



End-to-end assurance solution

# Increase customer QoE

Turn data into value



# Assure the quality of your services

Networks are becoming increasingly larger, complex and virtual. Simultaneously customers are becoming even more demanding and volatile. Meanwhile, Communication Service Providers (CSPs) are focusing their strategy in delivering the best quality of experience to their customers in a daily effort. Quality network and service monitoring in real time enables a proactive role, detecting service degradation and solve problems that will avoid customer complaints and reduce churn. Having a convergent solution for all networks, customers and devices, empowers CSPs with valuable and actionable insights that will help them gain operational efficiency, generate revenue, support strategic business decisions and provide excellent and meaningful experience for each and every subscriber.

# Current market



Quality and service experience are essential to maintain customer loyalty.

# Challenge



Ensuring that network and services operate at peak performance and availability.



# **Business benefits**

• Increases customer's quality of experience

Monitor individual customer performance and guarantee first-class quality of experience.

• Decreases churn rate

Increase quality of the offered services, coping with customer expectations.

• Gain operational efficiency

Delivering actionable intelligence to the right people ensuring accurate error detection and fast resolution.

• Proactively solve problems

Be one step ahead identifying and resolving network issues or poor performance before they impact service availability and be experienced by customers.

Powerful and unified end-to-end assurance platform

For multi-service, multi-technology and multi-vendor environments



### Opportunity



Proactively detecting service degradation and network problems will avoid customer complaints and reduce churn.

#### Solution



Having a powerful real-time platform which monitors network and services performance and ensures customer quality of experience.



# Who benefits from it?

# Key differentiators

- Extensive track record with telco operators worldwide;
- Off-the-shelf NQM, SQM and CQM packs ready to be deployed;
- Unified solution enabling performance and configuration management with advanced troubleshooting capabilities;
- Unified solution for all networks: mobile, fixed and convergent operations;
- Altaia is part of TMForum certified NOSSIS Suite.

#### Customer



Increase customer satisfaction

Reduce churn

#### Operator



Assure overall quality

Optimize resource investment



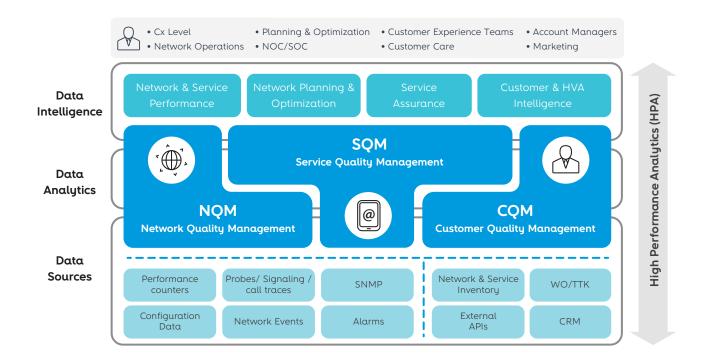
Network operations, engineering and network planning teams



Marketing and Customer Key accounts

## The architecture

The solution is based in a scalable architecture able to collect, process, enrich and display data tailored for NQM, SQM and CQM processes. The integration with the network is guaranteed by a mature Data Collection, through out-of-the-box plugins for multi-vendor and multi-technology environments. Streaming and timed information are supported to extract the maximum value from information and trigger proactive actions.





#### **NOM - Network Quality Management**

- Understand how the network behaves and ensure that it runs at peak performance;
- Perform accurate capacity management in order to optimize your network investments;
- Configure alarms to identify network performance degradation;
- Deep-dive analysis using powerful analytic applications.



#### **SQM - Service Quality Management**

- Service Level Objectives (SLO) can be activated to support service degradation detection providing accurate troubleshooting and quality enhancement;
- Quickly identify what is causing service degradation and who is being impacted. E2E service assurance correlates network resources with services and customers.



#### **CQM - Customer Quality Management**

- Monitor in real-time the customers quality of experience (QoE) for mobile, fixed and convergent services;
- Manage the performance for High Value Accounts (HVA) and VIP customers;
- Provide the right and focused information to customer key account managers, in real-time;
- Verify customer QoE, with clear and intuitive analytics supporting troubleshooting capabilities.

# Use cases

Altaia can be deployed in any network including support for the most recent technologies like LTE/VoLTE or SDN/NFV networks, and 3play or OTT services. It also supports older technologies with off-the-shelf performance packs ensuring that combined and E2E perspectives are achieved in order to maximize services quality.



#### Ran proactive network quality

Proactively monitors a multi-vendor access network producing several 2G/3G and LTE KPI/KQIs at cell level to identify and troubleshoot service degradation problems before they impact on customer quality. Guarantee an accurate service problem identification and quickly identify the root cause.

Produce indicators in real-time applying baseline thresholds that combine several KPI/KQIs
and ensures that depending on their individual activity and performance history, accurate
network cell service performance degradations are detected and solved.



#### VIP/HVA customer quality

Protect your most valuable customers and High Value Accounts (HVA), monitoring in real-time real quality of experience, ensuring that your Service Level Agreements (SLAs) are achieved for voice, SMS and data mobile services.

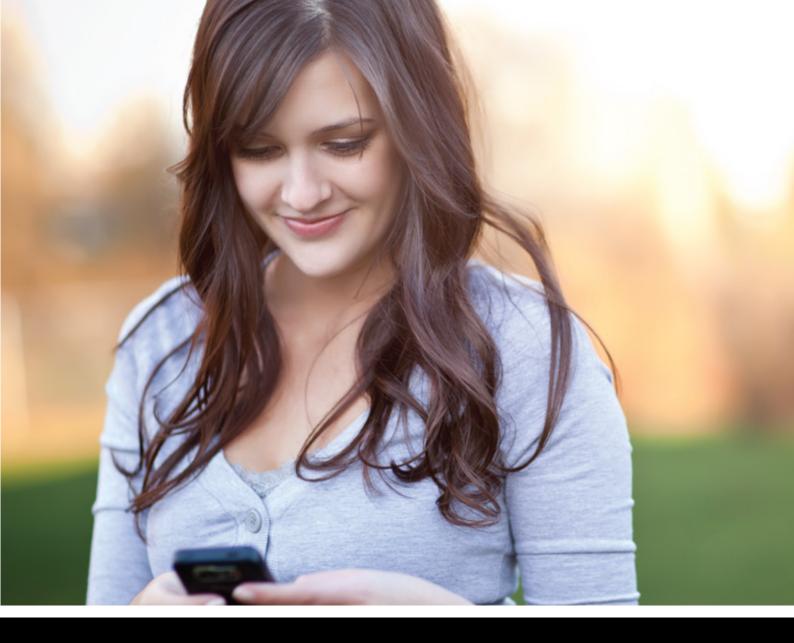
- Produce indicators in real-time that covers accessibility, integrity, mobility and usage information about each customer group.
- Display information in powerful dashboards for several customer groups with drill-down capabilities by subscribers, geographical, device or administrative perspectives.



#### IPTV proactive service quality

Manage the performance of IPTV service that relies on several network technologies, interconnection nodes and service platforms to deliver a high-value service with superior quality. Use retry requests from STBs in order to detect common network problems in real-time.

- Using network inventory, that identifies the full network hierarchy (from Local Offices through home network STBs), produces in real-time statistical indicators aggregated for each network hierarchy level.
- Apply baseline thresholds to proactively identify common network problems that are
  affecting groups of customers. This configuration enables for example the detection of
  abnormal service conditions for MSAN boards affecting the quality of data for all customers
  being served by that MSAN.



# References

#### **Customers:**

• MEO, OI, VIVO, TIM, CTM, Altice Dominicana

#### **Motivation:**

 Centralized and homogenous vision of the end-to-end quality of the services

#### **Application scenarios:**

- Engineering and planning teams;
- Network/Service Operations Center (NOC/SOC);
- Country Regulators;
- Customer account management.

#### Added value:

- Move from reactive to proactive service quality management;
- Monitor and report network and service quality, in order to guarantee expected quality for mobile and fixed services, optimizing resource investments;
- Provide accurate and appropriate overall quality executive reports and demanded regulatory reports;
- Increase knowledge about the customer in order to ensure customer loyalty and reduced churn.



# **About Altice Labs**

Delivering key telecommunications technologies since 1950, Altice Labs has been shaping the future of technology enabling Communications Service Providers and Enterprises to offer advanced and differentiated services to their customers and users.

Altice Labs is an innovation and transformation catalyst supported on a strong and dynamic Innovation Ecosystem. Through technology, we are committed to improve people's lives and the way in which companies do business.

