Case Study:
Adventist Health

Critical Issue

The computing load placed on an aging IBM AS/400 model 730 caused response times to swell, so a powerful new IBM System i model 570 was acquired to take its place.

All of the healthcare facilities supported by this system operate on a 24/7 basis, with Adventist employees accessing and updating patient charts continuously. A conventional migration from the AS/400 to the new System i model 570 was going to result in an unacceptable amount of downtime— potentially more than 20 hours.

Results

- Upgrade/Migrate While Active was used to run the new System i 570 in parallel with the existing production server.
- The setup and configuration was performed during the day while users were still on the system.
- 800 gigabytes of data were synchronized between the existing production server and the new System i model 570, with no inconvenience to users.
- MS4 clinical applications were available to every staff member at all five hospitals in one-seventh of the time originally estimated.

Business challenge

Hardware limitations strained Adventist Health's AS/400 and made sub-second response time increasingly difficult to attain. To remedy the problem, the healthcare organization acquired a powerful new IBM System i model 570.

All of the healthcare facilities connected to this server are continually open for business. Using the MedSeries4 clinical applications from Siemens Health Systems, Adventist accesses and updates patient data continuously. When Florencio Alcocer, Adventist Health's senior system engineer, calculated the amount of downtime users would face as they migrated from the old system to the new one, the result was staggering.

According to Alcocer, "The 730's dwindling performance factored into our estimate, indicating users would be offline for up to 20 hours. Once we knocked everyone off of the system, we would have had to perform a full backup. Next, we would have had to do a restore on the 570, and it could have taken much longer."

Company Name:
Adventist Health

Headquarters:
Roseville, California

Industry:
Healthcare

Business Environment:
- All of Adventist Health's facilities function around the clock
- Diverse health care operations include hospitals, clinics, and retirement centers
- Facilities can be found in California, Hawaii, Oregon, and Washington
- A state of the art data center situated in Glendale, California provides information management services for five of the network's 20 hospitals

Implementation Team:
System technicians from Adventist Health and Precisely Professional Services

Precisely Product:
Upgrade/Migrate While Active

Solution

To reduce the amount of downtime incurred during the migration process, and lessen exposure to unexpected startup problems, Adventist Health licensed Upgrade/Migrate While Active, offered by award-winning System i software vendor, Precisely.

This robust synchronization and replication engine allowed Adventist Health's new System i 570 to run in parallel with the existing production server. With the two servers sitting side-by-side Precisely's technicians accessed the 730 remotely over a secure VPN connection and installed Assure iTERA HA. The installation was completed with Assure iTERA HA installing itself automatically on the 570. "All of this was work performed during the day while users were still on the system," says Alcocer. Once they were synchronized, testing of the new 570 followed with no downtime on the production machine.

Without downtime on the production system, 800 gigabytes of data were synchronized to the 570 over the course of three evenings. "The libraries were huge and the AS/400 was already limping. Otherwise, I could have copied everything in five to six hours. There were no time-crunch issues though, and I did it without affecting users."

With both computers synchronized and testing completed, Alcocer logged active users off the old system and onto the new one. "We did this at midnight when the system starts a new admitting day," he says. Remarkably, Adventist Health's MS4 clinical applications were available to every staff member at all five hospitals in one-seventh of the time originally estimated.

According to Alcocer, "There were other alternatives, but Precisely's product was the best. We cut our downtime to a fraction of what it would have otherwise been, and eliminated some staff scheduling problems. We would have had to cover a 20-hour migration with two shifts of technicians, which would have been difficult. Being able to run the two servers in parallel Following the successful use of Upgrade/ Migrate While Active, Adventist Health now uses Assure iTERA HA to protect its business. "This insulates us from a number of failures. We recently conducted a switch test that went very well and raised everyone's comfort level." also eliminated unwelcome surprises at cutover time."

Technology used
- Precisely's Upgrade/Migrate While Active™
- Old Production Server: IBM® AS/400® model 730
- New Production Server: IBM System i™ model 570
- MedSeries4® clinical applications from Siemens Health Systems

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— Florencio Alcocer,
Senior System Engineer, Adventist Health

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