



EXPERT OPINION:

High performance, customisation and extendibility are key to operators' success

Telecoms operators exist in a rapidly changing world. Consumers are demanding instant access to new services, while enterprises have come to define high quality customer interactions across multiple channels as a core business enabler. Stephane Beauvais reports that this has had a dramatic effect on service provisioning and activation, which provides the crucial link between the development and marketing of new products and services and fulfilment, with the need to provide a high level of customer service across the chain.



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Service delivery platforms now need to deliver new levels of performance and flexibility, in order to meet market demands today while also providing the scope to support new products and services tomorrow. This flexibility will also ensure that the operator can always offer a product set which meets customer demand, thereby reducing churn.

But in a challenging marketplace, infrastructure operators have a set of business needs driven by the need to control costs. Emphasis is being placed on streamlining the fulfilment process, rationalising BSS and OSS platforms, reducing the potential for network inconsistencies and associated revenue leakage, and maximising the re-use of solutions across processes and organisations.

Increasing performance and lowering costs

Historically, service provisioning and activation have solely been the preserve of the operator and driven by its CRM platform, which has meant that the focus for service delivery platforms has not been on real-time transaction processing. Now and in the future, systems will need to support real-time subscriber self-care and self-activation, meaning a much higher performance is essential.

As an example, the Kabira Provisioning and Service Activation (KPSA) solution is capable of performing more than 350 simple service orders per second with latency of less than 100 milliseconds, for example barring/unbarring requests, or more than 120 complex service orders, consisting of a bundle of 10 resource-facing services, per second. This is achieved using commodity hardware (in this case, 2x2GHz quad-core Opteron running Red Hat 5 Linux).

A single KPSA implementation is able to leverage provisioning information from non-real-time channels, such as an operator's CRM or billing systems, as well as from real-time sources such as self-provisioning and auto-provisioning, removing the need for the deployment of separate solutions to process multiple transaction types. It can also enable end-to-end service fulfilment automation, removing the need for the expensive, and time-consuming, maintenance of disjointed legacy systems.

This type of high performance platform delivers real benefits to operators: new services can be rolled out rapidly with self-provisioning and auto-provisioning reducing cost and complexity, while the use of commodity Linux hardware reduces capital expenditure. This fits with the prevailing trend for cost containment while, crucially, not compromising performance.

Future flexibility

With the telecoms market developing at a rapid pace, driven by the emergence of products and services which were not even on the roadmap several years ago, operators are acutely aware of the need for systems to be enormously flexible. Service launches need to take place extremely swiftly, while maintaining the quality of service levels demanded by customers.

The best approach is support for the re-use of existing product and service components to compose a large portfolio of service offerings and bundles, using operator-defined rules. Because one product will implicitly impact another, and certain products will be included as elements of a larger bundle, flexibility is needed in controlling how each component is configured to support re-use and manipulation. ▶



KPSA addresses this need through the use of a dynamic service catalog, enabling the rapid definition of the resource-facing network services needed to deliver products, using provisioning policies and rules. The platform uses a business process modelling tool to describe all of the sequences necessary to run a product or service in the network, compiled on a dynamic basis, based on the parameters involved with specific offerings. It also supports the human interactions and asynchronous actions required by order handling processes.

Agnostic of connectivity technology, this catalog approach also supports converged products, providing customers with access to services across fixed and mobile networks, and enables the re-composing of products and services based on customer profile.

Significantly, service providers need a smart, dynamically-assembled catalog in order to meet complex provisioning demands, and to define and manage large numbers of product variations. It will not be possible to do this using static components, as the real-time flexibility demanded cannot be delivered.

Closing the loop

Increasingly, service delivery technologies are becoming more feature-rich, enabling them to play a greater role in the BSS/OSS space, working to unite disparate hardware and software and creating a closed loop which aligns provisioning, resource allocation, reconciliation and capacity planning.

This provides network operators with several compelling benefits. It becomes possible to ensure that the network inventory is synchronised with the network resource state, to reduce discrepancies between system elements, and also provides the ability to plan network evolution to align with marketing programmes and corporate strategy. And with an eye on cost, it can enable a simplified BSS/OSS picture, with disparate elements united through a single, architecture-agnostic platform.

In Kabira's case, KPSA is able to integrate tightly with the network inventory components, with the ability to reserve the network resources necessary to deliver services, with a multi-stage rollback mechanism available should it be necessary to reverse the changes made. If demanded by a customer, a network inventory element is available for KPSA, to further round out the solution.

KPSA can also provide similar functions for

product and service inventories, ensuring that subscriber profiles are kept in-sync across various network elements.

The platform can also be used to provide network mediation capabilities, with the ability to re-use its interfaces to query the network and discover infrastructure parameters, to ensure that operators always have an up-to-date view. This is essential to ensure that resources are used in the optimal way, and to enable network planning based on the most accurate information available.

No one-size-fits-all

Reflecting the diversity of access methods used to deliver a wide portfolio of services, and the expectation that services will be available to customers at any time, in any place, using any device, there is now a massive diversity among the network operator community.

This diversity needs to be reflected and supported by BSS and OSS elements, which must walk a fine line between providing the features necessary to support seamless operation out-of-the-box, and delivering the extendibility and customisation features to grow as market requirements change. Kabira's approach to meeting these demands comes not through providing a 'black box' solution, but through providing a framework, which customers can then, if they choose, extend to meet their own specific needs. The benefit of this is relatively straightforward: the platform is extendible and customisable using in-house resources where appropriate, meaning costs can be monitored and controlled, and a bespoke solution can be easily created to meet specific requirements.

This framework approach also means that operators can re-use and tailor solutions for use in different markets and territories, where core requirements are similar but specific demands vary, building on existing experience.

But it is important to note that KPSA is also a fully-featured and configurable eTOM (enhanced Telecom Operation Map) compliant fulfilment solution, designed to support the rapid implementation of new projects ■

The Kabira Provisioning and Service Activation (KPSA) platform is a proven technology, deployed by operators from new entrants to global tier ones, including France Telecom Group, and is the platform of choice for equipment vendors including Hitachi. KPSA manages more than 300 million subscribers worldwide.

“Operators can re-use and tailor solutions for use in different markets.”

VanillaPlus Jargon Buster

BSS / OSS: Business / Operations Support System

CRM: Customer Relationship Management

eTOM: Enhanced Telecom Operation Map

SDP: Service Delivery Platform