KEY BENEFITS

- Defer and Minimize Network CAPEX through Inventory Accuracy and Network Analytics
- Reduce OPEX through Efficient Utilization of Network Assets and Capacity
- Simplify and Optimize Network Transformation and Traffic Migration

Network operators are experiencing rapid growth in network traffic resulting from smarter devices, data intensive services, and faster access technologies. This growth is challenging operators to efficiently scale and manage their network and deploy new technologies within relatively flat capital and operational budgets. This is further exacerbated by mergers and acquisitions often leading to highly fragmented networks, systems and operations, poor data quality and accuracy, as well as heightened reliance on expensive leased network capacity.

Oracle Communications Network Resource Management (NRM) solution delivers an integrated, product-based solution that enables network operators to plan, build, optimize and transform their communications networks. The solution provides:

- Flexible network inventory enabling both collaboration with, and consolidation of, other inventory systems
- Discovery, assimilation, and reconciliation of network configuration data with inventory systems to ensure inventory data accuracy
- End-to-end visibility of network configurations across multiple inventory systems
- Intelligent, predictive network analytics supporting agile planning, optimization, and network migrations
- Process management to preview, execute, and audit resulting changes to systems and networks

The solution may be deployed in an integrated manner or in a modular fashion integrating with and leveraging investments in existing systems.

Solution Context

Oracle Communications Network Resource Management (NRM) solution supports two principal processes within the TM Forum’s Frameworx Business Process Framework (eTOM):

- Resource & Capacity Readiness in which the inventory is populated to accurately plan, track and manage the resources required to offer and deliver services
- Network Asset Lifecycle Management – the integrated management of network assets throughout their entire lifecycle across both operational inventory and financial asset management – from “acquire to retire”
Solution Overview

The solution, illustrated below, comprises of multiple, integrated, modular application components.

Figure 1. Oracle Communications NRM Solution Overview.

The solution components and their roles within the solution include:

- Oracle Communications Unified Inventory Management (UIM) / MetaSolv Solution (MSS) – flexible network inventory enabling both inventory consolidation and inventory collaboration through federation to complement and leverage existing inventory investments
- Oracle Communications Network Integrity – discovery, assimilation and reconciliation of network configuration data with inventory and other upstream systems
- Oracle Communications Network Intelligence – end to end visibility of network configurations across potentially multiple inventory systems together with intelligent, predictive network analytics for agile planning, optimization and network migrations
- Oracle Communications Order and Service Management (OSM) – network ordering and process management to preview, execute and audit resulting changes to systems and networks

Solution Value Proposition

Oracle Communications NRM solution delivers the following business benefits to network operators:

- Accurate Inventory with Actionable Network Analytics – Minimizes Network CAPEX
  - Discovery / reconciliation to recover stranded assets / capacity – identifying and releasing false paths in the network
  - Sophisticated network analytics increases network utilization from sometimes as low as 50% to ~ 85% through routing efficiencies, equipment consolidation, etc.
  - Proactively optimize legacy network configurations to ensure demand growth can be accommodated in order to protect new investment focus in next-gen network – e.g. optimizing the 3G network to protect the 4G build out investment – i.e. “sweat the assets”
• Efficient Capacity Management and Accurate Inventory – Reduces OPEX
  o Release unused leased circuits identified by comparing circuits for which the operator is paying against the leased circuits actually in use; route optimization of traffic on-net to reduce the requirement for more expensive leased capacity; and algorithms to enable consolidation of leased lines to further reduce network OPEX
  o Accurate & timely inventory data availability to downstream systems helps minimize fallout and process inefficiencies, increases user confidence in data quality and enables increased process automation
  o Having a single integrated solution reduces the operating footprint, training and vendor management costs

• Simplified, Optimized Approach to Transform and Migrate network traffic
  o The solution provides complete e2e visibility of network capacity and asset utilization by collecting and normalizing network capacity utilization data and presenting it to the user in contrast to operating with disjoint data and partial views
  o The solution provides tools for efficient and rapid migration of new acquisitions / lines of business onto a single, consolidated inventory
  o The solution supports both current and next generation technologies with explicit tools to safely migrate traffic to next-gen network technologies

Typical Solution Scenarios
The solution has been successfully applied to a number of different scenarios, including to:
• Identify & release stranded assets and capacity to defer & reduce network CAPEX
• Reduce the complexity and streamline fibre access build out to reduce network CAPEX
• Identify, optimize, consolidate & release leased network capacity for reduction in network OPEX
• Optimize hybrid RAN configurations for efficient network transformation & traffic migration
• Optimize mobile backhaul capacity utilization to reduce network OPEX
Deployment Scenario Examples

The solution may be modularly applied to solve different business problems. The following are three examples together a representation of the deployed solution footprint.

Large International Mobile Operator
- Inventory consolidation
- Integrated network asset lifecycle management
- Accurate, timely network data for downstream processes

Converged Fixed-Mobile US Operator
- Importance of inventory accuracy
- Leverage existing inventory investment
- Significant OpEx savings in leased capacity

Mobile Network Transformation
- Single e2e view of network capacity
- Enabling migration: 2G to 3G (to 4G)
- IP RAN deployment over a shared network

Contact Us

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