

# Welch Allyn Q-Tel® RMS Networking Definitions Specifications

## Primary Benefits:

- The Welch Allyn Q-Tel® RMS Rehab Management System includes telemetry monitoring stations, administrative workstations and printers networked together.
- All Q-Tel RMS Systems can be connected to the hospital network or stored on the network server.
- This guide includes definitions and frequently asked questions to help explain common networking terms as they apply to the Q-Tel RMS System.



## Network

The hospital network (domain) is the primary network used within the hospital or facility to connect all their computers and systems. The hospital network typically allows access to email, the Internet, network file servers (for file sharing) and shared printers, and enables communication between computers and systems. The Q-Tel RMS Systems can be configured to work as members of the hospital network. The Q-Tel RMS application requires network connectivity for EHR interfaces, database backup, Q-Tel RMS Software Only Workstation, Turnkey Workstation and network printing applications.

## Q-Tel RMS Networking Definitions

**Static IP Address** — Every computer connected to the network is assigned a unique number known as an Internet Protocol (IP) address. A static IP address is an IP address whose value does not change.

**Dynamic IP Address** — A Dynamic IP address is an IP address that is automatically assigned by another computer on the network, known as a DNS server. The DNS server allocates and assigns IP addresses to various devices and computers on the network on a temporary basis. Customer-supplied computers running the Q-Tel RMS applications may use dynamic IP addresses.

**Coaxial Cable Connection** — A type of wire that consists of a center wire surrounded by insulation and then a grounded shield of braided wire. The shield minimizes electrical and radio frequency interference. Coaxial cabling is used for Q-Tel's antenna cabling. It transports the signal from the patient monitors to the Q-Tel RMS towers.

**Access Point** — A hardware device or a computer's software that acts as a communication hub for wireless devices.

**Main Tower** — A custom computer provided by Mortara/Welch Allyn. Every Q-Tel RMS network must have one, and only one, Main Tower. The Main Tower contains the Q-Tel RMS patient database and associated cardiac rehab session information. A Main Tower has one or two proprietary telemetry receiver board(s) installed that are used for admitting patients to ECG monitoring sessions. Q-Tel RMS data can also be stored on the facility's network server.

**Secondary Tower** — A custom computer provided by Mortara/Welch Allyn. A Q-Tel RMS installation can have one or two Secondary Towers in addition to a Main Tower. A Secondary Tower contains one or two proprietary telemetry receiver board(s) for admitting patients to monitored exercise sessions. A patient can be admitted to an exercise session on a Secondary Tower machine.

**Software Workstation** — A Software Workstation is a customer-supplied computer running the Q-Tel RMS application. It is intended for use as an administrative and session management workstation. A Software Workstation user can manage full session management capabilities, input patient information data and perform charting and reporting functions.

**Turnkey Workstation** — A Turnkey Workstation is a custom designed and built PC provided by Mortara/Welch Allyn running the Q-Tel RMS application. It is intended for use as an administrative and session management workstation. All components (e.g., PC, software and peripherals) needed to use the equipment are provided by Mortara/Welch Allyn. With a Turnkey Workstation, a user can manage full session management capabilities, input patient information data and perform charting and reporting functions.

**WMTS** — Wireless Medical Telemetry Service refers to a dedicated band of frequencies (roughly 608-613 MHz) specifically set aside by the FCC for use by wireless medical telemetry devices. In this frequency range, medical devices have priority over commercial, non-medical devices when it comes to interference. These frequencies were set aside by the FCC to promote interference-free operation of medical telemetry systems.



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## Q-Tel RMS Workgroup and Network FAQs

**Can we place the Q-Tel RMS "server" in the data closet for security purposes?**

No—the Q-Tel RMS System is a medical device. The Q-Tel RMS Main Tower contains telemetry receiver cards and cannot be housed in a server room. However, the Q-Tel RMS database can be stored on the facility's network server.

**Do you support Active Directory or LDAP?**

Yes. The Q-Tel RMS System supports Active Directory or LDAP integration.

**Can I run my own backup and can it be automated?**

The Q-Tel RMS System comes with a manual backup/restore utility or can be backed up on the network server.

**What protocols do you support for remote access and diagnosis?**

Mortara/Welch Allyn technical support can utilize your remote access technology in order to remotely diagnose the Q-Tel RMS System. No additional hardware or software is needed. The Q-Tel RMS Main Tower must be connected to the hospital network to use this tool.

**What logon security protocols do you support?**

The Q-Tel RMS application runs on the Microsoft® Windows® operating system. Access to the Q-Tel RMS application is achieved through standard Microsoft Windows logon security measures.

**Can we add the Q-Tel RMS Systems to our domain?**

Yes.

**Can we perform Microsoft updates on the Q-Tel RMS System when available?**

Welch Allyn recommends that all Q-Tel RMS Systems be periodically updated with Microsoft critical and security updates to protect their systems from malware attacks and to fix critical Microsoft software issues. The following guidelines apply for Microsoft updates:

- Customer is responsible for applying Microsoft updates
- Configure Microsoft updates to be manually applied
- Do not install Microsoft updates during use of the product
- After installing updates, verify proper system operation before monitoring patients

Each Q-Tel RMS product release is tested against the cumulative Microsoft updates at the time of product release. There are no known Microsoft update conflicts with the Q-Tel RMS application. Please contact Mortara/Welch Allyn technical support if conflicts are identified.

**Can we send Q-Tel RMS patient data into our EHR?**

Yes. Q-Tel RMS can integrate all XML patient data into your EHR. The system also supports standard HL7® protocol so you can download ADT messages and orders. Session data can be uploaded as PDF reports by a path reference to a PDF, encapsulated PDF or PDF export.



### Can we load antivirus software on the Q-Tel RMS System?

Welch Allyn recommends the use of anti-virus (AV) software on computers hosting the Q-Tel RMS applications. The following guidelines apply in the use of AV software;

- Customer is responsible for installation and maintenance of AV software
- AV software updates (software and definition files) should not be applied during active use of the Q-Tel RMS application
- AV software must be configured to exclude files/folders as defined in the Q-Tel RMS Installation Manual
- Active scanning is not recommended during operation of the Q-Tel RMS application
- If you have a technical support issue on your Q-Tel RMS System, you may be asked to remove any virus scanning software from the device in order to investigate the issue.

### Can we connect the Q-Tel RMS Software Workstations over our wireless 802.11 network?

Yes. Software Workstations can run on the hospital wireless network.

### Is your system HIPAA compliant?

Site policies and procedures need to meet HIPAA regulations. We supply basic audit logs for log on/log off by Microsoft Windows users. The Q-Tel RMS System does not provide logging information for session editing and reporting. The Q-Tel RMS application supports a final review and electronic signature of the session report before being sent to an EHR application.

### What peripherals can the customer purchase?

The Q-Tel RMS Towers, Turnkey Workstations, printers and network equipments are specified and configured by Mortara/Welch Allyn. They are classified as system components of a Class II medical device. Mortara/Welch Allyn is obligated to provide a complete working system comprised only of components fully tested and verified by Mortara/Welch Allyn in accordance with strict testing procedures. Customers can provide their own PC equipment for the Q-Tel RMS Software Workstation application.

### How does Q-Tel RMS communicate with the American Association of Cardiac and Pulmonary Rehabilitation (AACVPR) Outcomes Registry?

The AACVPR Registry provides a secure application programming interface (API) for Q-Tel RMS to transmit information directly with the registry. The API is secured both under 128-bit Secure Socket Layers (SSL) in addition to two-factor authentication. The connection session includes an inactivity timeout constraint, where a connecting system will be required to re-authenticate after 15 minutes of inactivity. Q-Tel RMS transmits data in XML format using the API's Simple Object Access Protocol (SOAP).

For more information, contact your local Welch Allyn representative or visit [www.welchallyn.com](http://www.welchallyn.com).

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