

Out-of-Band

More than just an alternate path to remote gear, it's a smarter way to manage your network and eliminate downtime

WAN Traffic Failover- Using OOB for Primary Traffic

Uplogix can act as a backup cellular router by sharing its out-of-band cellular LTE connection with the local router/firewall/WAN accelerator.

How WAN Traffic Failover (WTF) Works

- ▶ A WAN router experiences an outage (A) that prevents it from sending local traffic back to the headquarters via its WAN.
- ▶ Both the router and the Uplogix Local Manager (LM) detect the outage. The LM brings up its LTE cellular out-of-band connection when the Pulse test fails and the router changes its default route to be the Uplogix LM (B).
- ▶ The router sends all (or select) traffic through a VPN over the cellular network back to the NOC while the WAN is down (C). The LM builds a VPN over the cellular WAN back to the NOC that is used for all network management traffic to and from the remote site.
- ▶ The router and the LM continue to monitor primary WAN connectivity. When the router detects that the WAN connection is restored, it changes the default gateway for its traffic back to the WAN. When the LM detects a healthy WAN connection, it tears down its VPN and the cellular LTE out-of-band connection, and returns to communicating over the WAN.

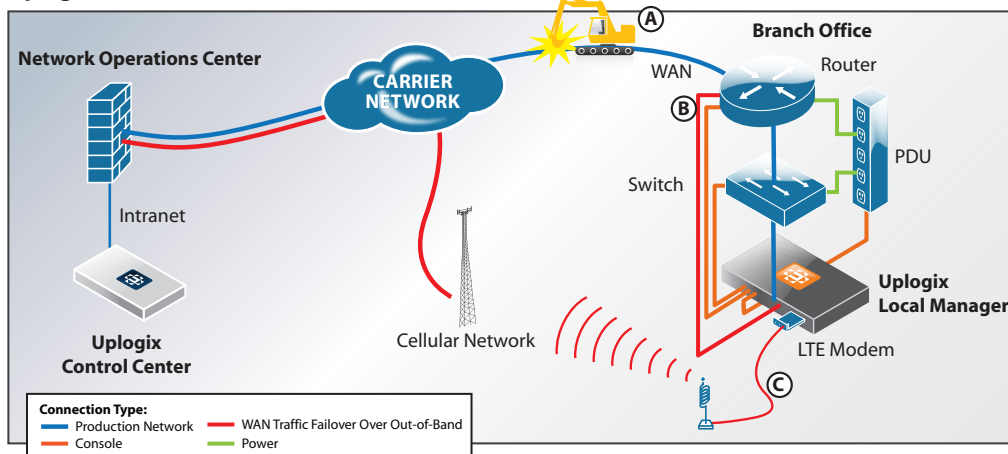
Find out more at uplogix.com.

Benefits of Out-of-Band Management

By providing persistent connectivity to the devices you need to manage, our solutions enable you to:

- ▶ Maintain management access and control over distributed locations, even when the network is down or degraded.
- ▶ With WAN Traffic Failover, user traffic continues to flow over the OOB link, eliminating downtime without the need for additional redundant networks and gear.
- ▶ Enforce security policies even during network outages to maintain compliance.
- ▶ Log all changes and the results of those changes, and inspect the logs in real-time for problems.
- ▶ Continuously monitor critical statistics and user interactions with managed devices via an always-on, serial connection.

Uplogix WAN Traffic Failover



The out-of-band connection, invaluable for network management, can also be used as a failover for network traffic in the event of losing the primary connection.

Uplogix is different from traditional out-of-band solutions

Uplogix was founded on the observation that the problem with network management is that it relied on the network itself to operate.

To really manage network infrastructure, you need to operate from an out-of-band perspective—and more than just as a remote secondary connection to devices. For Uplogix, intelligent out-of-band means monitoring devices and taking actions directly over the console port, like an onsite technician plugging in a laptop. We go far beyond traditional “dumb” console servers that sit plugged in and waiting to be useful should there be a crisis.

It's out-of-band the way you want it

Out-of-Band Categories

Uplogix uses two categories of out-of-band (OOB) methods to reach remote Local Managers (LMs):

- ▶ **Phone home:** When detecting an outage in the primary network, the LM initiates home connection automatically.
- ▶ **Dial-in:** A user manually connects to a remote LM via a secure dialer applet launched from the Uplogix Control Center (UCC.)

Phone Home

When the Uplogix Local Manager detects a network outage, it will initiate an OOB connection in order to create an alternative path back to the NOC. A variety of technologies can be used to create the OOB connections including analog phone lines, cellular, DSL or alternate networks, and satellites.

The OOB connection allows the LM to resume communication with the Uplogix Control Center as well as other network monitoring tools.

Users will be alerted when the OOB connection is initiated and the UCC will display the LM's new IP address. Users can connect to the OOB LM via SSH and will be authenticated as if the user were connecting via the in-band network.

Dial-In Overview

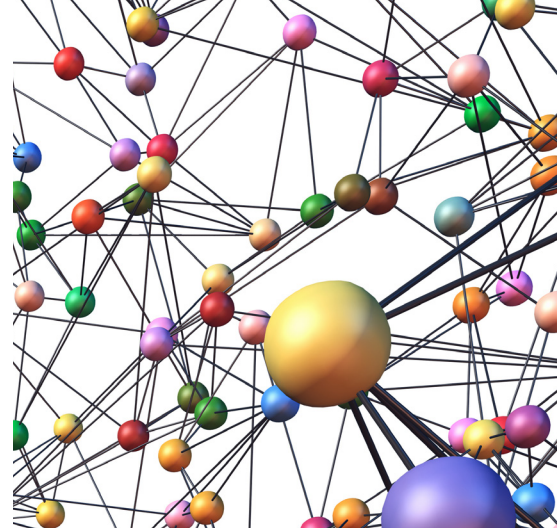
A user establishes a dial-in connection to the LM, usually due to an in-band connection failure. Then the user logs into the UCC and launches a secure dial applet for the desired LM. The dial applet runs on the user's local workstation and establishes a TLS encrypted connection to the LM via the Remote Access Server.

If normal AAA passwords are not cached, the administrator will need to define a user and password in the UCC that will exist in case AAA servers are not reachable. Once the administrator logs out of the LM, the encrypted connection between the user's workstation and the LM is torn down.

Out-of-Band Use in Multiple Secure Government Networks

For out-of-band connections to multiple secure networks, Uplogix can employ Enhanced Mobile Satellite Services (EMSS). This capability is provided by DISA, and features global data transfer and securable voice communications.

Uplogix OOB using EMSS utilizes the Router Unrestricted Digital Information Connectivity Solution (RUDICS/Apollo), allowing devices in the field to connect to servers using IP.



Out-of-Band Options

Out-of-band connectivity through a variety of options including dial-up, cellular, fiber or satellite modems provides a reliable management connection to remote gear.

There is also a secondary Ethernet connection that can be used for an out-of-band connection such as a DSL modem. This connection can also route primary traffic using the WAN Traffic Failover feature and a high-bandwidth OOB connection like an LTE modem.

For more information on the out-of-band methods described here, or using satellite connections for out-of-band such as Iridium or Inmarsat, please visit Uplogix.com/support.

ABOUT UPLOGIX // Uplogix provides the industry's first local management solution. Our collocated 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.

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