

# Managed DNS DHCP and IP Address Management Technology Service Description

## Overview

This document provides information relating to the management and monitoring of DNS, DHCP, IP Address Management (DDI) under the standard MCN offering. The monitoring, configuration, limitations, and available service requests are outlined hereunder.

## Client Responsibilities and Prerequisites

There are no technology specific pre-requisites required, however, a description of the standard pre-requisites for the offering are documented in the MCN Statement of Work.

## Technology Specific Operations

### Monitors

The following technology specific monitors can be configured by default.

Monitor	Description	Alerts	Performance Info	Resolution	Poll Interval (sec)
Interface	Check interface's status	✔	N/A	Engineering Teams will diagnose and try to resolve the issue.	60
Disk Usage	Check disk usage	✔	Percentage of disk space utilized	Engineering Teams will diagnose and try to resolve the issue.	300
Replication Status	Check replication status of node	✔	N/A	Engineering Teams will diagnose and try to resolve the issue.	60

### DNS Monitors

Monitor	Description	Alerts	Performance Info	Resolution	Poll Interval (sec)
DNS Server Status	Collects server status, zone and query metrics for DNS servers.	✘	N/A	Engineering Teams will diagnose and try to resolve the issue.	180
HTTP status	Monitors http page (port 80) load time and response status.	✔	Validation of http port status and response	Engineering Teams will diagnose and try to resolve the issue.	60
HTTPS status	Monitors SSL encrypted http page (port 443) load time and response status.	✔	Validation of https port status and response	Engineering Teams will diagnose and try to resolve the issue.	60

**IPAM Monitors**

Monitor	Description	Alerts	Performance Info	Resolution	Poll Interval (sec)
DHCP Pools	Collects the pool size and number of free addresses for DHCP pools managed by an appliance.	✘	N/A	Engineering Teams will diagnose and try to resolve the issue.	300
DHCP Server Status	Collects server status and lease request rate for DNS servers.	✘	N/A	Engineering Teams will diagnose and try to resolve the issue.	180
DHCP Subnets	Collects the subnet size and number of free addresses for subnets managed by an appliance.	✘	N/A	Engineering Teams will diagnose and try to resolve the issue.	300
HTTP status	Monitors http page (port 80) load time and response status.	✔	Validation of http port status and response	Engineering Teams will diagnose and try to resolve the issue.	60
HTTPS status	Monitors SSL encrypted http page (port 443) load time and response status.	✔	Validation of https port status and response	Engineering Teams will diagnose and try to resolve the issue.	60

**BloxOne Monitors**

Monitor	Description	Alerts	Performance Info	Resolution	Poll Interval (sec)
DHCP Servers List	Provides DHCP Server IP, details such as version, id, host tags output, DHCP Servers OS version etc.	✘	N/A	Engineering Teams will resolve the issue.	300
DNS Host Objects	All the details related to DNS Servers.	✘	N/A	Engineering Teams will diagnose and try to resolve the issue.	300
Infoblox Services List Status	Lists all services with their service type with status details, The Services API is used to manage the Infrastructure Service resources.	✔	Validate the operational status of the services	Engineering Teams will diagnose and try to resolve the issue.	300
IPAM IP Space utilization	IPAM space details.	✘	N/A	Engineering Teams will resolve the issue.	300
Subnet IP utilization	Subnet with each IP utilization (IPV4 Utilization Report)	✘	Allocation of IP addresses within an IP Subnet	Engineering Teams will diagnose and try to resolve the issue.	300
HTTP status	Monitors http page (port 80) load time and response status.	✔	Validation of http port status and response	Engineering Teams will diagnose and try to resolve the issue	60

Monitor	Description	Alerts	Performance Info	Resolution	Poll Interval (sec)
SSL Certificates	Monitors SSL validity information across all common SSL ports.		Validation of certificates	Engineering Teams will resolve the issue	1800

### Configuration Management

Device configuration backups for the on-prem device management solutions, are included in the standard offering and are described in more detail in the MCN Managed Configuration Backup Service Description.

The DDI SaaS solutions are full stack SaaS offerings, therefore device configuration backups are inherent to the solution and are executed automatically with the built-in toolsets to the SaaS Solution Cloud. All configuration backups are stored in the Cloud itself as part of Management Orchestration.

### Firmware Maintenance

There are no specific requirements or demands for the technology for on-prem device management solutions. Firmware maintenance is administered in accordance with the standard MCN processes. Refer to the MCN Common Network Management Service Description for further information.

The SaaS DDI solutions have an inherently automated firmware maintenance process and is included within the SaaS Solution. Firmware schedules and frequencies are determined and managed by the SaaS Solution vendor. For further details in this regard refer to the vendor’s relevant documentation.

### Supported Configurations

- Single DDI appliance i.e. a standalone physical and or virtual appliance.
- High Availability and or clustering DDI configurations (e.g. clustering, NFT - two or more appliances of compatible models in an active/passive configuration, both connected at the same time (failure recovery can be manual).
- The following environments, also referred to as “Sites”, are supported:
  - Client premises
  - Client on-premises data center
  - Colocation data center

### Limitations

- Any subscription-based service configuration, DNS firewalling or any other security features associated with DDI are excluded.
- IP address, DNS and DHCP design are excluded from the service.
- The tasks, features and services listed in this document are excluded from any underlying infrastructure hosting virtual DDI 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.