Infinet Wireless provides Oman's largest local bank with reliable connectivity for everyday banking services

As the largest local bank in the country, the National Bank of Oman required a high bandwidth, high value-for-money network solution reliable enough to connect its vital assets including local branches, a training center and its head office. To ensure it had a networking infrastructure it could rely on for day-to-day, unfaltering connectivity to uphold round the clock banking operations, the bank turned to Infinet Wireless and Hussam Technology Company (HTC).

Background

The National Bank of Oman SAOG (NBO) was the first incorporated bank in the Sultanate of Oman (Oman). Established in 1973 as a joint stock company to provide conventional and Islamic banking services, today NBO operates in five main segments: retail banking, treasury and international banking, corporate banking, investment banking, and Islamic banking.

NBO has over 60 branches and 173 ATMs and Cash Deposit Machines across Oman, serving a considerable portion of the country's five million residents.

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With many customers across a variety of segments all requiring secure and dependable

financial services, it is crucial for NBO to have a network that can ensure the facilitation of banking services that are convenient, accessible and trouble-free for all customers.

NBO was relying on a Free-space optical communication (FSO) network to provide its connectivity for important day-to-day banking transactions for its customers, as well as for the bank's internal operations between its branches and head office.

However, due to the limitations of the FSO network, NBO required a networking upgrade to provide connectivity to a number of bank branches in Muscat, the capital of Oman, for the daily operation of assorted banking activities such as transfers, transactions, customer services and more.

Challenges and requirements

NBO faced a number of issues with its FSO-based networking infrastructure. The challenges faced by NBO included the high cost of leasing a network from a private operator. Furthermore, there were a range of limiting factors, as, for example, laser connectivity responsiveness to extreme weather changes. Additionally, beam dispersion, interference from the sun, and disruption caused by dust storms were potential considerations, likewise receptivity of laser-based connectivity to heavy rain.

After testing a number of competitors' solutions to deploy the network, Infinet Wireless was approached by the bank thanks to the price-to-quality ratio and performance capabilities of its products and solutions. To implement the network, Inifinet Wireless worked in cooperation with the local partner Hussam Technology Company LLC (HTC).

Solution

To address the issues faced by NBO, Infinet Wireless deployed a Point-to-Point (P2P) solution in Muscat over distances between 5 and 10 kilometers. Up to three branches per device were connected to the head office using Infinet's R5000-Smn/5.300.2x63.2x23 and R5000-Mmx/3.300.2x200.2x22 InfiLINK 2x2 devices, as well as the InfiLINK XG. The InfiLINK 2x2 product family is a highly diversified family of wireless Point-to-Point products which brings together capacity up to 280 Mbps with a rich set of features and cost-effectiveness for high-capacity last mile access infrastructure.

InfiLINK XG 1000 is a range of products that accommodates escalating requirements for speed, reliability and flexibility. It can provide throughput of up to 1 Gbps over the air in 5 GHz license-free frequency bands. InfiLINK XG 1000 was specifically designed to deliver superior performance over long distances and in extremely adverse environments including nLOS and NLOS scenarios.

The last mile network used unlicensed spectrum in the 5.5 and 5.8 GHz bands. The solution worked by scanning local channels for the cleanest channels to ensure optimum connectivity delivered. It was chosen for the enhanced connectivity it provided, compared to other solutions on the market, together with the ease of installation and use. Furthermore, the solution offered an attractive costing and potential Return on Investment (ROI) for the bank.

Infinet Wireless' local partner HTC worked with the Telecommunications Regulatory Authority of Oman to ensure that the network met all regulatory standards. All private and public wireless networks in Oman require regulatory approval to be connected.

Partner

Founded in 2005, Hussam Technology Company LLC (HTC) is a leading Oman-based ICT information & communication technology (ICT) solutions company consulting, designing, integrating, deploying and managing solutions in the Middle East region.

HTC delivers reliable and cost-effective solutions in a wide range of verticals including Telecommunications, Oil & Gas, Finance, Military and Real Estate.

The company specializes in delivering Wireless and Wired Private Networks that works with clients from across a range of industries and geographies.

Mithilesh Singh, Information Communication Technology Director at HTC said up:

> ***"In partnership with Infinet Wireless, we have helped delivering a wireless network fit for the Bank's critical day-to-day operations. This was a project that required meeting the highest standards due to the sensitive nature of the bank's operations, as well as to ensure that the network met the requirements of the national telecommunications regulator. It has been a pleasure working with Infinet Wireless on this project, who showed professionalism and high-standards approach."***

Kamal Mokrani, Global Vice President at Infinet Wireless said: "This project demonstrates the adaptability of our solutions to various environments, and the dependability of them in critical, sensitive environments where data and transactions are involved. It had been essential that the network was secure and safe from malicious activity, and we're pleased to have been able to provide Oman's biggest bank with its own reliable and cost-effective network."

Results

The main benefit of Infinet's wireless solutions application was optimal connectivity – secure, reliable and cost-effective. It also helped to overcome some limiting factors, such as, for example, receptivity of laser-based connectivity, previously utilized by NBO, to heavy rain.

Requirements

- Reliable, high-performing network to interconnect two branches, a training office and the head office
- High bandwidth requirement for critical, day-to-day operational use

Solution

- R5000-Smn/5.300.2x63.2x23 (InfiLINK 2x2)
- R5000-Mmx/3.300.2x200.2x22 (InfiLINK 2x2)
- InfiLINK XG

Benefits

- Optimized Return of ROI
- Very high reliability
- Durability in weather extremes and much lower chance of interference

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