Overview
Vodafone is one of the world’s leading mobile communications providers, operating in 26 countries and in partnership with networks in over 55 more. Across the world, Vodafone has almost 444 million customers.

Challenge
To maintain its leadership position, Vodafone needs to deliver new services to market fast and have full control over its operating costs. With a massive global IT infrastructure, the operating model was fragmented. Processes required too many hand-offs, with parties acting in a siloed manner. Mohammed Shata, ITOM Solutions Architect, Vodafone Technology Shared Services, recalls a time where different tools and consoles were used for system monitoring: “It was siloed consoles. Alarms would go off to indicate an outage, and the team would pay a lot of effort to understand whether it was the firewall, a database, or a key application running between different consoles. The potential business impact of an incident wasn’t known and there was no end-to-end visibility into any of the systems.”

This fragmented monitoring model meant that IT was unable to support the business as effectively as it could. “There was no transparency into how IT provides services, and the business had no insight into what value IT provided,” Shata said.

Vodafone talks to their own customers about digital transformation and realized that understanding how their own IT Key Performance Indicators (KPIs) impact business revenue would be vital to creating the required end-to-end visibility.

Solution
To create a single pane of glass through which the entire hybrid IT infrastructure can be viewed, Vodafone looked to Micro Focus® Operations Bridge. This provides Vodafone a consolidated, end-to-end view of the environment. Operations Bridge has over 200

At a Glance

- **Industry**
  Telecommunications

- **Location**
  Global Vodafone Shared Services

- **Challenge**
  Align IT closer to the business and deliver new services fast, by automating hybrid IT monitoring to create end-to-end visibility

- **Products and Services**
  Micro Focus Operations Bridge

- **Results**
  - 70% alarm reduction
  - Reduced noise levels through event correlation and consolidation
  - Improved team collaboration with DevOps agile approach
  - Increased focus on development and service enhancement

“By automating our monitoring, we are freeing up our engineers for actual development and service enhancement. RCA, which could take hours to resolve, are now managed automatically in just a few minutes. Following the Operations Bridge implementation, we have noticed an alarm reduction of over 70 percent.”

MOHAMMED SHATA
ITOM Solutions Architect
Vodafone Technology Shared Services
tool integrations available allowing a hybrid IT infrastructure to be monitored by consolidating information rather than rip and replace. It distinguishes the signal from the noise, and focuses IT operations on root cause, rather than fighting symptoms.

This central visibility has really benefited the organization, according to Shata: “Our monitoring takes place on a three tier architecture where a central Operations Bridge console manages events received from different domains. We have automated flows for resolutions and can trigger tickets within the team when required. We not only detect incidents but correlate them so that we can remove duplicate events, and auto-close related events by matching event patterns. We consolidate everything into a unified perspective and move quickly through diagnosis and repair.”

The team applies analytics to the monitoring activity. Building on top of the monitoring data and using log sources, Vodafone creates analytics forecasts, and baselines. Business Value Dashboards (BVDs) give real-time insights into IT and business status, and a bi-directional integration with Splunk is used for log management and operational analytics. Vodafone is excited about the potential for metrics consolidation using the Vertica-driven Collect Once Store Once (COSO) concept.

As Operations Bridge specializes in hybrid IT monitoring, its open architecture is ready to integrate out-of-the-box with leading technologies. Vodafone’s centralized event monitoring draws data from AppDynamics, Dynatrace, VCenter with Cloud Optimizer, Oracle Enterprise Manager, and BMC Remedy.

**Results**

Automated hybrid IT monitoring with Operations Bridge has reduced the noise level in a consolidated environment. It has increased collaboration, as teams can work more effectively together, and it creates visibility into the end-to-end application lifecycle. Vodafone is very interested in enhancing their DevOps environment, as Shata explains: “Monitoring as Code (MaC) is of interest to us. It would be a real shift left for monitoring from a business case perspective. We will be able to dynamically configure events where developers can submit events via API to Operations Bridge. A definite roadmap item for us.”

Artificial Intelligence driven IT Operations monitoring (AIOps), leveraging machine learning, is also on the horizon for Vodafone. This will include anomaly detection and predictive analytics for all data types, events, topology, metrics, and logs—with no configuration required.

Shata concludes: “By automating our monitoring, we are freeing up our engineers for actual development and service enhancement. RCA, which could take hours to resolve, are now managed automatically in just a few minutes. Following the Operations Bridge implementation, we have noticed an alarm reduction of over 70 percent. We are excited about the opportunities ahead of us.”