#### **Oracle® Communications Network Integrity**

**Release Notes** 

Release 7.4 F93104-01 July 2024

### **Release Notes**

This document provides information about Oracle Communications Network Integrity Release 7.4.0.

This document consists of the following sections:

- Software Compatibility
- Network Integrity 7.4.0 New Features
- Fixed and Known Issues

See Oracle Communications Service Catalog and Design Release Notes for the release notes for the Design Studio for Network Integrity feature.

See *Network Integrity Licensing Information User Manual* for license and dependency information for Network Integrity components and cartridges.

### Software Compatibility

See *Network Integrity Installation Guide* for more information about software requirements and compatibility.

### Network Integrity 7.4.0 New Features

Network Integrity 7.4.0 includes the following new features and enhancements:

- Support for DWDM, SDH, MW, RAN, IP, and OTN Networks through Domain-Based Reference Cartridges
- Support to Run Groom and Rehome Operation for SDH and DWDM Networks
- Enhancement in NMS Listener for SDH and DWDM Networks
- Support for SAML 2.0 based Single Sign-On (SSO) with NI
- Support to Discover Nodes and Notifications from NMS in TMF814 Discovery Cartridge
- Support for Discovering Devices from Multiple Networks Using Enhanced SNMP Cartridge



- Support to Filter Discovery and Import Scans by Device and Equipment Specifications
- Support for Discovery, Discrepancy Detection, and Reconciliation of RAN and MW Network Devices
- Support to Recognize Usage of Contiguous Slots by a Card in NI
- Support to Encrypt Passwords for SNMP V3 Credentials
- Support to Discover SDH TP Links, Trails, Tunnels and Services using File Based Discovery Cartridge
- Support to Reconcile and Import SDH Connectivities in UIM
- Support to Discover and Reconcile Subnetworks in UIM for DWDM Connectivity
  and Service
- Support for Discovering Impacted Resources from Notifications in SDH and DWDM Networks
- Support to Use NMS and EMS as Scan Parameter
- Support to Synchronize Reconciled Entities in UTIA
- Support to Discover and Reconcile Entities in IMS Network
- Support to Discover and Reconcile Entities in DWDM Networks

## Support for DWDM, SDH, MW, RAN, IP, and OTN Networks through Domain-Based Reference Cartridges

Network Integrity 7.4.0 now supports the discovery of the following physical and logical entities, and manage them (create, add, modify, and delete):

- STM Link Connectivities
- Trails
- Tunnels
- Topological Links
- Services, such as MOT, VPLS
- OTS Topology
- OMS
- Och
- OTU/Cn
- ODU/Cn
- ODUFlex
- IDU resources
- Client service
- DWDM network entities: Physical device, Chassis, Shelf, Card, Port, Interface/ sub-interface



• IMS Domain network entities: NE, Frame, Module, Shelf, Port, Interface

NI uses multi-threading to reduce scan duration and use resources more efficiently. This allows for the discovery of both logical and physical entities from the network while also importing data from the inventory.

## Support to Run Groom and Rehome Operation for SDH and DWDM Networks

Network Integrity 7.4.0 allows you to initiate groom and rehome operations to move services between devices and interfaces in SDH and DWDM networks in Unified Inventory Management (UIM). Once the groom and rehome operations are completed, NI updates the discrepancies in end points of physical and logical connectivity found between discovery and imported scan data.

See FTP SDH Logical Resource Discovery and Assimilation Cartridge Guide and CORBA Based DWDM Layers and Service Discovery and Assimilation Cartridge Guide for more information.

#### Enhancement in NMS Listener for SDH and DWDM Networks

NI 7.4.0 now supports a Network Management System (NMS) Listener for SDH and DWDM networks that captures all notifications from physical and logical devices and saves them to the database. You can start or stop the NMS Listener or check its status.

See Optical TMF814 CORBA Cartridge Guide for more information.

#### Support for SAML 2.0 based Single Sign-On (SSO) with NI

You can now use Security Assertion Markup Language 2.0 (SAML 2.0) protocol to implement Single Sign-On (SSO) and Single Log-Out (SLO) in NI. You must use an Identity Provider (IDP) to configure SAML 2.0.

See Configuring Network Integrity to Enable Authentication using SSO/SLO and IDP using SAML in *Network Integrity Installation Guide* for more information.

## Support to Discover Nodes and Notifications from NMS in TMF814 Discovery Cartridge

The TMF814 discovery cartridge now discovers nodes using NMS notifications from devices, instead of performing a full discovery scan.

See Network Integrity Optical TMF814 CORBA Cartridge Guide for more information.

Support for Discovering Devices from Multiple Networks Using Enhanced SNMP Cartridge



NI 7.4.0 supports discovery of devices from multiple network domains. The Generic SNMP Cartridge can be used to discover and model logical and physical devices in IP networks. You can also perform import scans and reconcile data in UIM using this cartridge.

See Network Integrity SNMP Discovery and UIM Integration Cartridge Guide for more information.

# Support to Filter Discovery and Import Scans by Device and Equipment Specifications

You can now apply a filter on the device and equipment specifications to choose the type of device to be discovered or imported. You can set the filters based on the vendor and device types and NI will discover or import the devices from the network, as well as device notifications, according to the filters applied.

See Network Integrity UIM Integration Cartridge Guide for more information.

## Support for Discovery, Discrepancy Detection, and Reconciliation of RAN and MW Network Devices

NI 7.4.0 supports the discovery of Radio Access Network (RAN) and Microwave (MW) devices on the network. It supports the modeling of these devices to produce physical and logical device hierarchies and create associations between them. It also detects discrepancies and reconciles data to synchronize inventory.

See Network Integrity RAN and MW FTP Cartridge Guide for more information.

#### Support to Recognize Usage of Contiguous Slots by a Card in NI

NI 7.4.0 enables you to identify if a card takes up contiguous dual or triple slots in NMS when it performs discovery or import scan. You can achieve this by manually configuring your cartridge by using Service Catalog and Design - Design Studio. Once configured, the scan results reflect the correct slot usage details.

See **Associating Contiguous Slots to a Card** in *Network Integrity Developer's Guide* for more information.

#### Support to Encrypt Passwords for SNMP V3 Credentials

You can now encrypt the values of SNMP V3 credentials stored in the database by using the **EncryptDecryptUtil.jar** utility. You can also decrypt values using the same utility by running it from the directory where Network Integrity is installed.

See **Encrypt Decrypt Utility** in *Network Integrity System Administrator's Guide* for more information.

Support to Discover SDH TP Links, Trails, Tunnels and Services using File Based Discovery Cartridge



NI 7.4.0 supports the discovery of physical and logical SDH entities from the network by using the SDH Discovery cartridge. This cartridge supports modeling of SDH connectivities such as topological links, trails, and tunnels. It can perform incremental discovery of SDH connectivities through notifications stored in the database.

See **SDH Discovery Cartridge** in *Network Integrity FTP SDH Logical Resource Discovery and Assimilation Cartridge Guide* for more information.

#### Support to Reconcile and Import SDH Connectivities in UIM

NI 7.4 supports importing of SDH connectivities from UIM, compares the imported UIM data with the discovered SDH connectivities and services, and reports any differences. It also resolves any discrepancies by correcting entities, associations, and attributes in UIM.

See **SDH UIM Integration Cartridge** in *Network Integrity FTP SDH Logical Resource Discovery and Assimilation Cartridge Guide* for more information.

## Support to Discover and Reconcile Subnetworks in UIM for DWDM Connectivity and Service

NI 7.4 now supports the discovery and modeling of ODU, OTU, Och, OMS and OTS subnetworks within the DWDM network using the DWDM Logical Discovery Cartridge. It supports import of logical subnetworks from UIM, comparing this data with discovered subnetworks, and reconciling any discrepancies in the inventory.

See Network Integrity CORBA Based DWDM Layers and Service Discovery and Assimilation Cartridge Guide for more information.

## Support for Discovering Impacted Resources from Notifications in SDH and DWDM Networks

NI 7.4.0 recognizes impacted physical or logical resources in SDH and DWDM networks based on device notifications. NI distinguishes the incremental changes in the data and updates device information, reducing extra effort when discrepancies are very small.

See Network Integrity FTP SDH Logical Resource Discovery and Assimilation Cartridge Guide and Network Integrity CORBA Based DWDM Layers and Service Discovery and Assimilation Cartridge Guide for more information.

#### Support to Use NMS and EMS as Scan Parameter

You can now choose to run scans in an NMS and respective EMS of your choice. In NI 7.4.0, the scan parameter field on the user interface displays the list of available NMS values. Based on the NMS chosen, another field will appear from which you can choose the respective EMS to be scanned. Once the scan for the chosen EMS is complete, you can reset the scan parameters for other EMS to be scanned as well. This is a customization which can be manually added.



See Design Studio Modeling Network Integrity for more information.

#### Support to Synchronize Reconciled Entities in UTIA

The NI-UIM Integration web service now includes an ID that links reconciled entities with their corresponding PD, LD, Shelf, Card, Port or Interface. This improves discrepancy reconciliation by identifying the relationship between the reconciled entities and their sub-components.

See Network Integrity Optical UIM Integration Cartridge Guide for more information.

#### Support to Discover and Reconcile Entities in IMS Network

NI 7.4 supports the discovery and reconciliation of entities in IMS networks by using the IMS Discovery cartridge. It supports the modeling of devices in IMS networks, detects discrepancies between discovery scan results and data imported from UIM, and resolves the discrepancies.

See Network Integrity IMS FTP Discovery and UIM Integration Cartridge Guide for more information.

#### Support to Discover and Reconcile Entities in DWDM Networks

NI 7.4 supports the discovery and reconciliation of entities in DWDM networks by using the Optical FTP Discovery Cartridge. It supports the modeling of optical network devices in the DWDM networks, detects discrepancies between discovery scan results and data imported from UIM, and resolves the discrepancies.

See Network Integrity Optical FTP Discovery and UIM Integration Cartridge Guide for more information.

### Fixed and Known Issues

There are no fixed and known issues in this release.

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