3M™ Littmann® TeleSteth™ Online Teleauscultation System

Technical Overview

The 3M™ Littmann® TeleSteth™ Online Teleauscultation System integrates into telemedicine workflows and allows two-way communication between 3M™ Littmann® Electronic Stethoscope Models 3200 located anywhere in the world. The TeleSteth™ System is available as a turnkey enterprise server deployed on your network or through a secure 3M hosted Server.

Requirements & Configuration:
- Approximately 100kbps bandwidth is required per streaming connection.
- Approximately 1MB is required per store-and-forward session.
- Requires use of a Bluetooth®-enabled Littmann® Electronic Stethoscope Model 3200.
- The TeleSteth™ System operates "out-of-band" and will function in parallel with both software and hardware based videoconferencing codes.

Additional Requirements & Configuration Details for TeleSteth™ Servers:
- The TeleSteth™ Servers can be configured for operation on an existing private, public or hybrid network infrastructure.
- Adjustable latency to accommodate a variety of network technologies.
- Requires maintenance of an SSL certificate for the server (3M will help generate certificate request).
- The TeleSteth™ System can be configured for stand-alone user accounts or integrated with an existing LDAP authentication server.

Typical Set-up Process:
- **Server Option:**
  - 3M and client IT staff discuss requirements and configuration (1/2 day).
  - Equipment procurement (up to 2 weeks).
  - 3M installs the TeleSteth™ Server Software (3 days).
  - LDAP integration (if required) (2 days).
  - Final acceptance testing (1/2 day).
  - Administrator training (1/2 day).
- **3M Hosted Server Option:**
  - The 3M Server creates real-time streams using TCP over SSL on ports 1100-1300. In order for the TeleSteth™ System to function properly, the client needs to be able to open an outgoing port in that range to our server at IP 209.204.77.90. [Typically, those ports already allow outgoing connections so standard internet connection works fine]
  - Requires purchase of software licenses.
  - Accounts can be provisioned within one-two business days of purchase.

Security:
- All transmitted data is encrypted via SSL encryption.
- All stored data is encrypted at both client and server endpoints.
- The TeleSteth™ System contains automated mechanisms to detect failed authentication & suspicious server activity and notify administrators.

Minimum Specifications:
- Windows XP SP2 or later, Vista SP1 or later, or Windows 7
- 512 MB RAM
- Intel Pentium 4 compatible or later
- 1024 x 600 graphic display or better
- USB 1.1 port or better