

CASE STUDY

MINISTRY OF HIGHER EDUCATION, EGYPT

ipoque Traffic Manager Plays Key Role in Reform Project Implementation

Over the past two decades, Egypt's Ministry of Higher Education has been developing and implementing, in stages, a comprehensive plan for reforming public management and enabling better administration of the higher education system throughout the country. The Higher Education Enhancement Project (HEEP) was formed to improve administrative efficiencies as well as the quality and relevance of both university education and mid-level technical education. With the PRX Traffic Manager from ipoque playing a key role by enabling IT personnel to prioritize allocated bandwidths, the ministry is well on the way to achieving all of its goals.



PROJECT SUCCESS DEPENDED ON BANDWIDTH AVAILABILITY

Between 2005 and 2008, HEEP funded a number of projects at the universities, including ones that would improve IT infrastructure, establish an integrated computer and network infrastructure, and implement and enhance the management information system. The success of these initiatives, however, would depend upon the availability of additional, secure network bandwidth.

The universities have a constant need for additional bandwidth, says Dr. Tarek El Ahmady

Eltobely, executive director of HEEP's Information and Communication Technology Project (ICTP). "We wanted to monitor their traffic and explore the behavior of various applications to determine the actual usage of available bandwidth, then optimize its utilization," he says. "These activities would help universities provide better IT services and applications to staff members and employees."

In short, the IT staff had to be able to prioritize bandwidth usage and allocate higher bandwidths to critical applications. This would require the adoption of a system for analyzing and evaluating network traffic usage by means

CHALLENGES

Reform public management and administration of universities

Meet constant need for additional network bandwidth

Integrate computer and network infrastructure

Implement dependable yet cost-effective traffic monitoring system

of application monitoring and Web traffic management. "Our challenge was to find a single solution that could meet a university's business needs and operate inside each university data center," Dr. Eltobely continues. "We needed to provide something that could work smoothly with other network-active components. Above all, it had to be stable and easy to manage and deploy." With these objectives in mind, ICTP looked for a partner who could provide a solution that would meet their requirements.

IPOQUE SOLUTION BEST MET PROJECT REQUIREMENTS

After evaluating various vendors, Dr. Eltobely and his IT staff selected Raya IT to provide the infrastructure. Raya IT won out primarily because they offered the ipoque PRX-1100 Traffic Manager, which best met HEEP's requirements while also providing advanced technology and cost effectiveness. Operating as a transparent bridge for seamless integration into existing network environments, the PRX-1100 is an entry-level deep-packet inspection bandwidth management system for link speeds up to 400 Mbit/s and policy management for 32,000 subscribers. It is particularly suitable for budget-constrained network operators who need a near-constant ROI but can't afford to sacrifice performance or reliability. Implementation of the PRX-1100 was fast and easy, completed in all 17 data centers across the universities in October 2010. Installation

at each site took only about two hours. Staff members were now able to analyze which applications were consuming network bandwidth and prioritize allocated bandwidth according to business needs.

"Two IT staff at each university spend just an hour a day reviewing network bandwidth and updating policies as required," says Dr. Eltobely. "Now we have better control over our network, and we can direct network usage to serve the business needs of our institutions."

IMPROVED NETWORK PERFORMANCE, STABILITY, RELIABILITY

Not only is bandwidth being allocated to critical applications, university users are reaping the benefits of higher-quality services. "By controlling applications such as peer-to-peer, direct download links (DDL), and Flash, we can provide suitable priority to important applications such as scientific computing, digital libraries, and Net 2.0 applications," explains Dr. Eltobely. "We now have better network performance as well as improved stability and reliability. Just by limiting peer-to-peer applications, for example, we are saving about one-third of our daily Internet bandwidth."

Pleased with ICTP's first-phase achievements, the Ministry of Higher Education is funding the project's next phase, which is scheduled to run until 2013.

THE IPOQUE SOLUTION

Efficiently and reliably monitors and manages network bandwidth

Handles speeds up to 400 Mbit/s and policy management for 32,000 subscribers

Controls routine applications while prioritizing important traffic

Provides cost-effective ROI without sacrifice of performance or reliability

KEY BENEFITS

Improved efficiency through reform of governance and management

Enhanced quality and relevance of university education

Improved quality and relevance of mid-level technical education

Ministry funding extended for continuation of project

MINISTRY OF HIGHER EDUCATION

The Ministry of Higher Education was established in November 1961 to assume the responsibilities of higher education. After the ministry was established, higher education expanded considerably throughout the country. Especially universities - in addition to state and private higher institutes, and intermediate institutes - began to spread in various regions. The Ministry of Higher Education also supervises the Academy of the Arabic Language and the National Committee of UNESCO.

• For more information: www.egy-mhe.gov.eg

IPOQUE

ipoque provides network intelligence and policy control solutions helping fixed and mobile broadband operators to better understand traffic patterns, monetize new data services and improve the quality of experience for their subscribers. Our application classification and analysis engine enables bandwidth and congestion control, prioritized quality of service delivery and detailed network visibility. Over 200 broadband operator customers in more than 60 countries across the globe rely on ipoque's policy control solution to limit equipment and operating expenditures, increase profitability and maximize subscriber satisfaction.

• For more information: www.ipoque.com