Instructions For Use

IQ Messenger Medical 12.0.0

(English)

June 8, 2022

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CE
1639

Table of Contents

Introduction

We appreciate your decision to use the IQ Messenger Medical of IQ Messenger B.V.
This product is approved for its safety as well as for its performance and quality.

This manual describes the system, the intended use, safety-related issues and the daily operation and interpretation of the systems interface and response.

About this manual

Before using the IQ Messenger Medical, we strongly recommend that you will read, understand and follow the operation and maintenance instructions of this manual, and especially the safety information with ⚠ symbols, throughout this guide. The safety information is provided for your benefit and for the benefit of your patients.

In this manual, you can find important information for using IQ Messenger Medical in a safe and responsible manner. Throughout these manual certain conventions are used. These are warnings, cautions and notes.

They are given as follow:

⚠	**WARNING:** A warning is an alert to potential hazard which could result in serious product damage if proper procedures are not followed. **CAUTION:** A caution is an alert to a potential hazard which could result in minor product issues if the proper procedures are not followed.
✏	**NOTE:** Notes provide additional information or emphasize a point or procedure.

This manual was originally drafted in the **English** language.

⚠	**WARNING:** Make sure that only authorized personnel use the device.

Symbol definitions

Pay attention to the labelling symbols throughout this document they indicate:

Symbol	Meaning	Description
	Manufacturer	Indicates the medical device manufacturer, as defined in EU Directives 90/385/EEC, 93/42/EEC and 98/79/EC.
	Date of manufacture	Indicates the date when the medical device was manufactured.
	Consult instructions for use	Indicates the need for the user to consult the instructions for use.
CE	CE-mark that shows European Conformity	The product has been CE (Conformité Européenne) marked and has the CE-mark on the front page of the instructions for use (IFU). The number behind the CE-mark identifies the responsible notified body.
⚠	Caution	Indicates the need for the user to consult the instructions for use for important cautionary information such as warnings and precautions that cannot, for a variety of reasons, be presented on the medical device itself.

Intended purpose

Intended use

IQ Messenger Medical, as a redundant software-based platform, is a remote system which is part of a distributed alarm system (DAS) and is intended to provide an interface with primary clinical devices. This to provide a secondary means of acoustic, optic and/or vibratory alarms and clinically related event information, at near real-time, to designated client devices to inform healthcare professionals.

IQ Messenger Medical provides features for alarm filtering and prioritization, confirmed alarm delivery, and escalation of alarms in case of delayed or no response by the alarm recipient. IQ Messenger Medical supervises the interfaces of connected clinical devices and IQ Messenger Medical applications. IQ Messenger Medical actively informs the responsible staff in case alarms cannot be received on client devices and/or when an error is detected in the supervised alarm distribution.

IQ Messenger Medical is beneficial to patient management as it provides mechanisms to reduce acoustic signals together with remote reception of medical-related events. It is not considered in and of itself to be diagnostic without skilled interpretation of healthcare professionals, does not replace or replicate the original display of data and alarms for the connected clinical devices and does not control or alter the behaviour of these connected clinical devices.

> ⚠️ The scope of the CE marking applies to the IQ Messenger Medical applications and software modules defined in section Compatibel medical interface and interfaces.

Intended user

IQ Messenger Medical is intended for Healthcare Professionals only.

Patient population

The IQ Messenger Medical applications are not in contact with the patient. The patient population and patient conditions are established by the medical devices and systems with which the IQ Messenger Medical server is connected.

Precautions for use

Warnings and cautions described in this IFU should be observed.

> ⚠️ **WARNING:** Unless all risk control options applied to IQ Messenger Medical, incorporation of IQ Messenger Medical in the medical IT-network will introduce risk that alarm events of medical source devices are not communicated to the user. To minimise this residual risk further, the responsible organisation is strongly advised to perform life cycle risk management for the medical IT-network.

Contraindications

IQ Messenger Medical application events are contraindicated in the event of any of the following foreseeable hazards of which users should become aware:

- When the network connection indication on the mobile device shows the absence of the medical IT-network connection.
- The user's mobile device appears to be inoperable or damaged in any way.
- The user's mobile device is not turned-on.
- The user is not logged in to the IQ Messenger Medical applications.

Device description

IQ Messenger Medical is a suite of web-based and mobile-based software applications that can be operated by healthcare and IT professionals using general-purpose hardware. These applications operate on a server, PC or mobile device. IQ Messenger Medical is part of a Distributed Alarm System (DAS/CDAS) that provides delivery of alarm conditions, from primary clinical devices via an IT network interface, with technical confirmation that includes the capability to receive a response from a healthcare professional using general-purpose devices.

Though IQ Messenger Medical the healthcare professionals receive interactive, time-critical information from primary clinical systems directly on their general-purpose devices. Received attributes related to the alarm message may include priority, icon, colour, tone, vibration and instructions. The user can configure IQ Messenger Medical to define alarm conditions. When an inbound alarm is received by IQ Messenger Medical matching the defined alarm conditions, triggers an alarm to be delivered to users and subsequently escalate in case of no or delayed response by the healthcare professional.

All messaging activities are recorded to provide real-time and historical activity logging for review and reporting purposes. IQ Messenger Medical operates in a redundant mode together with permanent supervision of all of its medical interfaces. IQ Messenger Medical supports the generic and widely used third-party Simple Network Management Protocol (SNMP) to supervise the third-party IT-network and to allow third-party SNMP-tools to supervise services running within IQ Messenger Medical.

Application overview

This section shows IQ Messenger Medical applications.
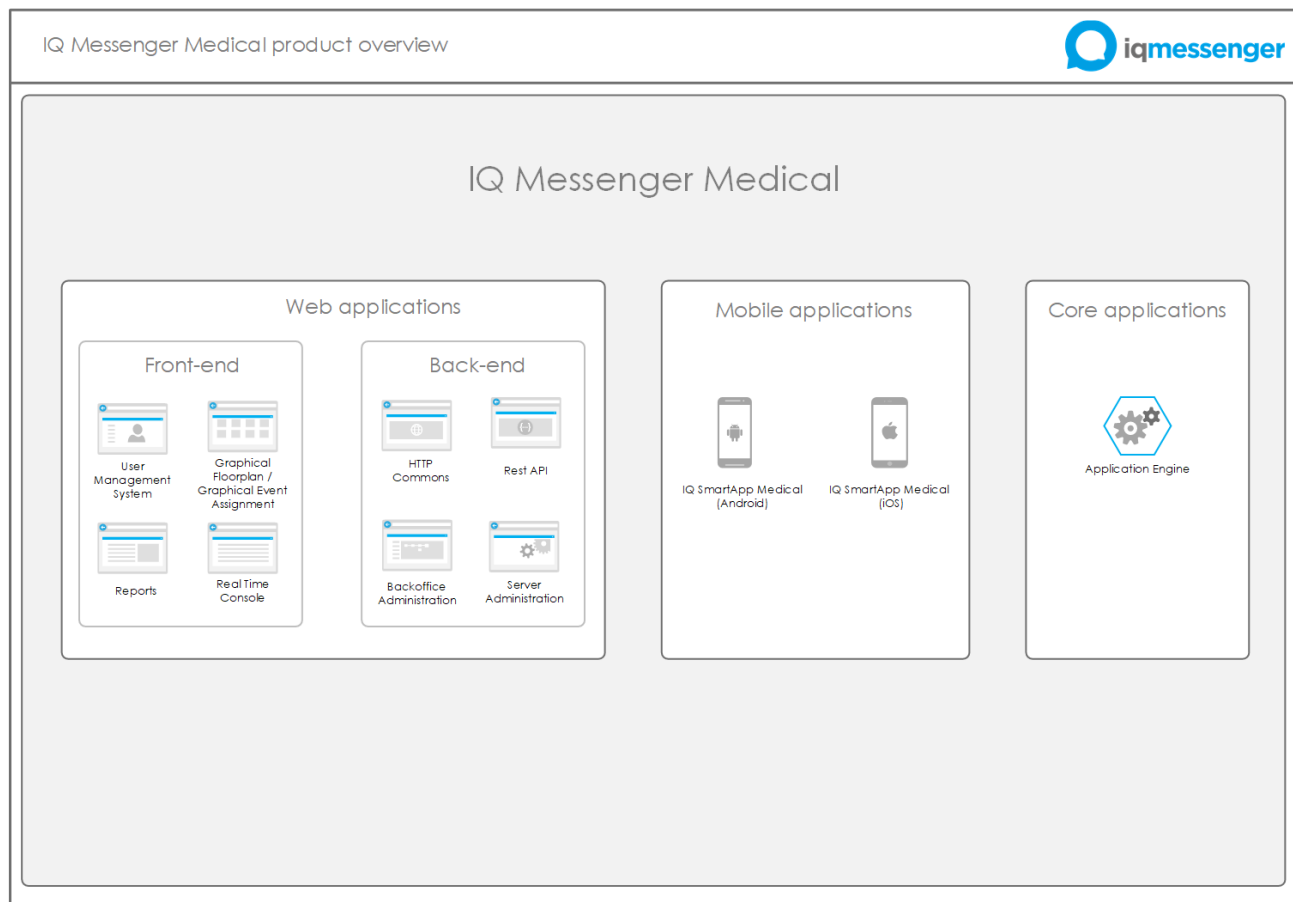
System specifications

The software specifications listed here are the minimum settings required to function.

IQ Messenger Medical server

Virtual hardware requirements

The following prerequisites must be met to deploy the IQ Messenger Medical virtual appliance:

Technical Specifications	Standard	High-end
Virtual CPUs	4 vCPU (2.4 GHz core)	8 vCPU (2.4 GHz core)
Virtual Network Interface	1 Gbps	1 Gbps
Virtual Memory	8 GB	16 GB
Virtual Storage	128 GB	128 GB

⚠ **CAUTION:** Resource allocation must be dedicated to the IQ Messenger server.

Firewall requirements

The following ports are used by the server. In addition to the ports listed below, additional ports may be required by specific integration interface that communicate with external systems. For more information, see the documentation for the integration.

Source	Destination	Port	Description
LAN	IQ Messenger Medical server	TCP (22)	SSH/SCP access to the server
IQ Messenger Medical server	DNS server	TCP/UDP (53)	Name resolution.
IQ Messenger Medical server	NTP server	UDP (123)	Time synchronization.
IQ Messenger Medical server	Internet	TCP (80)	HTTP connection to the update repositories. (optional)
IQ Messenger server	Internet	TCP (443)	HTTPS connection to the update repositories. (optional)
LAN	IQ Messenger Medical server	TCP (443)	Secure web access port on the IQ Messenger Medical server.

⚠ **WARNING:** The total average or maximum message transmission time is mainly dependant on the digital bandwidth capacity.

Hypervisor requirements

The following hypervisor platforms are supported:

- vSphere ESXi 6.5 or higher (Recommended to use OVA image)
- Microsoft Hyper-V (Recommended to use Hyper-V image)

The following hypervisor features and operations are NOT supported:

- Distributed Resource Scheduling (DRS)
- Fault Tolerance
- Resume
- Snapshot
- Suspend

Supported browsers

The following browsers are supported:

	Browser	Version
	Google Chrome	80 or higher
	Microsoft Edge	80 or higher
	Mozilla Firefox	75 or higher
	Safari	12 or higher

⚠ **WARNING:** The IQ Messenger Medical server availability is dependent on both the network and system availability.

⚠ **WARNING:** The IQ Messenger Medical server shall always run in High Availability.

⚠ **WARNING:** During the cluster failover, it is not possible to process event messages.

IQ SmartApp Medical (Android)

This section contains information about license, hardware/software and network requirements for the IQ SmartApp Medical (Android) app.

License requirements

The following table lists the available license codes:

	Product name	Product code	Description
	Basic SmartApp Android	02.036.1000	Basic license for the use of SmartApp for Android including 10 SmartApp Android device licenses
	SmartApp Android RFA1	02.036.1010	License for the use of 1 additional SmartApp Android device
	SmartApp Android RFA10	02.036.1020	License for the use of 10 additional SmartApp Android devices
	SmartApp Android RFA50	02.036.1030	License for the use of 50 additional SmartApp Android devices
	SmartApp Android RFA250	02.036.1040	License for the use of 250 additional SmartApp Android devices

Hardware/Software requirement

The following table lists the required hardware and software configuration:

Product name	Software version
Google Android	9 (Pie) 10 11 12

Please note that we usually limit our mobile support on versions that represent of market shares.

Hardware component	Minimum requirement
CPU	1.6 Ghz dual-core or higher
Memory	2GB RAM or higher
Storage	200 MB free space on the device storage.
Network	A Wi-Fi or cellular network connection is needed to communicate with the IQ Messenger Medical server. For cellular connections, a 3G network or faster is required.
Optional components	GPS Camera Bluetooth Low Energy NFC

Network/Firewall requirements

The following table provides the required network port information for network planning and troubleshooting:

Source	Destination	Port	Description
IQ SmartApp Medical (Android)	IQ Messenger Medical server	TCP (5671)	IQ SmartApp Medical (Android) secure communication port to the IQ Messenger Medical server.
IQ SmartApp Medical (Android)	SIP Server	UDP (5060)	IQ SmartApp Medical (Android) SIP communication port to the SIP server. (*optional*)
SmartApp Enterprise Android	IQ Messenger Server	TCP (443)	SmartApp Enterprise Android secure login communication port to the IQ Messenger Server. Used for SAMLv2/SSO.
IQ SmartApp Medical (Android)	SIP Server	UDP (10000~20000)	IQ SmartApp Medical (Android) RTP communication ports to the SIP server. (*optional*)

IQ SmartApp Medical (iOS)

This section contains information about license, hardware/software and network requirements for the IQ SmartApp Medical (iOS) app.

License requirements

The following table lists the product codes:

	Product name	Product code	Description
	Basic SmartApp iOS	02.037.1000	Basic license for the use of SmartApp for iOS including 10 SmartApp iOS device licenses
	SmartApp iOS RFA1	02.037.1010	License for the use of 1 additional SmartApp iOS device
	SmartApp iOS RFA10	02.037.1020	License for the use of 10 additional SmartApp iOS devices
	SmartApp iOS RFA50	02.037.1030	License for the use of 50 additional SmartApp iOS devices
	SmartApp iOS RFA250	02.037.1040	License for the use of 250 additional SmartApp iOS devices

Hardware/Software requirements

In order to fit the IQ SmartApp Medical (iOS) requirements the iOS device must have appropriate hardware and software possibilities. The following configuration is required:

Product Name	Software version(s)
Apple iOS	v14
	v15

Please note that we usually limit our mobile support on versions that represent of market shares.

Hardware component	Minimum requirement
iPhone	6S or higher
iPad	Air 2017 or higher

Network/Firewall requirements

The following table provides the required network port information for network planning and troubleshooting:

Source	Destination	Port	Description
iOS device	Apple Push Notification Service (APNs)	TCP (443)	Used during device activation, and when devices are unable to communicate to APNs on port 5223.
IQ SmartApp (iOS)	IQ Messenger Server	TCP (443)	IQ SmartApp (iOS) secure login communication port to the IQ Messenger Server.
IQ Messenger server	Apple Push Notification Service (APNs)	TCP (2197)	Used to send notifications to the APNs gateway.push.apple.com gateway.sandbox.push.apple.com

iOS device	Apple Push Notification Service (APNs)	TCP (5223)	Used by devices to communicate to the APNs servers
IQ SmartApp (iOS)	IQMessenger Server	TCP (5671)	IQ SmartApp (iOS) secure communication port to the IQ Messenger Server.
IQ SmartApp (iOS)	SIP Server	UDP (5060)	IQ SmartApp (iOS) SIP communication port to the SIP server. (*optional*)
IQ SmartApp (iOS)	SIP server	UDP (10000~20000)	IQ SmartApp (iOS) RTP communication ports to the built-in SIP server. This port may differ when using a 3rd party SIP server.(*optional*)
SIP server	IQ SmartApp (iOS)	UDP (4000~4019)	SIP server RTP communication ports to the SmartApp Enterprise. (*optional*)

Devices using APNs need a direct connection to Apple's server. If a device is unable to connect using cellular data, it will attempt to use Wi-Fi if available. If there is a proxy server on the Wi-Fi network, the device will not be able to use APNs, because APNs requires a direct and persistent connection from device to server.

When connecting to APNs, iOS devices will use the cellular data connection if it's available. Only if the cellular connection is not available or viable will the device switch to Wi-Fi for APNs connections.

The APNs servers use load balancing, so your devices will not always connect to the same public IP address for notifications. The entire 17.0.0.0/8 address block is assigned to Apple, so it's best to allow this range in your firewall settings.

IQ Messenger Medical server requires static IP-Address configuration and an internet connection is required to access the Apple Push Notification Services (APNS).

Device performance

This section of the instructions for use contains performance indicators for the IQ Messenger Medical applications.

- Application engine:
    - The average incoming message processing time of 100 ms;
    - The average incoming message processing time of 100 ms;
    - The average amount of 5000 event processes per seconds;
- Web applications:
    - The average event flow saving time of 1 second.
    - The average staff assignment time of 500 milliseconds.

- Mobile applications:
    - The average mobile end-point delivery time of 200 ms (time from smartphone device to the application engine);
    - The average mobile end-point response time of 200 ms (time from user acknowledge to the application engine);
    - The average processing time of 200 ms for erase on response and erase on time out messages.
- Cluster:
    - Failover time between master to slave cluster shall be 10 seconds.
    - The synchronization of the database in a clustered setup is near real-time.
    - File replication time is near real-time. (Files are only replicated when they are changed.)

Compatible apps

IQ Messenger Medical 12.0.0 version is compatible with the following IQ SmartApp Medical versions:
- IQ SmartApp Medical (Android) 11.3.1 or higher
- IQ SmartApp Medical (iOS) 11.3.1 or higher

Compatible medical interfaces and devices

This section contains details of the supported medical interfaces available for use with IQ Messenger Medical server.

⚠️ **WARNING:** The scope of the CE marking applies to the IQ Messenger Medical applications and to the listed software modules:

Vendor	Interface	Supported devices	Communication
arcomed ag	UniQue Concept PDMS Interface	UniQue DOC Concept • Volumed® µVP7000 • Syramed® µSP6000	TCP/IP
Baxter	PrisMax	Baxter PrisMax v2.x	Serial (RS-232)
BD Medical (Carefusion)	Alaris Syringe Pump Communications Protocol	Alaris GH v2.3.6 Alaris CC v2.3.6 Alaris TIVA v2.3.6 Alaris GH Guardrails v3.1.4 Alaris CC Guardrails v3.1.4 Alaris PK v3.2.16 Alaris PK Plus v3.3.0 Alaris GH Plus v4.1.4 (Mk3) Alaris GH Plus Guardrails v4.1.4 (Mk3) Alaris GH Plus v4.1.8 (Mk4) Alaris GH Plus Guardrails v4.1.8 (Mk4) Alaris CC Plus v4.1.4 (Mk3) Alaris CC Plus Guardrails v4.1.4 (Mk3) Alaris CC Plus v4.1.8 (Mk4) Alaris CC Plus Guardrails v4.1.8 (Mk4) Alaris Enteral v4.2.1 Alaris Enteral Plus v4.4.11	Serial (RS-232)
	Alaris Gateway Workstation	Alaris GH v2.3.6 Alaris CC v2.3.6 Alaris TIVA v2.3.6 Alaris GH Guardrails v3.1.4 Alaris CC Guardrails v3.1.4 Alaris PK v3.2.16 Alaris PK Plus v3.3.0 Alaris GH Plus v4.1.4 (Mk3) Alaris GH Plus Guardrails v4.1.4 (Mk3) Alaris GH Plus v4.1.8 (Mk4) Alaris GH Plus Guardrails v4.1.8 (Mk4) Alaris CC Plus v4.1.4 (Mk3 Alaris CC Plus Guardrails v4.1.4 (Mk3) Alaris CC Plus v4.1.8 (Mk4) Alaris CC Plus Guardrails v4.1.8 (Mk4)	TCP/IP

		Alaris Enteral v4.2.1 Alaris Enteral Plus v4.4.11 Alaris GW v5r2a Alaris GW v5r1f Alaris GW 800 v6r1a Alaris GP Plus v2.1.14 Alaris GP Plus Guardrails v2.1.14 Alaris VP Plus Guardrails v1.1.28	
	Alaris GW Volumetric Pump Communications Protocol	Alaris GW 800 v6r1a	Serial (RS-232)
B. Braun Melsungen AG	Bedside Communication Controller (BCC)	Space Station (SpaceCom)	TCP/IP
Buro Medische Automatisering B.V. (BMA)	HTTP I/O	Mosos CTG v12.13	TCP/IP
Dräger	Dräger RS 232 MEDIBUS	Apollo Babylog 8000 (SC) Babylog 8000 plus Babylog VN500 Carina Cato Cicero B Cicero C Cicero EM Evita- Evita 2 Evita 2 dura Evita 4 Evita Infinity V500 Evita V300 Evita XL Fabius CE Fabius GS Fabius GS (Vitalink) Fabius GS Premium Fabius MRI Fabius OS Fabius plus Fabius plus XL Fabius Tiro Julian Narkomed 2B Narkomed 2C Narkomed 3 Narkomed 4 Narkomed 6000 Narkomed 6400 Narkomed GS	Serial (RS-232)

		Narkomed Mobile Oxylog 3000 plus Pallas Perseus A500 PhysioFlex Primus Primus Infinity Empowered SA2 Savina Savina 300 Savina 300 Select Sulla Titus Trajan Zeus Zeus Infinity Empowered	
	Dräger RS 232 MEDIBUS.X	Apollo Babyleo TN500 Carina Evita V300 Fabius GS Fabius GS Premium Fabius MRI Fabius OS Fabius plus Fabius Plus XL Fabius Tiro, Fabius D-M Infinity Acute Care System Babylog VN500 Infinity Acute Care System Evita V500 Isolette 8000 plus Oxylog 3000 plus Perseus A500 Primus Primus Infinity Empowered Savina 300 Zeus Infinity Empowered	Serial (RS-232)
	ESPA 4.4.4	Dräger Infinity Gateway	Serial (RS-232)
GE Healthcare	Datex-Ohmeda	CARESCAPE R860 Ventilator	Serial (RS-232)
	S/5 Computer Interface	CARESCAPE Monitor B450	Serial (RS-232)
Getinge (MAQUET)	Computer Interface Emulator (CIE)	SERVO-i Ventilator System SERVO-s Ventilator System	Serial (RS-232)
Getinge (MAQUET)	FLOW-i Communication Interface (FCI)	FLOW-i AGC FLOW-i C20 FLOW-i C30 FLOW-i C40	Serial (RS-232)
Getinge (MAQUET)	SERVO Communication Interface (SCI)	SERVO-U SERVO-n SERVO-air	Serial (RS-232)

Hamilton	External Communication Hamilton RS232 Block Protocol v1.1.0	HAMILTON-C1/T1 HAMILTON-C2 HAMILTON-C3 HAMILTON-C6 HAMILTON-G5/S1	Serial (RS-232)
IHE	IHE Patient Care Device (PCD) protocol	IHE PCD ACM profile	TCP-IP
Itemedical	MDDG alarm distribution interface	MediScore MDDG server 10.13	TCP-IP
Luscii	Vitals	Luscii vitals 1.0	TCP-IP
LivAssured	NightWatch	NightWatch Base 14.1	TCP-IP
Mindray	HL7 Protocol IHE PCD ACM (ORU_R40)	Mindray eGateway	TCP/IP
Philips	Data Export Interface	IntelliVue Patient Monitor Avalon Fetal Monitor	UDP/IP
Philips	OAP v3	Philips Emergin server 10.0.014 Philips IntelliSpace Event Management 11.4.0.4	TCP/IP

Installation

This section contains the installation procedures for the IQ Messenger Medical applications.

IQ Messenger Medical server

The IQ Messenger Medical server comes as an OVA (Open Virtualization Appliance) file. It is available from the download section of the IQ Messenger partner website. The OVA file is a template that contains a functional CentOS perating system. To deploy the IQ Messenger Medical OVA file, follow the instructions.

After you deploy the .ova file, you can start configuring your IQ Messenger Medical server. The virtual appliance is a complete environment with the IQ Messenger Medical server components.

Before you begin deployment, make sure that all requirements are met. Once you finish the deployment and configuration process, you can connect to the IQ Messenger Medical server using the web interface.

> ⚠ **WARNING:** The software installation should only be done by the manufacturer or by the distributor. In some occasions other parties are permitted for installation of the software but only with the assistance of the manufacturer or an authorized person.

> ⚠ **WARNING:** System configuration must be performed only by qualified personnel who are trained and familiar with the IQ Messenger Medical and relevant communication standards, and with local implementation of the medical device aggregator. Improper configuration of the IQ Messenger Medical can cause unexpected and unintended behavior of the system.

IQ Messenger Medical must be used only after obtaining a valid license from the manufacturer or the Distributor .

Pre-installation tasks

This section describes the tasks that you must complete before you start dep,oyment of the server. It includes information about the following tasks:

- Obtain the (OVA) template image
  To obtain the IQ Messenger Medical server (OVA) file, go to the IQ Messenger partner portal downloads section.
- Collect the network setings
  Before deployment of the IQ Messenger Medical server, make note of the network configuration. The configuration will prompt for this information so that it can connect to the network to complete the installation.

OVA template deployment

Once you have downloaded the IQ Messenger Medical OVA template file, you can use the vSphere client to create the virtual machine from the deployment package OVA template. To deploy the template:

Launch the VMware vSphere web client, enter your user name and password and select Login.

Install the Client Integration plug-in before you deploy an OVF template. This plug-in enables OVF deployment on your local filesystem.

Depending on the security settings of your browser, you might have to explicitly approve the plug-in when you use it the first time.

Select *Hosts and Clusters* from the *Menu*.
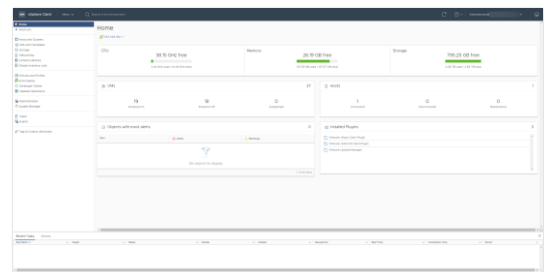
Select any inventory object that is a valid parent object of a virtual machine, such as a datacenter, folder, cluster, resource pool, or host.
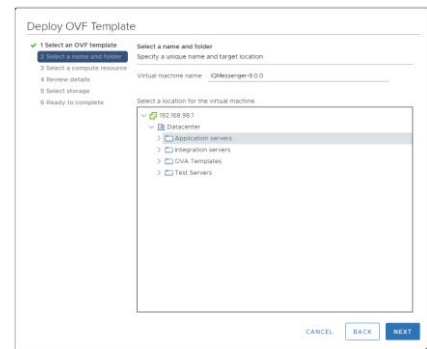
Select *Actions > Deploy OVF Template*
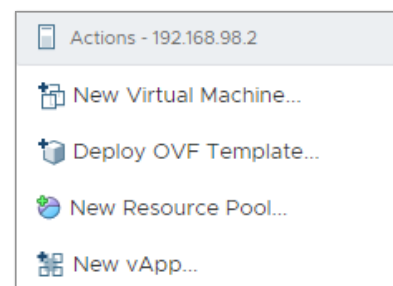
Select the source location of the OVA file.
Select *Browse* and locate the OVA file on your computer.
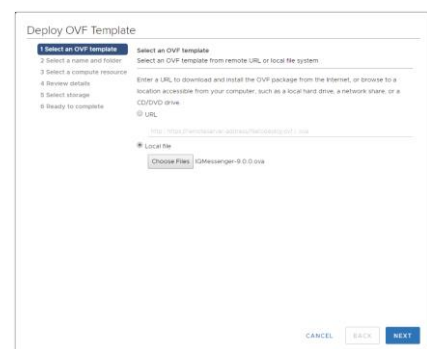
Specify the name and location for the deployed template. The name can contain up to 80 characters and it must be unique within the inventory folder.
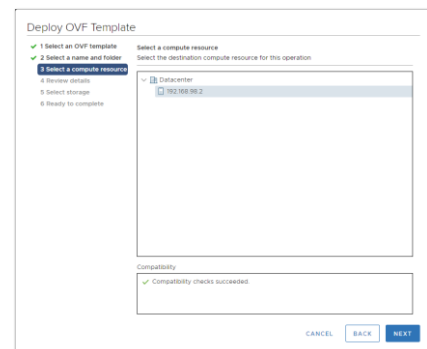
Select or browse for a resource (host, cluster or resource pool) on which you want to deploy the OVF template.
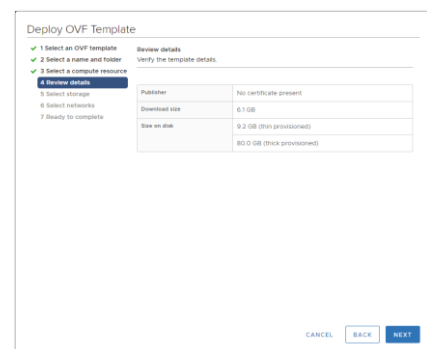
Review the OVA template details. This page details download size, size on disk, and description.
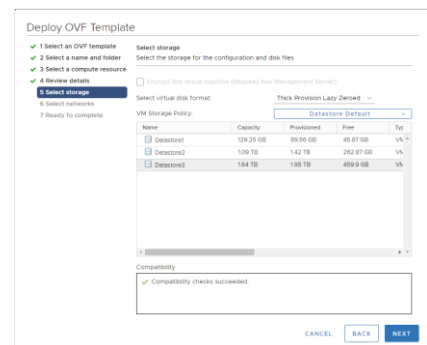
Select the data store location to store the virtual machine files.

Select virtual disk format *Thick Provision Lazy Zeroed.*
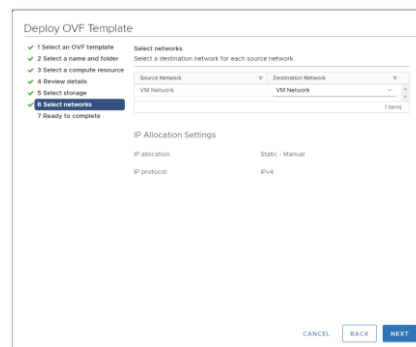
Thick Provision Lazy Zeroed option allocates the disk space statically (no other volumes can take the space), but does not write zeros to the blocks until the first write takes place to that block during runtime (which includes a full disk format)
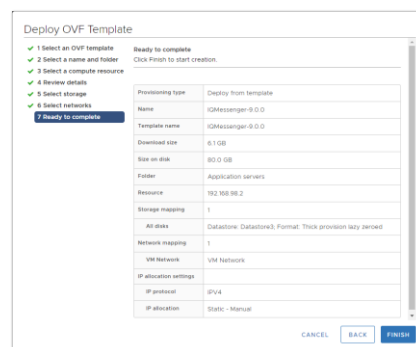
Configure the network the deployed OVF template should use.

Review the template configuration. Make sure that Power on after deployment is not enabled. You might need to configure the VM hardware and resource settings prior to powering on the Emergency Console server.

Select *Finish* to deploy the OVF template.

In the *Ready to Complete* window, review the selected options for the OVF deployment task and click Finish. The deployment job runs and provides a completion status window where you can track job progress.

Configure the VM hardware settings

Before powering on your IQ Messenger Medical VM you must configure the virtual memory, virtual CPU match your IQ Messenger Medical VM. See chapter Hardware requirements on page 4 for IQ Messenger Medical server VM requirements.

In the vSphere web client, select deployed OVA template in the left pane and then right-click the name of the deployed template, and select *Edit Settings*.
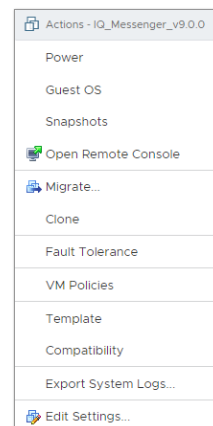
In *Virtual Hardware* tab, configure the memory and CPU requirements.
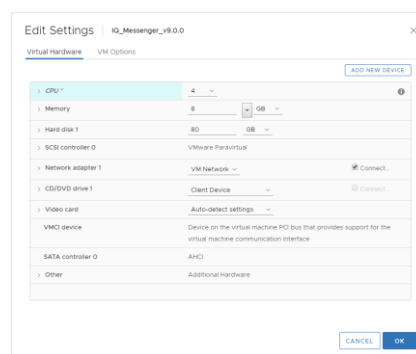
You can now proceed to power on.

Open the *Console*. The mouse is then captured and cannot leave the console screen. As the console is text-only, no mouse pointer is visible.

Configure the VM OS settings

After deploying the IQ Messenger Medical OVA file, configure the basic settings, and start IQ Messenger Medical server. To configure the server, follow these steps:

Log in to the vSphere Client and power on the IQ Messenger Medial virtual machine. Begin the configuration by providing the login credentials:

Localhost login: **iqm**
Password: **IQMessenger!**
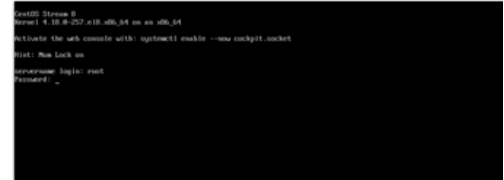
Configure the time zone and save the changes.
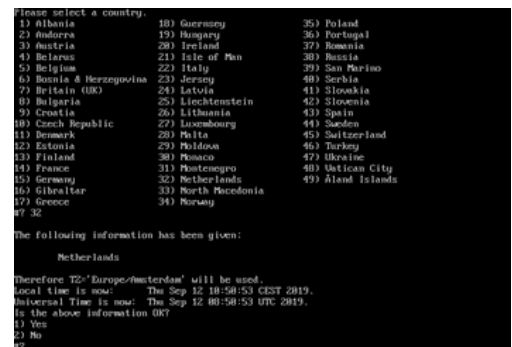
Go to the device configuration.
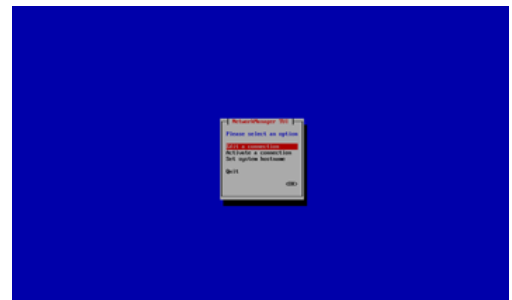
Select the available ethernet device from the list; then Edit. This example shows ENS192 but this can be different.
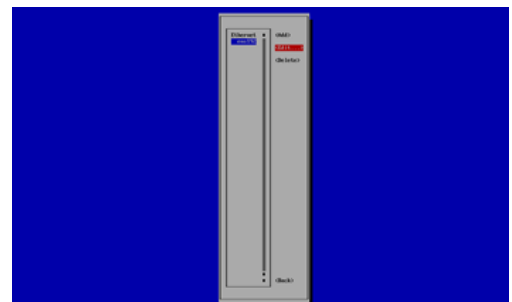
Edit the ethernet device configuration and enter the *Manual* IP configuration. Click *OK* to Save.

Go back to the main screen and set hostname for the server. Click *OK* to save.
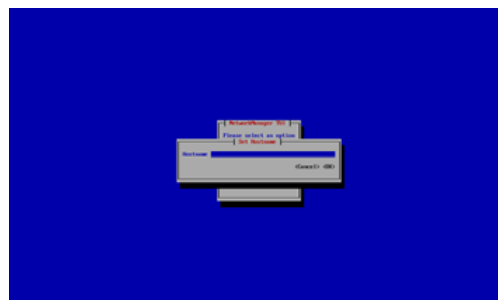
Choose Quit from the menu to finalize network configuration.
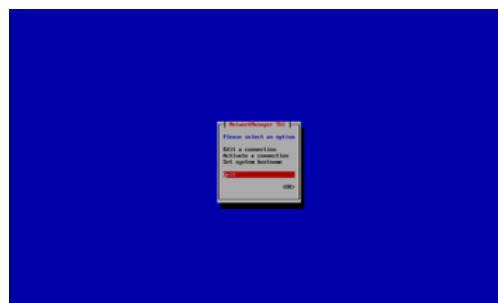
Enter a new password for iqm account and reconfirm it. The iqm password is used for logging into the IQ Messenger Medical Virtual Appliance for future configurations and maintenance.
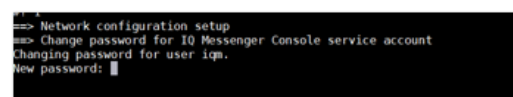
After this step Virtual Appliance automatically reboots.

> ⚠️ **WARNING:** Modifying, deleting or replacing any IQ Messenger Medical server files or changing any of the device settings can result in sub-optimal IQ Messenger Medical server performance, including inhibition of alarm delivery, system time settings and network connection.

License activation

After installing IQ Messenger Medical server, the user needs to activate the license by following the procedure indicated hereafter:

1. In a web browser, navigate to *"http://<ServerIP>/Orange/activate"*. When the page opens, click *"Create license request"* button. A license request file *"<filename>.WibuCmRaC"* will be downloaded.
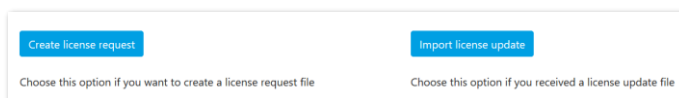
2. Click on the license activation link you have received from the manufacturer or by the business partner it is linked with.

3. Click on *"Select a file…"* Select your request file *"*.WibuCmRaC"* then click on *"Upload request and Continue Now"*.
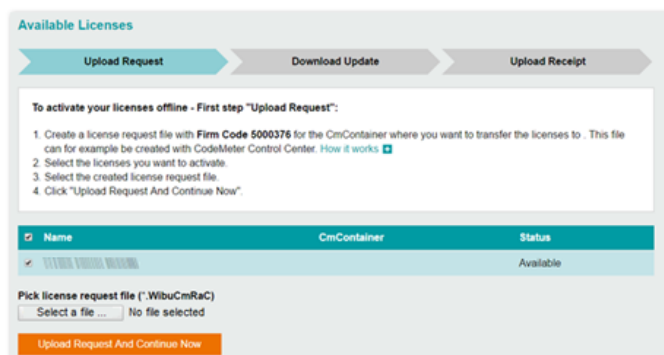
4. In the next page, click on *"Continue license transfer"* to get activation file.
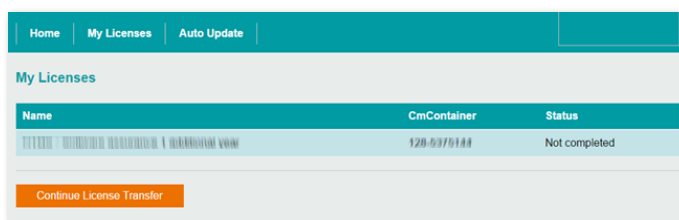
5. Once the license file downloaded *"*.WibuCmRaU"*, go back on the IQ Messenger Medical license page, click on *"Import license update"* button, select the downloaded license file in the dialog window and press *"Open"*.

6. Reboot the server and wait until services are started. Then, navigate to the server login page *"http://<ServerIP>"*.

The default username and password for the IQ Messenger Medical server is **admin**. Its highly recommended to change the admin password after initial server setup.

This system may contain privileged and/or confidential information. Only authorized individuals are permitted to access this system. Any unauthorized use or access to this system is strictly prohibited.

IQ SmartApp Medical (iOS) installation

IQ SmartApp Medical (iOS) is distributed through the Apple AppStore. To install the IQ SmartApp Medical (iOS), perform the following steps:
1. Open the *App Store* and go to the *Search* tab.
2. Search for *IQ SmartApp Medical* and choose *Download*.
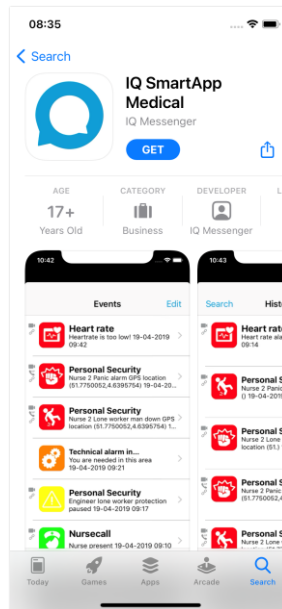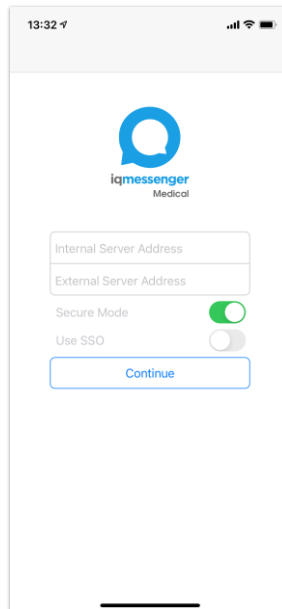
3. A new screen is displayed once the installation is completed. Close the screen by tapping the Home button on your iOS device.
4. Start IQ SmartApp Medical (iOS) app and *Allow* the app the send *Notifications* and *Critical Alerts.*
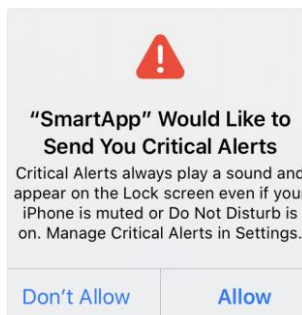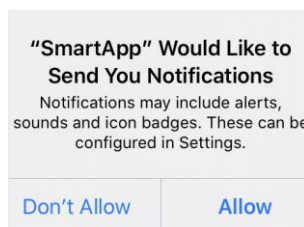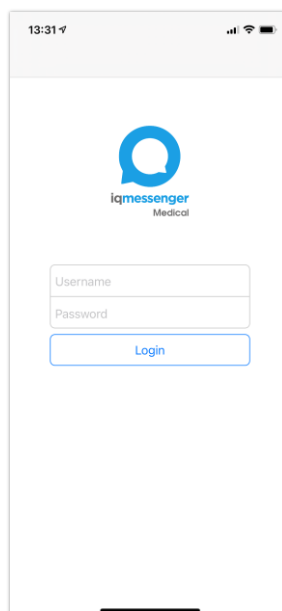
> ⚠️ **WARNING:** Not allowing notification type *Critical Alerts* for iOS devices can cause alerts without an audible signal resulting in an unnoticed or delayed alert and could result in patient injury.

5. When you start IQ SmartApp Medical (Android) for the first time, you must configure the *Internal* Server *Address* of the IQ Messenger Medical server. If the IQ SmartApp Medical (iOS) is also being used outside of the company network, then also fill in the *External Server Address* of the IQ Messenger Medical server. This information is basically provided by the IT facility.

6. Enter the provided username and password to login to the app.

7. The *Events* screen is displayed when successfully logged in.

IQ SmartApp Medical (Android) installation

IQ SmartApp Medical (Android) is distributed as offline APK file or through the Google Play store.

To install the IQ SmartApp Medical (Android) on offline devices, perform the following steps:

1. Create a folder named (*SmartApp)* on your desktop and copy the offline installation file (*SmartApp-<version>.apk*) into the *SmartApp* folder.

1. Plug the device into the computer via the device USB cable and use the computer's file manager to copy the *SmartApp* folder from your computer to the SD card or local device storage.

2. Unplug the device from the computer.

3. Open the file manager on your device and browse to the *SmartApp* folder.

4. Tap on the SmartApp-<version>.apk file. Make sure that the first selection, *Unknown Sources*, is checked so that you can install SmartApp (APK) file from a location other than the Google Play Store. You can change this setting back after the IQ SmartApp Medical (Android) installation.
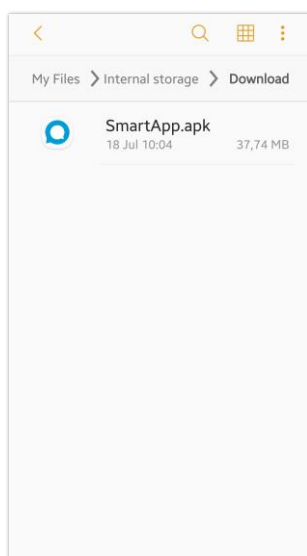
5. A new screen showing the IQ SmartApp Medical installation. To install the application, just tap on the Install button on the bottom of the screen.

6. A new screen is displayed once the installation is completed and you can choose to immediately run the application by tapping the Open button at the bottom of the screen. Otherwise click on *Done* button to complete the *IQ SmartApp Medical (Android)* installation.

7. When you start IQ SmartApp Medical (Android) for the first time, you must configure the *Internal Server Address* of the IQ Messenger Medical *server*. If the IQ SmartApp Medical (Android) is also being used outside of the company network, then also fill in the *External Server Address* of the IQ Messenger Medical server. This information is basically provided by the IT facility.
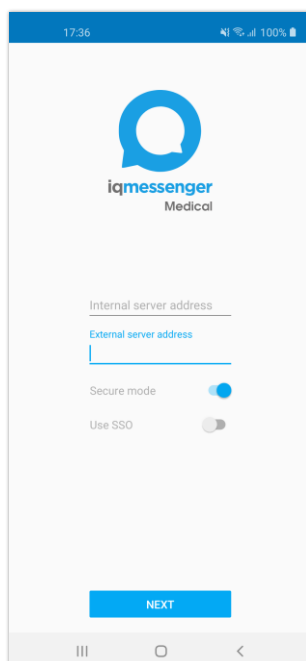
8. Enter the provided username and password to login to the app.
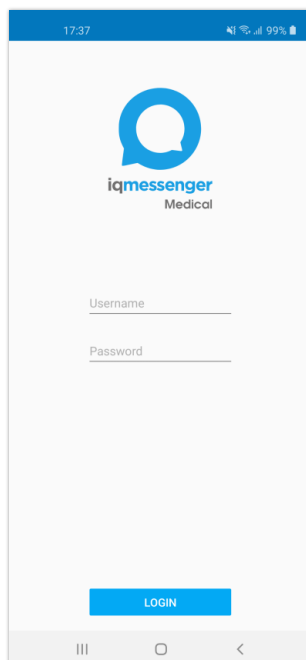
9. The *Events* screen is displayed when successfully logged in.

Operating Information

This section contains information regarding the operation of IQ Messenger Medical, such as maintenance and disposal.

Application roles

This section contains information regarding the application user roles and access rights. The menu items visibility depends on your application roles and permissions.
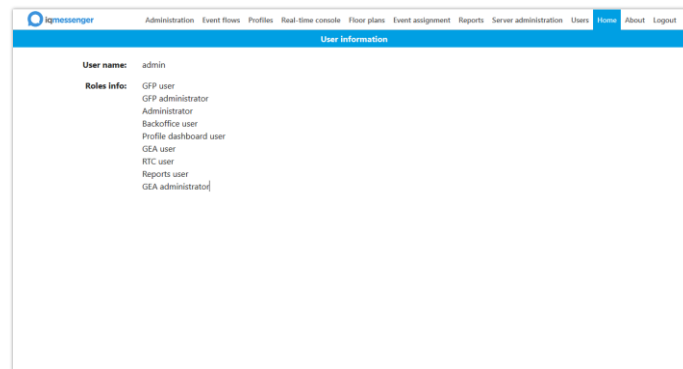
Application roles	Server Administration	API	Backoffice Administration	IQ CareApp (Android)	Contacts	Reports	Graphical Floorplan (Admin)	Graphical Floorplan (User)	Graphical Event Assignment (Admin)	Graphical Event Assignment (User)	Real Time Console	IQ SmartApp Medical (Android)	IQ SmartApp Medical (iOS)
Admin	●	●	●			●	●	●	●	●	●		
API user		●											
Backoffice user			●										
CareApp Android user				●									
Contact administrator					●								
Report user						●							
Reports administrator						●							
GFP administrator							●	●					
GFP user								●					
GEA administrator									●	●			
GEA user										●			
RTC user											●		
SmartApp Android user												●	
SmartApp iOS user													●

Checkout procedures

At the start of each shift, users should check to be sure the equipment is working correctly before they begin to perform their tasks on the unit. The user should verify that their mobile device is working correctly. User should ensure that the web browser is functioning as required to assign users to the unit. Contact IQ Messenger distributor or IT department for assistance if problems occur.

Checkout procedures for the user consist of the following steps.
- Swap the device's batteries. Place the charged battery in the device, and put the used battery into the charger.
- If using a smartphone, place the device in the charging station. The user should select a fully charged unit.
- Send a test alarm and check the time between alarm initiation on the medical device equipment and the alert receipt on the mobile device. Total latency should be under 5 seconds.
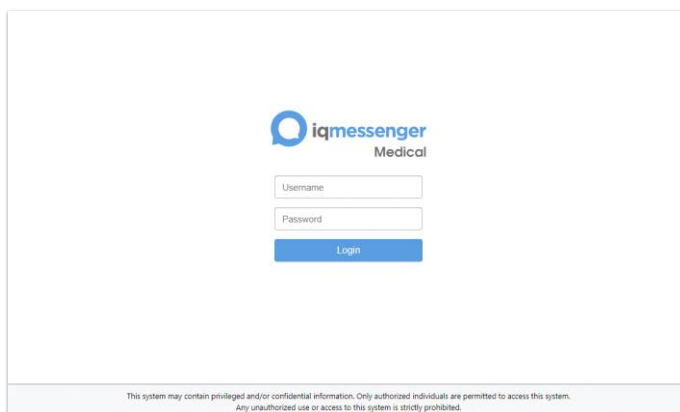
Login procedures

Login to the IQ Messenger Medical server

To login to the IQ Messenger Medical server, perform the following steps:
1. Start your preferred web browser and login to the IQ Messenger Medical server using the following case-sensitive URL "*http://<ServerIP>/UMS*".
2. Enter the provided username and password to login to the app.

3. The main application screen is displayed after successfully user login.

Accessing about screen

The *About* menu on the IQ Messenger Medical applications displays a screen that containing information about the manufacturer, product version and release date.
To access the about screen on the IQ Messenger Medical server, login to the system and click on the About menu in the navigation bar.

> ✏️ **NOTE:** You may access this Instructions for Use document from web-based and mobile application by tapping/clicking on the link https://partner.iqmessenger.com
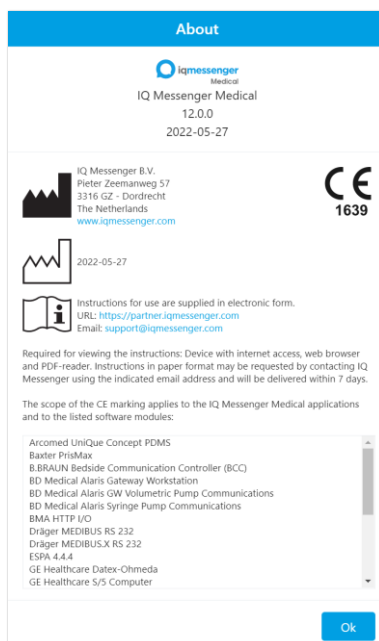
To access the about screen on the IQ SmartApp Medical (Android), access the In-App *Settings* menu and tap on the *About* menu.
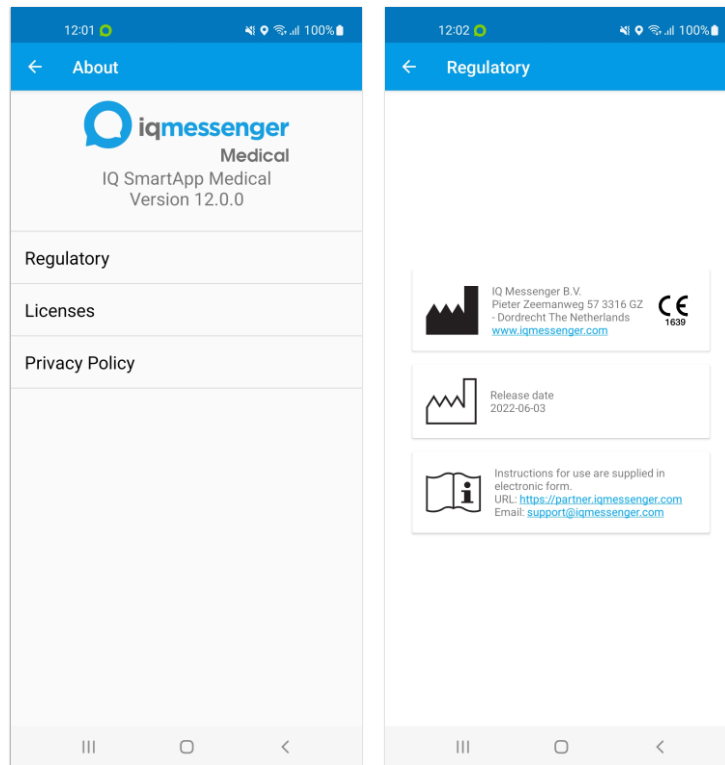
To access the about screen on the IQ SmartApp Medical (iOS), access the In-App *Settings* menu and tap on the *About* menu.
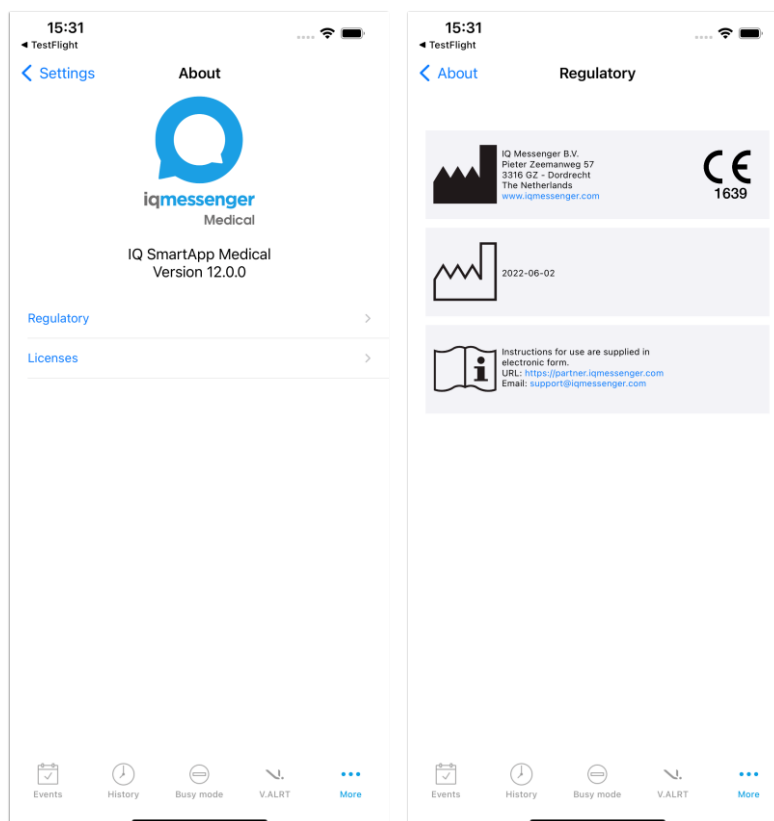
Backoffice Administration

Administration

The *Backoffice Administration application* provides all integration configuration options that are available within the IQ Messenger Medical server.

> ✏️ **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.

To access the administration menu, perform the following steps:
1. Start your preferred operating system browser. In the address bar of the web browser, enter the following case-sensitive URL: "*http://<ServerIP>:8080/UMS*".
2. Login with provided username and password.
3. Click on the *Administration* menu in the navigation bar to access.
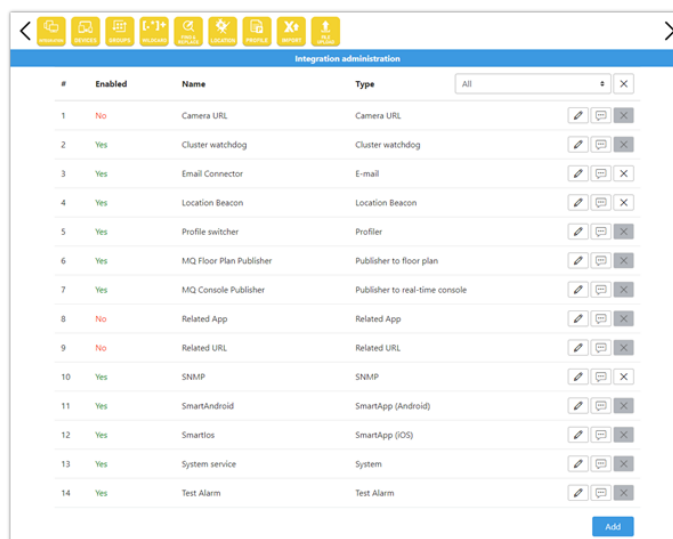
Each yellow icon represents an administration service. The icons below are the default icons available in IQ Messenger.

Icon	Description
INTEGRATION	Integration administration: The configuration screen for integration services. Before activating an integration service, you will need to configure the service.
DEVICES	Device administration: The device overview administration is used for registration process of devices (handset, medical devices etc.
GROUPS	Device group administration: The group administration gives administrators possibility to add, edit, delete and copy groups for devices.
[.*]+ WILDCARD	Wildcard administration: The Wildcard administration screen gives you to possibility to add additional information/features to incoming text messages like callback numbers and locations.
FIND & REPLACE	Find & Replace administration:

	The Find & Replace administration gives you the possibility to cut, find and replace functionalities to incoming text messages.
LOCATION	Location administration: The location administration allows you to create locations that you can associate with a device item. You assign a device to a location when you first create the device. The main purpose of assigning a device to a location is to help you identify a device by the location in which it resides.
PROFILE	Profile administration: The profile administration allows you to use profile switching in event flows. The main purpose of the profile switch is altering an event flows to follow a different path related to the situation that is active on customer site. For example, the profile switch can provide the possibility to switch between shifts.
IMPORT	Device import administration: The device import administration gives administrators possibility to import devices.
FILE UPLOAD	File upload administration: The file upload administration gives administrator to upload sound and attachment files to the IQ Messenger Medical server.

Event Flows

The event flow module is a user-friendly interface that provides an easy to use setup for events. An event flow is a definition of a work process that is used by the people on the work floor. In other words: which steps are taken by the people on the work floor when an event is received. The Even Flow manager provides a graphical setup and view of the work process.

An event flow is the visual representation of a working process. Using the Event flows, you can work with existing event flow definitions, easily modifying them to create new ones. You can also create event flow definitions that can be reused again. These event flow definitions can be easily incorporated into a new event flow definition. These allow you to create flows quickly, with fewer errors.

> **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.

Basic components

Before start creating an event flow, the knowledge of the basic components is required.
The Red icon correspond to receiving an alarm. A Green icon corresponds to delivering information to the selected output. Blue icons are the conditions in the event flow that determine for example escalations, stop flow, calendar, multiple red or profile switching.
Every flow contains at least 4 mandatory elements in the following order:

1. Blue start icon is the start of an event flow.
2. Red icon is the source of an event. Also known as input.
3. Green icon is the destination of an event. Also known as output.
4. Blue stop icon is the stop of an event flow.

The basic event flow will have the following appearance when using only 1 Red icon (input) and 1 Green icon (output):

The line between icons represents a connection logic.

The more detailed step-by-step explanation of a flow creation is in the following chapter.

Red icon

A red icon is an event flow input. More correct definition is: "Red icon is a representation of a primary event trigger of an event flow". This icon represents event messages from various sources. Such a source can be a special device (e.g. some handsets have a special button for an alarm generation) or a software (e.g. we can use Twitter to send a message/event).

Every flow must be started by a red icon, it is an initial of a flow or its trigger. A red icon should be configured for acceptation of the specific event from the specific device. Mostly, the configuration procedure is to choose the device and the type of an alarm to be accepted.

Green icon

A green icon represents an event output system. This system sends a specific signal to a receiver. Such a signal can be a telephone call, an XML, a hash-code, an e-mail, an SMS, etc. A receiver can be a handset, a smart device, an emergency call device, software (e.g. e-mail), etc. A receiver informs about the incoming signal via a ring tone, a sound, a blinking led, etc. A green icon can also generate and send events to other green icons.

Blue icons

A blue icon is intended to display all connections and ways in an alarm flow.

The Start and the Stop elements are mandatory in each flow and cannot be removed. Every flow starts with the Start element and ends with the Stop element.

The other elements serve to construct complicated flows. A complicated flow can include several ways of event flows' execution. The condition of each way is defined by a set of blue icons. It can be a time interval (date) within which the flow is allowed. An alarm can be split in order to be sent to different receivers and, vice versa, different events from different sources can be directed to one receiver (joined). Each blue icon from the table below will be discussed in detail in the corresponding section.

Icon	Description
	Start: The start element automatically added to the flow automatically. This element doesn't require configuration.
	Condition: The condition element provides alarm filtering options in event flows.
	Multiple red: The multiple red element allows you to used multiple start conditions in event flows. It's also possible to combine different interfaces within the multiple red element.
	Stop flow: The stop flow element provides the feature to revoke a triggered alarm in case when the alarm is being stopped from the alarm source. To use this feature, the connected integration/red icon needs to be able to send out a stop or cancel message when an alarm is being stopped from the medical device or nurse call system.

PROFILE	Profile: The profile element provides the feature for switching profiles in event flows. The main purpose of the profile switch is altering an event flows to follow a different path related to the situation that is active on customer site.
CALENDAR	Calendar: The calendar element provides the feature to use calendar functions in event flows. The main purpose of the element is routing event based on date and time.
ESCALATION	Escalation: The escalation element provides escalation features in event flows.
RESPONSE	Response: The response element provides advanced escalation and user response features in event flows.
SPLIT	Split: The split element provides possibility to split events to multiple branches in event flows.
JOIN	Join: The join element provides possibility to join events from multiple branches in event flows.
SAVE	Save flow: The save flow element is used to save the flow configuration.
STOP	Stop: The stop element automatically added to the flow automatically. This element doesn't require configuration.

Graphical Event Assignment

This section describes the main features of the Graphical Event Assignment web application. Patient information feature may not be available, depending on your licenses or activated features. On the *Event Assignment* screen, you can assing, unassign devices to the locations and view patient information.

> ⚠️ **WARNING:** The IQ Messenger Medical server is dependent upon the accuracy of your facility's HL7 ADT solution for patient information shown and send to IQ Messenger Medical applications and or third party devices or systems.

> ✏️ **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.

To assign a device to a GEA location, perform the following steps:

1. Start your preferred web browser. In the address bar of the web browser, enter the following case-sensitive URL: http://<ServerIP>/UMS or choose the *Event assignment* menu on the navigation bar.
2. Choose the location from the location selection filters where you want to assign a device(s) to a location.
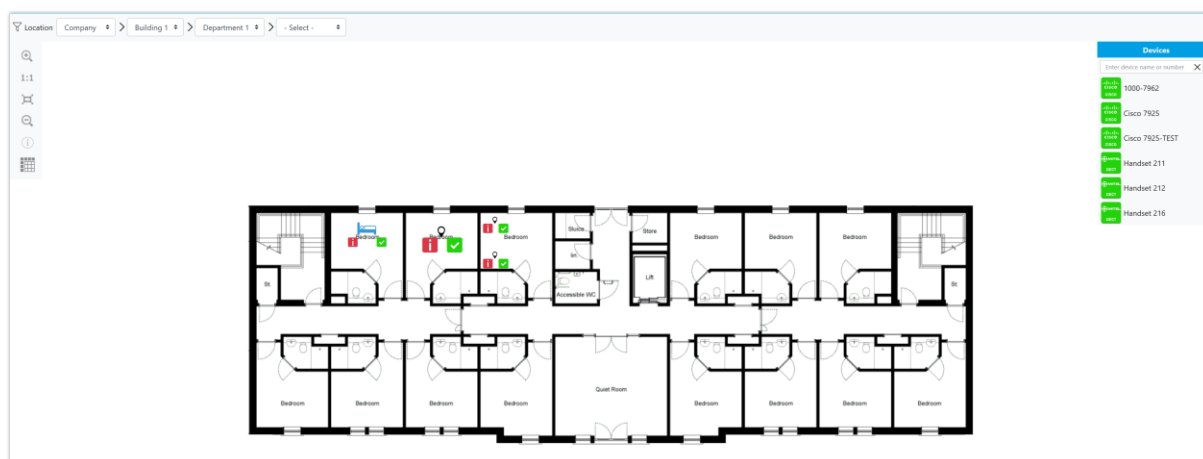
Label/Symbol	Description
Location	Location selection filters
🔍⊕	Zoom in
1:1	Reset zoom
⊐	Fit image to screen
🔍⊖	Zoom out
ⓘ	Show patient information for all locations
📍	Location marker
▦	Show all assignments

	i	No patient assigned to location/no patient information available
	i	Patient assigned to location/patient information available
	☐	No devices are assigned to this location for receiving events
	✓	Devices are assigned to this location for receiving events and devices are online
	✓	Devices are assigned to this location for receiving events but devices are offline
Devices		Overview of available device to assign to a location, when device is greyed out then user is not logged in/available for receiving calls

3. Click on ☐ to show location assignment box.
4. Drag and drop a device from the list of *Devices* to the desired field.
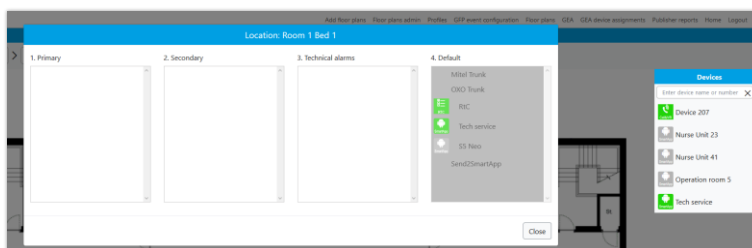
The drag and drop actions in this example configure automatically in the previously created event flow that all initial calls are send to *GEA User* and if this user does not respond on time, the call will be escalated to the users defined in the *Secondary call* list. In this case *GEA User2*
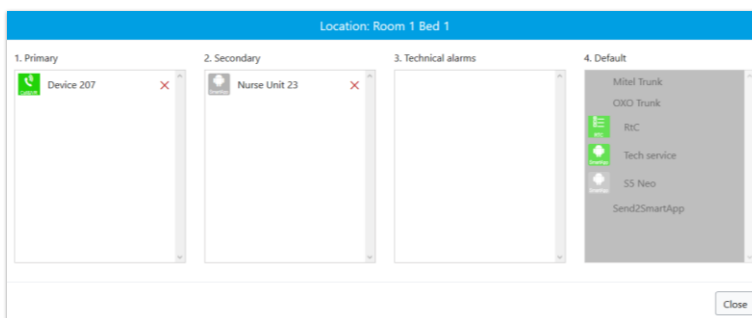
The *GEA Default* is the static group that you cannot adjust from this drag and drop screen by default. However if the checkbox "*Allow editing from GEA*" is checked in Backoffice group administration, you can change the users. If there is no response on the *Primary call* and no response in the *Secondary call,* then the call escalates to all users in the *GEA Default* group even if the users are not assigned to this location.

In the following specific situations, IQ Messenger Medical server may not deliver alarm notifications to the web-based and mobile applications or supported third party mobile or wired devices or systems:

⚠ **WARNING:** The assigned user has exited the unit.

⚠️ **WARNING:** The assigned user is logged out of, or disconnected from, the IQ Messenger Medical web-based or mobile application.

⚠️ **WARNING:** A user is not assigned to receive alerts from a medical device.

Graphical Floor Plan

This section describes the main features of the Graphical Floor Plan web application. Some of the features may not be available, depending on your licenses.

✏️ **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.
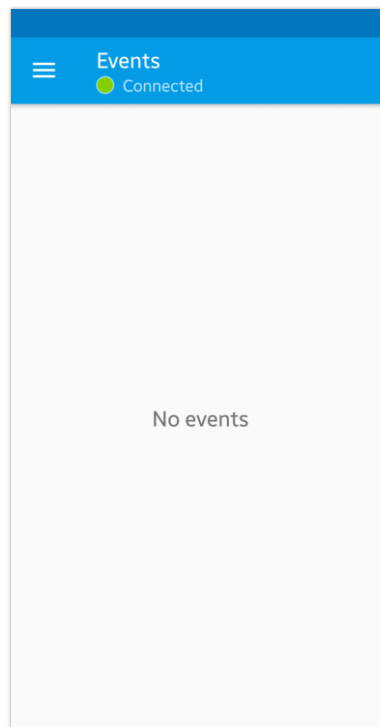
On the *Floor plans* screen you can view, acknowledge and clear active events. To access the *Floor plans* screen, perform the following steps:

1. Start your preferred web browser and login to the IQ Messenger Medical server using the case-sensitive URL: http://<ServerIP>/UMS and click on the Floor plan menu on the navigation bar.
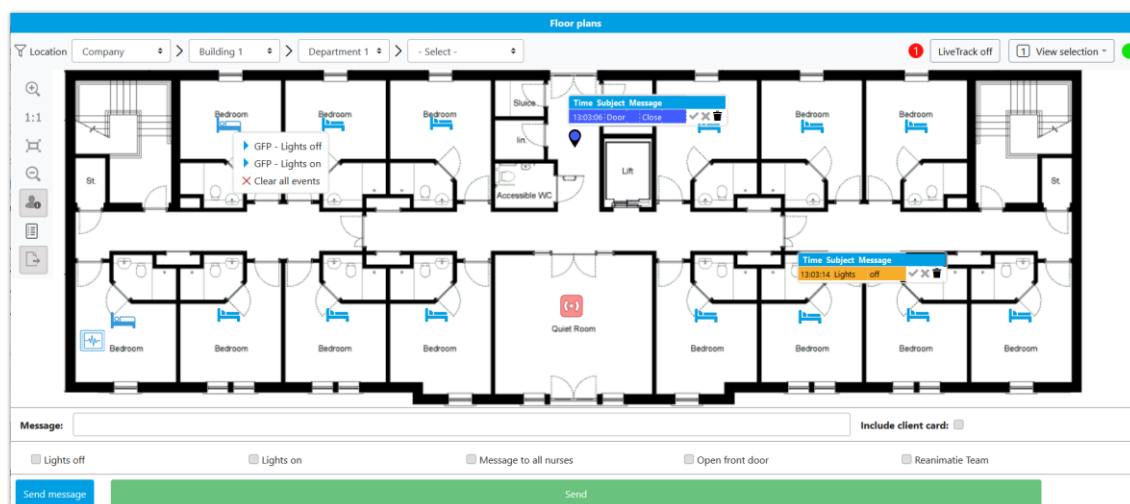
Label/Symbol	Description / Value
Location	Location selection filters
🔍➕	Zoom in
1:1	Reset zoom
⛶	Fit image to screen
🔍➖	Zoom out
🡒	Show send
View selection	View multiple floor plans. Available options are: • 1 floorplan • 2 floorplans • 4 floorplans

	• 9 floorplans • 16 floorplans • 32 floorplans • 64 floorplans
🟢	Heartbeat status
Send message	The *Send message* button opens in a panel at the bottom of the page. It provides a list of all the Graphical Floor Plan events on the page, including the custom message field.
Message	Field for customizing output message
Send	Send message to the selected Graphical Floor Plan events.
Include client card	Include client card (related information)

Right click on the marker to activate the run flow menu.
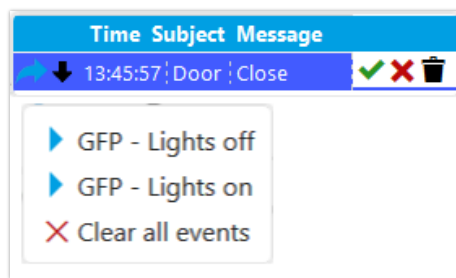
Label	Description
↗	Open related URL.
↓	Download attached file.
✔	Accept event.
✖	Reject event.
🗑	Delete event.
▶	Run event.

Real-time Console

This section describes the main features of the Real-time Console web application. Some of the features may not be available, depending on your licenses. On the Real-time console screen, you can view, acknowledge and clear active events.

> ✏️ **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.
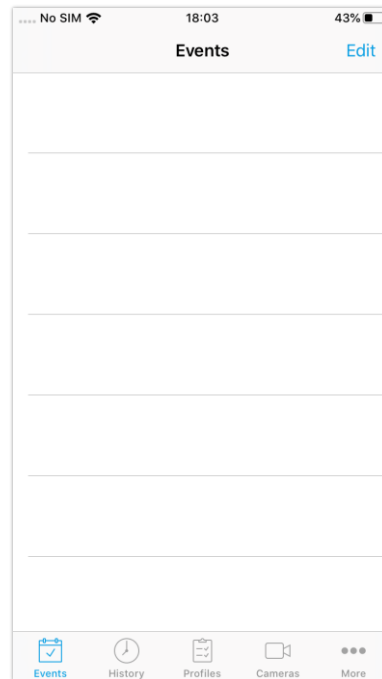
To access the Real-time Console application, start your preferred web browser and login to the IQ Messenger Medical server using the case-sensitive URL: http://<ServerIP>/UMS and click on the *Real-time console* menu on the navigation bar.
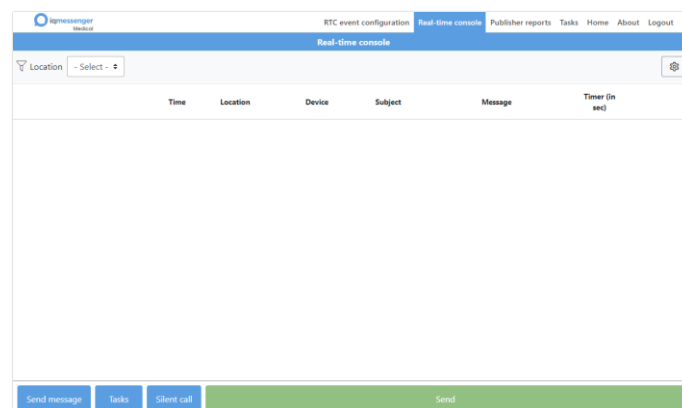
Label	Description
🔊	Setup a conference between the RTC user and the event source.
↪	Forward event
📝	Open client card.
➡	Open related URL
⬇	Download attached file
✔	Accept event
✖	Reject event
🗑	Delete event
🟢	Heartbeat status
Time	Message timestamp
Location	Main location of the device
Device	Type of the device
Subject	Message subject
Message	Received message
Timer	Received message timer
Custom message	Field for customizing output message
Send message	The *Send message* button opens in a panel at the bottom of the page. It provides a list of all the Real-time Console events on the page, including the custom message field.
Send	Sending/forwarding an output message

Reports
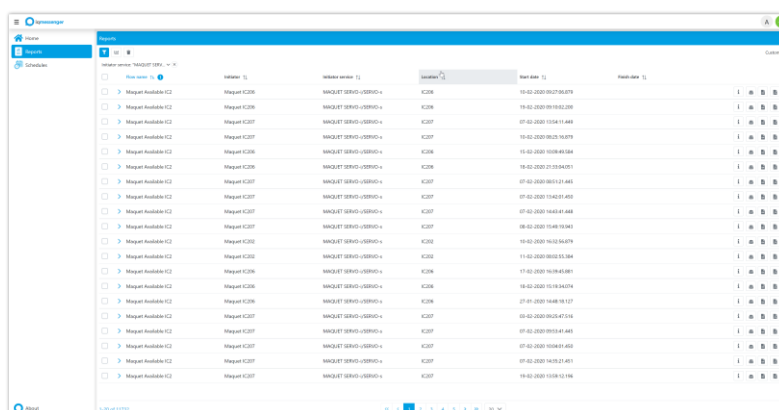
This section describes the main features of the Reports web application.

> **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.

To access the reports application, perform the following steps:
1. Start your preferred web browser. In the address bar of the web browser, enter the following case-sensitive URL: http://<ServerIP>/UMS or choose the *Reports* menu on the navigation bar.
2. Choose from selection filters required report parameters where you want to request information.

Label/Symbol	Description
🔍	Search by flow execution id
ℹ	Flow details
✉	Send report by e-mail
CSV	Download csv file
PDF	Download pdf file

3. The Reports pane will automatically resfresh based on the filting selection.
4. Click on ❯ expand button on desired row to see the flow details.

5. To export the report use send by email, download csv file or download pdf file.

IQ SmartApp Medical (Android)

This section describes the main features of the IQ SmartApp Medical (Android) app. Some of the menu items may not be visible depending on activated features on the app or mobile device hardware capabilities.

> **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.

When you start IQ SmartApp Medical (Android) for the first time, you must configure your device as either a shared device or a personal device. A shared device is used by more than one person, such as a nurse on shift. A personal device is used by one person only.

To login to the IQ SmartApp Medical (Android), perform the following steps:

1. Start IQ SmartApp Medical (Android) app,then enter the provided username and password.

iqmessenger
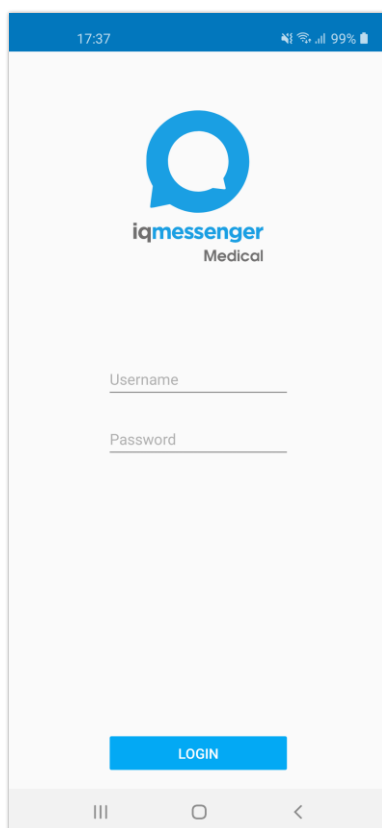
2.   The *Events* screen is displayed after successfully user login.

3.   By opening the side menu you can access available IQ SmartApp Medical features.
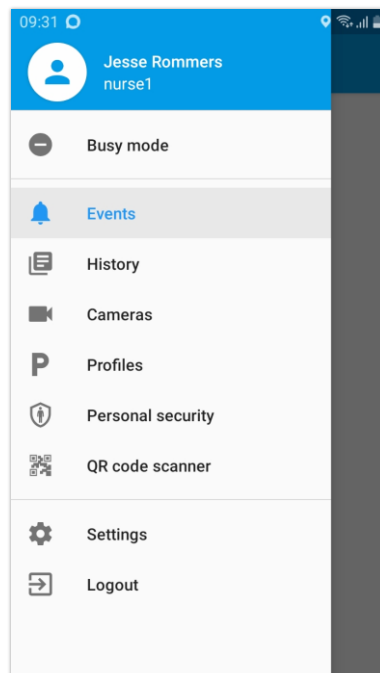
4. The *Events* screen shows all active events. The event messages are sorted by their priorities. By tapping on the event message the *Event detail* wil be shown.
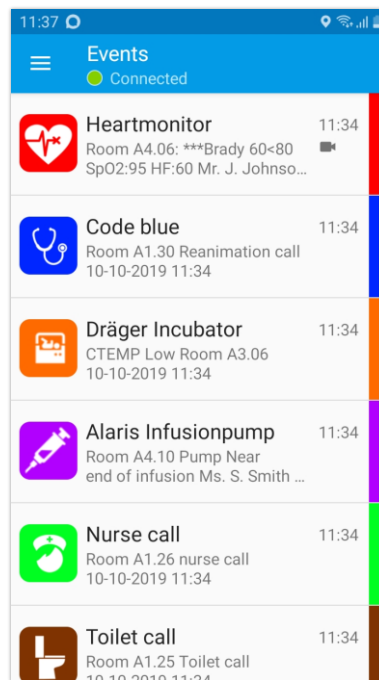
5. The *Events* details screen shows all details events that are sorted by their priorities. By tapping on the event message the *Event detail* wil be shown. In this screen you can respond to the event messages.
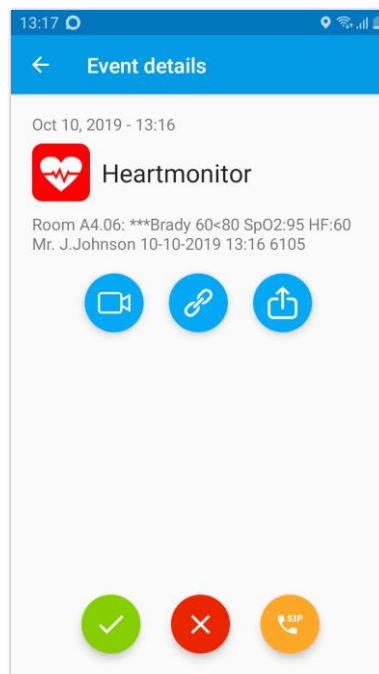
6. All information about the historical events are stored in the history and can be called up again afterwards by the user. The callback number, app link, camera and hyperlink URL's to events that have already been received can also be used at a later point in time.
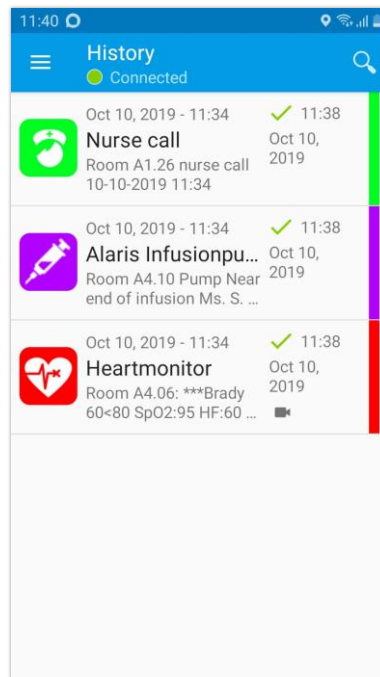
IQ SmartApp Medical (iOS)
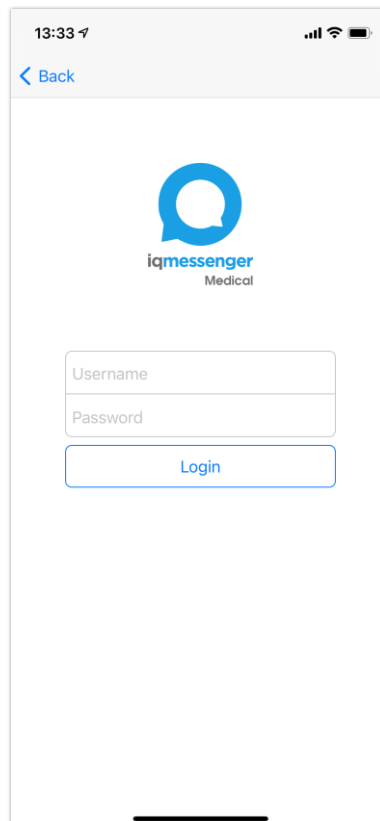
This section describes the main features of the IQ SmartApp Medical (iOS) app. Some of the menu items may not be visible depending on activated features on the app or mobile device hardware capabilities.

> **NOTE:** For a detailed description of operating information please refer to the setting and configuration guide of the application. This document can be requested through your IQ Messenger Medical distributor.

To login to the IQ SmartApp Medical (iOS), perform the following steps:
1. Start IQ SmartApp Medical (iOS) app,then enter the provided username and password.

2. The *Events* screen is displayed after successfully user login.

3. The *Events* screen shows all active events. The event messages are sorted by their priorities. By tapping on the event message the *Event detail* wil be shown.

4. The *Events* details screen shows all details events that are sorted by their priorities. By tapping on the event message the *Event detail* wil be shown. In this screen you can respond to the event messages.

5. All information about the historical events are stored in the history and can be called up again afterwards by the user. The callback number, app link, camera and hyperlink URL's to events that have already been received can also be used at a later point in time.

⚠️ **Warning:** IQ SmartApp Medical (Android) notify the user and the server in case of low battery on a Google Android device. Apple iOS device do not support this functionality.

IQ SmartApp Medical icons

The following set of icons are used by the IQ SmartApp Medical apps for alam notification. The icons may have different color depending on the event flow setup.

Acoustic detection / microphone	Aggression / panic	Assault	Battery alarm	Battery low	Bed	Bed alarm	Bed alarm, assistance
Breathing ventilator	Cafe	Connected	Contact closed	Contact open	Dementia	Disconnected	Doctor
Door	Door call	Door closed	Door open	Elevator call	Emergency call	Enteral infusion pump	Epilepsy
Escalator	Evacuation	Fall	Fall detection	Fire	Gauge	General alarm	General alarm call
General alarm, assistance	Heart monitor	Heart stop	Heating	Inactive alarm	Incubator	Indoor location detection	Intercom
Light off	Light on	Loudspeaker	Maintenance	Man Down	Medical heartbeat	Meeting	More attendants needed
Motion detection	No WiFi / Wireless network	No heating	No medical heartbeat	No power	Nuclear	Nurse	Nurse call
One attendant needed	Outdoor location detection	PIR Sensor	Power	Pull cord	Pump	Sprinkler	Syringe infusion pump

Technical fail	Temperature	Three attendants needed	Toilet call	Toilet call, assistance	Toxic / hazard	Tread mat	Two attendants needed
UPS	Valve	Video camera	Volumetric infusion pump	Wander detection	Warning / danger	Wireless alarm	

Maintenance instructions

IQ Messenger Medical requires a mobile device, and a computer system with a web browser. There is minimal maintenance for the end user.

Software updates

Periodically, manufacturer will release updates to software, and upgrades to the capability of the system. Manufacturer will provide release notes detailing the proposed changes to current software, new features and improvements that will be released, and any known issues at the time of release.

The manufacturer may decide to release a critical update to more or all releases in use in the field. In the case of a safety incident that relates to the use of the software, the manufacturer will provide adequate follow-up actions during the lifetime as required by law.

Database backup

On a daily base, the server will create a full backup of the application files including database. This database is in a ready state and able to be restored to the server. This may be necessary in the case of loss of data, loss of server, or a similar situation which would require a restoration of the database. IQ Messenger Medical distributor is able to provide this service at any time required. As an extra precaution, in the event of a system failure, the database backup should be configured to export to a network shared drive or SFTP server on the customer's local network. This option is configured within the Server Administration interface.

Virtual machine disposal

Manufacturer recommends following customer internal procedures for the destruction of a virtual machine. There will be no physical hardware to dispose of, due to the nature of a virtual machine.

Troubleshooting

This section of the instructions for use is intended to help resolve user issues or problems with IQ Messenger Medical applications.

> ⚠️ **WARNING:** Healthcare professionals must be trained on proper action instructions for alarms, and hospitals must schedule routine equipment inspection and calibration.

> ⚠️ **WARNING:** Do not rely solely on the IQ Messenger Medical server and connected web-based and mobile applications, third-party mobile or wired devices, or systems to indicate medical device alarms. Always continue to monitor at primary, the patient's medical device and or the medical central station if applicable and respond to the patient primary medical device alarms.

The mobile device is not receive alarms

If the mobile device is not receiving any alarms, please review the following steps:

- Ensure that the device is turned on and the battery is charged. If the mobile device will not boot up, please contact your IT facility.
- Once the mobile device is on and has completed the initial boot, check the wireless strength indicator. The wireless strength indicator is usually located top of the device screen. If the display indicates that the device has no wireless connection, please contact your IT facility.
- When using IQ SmartApp Medical apps, be sure the application is running and you are logged in.
- Ensure that the device is online in Graphical Event Assignment. At the beginning of every shift, all staff carrying the mobile devices must sign in to a EventAssignment module. All staff using a fixed device must sign into the phone. If you have signed into a Graphical Event Assignment module and are still not receiving any alarm, please contact your IT facility.

In the following specific situations, IQ Messenger Medical server may not deliver alarm notifications to the web-based and mobile applications or supported third party mobile or wired devices or systems:

> ⚠️ **WARNING:** The IQ Messenger Medical web-based, or mobile application is turned off, being obstructed or without a network connection.

> ⚠️ **WARNING:** The mobile device is turned off or the battery is depleted.

> ⚠️ **WARNING:** The mobile device is not receiving communications due to being obstructed or out of wireless coverage range.

> ⚠️ **WARNING:** The mobile device is not communicating with the IQ Messenger Medical server.

The mobile device is not receiving correct alarm information

If the mobile device is not receiving the correct alarm information, including too many or not enough alarm from the IQ Messenger Medical server, please review the following steps:

If the mobile device receives alarms for more than assigned locations (patient rooms).

- Review your assignments in the Graphical Event Assigment application.
- If carrying a mobile device, you may be part of an escalation group. If this is the case, you will receive alarm in case of an alarm escalation.
- If the mobile device is receiving the correct alarm for a location, but it does not contain the correct patient data, please contact your IT facility to correct HL7 ADT information.

> ⚠ **WARNING:** The IQ Messenger Medical server is dependent upon the accuracy of your facility's HL7 ADT solution for patient information shown and sends to IQ Messenger Medical applications and or third party devices or systems.

User is not noticed about received alarms

Complete the following steps when a user is not noticed about received alarms:

- Verify that the user is logged into the apps and the mobile device is turned on.
- Verify that the mobile device is connected to the wireless network.
- Check the volume of the mobile device if IQ SmartApp Medical (iOS) is used without critical alert notification, and adjust the volume of the device if needed.

> ⚠ **WARNING:** Turning down or off phone ringer/vibrate will preclude IQ Messenger Medical from effectively notifying the user of alerts.

> ⚠ **WARNING:** The mobile device volume is turned down too low or turned off.

Error and fault messages

All error messages and fault messages that are generated by the IQ Messenger Medical applications are self-explanatory.

Support

For reporting errors in the software, please contact your IQ Messenger Medical software distributor. One must have knowledge of the software and must be an authorized person.

Device lifetime

The lifetime of the system is 1 year. During this time, IQ Messenger will periodically provide patches to fix non-critical issues on the newest release. Critical updates (safety bugs) will be provided for all releases within their lifetime.

Changes in the environment

Changes in the product and environment are always mentioned in the product release notes.

Manufacturer

The IQ Messenger Medical and all its applications are manufactured by:

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The Netherlands
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To request additional information, please contact IQ Messenger B.V.