



Reference Case Managed Services

THE FUTURE IS HERE. IT'S JUST NOT DISTRIBUTED YET

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An international operator is offering an extensive array of “Managed Services” to its corporate customers such as “Work place on Demand”, including a multitude of hosted applications.

Ideally the customer will be connected to the operator service center over the operators own network, which presently will nearly always be Optical Fiber (OF) networks. At the customer premises a modem pool provides access to the customer's LAN. These modems are being monitored “in band” via the OF network.

Services such as internet and email are nowadays crucial for the everyday operation of most companies. The SLA (Service Level Agreement) will therefore specify availability (uptime) of these services of more than 99,99 %. Such SLA's can be realized by e.g. redundant networks and remote operation and maintenance on 24/7 basis. A malfunction in the gateway to the customer's network, i.e. the modem, 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 modem or the OF connection.

The solution...

A back-up connection to the modem, as an alternate route to the OF network, is therefore indispensable. An incumbent operator will 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, arresting any possible management information to or from the modems.

RFI Engineering was asked to come up with a solution, which would provide an independent back up channel, with fast availability and added value in the management of the modems. Within 3 months RFI Engineering presented the G-router. The G-router will monitor “managed” customer routers/modems via GPRS, providing an instantly available and redundant link for maintenance and support purposes. The G-router buffers the system information from the router/modem so events/faults can be backtracked, and so providing extra diagnosis information for fast fault tracking. The G-router also provides an optional “remote reboot” function: by control over a Remote Power Switch -designed by RFI Engineering as a special feature- a modem can be switched on and off. Such a reboot may clear fault situations by transient errors or network anomalies and so eliminate time consuming site visits by technical staff, and enable higher SLA scores.

In more technical terms

The G-router is a universal GSM/GPRS machine-to-machine terminal. The G-router is a robust unit with integrated GPRS and Quad band GSM functionality based on the Linux operating system.

Features of the G-router include:

2x 10/100 Base-T Eth. ports
RS-232 serial interface
Quad Band GSM interface (850/900/1800/1900MHz)
SSH encrypted
Complies With EMI/RFI Regulations

Relay contact for remote power control of equipment
Supports: GPRS, CSD Data/Fax, SMS
Remotely configurable and software upgradeable
CE and RoHS Compliant

About the company

RFI Engineering is a leading manufacturer of cellular M2M products and applications. The company was founded by a group of technology entrepreneurs, recognizing the vast and growing potential of M2M markets and applications. Based on thorough competence in radio and IP technologies and a well seasoned management, RFI Engineering is in an excellent position to be the partner of choice for operators and enterprises, active in fields from managed services to wireless POS transactions, from sensor networks to smart metering.