Start-up aims for always-on Exchange

By John Fontana, Network World, 05/09/05

Back-up and recovery start-up Teneros is developing an appliance designed to help users ensure that their Microsoft Exchange environments are always available.

The Teneros Applications Continuity Appliance (ACA) for Microsoft Exchange provides a real-time backup for the Exchange mail store and the capability to transfer e-mail operations to the appliance if the Exchange server goes down or is in need of service. The appliance is in beta.

Customers can provide end users with uninterrupted access to their mail stores. The appliance works without users having to install any agents on the Exchange server or reconfigure their networks, according to company officials. Teneros remotely monitors and updates the appliance.

It works using technology Teneros developed called Instant-On, which lets ACA instantly take over e-mail duties from an Exchange server when problems are detected or a server fails. While the Exchange server is healthy, ACA continually replicates the contents of its mail store.

"Teneros replicates the Exchange information store. That is the unique factor, and it really works," says Keith Costas, director of engineering at InfoPartners, a systems integrator in San Mateo, Calif. "We have tried for years and years and years all types of solutions for Exchange backup and recovery."

He says products from Legato Systems, Microsoft and NetApps all had major drawbacks. In addition, Costas says Teneros lets him schedule general Exchange maintenance anytime, instead of just off-peak hours when the entire system had to be down. And he says rebuilding a failed server takes about 90 minutes compared with 10 to 12 hours, because Teneros holds a copy of the entire mail store.

In the event of an Exchange failure, the appliance, which sits in front of Exchange on the network, assumes Exchange's IP address to ensure that incoming mail is not dropped and users can get to their in-boxes. The ACA takes the mail it receives when Exchange is down and replicates it back to the server when it is brought back online.

"The ACA sits at the Ethernet layer. We are a pass-through; we don't intercept e-mail," says Manish Kalia, director of product management for Teneros. "When Exchange goes down, within a second we want to flip users over to the ACA. What we have is unique technology to do that switch."

Targeting downtime

Start-up TENEROS is developing an appliance to help keep Exchange environments up and running. The company will face competition from a number of vendors, although none that offer an appliance or 24X7 application continuity.

Vendor	Product	Description
Neverfail	Neverfail for Exchange	Neverfail Heartbeat replicates data between Exchange and, back-up server.
NSI Software	NSI Solutions for Exchange	Company's Double-Take technology replicates changes to Exchange data continuously.
XOsoft	WANSync Exchange, Enterprise Rewinder Exchange	Automatic failover; Rewinder returns data to pre-corrupted state.

Also unique to the ACA is Teneros' Transaction Integrity Validation real-time data verification technology, which ensures corrupt data in Exchange is not replicated to the ACA.

To harden itself from failure, the ACA has multiple independent CPUs, hot-swappable power supplies and hard disks, and hardware RAID with redundant controllers.

The ACA also includes built-in Sophos anti-virus and anti-intrusion technology to protect against worms, viruses, network-level attacks, identity spoofing and Trojans.

One ACA, which is priced starting at $10,000, is needed for each Exchange server, which can have up to 100G bytes of mail or 250 users. Teneros is also developing models for users with larger Exchange servers.

The ACA, which competes with similar products from XOsoft, NSI Software and Neverfail, supports client access from Outlook 2003, 2002, 2000 and XP, and Outlook Web Access, Microsoft's browser-based client. On the server side, the appliance supports Exchange 2003 and Active Directory running on Windows Server 2003. A version is planned that will support Exchange 2000.

The ACA is expected to be available in August.