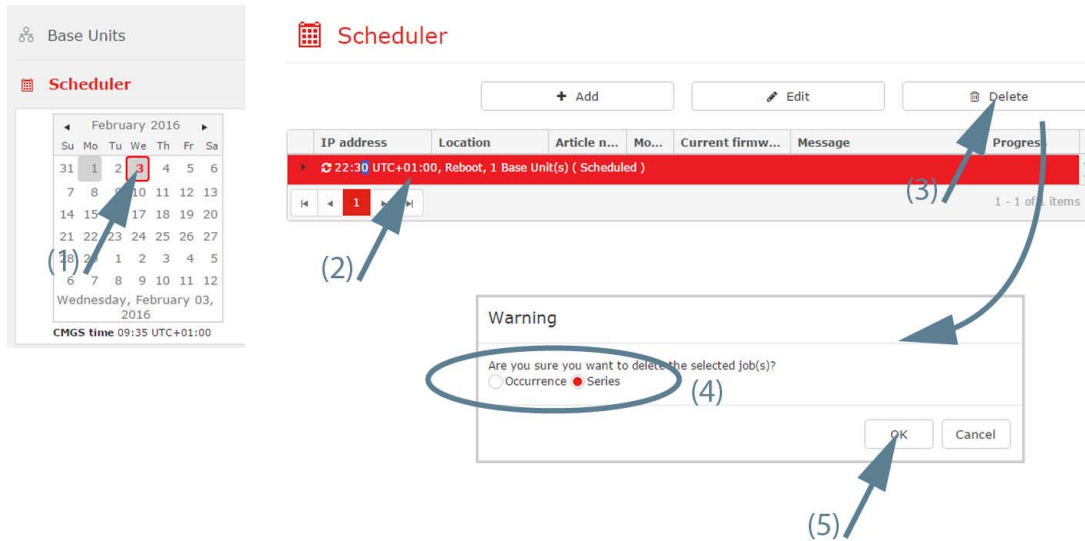


Image 3-5
Delete scheduled job

2. Click on the **Delete** button (3).
A delete selection window is displayed.
3. Select *Occurrence* or *Series* (4).
4. Click **OK** to confirm the deletion (5).

4. PERSONALIZATION

Overview

- User preferences
- Locations
- Configuration files

4.1 User preferences

How to setup

1. In the menu pane, click **Settings** and select *User preferences*.

Image 4-1
User preferences

The current user preferences are displayed.

For the fields with a drop down box, click inside the field and select a new value out of the list. For text fields, click inside the field, select the current value and enter a new value with your keyboard.

2. Click on **Save changes** to apply the changes.

4.2 Locations



Only for IT admin user.

4. Personalization

Overview

- Expand/collapse tree
- Add new location
- Rename location
- Delete location
- Move a location
- Search for a location

4.2.1 Expand/collapse tree

How to collapse/expand

1. To collapse an expanded branch, click on the arrow icon in front of a branch (1).
2. To expand a collapsed branch, click on the arrow icon in front of a branch (2).

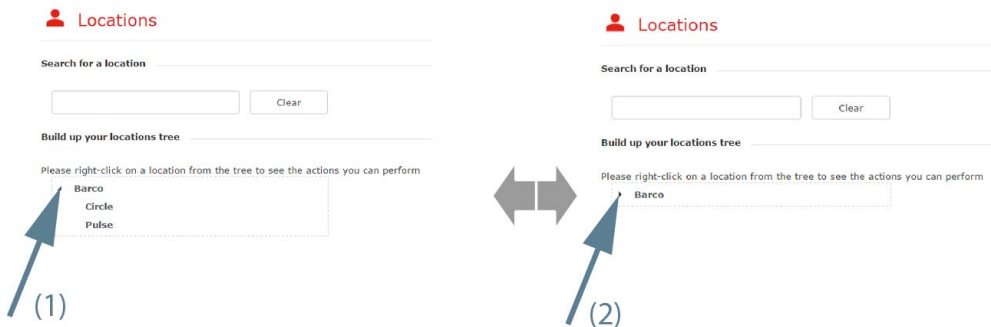


Image 4-2
Collapse/expand locations

Expand all

1. Right click on a collapsed branch with sub branches.

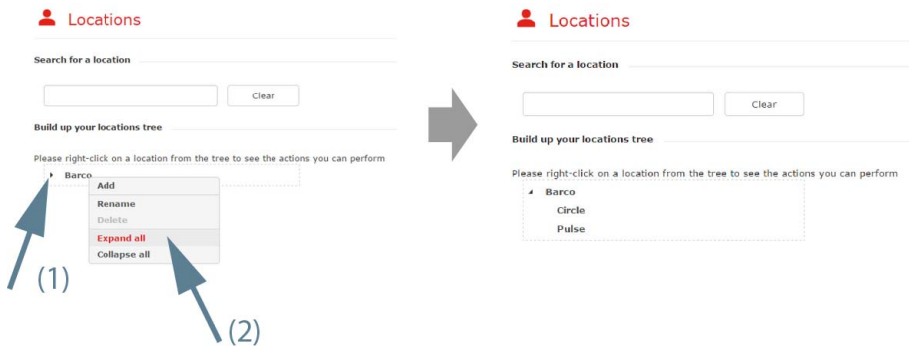


Image 4-3
Expand all

2. Select *Expand all*.

The branch is expanded until its deepest level.

Collapse all

1. Right click on an expanded branch with sub branches.

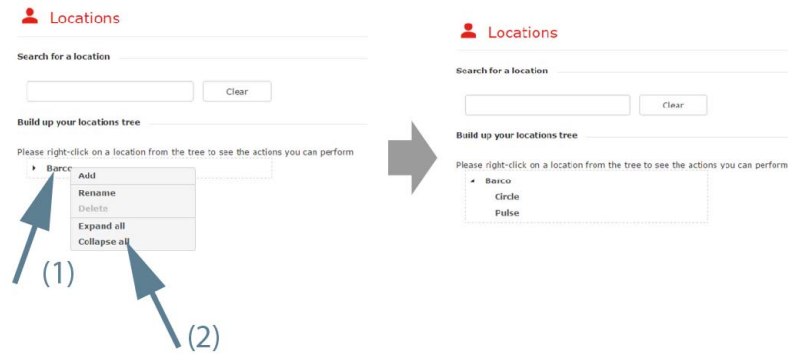


Image 4-4
Collapse all

2. Select *Collapse all*.

The branch with its sub branches is collapsed.

4.2.2 Add new location

What can be done?

A new location can be added to the location tree via the locations overview page

How to add

1. Select **Personalization** and click on **Locations** to display the locations page (1).

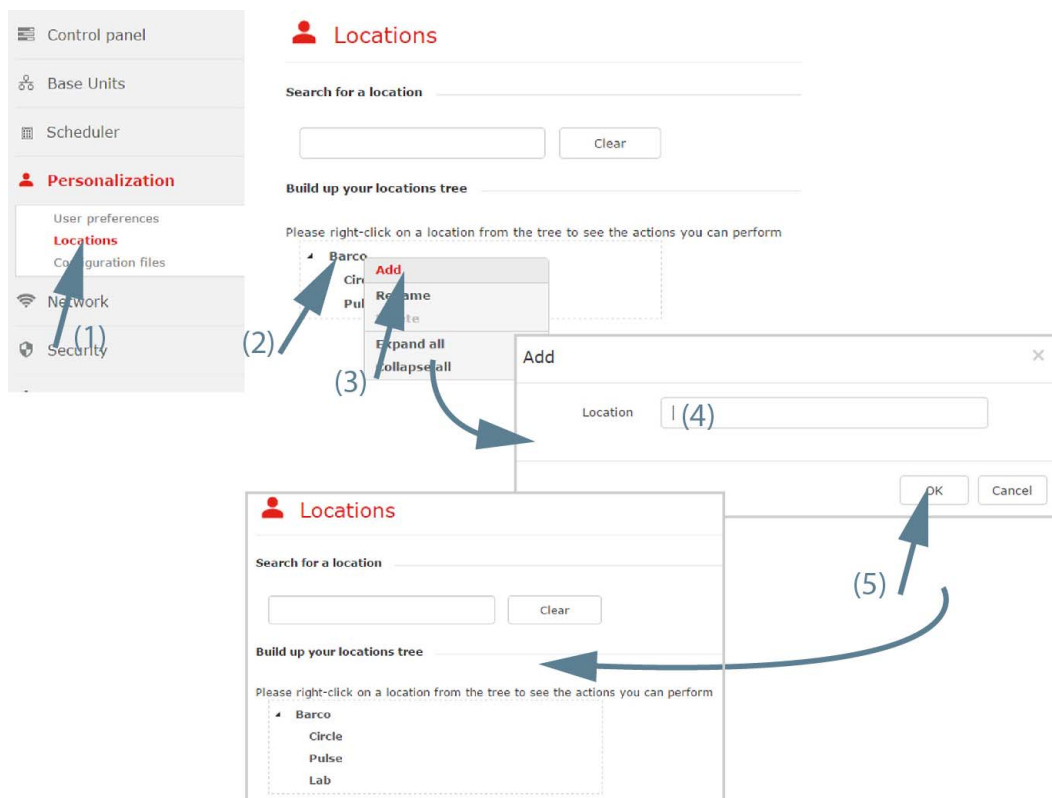


Image 4-5
Add new location

2. Right click on a location in the tree where to add a new location (2).

A context menu opens.

3. Select *Add* (3).

A *Add* window opens.

4. Enter a name for the location (4) and click **OK** (5).

Note: It is not allowed to use the backslash character "\" in the location name.

The new location is added to the selected branch.

4.2.3 Rename location

What can be done?

The name of any location in the tree can be changed.

How to rename

1. Select **Personalization** and click on **Locations** to display the locations page (1).

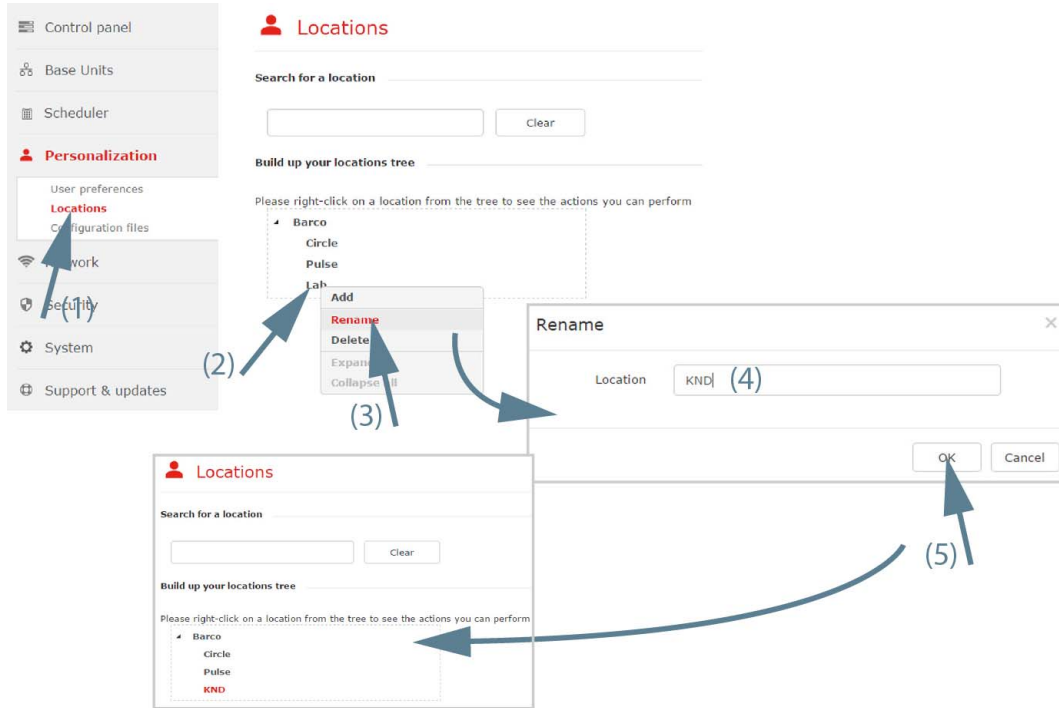


Image 4-6
Rename location

2. Right click on a location to rename (2).
A context menu opens.
3. Select *Rename* (3).
The *Rename* window opens
4. Edit the location name (4) and click **OK**.
Note: *It is not allowed to use the backslash character "\" in the location name.*
The location name is updated in the location tree.

4.2.4 Delete location

What can be done?

Any user added location in the locations tree can be removed from the tree.



Deleting a location is only possible when no Base Units are assigned to it or to one of its sub branches.

How to delete

1. Select **Personalization** and click on **Locations** to display the locations page (1).

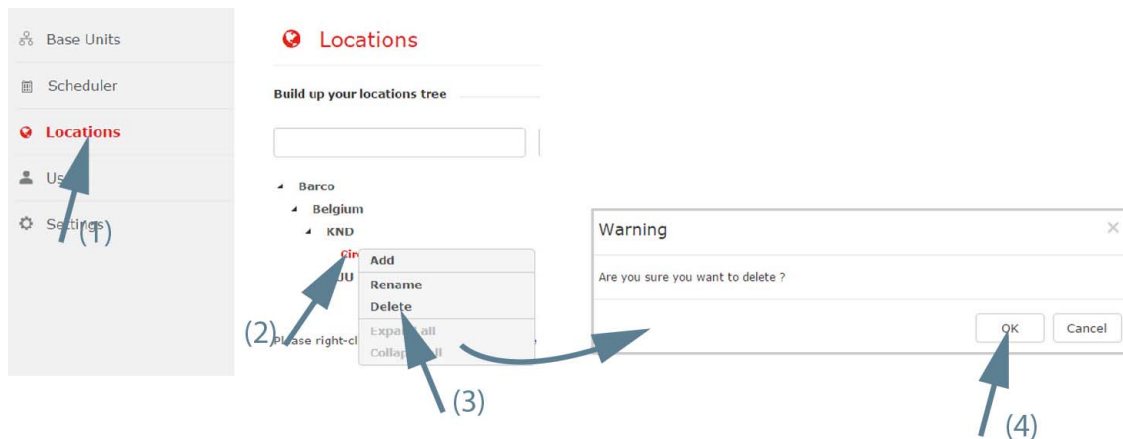


Image 4-7
Delete location

- Right click on a location to remove (2).
A context menu opens.
- Select **Delete** (3) to remove the selected location.
A warning message is displayed.
If there are Base Units still connected to the selected branch or to one of its subbranches, the delete operation is not possible.
- Click **OK** (4) to remove the selected location from the location tree. Also the sub-locations will be deleted.

4.2.5 Move a location

What can be done?

A location can be moved from one branch to another.

How to move

- Select **Personalization** and click on **Locations** to display the locations page (1).

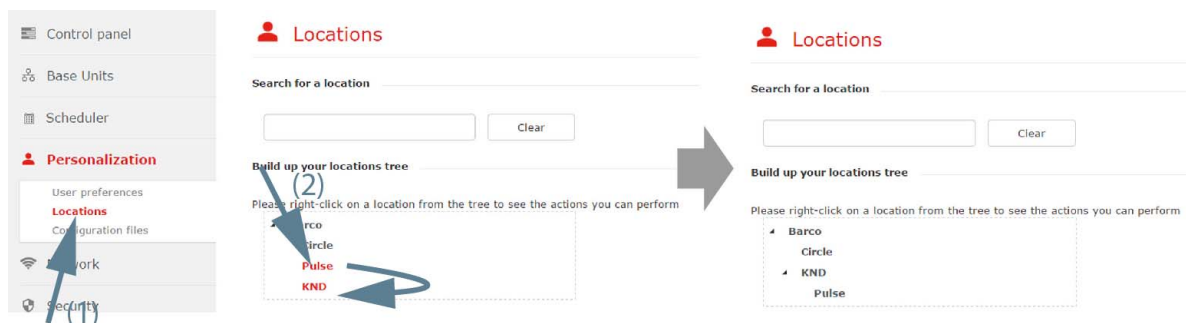


Image 4-8
Move location

- Click on a location and drag to the desired place (2).
While dragging a plus sign indicates that the dragged location can be dropped on that place.
A cross sign indicates that the dragged location cannot be dropped on that place.

4.2.6 Search for a location

How to search

- Select **Personalization** and click on **Locations** to display the locations page (1).

4. Personalization

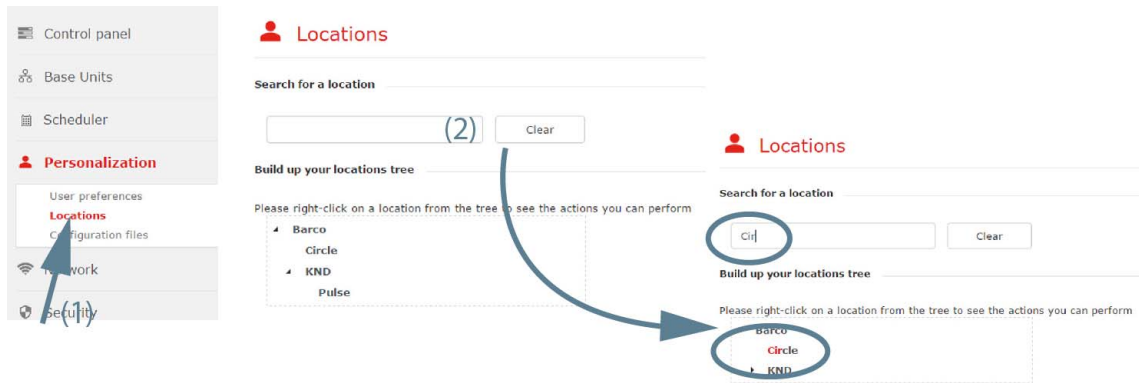


Image 4-9
Search for location

2. Click in the search criteria's input field and start entering your search criterion (2).
The location tree is immediately updated while typing the search criterion.
Click **Clear** to clear the search criteria.

4.3 Configuration files

Overview

- Clone Base Unit settings
- Backup CMGS configuration
- Restore CMGS configuration

4.3.1 Clone Base Unit settings

About Base Unit settings

The current settings of a Base Unit can be implemented on other Base Units of the same model. A wizard will guide you through the process.

How to clone

1. Select **Personalization** and click **Configuration files** to display the *Configuration files* page.
2. Click **Start wizard** next to *Clone Base Unit settings*.
3. Select your model of the Base Units you want to update and click **Next**.

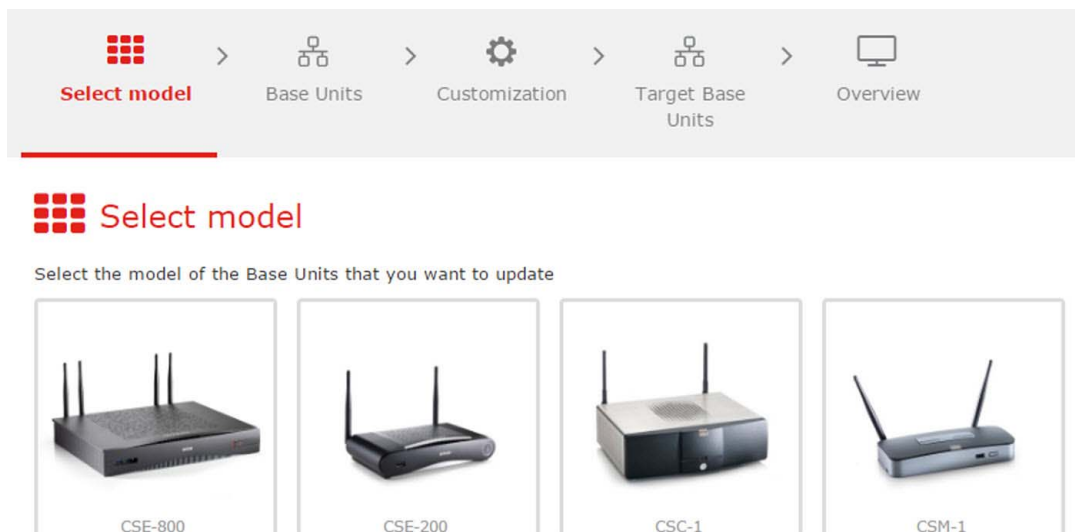
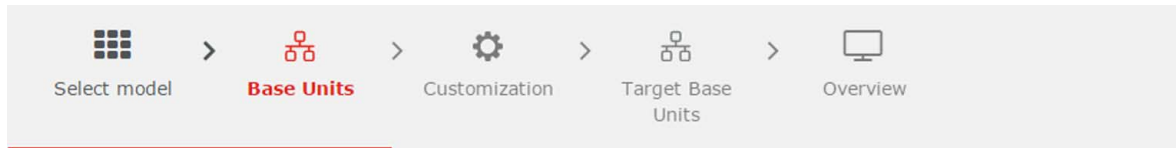


Image 4-10
Select model

4. Select your source Base Unit and click **Next**.



Base Units

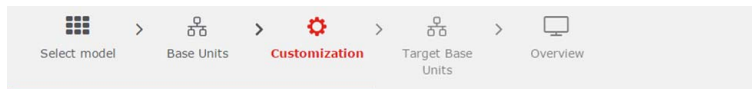
Please select source Base Unit

Status	Meeting room	Location	Hostname	Model	Software	In use
	KOR, MR Oslo	Barco	clickshare-oslo	CSE-200	01.03.03.0028	
	KOR, MR Rome	Barco	clickshare-rome	CSE-200	01.03.03.0028	
	Bondi Beach Cafe	Pulse	cs-cmgs-austra...	CSE-200	01.03.03.0028	

1 - 3 of 3 items

Image 4-11
Select Base Unit

- Select the settings that you want to be copied from the Base Unit. Check the check box in front of the desired settings and click **Next**.
To get more detailed information about a certain customization setting, click on **Details** next to the setting.



Customization

Select the settings that you want to be copied from the source Base Unit to the target Base Units.

- Personalization:** Personalization settings
 - On-screen ID:** Settings related to the text displayed on the Base Unit screen [Details](#)
 - Wallpaper:** The wallpaper displayed on the Base Unit [Details](#)
- Display and audio:** The settings related to audio and video while sharing data
 - Audio:** Audio settings used when sharing [Details](#)
 - Video:** Video settings used when sharing [Details](#)
- Wi-Fi and network:** Settings related to wired or wireless network and remote access management
 - Wi-Fi settings:** Wireless configuration including Channel, Frequency and Mode [Details](#)
 - Services:** Client access and remote management settings [Details](#)
- Security:** Base Unit security settings
 - Security level:** Base Unit security level [Details](#)
- System:** Settings related to Base Unit system configuration
 - Energy savers:** Efficient energy consumption settings [Details](#)
 - Date and time:** Mode for setting the date and time [Details](#)
- Support and updates:** Support and update settings
 - Troubleshoot:** Logging settings used for troubleshoot [Details](#)



Back



Next



Image 4-12
Customization

- Select the target Base Units and click **Next**.

Target Base Units

Select the Base Units that you need to set up

Status	Meeting room	Location	Hostname	Model	Software	In use
	KOR, MR Rome	Barco	clickshare-rome	CSE-200	01.03.03.0028	
	Bondi Beach Cafe	Pulse	cs-cmgs-austra...	CSE-200	01.03.03.0028	

1 - 2 of 2 items

Image 4-13
Select Target Base Units

Note: The target Base Units may reboot after applying the settings.

- Click **Finish** on the *Overview settings* page to execute the cloning.

4.3.2 Backup CMGS configuration

How to backup

1. Select **Personalization** and click **Configuration files** to display the *Configuration files* page.

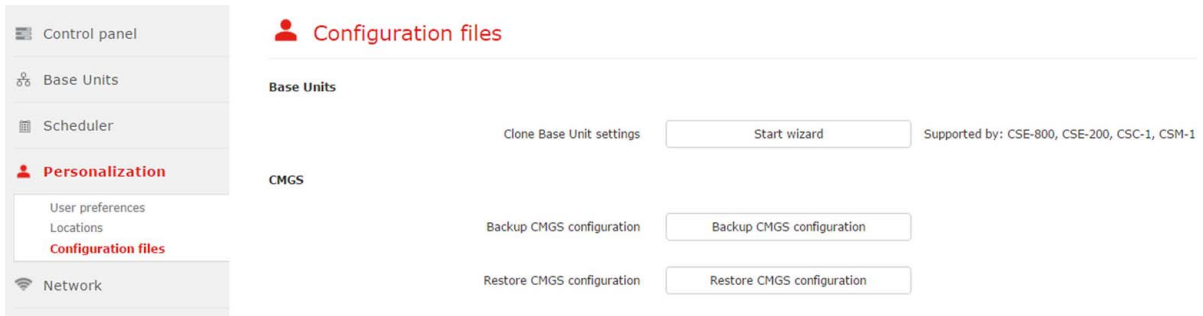


Image 4-14 Configuration files

2. Click on **Backup CMGS configuration** next to *Backup CMGS configuration*.

A backup file is created and stored on the hard disk. The file has a tar.gz.gpg format.

Restore will be executed. During this time the Collaboration Management Suite will not be accessible. This process will overwrite current settings. The firmware and scheduled software update jobs will not be restored. You will also be logged out of the application when the restore process ends.

3. To continue, click **OK**.

4.3.3 Restore CMGS configuration

How to restore

1. Select **Personalization** and click **Configuration files** to display the *Configuration files* page.

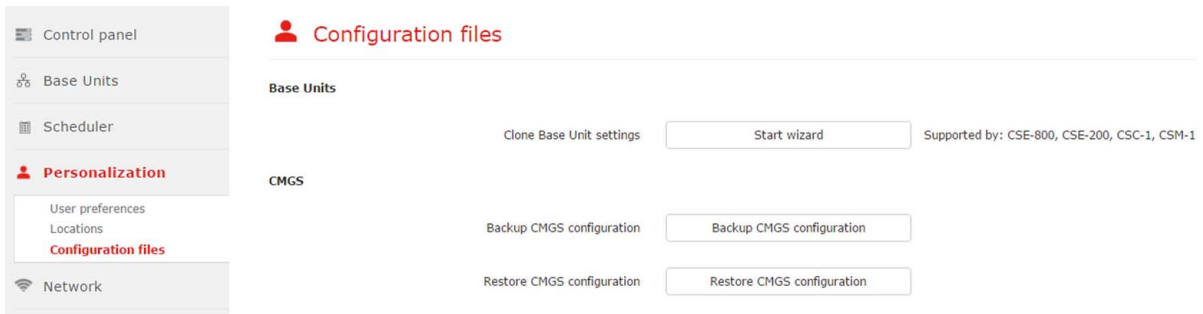


Image 4-15 Configuration files

2. Click on **Restore CMGS configuration** next to *Restore CMGS configuration*.

Restore will be executed. During this time the Collaboration Management Suite will not be accessible. This process will overwrite current settings. The firmware and scheduled software update jobs will not be restored. You will also be logged out of the application when the restore process ends.

5. NETWORK

Overview

- Base Units WiFi and network settings
- LAN settings
- Network integration
- Notifications

5.1 Base Units WiFi and network settings

About Base Units WiFi and network settings

The availability of the webUI via WiFi can be set.

For the LAN settings, the use of the a proxy server can be set.

How to setup

1. Select **Network** and click **Wi-Fi & LAN settings** to display the *Wi-Fi & LAN settings* page.

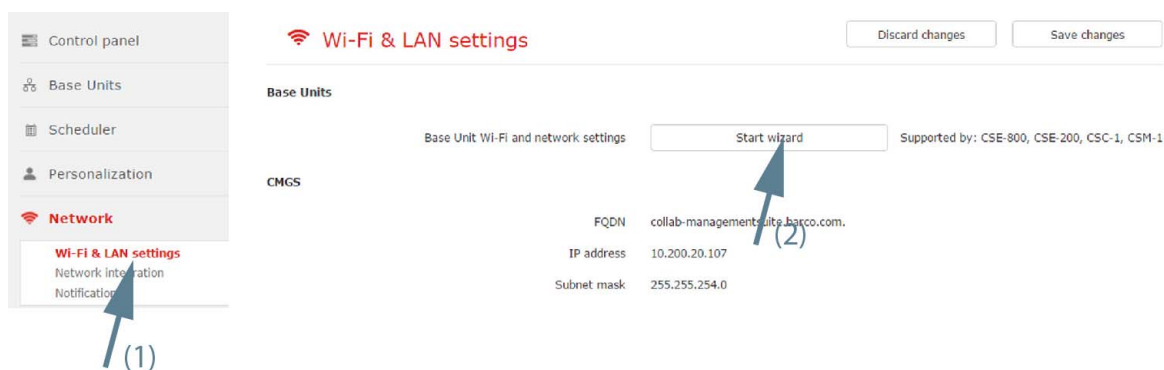


Image 5-1
Network, start wizard

2. Click on **Start wizard** next to *Base Unit Wi-Fi and network settings* to start.
3. Select the Base Units that need to set up. Click **Next** to continue.

5. Network

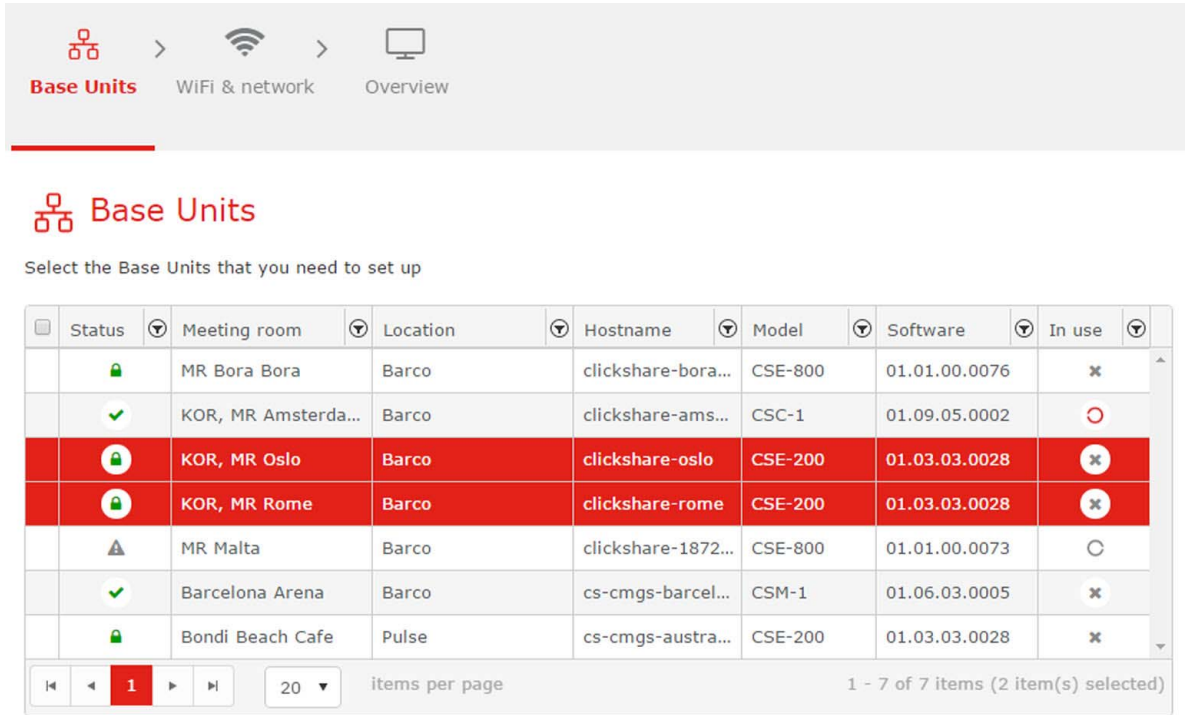


Image 5-2
Base units to setup

4. To change the setting for the WebUI availability via WiFi, click on the drop down box next to *WebUI available via WiFi* and select the desired setting.

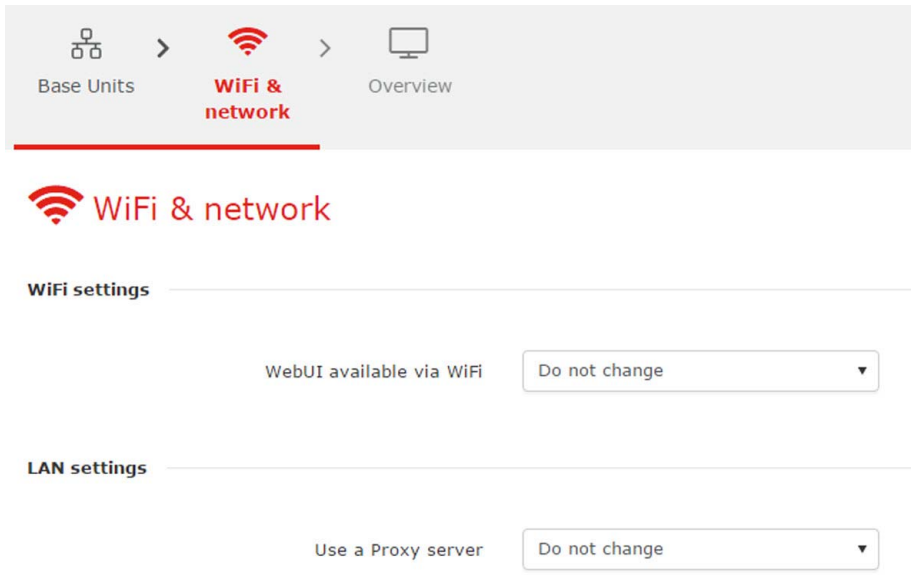


Image 5-3
Network, WiFi and LAN settings

The following setting are possible:

- Do not change: keep the current setting as set in the WebUI of the Base Unit.
- Enable: WebUI access via WiFi is enabled.
- Disable: WebUI access via WiFi is disabled.

5. To change the Proxy server setting, click on the drop down box next to *Use a Proxy server* and select the desired setting.

The following settings are possible:

- Do not change: keep the current setting as set in the WebUI of the Base Unit.
- Disable proxy server: the use of the proxy server is disabled.
- Use proxy settings below: use the proxy settings as set on this page.
 - Fill out the Proxy server URL
 - (optional) fill out Proxy server port
 - (optional) fill out Username
 - (optional) fill out Password
- Note: Changes made to the proxy settings will also be reflected in the CMGS proxy settings.

Click **Next** to continue to get an overview.

6. If you agree with the overview settings, click **Finish**.

WiFi networks settings might affect (downgrade) previous Base Units security settings and need button repairing.

5.2 LAN settings

How to set

1. Select **Network** and click **Wi-Fi & LAN settings** to display the *Wi-Fi & LAN settings* page.

Image 5-4
Network, LAN settings

2. To set up the Base Unit polling interval in seconds, click in the input field, select the current value and enter the desired value.
3. To setup the identification of the Base Units, check the radio button of your choice. The following choices are possible:
 - IP address
 - Hostname
4. If you want to use a proxy server, check the check box behind *Use a Proxy server*.
If checked, fill out the proxy settings.
 - Fill out the Proxy server URL
 - (optional) fill out Proxy server port
 - (optional) fill out Username
 - (optional) fill out Password
5. Click **Save changes** to apply the settings.

5.3 Network integration

Overview

- Network integration, wizard
- Network integration, EAP-TLS security mode
- Network integration, EAP-TTLS security mode
- Network integration, PEAP security mode
- Network integration, WPA2-PSK security mode

5.3.1 Network integration, wizard

Introduction

"Network Integration" aims at deploying the Base units in larger organizations without interfering with the existing wireless network infrastructure. In a default stand-alone setup, the ClickShare Base Unit creates its own wireless access point (AP) which the ClickShare Buttons use to connect. These so-called "rogue" APs can become a nuisance in larger installations. Next to that, meeting participants who are sharing content from mobile devices have to switch networks to connect with the ClickShare Base Unit.

This is where Network Integration comes in. Once fully configured and enabled, the built-in AP of the Base Unit is disabled. The Button or the mobile devices can then connect to a wireless access point that is part of the corporate network. At this point, the Base Unit needs to be connected to the corporate network via the wired Ethernet interface so that the Buttons and mobile devices can share their content on the Base Unit.

Security modes

There are 2 security modes supported by the Button to connect to the corporate network:

- The first one, which applies to a typical corporate network setup, is WPA2-Enterprise with 802.1X.
- As we also want to support smaller organizations, which might have a more traditional Wi-Fi setup, there is also support for WPA2-PSK, also known as WPA2-Personal.

Both modes are based on Wi-Fi Protected Access (WPA). We talk about WPA2, an improved version of the original WPA standard, which adds AES encryption to improve security.

WPA2-Enterprise with 802.1X

WPA2-Enterprise relies on a server (using RADIUS) to authenticate each individual client on the network. To do this, authentication 802.1x is used (also known as port-based Network Access Control). 802.1x encapsulates the Extensible Authentication Protocol (EAP) for use on local area networks. This is also known as "EAP over LAN" or EAPoL. Using RADIUS, these EAPoL messages are routed through the network in order to authenticate the client device on the network – which, in the case of ClickShare, are the Buttons.

The 802.11i (WPA2) standard defines a number of required EAP methods. However, not all of them are used extensively in the field, and some other ones (which are not in the standard) are used much more often. Therefore, we have selected the most widely used EAP methods. The list of EAP methods supported in the ClickShare system is:

- EAP-TLS
- PEAP
- EAP-TTLS

Considerations

When you choose to integrate the ClickShare system into your corporate network, there are a few things to consider up front. First of all, make sure that all your Base Units can be connected to your network via the wired Ethernet interface. Also, take into account the amount of bandwidth that each Button needs to stream the captured screen content to the Base Unit – this is usually somewhere between 5 and 15 Mbps. So, prevent bottlenecks in your network (e.g. 100 Mbps switches) that could potentially degrade your ClickShare experience due to a lack of bandwidth.

Prerequisites

Before rolling out ClickShare Network Integration, make sure your infrastructure meets the following prerequisites.

Network

Once you enable the corporate network, the internal Wi-Fi access point of the ClickShare Base Unit is disabled. Make sure your Base Unit is connected to the corporate network via its wired Ethernet interface.

Firewall

To ensure that you can successfully share content via the ClickShare Button, or from mobile devices, to the Base Unit, make sure the ports mentioned in "Used ports", page 75 are open on your network.

VLAN

A lot of corporate networks are divided into multiple VLANs – for example, to separate BYOD (Bring Your Own Device) traffic from the "core" corporate network. Take this into consideration when integrating ClickShare into your network. ClickShare Buttons connecting to your wireless infrastructure should be able to connect to the Base Units. Furthermore, if you want to use the mobile apps, these

should also be able to reach the Base Units. It is advisable to put all ClickShare Units into a separate VLAN so they are easily manageable.

DNS

For the Buttons to be able to stream their content to the Base Unit, they must be able to resolve the Base Unit's hostname within the network. If no DNS is available Buttons will fall back to the IP of the Base Unit at the moment of USB pairing. Because of this we strongly advise to reserve IP addresses in your DHCP server for each Base Unit to prevent issues when the hostname is not resolvable.

NTP

When using EAP-TLS, you must also configure NTP on the Base Unit. This can be done via the Base Unit WebUI. The Base Unit must have the correct time to handle the certificates required for EAP-TLS. Preferably, you should use an NTP server with high availability on the local corporate network. Be advised that, when using an NTP server on the internet, the Base Unit cannot connect through a proxy server.

Start up the wizard

1. Select **Network** and click **Network integration** to display the *Network integration* page (1).

Network integration

Base Units

The Corporate Network Integration feature allows you to integrate your ClickShare Base Units in your corporate network and disable the Base Units wireless access points.

Before enabling this feature, we advise to check whether your corporate network configuration is compatible with ClickShare's Network Integration. Rolling out ClickShare's Corporate Network Integration feature requires the involvement of your IT department, especially the persons responsible for the configuration of your network infrastructure and authentication protocols. For more information about the supported security protocols and implementation methods, we recommend you read our [white paper](#).

The Corporate Network Integration feature is provided 'AS IS', without any liability or obligation of or on behalf of Barco. Barco cannot guarantee that the feature works in your corporate network. The reliability, quality and stability when sharing using the Corporate Network Integration depends on your network infrastructure.

Corporate Network integration Supported by: CSE-800, CSE-200, CSC-1, CSM-1

Base Units

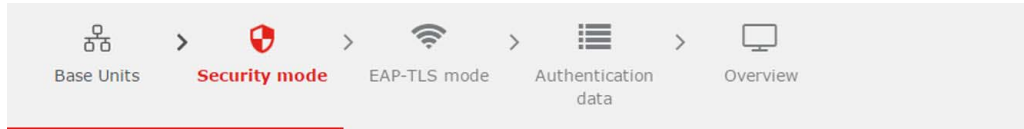
Select the Base Units that you need to set up

Status	Meeting room	Location	Hostname	Model	Software	In use
	MR Bora Bora	Barco	clickshare-bora...	CSE-800	01.01.00.0076	
	KOR, MR Amsterda...	Barco	clickshare-ams...	CSC-1	01.09.05.0002	
	KOR, MR Oslo	Barco	clickshare-oslo	CSE-200	01.03.03.0028	
	KOR, MR Rome	Barco	clickshare-rome	CSE-200	01.03.03.0028	
	MR Malta	Barco	clickshare-1872...	CSE-800	01.01.00.0073	
	Barcelona Arena	Barco	cs-cmgs-barcel...	CSM-1	01.06.03.0005	
	Bondi Beach Cafe	Pulse	cs-cmgs-austra...	CSE-200	01.03.03.0028	

1 - 7 of 7 Items (1 item(s) selected)

Image 5-5
Network integration, start wizard

2. Click **Start wizard** (2).
3. Select the Base Units that you need to set up (3). Click **Next** to continue.
4. Select the Security mode. Click **Next** to continue.



Security mode

The Corporate Network Integration feature allows you to integrate your Collaboration Base Units in your corporate network and disable their dedicated wireless access point. Before enabling this feature, it is important that your corporate network configuration is compatible with Collaboration Network Integration. For example, the Collaboration Base Unit's wired IP is reachable from a laptop connected to the corporate Wi-Fi

Rolling out Collaboration Corporate Network Integration feature requires the involvement of your IT department, especially the persons responsible for the configuration of your network infrastructure and authentication protocols. For more information about the supported security protocols and implementation methods, we recommend you read our white-paper

***Remark: You need to re-pair all Buttons after you change this setting**

- EAP-TLS
- EAP-TTLS
- PEAP
- WPA2-PSK
- Disable (Use built-in Wi-Fi)

Image 5-6
Network integration, security mode

The following modes are available:

- EAP-TLS
- EAP-TTLS
- PEAP
- WPA2-PSK
- Disabled: use the built-in WiFi

5.3.2 Network integration, EAP-TLS security mode

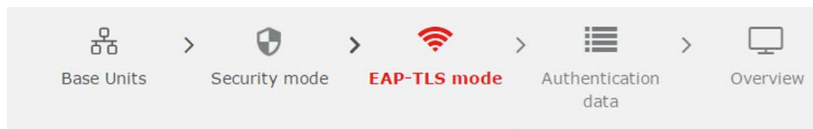
About EAP-TLS

EAP-TLS (Transport Layer Security) is an EAP method based on certificates which allows mutual authentication between client and server. It requires a PKI (Public Key Infrastructure) to distribute server and client certificates. For some organizations this might be too big of a hurdle, for those cases EAP-TTLS and PEAP provide good alternatives. Even though a X.509 client certificate is not strictly required by the standard it is mandatory in most implementations including for ClickShare. When implemented using client certificates, EAP-TLS is considered one of the most secure EAP methods. The only minor disadvantage, compared to PEAP and EAP-TTLS, is that the user identity is transmitted in the clear before the actual TLS handshake is performed. EAP-TLS is supported via SCEP or manual certificate upload.

Start up for EAP-TLS

1. Select the radio button next to *EAP-TLS* and click **Next**.

The EAP-TLS mode window opens.



EAP-TLS mode

- Auto enrollment via SCEP
- Manually provide Client and CA certificates

Image 5-7
EAP-TLS mode

Two choices are possible:

- Auto alignment via SCEP
- Manually provide Client & CA certificates

Using SCEP

Select the radio button next to *Auto enrollment via SCEP* and click **Next**.

The Simple Certificate Enrolment Protocol (SCEP) is a protocol which enables issuing and revoking of certificates in a scalable way. SCEP support is included to allow a quicker and smoother integration of the ClickShare Base Unit and Buttons into the corporate network. Since most companies are using Microsoft Windows Server and its active directory (AD) to manage users and devices our SCEP implementation is specifically targeted at the Network Device Enrolment Service (NDES) which is part of Windows Server 2008 R2 and Windows Server 2012. No other SCEP server implementations are supported.

The screenshot shows a configuration wizard for SCEP authentication data. The navigation bar at the top includes 'Base Units', 'Security mode', 'EAP-TLS mode', 'Authentication data' (which is highlighted in red), and 'Overview'. Below the navigation bar, the title 'Authentication data' is displayed with a red icon. There are six input fields, each with a label to its left: 'Domain', 'SCEP server IP/Hostname', 'SCEP username', 'SCEP password', 'Identity', and 'Corporate SSID'.

Image 5-8
SCEP, authentication data

About NDES

The Network Device Enrolment Service is Microsoft's server implementation of the SCEP protocol. If you want to enable EAP-TLS using SCEP make sure NDES is enabled, configured and running on your Windows Server. For more details about setting up NDES, please visit the Microsoft website³. SCEP uses a so called "*challenge password*" to authenticate the enrollment request. For NDES, this challenge can be retrieved from your server at: `http(s)://[your-server-hostname]/CertSrv/mscep_admin`.

After you enter the necessary credentials into the setup wizard, the Base Unit will automatically retrieve this challenge from the web page and use it in the enrollment request, thereby fully automating the process.

Necessary Data to continue:

Domain	The company domain for which you are enrolling, should match with the one defined in your Active Directory.
SCEP ServerIP/host-name	This is the IP or hostname of the Windows Server in your network running the NDES service. Since Internet Information Services (IIS) supports both HTTP and HTTPS, also include which of the two you want to use. If not provided it will be default set to HTTP. E.g.: <code>http://myserver</code> or <code>https://10.192.5.1</code> or <code>server.mycompany.com</code> (will use http)
SCEP User name	This is a user in your Active Directory which has the required permission to access the NDES service and request the challenge password. To be sure of this, the user should be part of the CA Administrators group (in case of a stand-alone CA) or have enroll permissions on the configured certificate templates.
SCEP Password	The corresponding password for the identity that you are using to authenticate on the corporate network. Per Base Unit, every Button uses the same identity and password to connect to the corporate network.
Domain	The company domain for which you are enrolling should match the one defined in your Active Directory.
Identity	Identity of the user account in the Active Directory which will be used by the ClickShare Buttons to connect to the corporate network. When using EAP-TLS make sure that the necessary mapping exists between the Client Certificate issued by your CA and this user account.
Corporate SSID	The SSID of your corporate wireless infrastructure to which the ClickShare Buttons will connect.

Using manually upload of certificates

Select the radio button next to *Provide certificates manually* and click **Next**.

3. NDES White Paper: <http://social.technet.microsoft.com/wiki/contents/articles/9063.network-device-enrollment-service-ndes-in-active-directory-certificate-services-ad-cs-en-us.aspx>

If your current setup does not support SCEP or you prefer not to use it but you still want to benefit of the mutual authentication EAP-TLS offers, it is also possible to manually upload the necessary certificates.

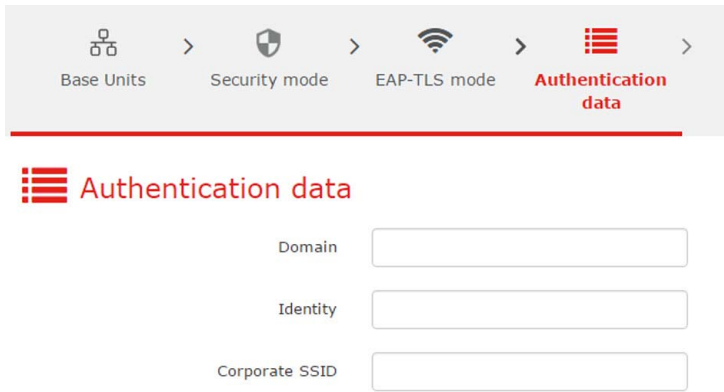


Image 5-9
Manually upload

Necessary Data to continue:

Domain	The company domain for which you are enrolling, should match with the one defined in your Active Directory.
Identity	Identity of the user account in the Active Directory which will be used by the ClickShare Buttons to connect to the corporate network. When using EAP-TLS make sure that the necessary mapping exists between the Client Certificate issued by your CA and this user account.
Corporate SSID	The SSID of your corporate wireless infrastructure to which the ClickShare Buttons will connect.

Click **Next** to continue with the upload of the client certificate.

Click **Upload Client Certificate**.

The client certificate you provide should be signed by the authoritative root CA in your domain and should be linked to the user you specify in the Identity field. Also, make sure that the client certificate you provide contains the private key – this is necessary to set up the TLS connection successfully.

ClickShare supports 2 formats for uploading a client certificate:

- *PKCS#12 (.pfx)* - An archive file format for storing multiple cryptography objects.
- *Privacy Enhanced Mail (.pem)* – A Base64 encoded DER certificate stored between 2 tags: "-----BEGIN CERTIFICATE-----" and "-----END CERTIFICATE-----".



When the provided PKCS#12 file also contains the necessary CA certificate the Base Unit will extract it and verify the chain of trust to avoid that you have to separately provide the CA certificate.

CA certificate

The CA certificate is the certificate of the authoritative root CA in your domain and will be used in setting up the EAP-TLS connection. During the wizard the Base Unit will ensure that it can validate the chain of trust between the Client and CA certificates you provide.

ClickShare supports the common .crt file extension which can contain a Base64 encoded DER certificate.



When having problems connecting the Button to your corporate network, to get feedback from the Button please have a look at the ClickShare Client log. This log can be pressing the holding Shift key when starting the Client executable. Look for the lines "EDSUSB DongleConnection::mpParseDongleMessages". An error code and a short summary of the issue should be logged.

5.3.3 Network integration, EAP-TTLS security mode

About EAP-TTLS

EAP-TTLS (Tunneled Transport Layer Security) is an EAP implementation by Juniper networks. It is designed to provide authentication that is as strong as EAP-TLS, but it does not require each user to be issued a certificate. Instead, only the authentication servers are issued certificates. User authentication is performed by password, but the password credentials are transported in a securely encrypted tunnel established based upon the server certificates.

User authentication is performed against the same security database that is already in use on the corporate LAN: for example, SQL or LDAP databases, or token systems. Since EAP-TTLS is usually implemented in corporate environments without a client certificate we have not included support for this. If you prefer using client certificates per user we suggest using EAP-TLS.

Start up of the EAP-TTLS

1. Select the radio button next to *EAP-TTLS* and click **Next**.

The EAP-TTLS mode window opens.

The screenshot shows a configuration window for EAP-TTLS. At the top, there is a navigation bar with four steps: 'Base Units', 'Security mode', 'Authentication data' (highlighted in red), and 'Overview'. Below the navigation bar, the title 'Authentication data' is displayed in red. There are four input fields: 'Domain', 'Identity', 'Password', and 'Corporate SSID'.

Image 5-10
EAP-TTLS

Necessary Data to continue:

Domain	The company domain for which you are enrolling, should match with the one defined in your Active Directory.
Identity	Identity of the user account in the Active Directory which will be used by the ClickShare Buttons to connect to the corporate network.
Password	The corresponding password for the identity that you are using to authenticate on the corporate network. Per Base Unit each Button will use the same identity and password to connect to the corporate network.
Corporate SSID	The SSID of your corporate wireless infrastructure to which the ClickShare Buttons will connect.

2. Click **Next** to continue.

The Overview window is displayed.

3. Click **Finish**.

When having problems connecting the Button to your corporate network, to get feedback from the Button please have a look at the ClickShare Client log. This log can be enabled by holding shift when starting the Client executable. Look for the lines *"EDSUSB DongleConnection::mpParseDongleMessages"*. An error code and a short summary of the issue should be logged.

5.3.4 Network integration, PEAP security mode

About PEAP

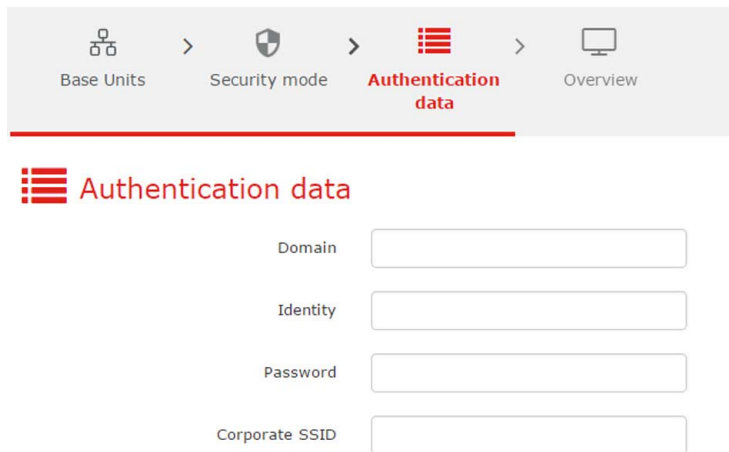
PEAP (Protected Extensible Authentication Protocol) is an EAP implementation co-developed by Cisco Systems, Microsoft and RSA Security. It sets up a secure TLS tunnel using the servers CA certificate after which actual user authentication takes place within the tunnel. This way of working enables it to use the security of TLS while authenticating the user but without the need for a PKI.

The standard does not mandate which method is to be used to authenticate within the tunnel. But in this application note, with regard to PEAP, we are referring to PEAPv0 with EAP-MSCHAPv2 as the inner authentication method. This is one of the two certified PEAP implementations in the WPA and WPA2 standards – and by far the most common and widespread implementation of PEAP.

Start up for PEAP

1. Select the radio button next to *PEAP* and click **Next**.

The PEAP window opens.



Base Units > Security mode > **Authentication data** > Overview

Authentication data

Domain

Identity

Password

Corporate SSID

Image 5-11
PEAP, authentication data

Necessary Data to continue:

Domain	The company domain for which you are enrolling, should match with the one defined in your Active Directory.
Identity	Identity of the user account in the Active Directory which will be used by the ClickShare Buttons to connect to the corporate network.
Password	The corresponding password for the identity that you are using to authenticate on the corporate network. Per Base Unit each Button will use the same identity and password to connect to the corporate network.
Corporate SSID	The SSID of your corporate wireless infrastructure to which the ClickShare Buttons will connect.

2. Click **Next** to continue.

The *Overview* window is displayed.

3. Click **Finish**.

When having problems connecting the Button to your corporate network, to get feedback from the Button please have a look at the ClickShare Client log. This log can be enabled by holding shift when starting the Client executable. Look for the lines *"EDSUSB DongleConnection::mpParseDongleMessages"*. An error code and a short summary of the issue should be logged.

5.3.5 Network integration, WPA2-PSK security mode

About WPA2-PSK

WPA2-PSK does not distinguish between individual users, there is 1 password (PSK – Pre-Shared Key) for all clients connecting to the wireless infrastructure. This makes setup very straightforward. Once connected, all data transmitted between client and AP (access point) is encrypted using a 256 bit key.

Start up for WPA2-PSK

1. Select the radio button next to *WPA2-PSK* and click **Next**.

The WPA2-PSK mode window opens.

Necessary Data to continue:

The screenshot shows a navigation bar with four items: 'Base Units', 'Security mode', 'Authentication data' (highlighted in red), and 'Overview'. Below the navigation bar, the 'Authentication data' section contains two input fields: 'Corporate SSID' and 'Passphrase'.

Image 5-12
WPA2-PSK, authentication data

Corporate SSID	The SSID of your corporate wireless infrastructure to which the ClickShare Buttons will connect.
Passphrase (Pre-shared key)	The key used in WPA2-PSK to authenticate onto the wireless infrastructure. This can be a string of 64 hexadecimal digits or a passphrase of 8 to 63 printable ASCII characters.

2. Click **Next** to continue.

The *Overview* window is displayed.

3. Click **Finish**.

When having problems connecting the Button to your corporate network, to get feedback from the Button please have a look at the ClickShare Client log. This log can be enabled by holding shift when starting the Client executable. Look for the lines *"EDSUSBongleConnection::mpParseDongleMessages"*. An error code and a short summary of the issue should be logged.

5.4 Notifications

IT admin

The screenshot shows the 'Notifications' configuration page. On the left is a sidebar with navigation options: Control panel, Base Units, Scheduler, Personalization, Network (highlighted), Security, System, and Support & updates. The 'Network' section is expanded to show 'Wi-Fi & LAN settings', 'Network integration', and 'Notifications'. The main content area is titled 'Notifications' and includes a 'Discard changes' button and a 'Save changes' button. Below the title, there is a heading 'Configure a SMTP server to register new users and to send notifications'. The configuration fields are: IT admin name (CMGS admin), E-mail address (clickshare@barco.com), SMTP server, Port, Username (Optional), Password (Optional), Use SSL/TLS (radio buttons for Yes and No, with No selected), Accept StartTLS (radio buttons for Yes and No, with Yes selected), and Reject invalid SSL certificates (radio buttons for Yes and No, with Yes selected). A 'Send test e-mail' button is located at the bottom right.

Image 5-13
Notifications

IT admin name: name used to send out notifications.

E-mail address: address used to send out notifications

SMTP parameters

SMTP server	Host name of the outgoing mail server.
Port	Used port of the outgoing mail server.

5. Network

- User name (optional) Name used to access the mail server.
- Password (optional) Password to access the mail server.
- Use SSL/TLS Use of secured sockets layer/transport layer security. Check the radio button of your choice.
- Accept StartTLS "Yes" will upgrade the existing unsecured connection to a secure connection using SSL/TLS.
- Reject invalid SSL certificates "Yes" will reject all invalid certificates.

Click on the button **Send test e-mail** to check the SMTP settings.

Click **Save changes** to activate the notification settings.

6. SECURITY

Overview

- Security, Base Unit HTTPS communication
- Security, Base Unit password
- Security, deploy Base Unit certificate
- Security, Base Unit security level
- Security, deploy CMGS SSL certificate

6.1 Security, Base Unit HTTPS communication



Only for CSC-1 and CSM-1 devices.

HTTPS communication

1. In the menu pane, click on **Security**.

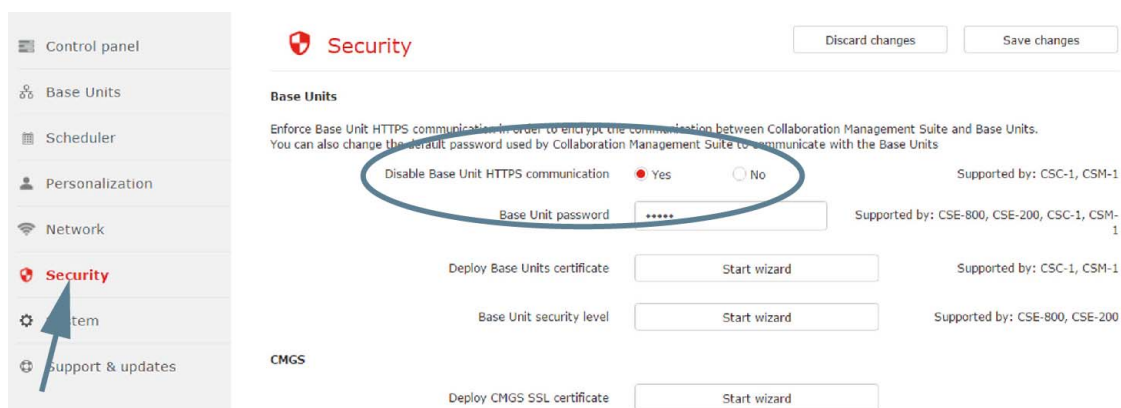


Image 6-1
Security, HTTPS communication

2. To setup the HTTPS communication, check the radio button of your choice.

Yes : Base Unit HTTPS communication is disabled.

No : HTTPS communication is used.

6.2 Security, Base Unit password



Supports in CSE-800, CSE-200, CSC-1 and CSM-1

Set password

1. In the menu pane, click on **Security**.

6. Security

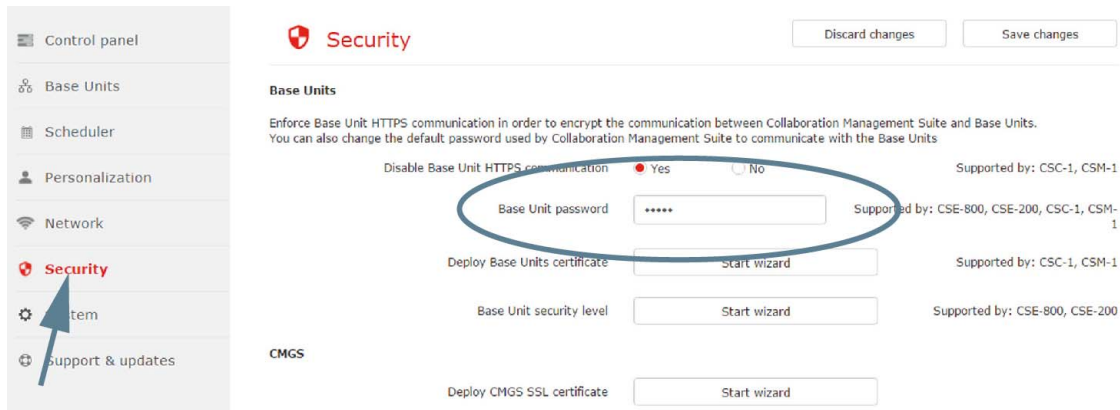


Image 6-2
Security, Base Unit password

2. Enter the password used to access the Configurator of the Base Unit.

6.3 Security, deploy Base Unit certificate



Only for CSC-1 and CSM-1

How to deploy

1. In the menu pane, click on **Security** (1).
2. Click **Start wizard** next to *Deploy Base Unit certificate* (2).

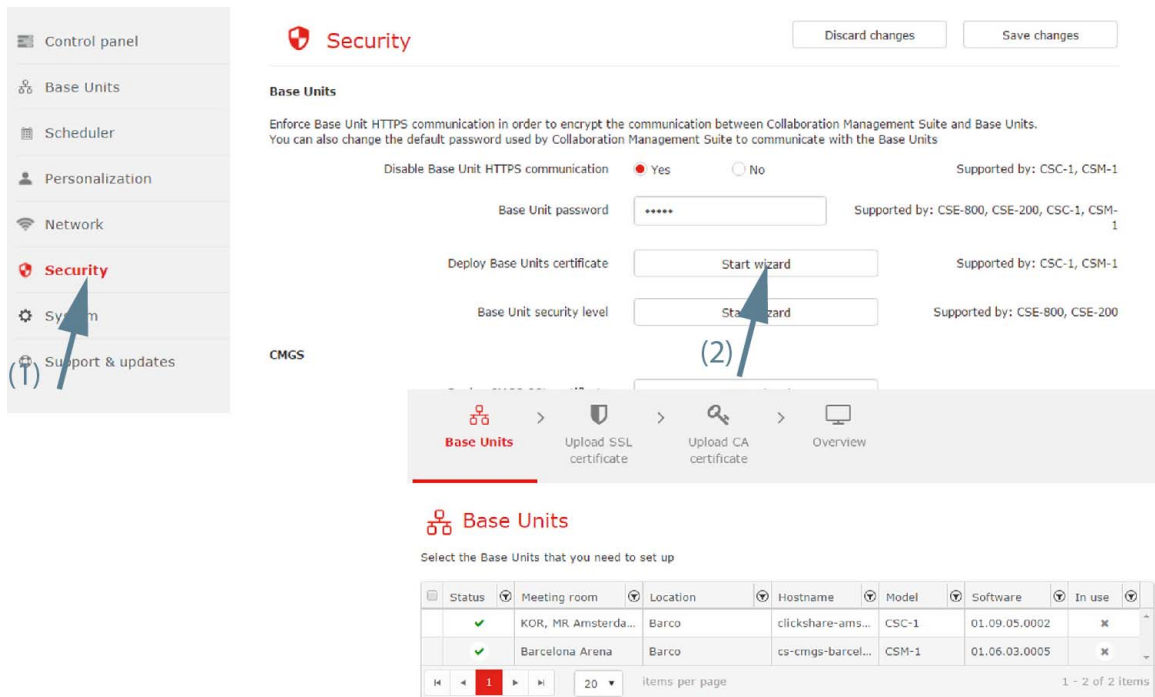


Image 6-3
Security, Base Unit certificate

3. Select the Base Unit that you need to set up and click **Next**.
4. Upload SSL Certificate. Click on upload and browse to the location of certificate file. Click **Next** to continue.

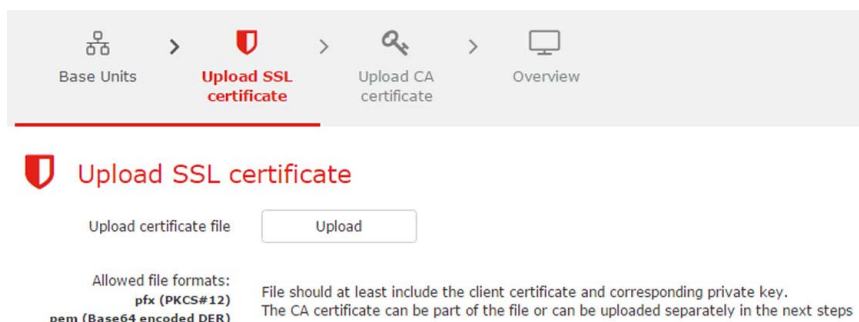


Image 6-4
Upload SSL certificate

5. Upload CA certificate. Enter password.

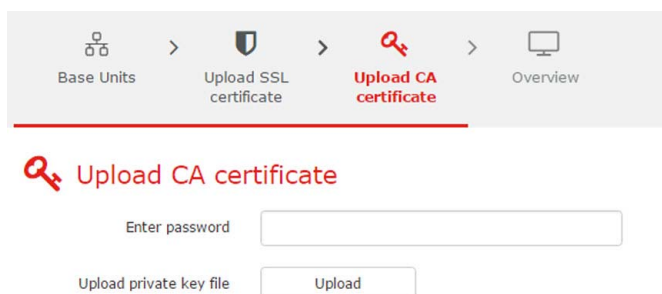


Image 6-5
Upload CA certificate

6. Upload private key file. Click on upload and select the private key file. Click **Next** to continue.
An *Overview* window is displayed.
7. Click **Finish**.

6.4 Security, Base Unit security level



Only for CSE-800 and CSE-200



Changing the security level will require Button re-pairing.

How to set

1. In the menu pane, click on **Security** (1).

6. Security

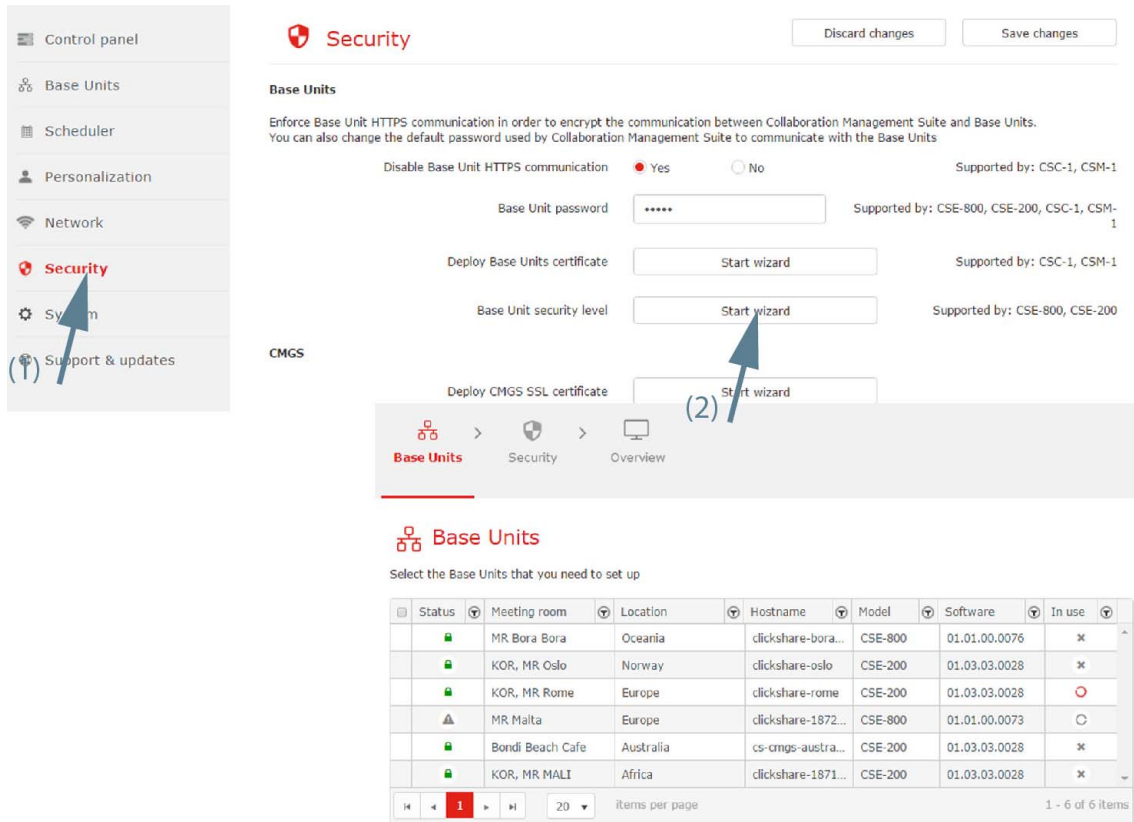


Image 6-6
Base Unit security level, start

2. Click **Start wizard** next to *Base Unit security level* (2).
3. Select the Base unit(s) that need to set up. Click **Next** to continue.
4. Click on the drop down box next to *Security level* and select the desired level for the selected Base Unit(s).

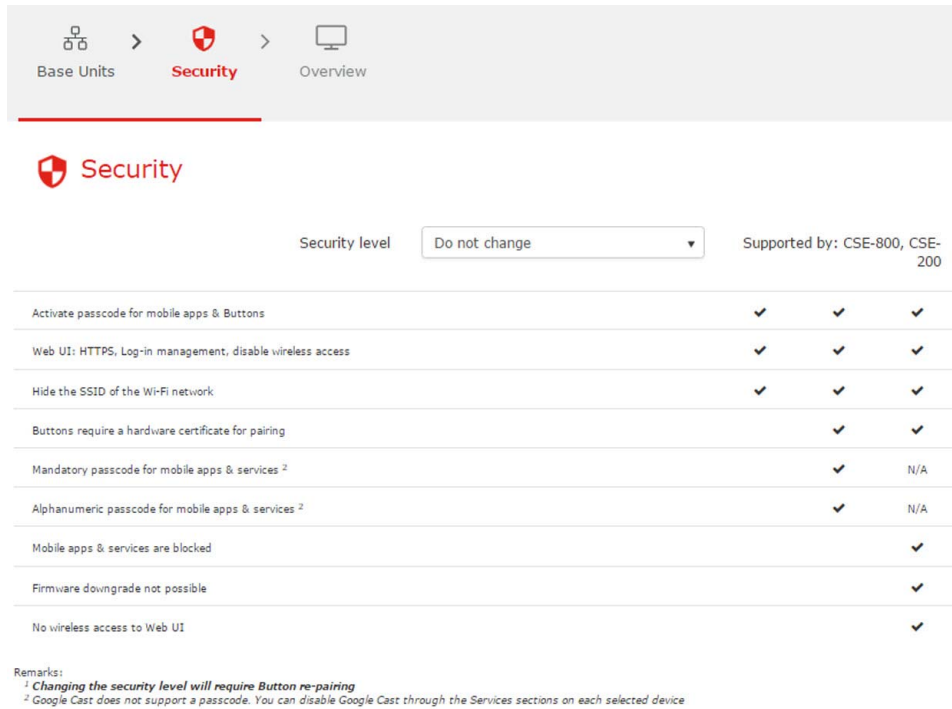


Image 6-7
Base Unit security

5. Click **Next** to continue.
An *Overview* window is displayed.

- Click **Finish**.

6.5 Security, deploy CMGS SSL certificate

How to deploy

- In the menu pane, click on **Security** (1).
- Click **Start wizard** next to *Deploy CMGS SSL certificate* (2).

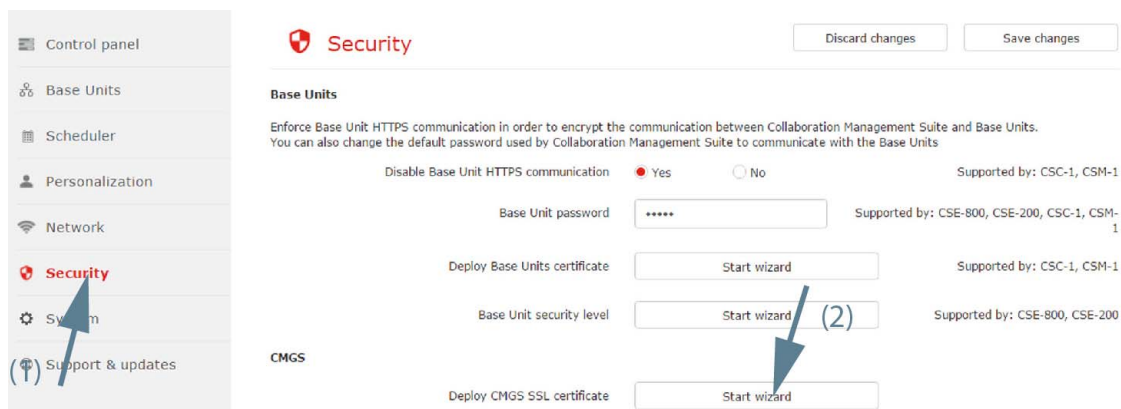


Image 6-8
CMGS SSL certificate

- Upload certificate. Click on **Upload** and browse to the location of certificate file. Click **Next** to continue.

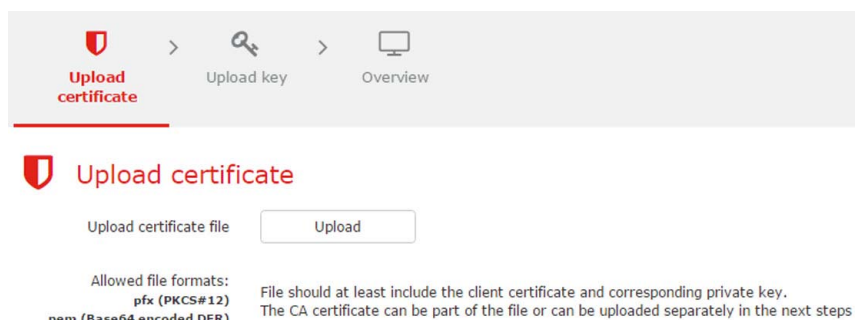


Image 6-9
Upload certificate

The format of the certificate file must be a pfx or pem file

- Enter the password and click on **Upload** to upload the private key file. Click **Next** to continue.

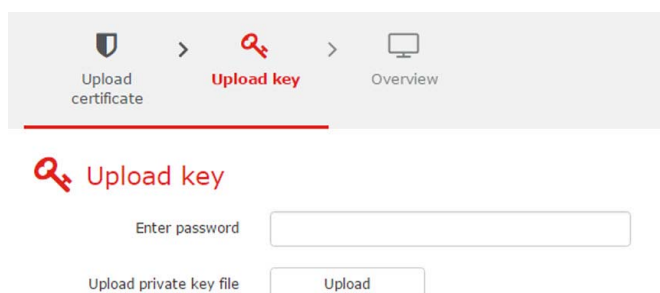


Image 6-10
Upload key

An *Overview* window is displayed.

- Click **Finish**.

7. SYSTEM



Only for IT admin user.

Overview

- Date & Time
- Buttons
- Users

7.1 Date & Time

About date & time

The date & time of one of or multiple Base Units can be set.

How to set

1. In the menu pane, click on **System** and select **Date & Time** (1).

The screenshot shows the 'Date & Time' configuration page. On the left, a sidebar menu has 'System' selected, and 'Date & Time' is highlighted with a blue arrow and the number (1). The main content area is titled 'Date & Time' and shows 'Base Units' configuration. There is a 'Start wizard' button next to 'Base Unit date and time' which is also highlighted with a blue arrow. Below this, the 'CMGS' section shows 'CMGS date and time' set to 'Wednesday, March 29, 2017 2:10 PM'. A breadcrumb trail shows 'Base Units > System > Overview'. Below the breadcrumb is a section titled 'Base Units' with the instruction 'Select the Base Units that you need to set up'. A table lists the following Base Units:

Status	Meeting room	Location	Hostname	Model	Software	In use
🔒	MR Bora Bora	Oceania	clickshare-bora...	CSE-800	01.01.00.0076	✘
✓	KOR, MR Amsterdam	The Netherlands	clickshare-amst...	CSC-1	01.09.05.0002	○
🔒	KOR, MR Oslo	Norway	clickshare-oslo	CSE-200	01.03.03.0028	✘
🔒	KOR, MR Rome	Europe	clickshare-rome	CSE-200	01.03.03.0028	○
⚠	MR Malta	Europe	clickshare-1872...	CSE-800	01.01.00.0073	○
✓	Barcelona Arena	Europe	cs-cmgs-barcel...	CSM-1	01.06.03.0005	✘
🔒	Bondi Beach Cafe	Australia	cs-cmgs-austra...	CSE-200	01.03.03.0028	✘
🔒	KOR, MR MALI	Africa	clickshare-1871...	CSE-200	01.03.03.0028	✘

Image 7-1
Date & time, start

2. Click **Start wizard** next to *Base Unit date and time* (2).
3. Select the Base Unit(s) that you need to set up. Click **Next** to continue.
4. Choose the mode for setting date and time.
The following modes are available:
 - Use NTP servers
 - Set date and time manually

Use NTP server

1. Click on the drop down box next to *Choose the mode for setting date and time* and select *Use NTP servers*.

7. System

The screenshot shows the 'System' configuration page. At the top, there are three navigation tabs: 'Base Units', 'System' (highlighted), and 'Overview'. Below the tabs, the 'System' title is displayed with a gear icon. Under the 'Date & Time' section, there are three main settings:

- 'Choose the mode for setting date and time' is set to 'Use NTP servers'.
- 'Timezone' is set to 'Etc/GMT+12'. To the right, it says 'Supported by: CSE-800, CSE-200'.
- 'Use NTP servers' is an empty text input field. To the right, it says 'Supported by: CSE-800, CSE-200, CSC-1, CSM-1'. Below this field, there is a note: 'Enter a comma-separated list of at most five NTP servers, in order of precedence'.

Image 7-2
NTP server

2. Click on the drop down box next to *Timezone* and select the corresponding time zone.
Note: *This is only for CSE-800 and CSE-200.*
3. Enter the hostname or IP address of the NTP server.
Up to maximum 5 server can be added, separated by a comma.

Set date and time manually

1. Click on the drop down box next to *Choose the mode for setting date and time* and select *Set date and time manually*.

The screenshot shows the 'System' configuration page with the 'Date & Time' section. The 'Choose the mode for setting date and time' dropdown is now set to 'Set a date and time manually'. The 'Timezone' remains 'Etc/GMT+12' with 'Supported by: CSE-800, CSE-200'. The 'Set a date and time manually' section has two input fields: the date is set to '3/14/2017' and the time is set to '15:52'. Both fields have calendar and clock icons respectively. To the right of the date field, it says 'Supported by: CSE-800, CSE-200'.

Image 7-3
Manually setup

2. Click on the drop down box next to *Timezone* and select the corresponding time zone.
3. Select the date (it may be year, month and day)
4. Click in the time field, select the current value and enter a new value with you keyboard. Use the following format *hh:mm*.
Or,
click on the icon next to the input field and select a time from the drop down list.
5. Click **Next** to continue.
An *Overview* window is displayed.
6. Click **Finish**.

7.2 Buttons

About Buttons

After selecting Buttons, an overview of the Base Units with its paired buttons is given together with the status, connected or not.

That overview contains the following information of a Button:

- Serial number
- Firmware version
- MAC address
- Connected status: Green check mark means connected or gray x means not connected.

The table can be sorted using the icons in the column header.

Setup a filter on Base Unit level

1. In the menu pane, click on **System** and select **Buttons** (1).

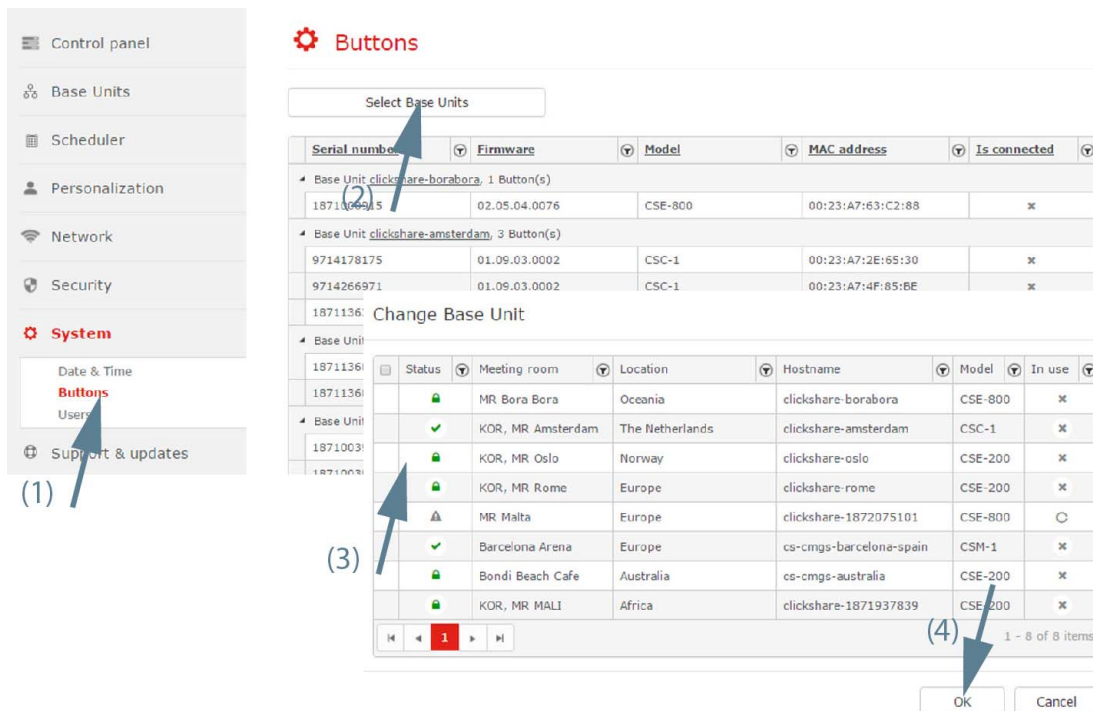


Image 7-4
Base Unit filter

2. Click on **Select Base Units** (2).
3. Select the Base Unit(s) to display the paired buttons (3).
4. Click **OK** (4).

An overview of the paired buttons for the selected Base Unit(s) is given.

7.3 Users



Only for IT admin user.

Overview

- Add new user
- Edit selected user
- Delete selected user
- Filter users
- Accept/reject a registered user

7.3.1 Add new user

How to add

1. Select System and click on **Users** to display the overview page (1).

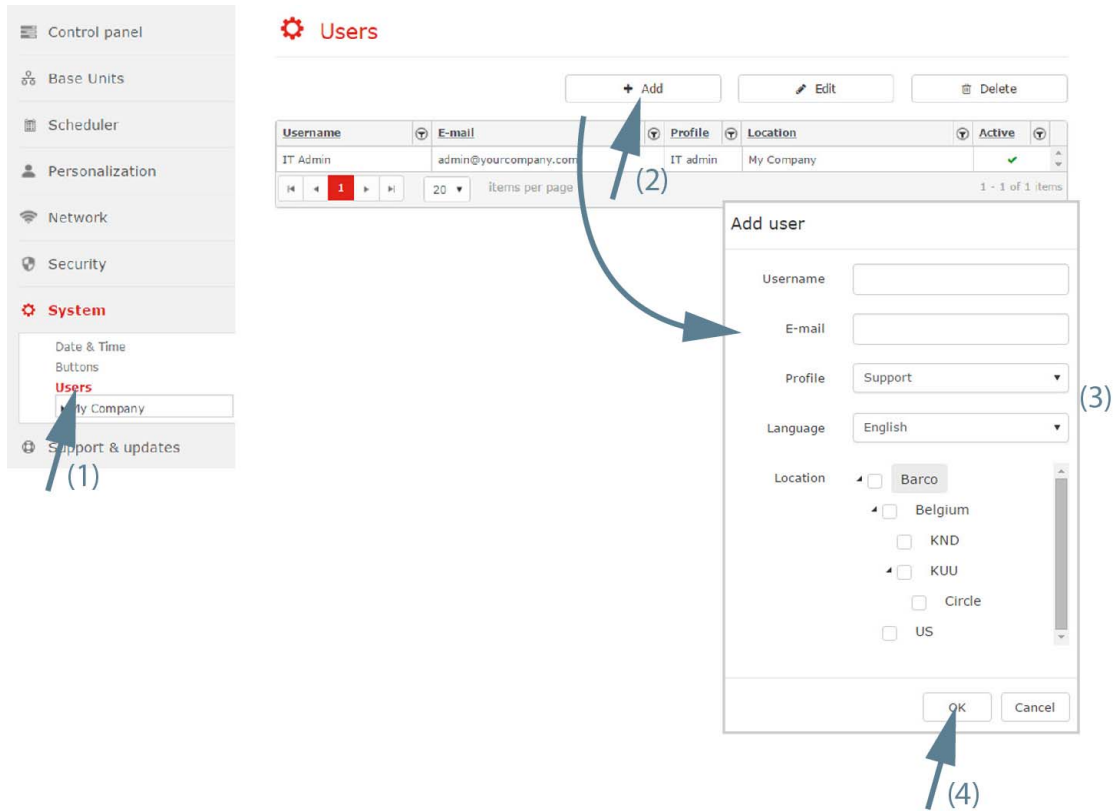


Image 7-5
Add new user

2. Click on **Add** (2).

The *Add user* window opens.

3. Fill out the user form (3).

- enter a *User* name.
- enter an *E-mail* address
- select a *Profile*. This can be Support or Key User.
- select a *Language*.
- select a *Location* by checking the check box in front of the location. If the location has sub locations, then these sub locations are selected at the same time.

4. Click on **OK** (4).

The user is added to the list of active users.

Users added by the IT admin using this method will receive an email with their password generated by the CMGS. If the SMTP settings are not added in the System Settings page then the users will not be able to login since they will not receive emails. See also "Accept/reject a registered user", page 62 in order to be able to populate the CMGS with users without having the SMTP server set up.

7.3.2 Edit selected user

How to edit

1. Select System and click on **Users** to display the overview page (1).

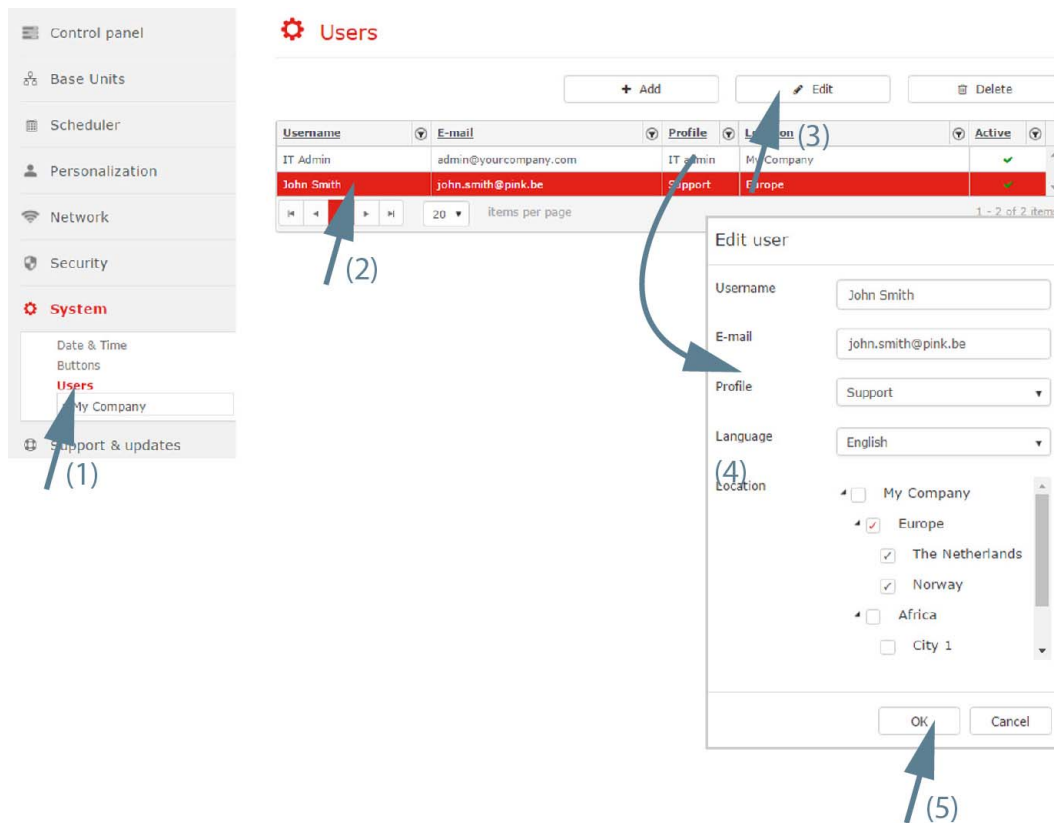


Image 7-6
Edit selected user

2. Select the user to edit (2).
3. Click on the **Edit** (3).

The *Edit user* window opens.

4. Edit the user settings (4).

- *Name*
- *E-mail* address
- *Profile*. This can be *Support* or *Key user*.
- *Language*.
- *Location*. Check the check box in front of the desired location. If the location has sub locations, then these sub locations are selected at the same time with gray selection marks. In order to explicitly assign the user to a sub-location it should be clicked to change the check-mark from gray into red. The user will have access on both the locations checked with gray or red check-marks. This could be useful only if the sub-location is planned to be moved later to another parent node and the user should still have access on it.

5. Click **OK** (5).

7.3.3 Delete selected user

How to delete

1. Select **System** and click on **Users** to display the overview page (1).

7. System

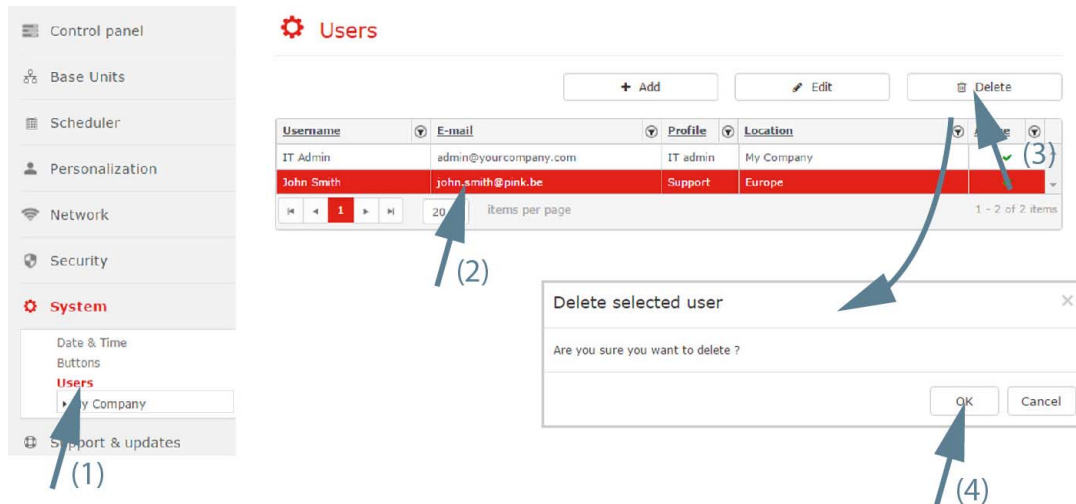


Image 7-7
Delete selected user

2. Select the user to delete (2).
3. Click **Delete** (3).
A delete message is displayed, asking for confirmation to remove the record.
4. Click **OK** to delete the selected user (4).

7.3.4 Filter users

About filtering users

All users of specific locations can be displayed in the list.

How to filter

1. Select **System** and click on the arrow before the main location to display a specific overview page (1).
Click on the arrow to expand/collapse the tree and select the desired level.

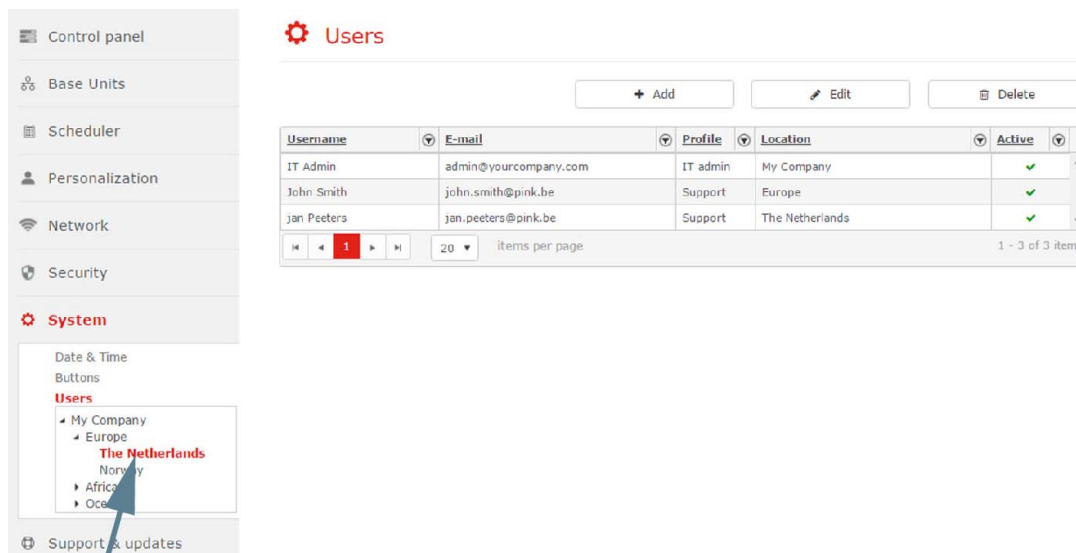


Image 7-8
Location filter on users

All user of the selected level and the higher levels are displayed in the list.

7.3.5 Accept/reject a registered user

What can be done?

If a new user has used the *Register now* page to register, this user will be displayed in the *Users* page but will not be able to login until the administrator accepts the registration. The administrator can edit the registered user, select a profile and assign a location in order to accept the registration. If the administrator simply deletes the user then the user registration will be considered as rejected. The users will define their own desired password when registering, so these users, if accepted by the IT admin, will be able to log

in even if the SMTP server is not set up. However the IT admin will have to notify them that their account registration request has been accepted.

How to accept a registered user

1. Select System and click on **Users** to display the overview page (1).
2. Select the registered user (2).

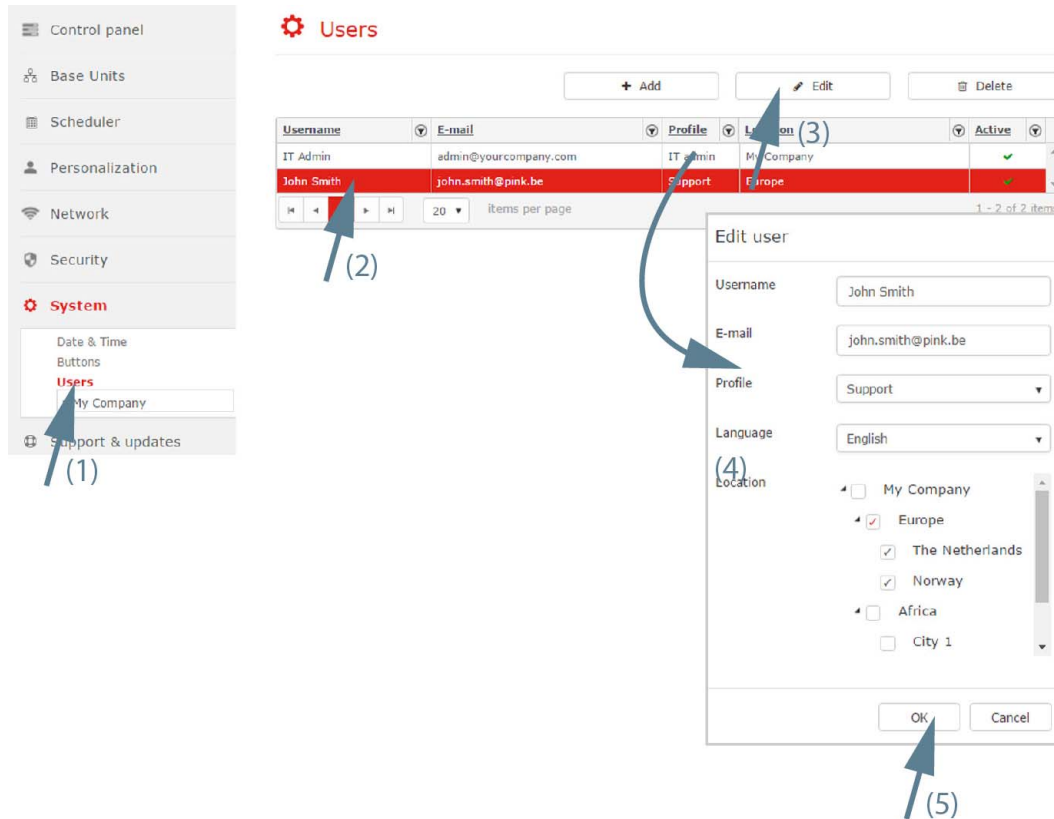


Image 7-9
Edit selected user

3. Click **Edit** to open the Edit user window (3).
4. Change the profile (4) and add a location (5). See "Edit selected user", page 60 for more info.
5. Click **OK** (5).

The registered user is activated and can login now.

How to reject a registered user

1. Select System and click on **Users** to display the overview page (1).
2. Select the registered user (2).

7. System

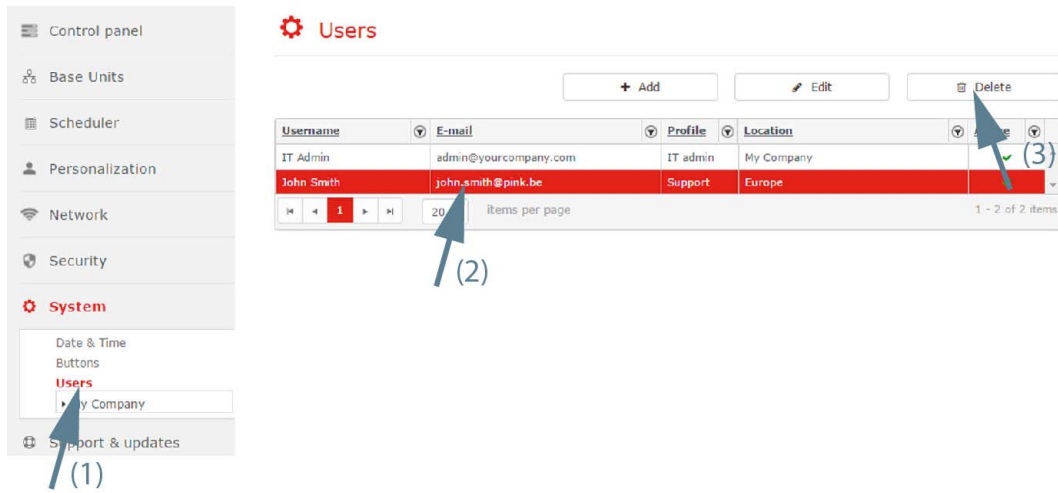


Image 7-10

3. Click **Delete** (3).

The registered user is removed.

8. SUPPORT & UPDATES

Overview

- Firmwares
- Updates
- Troubleshoot

8.1 Firmwares

What should be done?

Before a firmware update can take place, the firmware must be available on the Collaboration Management Suite. First, it should be downloaded.

Download/upload

1. Select **Support & updates** and click on **Firmwares** to display the overview page (1).

The screenshot shows the 'Firmwares' page with a 'Low free disk space' warning. The 'Available disk space' is 5.3G / 5.9G. The 'Download/Upload' section shows a table of firmwares for 'CSE-200'. The table has columns: Model, Release date, Release n..., Official r., and Status. The 'CSE-200' row is selected, and the 'Download' button is highlighted. Arrows (1) through (4) indicate the steps: (1) clicking 'Firmwares', (2) selecting 'CSE-200' from the dropdown, (3) clicking the 'Download' button, and (4) clicking the 'Download' button in the table.

Model	Release date	Release n...	Official r.	Status
CSE-200	18/02/2016		✓	Download
CSE-200	08/04/2016		✓	Download
CSE-200	02/05/2016		✓	Download
CSE-200	20/05/2016		✓	Download
CSE-200	29/07/2016		✓	Download
CSE-200	26/09/2016		✓	Download

Image 8-1
Firmwares, download/upload

2. Click on the drop down list and select the Base Unit model.
The current available firmwares are displayed.
3. Click on the **Download** button next to the firmware version you need.
The download starts and a progress bar is displayed.
When finished, the download button is replaced with the message Available.



With a low disk space on the Collaboration Management Suite server, a message is displayed on top of the Firmware page.

Upload firmware

If a firmware version is not available in the list, you may upload that firmware in the Collaboration Management Suite.

How to upload

1. While the *Firmwares* view is displayed, click on **Upload**.
Browser window opens.

2. Browse to the desired firmware and click **Open**.
The firmware is uploaded and becomes available in the list.

How to delete

1. While the *Firmwares* view is displayed, select the firmware to delete.
2. Click on **Delete**.

8.2 Updates

8.2.1 Base Unit firmware upgrade

About software update

The firmware of a single Base Unit or of multiple Base Units can be updated with Collaboration Management Suite. The update can be executed immediately or it can be scheduled.

The Base Unit firmware must be loaded on the Collaboration Management Suite, prior the update. Collaboration Management Suite may directly download a firmware from Barco site, or the firmware may be uploaded to Collaboration Management Suite.



An update takes more than 8 minutes for a CSC-1/CSE-200/CSE-800 and more than 10 minutes for a CSM-1, depending on the connection bandwidth, file size and Base Unit reboot duration.

Automatic firmware update⁴

1. Select **Support & updates** and click on **Updates** (a).

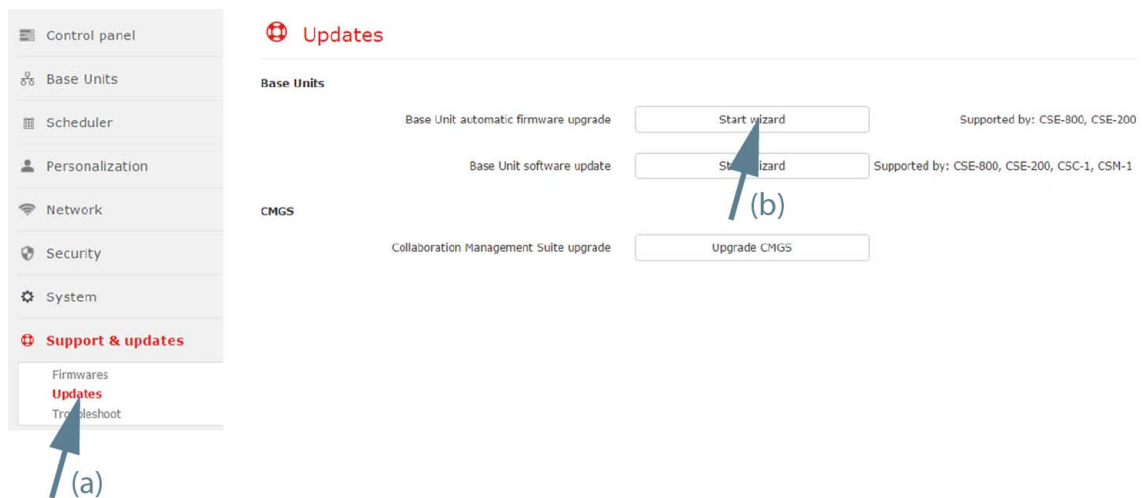


Image 8-2
Start firmware update wizard

2. Click on the **Start wizard** button next to *Base Unit automatic firmware upgrade* (b).
3. Select the Base Unit(s) to update (1).

⁴ only for CSE-800 and CSE-200

Base Units

Select the Base Units that you need to set up

Status	Meeting room	Location	Hostname	Model	Software	In use
(1)	MR. Bora Bora	Oceania	dickshare-bora...	CSE-800	00.00.00.Coden...	✘
	KOR, MR Oslo	Norway	dickshare-oslo	CSE-200	01.03.03.0028	✘

Automatic firmware updates

Ask confirmation before installing the software update: Do not change (Supported by: CSE-800, CSE-200)

Check at boot: Do not change (2) (Supported by: CSE-800, CSE-200)

Check on schedule: Do not change (Supported by: CSE-800, CSE-200)

Overview settings

Base Units

Apply the following settings to 2 Base Unit(s) ¹ 1 CSE-800, 1 CSE-200

Support & updates

Ask confirmation before installing the software update: **Enabled** (Supported by: CSE-800, CSE-200)

Remarks:
*Settings will be applied only to those Base Units that support them. Please see 'Supported by' section shown on the right side of each setting

Image 8-3
Automatic firmware updates

- Check the settings and change is necessary (2). To change a setting, click on the drop down box and select the desired setting. The following can be changed:
 - Ask confirmation before installing the software update: enable or disable or do not change.
 - Check at boot: enable or disable or do not change
 - Check on schedule: enable or disable or do not change.
- Click **Next** to continue.

The **Overview** page is displayed with changed settings.
- Click **Finish**.

Software update⁵

This procedure is similar to the software update procedure in *Base Units - Support & updates - Software updates*.

- Select **Support & updates** and click on **Updates** (a).

8. Support & updates

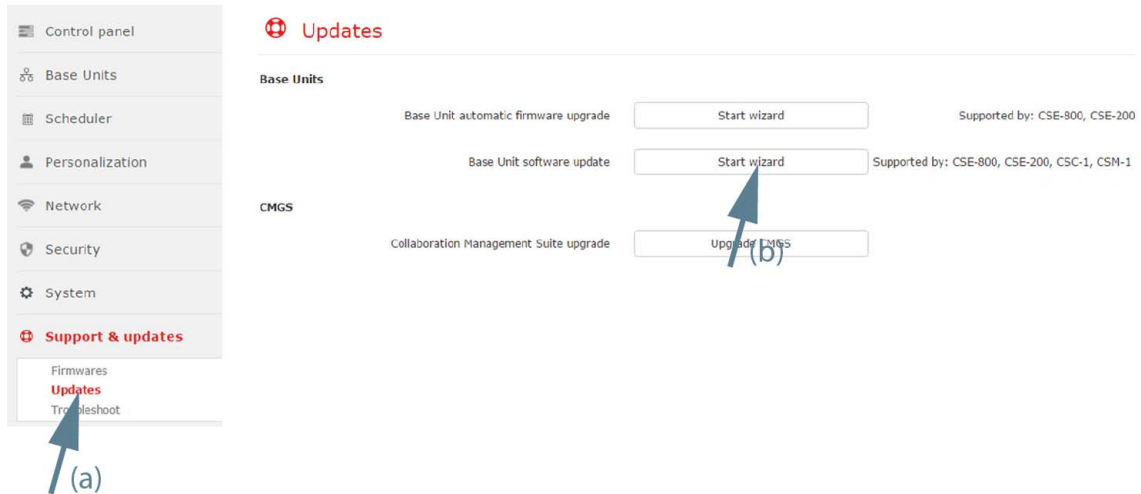


Image 8-4
Start software update wizard

2. Click on the **Start wizard** button next to *Base Unit software upgrade* (b).
3. Select your model and click **Next** to continue (1).

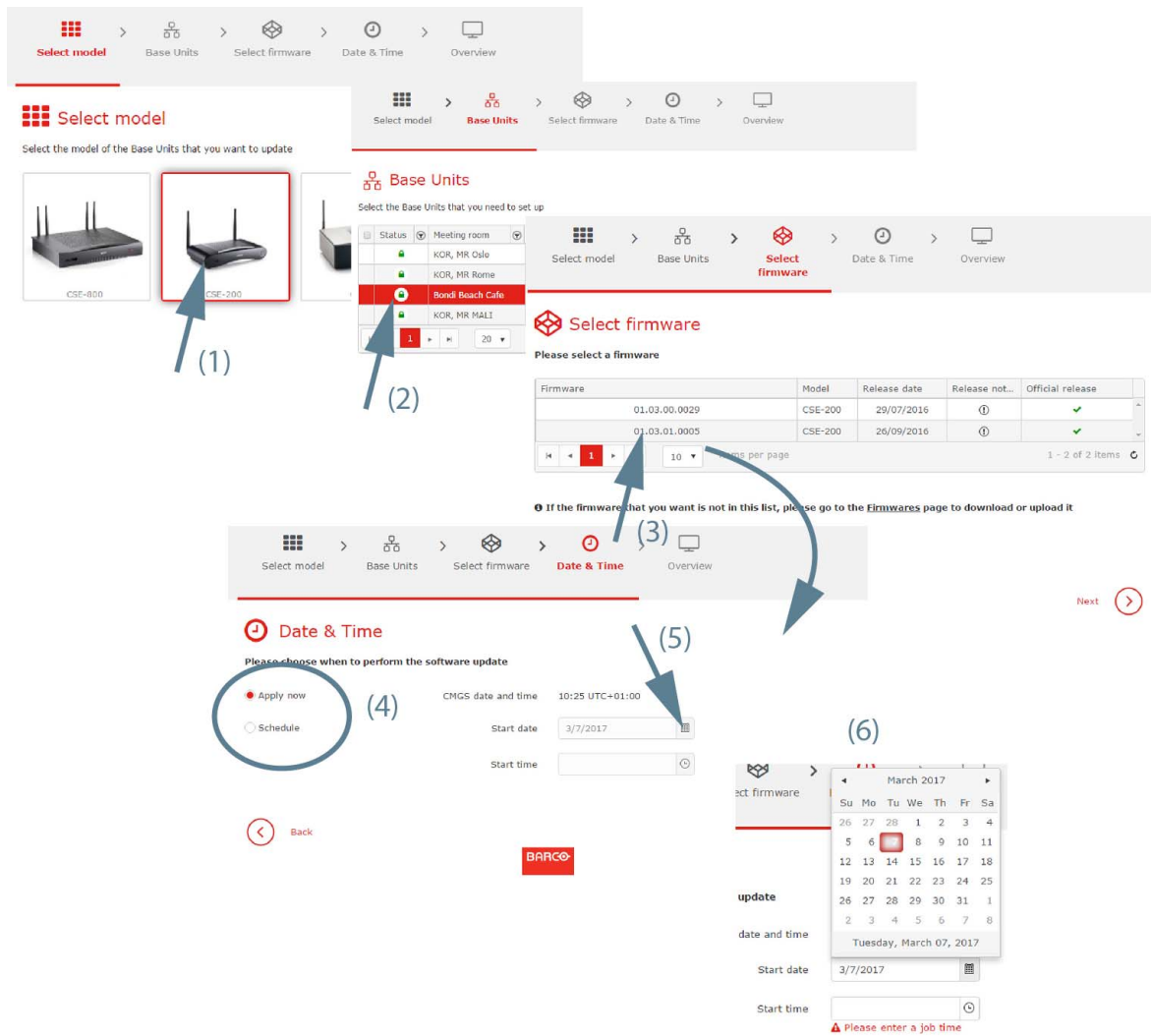


Image 8-5
Software updates

4. Select the Base Unit(s) that need(s) to set up and click **Next** (2).
5. Is the firmware you want in the list?
If yes, Continue with step 6.
If no, go first to the *Firmwares* page. For more info see "Firmwares", page 65.

6. Select the firmware version and click **Next** to continue (3).
7. To apply the firmware immediately, check the radio button in front of **Apply now** (4).
To schedule the update in the future, check the radio button in front of **Schedule**. Click on the calendar to change the date (5).
Click on the time drop down box and select a predefined time slot.
8. Click **OK**.
The Overview page is displayed with the new scheduled settings.
9. Click **Finish**.

8.2.2 Collaboration Management Suite upgrade

How to upgrade

1. Select **Support & updates** and click on **Updates** (a).

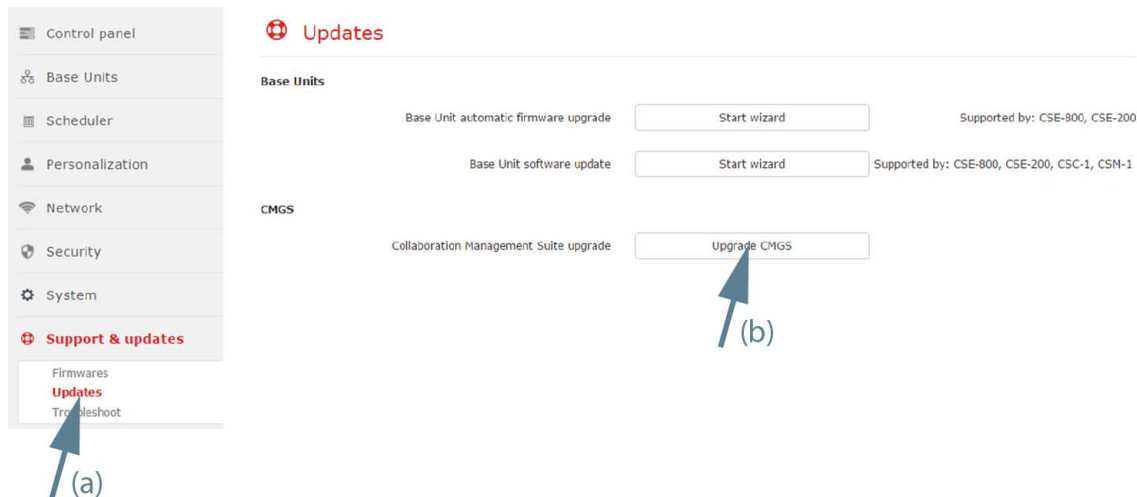


Image 8-6
CMGS upgrade wizard

2. Click on the **Upgrade CMGS** button next to *Collaboration Management Suite upgrade* (b).
An *Update process message* is displayed.

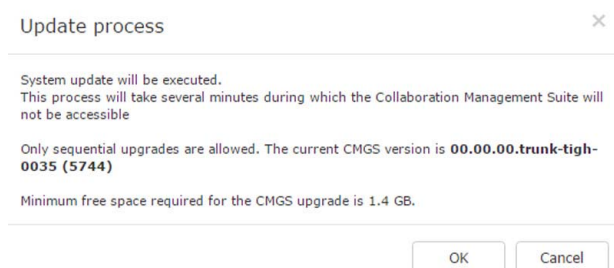


Image 8-7
Update process

This process will take several minutes during which the Collaboration Management Suite will not be accessible. Only sequential upgrades are allowed. That means that if you have to install all update versions available between your version and the latest released version.

3. Click **OK** to continue.

8.3 Troubleshoot

Overview

- Base Unit logging level
- Diagnose connection issues CMGS - Base Unit
- CMGS logging level
- Restart CMGS
- Report CMGS issues



After changing a setting in Troubleshoot, always click **Save changes** to apply the new settings.

8.3.1 Base Unit logging level

How to set

1. Select **Support & updates** and click on **Troubleshoot** (1).

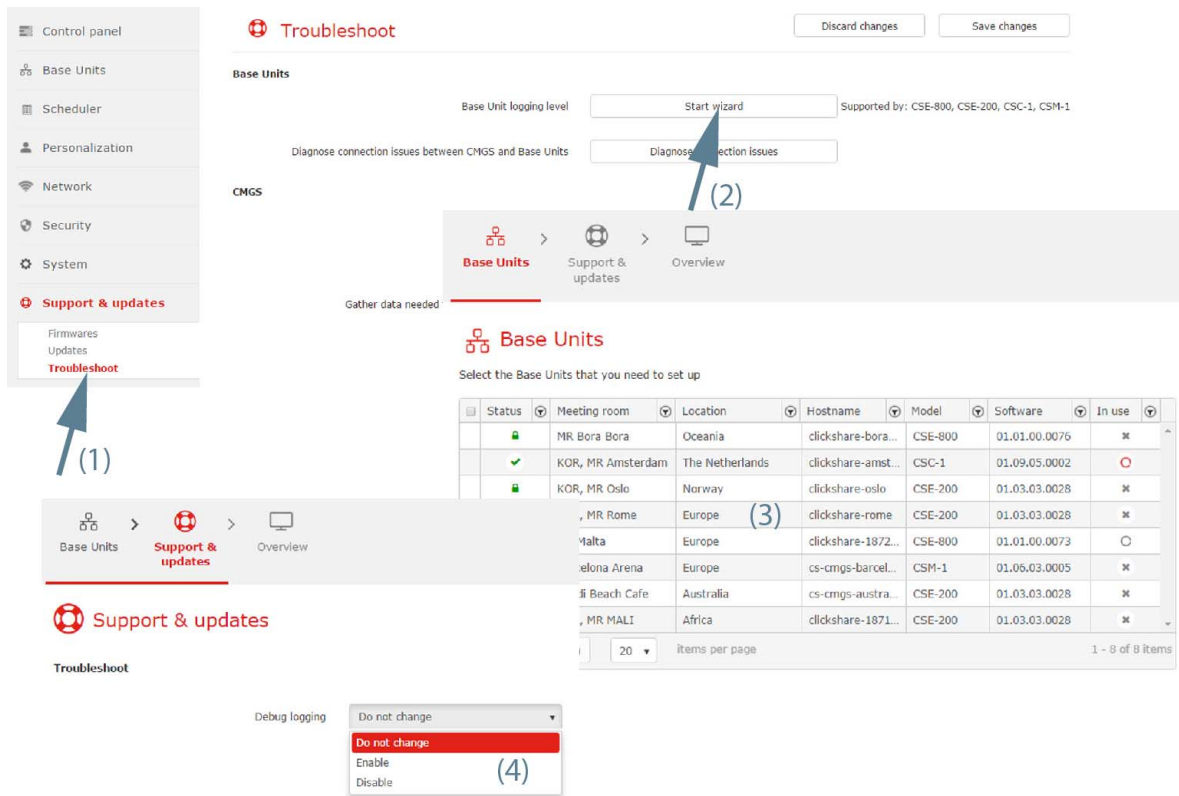


Image 8-8
Troubleshoot, Base Unit logging level

2. Click **Start wizard** next to *Base Unit logging level* (2).
3. Select Base Unit(s) (3) and click **Next**.
4. Click on the drop down next to *Debug logging* and select the desired setting (4).
The following settings are possible:
 - Do not change: the current setting remains active.
 - Enable: debug logging is enabled.
 - Disable: debug logging is disabled.
5. Click **Next** to continue.

An overview page is displayed.

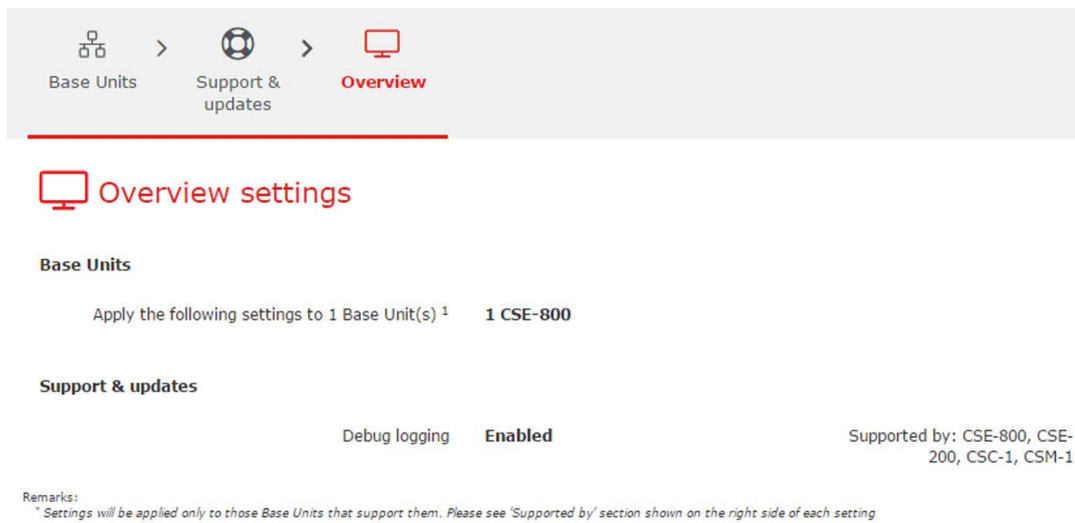


Image 8-9
Overview settings

6. Click **Finish**.

8.3.2 Diagnose connection issues CMGS - Base Unit

How to setup

1. Select **Support & updates** and click on **Troubleshoot** (1).

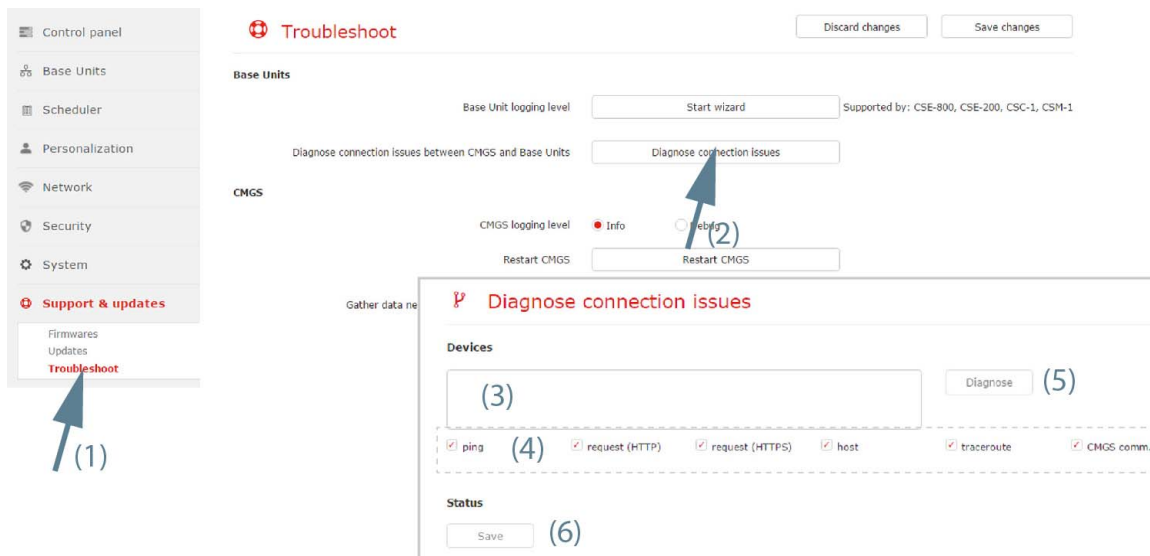


Image 8-10
Troubleshoot, diagnose connection issues

2. Click **Start wizard** next to *Diagnose connection issues between CMGS and Base Unit* (2).
3. Enter the hostnames or IP addresses, separated by a comma, of the Base Units to diagnose (3).
4. Check or uncheck the diagnose areas (4).
5. Click **Diagnose** (5).
6. To save the diagnose status, click on **Save** (6).

8.3.3 CMGS logging level

How to set

1. Select **Support & updates** and click on **Troubleshoot** (1).

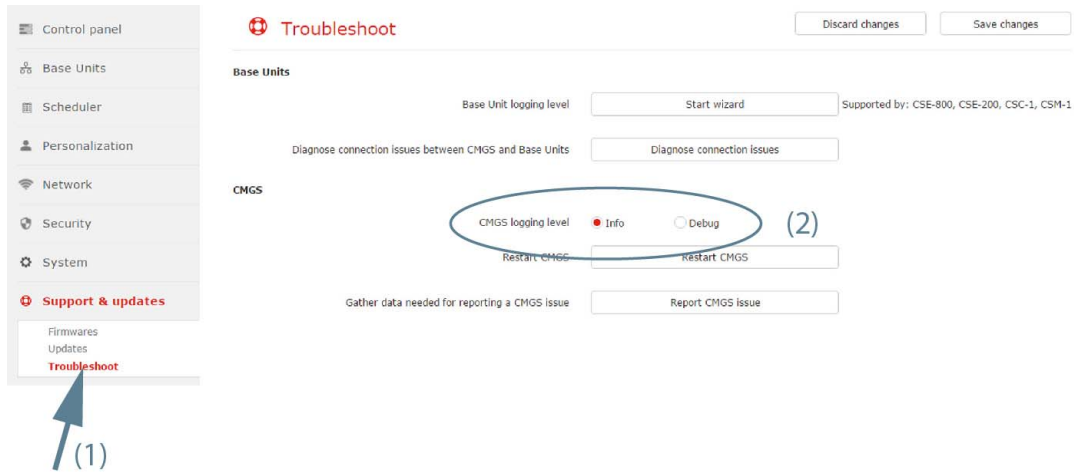


Image 8-11
Troubleshoot, CMGS logging level

2. Next to CMGS logging level, check the radio button of your choice (2).
The following choices are possible:
 - Info
 - Debug

8.3.4 Restart CMGS

How to restart

1. Select **Support & updates** and click on **Troubleshoot** (1).

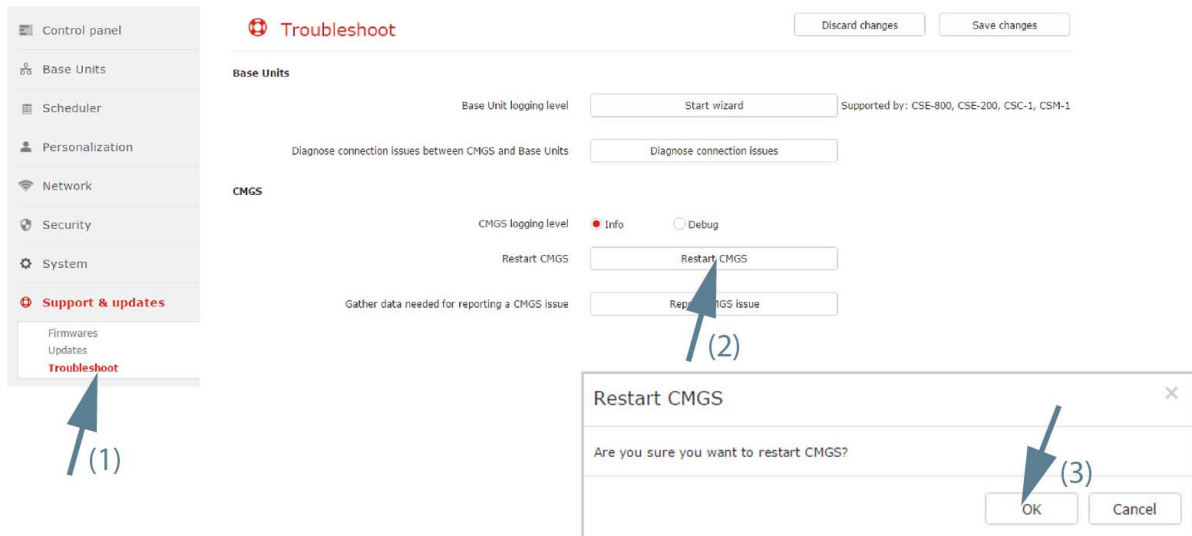


Image 8-12

2. Click on **Restart CMGS** next to *Restart CMGS* (2).
A restart message is displayed.
3. If you really want to restart, click **OK** (3).
This will take several minutes. Re-login will be necessary.

8.3.5 Report CMGS issues

How to report issues

1. Select **Support & updates** and click on **Troubleshoot** (1).

The image shows a web interface for troubleshooting. On the left is a navigation menu with categories: Control panel, Base Units, Scheduler, Personalization, Network, Security, System, and Support & updates. The 'Support & updates' category is expanded, showing 'Firmwares', 'Updates', and 'Troubleshoot'. An arrow labeled (1) points to the 'Troubleshoot' option.

The main content area is titled 'Troubleshoot' and has 'Discard changes' and 'Save changes' buttons at the top right. It is divided into two sections: 'Base Units' and 'CMGS'. In the 'Base Units' section, there is a 'Base Unit logging level' dropdown set to 'Start wizard', a 'Supported by:' list (CSE-800, CSE-200, CSC-1, CSM-1), and a 'Diagnose connection issues between CMGS and Base Units' button labeled 'Diagnose connection issues'. In the 'CMGS' section, there is a 'CMGS logging level' with radio buttons for 'Info' (selected) and 'Debug', a 'Restart CMGS' button, and a 'Report CMGS issue' button. An arrow labeled (2) points to the 'Report CMGS issue' button.

Clicking the 'Report CMGS issue' button leads to a sub-page titled 'Area'. This page has a breadcrumb trail: 'Area' > 'Base Units' > 'Details' > 'Gathering data'. The main heading is 'Area' and the instruction is 'Please select the area(s) that seem to have problems'. There are five checkboxes: 'CMGS interface', 'CMGS settings and parameters', 'Base Units', 'Users logging and accounts', and 'Other'. An arrow labeled (3) points to the 'Base Units' checkbox.

Image 8-13
Report CMGS issue

2. Click **Report CMGS issue** next to *Gather data needed for reporting a CMGS issue* (2).
3. Select the Area that seems to have problems (3).
4. Select the Base Unit(s) where you discovered an issue (4).

8. Support & updates

Base Units

Select the Base Units that you need to set up

Status	Meeting room	Location	Hostname	Model	Software	In use
🔒	MR Bora Bora	Oceania	clickshare-bora...	CSE-800	01.01.00.0076	✖
✔	KOR, MR Amsterdam	The Netherlands	clickshare-amst...	CSC-1	01.09.05.0002	🔴
🔒	KOR, MR Oslo	Norway	clickshare-oslo	CSE-200	01.03.03.0028	✖
🔒	KOR, MR Rome	Europe	clickshare-rome	CSE-200	01.03.03.0028	✖
⚠	MR Malta	Europe	clickshare-			
✔	Barcelona Arena	Europe	cs-cmgs-ba			
🔒	Bondi Beach Cafe	Australia	cs-cmgs-at			
🔒	KOR, MR MALI	Africa	clickshare-			

Items per page: 20

Details (5)

If possible please provide the appropriate time when the issue was noticed

Gathering data

When you press Finish, CMGS will try to gather data from the areas in question and create an archive with it.

Once finished, you will be prompted to download the archive that should be sent to Barco for further investigation.

Please contact Barco via <https://www.barco.com/en/support>

Image 8-14
Report CMGS issue

5. Enter more details (5).

- Click on the calendar icon and select the date.
- Enter a time (hh:mm) or click on the icon and select a time out of the drop down list.
- Enter a detailed description

6. Click Next to gather the data.

An archive file will be created and should be downloaded to be sent to Barco for further investigation.

Create a support ticket via <https://www.barco.com/en/support>

9. SOFTWARE PORTS

9.1 Used ports

Ports used by ClickShare Collaboration Management Suite

SMTP: depending on the settings of the SMTP server within the client's company the following ports are usually used:

- port 25 TCP/UDP outbound - this is needed for accessing SMTP server for sending E-mails.
- port 465 TCP/UDP outbound - this is needed for accessing SMTP over TLS/SSL (SMTPS) server for sending E-mails.

PROXY: if CMGS does not have direct access to the Internet and a Proxy server is needed to retrieve <http://update.barco.com/ClickShare/releases.json> then usually:

- port 80 TCP outbound
- port 8080 TCP outbound

DNS: if a DNS server exists in the client's company:

- port 53 UDP outbound
- port 53 TCP outbound

NTP: used for time synchronization

- port 123 UDP outbound
- port 123 TCP outbound

Ports used by the Base Unit's REST API

- port 4000 TCP outbound - for accessing Base Unit's REST API when HTTP is enabled on the Base Unit.
- port 4001 TCP outbound - for accessing Base Unit's REST API when HTTPS is enabled on the Base Unit

Browser access and Base Units access needed for retrieving files from CMGS (firmwares, Base units configuration files, wallpapers)

- port 80 TCP inbound - for HTTP access
- port 443 TCP inbound - for HTTPS access

Ports used by Base Units

Browser access and CMGS needs to retrieve certain files from the Base Units (Base Units configuration files)

- port 80 TCP inbound - for HTTP access
- port 443 TCP inbound - for HTTPS access

REST API

- port 4000 TCP inbound
- port 4001 TCP inbound

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