

# NetworkWorld Reprint

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March 17, 2003 ■ Volume 20, Number 11

## Brix safeguards Aetna network

■ BY TIM GREENE

HARTFORD, CONN. — When Aetna decided that running voice over IP among some of its 100 sites could save money, the insurance giant turned to Brix Networks to monitor voice quality from an end-user perspective.

Aetna already used Micromuse's carrier-grade NetCool management platform, but that software provides a centralized view of the network, says Geof Carofino, network engineer for Aetna. Keeping the network up to par for voice required more continuous, distributed monitoring to check for delay and jitter that could degrade voice quality, he says.

Aetna has installed about 20 Cisco VoIP gateways between traditional PBXs and the WAN links that tie the sites together. If a site on average has 50 or more concurrent calls with other sites, running IP voice over the data WAN is less expensive than paying the phone company for regular toll calls, Carofino says.

Many of those WAN links are dedicated circuits, so enough bandwidth can be carved out to support voice and guarantee that delay won't become a factor in voice quality. But the company is migrating to an ATM WAN in which voice quality will depend on IP quality of service as implemented by Cisco gateways and routers. "We're moving to ATM, which is more shared than T-1s," Carofino says. "With dedicated lines we almost didn't care about monitoring performance because bandwidth was all dedicated to us."

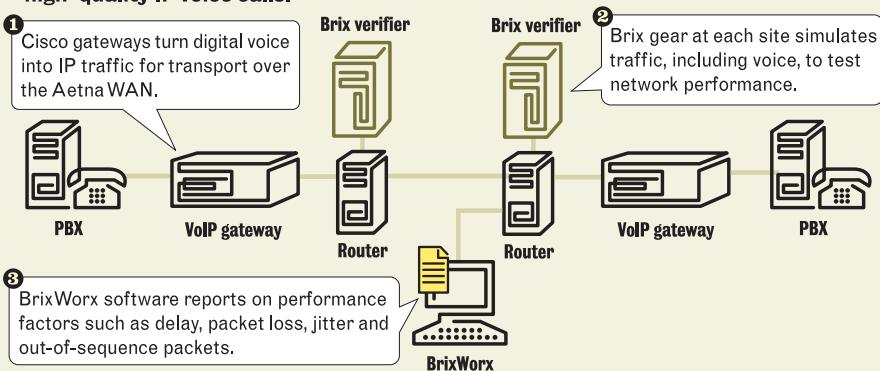
### Tracking WAN performance

To keep track of WAN performance, Aetna plugged a Brix 100 Verifier appliance into each of the 160 subnets in its network to draw a picture of performance at the desktop.

While the gear is made for service providers to verify that they meet service-level agreements, it can serve the same function in large corporate networks. Verifiers can sit on the wire in a network, monitoring traffic as it passes through the

### Aetna insures voice quality

Aetna uses Brix Networks' gear to test whether its WAN is up to handling high-quality IP voice calls.



box in both directions, or they can connect to a switch port and generate test streams. Aetna attaches them to switch ports so they have a PC-eye view of the network.

The devices generate traffic such as simulated voice calls, DNS lookups and Dynamic Host Configuration Protocol requests. The test traffic runs between the Brix 100s to a pair of Brix 1000s at the Hartford network hub. Using multiple Verifiers on the network and monitoring traffic in both directions gives a better assessment of network performance than pinging the network from one point, according to MierLabs, a member of the Network World Global Test Alliance that tested IP monitoring tools including Verifier for Network World (see [www.nwfusion.com](http://www.nwfusion.com), DocFinder: 4746).

### Centrally managed

The Brix devices report to BrixWorx software located at a corporate central site that gathers and compiles test results. BrixWorx then reports those results to the NetCool management platform. Since the Brix gear was installed last June it has discovered T-1 lines that were not performing as they should because they were misconfigured, Carofino says. Their performance wasn't bad enough to be picked up by NetCool,

but it was below T-1 standards. "That's a problem we wouldn't have known about," he says.

Aetna looked at competing products from NetIQ, Topaz and Concord, but they involved attaching PCs to the network to gather data. "There was no way we were going to implement that," Carofino says.

The Brix gear checks with BrixWorx periodically and downloads any software updates that have been posted there. The Verifiers do this automatically and reboot themselves. "It's maintenance-free," Carofino says. ■

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