



Overview

Customer NameRIO Networks

Customer IndustryTelecommunications

Challenge

To offer new and existing customers reliable communication services with significantly higher symmetrical bandwidth.

Benefit

With ZyXEL's G.SHDSL.bis, RIO was able to obtain higher speed bandwidth symmetrically, increasing capacity while maintaining flexibility. This solution allowed RIO to differentiate itself from competitors by offering their customers appealing service options.

Case Study

RIO offers higher-speed bandwidth upstream and downstream with ZyXEL's G.SHDSL.bis

Challenge

Rio Networks, a leading provider of local and long distance services, Internet access, and data communications, found interest in developing an affordable communications service that would draw new businesses and retain their existing customers. Rio saw that SMBs today drive demand for increased bandwidth. Typical high-speed DSL offerings were designed to deliver more bandwidth downstream than is made available upstream. Contrarily many SMBs require similar bandwidth needs whether downstream or upstream. Businesses use high speed Internet to share information about their company offerings, conduct videoconferences, and other high bandwidth needs requiring symmetric bandwidth. In order to continue differentiating themselves in the marketplace and to make their existing service option more appealing, RIO realized that they would have to offer higher bandwidth with symmetric Internet access. RIO's challenge was to offer Unified Communications Services that would include:

- High speed data transmission
- Voice through hosted IP PBX
- E-mail via hosted exchange
- · Two way fax capabilities
- · Unified messaging for voice mail
- Additional services

In order to generate revenue from this venture, Rio understood that they would have to provide these services at a very affordable price so that SMBs could run their business efficiently in difficult economic environments. Cost effectiveness ruled out expensive traditional T-1 access.

Solution

Rio Networks faced a challenge to offer reliable communication services with the significantly higher symmetrical bandwidth required to draw in new SMB customers and retain existing customers. To meet these challenges, Rio partnered with ZyXEL Communications. ZyXEL's product lineup includes a full G.SHDSL.bis solution ideal for Rio's SMB customer base. Rio Networks was confident that ZyXEL's G.SHDSL.bis would best suit their business application needs by offering higher-speed bandwidth whether upstream or downstream. ZyXEL's products using G.SHDSL.bis transmission methods combine the positive aspects inherent in utilizing existing copper to deliver high-speed communications with the



increased data rates at a longer reach with less noise. Rio further found ZyXEL's solution appealing due to its affordability, among numerous other benefits.

ZyXEL's solution met all of Rio Networks' objectives in their pursuit to offer a higher speed bandwidth service option to their SMB customers. While Internet services for business applications are traditionally served by T-1 lines, T-1 equipment can be very expensive both to purchase (CAPEX) and maintain (OPEX). Rio cut its CAPEX and OPEX costs through selecting ZyXEL's G.SHDSL.bis product solution, which delivered a value-competitive alternative to otherwise expensive T1 service offerings. Furthermore, ZyXEL's responsiveness and accessible US-based customer service organization helped Rio to meet its rapid deployment schedule. ZyXEL's support throughout the entire process provided Rio Networks' a smooth technology transition offering uninterrupted services to their SMB customer base at a most attractive price.

Key advantages of ZyXEL's G.SHDSL.bis product solution include

- Performance and reliability
- Full featured end-to-end QoS platform including VLAN tagging
- · Reliable remote management and troubleshooting
- Web GUI for easy configuration
- Solid US-based technical service and support
- Affordability

With ZyXEL, Rio Networks addressed the surge in demand for bandwidth by increasing capacity while maintaining flexibility. ZyXEL's solution provided Rio Networks with the opportunity to differentiate itself from competitors through offering both new and existing customers affordable updated technology bundled into appealing service options.



Product Used



P793H G.SHDSL.bis 4-port Security Gateway

- · High speed symmetric data transmission
- · 4-wire bundle for higher bandwidth and longer distance
- · Media Bandwidth Management QoS support





G.SHDSL line card SLC1248G-22

IES 5000 6.5 U Multi-Service Access Node (MSAN)

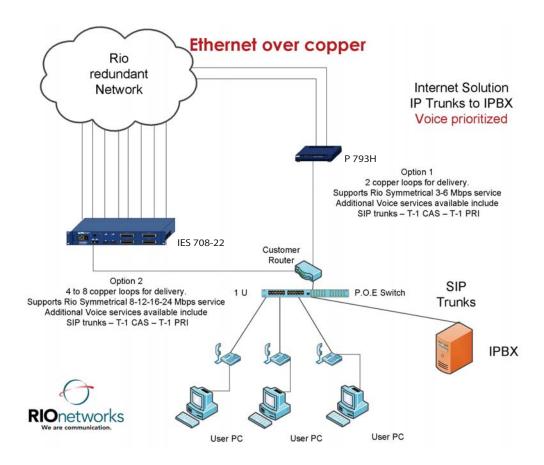
- Two management and switching cards and four Gigabit interfaces for uplink and subtending
- · U to eight slots for 72-port ADSL2+, 48-port ADSL2+/SHDSL/VoIP or 24 port
- · VDSL line cards, hot swappable
- 802.1p QoS, priority queuing, 802.1q VLAN tagging, and multicasting support



IES 708-22 8 portG.SHDSL.bis Mini IP DSLAM

- ATM based Multi-Pair bonding suport
- · Two Fast Ethernet interfaces for uplink





About RIO

RIO, a technology driven Telephone Company, provides leading edge residential and business voice, video and data services across Oregon and SW Washington. RIO is a complete solutions company to their customers'evolving and competitive needs. RIO Networks strongly believes that innovative services delivered over high speed broadband networks can have significant impact on the economic growth, community involvement, jobs, education, security, advertisement, research and entertainment of the communities they operate in. Their "Whatever It Takes" philosophy provides customers superior services, support, reliability and on time installations. For more information on RIO Networks, please visit www.rio.com

About ZyXEL Communications

ZyXEL offers reliable, end-to-end, fully-converged solutions for delivering broadband access, services and applications from the central office into the home. Our desire to build exactly what the carrier wants, our talent to deliver it, and our commitment to lifecycle support makes ZyXEL a valued and dependable business partner. With North American headquarters in Anaheim, California, ZyXEL's affordable, high-performance products include MSANs, xDSL DSLAMs and CPEs, cable access, broadband-sharing, WiMAX, VoIP and connected home solutions for a wide range of deployment scenarios. ZyXEL customers are supported by a trusted and reliable team that enables them to work without interruption.

ZyXEL's largest customers include: Embarq, Sprint, Verizon, Time Warner, Charter, Earthlink, Chunghwa Telecom, Deutsche Telekom, France Telecom, Telefónica Brazil, Telia and many others. North American distributors include KGP Telecommunications and Border States Electric. For more information, visit the company's Web site at http://www.us.zyxel.com.