Case Study: CU* Answers



Critical issue

If you supply software as a service (SaaS) to financial services organizations that operate around the clock, as CU*Answers does, you need to be certain that your applications are available. Always. And because its customers are also it's owners, CU* Answers has an added incentive to provide solutions that keep the software that customers run in-house available without exception as well.

Business challenge

Credit union members use their debit and credit cards, access ATMs and do online banking at all hours. And credit union systems must always be available to fulfill these needs, without excuses.

CU*Answers provides software applications and services to 190 credit unions that serve a total of almost 1.5-million members. It provides applications to most customer-owners using a SaaS model, while other credit unions run the software on their own systems. Regardless of the delivery model, 24x7 high availability (HA) is essential.

Operating as a cooperative, CU*Answers' customers are also its owners, which heightens customers' scrutiny of its operations. What's more, in the financial services industry, HA isn't just good business policy. It's mission critical. Stringent regulations require that all financial institutions aggressively protect their business continuity.

Hardware, software and power supplies don't always respect this need for availability. CU*Answers and its customer/owners use one of the most reliable systems on the market, IBM Power Systems running IBM i, but disasters can still happen. And, even when everything runs perfectly, hardware and software upgrades and maintenance are occasionally necessary to support evolving and growing demands. Nonetheless, CU*Answers must ensure that its applications are available no matter what.

Solution

CU*Answers has used Assure iTERA HA to help guarantee data and application availability for 10 years. This HA solution replicates data and applications from a primary server in Grand Rapids, Michigan to a backup server in Muskegon, Michigan. CU*Answers also hosts backup servers for nearly all many of its the customerowners that deploy core applications in their own production data center. In this case as well, Assure iTERA HA drives the replication between the primary and backup servers.

Client profile

CU* Answers

- Supports 190 credit unions with almost 1.5-million customers
- Approximately 4,000 user devices
- Systems run 24x7
- Heavily regulated industry
- Downtime is not acceptable

"True to our cooperative business model, we publish our availability statistics on our website for everyone to see. If we didn't have a partner like Precisely that had our back we wouldn't continue to earn the trust and confidence of our customer owners as stewards of their investment."

- Scott Collins, Vice President

In addition to its own systems, CU*Answers remotely manages the HA environment for the 10 customers that self-host their applications. It monitors and administers a total of 22 servers—11 primary and 11 backups—from a single Assure iTERA HA console. One person spends less than half a day verifying that everything is working smoothly on all 22 servers.

To say that CU*Answers takes uptime seriously would be a gross understatement. It posts downtime reports on its website, open to everyone. If it fails to meet its uptime objectives, the world knows about it. To avoid unexpected problems, it tests its system rollover capabilities two to three times a year and typically runs on the backup server for five to ten days during each test.

CU*Answers also proved Assure iTERA HA value in a real-life situation. Three years ago, after installing a new production server, the company discovered that it had a bad batch of disk drives that caused the system to fail.

CU*Answers quickly declared an emergency and rolled over to the backup server. The whole system was up and running within an hour—before CU*Answers' customers' offices opened for business that day. Operations continued on the backup system until IBM could replace the primary disk drives.

"One of the great things about Assure iTERA HA is the range of its replication suite," said Jody Karnes, CIO. "It is very feature-rich in what it can replicate, including devices, user accounts and the IFS structure. It truly can replicate a whole production environment. And the rollovers work very smoothly and quickly—typically within less than 30 minutes and much less for some applications.

Scott Collins, Vice President, noted another benefit of Assure iTERA HA. "It also allows us to do smooth technology upgrades when we need to implement new core servers both internally and across our customer-owner network."

To perform an upgrade, CU*Answers installs the new hardware, uses Assure iTERA HA to copy data and applications from the old system and keep the old and new systems synchronized until CU*Answers is ready to rollover to the new one. The resulting downtime is minimal. This strategy has been used three times over the past decade and it will be put to use again shortly when CU*Answers moves to the next generation of IBM Power servers.

Results

- · Virtually eliminates core server downtime
- · Allows hardware upgrades without downtime
- Easy to use and manage
- · Provides cost-effective high availability

Technology used

- Assure iTERA HA
- IBM i
- CU*Answers applications Hardware
- 2 x IBM Power 6 8204-E8A, 7-core (primary & backup)
- Various customer-owned Power Systems