Rosemount[™] TankMaster[™] Mobile User Guide

Inventory Management Software





TankMaster[™] **Mobile**

NOTICE

Read this manual before working with the product. For personal and system safety, and for optimum product performance, ensure you thoroughly understand the contents before installing, using, or maintaining this product. For equipment service or support needs, contact your local Emerson representative.

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1 Introduction

This is an introduction to the Rosemount $^{\text{\tiny{IM}}}$ TankMaster $^{\text{\tiny{IM}}}$ Mobile Inventory Management software.

Rosemount TankMaster Mobile is an application for remote monitoring of tank farms. It is designed for standard web browsers and mobile phones. The application connects with servers that run Rosemount TankMaster inventory management software.

The graphical interface gives you a clear overview of tanks. Various views are available for different levels of detail.

Rosemount TankMaster Mobile is designed to meet applicable requirements for network and system security in international standard IEC 62443-3-3. It is designed for an architecture that supports segmentation of network layers and separate security zones with different access levels for various components.

Rosemount TankMaster Mobile is designed for the Docker platform. This ensures stable and reliable operation and simple installation in various computer network environments.

Subscribe to software updates

You can subscribe to Rosemount TankMaster Mobile updates for a specified period of time.

A license gives you access to software upgrades and security patches when available. Software updates are available on TankMaster.Rosemount.com/ServiceCenter.

1.1 Features

TankMaster Mobile features real-time information on tank status. It collects data from existing TankMaster systems, and presents it in web browser interface on local or remote client computers, tablets, and smart phones.

Features can be summarized as:

- · Web browser based user interface
- · Connects to tank server in existing TankMaster systems
- Allows remote tank monitoring via web browser
- Access live inventory data when and where you need it
- · Get instant overview of all tanks
- Easy-to-use web application optimized for computer, tablet, and smartphone
- Cyber secure solution, compliant with the IEC 62443-3-3 standard

Rosemount TankMaster Mobile allows you to remotely monitor your tank farm. A dedicated server connects TankMaster Mobile with virtually any standard web browser and presents data collected from connected TankMaster servers.

Figure 1-1: TankMaster Mobile Overview

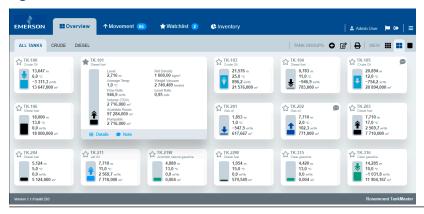
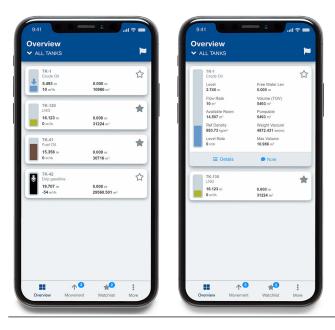


Figure 1-2: TankMaster Mobile Overview on Mobile Phone



TankMaster Mobile is based on servers that communicate with existing TankMaster tank server and provides measurement data and status information for presentation in a web user interface.

TankMaster Mobile supports responsive design principles. Tank cards and windows adapt to different screen sizes. User experience is not compromised as program windows are rescaled and re-sized.

The **Tank Server** is part of the existing TankMaster system. It manages all measurement data and status information for the connected devices.

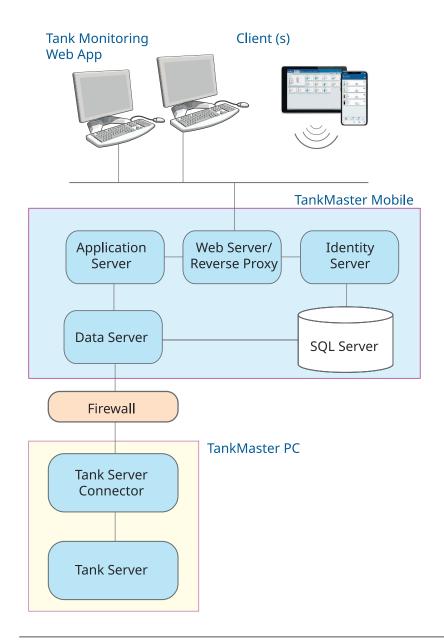
The **Tank Server Connector** communicates with the existing TankMaster system's Tank Server. It collects measurement data and status information and provides it to the **Data Server**.

The connector runs on a separate machine and exposes its ports to the plant network only. It will not allow traffic outside this network layer.

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The **Data Server** feeds the **Application Server** with tank data. The **Application Server** then provides the encrypted information to connected web browser clients.

Figure 1-3: TankMaster Mobile System Architecture



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1.2 Manual overview

This manual is a guide for using the Rosemount[™] TankMaster[™] Mobile application.

Chapter Introduction provides a description of the TankMaster Mobile workspace and system architecture.

Chapter What is Rosemount TankMaster™ Mobile? provides a brief introduction to the Rosemount TankMaster Mobile web browser interface.

Chapter Getting started provides information on how to start using the TankMaster Mobile web application.

Chapter View tank data describes tank data presentation with tank cards.

Chapter View inventory data describes how to set up and view inventory data cards.

Chapter Reports describes how to set up and view reports.

Chapter Translations describes how to manage translations for the Rosemount TankMaster[™] Mobile application web interface.

Chapter System administration describes various system administration functions such as user administration, license management, and more.

Chapter User settings describes setup functions available for all users such as My Profile setup, changing password, and adding tank groups.

Chapter Data presentation provides an overview of how status information is presented in tank cards.

Chapter License management describes how to add a new Rosemount[™] TankMaster[™] Mobile license as well as various license management tasks

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1.3 Technical documentation

The Rosemount Tank Gauging System includes a wide portfolio of user documentation. For a complete list, see product pages on Emerson.com/Rosemount.

Reference manuals

- Rosemount Tank Gauging System Configuration Manual (00809-0300-5100)
- Rosemount 2460 System Hub (00809-0100-2460)
- Rosemount 2410 Tank Hub (00809-0100-2410)
- Rosemount 5900S Radar Level Gauge (00809-0100-5900)
- Rosemount 5900C Radar Level Gauge (00809-0100-5901)
- Rosemount 2240S Multi-Input Temperature Transmitter (00809-0100-2240)
- Rosemount 2230 Graphical Field Display (00809-0100-2230)
- Rosemount 5300 Guided Wave Radar (00809-0100-4530)
- Rosemount 5408 Radar Level Transmitter (00809-0300-4408)
- Rosemount 3308 Series Wireless Guided Wave Radar (00809-0100-4308)
- Rosemount Tank Gauging Wireless System (00809-0100-5200)
- Rosemount TankMaster Software Installation Manual (00809-0400-5110)
- Rosemount TankMaster WinOpi (00809-0200-5110)
- Rosemount TankMaster WinSetup (00809-0100-5110)
- Rosemount TankMaster WinView (00809-0300-5110)
- Rosemount 5900 Proof Test with Reference Reflector (00809-0200-5900)
- Rosemount TankMaster Floating Roof Monitoring (00809-0500-5100)
- Rosemount TankMaster Full containment tanks (00809-0500-5110)
- Rosemount 5900 Radar Level Gauge and Rosemount 2410 Tank Hub Safety Manual Option S (00809-0400-5100)
- Rosemount 5900 Radar Level Gauge and Rosemount 2410 Tank Hub Safety Manual SIL3 (00809-0200-5100)
- Rosemount TankMaster Mobile User Guide (00809-0100-5120)
- Rosemount TankMaster Mobile Installation Manual (00809-0200-5120)

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Product data sheets

- Rosemount Tank Gauging System (00813-0100-5100)
- Rosemount TankMaster Inventory Management Software (00813-0100-5110)
- Rosemount TankMaster Mobile Inventory Management Software (00813-0100-5120)
- Rosemount 2460 System Hub (00813-0100-2460)
- Rosemount 2410 Tank Hub (00813-0100-2410)
- Rosemount 5900S Radar Level Gauge (00813-0100-5900)
- Rosemount 5900C Radar Level Gauge (00813-0100-5901)
- Rosemount 2240S Multi-input Temperature Transmitter (00813-0100-2240)
- Rosemount 565/566/765/614 Temperature and Water Level Sensors (00813-0100-5565)
- Rosemount 2230 Graphical Field Display (00813-0100-2230)
- Rosemount 5300 Level Transmitter (00813-0100-4530)
- Rosemount 5408 Level Transmitter (00813-0100-4408)

2 What is Rosemount TankMaster[™] Mobile?

2.1 Start page

This is a brief introduction of what you can do in TankMaster Mobile Web app.

TankMaster Mobile provides you with several tools for efficient tank monitoring:

- Clear overview of tanks
- Use watchlists to monitor tanks of special interest
- · Tank movements based on desired flow rate limits
- · Each tank presented with a card
- · Tanks can be organized in groups

Sign in to the TankMaster Mobile application as described in Sign in procedure. The Overview page will appear showing tanks and tank data.

In the **All Tanks** tab each tank is presented with a tank card. You may change view to larger tank cards with more information.

EMERSON Overview ↑ Movement 65 ★ Watchlist 2 (Inventory TANK GROUPS 😝 🌠 🔒 VIEW 🏢 🔡 ALL TANKS DIESEL TK-101 TK-103 TK-100 ★ TK-102 TK-104 12,085 m 3,159 m 1,0 °C 970,9 m³/h 3 159,000 m³ 23,138 m 2,0 °C -527,3 m³/h 23 138,000 m³ 21,978 m 25,0 °C 858,6 m³/h 21 978,000 m³ 0,343 m 11,0 °C -964,1 m³/h 343,000 m³ TK-106 ☆ TK-111 TK-105 9 ☆ TK-130 ☆ TK-201 20,524 m 12,0 °C -788,3 m³/h 20 524,000 m³ 12,085 m 7,0 °C -1 668,7 m³/h 6 042,500 m³ 1,104 m 1,0 °C -552,3 m³/h 368,000 m³ 18,000 m 13,0 °c 15,358 m −162,0 °c 0,0 m³/h 18 000,000 m 0,0 m³/h 30 716,000 m² TK-203 ☆ TK-204 ☆ TK-211 ☆ TK-21W ₩ TK-202 8,178 m 2,0 °C 98,7 m³/h 817,800 m³ 8,889 m 17,0 °C 2 535,0 m³/h 8 889,000 m³ 8,893 m 11,0 °C 2 508,8 m³/h 8 893,000 m³ 5,124 m 5,0 °c 9,082 m 6,0 °C 4 124,0 m³/h 15 170,724 m² 0,0 m 5 124,000 m

Figure 2-1: Overview Page All Tanks

Tank groups

You may organize tanks in various tank groups that suit your product portfolio or other requirements.

Figure 2-2: Overview All Tanks

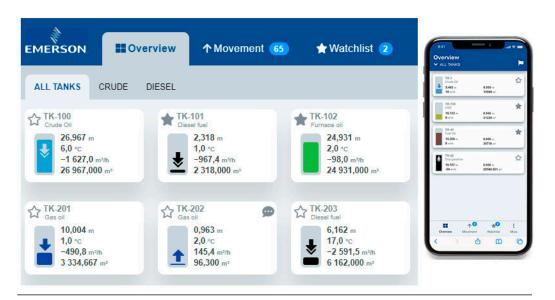


Figure 2-3: Overview Tank Groups



Movement and Watchlists

There are dedicated tabs for tank movement and watchlist.

Figure 2-4: Movement



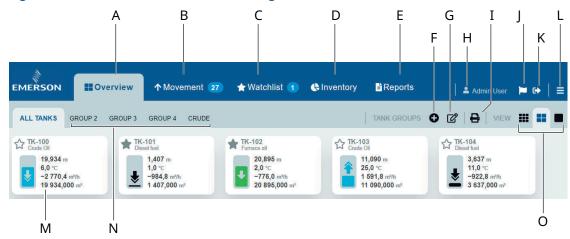
Figure 2-5: Watchlist



2.2 Workspace

TankMaster Mobile web application start page has menus and icons for easy navigation to the various TankMaster Mobile functions.

Figure 2-6: Menus and Icons on the Start Page



- A. Overview tab
- B. Movement
- C. Watchlist
- D. Inventory
- E. Reports
- F. Add tank group
- G. Shortcut to My Profile
- H. User account ("Administration Mode" appears to the left when signed in as administrator)
- I. Print
- J. Message
- K. Sign out
- L. Menu options (Administration Mode⁽¹⁾, My Profile, Sign Out, Help Center, About TankMaster)
- M. Tank card
- N. Tank groups
- O. Tank card size (small, medium, large)

Related information

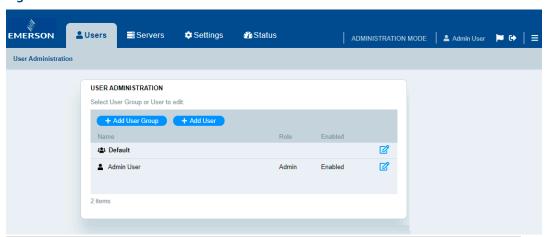
Start page menus

⁽¹⁾ Available for administrator accounts

2.2.1 Administration Mode

New menu options appear when you sign in to **Administration Mode**.

Figure 2-7: Menus in Administration Mode



2.2.2 Start page menus

Summary of start page menus.

Table 2-1: Menus and icons on the start page

Item	Description
Overview	Presents an overview of tanks and tank groups
Movement	Shows all tanks with moving product surface, i.e. tanks which are filled or emptied
Watchlist	Presents a group of tanks of special interest
Inventory	Presents Total Observed Volume and other tank inventory variables
Reports	Lets you view reports with tanks and variables
Add tank group	Lets you add a new group with the desired tanks
User account	User account currently signed in
Print	Shortcut to print dialog.
Message	The message flag indicates that a message is available. Click the icon to read messages.
Sign out	Sign out from this account
Menu options	List of menu options: Administrator Mode My Profile Sign out Help center About TankMaster
Tank card	Tank cards are available in small, medium, and large size
Tank groups	Available tank groups
Shortcut to My Profile	Opens My Profile with Account and Tank Groups
Select tank card size	Select the desired tank card size; small, medium, or large

Related information

Workspace

3 Getting started

3.1 Preparations

This section shows how to navigate and sign in to the Rosemount[™] TankMaster[™] Mobile web application.

Prior to start using the TankMaster Mobile web app you need to make sure that a valid user account is available. An account can be created by the system administrator. The administrator grants access to view tanks and tank data. Note that you also need an approved device in order to access the web app. Device approval is part of first time sign in with a new device.

This is what you need to start using the TankMaster Mobile web app:

Enabled user Id and password

Sign in with new device

In case you are going to sign in with a new device, it needs to be registered in the TankMaster Mobile system. You may register a device by using one of the following methods:

- As part of the log in procedure when signing in to the TankMaster Web app. Once
 registered, you will receive an email with a six digit registration code. Use this code as
 requested in the log in procedure.
- By contacting the system administrator.

Device registration can be turned off. However, for security reasons we recommend using this function as the standard option.

Note

In case you clear the web browser's history and cookies you need to register the device again.

Related information

Sign in procedure Security settings **Getting started**December 2023

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3.2 Preparations for mobile device users

For best user experience it is recommended that you:

- install the Emerson TankMaster CA digital root certificate on your mobile device
- add TankMaster Mobile to the home screen

By adding the start page to the Home screen you will ensure that TankMaster Mobile can be accessed as any other mobile device app.

TankMaster Mobile app is a Progressive Web Application (PWA) and is not downloaded from any app store. PWAs work across many devices and platforms. Once the TankMaster Mobile digital certificate is installed, the app acts and feels like a regular app without any web browser fields or buttons.

Related information

TankMaster Mobile Install certificate and app on Android device Install certificate and app on iOS device

3.3 Sign in procedure

The sign in procedure may differ slightly depending on whether you are signing in with a new device or not.

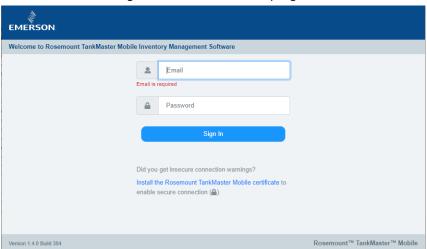
3.3.1 Sign in

Follow this procedure to sign in to the TankMaster Mobile web application.

This is the standard sign in procedure when using a registered device.

Procedure

1. Navigate to the TankMaster Mobile web page. Use the IP address (or URL) that was entered when installing the TankMaster Mobile program.



- 2. Optional: If a root certificate is not installed, you will be prompted the option to download a certificate prior to signing in. The root certificate allows your client machine to authenticate the TankMaster Mobile server. Even without a root certificate you will have a secure connection.
- 3. Enter your credentials.
- 4. Select Sign In.

Note

First time you sign in you will be prompted to register your device and change your password.

5. Now you are signed in.

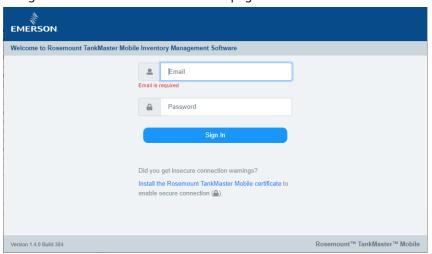
3.3.2 Sign in with new device

In case you sign in to the TankMaster Mobile web application with a new device, it needs to be registered in the TankMaster Mobile system. This must be done each time you sign in to your TankMaster Mobile account on a device for the first time, even in case other TankMaster Mobile users have signed in on that particular device on previous occasions. For security reasons your account must be associated with each device that you sign in from.

This section describes how to sign in and register a new device.

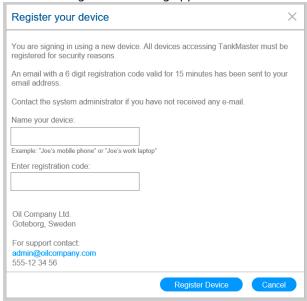
Procedure

1. Navigate to the TankMaster Mobile web page.



- 2. Enter your credentials.
- 3. Click the **Sign In** button.

The device registration dialog appears.



- 4. Open your mailbox and note the registration code.
- 5. Enter the registration code and a device name.
- 6. Click the **Register Device** button.
- 7. Now you are signed in.

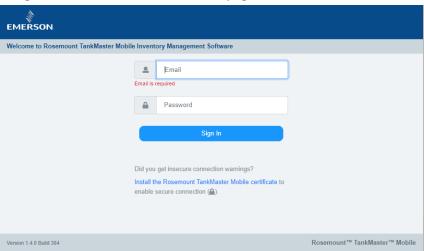
3.3.3 Sign in with new device and manual administrator approval

In case you sign in to the TankMaster Mobile web application with a new device, it needs to be registered in the TankMaster Mobile system. This must be done each time you sign in to your TankMaster Mobile account on a device for the first time, even in case other TankMaster Mobile users have signed in on that particular device on previous occasions. For security reasons your account must be associated with each device that you sign in from.

This section describes how to sign in and register a new device with administrator manually granting device access.

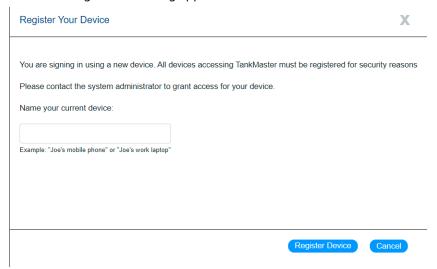
Procedure

1. Navigate to the TankMaster Mobile web page.



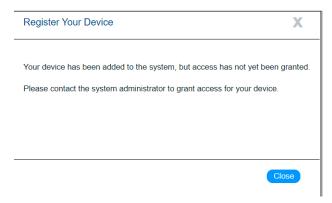
- 2. Enter your credentials.
- 3. Click the **Sign In** button.

The device registration dialog appears.



- 4. Enter a device name.
- 5. Click the **Register Device** button.
- 6. Now the system will verify that your device is added to the system.

 You will be prompted to contact the system administrator for granting access.



7. Click the **Close** button.

Once your device is granted access you will be able to sign in.

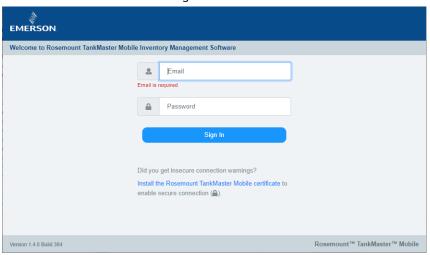
3.4 Install digital certificate

This is a description of how to install digital certificates for Rosemount[™] TankMaster[™] Mobile.

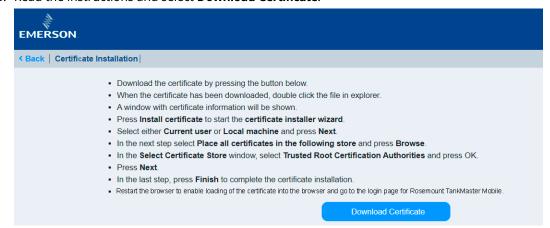
A digital certificate allows your client machine to authenticate the TankMaster Mobile server.

Procedure

- 1. Open TankMaster Mobile.
- 2. Click **Install TankMaster Mobile certificate** for instructions how to download and install the TankMaster Mobile digital certificate.

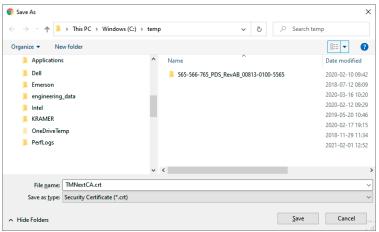


3. Read the instructions and select **Download Certificate**.

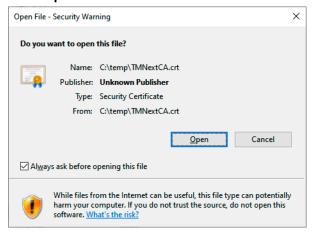


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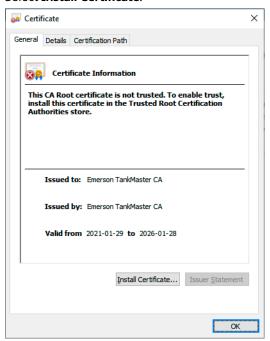
4. Choose an appropriate folder to store the certificate file.



- 5. Once downloaded, double-click the certificate file. A security message appears.
- 6. Select Open.



7. Select Install Certificate.



Now the certificate installation wizard will start.

8. Select Current User or Local Machine.



Certificate Store
Certificate stores are system areas where certificates are kept.

Windows can automatically select a certificate store, or you can specify a location for the certificate.

Automatically select the certificate store based on the type of certificate

Place all certificates in the following store:

Certificate store:

Browse...

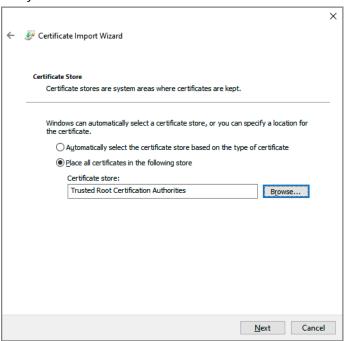
9. Select option Place all certificates in the following store and select Browse.

10. Select Trusted Root Certification Authorities and then OK.

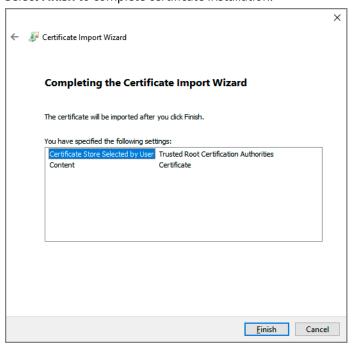
<u>N</u>ext Cancel



11. Verify Certificate store and select Next.



12. Select **Finish** to complete certificate installation.



13. Now the certificate is installed. Close and restart Chrome browser to ensure that the certificate is properly loaded.

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3.5 Install certificate and app on Android device

This is a description on how to install the Rosemount[™] TankMaster[™] Mobile certificate on Android phones and tablets. The description also includes how to add a TankMaster Mobile icon to the Home screen. TankMaster Mobile uses the Progressive Web App (PWA) technology which means that the app is not downloaded from Google Play store. PWA requires a certificate to be installed, then the PWA acts and feels like an app.

Procedure

1. Open the *Chrome* app.



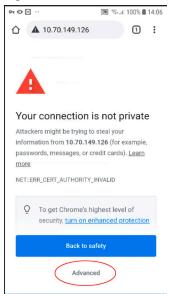
2. In the address field enter the IP address (or URL) for the Rosemount TankMaster Mobile server.

Note

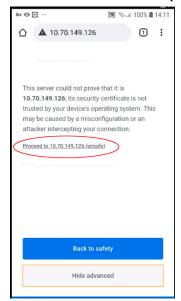
The IP address in this instruction is just an example and cannot be used for your server.

3. In case it is the first time you visit this page, a warning message will appear since your device has no TankMaster Mobile certificate installed. Select **Advanced** to continue.

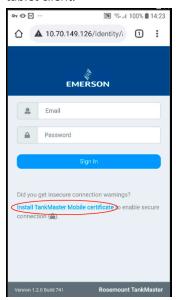
The warning is a standard text that appears for unknown web sites without valid digital certificate.



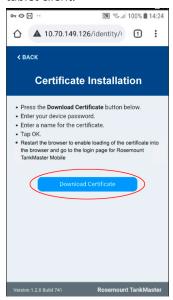
4. Select the link **Proceed to ... (unsafe)** .



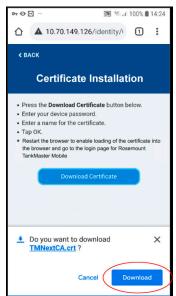
5. On the sign in page, select **Install TankMaster Mobile certificate**. This will open a page that allows you to download a digital root certificate for your mobile phone/ tablet client.



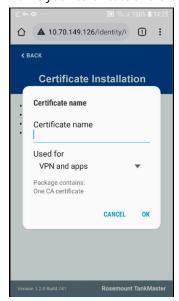
6. Select **Download Certificate** to download a root certificate for your mobile phone/ tablet client.



7. Select **Download** to start downloading the certificate.



8. Name your certificate and click **OK**.



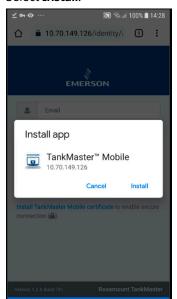
9. Now the certificate is installed. Close and restart the Chrome app to ensure that the certificate is properly loaded.



10. Enter the IP address to the TankMaster Mobile start page if it does not appear automatically. **Add TankMaster Mobile to Home screen** should appear at the bottom of the screen. Select this option if you would like to install TankMaster Mobile as an app on the Home screen.



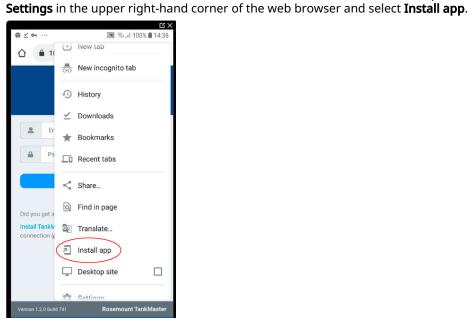
11. Select **Install**.



12. Now the **TankMaster Mobile** icon appears on the Home screen.



13. Optional: In case you chose not to install the TankMaster Mobile icon on the Home screen, it can be installed at a later occasion. In the Chrome web browser, open



3.6 Install certificate and app on iOS device

This is a description on how to install the Rosemount[™] TankMaster[™] Mobile certificate on iOS phones and tablets. The description also includes how to add a TankMaster Mobile icon to the Home screen. TankMaster Mobile uses the Progressive Web App (PWA) technology which means that the app is not downloaded from Apple App store. PWA requires a certificate to be installed, then the PWA acts and feels like an app.

Procedure

1. Open the *Safari* app.



2. In the address field, enter the IP address (or URL) to the Rosemount TankMaster Mobile server.

Note

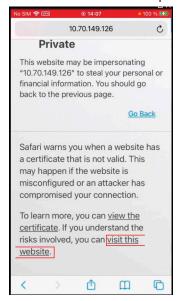
The IP address in this instruction is just an example and cannot be used for your server.

3. In case it is the first time you visit this page, a warning message will appear since your device has no TankMaster Mobile certificate installed. Select **Show Details** to continue.

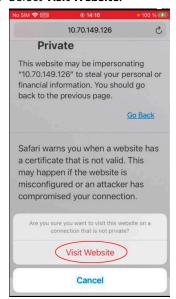
The warning is a standard text that appears for unknown web sites without valid digital certificate.



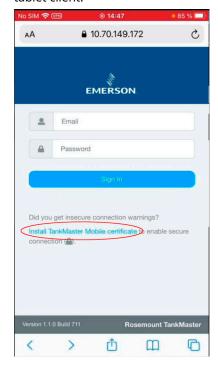
4. Select **visit this website** to proceed.



5. Select **Visit Website**.



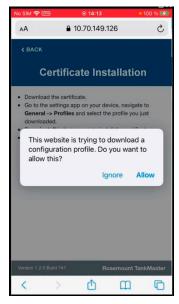
6. On the sign in page, select **Install TankMaster Mobile certificate**. This will open a page that allows you to download a digital root certificate for your mobile phone/ tablet client.



7. Select **Download Certificate** to download a root certificate for your mobile phone/ tablet client.



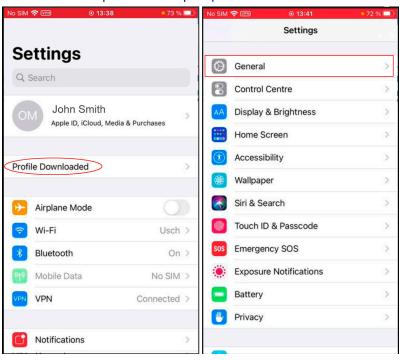
8. Select **Allow** to start downloading the certificate.



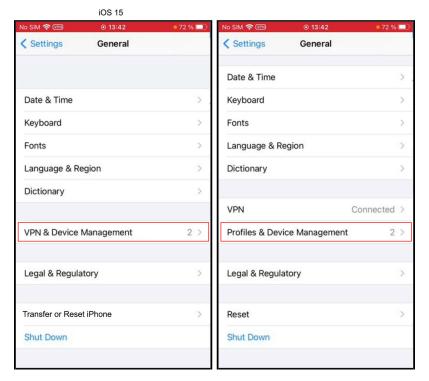
9. Once the certificate is downloaded you will have to open **Settings** in order to install it. Select **Close** to proceed.



10. Open **Settings** and navigate to **General**. As another option, you may select **Profile Downloaded** and proceed to step Step 13.



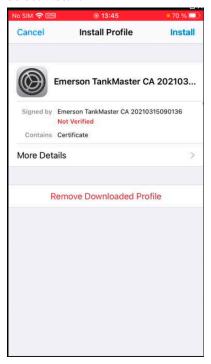
11. Select **General** → **VPN & Device Management** (iOS 15). For previous iOS versions select **General** → **Profiles & Device Management**.



12. Select the **Emerson TankMaster CA** profile.

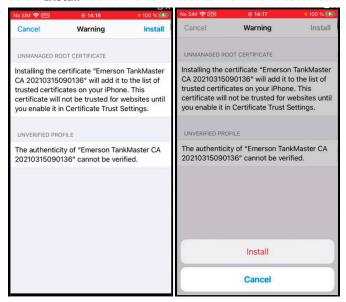


13. Select Install.

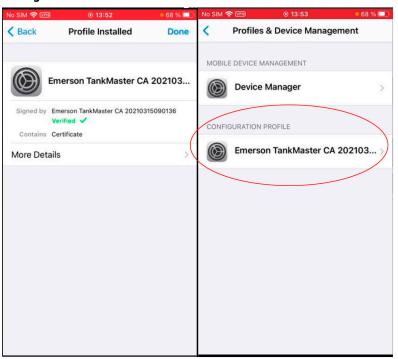


You will be prompted to enter your pass code.

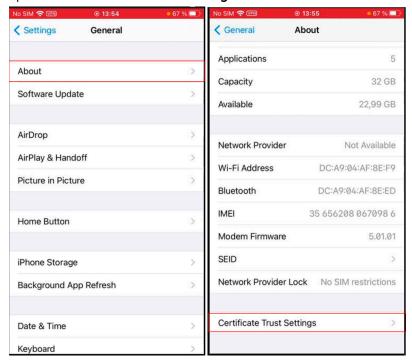
14. Select **Install** to add the certificate to the list of trusted certificates.



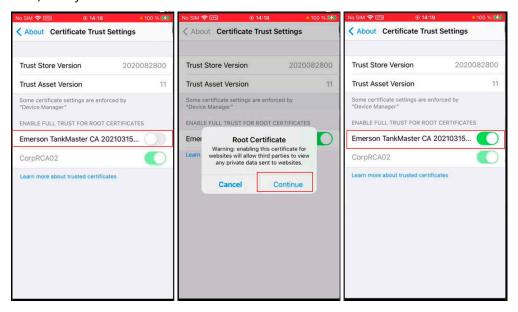
Now the certificate is installed. Click **Done** to return to **Profiles & Device** *Management* to see the installed certificate.



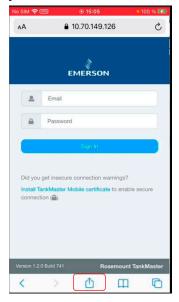
 Once installed you will have to enable the certificate in order to allow the web browser to recognize TankMaster Mobile as a trusted site. Return to *General* and open About → Certificate Trust Settings.



- 17. To enable the certificate:
 - a) Locate the **Emerson TankMaster CA** certificate and select the enable button.
 - b) Click Continue.
 - c) Verify that the certificate is enabled.

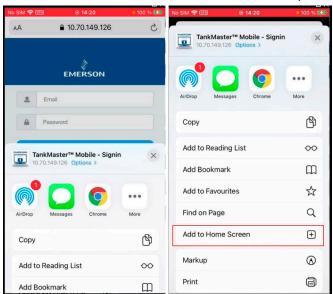


- 18. Now the certificate is installed. Close and restart the Safari browser to ensure that the certificate is properly loaded.
- 19. Return to the sign in page and select the **Share** button at the bottom of the page if you want to install TankMaster Mobile as an App.



Note

When you sign in first time after installing the certificate you will have to register the device as a new device again.



20. Scroll down to **Add to Home Screen** and select this option.

21. Edit the text to the desired title for the app, and click **Add** to install it on your Home screen.



22. Now the TankMaster Mobile page will appear as an app icon on the Home Screen.



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4 View tank data

This section presents the concept of tank cards.

Tank data is presented on tank cards of various size. Small tank cards show tank name and a bar graph that represents current product level. Product movement is indicated by a symbol showing direction and minor or major flow rate. A symbol indicates if the tank is included in the watch list.

More data such as product level, level rate, temperature, and volume is presented on medium size tank cards. The large tank cards present extended information including up to 12 tank parameters.

Related information

Tank cards
Tank details
Tank movement
Tank data setup
View inventory data
Data presentation

4.1 Configure tank data view

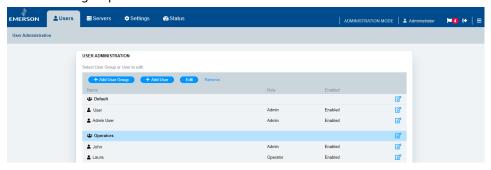
This is a brief summary of how to configure tank variables to be available in tank cards for the selected user group. See **Related information** for links to more information.

Prerequisites

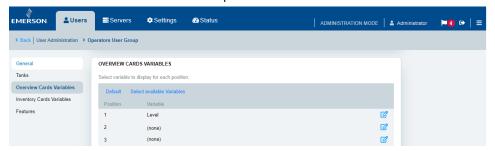
Ensure that you are logged in to TankMaster Mobile as **administrator**.

Procedure

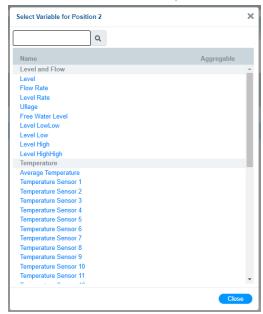
- 1. Select the Users menu.
- 2. Select a user group and then the **Edit** button.



3. Select the **Overview Cards Variables** option from the list on the left-hand side.



4. For each position click the **Edit** desired tank variable for that particular tank card position.



5. Click **Save** once you are finished.

Related information

Administration mode Map tanks and tank data to a user group Tank data setup

4.2 Tank data setup

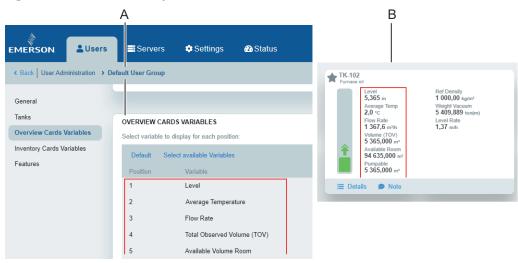
There are several categories of tank variables which can be configured for presentation in the TankMaster Mobile app.

Each tank is presented with a tank card that shows tank variables and current inventory status. A specific set of variables available for a user group is configured by the system administrator. Standard variables such as Level, Temperature, Level rate and many more can be added to the list.

In medium size cards the first four variables are shown . Large size tank cards can show up to 12 variables.

Figure 4-1 illustrates configuration of first five variables and resulting tank card.

Figure 4-1: Tank Data Setup



- A. Configuration of tank card variables
- B. Tank card

Related information

Configure tank data view Tank cards Tank details Tank groups View tank dataUser GuideDecember 202300809-0100-5120

4.3 Tank cards

TankMaster Mobile supports tank cards of various design for presentation of tank data.

Figure 4-2: Tank Cards



- A. Select tank card size
- B. Medium size tank cards

Related information

Data presentation

4.3.1 Small size tank cards

Small size tank cards provide and overview of a large number of tanks; product level, tank name, and watchlist symbol. Product movement, up or down, is indicated by arrows. The arrow size indicates level rate.

Figure 4-3: Small Size Tank Cards



- A. Watch list
- B. Tank name
- C. Bar graph
- D. Tank movement

Related information

Product color Tank movement limits Expanded tank card

4.3.2 Medium size tank cards

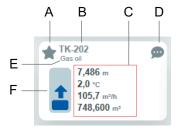
Medium size cards provide an overview of tanks, and a limited set of tank variables and measurement data such as:

- Product level
- Average temperature
- Level rate
- Volume

The actual data that is presented can be configured specifically for each user group by mapping tanks and tank data.

Medium size cards also show whether the tank is on a watch list, and indicate if there is a tank note.

Figure 4-4: Tank Card Description



- A. Watch list
- B. Tank name
- C. First four parameters from the list of tank parameters available for this user group
- D. Tank note
- E. Product name
- F. Bar graph shows product level related to maximum level. Min/max levels are provided by the Tank Server.

Related information

Product color
Tank movement limits
Map tanks and tank data to a user group
Tank movement
Expanded tank card

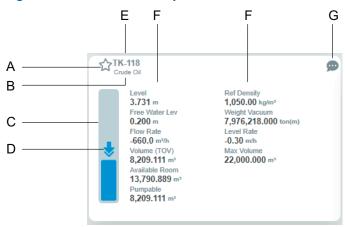
View tank dataUser GuideDecember 202300809-0100-5120

4.3.3 Large size tank cards

Large size tank cards can show up to 12 tank variables. Variables can be configured by selecting from a wide range of variables such as:

- Product level
- Average temperature
- · Free Water Level
- Volume
- Level rate

Figure 4-5: Tank Card Description



- A. Watch list symbol
- B. Product name
- C. Bar graph
- D. Tank movement indication
- E. Tank name
- F. Tank parameters
- G. Tank note

Related information

Product color

Tank movement limits

Map tanks and tank data to a user group

Tank movement

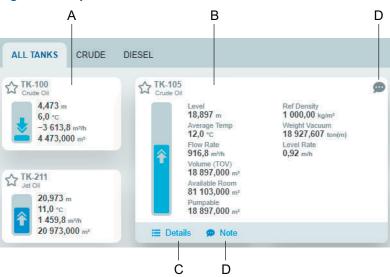
4.3.4 Expanded tank card

You may expand a tank card by clicking on it. Then more information will be displayed about the tank. The expanded card shows tank variables and a menu bar with extra features.

At the bottom of the tank card you will find menu options such as **Details** and **Note**. Available options depend on license and system setup.

Note that an expanded tank card temporarily covers the nearest small or medium size cards. The hidden cards appear as soon as the expanded card returns to its normal state.

Figure 4-6: Expanded Tank Card



- A. Tank card
- B. Expanded tank card
- C. Details
- D. Note

Related information

Tank details

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4.4 Tank details

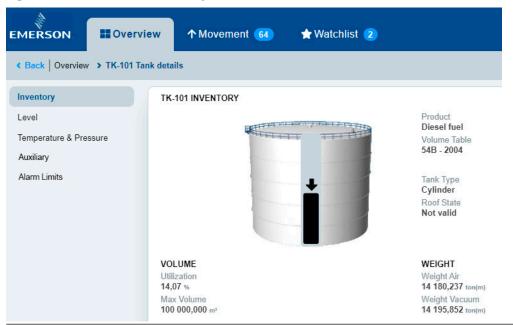
The **Tank details** page lets you view a comprehensive summary of tank data.

The **Details** option opens the **Tank Details** view which lets you view different categories of information for a specific tank:

- Inventory
- Level
- Temperature and pressure

The following example shows details for the **Inventory** option:

Figure 4-7: Tank Details Inventory



The *Tank Details* view is available from the menu bar at the bottom of large size tank cards (see Figure 4-8 and Figure 4-9).

Figure 4-8: Tank Details Option in Web Browser

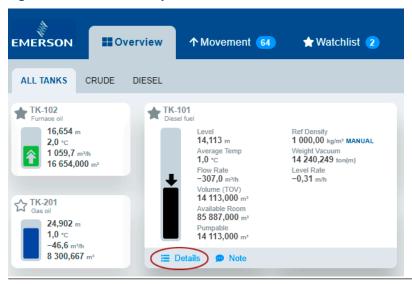
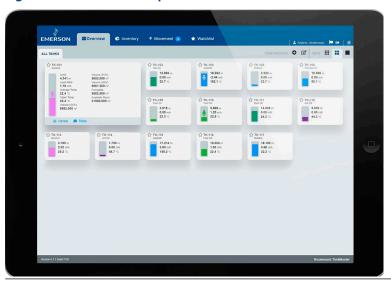


Figure 4-9: Tank Details Option on Tablet



Related information

Tank data setup

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4.5 Tank groups

The **Overview** page presents all available tanks and tank groups.

The menu bar shows the selected tank group.

Figure 4-10: Overview Page



You may organize tanks in groups based on product or any other suitable concept.

Figure 4-11: Example of Tank Group for a Product Type



Related information

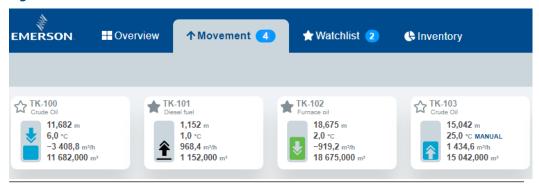
Tank groups

4.6 Tank movement

The **Overview** tank view shows all tanks including tank movements. The **Movement** menu lets you view only those tanks in which the product level is moving.

The **Movement** view is dynamic and tanks may appear and disappear depending on the current status. The number of moving tanks is indicated on the **Movement** menu regardless if the menu is selected or not.

Figure 4-12: Tank Movement View

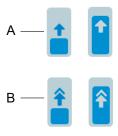


The arrow size that indicates movement changes in case movement rate exceeds a specified limit.

There is a **Minor Limit** and a **Major Limit** that can be set by a **System Administrator**.

The tank starts indicating tank movement when movement rate exceeds the **Minor Limit**. For rates exceeding the **Major Limit**, the arrow size and appearance changes to indicate a high movement rate.

Figure 4-13: Tank Movement Rate



- A. Level rate above Minor Limit
- B. Level rate above Major Limit

Related information

Tank movement limits

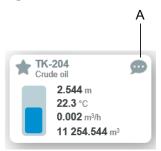
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4.7 Tank notes

You may attach an editable tank note on each tank card.

When a tank card has a tank note, an indicator appears in the upper right-hand corner of the card. By clicking the icon you may view and edit the tank note.

Figure 4-14: Tank Card with Tank Note



A. Tank note icon

When clicking the tank note icon a dialog appears that allows you type a text message. Tank notes are visible for all users.

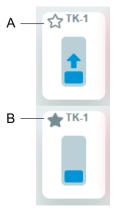
Figure 4-15: Tank Note Window



4.8 Watchlists

Watchlist symbols indicate whether the tank is included in a watchlist or not. Tanks can be added to the watchlist in any view or tank card.

Figure 4-16: Watch List Symbols



- A. Watchlist cleared
- B. Tank is included in Watchlist

The Watchlist menu lets you view all tanks included in the watchlist.

Figure 4-17: Watchlist Menu



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5 View inventory data

This section presents how to set up and view inventory data cards.

Inventory data is presented on cards of various size; small, medium, and large inventory tank cards. This is similar to standard overview tank cards.

Data such as Total Observed Volume (TOV), Gross Observed Volume (GSV), Net Standard Volume (NSV), and more is presented on the tank cards. The large tank cards show extended information including up to 12 tank parameters.

Related information

View inventory cards
Inventory data setup
View tank data
Configure available features for user group
List of variables and abbreviations

5.1 Configure inventory view

This is a brief summary of how to configure inventory card variables for the selected user group. See **Related information** for links to more information.

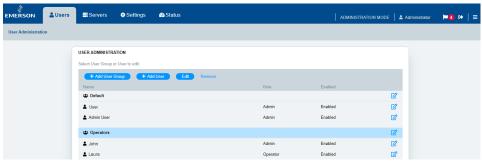
Prerequisites

Ensure that you are logged in to TankMaster Mobile as **administrator**.

Ensure that **Inventory View** feature is enabled for the user group.

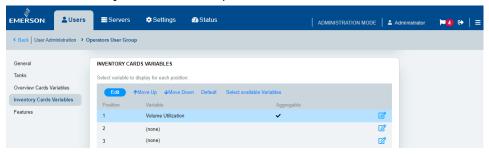
Procedure

- 1. Select the **Users** menu.
- 2. Select a user group and then the **Edit** button.

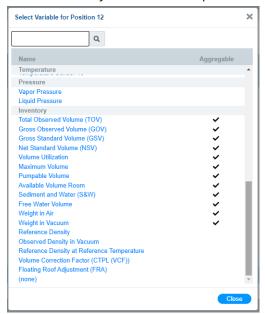


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3. Select the **Inventory Cards Variables** option from the list on the left-hand side.



4. For each position click the **Edit** button on the right-hand side and select the desired inventory variable for that particular inventory card position.



5. Click **Save** once you are finished.

Related information

Administration mode Configure inventory variables for user group Inventory data setup

5.2 Inventory data setup

There are several categories of inventory variables which can be configured for presentation in the Rosemount TankMaster Mobile app.

Each tank is presented with a tank card that shows inventory variables and current status. A specific set of variables available for a user group is configured by the system administrator. Standard variables such as Total Observed Volume (TOV), Gross Observed Volume (GOV), and many more can be added to the list.

Medium size cards show the first four variables. Large size tank cards can show up to 12 variables.

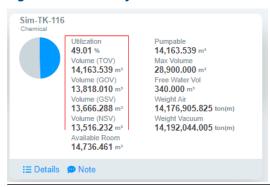
Figure 5-1 illustrates configuration of first five inventory variables and resulting tank card.

Figure 5-1: Inventory Data Setup



The resulting tank card shows the specified inventory variables:

Figure 5-2: Inventory Tank Card



Related information

Configure inventory view View inventory cards

View inventory data
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5.3 View inventory cards

The *Inventory* page shows inventory data such as Total Observed Volume (TOV), Gross Observed Volume (GOV), Gross Standard Volume (GSV), and much more.

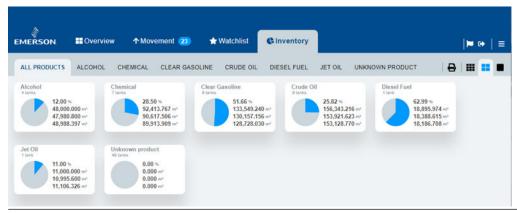
Tanks are organized in groups based on product type.

The **All Products** group shows the total volumes for each product group.

Each card shows the total sum of inventory data for a particular product.

Separate tabs show all tanks for the selected product type.

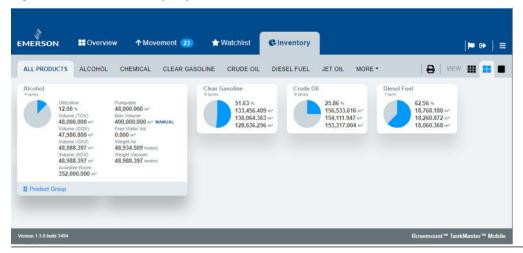
Figure 5-3: Tank Inventory View



You may see more inventory data for a specific product group by clicking its tank card. Then an expanded view appears with more data for the selected product group.

The **Product Group** option at the bottom of the card provides a shortcut to the inventory view with tanks for the selected product group. It's the same view that opens when selecting the inventory menu option for the selected product group.

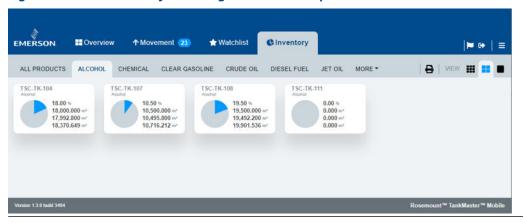
Figure 5-4: Tank Inventory Expanded View



Inventory view of tanks grouped by product

You may select a product to view all the tanks in that particular product group.

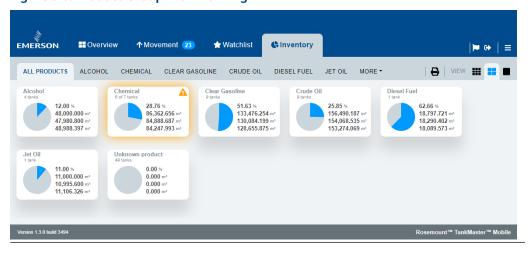
Figure 5-5: Tank Inventory for a Single Product Group



Warnings

Missing inventory data for one or more tanks, is indicated with a warning symbol. An excluded tank may have one or more "BAD" parameter values. In the upper left-hand corner you can see the number of tanks that are included in the calculated sum for each variable. You can view more information in an expanded view of the excluded tank by opening the product group view of the tank.

Figure 5-6: Product Group with Warning

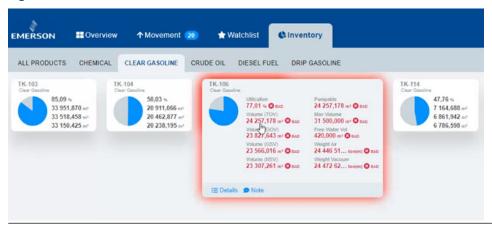


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Tank with bad data

You may open a tank group that contains a tank with warnings to find out more. Select the inventory card to open an expanded view with more information on which tank variables that don't show correct data.

Figure 5-7: Tank with bad values



Inventory cards of various size

All inventory card sizes can be used for **Inventory** in the same way as for the **Overview** presentation.

Figure 5-8: Inventory Cards of Different Size



Related information

Inventory data setup

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6 Reports

This section presents how to set up and view reports.

The **Reports** function allows you create reports including the desired tanks and tank variables. Multiple options are available for schedules and distribution.

The basic configuration categories include:

General Lets you setup name and description.

Schedule Lets you setup daily, weekly, or monthly reports as well as creating reports

on demand.

Distribution Offers multiple options for sending out reports such as email, save to disk,

and printout.

Tanks Lets you select the particular tanks to include in the report.

Variables Lets you select the particular tank variables to display in columns.

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6.1 Create a report

Reports that you create will be available to all users in your user group.

Prerequisites

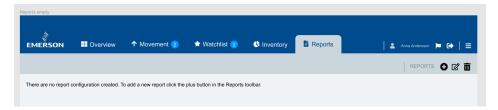
Ensure that the Reports feature is activated for your user group.

Procedure

- 1. In TankMaster Mobile, select the *Reports* tab.
- 2. Click the **Reports t** icon.

Note

The Edit button lets you edit existing reports.



3. Specify the report options.

On the left-hand side you will find options such as **General**, **Schedule**, **Distribution**, **Tanks**, and **Variables** that you need to setup for a complete report.

Once a report is created and saved it can be used as is, or you may return later to modify these settings if needed.

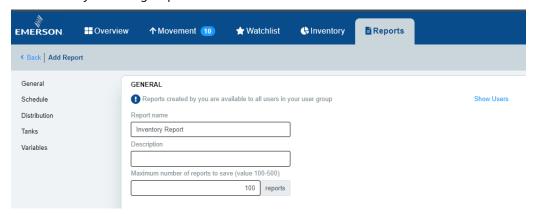


Related information

Configure available features for user group Administration mode

6.2 General settings

The **Reports General** option lets you specify basic information for report that will be available for your user group.



Enter the desired **name** of the report.

An optional **description** of the report may be added.

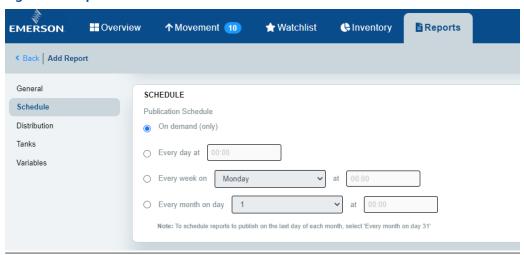
Specify the **maximum number** of reports to be saved. When this number is reached, reports will be deleted starting with the oldest. 500 reports is the maximum possible number of reports.

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6.3 Reports schedule

Depending on available options for your TankMaster Mobile license, you can setup reports for various distribution schedules.

Figure 6-1: Report Publication Schedule



On demand

Reports can be published on demand according to the specified distribution methods. This is the only option available for a **standard** license.

Scheduled reports

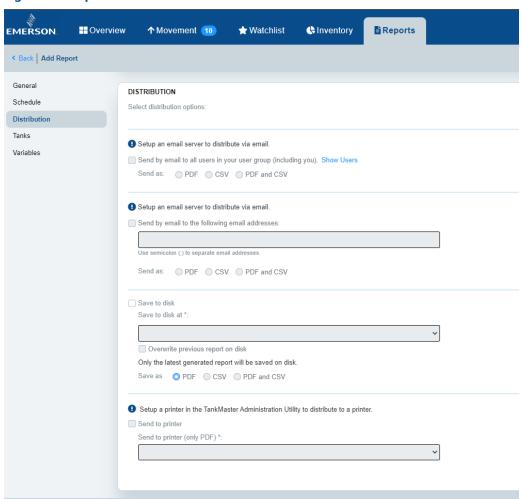
Various publication options are available for **premium** license. A report can be setup for daily, weekly, or monthly publishing. You may setup multiple reports for daily, weekly, and monthly publishing.

Reports can be scheduled to automatically publish on the last day of each month. By selecting **Every month on day 31**, the report will be published the last day of the month regardless of the number of days in a particular month.

6.4 Reports distribution

The **Reports Distribution** option lets you setup various scheduled reports options for members of the user group. You may select multiple distribution options if required.

Figure 6-2: Reports Distribution



Send by email

The report distribution option lets you setup the report for distribution via email. Choose the desired option:

- · To all users in the user group
- To specific email addresses for users in the user group

You may send the report in the following formats:

- PDF
- CSV
- PDF and CSV

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Note

The **Send by email** option requires that an email server is setup for Simple Mail Transfer Protocol (SMTP) by a system administrator.

Save to disk

This option lets you save reports to disk at the specified location. Available locations must be configured by using the **TankMaster Administration Utility** on the server machine.

The **Overwrite previous report** option ensures that only the last report will be saved. It facilitates locating the latest report since the same file name is used each time a new report is saved.

In case you wish to save previous reports, the **Overwrite** option should not be used. Then each report will be saved with a unique file name.

Reports can be saved in the following formats:

- PDF
- CSV
- PDF and CSV

Note

Local system user on the TankMaster Mobile server must have access to appropriate **Folder sharing** setup in order to save reports to disk.

Print

Reports in pdf formats can be printed. Available printers must be configured by using the **TankMaster Administration Utility** on the server machine.

Related information

Email server configuration

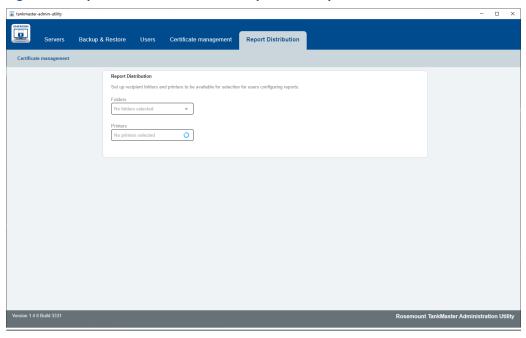
6.4.1 Report distribution setup

The **Report Distribution** option in **TankMaster Administration Utility** lets you setup folders and printers to be available for report distribution.

Folders and printers setup in this dialog will be available to users when configuring reports:

- Folders will be available in the drop-down list for Save to disk.
- **Printers** will be available in the drop-down list for **Send to printer**.

Figure 6-3: Report Distribution folder and printer setup

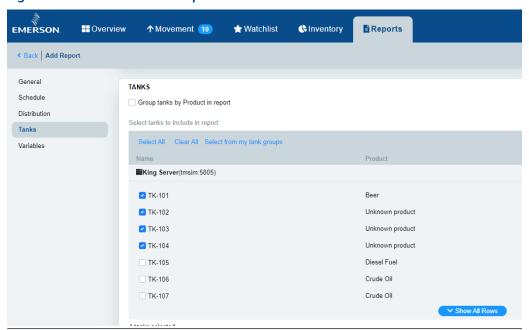


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6.5 Tanks

The report **Tanks** option lets you setup the desired tanks for the report.

Figure 6-4: Add Tanks to the Report



Select the desired tanks for the report. You may select all tanks or just a few.

The **Select from my tank groups** option allows you select one or several tank groups. That option lets you select multiple tanks with one click. You will still be able to exclude tanks that you don't like to include in the report.

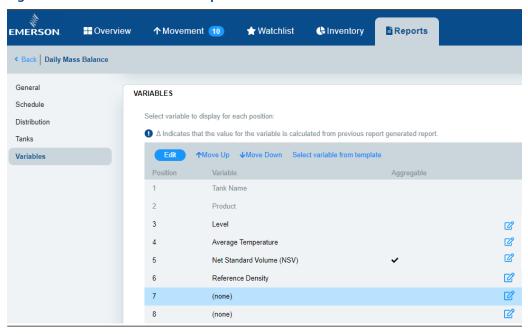
Group tanks by product in report

This feature presents tanks in goups based on product, and shows a summarized (aggregated) total per product for applicable products.

6.6 Variables

The reports **Variables** option lets you setup the desired tank variables to include in the report.

Figure 6-5: Tank Variables for a Report



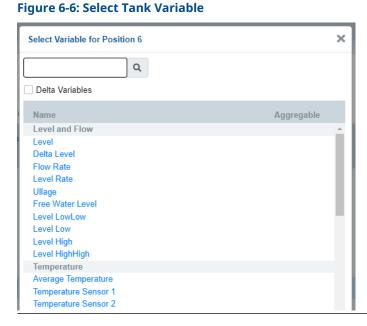
Select variables

On each position you may use the **Edit** button to select the desired tank variables.

Aggregable means that for this variable the total sum of all tanks will be presented in the report in addition to individual tank values.

Note

The **Aggregable** option requires tanks to be grouped by product. It can be enabled under **Reports** \rightarrow **Tanks**.



Delta Variables lets you add the difference of a variable between the last two reports.

Default variables

The **Select Variable from Template** option allows you to select one of the available standard **Mass Balance Report** or **Log Report**. The default reports have pre-selected setups of variables. However, these default setups can be modified to your own preferences by using the Edit 🗷 button.

6.7 View and publish reports

There a multiple options to view reports.

Procedure

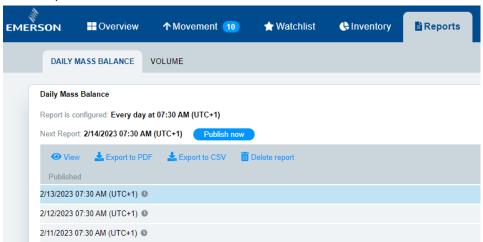
- 1. In TankMaster Mobile, select the *Reports* tab.
- 2. Select one of the report types.

Standard reports such as Mass Balance or Log Report may appear, as well as custom reports added to your TankMaster Mobile server.

Select a report in the current list, or select **Publish now** to instantly create a new report.

Any available report in the list may be selected.

Publishing options such as **View**, **Export to PDF**, and **Export to CSV** will be enabled once a report is selected.



The **Report is configured** field shows the current report schedule. For unscheduled reports this field shows **On Demand Only**.

The **Next Report** field shows when next scheduled report will be published.

Note

Missing tank measurement data will be displayed with hyphens (-).

Note

Reports will always be generated with the most recent data available. Measurements are not used if they are older than 10 minutes.

4. For the selected report, choose on of the options:

Publish option	Desription
View	The selected report will open in the web browser.
Export to PDF	The selected report will be downloaded as a PDF file.
Export to CSV	The selected report will be downloaded as a CSV file.

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5. In case the report was exported as a file, use the appropriate application to view the report.

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7 Translations

This section presents how to manage translations for the Rosemount TankMaster $^{\mathbb{M}}$ Mobile application web interface.

Managing translations for TankMaster Mobile is a straight-forward process. There are two ways to setup translated menus for TankMaster Mobile:

- Download **existing translations** from the TankMaster Service Center.
- Download an English source file from the TankMaster Service Center and create desired translations.

The English source file is in Microsoft[®] Excel format and contains items which can be edited to provide the desired language. The translated file can be exported to a file format supported by the TankMaster Mobile application. The translated file can be used even if not all of the available items are translated.

Once translations are available:

- Load the desired language into the TankMaster Mobile application. Then the translation will be available for the web browser's language settings.
- · Configure the web browser for the desired language.

Files can be downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

Related information

TankMaster Service Center Activate developer tab in Microsoft Excel Translate menus in TankMaster Mobile Add translations to TankMaster Mobile Select web browser language **Translations**December 2023

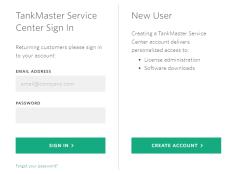
User Guide
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7.1 Download translation files

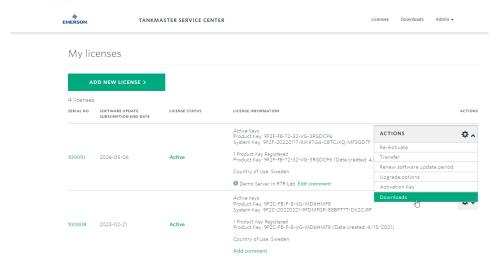
Tanslations can be downloaded from the TankMaster Service Center.

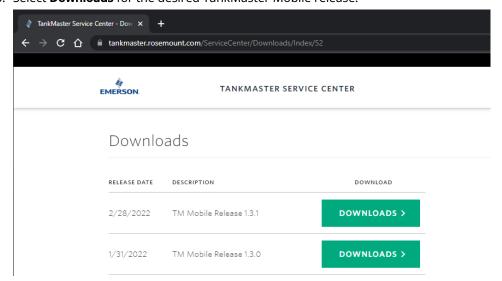
Procedure

1. Navigate to TankMaster.Rosemount.com/ServiceCenter and sign in to your account or create a new account if you are a new user.



2. Open the **Actions** drop-down list for the desired active license and select **Downloads**.





3. Select **Downloads** for the desired TankMaster Mobile release.

Select and download the desired translation file.
 Existing translations or english source file to be used for your own translation projects.

7.2 Create new translation files

This section is a brief introduction how to create new translations for TankMaster Mobile.

Procedure

- Download the source file from the TankMaster.Rosemount.com/ServiceCenter web site.
 - The english source file is in Microsoft[®] Excel format and contains all menus. Each item can be edited to provide the desired language.
- 2. Open the english source file and translate the various items to the desired language.

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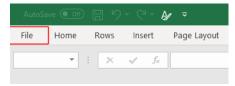
7.2.1 Activate developer tab in Microsoft® Excel

This is a description of how to enable the **Developer** option in Microsoft® Excel.

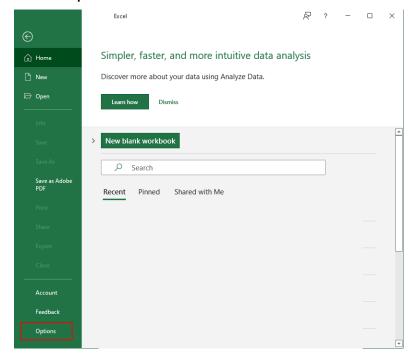
The **Developer** option lets you export a translated Excel file into a format supported by TankMaster Mobile in order to activate desired language options.

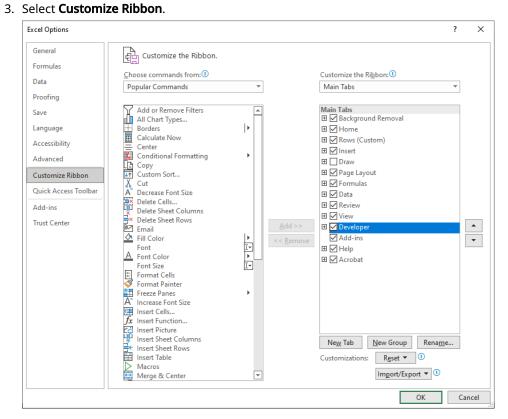
Procedure

- 1. Open the **Microsoft Excel** program.
- 2. Select File,



and then **Options**:





- 4. Under **Main Tabs** on the right-hand side, select the **Developer** check box.
- 5. Select OK.

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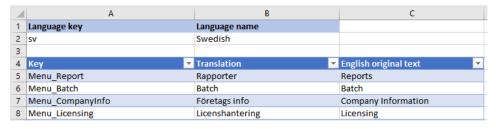
7.2.2 Translate menus in TankMaster[™] Mobile

Prerequisites

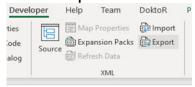
Ensure that *Developer* tab is activated in Microsoft[®] Excel.

Procedure

- 1. Open the Excel file with TankMaster Mobile's English source text.
- 2. Under **Language Key**, enter the standard language code according to ISO 639-1.
- 3. Edit the file by filling in the **Translation** column which appears next to the English source text column.



- 4. Once finished, save the file by exporting it to **XML** format:
 - a) Select menu option **Developer**.
 - b) Select the **Export** button.



c) Select a folder, type the desired file name, and make sure that the file is saved in **XML** format.



d) Select the **Export** button.

7.3 Add translations to TankMaster™ Mobile

This is description of how to add translations into TankMaster Mobile to make them available for web browser language settings.

Prerequisites

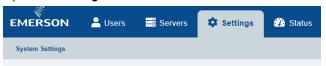
Ensure that the translation file is available in XML format.

Note

Languages can only be added by administrators.

Procedure

- 1. Open the TankMaster Mobile web page.
- 2. Sign in as administrator.
- 3. Open the Settings tab.



4. In the menu on the left-hand side, select **Languages** and scroll down to the **Languages** pane.



- 5. Select the desired language:
 - a) In the *Languages* pane, select the **Select File** button.



- b) Browse to the folder where the desired language file is stored.
- c) Select the file and click **OK**.

Need help?

In case you don't find the desired language, check that:

- the translation file is available in XML format.
- the file has a tab with the correct **language key** for the desired language

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Postrequisites

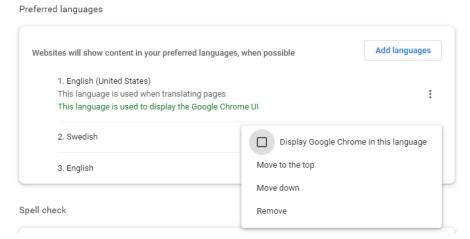
Restart the TankMaster Mobile server to ensure that languages are properly installed. Alternatively, you may restart the **Identity Server** from the **TankMaster Administration Utility**.

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7.4 Select web browser language

Procedure

- 1. Open the Chrome web browser.
- 2. Open Settings → Languages.
- 3. Select the desired language by selecting check box **Display Google Chrome in this** language.



Now TankMaster Mobile will be displayed in the selected language.

Note

The selected web browser language will be used for this computer. Other users may select other languages for TankMaster Mobile on their computers.

Need help?

In case TankMaster Mobile is not displayed in the desired language, check that the language file is loaded.

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8 System administration

8.1 Administration mode

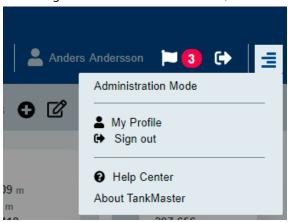
In administration mode, you can manage system settings such as connecting to tank servers and application servers. In addition to that, administration mode allows you to create user accounts and user groups as well as manage security settings and various other system related tasks.

8.1.1 Enter administration mode

To enter Administration Mode:

Procedure

1. On the right-hand side of the menu bar, click **Administration Mode**.

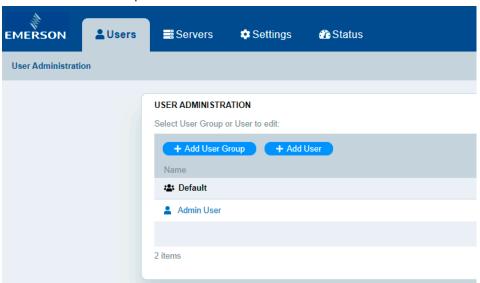


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2. Enter your password.

The **Users** menu will open automatically in case a tank server is available. Otherwise the **Servers** menu will open.

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- 3. Configure user accounts, servers, or system settings.
- 4. Exit Administration mode when finished.

Postrequisites

Verify that new users, user groups, tank servers, and application servers are accessible.

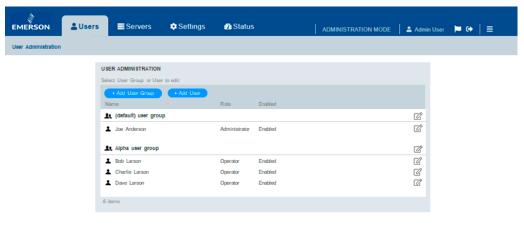
8.2 User administration

This section provides information on adding users and user groups. It also covers how to specify access to tanks and variables for different users.

A user group can be given access to certain tanks and tank groups. In addition to that, a selection of specific features such as Movement View, Reports, Tank Details, and Tank Notes can be made available for the group.

For each user group a set of variables such as Level, Average Temperature, and more can be made available.

Figure 8-1: Adding and Editing User Groups



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8.2.1 Add user groups and users

This section describes how to add and edit user groups and users.

A user group can be given access to tanks, tank groups, and a selection of specific features such as Movement View, Reports, Tank Details, and Tank Notes. Also, a set of variables such as Level, Average Temperature, and more can be made available. Tanks and variables must be mapped to the user group in order to be available in tank cards.

Related information

Tank cards

Configure user groups and users

Prerequisites

Make sure that you are logged in as **Administrator**.

Procedure

- 1. Select the **Users** menu.
- 2. Click the **Add User Group** or the **Add User** button.
- 3. Select the **General** option.
- 4. Enter the required information.

For a **user group** you need to configure the following:

- Name
- Tanks
- Variables
- Features such as Movement view, Reports, Tank details, and Tank Notes.

For users you need to configure:

- · Name and contact information
- Role (Admin or Operator)
- User group
- · How long this user account will be enabled
- Register device
- 5. Click Save when finished.

Related information

Enter administration mode

8.2.2 Map tanks and tank data to a user group

This section describes how to map tanks and parameters to be accessible for a user group.

Related information

Administration mode

Map tanks to a user group

This description shows how to map tanks to a user group.

Prerequisites

Make sure that you are logged in as **Administrator**.

Procedure

- 1. Open the **Users** menu.
- 2. Select a user group.
- 3. Click the Edit button.
- 4. Select the **Tanks** option.

The **Tanks** option lets you select the desired tanks to be available for the current user group.

- 5. Select the desired tanks to be accessible for the user group.
- 6. Click Save.

Map tank data to a user group

This description shows how to map tank data to a user group.

Prerequisites

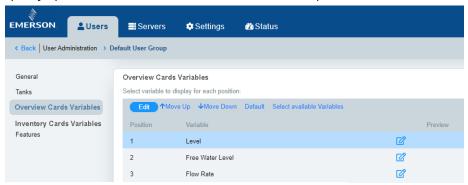
Make sure that you are logged in as **Administrator**.

Procedure

- 1. Open the **Users** menu.
- 2. Select a user group.
- 3. Click the **Edit** button.



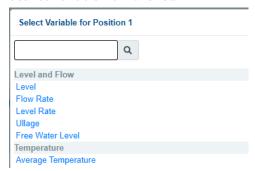
4. Select the desired option, for example **Overview Cards Variables**. Now you may specify up to 12 tank variables to be used for tank card presentations.



The **Overview Cards Variables** option includes variables such as Level, Free Water Level, Flow Rate, and more.

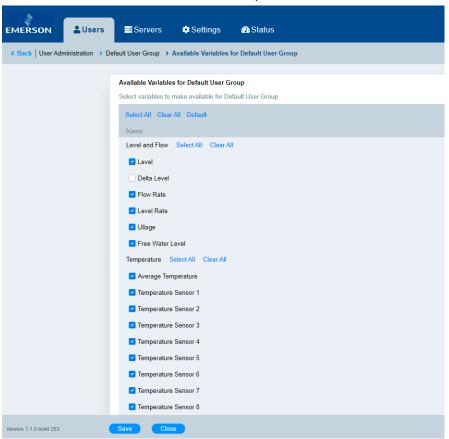
The **Tanks** option lets you select tanks to be available for the current user group.

5. For each row there is an **Edit** icon on the right-hand side. Select the edit icon to find a complete list of available variables. For each position 1 -12 you may select the desired variable from this list.



- 6. Configure the desired variables to be accessible for the user group. Up to 12 variables can be configured.
- 7. Use **Move Up** or **Move Down** to put a selected variable in the desired position.

8. Optional: Click **Select available variables** in case you would like to limit or extend the list of variables that can be selected for each position.



9. Click **Save** once you are finished.

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8.2.3 Configure inventory variables for user group

Follow this procedure to map inventory data to a user group.

Prerequisites

Make sure that you are logged in as **Administrator**.

Procedure

- 1. Open the **Users** menu.
- 2. Select the desired user group.
- 3. Click the Edit button.

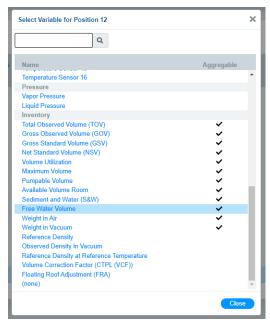


4. Select the **Inventory Cards Variables** option.

Now you may specify up to 12 inventory card variables.

The **Inventory Cards Variables** option lets you select the desired inventory variables for volume calculations. This includes variables such as Total Observed Volume (TOV), Gross Observed Volume (GOV), Net Standard Volume (NSV), and many more.

5. For each row there is an **Edit** icon on the right-hand side. Select the edit icon to find a complete list of available variables. For each position 1 -12 you may select the desired variable from the list.



- 6. Configure the desired inventory variables to be accessible for the user group. Up to 12 variables can be configured.
- 7. Use **Move Up** or **Move Down** to put a selected variable in the desired position.
- 8. Optional: Click **Select available variables** in case you would like to limit or extend the list of variables that can be selected for each position.
- 9. Click **Save** once you are finished.

8.2.4 Configure available features for user group

Follow this procedure to map features to a user group.

Prerequisites

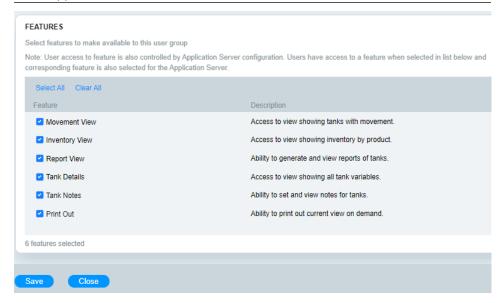
Make sure that you are logged in as **Administrator**.

Procedure

- 1. Open the **Users** menu.
- 2. Select the desired user group.
- 3. Click the **Edit** button.
- 4. Select the **Features** option.
- 5. Select the desired features to be available for this user group.

Note

In order to make features available for user groups they need to be made available in the Application Server as well⁽²⁾.



6. Click **Save** once you are finished.

Related information

Administration mode

⁽²⁾ See Server management in the Rosemount TankMaster Mobile Installation Manual for more information on how to edit an application server.

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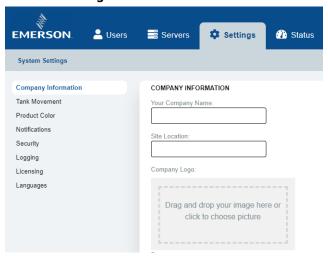
8.3 System settings

This section describes how to configure system settings, servers, and user accounts.

8.3.1 System settings menu

Procedure

- 1. Enter Administration mode.
- 2. Select the **Settings** menu.



- 3. In the left-hand menu bar, select a menu option and do the required configuration.
- 4. Click Save when finished.

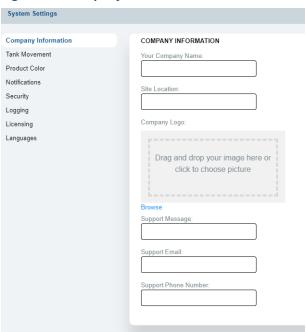
Related information

Enter administration mode

8.3.2 Company information

You may specify name, logotype, and contact information for your company. This information will appear on the sign in page.

Figure 8-2: Company Information



Company information

Follow this procedure to add company information:

Procedure

- 1. Enter Administration mode.
- 2. Open the Settings menu.
- 3. Select Company Information.
- 4. Add the desired information.
- 5. You may upload a company logotype by drag and drop to the **Company Logo** frame. Standard file formats such as PNG and JPG are supported. Note that file size may not exceed **1 MB**.
- 6. Click **Save** once your are finished.

Related information

Enter administration mode

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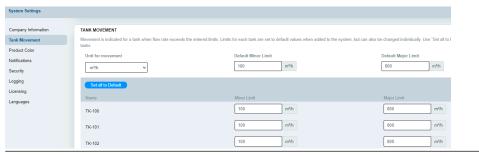
8.3.3 Tank movement limits

Movement is indicated when flow rate exceeds certain limits. Default values are automatically set unless you change to other limits.

Minor and **Major** limits for tank movement can be configured for each tank. Product movement is indicated in tank cards based on the specified limits.

You may return to default limits by selecting Set all to Default.

Figure 8-3: Tank Movement Limits



Related information

Tank movement

Tank movement configuration

Follow this procedure to configure limits for tank movement presentation.

Procedure

- 1. Enter **Administration** mode.
- 2. Open the Settings menu.
- 3. Select Tank Movement.
- 4. Start by setting the desired **Measurement Unit**; m³/h, bbl/h etc.
- 5. Set the desired **Default Major Limit** and **Default Minor Limit**. You can use the default values to set the same movement limits for all tanks. They can also be used as a starting point before you specify limits for individual some tanks.
- 6. Click **Set all to Default** in case you like to use common limits for all tanks. You may also use this function to set a starting point before configuring individual movement limits.
- 7. Configure desired **Minor Limits** and **Major Limits** for individual tanks if desired. Individual limits will override default values.
- 8. Click Save.

Related information

Enter administration mode

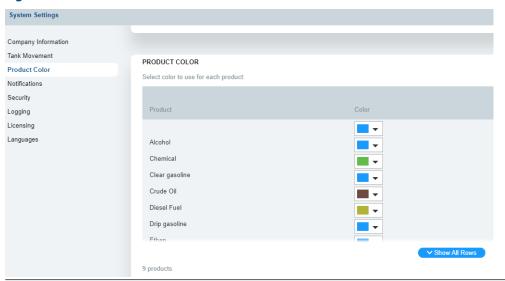
8.3.4 Product color

The **Product Color** page lets you configure colors to facilitate tracking of different products. These colors will be used for presentation of tanks and products. You can configure product colors regardless of the current color configuration on the Tank Server.

Note

A product will disappear from the list in case the product name is changed in the Tank Server.

Figure 8-4: Product Colors



Product color configuration

You may specify a color for each product to be used in various bar graph presentations.

Procedure

- 1. Enter Administration mode.
- 2. Open the **Settings** menu.
- 3. Select Product Color.
- 4. Assign colors for the desired products.
- 5. Click Save once your are finished.

Related information

Enter administration mode

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8.3.5 Security settings

The **Security** menu offers several options for security related configuration.

A number of security related settings can be configured:

- Number of failed sign in attempts
- Account lockout duration
- Password renewal interval
- · Minimum password length
- Required password characters
- · Sign out inactivity option and time period
- · Device access procedure to register new devices
- · Email server configuration

Grant access for new devices

Each new device needs to be granted access to TankMaster Mobile.

Figure 8-5: Device Access

Device Access

Select procedure for how new devices are granted access to the system:

Granted by Administrator manually

\$\displaystyle{\pi}\$

Access needs to be granted for each new device (e.g. mobile phone) used to access the system.

There are three different options for registration of new devices:

- Granted by user via email.
 The user automatically receives a code via email to register a new device.
- Granted by administrator manually.
 The administrator must manually grant access for a new device.
- Always granted.
 This option does not require any code or manual approval by administrator.

Configure security settings

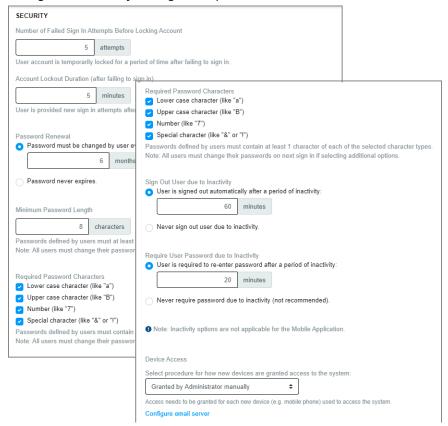
This procedure describes how to configure security settings.

Procedure

- 1. Open TankMaster Mobile.
- 2. Sign in to **Administration mode**.
- 3. Open the **Settings** menu.
- 4. Select Security.

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5. Configure the security settings as required.



6. Click Save when finished.

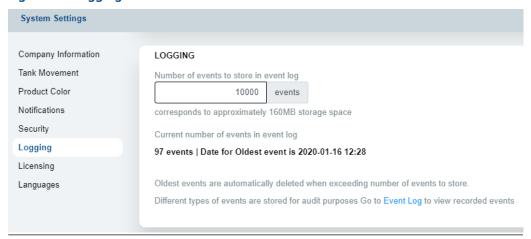
Related information

Email server configuration Enter administration mode System administration
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8.3.6 Logging

You may specify the number of events to store in the event log. Once the maximum number of events is reached, the oldest item will be removed.

Figure 8-6: Logging



Configure logging

Follow this procedure to configure the number of logging events.

Procedure

- 1. Enter **Administration** mode.
- 2. Open the **Settings** menu.
- 3. Select Logging.
- 4. Configure the number of events to store in the log file.
- Click Save.Event log can be viewed on the *Status* page.

Related information

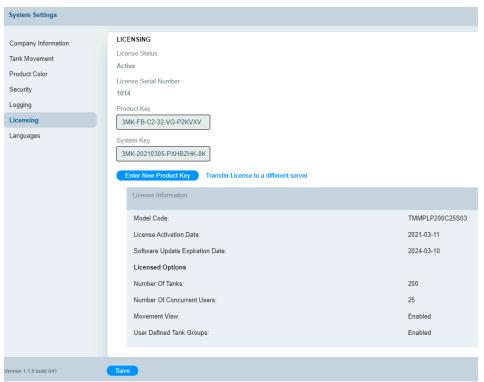
Enter administration mode Event log

8.3.7 Licensing

The *Licensing* page allows you to view the current status of your TankMaster Mobile license.

This page lets you enter a new product key or transfer the current license to another server.

Figure 8-7: Licensing Page



Related information

Enter administration mode License management

License information

Follow this procedure to view current license information.

Procedure

- 1. Enter Administration mode.
- 2. Open the **Settings** menu.
- 3. Select Licensing.
- 4. View the desired license information.
- 5. Click Save.

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8.3.8 Connect to Tank Servers

This section describes how to connect to Tank Servers.

Related information

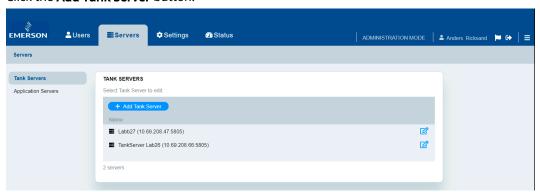
Enter administration mode

Connect to a Tank Server

Follow this procedure to connect to a tank server.

Procedure

- 1. Open TankMaster Mobile web application.
- 2. Sign in and enter Administration mode.
- 3. Open the **Servers** menu.
- 4. Select Tank Servers.
- 5. Click the Add Tank Server button.



- 6. Under **General** enter the required information for:
 - · Tank Server name.
 - · Description (optional)
 - · Network location (IP address) of the Tank Server Connector machine
 - Port number. Default is 5805.
 You can change to other port in case you need to align with site policies.
 - Tank Server connector key.
 Use the key that was provided during installation of Tank Server Connector.
 - Server Alias (optional).
 The Alias is used as prefix to tank names for this server.
 Example: Alias "A-" for tank TK-101 results in tank name "A-TK-101".
 It is recommended to leave server alias blank if only one Tank Server is connected.
- 7. Click Save.
- 8. Click Close to return to the Servers menu.

8.3.9 Email server configuration

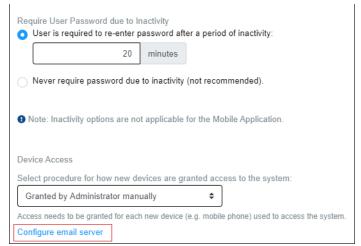
Configure email server to enable TankMaster Mobile email communication.

Prerequisites

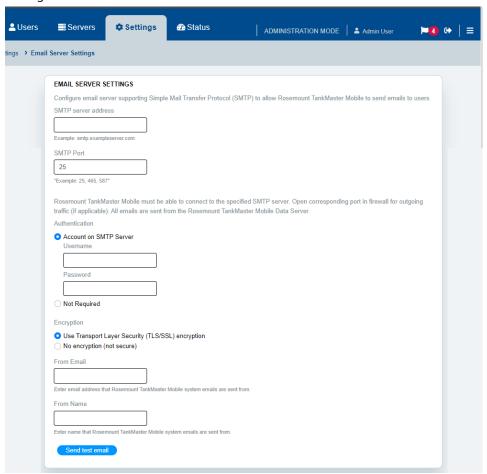
Ensure that appropriate SMTP parameters are available for configuration of TankMaster Mobile email server.

Procedure

- 1. Open TankMaster Mobile.
- 2. Sign in to Administration mode.
- 3. Open the **Settings** menu.
- 4. Select the **Security** option.
- 5. Scroll down and select **Configure email server**.



6. Configure the email server with appropriate Simple Mail Transfer Protocol (SMTP) settings.

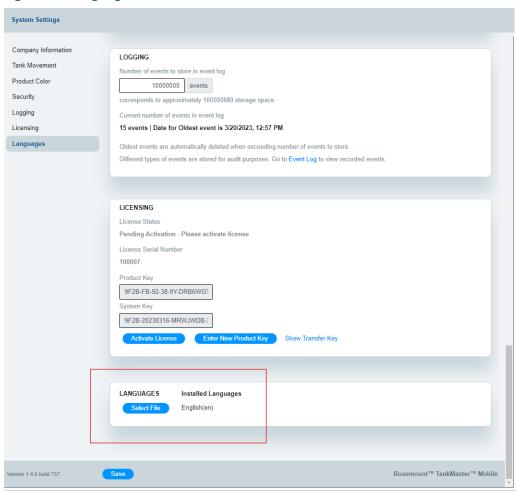


8.3.10 Languages

The **Languages** option allows you to setup the TankMaster Mobile application for the preferred language.

A translation file must be available in **XML** format and include the desired language with correct language key.

Figure 8-8: Languages



Related information

Add translations to TankMaster Mobile

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8.4 Status information

This section describes how to view system status such as server status, active users, and event log.

The Status page is available when you are signed in as administrator in **Administration Mode**.

Figure 8-9: Status Menu



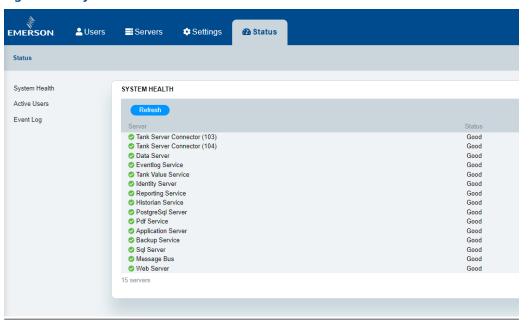
Related information

Administration mode System health Active users Event log

8.4.1 System health

The **System Health** page shows the current status of servers that communicate with the TankMaster Mobile application.

Figure 8-10: System Health



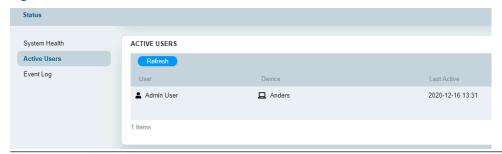
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8.4.2 Active users

This option shows the currently signed in users.

Select **Refresh** to update the list.

Figure 8-11: Active Users



8.4.3 Event log

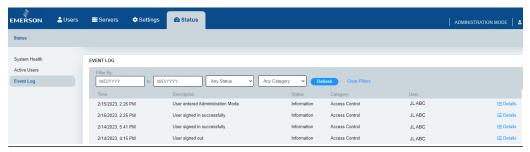
The **Event log** shows various types of events such as:

- Access control
- Audit log
- Backup and restore
- Configuration changes
- System events

The list of events can be filtered by date, status, and category.

Extended information is available by selecting **Details** on the right-hand side of the Event Log pane.

Figure 8-12: Event Log



Related information

Configure logging

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9 User settings

This section presents options that are available under My Profile.

My Profile lets you edit your personal account information as well as change your password. You may also add tank groups, or edit existing tank groups.

9.1 Account

The **Account** page shows personal information for your TankMaster Mobile account.

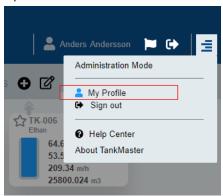
9.1.1 Configure account

The **Account** option allows you to change personal information for you account.

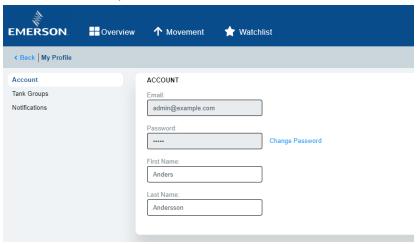
This procedure describes how to edit your **Account** settings.

Procedure

- 1. Navigate to the TankMaster Mobile web page and sign in.
- 2. Open the menu for administration and user settings.



- 3. Click My Profile.
- 4. Select the **Account** option.



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5. When editing is finished, click the **Save** button.

6. Click the **Close** button to return to Overview.

9.2 Password

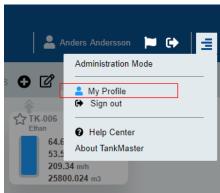
You can easily change password at any time on the **Accounts** page.

9.2.1 Change password

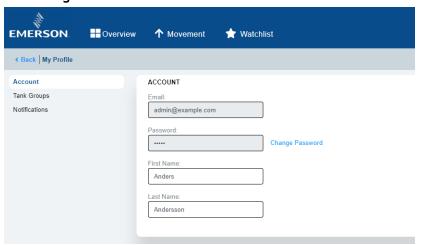
This procedure describes how to change **Password** for your account.

Procedure

- 1. Navigate to the TankMaster Mobile web page and sign in.
- 2. Open the menu for **administration and user settings**.



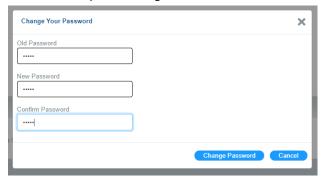
- 3. Click My Profile.
- 4. Select the **Account** option.
- 5. Click Change Password.



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6. Enter the old and new passwords.

7. Enter the new password again in the **Confirm Password** field.



8. Click **Change Password** to finish.

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9.3 Tank groups

Tanks can be organized in groups for a clear overview. You can easily add or remove tank groups whenever needed.

Related information

Configure account

9.3.1 Add a tank group

You can easily add tank groups if needed. This option allows you to organize tanks for a clear overview.

Procedure

1. Select the **Add Tank Group** button.



A dialog appears that lets you create a new tank group with the desired tanks.

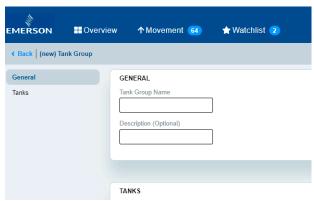
You may also add tank groups via My Profile:

- a) Open My Profile.
- b) Select **Tank Groups** in the left-hand menu.

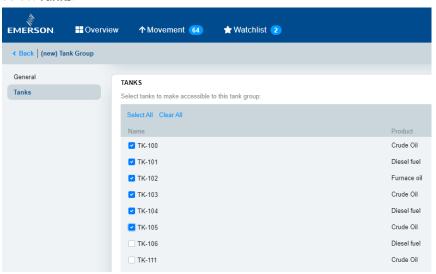


c) Click the **Add Tank Group** button to open a dialog for a new tank group.

2. Select General.



- 3. Enter a tank group name and a short description.
- 4. Select Tanks.



- 5. Select the desired tanks to be included in the group. The tank group can be edited at a later occasion in case you like to add or remove tanks
- 6. Click **Save** once you are finished.

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9.3.2 Remove a tank group

You can easily remove tank groups whenever needed.

Procedure

- 1. Open My Profile.
- 2. In the left-hand menu, select **Tank Groups**.



3. Select the tank group to be removed.

The **Remove** option will appear.

4. Click **Remove** to delete the selected tank group.

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10 Data presentation

Related information

Tank cards View tank data

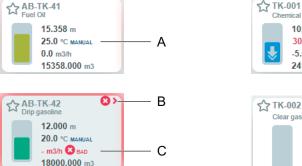
10.1 Data presentation

This section shows how data is presented to indicate current status.

Current status is indicated by color and status message:

- Good value
- · Bad value
- Old value
- Manual value

Figure 10-1: Data Presentation in Tank Cards





D

10.943 m 30.0 °C **⊗** old

-5.61 m/h

24184.566 m3

- A. Manual value
- B. Indicates bad data for hidden variables
- C. Bad data (unreliable data)
- D. Old data (measurement value not updated within the last 60 seconds)
- E. Tank details with current status presentation

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11 License management

11.1 License management

This section describes how to add a new Rosemount[™] TankMaster[™] Mobile license as well as various license management tasks.

The **Rosemount TankMaster Mobile** software can be used for a trial period of 90 days. After 90 days you need to activate your license.

A notification is displayed on the start page on the remaining number of days until the trial period expires.

You will find information on license updates and TankMaster Mobile subscriptions on the TankMaster.Rosemount.com/ServiceCenter web site.

Related information

TankMaster Service Center Tank Gauging System

11.1.1 Add and activate new license

This procedure describes how to add and activate a new Rosemount[™] TankMaster[™] Mobile license.

Prerequisites

Prior to managing your TankMaster Mobile license, you need to ensure that:

- TankMaster Mobile is installed and up and running
- Serial number and Product key are available. You will find them in the DVD box that was shipped with the TankMaster Mobile software package.
- A client computer is available to access the TankMaster Mobile web application.

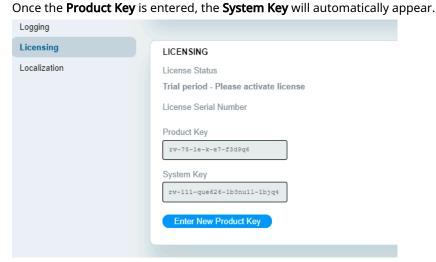
Procedure

- 1. From the client computer, connect to the **TankMaster Mobile web application** and sign in.
- 2. Enter **Administration** mode.
- 3. Open the **Settings** menu.
- 4. Navigate to the **Licensing** page.
- 5. Click Enter New Product Key.

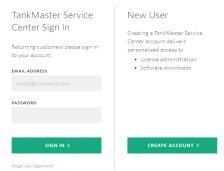
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6. In the dialog that appears, enter the **Product Key** and select **Save**.

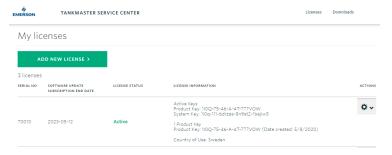
You will find the **Product Key** in the DVD box that was shipped with the product.



- 7. Copy or make a note of the **System Key**.
- 8. Navigate to TankMaster.Rosemount.com/ServiceCenter and sign in to your account or create a new account if you are a new user.



9. Under My Licenses click Add New License.



- 10. Enter Serial No., Product key, and Country of Use.
- Click Add License.
 A message appears saying: "License with serial number xxxx was added".
- 12. Enter the **System Key** that was shown on the TankMaster Mobile **Licensing** page.
- 13. Click Activate License.

14. Select option **Download activation key** or **Email activation key**.

In case you select the email option, note that the Activation Key is attached to the email and needs to be downloaded.

- 15. Return to the TankMaster Mobile web application.
- 16. Navigate to the **Licensing** page.
- 17. Click Activate License.
- 18. Browse to the folder where the **Activation key** file is stored, select the key, and click **Open**.

A message appears saying that the TankMaster Mobile license was activated.

19. Click Confirm.

The TankMaster Mobile license options are shown in the License Information pane.

20. Check that license options are correct according to model code.

Related information

TankMaster Service Center Administration mode License management
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11.1.2 Upgrade license with new options

This procedure describes how to upgrade a Rosemount[™] TankMaster[™] Mobile license with new options.

Prerequisites

Prior to managing your TankMaster Mobile license, you need to ensure that:

- TankMaster Mobile is up and running
- Serial number and Product key are available. You will find them in the DVD box that was shipped with the TankMaster Mobile software package.
- A client computer is available to access the TankMaster Mobile web application.

Procedure

- 1. Navigate to TankMaster.Rosemount.com/ServiceCenter and sign in to your account.
- 2. Open My Licenses.
- 3. Under Actions, select Upgrade options.
- 4. Select desired options for:
 - Features
 - Number of tanks
 - · Concurrent users
- Click Continue.
- 6. Verify ordering info.
- 7. Click **Create pdf** to create an order with new model code.
- 8. Send the order to Emerson.
 - A new Product key will be shipped as soon as the order is confirmed.
- 9. From the client computer, connect to the TankMaster Mobile web application and sign in.
- 10. Enter **Administration** mode.
- 11. Open the **Settings** menu.
- 12. Navigate to the **Licensing** page.
- 13. Click Enter New Product Key.
- 14. Enter the **Product Key**. The new **Product Key** for the upgraded license is sent out via email. It can also be found on TankMaster.Rosemount.com/ServiceCenter. Note that you may find two or more keys with different dates in case previous license updates have been performed. Then the updated license can be identified by date.
 - Once the Product key is entered, the **System Key** will automatically appear.
- 15. Copy or make a note of the **System Key**.
- 16. Navigate to TankMaster.Rosemount.com/ServiceCenter and sign in to your account.
- 17. Under My Licenses click Re-activate.
- 18. Enter the new **System Key** that was shown on the TM Mobile **Licensing** page.
- 19. Click Activate License.
- 20. Select option **Download activation key** or **Email activation key**. In case you select the email option, note that the Activation Key is attached to the email and needs to be downloaded.

- 21. Return to the TankMaster Mobile web application.
- 22. Navigate to the **Licensing** page.
- 23. Click Activate License.
- 24. Browse to the folder where the **Activation key** file is stored, select the key, and click **Open**.
 - A message appears saying that the TankMaster Mobile license was activated.
- 25. Click **Confirm**.

The TankMaster Mobile license options are shown in the *License Information* pane.

26. Check that license options are correct according to model code.

Related information

TankMaster Service Center Administration mode License management
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11.1.3 Transfer license to a new server

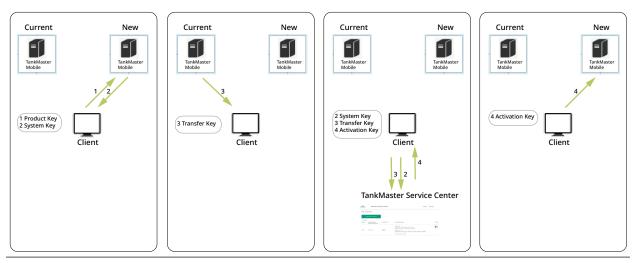
This procedure describes how to move a Rosemount[™] TankMaster[™] Mobile license to a new server.

Prerequisites

Prior to managing your TankMaster Mobile license, you need to ensure that:

- TankMaster Mobile is up and running
- Serial number and Product key are available. You will find them in the DVD box that was shipped with the TankMaster Mobile software package. Also available on TankMaster.Rosemount.com/ServiceCenter.
- A client computer is available to access the TankMaster Mobile web application.

Figure 11-1: Licence transfer procedure in brief



Procedure

- Start by installing Rosemount TankMaster Mobile on the new TankMaster Mobile server.
- 2. From the client computer, connect to the **new TankMaster Mobile server** and sign in.
- 3. Enter **Administration** mode.
- 4. Open the **Settings** menu.
- 5. Navigate to the **Licensing** page.
- 6. Click Enter New Product Key.
 - Use the **Product Key** from the **old TankMaster Mobile server** installation.
 - A **System Key** for the new server is generated.
- 7. Copy or make a note of the **System Key**.
- 8. From the client computer, connect to the **old TankMaster Mobile server** and sign in
- 9. Enter Administration mode.
- 10. Open the **Settings** menu.
- 11. Navigate to the **Licensing** page.

12. Click Transfer license to a different server.

A dialog appears with information on license transfer.

13. Click **Transfer**.

A **Transfer Key** is generated.

Note

Generating a **Transfer Key** will disable the license on the current server.

- 14. Copy the **Transfer** key.
- 15. Navigate to TankMaster.Rosemount.com/ServiceCenter and sign in to your account.
- 16. Select **My licenses** → **Actions** → **Transfer**.
- 17. Enter the **Transfer Key** and click the **Transfer License** button.

 The **Activate License** dialog appears which verifies that the license was transferred.
- 18. Enter the **System Key** that was generated on the **Licensing** page for the **new TankMaster Mobile server**.
- 19. Click Activate License.
- 20. Select one of the options **Download Activation Key** or **Email Activation Key**. In case you select the email option, note that the Activation Key is attached to the email and needs to be downloaded.
- 21. Return to the web application for the **new TankMaster Mobile server**.
- 22. Navigate to the **Licensing** page.
- 23. Click Activate License.
- 24. Browse to the folder where the **Activation key** file is stored, select the key, and click **Open**.

A message appears saying that the TankMaster Mobile license was activated.

25. Click Confirm.

The TankMaster Mobile license options are shown in the *License Information* pane.

26. Check that license options are correct according to model code.

Related information

TankMaster Service Center Administration mode License management User Guide
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11.1.4 Update license subscription/software update period

This procedure describes how to update a Rosemount[™] TankMaster[™] Mobile license subscription.

Procedure

- 1. Navigate to TankMaster.Rosemount.com/ServiceCenter and sign in to your account.
- 2. Open My Licenses.
- 3. Under Actions, select Renew software update period.
- 4. From the drop-down list, select the desired software update period: 1 year, 3 year, or 5 years.

In case the current software update period is still valid, then the new period will be added after the current period expires.

Note

By renewing the update period you will get access to new software versions. The current version will still work regardless if the update period is renewed or not

- 5. Click Continue.
- 6. Verify that Serial number is correct.
- 7. Click **Create pdf** to create an order for the new software update period. The pdf file will include the license serial number and an item number.
- 8. Send the order to your local sales representative.

 Your software update period extension will be confirmed via email.

Related information

TankMaster Service Center

A List of variables and abbreviations

This is a list of variables and abbreviations used in Rosemount TankMaster Mobile.

Table A-1: Variable names

Long Name	Short Name
Level and Flow	
Level	Level
Delta Level	Delta Lev
Flow Rate	Flow Rate
Level Rate	Level Rate
Ullage	Ullage
Free Water Level	FWL
Level Low	Lo
Level LowLow	LoLo
Level High	Hi
Level HighHigh	HiHi
Temperature	
Average Temperature	Avg Temp
Temperature Sensor #	Temp #
Vapor Temperature	Vap Temp
Outer Vapor Temperature	OVT
Pressure	
Vapor Pressure	Vap Press
Middle Pressure	Mid Press
Liquid Pressure	Liq Press
Inventory	
Total Observed Volume (TOV)	TOV
Gross Observed Volume (GOV)	GOV
Gross Standard Volume (GSV)	GSV
Net Standard Volume (NSV)	NSV
Volume Utilization	Vol Util
Maximum Volume	Max Vol
Pumpable Volume	Pumpable
Pumpable Weight	PW
Available Volume Room	AVRM
Available Weight Room	AWRM
Sediment and Water	S&W

Table A-1: Variable names (continued)

Long Name	Short Name
Free Water Volume	FWV
Pipeline Volume	Pipeline
Weight in Air	WIA
Weight in Vacuum	WIV
Observed Weight in Vacuum	OWV
Liquid Equivalent of Vapor	Liq Eq Vap
Liquid Equivalent of Outer Vapor	Liq Eq OV
Liquid Equivalent of Total Vapor	Liq Eq TV
Vapor Mass	Vap Mass
Liquid Mass	Liq Mass
Outer Vapor Mass	OVM
Total Vapor Mass	TVM
Outer Vapor Room	OVR
Reference Density	RefDens
Observed Density in Vacuum	ObsDens
Reference Density at Reference Temperature	RefDens RT
Volume Correction Factor	VCF
Floating Roof Adjustment	FRA
Thermal Expansion Coefficient (TEC) for the Liquid	TEC Liq
Tank Shell Temperature Correction	CTSh
Input and Outputs	
Analog Input #	Ain#
HART Input #	HARTin#
Relay Output #	RelayOut#

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