

Leading WISP Links Branches to Leading Bank

Pakistan



Customer

Prime Bank was the vision of a group of Pakistani professionals with extensive domestic and international banking and finance experience. In 1992, this group teamed up with successful, like-minded business houses in Pakistan and overseas, including a highly regarded and well-diversified business group in Saudi Arabia, and Prime Bank evolved from vision to reality.

Now, more than a decade later, the Bank's prudent and profitable operations have positioned it on the leading edge of financial services. Prime Bank combines highly efficient delivery systems with continual product innovation. Its emphasis on superior customer service and commitment to the latest information technology platform are the cornerstones of Prime Bank's overall strategy to keep it among the top global banks.

Solution Provider

A leader in wireless data communication since 1996, Data4 Networks specialises in providing solutions for traditional and WiFi networking for the ever-dynamic IT market, both nationally and internationally. Data4 Networks (Pvt) Ltd is a licensed, non-voice communications network services provider working under the regulations of the Pakistan Telecommunications Authority (PTA) and the Government of Pakistan.

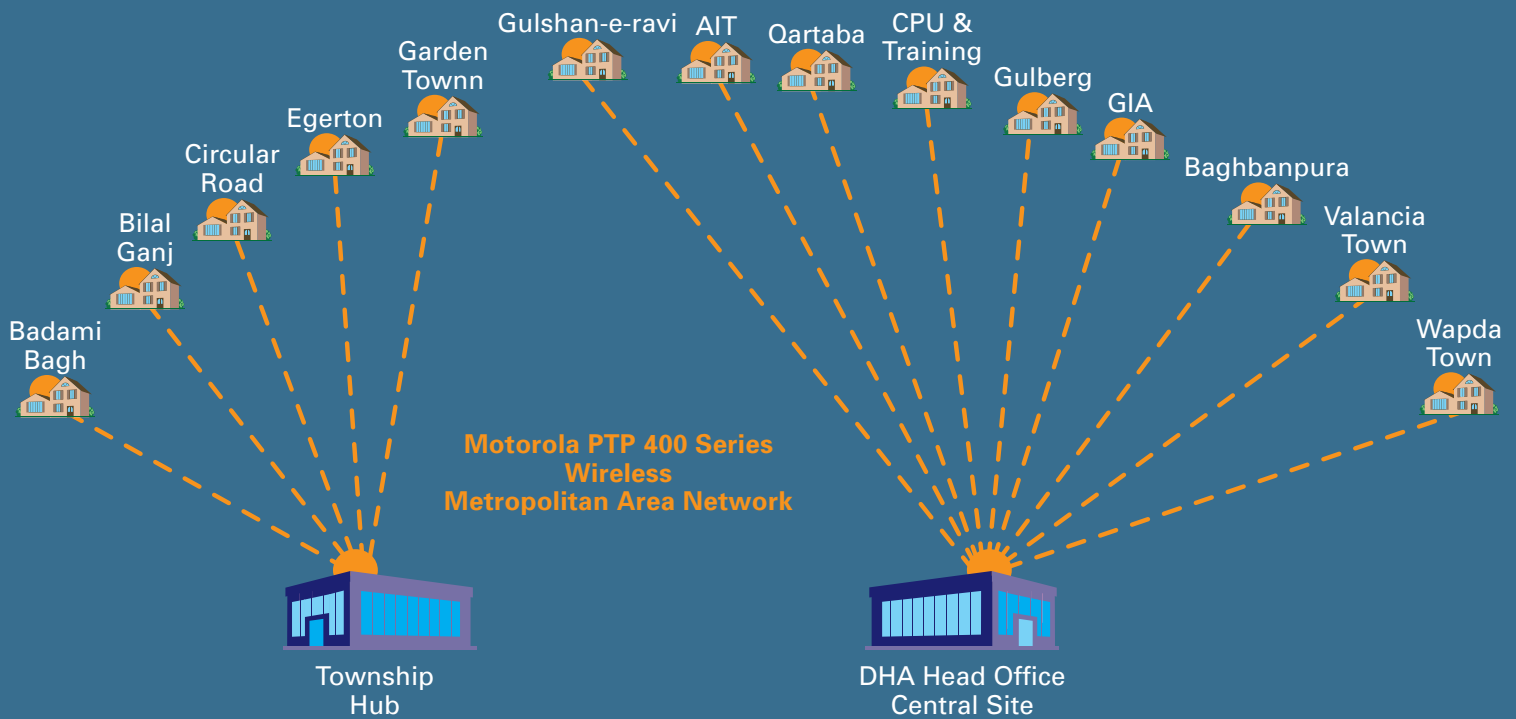
Complementing its networking and connectivity solutions, Data4 Networks was one of the first service providers to deploy wireless services commercially in Pakistan. With the biggest pool of dedicated and highly qualified technical specialists in the country, Data4 Networks offers a comprehensive range of services: System Program Planning and Management, Engineering Design, Application Engineering, Frequency Band Planning, Path Survey, Design, Network Engineering, Operations and Maintenance. The company has offices in three major Pakistani cities, including Islamabad, Lahore and Karachi.

The Situation and Challenge

Prime Bank needed to link all of its branch offices in Lahore and Karachi to the data centres in each city, providing e-mail services, Internet access and, most important, access to the bank's centralised server. It was imperative that the link be extremely secure and deliver carrier-class reliability to enable the bank to share all the banking services in their centralised server environment.

In addition, the densely urban environments posed significant interference problems, making it difficult to achieve optimum performance. Because of the interference issues and the stringent security and reliability requirements, a 2.4 GHz solution, or even a solution based on regular 5.8 GHz equipment, were not feasible.

Prime Commercial Bank, Lahore, Pakistan, Metropolitan Area Network



Technical Requirements

Point-to-point links to Prime Bank's branch offices needed to fulfill these requirements:

- Establish near-line-of-sight and non-line-of-sight connectivity, overcoming the interference and obstruction from multiple buildings within the city
- Deliver a data rate in excess of 10 Mbps in all cases
- Provide carrier-class reliability (99.999% availability)
- Eliminate single point-of-failure
- Recover quickly in the event of a disaster
- Provide centralised management
- Offer scalability for future growth

Deployment Detail and Interoperability

Data4 Networks was charged with building a virtually fail-safe communication plan for Prime Bank, with central management capabilities, scalability and maximum network reliability. A Motorola Point-to-Point Wireless

Ethernet Bridges – 400 Series solution of 5.8 GHz radios were determined to be the ideal solution because of their true non-line-of-sight capabilities, their 99.999% availability and their unique scrambling mechanism for high security. Data4 Networks used a combination of PTP 400 Series units with Integrated and Connectorised antennas to maximise antenna reach. Because of their small form factor and onboard software, the radios were deployed quickly and easily, and can be monitored remotely.

The Results

Prime Bank now has Motorola point-to-point broadband wireless links to 32 of its branch offices. Over the PTP 400 Series Integrated units, the bandwidth averages 15-20 Mbps, with an average of 20-30 Mbps over the OS-Gemini Connectorised links. Even the lowest bandwidth is more than sufficient to provide current communications and carry future applications for Prime Bank. The branch office in Lahore reports that the Motorola links have been running trouble-free for more than six months.

At the time of this installation, the products deployed were the Orthogon Systems OS-Gemini point-to-point wireless Ethernet bridges. With Motorola's acquisition of Orthogon Systems, the OS-Gemini products were renamed as the PTP 400 Series bridges. They are now part of Motorola's **MOTOwi4™** portfolio of innovative wireless broadband solutions that create, complement and complete IP networks. Delivering IP coverage to virtually all spaces, the **MOTOwi4** portfolio includes Fixed Broadband, WiMAX, Mesh and Broadband-over-Powerline solutions for private and public networks.

MOTOwi4™

"It's like getting on an eight-lane highway from a curbed city street. Motorola and Data4 Networks gave us much more than we expected."

~ Hassan Rizvi, Group Vice President, System Division, Prime Bank

Why Motorola?

- Only broadband wireless platform that could achieve the bandwidth and availability requirements of this installation due to its true non-line-of-sight abilities
- Quick and easy installation
- Extreme reliability
- Spectrum efficiency to deploy maximum number of links from single location
- Superior features to minimise support, e.g., i-DFS and built-in Spectrum Analyser, to scan down the available frequency channels and level of interference instantaneously
- High-end security options

About Motorola

Motorola is known around the world for innovation and leadership in wireless and broadband communications. Inspired by our vision of Seamless Mobility, the people of Motorola are committed to helping you get and stay connected simply and seamlessly to the people, information, and entertainment that you want and need. We do this by designing and delivering "must have" products, "must do" experiences and powerful networks – along with a full complement of support services. A Fortune 100 company with global presence and impact, Motorola had sales of US \$36.8 billion in 2005. For more information about our point-to-point products and services, visit our website at www.motorola.com/ptp.



For more information about the Motorola Point-to-Point Solutions:

Outside of North America: +44 1364 655500

In North America: +1 877 515-0400

www.motorola.com/ptp

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