Reference Case Out-of-Band Management

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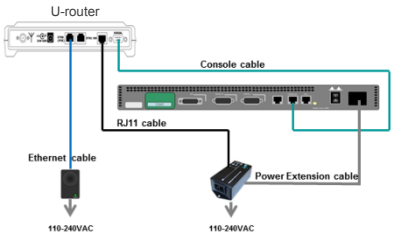
Out-of-Band Management

An international operator is offering an extensive array of managed services to its corporate customers, including a multitude of hosted applications. The customer's network is managed by a network server, managing all data, voice, mail and internet. The customer's LAN is connected to the operator's fiber network.



Services are nowadays crucial for the everyday operation of most companies. The Service Level Agreement (SLA) will therefore specify availability (uptime) of these services of more than 99,99 %.

Any malfunction in the gateway to the customer's network, i.e. network server, is a significant disturbance, severely impacting the SLA level. The issue is being compounded by the fact that most of the times, it will not be clear if the fault lies with the server or the optical fiber connection.

The solution…

A diagnostic connection to the network server, via an alternate route than the optical fiber network, is therefore indispensable. An incumbent operator may route such traffic over its own analog lines. An international operator will face the situation that the provisioning of such analog lines will be cumbersome and may take up to several weeks, impeding the start of services to the customer. Moreover, more and more "analog traffic" is routed over VoIP circuits, corrupting the traffic to and from such modems.

RFI Engineering created a solution, which would provide an independent backup channel, with fast availability and added value in the management of the gateway/network server. The U-router will monitor "managed" customer gateway/network server via the wireless nationwide network, providing an instantly available and redundant link for maintenance and support purposes. The U-router buffers the system information from the network server so events/faults can be backtracked, and provide extra diagnosis information for fast fault tracking. The U-router also features a "remote reboot" function: by control over a Remote Power Switch –another unique RFI Engineering product- the customer gateway/network server can be switched on and off. Such a reboot may clear fault situations by transient errors or network anomalies and eliminate time consuming site visits by technical staff enabling higher SLA scores.

The U-router and the Remote Power Switch communicate over the GSM or CDMA network, i.e. independent from the operational network, and therefore labeled as "Out-of-Band".

Features of the U-router

10/100 Base-T Ethernet port and RS-232 serial interface
USB 2.0 port
Complies With EMI/RFI Regulations
Relay contact for remote power control of equipment
Remotely configurable and software upgradeable
CE, WEE and RoHS Compliant
Five Bands UMTS (WCDMA/FDD). Bands: 800,850,900, 1900 and 2100 MHz
Quad Band GSM Bands: 850, 900, 1800 and 1900MHz

About the company

RFI Engineering is a leading manufacturer of programmable smart data routers, access controllers, port controllers and remote management accessories. RFI Engineering develops, manufactures and markets sophisticated products and solutions for the M2M market, which streamline business processes by enabling machines, devices and vehicles to communicate via mobile networks. As both producer and marketer of advanced cellular technology and wireless products, RFI Engineering is uniquely positioned in the M2M market.

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