AUTOMATING AN INTERSYSTEMS IRIS DEPLOYMENT

THE CLIENT
An American academic orthopedics practice with worldwide acclaim.

THE CHALLENGE
The client needed to modernize its infrastructure for higher performance and future enhancements to serve critical business needs. They began with a rebuild of their network and a move to two new data centers with Sirius' help. Afterward, the client deployed a new electronic health record (EHR) system using InterSystems IRIS® as its online transaction processing (OLTP) database. As the heart of a mission-critical system, IRIS would need to be hosted on responsive, reliable infrastructure capable of handling demanding workloads.

THE SOLUTION
To achieve higher performance while managing costs, and following their EHR partner’s requirements, the client and Sirius deployed their new EHR system on Intel® Xeon® processors running the Red Hat® Enterprise Linux® operating system and VMware vSphere® hypervisor. Given the criticality of IRIS in the EHR platform, it was necessary that the systems were deployed in accordance with industry and EHR vendor best practices. Sirius employed a set of Ansible® playbooks to support this need. The stability and consistency of end-user experiences depended on the effective operational management of the new platform.
In late 2019, a Sirius client decided on a transformational IT milestone—a shift from legacy data centers to two new co-location facilities that would empower them to effectively handle present and future business needs. Partnering with Sirius experts, the client evaluated their current and future needs and decided to host a new EHR on their servers alongside other critical applications and infrastructure to support care delivery and offer advantages in terms of cost and management.

The project was under way in March, 2020 as COVID-19 was declared a pandemic in the United States. “Despite the challenges of these times, the Sirius team stayed on track with the build-out of our two new data centers, the migration of our existing data centers, our network up-fits and standing up new locations, as well as dealing with our legacy environment,” said the client’s senior vice president of Technology Services. “And the Sirius team isn’t done—they’re also providing much-needed business continuity support during the COVID-19 crisis.”

Among the critical work streams in this larger effort was the deployment of InterSystems IRIS data management software. The team chose Intel® Xeon® Scalable Platinum processors to power the servers that would become the nucleus for all EHR operations. To support the mission-critical EHR, securely host protected health information (PHI) and provide a great user experience, the client and Sirius leveraged pre-built Ansible playbooks to accelerate deployment and consistently manage the IRIS environment. In addition to the playbooks, Sirius provided existing backup/refresh scripts to expedite the implementation and eliminate any duplication of work for the client. All this helped with an effective deployment and to maintain IRIS while significantly reducing time to deploy, operational overhead and consulting costs. It also eliminated the chance of end-user frustration and project delays.
THE RESULTS

- The new Intel® processors improved database response times by 20%.
- The client's data center footprint was reduced by 60%.
- The combination of Intel® and Red Hat technologies reduced complexity, making the IRIS environment easier to manage while ensuring compliance with EHR best practices.
- The solution allowed for consistent management of the environment with safeguards against configuration drift and robust audit trails for change-management needs.
- Reduced costs to manage and maintain the infrastructure with a server environment based on Intel® Xeon® Scalable processors.

SOLUTION COMPONENTS

- Intel® Xeon® processors
- Ansible
- VMware vSphere
- Red Hat

INTEL PROCESSORS SUPPORT DATABASE PERFORMANCE AND SECURITY

The Sirius solution for EHRs integrates Intel® Xeon® Scalable Platinum processors for maximum density per blade. These powerful processors are workload-optimized to support applications that require high performance and availability. Advanced features include Intel® Optane™ persistent memory to help optimize in-memory databases and Intel® Advanced Vector Extensions 512 (Intel® AVX-512), designed to accelerate data processing for excellent database performance. Hardware-enhanced security features, such as Intel® QuickAssist Technology for fast data compression and cryptography, help protect data and systems without sacrificing speed.

ABOUT SIRIUS HEALTHCARE

At every step of the healthcare continuum, and throughout the entire technology life cycle, Sirius provides best-of-breed multivendor technology solutions that help healthcare organizations improve quality of care, control costs, enhance security, comply with regulations, and extend reach to communities. Visit us online and call Sirius today at 800-460-1237 to schedule a discussion of your needs.