Driver Options for Remote Management of Network Devices

Uplogix Local Managers (LMs) co-locate with network devices and servers to provide local, non-stop management and control eliminating time-consuming and expensive tech support trips. Through the LMs, Uplogix provides persistent connectivity to managed devices through both in-band and out-of-band channels—monitoring devices locally, performing maintenance or recovery tasks as needed, with constant enforcement of security policies. From the Uplogix Control Center, all Uplogix LMs and devices connected to them can be accessed and controlled from a single, enterprise-wide view.

Various network devices and server platforms are managed by Uplogix by integrating the device command line interface into the Uplogix unified CLI framework. This framework provides a unified common interface to manage network devices and servers. This approach not only eliminates the need for administrators to remember individual device commands, but also makes automating common management tasks easier. Uplogix provides two approaches for managing devices—native and advanced.

Native Support

Native Mode is the default state of the ports on an Uplogix LM unless a port has been configured for a specific device driver. Unsupported devices can be managed natively by using the device CLI if the device has a physical console port. Native support provides the following features:

- Secure console server access (SSH V2)
- Authentication, Authorization and Audit of the Uplogix appliance console port
- 2 MB buffer to capture all messages from console port: 1 MB each for Current and Previous versions. Admin is also able to view raw, unformatted messages for troubleshooting.
- Ability to power cycle any unresponsive device to the console after specified time (through supported third party power controllers)
- Remote power shut down (through supported third party power controllers)
- Survivable connectivity: In-band and out-of-band options for access to devices with native support even when the network is down
- Local TFTP/FTP server for config and OS files: Up to three different versions can be uploaded to the Uplogix appliance as Candidate, Current and Previous. Once the files are on the Uplogix appliance, users can access them from attached devices as they would if using a remote TFTP/FTP server. Managed devices must support TFTP/FTP to use this process.
- Run monitors at user-defined intervals against a device’s state or connection state. (The connection between the Uplogix appliance and the managed device as well as the device’s response to a ‘device execute’ command action.)
- Browser for Ethernet devices: Ability to manage devices with web-based management interface
Advanced Support

Typical device integration includes (but not limited to) the following:

- Authentication to the device (both automated and managed by the appliance)
  - Auto-logout is used for session management (i.e. the user walks away without logging off)
- Granular authorization to device commands through integration with TACACS
- Configuration management and recovery for the device
- Firmware / OS upgrade and re-imaging in event of failures
- Collection of device system logs
- Monitoring and collection of interface statistics and configuration parameters
- Reboot / power cycle
- Constant performance/ error monitoring for the device
- User session and keystroke logging
- Storage and reporting of device changes
- Collecting device syslog and console messages
- In the event of a configuration change failure, Uplogix can immediately roll the device back to the last known good configuration using the unique SurgicalRollback™ feature—an automated safety net to recover from configuration errors without requiring an on-site visit.
- Capture / parsing of POST records

Some of the enhanced value of Advanced Drivers versus Native Drivers includes:

- Pull & push config
- Pull & push OS
- Reboot
- Clear counters, Clear log, Clear service-module
- Monitor an interface
- Schedule jobs
- Clear/reset password; Change password
- Show Tech
- Rules (Defining custom automated management policies. This functionality is present in Native Support, but is not as full-featured as in Advanced Support.)

Devices Supported

Uplogix expands its device coverage through software revision of its Local Management Operating System. Currently supported devices include:

Networking & Satcom
- Alcatel OmniSwitch
- Cisco IOS
- Cisco CatOS
- Cisco ASA
- Cisco PIX
- Comtech
- Garmin - GPS Receiver
- GE
- iDirect iDS
- iDirect IDX
- Iridium
- Juniper JunOS
- Juniper ScreenOS (NetScreen)
- ND SatCom
- Nortel BayRS
- Sea Tel
- Tasman TiOS (Nortel)
- Thrane & Thrane
- Tipping Point
- 3Com

Server Drivers
- Linux Server
- Server (Generic)
- Windows Server
- Solaris Server

Service Processor Drivers
- Dell DRAC (Service Processor)
- HP ILO2 (Service Processor)
- IBM RSA (Service Processor)
- Sun ILOM (Service Processor)

MultiTech (USB Modems)

Power Controller Drivers
- APC
- Avocent
- Baytech
- Lantronix
- Servertech

Uplogix integrates with various network devices and server platforms by tying the device’s command line interface into the Uplogix unified CLI framework.

The unified common interface not only eliminates the need for administrators to remember individual device commands, but also makes automating common management tasks simpler.

Devices not currently supported can be managed natively by using the device CLI.

ABOUT UPLOGIX // Uplogix provides the industry’s first local management solution. Our co-located management platform automates routine administration, maintenance and recovery tasks—securely and regardless of network availability. In comparison, traditional network and systems management depends on the network, uses multiple tools, and remains labor intensive. Uplogix puts the power of your most trusted IT administrator everywhere, all the time.

Uplogix is privately held and headquartered in Austin, Texas. For more information, please visit www.uplogix.com.