Multivendor, multidomain network management tool set

Service providers and enterprises face a critical challenge with both physical and virtualized infrastructure in multivendor multilayer networks. This challenge is how to achieve fast, efficient service lifecycle management and deliver unified, end-to-end, error-free service activation and discovery across the entire network.

In order to facilitate new service offerings in days or weeks and at the lowest possible cost, it is essential to maintain maximum service agility when introducing new services or products and when onboarding new vendors’ equipment or technology. For these organizations, model-driven network automation is essential if they are to simplify the process of provisioning and controlling network applications and services.

**NetACE from Atrinet—Single View, Multivendor Network**

NetACE is a multivendor, multidomain network management tool set that delivers service lifecycle management, discovery, and configuration. NetACE contributes to a single view of the network across all layers and legacy vendors. The ecosystem also enables a single view of multivendor, multilayer management systems.

**Key Functional Elements**

The main pillars of NetACE functionality include:

- **Self-service design tools** – Visual modeling and design environment for ultrafast onboarding of new services, vendors, and technologies
- **Real-time network activation** – Multivendor platform that automates all network and service lifecycle activities
- **Intelligent network discovery** – Discover and manage logical and physical network resources, network topology, and multilayer services
- **API-driven network automation** – Exposes an auto-rendered unified programmable interface and APIs that enable development and integration of third-party applications

NetACE brings important business benefits to complex, dynamic networks:

- Faster development and deployment of new services
- Shorter turnaround times for new features
- Real time dynamic network capacity allocation
- Big data service analytics and SLA dashboards
- Real time network and service operational status
- End-to-end visibility
- Shorter Mean Time to Repair (MTTR)
- Improved quality through reduced error potential and less repetitive manual work
- Vendor independence with mix-and-match freedom
- Substantial capital and operational savings
- Automation, agility and flexibility
- Reduced service turn-up times for both traditional and virtual networks

NetACE’s GUI-based self-service user interface and design tools simplify the complex process of onboarding new network elements, resources, and vendors, transforming months of custom development into 1–2 week turnkey projects.
A Single Network-Wide Interface

Supported Network Services
Listed below are some examples of service types supported by NetACE:
- Layer 3 VPNs
- Layer 2 VPNs
- CESoPSN, SAToP
- TDMoIP
- Firewall policy rules
- Network-wide configuration changes
- Virtual Network Functions (VNFs)
- Service migrations from legacy to new technology

Seamless Lifecycle Management for Multivendor Networks
NetACE provides a single network-wide interface to all functions and services, as well as standard YANG modeling language, data store, end-to-end service assurance, and service analytics.

NetACE’s network service lifecycle management orchestration capabilities make the service provider’s operational environment much more agile. Additionally, moving away from hard-coded, rigid service structures to reusable and simple editable service models, the tool facilitates accelerated time-to-market when introducing new services into the portfolio. Service providers significantly improve their responsiveness to business demands through a simple, network-aware service design approach (with no programming skills required) and rapid cross-organizational service provisioning. This translates into a sizable reduction of overhead throughout network operations.

NetACE features include:
- Robust business scalability
- Model-driven service design and assurance (YANG RFC 6020 and native data modeling)
- Vendor-agnostic, adapter-free southbound interfaces
- NETCONF, SNMP, CLI, TL1
- SOAP/XML, REST, S/FTP
- Model-based service analytics and multi-tenant customer portals
- Northbound programmatic interfaces for rapid integration with OSS/BBS portals (REST, TMNF)

Atrinet Programmable Workflow-Based Automation & Orchestration Engine

Atrinet Codeless Self-Service Design Environment

Atrinet Runtime Environment

NetACE Model-Driven DevOps-enabled Architecture
Scalable, Model-Driven, Vendor-Agnostic

Service-Aware
NetACE provides a specification of how a network service shall be applied to the network infrastructure. This simplifies service configuration mapping and changes to device configuration commands. The entire service lifecycle is supported including designing, creating, modifying and deleting service instances.

Model-Driven
Services are specified in declarative YANG RFC 6020 and/or rich native data models using codeless on-screen design tools that are engineer-friendly and do not require programmer skills to manipulate.

Fail-Safe
NetACE applies service changes as a minimal change-set using distributed transactions. This ensures that the network is always in a consistent state and can automatically recover when configuration changes fail.

Real Time
NetACE maintains an accurate and synchronized copy of the network configuration state. Orchestration and management systems can be kept in sync with the network in real time using NetACE’s publish-subscribe APIs.

Fujitsu Professional Services for NetACE Integration
Fujitsu offers its suite of professional services alongside the NetACE tool. These services include all system installation and integration, to ensure that NetACE is properly integrated into your network operations center. The Fujitsu Services team validates that all interfaces function properly, and verifies that systems are operating to expectations. We work with you to modernize your network and provide consulting on use case development. These services ensure readiness for NetACE deployment and assist you in getting the best possible outcome.

About the Managed Network Solutions Portfolio
As part of the Fujitsu Managed Network Solutions portfolio, NetACE joins a growing list of products designed to help providers drive efficiency through their network operations. The portfolio includes the Managed Network Services offering, built specifically to help companies without a network operations center. Managed Network Services makes it possible for companies to enjoy multivendor network support that includes service activation and service assurance.

- 24 × 7 × 365 real time network monitoring and troubleshooting
- Enhanced network reliability and performance
- Proactive measurements and network action planning
- Support for multivendor OSSs
- Network activation, circuit provisioning, and records management
- Fault monitoring, management and correction