Amdocs Private Networks Single Pane of Glass (SPOG)

Wireless connectivity presents significant challenges for optimizing IT and OT processes. This is especially true in private networks, with their abundance of devices and diverse technologies. Amdocs Private Networks SPOG overcomes this complexity with agile monitoring and unified visibility across hybrid networks, LTE/5G, transport, Wi-Fi and IoT devices. Our API-driven solution supports the entire spectrum from planning and deployment to operations, allowing us to manage complex multi-tenant environments, and empowering your enterprise customers to enhance network efficiency.

Amdocs Private Network Management Portal

End to End Visibility and transparency with a single pane of glass view

Centralized multi-vendor dashboard providing a Single Pane of Glass view of all enterprises

Role based access profiles for different users (Enterprises vs CSP), (RAN/Core vs Infra/Devices)

Workflow Overview and Management of all network elements, devices and applications

Network analytics and trends for NOC teams.

Advanced AI/ML rules for predictive analytics

IoT Device & Connectivity management

Device/SIM management for any device connected to the network

Capabilities for Policy Management, Charging and Network Exposure

Amdocs Deployment automation and AI-enabled Operations enhances Enterprise experience and improves operational efficiency

Harnessing the power of AI & ML

To enable faster mean time to resolution for network operation teams, Amdocs Private Networks Single Pane of Glass' unified dashboard leverages machine learning and AI to provide best-in-class visibility and advanced insights, summarizing all types of performance data. It also correlates network performance data with other network data sources for predictive analytics and proactive problem resolution.

Solution features:

- **Open APIs:** northbound for external systems; southbound for element management

- **Modular framework:** FCAPS-based, with extensions for device, subscriber and eSIM/SIM card management

- **Multi-vendor support:** correlates events, providing intelligent support across vendors

- **Comprehensive insights:** full stack views, service availability and performance monitoring

- **SLA management:** monitors and manages service level agreements

- **Optimization recommendations:** provides network optimization suggestions

Empowering efficient operations

Maximizing visibility

Gaining comprehensive insights into performance, end-user experience, and IoT devices is of utmost importance for achieving maximum visibility. Our solution addresses this by providing a unified view of the network's performance. It provides an end-to-end perspective that empowers you to proactively detect and resolve issues, from assessing overall network health to scrutinizing application transaction-level activity.

Effortless device management

Effectively managing a multitude of connected devices can pose a complex challenge. Our solution simplifies device management by reducing manual tasks and implementing automated processes. Furthermore, it streamlines task prioritization, enabling teams to work seamlessly with intelligently optimized operations. This, in turn, enhances efficiency and reduces overhead, allowing teams to concentrate on strategic initiatives.
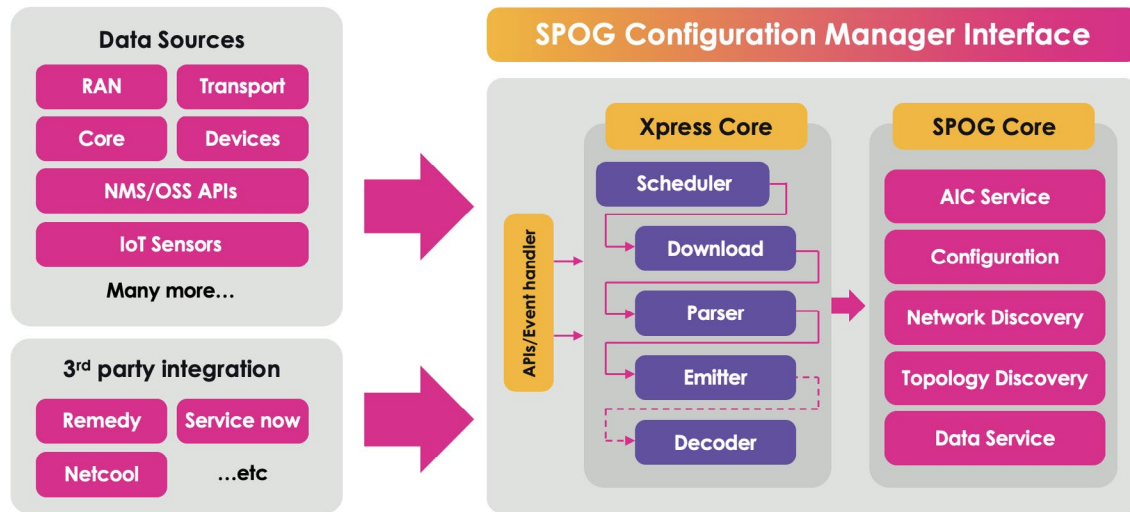
Instant alerts & remote issue resolution

Timely response to security threats and outages is crucial for maintaining optimal network performance. Our solution delivers instant alerts, ensuring prompt notifications of potential security breaches and service interruptions. Furthermore, remote issue resolution allows for rapid problem solving, eliminating the need for onsite visits. It also ensures that firmware remains consistently updated with the latest security enhancements.

Solution architecture

Amdocs Private Networks Single Pane of Glass architecture has been designed and optimized specifically for Mobile Private Networks:

- The solution core contains the main PostgreSQL open-source object relational database designed for reliability and powerful performance

- PostgreSQL databases are monitored using the Prometheus open-source tool

- The solution API provides an interface to manage network element resources

- RESTful API facilitates seamless data exchange between the solution and external systems

- Grafana dashboards empower internal support teams and customers to visualize the network in a wide variety of ways

Data Sources
- RAN
- Transport
- Core
- Devices
- NMS/OSS APIs
- IoT Sensors

Many more…

3rd party integration
- Remedy
- Service now
- Netcool

…etc

SPOG Configuration Manager Interface

APIs/Event handler

Xpress Core
- Scheduler
- Download
- Parser
- Emitter
- Decoder

SPOG Core
- AIC Service
- Configuration
- Network Discovery
- Topology Discovery
- Data Service

Key capabilities

Mediation: bi-directional integration with NMS/EMS, aggregating data from diverse sources, including PM counters, alarms, and trouble tickets.

Multi-domain, multi-technology, multi-vendor performance and fault monitoring: real-time tracking of network KPIs, offering trend analysis and insights at the network element level; comprehensive monitoring of network and service faults, enabling intelligent threshold application for fault detection and analysis.

Device management: network configuration and comprehensive monitoring.

Configuration oversight: audits network data, highlights inconsistencies, supports multiple vendors, and facilitates corrective actions to rectify misconfigurations.

Dashboard & visualization: user-friendly portal for network overview, KPI-based grouping, failure analysis and trouble ticket correlation.

User control: enables comprehensive management of authentication, user rights, configuration and network performance settings.

Benefits

01 Issue Detection & Resolution: Allowing for the early detection of potential issues or anomalies. Proactive approach enables timely resolution and minimizes downtime.

02 Disaster Recovery and Redundancy: Disaster recovery readiness by monitoring backup systems, failover mechanisms, and redundancy configurations. Helps in minimizing down time.

03 Resource Allocation and Capacity Planning: Planning for future growth and optimizing resource allocation.

04 Cost Reduction and Efficiency Improvement: Cost-effective decisions regarding hardware, software. Unused or underutilized resources can be identified and reallocated.

05 User Experience Improvement: By tracking response times, application performance, and overall system responsiveness.

06 Security Enhancement: Insights into potential security threats, unauthorized access, or suspicious activities. identifying and mitigating security breaches, ensuring the safety and integrity of data and systems.

SPOG

Why Amdocs

Amdocs leverages a deep understanding of existing capabilities and strategies to create tailored solutions that combine our own assets with those of the service providers' enterprise customers. Our holistic solution design approach considers enterprise requirements, use case, future vision, as well as the degree to which the enterprise wishes to manage their own network operations.

Leveraging our vendor experience, flexible solution blueprints and private network deployment experience, we provide a single point of accountability for committed SLAs, while minimizing risks associated with private network implementations. Meanwhile, our global delivery and support organization – spanning RAN, core, cloud, IT, system integration, transport, security and software domains – enables us to manage all the complexities of an end-to-end private network solution.

With our combination of deployment and automation, private network management portal and AI-enabled operations services, we lead the industry both in enhancing the customer experience, as well as improving operational efficiencies.

Learn more

To discover how Amdocs Private Networks Single Pane of Glass (SPOG) solution can help you better manage your enterprise customers' MPN experiences, contact
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