

INSYNC AUTOMATION ENGINE

Increased data consumption needs, lower ARPU, increased operating expenses coupled with high competition and customer expectations have driven communication service providers (CSP) to transform into digital service providers (DSP). In this journey, network automation has become an integral part of DSP strategy and InSync caters that very need of CSPs through its own in-house developed automation platform - 'InSync Automation Engine'.

Network automation is widely sought within service providers to bring operational efficiency, increased productivity, accuracy, agility and to bring a superior customer experience. This is where InSync's expertise play a role in transforming manual mundane network operations to a fully automated network operation with minimal human intervention.

Communication service providers (CSPs) have a large volume of routine network operations such as provisioning, troubleshooting, testing & validation and periodic maintenance tasks. In addition, CSPs are transforming their businesses to explore new innovative business opportunities such as providing enterprise selfcare portals, on-demand services, dynamic bandwidth selections, guaranteed SLA based services and more.

Sheer volume of operations and growth requirements combined with business imperatives demand automation of operations in a methodical manner. InSync aims to cater these needs through its automation & orchestration platform.

InSync Automation Engine

InSync Automation Engine is a software platform purpose built for network automation and orchestration. Underneath the platform is a powerful python-based core that runs on virtual environment for flexible deployment across both on-prem or cloud. With InSync Automation Engine, you can easily provision or deprovision enterprise network services such as L2/L3 VPN, ILL, & Broadband links, orchestrate multi-vendor network environments, monitor near real-time network state, automate workflows, manage devices and services and custom build use-cases for network automation and orchestration needs.

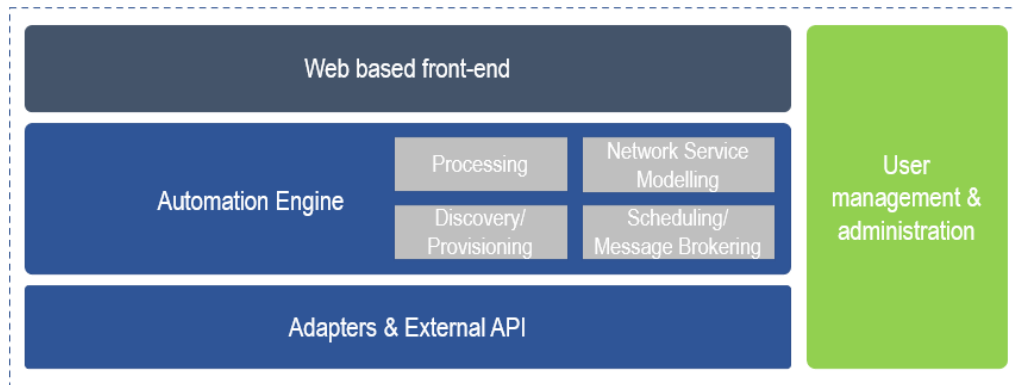


Figure 1: INSYNC AUTOMATION ENGINE

Adapters & External API: This layer consists of adaptors that communicate with devices over interfaces such as NETCONF, SSH and REST APIs in a vendor agnostic manner.

Automation Engine: This is the central intelligence of InSync’s automation engine and consist of functions such as processing of data collected through other modules.

Web based front-end: This is the external facing portal that is used by both administrators and service users. In addition to its web-based user interface, this layer also consists of gateways that connects to third-party applications such as ticketing systems, OSS/BSS and CRM for external system integration.

User management & administration: Purpose of this module is to manage the administration of the software, store files, logs, reports and to manage user privileges.

Above four modules are the key components of the integrated product that can be deployed on a virtualized or cloud environment on Linux OS.

Features

- Asynchronous transaction handling
- Role based access
- Self-servicing portals and dashboards
- Service desk/OSS/BSS/CRM/Ticketing system integration with REST API & integration with third party provisioning applications
- Supports services provisioning and workflow automation

- Supports state discovery & monitoring
- Customizable GUI based web interface
- Reporting and alerting
- Network services topology view
- Vendor agnostic

Use cases

- Circuit provisioning automation (L2VPN, L3VPN, P2P, P2MP, ILL, Cloud, Broadband circuits)
- Automated circuit bandwidth upgrade/downgrade
- Extending the self-servicing capability for circuit provisioning and on-demand bandwidth change
- Network state monitoring and comparison
- CPE device management for enterprise customers – E.g. managed WAN network
- Service provider core network device management (Inventory, back-up, migrations, etc)
- Configuration comparison against a golden configuration file
- Network services enablement, periodic maintenance tasks
- Automated L1 troubleshooting
- *SD-WAN orchestration – in roadmap as the next stage of major development

For more information

Contact info@insyncit.net, visit www.insyncit.net. InSync information technologies is a specialized IT services provider in the field of networking & network automation. What drives InSync is its passion towards building business aligned technologies.