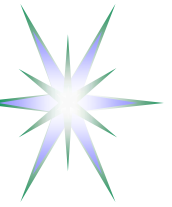




ISOD WG Chapter discussion

On-Demand Infrastructure Services Provisioning Working Group
(ISOD WG)



ISOD WG Summary:

The On-demand Infrastructure Services Provisioning (ISOD) Working Group (WG) will propose an architectural framework to support basic use cases in on-demand infrastructure services provisioning and emerging new business models for infrastructure virtualisation.

The proposed architecture and components will reflect both views – infrastructure providers and applications providers.

The recommendations will define a framework for Logical Infrastructure description and Composition Layer (LICL) and the whole provisioned services lifecycle management.

The ISOD WG will also propose a framework for providing consistent security services for dynamically provisioned combined network and IT/applications.

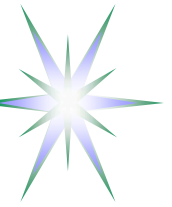


Scope

The scope of the ISOD WG will includes

- Defining architecture, LICL, extended UNI and ANI
- Infrastructure virtualisation issues, including “Infrastructure Virtualisation” (“virtualised infrastructure”) definition/model
- Provisioned services lifecycle management
- Security issues, e.g. pluggable AAA services, security context management

The WG will consider Service Level Agreement (SLA) negotiation and SLA aware services provisioning management.

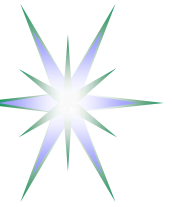


ISOD WG Purpose

WG Focus/Purpose :

The main purpose of the ISOD WG is to propose a consistent framework for on-demand infrastructure services provisioning. The propose framework should also support a new emerging business and operational models for virtualised infrastructure providers. The proposed framework should create a basis for existing heterogeneous services inter-operation and allow creation of the new interoperable and composable services.

It is intended that ISOD WG will provide upper layer framework for a number of currently running initiatives at OGF, such as NSI WG, NML WG and OCCI WG, and will use (or adopt for OGF user community) standardisation work done by ITU-T and TeleManagement Forum (TMF).



ISOD WG Deliverables

Deliverable 1 - BCP/taxonomy in existing and on-demand network services provisioning technologies, including existing Bandwidth on Demand (BoD) systems

- Delivered as single deliverable.

Deliverable 2 - Usecases for On-demand Infrastructure Services (combined Network + IT) provisioning

- This deliverable may be combined with the Requirements deliverable

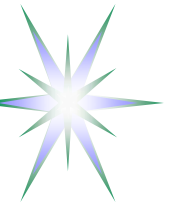
Deliverable 3 - Requirements to On-demand Infrastructure Services provisioning

- Delivered in two deliverables as an initial requirements set and updated after first implementations

Deliverable 4 - Security Framework for On-demand Infrastructure Services provisioning

- This deliverable will also describe Security Services Lifecycle Mngnt (SSLM) model

Deliverable 5 (TBD) - NML/NDL profile for Logical Infrastructure Composition Layer (Additionally)



ISOD WG Timeline

OGF 29 (June 2010):

- Official start of working group
- Outline and author list of deliverables

OGF 30 (Autumn 2010):

- First draft of Deliverable 1
- First draft of Deliverable 2

OGF 31 (Winter/Spring 2011):

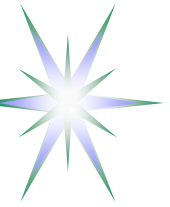
- Feedback and discussion on Deliverables 1 and 2
- First draft of Deliverable 1

OGF 32 (Summer 2011):

- Submission of Deliverable 1
- Submission of Deliverable 2
- Feedback and discussion on Deliverable 3

OGF 33 (Autumn 2011)

- Submission of Deliverable 3
- First draft of Deliverable 4



7 Questions (1&2)

1. Is the scope of the proposed group sufficiently focused?

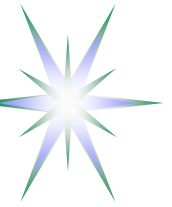
Yes.

It focuses on the definition and specification of an architecture for on-demand infrastructure services provisioning that should provide a framework for services interoperability, new services development and the whole on-demand provisioned services lifecycle management.

2. Are the topics that the group plans to address clear and relevant for the Grid research, development, industrial, implementation, and/or application user community?

Yes.

ISOD addresses an important need for the Grid community which is the common architectural framework for new emerging infrastructure services and new business models (of the virtualised infrastructure provider) in infrastructure virtualisation and provisioning, in particular with the recent move of the Cloud computing to infrastructure service.



7 Questions (3&4)

3. Will the formation of the group foster (consensus-based) work that would not be done otherwise?

Yes.

Currently, different projects are implementing proprietary solutions, which are able to support specific network or IT/Grid/Cloud services. Such solutions are also limited on the type of service providers that are able to serve both in Grid middleware level and the type of network service providers they can inter-operate. Thus, there is a need to define a standard interoperable architectural and operational framework to ensure interoperability and new services development across heterogeneous Grid/Cloud and network infrastructures.

4. Do the group's activities overlap inappropriately with those of another OGF group or to a group active in another organization such as IETF or W3C?

No.

However, this group could benefit from some of the work has been carried out in other OGF groups or other organizations (e.g. IETF, OASIS, ITU-T, TMF) in order to define and standardise the ISOD the most appropriate way.



7 Questions (5&6)

5. Are there sufficient interest and expertise in the group's topic, with at least several people willing to expend the effort that is likely to produce significant results over time?

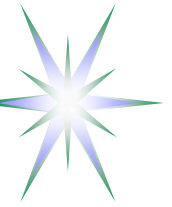
Yes.

Several people have been involved in this effort. People working on deployed dynamic networks like ESnet and Internet2, Research projects like GEANT3 JRA3 Task 3 Composable services, GEYSERS, and others.

6. Does a base of interested consumers (e.g., application developers, Grid system implementers, industry partners, end-users) appear to exist for the planned work?

Yes.

Several groups have been identified as being interested in standardizing a network service interface, these are— telecommunications operators, grid operators, cloud computing operators and network equipment vendors.



7 Questions (7)

7. Does the OGF have a reasonable role to play in the determination of the technology?

Yes.

OGF is the appropriate place to carry out the activities planned for this WG since it's the most relevant organisation that relates to Grid users/applications and how the ISOD would be standardised to provide interoperability with network providers. It is critical to consider the relation between end users (e.g. Grid, Cloud computing) and network services to proceed with a common interface that can be adopted on distributed heterogeneous environments.