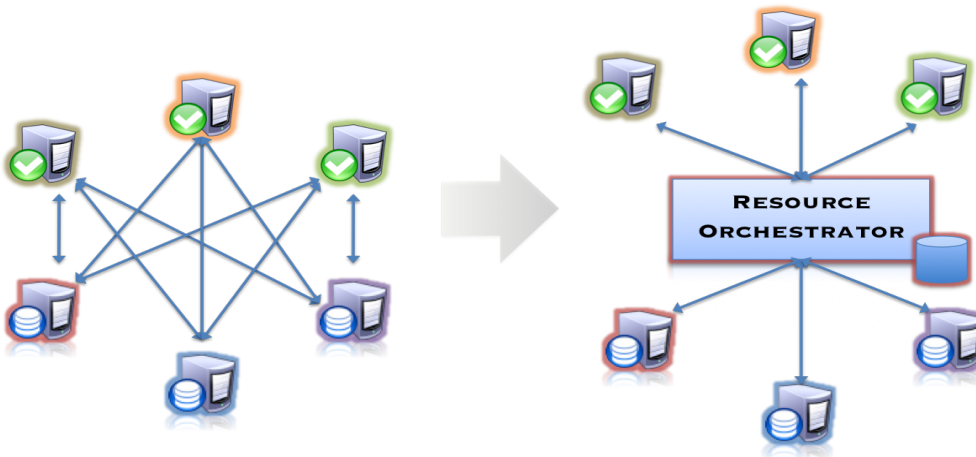


The challenge of service provider resource management

Service providers often have several inventories responsible for different aspects of their networks. Typically these inventories all have varying levels of support for resource management and life cycle semantics, such as transactions - and their API's are often legacy in nature. Deploying provisioning processes on top of these systems can be very complex and error-prone as the limited capabilities in these systems require more life cycle logic to be handled by the clients. Since robust and fast resource management is a key factor in creating efficient provisioning and delivery processes Visionael has addressed these challenges with a unique product - Resource Orchestrator.

RO provides a single integration point for all OSS applications

RO allows service providers to form a common integration point for all applications that depend on resources maintained in other systems, such as pure service delivery platforms, or designated network management applications. Business logic related to the life cycle of these resources are centralized providing a set of homogenous API's for all stakeholders of the resources. Allocation logic only has to be managed in one place, rather in all systems that work with the resources.



Streamlines life cycle semantics for all kinds of resources

Most resources share common life cycle patterns, such as allocation, de-allocation, re-usage grace time, low-level-alarms etc. Most inventories, however, do not always support these semantics and therefore are required to be implemented by the client manually. By using RO as a resource broker it wraps resources tracked in inventories with varying support for these semantics and provides a streamlined and unified API stack in the OSS environment.

True understanding of the resources and their importance

To carry out successful delivery, on time, any provisioning solution requires that the network resources it works with are available. Network inventories often have good understanding of what a resource is the network is, but not its importance in any provisioning process. RO can be used to set lower boundaries for when to alarm on certain utilization of resources such as ports or bandwidth consumption.

Safe transactions decreasing the burden for resource stakeholders

By use of its streamlined API, RO provides transparent transaction support for its clients, making it much easier to create long-running provisioning processes and workflows involving resource management. Instead of focusing on life cycle semantics and error handling, provisioning processes can focus on the actual business goal of the process.

The Visionael OSS suite

The Visionael OSS Suite provides a full set of tools for service providers or enterprises facilitating automatic discovery, documentation, physical and logical resource allocation and provisioning/activation of services and network elements as well as customer specific process automation.

All products in the OSS suite are designed to work in concert or as parts of an OSS environment built of products from many vendors.



Management of address space oriented resources

Many resources are not tracked in network inventories, but are abstract in nature and often just imply a network wide name space. Address spaces such as IP-Address ranges, telephone numbers or MPLS route targets are resources whereby the network inventory may track usage per node, but where it's often more suitable to allocate from a predefined range, rather than consulting the inventory. RO supports defining such ranges, all with inherited semantics.

Human interaction with escalation

In many service providers the task of automating business workflows is an evolutionary process that often require that manual steps are part of the process. By its use of SO, RO allows manual steps to be part of resource allocation processes using interaction via web and mail. Workflows can even incorporate escalation rules if human tasks are ignored for too long. When certain resources reach lower boundaries tasks can be spawned off to make sure that appropriate actions are taken.

Platform and Requirements, RO Server

Operating Systems and Platforms:

- **Sun Solaris 10**
 - Sun UltraSPARC (minimum 1 processor at 1.4GHz)
 - Intel and AMD 32 and 64 bits processors
- **SUSE Linux Enterprise Server 10**
 - Intel and AMD 32 and 64 bits processors
- **Red Hat Enterprise Linux 5 server**
 - Intel and AMD 32 and 64 bits processors

Databases Supported:

- Oracle 10
- Oracle 11g
- Oracle 11g RAC

Java requirement:

- Java JRE 1.6

Application server

- Sun Glassfish 2.1

System Requirements:

- Dual core 2.6GHz (minimum)
- Memory: 3 GB (minimum)
- Disk Space: 2 GB (minimum)

Platform and Requirements, RO Client

Operating Systems and Browser:

- Any OS support ing the supported browser requirements
- Mozilla Firefox 3.5 or later.

System Requirements:

- 2.3GHz (recommended)
- Memory: 2 GB (recommended)

Want more information?

Please visit us at:

<http://www.visionael.com/>

Enterprise Service Bus

All our API's are exposed and documented allowing any part of your OSS environment to utilize the data, minimizing the integration tax.

No internal API's are used.

Customizable allocation logic using SO

Since resource inventories and desired resource allocation logic may be very different from service provider to service provider RO relies heavily upon Visionael Systems Orchestrator to implement customizable logic and asynchronous allocation processes with third-party systems and databases. These workflows are all wrapped by the common resource allocation life cycle semantics that RO provides to its stakeholders.

OSS simplified

The Visionael OSS Suite is designed for cost-effective deployment by operators and systems integrators. Visionael OSS provides an alternative to traditional costly/time consuming solutions and a significant improvement over manual management methods.

Easy to learn, your teams can be productive in weeks not months. Integration to other systems like CRM or Order Entry is simple with our flexible Enterprise Service Bus – a set of public APIs. Fast time to value delivered. The Visionael OSS Suite is a proven solution in use by operators around the world.

Please visit our web site for additional data sheets and videos.