About Boreas NFVI Manager

Boreas NFVI Manager in brief

The Globberry Boreas NFVI Manager solution provides dashboard, inventory, and capacity management for an OpenStack-based telco cloud. Designed specifically for the requirements of software-defined networks, it consolidates all compute, storage, and network infrastructure data. Its automated discovery capability provides a single point of reference for network visibility, and its advanced capacity planning functionality streamlines decision making and telco cloud resource management. A GUI-based customizable dashboard application provides a 'single pane of glass' view for complete NFV infrastructure visibility, for resource use optimization and management, reporting and alerting.

The cloud is here to stay, and operators need to evolve accordingly to implement, support and optimize their cloud-based service delivery environments. The Globberry Boreas NFVI Manager platform helps service providers unlock the potential for improved cost-effectiveness, support, and configuration management in the telco cloud. It enables operators to easily and successfully implement NFVI management, overcoming the many challenges in building a unified operational framework, from the need for end-to-end visibility in a multiple vendor platform environment of ever-growing complexity, to the required level of flexibility driven by the dynamic nature of the telco cloud world.

The Boreas NFVI Manager Platform

The Globberry Boreas NFVI Manager platform has been designed specifically for NFVI-based telco operations, with a flexible architecture and future-proof design to address the unique challenges of resource management and capacity planning in a VNF cloud environment: consolidated data, a consolidated view, and proactive capacity management. Just some of the key architectural design elements embodied are:

- ***Cloud-native application***: Boreas NFVI Manager is vendor-agnostic rather than integrated with any specific cloud infrastructure provider stack. It supports both container and VM-based deployment and horizontal scaling, for the networks of both today and tomorrow
- ***Open-source values***: Boreas NFVI Manager has been designed and built according to the 'open-source first' principle, reducing the OPEX associated with running applications, and there are no third party components requiring licensing
- Diverse ***integration approach***, making it easy to incorporate and use: Boreas NFVI Manager provides a set of integration adapters covering the de-facto standard NFVI Management stack, with OpenStack adapter for distributed OpenStack deployment, MANO, Ceph and Zabbix adapters, and generic API integration layers for third party or custom integration
- ***Customizability***: the high level of customization that can be applied to the Boreas NFVI Manager GUI, and its inputs, alerts and displays, provides a future-proof approach. This means that operators can easily and quickly deal with the ever-increasing complexity of their cloud-based infrastructure
- Designed with ***operations as top priority***: typically, operational tools are viewed as insignificant in NFV infrastructure architecture, resulting in underestimating the required investment, complexity and effort needed for adequate monitoring, support and configuration management; in contrast, Boreas NFVI Manager focuses on operations as key to performance improvement.

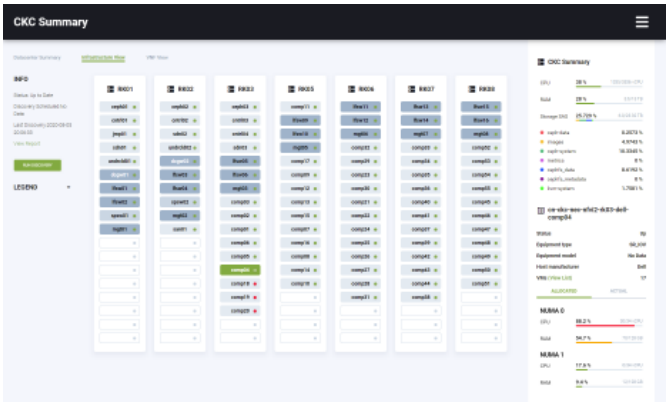
Key Features and Benefits

Single point of reference, with consolidated data

With the ever-increasing complexity of operational infrastructure, particularly in a cloud environment, it is ***essential to easily achieve a unified, trusted view across multiple domains***. Boreas NFVI Manager provides this with its **Infrastructure Inventory** and **Automated Discovery** functionality. It provides a complete end-to-end and top-to-bottom view of the network, with visualization and drill-down capabilities, including:

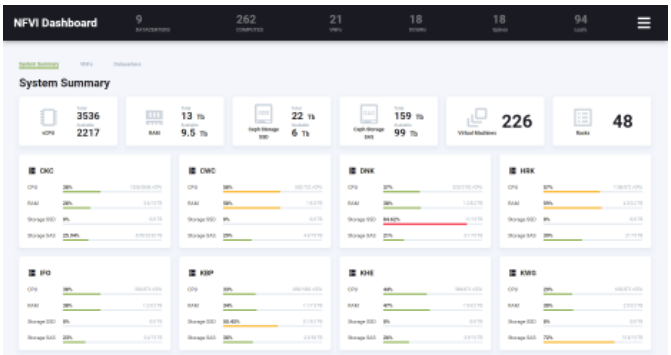
- Logical and physical interfaces for network equipment including their properties, configuration, traffic statistics, load telemetry, and utilization history
- Uplink utilization summary
- Logical entities (EVPN, VLAN, VXLAN, etc.)

The Automated Discovery functionality provides automated, regular discovery of NFVI management systems, compute nodes and storage capacity. It collects and synchronizes inventory data from multiple sources such as MANO, OpenStack, and element managers, as well as directly from equipment, with several tools including scheduler, data consistency and data conflict resolution. With Boreas NFVI Manager, the ***'single point of truth' is maintained*** as the cloud network evolves.



Consolidated view, with a single pane of glass

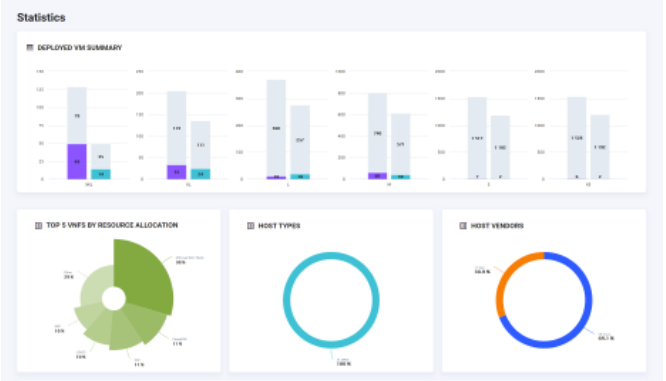
Building a comprehensible visual representation of the network is as important as the information which underlies it. It is ***essential to meaningfully inform operational decision making***, and Boreas NFVI Manager provides this with its simple, intuitive **Cloud Dashboard**, which provides a 'single pane of glass' for end-to-end network visibility. The user is provided with a unified view of many domains in a multi-vendor, multi-cloud environment, including VNFs, computes, IP fabric and storage. It provides executive-level summaries with key metrics and breakdowns, along with more detailed views of VNFs and data centers. The user-friendly, widget-based Dashboard is fully customizable, with a variety of customer-defined widgets with resource consumption, forecasting, different breakdowns (for example host aggregates, vendors, etc.), maps, alarms, and many more. With Boreas NFVI Manager, a ***balanced visual representation is achieved and maintained***.



Advanced capacity planning capability

Along with understanding and viewing the complex cloud-based telco network, it is ***essential to proactively manage the network capacity*** to maximize its efficiency and resource utilization. Boreas NFVI Manager delivers this with its **Capacity Analytics** functionality, which leverages the inventory topology and resource utilization data gathered through automated discovery, workflows facilitating VNF planning, and equipment expansion. It includes:

- Real-time capacity visualization for current, historical, and projected capacity utilization at all levels of resource inventory hierarchy
- Closed loop capacity management to allow users to plan for
- future VNF onboarding and expansion
- Automated and manual BoM/BoQ generation of expansion requests containing the list and specifications of the equipment
- Configurable capacity alerts to notify the user of any projected NFVI resource deficits and pre-defined capacity utilization thresholds
- Scheduled and on-demand capacity reports to provide management and operations teams with regular summaries of current and projected infrastructure capacity utilization



With Boreas NFVI Manager, *decision making is streamlined and simplified* with data accuracy, business logic automation and process standardization.

For more information please visit **https://globberry.com/nfvi-manager/** to request your complimentary demonstration of how Globberry Boreas NFVI Manager is helping operators evolve their operational and management infrastructure to meet the new challenges the telco cloud service delivery environment presents, as well as learning more about the solution and its applications.