

# Cloud-based development and test environment speeds up OSS integrations

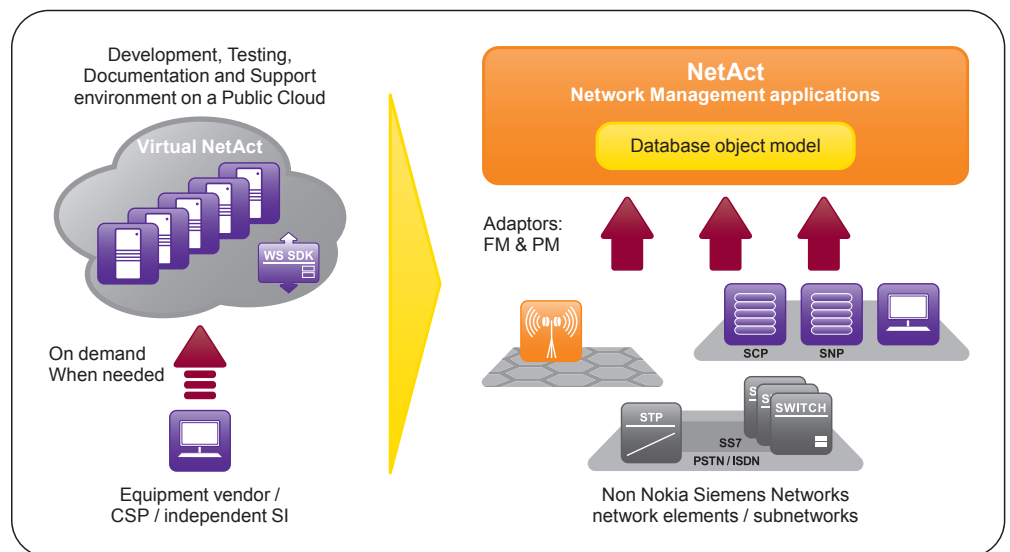
Nokia Siemens Networks



Nokia Siemens Networks Integration Center offers a quick and easy way of developing OSS integrations, cutting the time and minimizing the cost needed to bring new elements and services into the network.

The system is based on the use of Nokia Siemens Networks NetAct™. Using a modular architecture, NetAct combines the management of overall network operations, individual network elements and services to provide a comprehensive solution for all communications networks, even the most complex multi-vendor, multi-technology network deployments.

Among the benefits of NetAct are the hiding of network complexity, the reduction of administration and maintenance costs, reduced operational costs through increased automation and reduced capital costs by using a single system for different technologies, vendors, domains and tasks.



Integration Development model

## Quicker integration

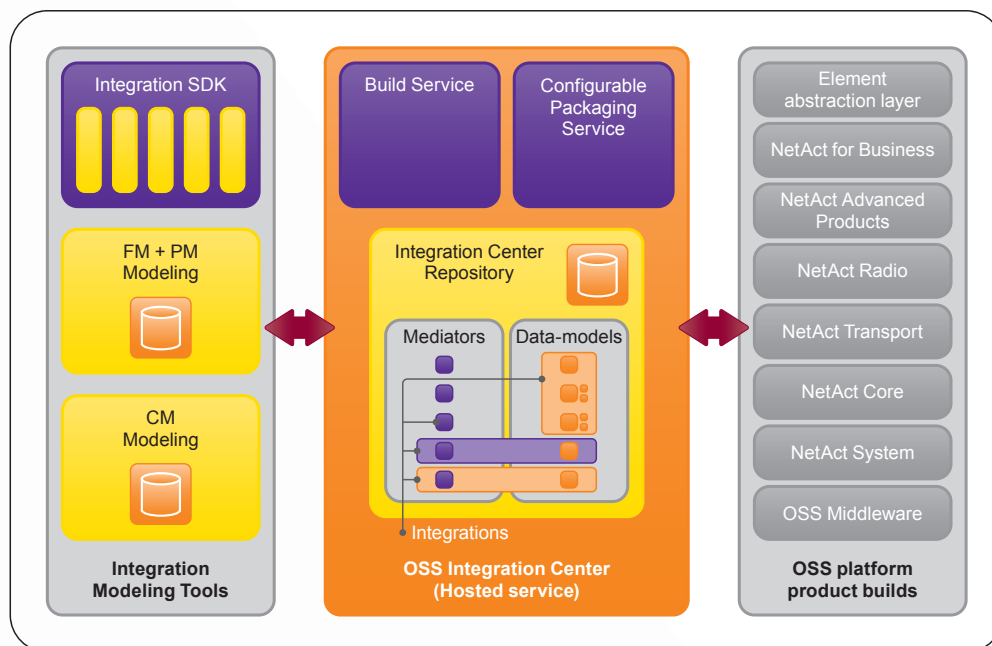
The Integration Center allows communications service providers (CSPs), system integrators and element vendors to add new network elements and technologies quickly and efficiently, and without calling for support from Nokia Siemens Networks.

Developers acquire a license to gain online access to SDKs, a testing environment and libraries of information,

allowing them to build and test their own NetAct integrations. With online documentation support available, the system is presented as a web 2.0 application, with e-mail support, instructional videos and other aids. Higher levels of support could also be provided once the service has matured.

With the cloud-based testing environment, developers can prove that their integration is stable and

meets CSPs' requirements. In addition, thanks to the cloud-based approach, integrators will be able to run verification sessions with their customers, increasing customers' satisfaction, reducing the costs of off-line testing in their own laboratories and the risks of introducing immature integrations to live networks. When they are happy with the test results, they can take the integrations and implement them in their customers' network.



Nokia Siemens Networks Integration Center View

### A market in integrations

For CSPs, the Integration Center will mean reduced lead time and lower cost for new integrations, as well as offering more possibilities to develop their own southbound integrations. It will also help them protect and generate more value from their existing platform investments. As experience grows and the ecosystem develops, there will be numerous off-the-shelf integrations available from developers, while in the future, applications could also be available.

For integrators, the Integration Center will reduce the cost and complexity involved in developing integrations through offering a virtual, always available low cost development and testing environment.

While developing for customers, system integrators will still own the IPR of the integration and can sell it to other customers. If a network element is common, an integration can be developed for one customer and sold to hundreds around the world. With no separate customer specific NDA or special arrangement required with Nokia Siemens Networks, it also provides access to a market of over 400 NetAct customers.

Equipment manufacturers can also benefit from the Integration Center. It will allow them to add full OSS support to their network and service elements, without the need to develop their own OSS.

### Application integration

The Integration Center lays the foundation for an evolution towards a common integration platform which also enables the use of existing and well-documented northbound interfaces to integrate third party umbrella systems. This reduces costs by minimizing the Network Operations Center (NOC) and Service Operations Center (SOC) architecture integration points.

Nokia Siemens Networks is planning to further evolve the Integration Center to provide a library of functionalities to allow direct application integration. This approach will offer system integrators and application developers simple development and a shared information model, while giving CSPs a wide set of Commercial Off-The-Shelf (COTS) integrations on which to build simplified architectures that match their own processes.