

Verax OSS/BSS Suite

Provisioning server

Overview

Verax OSS/BSS Suite's Provisioning Server (VPS) is a **convergent, carrier-grade** technology for activating services in heterogeneous, multi-play environments (IP, wire-line and wireless).

It links business support systems, BSS (such as Order Entry, Customer Care or others) and network elements (switches, VoIP gateways, IPTV platforms or others). VPS accepts requests from the business and translates them into network commands, enabling particular service(s) to be activated.

Process management interface

VPS exposes a **SOAP-based, EAI-ready north-bound interface** for BSS integration allowing:

- Process deployment (a process is a set of workflow(s), optional business rules, java classes and other assets required for business logic execution).
- Synchronous and asynchronous process execution.
- Starting and stopping of deployed processes.
- Execution control: completion status, error and exception handling.

Workflow engine

The VPS workflow engine is based on the **industry standard jBPM engine** featuring:

- Transaction integrity enforcement, restart awareness, rollbacks and checkpointing.
- Deployment of new rules, versioning and rollback capabilities.

The rules engine in the VPS can be **extended with JRuby based rules** (interpreted) and/or Java classes (compiled) for integration with external systems such as inventories.

Activation platform

VPS uses Verax NMS network element plugins in order to communicate with the network and execute actions required to activate provisioned services. In addition to plugin-based APIs, the NMS contains proxies allowing element communication via SOAP and SNMP. Supported types of network elements include a wide range of VoIP, BRAS, AAA, IPTV devices (for an up to date plugin list see: www.veraxsystems.com/en/products/nms).

Access to external, third party systems

Open (e.g. SOAP-based) third party systems can be accessed directly from workflows. Non-standard interfaces can be accessed via Java classes (requires a SDK) that can be bundled with processes & workflow packages.

Provisioning inventory

Provisioning inventory is a database (along with a GUI) containing user-defined list of assets required in the provisioning process such as: service providers, packages, customer premises units, licenses and others.

Features and benefits

- Simplifies and **streamlines service management** and reduces errors and fallout, reducing customer churn.
- **Increases operational efficiency** of service activation.
- **Assures repeatability** of the provisioning process through automation.
- Ensures **provisioning transaction consistency**.
- Can be used either as a stand-alone solution or as part of a greater, umbrella system.
- Ensures seamless, uniform communications between operator's BSS systems and the various types of network elements.
- Abstract low-level configuration protocols and issue management commands to network elements using high-level web-service calls.
- Ensures **easy integration** via industry-standard web services interface or ESB.
- Easy administration via administrative console rich GUI interface.

In addition, VPS offers scalability features provided by the Verax OSS/BSS Suite including distribution of processing over a **clustering mechanism**, in cases where single host configuration does not provide sufficient performance or where **fault-tolerance** is top priority.

Learn more

To learn more about Verax OSS/BSS Suite visit us at: www.veraxsystems.com.

Build and deploy

provisioning solution

quickly using off-the shelf network modules, rules and workflows.

Extend workflows

with a SDK to handle complex provisioning scenarios and non-standard integrations.

Carrier-grade

solution with 99,999% reliability rating.

Transaction integrity

across system restarts.

High efficiency and

scalability

– use clustered architecture to handle large networks and ensure fault tolerance.

BSS/OSS core integration

for security enforcement, event logging & tracing and administrative console.