

Averting mishap

Cars are getting better at avoiding collisions. Soon they may be communicating with each other too

**A jab of hope**

Vaccines may help defeat both a scourge of the poor and a rich-world affliction P II

Securing money

Dax Networks' WAN solutions are helping CAMS service the mutual fund industry efficiently

Beating odds

NIIT Technologies CEO Arvind Thakur points out that India makes a big market and an opportunity for the industry to tap into P III

**Picture perfect**

Online photo printing stores, pushing people to print their digital pictures, are gaining momentum

**Carrying the number**

A look at phone penetration across the world at the time of mobile number portability implementation P IV

Keeping money bags secure

CAMS implemented Dax Networks' WAN solution for servicing the mutual fund industry, which helped them maintain service delivery timelines

MANAGING IT

Renuka Vembu

COMPUTER Age Management Services (CAMS) is engaged in providing transaction processing and customer care services to the mutual fund industry. They have adopted advanced communication technology for servicing their clients through the service centres that are spread across all the major cities in the country.

The service delivery timelines and

work will be more easily amenable to customised infrastructure and effective to criticality and operations management," says N K Ramakrishna, vice-president, technology, CAMS, Chennai. In each of the locations, the company has now deployed 1+1 router configuration.

The pilot run and the first phase was executed in Chennai in 2005. Ramakrishna adds, "We deployed the solution in a phased manner due to the load traffic, that is, based on transaction intensity across the geography. This was the natural choice in our case, considering the huge transaction

are connected to the data centre through a multi-protocol label switching (MPLS) network. In each investor service centre, Dax has deployed dual DX-805E routers configured in 1+1 mode. DX-805E router is terminated with one high speed serial link and additional slot for voice. DX-805E has a comprehensive suite of software features built in, including routing features such as RIP, OSPF, BGP4, which is required for domain differentiation as well as VoIP software suite.

Following Dax's highly structured pilot run, the implementation went through smoothly. Dax has multi-serv-

and proprietary VBRP (virtual backup redundant protocol). This means that a futuristic setup of concurrent WAN links with multiple routers over the secured VPN networks would still benefit from router level redundancy via Dax routers.

In addition, CAMS wanted special technical and warranty support to address any critical post sales requirement across the country. They got a customer friendly SLA from Dax which further assured them of the right choice of their critical infrastructure investment.

In each of the locations, CAMS has deployed 1+1 router configuration. This redundancy in design has helped them in ensuring availability at all times. CAMS has got high price-performance and value for money solution with guaranteed critical network uptime. The pre-configured redundant router option at all the locations ensured total protection for safe connectivity. A comprehensive three year warranty backed up by stringent SLA option protects CAMS investment.

Only the product costs and bandwidth costs were the investment put in by CAMS. All the cost heads put together provided them with a solution where transaction processing achieved significant economy in terms of cost (including opportunity cost), convenience and reliability.

As the company is expanding bandwidth between its data centre and disaster recovery site, they

have started implementing 10G backbone bandwidth termination using Dax's Layer 3 switch, DX-0524GT, between these sites. Ramakrishna asserts, "This is an ongoing project. Initially, the project was implemented for a few of our locations in the year 2005. The first phase of implementation was completed by connecting 140 locations."

He adds: "As of today, the scalability of networking has increased and the number of locations being connected is more than 200. Every year, CAMS has been increasing its investor's service centre across India and Dax will continue to provide the connectivity solutions as per CAMS requirement."

As the next phase of the project, Dax will be implementing WAN solution for an additional 75 locations.

In arrangement with



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maintaining uptime 24/7 remains critical to the company. The criticality here assumes added importance because of the volatile nature of stock markets and price variations which affect the net asset value of mutual fund schemes. Timeline was a critical aspect as all of CAMS' activities were time sensitive and needed close monitoring due to the financial impact. This was coupled with the fact that the solution had to cater to the large retail investors' financial and non-financial transaction processing requirements.

The company needed a WAN solution primarily to facilitate transaction processing for investors located across the length and breadth of a vast country like India. After evaluating multiple parameters like costs, convenience, connectivity, dependability, reputation and support, they selected Dax Networks as their vendor. "The idea behind seek-

ing volumes we process every business day and its financial implications."

From then on, year after year, CAMS has been increasing its investor service centres across India. The network topology has remained the same throughout. Under this project, Dax's routing solutions have been deployed across the country in over 140 investor service centres of CAMS that are connected in real-time to their back-office in Chennai.

ice provider termination and hot standby option across two routers in each centre, and this ensures that CAMS is assured of 99.99% uptime and will be able to maintain its SLA even in remote cities at a nominal cost.

The challenges faced by CAMS fell in three broad categories—connectivity, technology infrastructure and business continuity plan. The first challenge was the need for a solution where the network downtime was zero with no manual intervention. Dax addressed this by combining cost-efficient and guaranteed uptime solution by positioning two routers in each location. While the first router handles the secured VPN link, the pre-configured second router was made available for critical link uptime, in case the primary router failed.

CAMS wanted box level redundancy in the router, which was addressed through features, viz standard VRRP