

MetroIntegrator

Network and Element Manager V1.5 for the ULAF+ Access and Aggregation Platform



Introduction of AccessIntegrator's Successor

New functional requirements and the extension of the portfolio let Albis Technologies decide to introduce its own state of the art network management platform under the name Metro Integrator, which will replace the full Access Integrator management platform. From the first release MetroIntegrator will offer comprehensive network management. With a strong multi-level navigation framework it allows the operator by means of a navigation map and tree and a powerful search facility to quickly acquire overview and zoom in to the network elements that require attention. It has been designed as a flexible and scalable architecture based on the ITU-T M.3000 series for the Telecommunications Management Network (TMN). The FCAPS functionality sets as defined in ITU-T M.3400 were taken as the main starting point to design a network management tool that perfectly suits the needs of the operator.

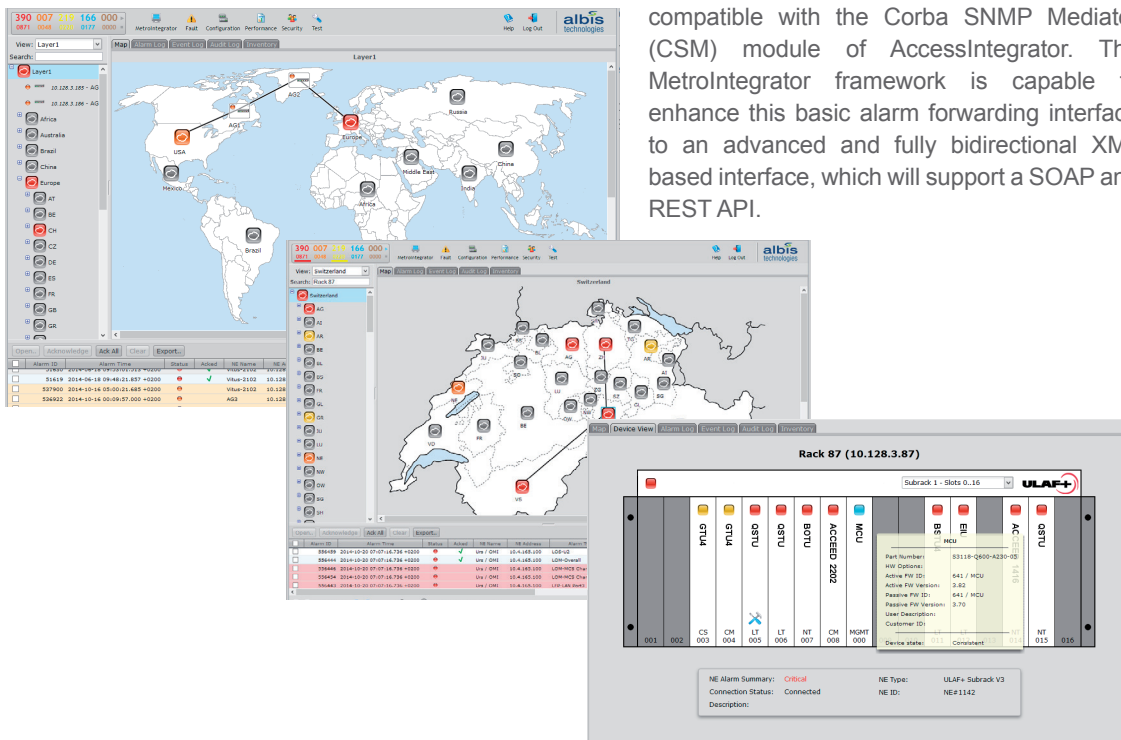
Powerful Web 2.0 GUI

MetroIntegrator is designed around the latest Web 2.0 technologies from Google™, which provides the user an application like experience right in a web-page. So it does not require Client software installation or administration, nor plug-ins to be installed on the Client. Through the intuitive and thus easy to operate GUI, training effort is reduced and focus given to the things that matter to the operator.

Besides the strong navigation framework, MetroIntegrator allows the definition of multiple Views, in combination with its rich security framework, it enables true multi-domain management and Customer Network Management (CNM).

Advanced North Bound Interface

MetroIntegrator provides a SNMP NBI to connect to 3rd party umbrella Network Management Systems, which is backward compatible with the Corba SNMP Mediator (CSM) module of AccessIntegrator. The MetroIntegrator framework is capable to enhance this basic alarm forwarding interface to an advanced and fully bidirectional XML based interface, which will support a SOAP and REST API.



Configuration Management

Configuration management is presented through the well-known ULAF+ LCT, LCT+ and Download Manager tools, which are web started from the MetroIntegrator server, eliminating the need for these applications to be installed on the clients and thus taking away the effort for client administration and required version management.

The back-up and restore facility protects the valuable network configuration in case of failure of network elements and / or management systems.

Fault Management

The Alarm Counter Bar provides overview of the total and unacknowledged alarm counts per severity and helps by use of trend indications to track alarm changes efficiently. Dynamic Alarm Lists on subnetwork, NE (subrack) and card (link) levels are available with extensive filtering capabilities. Together with the Graphical Device View, they provide detailed information with colored alarm indication about alarm status in the network. The Alarm Log provides access to the full alarm history of the network. An integrated trouble ticket system supports the operator in managing open issues and handovers.

Resource Management

Inventory management generates lists of equipment installed in the network. With the Software Download function, centralized software distribution simplifies network upgrades. The Event Log provides access to all events which are not categorized as Alarms or Security related.

Performance Management

Performance data according relevant standards (i.e. ITU-T G.821 / G.826 or MEF) are stored for service quality monitoring and can be shown through interactive line graphs and tables. File export functions can be used to generate statistics in comma separated values (CSV) format for further analysis with external tools (e.g. Excel™). Threshold Crossing Alerts inform the operator on important deviations.

Security Management

The integrated security solution of MetroIntegrator supports authentication and authorization in combination with user role and profile management and the connection to external authentication systems using LDAP or RADIUS. Audit Logs enable the operator to verify and relate historical activity.

Functionality

Architecture

- Web 2.0 GUI
- 100 concurrent users of up to 1.000 configured users
- Max supported links = 250.000
- Max supported racks = 6.000
- 1+1 Hot Standby High Available Mode
- SNMP North Bound Interface with filtering-capability
- LDAP and RADIUS authentication / authorization
- Multi domain and Customer Network Management
- Web-started LCT / LCT+ / Download Manager

Features

- Navigation Map and Tree with Search function
- Multi-level sub-networks
- Colored alarm indication (node, device)
- Conditional audible alarm indication
- Alarm lists (Subnetwork / NE / Card) and filters
- Alarm, Event and Audit Log
- Graphical Device Views (ULAF Racks / Compact Shelf / Desktops / Stand-Alone ACCEED)
- Centralized software distribution management
- Inventory data with export function
- Performance statistics with export function
- Alarm assignment and handover
- Manual and periodic back-up & restore for both single and multi NE selections

Supported NE's and Modules

With detailed alarm support

- ACCEED 1102 / 1104 / 1404 / 1416
- ACCEED 2102 / 2104 / 2202
- AG1210
- MCU-CES / MCU-S / MCU / OMI-SNMP
- EIU
- BSRU / BSRU+
- BSTU4 / STU4
- BOTU / QOTU / OTU
- BGTU / GTU4 / GTU
- BSTU / QSTU / STU2 / STU
- SRU / REG
- HTU

System Requirements

Server

Hardware ≥ 2.5 GHz quadcore CPU
 ≥ 8 GB RAM
 ≥ 300 GB HDD
 ≥ Fast Ethernet NIC

64-bit Operating System

Windows 7
 Windows 2008 R2 Server
 Solaris 10
 RHEL 6.3 / CentOS 6.3
 Java Runtime Environment (JRE) ≥ 6

Client

Hardware ≥ 2 GHz CPU
 ≥ 1 GB RAM
 ≥ Fast Ethernet NIC
 Screen resolution ≥ 1280 x 800

Operating System

Cross-browser compatible
 Microsoft IE ≥ 10
 Mozilla Firefox ESR ≥ 17
 Java Runtime Environment (JRE) ≥ 6
(to run LCT and Download Manager)
 Windows based OS ≥ Windows XP SP3

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