

Software manual

moneo|appliance management system (AMS) QHA200 V1.8 or higher

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1 Preliminary note

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1.3 Purpose of the document

This software manual describes the moneo|appliance management system (AMS).

▶ For better understanding, use this manual along with the opened software.

1.4 Symbols used

- ✓ Requirement
- Instructions
- Reaction, result
- [...] Designation of keys, buttons or indications
- → Cross-reference

Important note

Information



Non-compliance may result in malfunction or interference.



Supplementary note

1.5 Warnings used

ATTENTION

Warning of damage to property

2 Safety instructions

- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications without any restrictions.
- Only use the product for its intended purpose (\rightarrow Intended use).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- There is an encrypted ifm service account that is used for assistance in the event of support/errors.
 (→ ifm service account □ 26)

3 Intended use

The moneo|appliance management system (AMS) is used for maintenance and configuration of the moneo|appliance.

4 Installation

The AMS is pre-installed on moneo|appliance at the factory.

For further information on setting up moneo|appliance see \rightarrow Instructions for set-up.

4.1 Standard IP addresses

moneo|appliance (standard)

Ethernet interface	Description	Standard IP address	Subnet mask
Eth1	OT interface (sensor network)	192.168.0.100	255.255.255.0
Eth2	IT interface	DHCP	DHCP

moneo|appliance (as part of the starter kit)

Ethernet interface	Description	Standard IP address	Subnet mask
Eth1	OT interface (sensor network)	192.168.1.100	255.255.255.0
Eth2	IT interface	192.168.0.100	

4.2 Default host name

The default host name of the moneo|appliance is: moneo-<serial number of moneo|appliance>. When the user has logged in, the default host name can be viewed at: [System status] > [System information]



The serial number can be found on the product label attached to the device.

4.3 Standard network communication

4.3.1 Firewall exceptions - ports

For communication in the network, the appliance needs access to various addresses in the network.

Source	Target	Protocol / port	Description
Client	moneo	TCP/80	Unencrypted access to moneo and AMS
Client	moneo	TCP/443*	Encrypted access to moneo and AMS
moneo	IO-Link Master	TCP/80	Connection to the IO-Link master for data communication
moneo	VSE	TCP/3321	Communication connection VSE diagnostic hardware
moneo	ifm Agent software	TCP/9123	Communication connection ifm Agent software
moneo	https://System.update.ifm	TCP/443	ifm update server

▶ If necessary: adjust the firewall settings accordingly.

Source	Target	Protocol / port	Description
moneo	https://ifmelectronicgmbh.prod.sentinelcloud.com	TCP/443	ifm licensing server
moneo	gm01-emea.ifm.com	TCP/443	Remote access rendezvous server
moneo	https://www.ifm.com https://ioddfinder.io-link.com https://io-link.com https://autosen.com https://www.phoenixcontact.com	TCP/443	IODD database

4.3.2 External URLs

Certain functions/services use external resources. The table below shows the external URLs which are accessed.

▶ If necessary: adjust the firewall settings accordingly.

URL	Service	As of release version	Purpose
https://www.ifm.com/ifmweb/ downcont.nsf/files/update_IODDs _LRS4/\$file/update_IODDs_LRS4.xml	loddParser	1.7	Downloading the ifm IODDs that are not available under loddFind- er.
https://ioddfinder.io-link.com/api/ drivers?size=2000&page={0}	loddParser	1.6	 Checking for updates under loddFinder for local IODDs.
https://ioddfinder.io-link.com/api/ ioddarchive?vendorId={0}&deviceId ={1}&ioLinkRev={2}			 Downloading IODDs from loddFinder
https://www.io-link.com/share/ Downloads/Vendor_ID_Table.xml	Parameterization	1.6	Finding manufacturers for newly imported Irp files.
https://www.ifm.com/{region}/ {locale}/product/{productId}			User documentation for ifm devices
https://autosen.com/_img/ _products/_downloads/{locale}/ {productId}_manual.pdf			User documentation for autosen devices
https://www.phoenixcontact.com/ qr/{productId}			User documentation for Phoenix contact devices
https://system.update.ifm/artifactory/api	AMS	1.6	Online updates
gm01-(193,242,155,235)			Remote support
https://ifmelectronicgmbh.prod. sentinelcloud.com/	License Manage- ment	1.6	Licence activation

5 Function

The AMS allows the user to carry out basic maintenance tasks for the moneo|appliance, e.g.:

- Reading status information for hardware and software
- Setting the network configuration and hostnames
- Setting the date and time
- Rebooting or shutting down the moneo|appliance
- · Monitoring and restarting services
- Importing software updates
- Displaying contact details for technical support.
- · Setting the access for remote support
- · Reading log files
- Data backup

5.1 Access options

The AMS offers the following access options with different functionalities:

- 1. Web interface: Offers the full range of functions and can be used via a browser.
- 2. Console: Offers basic functions for interfaces, accesses, etc. that are required for initial setup as well as subsequent administrative activities.

6 Web interface

The web interface offers the following access options:

- 1. Guest view:
 - Restricted access; Limited to status information and system information
- 2. Registered with AMS:
 - Unrestricted access to all status and system information
 - Unrestricted access to all settings of the system

6.1 Open guest view

- ✓ The installation and connection of the moneo|appliance are completed. → Instructions for set-up
- ✓ Use a recommended browser: Google Chrome (version 93 or higher), Mozilla Firefox (version 78 or higher), Microsoft Edge (version 93 or higher).
- The device with the browser (e.g. PC) is connected to the same network as the Ethernet interface eth2 of the moneo|appliance.
- Open the URL of the moneo|appliance in the browser: https://<IP or host name>/ams

Please observe the following when opening it for the first time:

IP address It was assigned during setup or automatically assigned by the DHCP server.

Host name: \rightarrow Chapter Default host name (\rightarrow \square 8)

 \triangleright The guest view is open.

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6.2 Login to AMS

6.2.1 First-time login

- ✓ The guest view is open. (\rightarrow Open guest view □ 11)
- ✓ Standard login details: User: administrator
 Default password: serial number of the device
- Read the serial number on the product label on the unit.
- ▶ Click on the *⊕* icon (top left) to log in as administrator with the above standard login details.
 - > The user is prompted to change the default password.
- Change the password according to the Password requirements (\rightarrow \Box 12).
- \triangleright The password has been changed.
- \triangleright The AMS offers the full range of functions.

6.2.2 Login

- ✓ The guest view is open. (\rightarrow Open guest view □ 11)
- ▶ Click on the *∋* icon (top left) to log in as administrator.
- \triangleright The AMS offers the full range of functions.

6.2.3 Logout

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ► Click on the Licon (top left)
- ▶ Log out by clicking on ⊖ [Logout].
- \triangleright The guest view is open.

6.2.4 Changing the password

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ► Click on the Licon (top left)
- ▶ Click on \widehat{P} [Change password] to change the password. Password requirements (\rightarrow \square 12)
- \triangleright The password has been changed.

6.2.5 Resetting the password

- ✓ The guest view is open. (\rightarrow Open guest view □ 11)
- ► Click on the Licon (top left)
 - \triangleright The input mask for the login appears.
 - \triangleright The button [Forgot password?] is below the input mask.
- Click on the [Forgot password?] button.
- In the input field [Username], enter the user name administrator.
- Enter the new password in the input field [New password]. Password requirements (\rightarrow \Box 12)
- ▶ In the input field [Serial number], enter the serial number of the moneo|appliance.
- Click on the [Change password] button.
- \triangleright The new password will be immediately active.

6.2.6 Password requirements

- · Minimum length: 8 characters
- Must contain:
 - at least one upper case letter
 - at least one lower case letter
 - At least one number
 - At least one special character

6.3 System status

6.3.1 Display system load

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- In the [System status] section, show the system load for various system components on the [Resource monitoring] tab:
- CPU utilisation in %
- Total and used RAM in % and GB

- Network load in Mbit
- · Total and used hard disk space in % and GB for all partitions

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The displayed values for system load are read and displayed statically at the time of page setup.

An update is only performed when the page is reloaded, e.g. by pressing the key [F5].

6.3.2 Managing moneo services

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ✓ In the [System status] section, the [moneo services] tab shows the moneo services in their individual states.
- Clicking on i opens a menu with the following options:
- [Restart all services]
- [Start all services]
- [Stop all services]
- Click on one of the menu items to start, stop or restart all moneo services simultaneously.
- Click on one of the buttons in the [Actions] column next to the respective moneo service to perform the following individual actions:
- Display the memory usage of the service with ♥.
- Start the service with ►.
- Stop the service with ■.
- Restart the service with O.

ATTENTION

Starting and stopping services

- \triangleright Influence on the proper functioning of the running system.
- ▷ Data loss is possible.
- ▶ Recommendation: Only start and stop services after consultation with the ifm service.

6.3.3 Managing System Services

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ✓ In the [System status] section, the [moneo services] tab shows the moneo services in their individual states.
- Click on one of the buttons in the [Actions] column to perform the following actions:
- Start the service with ▶.
- Stop the service with ■.
- Restart the service with O.

ATTENTION

Starting and stopping services

- > Influence on the proper functioning of the running system.
- \triangleright Data loss is possible.
- ▶ Recommendation: Only start and stop services after consultation with the ifm service.

6.3.4 Displaying system information

- ▶ In the [System status] area, select the [System information] tab.
- \triangleright General status information is displayed:
- System type
- Serial number
- Installed version of the moneo software
- Installed version of the AMS
- · Installed version of the moneo|appliance
- Installed version of the License Gateway

6.4 Configuration

6.4.1 Changing the network settings

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- In the section [Configuration] > [Network], enter the following network settings for the network interfaces Eth1 and Eth2 separately.

Input box	Description	
IP address	IP address	
Netmask	Subnet mask	
Gateway	Standard gateway	
Name server	DNS server (separate multiple servers with commas)	

- Click on [Save] to save the changes.
- \triangleright The network settings will be stored.



Adjust the DNS alias according to the set IP address to Eth1 and the set host name.



Interference with the function of the current system when the network settings are changed.
Assign the IP address and host name in a network (subnet) only once.

6.4.2 Setting DHCP

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- Configure the following network settings for the network interfaces Eth1 and Eth2 separately.
- Click on the [DHCP] button under [Configuration] > [Network] in the section of the required network interface.
- Click on [Save] to save the changes.

 \triangleright The interface has been changed to DHCP mode.

6.4.3 Changing the hostname

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ▶ Change the host name under [Configuration] > [Network] in the [HOSTNAME] section.
- Click on the [Save] button.
- \triangleright The hostname has been changed.



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Adjust the DNS alias according to the set IP address to Eth1 and the set host name.

Interference with the function of the current system when the network settings are changed.
Assign the IP address and host name in a network (subnet) only once.

6.4.4 Activating proxy servers

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- Under [Configuration] > [Proxy settings] enable [Use proxy].
- Enter the proxy data for the respective protocol ([http] and [https]) or activate [Use same proxy server for all protocols] to use the same proxy server for all protocols.
- ▶ If a user name and password are required for the proxy server: Enable [Use authentication] and enter the user information [User name] and [Password].
- ▶ If no user name and password are required for the proxy server: Disable [Use authentication].
- Click [Save] to save and apply the proxy server settings.

6.4.5 Adding proxy exclusions

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ▶ Under [Configuration] > [Proxy settings] in the section [Proxy exclusions], click on the + icon.
- Enter the proxy exceptions and click [Save].
- $Descript{S}$ The proxy will no longer be applied to the added addresses.

6.4.6 Removing proxy exceptions

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ► Under [Configuration] > [Proxy settings] in the section [Proxy exclusions], remove the desired addresses by clicking on the to icon.
- Click [Save] to save the settings.

6.4.7 Deactivating proxy servers

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- Under [Configuration] > [Proxy settings] disable [Use proxy].
- Click [Save] to save the settings.
- \triangleright No proxy is used.

6.4.8 Enabling and setting the time server

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The current time of an internal or external time server can be adopted using the Network Time Protocol (NTP).

ATTENTION

The moneo services are restarted when the settings are saved. During this process, moneo and the moneo appliance management system are unavailable for some time.

- \triangleright No data is recorded during the restart.
- \triangleright Data loss is possible.
- ▶ Restart the moneo services at an uncritical moment, e.g. during a standstill.
- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ▶ Under [Configuration] > [Date & Time] select the option [Synchronise with NTP-Server].
- In the [NTP-Server] section under [Enter NTP server address] enter the IP address of the requested NTP server.
- ▶ If there are several NTP servers, click on + to add and configure an additional NTP server.
- Click on [Save].

> The window [Time changes require restart] appears.

- ▶ Click [SAVE & RESTART] to apply the settings and restart the moneo services.
- \triangleright The NTP servers are set.

6.4.9 Deleting the time server

ATTENTION

The moneo services are restarted when the settings are saved. During this process, moneo and the moneo appliance management system are unavailable for some time.

- \triangleright No data is recorded during the restart.
- \triangleright Data loss is possible.
- Restart the moneo services at an uncritical moment, e.g. during a standstill.
- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ✓ The section [Configuration] > [Date & Time] is open.
- ▶ In the [NTP-Server] section, click on in the [Actions] column to delete the corresponding NTP server.
- Click on [Save].
 - ▷ The window [Time changes require restart] appears.
- ▶ Click [SAVE & RESTART] to apply the settings and restart the moneo services.
- \triangleright The corresponding NTP server will be deleted.

6.4.10 Disabling the a time server

To disable an NTP server, set the date and time manually. Setting date and time (\rightarrow 17)

6.4.11 Setting the time zone

ATTENTION

The moneo services are restarted when the settings are saved. During this process, moneo and the moneo appliance management system are unavailable for some time.

- \triangleright No data is recorded during the restart.
- \triangleright Data loss is possible.
- Restart the moneo services at an uncritical moment, e.g. during a standstill.
- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ✓ The currently set time zone is indicated under [Configuration] > [Date & Time].
- ▶ Under [Configuration] > [Date & Time], select the required time zone from the list.
- Click on [Save].
 - > The window [Time changes require restart] appears.
- ▶ Click [SAVE & RESTART] to apply the settings and restart the moneo services.
- \triangleright The time zone has been set.

6.4.12 Setting date and time

ATTENTION

The moneo services are restarted when the settings are saved. During this process, moneo and the moneo appliance management system are unavailable for some time.

- \triangleright No data is recorded during the restart.
- \triangleright Data loss is possible.
- Restart the moneo services at an uncritical moment, e.g. during a standstill.
- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ▶ Under [Configuration] > [Date & Time] select the option [Manual time setting].
- Set the date and time.
- Click on [Save].
 - > The window [Time changes require restart] appears.
- ▶ Click [SAVE & RESTART] to apply the settings and restart the moneo services.
- $\,\triangleright\,$ The date and time are set.

6.4.13 Adding a USB memory device

Connect the USB memory device to the USB port of moneo|appliance.



- ▶ Use a USB memory device with at least 4 GB storage capacity.
- ▶ Under [Configuration] > [USB device], select the requested device from the table.
- ▶ In the [Actions] column, click on ✓ [Allow device].
- ▶ The message [Formatting of the USB device necessary] appears.

ATTENTION

Formatting the USB memory device.

- \triangleright Data stored on the USB memory device will be deleted.
- \triangleright Data loss is possible.
- Create a backup of data you want to keep.
- Click on [Delete Data & Format].
- > The USB memory device is formatted. Data stored on the USB memory device will be deleted.
- \triangleright The USB memory can now be used in moneo|appliance.

6.4.14 Denying a USB memory device

- ▶ Under [Configuration] > [USB device], select the requested device from the table.
- ▶ In the Actions column, click on ✓ [Deny device].
- \triangleright The USB memory can no longer be used in moneo|appliance.

6.4.15 Removing a USB memory device

- ▶ Under [Configuration] > [USB device], select the requested device from the table.
- ▶ In the [Actions] column, click on ✓ [Delete device].
- $\,\triangleright\,$ The USB memory device is removed.

6.4.16 Shutting down / rebooting the device

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- Restart the moneo|appliance by clicking on [RESTART] under [Settings] > [System]

or

Click on [SHUTDOWN] to shut the system down.



If the system is shut down using the [SHUTDOWN] function, it can only be restarted on the device.

6.5 Update

6.5.1 Enabling automatic checks for updates

- $\checkmark~$ The user is logged in to the AMS. (\rightarrow Login to AMS \square 11)
- ▶ Under [Update] enable the option [Automatic update check daily at 05:00].
- \triangleright The system checks daily at 5:00 am whether updates are available.
- $Descript{S}$ If an update is available, the status [Update available] is displayed.

6.5.2 Disabling automatic checks for updates

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ▶ Under [Update] disable the option [Automatic update check daily at 05:00].

 \triangleright The system no longer checks automatically whether updates are available.

6.5.3 Manual search for available updates

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ▶ Click on the ⊖ icon under [Updates].
- \triangleright A check for updates is run.
- \triangleright If an update is available, the status [Update available] is displayed.

6.5.4 Installing online updates

ATTENTION

Changes to the system during the update process.

- ▷ Influence on the proper functioning of the system.
- \triangleright Data loss is possible.
- Do not make any changes to the system during the update procedure.
- Follow the instructions during the update procedure.

!

No version may be skipped!

An update is only possible from the previous version!

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ✓ An update is available.
 Enabling automatic checks for updates (→ □ 18)
 Manual search for available updates (→ □ 19)
- ✓ Under [Updates] the status [Update available] is displayed.
- Click on ± to download the update.
 - Once the update is downloaded, information about the available update is displayed in the column [Available update version].
- Click on [Start Update] to install the update.

6.5.5 Installing online updates

ATTENTION

Changes to the system during the update process.

- \triangleright Influence on the proper functioning of the system.
- \triangleright Data loss is possible.
- Do not make any changes to the system during the update procedure.
- Follow the instructions during the update procedure.



No version may be skipped!

An update is only possible from the previous version!

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ✓ A more recent version than the one currently installed is available.
- Download the update file from www.ifm.com.

- ▶ Under [Updates], click on the th icon and select an update file.
- Click on [Start Update] to install the update.

6.6 Saving and restoring

This menu item offers the following options:

- · Manually creating and externally saving a backup of the existing system
- · Activating/deactivating an automatic daily backup in the memory of the moneo|appliance.
- · Restoring backup files that were created manually or automatically.

The generated backup file contains all system-relevant information to ensure a smooth system recovery.

6.6.1 Creating a manual backup

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ✓ The [Backup & Restore] section is open.
- Click on the [Create backup] button.
 - \triangleright The backup is created and stored on the hard disk of moneo|appliance.
 - \triangleright The backup is encrypted with an automatically generated password.
- When the backup is complete, press the [F5] key to refresh the page.
- \triangleright The newly created backup appears in the table.
- \triangleright The backup is saved to the desired target. (\rightarrow Configuring a backup target \square 20)
- \triangleright The backup file is additionally stored in the archive in the memory of moneo|appliance.



Keep the backup file in a different location than moneo|appliance, taking into account fire protection and access regulations.

6.6.2 Uploading a backup file

- ✓ A backup file has been previously created and is located on a data carrier of the currently used end device. (→ Downloading a backup □ 22)
- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ✓ The [Backup & Restore] section is open.
- Click the [Upload backup file] button and select and open the file to be restored.
- \triangleright The backup file is loaded to moneo|appliance.
- \triangleright The backup file is available for recovery in the [Restore] section.



The backup file is only uploaded to the local memory.

6.6.3 Configuring a backup target

- Open the [Backup & Restore] section.
- Click the button [Configure backup target].
 - ▷ The [Configure backup target] window opens.
- Select the requested backup destination in the selection field.

To save backups locally:

- Select [Local Storage] as the destination and confirm with [OK].
- \triangleright Backups will now be stored locally.

To save backups on a USB memory device:



► First allow USB memory devices (→ Adding a USB memory device □ 17).

- Select [USB Storage] as the destination.
- ▶ Click ☉ [Refresh] to refresh the USB memories.
- Select the desired USB memory device from the table and confirm with [OK].
- \triangleright Backups will be stored on the selected USB memory device.

To save backups on a network storage:

- Select [Network storage] as the destination.
- ▶ Select the required protocol type: SMB, SFTP or NFS.
- Enter the required parameters and confirm with [OK].
- $Descript{S}$ Backups will be stored on the selected network storage.

6.6.4 Downloading backup passwords

- Open the [Backup & Restore] section.
- Click the button [Download backup passwords].
- > A PDF file with all backup targets and the corresponding MasterKey is downloaded.
- \triangleright The red key is the backup key used to encrypt the backups.



The local MasterKey is not output.

6.6.5 Restoring a backup



If the backup is to be restored on another moneo|appliance, assistance from ifm support is required.

A backup can only be restored if it has been created in the same moneo version with which the system is operated.

- ✓ At least one backup file has been previously created and/or uploaded from an external data carrier.
- ✓ The backup file is in the archive of the moneo|appliance.
- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ✓ The [Backup & Restore] section is open.
- ✓ Available backup files are displayed in tabular form with a timestamp.
- ▶ In the line of the required backup: Click on the [®] icon in the [Actions] column to start restoring the backup file.
- \triangleright The backup file will be restored.
- \triangleright Once started, the recovery of a backup file cannot be aborted.

> System settings, data, etc. of the moneo|appliance are reset to the status of the backup file that was imported.

6.6.6 Downloading a backup

- ✓ At least one backup file has been previously created and/or uploaded from an external data carrier.
- ✓ The backup file is in the archive of moneo|appliance.
- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ✓ The section [Backup & Restore] is open.
- ✓ Available backup files are displayed in tabular form with a timestamp.
- ► In the line of the required backup: Click on the [®] [Download] icon in the [Actions] column to download the backup file.



Downloading a backup is only possible if the backup destination is "Local" or "USB" Configuring a backup target (\Rightarrow \Box 20)

6.6.7 Deleting a backup

- ✓ At least one backup file has been previously created and/or uploaded from an external data carrier.
- ✓ The backup file is in the archive of moneo|appliance.
- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ✓ The section [Backup & Restore] is open.
- ✓ Available backup files are displayed in tabular form with a timestamp.
- ► In the line of the required backup: Click on the [®] [delete] icon in the [Actions] column to delete the backup file.

6.6.8 Enable automatic backup

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ✓ The [Backup & Restore] section is open.
- Enable the option field [Automatic daily backup at 02:50:00].
- \triangleright The automatic backup is active.
- > Every day at 2:50 am, a backup file will be created automatically in the moneo|appliance archive.

6.6.9 Disable automatic backup

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS \square 11)
- ✓ The [Backup & Restore] section is open.
- Disable the option field [Automatic daily backup at 02:50:00].
- \triangleright Automatic backup is disabled.

6.7 Maintenance

6.7.1 Determining support-related information

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS \square 11)
- Look up the ifm contact information in the section [Support] > [Contact information].

- ▶ Look up the information relevant for support in the section [System status] > [System information]:
- [System type]
- [Serial number]
- [Installed software]

6.7.2 Enabling remote access (SSH)

ATTENTION

SSH for remote access is enabled.

- \triangleright Unauthorised data access (read or write) is possible.
- > Unauthorised manipulation of the device function is possible.
- ▶ Recommendation: Enable SSH access only if prompted by the ifm service.
- ▶ Recommendation: Enable SSH access only temporarily and disable it after use.
- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- In the section [Support] > [Remote access], click on [Enable SSH access] to enable the SSH service for remote access to the console.
- \triangleright The SSH service is enabled.
- \triangleright Access via SSH is possible.

6.7.3 Disabling remote access (SSH)

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- In the section [Support] > [Remote access], click on [Enable SSH access] to disable the SSH service for remote access to the console.
- \triangleright The SSH service is disabled.
- \triangleright Access via SSH is no longer possible.

6.7.4 Enabling ifm remote support

Please note the information on the ifm-Serviceaccount (\rightarrow ifm service account \square 26).

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ✓ Remote access is enabled. (\rightarrow Enabling remote access (SSH) \Box 23)
- In the section [Support] > [Remote access], click on [Enable ifm remote support] to enable remote access for ifm.
- \triangleright The connection to the ifm VPN gateway is established.
- \triangleright ifm's support can access the system.

6.7.5 Disabling ifm remote support

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- In the section [Support] > [Remote access], click on [Enable ifm remote support] to disable remote access for ifm.
- \triangleright The connection to the ifm VPN gateway is disconnected.

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 \triangleright ifm's support can no longer access the system.

Recommendation: Also disable SSH access. (\rightarrow Disabling remote access (SSH) \square 23)

6.7.6 Download logfiles

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ▶ Click on [Download all logs] under [Support] > [Logging] to download all log files as a ZIP archive.

6.7.7 Show logfiles

- ✓ The user is logged in to the AMS. (\rightarrow Login to AMS □ 11)
- ▶ Click on ▷ under [Support] > [Logging] to show all log files.
- \triangleright The individual log files are displayed one below the other.

6.7.8 Show live log

- ✓ The user is logged in to the AMS. (→ Login to AMS \square 11)
- ▶ Display the log files under [Support] > [Logging]. Show logfiles (\rightarrow \square 24)
- ▶ In the line of the required log file: Click on the icon in the [Actions] column to show the selected log file.

7 AMS console

The following options are available to access the console:

- · Local access via a screen and keyboard connected to moneo|appliance.
- Remote access via IP/SSH. This access requires administrative clearing. Web interface: Enabling remote access (SSH) (→ □ 23), Console: Enabling Remote Support (SSH) (→ □ 28)

After logging in and establishing the connection to the AMS console, the operation and range of functions is identical in both cases.

The different menu items in the appliance management system can be selected using the keyboard. Example: The keyboard shortcut [C] opens [C) Configure the system].

7.1 Local access

In the following, local access to the AMS console is described.

7.1.1 Requirements

- ✓ The installation and connection of the moneo|appliance are completed. → Instructions for set-up
- Start the moneo appliance.
- \triangleright The AMS console will be started.

7.1.2 Logging in for the first time

- ✓ The login prompt is displayed.
- ✓ Standard login details: User: administrator
 Default password: serial number of the device
- Read the serial number on the product label on the unit.
- Enter the login details and confirm with [Enter].
 - ▷ If the login details are correct, the [Simple keyboard configuration menu] appears. Changing the keyboard layout (→ □ 28)
- Select the corresponding keyboard layout and confirm by clicking on [OK].
- Confirm the successful change by clicking [OK].
 - ▷ The prompt to change the password appears.
- Change the password according to the requirements and confirm by clicking [OK].
- Repeat the password and confirm by clicking [OK].
- \triangleright When the change was successful, the [Main menu] appears.

7.1.3 Login

- ✓ Login prompt is displayed.
- Enter the login details and confirm with [Enter].
- \triangleright If the login data is correct, the [Main menu] will appear.

7.2 Remote access

The following describes remote access to the AMS console via IP/SSH.

7.2.1 ifm service account



- There is an ifm service account that has full access to the system. This can be used for assistance in the event of support/error.
- The ifm service account can only be used if the customer allows SSH access / remote support and ifm is also granted access to the customer network.
- The password is unique for each appliance.
- The password is documented in encrypted form and can only be accessed by ifm support staff.

7.2.2 Requirements

- ✓ The installation and connection of the moneo|appliance are completed. → Instructions for set-up
- ✓ Remote access via IP/SSH is enabled.
 Web interface: Enabling remote access (SSH) (→ □ 23)
 Console: Enabling Remote Support (SSH) (→ □ 28)
- ✓ The device (e.g. PC) for connection is connected to the same network as the Ethernet interface eth2 of the moneo|appliance.
- ✓ A suitable SSH client is installed on the device, e.g. Putty or Microsoft Powershell.
- ✓ The login data for the system that is assigned during initial setup is known.
- Check the above-mentioned conditions.

7.2.3 Accessing the AMS console via SSH

- Start the SSH client on the accessing device.
- Enter the IP address of the moneo|appliance.
- ▶ Optional: Enter the SSH port 22.
- \triangleright Connection to the moneo|appliance console is established.
- \triangleright The AMS console login is displayed.

7.2.4 Login

- ✓ AMS console is started.
- ✓ Login prompt is displayed.
- Enter the login details and confirm with [Enter].
- \triangleright If the login data is correct, the [Main menu] will appear.

7.3 Displaying system information

7.3.1 Display host information

- Open the [Main menu].
- Select [I) Show system information].
 - ▷ The [Info menu] opens.
- Select [H) Show host information].
- \triangleright [Show host information] with the following information:

- Host name
- Uptime
- Serial number
- Version
- Hard disk utilisation

7.3.2 Display network information

- ▶ Open the [Main menu].
- Select [I) Show system information].
 - ▷ The [Info menu] opens.
- Select [N) Show network information].
- \triangleright [Show network information] with the configurations of the Ethernet interfaces appears.

7.3.3 Showing moneo service information

- ▶ Open the [Main menu].
- Select [I) Show system information].
 - \triangleright The [Info menu] opens.
- Select [S) Show moneo services information].
- Dash [moneo services status] appears with status information of the moneo services.

7.4 System configuration

7.4.1 Adapting the host name

The default host name of the moneo|appliance is:

moneo-<serial number of moneo|appliance>

▶ Note that the entry is case sensitive.

The host name can be adapted when signing in for the first time or later by following the below steps.

- Open the [Main menu].
- Select [C) Configure the system].

 \triangleright The [Configuration menu] opens.

- Select [H) Change the hostname].
 - \triangleright [Host name change] opens.
 - $Descript{Specify the new hostname]}$.
- Change the host name using the keyboard and select [Ok].
- \triangleright The host name is saved and the interface [Host name change] is closed.
- Select [R) Return to the previous menu] to go back to the previous menu environment.

7.4.2 Changing the password

- Open the [Main menu].
- Select [C) Configure the system].

- ▷ The [Configuration menu] opens.
- Select [P) Change the password].
 - \triangleright [Password change] opens.
- Enter password and acknowledge with [OK].
- Enter the identical password again and acknowledge with [OK].
- \triangleright Password is saved and the interface [Password change] change is closed.
- Select [R) Return to the previous menu] to go back to the previous menu environment.

7.4.3 Changing the keyboard layout

- ▶ Open the [Main menu].
- Select [C) Configure the system].
 - \triangleright The [Configuration menu] opens.
- Select [K) Change the keyboard layout].
 - ▷ The [Keyboard configuration menu] opens.
- Select
 - Simple: [S) Simple keyboard configuration] or Advanced: [A) Advanced keyboard configuration]
 - ▷ The [Simple keyboard configuration menu] or the [Configuring keyboard-configuration] menu opens.
- Select the drequired keyboard layout.
- Confirm by clicking [OK].

7.4.4 Enabling Remote Support (SSH)

The SSH service can be enabled only with local access.

Enabling the SSH service is necessary for subsequent remote access.

The current status of the SSH service is displayed in brackets after the menu item.



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Please note the information on the ifm-Serviceaccount (\rightarrow ifm service account \Box 26).

ATTENTION

SSH for remote access is enabled.

- > Unauthorised data access (read or write) is possible.
- > Unauthorised manipulation of the device function is possible.
- ▶ Recommendation: Enable SSH access only if prompted by the ifm service.
- ▶ Recommendation: Enable SSH access only temporarily and disable it after use.
- ✓ [Local access.]
- Open the [Main menu].
- Select [C) Configure the system].
 - \triangleright The [Configuration menu] opens.

- Select the menu item [S) Toggle SSH access (disabled)].
 - \triangleright Access via SSH will be enabled.
 - ▷ The menu item [S) Toggle SSH access (enabled)] is shown.
- Select [R) Return to the previous menu] to go back to the previous menu environment.

7.4.5 Disabling Remote Support (SSH)



Risk of connection failure and loss of access:

Disable the SSH service only with local access.



The current status of the SSH service is displayed in brackets after the menu item.

- ✓ [Local access]
- Open the [Main menu].
- Select [C) Configure the system].
 - ▷ The [Configuration menu] opens.
- Select the menu item [S) Toggle SSH access (enabled)].
 - \triangleright Access via SSH is blocked.
 - \triangleright The menu item [S) Toggle SSH access (disabled)] is displayed.
- Select [R) Return to the previous menu] to go back to the previous menu environment.

7.4.6 Adjust network settings

- Open the [Main menu].
- Select [C) Configure the system].
 - \triangleright The [Configuration menu] opens.
- Select [N) Configure the network].
 - \triangleright [Network configuration] opens.
- Select the required interface: [S) Sensor network (ETH 1)] or [I) IT network (ETH 2)].
- Select [U) Use DHCP].
- ▶ Change the entry [yes] / [no] as required.

With DHCP deactivated:

- Select [I) Set the IP address].
 - ▷ [Network (ip)] opens.
- Enter the new IP address using the keyboard and select [Ok].
 - \triangleright [Network configuration] opens.
- Carry out the settings for the network mask, the gateway and the DNS servers.
- Select [S) Save the configuration].
 - Dash The message [The network configuration was successfully changed] is displayed.
- Select [Ok].
- Select [R) Return to the previous menu] to go back to the previous menu environment.
- arepsilon The system is configured and available via web interface.

7.5 Restart the required moneo service.

- Open the [Main menu].
- Select [R) Restart the moneo services].
 - \triangleright [Restart the moneo services] opens.
- Restart the required service.
- Select [R) Return to the previous menu] to go back to the previous menu environment.

7.6 Resetting the AMS administrator password

- Open the [Main menu].
- Select [A) Reset the AMS 'administrator' password].
- > The administrator password is reset to: <serial number of moneo|appliance>

7.7 Reset the system to factory settings

ATTENTION

When resetting the system, all data is deleted and reset to the factory settings. This also includes the databases and backups.

- \triangleright Data loss is possible.
- ► Export backups you want to keep before resetting the system. (→ Saving and restoring □ 20)
- Open the [Main menu].
- Select [F) Factory-reset the system].
- Click [OK] to confirm the factory reset -or-

Click [ESC] to abort the factory reset.



At this point, the factory reset can be aborted with [ESC].

After confirming with [OK], the factory reset can no longer be aborted!

- \triangleright The system will be reset to the factory settings:
- > The host name will be reset to: moneo-<serial number of moneo|appliance>
- > The admin password will be reset to: <serial number of moneo|appliance>
- > The AMS password will be reset to: <serial number of moneo|appliance>
- > The IP addresses will be reset to the factory settings.
- \triangleright The moneo databases will be deleted.
- \triangleright The licences will be deleted.

7.8 Reboot the system

- Open the [Main menu].
- Select [B) Reboot the system].
- Acknowledge with [OK].
- $Descript{S}$ The system will then be restarted

7.9 Shut down the system

- ▶ Open the [Main menu].
- Select [D) Shutdown the system].
- Acknowledge with [OK].
- \triangleright The system will be shut down.

7.10 Logout

- ✓ Logging in to the console was successful.
- ✓ The [Main menu] is displayed.
- ► Use the menu [X) Exit] the console.
- \triangleright The user will be logged out.
- \triangleright Local access: The login prompt is displayed.
- \triangleright Remote access: The SSH connection is terminated.