

Ministry of Justice Modernizes Technology Platform



Cisco and SBM play important role in major project to give Saudi Arabia legal system greater efficiency through more collaborative processes

EXECUTIVE SUMMARY

Customer Name: Ministry of Justice

Industry: Public sector

Location: Saudi Arabia

Number of Employees: 23,000

Challenge

- Remove limitations and complexities within legacy systems
- Improve the service the Ministry offers to citizens
- Simplify approach for building private cloud
- Improve services uptime and response, and speed up legal processes

Solution

- Cisco Borderless Network Architecture
- Cisco® Collaboration Architecture and Unified Communications Solutions
- Cisco Unified Data Center Architecture, pre-validated and integrated with VMware and EMC solutions
- Cisco Services and Saudi Business Machines for design and implementation support

Results

- The Ministry of Justice is now able to provide speedier, more flexible service for less money
- New server set up reduced from days to hours; network availability increased from 75 to 99 percent
- Costs avoided by shutting down more than 400 private branch exchanges, each of which had its own support contract

Challenges

The Saudi Ministry of Justice is responsible for the operation of 272 courts, 154 notary offices, and 13 administrative branches. Some 1600 judges, who are part of a staff of 23,000, handle around 1.3 million cases a year in 1000 hearing rooms.

The Ministry has historically faced challenges in processing large numbers of cases quickly, along with problems verifying IDs and providing service in remote locations. These problems were exacerbated by nonexistent or outdated network links in some locations. Data centers tended to serve local or regional offices only, hampering standardized service delivery. Finally, the Ministry faced operational costs associated with using different technologies in different locations.

Solution

The Ministry needed a wide-ranging technology upgrade, along with a redesign of court and notary processes. As a result, it embarked on a major project that included the introduction of a new information center, and new network technology and communications systems. Regarding the network element of the project, Majed Al-Adwan, director general of the computer department at the Saudi Ministry of Justice, explains: "In choosing a supplier we didn't evaluate product by product. Instead we took a holistic end-to-end approach. It was clear that Cisco® would provide the most integrated solution for our needs, when it comes to the network, data center, and collaboration technologies."

The Ministry has installed an end-to-end Cisco Borderless Network with about 2000 switches across its 400 locations. This network foundation provides interconnections with telephony services provided by the service providers Saudi Telecom and Mobily. It also helps judges and ministry officials access a range of legal applications and documentation via wired connections, or via Wi-Fi in main locations and more than 300 waiting rooms.

Cisco Catalyst® 3750 Series Switches are used as the access platform across the entire organization, while the choice of core switch is governed by the size of each site. For instance, multi-floor offices with more than 250 employees are equipped with Cisco Catalyst 6500 Series Switches, while locations with between 70 and 250 workers have Catalyst 3750 Series Switches. Network speeds likewise depend on location—ranging from 5Mbps in local offices to 50Mbps or 100Mbps in main buildings, and 300Mbps in the main data center.



“The Ministry of Justice has become one of the leaders in technology and our data center architecture is a reference model. With this massive progress in the use of technology, and unified communications services for everyone, people now feel that the Ministry of Justice is an excellent place to work.”

Majed Al-Adwan
Director General of the Computer Department
Saudi Ministry of Justice

The whole infrastructure is designed to be highly redundant and secure. Security features embedded in Cisco Integrated Services Routers provide protection at branch level, while the data center, situated away from the main Ministry building, is equipped with dedicated firewalls and Cisco IronPort® Email and Web Security Appliances.

The Borderless Network extends to the physical security infrastructure. Roughly 50 locations have a total of 800 Cisco IP cameras, with between four and 40 cameras per location. These are monitored from a security operations center via Cisco Digital Media Suite.

A Cisco Services team was also instrumental in helping to design and deploy a Cisco Unified Data Center, along with network security and physical security solutions, which was a core element of the Ministry's information center plans.

[Saudi Business Machines \(SBM\)](#) was the systems integrator that carried out the project. Ahmed Azzam, a specialist network solutions engineer at SBM, says: “We're one of the few companies in the region with the expertise and resources to do this kind of work. We were able to deploy 200 engineers and technicians to complete it within the aggressive time scale required. The number of sites involved, and the need to integrate a wide range of technologies, made this one of the most complex projects we've handled.”

Within the information center, a Cisco Unified Data Center Architecture delivers court and notary applications and serves as the gateway to the Internet for the entire Ministry. It includes seven Cisco Unified Computing System™ (Cisco UCS®) chassis equipped with 24 blades for Cisco Unified Communications and Collaboration applications, and a further 64 for general use. Switching—for both existing equipment and the new Cisco servers—uses two Cisco Nexus® 7000 Series and four Cisco Nexus 5000 Series Switches, plus 40 Cisco Nexus 2000 Series Fabric Extenders. The whole data center is virtualized using VMware technology, and the Ministry is boosting its EMC VMAX Enterprise storage.

Finally, the Cisco Unified Data Center and Borderless Network support an extensive suite of collaboration technologies. The Ministry has installed around 25,000 Cisco Unified IP Phones, including some 3500 video-enabled Cisco Unified IP Phones 8961, 9971, and 9951 models, and about 1500 cost-effective Cisco Unified IP Phones 6941. Calls are processed through a Cisco Unified Communications Manager Version 8.6 system. For the video-enabled phones, the Ministry also has Cisco MeetingPlace® licenses for internal meetings and Cisco WebEx® Meetings for external attendees.

The infrastructure also supports a Cisco Unified Contact Center Enterprise solution for up to 100 agents, along with Cisco Unified Communications Manager Auto-Attendant at local offices. The remaining agents serve various internal and external help-desk functions.

The Ministry is also deploying video conferencing across more than 40 courts, using a Cisco TelePresence® MSE 8000 Series multipoint control unit. The organization has installed 18-seat Cisco TelePresence System 3210 Series suites at three locations, 500 Series units at 20-plus locations, and Profile Series endpoints at another 20-plus sites.



“Our SBM-supplied Cisco Unified Communications solution has provided many benefits. We’ve seen a quick return on investment with savings on office telecom charges, mobile bills, and desk phone costs with Cisco Unified IP Phones which also save on moves, adds, and changes.”

Abdirashid Samater
Technical Manager and IT advisor
Saudi Ministry of Justice

Results

The modernization project is allowing the Ministry of Justice to provide quicker, more flexible service for less money. The network infrastructure also allows the Ministry to route new cases to notaries who have lower case loads, which has helped reduce the waiting time for a notary from 15 days to just one day. Network availability was 75 percent previously and has now reached at least 99 percent, increasing staff productivity.

“With Cisco UCS and virtualized servers, we are able to reduce the time needed to deliver a new service from days to a few hours,” says Al-Adwan. Furthermore, each document produced by the Ministry now has a unique identifier, making it easier to recall and process case-related information from the data center.

Through improved communications, judges are more able to share their experience and consult with each other. Delivering training and personal development is simpler and more cost-effective. Judges have time to close more cases.

With its move to Cisco Unified Communications the organization has been able to shut down more than 400 private branch exchanges, each of which had its own support contract. All local data centers have been shut down, too. This has resulted in major savings and cheaper, simplified administration.

“Our SBM-supplied Cisco Unified Communications solution has provided many benefits,” says Abdirashid Samater, technical manager and IT advisor for the Saudi Ministry of Justice. “We’ve seen a quick return on investment with savings on office telecom charges, mobile bills, and desk phone costs. Our Cisco Unified IP Phones also save on moves, adds, and changes. Now employees working at home can call colleagues in the office without incurring costs, and receive calls on their smart phones while working remotely. And they can access the full features of the Cisco Unified IP Phone system from anywhere, all they need is a broadband Internet connection.”

In the future, the Ministry wants to extend court services to include remote experts and audio-visual translation for non-Arabic speakers.

Al-Adwan concludes: “The Ministry of Justice has become a leader in technology and our data center architecture is a reference model. With this massive progress in the use of technology, and unified communications services for everyone, people now feel that the Ministry of Justice is an excellent place to work.”

Partner Profile

Saudi Business Machines (SBM) offers integrated technology solutions that are at the cutting edge of the global business landscape. In optimizing processes and facilitating transactions, SBM empowers its customers to compete in business with the right systems. Supported by decades of experience and in partnership with the world’s principal technology brands, SBM today is the leading solutions provider for companies and governmental organizations in industries across the Kingdom of Saudi Arabia.

“We worked in close collaboration with the Ministry of Justice and with Cisco Services,” says Ahmed Azzam, a specialist network solutions engineer at SBM, “to ensure a textbook implementation that met the customer’s needs.”



For More Information

To discover how Cisco can help you succeed with Borderless Networks, visit:
www.cisco.com/go/borderless

To find out about Cisco collaboration solutions, visit:
www.cisco.com/go/collaboration

For more on Cisco data centers, visit:
www.cisco.com/go/datacenter

For information on Cisco Services, visit:
www.cisco.com/go/services

Product List

Routing and switching

- Cisco Catalyst 6506 Series Switches
- Cisco Catalyst 3750 Series Switches
- Cisco 3800 Series Integrated Services Routers

Data center

- Cisco UCS Servers
- Cisco Nexus 7010 Series Switches
- Cisco Nexus 5000 Series Switches
- Cisco Nexus 2000 Series Fabric Extenders
- EMC VMAX Enterprise storage
- VMware virtualization technology

IP telephony and collaboration

- Cisco Unified IP Phone (6941, 8961, 9951, and 9971 models)
- Cisco Unified Communications Manager Version 8.6
- Cisco MeetingPlace
- Cisco WebEx Meetings
- Cisco Unified Contact Center Enterprise
- Cisco Unified Communications Manager Auto-Attendant
- Cisco TelePresence MSE 8000 Series multipoint control unit
- Cisco TelePresence System 3210 Series
- Cisco TelePresence System 500 Series
- Cisco TelePresence System Profile Series

Security

- Cisco IronPort Email Security Appliance
- Cisco IronPort Web Security Appliance
- Cisco Video Surveillance IP Cameras
- Cisco Digital Media Suite

Services

- Cisco Services



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