Abstract
Design a web-based dashboard application to provide a visual representation of Aprima’s message data. The data includes time sent, round trip time, message status, alert data, and other key data for monitoring message traffic. The dashboard should provide real-time monitoring functionality, be easy to navigate, send alert notifications, and allow access to complete message details for proper troubleshooting in the event of an error or poor system performance.

Impact
• Provides frontline personnel a tool to monitor message statuses and system performance in real-time
• Reduces load on mission critical systems by limiting access to the central database architecture
• Alerts technical staff immediately of problems in the system, which provides proactive troubleshooting so customers are minimally affected
• Adds potential new features to Aprima’s medical software suite

Architecture

Results
Dashboard Summary:

Round-Trip Monitoring:

Troubleshooting Information:

Summary
A dashboard application design utilizing a RESTful Web API to present data to a web-based GUI. The backend controllers are written in C# and offer well-defined data sets to the calling application via http:get. The GUI interface is a web-based HTML page that uses Angular.js to implement graphs, gauges, and charts, as well as interactive features to enhance the user experience.