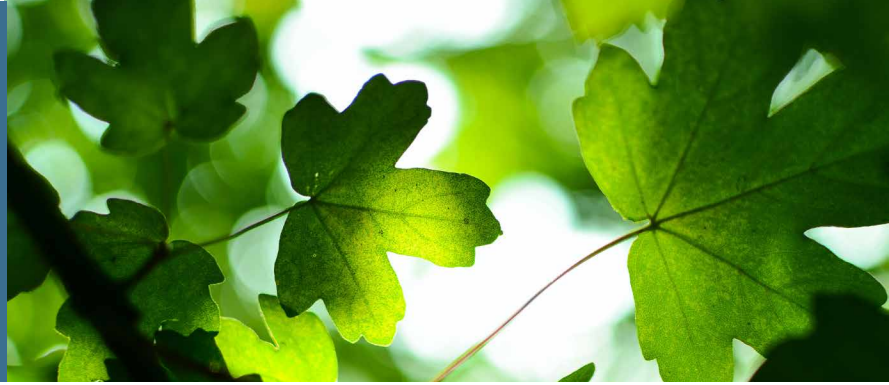# ONEMANAGE

Programmable Management Platform

OneManage is the OneAccess portofolio's management suite automating Customer Premises Equipment (CPE, either physical pCPE or virtual uCPE) configuration, software image distribution and Voice Quality Monitoring (VQM). Provisioning and VQM are available as two separate licenses that include a common device monitoring and alarm framework. OneManage simplifies daily operations and increases productivity for lower operation costs.

Zero-touch CPE installation is enabled by an auto-configuration protocol such as TR-069 (CWMP) and Call Home protocol. OneManage manages the server-side parameter creation for the auto-configuration protocol. The system enables rapid CPE configuration creation from CLI templates. CPE are managed in groups where the network administrator can apply bulk changes for a whole group.

The zero-touch service activation reduces installation costs for telecom operators and organizations deploying large-scale networks. OneManage also simplifies network maintenance by automating change tasks in hundreds of CPE (pCPEs, uCPEs and VNFs) in one operation. Updating all device types with a new software image or populating a template change into many device configurations does not require significant effort and time any more. While operation costs are streamlined, OneManage's main benefit is also to reduce risks of errors associated with the use of self-designed tools or manual operations.

Critical to SMB's operation is the availability of communications. VQM enable service providers to pro-actively monitor and fix voice quality issues. Customer satisfaction is increased while ensuring low customer churn.

Customizable, User-Friendly Configuration Engine

The configuration generation engine is flexible to support complex scenarios. Including scripting within the template enables the ability to generate advanced configuration files. Adding template input parameter controls avoids user input errors and unexpected output configurations.

With OneAccess solutions, network engineers do not need programming skills to orchestrate VNF activation and chaining anymore. OneManage facilitates the template design of its uCPE solution with a GUI-based plugin called 'Design Studio'.

Task Automation

CPE are all member of a group. Groups can be organized in sub-groups. The hierarchical organization of CPE enables an administrator to operate bulk operations on logical groups, such as planning a software upgrade or querying connection status.

When changes on templates, software, web files are applied, they are de-facto activated in OneManage database. For a better scalability, the CPE will be updated at their next connection to OneManage. However, several CPEs may be selected on OneManage web interface to trigger an immediate update.

Monitoring and Alarm Management

Network status is displayed at a glance with alarmed sites on a map. The operations team can quickly drill-down into graphs from this map and discover the root cause of service degradation.

Specifications

General

- Web-based GUI
- Multi-tenant user management: user profiles, customer view
- Northbound interface to create / update / query CPE, retrieve graph data
- Nightly snapshot and restore operations
- Server responsiveness self-monitoring
- Device management in hierarchy of groups

Provisioning

- Standard-based provisioning protocols: CWMP (TR-069), Call Home
- Zero-touch configuration and firmware deployment
- Automatic configuration backup
- Configuration versioning and difference log
- Configuration consistency audit
- Fully customizable templates:
  - Embedded scripting to generate CLI text files
  - Programmable input field types and checks

Alarm Management & Device Metrics Collection

- Provisioning, voice quality degradation events mapped to alarms
- Custom alarm configuration and threshold
- Alarm filtering

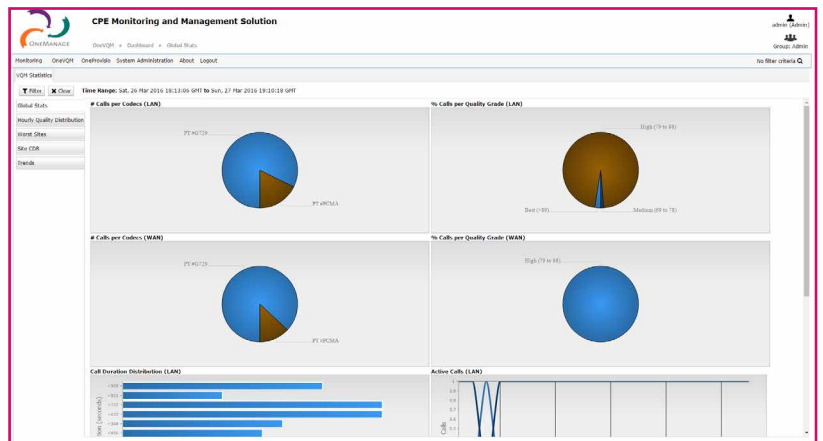## Voice Quality Monitoring (VQM)

- VQM metrics: WAN- and LAN-side MOS (R-factor), jitter, losses
- Detailed Call Detail Records (CDR)
- Graph display with flexible filtering criteria
- Trend graphs (weekly, monthly basis) and top-worst sites
- Click and drill-down with graphs
- PDF report generation with customizable templates

Installation

- Up to 30,000 CPE managed per server in provisioning only mode
- Up to 5,000 CPE managed per server (provisioning/VQM/alarm management)
- Recommended Hardware configuration: 4 Cores*2 GHz CPU, 8 GB RAM, 250 GB HDD
- Recommended Linux distribution Ubuntu 20.04
- Deployment in Application mode (ZIP) running on Ubuntu 20.04 or containers
- Also available in High Availability mode for critical services
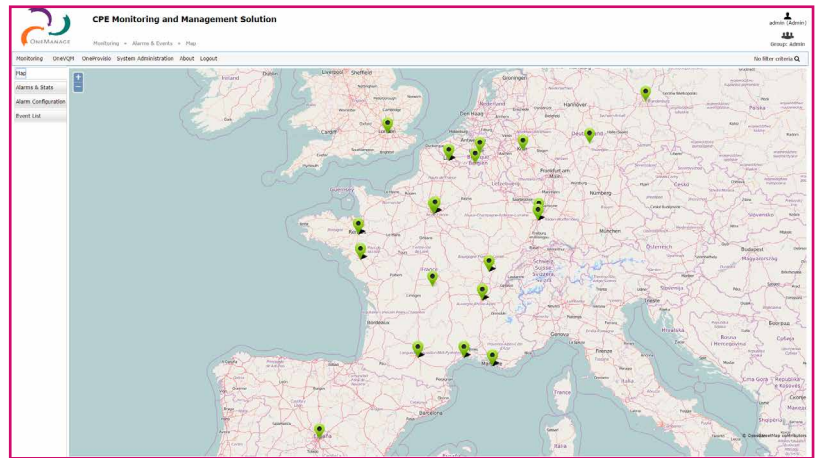
Alarm display on a map

VQM statistics

Router List

About Ekinops

Ekinops is a leading provider of open and fully interoperable Layer 1, 2 and 3 solutions to service providers around the world. Our programmable and highly scalable solutions enable the fast, flexible and cost-effective deployment of new services for both high-speed, high-capacity optical transport networks and virtualization-enabled managed enterprise services

Our product portfolio consists of three highly complementary product and service sets: Ekinops360, OneAccess and Compose.

- Ekinops360 provides optical transport solutions for metro, regional and long-distance networks with WDM for high-capacity point-to-point, ring and optical mesh architectures, and OTN for improved bandwidth utilization and efficient multi-service aggregation.

- OneAccess offers a wide choice of physical and virtualized deployment options for Layer 2 and Layer 3 access network functions.

- Compose supports service providers in making their networks software-defined with a variety of software management tools and services, including the scalable SD-WAN Xpress and SixSq Edge-to-Cloud solutions.

As service providers embrace SDN and NFV deployment models, Ekinops enables future-proofed deployment today, enabling operators to seamlessly migrate to an open, virtualized delivery model at a time of their choosing.

A global organization, Ekinops (EKI) - a public company traded on the Euronext Paris exchange – operates on four continents.