

Performance Testing for Integrated Healthcare Suite

The client is one of the nation's largest providers of release of information (ROI) services, audit management and tracking technology. After a recent merger with its competitor, the client wanted to combine the existing two platforms to make a comprehensive platform for creating secure clinical data solutions.

As part of this engagement, OFS conducted performance testing to validate that the two integrated systems could meet minimum system performance, meet response times, and handle combined data and user load to satisfy expectations for both companies' customers.

Business Benefits:

OFS created performance test scripts to validate and create the following:

- We validated that load balancing servers were properly responding to requests from different users, created the test script for patient requests, and added concurrent users to hit the application server.
- We identified memory exception errors and system crashes at a specific level.
- We created the functional patient request creation test script in the Test Complete tool for the standalone application, then ran it in different virtual machines to capture memory exception errors and system crash errors.
- We created a Load Complete test script for bulk request transmission to the integrated database and detected errors while increasing the load.
- We provided the client with an ongoing maintenance schedule that keeps the systems performing as expected.

Key Highlights

- Verified the test environment by performing the basic functional test to capture benchmark data
- Identified the data elements needed for business functions and workflow
- Built performance test cases for the business scope
- Validated four system components (Application Server Tier, Database Server Tier, Web Services & Client/Server)
- Performed performance testing for a few applications that were not client/server based
- Collected metrics like memory utilization, concurrent users load and volume testing

Technologies

- Load Complete (Web application's performance evaluation), Test Execute (Standalone application's performance evaluation)