Managed Out-of-Band Technology Service Description

Overview

This document provides information relating to the management and monitoring of Out-Of-Band technology under the standard MCN offering. The monitoring, configuration, limitations, and available service requests are outlined hereunder.

Out-of-Band (OOB) management provides organizations with a secure, remote connection to their IT network environment during outages or disruptions in communications to the primary WAN/LAN connection.

This is accomplished through the use of serial console servers (sometimes called terminal servers) which provide an alternate path of remediation for critical network devices through a separate management plane. Often, connectivity to this management plane is achieved by means of a 5G, 4G/LTE, DSL, wireless, fixed wide area network (fixed lease line) or other similar connection.

This ensures organizations have uninterrupted availability and resilience to their network devices. Implementing Out-of-Band management is simple and is done by placing console servers at each location and connecting them to routers, switches, and other key hardware providing an alternative path to the management plane for the network. Throughout this document, any reference to "WAN" refers to a 5G, 4G/LTE, DSL, wireless, fixed wide area network (fixed lease line), fiber optic or similar link that provides network connectivity between two or more devices.

NTT's WAN Carrier Circuit Coordination offering may be optionally included when subscribing to this technology. Consult the WAN Carrier Circuit Coordination Service Description for more information.

Client Responsibilities and Prerequisites

In addition to the pre-requisites documented in the MCN Statement of Work, the following technology specific pre-requisites are applicable.

- Each site that needs Out of Band Management (OOBM) must have a hardware device present onsite.
- Include specific serial interfaces/cables for each technology providing the OOB connectivity.
- Any faults against non-fixed line circuits such as 5G, 4G LTE / cellular links will need to be raised directly by the client with the Service Provider.

Technology Descriptions

Out of band management is supported by NTT to provide the capability to reboot or manage client's end point devices at remote sites even when the primary path for network connectivity is broken, or a device becomes un-responsive through the primary path of connectivity.

OOB is a backup management mechanism, rather than a regular standard connection mechanism to connect to device consoles via SSH/HTTP. It is to be used when a connectivity issue prevents NTT from normal device administration (e.g., frozen and requires remote device reboot or config change).

The solution allows for terminal-type access to the managed environment and will allow NTT support teams to troubleshoot and resolve connectivity issues along the primary connectivity path and or other CI related outages while the primary NTT Management platform connectivity has failed. Standard access management policies apply for accessing the OOB device.

Technology Specific Operations

Monitors

The following technology specific monitors can be configured by default.

Monitor	Description	Alerts	Performance Info	Resolution	Poll Interval (sec)
Interface Status	Check interface's status	✅	N/A	Engineering Teams will diagnose and try to resolve the issue, and escalate to the Client if needed	60

Configuration Management

Device configuration backups are included in the standard offering and are described in more detail in the MCN Managed Configuration Backup Service Description

Firmware Maintenance

There are no specific requirements for firmware maintenance of the technology. Firmware maintenance is administered in accordance with the standard MCN processes. Refer to the MCN Common Network Management Service Description for further information.

Supported configurations.

The following management are supported for OOB devices.

- Reactive and Proactive incidents of the OOB device
- Troubleshoot / resolve an existing incident / issue or new incident / issues that have been reactively reported.
- Incident response
- Incident diagnosis

The following environments, also referred to as "Sites", are supported:

- Client premises
- Client on-premises data center
- Colocation data center

Limitations

- Any monitoring or management of the Carrier Network Termination Unit (NTU).
- Incident restoration of WAN connections and or WAN circuits
- Incidents resulting from performance degradation.
- Any SLAs related to the WAN connection and or WAN circuits.
- Any Service Requests relating to the WAN connection and or circuits (Adds / Moves / Changes)
- Any billing related enquiries and requests relating to the WAN connection and or WAN services.
- Any other functionality of the device, for example Routing, Switching, Firewall capabilities will not be supported. i.e. the device will only be supported for providing an Out-of-Band (OOB) management service.
- Any monitoring of BAU (Business as usual) devices through the OOB network is not supported. NTT will make use of the OOB network for device management and administration when the primary path is down.
- Any devices being managed by the OOB network, (i.e., in case of primary management path being down), will not have any pro-active incident management. NTT will not be able to monitor and alert on the devices that are down when the primary path to the device is down.
- Any faults relating to non-fixed line circuits such as 5G, 4G LTE / cellular links and or circuits.
- OOB connection is only a backup mechanism to connect to device consoles via SSH/HTTP/ Telnet / HTTPS rather than a BAU (Business as usual) mechanism. This cannot be used as a primary path connection to devices at the client site.
- Static IP addresses will be configured between the NTT Management platform and OOB devices to allow for connectivity and monitoring of the OOB device back into NTT. The solution will not be able to support any solution making use of dynamic IPs.
- The tasks, features and services listed in this document are excluded from any underlying infrastructure hosting virtual Out-of-Band appliances.

Service Requests

A list of service requests available for this technology can be found in the MCN Request Catalogue.

Technology Transition Tasks

No technology specific transition tasks are required. A description of the standard transition tasks included for the service offering is documented in the MCN Statement of Work