Data Fabric

Normalized data for Big Data Lakes to enrich service and business performance analytics

Mycom's Data Fabric offers telco and enterprise use cases by extending the benefits of Assurance and Observability to CSPs through enriched, and high-quality network and service data..

Normalized data for Big Data Lakes to enrich service and business performance analytics

Modern communication networks (5G and FTTx) generate complex data in petabytes, offering challenges in ensuring optimal service performance, revenue generation, and controlling opex. CSPs require ready-to-consume network and service data for Big Data Lakes which can consolidate data (technical and business) to facilitate operational and business analytics.

Mycom's Data Fabric facilitates seamless movement of normalized network and service data into CSP Data Lakes, where it can be stored, processed, and analyzed by external applications for business insights and supporting CSP growth. Offered on demand from the cloud, pre-integrated with most network deployments, Mycom's Data Fabric application eliminates months of data mining efforts intelligently. Data Fabric is built on the award winning EAA platform, proven at some of the world's largest, most complex Tier-1 CSP networks.

The drivers for Data Fabric are based on the CSPs' needs to:

- Feed ready-to-consume network and service data into Big Data Lakes.
- Consolidate network and service data to facilitate service performance analytics.
- Generate business analytics based on intelligent data from various applications in CSP ecosystem.
- Monetization of Data and User Experience to create new revenue streams.



Part of Mycom's EAA Service Assurance portfolio

The Data Fabric application, operated on Amazon Web Services (AWS), private cloud or on-prem, enables CSPs to benefit from the data processing capabilities of the EAA Cloud Platform, which is the engine for Mycom's Service Assurance applications. Based on microservices based cloud architecture, with inbuilt automation and analytics, the Data Fabric application enables CSPs to collect, consolidate and store data from their networks and services, so that they can utilize it to generate operational and business analytics.

Seamless collection and transfer of network and service data

The Data Fabric application collects raw network/service data from PM mediation and produces clean, normalized and consumable data. It facilitates seamless transfer of normalized raw and pre-aggregated KPIs network and service data into CSP Data Lakes, where it can be stored, processed, and analyzed by external applications. Data Fabric publishes data as a continuous stream, or periodic files based on use case and integration conditions. It provides separate output streams for each data type, such as inventory, catalog, PM (Performance Management) counter metadata, and PM counter datapoints.

Data extraction, encoding and integration

The Data Fabric application defines scope of data extraction from the Mycom performance management application, which is based on Managed Object Class, vendor, type adaptor type and raw vs pre-aggregated KPIs and glevel of granularity. The output is encoded and compressed using Avro encoded messages for BUS and Parquet encoded files for BUCKET.

Open to OSS ecosystem and Big Data Lakes

The Data Fabric application drives data normalization based on TMF standards (TMF628- performance, TMF639- inventory, TMF634- catalog). It supports high speed, and high integration flexibility with Industry Standard Interfaces (TMF), backed by Open standards. It uses Kafka bus for on-prem, and AWS MSK for SaaS. For buckets, it uses MinIO for on-prem, and AWS S3 for SaaS implementations.

Support for building CSP analytics

The CSPs' data and analytics programs is supported by Data Fabric as it saves endless data engineering cycles and data consolidation time. Data Fabric reduces data consolidation costs and accelerates CSPs' business analytics projects.

Data Fabric powered by Mycom's Service Assurance Suite offers seamless movement of normalized network and service data into CSP Data Lakes, to be processed and analyzed by external applications for business insights and CSP growth.

Extends the benefits of EAA to CSPs through enhanced,

open, and flexible insights to support their growth plans

Key Features

Flexible and Open

High Integration flexibility with Industry Standard Interfaces (TMF), backed by Open standards.

Normalization of data

Publishes raw and smart data (pre-aggregated KPIs) generated by Mycom's Performance Management application in a normalized format.

High Scalability

Collects, normalizes, correlates, and transfers the performance data of thousands of network entities and applications simultaneously in near real-time.

Multi-stream data

Provides separate output streams for each data type, such as inventory, catalog, PM counter metadata, and PM counter datapoints.

L1 Filter configuration

Defines scope of data extraction from Mycom PM, based on Managed Object Class, vendor, adaptor, raw versus pre-aggregated KPIs and granularity.

Encoded and compressed output

Avro encoded messages are used for the bus (Kafka for on-prem and AWS MSK for SaaS) and Parquet encoded files for the bucket (MinIO for on-prem, AWS S3 for SaaS).

Data integration eliminates the need for repetitive data integration processes by CSPs.

Offers a building block of data-driven decision-making to drive multiple telco and enterprise business analytics.

Benefits

High scalability and low-error

Transfer of performance of thousands of network entities and service applications in near real-time.

Drives reduced time-to-value approach

CSP data and analytics programs can avoid the need for endless data engineering cycles, resulting in accelerated time to value.

Reduces CSPs' data costs

Reduces data consolidation costs and accelerates business analytics projects. Massive data can be consumed seamlessly by a the CSP ecosystem and Big Data Lakes.

Supports CSPs' rapid revenue stream expansion

Supports CSP in building business analytics and intelligent services in minimum time.

Data Fabric - Powered by the Assurance Cloud

Mycom's Data Fabric application is powered by the Assurance Cloud. Proven to reduce TCO, accelerate TTM and support increased automation at the world's largest, most complex networks, the Assurance Cloud is the world's first fully cloud-native network and service assurance software-as-a-service (SaaS) offering. Mycom's Data Fabric cloud-based application is an essential capability for CSPs to enrich their Big Data Lakes resulting in accelerated time to value.



About Mycom

Mycom is a leader in Network Assurance and Service Experience Assurance solutions powered by predictive and generative AI-based Analytics and Automation capabilities enabling Communications Service Providers (CSPs), Managed Service Providers (MSPs) and enterprises to launch and manage mobile and enterprise services with high performance, at scale. Its telco transformation solutions are based on 25+ years of experience and expertise gained at the world's largest, most diverse and most complex networks.

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A multi-award-winning Assurance vendor

With over 25 years' experience, Mycom is recognised as a leading service assurance provider.













