



Network and Service Assurance. Done right.

Product overview



Introducing UMBOSS

UMBOSS is a unified Network and Service Assurance product designed for telecom providers and enterprises managing complex communication, hybrid data centers, IT infrastructure and digital services.

Crafted by a passionate team of experts, UMBOSS offers practical tools to streamline resource and service assurance.

UMBOSS has been developed with an umbrella concept in mind, and its name stands for "Umbrella Operations Support Systems."

Consolidated data management.



UMBOSS seamlessly integrates and processes data from various sources, ensuring comprehensive data processing across all network and IT domains.

Unified operations.



Experience a unified approach with UMBOSS, offering event and fault management, performance management, inventory management with interactive topologies, automatic network discovery and reconciliation, service inventory, and service quality management, all in one platform.

Umbrella network insight.

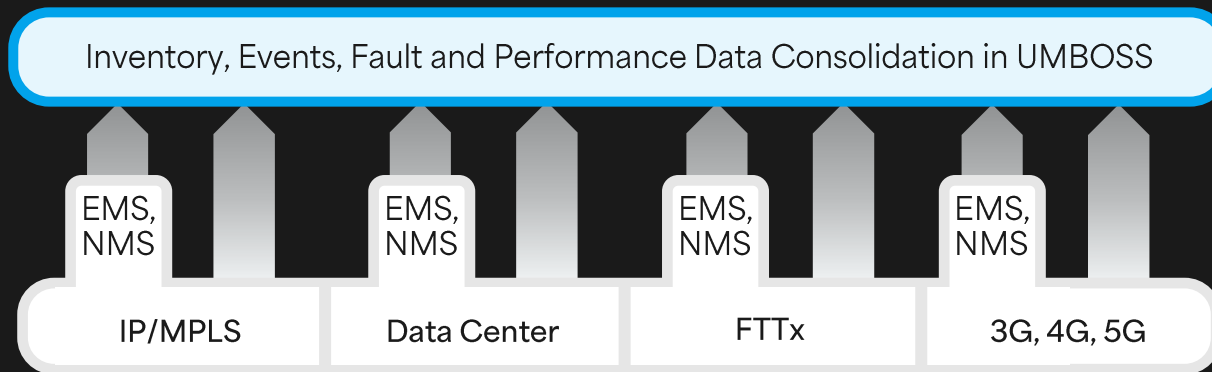


UMBOSS integrates with your BSS, OSS, and IT systems, providing a complete overview of your network, hybrid data center, customers, and services. Equipped with analytics tools, corrective actions, and report sharing, UMBOSS ensures comprehensive network management.

UMBOSS is Based on Data Consolidation

It all starts with [Resource Assurance](#).

UMBOSS consolidates event, fault, and performance data from diverse ICT infrastructure domains like IP/MPLS, Data Center, FTTx networks, and mobile networks. Ingesting data from domain-specific EMS, existing NMS, or UMBOSS collectors, it creates a streamlined, consolidated data flow across all domains.



The unique benefits of consolidation

With consolidation you achieve cost efficiency with a single platform that addresses all aspects of network and IT ecosystems, including:

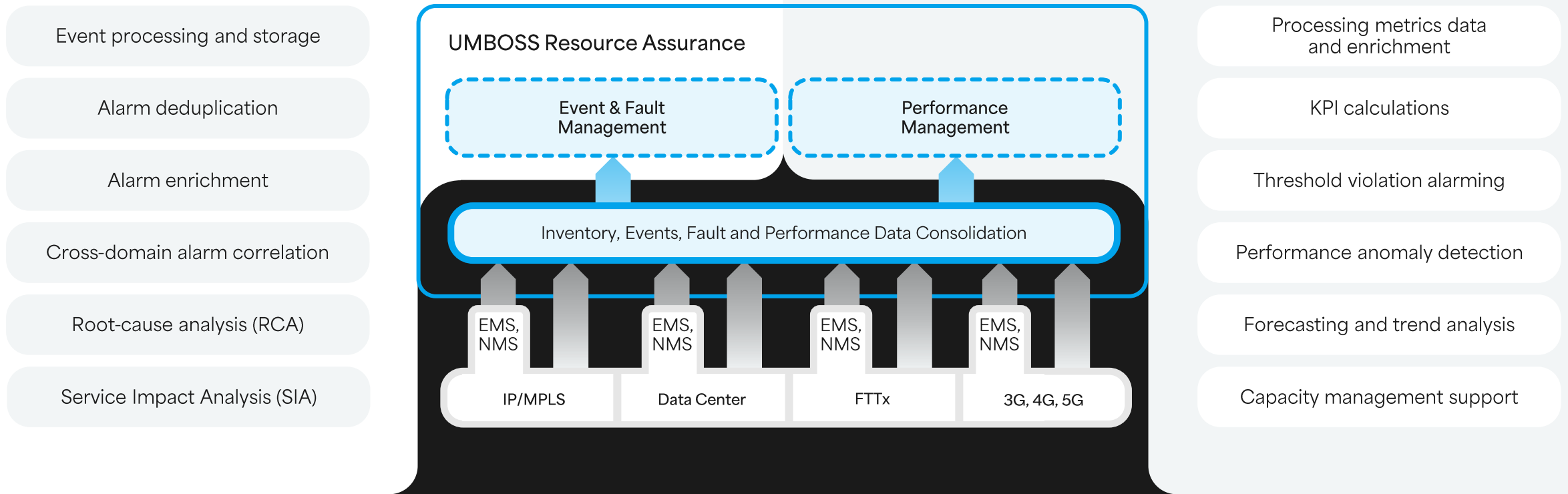
- Core network
- Transport network
- Access network
- Mobile network
- Data center infrastructure
- Cloud infrastructure
- Service platforms
- Enterprise customers
- Business applications
- Power supply and cooling systems

Streamlined Event and Fault Management (EFM)

UMBOSS's Event and Fault Management (EFM) module efficiently processes consolidated event data through a series of essential alarm management processes. Additionally, the EFM module initiates closed-loop automation actions upon detecting a faulty condition, ensuring a prompt response and resolution.

Optimized Performance Management (PM)

The Performance Management (PM) module efficiently processes consolidated data through various key functions. Any threshold violation or anomaly triggers automatic alarms via the Event and Fault Management module. Together, these two modules form the core of UMBOSS's Resource Assurance system.

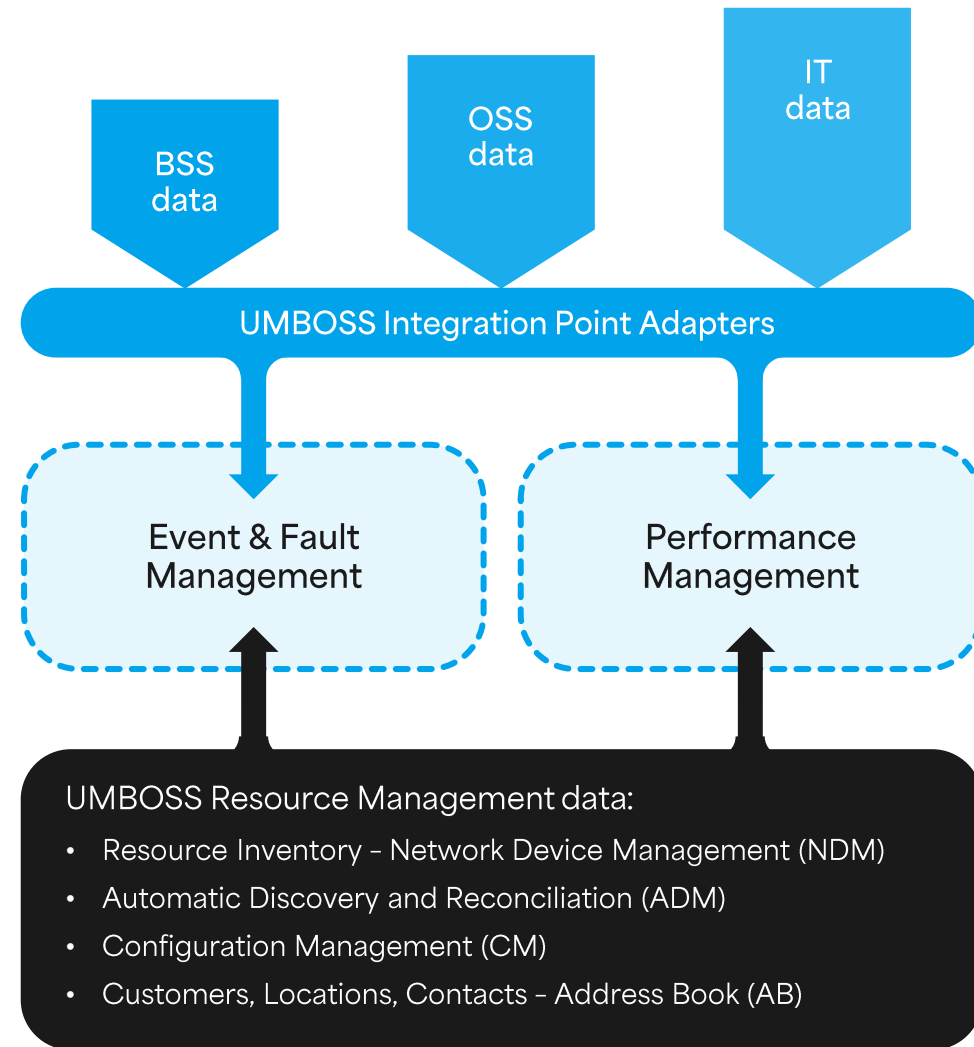


Enrichment Provides Context Behind Consolidated Data

Efficient assurance hinges on contextualizing alarms and performance data. UMBOSS seamlessly achieves this through enrichment, pulling information from inventory, CRM, ERP, billing, ticketing, and other relevant data in a customer's BSS, OSS, or IT landscape.

Out-of-the-box processes enhance resource information by including device details, location specifics, contact information, and customer data, all managed by UMBOSS's Resource Management.

Integration Point Adapters in UMBOSS extract and integrate data from existing BSS, OSS, and IT environments, ensuring comprehensive enrichment of both alarm and performance data.





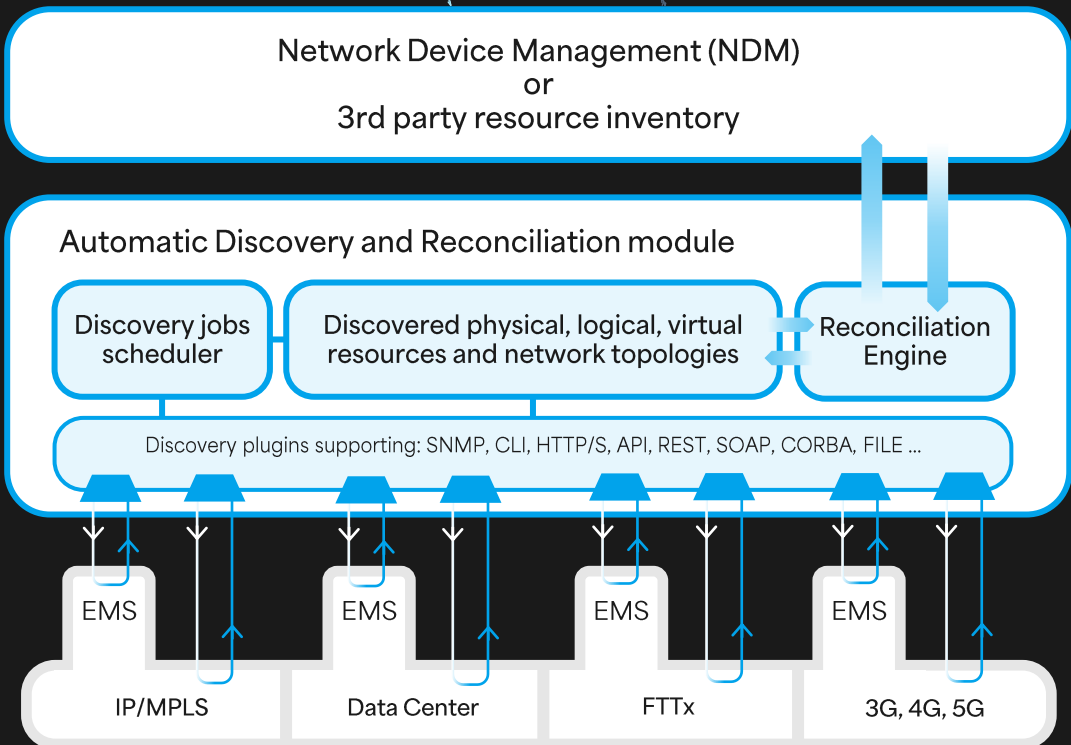
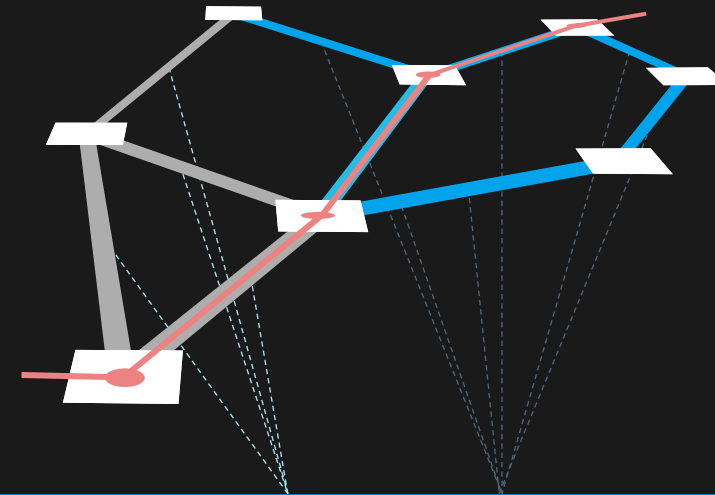
Automatic Discovery and Reconciliation (ADM)

Thanks to its umbrella vantage point, UMBOS is perfectly positioned to discover correct and updated physical, logical, and virtual resource inventory information and topologies across all domains.

ADM crawls through the network and retrieves inventory information directly from devices and element managers using various protocols.

All discovered data is combined to calculate different network topologies on different layers such as BGP, OSPF, L2, L3, and ISIS, among others.

Discovered data is reconciled with UMBOS's own inventory system (NDM) or a third-party inventory system.



Resource Management Modules

Driving the Enrichment



Network Device Management (NDM)

NDM functions as UMBOSS's own inventory hub for active physical, logical, and virtual devices and their topologies, housing essential data like serial numbers, vendor details, device names, roles, hardware/software versions, firmware location, status, and custom information.

It also manages data on modules, interfaces, topologies, IP addresses, and supports file attachments. Data is sourced through automatic discovery, or more time-consuming methods like data import or manual input.



Configuration Management (CM)

The Configuration Management module periodically collects configurations directly from all managed devices as part of batch or per-event jobs.

It executes configuration versioning and provides configuration comparison capabilities.



Address Book (AB)

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The Address Book module manages data on:

- Customers
- Locations
- Contact Data

This data is further used to enrich alarms and performance data. It can be synchronized with external sources or loaded and updated manually.

Resource Assurance is Necessary, but Service Assurance is What You Want!

Resource Assurance encompasses the thorough management of network, hybrid data center, and IT infrastructure through Event, Fault, and Performance modules. Yet, true assurance requires the ability to detect service degradation or disruptions.

Service Assurance now enters the picture. It is the key to identifying issues impacting services for both internal and external customers.

With UMBOSS, you gain Service Assurance through its specialized modules: Service Inventory and Service Quality Management.

These empower you to pinpoint malfunctioning resources that negatively affect services and customers.

Customer Assurance

Service Assurance

Service Quality Management

Service Model and Inventory

Resource Assurance

Event & Fault Management

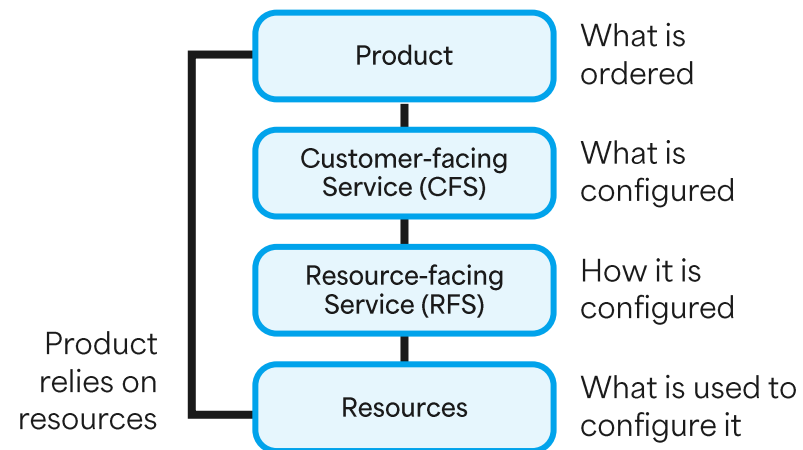
Performance Management

Service Inventory (SI)

The cornerstone of Service Assurance in UMBOSS is its Service Inventory module or SI. SI enables the management of service order and service instance data based on the TM Forum Information Framework (SID).

Products are described and mapped by product offering, customer-facing services, resource-facing services, and the resources themselves. All stored data can be accessed through a GUI and by external systems using the TM Forum Open API-aligned northbound interface.

An original concept in the telecom world, SI is now applied to enhance enterprise IT services for crucial business functions.

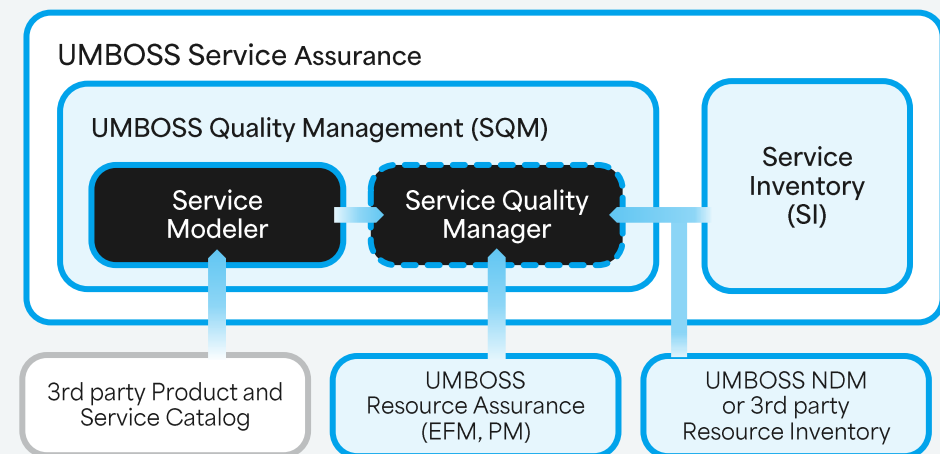


Service Quality Management (SQM)

UMBOSS SQM combines the data available in Service Inventory, Resource Assurance, Resource Inventory, and existing BSS, OSS and IT systems to calculate Key Quality Indicators (KQIs), detect degradation, and generate service-level alarms.

The Service Modeler, part of SQM, utilizes the product and service catalog to define service models, and configure KQI calculation formulas, degradation thresholds, and hierarchical dependencies for overall service status calculation.

This allows engineers to respond promptly to service degradations, swiftly identify technical issues, and proactively prevent customer service calls.



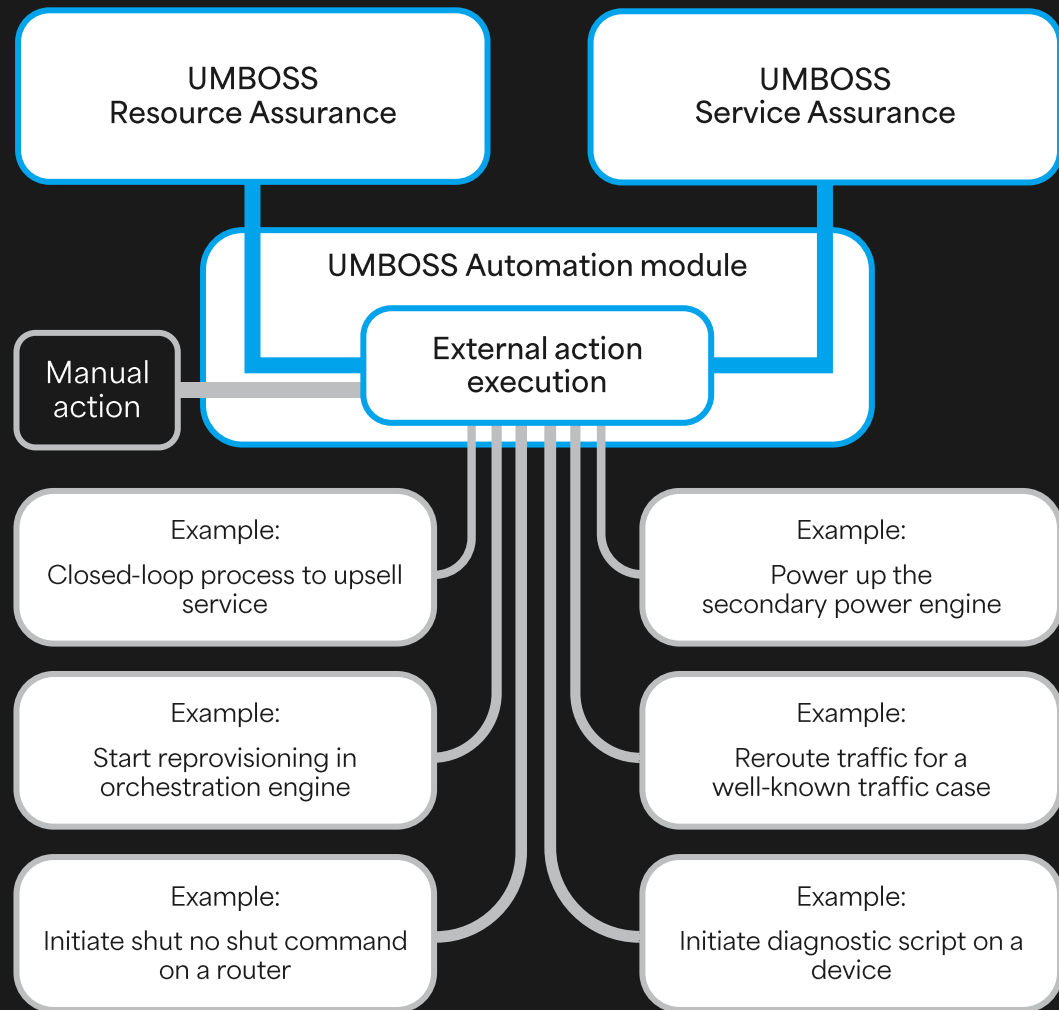


Automation

UMBOSS is dedicated to achieving fully autonomous assurance by empowering both resource and service assurance to trigger external actions, from remediation to rerouting and beyond, including business-oriented actions like initiating service upsells.

Our dedicated Automation module facilitates robust automation, allowing your team to effortlessly automate targeted remediation actions. Addressing just 20% of use cases enables the automation of 80% of network troubleshooting, providing significant relief for your operations engineers.

The illustration to the right gives a glimpse of the diverse scripts and processes UMBOSS can activate and control, showcasing the flexibility and effectiveness of its automation capabilities.





UMBOSS Portal, Gateway to Informed Decision Making

UMBOSS empowers engineers with tools for informed decision-making and effective actions, along with operational and management reports.

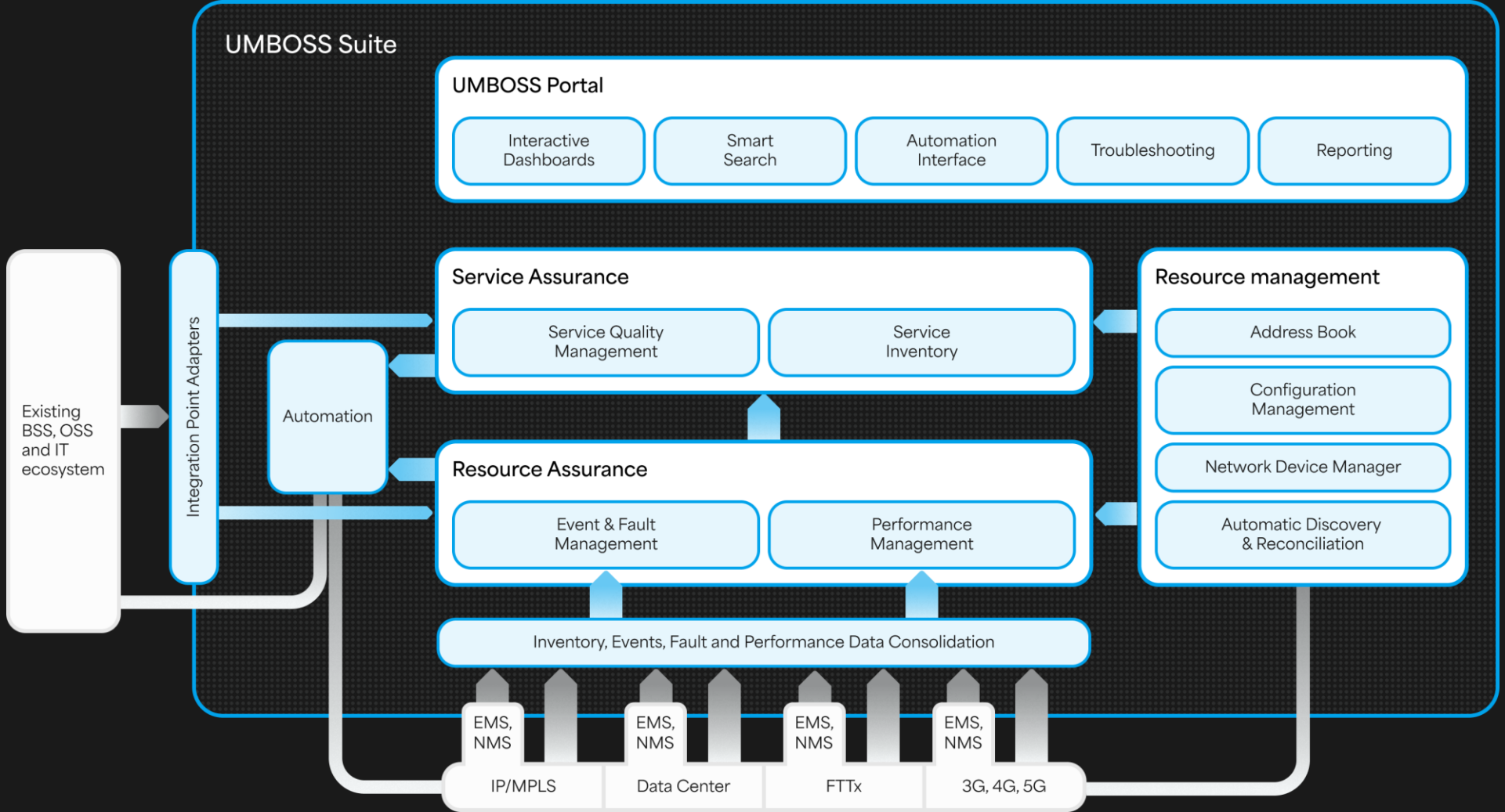
The UMBOSS Portal is a centralized hub for NOC and SOC engineers, offering unified management and a consolidated view of customers, locations, services, devices, and their performance.

Engineers can use interactive dashboards to visualize network health, employ smart search for seamless navigation, and execute external actions via the automation interface. The troubleshooting toolset ensures swift issue resolution, contextualizing data with integrated external sources.

The Reporting module provides integrated reporting on-demand or scheduled, covering all available data within UMBOSS.



Streamlining Umbrella Assurance



One Platform, Countless Use Cases

Consolidate alarms from multiple network domains to get a unified view over your network

Manage network performance across domains to get complete insight into its health

Localize alarms in your network quickly and precisely with alarm enrichment

Utilize performance data forecasting to enhance network capacity management

Automatically discover network inventory data to get your whole network under control

Discover your network topologies to learn how it's all connected

Continuous scanning assures your whole network is being monitored

Prevent disaster by monitoring the environment of your Data Centers and POPs

Create innovative VPN and Internet access services by utilizing customer performance data

Monetize performance data by upselling and x-selling what customers need and when they need it

Minimize churn of your customers by analyzing your enterprise customers' performance data

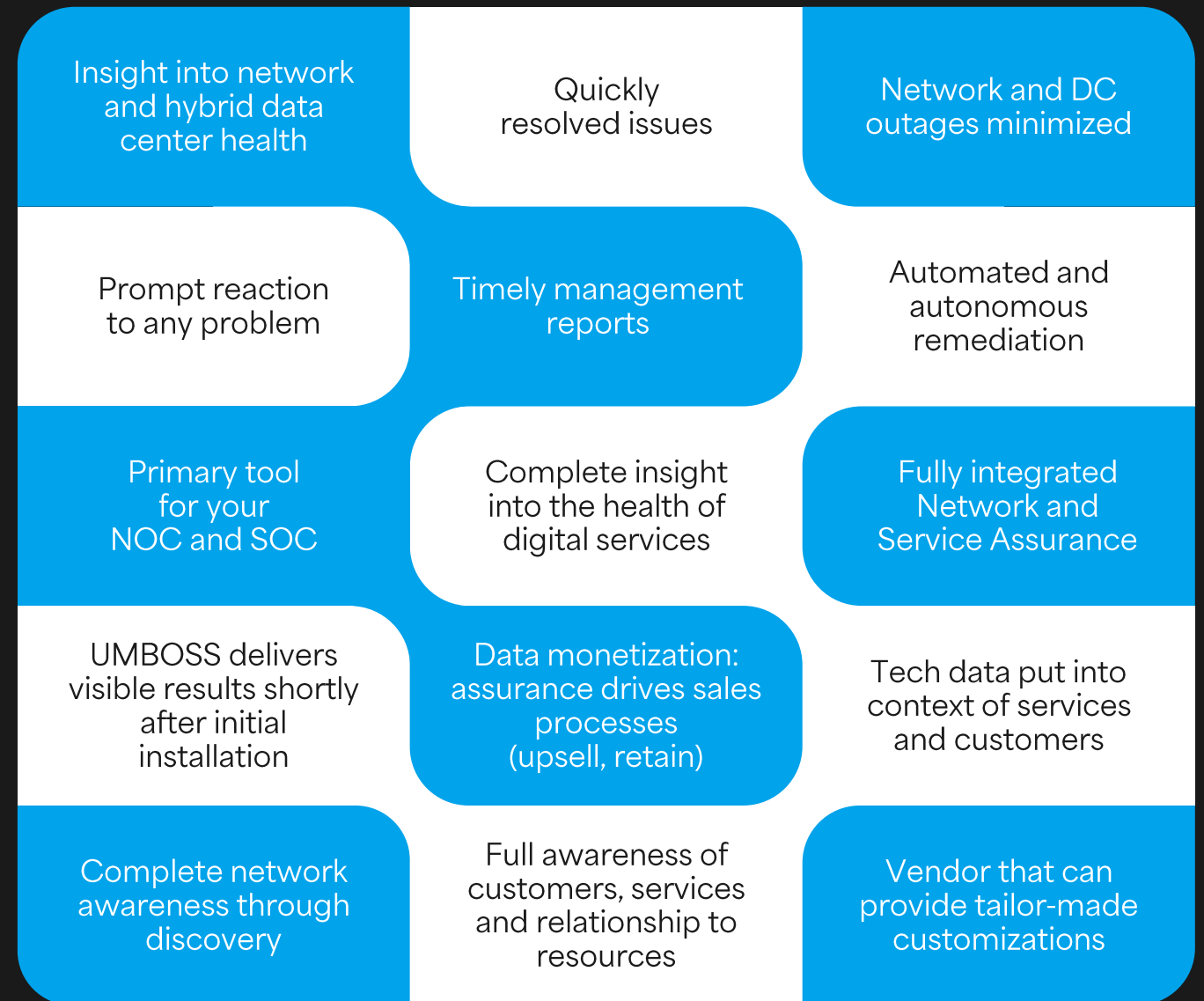
Manage power and cooling growth in your data center efficiently

The Unique Benefits of UMBOSS

UMBOSS customers are its strongest advocates, and they enjoy a multitude of benefits.

With UMBOSS, you gain deep insight into how everything operates across all corners of your network or within your hybrid data center environment while assessing the health of your service platforms.

This all-encompassing view is further enhanced by providing a consolidated perspective of your customers and the services they consume.





About UMBOSS Company

UMBOS Company, vendor for its genuine software product UMBOS, serves as a trusted advisor to telecoms and enterprise IT, streamlining digital services provisioning through end-to-end resource and service assurance processes.

Our dedicated team, comprised of subject matter and domain experts, continuously enhances UMBOS to be the preferred choice for assurance solutions.

Committed to TM Forum and other industry standards, we aim to create a cloud-native, AI-backed autonomous assurance product for global telecom and enterprise IT customers.

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🌐 www.umboss.com

in www.linkedin.com/company/umboss-done-right

Interested in discovering more?

You can read all you want about [UMBOS](#), but the best way is to [experience it through a demo.](#)

Schedule a Demo

