



"iTera HA for i5/OS does a great job of keeping objects in sync and bringing objects back into sync if a problem occurs. It's truly automated, self-healing, and self-correcting."

Tim Jensen, Senior Programmer/Analyst
Great Plains Communications

Business Profile

Company name:
Great Plains Communications

Headquarters:
Blair, Nebraska (U.S.A.)

Industry:
Communications

Employees:
More than 200

- Business Environment:
- Largest Nebraska-owned telecommunications provider
 - Provides local and nationwide long distance telephone service to 76 Nebraska communities, digital cable television service to 38 Nebraska communities, and local dial-up Internet access to 84 Nebraska communities
 - Communities served range in size from a population of 31 to 5,634
 - About half of the company employees live and work in the communities where they provide service

Vision Solutions Product:
iTera™ HA for i5/OS®

Critical Issue

When Great Plains Communications transitioned to a paperless service order system, the company could no longer fall back on hard copies to rebuild transactions if a system failure should occur between daily tape backups. A reliable high availability (HA) solution became a business imperative.

Results

- Monitoring and management of the HA system reduced significantly.
- Automation and ease-of-use features eased the learning curve.
- Easy to regularly test the role-swap process, and team is confident that it will reliably replicate the data.
- One emergency failover was executed quickly without a hitch, and all users were back to work in a few minutes.

Technologies

- iTera™ HA for i5/OS®
- Two IBM® System i Model 820 (production and backup machines)

Business Challenge

An initiative at Great Plains Communications to transition to a paperless service order system was the tipping point that got the company searching for a reliable high availability (HA) solution. That's because once the paperless processes were in place, the company could no longer fall back on hard copies to rebuild transactions if a system failure should occur between daily tape backups.

The responsibility for high availability at Great Plains Communications had recently been given to Tim Jensen, Senior Programmer/Analyst. Jensen read about the benefits of using remote journaling in HA solutions, and he subsequently learned that iTera HA i5/OS from Vision Solutions is built natively on remote journaling. Jensen and other Great Plains decision makers evaluated iTera HA and selected it.

"We chose iTera HA not only because it was significantly less expensive, but because it had the features we were looking for and we were confident that we would get a high level of service," said Jensen. "The iTera HA software appeared to be succinct, tidy and unified, and we felt convinced that it would reliably replicate our data, as well as allow us to regularly test and gain confidence in the role-swap process. Also, the learning curve appeared to be far easier because of its automation and ease-of-use features."



Solution

When iTera HA was installed at Great Plains Communications, the company had already purchased an additional IBM System i Model 820 to act as its backup system. For additional disaster-recovery protection, the backup machine was located at a facility ten miles away and linked to the production system by fiber-optic.

Jensen praised the minimal monitoring needed by iTera HA. "Once iTera HA was installed, I've been freed-up to spend more time on other IT projects."

Jensen and other members of the IT staff test the role-swap process nearly every month and run for a day or so on the backup machine before switching back.

"Each time we do the role swap, we better understand the process, and have the opportunity to keep others trained on the process as well," said Jensen.

Frequent testing of the critical role-swap process ensures it will be smooth when it is most needed. For Great Plains Communications, it didn't take long for this practice to pay off. In the middle of a busy workday about a year after the installation of iTera HA, the production machine did an unexpected reboot (IPL). Jensen had to quickly execute a failover, doing a manual role swap to the backup system while the production system was offline.

"Because there were so many objects open at the time of the sudden IPL, we knew the machine would be slow coming back up. Plus, we worried that since this problem was so unusual, it might repeat, and we needed to investigate the cause; therefore, we decided to failover to our backup system," Jensen explained.

The failover was executed quickly and without a hitch. Within a few minutes, all users were back to work. The company continued to operate on the backup machine for the rest of the day, giving the IT staff the time needed to thoroughly investigate the problem and be comfortable it wouldn't occur again.

Jensen said that it was good to have this experience in the middle of a busy period. "We normally test our role swap at slower times on the weekend. However, during this failover, we discovered some issues with our own internal processes, and we've had the opportunity to resolve them. If we ever have to failover again, I am confident in iTera HA."



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