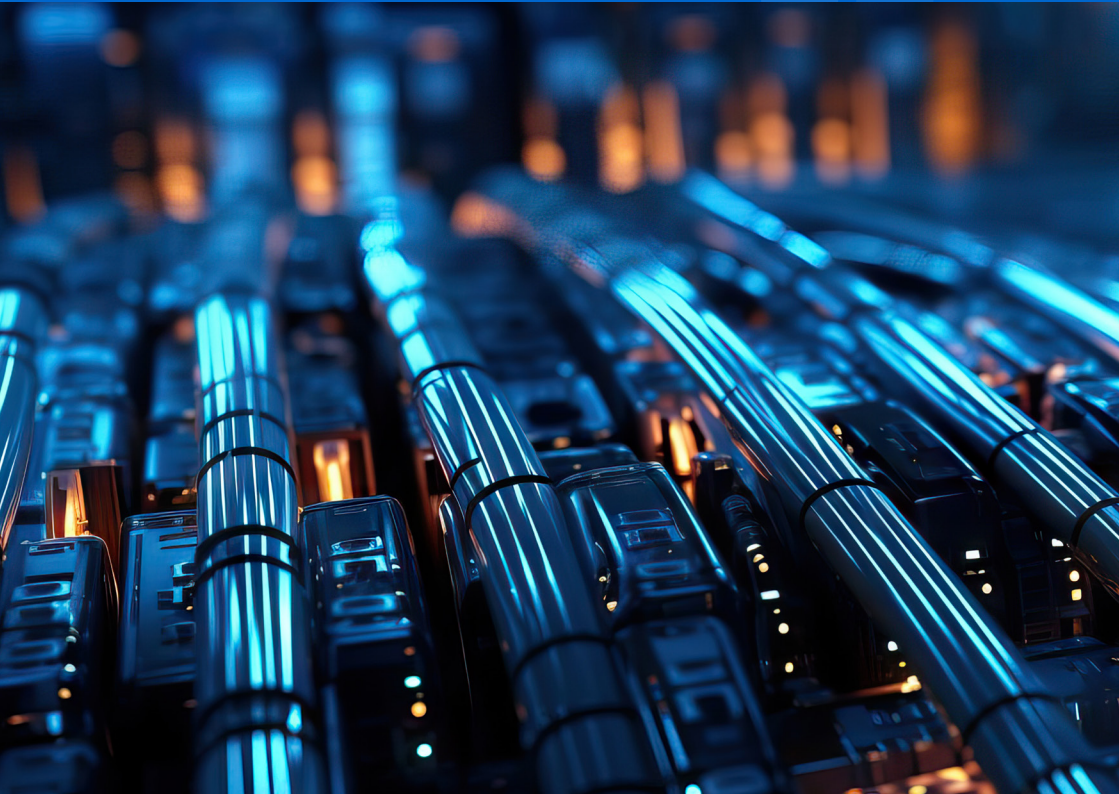# Broadband Service Assurance Platform

AI-powered proactive maintenance and monitoring of access network devices

Introduction

The ever-changing landscape of the telecommunications industry is facing rapid developments almost every day. As a result, telecoms nowadays manage complex networks that involve many vendors, new and legacy technologies and device types. Yet frequently they lack the means to ensure a unified view of such heterogeneous network infrastructure. This creates a number of issues that become the most visible when a failure occurs. Without a bird's-eye view of the network in one place, fault detection becomes time-consuming at best and near-impossible at worst.

Challenges

- ⊘ Data scattered across different sources
- ⊘ No means of visualizing and grouping of the data
- ⊘ Missing tools for preventive maintenance

Our solution

AVSystem's Broadband Service Assurance Platform (BSAP) is a system that monitors the conditions of DSL, HFC, and FTTX services based on the input from a variety of access network devices (OLT/CMTS/DSLAM/MSAN/eNodeB) via any protocol (SNMP, Telnet, TR-069, SSH, TL1).

BSAP aggregates data from different network devices and integrates it with external OSS and BSS to provide a comprehensive source of information needed for service assurance in customer care and network operation centers. This makes it easier to take full control of the network and quickly find root causes of even the most complex issues.

BSAP also comes equipped with a powerful AI-driven algorithm for fault prediction. Using machine learning, the algorithm can identify underlying problems that might have gone unnoticed and alert operators, so that they can respond before any serious breakdown occurs.

A platform that combines data from different sources and comes with a flexible reporting engine, it gives telcos a unique tool to detect inconsistencies in external BSS/OSS databases, analyze different customer propositions they have on offer, find opportunities for upselling, and more.
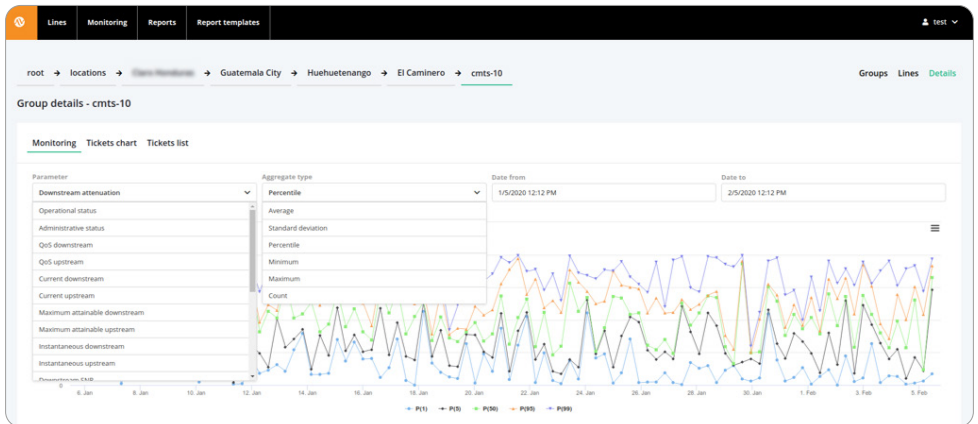
Features

- ⊘ **Data visualization**
  Predefined and customized dashboards visualize integrated data from different access network devices and BSS/OSS.
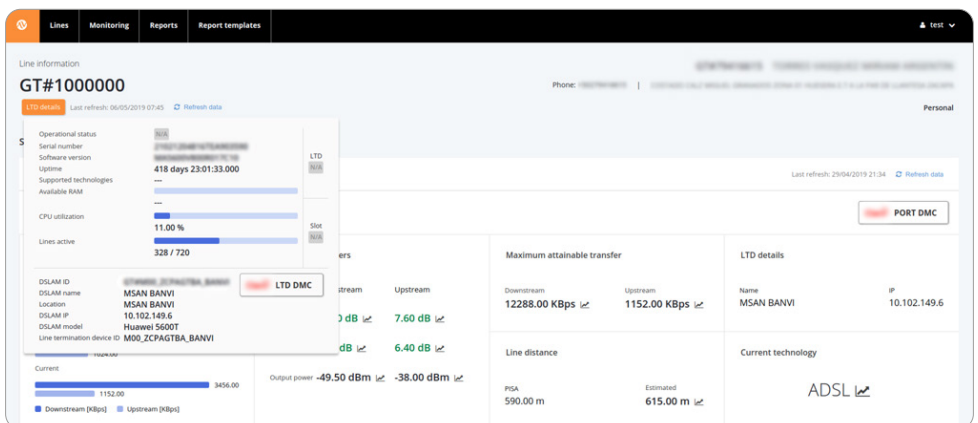
✅ Data grouping

Powerful grouping mechanisms enable flexible categorization based on different criteria, as well as group monitoring and analysis, or SLA performance assessment.
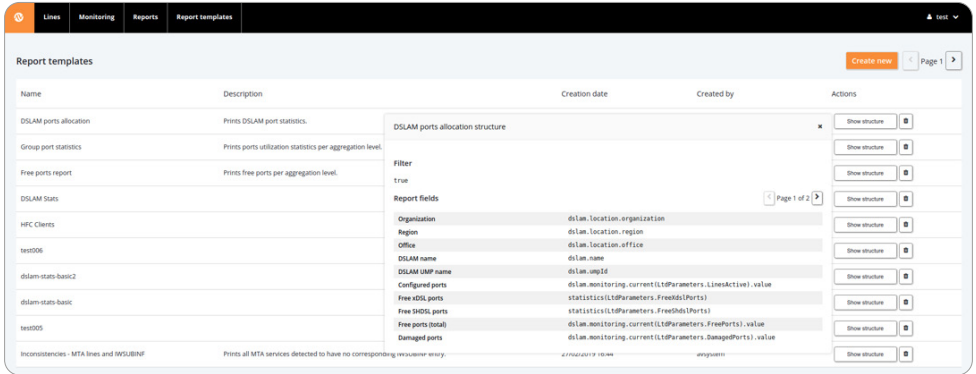

✅ Preventive diagnostics

The system runs preemptive and scheduled maintenance, identifies root causes of network problems and misconfiguration issues.

⊘ Reporting

The reporting module with predefined templates allows for easy monitoring of inconsistencies and finding opportunities for optimization.

Benefits

Less downtime, reduced MTTR and smaller number of maintenance actions.

Improved quality of service driving higher customer satisfaction and lowering churn rate.

Cost savings on technical staff hiring, training, manual interventions and customer care/NOC operations.

Possibility of integrating with ACS to supervise both CPEs and access network devices, ensuring customer satisfaction.

Identify, analyze and prevent network issues

The ability to monitor the whole network and troubleshoot all issues has a direct impact on both operational costs and customer satisfaction. Having a full overview of the infrastructure allows you to act on issues more quickly or even prevent them altogether, thus reducing the downtime and mean time to repair. Managing the network becomes more intuitive to staff thanks to an understandable graphical user interface and customizable key performance indicators integrated with all your systems, and so can lead to savings on onboarding and training. Additionally, comprehensive reporting that combines information from BSS and OSS with recent and historical monitoring data gives you one-of-a-kind insight into your company infrastructure, thus creating new opportunities for both technical and business improvements. It all results in a better quality of service that has a palpable impact on customer satisfaction and retention.

Go beyond service assurance!

Broadband Service Assurance Platform works in tandem with Unified Management Platform – AVSystem's powerful multiprotocol ACS that helps telecoms take care of CPE management. UMP provides top-class tools for device configuration and maintenance that make it easier to install and manage both residential and business CPEs, regardless of what access technology or protocol they use. It also offers premium features that cover a variety of use cases, depending on the technological and business needs of your company. These include business router management, WiFi optimization, DOCSIS provisioning, customer care automation and more.

Together, BSAP and UMP deliver a comprehensive solution that allows telcos to supervise both customer premises equipment and access network devices to provide a seamless experience for end users and significantly improve their satisfaction.

AVSystem

Broadband services management and assurance on truly open standards.

AVSystem was founded in 2006 with a focus on providing automation solutions for connected device ecosystems. Although the company started by serving the telecommunications industry, it has since expanded its services to various sectors in over 60 countries. Catering local internet service providers as well as multinational telco operators and enterprises, we develop top-notch solutions dedicated to telecommunications, WiFi VAS, and the rapidly growing Internet of Things. Our goal is to create flexible and dynamic technology based on open standards accessible to everyone. We not only follow the newest trends but also co-create them with other IT industry pioneers by actively participating in organizations such as the Broadband Forum.

Get in touch!
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Learn more about BSAP   Become our partner

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