

Preparing your network infrastructure for the Internet of Things

#### What is Local Management?

Uplogix turns network management inside out by deploying intelligent monitoring and automation to where network devices are to improve security, performance and availability. It's like having a virtual onsite technician.

Uplogix is a network independent management platform that is located with—and directly connected to managed devices. It can stand alone or augment your existing centralized management tools providing the configuration, performance and security management automation functions that are best performed locally.

The benefits are reduced operational costs, faster resolution when issues arise and improved security and compliance vs. centralized only management.

### If you aren't ready, the coming onslaught of IP-enabled devices is going to break your network

The exponential expansion of end nodes from the Internet of Things (IoT) will break the underlying infrastructure (technically or from a financial perspective) without similarly exponential improvement in managing network infrastructure. Uplogix Local Management will help enable the IoT revolution in two key areas:

- Secure administration of remote devices | Ensuring appropriate and audited access/compliance with policies at all times through secure out-of-band administrative access
- Scaling management of network infrastructure | Combining high resolution monitoring with runbook responses ensures the bulk of device issues are handed rapidly and automatically. As an onsite "toolbox" Uplogix saves truck rolls and allows administrators to implement mass config changes efficiently.

### Connecting People, Process, Data and Things

That's the promise of the IoT. Extracting information from all facets of life and collecting and analyzing that data to make decisions and take actions. The sheer number of data nodes will go beyond mere machine-to-machine (M2M) communication, but also require intelligent and automated management of the network infrastructure those billions of IP-addressed nodes rely on.

The Uplogix Local Management platform does this today. We implement automated management functionality for network and communications infrastructure, working independently of any network. High-resolution monitoring and trend analysis is combined with automated responses to the basic issues that make up the bulk of networking troubles. Uplogix delivers secure, intelligent machine-based management that enables scaling of the network management functions required to achieve the promises of the Internet of Things.

The Internet of Things is coming, get your network infrastructure ready today with Local Management.

## Securing administrative access to network devices

Uplogix connects over the console like an onsite technician to managed devices, simultaneously enhancing a remote NOC's ability to mount an effective response to issues while ensuring that security and audit is not compromised.

Flexible and fine-grained role-based administrative access allows security policies to be precisely reflected and enforced in the form of user access privileges. Rules prevent unauthorized user access by doing things like automatically closing idle console sessions, or intercepting and stopping noncompliant administrative commands, or even command sequences eliminating security gaps.

By storing encrypted device credentials only on the Uplogix Local Manager, secure, policy compliant and audited administrative access can be ensured with complete logging of all transactions for compliance requirements.

# Scaling network management to keep up with the IoT

Finding and fixing IT problems remains a time-consuming, labor-intensive and expensive process. Existing management tools are good at monitoring devices and identifying problems, but lack the intelligence and local control to actively fix problems when they occur, forcing IT staff to perform routine administration and recovery tasks.

Uplogix lowers the cost and complexity of management by diagnosing and automatically fixing common problems throughout network infrastructure. In fact, Uplogix local management can address and resolve the bulk of issues that commonly impact distributed networks such as configuration errors, nonresponsive devices and telecom hardware failures. This is how you scale network infrastructure management to support billions of nodes. Administrators are more efficient using Uplogix features like the ability to push mass config changes and upgrades without the risk that changes could result in network outages. Out-of-band automated SurgicalRollback<sup>™</sup> restores valid configurations instantly and automatically, allowing admins to focus on exceptions, rather than every site.

### CASE STUDIES: The IoT Revolution has already started



Regional bank finds that Uplogix is the answer for increasing deployment of ATMs while holding support costs down

The Uplogix Local Management platform provides the equivalent of an IT administrator in-the-box speeding deployments, monitoring devices 24x7, taking initial runbook recovery actions when needed, and serving as an onsite toolbox for remote technicians to investigate and recover issues as if they were onsite.



Uplogix helps secure and simplify management of the network that controls the transportation of energy for millions in North America

It can be argued that the convergence of SCADA and IP in the Energy Industry was the start of the IoT. Increasing numbers of sensors and control devices reporting data from thousands of miles of pipeline are only as useful as the reliability of the network infrastructure. Uplogix has reduced the number of truck rolls required to service remote networking sites while increasing network security to a key piece of national energy infrastructure.