Rosemount[™] TankMaster[™] Mobile

Inventory Management Software





ROSEMOUNT

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[™] TankMaster[™] 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.

Related information

Software updates

1.1 Manual overview

This manual provides information on installing, and maintaining the Rosemount[™] TankMaster[™] Mobile system.

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

The Getting started chapter provides system requirements and guidelines for installing the Rosemount TankMaster Mobile system.

The Install the Rosemount TankMaster Mobile server software chapter describes installation and update of Rosemount TankMaster Mobile.

The Install the Rosemount TankMaster[™] Tank Server Connector chapter describes how to install and update the Tank Server Connector.

The Server management chapter describes how to edit application server and tank server features.

The Sign in procedure chapter describes how to sign in to TankMaster Mobile.

The License management chapter describes various license management options.

The Service and maintenance chapter describes various maintenance functions such as backup, restore and more.

1.2 System architecture

Rosemount[™] TankMaster[™] Mobile is a web-based system that allows you to collect real-time data and status information from Rosemount TankMaster Inventory Management systems. You may use desktop computers, laptops, tablets, and mobile phones to monitor tank farms via standard web browsers.

Rosemount TankMaster Mobile supports a network topology where different access points can be placed on different network layers as illustrated in Figure 1-1.

The system architecture is designed to meet high security requirements based on segmented networks with multiple layers isolated by firewalls.

A network is typically partitioned into separate network segments. The objective of network topology is to ensure that only authorized devices are connected to the network, and that their connectivity is restricted to the network segments where they are used.

The system can be setup with multiple access points (via Application Servers) on different network layers. Privileges are assigned to each Application Server in the system. A client connecting to a server on one network layer may have different privileges than a client on a second network layer.

Users are required to sign in for access to the TankMaster Mobile system. Full authentication requires registered devices which are validated by the TankMaster Mobile system for access to the system. All data is encrypted for secure communication.

Your site dictates PC addressing, applications allowed, timing of Windows Software Updates, and so on for the TankMaster Mobile Server. You must ensure that the TankMaster Mobile computer is compatible with site policy with regard to anti-virus software, security (such as PC hardening), and software updates.

Components

Components in the TankMaster Mobile system:

- Reverse Proxy Server
- Application Server
- Identity Server
- Data Server
- Tank Server Connector
- Docker software platform

The **Tank Server** and **Tank Server Connector** are running on the same Rosemount TankMaster workstation. In a segmented topology, the TankMaster workstation is typically installed on a Plant Network Layer 2 protected by firewalls. 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**.

TankMaster Mobile components are installed on a separate machine on Plant Network Layer 3 as illustrated in Figure 1-1.

Clients connect to the system via a **Reverse Proxy Server**. The **Application Server** provides data to clients and can be configured to provide limited features for selected user groups.

Application Servers can be added to an existing TankMaster Mobile system. This may be useful, for example, in case you would like to provide access for clients on a Business Network Layer 4.



User documentation

User documentation is organized as illustrated in Figure 1-2 to cover installation and operation.





1.3 Workspace

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



- 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

1.3.1 Administration Mode

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

Figure 1-4: Menus in Administration Mode

EMERSON	Users	Servers	Settings	🕐 Status		ADMINISTRATION	MODE	💄 Admin User) (+	≡
User Administratio	n									
	USER AL	DMINISTRATION ser Group or User to a	edit:							
	+ A Name	Add User Group	+ Add User	Role	Enabled					
	😩 De	fault min User		Admin	Enabled	ď				
	2 items									

1.3.2 Start page menus

Summary of start page menus.

Table 1-1: 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

1.4 Before you begin

To install and use **TankMaster Mobile** software, you should be familiar with:

- Microsoft[®] Windows
- Your local area network (LAN) configuration and security settings
- Network components installed on your system
- System requirements
- System management functions such as backup and restore
- Synchronizing system clocks for servers and clients

Related information

Software installation overview

1.5 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)

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 Getting started

2.1 System requirements

Hardware and software requirements for TankMaster[™] Mobile Data server and Application server.

Version

TankMaster Mobile	1.4.2
Tank Server Connector	3.0.2
Docker	20.10.13

The machine hosting TankMaster Mobile requires a dedicated assigned IP-address.

It is highly recommended that TankMaster Mobile is hosted on a dedicated server that only run essential software, to achieve best performance.

Hardware

- 64-bit processor
- Intel[®] i7 processor or similar (minimum 8 cores)
- Internal memory (RAM): Minimum 32 GB
- Hard disk drive:
 - Minimum: 100 GB free disk space
 - Recommended: 256 GB
- Minimum screen resolution: 1280 x 1024

Software

 Microsoft[®] Windows Server 2019, English (United States) based Standard Desktop Experience version 1809 OS Build 17763.2300 or later.

Important

Ensure that English version of Microsoft[®] Windows is used on the TankMaster Mobile server.

- Firewall: open appropriate ports on the TankMaster Mobile server
- Supported web browsers for Microsoft Windows: Chrome⁽²⁾
- Supported web browsers on Android devices: Chrome⁽²⁾
- Supported web browsers on iOS devices: Safari⁽²⁾

⁽²⁾ Latest version is recommended

Other requirements

- Operating system must support Docker container servers.
- Internet Information Services (IIS) should be disabled to ensure that port 443 is available.
- Tank Server Connector and TankMaster Mobile can not be installed on the same server. Tank Server Connector is installed on the same server as TankMaster, and TankMaster Mobile is installed on a separate server.
- Installation requires administrator privileges.
- To access the TankMaster Mobile system you need to make sure that the ports specified in Table 2-1 are open:

Node	Protocol	Port
Data Server (Main node)	ТСР	2377, 5000, 5011, 5671, 7946 80, 443 ⁽¹⁾⁽²⁾
Data Server (Main node)	UDP	4789, 5011, 5671, 7946
Data Server (Main node)	ICMPv4	(ping)
Tank Server Connector	ТСР	5805 ⁽¹⁾ 5805+1 ⁽¹⁾ 5671
Additional App Server	ТСР	2377, 4433 ⁽¹⁾ , 7946
Additional App Server	UDP	4789, 7946
Additional App Server	ICMPv4	(ping)
Firewall Layer 3	ТСР	80, 443 ⁽¹⁾ 5671 5805 ⁽¹⁾ 5805+1 ⁽¹⁾
Firewall Layer 3	UDP	5671
Firewall Layer 4	ТСР	2377, 5011, 7946
Firewall Layer 4	UDP	4789, 5011, 7946
Firewall Layer 4	ICMPv4	(ping)
External network nodes		Appropriate ports

Table 2-1: Firewall Connections

User configurable, i.e you may choose a port that complies with local IT policies
 Internet Information Services (IIS) should be disabled to ensure that port 443 is

available.

TankMaster

The following requirements refer to the server machine that hosts the TankMaster Tank Server and the Tank Server Connector:

- TankMaster version 6.G0 and higher for TankMaster Mobile version 1.4.0.
- TankMaster version 6.F0 and higher for TankMaster Mobile version 1.3.1.
- Operating system Microsoft Windows 2012 Server R2 may not be used on TankMaster machine due to security limitations

Certificates

TankMaster Mobile requires digital certificates for a secure and trusted communication. Self-signed certificates are automatically distributed to all servers upon installation of TankMaster Mobile. The self-signed public root certificate needs to be distributed securely to clients using the system in order to be trusted by web browsers.

In case your organization has trusted root certificates from a root certificate vendor, you may use these instead of the self-signed certificates.

Related information

System architecture

2.2 Quick start installation guide

This is a brief introduction how to setup the Rosemount TankMaster[™] Mobile system.

The following steps need to be managed in order to properly setup a Rosemount TankMaster Mobile system. More information is provided in appropriate sections of this installation manual.

- 1. Setup a server machine for **Rosemount TankMaster Mobile**. Ensure that system requirements are fulfilled.
- 2. Ensure that **TankMaster** version 6.G0 or higher is installed on the TankMaster workstation.
- 3. Install **Docker** on the TankMaster Mobile machine.
- 4. Install Rosemount TankMaster Mobile on the dedicated machine.
- 5. Install Tank Server Connector on the TankMaster workstation.
- 6. Configure the TankMaster Mobile system:
 - Connect the TankMaster Mobile server to the Tank Server on the TankMaster workstation
 - Configure users and user groups
- 7. Activate your Rosemount TankMaster Mobile license.

Figure 2-1: Installation of components on various servers



3 Install the Rosemount TankMaster Mobile server software

Preparations 3.1

Before you begin installing the Rosemount TankMaster Mobile application, make sure that hardware and software system requirements are fulfilled.

Make sure that you have required information such as IP addresses, server names, firewall ports, service accounts, and other essential information.

The following information is required:

- IP address of the TankMaster Mobile computer
- IP address of the TankMaster Tank Server computer (will be needed after installation when connecting to TankMaster Tank Server)

Prior to installing Rosemount TankMaster Mobile you also need to:

- ensure that there are computers available that fulfill system requirements to host the TankMaster Mobile application and the **Tank Server Connector**. The Tank Server Connector is installed on the same machine as the Rosemount TankMaster software.
- make sure that **Docker** is installed and up and running on the TankMaster Mobile computer.
- ensure that no other services than TankMaster Mobile services are running in the Docker environment. Other services will automatically be terminated by the installer program.
- ensure that multiple network cards are not enabled during installation of TankMaster Mobile. Make sure that only one network card is enabled. Once installation is finished other network cards may be enabled again.

It is recommended that you collaborate with the IT department in order to integrate the TankMaster Mobile application with your network infrastructure.

Note

TankMaster Mobile is running in a Docker environment. In the event that Docker is used on the server machine for other services than TankMaster Mobile, they will automatically be terminated by the software installer. No other services may be used by Docker on a TankMaster Mobile server machine.

Related information

System requirements **Docker installation** Certificate management December 2023

3.2 Software installation overview

This is an introduction to the Rosemount TankMaster Mobile installation procedure.

Installation procedure

Installation of the system includes the following steps:

- Install **Docker** on the machine where TankMaster Mobile will be installed
- Install the TankMaster Mobile server software
- Install the **Tank Server Connector** on the computer where the TankMaster Tank Server is installed
- Configure the system:
 - Connect the TankMaster Mobile server to the TankMaster Tank Server (Administrator mode; Servers>Tank Servers)
 - configure users and user groups (Administrator mode; Users>User administration)
- Activate the TankMaster Mobile license
- Optional: setup custom certificates

Note

Once TankMaster Mobile is installed, ensure that clocks in servers and clients are synchronized. They may be located in different time zones as long as using accurate system time.

Related information

Docker installation Main Server setup Install TankMaster Tank Server Connector Connect to TankMaster Tank Server Tank Server Connector setup Administration mode Software updates

3.2.1 System components

This is a brief summary of software components installed with the TankMaster Mobile system.

Table 3-1: System Components

Component	Description
Tank Server Connector	The Tank Server Connector runs as a service on the same computer as the Tank Server and connects the existing Tank Server with the TankMaster Mobile system. It is installed on the same hardware and operating systems as the Tank Server.
Data Server	The Data Server collects data from one or several Tank Server Connectors and provides data to Application Servers. It also manages users, system settings and logging.
SQL Server	The SQL Server is a database that stores persistent data in the system.
Identity Server	The Identity Server is responsible for authenticating users. The Identity Server also manages authentication between servers in the system.
Application Server	The Application Server interacts with the Data Server to retrieve information. All communication with clients and Data Server is encrypted.
Reverse Proxy Server	The Reverse Proxy Server routes client requests to the Web Servers, Application Server and Identity Server running on a different network layer.
Web Server	Web servers respond to requests and displays contents by delivering web pages to the clients.
Docker	Docker is an application that is used to run TankMaster Mobile in an isolated environment called a container. This allows efficient use of computer resources.
TankMaster Administration Utility	Includes functions for server management, backup and restore, user password reset, web server URL handling, and certificate management.
Backup & Restore service	Lets you make system backup and restore installation. This function is included in the Administration Utility.

Related information

System architecture

3.2.2 Certificates

Digital certificates allow clients to check if the received data is coming from a trusted Server (Client/Server model).

Clients connect to Rosemount TankMaster[™] Mobile servers using digital certificates. Servers and clients require separate web certificates. Self signed certificates are generated by the **Data Server** and distributed to all servers in the system.

Installation of server certificates is done automatically upon installation of TankMaster Mobile.

Once a client machine is approved by, and registered in, the TankMaster Mobile system, a root certificate can be downloaded. This option is provided from the start page when signing in the first time.

Should you want to use CA (Certificate Authority) web certificates, begin the process of establishing the chain of trust. CA certificates can be applied after installation.

You are responsible for system security, practices, and processes, and for the proper configuration and use of the Rosemount TankMaster Mobile product.

3.2.3 Installation utility

Rosemount TankMaster Mobile software installation is easily managed by utilizing the **TankMaster Installation Utility** and wizards.

The **TankMaster Installation Utility** is available in the folder that contains all the installation files.

Figure 3-1: TankMaster Installation Utility

Name
Docker 19.03.16
TankMaster Mobile 1.2.0.1654

- Installation Guide.pdf
- 🚆 TankMaster™ Installation Utility.exe

Double-click the TankMaster Installation Utility.exe.

Figure 3-2: Installation Utility



The **Installation Utility** presents buttons for installation of the various components. Buttons will show different color depending on component availability in the installation package:

- Blue the program package is available
- **Gray** the program is installed or the program package is not available

3.3 Docker installation

Docker needs to be installed prior to installing the Rosemount[™] TankMaster[™] Mobile package. Both these software packages are installed by utilizing the **Rosemount TankMaster Installation Utility**.

Related information

Docker Docker docs Installation utility

3.3.1 Install Docker

This is an instruction for installing the Docker software.

Prerequisites

Ensure that system requirements are fulfilled for the TankMaster Mobile server machine as well as any additional Application server machine.

Note

The operating system on the TankMaster Mobile server must support Docker container servers.

Procedure

- 1. Locate the installation file named **TankMaster Installation Utility** and double-click the file.
 - Name ____ Docker 19.03.16 ____ TankMaster Mobile 1.2.0.1654 & Installation Guide.pdf # TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation DVD, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

2. In the Rosemount TankMaster Utility, select Manage Docker.



3. Select Install Docker.



- 4. Wait until the installation process is finished.
- 5. When Docker installation is completed you will be prompted to restart the computer now (**y**) or manually at a later occasion.



3.3.2 Update Docker

This is an instruction for updating the Docker software.

Prerequisites

Ensure that the new software installation package is available.

Important

Make sure that the Docker software is upgraded prior to upgrading the Rosemount[™] TankMaster[™] Mobile Server software.

Procedure

- Locate the installation file named TankMaster Installation Utility and double-click the file.
 - Docker 19.03.16 TankMaster Mobile 1.2.0.1654 Installation Guide.pdf TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation DVD, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

- 2. In the TankMaster Installation Utility, select Manage Docker.
- 3. Select Update Docker.



- 4. Wait until the installation process is finished.
- 5. When Docker installation is completed you will be prompted to restart the computer now (**y**) or manually at a later occasion.



3.4 Main Server setup

Related information

Software installation overview Installation utility

3.4.1 Data Server and Application Server installation

Follow this instruction to install the Rosemount TankMaster[™] Mobile Server software. The TankMaster Installation Utility automatically installs all the necessary components.

Prerequisites

Prior to installing the Rosemount TankMaster Mobile software you need to ensure that Docker is installed and up and running.

Make sure that server address and port number are available when requested during the installation process.

Procedure

- Locate the installation file named TankMaster Installation Utility and double-click the file.
 - Name Docker 19.03.16 TankMaster Mobile 1.2.0.1654 Installation Guide.pdf TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation DVD, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

2. In the TankMaster Installation Utility, select Manage TankMaster Mobile.



3. Select Install TankMaster Mobile.



4. Review and accept the end-user license agreement. Click Accept to continue.



5. Enter the requested information.



- a) Accept the suggested **installation path**, or click **Change** to select another folder.
- b) Enter the host server IP address and HTTPS port number for the web server. As an alternative you may enter a URL and HTTPS port number. This is the URL that is used to connect to the TankMaster Mobile server by web browsers in mobile phones, tablets, and computers.

Note

The port must be open in applicable firewalls. Ensure that appropriate ports recommended by your local IT department are used.

Example:

- 1. 10.70.148.60:443
- 2. tankmaster.com:443
- c) Enter the TankMaster Mobile server network location. This address needs to be accessible by other computers where TankMaster Mobile will be installed.
- d) Create an **Administrator** account by entering your email address and a password. The password must be changed when signing in the first time. Click **Next** to start the installation process.
- 6. Select **Next** to proceed.

7. Please wait until the installation is completed.



Note

In case you need to cancel an ongoing installation, it may take some time until you will see that the installer has stopped the installation process. Once the installation is canceled, it is recommended that you uninstall the program to make sure that there are no remaining files.

8. Select **Finish** once the installation is completed.

Important

The TankMaster Mobile system is installed with 90 day trial license. You need to configure a valid license before the trial license expires.



9. Now the *Servers* window will open automatically. It shows an overview of current status for installed components.

Backup & Rostore Select ma Sever WIN DC Applicat Data Se Event L	Users Certific in the or server for more option (type) TUL2460BF (this machine loo Server treet a security	ate management R ons: Server Name b) Imapp_apserver Imapp_datasever	Version	Status Running about a minute Running about p minuta			
SERVERS Select ma Server WiN DC Applicat Data Se Event L	chine or server for more option Type DTUL2460BF (this machine tion Server exver en Service	server Name) Imapp_appserver Imapp_dataserver	Version 1.4.0	Status Running about a minute Running about p minute			
SERVERS Select ma Server 1 WIN DD Applicat Data Se Event L	i Cype TVUL2460BF (this machine tion Server Hyper as Service	Server Name b) tmapp_appserver tmapp_dataserver	Version 1.4.0	Status Running about a minute Running about a minute			
Select mar Server 1 WIN-DE Applicat Data Se Event L	chine or server for more opti- fype TTUL246OBF (this machine tion Server erver on Service	Server Name) tmapp_appserver tmapp_dataserver	Version 1.4.0	Status Running about a minute Running about a minute			
Server V WIN-DE Applicat Data Se Event L	Type)TUL2460BF (this machine tion Server erver	Server Name) tmapp_appserver tmapp_dataserver	Version 1.4.0	Status Running about a minute Running about a minute			
Server 1 WIN-DC Applicat Data Se Event L	Type DTUL2460BF (this machine tion Server erver	Server Name	Version 1.4.0	Status Running about a minute Running about a minute			
WIN-DE Applicat Data Se Event L	DTUL2460BF (this machine tion Server erver	e) tmapp_appserver tmapp_dataserver	1.4.0	Running about a minute			
Applicat Data Se Event L	tion Server erver	tmapp_appserver tmapp_dataserver	1.4.0	Running about a minute Running about a minute			
Data Se Event L	erver	tmapp_dataserver	140	Running about a minute			
Event L	na Sonico		1.4.0				
	og Gerrice	tmapp_eventlogservice	1.4.0	Running about a minute			
Historia	n Service	tmapp_historianservice	1.4.0	Running about a minute			
Identity	Server	tmapp_identityserver	1.4.0	Running about a minute			
Reportir	ng Service	tmapp_reportingservice	1.4.0	Running about a minute			
Tank Va	lue Service	tmapp_tankvalueservice	1.4.0	Running about a minute			
Pdf Rep	oort Generation	tmapp_tmpdfreportgeneration	1.4.0	Running about a minute			
Pdf Ser	vice	tmapp_tmpdfservice	1.4.0	Running about a minute			
Web Se	rver	tmapp_webcore	1.4.0	Running about a minute			
Web Se	rver	tmapp_webreport	1.4.0	Running about a minute			
Web Se	irver	tmapp_webtank	1.4.0	Running about a minute			
SQL Se	rver	tminfra_dbserver	1.4.0	Running 2 minutes			
Web Se	rver	tminfra_nginx	1.4.0	Running about a minute			
Postgre	SQL Server	tminfra_tmpostgres	1.4.0	Running 2 minutes			
Messag	e Bus	tminfra tmrabbitmq	1.4.0	Running 2 minutes			
	Identity Report Tank W Pdf Bar Web Se Web Se SQL Se Web Se SQL Se Postgre Messac	Identity Server Reporting Service Park Value Service Park Report Generation Park Service Web Server Web Server SOL Server Web Server PedgingSOL Server Message Bus	Identity Server tmapp_technityserver Reporting Service tmapp_technityservice Tank Value Service tmapp_tankvalueservice Pdf Report Generation tmapp_technityservice Pdf Service tmapp_technityservice Web Server tmapp_technityservice Web Server tmapp_webreport Web Server tmapp_webreport Web Server tminfra_dberver Web Server tminfra_nginx PostgreSQL Server tminfra_tmpostgres Message Bus tminfra_tmrabitimg	Identity Server tmapp_identityserver 1.4.0 Reporting Service tmapp_reportingservice 1.4.0 Tank Value Service tmapp_ilankvalueservice 1.4.0 Pdt Report Generation tmapp_ilankvalueservice 1.4.0 Pdt Report Generation tmapp_ilankvalueservice 1.4.0 Web Server tminfra_dbserver 1.4.0	Identity Server tmapp_reportingservice 1.0 Running about a minute Reporting Service tmapp_reportingservice 1.4.0 Running about a minute Tark Value Service tmapp_tmodfregortigneration 1.4.0 Running about a minute Pdf Report Generation tmapp_tmodfregortigneration 1.4.0 Running about a minute Pdf Service tmapp_tmodfregortigneration 1.4.0 Running about a minute Veb Server tmapp_webcore 1.4.0 Running about a minute Web Server tmapp_webcore 1.4.0 Running about a minute Web Server tmapp_webcore 1.4.0 Running about a minute Web Server tmapp_webcore 1.4.0 Running about a minute SOL Server tmapf_methorizer 1.4.0 Running about a minute Veb Server tminifm_descrear 1.4.0 Running about a minute Veb Server tminifm_methorizer 1.4.0 Running about a minute Veb Server tminifm_methorizer 1.4.0 Running about a minute PatigeSDL Server tminifm_methorizer 1.4.0	Identity Server mapp_identifyserver 1.4.0 Running about a minute Reporting Service tmapp_reportingservice 1.4.0 Running about a minute Tark Value Service tmapp_line/valueservice 1.4.0 Running about a minute Pd Report Generation tmapp_ine/dreportgeneration 1.4.0 Running about a minute Pd Report Generation tmapp_ine/dreportgeneration 1.4.0 Running about a minute Velb Server tmapp_ine/desortgeneration 1.4.0 Running about a minute Web Server tmapp_ine/bearvice 1.4.0 Running about a minute Web Server tmapp_ine/bearvice 1.4.0 Running about a minute SQL Server tmapp_ine/bearvice 1.4.0 Running about a minute Veb Server tminfir_dbearvice 1.4.0 Running about a minute SQL Server tminfir_dbearvice 1.4.0 Running about a minute Veb Server tminfir_disport 1.4.0 Running about a minute Veb Server tminfir_disport 1.4.0 <t< td=""><td>Identify Server tmapp_ident/tyserver 1.4.0 Running about a minute Reporting Service tmapp_reportingservice 1.4.0 Running about a minute Tark Value Service tmapp_imprime 1.4.0 Running about a minute Pdf Report Generation tmapp_imprime 1.4.0 Running about a minute Pdf Report Generation tmapp_imprime 1.4.0 Running about a minute Velb Server tmapp_webcore 1.4.0 Running about a minute Web Server tmapp_webcore 1.4.0 Running about a minute Web Server tmapp_webcore 1.4.0 Running about a minute SOL Server tmainf_ubserver 1.4.0 Running about a minute Veb Server tminfin_ubserver 1.4.0 Running about a minute SOL Server tminfin_ubserver 1.4.0 Running about a minute Veb Server tminfin_ubserver 1.4.0 Running about a minute PedgeSOL Server tminfin_upostgress 1.4.0 Running about a minute PedgeSOL Server tminfin_impostgress 1.4.0 Running about a minute Message Bus tminfin_turnabbitms 1.4.0 Running about a minute</td></t<>	Identify Server tmapp_ident/tyserver 1.4.0 Running about a minute Reporting Service tmapp_reportingservice 1.4.0 Running about a minute Tark Value Service tmapp_imprime 1.4.0 Running about a minute Pdf Report Generation tmapp_imprime 1.4.0 Running about a minute Pdf Report Generation tmapp_imprime 1.4.0 Running about a minute Velb Server tmapp_webcore 1.4.0 Running about a minute Web Server tmapp_webcore 1.4.0 Running about a minute Web Server tmapp_webcore 1.4.0 Running about a minute SOL Server tmainf_ubserver 1.4.0 Running about a minute Veb Server tminfin_ubserver 1.4.0 Running about a minute SOL Server tminfin_ubserver 1.4.0 Running about a minute Veb Server tminfin_ubserver 1.4.0 Running about a minute PedgeSOL Server tminfin_upostgress 1.4.0 Running about a minute PedgeSOL Server tminfin_impostgress 1.4.0 Running about a minute Message Bus tminfin_turnabbitms 1.4.0 Running about a minute

Postrequisites

Once the Rosemount TankMaster Mobile server is installed;

- 1. Install the **Tankserver Connector** if not done.
- 2. Sign in to TankMaster mobile on a computer other than the one where TankMaster Mobile was installed.
- 3. Enter Administration Mode.
- 4. Configure the system:
 - connect the TankMaster Mobile server to a TankMaster Tank Server (Administration mode; Servers>Tank Servers)
 - configure users and user groups (Administration mode; Users>User administration)

Once TankMaster Mobile is configured, proceed with:

- activating your license
- optional: setup custom certificates (not needed in case self-signed certificates will be used)

It is recommended that you create a backup copy of the system once the installation is completed. The Rosemount TankMaster **Administration Utility** offers backup and restore functionality.

Related information

Install the Rosemount TankMaster Tank Server Connector Software installation overview Backup and restore Administration mode License management

3.4.2 Update TankMaster[™] Mobile

This is an instruction on how to update the Rosemount TankMaster Mobile Server software.

When updating TankMaster Mobile, an automatic backup is created. It will be stored in the repository that is setup for system backups⁽³⁾. If no backup setup is done, then the backup will be stored in the **\backup** sub folder located in the TankMaster Mobile installation folder. Default installation folder is: C:\Program Files\Rosemount\TankMaster\TankMasterMobile. However, a different folder may have been selected for the current TankMaster Mobile installation.

Prerequisites

- It is recommended that you make a backup copy before updating the TankMaster Mobile system.
- You may need to update Docker if the current version is incompatible with the updated TankMaster Mobile version.

Note

When updating TankMaster Mobile, current certificates (self-signed or custom) will be overwritten by new self-signed certificates that come with the updated version of TankMaster Mobile. Any custom certificates need to be installed again.

Procedure

- Locate the installation file named TankMaster Installation Utility and double-click the file.
 - Docker 19.03.16
 - Installation Guide.pdf
 - 🚊 TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation DVD, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

⁽³⁾ See Related information at the end of this instruction for more information.



2. In the TankMaster Installation Utility, select Manage TankMaster Mobile.

3. Select Update TankMaster Mobile.


4. Wait for the upgrader to load.



5. When the upgrader is loaded, select **Next** to continue.



6. Wait for the upgrade process to finish.

Note

TankMaster Mobile will stop during the installation procedure.



7. Once the installation is done, click **Finish** to complete the installation. The computer does not need to be restarted.

Postrequisites

You may need to update **Tank Server Connector** if the current version is incompatible with the updated TankMaster Mobile version.

Once the Rosemount TankMaster[™] Mobile software is upgraded, you will need to reconnect TankMaster Mobile to the **Tank Server Connector**.

Related information

Backup and restore System requirements Reconnect to Tank Server Connector Update software revision

4 Install the Rosemount TankMaster[™] Tank Server Connector

4.1 **Preparations**

Before you begin installing the **Tank Server Connector** make sure that hardware and software system requirements are fulfilled.

The following information is required:

- IP address of the TankMaster Tank Server computer
- · Firewall ports that must be open

Prior to installing the Tank Server Connector you also need to:

 Verify that the computer that will host the Tank Server Connector fulfills system requirements. The Tank Server Connector is installed on the same machine as the Rosemount[™] TankMaster[™] software. See system requirements for Rosemount TankMaster inventory management software.

Related information

System requirements

4.2 Install TankMaster[™] Tank Server Connector

Follow this instruction to install the TankMaster[™] Tank Server Connector.

Prerequisites

Prior to installing the Tank Server Connector you need to make sure that the TankMaster workstation is properly prepared. For example, ensure that no pending Windows updates will start during the installation.

Procedure

1. Locate the installation file named **TankMaster Installation Utility** and double-click the file.

Name
TankServer Connector 1.2.0.1589
Installation Guide.pdf
📸 TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation disk, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

2. In the Rosemount TankMaster Utility, select Manage Tank Server Connector.



3. Select **Install Tank Server Connector**. The Rosemount TankMaster Tank Server installation wizard appears:



- 4. Click **Next** to proceed with the installation procedure.
- 5. Review and accept end-user license agreement. Click Next.

🛃 Rosemount TankMaster™ Tank Server Connector Installation — 🛛 🗙
End-User License Agreement
Please read the following end-user license agreement carefully.
END-USER LICENSE AGREEMENT
for
Rosemount TankMaster Mobile
IMPORTANT - READ CAREFULLY: This License Agreement is a legal agreement between you (either an individual or a single entity) and Rosemount Tank Radar AB for the software product identified above, which includes computer software and may include consistent media winted materials and online or electronic and colline or electronic
Print Back Next Cancel

Now the installation wizard performs a system requirement check.

6. Accept the suggested folder, or click **Change** to select another destination folder. Click **Next**.

Rosemount TankMaster™ Tank Server Connector Installation —		×
Destination Folder		
Select a folder where installation will install files.		Ipullary'
Installation will install Rosemount TankMaster™ Tank Server Connector to the selected folder:		
C: \Program Files \Rosemount\TankMaster\TankServerConnector\		
Change		
Back Next	Ca	ncel

7. Enter the port number to be used for the machine where the Tank Server Connector will be installed. Click **Next**.

Note

Ensure that the port is open in the firewall.

Rosemount TankMaster™ Tank Server Co	onnector Installation	-		×
Enter port number				EMERSON Igne Marrer *
The Tank Server Connector will use the por address) of this machine to allow access to	t for the network locatio the system.	n (e.g. IP		
Port number (TCP) 5805			1	
1				
	Back Ne	xt	Car	ncel

8. Make a note of the Tank Server Connector key. You will need this key in a later step when adding a tank server in TankMaster Mobile. You may access the key again after installation is completed by opening the **Tank Server Connector Utility** application from the system tray. Click **Next** to continue.



9. Click **Install** to start the installation process.

Rosemount TankMaster [™] Tank Server Connector Installation	_		×
Rosemount TankMaster™ Tank Server Connector Installation			EMERSON
After you have installed the Rosemount TankMaster™ Tank Server step is to add it in TankMaster Mobile. You will need the network loc the port and key to complete that task	Connect ation of	or the ne this mach	ext line,
Port Number (TCP): 5805 Tank Server Connector Key: cb8ecb9e-603d-4e95-9f9d-10a3048b6	901		
<u>B</u> ack O Instal		Ca	ncel

Make sure to make a note of port number and Tank Server Connector key. You will need this information later when connecting TankMaster Tank Server to TankMaster Mobile.

- Rosemount TankMaster™ Tank Server Connector Installation X Completed the Rosemount TankMaster™ Tank Server Connector Installation Wizard Cick the Finish button to exit the Installation Wizard. Back Finish Cancel
- 10. Click **Finish** to complete installation of the Tank Server Connector.

Postrequisites

Once the Tank Server Connector is installed you will need to connect TankMaster Mobile to the TankMaster machine and the Tank Server. The following information is required:

- network location of the Tank Server Connector machine
- port number
- Tank Server Connector key

When installation is completed, you may open the **Tank Server Connector Utility** to check the server status:

Rosemount TankMaster Tank Server Connector Utility		-	×
EMERSON.	Tank Server Connector Tank Server Connector Key: [7115894-50d2-42bc-9687-9687-9681050cdba3		
	Port (TCP): 5805 Status: Connector needs to be configured in TankMaster Mobile		
TANKMASTER™			

Related information

Installation utility Connect to TankMaster Tank Server

4.3 Connect to TankMaster[™] Tank Server

Follow this procedure to connect Rosemount[™] TankMaster[™] Mobile to the desired Tank Server.

Prerequisites

Make sure that you have the following information available:

- Tank Server name
- Network location (IP address) of the TankMaster Tank Server machine
- Port number
- Tank Server Connector key

Procedure

1. Open the TankMaster Mobile desktop web application.

Note

Web application must be accessed from other PC in the network than the TankMaster Mobile server machine.

- 2. Sign in as administrator and enter Administration Mode.
- 3. Open the Servers menu.
- 4. Select Tank Servers.
- 5. Select the **Add Tank Server** button.

Note

In case the Tank Server Connector was upgraded, you may update the existing Tank Server connection by selecting the **Edit** is button. Then you will be able to update the setup by replacing the old Tank Server Connector key with the new one that was created during the upgrade procedure.

EMERSON LUse	rs Servers 🌣 Settings 🍪 Status	ADMINISTRATION MODE	🕹 Anders Ricksand 📔 🔂 ╞ 🚍
Servers			
Tank Servers	TANK SERVERS		
Application Servers	Select Tank Server to edit: + Add Tank Server Name		
	Labb27 (10.69.208.47:5805)	C C	
	TankServer Lab26 (10.69.208.66:5805)	Ľ	
	2 servers		

- 6. Under **General** enter the required information for the tank server to connect:
 - Tank Server name
 - Description (optional)
 - Network location (IP address) of the TankMaster Tank Server machine
 - Port number. Default is 5805.
 You can change to another port in case you need to align with site policies.
 However, ensure that it is the same port as was specified when TankMaster Tank
 Server Connector was installed.
 - 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.

< Back Servers > Segot01-01110	8	
	Tank Server Name:	
	Segot01-011108	
	Description:	
	Network Location:	
	10.69.212.139	
	E.g. 192.168.1.1	
	Port:	
	5805	Default
	Default: 5805	
	Tank Server Connector Key:	
	8ada465c-9eb8-4e03-a8e1-897	72(
	Enter key provided during installation	n of Tank Server Connector.
	Server Alias (optional):	
	The Server Alias is added as prefix to	o tank names for this server.
	Example: Server alias "A-" results in	tank name "A-TK-101"
	It is recommended to leave server al	ias blank of only using one(1) Tank Server.

7. Click Save.

8. Select the **Status** menu and verify that the tank server is connected.



Related information

Server management System requirements Install TankMaster Tank Server Connector

4.4 Update TankMaster[™] Tank Server Connector

Follow this instruction to update the TankMaster[™] Tank Server Connector.

Prerequisites

- Prior to updating the Tank Server Connector you need to make sure that the TankMaster workstation is properly prepared. For example, ensure that no pending Windows updates will start during the installation.
- Ensure that Tank Server Connector is shut down before the updating procedure is started. In the system tray, right-click the Tank Server Connector icon and select Exit.



Procedure

1. Locate the installation file named **TankMaster Installation Utility** and double-click the file.

Nar	ne
	TankServer Connector 1.2.0.1589
æ	Installation Guide.pdf
	TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation disk, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

2. In the Rosemount TankMaster Utility, select Manage Tank Server Connector.



3. Now the **TankMaster Installation Utility** checks if the current Tank Server Connector needs to be updated to a new version. Select **OK** when you are prompted to uninstall the old Tank Server Connector version:



4. Now the automatic uninstallation process starts. Wait until uninstallation is finished for next step of the update procedure.



5. Once Tank Server Connector Is removed, the installation **wizard** appears.



- 6. Click **Next** to proceed with the installation procedure.
- 7. Review and accept end-user license agreement. Click **Next**.

Rosemount TankMaster™ Tank Server Connector Installation – □ ×
End-User License Agreement
Please read the following end-user license agreement carefully.
END-USER LICENSE AGREEMENT
for
Rosemount TankMaster Mobile
IMPORTANT - READ CAREFULLY: This License Agreement is a legal agreement between you (either an individual or a single entity) and Rosemount Tank Radar AB for the software product identified above, which includes computer software and may include viewer include and contract and contract on the End-User License Agreement
Print Back Next Cancel

Now the installation wizard performs a system requirement check.

8. Accept the suggested folder, or click **Change** to select another destination folder. Click **Next**.

Rosemount TankMaster™ Tank Server Connector Installation —		×
Destination Folder		
Select a folder where installation will install files.		Ipullary'
Installation will install Rosemount TankMaster™ Tank Server Connector to the selected folder:		
C: \Program Files \Rosemount\TankMaster\TankServerConnector\		
Change		
Back Next	Ca	ncel

9. Enter the port number to be used for the machine where the Tank Server Connector will be installed. Click **Next**.

Note

Ensure that the port is open in the firewall.

Rosemount TankMaster™ Tank Server Connector Installation	-		×
Enter port number			EMERSON
The Tank Server Connector will use the port for the network location (address) of this machine to allow access to the system.	e.g. IP		
Port number (TCP)		1	
5805			

10. Make a note of the **Tank Server Connector key**. You will need this key in a later step when updating the tank server in TankMaster Mobile. You may access the key again after installation is completed by opening the **Tank Server Connector Utility** application from the system tray. Click **Next** to continue.

😸 Rosemount TankMaster™ Tank Server Connector Installation —	□ ×
Important information Make a note of the Tank Server Connector Key.	EMERSON
The Tank Server Connector Key is needed later when adding this Tank Server Connector in TankMaster Mobile. You may access the key again later by clicking the Tank Server Connector Utility application in the system tray after installation has been completed.	
db8edb9e-603d-4e95-9f9d-10a3048b6901	
Back Next	Cancel

11. Click **Install** to start the installation process.

#Rosemount TankMaster™ Tank Server Connector Installation – □	×
Rosemount TankMaster™ Tank Server Connector Installation	EMERSON
After you have installed the Rosemount TankMaster™ Tank Server Connector the n step is to add it in TankMaster Mobile. You will need the network location of this mac the port and key to complete that task	ext hine,
Port Number (TCP): 5805 Tank Server Connector Key: cb8ecb9e-603d-4e95-9f9d-10a3048b6901	
Back U install C	ancel

Make sure to make a note of port number and Tank Server Connector key. You will need this information later when updating the TankMaster Tank Server setup in TankMaster Mobile.

- 12. Click **Finish** to complete installation of the Tank Server Connector.

Postrequisites

Once the Tank Server Connector is upgraded, you will need to reconnect TankMaster Mobile to the Tank Server Connector by updating the tank server connection with the new **Tank Server Connector Key**. The following information is required:

Back Finish

Cancel

New Tank Server Connector key

When installation is completed, you may open the **Tank Server Connector Utility** to check the server status:

Rosemount TankMaster Tank Server Connector Utility		-	\times
EMERSON.	Tank Server Connector Tank Server Connector Key: [7115894c-50d2-42bc-966F-9fa1650cdba3		
TANKMASTER™	Port (TCP): 5805 Status: Connector needs to be configured in TankMaster Mobile		

Related information Connect to TankMaster Tank Server

5 Server management

The **Servers** menu allows you to add new **Tank Servers** and edit existing servers. For **Application Servers** you may configure features that will be available for user groups.

The **Servers** menu is available when you are signed in as administrator in **Administration Mode**.

Figure 5-1: Servers Menu

EMERSON LUsers	Servers	Settings	1 Status
Servers			
Tank Servers Application Servers	TANK SERVERS Select Tank Server to Add Tank Server Lal Labb27 (10.69) TankServer Lal 2 servers	edit: rver 208.47:5805) 526 (10.69.208.66.5	805)
	APPLICATION SERV Select Application See Note: To add an Appli Application Servers Application Servers	ERS vver to edit: cation Server you n a oppserver AppServe	eed to install the server on a machine and connect it to the TankMaster network. ar1)

Related information Administration mode

5.1 Edit an Application Server

This options lets you edit description of and features for Application Servers.

Prerequisites

Prior to configuring a new Application server, it needs to be installed on a machine and connected to the TankMaster Mobile network.

To configure available Application Server features:

Procedure

- 1. Open the **TankMaster Mobile** desktop web application.
- 2. Sign in as administrator and enter Administration Mode.
- 3. Open the **Servers** menu.
- 4. Select the desired Application Server.
- 5. Select Edit.

APPLICATION SERVERS

Select Application Server to edit:

Note: To add an Application Server you need to install the server on a machine and connect it to the TankMaster network.

Edit Application Servers

AppServer1 (appserver | AppServer1)

Summary of features:

Table 5-1: Application Server Features

Feature	Description
Movement View	Access to view that shows tank movement.
Inventory View	Access to view showing inventory by product.
Report View	Lets you generate and view tank reports.
Tank Details	View that shows all tank variables.
Tank Notes	Set and view notes for selected tanks.
Print Out	Print current view on demand.

6. Select desired features that should be available for users who connect via this Application Server.

User group access to Application Server features is configured in TankMaster Mobile by the system administrator. In order to make a feature item available for user groups, it needs to be enabled here. Then an administrator may configure different access restrictions for different user groups as required.

FEATURES				
Clear features to restrict access to features for users connecting via this Application Server:				
Note: Permissions for users are defined separately. You can restrict access to features for users by clearing items in the list below. A user will never gain additional permissions even if all items are selected in the list.				
Select All Clear All				
Feature	Description			
Movement View	Access to view showing tanks with movement.			
Inventory View	Access to view showing inventory by product.			
Report View	Ability to generate and view reports of tanks.			
Z Tank Details	Access to view showing all tank variables.			
Tank Notes	Ability to set and view notes for tanks.			
Print Out	Ability to print out current view on demand.			
6 feetures calested				

Related information

TankMaster Mobile User Guide Install an Additional Application Server

5.2 Edit a Tank Server

You may extend the list of available Tank Servers as well as edit current information on existing servers.

Follow this procedure to edit a Tank Server:

Procedure

- 1. Open the **TankMaster Mobile** desktop web application.
- 2. Sign in as administrator and enter Administration Mode.
- 3. Open the **Servers** menu.
- 4. Select the desired server from the list, and click the **Edit** button.

Select Tank Server to edit:
+Add Tank Server Edit Remove
Name
Labb27 (10.69.208.47:5801)
Segot01-011108 (10.69.212.139:5805)
TankServer Lab26 (10.69.208.66:5001)
3 servers

5. Edit the required input fields.

< Back Servers > Segot01-011	108
	Tank Server Name: Segot01-011108 Description:

The following input fields are available:

- Tank Server Name
- Description
- Network Location (IP address)
- Port
- Tank Server Connector Key
- Server Alias (optional)

6 Sign in procedure

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

6.1 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.

EMERSON		
Welcome to Rosemount TankMaster Mobile Inv	ventory Management Software	
	E Email	
	Password	
	Sign In	
Did	you get insecure connection warnings?	
Install the Rosemount TankMaster Mobile certificate to enable secure connection (@).		
Version 1.4.0 Build 384		Rosemount™ TankMaster™ Mobile

- 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.

Related information

Install digital certificate

7 License management

7.1 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.

7.1.1 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.

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.

Once the **Product Key** is entered, the **System Key** will automatically appear.

 Logging

 Licensing

 License Status

 Trial period - Please activate license

 License Serial Number

 Product Key

 zv-75-1e-k-e7-f3d9q6

 System Key

 zv-111-que626-1b3null-1bjq4

Enter New Product Key

- 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.

TankMaster Service	New User
Center Sign In	Creating a TankMaster Service Center account delivers
to your account:	personalized access to: • License administration • Software downloade
email@company.com	Sottware downloads
PASSWORD	
SIGN IN >	CREATE ACCOUNT >
Forgot your password?	

9. Under My Licenses click Add New License.

EMERSON	TANKMASTER SE	RVICE CENTER	Licenses	Downloads
My lic	censes			
A	DD NEW LICENSE >			
3 licenses	1			
SERIAL NO	SOFTWARE UPDATE SUBSCRIPTION END DATE	LICENSE STATUS	LICENSE INFORMATION	ACTIONS
			Active Keys Product Key: 110Q-75-46-A-4T-777VOW System Key: 110q-111-6drzas-8n9st2-1bajiwS	\$ ~
70010	2023-05-12	Active	1 Product Key Product Key: 110Q-75-46-A-4T-777VOW (Date created: 5/8/2020)	
			Country of Use: Sweden	

- 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
- 15. Return to the TankMaster Mobile web application.
- 16. Navigate to the **Licensing** page.

email and needs to be downloaded.

- 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.

7.1.2 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
- 5. Click Continue.
- 6. Verify ordering info.
- 7. Click **Create pdf** to create an order with new model code.
- 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.

7.1.3 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 7-1: Licence transfer procedure in brief



Procedure

- 1. 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.
- 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** \rightarrow **Actions** \rightarrow **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.

7.1.4 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.
- 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.
- Send the order to your local sales representative.
 Your software update period extension will be confirmed via email.

8 Service and maintenance

8.1 Uninstall TankMaster[™] Mobile

In case you need to uninstall the Rosemount TankMaster Mobile software, there are various options available.

Prior to uninstalling the system, make sure to create a **Transfer key** and store it in a safe place. The **Transfer key** key ensures that you license is still valid and allows you to install TankMaster Mobile again.

Note

It is recommended that you perform a backup before proceeding. Once started, uninstallation cannot be aborted.

8.1.1 Uninstall Rosemount TankMaster[™] Mobile

This section shows how to remove the Rosemount TankMaster Mobile software from the server.

Prerequisites

Ensure that users are signed out of TankMaster Mobile.

Procedure

- Locate the installation file named TankMaster Installation Utility and double-click the file.
 - Docker 19.03.16
 - TankMaster Mobile 1.2.0.1654
 - Installation Guide.pdf
 - TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation DVD, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

2. In the TankMaster Installation Utility, select Manage TankMaster Mobile.



3. Select Uninstall TankMaster Mobile and wait until the TankMaster Mobile uninstaller is loaded.



4. Once the uninstaller is loaded, click **Next** to proceed removing TankMaster Mobile. This option lets you completely remove TankMaster Mobile from your computer. Click **Cancel** if you like to abort the uninstallation procedure.



5. Wait until the uninstall process is finished.



6. Select **Finish** to complete uninstallation of TankMaster Mobile.



Postrequisites

Restart the computer and verify that Rosemount TankMaster Mobile is removed.

8.2 Reinstall TankMaster Mobile

In case you would like to reinstall the Rosemount[™] TankMaster[™] Mobile software, we recommend that you follow this procedure.

Prior to reinstalling the system, make sure to have your **Transfer key** available in order to be able to activate your license.

Related information

Install the Rosemount TankMaster Mobile server software Install an Additional Application Server Uninstall TankMaster Mobile Docker installation

8.2.1 Reinstall procedure

This is a description of the recommended procedure for re-installation of a Rosemount TankMaster Mobile system.

Procedure

- Uninstall the Rosemount TankMaster Mobile system. This includes TankMaster Mobile as well as the Tank Server Connector.
- 2. Uninstall **Docker** from the TankMaster Mobile server. In case there is an additional Application server, Docker needs to be uninstalled from that server as well.
- 3. Restart both servers.
- 4. Install Docker on the TankMaster Mobile server and any additional Application server.
- 5. Install TankMaster Mobile.
- 6. Install additional Application server that was installed prior to re-installation.

Related information

Uninstall TankMaster Mobile Main Server setup Install an Additional Application Server
8.3 Uninstall Tank Server Connector

Follow this instruction in case you need to uninstall the Rosemount[™] TankMaster[™] Tank Server Connector software.

Prerequisites

Ensure that users are signed out of TankMaster Mobile.

Prerequisites

Ensure that Tank Server Connector Utility is closed by selecting Exit.



Procedure

1. Locate the installation file named **TankMaster Installation Utility** and double-click the file.

Name
TankServer Connector 1.2.0.1589
Installation Guide.pdf
🚆 TankMaster™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation disk, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

2. In the Rosemount TankMaster Utility, select Manage Tank Server Connector.



3. Select Uninstall Tank Server Connector.

The Rosemount TankMaster Tank Server Connector Setup wizard appears:



- 4. Click **Next** to proceed.
- 5. Select the **Remove** option. This option lets you completely remove the Tank Server Connector from your computer.

🚼 Roser	mount TankMaster™ Tar	nk Server Co	nnector Setup		-		×
Chane Sele	ge, repair, or removen ct the operation you wish	e installation to perform.	on				EMERSON
	Change Rosemount TankMa selectable features. Repair Repairs errors in the files, shortcuts, and	ster™ Tank S a most recent registry entr	erver Connecto installation by f ies,	r has no inc fixing missin	lepende g and c	ently orrupt	
	Remove Removes Rosemour computer.	it TankMaster	™ Tank Server	Connector	from yc	bur	
			Back	Next		Ca	ncel

6. Select the **Remove** button to start the removal procedure.

🖟 Rosemount TankMaster™ Tank Se	ver Connector Installation	- 0	×
Ready to remove Rosemount	TankMaster™ Tank Serv	ver Conne	EMERSON
Click Remove to remove Rosemoun computer. Click Back to review or d to exit the wizard.	t TankMaster™ Tank Server C nange any of your installation	onnector from y settings. Click C	pur ancel
	Back Remov	re l	Cancel
	Back Remov	'e	Cancel

Wait until the removal process is finished.

7. Select **Finish** to complete uninstallation of the Tank Server Connector.



Postrequisites

Verify that Rosemount TankMaster Tank Server Connector is removed.

8.4 Uninstall Docker

This instruction shows how to uninstall the Docker software.

Prerequisites

Ensure that users are signed out of TankMaster Mobile. Make sure that TankMaster Mobile and TankMaster Server Connector are shut down.

Procedure

- 1. Locate the installation file named **TankMaster Installation Utility** and double-click the file.
 - Name — Docker 19.03.16 — Tank/Master Mobile 1.2.0.1654 ← Installation Guide.pdf — Tank/Master™ Installation Utility.exe

The **TankMaster Installation Utility** is located on the Rosemount TankMaster Mobile software installation DVD, or in the downloaded and extracted zip-file if downloaded from the TankMaster.Rosemount.com/ServiceCenter web site.

- 2. In the TankMaster Installation Utility, select Manage Docker.
- 3. Select Uninstall Docker.



- 4. Wait until the removing process is finished.
- 5. When uninstallation is completed you will be prompted to restart the computer now (**y**) or manually at a later occasion.



8.5 TankMaster[™] Administration Utility

The TankMaster Administration Utility includes maintenance tools that let you backup and restore the system, reset user account passwords, and other advanced functions which may only be performed by a TankMaster Mobile system administrator.

In order to use the Administration Utility you need to sign in to **Administrator Mode** on the TankMaster Mobile server machine.

Open the utility by double-clicking the **TankMaster Admin Utility** icon on the desktop.



Figure 8-1: Administration Utility Icon

8.5.1 TankMaster[™] Administration Utility options

The following menu options are available.

Table 8-1: Menu Options in the TankMaster Mobile Administration Utility

Menu option	Description
Servers	Manage Tank Servers and Application Servers.
Backup & Restore	Make backup copy of the TankMaster Mobile system.
Users	Reset user password. Advanced function to be used by system administrator in case no TankMaster Mobile system administrator is available.
Certificate Management	Lets you manage digital certificates.
Report Distribution	Lets you setup printers and disk drive folders.

8.6 Servers

The **Administrator Utility** has a **Servers** tab that lets you manage servers in the TankMaster Mobile system.

The *Servers* window allows you to install new **Application** servers to the Rosemount TankMaster[™] Mobile system. This is useful in case you would like to add a server with restricted access for certain user groups.

The **Servers** section also lets you restart servers. Select the desired server and select **Restart**.

The **Servers** option requires Windows administrator privileges on the server machine.

🚊 tankmaster-a	admin-utility							- 🗆 X
	Servers	Backup &	& Restore Us	ers Certificate n	nanagement	Report Distribution		
Servers								
			Data Server	tmap	p_dataserver	1.4.0	Running 2 minutes	
			Event Log Serv	ice tmap	p_eventlogservice	1.4.0	Running 2 minutes	
			Historian Servio	e tmapi	_historianservice	1.4.0	Running 2 minutes	
			Identity Server	tmap	p_identityserver	1.4.0	Running 2 minutes	
			Reporting Serv	ce tmap	p_reportingservice	1.4.0	Running 2 minutes	
			Tank Value Ser	vice tmap	p_tankvalueservice	1.4.0	Running 2 minutes	
			Pdf Report Ger	eration tmap	p_tmpdfreportgener	ration 1.4.0	Running 2 minutes	
			Pdf Service	tmap	_tmpdfservice	1.4.0	Running 2 minutes	
			Web Server	tmap	_webcore	1.4.0	Running 2 minutes	
			Web Server	tmap	p_webreport	1.4.0	Running 2 minutes	
			Web Server	tmap	p_webtank	1.4.0	Running 2 minutes	
			SQL Server	tminfr	a_dbserver	1.4.0	Running 3 minutes	
			Web Server	tminfr	a_nginx	1.4.0	Running 2 minutes	
			PostgreSQL Se	rver tminfr	a_tmpostgres	1.4.0	Running 3 minutes	
			Message Bus	tminfr	a_tmrabbitmq	1.4.0	Running 3 minutes	
			ADD APPLICATIO	IN SERVER				
			Generate scripts t	o be run on servers that sh	ould be added.			
			Generate So	ripts				
Version 1 4 0	Build 3331						Roser	mount TankMaster Administration Utility

Figure 8-2: Server Management

Automatic restart

It is recommended that automatic restart is enabled. The standard schedule is a weekly restart of all background services. This ensures optimal performance. However, if needed this function can be disabled.

Figure 8-3: Automatic restart

RSON	Servers Backup & Restore	Users Certificates	Report Distribution		
	Identity Server	tmapp_identityserver	1.4.2	Running 4 days	
	Reporting Service	tmapp_reportingservice	1.4.2	Running 4 days	
	Tank Value Service	tmapp_tankvalueservice	1.4.2	Running 4 days	
	Backup Service	tmapp_tmbackupservice	1.4.2	Running 4 days	
	Pdf Report Generation	tmapp_tmpdfreportgeneration	1.4.2	Running 4 days	
	Pdf Service	tmapp_tmpdfservice	1.4.2	Running 4 days	
	AUTOMATIC RESTART Schedule automatic restart of Ta Weekly on Mondays Disabled The automatic restart will re	at 05:00 VUTC+1	sduled to maintain optimal	performance.	
	Add Application Server Generate scripts to be run on se	rvers that should be added.			

8.7 Backup and restore

The Administrator Utility has a Backup and Restore function.

The **Backup and Restore** window lets you store a backup of the current Rosemount[™] TankMaster[™] Mobile system.

The **Restore** option lets you use a backup file to restore the TankMaster Mobile system.

Note that the backup file is password protected. Ensure that the password is stored in a safe location. You will not be able to use the backup file unless the password is entered when restoring the system.

You may configure backup files to be saved automatically.

The Backup and Restore function requires Windows administrator privileges on the server machine.

Note

Once the backup options are configured you will need to select the **Save** button to ensure that the configuration is stored.

Figure 8-4: Backup and Restore

a tankmaster-admin-utility	- 🗆 X
Servers Backup & Restore Users Certificate management Report Distribution	
Backup & Restore	
EACKUP AND REFICIE Configure and perform backup and reators. Extrap File Location Chardson Chardson	
Version 1.4 0 Build 3331 Rosemount T	TankMaster Administration Utility
()	• •

Important

In case TankMaster Mobile has been restored from a backup, you will need to remove and reinstall any Additional Application servers to ensure that communication is properly maintained.

Important

Once a restore is performed, you will need to reconnect TankMaster Mobile to the **Tank Server Connector**.

Related information

Install an Additional Application Server Reconnect to Tank Server Connector

8.8 Reset user

The **Users** tab lets you reset password, and temporarily disable two-factor authentication.

This function should only be used in special situations when there is no user available with administrator authorization for the TankMaster Mobile system.

Figure 8-5: User Management

🚊 tankmaster-	-admin-utility											-		×
EMERSON Texture	Servers	Backup &	Restore	Users	Certificate management	Repo	ort Distribution							
Users														
			RESET US	ER										
			Use Reset user to sigr	User to reset the in to the system	he password for the user, enable the em using a default password and us	user and di	sable device access ch browser or mobile devic	ecks for the user during 3 e to sign in.	30 minutes.This allo	ws the				
			The user w	ill be requested	d to change the password when sign	ing in.								
			Note: Only	use this function	onality when no Administrator is able	to sign in to	the system.							
			Email		Name	Role	User Enabled							
			admin@	example.com	Admin User	Admin	Enabled	Reset User	Disable	2FA				
Version 1 4 (0 Build 3331									Rosemount	TankMaster Ad	ministrati	on Uti	lity

Reset user

This option lets you reset password and disable device access check for 30 minutes.

Construction and the service of the user of the u

Figure 8-6: Reset User Message

Disable two factor authentication

This option disables two factor authentication for 30 minutes.

Figure 8-7: Disable two factor authentication message



8.9 Certificate management

The *Certificate management* window lets you manage self-signed and custom certificates.

Various options are available:

- Install custom certificates. This function lets you install custom certificates instead of using the self-signed certificates installed by the system. A recovery backup of the self-signed certificates will automatically be created. These self-signed certificates can be restored by using the **Restore All Certificates** function.
- Update self-signed certificates installed by the system. Note that this will generate new self-signed certificates and will overwrite custom certificates in case such certificates are installed. A recovery backup of the current certificates will automatically be created.
- Restore certificates from backup. This function can be used to restore self-signed certificates installed by the system. This may be useful in case of malfunctioning custom certificates.

Very Departed Active part Restore Certificate management	ankmaster-admin-utility		
Certificate management ADD OR UPDATE WEB CLIENT CERTIFICATE Configure custom certificate to use for web server instaad of system generated self-signed certificate. Certificate File Location Certificates File Location Certificates File Location Certificate solution and a valid path, e.g. C.VFolderFile of or lisewerholderFile kay Location is not a valid path, e.g. C.VFolderFile kay Certificate Certificate Certificate Certificate and certificates and update system. Totals web certificate Create new system generated self-signed certificates and update system. Totals and certificates Update all certificates Update all certificates Extense system control total strated, system thereword certificate atter this step has completed. Additional application server will need to be updated with the new root certificate. Update all certificates	Servers Backup	& Restore Users Certificate management Report Distribution	
ADD CR UPDATE WEB CLENT CERTIFICATE Configure custom certificate to use for web server instead of system generated self-signed certificate. Cutticate File Location Description is not a valid path, e.g. C/PoderFile of or isseveritoiderFile of Location is not a valid path, e.g. C/PoderFile of or isseveritoiderFile asy Location is not a valid path, e.g. C/PoderFile of or isseveritoiderFile asy Location is not a valid path, e.g. C/PoderFile of or isseveritoiderFile asy Install web certificate Create new system generated self-signed certificates and update system. Create new system generated self-isfeed certificates and update system. Location application server will need to be updated with the new root certificate. Update all certificates	Certificate management		
UPDATE ALL CERTIFICATES Create new system generated self-signed certificates and update system. This will overwrite installed custom certificate if installed, you will need to reinstall custom certificate after this step has completed. Additional application server will need to be updated with the new root certificate. Update all certificates		ADO OR UPDATE WEB CLIENT CERTIFICATE Configure custom certificate to use for web server instead of system generated self-signed certificate. Certificate File Location Browse Location is not a valid path, e.g. C.VFolder/File cot or //server/folder/File key Location is not a valid path, e.g. C.VFolder/File key or //server/folder/File key	
DESTODE ALL CEDITECATES		UPDATE ALL CERTIFICATES Create new system generated self-signed certificates and update system. This will overwhere installed custom certificate if installed, you will need to reinstall custom certificate after this step has completed. Additional application server will need to be updated with the new root certificate. Update all certificates	
Version 1 4 0 Build 3331 Version 1 4 0 Build 3331 Version 1 4 0 Build 3331	Version 1.4.0 Build 3331	RESTORE ALL CERTIFICATES Restore previously installed certificates. Certificate Backup Location Rosemount TankMaster Admini	stration Utility

Figure 8-8: Certificate Management

Note

When updating TankMaster Mobile, current certificates (self-signed or custom) will be overwritten by new self-signed certificates that come with the updated version of TankMaster Mobile. Any custom certificates need to be installed again.

Add or update web client custom certificate

Figure 8-9: Configure custom certificate

ADD OR UPDATE WEB CLIENT CERTIFICATE
Configure custom certificate to use for web server instead of system generated self-signed certificate.
Certificate File Location
① Browse
Location is not a valid path, e.g. C:\Folder\File.crt or //server/folder/File.crt
Key File Location
() Browse
Location is not a valid path, e.g. C:\Folder\File.key or //server/folder/File.key
Install web certificate

Update self-signed certificates

Figure 8-10: Update certificates

	The certificates will now be updated.	
PDATE ALL CERTIFICATES	IMPORTANT! During the installation the system will be restarted.	
is will overwrite installed cus	This operation can take a few minutes to complete.	completed.
iditional application server w	Currently used certificates will be backed up in folder below:	
Update all certificates	C:\Program Files\Rosemount\TankMaster\TankMasterMobile\AdminUtility\\certs\before-all- updated-2022-12-08-16-23-44	
-		-

Restore certificates

Figure 8-11: Restore previous certificates

RESTORE ALL CERTIFICATES	
Restore previously installed certificates.	
Certificate Backup Location	
0	Browse
Location is not a valid path, e.g. C:\Folder or /	iserver/folder
Restore certificates	

8.10 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 8-12: Report Distribution folder and printer setup

tankmaster-admin-utility		- 0 ×
Servers	Backup & Restore Users Certificate management Report Distribution	
Certificate management		
	Report Distribution Set up recipient folders and printers to be available for selection for users configuring reports. Folders No folders selected Voritors No printers selected	
Version 1 4 0 Build 3331	R	osemount TankMaster Administration Utility

Related information

TankMaster Mobile User Guide

8.11 Install an Additional Application Server

This is a description of how to install an **Additional Application Server** to an existing TankMaster Mobile system. An additional Application Server may be useful if you need to set up limited functionality for clients external to the plant network. For example, you may allow external clients to monitor tanks but not access administration capabilities.

Related information

Edit an Application Server

8.11.1 Preparations

Before you begin installation of an Additional Application Server:

 Assign a computer that fulfills hardware and software system requirements to host the Application server

The following information is required during the installation procedure:

- TankMaster Mobile Application Server network location (URL or IP address)
- Firewall ports that must be open

Related information

System requirements Servers

8.11.2 Generate installation package for Additional Application Server

This is and instruction how to generate a file package for installing an Additional Application server.

Procedure

1. Open the **Administration Utility** by double-clicking the program icon on the desktop:



2. Select menu option **Servers**. In the **Add Application Server** pane, select the **Generate Scripts** button.

MERSON	Servers	Backup & Restore	Users	Change URL	Certificate m	anagement
Servers						
		SERVERS				
		Select machine or se	erver for more	options.		
		Server Type		Server Name		Versio
		Dev-TMN-05 (this	s machine)			
		SQL Server		tmdb_dbserv	ver	1.0.0
		Application Serve	r -	tmnext_apps	ierver	1.0.0
		Data Server		tmnext_data	server	1.0.0
		Identity Server		tmnext_iden	tityserver	1.0.0
		Web Server		tmnginx_ngi	nx	1.0.0
		Dev-TMN-06				
		Application Serve	r .	demo_appse	irver	1.0.0
		Web Server		demo_nginx		1.0.0
		ADD APPLICATION SEF	RVER	hat should be added.		

3. In the dialog that appears, click **Generate Scripts** to continue. Select **Cancel** in case you want to abort.

Generate Scripts	×
Click Generate Scripts to create a zip-file that contains the required files.	
Generate Scripts Cano	el

- 4. Once the script has generated the zip file with the Application Server file package, a dialog appears with further instructions:
 - a) Location of the generated script: C:\Program
 Files\Rosemount\TankMaster\TankMasterMobile\AddAppServer\
 AddAppServer.zip.
 - b) Copy the zip-file to the desired location on the machine where you will install the **Additional AppServer**.

The generated zip file contains a software package that includes the Installation Utility, Docker, and Additional Application Server.

8.11.3 Install Additional Application Server

Follow this instruction to install an Additional Application server.

Procedure

1. On the server machine where you are going to install an Additional Application Server, locate the **AddAppServer.zip** file which contains the installation package.

The generated zip file contains a software package that includes the Installation Utility, Docker, and Additional Application Server.

2. Extract the zip file. A folder structure will appear that contains all the installation files:



- 3. Run the TankMaster Installation Utility.
- 4. Select Manage Docker.



5. Select Install Docker (see Install Docker).



6. Restart the machine and wait for Docker to start.

Note

You may for example open Windows Task Manager/Services to check that Docker is up and running.

r⊠ Task Manager — ☐ × File Options View						
Processes Performance Use	rs Details	Services				
Name	PID	Description	Status	Group		
RrokerInfrastructure	840	Background Tasks Infrastructure Service	Running	DcomLaunch		
BTAGService		Bluetooth Audio Gateway Service	Stopped	LocalServiceN		
🔍 BthAvctpSvc		AVCTP service	Stopped	LocalService		
🔍 bthserv		Bluetooth Support Service	Stopped	LocalService		
🔍 camsvc		Capability Access Manager Service	Stopped	appmodel		
docker	1124	Docker Engine	Running			
🔍 DoSvc		Delivery Optimization	Stopped	NetworkService		

7. Run the TankMaster Installation Utility again.

8. Select Install Additional AppServer.



- 9. Once the script is completed, select the **Enter** key to exit.
 - Administrator: C:\Windows\system32\cmd.exe _ \times arget inkType Microsoft.PowerShell.Core\FileSystem::C:\ProgramData\TankMasterMobile\Scripts Microsoft.PowerShell.Core\FileSystem::C:\ProgramData\TankMasterMobile Scripts C ParentPath ChildName Drive C Microsoft.PowerShell.Core\FileSystem True Scripts C:\ProgramData\TankMasterMobile\Scripts TankMasterMobile ovider 11Name tension eationTime 2021-06-28 15:08:10 2021-06-28 13:08:10 2021-06-28 15:08:10 2021-06-28 13:08:10 2021-06-28 13:08:10 2021-06-28 13:08:10 Directory, NotContentIndexed eationTimeUtc stAccessTime stAccessTimeUtc riteTime riteTimeUtc tributes d-----Scripts іkТуре s ENTER to
- 10. Return to the **TankMaster Mobile** machine and open **Admin Utility** again.
- 11. In the list of servers, select the newly installed application server, then select the **Add Application Server** button.

tankmaster-admin-utility					
EMERSON	Servers	Backup & Restore	Users Change URL	Certificate management	
Servers					
		SERVERS Select machine or server	for more options:		
		Add Application Ser	rver Remove Machine		
		Server Type	Server Name	Version	Status
		DevTmn (this machin	e)		
		SQL Server	tmdb_dbserver	1.1.0	Running
		Application Server	tmnext_appserver	1.1.0	Running
		Data Server	tmnext_dataserver	1.1.0	Running
		Identity Server	tmnext_identityserve	er 1.1.0	Running
		Web Server	tmnginx_nginx	1.1.0	Running
		DevTmn2			

12. Enter the desired Application server name, description (optional), Web server location (URL or IP address), and port number. The port must be open in appropriate firewalls. Ensure that you use ports recommended by your local IT department.

Note

It is important that you use a **unique port number** for the new Application Server.

tankmaster-admin-utility				
EMERSON Se	Backup & Restore	Users Change URL	Certificate management	
< Back Servers > Add	Application Server			
General	GENERAL Application Server Nam officeAppServer Example: Control Room on Description:	ne: r Office Network <u>ocation (URL or IP address)</u> : rcompany.com or 192.168.1.1 r network location is the address users may need to configure your DNS serv	s should enter in TankMaster Mobile clients to access the system th ver to route traffic to this machine for the entered URL.	rough this

13. Select Start Appserver.



Now the Application server will be connected to the TankMaster Mobile system.

14. Wait until status for the new Application and Web servers is changed from Preparing to Running.

	SERVERS						
;	Select machine or server for more options:						
	Server Type	Server Name	Version	Status			
	DevTmn(this machine)						
	SQL Server	tmdb_dbserver	1.1.0	Running			
	Application Server	tmnext_appserver	1.1.0	Running			
	Data Server	tmnext_dataserver	1.1.0	Running			
	Identity Server	tmnext_identityserver	1.1.0	Running			
	Web Server	tmnginx_nginx	1.1.0	Running			
	DevTmn2						
	Application Server	officeAppServer_appserver	1.1.0	Running			
	Web Server	officeAppServer_nginx	1.1.0	Preparing			

- 15. Once the new application server has been added, wait for all servers to have status **Running** in **Admin Utility**.
- 16. Verify access to TankMaster Mobile via each application server using Chrome web browser.
- 17. If the TankMaster Mobile system cannot be accessed via one of the application servers:
 - a) Restart all Windows servers.
 - b) Wait for all servers to have status **Running** in **Admin Utility**.
 - c) Verify access to TankMaster Mobile via each application server using Chrome web browser.

Postrequisites

Once the new Application Server is up and running you may proceed with configuration of the server features. You will find those settings in TankMaster Mobile under the **Servers** menu.

8.12 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.

8.12.1 Enter administration mode

To enter Administration Mode:

Procedure

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



2. Enter your password.

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

EMERSON	LUsers	Servers	settings 🕸	🕐 Status	
User Administration	on				
		USER ADMINISTRA Select User Group o + Add User G Name	ATION Ir User to edit: roup + Add U	lser	
		Admin User			
		2 items			

- 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.

8.13 Software updates

Software updates is important for maintaining system functionality and security.

All Rosemount TankMaster[™] Mobile updates are signed for integrity. It is important that you maintain up-to-date software updates.

Software updates can be found at TankMaster.Rosemount.com/ServiceCenter.

Related information

License management Update software revision

8.13.1 Update software revision

This procedure describes how to update the Rosemount TankMaster $^{\scriptscriptstyle \rm M}$ Mobile software to a new revision.

Prerequisites

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

- TankMaster Mobile is up and running
- Your license has an active software update period.

Procedure

- 1. Navigate to TankMaster.Rosemount.com/ServiceCenter and sign in to your account.
- 2. Open My Licenses.
- 3. Under **Actions**, select **Downloads**.
- 4. Download the appropriate software revision.
- 5. Install the new software revision on the TankMaster Mobile server.

Postrequisites

Once the Rosemount TankMaster[™] Mobile software is upgraded, you will need to reconnect TankMaster Mobile to the **Tank Server Connector**. When installation is completed, you may open the **Tank Server Connector Utility** to check the server status:

Rosemount TankMaster Tank Server Connector Utility —			
EMERSON.	Tank Server Connector		_
	(7115394-5002/42bc-964-964-3fa1650coba3 Pot (TCP): [5805 Status:		
TANKMASTER™	Connector needs to be configured in Tank-Master Mobile		

Related information

Update TankMaster Mobile Reconnect to Tank Server Connector

8.14 Reconnect to Tank Server Connector

Procedure

- 1. Sign in to **Admininistrator** mode.
- 2. Open *Servers* tab.
- 3. Edit Tank Server Connector.
- 4. Ensure information is correct.
- 5. Select **Save** to close the Edit dialog.

Related information

Update software revision Backup and restore

8.15 Tank Server Connector setup

The Tank Server Connector is installed on the same machine as the Tank Server. It automatically connects to the Tank Server.

The connector installer contains 3 components:

- TankServerConnector.SelfHosted (Windows service)
- TankServerConnector.SetupSelfHosted (Windows service)
- Manage TankServerConnector (Tray application)

Tank Server Connector setup self hosted

TankServerConnector.SetupSelfHosted manages information from TankMaster Mobile to install self-signed certificates, setup SSL, and configure the URL to the authorization server at setup. When the self-signed certificates are about to expire TankMaster Mobile will send new certificates to this service.

Tank Server Connector self hosted

TankServerConnector.SelfHosted is the main component. All functionality apart from the setup described above is handled by this service.

Manage Tank Server Connector

The tray application *Manage TankServerConnector* shows the status of the connector and the setup key that needs to be entered into TankMaster Mobile when the Tank Server Connector is added. It has convenience functions to start and stop the *TankServerConnector.SelfHosted* service.

Figure 8-13: Tank Server Connector Utility

🧟 Rosemount TankMaster Tank Server Connector Utility		×
EMERSON Image: Solution of the second sec		

Related information

Software installation overview Installation utility

00809-0200-5120 Rev. AG 2023

For more information: Emerson.com/global

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