Synco IC
Cloud and remote access for OZW772 and OZW672, cloud access for WTV676
User Guide – Enduser / Installer
Imprint

Delivery and technical specifications subject to change
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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:

<table>
<thead>
<tr>
<th>![Notice Symbol]</th>
<th><strong>NOTICE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type and source of hazard</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Consequences in the event the hazard occurs</strong></td>
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<tr>
<td>• Measures/prohibitions to prevent the hazard</td>
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</tr>
</tbody>
</table>

**Qualified personnel**
Only qualified personnel may commission the device/system. For our purposes, 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 product (including copyright owners and license agreements) can be viewed on the following web server:

- Go to [https://www.siemens-syncoic.com](https://www.siemens-syncoic.com) in the footer on entry "OSS".
- Direct: [https://www.siemens-syncoic.com/Content/OSS_ClimatixIC.htm](https://www.siemens-syncoic.com/Content/OSS_ClimatixIC.htm)
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.
1 About this document

1.1 Revision history

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<th>Date</th>
<th>Changes</th>
<th>Section</th>
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<td>Sign in [➙ 17]</td>
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<td>Alarm classes [➙ 51]</td>
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<td>Notification classes [➙ 52]</td>
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<td>Supplemented plant roles</td>
<td>Overview of plant roles [➙ 53]</td>
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<td>OZW documentation is available as version V8.0</td>
<td>Reference documentation [➙ 9]</td>
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<td>2017-08-17</td>
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<td>General</td>
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<td></td>
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<td>Activation key and QR code [➙ 13]</td>
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<td>New: Assistance on the start page</td>
<td>Assistance on the start page [➙ 15]</td>
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<td>Remote Tool Access (OZW) [➙ 40]</td>
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<td>Date</td>
<td>Description</td>
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<td>-------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>c</td>
<td>2016-12-14</td>
<td>Alarm class definition</td>
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<td>b</td>
<td>2016-09-08</td>
<td>Update screenshots</td>
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<td>Add legal notes</td>
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<td></td>
<td>Add note on cyber security</td>
<td></td>
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<td></td>
<td></td>
<td>Add revision history, documentation, and reading notes</td>
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<td>Changed required browser, online status, and update required firmware version</td>
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<td>Supplemented notes on passwords</td>
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<td>Changed plant data, added connection supervision, and document sub-section Cloud</td>
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<td>Modified note &quot;The web server language follows the portal language&quot;</td>
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<td>Documented home screens &quot;Map&quot; and &quot;Overview&quot;</td>
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<td>Document link to plant settings</td>
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<td></td>
<td>Add &quot;Learn more&quot; on alarm classes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The importance of firewall for security</td>
<td></td>
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<td></td>
<td></td>
<td>Firmware information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Operating tips on user interface</td>
<td></td>
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<td></td>
<td></td>
<td>Background information on alarm classes</td>
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<td>a</td>
<td>2015-03-19</td>
<td>First draft</td>
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1.2 Reference documentation

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<th>Document ID</th>
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<th>Topic</th>
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<tr>
<td>N5701</td>
<td>Web server OZW772...V8.0</td>
<td>Web server data sheet</td>
</tr>
<tr>
<td>N5712</td>
<td>Web server OZW672...V8.0</td>
<td>Web server data sheet</td>
</tr>
<tr>
<td>C5701</td>
<td>Web server OZW772...V8.0</td>
<td>Web server commissioning</td>
</tr>
<tr>
<td>C5712</td>
<td>Web server OZW672...V8.0</td>
<td>Web server commissioning</td>
</tr>
<tr>
<td>A6V11157961</td>
<td>M-bus web server WTV676-HB6035</td>
<td>M-bus web server data sheet</td>
</tr>
<tr>
<td>A6V11157985</td>
<td>M-bus web server WTV676-HB6035</td>
<td>M-bus web server user's guide</td>
</tr>
</tbody>
</table>

1.3 Before you start

Document conventions

Text markups

Special text markups are displayed as follows in this document:

<table>
<thead>
<tr>
<th>Markup</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶</td>
<td>Prerequisite for an instruction</td>
</tr>
<tr>
<td>⇨</td>
<td>Interim result of an instruction</td>
</tr>
<tr>
<td>⇨</td>
<td>Final result of an instruction</td>
</tr>
<tr>
<td>Text</td>
<td>Hyperlink, reference</td>
</tr>
<tr>
<td>&quot;Text&quot;</td>
<td>Term with a standing meaning</td>
</tr>
<tr>
<td>&quot;Text&quot;</td>
<td>Quote, exact match</td>
</tr>
</tbody>
</table>

Supplemental information and tips

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

Definition of terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant</td>
<td>The same as web server</td>
</tr>
<tr>
<td>Firewalls</td>
<td>A firewall protects networks against unauthorized access from the outside. Firewalls are hardware and/or software measures designed to control data exchanges between the private network to be protected and the unsecured network (e.g. the Internet).</td>
</tr>
</tbody>
</table>
Trademarks

<table>
<thead>
<tr>
<th>Trademarks</th>
<th>Legal owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Google, Google Chrome</td>
<td>Google Inc.</td>
</tr>
<tr>
<td>Mozilla Firefox</td>
<td>Mozilla Corporation</td>
</tr>
<tr>
<td>ETS</td>
<td>The Engineering Tool Software (ETS) is licensed software sold by the KNX Association</td>
</tr>
<tr>
<td>ACS</td>
<td>ACS790 is a PC software program by Siemens Building Technologies to commission, operate, and monitor HVAC plants.</td>
</tr>
</tbody>
</table>

The listing above forgoes the labeling (e.g. using the symbols ® and ™) of third-party trademarks for the purposes of legibility based on this list.
2 Synco IC

With Synco IC, Siemens provides simple and secure access to the web server and with it to the HVAC plant.

Synco 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.siemens-syncoic.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.
- Alarm messages, invoicing and trend files can be sent by e-mail.
- New ways to manage plants and users via the portal.
- Secure communications thanks to encryption (HTTPS).
3 Requirements

3.1 Technical requirements

OZW firmware version

- The OZW772/OZW672 web server requires firmware V5.2 or higher.
- Firmware 7.0 is recommended and required to use the Remote Tool Access.
  Information on updating to firmware V7.0 is included in "Update firmware [➔ 46]".

Firmware version WTV676

The web server WTV676-HB6035 has firmware version WTV676_WI-2.23_FW-2.4-16-2.3.bin or higher.

NOTICE

Update firmware version

The firmware must be updated to firmware version WTV676_WI-2.23_FW-2.4-16-2.3.bin, if the web server WTV676-HB6035 is using an older version.

Additional information on the firmware version is available in the M-bus web server user's guide (Document A6V11157985), see "Reference documentation [➔ 9]". Information on updating to firmware version is included in Section "Update firmware [➔ 46]".

Network connection and online status

- OZW772/OZW672 or WTV676-HB6035 web server is installed and connected to the Internet. The mounting instructions are included in the packaging.
- The OZW or WTV676-HB6035 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 OZW772/OZW672 web server cannot connect to the portal via a proxy server.

Web browser

The browser must support HTML5.

- The latest versions (as of the date of publication for this document) of Google Chrome and Mozilla Firefox have been tested.
- Internet Explorer is no longer supported
3.2 Activation key and QR code

3.2.1 OZW

Activation key
The activation key can be accessed in various ways. The activation key is
- printed on the packaging. It can also be scanned using a QR code reader.
- attached under the terminal cover for the web server. It can also be scanned
  using a QR code reader.
- an entry under the "Device information" menu of the web server.

Find activation key on upgraded web servers
The web server also receives an "activation key" when upgrading to firmware
version V5.2 or higher. The key is required to use Synco 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.

3.2.2 WTV676

Activation key
You can view the activation key either on the web server browser or locally on the
display.
Additional information on the activation key is available in the M-bus web server
user’s guide (Document A6V11157985), see "Reference documentation [➙ 9]".
4 Entering Synco IC

Requirements for using Synco IC
The following initial steps are required to enter the portal:
- Sign up - Register a plant [→ 16]
- Sign in [→ 17]
- Manage plant data [→ 19]

Result
- You can access your plant via portal services.
- You can assign other persons (e-mail addresses) a user role on your plant.
4.1 Assistance on the start page

Accessible documentation
- "Support" on the start page provides an introduction.
- A comprehensive help is located in the same place, after login.

Information on unsupported browsers
A clear information window indicates that Synco IC was opened by an unsupported browser.

Central maintenance information from the IC Operations Team
Maintenance and important product 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.

Language Selection
- Set the language in the portal navigation ribbon to the right.
4.2 Sign up - Register a plant

<table>
<thead>
<tr>
<th>NOTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OZW registration</strong></td>
</tr>
<tr>
<td>The OZW web server must be connected to Synco IC to register. The operating LED on the OZW web server flashes as soon as it is connected to Synco IC. Detailed information on commissioning the OZW web server is available in the OZW web server commissioning guides (Documents C5701 and C5712), see Section &quot;Reference documentation [➙ 9]&quot;.</td>
</tr>
</tbody>
</table>

**Initial registration**

You must set up a user account to work with Synco IC. The activation key for a OZW772, OZW672, or WTV676-HB6035 web server is always required as the first step.

- Go to the following URL to start Synco IC:
  - https://www.siemens-syncoic.com
    (for Synco controllers and Sigmagyr controllers RVL4.., RVP3.., RVD2..)

1. Click "Register" to create a user account the first time you go to the portal.
2. Enter a personal e-mail address to use as your contact with the portal.
3. Enter the activation key for your OZW772, OZW672, or WTV676-HB6035 web server.
4. Accept the general terms and conditions.
5. Confirm entries with "Sign up".
6. **NOTICE! You do not receive an e-mail if you are already registered on the portal.**
   You receive a feedback that the account was created and that the password was sent to the e-mail address.
7. Complete the registration by selecting "Sign in".

**Add plants**

You can add web servers (OZW or WTV676) in Synco IC after initial registration on the cloud. You must register plants to add them. Click the link "Register" and activate the plant using a valid activation key.

Activation of additional plants is also possible via the menu "Administration" > "Plants" (OZW only). You must sign in before activating plants. Detailed information on activation additional plants for OZW is available in Section "Set up end user access to the portal service [➙ 32]".

You must use the link "Register" on the start page for initial registration and activation of plants.
4.3 Sign in

**NOTICE**

Ensure you are in the desired tenant area after signing in.
Additional information on switching tenants is available in Section "Switch tenant [➙ 23]".

**Change password at first 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 Synco 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**

Synco 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 Synco 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]
4.4 Manage plant data

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 "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 name as used.
- 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.
- The IMSI 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.

**Activate an alarm notification for a connection failure in excess of the set value:**

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 the basic data, the e-mail recipient is important, in addition to the text.
5. Under Alarm classes, select "Alarm class 4" (Connection Supervision) only.
4.5 Delete plant and own profile

Only plants for OZW can be deleted in Synco IC.
Plants for WTV676 cannot be deleted via Synco IC, but rather only direct on the M-bus web server.
Additional information on deleting plants for WTV676 is available in the M-bus web server user's guide (Document A6V11157985), see "Reference documentation [➙ 9]".

As the user, only delete plants as an exception.
For example, only if web server is defective and out of service.

Correctly disconnect to the plant
In the event that multiple users are entitled to delete the plant and one user wants to disconnect from the plant, the proper procedure is as follows: The second user disconnects the first user from the plant by deleting the user.

Delete a plant (OZW only)
Proceed as follows to delete a plant:
1. In the primary navigation, go to "Administration".
2. In the plant overview, click the name of the plant for delete.
3. In secondary navigation, go to "Plant Settings".
4. Click "Delete".
5. Observe all the cautions!
6. Click "Yes" to confirm.
Delete own profile to end portal use
Proceed as follows to delete your profile:

1. On the navigation ribbon, click "Account details and log out". Additional information on the navigation ribbon is available in Section "Webpage setup [➙ 22]".
2. In the drop-down list, select the "Account details".
3. Click the "Delete my profile" button.
4. Observe all the cautions!
5. Click "Yes" to confirm.

### NOTICE

Plants require at least one user.
The plant is also deleted, or no longer accessible, if the only user for a plant deletes the profile.
5 Portal page design and basic data

5.1 Webpage setup

1. Portal navigation ribbon
2. Switch tenant
3. Change language
4. Account details and log off
5. Primary navigation
6. Add to dashboard
7. Secondary navigation
8. Desktop
9. Menu path (enabled)
10. Refresh view
11. Workpane in own web page tab
5.2 **Switch tenant**

A tenant is a closed area in the portal. A cloud-based application can be individualized per tenant and completed to the outside world.

You must be assigned more than one area to switch a tenant.

The following tenants are available on the portal:

<table>
<thead>
<tr>
<th>Tenant</th>
<th>Web server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siemens Metering</td>
<td>M-bus web server WTV676</td>
</tr>
<tr>
<td>Siemens Proxy</td>
<td>Web server OZW772 or OZW672</td>
</tr>
</tbody>
</table>

Perform the following steps to switch the tenant:

- Click the "Select tenant" button.
- Opens up a drop-down list of the possible tenants.
- Select the desired tenant.

5.3 **Change language**

The portal is available in various languages. The settings affect the web server display language (see note below).

1. Click "Select language" button.
   
   - A drop-down list opens with available portal languages.

2. Select the desired language.

---

**NOTICE**

The web server language follows the portal language

Enter your language in the portal before accessing the web server with web access. Web server immediately takes over the selected language.
5.4 Account details and log off

Account details

The entries permit contact as needed by the portal administrator:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact name</td>
<td>Designates the user in the event of contact.</td>
</tr>
<tr>
<td>Owner name</td>
<td>Recommended: Enter own name.</td>
</tr>
<tr>
<td>Address</td>
<td>Recommended: Enter own address.</td>
</tr>
<tr>
<td>Phone</td>
<td>Telephone number for contact purposes.</td>
</tr>
</tbody>
</table>

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.
6 Home screens "Map" and "Overview"

"Map" displays the essentials

- "Map" displays the geographic location of your plant together with 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.
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.

**Default tiles**

The following menus are displayed by default (but classified by privilege):
- Operation, application sets, administration and 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.
6.1 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 star symbol of any menu with a favorite star symbol [ ] to add it to the dashboard.

6.2 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.
7 Plant operation

7.1 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.

Operational tips on how to adapt comprehensive lists for a better overview can be found in: "Search, sort, group [➙ 49]"
### Active and info symbols in the workpane

<table>
<thead>
<tr>
<th>Symbol / element</th>
<th>Meaning/function</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Globe symbol" /></td>
<td>&quot;Globe&quot; symbol. Direct link to web access for the corresponding plant.</td>
</tr>
<tr>
<td><img src="image" alt="Alarm symbol" /></td>
<td>Alarm symbol. Direct link to &quot;alarms&quot; for the corresponding plant. Corresponds to the LED indicator on the web server and the plant state of the web user interface. Content: There is or was (for offline plants) an error on the plant.</td>
</tr>
<tr>
<td><img src="image" alt="Green leaf symbol" /></td>
<td>Green leaf symbol. Corresponds to the LED indicator on the web server and the plant state of the web user interface. Content: All &quot;Energy indicator&quot; data points are within their &quot;Green limits&quot;, i.e. in the green.</td>
</tr>
<tr>
<td><img src="image" alt="Orange leaf symbol" /></td>
<td>Orange leaf symbol. Corresponds to the LED indicator on the web server and the plant state of the web user interface. Content: One or multiple &quot;Energy indicator&quot; data points are outside their &quot;Green limits&quot;.</td>
</tr>
<tr>
<td><img src="image" alt="On/offline symbol" /></td>
<td>On/offline symbol. Symbol available: The plant is online, i.e. it is connected to the portal via Internet. Symbol unavailable: The plant is offline. The portal monitors online status at adjustable intervals (every 5 minutes by default). The connection supervisor can trigger a corresponding plant message.</td>
</tr>
</tbody>
</table>
7.2 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.

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.

Web access

The "Web access" menu provides operator access to the plant that corresponds one-to-one to the 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 document (by web server):

- OZW772: Commissioning guide Web server OZW772, CE1C5701en
- OZW672: Commissioning guide Web server OZW672, CE1C5712en
- WTV676-HB6035: No remote access to the plant via the web user interface

Documentation

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

Plant settings

The Settings menu is a link here to "Administration > Plants > 'my plant' > Plant settings".
8 Set up remote access to plant (OZW only)

Activating plants via menu "Administration" > "Plants" is only possible for OZW. You must active plants for WTV676 as well as initial registration via the link "Register" on the start page. Additional information on registration is available in Section "Sign up - Register a plant [➙ 16]".

Select the use case and set it up
- Permit remote access for the installer [➙ 31].
- Set up end user access to the portal service [➙ 32].

8.1 Permit remote access for the installer

▷ You are an end user and want to grant remote access to your plant to the installer.
▷ You are registered and logged on to the portal (Entering Synco IC [➙ 14]).
▷ You have the plant role owner or administrator.

1. In the primary navigation, go to "Administration".
   - The plant overview list is displayed.
2. Click the name of your plant to select it.
3. Click "Add user".
4. Enter the installer's e-mail address.
5. Also add the plant role for the installer.

**NOTICE**

<table>
<thead>
<tr>
<th>Plant roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The role with the highest rights applies in the event of a multiple selection.</td>
</tr>
<tr>
<td>- Take note of the descriptions next to the selection checkbox and the role overview under &quot;Overview of plant roles [➙ 53]&quot;.</td>
</tr>
</tbody>
</table>

Result
- The installer receives an e-mail that is used to log on to the portal and select your plant.
8.2 Set up end user access to the portal service

- You are an installer and want to set up end user access to the portal service.

**Plant activation (OZW only)**

- You are registered and logged on to the portal (Entering Synco IC [→ 14]).
- You have the plant role owner or administrator on at least one other plant. The menu "Administration" is available to you in the portal.
- You have the activation key of the web server. The web server is not yet activated.

1. In primary navigation, select "Administration".
2. Click "Activate Plant".

![Image of the portal administration interface]

3. Enter the "New Activation Key" and "Name" (required fields).
4. Fill in the remaining entry fields with meaningful information.
5. Under "Time zone" enter the time zone of the plant if located in a different time zone as the operating environment.
6. The setting "On" activates "Connection Supervision". You are then informed by e-mail if the plant is offline.
7. Close the process with "Activate".
Set up end user portal services

1. In primary navigation, select "Administration".
2. Click the name of the just activated plant to select it.
3. Click "Add user".
4. Enter the end user’s e-mail address.
5. Also add the plant role for the end user.

6. Close the process with "Save".

Result
- The end user receives an e-mail that is used to log on to the portal and select your plant.

---

**NOTICE**

Plant roles
- The role with the highest rights applies in the event of a multiple selection.
- Take note of the descriptions next to the selection checkbox and the role overview under "Overview of plant roles [➙ 53]".
9 Plant management

9.1 Add/remove plant user

You add a plant user and assign a plant role for this plant.

You must have the plant role "Administrator" or "Owner" to add a user. Detailed information on plant roles is available in Section "Overview of plant roles [➙ 53]".

1. In primary navigation, select "Administration".
2. Click the name of the desired plant.
3. Click "Add user".
4. Enter the e-mail address and plant role.
5. Save the information for the new user.

To remove a plant user, select the user and click "Remove".

9.2 Set up plant notifications

Set up a plant notification as end user or installer for your own or a customer plant. The notification types "Alarm" and "Report" are available as a rule.

You receive an alarm notification in the event of a plant fault.

You receive reports on invoicing, if you have created a corresponding alarm notification with type "Report".

You receive reports on trends (trend files), if you have selected "Trend file" on the M-bus web server and set a timeframe in the future for evaluating the meter data. A trend file is sent to the Synco IC cloud as soon as the web server creates a trend over this timeframe.

Additional information on trend file settings is available in the M-bus web server user's guide (Document A6V11157985), see "Reference documentation [➙ 9]".

Trend tiles are sent only one time to the cloud. The selection "Trend file" must be selected each time to send additional trend files and a timeframe in the future set for evaluating meter data on the web server.

For information on basic data for plant notifications (alarms and reports), see Section "Basic data [➙ 35]".
Information on alarm messages in available in Section "Alarm-specific settings [➙ 36]".
Information on the reports (billing and trend files), is available in Section "Report-specific settings [➙ 37]".

The function "Set up plant notifications" is based on the plant role.

In the tenant area "Siemens Metering", you can set up a plant notification with all roles with the exception of "Owner".
In the tenant area "Siemens Proxy", you can set up a plant notification with all roles.
Additional information on switching the tenant area is available in Section "Switch tenant [➙ 23]".

9.2.1 Basic data
First, complete the basic data and then enter the alarm and report-specific data. Additional information is available in the Sections "Alarm-specific settings" or "Report-specific settings".

1. In primary navigation, select "Administration".
2. Click the name of the desired plant.
3. In secondary navigation, select "Plant notifications".
4. Click "Add plant notification".
5. In the entry mask, configure the notification in the section "Basic settings"
6. Select the notification type "Alarm" or "Report".
7. Enter the name of the alarm notification.
8. Enter the recipient. Multiple recipients can be entered, with each e-mail address separated by a comma.

9. Click available tokens (wildcards) directly to add it to the notification.
Detailed information on tokens is available in Section "Token [➙ 52]".

"Send test notification"
Click "Send test notification" to quickly test functionality without waiting for an actual error.
Option "Create from template"
You can create an alarm notification using an existing template.
1. Click the "Create from template" button and select the appropriate template file.
2. Click "Save" to import the template.
3. Check the detailed settings after import.
Detailed information on tokens is available in Section "Token [➙ 52]".

Option "Export template"
1. Click an existing template to reuse a notification.
2. Click "Export template". The templates can be accepted independent of the plant.

In addition to the basic data, complete the alarm and report-specific settings described below.

9.2.2 Alarm-specific settings

Alarm classes
In the entry mask, restrict the alarms sent by e-mail in "Alarm classes" (see Alarm classes [➙ 51]).

Alarm times
In "Alarm times" define the times when you want to receive notifications.

Excluded dates
In "Excluded dates" define the times when you do not want to receive notifications.

**NOTICE**
For "Alarm times" and "Excluded dates", an active entry is only made after clicking "✚"; clicking "➖" deletes the entry.
Click "Save" to save the plant notifications.
9.2.3 Report-specific settings

Notification classes
In the entry mask, restrict the reports sent by e-mail in "Notification classes" (see Notification classes [➡ 52]).
Click "Save" to save the plant notifications.

9.3 Plant settings
Enter the plant-related settings. The information improves search and sort. For more information, refer to section "Search, sort, group [➡ 49]."

1. In primary navigation, select "Administration".
2. Click the name of the desired plant.
3. In secondary navigation, select "Plant settings".

In section "Basic data", you enter the plant-related data, such as name, address, and coordinates.

Use "Get coordinates" to find your plant's longitude/latitude. Your plant cannot be displayed on the "Map" if this information is unavailable.

In the example below, the plant location is marked by the green dot on the card.
9.4 **Plant operation**

1. In primary navigation, select "Administration".
2. Click the name of the desired plant.
3. In secondary navigation, select "Plant operation".

Click "Documentation" to display the most current notifications and reports. Click the diskette symbol to download a copy of the document.

Detailed information on notifications and reports and the associated tokens is available in Section "Token [➙ 52]".

Click "Plant settings" to go to the plant-related settings. For more information, refer to section "Plant settings [➙ 37]".
10 Example: Reacting to an alarm

- For your classification of the portal's alarm functions, see "Plant detail view [➙ 30]", section "Alarms".
- For notification per mail on common alarms, please note "Set up plant notifications [➙ 34]".

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.
11 Remote Tool Access (OZW)

**Purpose**
With Remote Tool Access, Siemens provides users, with “Service Level” (or higher) access rights, simple and secure access to the OZW web server. The plant can be serviced at any time, from anywhere.

**Functionality**
Remote Tool Access establishes a secure tunnel connection to the web server via Synco IC. The connection is used for tool access:
- By ACS
- By ETS

**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
Requirements

- Web server as of version 7.0
- The user has an account on Synco IC
- Access level is "Service Level" or higher

Program

Remote Tool Access is an independent program. Remote Tool Access is distributed as part of the ACS CD or 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

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 Synco 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,
  - if the access level is for end users only
  - 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 Synco IC using this address.
   - It can be used with ACS or ETS as soon as it is connected.

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".

ETS

Connect as follows with ETS:
1. Select "New Connection" in ETS.
2. Select connection type "KNXnet/IP".
3. Enter local IP address as per Remote Tool Access (e.g. 127.0.0.1).
4. Confirm with OK.
12 Synco IC and security

12.1 Synco IC

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

- All connections are encrypted (HTTPS) to prevent tapping into the line and man-in-the-middle attacks.
- Data security as per EU Data Privacy Chapter 5
- Geo-redundant data storage from northern Europe (primary) to western Europe (secondary).

12.2 OZW and WTV676 web server

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.
13 Support on technical issues

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://siemens.com/bl/download](http://siemens.com/bl/download).
   - Own information via the Service and Support Portal [https://support.industry.siemens.com](https://support.industry.siemens.com).
14 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.

14.1 Update firmware

14.1.1 OZW

Please note the following when upgrading to V7.0:

- The firmware state of your web server is available in the "Device information" menu
- The following was essentially improved in V7.0:
  - Access to Remote Tool Access
- Firmware V7.0 and the corresponding tool is available at any time at:
  - OZW772: https://support.industry.siemens.com/cs/ww/de/view/62564534
  - OZW672: https://support.industry.siemens.com/cs/ww/de/view/62567396

14.1.2 WTV676

The firmware can be updated online or offline. The appropriate firmware can be installed directly from the Internet on the Web Server (online) or via PC (offline). Web Server restarts after updating.

The progress of installation as well as restart is displayed.

Additional information on firmware version is available in the M-bus web server user's guide (Document A6V11157985), see "Reference documentation [➙ 9]".
14.2 Change password and user name

Change password
Change your portal password periodically for security reasons.

1. You are logged onto the portal.
2. On the navigation ribbon, click "User profile and log off".
3. In the drop-down list, select the "Account details".
   - Displays your account profile.
4. In the right lower corner, click "Change password".
5. 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).

- 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 "Plant 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 "Plant Roles" assign the new user name owner and administrative rights.
7. Confirm with "Save".
8. In secondary navigation, select "Plant notifications".
9. Under "Add alarm notification", re-create the alarms that went to the old e-mail address for the new e-mail address.
10. Then delete the plant 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 for log on.
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 "Plant user".
   ➔ Lists all plant users, even the old user name to be cancelled by the plant.
4. Click the e-mail address for the old user name.
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.
14.3 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.

Column selection and sort
Optimize your overviews by showing and hiding 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.

Group
Create groups to get an even better overview. Drag a column header to the white space above the table 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.
14.4 Administration for end user/installer

Plant and user administration is described in the main section of the documentation:

- Plant activation, see Sign up - Register a plant [➙ 16].
- Add user to plant, see "Set up remote access to plant (OZW only) [➙ 31]".
- Add plant notifications for a plant, see "Set up plant notifications [➙ 34]".
- Modify plant settings, see "Manage plant data [➙ 19]".
- Delete plants, see "Delete plant and own profile [➙ 20]".
14.5 Alarm classes

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

14.5.1 OZW

<table>
<thead>
<tr>
<th>Alarm classes</th>
<th>Type of alarms on…</th>
<th>OZW672, internal</th>
<th>OZW672, connected controllers</th>
<th>OZW772, internal and connected controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>C5712</td>
<td>LPB controller manuals</td>
<td>Synco controller manuals</td>
<td></td>
</tr>
</tbody>
</table>

Class 0
- Fault input (urgent)
- No bus power supply

Class 1
Unused

Class 2
- Fault input (not urgent)
- Faults web server

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 web server, are simply ignored

Conclusion
This means the following for your application:
- Clearing alarm class 2 means that low-priority alarms are not sent by e-mail
- Clearing alarm class 4 means that no e-mail is sent when your plant goes offline

14.5.2 WTV676

<table>
<thead>
<tr>
<th>Alarm classes</th>
<th>Alarm type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes 0 to 3</td>
<td>Unused</td>
</tr>
<tr>
<td>Class 4</td>
<td>Connection supervision</td>
</tr>
<tr>
<td>Class 5</td>
<td>Alarm supervision</td>
</tr>
<tr>
<td>Classes 6 to 15</td>
<td>Unused (Climatix POLxxx only)</td>
</tr>
</tbody>
</table>

- All alarm classes are selected by default.
- Selected alarm classes that are not used by your web server are ignored.
14.6 Notification classes

Use notification classes to limit the type of alarms sent to you by e-mail. The following notification classes are currently available for M-bus web server WTV676:

<table>
<thead>
<tr>
<th>Notification classes</th>
<th>Notification type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes 0 and 1</td>
<td>Unused</td>
</tr>
<tr>
<td>Class 2</td>
<td>Information for billing</td>
</tr>
<tr>
<td>Class 3</td>
<td>Evaluation of the meter data (trend)</td>
</tr>
<tr>
<td>Classes 4 to 15</td>
<td>Unused (Climatix POLxxx only)</td>
</tr>
</tbody>
</table>

- All notification classes are selected by default.
- Selected notification classes that are not used by your web server are ignored.

14.7 Token

Various tokens are available (wildcards) to create plant notifications; you can integrate them into your notification.
For example, [SiteName], [SiteAddress], [SitePhone] belong to the plant-specific token.

If [PlantReport1] is selected, an alarm file is appended as a zip file to the plant notification.
If [PlantReport2] is selected, a billing file is appended as a zip file to the plant notification.
If [PlantReport3] is selected, a trend file is appended as a zip file to the plant notification.

<table>
<thead>
<tr>
<th>Notification classes</th>
<th>Notification type</th>
<th>File/service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm from M-bus web server WTV676</td>
<td>[PlantReport1]</td>
<td>Alarm file</td>
</tr>
</tbody>
</table>

Detailed information on plant notifications is available in Section "Set up plant notifications [➙ 34]".

14.8 Query interval (Trends)

A trend file includes an evaluation of meter data over a selected timeframe.
A query interval can be defined per device on the web server. This interval determines the time intervals at which the device is read.
The shortest query interval determines the interval between trend files if individual, connected devices have different query intervals. As a result, devices with longer query intervals are not read out at each query.
For example, a device with a query interval of seven days means that a value is only entered in the trend file every seven days.

Additional information on query interval is available in the M-bus web server user’s guide (Document A6V11157985), see "Reference documentation [➙ 9]".
14.9 Overview of plant roles

14.9.1 OZW

The following is an overview of plant role functionality:

<table>
<thead>
<tr>
<th>Role</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>Users can operate the plant with administrator access. Users can manage users.</td>
</tr>
<tr>
<td>End user</td>
<td>Users can operate the plant with end user access.</td>
</tr>
<tr>
<td>Owner</td>
<td>Users can operate the plant with administrator access. Users can manage user accounts and the plant.</td>
</tr>
<tr>
<td>Service</td>
<td>Users can operate the plant with service access.</td>
</tr>
<tr>
<td>State viewer</td>
<td>Users receive a plant overview.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Function</th>
<th>Administrator</th>
<th>Service</th>
<th>End user</th>
<th>Owner</th>
<th>State viewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operate plant data points at the end-user level</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Operate plant data points at the service level</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Operate plant at the admin level (e.g. device list)</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Create additional plants, activate</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Delete plants</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Create user</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Assign/unassign plant user</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Set up alarm notifications</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Web access</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Remote Tool Access</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Plant overview</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
The following is an overview of plant role functionality:

<table>
<thead>
<tr>
<th>Function</th>
<th>Administrator</th>
<th>Owner</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operate plant data points at the end-user level</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Operate plant at the admin level (e.g. device list)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Create additional plants, activate</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Delete plants</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Create user</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Assign/unassign plant user</td>
<td>X</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Set up plant notifications</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Web access</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Plant overview</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Access to plant files</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>