ORACLE

Oracle Communications Network Integrity

The benefits that can be gained from a network inventory and topology solution are dependent on the quality of the data it contains. If there are significant data discrepancies between the inventory system and the live network, the business processes that rely on the integrity of the inventory data will deteriorate and user confidence will erode.

Network Integrity context within Oracle's Unified Inventory and Topology solution

Network Integrity is a key component within Oracle's Unified Inventory and Topology solution, shown below. This solution provides holistic service, network and resource visibility across diverse network technologies, generations, and domains. Such accurate, real-time views support automated orchestration and assurance.

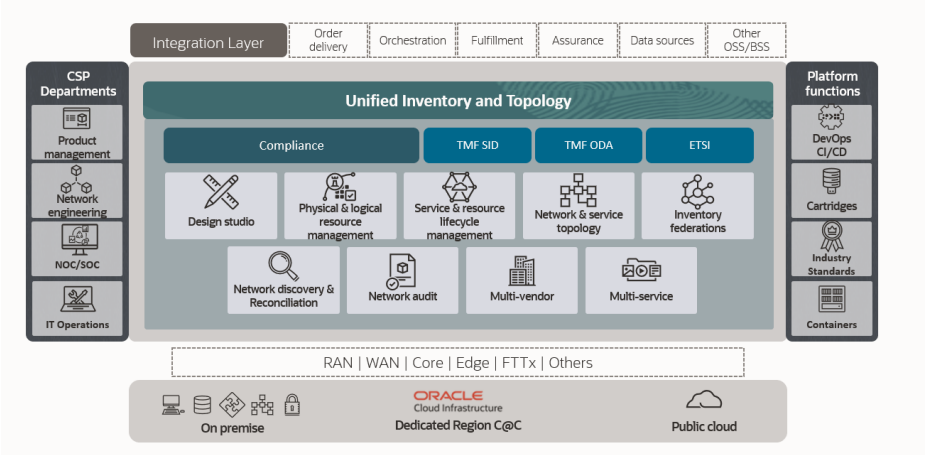

Image 1. Network Integrity context within Oracle's Unified Inventory and Topology solution.

A consolidated application for discovery, assimilation, reconciliation, and resolution

Many CSPs have made considerable investments in a common information model that puts network inventory and topology at the heart of their communications operational support system strategy. These providers now want to leverage the value of this data resource to improve their automated service provisioning success rate, improve capacity utilization and planning, to enable rapid root cause analysis, and to ensure accurate decision-making.

Oracle Communications Network Integrity is a single, flexible application that discovers and reconciles information from network devices and other data sources – such as inventory systems – to ensure optimum data accuracy. It is a

Key benefits

- Enables dynamic connectivity for Cloud-based business models.
- Reduced capital expenditures through accurate and optimized network investment plans.
- Lower operational expenditures through reduced fallout caused by incorrect inventory data.
- Accuracy in network asset information for reliable financial and regulatory reporting.
- Faster resolution of network faults from accurate inventory data.
- Improved customer satisfaction and revenue assurance with "right first time" network configuration.
- Higher user confidence in decision-making processes based on accurate inventory data.
- Delivers simplicity of deployment and operation with a lower, ongoing total cost of ownership.

ORACLE

consolidated application for the discovery, assimilation, reconciliation, and resolution of network asset information. Built on Oracle Fusion and Oracle database technologies,

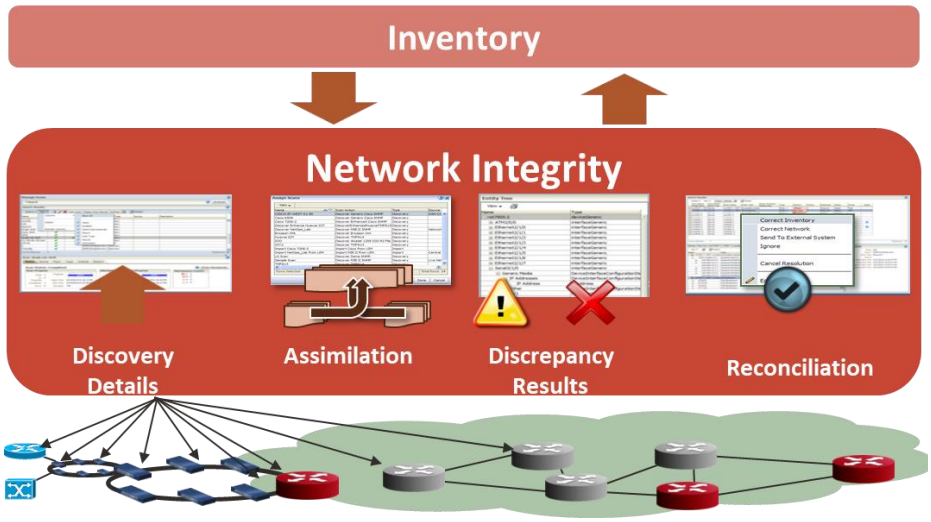

Image 2. Oracle Network Integrity scans data from a variety of devices and through a variety of interfaces.

Product overview

The benefits that can be gained from a network inventory and topology system are dependent on the quality of the data it contains. If there are significant data discrepancies between the inventory system and the live network, the business processes that rely on the inventory data will deteriorate and user confidence will erode. Inaccurate inventory can have many expensive repercussions:

- Fallout in customer service and network provisioning due to inaccurate inventory data resulting is elevated costs, provisioning times and customer dissatisfaction.
- Network faults can take longer to correctly identify and resolve, impacting the customer experience.
- Inaccurate and untrustworthy inventory data provided to expensive field engineering resources results in heightened costs, increased inefficiencies, and project delays.
- Inefficient network traffic routing across the network due to inaccurate inventory visibility.
- Inaccurate network asset information can result in erroneous financial reporting, impacting your ability to ensure regulatory and business process compliance.

The keys to maintaining inventory accuracy are constant auditing of the data quality and a user-friendly mechanism to allow data discrepancies to be easily identified and corrected. Oracle Communications Network Integrity provides automated discovery of the network, comparison of the discovery results with existing repositories, automated generation of discrepancies and an intuitive fully browser-based graphical user interface (GUI) to resolve issues.

Key features

- Browser-based client, for intuitive management of discovery scans, results & discrepancy reconciliation
- Pre-Integrated with Oracle Communications UIM and MetaSolv Solution; also supports other inventory, BSS/OSS
- Cartridge Extensibility through Oracle Communications Design Studio
- SOA-Based, JEE-Compliant Application with extensive Web Service APIs
- Built on Oracle Fusion Middleware and Oracle DB

Discover functionality

Oracle Communications Network Integrity works with a broad set of network facing cartridges to automate the discovery of physical resources, logical resources, and provisioned services data from network elements, element management systems (EMSs), and network management systems (NMSs). The solution discovers and reports detailed information about physical resources such as chassis, slots, and ports. It also identifies information about logical resources such as interfaces and connections, and what services are provisioned. Key discovery features include:

- Full core-to-edge discovery
- A highly extensible cartridge architecture
- Flexible configuration and scheduling of discovery scans

Flexible configuration and scheduling of discovery scans

An intuitive browser-based GUI is used to configure and schedule discovery scans. Discovery scan configuration includes selecting the interface protocol, the address range to scan, specific parameters (such as timeout interval and number of retries), and the scan schedule.

You can schedule a discovery scan to run once (at a specified time and date) or on a recurring basis (daily, weekly, or monthly). You can also run the scan on demand. You can assign configurable system-wide blackout periods to ensure that scans do not run during peak network busy times or during network upgrade windows.

The GUI displays the current status and progress of each scan in the GUI. It lets you know if a scan is currently running as well as any problems. For scans in progress, the GUI displays the number of discovered network elements, elapsed time, percentage complete and discovery errors.

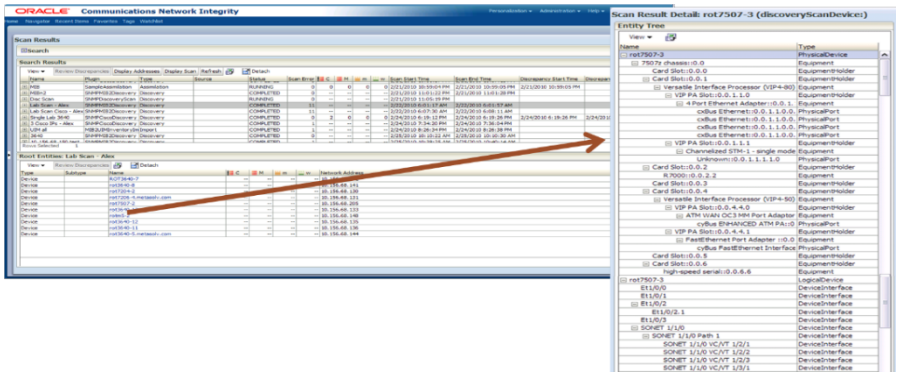

Image 3. Oracle Communications Network Integrity Browser-based GUI.

Network Reconciliation Functionality

Oracle Communications Network Integrity is a scalable, vendor-agnostic tool that accesses different data sources such as discovered network data and inventory data. It compares discovered data with a known baseline, calculates where discrepancies exist, presents the discrepancies through a browser, and allows

correction online. Network Integrity continuously audits the inventory data to ensure optimum data accuracy.

An analysis detailing the level of data accuracy is produced for each scan instance, where broader manipulation of data can be accomplished through reporting using Oracle Business Intelligence or other reporting tools. The Network Integrity GUI lists all objects with discrepancies in a tree browser. Users can correct discrepancies by simply selecting the appropriate administrator configured action to update the Inventory object or trigger an external action such as sending an action to the trouble ticketing or order management system. Discrepancies can be automatically corrected or automatically assigned to a user or group. An open application, it is also pre-integrated with Oracle Communications Unified Inventory Management (UIM) and MetaSolv Solution (MSS) ensuring data integrity of network assets throughout their entire lifecycle.

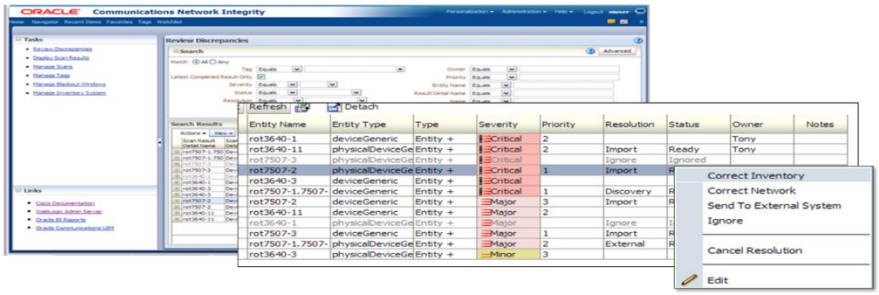

Image 4. Oracle Network Integrity enables user to view and resolve discrepancies with all the details.

Highly Extensible Cartridges through Oracle Communications Design Studio

Oracle Communications Network Integrity shares a single cartridge extensibility environment with the Oracle Communications Unified Operations suite. The Oracle Communications Design Studio is a common extensibility tool to create, manage and extend cartridges. The extensible cartridge-based architecture delivers ultimate flexibility. Cartridges are modular components that contain the necessary logic and protocol support to discover physical/logical devices, configuration data and services and the associated attributes of each object type for a particular type of network element or system. They include mapping of the collected data and are configured with discrepancy creation rules and resolution actions. Cartridges can be built or extended by customers, Oracle Consulting or System Integrators.

Summary

As a key component of the network asset lifecycle management process, Oracle Network Integrity provides a consolidated application for discovery, assimilation, reconciliation, and resolution. It helps deliver key business benefits:

- Reduced capital expenditures through accurate and optimized network investment plans.
- Lower operational expenditures through reduced fallout caused by incorrect inventory data.
- Accuracy in network asset information for reliable financial and regulatory reporting.
- Faster resolution of network faults from accurate inventory data.
- Improved customer satisfaction and revenue assurance with “right first time” network configuration.
- Higher user confidence in decision-making processes based on accurate inventory data.
- Delivers simplicity of deployment and operation with a lower, ongoing total cost of ownership.

Connect with us

Call +**1.800.ORACLE1** or visit **oracle.com**. Outside North America, find your local office at: **oracle.com/contact**.

blogs.oracle.com facebook.com/oracle twitter.com/oracle