

NetCracker Service Inventory

The following question is at the heart of the transition to the world of convergent, content-rich services: how can Communications Service Providers (CSPs) move from a business model where “network access is the service” to a model where “network is just an access mechanism to a world of new services and content?”

Most CSPs are facing significant challenges in evolving to this model because their operations, processes, and capabilities have been designed to build the “best network” as opposed to the “best services.”

In addition, their Service Layer, where back office and OSS reside, is configured towards managing resources and infrastructure at Layer 4 and below where the network lives, and not at Layers 4 and above where many of the content-rich, converged services will be created.

The NetCracker Service Inventory module was designed and developed with these changing imperatives in mind. It provides a quick and efficient way to bring together information about the capabilities of different network technologies and configurations and then present it as a Service Catalog consisting of reusable service components that can quickly be combined to create new services.

NetCracker Service Inventory stores information about the configuration of all installed services, and thereby enables changes to be made to the existing services without time-consuming re-configurations. It provides references to the underlying resources and creates logical links between the market offering and the network information. It serves as a point of reference for services and products recorded in a company’s product catalog and customer information in customer-facing systems. It brings together all information vital for the efficient sale, delivery, and assurance of the CSP offering.

The Service Inventory design is based on NetCracker’s deep experience building inventory-

The Service Management Challenge

With the very definition of a service changing quickly, CSPs will have to develop the ability to introduce new services in a matter of days, service configurations will have to be on-demand, and customers will want access to services no matter where they are.

To fulfill such expectations, CSPs need to move to an environment where the network is the means to an end, not an end in itself.

This will require that network capabilities be presented in a way that allows other operational groups—such as product management, marketing, sales, and customer care—to help define and create new services. Currently very few CSPs can provide such views in order to empower entities that have the task of coming up with new services.

NetCracker Service Inventory

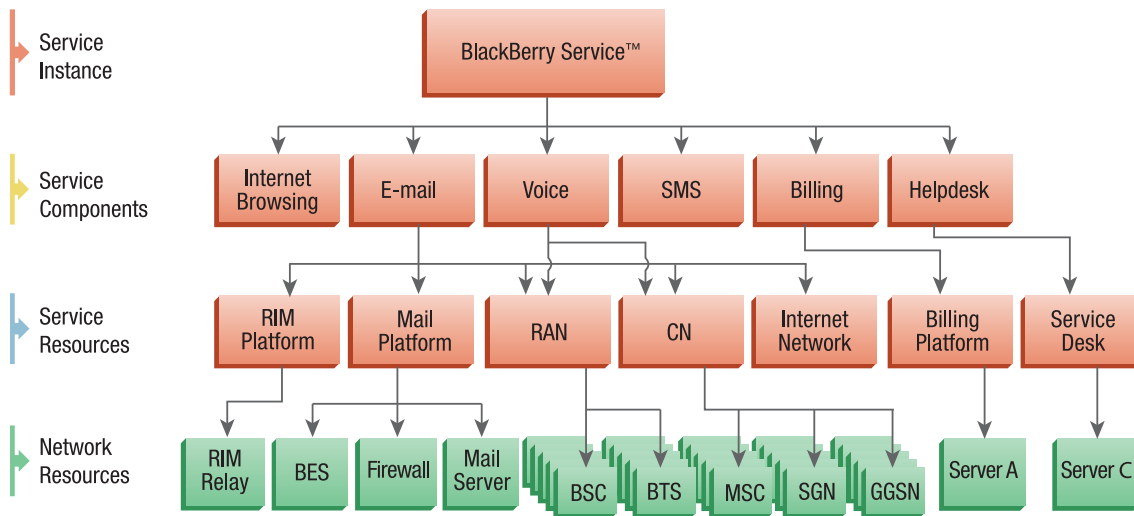
centric OSS solutions combined with currently emerging industry standards, such as the TMF’s SID model recommendations.

At the core of the Service Inventory module is the open unified Service Model that provides a configurable way to support any service type and structure:

- User-configurable templates
- Service on Service Dependencies
- Assignment Rules
- QoS Requirements

The Service Catalog component of Service Inventory keeps track of the service offering and allows for the quick introduction of new services. It includes information about:

- Service Components: Identifies which components and groups of components are available for service construction.
- Service Structure: Details which sub-service and service components are necessary for a particular service type.



Service Topology: Defines how service components map to the network resources infrastructure.

- Service Capabilities: Describes the QoS, CoS, and SLA parameters available for a service.
- Visual tools for managing service components and the relationships among them.
- Comprehensive reports that show the capabilities of a CSP's network and its readiness for the introduction of new services.

Using components from the Service Catalog, each service can be constructed and associated with particular resources. Service templates, sub-services, and a catalog of service components provide pre-configured bricks to support a service instance.

The inherent flexibility of the NetCracker Service Model allows for the rapid configuration and extension of Service Catalog components in order to support new service types and service

components.

The Service Instances repository provides a clear picture of services currently in use by a CSP's customers. It provides information about:

- Which customer account is associated with a service
- Which resources are assigned to a service
- SLA, QoS, CoS, and other quality and Service Level parameters associated with a service
- Operational information (orders, trouble tickets) associated with a service
- Moves, adds, changes, and disconnects (MACDs) planned for a service

The Service Inventory module has open and documented integration interfaces and is seamlessly pre-integrated with other NetCracker OSS modules including Resource Inventory, Design & Planning, Order Management, and Customer Impact Analysis.

Benefits of NetCracker Service Inventory

- A comprehensive view of services greatly improves the efficiency of the fulfillment and assurance processes, and ultimately improves customer satisfaction.
- A flexible, unified repository of the entire service offering enables new services and combinations of services to be introduced more quickly, and thereby provides an important competitive advantage.
- The visualization of service components and relationships speeds up service modeling and improves assurance.
- A technology-centric Service Model supports top-down service design methods that allow new user services to be created quickly through the mixing and matching of service components.
- Creating extensibility through configuration rather than re-development and re-integration enables the quick rollout of new products, and this significantly reduces TCO and improves time-to-market.
- Pre-integrated, value-added modules combined with industry recommendations for data modeling reduce implementation time and "integration tax."