

TeleQuill EMS- V1.0.1

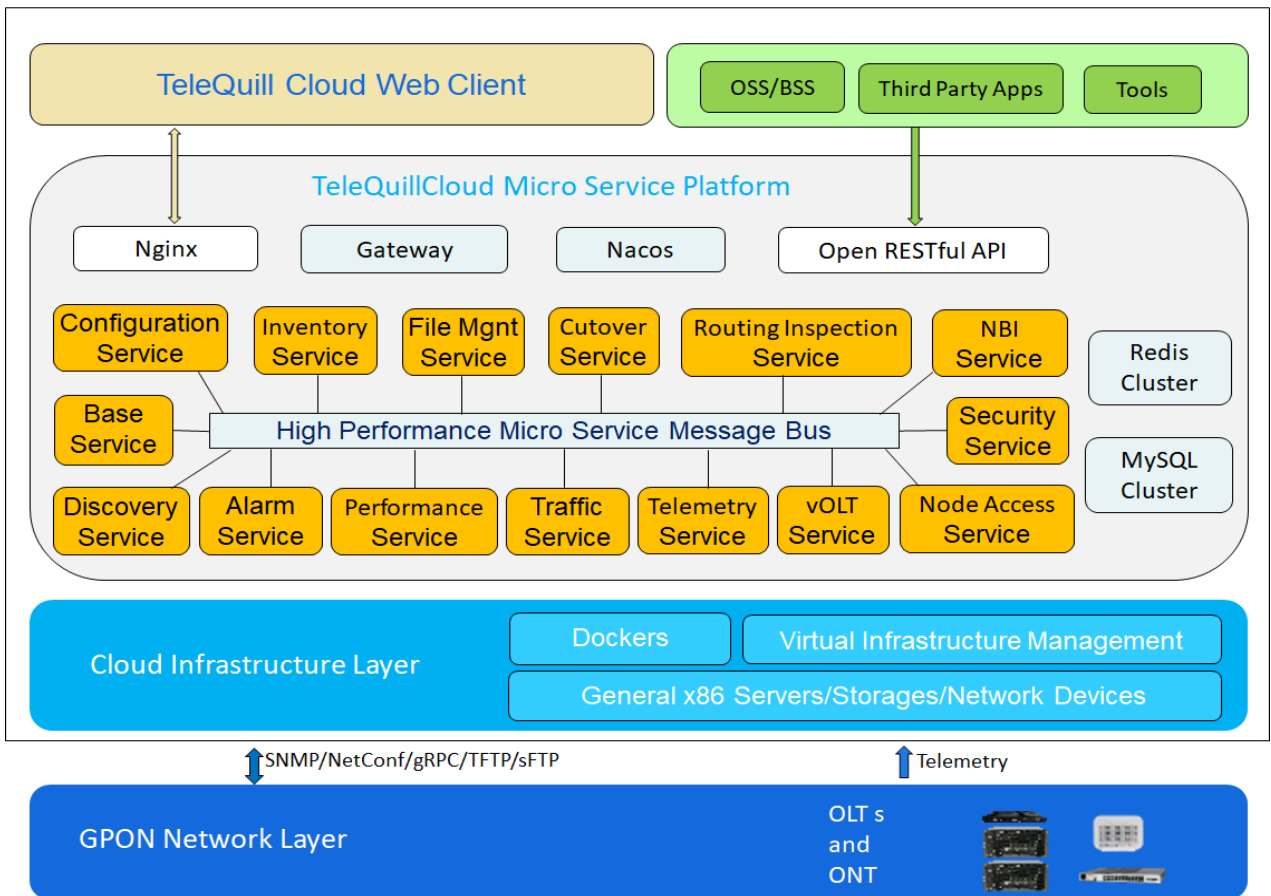
Introduction – TeleQuill EMS

TeleQuill EMS is an integrated Element Management System for managing Alpha Bridge access devices. It provides centralized operation and maintenance functions for Alpha Bridge devices and networks and supports end- to-end solutions.

Alpha Bridge TeleQuill EMS adopts modular architecture(multi-tier), based on Micro services, thus it is good openness, security, stability and scalability.

The TeleQuill EMS has a unified standard interface (NBI) and powerful value-added functions, support cross network management and smooth upgrade for network evolution

Architecture Overview



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Functional Characteristics

- Manage stand-alone devices and entire network devices.
- The system can perform topology discovery on the entire network, generate device-specific panels, perform parameter configuration and real-time monitoring of devices, perform performance statistics on devices, and locate and recover in a timely and automatic manner when devices fail, with complete functions.
- It is suitable for large and complex network structures.
- Adopt a friendly full graphical interface, which is easy to operate and use.

Framework

- The database communicates with the server, without any direct interaction with the client, and adopts the C/S architecture.
 - The server directly interacts with the client, and the server has the ability to directly operate the device; The network management server mainly provides the following functions
1. **Framework services:** Framework services include database operations, policy scheduling, and log services
 2. **Business logic function:** including the processing logic of each business function of the network management
 3. **External interface:** Provide external northbound interface
 4. **Communication module:** This module mainly performs the operation of communicating with the client application
 5. **Security framework:** The security framework is embedded in the entire platform to manage permissions and authentication for all functional modules

NBI interfaces- V1.0.1

Protocol	Fault Management	Configuration Management	Resource Management	Real-time performance	History performance
TL1	Y	Y	Y	Y	N
SAOP/XML	Y	Y	Y	Y	Y
SNMP V3	Y	N	N	N	N
SFTP	N	N	Y	N	Y



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Key Deliverables

- The network management platform mainly includes the following functions :
- **TM (Topology) Management:** Automatic discovery of network devices, display devices panel, update device status ;
- **CM (Configuration Management) :** Service configuration for the device, routine maintenance to provide a friendly user interface ;
- **FM (Fault Management) :** Capture a variety of network events and alarms, and make the appropriate inquiries and management ;
- **PM (Performance Management) :** Relevant performance data network equipment for real-time or on a regular basis to monitor the statistics to facilitate user management ;
- **SM (Security Management) :** Users can add / delete / certification operations, assign user rights and groups, in order to ensure the safety of their data network equipment.
- TeleQuill EMS can make use of COTS server or Cloud based VM

Typical Hardware and Software Requirement

- **Hardware Requirements:**
- Configuration below Minimum hardware configuration required for OMC.
 - Server: Pentium IV 2.8G, 1G RAM.
 - Client: Pentium IV 1.6G, 512M RAM.
- **Software requirements**
 - Server: Windows Server 2003, Windows XP, Windows 7
 - Client: Windows 7, Windows XP, Vista
 - Database: Support MySQL database

