

Network Capacity Management with BMC Capacity Optimization

BMC Capacity Optimization supports an automated and proactive approach to network capacity management with capacity analytics, "best-practice" network views and integration of leading network management solutions, such as Entuity

KEY BENEFITS

- » Get better insight on network capacity and simplify analysis and reporting on network resources
- » Forecast utilization of key network resources and identify bottlenecks and potential saturations
- » Correlate network resource utilization with business KPIs to extrapolate expected resource utilization with respect to demand growth
- » Automatically generate and distribute by exception reports

BMC CAPACITY OPTIMIZATION

BMC Capacity Optimization (BCO) takes a new approach to capacity management by delivering automated capacity management for modern IT infrastructures, from a service and business perspective. This modern approach to capacity management is made possible through the automated integration of virtually any data source providing performance, capacity and configuration data for all data center resources, including compute (both distributed and mainframe - physical, virtual and cloud), database, storage and network - as well as business KPIs.

BMC Capacity Optimization provides powerful analytics that generate automated predictions of potential risks and optimizations as well as full visibility into IT capacity at the component, service and business level via out- of-the-box best-practice views and by exception reports.

With BMC Capacity Optimization, you will effectively support and contribute to the success of IT innovation and transformation initiatives and enable timely decision making, thereby ensuring that IT is more alligned to Business. With BMC Capacity Optimization you will:

- Have full visibility of the current level of resource utilization, predict potential risks (e.g. over utilized servers or storage saturation) or identify potential areas of optimization (e.g. under utilized servers or idle VMs)
- Safely plan consolidation, virtualization and cloud computing initiatives and evaluate available options (e.g. performance of different hardware models based on standard benchmarks) or recommendations (e.g. how many additional hosts need to be added to the virtual clusters to accommodate additional VMs)
- Correlate business key performance indicators (KPIs) with resource utilization metrics to extrapolate the required capacity for supporting potential or expected business demand
- Continuously optimize cloud infrastructures by providing capacity-aware placement advice to support self provisioning of new resources
- Automatically provide cost visibility at service and tenant level based on fixed, allocation- and utilization-based chargeback models

BMC Capacity Optimization is based on a robust and scalable architecture that couples lightweight and agentless data collection and flexible data integration mechanisms, with powerful analytics and reporting capabilities to provide automated notification of predicted risks and full visibility of IT capacity from an infrastructure, service and business perspective via fully web-based, out-of-the-box and easily customizable views.



WHY BMC

- » Enterprise-wide: Provides visibility across distributed, mainframe, physical, virtual, and cloud environments, as well as compute, database, and storage resources
- » Agentless: Offers a wide set of supported connectors to leverage already deployed management tools and the ability to integrate custom data sources
- » Service-oriented: Integrates configuration items and relationships to technical and business services to provide a service and business-level perspective
- » Business-aware: Correlates resource utilization metrics and business KPIs to align IT capacity and business demand
- » Automated: Automatically predicts potential resource saturations and delivers notifications and exception-based reports

NETWORK CAPACITY MANAGEMENT

BMC Capacity Optimization makes possible to implement network capacity management by integrating Network Management data sources that provide configuration, performance and capacity data for network devices and links and by applying BMC Capacity Optimization analytics for generating network related (and cross-domain) analyses, time forecasting models, correlation with Business KPIs and by-exception reports.

Network capacity management is simplified by the “Moviri Integration for BMC Capacity Optimization” add-on package, that provides supported data connectors to Entuity and HP Network Node Manager (NNMi). Moreover, Moviri Integration for BCO also offers a “best-practice” Network Views that provide capacity visibility of network devices and interfaces. This Network view complements other “best-practice” views provided BMC Capacity Optimization for physical, virtual, cloud and storage resources.

DATA INTEGRATION

The general architecture for the integration of network data into BMC Capacity Optimization is illustrated in Figure 1, where connectors leveraging the various integration points provided by the integrated Network Management solutions are displayed.

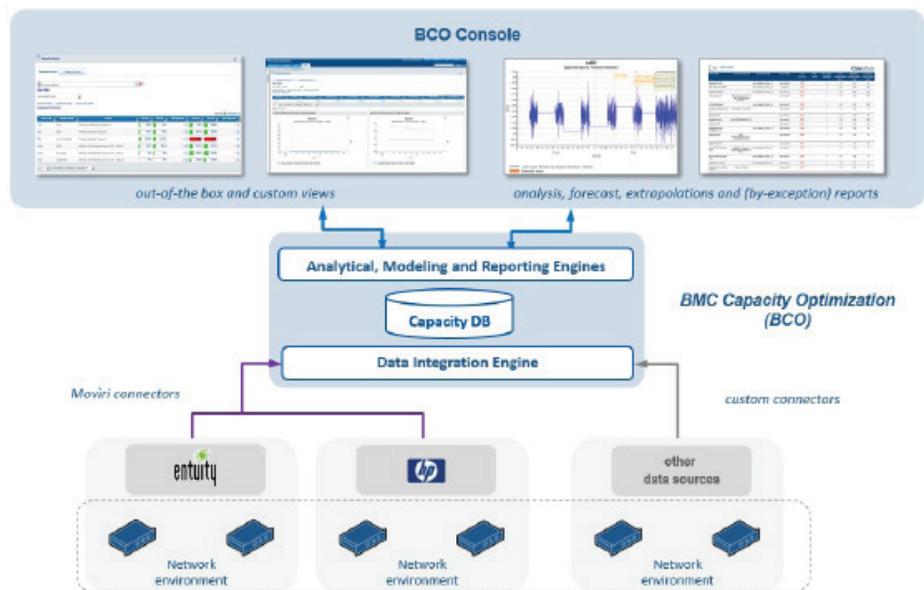


Figure 1. BCO for Networks Architecture

In particular, the connectors to Entuity and HP Network Node Manager (NNMi) provided by “Moviri Integration for BMC Capacity Optimization” are implemented as follows:

- The connector for Entuity leverages Entuity data export functionality, which allows data collected from one, or multiple Entuity instances to be stored in an external MySQL database. Thus the connector to Entuity extracts capacity-relevant data on a daily basis and in a configurable manner.
- The connector for HP NNMi leverages the ability of HP “Performance for Metrics” Smart Plug-in (ISPI) to save collected data into CSV files. Thus the connector to HP NNMi extracts capacity-relevant data from the CSV files in an incremental fashion and also takes care of purging successfully parsed data.

Notice that “Moviri Integration for BMC Capacity Optimization” is a BMC supported solution available as BCO add-on from BMC Market Zone.

KEY BENEFITS

- » Get an holistic view of overall data center capacity - combining compute, storage and network into a single pane-of-glass
- » Prevent network capacity issues by proactively detecting potential resource saturation
- » Assess how business demand and decisions can impact network utilization

ANALYTICS

BMC Capacity Optimization analytics can be applied to network data to effectively support a proactive approach to network capacity management, and thus prevent service disruptions, enable consistent service delivery and keep IT capacity continuously aligned with business demand.

The network best-practice view enclosed in “Moviri Integration for BMC Capacity Optimization” add-on helps to maximize the continuous visibility and control of your network resources and enables IT to rapidly identify and prioritize capacity issues, drill down and take action efficiently across the full environment, to avoid impending saturation. With unique insights into both current and future capacity and potential of saturation of network devices you can proactively manage your environment and effectively plan for future capacity requirements.

With BMC Capacity Optimization, you can:

Have capacity visibility over key network resources in single panes of glass with information aggregated and summarized to give at a glance control over network environment and the ability to filter on various dimensions (e.g. vendor and location). The following figure shows two pages providing an overview on key capacity for all network devices and their interfaces.

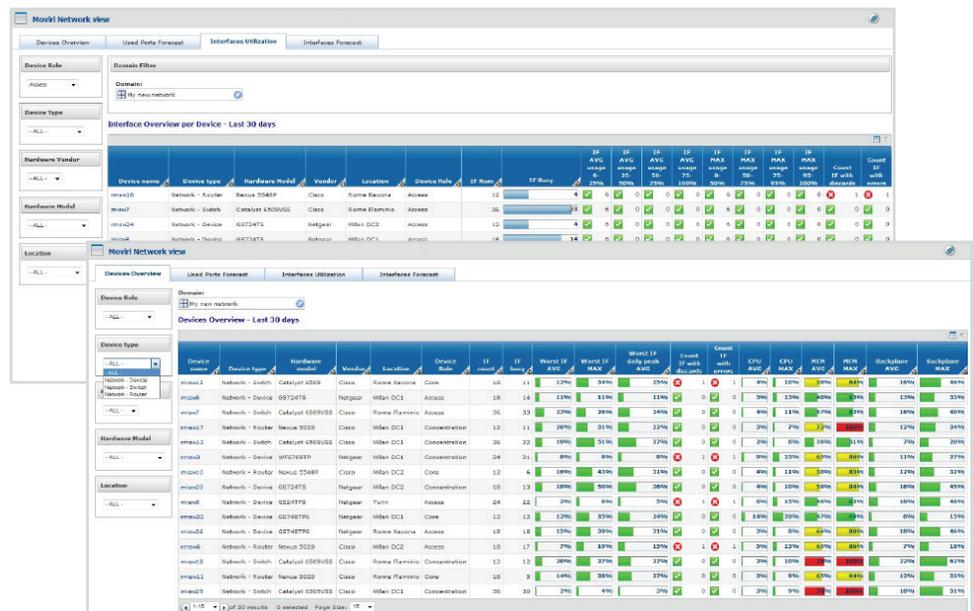


Figure 2. Network view: overview pages

Drill Down to more detailed capacity visibility, including historical data and seasonal behavior of critical network components. For example, the following figure shows how key configuration and utilization metrics over time page are displayed for a select network device.

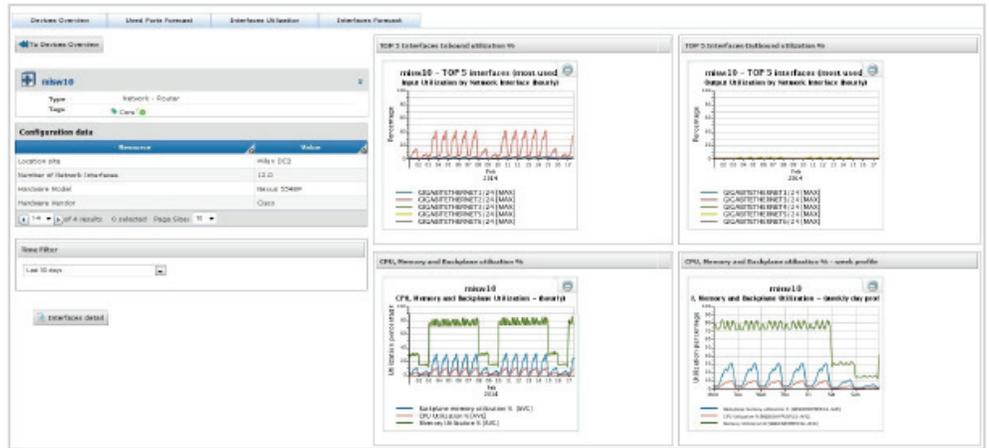


Figure 3. Network view: detail page

Predict capacity issues and estimate expected situation dates on critical network resources so as to proactively provision and allocate adequate resources and avoid disruption of service. The two pages displayed in the following figure show summarized trends and about remaining days before the saturation for interface and port utilization respectively. For both pages different filters can be specified and results can be sorted based on their criticality.

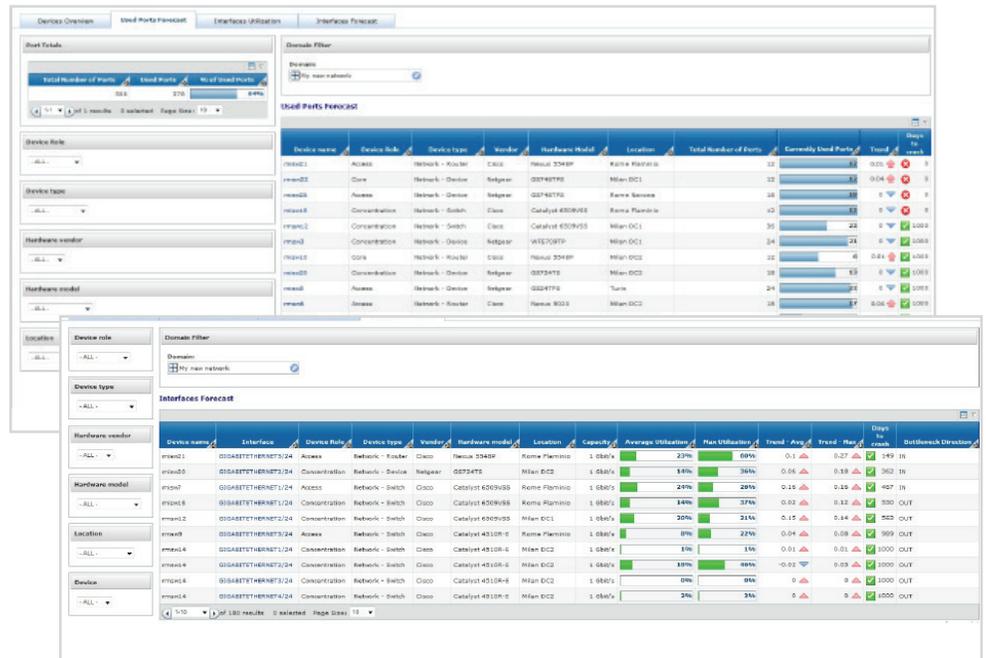


Figure 4. Network view: forecasted

FOR MORE INFORMATION

To learn more on presented products, please visit www.bmc.com/capacityoptimization or www.bmc.com/moviri

UNIFIED BUSINESS SERVICE MANAGEMENT (BSM)

BMC Capacity Optimization plays a key role in BMC's over arching service management strategy by incorporating compute, storage and network capacity optimization into your service management process.

As organizations work to optimize existing and accurately forecast their IT capacity to meet business demand, they understand that an effective capacity management process complements their real-time performance management activities and includes all data center resources, including network information. Only with 'holistic' capacity management, that incorporates compute, storage and network data can organizations avoid capacity-related risks and ensure the expected quality of service. The combination of network data from Entuity, HP NNMi or other third party sources and BMC Capacity Optimization analytics makes holistic capacity management possible.

BMC Software helps leading companies around the world put technology at the forefront of business transformation, improving the delivery and consumption of digital services. From mainframe to cloud to mobile, BMC delivers innovative IT management solutions that have enabled more than 20,000 customers to leverage complex technology into extraordinary business performance—increasing their agility and exceeding anything they previously thought possible.



IT'S AMAZING WHAT I.T. WAS MEANT TO BE.

BMC, BMC Software, and the BMC Software logo are the exclusive properties of BMC Software, Inc., are registered with the U.S. Patent and Trademark Office, and may be registered or pending registration in other countries. Linux is the registered trademark of Linus Torvalds. UNIX is the registered trademark of The Open Group in the US and other countries. All other BMC trademarks, service marks, and logos may be registered or pending registration in the U.S. or in other countries. All other trademarks or registered trademarks are the property of their respective owners. © 2007, 2008, 2009, 2014 Copyright BMC Software, Inc. All rights reserved.

