

Infonova MPLS Integration Framework

The Infonova MPLS Integration Framework (MPLS IF) is a software module that enables operators to automatically fulfill all MPLS VPN services. The MPLS IF acts as the “middleware” between products & services that have been purchased by customers in a BSS and the delivery by the OSS. The MPLS IF provides the capability to automatically interpret the complex IP service requirements from the BSS and orchestrate the fulfillment across all the necessary OSS systems environments.

CHALLENGE

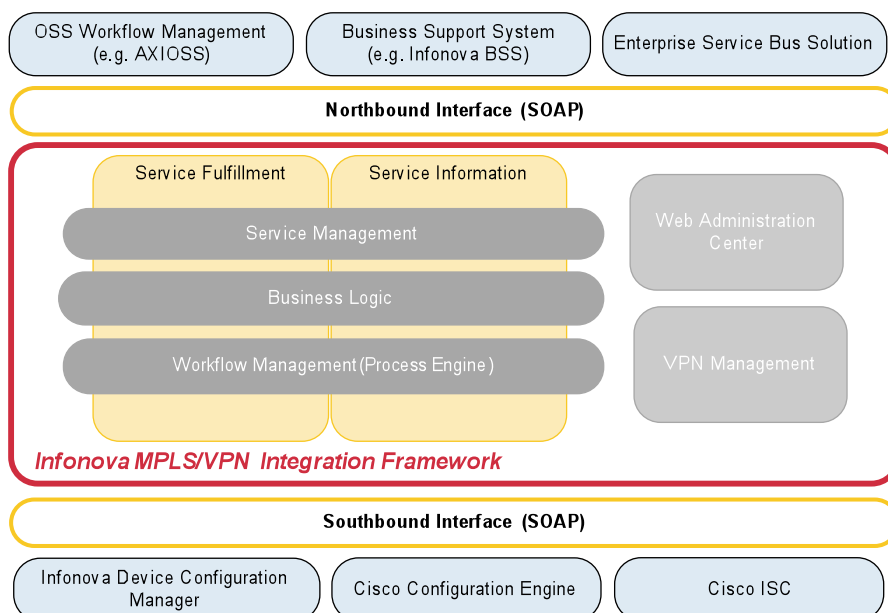
Setup and configuration of devices and networks can be time consuming and generally requires a lot of manual interaction. The main challenge from a high level perspective is automating service fulfillment and the provisioning of the necessary data “quickly and error free”. Another area crucial for operators includes the functionality to create and delete customer VPNs and the enablement of special multi endpoint services for community networks.

In short, most operators seek a scalable and open solution to support an easy and seamless integration of MPLS OSS components into a heterogeneous and complex BSS/OSS architecture using SOA based standards and guidelines.

Infonova’s MPLS IF significantly reduces the complexity, the time, the cost and the risk of integrating MPLS OSS components. It provides the logic between critical business focused BSS functions such as management of products, customers, ordering and billing and the network infrastructure and devices required to deliver the product functionality.

SOLUTION

The MPLS IF enables an easy and seamless configuration of any kind of device and service to be set up without manual interaction. Additionally it provides high flexibility regarding template management, interfaces and workflows, scalability and reliability. It is based on a J2EE infrastructure using open source applications.



The core components of the MPLS IF are:

- Service Management - the MPLS IF uses a template for each service to define and manage the relationship between services and components
- Business Logic - manages the rule driven processing of the device parameters
- Workflow Management - controlled via Process Engine and manages the execution of the device configuration activities
- Web Administration Center - web GUI to provide manual management and configuration of the MPLS IF
- VPN Management - holds the data sovereignty regarding all VPNs used by customers including VPN creation and VPN deletion

For automatic service fulfillment it is critical to have the necessary data immediately and error free. Accordingly the MPLS IF offers two different ways to assimilate data. Data can be generated inside the MPLS IF on the basis of defined rules (e.g. assignment of IP addresses from a pool assigned to the service, and configuration of customer router), or the data can be requested via interfaces (e.g. xDSL parameter of DSLAM). The MPLS IF also provides functionality to create and delete customer VPNs and to enable special multi endpoint services like Point of Sale Terminals. VPNs for these types of service are also forwarded automatically to, for example, the Cisco IP Solution Center.

The MPLS IF is a flexible and open solution. From a northbound perspective, any system that supports SOAP can be interfaced with the MPLS IF. This applies to OSS workflow management tools like AXIOSS, as well as for Enterprise Service Bus solutions. All functions of the MPLS IF can be invoked via Web Services.

Southbound, the MPLS IF can be deployed to orchestrate and configure multiple systems via web services such as the Cisco Configuration Engine, the Cisco IP solution center, as well as the Infonova Device Configuration Manager.

BENEFITS

With a sophisticated network provisioning and management solution like the MPLS IF, operators can gain numerous of advantages:

- Service ordering and implementation times can be reduced through highly automated work flows
- Introduction of add-on services can be achieved with high flexibility
- Multi-tenant capability service used by different customers
- Scalability from SOHO to large enterprise
- Highly simplified customer experience
- Minimization of human involvement
- Reduced operating costs for service establishment, troubleshooting and simplicity in MAC's
- Configuration errors can be minimized

About Infonova

Infonova was founded in 1989 and delivers highly automated IT solutions for Telco & Media companies. Infonova's BSS solutions have been implemented for incumbent, attacker and cable operators supporting triple & quadruple play service portfolios.

For more information, please visit www.infonova.com