

OpenCloud Rhino Service Interaction Server

An Operator Under Pressure

Operators are running multiple networks (2G, 2.5G, 3G, IMS), and yet somehow have to offer a unified set of services across these networks for their customers. There are also new networks with new capabilities, such as IMS, to consider and challenges from new entrants with new delivery mechanisms (WiMAX, VOIP, and so on). Meanwhile, services are becoming ubiquitous (Voice, Prepaid, SMS) and ARPU for these services is under attack.

So how does an operator:

- Differentiate itself from its competitors?
- Encourage subscriber loyalty?
- Maintain and increase ARPU?
- Achieve all of these things in a volatile economic environment?

The service development, delivery and charging mechanisms of the past are not flexible or powerful enough to answer these questions. A new approach is needed.

A new approach to service development and delivery

Service broking and service / feature interaction technology is the answer.

Service brokers allow operators to selectively trigger and run multiple services on a single network trigger. Service brokers blend together services by managing the signalling interactions between the network and the service layer.

BENEFITS

MAXIMISE THE RETURN on investment in existing networks and services, whilst removing the barriers to future innovation.

EMBRACE NEW NETWORKS and technologies, whilst at the same time minimising the impact on subscribers during migration.

COMMERCIALLY VIABLE TO INNOVATE IN TDM IN SERVICES – Create new services by reusing existing services (and/or components of services) by augmenting existing IN platforms. New service propositions may span the SS7 networks of today and the IP-based ones of the future.

COMMON SERVICE PORTFOLIO – Offer a new, common set of services to both prepaid and contract-based subscribers.

SERVICE INNOVATION – Augmenting the incumbent SCP to enhance the existing services with new capabilities, for example enabling services for prepaid charging and adding location awareness, can increase customer loyalty and achieve greater market reach.

LOWER OPEX – Build services faster and more cost effectively.

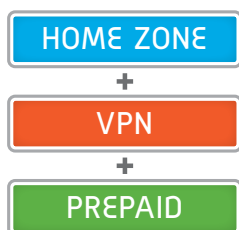
OpenCloud Rhino Service Interaction Server

The OpenCloud Rhino Service Interaction Server (SIS) is a powerful, flexible, and extendable, script-driven service interaction platform which provides service composition, broking and interaction functionality for both SS7 and IMS networks.

FEATURES

SERVICE COMPOSITION – Create new services by blending together multiple independent services simply by writing a script. This includes combinations of SCP, SIP Application Server and Rhino-hosted services. The interaction logic (executed in the SIS) is separate from the service code. Baseline services remain untouched as Rhino SIS interacts through intercepting the signalling rather than interacting with the core application logic. No change to the existing services is required and users of existing services see no change in service behaviour.

With Rhino SIS, IN Service Layer Engineers can compose new services by writing simple scripts using a Graphical User Interface. Service composition and orchestration does not require programming skills.



The SIS charging capability increases the range of services that are available to prepaid subscribers. Prepaid versions of services can be created from service components hosted across two or more platforms using a script.

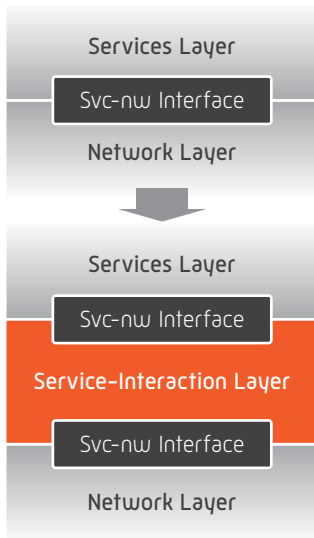
Combinations or mash-ups of 'smart' next generation and traditional telecom services create enhanced services. With increased customer personalisation and the direct integration and interaction of speech, text, messaging and data services operators are able to add significant value to their customers.

REAL-TIME CHARGING CAPABILITIES – Provided through the Rhino SIS Online Charging Module, Rhino SIS enables both the creation of the new service and importantly, the ability to charge for that service, whether they are pre or post-paid services. The Online Charging Module allows the service composition engineer to send real-time charging messages to various points in the service composition to the OCS. The module can inter-work with other services on the same session and extends to both circuit and packet switched networks.

REAL-TIME SESSION CONTROL – Provides real-time session control for telecoms services whether they are delivered in a pre or postpaid manner.

RHINO SIS TRANSLATORS – SIS SIP-IN and SIS IN-SIP Translators provide service layer interworking between packet and network. This allows TDM-based subscribers to access IMS services and vice versa, avoiding duplication of services in either the TDM or IMS network.

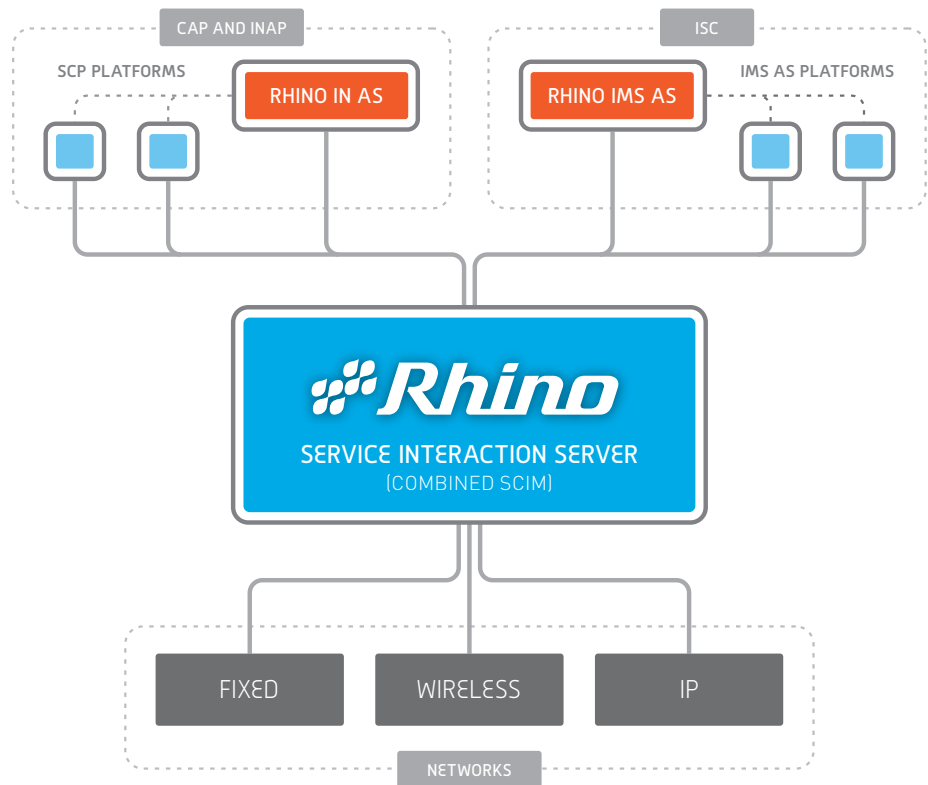
New services are created by blending existing services together.



How does the SIS work?

The OpenCloud SIS interposes a **service-interaction layer** between the service and network layers. The service-interaction layer implements the service-to-network (Svc-nw) interface.

The network appears as though it is interacting with a single service. From the perspective of each of the services in the composition, the service-interaction layer appears like the network. From the service hosting platform's perspective, multiple services are interacting with the network. The SIS manages and coordinates the signalling between each individual service to create a new, combined service. The SIS is responsible for ensuring that the composition is comprised of a coherent and consistent stream of messages between the platform and network.



Rhino SIS can be deployed as a standalone product, or as an integral part of the Rhino platform.

OpenCloud was formed in New Zealand in 2000 to create open standard software technology that would revolutionise the portability and interoperability of services in telecommunications specifically in the evolution to IP and 3G IMS. OpenCloud works with partners to deliver, integrate and support end-to-end solutions incorporating OpenCloud products to network operators and service providers worldwide. OpenCloud has offices in the United Kingdom, New Zealand, Madrid and Tokyo.

MORE INFORMATION

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