

**COMARCH**

PRODUCT LEAFLET

# COMARCH REAL-TIME NETWORK INVENTORY MANAGEMENT



**Comarch Real-time Network Inventory Management** stores complete information about physical, logical and virtual network resources. It is a shared, central fixed-access inventory to capture all details of a very complex IT/telecom environment with advanced micro-services technology underneath.

**Telecom Real-time Network Inventory** facilitates network resource catalog management for multi-vendor, multi-domain networks. It manages RAN, transmission, core, and fixed network domains, IT infrastructure and data center inventory tasks for SDN/NFV and hybrid networks, handling both inside plant telecom and outside plant telecom operations, and allowing easy onboarding of new technologies.

With artificial intelligence **Comarch Real-time Network Inventory supports the management of the end to end network, while enabling automation within each dynamic virtual domain based on immediately available network resources.** Static physical and logical resources are managed by the conventional Comarch Network Inventory Management software. Comarch Real-time Network inventory with AI manages the dynamic virtual resources.



## THE MAIN COMPONENTS

### ■ **Physical Infrastructure Inventory**

A shared source of knowledge about sites and infrastructure in the telecommunications network. Includes integration with internal and external address databases, and documentation of hierarchy locations and space. Provides sophisticated, graphical tools for documenting any type of site from a telecommunications tower to a data center, including a visual representation of floor plans. Contains tools for inside plant telecom and outside plant telecom physical network documentation, including cabinets, manholes, ducts, cables and other elements of the physical infrastructure.

### ■ **Radio access inventory**

Our radio network inventory product is a comprehensive tool for managing radio access network (RAN) resources, and helps operators to maintain a logical and physical radio network. The 3GPP-based vendor-agnostic data model provides a unified, easy to manage inventory for all radio hardware vendors and technologies (GSM, UMTS, LTE, 5G, etc.). Layered modeling of devices in the network (physical/logical) allows easy and effective modeling of multi-radio and SDN/cloud-RAN scenarios. A shared model with radio network planning, as well as integration with configuration management and Comarch SON, gives operators a powerful tool that helps to maintain a network of the highest quality.

### ■ **Devices and Virtualization Inventory**

A vendor and domain-agnostic source of knowledge about network elements (physical, logical or virtual). This set of supported technologies is easily extendable due to integration with Resource Catalog. Resources managed here are a convergence point for the technologies utilizing them, and the source provides a coherent view of a multi-domain, multi-layer network.

### ■ **Resource Catalog**

Catalog of specifications for physical equipment, logical network functions, connectivity and infrastructure. Provides effective onboarding mechanisms for new specifications and technologies. Acts as a source of knowledge for Network Inventory, Network Planning and Design, and other OSS suite products.

### ■ **Transport Inventory**

Out of the box support for Ethernet, IP, xWDM, microwave, SDH and PDH – along with several other technologies. Easy onboarding of niche and emerging technologies due to Resource Catalog integration. When used with Virtualization Inventory, it is fully capable of documenting virtual and hybrid networks.

### ■ **Fixed Access Inventory**

Fixed access inventory covers multiple access technologies (GPON, xDSL, GFast, RFoG, etc.). The system is pre-integrated with Comarch Service Fulfillment & Orchestration and other inventory components.

- **Resource Management Processes**

Part of the telecom Network Inventory Management solution. Resource Management Processes provide the opportunity to exploit all inventory data in a manner that is both efficient and tailored to the operator's environment, while helping to ensure always up to date data.

- **Mobile and Fixed Core Inventory**

An inventory of mobile and fixed core network physical and logical devices. Providing PS and CS core network virtualization support. Integrated Network Auto-discovery and Reconciliation can provide a network-driven inventory solution that minimizes the overall effort of maintaining an up to date inventory - the real enabler for advanced and effective assurance.

- **Reporting**

The Reporting module allows the self-creation of many report formats. The future-proof architecture of the Network Inventory Management system allows easy integration with innovative NFV/SDN environments, and plays the role of topology manager.

- **Real-time Inventory**

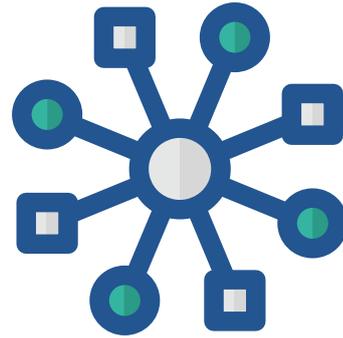
Comarch believes that SDN and NFV, in combination with artificial intelligence, provide several powerful functions for efficient network and service operations. It can help CSPs to address concerns about analyzing massive volumes of information, and mitigate the challenges of managing hybrid networks. As a result, looking to the future, Comarch Real-time Network Inventory Management system in harmony with artificial intelligence will support truly dynamic networks and services, reflecting accurately the current state of the network with an up to date view of both physical and virtual resources, and providing a complete historical record of the network in order to apply pattern recognition techniques to support cross domain hybrid service orchestration and assurance.



## BENEFITS

### END TO END VIEW OF MULTI-VENDOR, MULTI-TECHNOLOGY NETWORKS

The idea is to represent the same equipment and connections in several layers, with technology-specific information included in the dedicated-generic layer providing a consistent view of the network for the operator, without an information overflow.

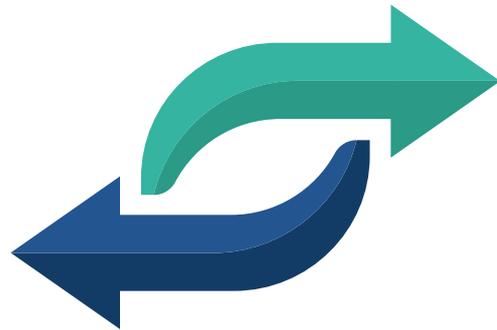


### REDUCED NETWORK OPERATING COST

Having one consistent view of the network for all technologies and layers allows the operator to increase business efficiency and decrease operational costs. Inventory is the foundation of a lot of business processes across a telecom company, including the network operation center, engineering and planning departments, procurement, and business partners.

### IMPROVED UTILIZATION OF EXISTING RESOURCES

An up to date, cross-domain network inventory management solution is the basis of network investments in telecoms. It allows the efficient utilization of existing resources, and planning of new ones which are profitable from the business perspective.

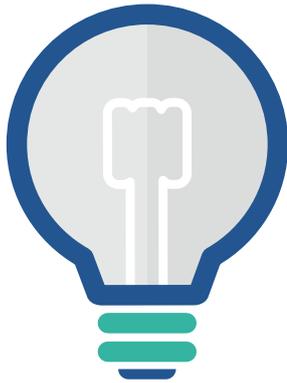


### INTEGRATED IN UMBRELLA OSS

Resource & Network Inventory is the heart of the Comarch OSS Suite. It provides the data and information for all other modules, such as Planning & Design, Configuration Management, Fault Management, Service Quality Management, Customer Experience Management, and Business Process Management. All dedicated modules utilize the same inventory database, which leads to efficient data processing and, thanks to the elimination of lots of dedicated interfaces, reduced operational costs.

## EFFICIENT RESOURCES ASSURANCE

Comarch Network Inventory provides a network assurance system support with topological correlations and allows recognition and troubleshooting of the root cause of failures in the most efficient manner.



## INNOVATIONS

Thanks to its future-proof architecture, Comarch OSS is already integrated with the NFV/SDN framework in the inventory, planning, configuration and assurance areas. This means that the Comarch OSS is an umbrella OSS for new virtualized and legacy architectures.

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## ABOUT COMARCH

Since 1993, Comarch's specialist telco solutions business unit has worked with some of the biggest telecoms companies in the world to transform their business operations. Our industry-recognized telco OSS and BSS solutions help telecoms companies streamline their business processes and simplify their systems to increase business efficiency and revenue, as well as to improve the customer experience and help telcos bring innovative services to market. Comarch's telco solutions customers include Telefónica, Deutsche Telekom, Vodafone, KPN and Orange.

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