

How can I reduce network connection errors in my practice?

A Spring Medical White Paper

By Ken Santoro, Director Support and Operations

August 2, 2010

In today's growing need to be "connected", it is important to reevaluate your practice network setup and utilization and how your network infrastructure affects the day-to-day success of your business. It wasn't too long ago that a brief interruption in internet service or in your internal network connections was common and did impact your business. Now, a network disruption can be catastrophic to your business.

Network Connection Issues

Network connection issues are compounded in a healthcare information environment by the new requirements for interoperability between labs, other software products, other practices, governing agencies, etc., all with their own unique connectivity requirements. These new requirements put a huge burden on practices to make sure their network infrastructure is sound.

These requirements also put a burden on computer hardware. In a small business environment this is especially true since consumer grade hardware is often not designed to handle these growing connectivity demands.

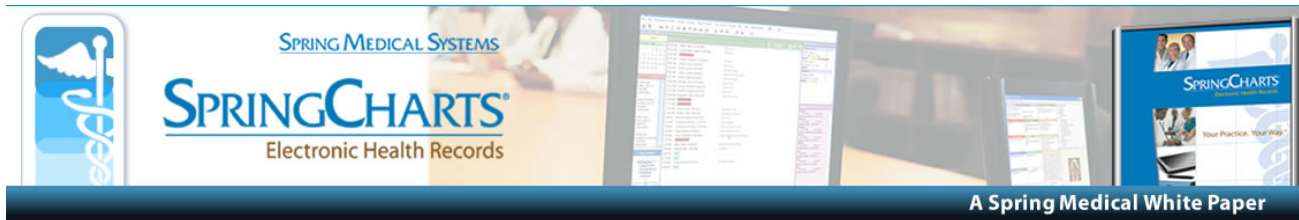
SpringCharts Falcon - Network Tolerant Design

To help minimize network problems, Spring Medical is rewriting the communications layer of the SpringCharts EHR to take into account the increased latency¹ found in most small business networks due to all of the required connectivity to outside organizations. This new version, SpringCharts Falcon, will not only be more network tolerant, it will be ARRA-ready and include many requested new features. This release will be provided at no charge to our customers with a current Maintenance Agreement or those who have an updates and upgrades contract through their resellers.

Checklist

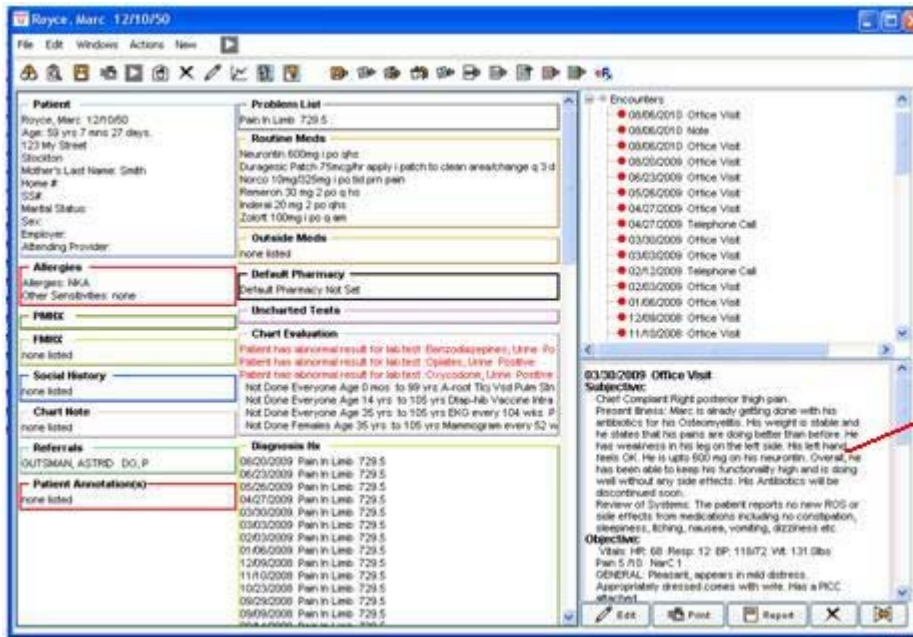
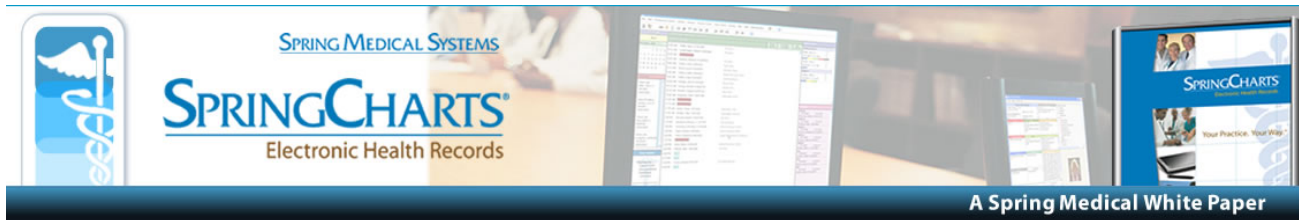
In an effort to assist our customers, Spring Medical Systems put together a checklist of best practices to help get the most out of your network and, of course, your SpringCharts

¹ In a network, **latency**, a synonym for delay, is an expression of how much time it takes for a packet of data to get from one designated point to another.



EHR. The goal is for you to have a reliable network to run all of your critical applications, thus avoiding network timeouts and disruptions in client/server communications, both of which could cause data interruptions between the client and the server or could cause the client to lose connectivity with the server.

1. If you are installing a new network, choose **Gigabit Ethernet** when given the option.
2. For wireless networks, there is a big difference between signal strength and a "clean" signal (free from interference). The Wi-Fi tools that come with all computers only show signal strength. Interference is invisible and cannot be measured without expensive equipment. Doctors' offices are very susceptible to interference, especially given the amount of medical equipment found in most doctors' offices. Therefore, locating your network ports away from most equipment, including telephones, will optimize your network's operation.
3. Steaming live music to the waiting room over the office network, while fun, takes a lot of network bandwidth and will detract from performance of software like SpringCharts EHR.
4. Choose only hardware designed for business use, not consumer or home use.
5. Ensure that all of the **power saving features** are turned "**off**" on your computers including your server.
6. Disable your firewalls (or at a minimum, exclude SpringCharts from being monitored).
7. Exclude SpringCharts from real-time virus scanning.
8. Avoid real-time backup programs.
9. When you are in SpringCharts saving and exiting an office visit note (clicking on "Done"), please keep an eye on the preview pane on the bottom right side of the patient chart. If the OV note displays in this pane, then you are ok to move on. If the note does not display here, then you may need to reenter the note information. This is a good sign that your client has lost connection with the server or some other connectivity problem exists.



SpringCharts
Preview Pane

Remember, network time runs in milliseconds. So, while on the surface your programs are running fine, behind the scenes, they could be gasping for air.

If you any questions about your network or SpringCharts EHR, please contact us at:
support@springmedical.com or +1.281.537.1377