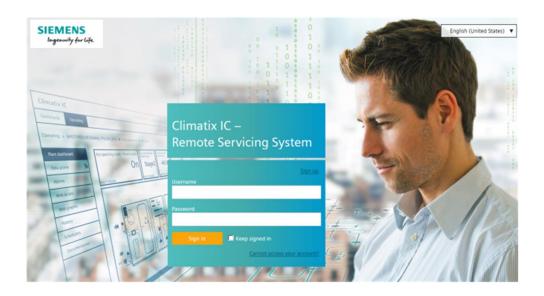
SIEMENS



Climatix IC

Remote Access with OCI670 and OZW672

User Guide – Enduser/Installer

Contents

| Conte | ents | | 2 |
|-------|------------|------------------------------|----|
| Cybe | r security | disclaimer | 5 |
| Legal | note | | 6 |
| 1 | About thi | is document | 7 |
| 1.1 | Reference | ce documentation | 7 |
| 1.2 | Before ye | ou start | 8 |
| 2 | Climatix | IC | 9 |
| 3 | Glossary | [,] | 10 |
| 4 | Requirer | nents | 11 |
| 4.1 | Technica | al requirements | 11 |
| 4.2 | Activatio | n key and QR code | 12 |
| 5 | Entering | Climatix IC | 13 |
| 5.1 | Assistan | ce on the start page | 14 |
| 5.2 | Sign in | | 15 |
| 5.3 | Sign up - | - Register a plant | 17 |
| 5.4 | Manage | plant data | 17 |
| 6 | Portal pa | age design and basic data | 18 |
| 6.1 | Webpage | e setup | 18 |
| 6.2 | Change I | language | 19 |
| 6.3 | Account | details and log off | 20 |
| 7 | Home so | reens "Map" and "Overview" | 21 |
| 7.1 | Operate | dashboard | 23 |
| 7.2 | Create a | nd share "Overviews" | 23 |
| 8 | Plant ope | eration | 24 |
| 8.1 | Plant ove | erview | 24 |
| 8.2 | Plant det | ail view | 25 |
| 8.3 | Alarms | | 26 |
| 8.4 | | ess | |
| 8.5 | | | |
| 8.6 | Plant set | tings | 26 |
| 9 | | IC administration | |
| 9.1 | | ministration | |
| | 9.1.1 | Plant users | |
| | 9.1.2 | Plant notifications | |
| | 9.1.3 | Plant settings | |
| | 9.1.4 | Plant operation | |
| 10 | | Tool Access | |
| 11 | | IC and security | |
| 11.1 | | IC | |
| 11.2 | Gateway | OCI670 and web server OZW672 | 36 |

| 12 | Support | on technical problems | . 37 |
|------|------------|-------------------------------|------|
| 13 | Appendi | c: Detail information | . 38 |
| 13.1 | Alarms | | 38 |
| | 13.1.1 | Alarm classes | 38 |
| | 13.1.2 | Create plant messages | 39 |
| | 13.1.3 | Case studies: Alarm handling | 40 |
| 13.2 | Tips and | tricks | 41 |
| | 13.2.1 | Search, sort, group | 41 |
| | 13.2.2 | Change password and user name | 43 |
| 13.3 | Plant role | es and privileges | 45 |
| | | | |

4 | 46 Siemens A6V11269223_en--_e **Building Technologies** 2018-10-30

Cyber security disclaimer

Siemens provides a portfolio of products, solutions, systems and services that includes security functions that support the secure operation of plants, systems, machines and networks. In the field of Building Technologies, this includes building automation and control, fire safety, security management as well as physical security systems.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art security concept. Siemens' portfolio only forms one element of such a concept.

You are responsible for preventing unauthorized access to your plants, systems, machines and networks which should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. Additionally, Siemens' guidance on appropriate security measures should be taken into account. For additional information, please contact your Siemens sales representative or visit https://www.siemens.com/global/en/home/company/topic-areas/future-of-manufacturing/industrial-security.html.

Siemens' portfolio undergoes continuous development to make it more secure. Siemens strongly recommends that updates are applied as soon as they are available and that the latest versions are used. Use of versions that are no longer supported, and failure to apply the latest updates may increase your exposure to cyber threats. Siemens strongly recommends to comply with security advisories on the latest security threats, patches and other related measures, published, among others, under https://www.siemens.com/cert/en/cert-security-advisories.htm.

Legal note

Legal note concept

This guide includes notes that must be followed to prevent damage to property. Notes dealing only with damage to property use the signal word NOTE and an exclamation point.

They are depicted as follows:

NOTICE

Type and source of hazard

Consequences in the event the hazard occurs

Measures/prohibitions to prevent the hazard

Qualified personnel

Only qualified personnel may commission the device/system. In this regard. qualified personnel have the training and experience necessary to recognize and avoid risks when working with this device/system.

Proper use

The device/system described here may only be used on building technical plants and for the described applications only.

The trouble-free and safe operation of the device/system described here requires proper transportation, correct warehousing, mounting, installation, commissioning, operation, and maintenance.

You must comply with permissible ambient conditions. You must comply with the information provided in the Section "Technical data" and any notes in the associated documentation.

Fuses, switches, wiring and grounding must comply with local safety regulations for electrical installations. Observe all local and currently valid laws and regulations.

Exemption from liability

The content of this document was reviewed to ensure it matches the hardware and firmware described herein. Deviations cannot be precluded, however, so that we cannot guarantee that the document matches in full the actual device/system. The information provided in this document is reviewed on a regular basis and any required corrections are added to the next edition.

Software used

All open source software components used in this solution/service (including copyright owners and license agreements) can be viewed at the following link:

- Go to https://www.climatixic.com in the footer on entry "OSS".
- Direct: https://www.climatixic.com/Content/OSS_ClimatixIC.htm

6 | 46

Siemens **Building Technologies** 2018-10-30

1 About this document

1.1 Reference documentation

| Document ID | Title | Topic | |
|--------------|-------------------|---|--|
| A6V101022127 | Gateway OCI670 | Gateway data sheet | |
| N5712 | Web server OZW672 | Web server data sheet | |
| A6V101022140 | Gateway OCI670 | Gateway commissioning | |
| C5712 | Web server OZW672 | Web server commissioning | |
| A6V10449189 | Climatix IC20 | Data sheet on market offering for Climatix IC20 | |

1.2 Before you start

Document conventions

Text markups

Special text markups are displayed as follows in this document:

| ⊳ | Prerequisite for an instruction |
|----------------------------------|----------------------------------|
| ⇔ | Interim result of an instruction |
| ⇒ Final result of an instruction | |
| Text Hyperlink, reference | |
| "Text" | Term with a standing meaning |
| "Text" Quote, exact match | |

Supplemental information and tips



The "i" symbol identifies supplemental information and tips to simplify procedures.

Trademarks

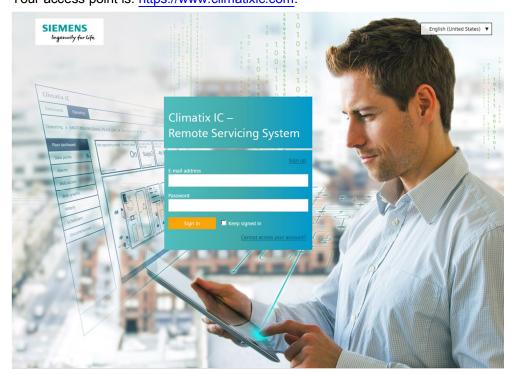
| Trademarks | Legal owner | | | |
|-----------------------|---|--|--|--|
| Google, Google Chrome | Google Inc. | | | |
| Mozilla Firefox | Mozilla Corporation | | | |
| Safari | Apple Inc. | | | |
| Edge | Microsoft Inc. | | | |
| ETS | The Engineering Tool Software (ETS) is licensed software sold by the KNX Association | | | |
| ACS | ACS790 is a PC software program by Siemens Building Technologies to commission, operate, and monitor HVAC plants. | | | |

The listing above forgoes the labeling (e.g. using the symbols @ and $^{\text{TM}}$) of third-party trademarks for the purposes of legibility based on this list.

2 Climatix IC

Siemens Climatix IC provides easy-to-use and secure access to your HVAC plants. A web browser, ACS790 service tool, or Smartphone App is used for access. Climatix IC permits remote servicing of the plant at any time (24/7) and from anywhere.

After signing in on the web browser, you access the plant as per plant privileges. The portal offers new ways to setup user-defined access (e.g. installers) to plants. Your access point is: https://www.climatixic.com.



Functions

- Simple and fast set up of plant Internet access.
- The plant overview provides a single point for pending alarms and energy savings potential.
- Error messages can be sent by e-mail.
- New ways to manage plants and users via the portal.
- Secure communications thanks to encryption (HTTPS).

3 Glossary

| Term | Explanation | | | | |
|--|--|--|--|--|--|
| Climatix IC | Climatix IC is a cloud-based remote servicing application and for efficient operation of plants with OCl670 gateways or OZW672 web servers. | | | | |
| Plant | The same as gateway/web server. | | | | |
| Activate plant | The function "Activate plant" is available for offline and online plants. In the program, the plant is entered on the Assigned list with "Activate". | | | | |
| Assigned / unassigned | The command "Activate" assigns plants. A plant must be assigned to manage it (settings, assign users, etc.). | | | | |
| Activation key | The activation key is valid for one OCI670 gateway or OZW672 web server. The device is activated with the activation key. | | | | |
| Tenant | Tenant is the same here as company or organization. An area can be set up for each company/organization that individualizes the cloud-based application for the customer and closes it off to the outside world. | | | | |
| Main-tenant | Main-tenant and sub-tenant are in a 1 : n ratio. | | | | |
| Sub-tenant | Main-tenant is, for example, an OEM, sub-tenant could be its regional company. | | | | |
| Tenant administrator | The tenant administrator role is one of multiple portal roles. The tenant administrator manages plants and users within its tenant space. | | | | |
| Tenant key | Each tenant area has a unique tenant key. Sub-tenants also have their own keys. | | | | |
| | The plant is moved to the desired (sub)-tenant by entering the (sub)-tenant key during registration. | | | | |
| | The term "Distributor" used in the program refers to the Climatix controllers and is not relevant here. | | | | |
| Portal role | Portal roles define access to the system functions and menus in the portal. | | | | |
| Plant role | A plant role (e.g. owner) is comprised of the OZW/OCI access level and granted privileges on the portal. | | | | |
| Online plants | The gateway/web server connects to Climatix IC as soon as a OCI670 gateway or OZW672 web server is connected to the Internet. | | | | |
| Offline plants | A tenant admin can already manage the plant offline and assign, for example, the plant to a sub-tenant. The tenant admin only needs the activation key. | | | | |
| Remote Tool Access | The Remote Tool Access is a PC-based program for the secure and easy connection of an engineering tool (e.g. ACS, ETS) with OCI670 gateways or OZW672 web servers. | | | | |
| Firewalls A firewall protects networks against unauthorized access from the outside. Firewalls are hardware and/or software measures designed to control data exchanges be the private network to be protected and the unsecured network (e.g. the Internet | | | | | |

4 Requirements

4.1 Technical requirements

Firmware version

- The OZW672 web server requires firmware V5.2 or higher.
- Gateway OCI670 has a firmware version of V7.0 or higher
- Firmware version V7.0 or higher is required to use the Remote Tool Access.

Network connection and online status

- The gateway/web server is installed and connected to the Internet. The installation instructions are included in the packaging.
- · Gateway/web server is online, if
 - The power LED is flashing green (1 Hz), or
 - The power LED is flashing orange (the energy indicator is active)



NOTICE

No connection to networks with web proxy servers

The gateway/web server cannot connect to the portal via a proxy server.

Web browser

The browser must support HTML5.

- The latest versions (as of the publication date) of the following browsers were tested: Google Chrome, Mozilla Firefox, Microsoft Edge, and Safari (based on iOS) by Apple
- Internet Explorer is no longer supported

4.2 Activation key and QR code

Activation key

The activation key can be accessed in various ways. The activation key:

- is printed on the packaging and can be scanned there using a QR code reader.
- is attached under the terminal cover for the gateway/web server.
- is located as an entry under the "Device information" menu of the gateway/web server.

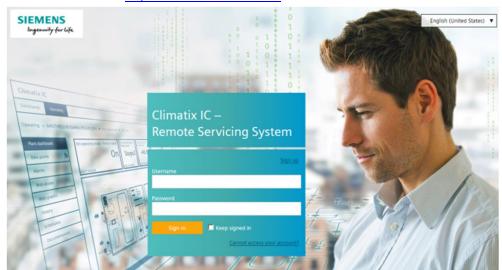
Find activation key on upgraded OZW672 web servers

The OZW672 web server also receives an "activation key" when upgrading to firmware version V5.2 or higher. The key is required to use Climatix IC.

A direct connection to the web server is required to read the newly generated activation key. The easiest method is to use a USB connection or Ethernet direct connection (UPnP). The activation key is located under the web server's "Device information" menu.

5 Entering Climatix IC

Enter Climatix IC at https://www.climatixic.com.



5.1 Assistance on the start page



Accessible documentation

- "Support" on the start page provides an introduction.
- The comprehensive help for reading is located at the same location after log in.

Information on unsupported browsers

A clear information window indicates when Climatix IC is opened by an unsupported browser.



Central maintenance information from the IC Operations Team

Maintenance and important improvements are prominently displayed on the start page.

A color code (green, yellow, red) intuitively indicates the relevance of the information. Once logged in, you can access the same information at any time using the Info symbol (upper right). The Info symbol flashes for news.



IC dashboard

You are investigating an event and want to know whether IC was online at a specific time? The IC dashboard provides an objective overview whether services are or were available. You can also subscribe to the RSS feed for the service.



Cookie information

You must confirm the cookie information every 90 days.

Language selection

Set the language in the portal navigation ribbon to the right.

14 | 46

5.2 Sign in

Sign in

- > You have received an e-mail with an invitation link and temporary password.
- 1. Enter the User name (your e-mail address) and (temporary) password and click "Sign in".
 - ⇒ You are requested to change the password.
- 2. NOTICE! Read the note below for accepting Climatix IC passwords. Create a secure password and confirm the new password below it.
- 3. Click "Change password" to confirm the change.
- ⇒ Your individual password is active and you are now forwarded to an entry mask.



NOTICE

Climatix IC accepts the following passwords:

A secure password consists of at least 8 characters and includes at least one of the 4 character groups:

- Latin capital letters (A...Z)
- Latin low-case letters (A...Z)
- Digits (0...9)
- Non-alphabetic characters (e.g. !, \$, +,?)

Secure sign in and out

Note the following functions for sign in/out:

- The connection is ended after 30 minutes of inactivity. The web page returns to the sign-in screen.
 - NOTICE! Only the activity on the first tab is registered when working in multiple browser tabs.
- The user account is locked after 5 attempts with the wrong password.
- The user is notified as soon as a new password is set using the "Forgot password?".
- For security reasons, a new sign in is required after 24 hours of uninterrupted user activity.



NOTICE

Protect passwords

- Do not pass on your user name and password for Climatix IC to just any third party
- Encrypt e-mails that include the user name and password.

Forgotten password

Use the "Forgot password" function if you have forgotten your password and follow the instructions.

| Reset your password |
|---------------------|
| E-mail address |
| Reset password |

Building Technologies

5.3 Sign up - Register a plant



As a rule, you are invited by e-mail the first time you contact Climatix IC, in other words, you follow the workflow as described under "Sign in".

Registration is a process that combines multiple steps:

- First time log in by a new user without an invitation by a higher role
- Plant activation using a valid activation key
- The new users are added to the plant with the user role Owner
- Optional: Direct moving of the plant to a sub-tenant area

5.4 Manage plant data

You must enter information on the plant to complete the registration process. Compare the explanations in "Plant settings [\rightarrow 30]".

6 Portal page design and basic data

6.1 Webpage setup



- 1 Portal navigation ribbon
- 2 Switch tenant
- 3 Change language
- 4 Account details and log off
- 5 Primary navigation
- 6 Pin to the dashboard (here: The entire menu)
- 7 Secondary navigation
- 8 Desktop
- 9 Menu path (enabled)
- 10 Refresh view
- 11 Workpane in own web page tab

Additional information

The Climatix IC user interface offers numerous state-of-the-art intuitive operating features. Some of these features are compiled in "Search, sort, group [\rightarrow 41]".

6.2 Change language

The portal is available in various languages. The settings act on the gateway/web server display language (see note below).

- 1. Click "Select language" button.
 - ⇒ A drop-down list field opens with available portal languages.
- 2. Select the desired language.



NOTICE

The gateway/web server language follows the portal language

Enter your language in the portal before accessing the gateway/web server with web access. Gateway/web server immediately takes over the selected language.

Account details and log off

Account details



The entries permit contact as needed by the portal administrator:

| Contact name | Designates the user in the event of contact. |
|--|--|
| Owner name Recommended: Enter own name. | |
| Address Recommended: Enter own address. | |
| Phone Telephone number for contact purposes. | |



The profile form includes some queries ("...(Climatix)" that have no influence on the documented solution.

Query profile details

- 1. Click "Account details and log off".
- 2. In the drop-down list, select the "Account details".
 - ⇒ Entry fields on your account are displayed. None of the data is required, but can be useful if you need to contact support.
- 3. Enter meaningful information on your company/person and confirm with the "Save" button.

Log off

To log off the portal, click the user profile and log off and select "Log off".

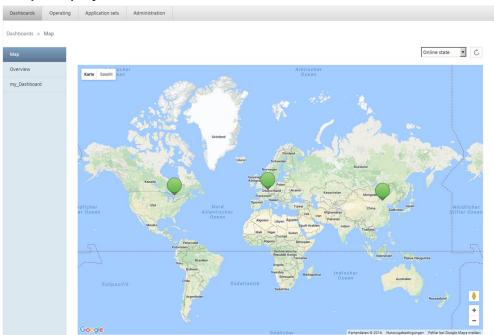
This is better than simply closing the window:

- The session is terminated.
- When you return to the portal, you are not automatically logged on, but rather have to select the user name and password.

20 | 46

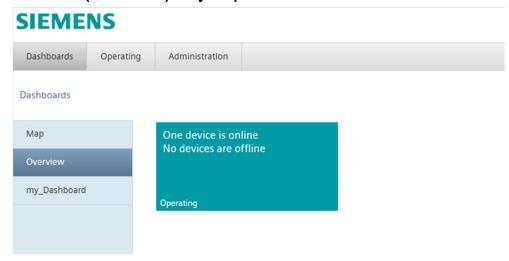
7 Home screens "Map" and "Overview"

"Map" displays the essentials



- "Map" displays the geographic location of your plant together with a selectable indicators (online state, alarm state, energy indicator).
- Street and satellite information is provided by Google and offers supplemental information for service calls.
- "Map" can go directly from the map to the plant settings.
- The indicators for online, alarm state, and energy indicators are preconfigured and can be selected.

Overview (dashboard) for your plant



- Your configurable "Dashboard" or favorites page.
- The main menus for primary navigation as well as all sub-menus for secondary navigation can be displayed as tiles. The tiles can be arranged and sized to individual needs.
- You can share your own overviews with other users

"Operation" is displayed by default.

A click (left or right) in a menu tile offers:

- Show page
- Show page in a new tab

Click the red alarm symbol to list plants with current alarms.

Additional information

"Operate dashboard [\rightarrow 23]" demonstrates how to operate "Overviews".

The next Section "Create and share "Overviews" [\rightarrow 23]" shows you how to create your own dashboard and share with other users, or assign dashboards for specific users as the administrator.

Default tiles

Building Technologies

7.1 Operate dashboard

Normal/edit mode

Click the 3 dots [displayed on the bottom right to start edit mode.

Clicking a tile highlights it (selected). You can do the following from the Edit bar: Resize, remove tile, edit tile, download dashboard and add a dashboard.

Click the 3 dots [again to return to normal mode.

Place menus on the dashboard

Click on the pin icon [*] of any menu to add it to the dashboard.

7.2 Create and share "Overviews"

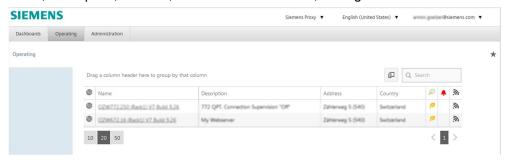
- The dashboard "Overview" is available by default and cannot be deleted.
- You can add new or create your own dashboards below "Overview" with "Add dashboard".
- Your own dashboards (entries below "Overview") are saved in the user profile and not visible to other users.
- Own dashboards can be saved as a .json file using "Download dashboard" and can then be shared with other users.
- The other users use "Add dashboard" and then select the received .json file.

8 Plant operation

8.1 Plant overview

Plant list

Available plants are displayed in the "Operating" menu. The plants are identified by name, description, address, alarm and online status, among others.



Additional information

"Search, sort, group $[\rightarrow 41]$ ", the Section on Tips and Tricks includes a number of operating notes that help you modify comprehensive lists to improved usability.

Active and info symbols in the workpane

| Symbol / element | Meaning/function | | | | | |
|------------------|---|--|--|--|--|--|
| | Clickable "Globe" symbol. | | | | | |
| | Direct link to web access for the corresponding plant. | | | | | |
| 772 Automation | Plant name. | | | | | |
| | Opens a detail view on the plant. | | | | | |
| <u> </u> | Alarm symbol. | | | | | |
| | Direct link to "alarms" for the corresponding plant. | | | | | |
| | Corresponds to the LED indicator on the gateway/web server and the plant state of the web user interface. | | | | | |
| | Content: There is or was (for offline plants) an error on the plant. | | | | | |
| 0 | 'Green leaf' symbol. | | | | | |
| | Corresponds to the LED indicator on the gateway/web server and the plant state of the web user interface. | | | | | |
| | Content: All "Energy indicator" data points are within their "Green limits", i.e. in the green. | | | | | |
| Ø | 'Orange leaf' symbol. | | | | | |
| | Corresponds to the LED indicator on the gateway/web server and the plant state of the web user interface. | | | | | |
| | Content: One or multiple "Energy indicator" data points are outside their "Green limits". | | | | | |
| 30 | On/offline symbol. | | | | | |
| •••• | If displayed, the plant is online, i.e. is connected to the portal via the Internet. | | | | | |
| | The plant is otherwise offline if the symbol is missing from the corresponding column. | | | | | |
| | The portal monitors the online status within an adjustable range. | | | | | |
| ' | Plant is online using a 3G router. "Cursor": Display the ICCID number as a tooltip. | | | | | |

8.2 Plant detail view

You can go to a plant's detail view from the plant overview as follows:

- Click the plant name. Open the plant in secondary navigation in the "Alarms" menu.
- Click the globe symbol Open the plant in secondary navigation in the "Web access" menu.
- Click the alarm symbol
 Open the plant in secondary navigation in the "Alarms" menu.

8.3 Alarms

The "Alarms" menu for a plant provides information on pending alarms as well as past alarms. Please note the following when evaluating:

- The portal depicts the most serious error. For troubleshooting, you must view the plant in detail, e.g. via the "Web access" menu.
- All entries are time stamped.
- Error entries on plants, that are offline, are retained.

Additional information

Additional information and examples are demonstrated in "Create plant messages $[\rightarrow 39]$ ".

8.4 Web access

The "Web access" menu provides operator access to the plant, that corresponds one-to-one to the gateway/web server user interface.

NOTICE

Operator interventions via portal change the situation on the plant.

Make sure that you have enough information on the actual on-site situation.

Plant operation via the web user interface is described in the following documents:

- OCI670: Gateway commissioning instructions OCI670
- OZW672: Gateway commissioning instructions web server OZW672

8.5 Files

The "File" menu includes current documents stored for you by the portal administrator. Click the disk symbol to download a copy of the document.

8.6 Plant settings

Plant settings

The Settings menu is a link here to "Administration > Plants > 'my plant' > Plant settings".

9 Climatix IC administration

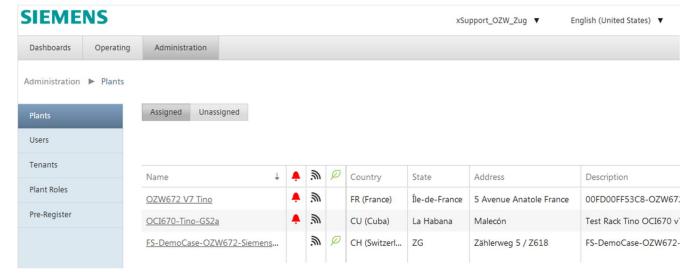


Certain menus are hidden for your access depending on the plant role (e.g. application set or administration).

Administration provides functions to manage plants, users, tenants, and plant roles.

Overview

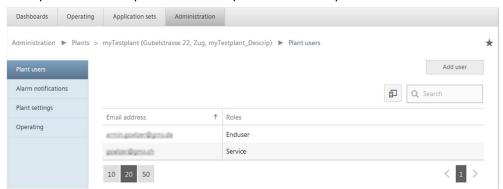
The overview provides access to superposed plant administrators with the menus Plants, Users, Tenants, Plant roles, and Pre-registration. The user has access to manage a specific plant, if selected in the overview, with the menus Plant user, Alarm notifications, Plant settings, and operating (Link).



9.1 Plant administration

9.1.1 Plant users

A tenant administrator or user with the right "Manage plant users" (e.g. Owner) adds plant users and provides them a plant role for this plant.



- The user receives an e-mail on the new plant access if the e-mail account is known in tenant.
- The new user is loaded to Climatix IC and also receives the information on the new plant access if the e-mail account is new.



NOTICE

- Plant users are different from portal administrators: Portal administrators should not simultaneously be plant users since this would result in a lack of transparency of rights to the concrete plants.
- The system prevents increases to rights: You cannot create plant users with higher rights to the plant than the creator.

9.1.2 Plant notifications

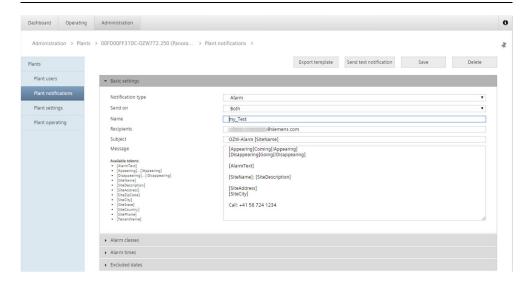
A tenant administrator or user with the right "Plant Upgrade/Alarm notification setup" (e.g. owner) creates one or more plant messages per plant.

"Export template" can reuse a message with the function "Create from template".

"Send test notification" quickly tests the functionality without the need to wait for a concrete error.



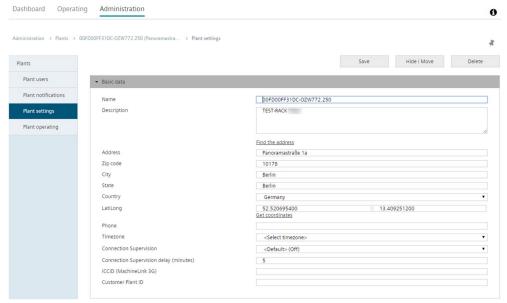
The entered e-mail address is not tested. A message is lost to an incorrect address. Use "Send test notification".



Additional information

- "Alarm classes [→ 38]" illustrates the interaction of the message classes
- "Create plant messages [→ 39]" illustrate concrete procedures and provides additional tips.

9.1.3 Plant settings



Various workflows take you to the entry dialog box "Manage plant data":

- The first time you go to the portal immediately after changing the password.
- After registering a new device on an existing user account (the portal permits this workflow as well).
- Click "Activate Plant" in the "Administration" menu.
- In the "Plant Settings", a plant, if selected in the "Administration" menu.

Plant data

Plant information identifies the plant and renders it easier to find.

Some notes on the entries:

- The plant name replaces the generically generated and used name
- Plant-related properties (e.g. address, time zone) are required for sorting, grouping, and searching.
- Use "Get coordinates" to find your plant's longitude/latitude. Your plant cannot be displayed on the "Map" if this information is unavailable!
- Under "Time zone" enter the time zone of the plant if located in a different time zone as the operating environment. In this manner, the timestamp for the alarms in Climatix IC matches the timestamp on the controllers. This simplifies comparisons when troubleshooting an error.
- The ICCID number is a unique ID for your SIM card. The entry leads to an online symbol with 3G supplement and display of the IMSI number as a tool tip.
- Customer plant ID is an empty text field that permits the customer to enter text. You can search and group plants by an internal numbering system.

Plant administration

Connection Supervision

Activate an alarm notification for a connection failure in excess of 5 minutes:

- 1. In the basic data, select "Connection supervision": On.
- 2. In secondary navigation, select the "Plant notifications" menu.
- 3. Click "Add alarm notification".
- **4.** In addition to the text, it is the recipient e-mail address that is particularly important under Basic settings.
- 5. Under Alarm classes, select "Alarm class 4" (Connection Supervision) only.



The tenant administrator can change the default setting for connection supervision. This takes place at "Administration > Tenants > 'my tenant' > Basic data > Connection Supervision (default)"

9.1.3.1 Delete or hide plants

Delete plants

The plant is moved to the "Unassigned" tab. The user can no longer access the plant. Only the tenant administration can reassign them or reactivate them using an activation key. In contrast to "Hide" plant, settings specific to the plant are also deleted.



Hide plants

In contrast to deleting a plant, the specific plant settings are retained under hide plant and are immediately available on the plant is reassigned.

9.1.4 Plant operation

The plant operation menu is a link here to "Operating >'my plant' > Alarms".

Remote Tool Access 10

Purpose

For plant users with the privilege "Remote Tool Access", typically the plant roles service, administrator, and owner, Siemens provides a simple and secure access to the gateway/web server. Portal administrators are excluded from this solution.

The plant can be serviced at any time, from anywhere.

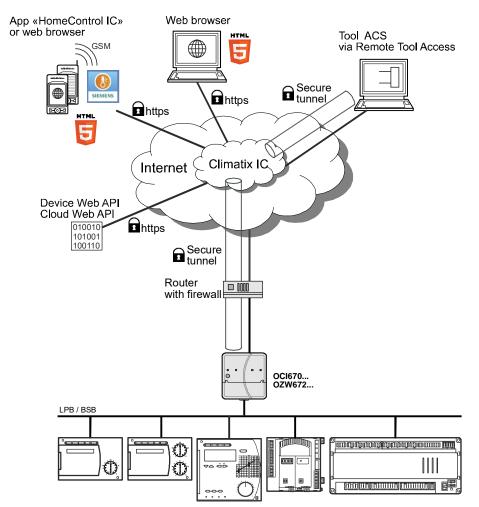
Functionality

Remote Tool Access establishes a secure tunnel connection to the gateway/web server via Climatix IC. The connection is used for tool access:

For example, by ACS

Benefits

- Simple and fast set up of Internet access no fixed IP address, forwarding over a dynamic IP address, or port forwarding (NAT/PAT) required
- The same view and operations as direct on-site access
- **Encrypted connection**
- No open ports on the router
- No need to open the firewall
- Access is to OZW only and not the entire LAN



32 | 46

Siemens **Building Technologies** 2018-10-30

5712Z105a

Requirements

- Gateway/web server as of version 7.0
- The user have an account on Climatix IC and has its own plant role (no portal administrators).
- The plant role include the privilege "Remote Tool Access" (typically the plant roles service, administrator, and owner)



Program

Remote Tool Access is an independent program. The Remote Tool Access is distributed on the ACS-CD and now together with the OZW/OCI firmware download.

Download from ACS-CD

The ACS-CD can be downloaded at the following URL:

https://support.industry.siemens.com/cs/ww/de/view/109481853

There are two ways to install the Remote Tool Access:

- Together with the ACS790 installation
- Individually
 - In the Setup folder, double-click file RemoteToolAccessSetup.exe
 - Select the "Remote Tool Access" button in the start routine for ACS790

Download via firmware download

See "Web server OZW672: Current firmware/software".

Use

Some examples of possible uses:

- Commissioning support by technicians without the need to be on site
- Creating a commissioning protocol in the office
- Offsite clarifications on a support call, e.g. automatic comparison of parameter sets
- Simple remote modifications to the configuration



NOTICE

Actions requiring the buttons be pressed on the devices cannot be performed remotely (e.g. assigning KNX addresses). Also not possible are any actions requiring connections in excess of 24 hours (e.g. long-term computer trends).

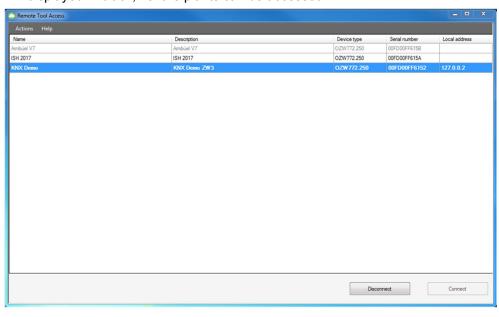
Connect

The user logs in to the Remote Tool Access using the same Climatix IC user name and password.



All the user's plants are listed on the overview page. The line displayed for the plants are

- grayed out, i.e. the plants cannot be accessed,
 - The plant role does not include the privilege "Remote Tool Access" (typically for the plant roles state view and end user)
 - if the plant is offline
 - if the OZW firmware version is older than V7.0
- displayed in black, i.e. the plants can be accessed



Procedure

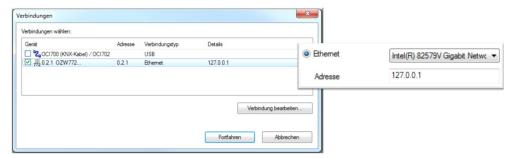
- **1.** Select the plant for connection.
- 2. Click "Connect".
- ⇒ The software searches for an available local IP address between 127.0.0.1 and 127.0.0.255 connected to the selected OZW via Climatix IC using this address.
- ⇒ It can be used with ACS as soon as it is connected.

34 | 46

Siemens A6V11269223_en--_e

ACS

- 1. Open or create a project.
- 2. If unavailable, add the OZW in the project in ACS menu "Topology".
- 3. Select "Connections" in ACS.
- **4.** Select "Ethernet" as the connection type.
- 5. Enter local IP address as per Remote Tool Access (e.g. 127.0.0.1).
- 6. Confirm with "Next".



Climatix IC and security

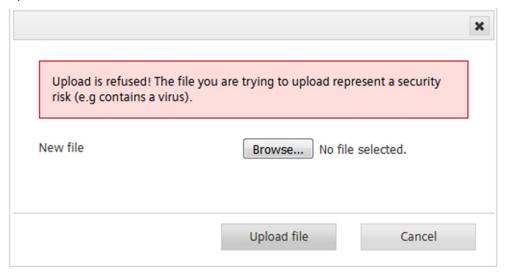
Climatix IC 11.1

The portal provides comprehensive security, e.g. data security, security data storage, and reliable data transportation.

- Certification complies with IEC/ISA-62443 Security Level 2.
- The security certificate is based on SHA-256 encryption between the controller and the cloud as well as between the cloud and the web client.
- All connections are encrypted (HTTPS) to prevent tapping into the line and man-in-the-middle attacks.
- Geo-redundant data storage within the EU (Netherlands, Ireland).

Virus scan

Uploaded files are scanned for viruses.



11.2 Gateway OCI670 and web server OZW672

The gateway or web server is not suitable for connecting directly to the Internet; it must be connected via a Firewall. This type of router typically has a firewall.

The firewall must be configured to permit only outgoing connections. Incoming connections must be suppressed.

12 Support on technical problems

Please adhere to the following sequence on support issues:

- 1. Contact the supplier of the device or plant.
- 2. If unknown, Siemens provides the following tools:
- Own information via the Download Center: http://www.siemens.com/dlc.
- Own information via the Service and Support Portal https://support.industry.siemens.com.
- Submit a support request: http://www.siemens.com/automation/support-request.

13 Appendix: Detail information

As a supplement to the main part, the appendix depicts information and workflows that may be more or less relevant to the application.

13.1 Alarms

13.1.1 Alarm classes

Alarms classes are used to limit the type of alarms sent to you via e-mail. The following alarm classes are currently available:

| Alarm classes | Type of alarms on | | | |
|-----------------|--|---------------------------------------|--|--|
| | OCI670, OZW672, internal | OCI670, OZW672, connected controllers | | |
| Documentation | e.g. C5712 | LPB controller manuals | | |
| Class 0 | Fault input (urgent) No bus power supply. | | | |
| Class 1 | Unused | | | |
| Class 2 | Fault input (not urgent) Faults gateway/web server | Unused | | |
| Class 3 | Unused | | | |
| Class 4 | Connection supervision | | | |
| Classes 5 to 15 | Unused (Climatix POLxxx only) | | | |

- All alarm classes are selected by default
- Selected alarm classes, that are not used by your gateway/web server, are simply ignored

This means the following for your application:

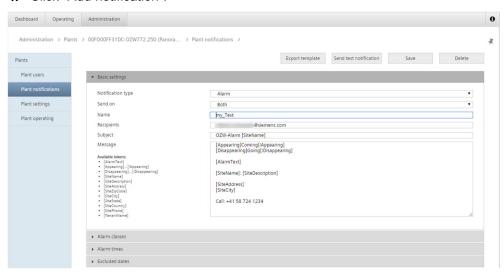
- Clearing alarm class 2 means that low-priority alarms are not sent via e-mail
- Clearing alarm class 4 means that no e-mail is sent when your plant goes offline

Conclusion

13.1.2 Create plant messages

Start

- 1. In primary navigation, select "Administration".
- 2. Click the name of the desired plant.
- 3. In secondary navigation, select "Plant notifications".
- 4. Click "Add notification".



Basic data

You configure the notification in "Basic data".

- Multiple recipients can be entered, with each e-mail address separated by a comma.
- "Send on" triggers a notification for incoming and/or outgoing alarms. A notification is sent for both cases for setting "Both".
- Click the message token directly to add it to the notification.
- The bracket tokens [Appearing]...[/Appearing] and
 [Disappearing]...[/Disappearing] are available based on "Send on". The
 notification includes the text as defined by you between the brackets. Only the
 applicable text is added to the notification for "Both".
- Tip: To add a subject line, e.g. the [SiteName], copy it from the actual message to the subject.

Alarm classes

 Restrict the alarms sent via e-mail in "Alarm classes" (see "Alarm classes [→ 38]").

Alarm times and excluded dates

- Under "Alarm times" and "Exception dates", define the times you want to receive (or not receive) notifications.
- For "Alarm times" and "Excluded dates", an active entry is only made after clicking "
 "; clicking deletes the entry.

Side note: Implement message routing using alarm times or excluded data

If an e-mail contact (service person) is responsible 24/7 for all alarm notifications, they will not limit alarm times nor exclude data.

On the other hand, if your organization does share alarm management to multiple e-mail contacts (service personnel), you can easily set up message routing:

- Create an alarm notification with the same wording for each service person.
- Define the times they are responsible in the applicable plant notification; the exact hour with alarm time or the exact day with excluded data.
- Make sure that there are no gaps in times.

13.1.3 Case studies: Alarm handling

- Comply with "Alarms $[\rightarrow 26]$ " when classifying the portal alarm function.
- For notification per mail on common alarms, please note "Plant notifications [**→** 29]".

The following describes how to handle an alarm, from occurrence in the plant overview, to detailed analysis on the plant device.

- You are logged on to the portal and have opened the plant overview.
- On one plant, an error is displayed with the red alarm symbol.
- 1. Click the red alarm symbol 👨



- ⇒ The plant's detail view is opened in the "Alarms" menu. Current, pending errors are listed with timestamp and error text under "Active alarms".
- 2. Write down or remember the timestamp.
- 3. Consult the "Alarm history" to estimate the times and frequency of faults.
- 4. In secondary navigation, go to "Web access".
- 5. Click the red alarm zone in the top right on the web interface.
 - ⇒ The most serious error is displayed on each device.
- 6. Compare the timestamp from the portal and the web interface (column "Fault info") to ensure that you are researching the same fault.
- 7. Click the red eye symbol on the far left of the error line.
 - ⇒ You go to the device causing the error.
- 8. Eliminate the error if possible over remote access.

Tips and tricks

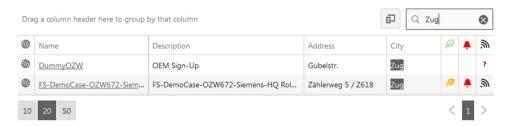
13.2 Tips and tricks

13.2.1 Search, sort, group

Search

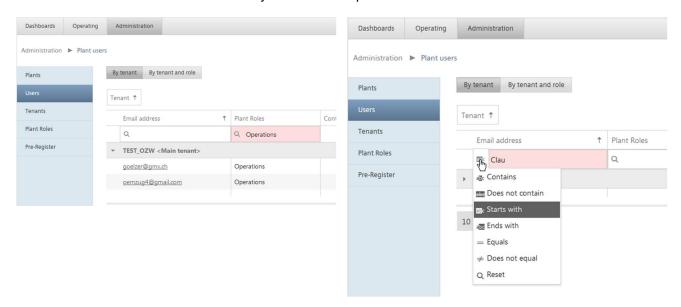
Plant and user lists can quickly become confusing. Use the search function to search displayed as well as hidden columns. Delete the search term from the search field to once again view the entire list.

Plants



User

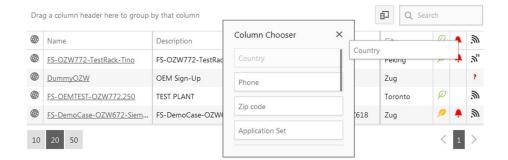
The search by user is now improved.



Column selection and sort

Optimize your overviews by showing and hidden columns as needed. Enable by selecting the column and drag-and-drop it from the table to the box and vice versa. These selections are saved to your user profile. Of course, lists can also be sorted. If the sort arrow is not displayed, simply click the corresponding header line.

Tips and tricks



Group

Create groups to get an even better overview. Follow the instructions via the Table: Drag a column in to group". Grouping cascades are also possible for up to 4 levels.

To reset grouping, drag the grouping criterion to the table it once again reverts to the column heading.

42 | 46

13.2.2 Change password and user name

Change password

Change your portal password periodically for security reasons.

- You are logged onto the portal.
- 1. On the navigation ribbon, click "User profile and log off".
- 2. In the drop-down list, select the "Account details".
 - ⇒ Displays your account profile.
- **3.** In the right lower corner, click "Change password". Compliance with new password rules is required where applicable.
- **4.** Enter the appropriate fields and confirm with "Change password".
- ⇒ Your password is now changed. You must enter the new password at the next log on.

Change user name

Proceed as per the description below if you need to change the user name (e-mail address).

Create new user name

- > You have plant owner or administrator rights.
- > You are logged on to the portal using the old user name.
- 1. In primary navigation, select "Administration".
- **2.** Click the plant name to change the user name.
- 3. In secondary navigation, select "User".
 - ⇒ All plant users are listed, even the old user name just used to log on.
- 4. Click "Add user".
- 5. Enter your new e-mail address (user name).
- 6. Under "User Roles" assign the new user name owner and administrative rights.
- 7. Confirm with "Save".
- 8. In secondary navigation, select "Alarm notifications".
- **9.** Under "Add alarm notification", re-create the ones that went to the old e-mail address for the new e-mail address.
- **10.** Then delete the alarm notifications that go to the old e-mail address.
- 11. Repeat the process for all plants connected using the old user name.
- The portal automatically sends your new user name to the e-mail address to log in.

Tips and tricks

Delete old user names

- > You have logged on to the portal using e-mail you received and the new user name.
- > The new user name has owner and administrator rights to the plant in question.
- 1. In primary navigation, select "Administration".
- 2. Click the plant name to cancel the old user name.
- 3. In secondary navigation, select "User".
 - ⇒ Lists all plant users, even the old user name to be cancelled by the plant.
- 4. Click old user's e-mail address.
- 5. Click "Delete".
- 6. Confirm with OK.
- 7. Repeat the process for all plants connected using the old user name.
- ⇒ The old user name is no longer assigned to a plant and is automatically deleted in the system.

13.3 Plant roles and privileges



NOTICE

- The following rights matrix is the example used consistently throughout this documentation.
- The rights matrix for your organization may vary since an administrator can change the rights.

| Permission*, ** | Description | Administrator | Service | End user | Owner | State viewer |
|--|---|---------------|---------|----------|---------------|--------------|
| Plant access level (list box) | Operate plant data points on level | Administrator | Service | End user | Administrator | NoAccess |
| · · · · · · · · · · · · · · · · · · · | | | | | | |
| Read/write data points/Cloud-Items | Access to data points is possible in principle | Yes | Yes | Yes | Yes | No |
| Plant upgrade/ Alarm notification setup | Set up plant notifications | Yes | No | No | Yes | No |
| Manage plant users | Add user to plants, etc. | Yes | No | No | Yes | No |
| Manage plant settings | Create additional plants, activate | Yes | No | No | Yes | No |
| Web access | "Operate > [my_plant] > Web access" | Yes | Yes | Yes | Yes | No |
| Remote Tool Access | Use Remote Tool Access | Yes | Yes | No | Yes | No |
| Cloud-API access | Use Cloud-API *** | No | No | No | No | No |
| Manage plant files | Create a file that can only be accessed through the plant | No | No | No | No | No |
| Plant file access | Use plant file | No | No | No | No | No |
| Set up notification report | Not yet available for OZW | | | | | |
| | Plant overview | Yes | Yes | Yes | Yes | Yes |

^{*} Privileges are available at "Administration > Plant roles > [Role] > Area: Privileges"

^{**} Privileges in italics refer to the POL controller on Climatix IC

^{***} There are other requirements: See Climatix IC20 data sheet

Issued by
Siemens Switzerland Ltd
Building Technologies Division
International Headquarters
Theilerstrasse 1a
CH-6300 Zug
+41 58 724 2424
www.siemens.com/buildingtechnologies

© Siemens Switzerland Ltd, 2015 Technical specifications and availability subject to change without notice.

emational Headquarters

Document ID: A6V11269223_en--_e

Edition: 2018-10-30