User Guide

Vaisala Observation Network Manager
NM10

VAISALA

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1. About this document

1.1 Version information

This manual contains instructions for operating the Vaisala Observation Network Manager NM10 web user interface.

Depending on your system details, the available specifications and options may differ from the ones described here. For details on your system, refer to the delivery and tender documentation, including system proposal. For installation and configuration instructions, see *Vaisala Observation Network Manager NM10 Installation and Configuration Guide*.

Table 1   Document versions (English)

Document Code	Date	Description
M213021EN-D	June 2024	Applicable for software version 4.8. Images updated with new brand colors.
M213021EN-C	March 2024	Applicable for software version 4.7.
M213021EN-B	January 2024	Applicable for software version 4.6.1. Single-site display modified.

1.2 Related manuals

Some of these documents can be found in our product documentation portal at docs.vaisala.com.

Table 2   Related manuals

Document code	Name
M212997EN	*Vaisala Observation Network Manager NM10 Installation and Configuration Guide*
-	*Vaisala Observation Network Manager NM10 online help*
M211938EN	*Vaisala Automatic Weather Station AWS310 System Description*
M211939EN	*Vaisala Automatic Weather Station AWS310 Configuration and Maintenance Manual*
M211948EN	*Vaisala Automatic Weather Station AWS310 Installation Manual*
M212925EN	*IRIS and RDA Utilities Guide*

1.3 Documentation conventions

⚠️	**WARNING! Warning** alerts you to a serious hazard. If you do not read and follow instructions carefully at this point, there is a risk of injury or even death.

⚠️	**CAUTION! Caution** warns you of a potential hazard. If you do not read and follow instructions carefully at this point, the product could be damaged or important data could be lost.

ℹ️	Highlights important information on using the product.

💡	Gives information for using the product more efficiently.

🛠️	Lists tools needed to perform the task.

📝	Indicates that you need to take some notes during the task.

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2. Product overview

2.1 Product overview

NM10 is a stand-alone system installed in customer premises and configured individually for each customer, either by Vaisala or the customer.

The number and types of the components depend on the installation and purchased licenses.

FRONTEND
- User authentication
- User configurable desktop
- System settings
- Alerts, event monitoring
- Data availability, validity, and observation reports
- Remote access tools

BACKEND
- Data collection/ post collection
- Data quality control
- File service with housekeeping
- Notification service
- Time synchronization
- SFTP data export

DATABASE
- Events, observations, and message reports storage
- Automatic database housekeeping

MAP
- Observations and network status on map

DEVICE MANAGEMENT SERVER
- Metadata information
- Software updates

Upper-air sounding

Lightning

Surface and road weather, air quality

Airport weather

Weather radar

External systems

Client computers

EMAIL NOTIFICATIONS

Figure 1   Vaisala Observation Network Manager main components

3. NM10 web user interface basics

> ℹ️ For single-site display basics, see Single-site display for surface weather (page 23).

After installation, NM10 web user interface is displayed with a set of default pages and settings, which depend on the installation setup type and the purchased licenses.
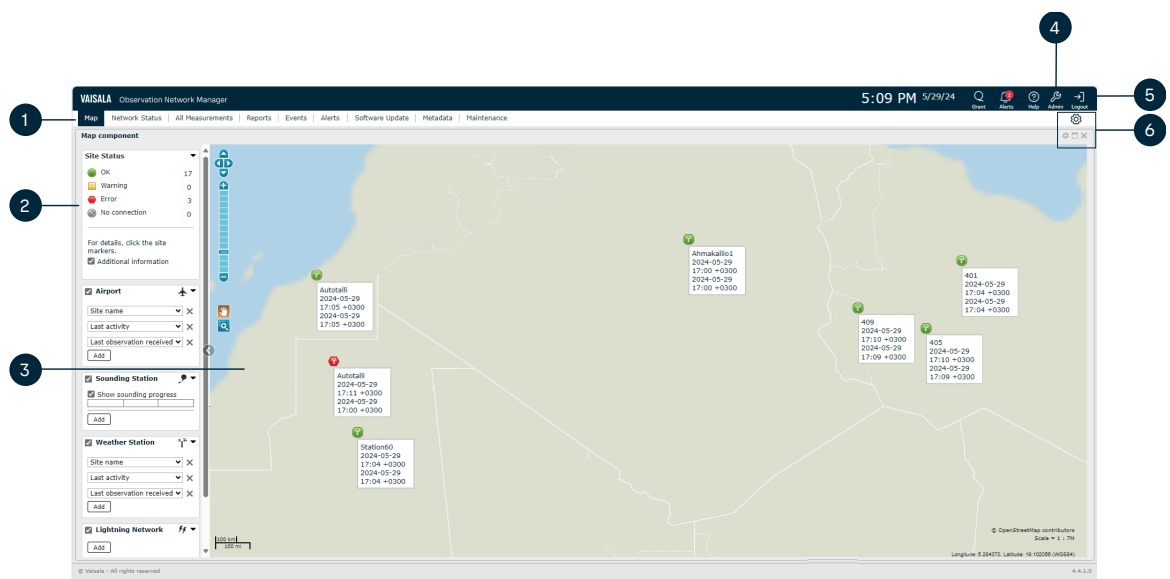
Figure 2   NM10 web user interface (example)

1   Tabs for accessing the pages
2   Side panel for showing site status and selecting the displayed data, and the related legends
3   Main page area, for example, map
4   Access to administrator pages, for example, for adding the weather station sites
5   Application header, for example, for selecting site group or organization, accessing help pages and logging in and out
6   Icons for adding and editing pages and components

> ℹ️ The content and options are different depending on the available software feature licenses.

3.1 Browser requirements

This software works best with the latest versions of Microsoft Edge and Google Chrome.

3.2 Logging in

Basic access authentication to NM10 is provided using HTTPS. Access to the system is restricted by user name and password. Typically, the users are created in NM10. In some systems Windows Active Directory is used for authenticating, in which case the users and passwords are created during system configuration and cannot be managed in NM10.

To start monitoring the configured network, open the NM10 web user interface (Web UI).

▶ 1. Open a web browser and go to the following address:

   Remote connection:
   `https://<web_server_name>/nm10/login`
   where `<web_server_name>` = the IP address, or the name of the web server.

   Local connection:
   `https://localhost/nm10/login`
   Or click the NM10 icon on the desktop:

2. In the login page, enter your user name and password.

   - If you do not have a user name or do not remember your password, contact an administrator-level user.
   - When logging in the first time, you are redirected to a page where you must change the password. Change the password and log in with the new password.

   When you successfully log in for the first time, the common page to all users is displayed. If you have logged in before, the page that you last viewed before logging out is displayed.

> ℹ️ A maximum number of simultaneous users may have been defined. If the maximum number is exceeded, you may not be able to log in until another user logs out.

3.2.1 Logging out and changing user

To log out, select **Logout** in the application header. The changes you have made are saved and they will be available the next time you log in (this is not available for guest users).

The login page is displayed and you can log in with another user name.

Root-level administrators can also log out other users.

3.2.2 Viewing pages as guest user

The system typically enables viewing the pages without logging in:

▶   1. Enter the address in the following format:

   https://<web_server_name>/nm10/

2. You can now view the pages with limited access to the software features.

> 💡 If you accidentally access the software using this address, you can still log in with your user name by clicking the **Login** button in the application header.

3.3 Application header

Application header is located at the top of the application. It contains the application name and the options available for your user type and the activated licenses.

Figure 3   Application header example

> ℹ️ The content and options are different depending on the available software feature licenses.

Table 3   Application header elements

Icon	Element	Description
-	Site group or organization name and selection list	When available, shows the organization name and a list of the available site groups or organizations that you can select to display.
-	Time and date	Time and date are displayed at the top of the screen, in the time zone defined in the user profile. The time zone used is indicated with the +/- UTC marking.
	Inactive balloon release indicator	Indicates that no AUTOSONDE sites are waiting for the permission to release a balloon.
	Active balloon release indicator	Indicates the number of AUTOSONDE sites that are waiting for the permission to release a balloon. Users with **AUTOSONDE operator** role can give the permission by clicking the **Grant** button.
	Indicator for alarm/error-level alerts	Indicates that there are new active alarm/error severity alerts. To see the alerts, click the icon and the **Alerts** view is displayed.

Icon	Element	Description
🔔 3	Indicator for warning-level alerts	Indicates that there are new active warning severity alerts. To see the alerts, click the icon and the **Alerts** view is displayed.
🔔 3	Indicator for info-level alerts	Indicates that there are new active info severity alerts. To see the alerts, click the icon and the **Alerts** view is displayed.
🔔 3	Indicator for debug-level alerts	Indicates that there are new active debug severity alerts. To see the alerts, click the icon and the **Alerts** view is displayed.
🔔 2	Indicator for active alerts	Indicates that there are active alerts but the user has already clicked the icon and seen the alerts in the **Alerts** view.
🔔	Indicator for inactive alerts	Indicates that there are no active alerts in the **Alerts** view.
?	**Help**	Opens the online help start page. ℹ️ For the administrator-level users there are also help icons in the administrator view at the top corner of each page. When you click these icons, the online help page that is the most relevant to the specific page opens.
🔧	**Admin**	Opens the administrator view.
↩	**Exit Admin**	Exits the administrator view and opens the desktop view.
→]	**Logout**	Logs you out of NM10.
→]	**Login**	Opens the page for logging in. When viewing the pages as a guest user, click the **Login** button to log in with a user name.

3.3.1 Changing site group or organization

If configured in your system, you can change which site group or organization is displayed. Root-level administrators have created the organizations and the view contexts that define which selections are available for you. The view contexts can contain for example site groups based on geographical or administrative areas.

▶ 1. If you belong to several organizations, you can select the organization in the application header.

The desktop and the visible sites might change depending on the configuration.

2. If the organization contains several view contexts, you can select the view context in the application header. The view context list can contain for example site groups based on geographical or administrative areas.

   The visible sites typically change, depending on the configuration.

   > **i** If the lists are not shown, or do not contain the content you expect, make sure that you are logged in with the correct username.

   > **i** The selection affects all views. For example, alerts and events will be shown only for the sites that are part of the selected organization or group.

3.3.2 Sounding notifications

In sounding systems, notification messages may be displayed on top of the application header and other page content.

If configured, an audio message consisting of a beep sound and a prerecorded spoken message is played.

3.3.3 Granting permission for AUTOSONDE balloon release

When there are AUTOSONDE sites waiting for the permission to release a balloon:
- the balloon release icon is activated in the application header
- the radiosonde launch permission window is displayed.

1. In the launch permission window, click the **Grant** button for the site you want to grant the permission. The permission is forwarded to the AUTOSONDE site and the balloon will be released.

   > **i** Users with AUTOSONDE operator rights can grant the permission.

2. Repeat for other AUTOSONDE sites, if needed.

3.4 Application toolbar (Desktop view)
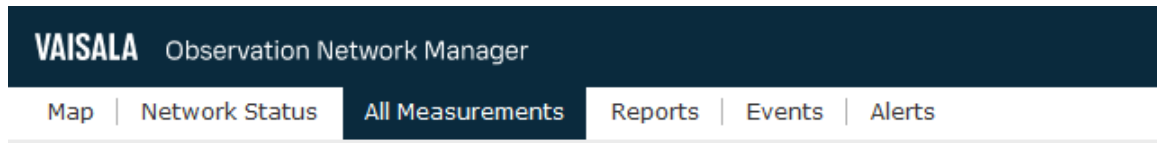
Figure 4   Application toolbar example (Desktop)

> ℹ️ Depending on your system configuration and activated licenses, the view names and content may differ from the ones described here.

> ℹ️ In translated documentation the English names are used for the main views. These view names also remain in English in the localized software until configured by Vaisala or customer during system delivery.

3.5 User roles and types

There are 5 user roles: **user**, **administrator**, **AUTOSONDE operator**, **IO terminal operator**, and **guest**.

There are 2 types of **administrator** users:
- Root-level administrator: Administrator of the root organization, with the widest set of user rights.
- Organization-level administrator: Administrator at organization-level, with a more limited set of rights inside their organization.

One user can have several roles, for example, **administrator** and **AUTOSONDE operator**.

Depending on your user role and type, different features are available in the software. The following table lists possible user rights for each user role and type.

> ℹ️ The features are available depending on the activated software feature licenses.

Table 4   User roles and types

User role and type	Description
user	Users can, for example: • Access the available pages and select the displayed parameters. • Add maintenance tasks. • Create reports and delete their own reports. • Change their own password. • Edit their own personal information (user profile).
AUTOSONDE operator	AUTOSONDE operators can: • Grant a permission for balloon launch in AUTOSONDE stations. • Access the available pages and select the displayed parameters. • Change their own password. • Edit their own personal information (user profile).
IO terminal operator	IO terminal operators can use the terminal connection to monitor the messages from weather stations and send commands to the stations. Administrators have this role by default.
administrator, at root level	Root-level administrator can configure the system, for example • Add and edit organizations and users. • Change the passwords for all users. • Modify the user interface (pages and page components) for all users. • Add and edit weather stations and other observation sites, and manage the related settings. • Manage system settings. • Restart the data management unit of the sites that use the LwM2M device management (for example, RWS200 and AWS810). • Update data management unit software of the sites that use the LwM2M device management (for example, RWS200 and AWS810).
administrator, at organization level	Organization-level administrators can, for example: • Modify the user interface (pages and page components) in their organization. • Add and edit users in their organization. • Change the passwords for the users in their organization. • Restart the data management unit of the sites that use the LwM2M device management (for example, RWS200 and AWS810). • Update data management unit software of the sites that use the LwM2M device management (for example, RWS200 and AWS810).
guest	Guest users can: • Access the available pages and select the displayed parameters. The guest role enables viewing the pages without logging in. See Viewing pages as guest user (page 14). ⚠ **CAUTION!** The pre-configured guest user with the guest role must not be deleted, unless specifically instructed by Vaisala. The guest role should not be assigned to other users.

3.6 Web user interface components

Depending on the configuration, the web user interface can consist of the following views and components:

- Application header: Site group or organization selection, alert indication, balloon release indicator for AUTOSONDE sites, access to administrator pages, access to online help, and logout.
- Application toolbar: For selecting between the available views.
- **Map** view: Map with site markers indicating the available observation sites, their status, and the selected parameters.
- **Network Status** view: The status of the whole network, including observation sites, communication devices, and servers.
- **All Measurements** view: The available and selected data from the observation sites.
- **Site Details** window: Detailed information from the site, depending on the site type and system configuration.
- **Reports** view: For creating reports from the available data.
- **Events** view: The preconfigured and available events, including events from sites and events from NM10 system applications and services.
- **Alerts** view: The preconfigured and available alerts from sites and system alerts.
- **Wind widget** component: A wind display component displaying the selected wind variables from the selected observation site in wind rose format.
- **Chart component**: The selected variables from the selected observation site in graph format.
- **Text Observation Widget**: The latest observations in text format for the configured parameters.
- **Web Component**: A preconfigured embedded web site.
- **Metadata**: A component for viewing metadata from observation sites, when available.
- **Maintenance**: A component for viewing the maintenance tasks from observation sites, when available.
- Administrator view (**Admin**): User and system management.

> **i** Depending on your system configuration and activated licenses, the view names and content may differ from the ones described here.

> **i** In translated documentation the English names are used for the main views. These view names also remain in English in the localized software until configured by Vaisala or customer during system delivery.

3.7 NM10 software version

NM10 software version is displayed at the bottom of the NM10 login page and the NM10 web user interface pages.

3.8 Getting help in web user interface

Observation Network Manager web user interface includes online help pages that provide more information about the software. The following figure explains where you can find help when using the web pages.
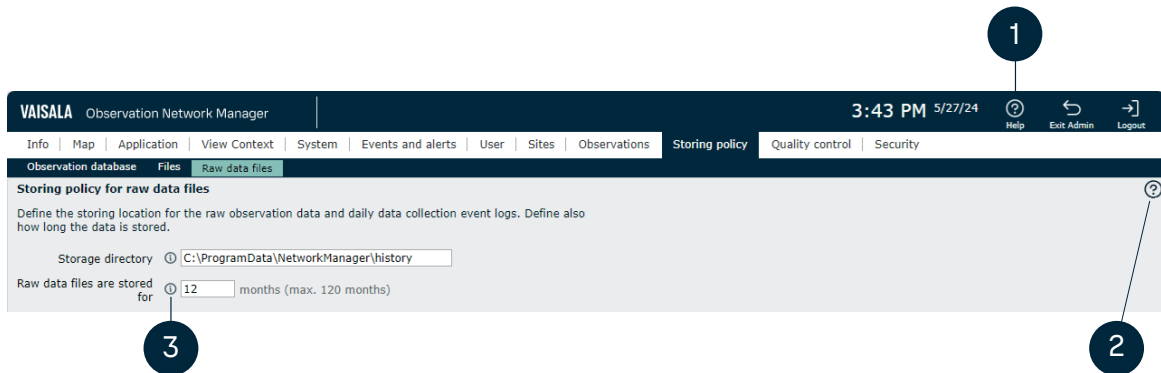
Figure 5   Help options

1   ⑦ Opens the online help from the start page.
2   ⑦ Opens the online help page that is the most relevant to the active page (in administrator view).
3   ⓘ Hovering the mouse over these icons opens short help texts relevant to the specific elements (in administrator view)

> ⓘ Depending on your organization and your user rights in the organization, you may have customer-specific options available that are not covered in this online help.

3.8.1 Using search in help

▶ 1. Type the word in the **Search** field at the top of the page and press **ENTER**.

A list of the pages where the search word appears is shown, together with page previews.

2. Click the page title to view the page.

The selected page is displayed with the search word(s) highlighted.

3.8.2 Using online help

To find information, use the navigation pane, or the search field at the top.

You can also scroll the pages in order by clicking the arrows.

	Show/Hide the navigation pane. Visible only when browser window is narrow.
	Show/Hide the navigation pane on the left, or the page summary on the right, when available. Visible only when browser window is wide.
	Collapse/Expand sections on the page, when available.
	Show/Hide the search results highlighted.
	Scroll the help pages (previous/next)
	Print the current page
	Shows the relevance of the search result pages.

4. Single-site display for surface weather

If the setup type **Single-site installation** was selected during NM10 software installation, a set of widgets is automatically displayed in the NM10 web user interface.

Administrator-level users can select the site for the widgets and adjust the displayed parameters to match the observation value parameters of the site.
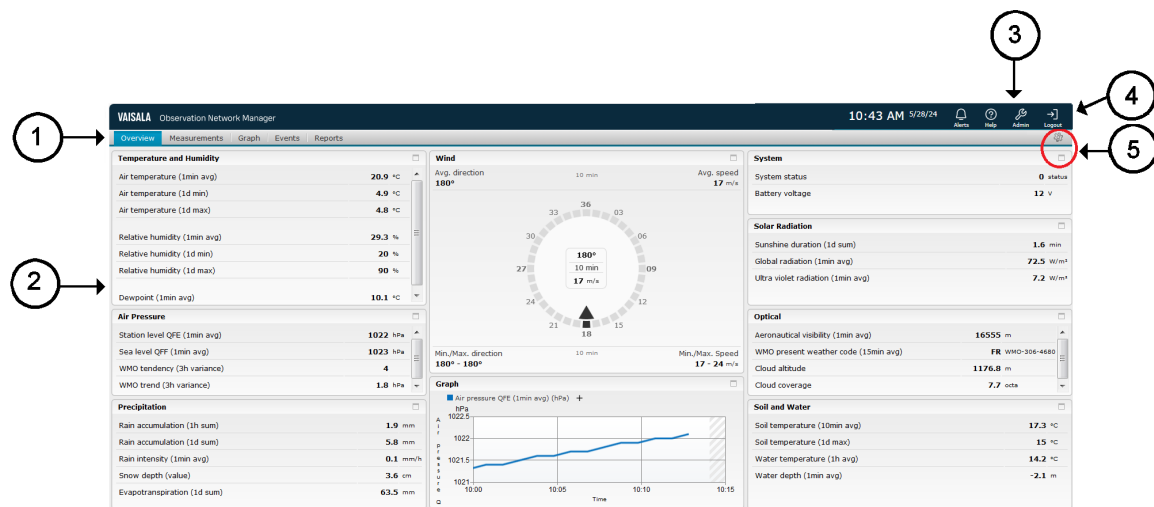
Figure 6   NM10 web user interface for single-site display (example)

1   Tabs for accessing the pages
2   Main page area: Displays the default values from the selected site when the weather station and communication settings have been configured correctly.
3   Access to administrator pages
4   Application header, for example, for accessing help pages and logging in/out
5   Icons for adding and editing pages, components, and widgets

> The content and options are different depending on the available software feature licenses.

5. Map view

The **Map** view displays the map of the region, with site markers indicating the observation sites, their status, and the selected parameters.
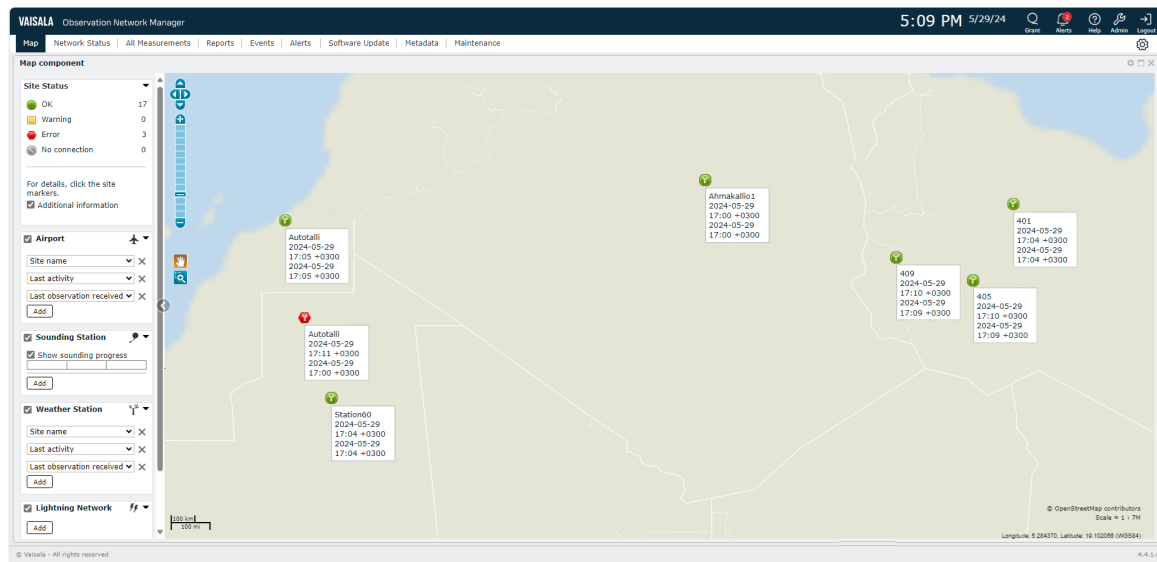
Figure 7   Example Map view

> ℹ️ This feature is a licensed option. It is available only with the applicable software feature license.

> ℹ️ Depending on your system configuration and activated licenses, the view names and content may differ from the ones described here.

> ℹ️ If configured in your system, you can change which site group or organization is displayed.

5.1 Site markers with status indication

The site markers on the map indicate the status of the observation sites. Move the mouse pointer over the site marker to show more information of the site status. Click the site marker to show the **Site Details** window with detailed information from the site.
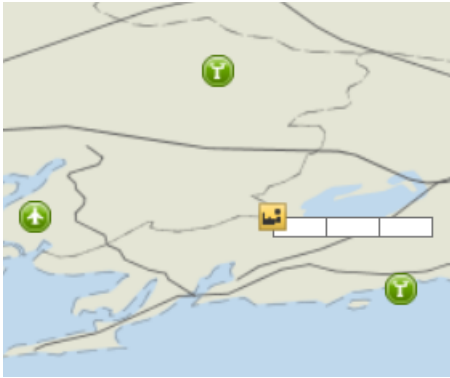
Figure 8   Site markers

The legend in the side panel explains the colors and shapes of the site markers. The small image inside the site marker indicates the observation site type, for example:

Airport site

AUTOSONDE site

MW41 site

Weather station site, including road weather stations

Weather radar site

Lightning processor site

Lightning sensor site

Ceilometer site

Pluvio^2 site

Web camera site

5.2 AUTOSONDE data

AUTOSONDE progress bar

For AUTOSONDE sites, the progress bar in **Map** view indicates the sounding status, for example:

Table 5   AUTOSONDE progress bar

0 green sections	System is in idle state.
1 green section	System is preparing a sounding.
2 green sections	System is ready for release.
3 green sections	Sounding is in progress.

AUTOSONDE links

For AUTOSONDE sites, you can also add links to the AUTOSONDE site software:
- AUTOSONDE quick link: Connects to the AUTOSONDE site and opens the AUTOSONDE Control software.
- Sounding data link: Connects to the AUTOSONDE site and opens the MW41 sounding software for viewing the sounding data.

5.3 Selecting data for site markers

In the **Map** view, you can select which parameters are displayed on the map for each site type.

1. Select the **Additional information** option in the side panel.

2. In the side panel, select the site type, for example, **Weather station**.
   - Use the **Lightning Network** list for selecting the data for both lightning sensors and lightning processors.
   - Use the **Sounding Station** list for selecting the data for both AUTOSONDE and MW41.

3. Next to the selected site type, click the arrow icon to open the list of parameters.

4. Select the displayed parameters:

- To change one of the displayed parameters, select another parameter from the list.
- To add a new parameter, click **Add** and select a parameter from the new list.

The parameters are displayed on the map next to the site markers in the same order as in the list; the top-most parameter first.
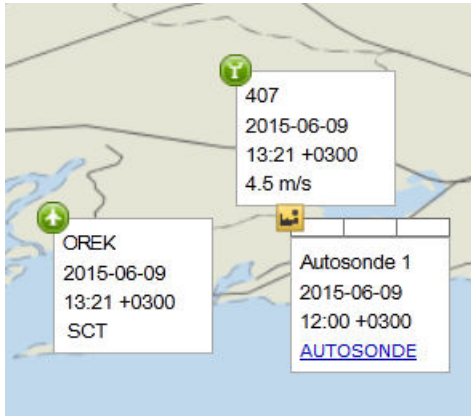
To remove a parameter, click the ✕ icon next to the parameter.

5.4 Zooming and moving the map

To zoom and move the map, you can use scroll mouse features or the Zoom and Move toolbar, displayed on the upper left corner of the map. The coordinates of the mouse position and the scale of the map are displayed in the lower right corner of the view.

For detailed instructions, refer to the Observation Network Manager online help.

5.4.1 Setting map position and zoom level

After installation the map opens to show the whole world. Typically, an administrator-level user moves and zooms the map to the position and the zoom level that is suitable for viewing the stations in the organization. For guest users the map always follows the last saved position of the administrator-level user.

When you log in as a user and move the map for the first time, the system saves the new map position and zoom level after the last change and remembers it the next time you log in. When you move the map again the new position will be saved after the change.

To set the map position and zoom level:

1. Move and zoom the map to the position and zoom level that is suitable for viewing the stations. Use the zoom and move toolbar at the top left corner of the map.

2. When you find the correct position and zoom level do not change them for a few seconds. The map position is saved and the map will open using those settings when you log in the next time.

5.4.2 Zoom and move toolbar

The Zoom and move toolbar is displayed in the upper left corner of the map. It contains the following buttons:

	Click the arrows to move on the map.
	Click to zoom in.
	Click to zoom out.
	Click to drag and zoom to an area.
	Click to pan the map by dragging with the mouse.

5.4.3 Zooming in

1. To zoom in the map in the **Map** view, do **one** of the following:

   a. Spin the mouse scroll wheel forwards.

   b. Double-click on the map.

   c. Click the ⊕ icon on the Zoom and move toolbar.

2. To zoom into an **area**, do the following:

   a. Click the 🔍 icon on the Zoom and move toolbar.

   b. Click and drag with the mouse over the area:
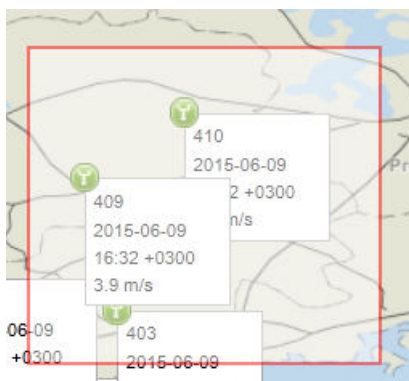
5.4.4 Zooming out

▶ 1. To zoom out, do **one** of the following:

    a. Spin the mouse scroll wheel backwards.

    b. Click the ⬇ icon on the Zoom and move toolbar.

5.4.5 Panning and moving the map

▶ 1. Click the ✋ icon on the Zoom and move toolbar.

    2. Click the mouse button down on the map, do not release the button. The mouse pointer symbol changes into an arrow symbol:

    3. Drag the arrow symbol until you see the part you want to view, then release the mouse button.

> 💡 You can also use the arrow buttons in the Zoom and move toolbar to move and pan the map.

6. Network Status view

The **Network Status** view displays the status of the observation sites (for example, weather stations), servers, and communication devices in table format.

Figure 9   Network Status view example

ℹ️ This feature is a licensed option. It is available only with the applicable software feature license.

ℹ️ Depending on your system configuration and activated licenses, the view names and content may differ from the ones described here.

Subtabs

The **Network Status** view typically consists of the following tabs:

- **Observation Sites**: Displays the status of all the observation sites in your organization. For more information, see All Measurements view (page 32). When you click a row in the table the **Site Details** window shows more detailed information about the site.
- **Servers**: Shows the status of the monitored server(s) in the system. Root-level administrators can define which servers are monitored.
- **Communication devices**: Shows the status of the communication devices in the system. The communication device for MOG sites remains visible after deleting all MOG sites.

For observation sites, typically the same data and status information apply as presented in **All Measurements** view. For servers and communication devices, typically the following statuses are displayed:

Table 6   Network status indicators

Icon	Status	Description
🟢	OK	Normal state: No technical alarms exist for this device.
🟨	Warning	Technical warning(s) exist for this device.

Icon	Status	Description
	Error	Technical alarm(s) exist for this device.
	No connection	User has set the device to offline status.

7. All Measurements view

The **All Measurements** view displays the selected parameters from the observation sites in table format. Depending on your system, the observation sites can be, for example, automatic weather stations, airport sites, or sounding sites, such as AUTOSONDE.
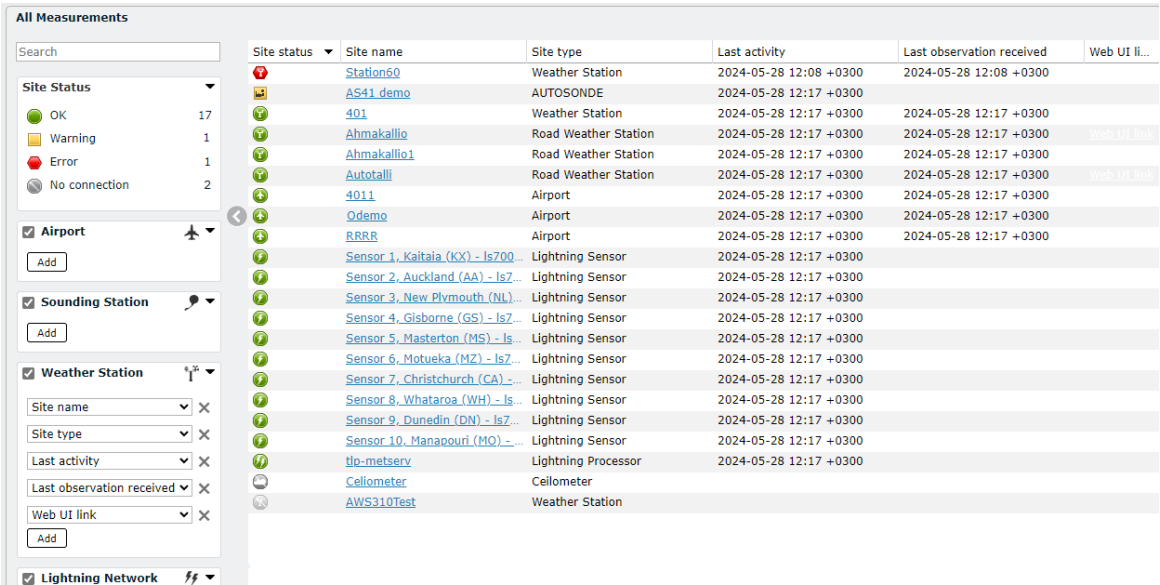
Figure 10   All Measurements view example

> ℹ️ This feature is a licensed option. It is available only with the applicable software feature license.

> ℹ️ Depending on your system configuration and activated licenses, the view names and content may differ from the ones described here.

> ℹ️ If configured in your system, you can change which site group or organization is displayed.

7.1 System status summary widgets

When available, the system status summary widgets provide a quick overview of the system status. You can open and close the widgets by clicking the arrows. Move the mouse pointer over the numbers to get more information.

Data Availability	▼	Data Validity	▼	Observations Received	▼
100 %	5 stations	100 %	5 stations	OK	7 stations
50-99.99 %	0 stations	90-99.99 %	0 stations	Failure	1 stations
< 50 %	3 stations	50-89.99 %	0 stations		
		< 50 %	3 stations		

Figure 11   System status summary widgets

More information

‣ System status summary (page 39)

7.2 Columns

Typically **Site status**, **Site name**, and **Site type** are displayed by default. More columns can be selected in the side panel. Administrator-level users can modify the columns, for example, show or hide the **Site status** column.

7.2.1 Site status

The icon in the **Site status** column indicates the status of the site. The legend in the side panel explains the site status icons and shows the current number of sites in each status for the site types that have been selected to be displayed.

The 🔔 icon indicates that alerts for the site are being blocked. The reason and duration of alert blocking are displayed if the corresponding columns are selected from the side panel.

A status summary is also shown when you move the mouse pointer over a site row.

7.2.2 Site subsystem status

The site subsystems include the subsystems in an airport system, for example, the servers and workstations.

If the **Degraded subsystems** and/or **Faulty subsystems** columns have been selected, the columns indicate the number of degraded and / or faulty subsystems in the site. When you move the mouse pointer over the table row, the tooltip lists the affected subsystems.

7.2.3 Data validity and availability

If selected, configured, and available, data availability and validity are displayed in the table.

7.2.4 Sorting and resizing columns

By default, the table is sorted based on the **Site status** column.

▶ 1. You can sort the columns in ascending or descending order by clicking the column heading.

2. You can temporarily resize the columns by dragging the dividers between the column headers. The adjustment is valid only for the current session.
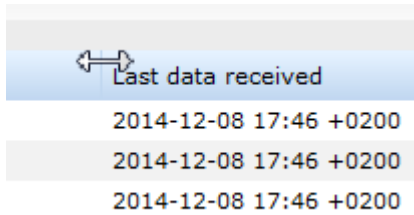
3. Administrator-level users can adjust the column widths permanently by clicking the settings icon ⚙.

7.3 Side panel

In the side panel you can filter the displayed content by using the search field or by selecting the site types and parameters from the lists.

The legend in the side panel explains the site status colors and shows the number of sites in each status.

The available content depends on your system configuration and the view context defined for your organization.

7.3.1 Searching and filtering

To filter and search the sites and content:

1. In the side panel, select the site types to be displayed, for example **Weather station**.

> If applicable in your system, make also sure that the relevant site group or organization is selected in the application header.

2. In the **Search** field in the side panel, enter the item you are searching for. You can search for:

   • Site name, site status, and sub device name
   • Metadata, depending on the metadata available in your system, for example serial number, sensor, and firmware version.
   • You can also use partial search, for example the beginning of the site name.

   The system looks for the search item in the site name, site status, sub devices, and metadata content and updates the table to show the sites that contain the searched item.
   When searching for sensors, NM10 searches for sensors that are configured in the road weather station and ignores sensors configured as connected sensors in NM10.

7.3.2 Selecting parameters for tables

In addition to the default columns, you can add columns in the side panel:

1. In the side panel, select the site type, for example, **Weather station**.

> Use the **Lightning Network** list for selecting the data for both lightning sensors and lightning processors, and the **Sounding Station** list for selecting the data for both AUTOSONDE and MW41.

2. Select **Add** under the selected site type.

3. Select a parameter from the displayed list.

   The selected parameter is added to the table as a new column on the right.

4. Select all the needed parameters.

> Status information is also displayed in a tooltip when you hover the mouse over the table rows. If you need space for several other columns, you can leave the status columns out.

5. If you have administrator-level rights, you can further modify the columns, for example, show or hide the **Site status** column, by modifying the table component.

7.4 Data value status

The background color of the table cells indicate the data value status based on the data quality control results.

> When you move the mouse pointer over the table row, the tooltip shows details of the site status.

7.5 Opening site details

When you click a row in the table, the **Site Details** window opens with more detailed information about the site.

7.6 Multiple tab pages

If configured, there may be several tabs, each for a different set of parameters. Click the subtabs to view the pages.

8. Alerts view

The **Alerts** view contains a list of alerts from the system and the sites. Also alerts based on station status, sensor status, or device state might be available. The available alerts depend on the system configuration, the site type, available licenses, and the site group or organization that is selected in the application header.

> ℹ️ This feature is a licensed option. It is available only with the applicable software feature license.

When there are new alerts, the alert indicator icon in the application header is highlighted. To see the alerts, click the alert indicator icon and the **Alerts** view is displayed.

> ℹ️ The alert indicator icons are not displayed when working in the administrator view.

Table 7 Alert indicator in the application header

Icon	Description
🔔3	Indicates that there are new active alarm/error severity alerts.
🔔3	Indicates that there are new active warning severity alerts.
🔔3	Indicates that there are new active info severity alerts.
🔔3	Indicates that there are new active debug severity alerts.
🔔2	Indicates that there are active alerts but the user has already clicked the icon and seen the alerts in the **Alerts** view.
🔔	Indicates that there are no active alerts.

Table 8 Alerts examples

Icon	Severity	Description
⚠️	**Alarm**	Informs about a fault that prevents the system from working properly. Typically requires immediate action.
		For example, informs when (examples from AUTOSONDE sites):
		• Emergency switch has been pressed • Inside temperature is out of limits • System is not operational • A robotics error prevents AUTOSONDE from performing a sounding

Icon	Severity	Description
⚠	**Warning**	Warning about a situation that, if persisting, may lead into the system not working properly. Typically requires at least monitoring.
		For example, events informing about the following (examples from AUTOSONDE sites): • Surface observations have failed in AUTOSONDE site • UPS power failure • Inside humidity is too high
ⓘ	**Info**	Can be selected for system alerts defined in the administrator view.
✅	**Debug**	Can be selected for system alerts defined in the administrator view.

When the alerts are no longer valid, that is, the situation causing the alert is over, the system sends an `AlertOff` event and the alert becomes inactive. The icon color changes into gray.

Alerts are turned off for sites that are defined as disabled (not in use) in the site configuration page.

> ℹ Root-level administrator can configure some system alerts in the administrator view, including the sensitivity level of triggering the alert and the severity type of the alert.

For detailed information on the alerts from the sites, refer to the documentation delivered with the site.

8.1 Filtering alerts by acknowledgement

In the **Alerts** view, you can select to display all alerts, only acknowledged alerts, only unacknowledged alerts, or alerts for which acknowledging is not required at all. The acknowledgement is done in the site software, for example, in AUTOSONDE.

Select the type from the **Acknowledgements** list. The list is updated to display only the selected types of alerts.

8.2 Filtering alerts by state

You can filter alerts by the Active/Inactive state:

▶ 1. To show inactive alerts, click the visible-hidden switch so that the Inactive alerts are visible: [||| Visible]

2. To show only active alerts, click the visible-hidden switch so that the Inactive alerts are hidden: [||| Hidden]

8.3 Filtering alerts by severity

You can filter alerts by their severity type:

▶ 1. Open the **Alerts** view.

2. Select the severity type from the **Severities** list.

The list is updated to display only the selected types of alerts.

9. Status information

Status information is displayed in several locations in the web user interface, when available.

> ℹ The features are available depending on the activated software feature licenses.

9.1 System status summary

The system status summary widgets at the top of the **All Measurements** view provide a quick overview of the system status. You can open and close the widgets by clicking the arrows. Move the mouse pointer over the numbers to get more information.

Data Availability		Data Validity		Observations Received	
100 %	5 stations	100 %	5 stations	OK	7 stations
50-99.99 %	0 stations	90-99.99 %	0 stations	Failure	1 stations
< 50 %	3 stations	50-89.99 %	0 stations		
		< 50 %	3 stations		

Figure 12   System status summary widgets

Data Availability
The number of stations in different data availability categories.

Data Validity
The number of stations in different data validity categories.

The availability and validity numbers concern only stations from which availability and validity data have been received. Stations that have been defined as disabled (not in use) are excluded from the count.

Observations received
OK: The number of stations from which observations have been received as planned.
Failure: The number of stations from which observations have not been received as planned.

The observations received count takes into account only stations from which observations are expected and have been received at least once, also if alerts are being blocked. Stations that have been defined as disabled (not in use) are excluded from the count.

9.2 Site status

The status of the sites is indicated with the status icons. The legend in the side panel explains the status icon colors. The legend also shows the current number of sites in each status (for the organization, site group, and site types that have been selected to be displayed).

Table 9   Site status icons

Icon	Status	Description
(green circle)	OK	No problems detected.
(yellow square)	Warning	The site may have problems that need to be addressed. For example, the last data received from the site has at least one observation value that the quality control feature has marked as suspicious.
(red hexagon)	Error	There are serious problems with the site. For example, no observations are received from the site, the last data received from the site contained at least one missing value, or could not be interpreted, or data has not been received inside the preconfigured time period.
(gray circle)	No connection	No data has ever been received from the site, its status is unknown, or no observations have been received from the site for the last 24 hours. This includes sites with the status Unknown, Disabled, Offline, and No license.

Status icons also contain a small image of the site type, for example, an airplane for airport sites: (icon).

The status icons are displayed:
- in the site markers in **Map** view
- in the **Site status** column in the table format views, for example, in the **All Measurements** view

To get more information from the site status:
- Move the mouse pointer over the site marker. A tooltip shows more information of the site, for example, which values are marked as suspicious.
- Click the site marker or the table row to open the **Site Details** window, which will show you more detailed information from the site.

> (i) The status explanation described here only applies if your system has the quality control features installed and configured.

9.3 Data value status

The background color of the data fields indicates the data value status.

> ℹ The status explanation described here only applies if your system has the quality control features installed and configured.

Table 10 Data value status

Data field color	Description	Site status	Site status icon
No highlight	Data value received is OK.	OK	🟢
99.167	The last value received from the site is suspicious.	Warning	🟨
///	Invalid values have been received.	Error	⬡
	Data has not been received inside the pre-configured time period.	Error	⬡
///	Data value status is not applicable (site is unknown/ offline).	Unknown/Offline	⚫

When you place the mouse pointer on the data row, a tooltip provides more details about the suspicious or invalid values.

9.4 Data validity and data availability

Data validity and data availability can be displayed:
- in table format in **All Measurements** view and in **Network Status > Observation Sites** page
- in the site markers in **Map** view and in **Site Details** window.

> ℹ The validity explanation described here only applies if your system has the quality control features installed and configured for the observations.

Message count
> The number of messages received from the site during the last hour.

Message interval
> The expected interval between observation data messages from the site.

Availability
> The percentage of the site's observation data that has been available (that is, not missing) during the last hour.

Validity

The percentage of valid observation data (that is, data values with no failures in the pre-configured quality control) from the site during the last hour.

Message availability

Similar to availability, but does not take into account separate missing observations - calculates only messages.

Average delay

Hourly average delay between sending the observation messages and receiving the messages in NM10.

> **i** Message count and message interval may not always match. The message count can be larger because data has been missing and it has been post-collected, thus increasing the number of messages.

> **i** Some observations that are only occasionally sent from the sites (for example, wind gust, cloud amount, and cloud type) may not affect the data validity/availability if they are missing. The functionality depends on the message parser configuration.

The background color of the validity and availability fields indicate the following:

Table 11   Data availability/validity colors

Data color		Description
-	No highlight	Validity or availability is 100 %.
	Light yellow	Subtle warning: Validity is 90 ... 99.999 %.
	Dark yellow	Strong warning: • Validity is 50 ... 89.999 %. • Availability is 50 ... 99.999 %.
	Red	Warning: Validity or availability is under 50 %.

9.5 Site subsystem status

The site subsystems include, for example, the servers and workstations in an airport system.

The status of the subsystems is indicated in the **Site Details** window, under the heading **Site subsystem statuses**. The color of the text fields indicates the status:

Table 12   Site subsystem status

Data field color	Site status	Description
White	Online	Normal state: No technical alarms exist for this device.

Data field color	Site status	Description
Red	Faulty	Technical alarm(s) exist for this device.
Yellow	Degraded	Technical warning(s) exist for this device.
Grey	Offline/ Unavailable	User has set the device to offline status.

In addition, degraded and faulty subsystems are indicated:

- in **Map** view: When you place the mouse pointer over a site marker, the tooltip shows a list of faulty and/or degraded subsystems, when applicable.
- in **All Measurements** view: If the **Degraded subsystems** and/or **Faulty subsystems** columns have been selected, the columns indicate the number of degraded and / or faulty subsystems in the site. When you move the mouse pointer over the table row the tooltip lists the affected subsystems.

10. Site Details window

To show the **Site Details** window, click a site marker in the **Map** view, or click a data row for example in the **All Measurements** view.
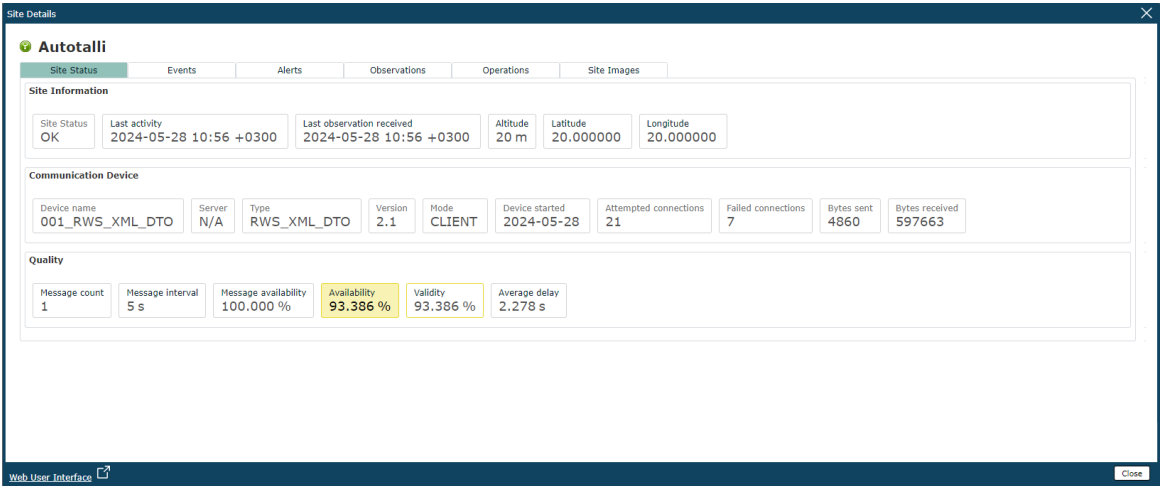
Figure 13   Site Details window example

The **Site Details** window contains detailed information from the site, depending on the site type and system configuration.

Site Status
>   Information on site, communication device, and quality.
>   When available and configured, contains also alert blocking information, sub-system status, and metadata from the site.

Events
>   The latest events from the site. If only part of the event message is displayed, move the mouse pointer over the message to display the whole event text.
>   You can filter, pause, and clear the events.

Alerts
>   The latest alerts for the site.

Observations
>   The last observation data received from the site, including METAR/SPECI report from airport sites, if configured. The data value status is indicated with the background color of the data fields.
>   Observations are displayed for the individual data sources at the site. To display the observation time, move the mouse pointer over the observation value.

Assets
>   List of the available assets on the site, for example, measurement devices and data loggers, and their metadata, such as model and serial number. Select an asset row to see detailed information. Logged-in users can also add and relocate assets.

Maintenance

List of maintenance tasks for the assets. Logged in users can also add and edit the tasks.

Operations

The available device management operations, for example, restarting.

Site Images

Images from the site that have been uploaded to NM10.

> **i** If no data has yet been received from the site, the **Site Details** cannot be displayed.

> **i** The content and options are different depending on the available software feature licenses.

More information

‣ Status information (page 39)
‣ Events view (page 61)
‣ Alerts view (page 36)
‣ Managing assets (page 46)
‣ Managing maintenance tasks (page 47)

10.1 Enabling and disabling automatic refresh

In the **Site Details > Site Status** tab automatic refresh is always on.

In the other tabs the automatic data refresh is by default enabled or disabled depending on the data type. You can change the setting by enabling or disabling **Updating**. When enabled, the data is automatically refreshed when new data is received from the site. When disabled, the data is not updated.

10.2 Remote access links to sites

To further diagnose the site status, you can connect to the site using the remote access links in the **Site Details** window, when available and configured. The remote access links can be, for example, remote desktop connection (RDP) links to the site server, Terminal connection or remote connection to the site web user interface.

Remote access links are not available for guest users.

10.3 Managing assets

If available in your system, the assets associated with the sites can be added and edited to match the actual changes at the site. For example, if a new sensor has been installed at the site, the sensor can be added as an asset in the system.

All users can view the assets. Logged in users can add and edit assets.

Assets are displayed in the **Site Details** window for each site, on the **Assets** tab. You can do the following:
- Move the selected assets into another location, using **Relocate selected assets to** and **Relocate**.
- Add new assets with **Add New Asset**.
- View the asset details by clicking the asset row.

More information

‣ Site Details window (page 44)

10.3.1 Adding new assets

When logged in, you can add assets in NM10 after they have been installed at the site.

▶ 1. Open the **Site Details** window, for example by clicking the site marker in the map view, or the site row in a list view.

2. Select **Assets**.

3. Select **Add New Asset**.

4. Fill in the asset information. **Category** and **Model** are mandatory, other information is optional.

5. Check that the **In use** option is selected.

6. Select **Save**.

10.3.2 Editing assets

When logged in, you can edit the assets:

▶ 1. Open the **Site Details** window, for example by clicking the site marker in the map view, or the site row in a list view.

2. Select **Assets**.

3. Click the asset row that you want to edit.

4. In the details window, select **Edit**.

5. Make the needed changes.

- You can also manage the maintenance tasks related to the asset by selecting **Maintenance**.
- You can not delete assets. You can remove them by relocating them to a service center.

6. Select **Save**.

10.3.3 Relocating assets

When logged in, you can relocate the assets in NM10 to match the actual relocating in the field.

▶ 1. Open the **Site Details** window, for example, by clicking the site marker in the map view, or the site row in a list view.

2. Select **Assets**.

3. Select the check box in the first column for the assets that you want to relocate.

4. From the **Relocate selected assets to** list, select the site where you want to relocate the assets.

5. Select **Relocate**.

10.3.4 Importing assets

If your system has been configured to contain assets, you can import new or updated assets from a CSV file into NM10.

> **i** If new sites are needed, they need to be created before the asset import. If the uploaded file contains sites that are not included in NM10, the import skips those site rows and does not create the sites in NM10.

▶ 1. Select **Admin** in the application header.

2. Select **System > Data import**.

3. Select **Import New CSV File**.

4. Browse to the CSV file, and if needed, change the separator character.

5. Select **Upload**. The window shows information on the uploaded file.

   • If an asset with the serial number or the asset name exists, the existing asset will be updated. If the existing asset is in another site, the asset will be relocated to the site defined in the import file.
   • If both serial number and asset name are empty, import will create a new asset.

6. Select **Import**.

7. Select **Close**. Check from the **Site Details** windows of the sites that the assets are displayed as they should.

10.4 Managing maintenance tasks

All users can view the maintenance task metadata associated with the actual maintenance tasks at the sites. Logged in users can add and edit the maintenance tasks.

Maintenance tasks are displayed in the **Site Details** window for each site, on the **Maintenance** tab. Alternatively, you can access them on the **Assets** tab by clicking an asset and then selecting **Maintenance**. You can do the following:

Completed tasks
Use this toggle button to show or hide the completed maintenance tasks in the list.

Add New Task
Select this to add a new maintenance task.

Planned period
This column shows the period when the maintenance task has been planned to be performed. Column colors: Red = Overdue, Green = Ongoing.

Mark as Completed
Select this to mark the maintenance task as completed.

Edit
Select this to edit the maintenance task.

More information

‣

10.4.1 Adding new maintenance tasks

When logged in, you can add new maintenance tasks:

1. Open the **Site Details** window by clicking the site marker in the map view, or the site row in a list view.

2. Select **Maintenance**.

    • Alternatively, you can add a maintenance task for a particular asset by selecting the **Assets** tab, clicking the asset row, and selecting **Maintenance**.

3. Select **Add New Task**.

4. From the **Asset** list, select the asset that the maintenance task is related to. The available metadata is displayed.

5. Under **Task**, select or enter the following:

    Maintenance type
        The type of maintenance task, for example, corrective or preventive maintenance.

    Details
        Optional details about the maintenance task.

    Planned period
        The period during which the maintenance is planned to take place.

    Status
        Displays the status of the task, for example, **Planned** or **Completed**.

    Completion date
        Filled in when completed: Completion date of the maintenance task.

    Performed by
        Filled in when completed: Name of the maintenance person completing the task.

    Comments
        Optional comments.

6. Select **Save**.

10.4.2 Editing maintenance tasks

When logged in, you can edit the maintenance tasks:

1. Open the **Site Details** window, for example by clicking the site marker in the map view, or the site row in a list view.

2. Select **Maintenance**.

- Alternatively, you can edit a maintenance task of a particular asset by selecting the **Assets** tab, clicking the asset row, and selecting **Maintenance**.

3. Select **Edit** in the row of the task that you want to change.

4. In the **Edit Task** window, make the needed changes:

- To mark the task as completed, fill in the **Completion date** field.
- To delete the task, select **Delete Task** and confirm the deletion.
- Other options are explained in Adding new maintenance tasks (page 48).

5. Select **Save**.

11. Terminal connection

If available, you can use the terminal connection to connect to weather stations and other field devices through a communication port.

You can monitor the messages the stations send and you can send commands to the stations to check and modify the device status.

The **Terminal** link is located in the **Actions** column on the **Sites** tab, when available.

> ℹ️ This option is available for administrators and for user profiles that have the role **IO terminal operator** defined.
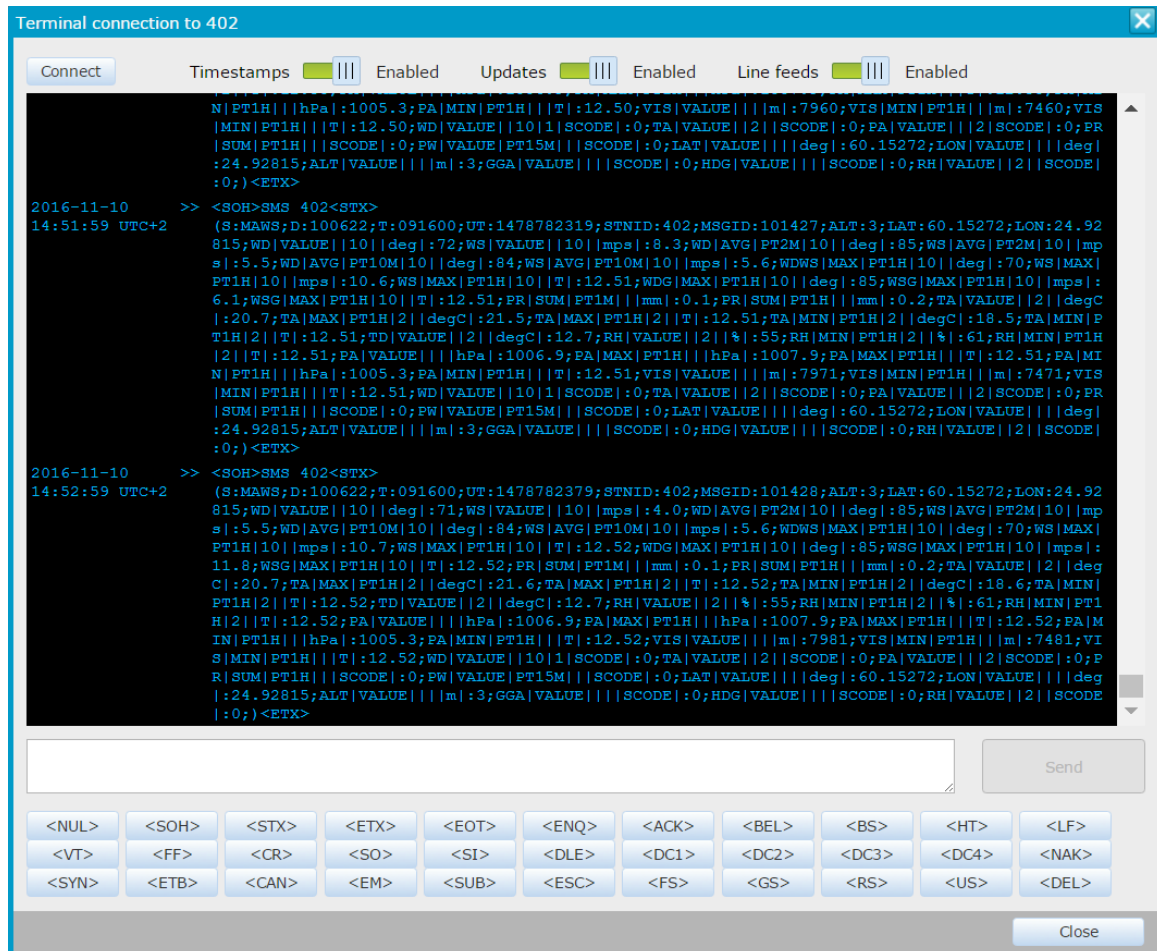

Figure 14   Terminal connection window

Service connection and data connection must have been configured to use the same port in the weather station.

11.1 Viewing messages from site

This option is available for administrators and for user profiles that have the role **IO terminal operator** defined.

▶ 1. Open the **Site Details** window for the site that you want to connect to by clicking the site marker in **Map** view, or by clicking the data row for the site in **All Measurements** view.

2. In the **Site Details** window, click the **Terminal** link.

   The terminal connection window opens, showing the message flow from the station.

3. You can filter how the messages look by toggling the enabled/disabled buttons.

11.2 Sending messages using terminal connection

This option is available for administrators and for user profiles that have the role **IO terminal operator** defined.

▶ 1. Open the **Site Details** window for the site that you want to connect to by clicking the site marker in **Map** view, or by clicking the data row for the site in **All Measurements** view.

2. In the **Site Details** window, click the **Terminal** link.

   The terminal connection window opens, showing the message flow from the station.

3. To enable the connection for sending commands, click the **Connect** button at the top of the window.

> ⚠️ **CAUTION!** Opening connection to the station will temporarily block observation data from the station.

4. Select **Connect** in the confirmation window.

5. Enter the commands in the text field.

   • You can select the necessary ASCII characters using the buttons provided.
   • See the appropriate field device manuals for the commands you need to send.

6. Select **Send**.

12. Remote desktop connection

You may be able connect to another computer over a network connection using the Remote Desktop Protocol (RDP). Typically the remote connection is configured to the airport site servers. When the remote desktop connection is open you can use the applications in the airport site server that have been configured for remote access.

> **i** The availability and functionality of this feature depends on the configuration and roles in the airport system.

The following must have been configured in the airport system:
- The remote desktop feature must have been configured. For example, the Thinfinity Remote Desktop Connection server software must be installed in the airport site server and the applications for remote access must have been defined.
- You must have the remote desktop software credentials that you have received during system delivery.
- You must have the necessary credentials to access the airport site server.

12.1 Opening remote desktop connection

You may be able to connect to the airport site servers over a network connection using the Remote Desktop Protocol (RDP).

> **i** The availability and functionality of this feature depends on the configuration and roles in the airport system.

> **i** The remote connections are supported only with HTML5-compliant web browsers (Chrome, Firefox, and Microsoft Edge).

▶ 1. Open the **Site Details** window for the site that you want to connect to by clicking the site marker in **Map** view, or by clicking the data row for the site in **All Measurements** view.

2. In the **Site Details** window, click the link for remote desktop connection.

> ℹ️ If there is no link available, the functionality is not available.

3. In the security certificate warning page, select the **Continue to this website** option.

4. Enter the remote desktop software credentials that you have received during system delivery and click **OK**.

5. In the Thinfinity Remote Desktop window that is displayed, make sure that the Remote Desktop option is selected and click **Connect**.
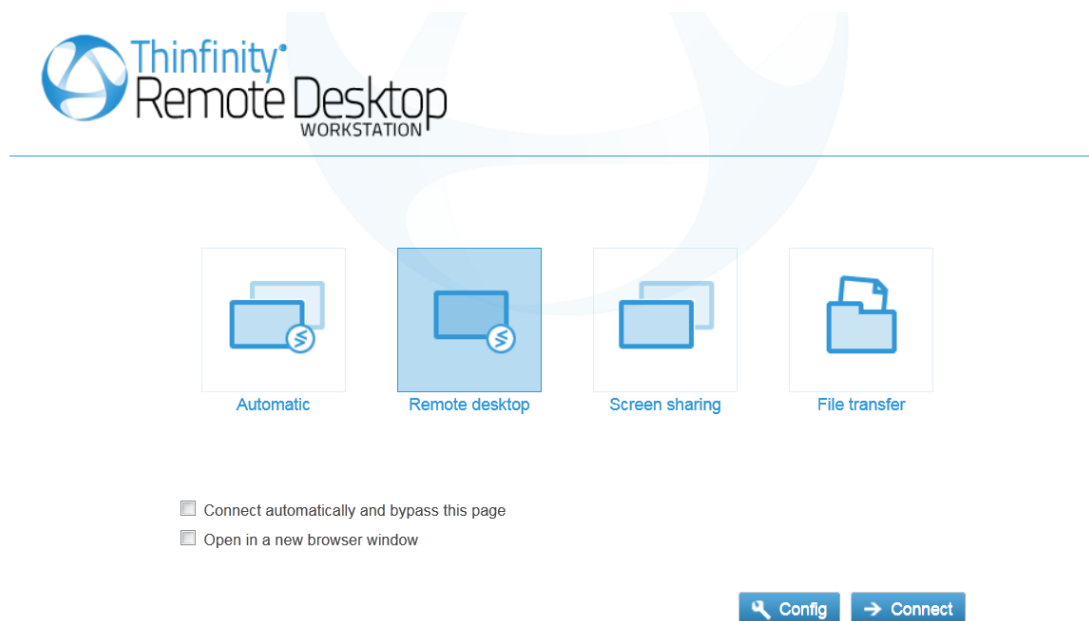
6. Enter the AviMet server computer credentials and click **Log in**.

7. When you have successfully logged in, you can see the AviMet server remote desktop and access the applications depending on your credentials.

12.2 Closing remote desktop connection

Closing the applications does not close the remote desktop connection. To close the connection:

1. Click the arrow _____ at the top of the desktop. You may have to move application windows to see the arrow.

2. Select **Disconnect**.

3. Confirm disconnecting by selecting **OK**.

13. Wind and graph view

The wind and graph view visualizes the observation site data in more detail. Typically it displays a wind widget and the pre-configured chart components. The number and type of the wind and graph components is pre-configured and can be changed only by administrator-level users.

> ℹ️ Depending on your system configuration, the view name and content may differ from the ones described here.

13.1 Wind widget component

The **Wind widget** component shows the wind data from the selected source, as configured.

The source, type, and unit of the values have been preconfigured. Administrator-level users can edit the configuration.
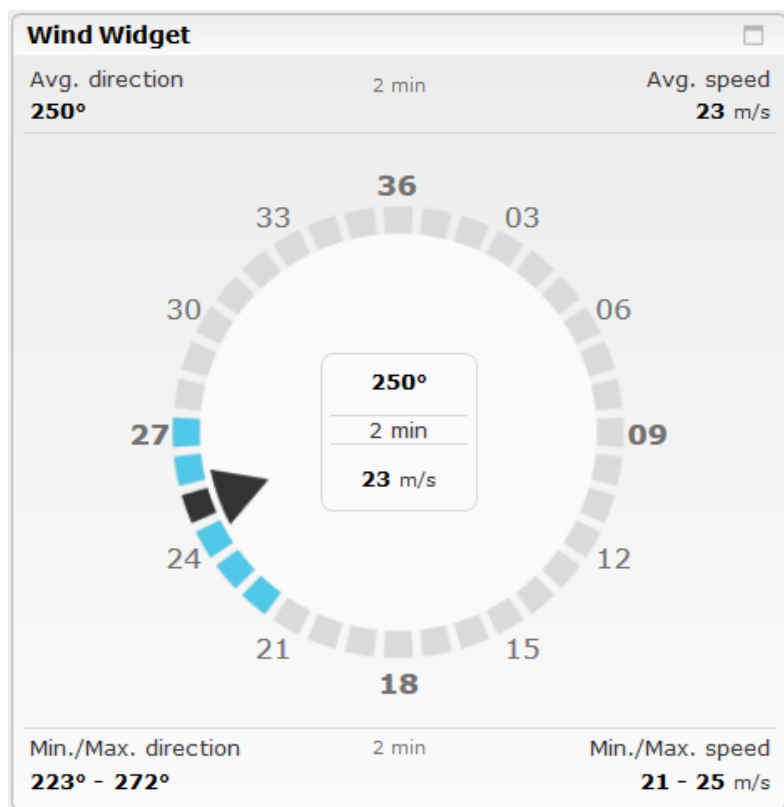

Figure 15   Wind widget example

- The fields in the middle of the wind rose show the preconfigured wind direction and wind speed.
- The wind rose arrow indicates the preconfigured wind direction.
- The fields in the corners show any four preconfigured wind values in the selected unit.
- The colored pegs next to the wind rose arrow show the preconfigured wind direction range (if minimum and maximum direction values are received from the source).

13.2 Chart component (graph)

The chart component displays the selected weather variables from the pre-configured site(s) in graph format. When you move the mouse over a graph line, a tooltip displays the exact value, unit, time, and location.
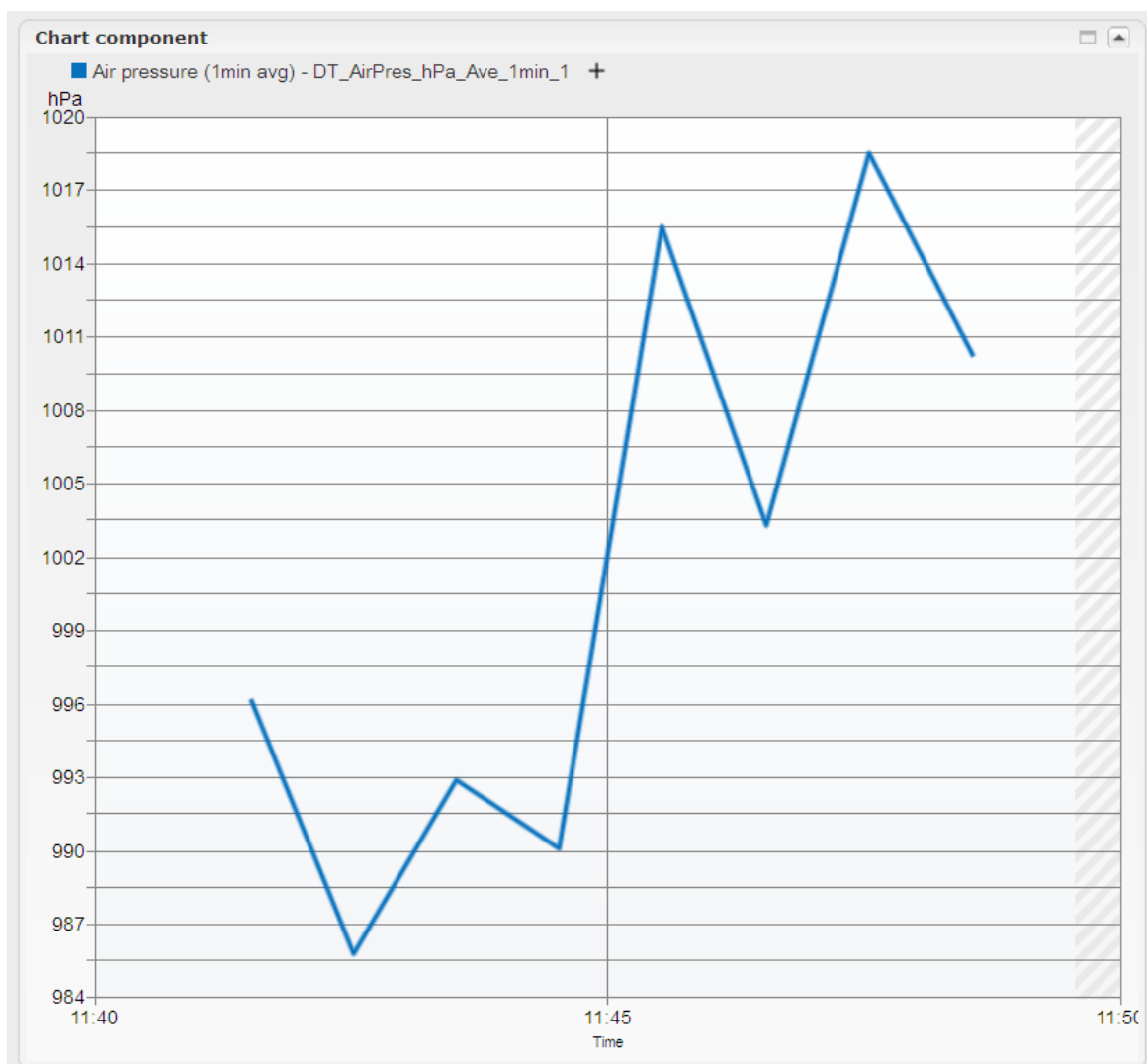

Figure 16   Chart component example

13.3 Selecting variables for graph

▶ 1. To select variables for the graph, click the ➕ icon near the graph line legend.

2. If available, select the data source.

3. Select a variable from the list of available variables.

4. The graph for the selected parameter is displayed.

> ℹ The graph can only display two (2) different units. You can select more parameters only if the number of different units does not exceed 2.

> ℹ If the graph is not displayed, the chart settings may need modifying. Administrator-level users can modify the graph component.

5. If you want to remove a graph line, click the graph line name in the legend and select **Remove curve**.

14. Text Observation view

Text Observation view displays the latest observations in text format for the configured parameters.

> ℹ️ Depending on your system configuration, the view name and content may differ from the ones described here.

The following parts of the widget depend on your system configuration:
- Name of the component. Typically, the title of the component contains the name of the site or another data source.
- Location of the component.
- Displayed parameters and their sources.
- The time that the system waits before marking the data as "missing" (///).

Contact an administrator-level user if anything needs clarifying or modifying.

15. Reports view

In the **Reports** view several types of reports from the data available in your system can be created. For example, observation data reports for specific parameters from the data available in your observation database and event reports showing the generated events for the selected time period.

Reports are not available for guest users.

Reports

You can create reports, preview existing reports, download reports as CSV, and delete reports.
If the maximum number of reports is exceeded, you can create new reports after deleting some old reports.

ℹ Deleting old reports on a regular basis is recommended.

Create Report

Report name	Report type	Report format	Generation started	Generation ended	User	Status	Actions		
Metadata	Metadata report	Table	28.05.2024 , 11:01	28.05.2024 , 11:01	admin	Completed	Save as CSV	Show →	Delete
Data Quality	Data quality report	Table	28.05.2024 , 11:01	28.05.2024 , 11:01	admin	Completed	Save as CSV	Show →	Delete
Event Report	Event report	Table	28.05.2024 , 11:00	28.05.2024 , 11:00	admin	Completed	Save as CSV	Show →	Delete
Event Summary	Event summary report	Table	28.05.2024 , 11:00	28.05.2024 , 11:00	admin	Completed	Save as CSV	Show →	Delete
Obs	Observation report	Table	28.05.2024 , 10:59	28.05.2024 , 10:59	admin	Completed	Save as CSV	Show →	Delete

Figure 17   **Reports** view example

ℹ Depending on your system configuration and activated licenses, the view names and content may differ from the ones described here.

ℹ All times in the **Reports** view, including the saved CSV reports, are displayed in the time zone defined in the user profile.

15.1 Creating reports

You can create different types of reports from the available data.

▶ 1. Open the **Reports** view.

  2. Select **Create report**.

3. Select the report contents:

Name

    Enter a name for the report.

Report type

    Select the type of report you want to create:

    Observation report

        The selected observation parameters from the selected sites from the data available in your observation database.

    Event summary report

        The generated events from the selected time period and selected sites, and the number of times each event has occurred.

    Event report

        The generated events from the selected time period and selected sites.

    Metadata report

        The available metadata from the selected sites.

    Data quality report

        Available data quality information from the selected sites
        Maintenance reports can be created in the **Maintenance** view.

Report format

    Report format is currently preselected.

Start time, **End time**

    Select the start time and end time for the report.

Sites

    Select the sites.

Parameters

    For observation reports, select the observation parameters.

4. Select **Create**.

The report generation starts and the report is listed in the **Reports** page.

It may take a while for the report to be generated. You can follow the status of the report generation in the **Status** column.

15.2 Viewing reports

▶ 1. Open the **Reports** view.

If many large reports have been created, the page might take a while to load. Consider deleting old reports. See .

2. Find the report that you want to view.

> The list shows reports created by all users. You can sort the list by clicking the column names, for example the **User** column.

3. Select **Show** in the **Actions** column.

    If this option is not displayed, the report is too big to be shown on the browser page. Instead, select **Save as CSV** to view it.

The report preview is displayed on the next page. To get back to the reports list, select the back arrow at the top of the preview.

15.3 Saving reports

After creating a report you can save it in CSV format.

1. When the report status is **Completed**, select **Save as CSV** in the **Actions** column.

    The report is saved in semicolon-separated CSV format.

2. Depending on your browser and settings, you may have to select the Save option, or the report is automatically saved on your computer.

> For further use, you can import the data, for example, into MS Excel. When importing, select "semicolon" for the delimiter.

15.4 Deleting reports

Deleting old reports on a regular basis is recommended for smooth use of the **Reports** view.

Reports must be deleted when the maximum number of reports has been exceeded so that new reports can not be created.

1. In the **Reports** view, find the report that you want to delete.
    *   You can sort the list by clicking the column names, for example the **User** column.
2. Select **Delete** in the **Actions** column.
    *   Users with the role **user** can delete the reports that they have created.
    *   Administrators can delete reports created by all users.
    *   When deleting reports created by others check which reports can be deleted and/or save the reports as CSV.
3. Confirm the deletion.

16. Events view

The **Events** view displays the last available 1000 events sent by the system, including events created by NM10 system applications and services, and events from the sites, depending on the site group and organization selected in application header, system configuration, and the available licenses.

Figure 18   Events view example

If only part of the event message is displayed, move the mouse pointer over the message. A tooltip shows the whole event text. Use the page navigation at the bottom of the page to see all pages.

To get more information on the event messages in the **Message** column, see the product manuals for the site in question.

For RWS200 events, you can also see the troubleshooting instructions in the NM10 online helps.

> **i** Depending on your system configuration, the view name and the content may differ from the ones described here.

16.1 Event severity types

The **Severity** columns show the severity of the events. You can also filter the displayed events by severity.

Icon	Severity	Description
	Info	Notification of a change in the system state, or other information-level event. Typically does not require any action. For example: • An event informing that a situation that caused an alarm event is over. • An event informing that a configuration was updated.
	Warning	Warning about a situation that, if persisting, may lead into the system not working properly. Typically requires at least monitoring. For example: • An event informing that quality control has flagged a value as suspicious. Available if your system has the quality control features installed and configured. • An error in the message parsing configuration. • Warning about adding a new station when there are no licenses available. • An event informing that surface observations failed in AUTOSONDE site.
	Alarm	Alarm informing about a fault that prevents the system from working properly. Typically requires immediate action. For example: • An error in observation sites, servers and/or communication devices. • An event about a failure to enable a new site because no licenses are available.
	Debug	Event informing about a debug-level system alert.

16.2 Filtering events

▶ 1. To select which events are displayed, use the filters at the top of the **Events** view:

Severities
Select the severity of the events. See Event severity types (page 61).

Types
Select the type of the events.

Search
Enter the severity, type, time, source, message content. You can also enter only part of the text, for example, a key word or the beginning of the message text.

Archive
Select a date to show events only from that date. To exit archive mode, select **Return Live**.

2. You can clear the used filters by selecting **Clear**, under **Filter**.

All events are displayed.

3. To display only new events, select **Clear View**.

The current event list is emptied and only new events are displayed.

16.3 Pausing event updates

▶ 1. To have more time to read the events, select **Pause updates** at the top of the **Events** page.

   The events list updating stops.

2. To resume the normal updating, select **Resume updates**.

17. Maintenance view

Maintenance view shows the sites, the maintenance tasks and their status, and the applicable and available metadata.

Figure 19   Example Maintenance view

Use the scroll bars to see more sites and more columns with information about the tasks.

You can also control what information is shown by using the following:

Filters
Filter the tasks by the status, for example to show only overdue tasks.

Clear filter
Clear the filter selections and show all tasks.

Additional information
Toggle to show or hide the available additional information columns (metadata, for example, sensor states).

Save as CSV
Select to save the maintenance tasks as a CSV report. To include only relevant information, use the filters first.

You can add more tasks by selecting **Add New Task**.

Maintenance tasks are not available for guest users.

17.1 Adding maintenance tasks

▶ 1. Select the **Maintenance** view.

2. Select **Add New Task**.

3. Select the site that the maintenance task is related to.

4. From the **Asset** list, select the asset that the maintenance task is related to. The available metadata is displayed.

5. Under **Task**, select or enter the following:

   Maintenance type
   The type of maintenance task, for example, corrective or preventive maintenance.

   Details
   Optional details about the maintenance task.

   Planned period
   The period during which the maintenance is planned to take place. You can select start and end date or only one of them.

   Status
   Displays the status of the task, **Planned**, **Ongoing**, **Overdue**, or **Completed**.

   Completion date
   Filled in when completed: Completion date of the maintenance task.

   Performed by
   Filled in when completed: Name of the maintenance person completing the task.

   Comments
   Optional comments

6. Select **Save**.

17.2 Filtering maintenance tasks

1. Select the **Maintenance** view.

2. Select **Filters**.

3. Select the sites and/or status options.

4. Select **Create**.

   The maintenance task list shows the tasks that match the filters, when available.

5. To show all tasks again, select **Clear filter**.

17.3 Editing maintenance tasks

1. Select the **Maintenance** view.

2. In the **Actions** column, select **Edit** in the row of the task that you want to change.

3. Make the needed changes.

4. Select **Save**.

17.4 Creating maintenance reports

You can create reports that contain the maintenance tasks performed in the sites.

▶ 1. Select the **Maintenance** view.

   2. Optional: To include only certain sites or statuses:

      a. Select **Filters**.

      b. Select the sites and/or status options.

      c. Select **Create**.

         The maintenance task list shows the tasks that match the filters, when available.

   3. Select **Save as CSV**.

      The report is saved in semicolon-separated CSV format.

   4. Depending on your browser and settings, you may have to select the Save option, or
      the report is automatically saved on your computer.

> For further use, you can import the data, for example, into MS Excel. When
> importing, select "semicolon" for the delimiter.

18. Metadata view

Administrators can add a desktop page for showing the metadata from the sites.

Figure 20   Example Metadata view

Use the scroll bars to see more sites and more metadata columns. You can also control what information is shown by using the following:

Search
> Search from the table contents, for example for a certain model or serial number.

Additional information
> Toggle to show or hide the available additional information columns.

19. Administrator view

To enter the administrator view, select **Admin** in the application header. The available administrator view options are different for each user role.

The administrator view is not available for guest users.

19.1 Administrator view for users

Users with the user role **user** have only access to their own user information.
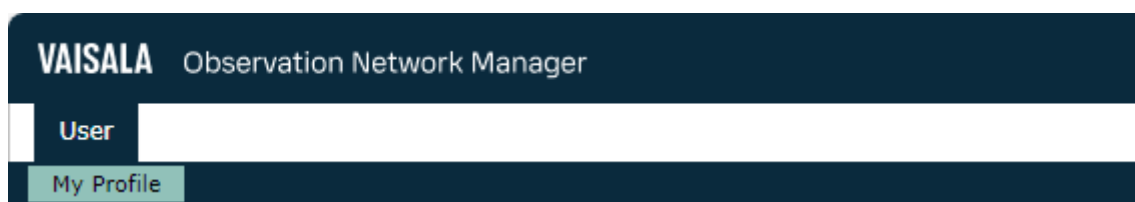
Figure 21   Administrator view for users

19.2 Editing user profile

To edit your personal information:

1. In the application header, select **Admin**.

2. In the administrator view, select **User > My Profile**.

> Active Directory users can edit only **Time zone** and **Language**.

3. Fill in the appropriate information.

Username
Cannot be edited.

Email
Your email address. This is a mandatory field.

First name, **Last name**, **City**, **Country**
Optional fields.

Time zone
Time zone used in NM10 views and reports. By default **Local** (= as set in your computer settings).

Language
The language of the user interface.

Organizations and roles
Cannot be edited.

4. Select **Save**.

5. To return to the desktop view, select **Exit Admin** in the application header.

19.3 Changing password

Users can change their password after a successful login with the current password. This is not available for guest users and Windows Active Directory users.

> If you have forgotten your password, contact an administrator-level user to get a new one.

1. In the application header, select **Admin**.

2. Select **User > My Profile**.

3. Select **Reset password**.

4. In the **Change password** window, enter the old password, the new password, and confirm the new password.

   • If you try to create a password that does not match the defined password requirements, the system will prompt you to edit the password.
   • Root-level administrators can configure the password requirements for all the passwords created in the system.

5. Select **Save**. Use the new password the next time you log in.

19.4 Changing time zone

Users can select which time zone used in their NM10 views and reports. This is not available for guest users.

1. In the application header, select **Admin**.

2. Select **User > My Profile**.

3. Select the time zone from the **Time zone** list. By default **Local** (= as set in your computer settings).

4. Select **Save**. The time is displayed using the selected time zone when you refresh the screen or go back to the desktop view.

20. Troubleshooting

Table 13   Troubleshooting

Problem	Probable Cause	Solution
An observation site is not displayed on the web pages.	The site has not been added or enabled.	Contact administrator.
	The site may be filtered out by search or site group or organization selection.	Empty the search field. Check the site group and organization selection in the application header.
The data or the view elements are not displayed properly.	Check your internet browser version.	See Browser requirements (page 14).
Observation data is missing (empty).	Empty column in a table means there is no sensor for that parameter in the observation site.	-
Slash marks (///) are displayed instead of observation data.	There is a problem in the site or in communication.	See the events in the **Events** view for more information. Check database connection and the station.
	In single-site display installation, the site has not been selected. In single-site display installation, the default configuration may contain parameters that your weather station does not send.	Administrator-level users can select the site and adjust and remove the parameters.
Problems with saving the data into database or with showing the data in the Web user interface.	3rd party Firewall settings may prevent communication.	Contact administrator.
You cannot log in with your user name, instead the text "Login failed, please check your user name and password." is displayed.	The user name and password may be case sensitive. The maximum allowed number of logged in users has been exceeded, or users have closed the browser windows without logging out in which case there is a session timeout (by default 5 minutes) before the user is actually logged out.	Check your user name and password. If you have forgotten your password, contact administrator.
You cannot log in, instead the text "The maximum number of users has been exceeded." is displayed.	The maximum allowed number of logged in users has been exceeded, or users have closed the browser windows without logging out in which case there is a session timeout (by default 5 minutes) before the user is actually logged out.	Wait for a few minutes and try again. If the problems persists, contact administrator.

Problem	Probable Cause	Solution
AUTOSONDE site is not displayed in the user interface.	AUTOSONDE sites have not been registered, or SSL/TLS certificates or authentication keys have not been configured correctly.	Contact administrator.
	You may not have logged in the correct organization.	Check your user name, and contact root-level administrator, if needed.
Site status is "error" but there are no related error events.	Connection to the site is not available and no heartbeat event is received.	See the **Disconnect time** and **Disconnected since** columns.
Weather radar site is not displayed in the user interface.	Weather radar site has not been registered or authentication key has not been configured correctly.	Contact administrator.
Lightning processor or lightning sensor is not displayed in the user interface.	Lightning processor has not been registered or authentication key has not been configured correctly.	Contact administrator.
Thinfinity Remote Desktop window is not displayed.	The **Connect automatically and bypass this page** option may have been selected previously.	Contact administrator.
NM10 system becomes unstable, for example: • Map is not loading properly • Observations are not being saved in the database • Configurations cannot be changed • Services do not start properly	The default Windows paging file size is too small (= the same as the amount of installed RAM).	Contact administrator.

More troubleshooting information is available in *Vaisala Observation Network Manager NM10 Installation and Configuration Guide*.

Technical support

Contact Vaisala technical support at helpdesk@vaisala.com. Provide at least the following supporting information as applicable:
- Product name, model, and serial number
- Software/Firmware version
- Name and location of the installation site
- Name and contact information of a technical person who can provide further information on the problem

For more information, see www.vaisala.com/support.

Warranty

For standard warranty terms and conditions, see www.vaisala.com/warranty.

Please observe that any such warranty may not be valid in case of damage due to normal wear and tear, exceptional operating conditions, negligent handling or installation, or unauthorized modifications. Please see the applicable supply contract or Conditions of Sale for details of the warranty for each product.

Recycling

Recycle all applicable material according to local regulations.

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