## Platform Options

The power of Uplogix is that it combines a local directly-connected hardware platform called a Local Manager with Local Management Software built to take full advantage of this platform. Uplogix provides an array of Local Manager options to meet customer needs.

Uplogix Hardware

Uplogix 5000 Local Manager
Available in models that can manage 6, 14, or 22 devices including a managed power supply. The Uplogix 5000 is a scalable and robust local management platform for enterprises that need to manage an ever-growing infrastructure of distributed networking gear, servers and other IT devices located at remote sites, branch locations and data centers.
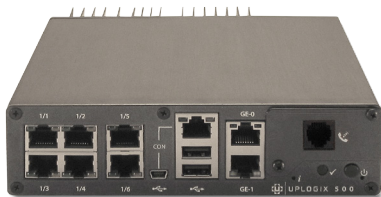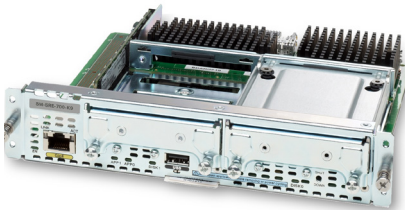

Uplogix 500 Local Manager
A full featured, compact and cost effective Local Manager capable of managing six network devices including a managed power supply. It is ideal for branch offices and remote applications where space is at a premium.

Uplogix on Cisco UCS Express

Uplogix on Cisco UCS Express is an ideal solution for customers that have standardized on Cisco hardware or that have already purchased extensible Cisco Integrated Services Routers and wish to gain the benefits of local management with a minimal hardware investment.

Uplogix uses the Cisco Unified Computing System Express as a hosting environment to embed on Cisco ISRs, making the router a full featured Uplogix Local Manager. The ISR is configured with HWIC serial port cards to allow serial port connections to up to 48 managed devices. An HWIC wireless modem is used for out-of-band access.

Platform Requirements
Uplogix is supported on the following Cisco SRE Modules and Cisco ISR G2 combinations:

Part Number	Supported Cisco ISR G2 Models				
	2911	2921	2951	3925	3945
SM-SRE-710-K9	✓	✓	✓	✓	✓
SM-SRE-910-K9	✓	✓	✓	✓	✓

CISCO PARTNER
Technology Developer

UPLOGIX

Uplogix Local Management

Uplogix is the first Local Management Platform, located with and directly connected to managed networking and communications devices, enabling IT Operations Departments to:

▶ **Lower operational expenses**

▶ **Improve infrastructure performance and availability**

▶ **Address significant existing security and regulatory compliance vulnerabilities**

With Uplogix, these goals are accomplished even while making challenging operational transitions to new computing models such as Cloud and Virtualized Computing and while exploiting services such as SaaS, VoIP and TelePresence, all of which greatly increase network sensitivity and dependence.

When systems are operating normally

Uplogix provides an array of Local Management Services that augment centralized management:

Configuration Management
▶ Reliable automated upgrades & changes to network devices with built-in automated actions (e.g. Push OS, Pull Config) to reduce human error
▶ Detailed configuration change logging for network devices and connected servers
▶ Centralized enterprise-wide reporting based on configuration parameters and actions

Security & Compliance
▶ Highly configurable and fine grained role-based administrative access with flexible password rules, multi-factor authentication and TACACS and RADIUS integration
▶ Complete activity logging including system prompts and responses
▶ Serial port session management including rule-based closing of ports

Performance & Availability
▶ Rapid detection of issues via off-network monitoring for frequent sampling without performance degradation
▶ Detailed monitoring and logging for trending and improved visibility. Explicit Service Level Verification of user experienced Internet, Network and VoIP performance.
▶ Integration with centralized systems management consoles

When problems arise

Uplogix provides Local Management Services that expedite rapid resolution and maintain security whether or not the network is available, including:

Configuration Management
▶ Uplogix SurgicalRollback™ automatically rolls back production configuration changes to prior or golden configuration if not explicitly committed in response to management system query (e.g. if technician loses connectivity as a result of a change) or if initiated centrally or by a rule
▶ Local storage of OS and configuration files provides access to 20 previous known valid configurations (network OS and configuration files) with change differencing and a built in TFTP/FTP server

Security & Compliance
▶ Maintains role-based management access control even when the network is unavailable. Flexible password rules including cached last good and "break glass."
▶ Stores all interactions and keystrokes including managed device system prompts and responses

Performance & Availability
▶ Sophisticated secure rules engine takes automated actions to recover network and/or address device faults, performing complex task sequences that normally require an on-site technician
▶ More detailed monitoring and logging, plus the ability to view trends prior to—and immediately following—issues occurring facilitates diagnosis and rapid resolution. Maintains rolling 2MB log of all console port traffic, detecting, storing and forwarding properly formatted syslog messages.
▶ Secure out-of-band connection automatically established to provide immediate centralized visibility and control. Uses an SSHv2 connection with cipher specification (allowed & preferred) and IP filtering.

Uplogix Makes
Solutions Stro

The Uplogix platf
and control of a c
functionality of n
software to auto
admin.

Since Uplogix is c
devices it manag
even when the n
out-of-band con
tion to NSM tools

System alarms, e
mance data can l
systems from the
via SNMP messag
came from the m

Co

UPLOGIX REDUCES OPERATIONAL EXPENSES

▶ Administrators are provided with consistent management interfaces in heterogeneous environments reducing the need for device-specific expertise
▶ Network device software upgrades and changes can be reliably automated with Uplogix' network independent implementation and SurgicalRollback™ features
▶ Automated problem responses eliminate much manual effort

▶ Common maintenance activities can be reliably automated including configuration changes and password resets
▶ Secure out-of-band access reduces the frequency of expensive site visits
▶ Detailed activity and change logging dramatically reduces the risk of regulatory compliance violations resulting in costly audits

UPLOGIX IMPROVE

▶ Performance and availability can be monitored intensively without degrading network performance because Uplogix connects directly to managed devices for faster problem detection and fine grained trending for diagnosis
▶ Uplogix Service Level Verification (SLV) monitors the performance of critical network services and applications from an end-user's perspective including TCP/IP communications, web-based transactions and voice over IP telephony.

form combines the access
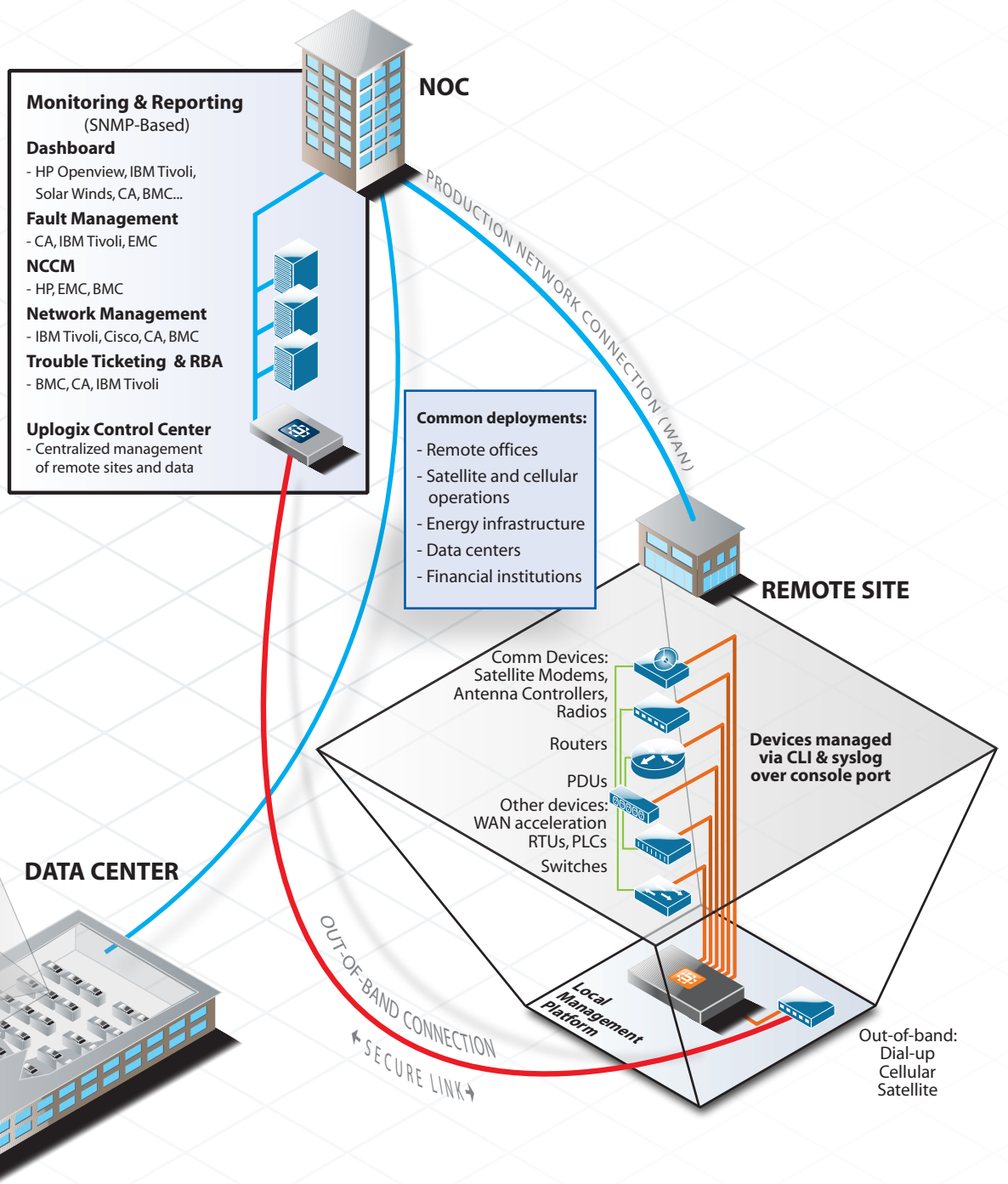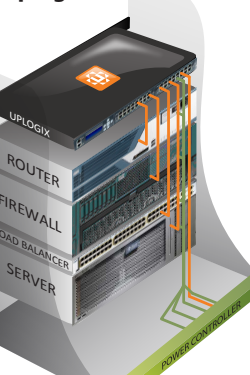console server with the
network management
mate the actions of an IT

directly connected to the
es, monitoring continues
etwork is down. An
nection delivers informa-
s in the NOC.

vents and device perfor-
be forwarded to NMS
e Uplogix Control Center
ges that appear as if they
managed device itself.

nnection Type:
- Production Network
- Console
- Power
- Out-of-band

Uplogix in the Rack

UPLOGIX
ROUTER
FIREWALL
OAD BALANCER
SERVER

POWER CONTROLLER

DATA CENTER

NOC

PRODUCTION NETWORK CONNECTION (WAN)

Monitoring & Reporting
(SNMP-Based)
Dashboard
- HP Openview, IBM Tivoli,
  Solar Winds, CA, BMC...
Fault Management
- CA, IBM Tivoli, EMC
NCCM
- HP, EMC, BMC
Network Management
- IBM Tivoli, Cisco, CA, BMC
Trouble Ticketing & RBA
- BMC, CA, IBM Tivoli

Uplogix Control Center
- Centralized management
  of remote sites and data

Common deployments:
- Remote offices
- Satellite and cellular
  operations
- Energy infrastructure
- Data centers
- Financial institutions

REMOTE SITE

Comm Devices:
Satellite Modems,
Antenna Controllers,
Radios

Routers

PDUs

Other devices:
WAN acceleration
RTUs, PLCs

Switches

**Devices managed
via CLI & syslog
over console port**

**Local
Management
Platform**

Out-of-band:
Dial-up
Cellular
Satellite

OUT-OF-BAND CONNECTION
◄ SECURE LINK ►

S SERVICE LEVELS

▶ Quickly and automatically initiate
appropriate actions to resolve issues
impacting service including detailed
diagnosis, setting changes, configuration
updates or rollbacks and even reboots and
power cycles

▶ Gain immediate, highly secure, network
independent access to all managed devices
when human intervention is required and
connectivity to a site is lost

UPLOGIX INCREASES SECURITY AND MAINTAINS
REGULATORY COMPLIANCE

▶ Apply administrative security standards to
network management by extending role-
based systems management policies to
network devices

▶ Eliminate critical vulnerabilities created
by console port access for management
by applying rule-based policies to ensure
sessions are properly closed eliminating the
likelihood of inappropriate access

▶ Maintain administrative security policies
and audit when network connectivity is lost.
Eliminate the need for unaudited access
to managed devices using "break glass"
passwords with sweeping privileges. Audit
extends to all actions including warning
dialogs and administrator responses.