

Managed Non-Standard Device Management Technology Service Description

Overview

This document provides information relating to the management and monitoring of Non-standard devices (NSD) under the standard MCN offering. The monitoring, configuration, limitations, and available service requests are outlined hereunder.

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.

The Client is responsible for

- All standard management operations on the device such as:
 - Moves, Adds, Changes and Deletions on the device, including any configuration changes, or software or firmware patching or updates.
 - Any configuration backup that may be required for the device type.
- Providing a run book that NTT DATA operations engineers can use in an attempt to respond to alerts and resolve incidents related to the device.
- Providing an escalation procedure and matrix that NTT DATA can use to escalate Alerts or Incidents related to the device.
- Providing access to device specific documentation, such as SNMP and operational related information, which allows NTT DATA to develop monitoring data sources for the device(s) that require such development and to which this has been agreed to in writing.
- Active device Vendor Support Contract, with authorization for NTT DATA via a Letter of Authorization, to facilitate engagement between the vendor and NTT DATA when required.

NTT DATA requires the following in order to deliver the service;

- Remote Access - NTT DATA must have access to the device(s) to be managed. This is described in more detail in the Managed Campus Statement of Work.
- Procedures / Run Books – Required where NTT DATA has agreed to manage the device(s) via SNMP. These process flow documents are used to attempt to resolve Incidents when they occur, and for escalation when they don't. The client is responsible for the creation and definition of these run books . NTT DATA will review and accept / reject, however the process flow is the responsibility of the client.
- Device documentation - These documents detail information about the device, and the way in which a monitoring tool can interact with. As an example, SNMP MIB information.
 - In order for this service to function the device(s) to be managed must support at a minimum, an ICMP ping.

Technology Specific Operations

Monitors

By default, device(s) will be monitored on a 24x7x365 basis using ICMP protocol (ping) to validate the status of the device. Where it has been agreed to monitor devices using SNMP, the Client will select the key parameters to be monitored and the associated alerts for any error condition that may be triggered, based on the pre-defined list provided hereunder by NTT DATA.

NOTE: The monitors available will be subject to their availability on the underlying device and by NTT DATA platforms.

Monitors are used to monitor the physical health of the device. The following pre-defined monitors are provided, subject to availability and support, of the underlying device(s) under management by NTT DATA platforms. These monitors are only applicable for devices that NTT DATA has agreed to monitor using SNMP in addition to the default ICMP ping.

Monitor	Description
CPU utilization	Measures the instantaneous CPU utilization of the device
Memory utilization	Measures the use of RAM and swap (if available) on the device, and tracks any faults
Storage utilization	Measures the percentage of disk space used on the device
Interface status	Measures the device interface status
Interface bandwidth utilization	Measures the bandwidth utilization on the interface
Availability / Uptime	Measures the device process queue and availability status

Configuration Management

Device configuration backups are excluded from the offering. Clients are responsible for ensuring that the device configurations are periodically backed up and that such backups have been successfully completed. NTT DATA proposes that a weekly configuration backup schedule is implemented.

Firmware Maintenance

Firmware maintenance of these devices is excluded from the service offering. Clients are responsible for updating and patching the software on these devices.

Supported Configurations

The following configurations are supported under the offering:

- Standalone devices. i.e. a single device.
- High Availability or Clustered devices. i.e. Two or more devices configured in a highly available (HA) or clustered topology using the specific vendor provided HA or clustering feature. Alerts related to this configuration may refer to individual members of the cluster (or HA pair), or the cluster (or HA pair) as a whole.
- Virtual devices. Virtualized network devices running on an underlying private or public cloud service.

Limitations

- Only the specifically named devices that have explicitly been agreed to during the pre-sales engagement with NTT DATA will be monitored via SNMP.
- Devices that rely solely on API integration for monitoring or management of the health, performance and availability thereof, are excluded under this Service offer.
- The tasks, features and services listed in this document are excluded from any underlying infrastructure hosting virtual appliances for the technology in question.
- Run books provided by the Client must be short, concise and clear to follow. The content should not require more than thirty minutes to consume.
- Where run books are defined, NTT DATA will follow the procedures outlined in the run book to attempt the resolution of an incident for up to thirty (30) minutes, where after the incident will be further investigated by the relevant NTT DATA resolution team, however, if NTT DATA is unable to resolve the incident using the client's provided run book(s) the incident ticket will be escalated to the client for resolution.
- If no run book has been provided, NTT DATA will escalate all alerts and incidents to the client for resolution unless a written agreement that NTT DATA will resolve such alerts and incidents, has been recorded.
- For each monitor, or group of monitors in place, a corresponding run book and escalation matrix must be defined and provided by the client (a single run book and escalation matrix can be used across multiple monitors).
- NTT DATA engages in a fair use approach to resolving incidents under this offering. Three incidents monthly per devices are included in the offering and any incidents exceeding this criteria will be evaluated and billed on a time and material basis.
- The following are excluded from the service offering:

- Service Level Targets for any device(s) managed under this offering.
- Moves, adds, changes or deletions for any device, including any configuration changes.
- Software or firmware patching or updates.
- Backup of the configuration of any device.
- Reporting for any device including the NTT DATA standard portal dashboards and other any regularly scheduled reports.
- Any advanced reporting services including recommendations relating to the availability, capacity and performance of the device(s).

Note:

Consult the MCN Statement of Work to validate the entitlement applicable to the devices managed under this offering.

Service Requests

No service requests have been defined for this offering.

Technology Transition Tasks

- Readiness assessment, gathering of Client environment information.
- Creation and deployment of monitors for the specific device, including configuration of alerts.
- Documentation of the device configuration and associated monitors in NTT DATA's CMDB
- Receipt of the Client's alert escalation process documentation and incident resolution runbook documentation.
- QA testing to ensure monitoring configuration is correct and alerting is responding as expected.

Note:

Any tasks not explicitly described under the Technology Transition tasks are implicitly excluded from transition.
