

Bank Centrally Monitors Streaming Video from Branches

Noor Islamic Bank PJSC optimized WAN bandwidth to make room for real-time surveillance video and enhance disaster recovery.

EXECUTIVE SUMMARY

NOOR ISLAMIC BANK PJSC

- **Industry:** Financial Institution
- **Location:** Dubai, United Arab Emirates
- **Number of Employees:** 600+

BUSINESS CHALLENGE

- Centrally monitor and manage real-time security and video surveillance systems
- Deliver online learning to branch employees
- Help ensure business continuity

NETWORK SOLUTION

- Implemented Cisco Wide Area Application Services (WAAS) to optimize WAN bandwidth utilization
- Used Cisco WAAS Replication Accelerator feature to increase efficiency of data replication between main data center and disaster-recovery site

BUSINESS RESULTS

- Enabled centralized command and control
- Accelerated performance of web-based employee-training application
- Improved turn-around time (TAT) for data replication at disaster recovery site

Business Challenge

Established in 2007 in Dubai, Noor Islamic Bank PJSC delivers a full range of banking, investing, financial, and risk management products and services for individual clients, small and medium sized businesses, corporations, and government institutions. To save costs, streamline processes, and meet regulatory requirements from police and other organizations, the bank decided to centralize all security operations and storage of security information, including video surveillance.

“One of the main requirements for a centralized command and control center is adequate WAN bandwidth,” says Khaldoun Alkhalidi, network operations manager, Noor Islamic Bank PJSC. The bank had planned branch WAN connections to accommodate core banking applications, not the approximately 3 to 4 Mbps of bandwidth needed for video surveillance. Even without streaming video, WAN bandwidth was 70 to 80 percent utilized. “Compressing streaming video is not practical today, so we decided to optimize all other types of traffic on WAN and use the remaining bandwidth for live video streaming and other security systems management,” says Alkhalidi.

The bank also wanted to increase the efficiency of data replication between the main data center and disaster recovery site. While the available bandwidth between the two locations was adequate for replicating existing applications, the new applications and associated database would exceed capacity.

Network Solution

After consulting with Cisco and Emircom, a Cisco Gold Certified Partner, Noor Islamic Bank PJSC selected Cisco® Wide Area Application Services (WAAS). Cisco WAAS software resides on a Cisco Wide Area Application Engine (WAE) in the data center, disaster recovery site, and in each branch office. The solution optimizes the bank's existing WAN bandwidth using Transmission Control Protocol (TCP) optimization, caching, and compression techniques.

“Cisco WAAS boosted our systems’ ability to centrally monitor video streams from our branches. Adding video traffic to the WAN has not slowed the performance of other bank applications, and in fact, users are actually reporting faster application response.”

—Khaldoun Alkhalidi, Network Operations Manager, Noor Islamic Bank

The bank uses Cisco WAAS to optimize all branch TCP traffic, including Microsoft Exchange email, file sharing, web browsing, and web-based banking applications. The Cisco WAAS Replication Accelerator feature optimizes replication traffic between the data center and disaster recovery site, including Microsoft SQL Server and Oracle data. The IT team uses the default policies in Cisco WAAS for different traffic types, and is experimenting with the optimum settings for its customized financial and nonfinancial applications.

Business Results

Optimizing all WAN traffic other than streaming video increased throughput from the existing available bandwidth. A few examples of the additional traffic the WAN now supports include management and monitoring of surveillance system, web-based employee training solutions, and enhanced data replication between the data center and disaster recovery sites.

Lower-Cost Physical Security in Branches

Noor Islamic Bank PJSC has installed video surveillance systems in branches, which transmit video streams over the WAN to the command and control center for monitoring by security personnel. "We could not have centrally monitored video streams from branches without Cisco WAAS," says Alkhalidi. "Adding video traffic to the WAN has not slowed the performance of other bank applications, and in fact, users are actually reporting faster application response."

Support for Web-Based Training

After implementing Cisco WAAS, the bank IT department received a request to deploy an e-learning solution for employee training, including Adobe Flash presentations. The business goal was to provide quality education and learning at lower cost by using state-of-the-art technology and modern tools. The 80-percent utilized WAN could not have delivered graphics and animation with an acceptable user experience. "By accelerating HTTP traffic, Cisco WAAS created an excellent user experience for our e-learning solution," says Alkhalidi. "Using Cisco WAAS for e-learning in addition to video streaming for security increased our return on investment."

Improved Business Continuity and Disaster Recovery

The Cisco WAAS Replication Acceleration feature has enabled the bank to meet its recovery point objectives (RPOs) without costly network bandwidth upgrades. "Previously, we had adequate bandwidth to replicate only critical banking application data to our disaster recovery site," Alkhalidi says. "Now, with the Replication Accelerator feature in Cisco WAAS, we can replicate more data in a short time, with accelerated recovery timelines."

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Next Steps

To further reduce the cost of delivering IT services in branches, Noor Islamic Bank PJSC plans to implement Windows Server on WAAS in certain larger offices. A Cisco WAE appliance will deliver Windows Server services, including Active Directory, domain name server, and print services. The bank expects Windows Server on WAAS to further reduce WAN traffic and to lower branch server costs.

PRODUCT LIST

Data Center

- Cisco Wide Area Application Services
 - Cisco Wide Area Engine 7341 in data center and disaster recovery site
 - Cisco Wide Area Engine 674 in large branch offices
 - Cisco Wide Area Virtualization Engine (WAVE) 574 in small and medium-sized branches
 - Cisco Wide Area Engine 512 and 574 in branch offices

For More Information

To find out more about Cisco Wide Area Application Services, visit: <http://www.cisco.com/go/waas>. To find out more about Cisco Data Center 3.0 solutions, visit: <http://www.cisco.com/go/datacenter>.



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