



TAKE THE COMPLEXITY
OUT OF NETWORK AUTOMATION

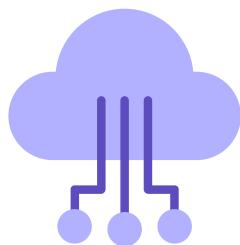




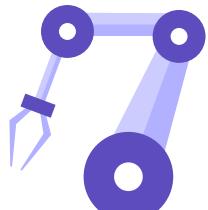
Codeless Provisioning Automation That Fits Your Needs

Symphonica is an easy and convenient orchestration and service activation platform for communication operators seeking to streamline service deployment processes without investing in time-consuming and budget-heavy infrastructure projects.

Symphonica lives in the cloud, ready to serve with pre-configured endpoint integrations that securely facilitate faster service deployments.



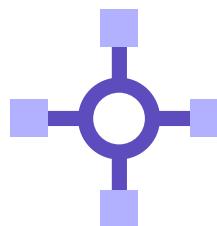
Simplify IT and reduce TCO of OSS infrastructure.



Automate manual activities from current service provisioning processes.



Launch new services (or integrate a new network technology) fast.



Eliminate silos and implement a centralized end-to-end provisioning orchestration solution

From silo-structured network to end-to-end provisioning orchestration

Syphonica is designed-based on microservices and Open APIs, it's aligned with TM Forum and MEF standards. It is deployed on containers managed by Kubernetes, allowing the platform to scale vertically and horizontally according to the requirements of the business.



Activates any Service, any Technology, any Network, from a Single Point.



Single point of integration with B/OSS systems via Open APIs.



Multi-Domain, Multi-Technology, Multi-Vendor.



Abstraction layer to complex southbound proprietary interfaces and protocols.



For fixed and mobile. For physical and virtual. For cloud and NFV.



Reduces infrastructure and operation complexity.

The Closest You'll Get to Service Activation Plug-and-Play Automation

Operators can now simplify traditional onboarding and launch a service in days with five easy steps.

1

Information Exchange

You provide information about your network

2

Intance Setup

We create and setup your service instance

3

Connectivity & Configuration

You configure your VPN tunnel and together we test everything

4

Training & Rollout

We provide training and help you with the service rollout

Voilà!

You can start using the service and activating your first subscribers

Lifecycle Service Orchestration Platform

Symphonica is a cloud-native, telco-grade orchestration and service activation platform for the automation of the entire life cycle of services orchestrated across multiple networks and multiple technology domains.

Deploy the Way You Want

On-premise, cloud or software-as-a-service from a common codebase. Integrate easily, via a flexible Open API gateway and configurable network gateways.



Software as a Service

Subscribe to a ready-to-use, multitenant, certified Symphonica platform running on AWS Cloud.



Cloud

Deploy your own instance of Symphonica on your AWS account.



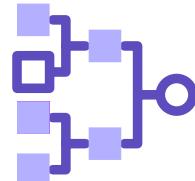
On-Premise

Off the shelf, commodity hardware.

Codeless Provisioning Automation

Symphonica provides a codeless provisioning design studio that enables a quick and easy configuration and deployment of

new orchestration and automation processes without having to develop a single line of code or install new components.



NO CODING
NEEDED!



NO RISKY SOFTWARE
UPGRADE REQUIRED!

You only have to focus on the business logic configuration. Performance, rate-limiting, prioritized queuing, connection management, SLA enforcement, and overall transaction management are handled seamlessly by the platform.



Stressless Service Deployments

Quickly deploy orchestration workflows without going through heavy software development process using Symphonica's quick launch packages.



Connect Your Network

Connect virtually any endpoint using Symphonica's pre-built connectors or easily build your own.



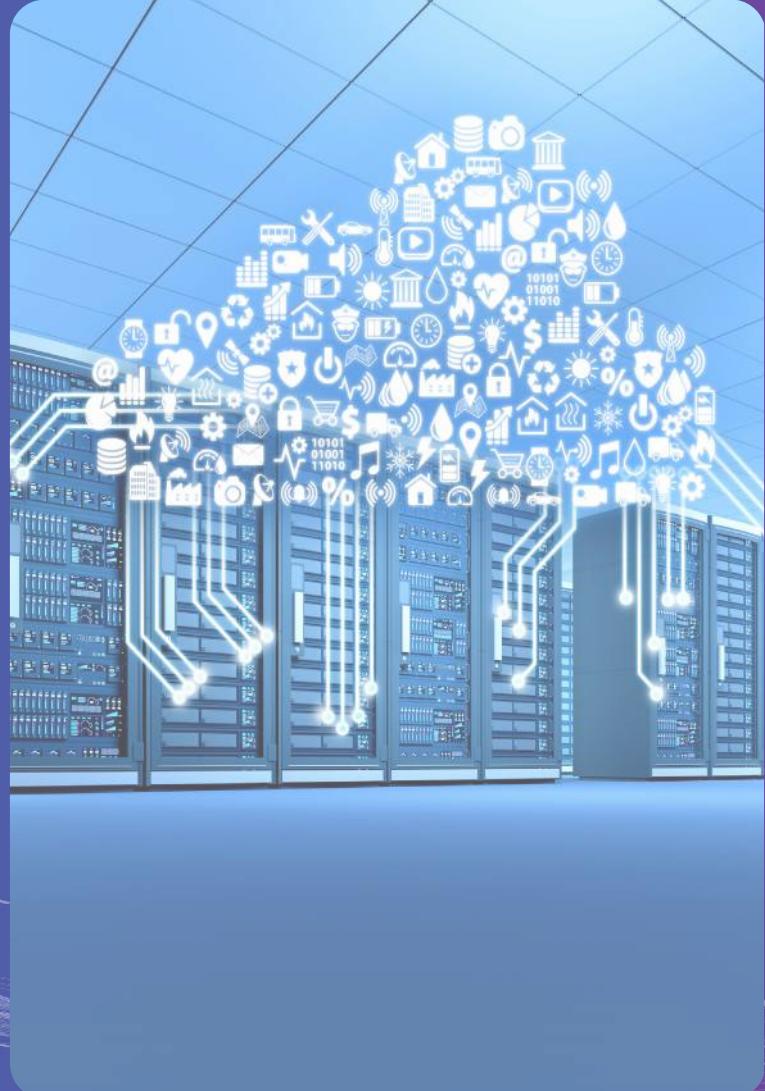
Codeless Process Automation

Quickly launch services from our cloud infrastructure. It's easy. It's quick. And most importantly, it's secure.

An Amazon Web Service (AWS) Well-Architected Platform

Leveraging AWS, Intraway's Symphonica platform is a cloud-native, codeless automation, orchestration, and service activation engine designed following the five pillars of a well-architected cloud platform — **operational excellence, security, reliability, performance efficiency, and cost optimization**.

It enables communications service providers (CSPs) to automate service lifecycle management without investing in time-consuming and budget-heavy projects.



How Symphonica Helps You Achieve Your Provisioning Automation Goals



Northbound Interface Automation

Single and standard-based northbound interface (Rest API) to simplify integration with operator's B/OSS systems.

The northbound interface is based on TM Forum Open APIs (TMF641 Service Ordering REST API) and it works as an abstraction layer for multiple proprietary and complex southbound APIs and protocols.

Management Web Portal

Administration web portal to operate the service and self-manage its configurations. It includes service catalog and subscriber management applications, among others.

CSR web portal to assist call center representatives on diagnose and troubleshoot service problems reported by end customers.

Monitoring Workflows

Pre-built and ready-to-deploy monitoring workflows designed and tested following industry best practices.

Automated processes to help with the remote diagnosis and management of customer's service, such as device reboot, configuration refresh and service quality test.

Southbound Connectors

Off-the-shelf, ready-to-use integrations with industry's main vendors, such as Huawei, ZTE, Nokia, Adtran and Calix.

Provisioning Workflows

Pre-built and ready-to-deploy provisioning workflows designed and tested following industry best practices.

Includes automated processes for service activation, cancellation, suspension / reconnection and modifications, among others.

Field Service Mobile App

Field service mobile app that guides field technicians during the installation process.

Provides end-to-end automation, simplifying & certifying installations, improving customer satisfaction, and maximizing productivity.

Featured Fulfillment Provisioning Processes

Residential Broadband Services

Automate GPON, DOCSIS, ADLS, etc. operations by replacing multiple service provisioning systems with a single real-time, fully automated lifecycle service orchestration that has the fastest service integration time on the market.

The total cost of ownership is minimized when multiple siloed OSS systems and interfaces are replaced by a single automated service orchestration, service order fulfillment, and resource provisioning solution.

Business Services

MSOs and CSPs seek to enter new business market segments, such as SMB and Enterprise. These segments demand dynamic responses to meet their ever-changing needs. The solution allows a faster introduction of enterprise-like services such as DIA over GPON, SD-WAN, etc., which increases the operator's business service portfolio.

Mobile Service

Provisioning VoLTE adds a new layer to the OSS stack, including an extra motivation to accelerate the OSS transformation to consolidate multiple siloed systems into a single multi-service orchestration solution.

It also orchestrates LTE provisioning on the HSS/IMS in order to offer broadband services over LTE.

The future of mobile is eSIM. eSIM subscription management and remote provisioning enable the connectivity of the future.



E2E Infrastructure Provisioning

Orchestrate end-to-end virtual services, including provisioning of remote infrastructure (such as remote PHY nodes and small cells), management of network configuration, and provisioning and management of Virtual Network Function over virtual cores (such as vCCAP and Virtual EPC) using OpenStack, OpenFlow, and other NFV/SDN controllers via standard APIs.

Next-Gen TV Services

In the connected home, most of the services are consumed by multiple devices, such as STBs, smart TVs, tablets, smartphones, TiVo, Chromecasts, Apple TV, Roku, etc.

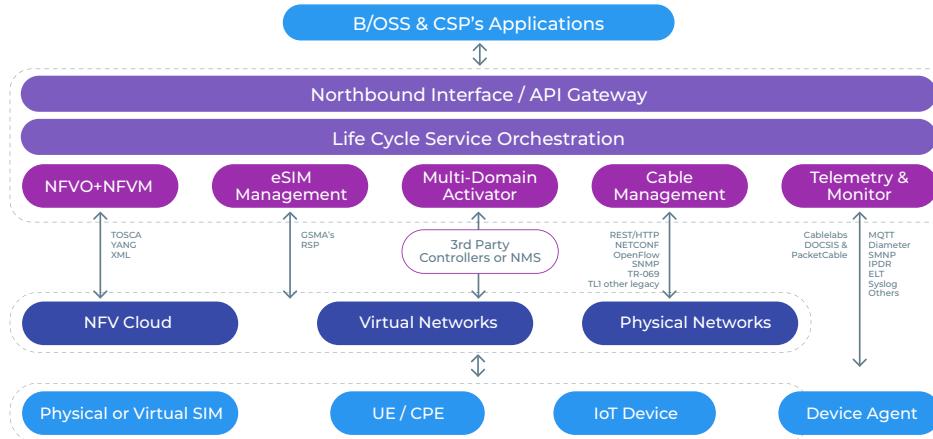
Orchestrate and activate legacy broadcast services (DTH, Cable, etc.) along with IPTV, third-party OTT applications, and TV Everywhere services (Netflix, ESPN Play, HBO GO, etc.), which are required to provide multi-screen TV experience. The solution transforms a costly and complex integration among different platforms and components into a simple and flexible orchestration process.

Architecture & Key Features

Standard-Based Architecture

Symphonica provides a service-oriented environment that allows B/OSS Systems and self-care applications to interact easily with network infrastructure in an effective, decoupled, secure, and auditable manner. The platform implements the TMForum Open API to expose a single interface to northbound systems that abstracts complex southbound network protocols.

The platform is built using well-proven technology such as Web Services, BPM-based workflow engine, messaging queues, and highly performant frameworks following industry standards' definitions such as TMForum, MEF, and CableLabs. It relies on standard hardware and software components with load balancing and failover support in all system components.



Take Control with a Service Order Management

Easily design, configure, deploy, and test connectors with external systems in multiple protocols optimizing time and minimizing the risk of software development and updates processes. Most of the telecommunications management protocols - including HTTP, SNMP, TL1, Telnet, SSH, LDAP, SQL, NETCONF - are natively supported.

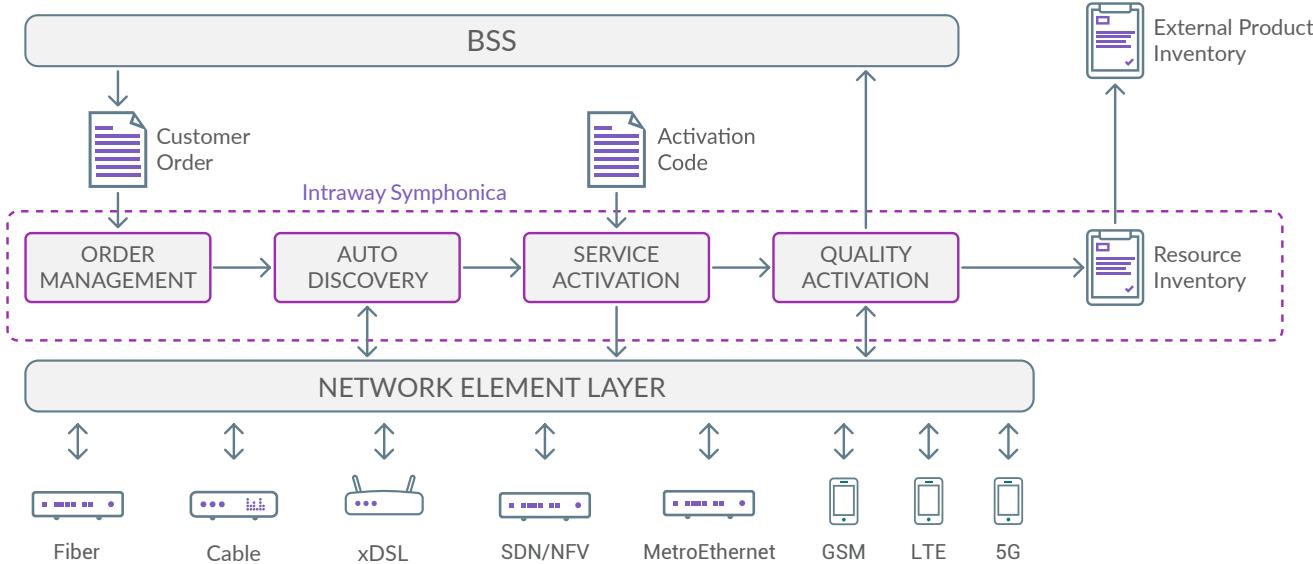
Industry-unique domain-specific language allows the creation of new connectors without requiring any coding skills. Configure new connectors with new platforms in a matter of hours or use our wide catalog of off-the-shelf connectors that are available to reuse industry best-practices and accelerate new technology roll-outs.

Service-Resource Catalog and Resource Inventory

It allows the decomposition of customer-facing services into resource-facing services, which are translated into adapter's commands with all the technical attributes required for the service activation process. It allows keeping an inventory of the installed base.

Self-Provisioning (Bottom-Up Provisioning)

Smart facility assignment, auto-discovery, and a pre-registration process allow technicians just to pick any device from their stack in new service installations and replacements. After setting the activation code and verifying the installation quality, the customer obtains service in a few minutes.



Web-Based Connector Design Framework

Through the Design studio, a user-friendly graphical web UI, service and resource order definitions are created in minutes using building blocks and logical structures without the need for any extra meta-language or scripting.

Intelligent Rollback And Fallout Management

Checkpoints at every step of the activation process assure that pre-programmed rollback orders can be executed in case of failure. This allows resending partial or complete orders and perform intelligent refreshes.



Intelligent Automation for the Autonomous Network

Supporting the service of over 40 million subscribers in more than 20 countries over three continents, Intraway's mission-critical solutions help global telecommunications operators create the network of the future, today. By unleashing the full potential of networks, Intraway's standards-based fulfillment and assurance solutions add the latest, cutting-edge functionalities to speed up time-to-market, reduce operational costs, and advance customer-centricity.

Not only do we empower leading communications service providers with innovative, highly configurable, and ready-to-deploy solutions that enable seamless provisioning, orchestration, and first-rate service assurance, we do it while guaranteeing Amazing Delivery. This means that from our first handshake through deployment and beyond – we are a trusted partner for the complete service life cycle that is working side-by-side with leading operators towards their success.

Join us and secure your position as a key player in the global digital transformation.

www.intraway.com