

OGSA Naming Working Group

Global Grid Forum, Arch Area

Charter

Administrative Information

Name and Acronym:

OGSA-Naming-WG

Chairs:

Andrew Grimshaw	University of Virginia
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Secretary(s)/Webmaster(s) (both optional):

Email list:

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<http://forge.ggf.org/projects/ogsa-naming-wg>

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Focus/Purpose

The objective of this working group is to work on two specifications (RNS and WSNR) to realize a three level name space for OGSA and to produce WS-Naming naming specification based on WS-Addressing. Thus, both RNS and WS-Naming must be combinable with OGSA Basic Profile.

Naming in distributed systems has a rich history and literature – and the basics are very well understood. Traditional distributed systems often have a three layer naming scheme. Human names such as paths or attributes are mapped to abstract names, which are then mapped to some form of address.

The first specification is RNS – Resource Naming Service, that maps directory strings (i.e., paths) to WS-Addressing Endpoint References (EPR's). The EPR's may (or may not) be WS-Names. If they are, the second specification – WSNR – Web-Service Name Resolution comes into play. WSNR is very simple, it resolves (or maps) WS-Names to EPR's.

Draft specifications for RNS, the WS-Naming specification, and WSNR have been developed, RNS in the GGF GFS-WG and the WS-Naming specification and WSNR in discussions in the OGSA-WG.

The milestones are particularly ambitious in order to support the overall OGSA roadmap and timeline.

In order to satisfy the need to define a resolution port-type as soon as possible, the WG may separate WS-naming specification into two specs; 'WS-Name resolution and the definition of the abstract name. This discussion and decision will be one of the first work items for the group

Scope

The scope of this working group is restricted to naming and name resolution for Web-Services. We presume the use of the WS-Addressing standard being developed in W3C. If we determine that another existing standard such as XRI satisfies our requirements (particularly for WS-Naming, WSNR), then we will terminate activity.

Goals

Deliverable/Milestone 1: *BOF – March 2005, Korea. Done*

Deliverable/Milestone 2: Draft recommendation WSNR and WS-Name specification documents, June 2005.
Milestone 3: Draft recommendation RNS document from GFS working group, June 2005.
Deliverable/Milestone 4: Draft WSNR/WS-Name experience documents, September, 2005.
Deliverable/Milestone 5: Draft RNS experience documents, September, 2005.
Deliverable/Milestone 6: WSNR/WS-Naming recommendation document ready for public review, November, 2005.
Milestone 7: RNS final recommendation document, late November, 2005.
Deliverable/Milestone 8: WSNR/WS-Naming final recommendation document, late Spring, 2006.

Management Issues

The working group will have teleconferences at least every other week, and will have face-to-face meetings between GGF meetings. Furthermore, members of the working group will have regular briefings and discussions with the OGSA working group including joint review discussions before every milestone to ensure that the deliverables are consistent with OGSA needs.

Evidence of commitments to carry out WG tasks

Several of the interested parties have already committed to seeing this through. UVA, UK e-Sciences, and others have agreed to participate.

Pre-existing Document(s) (if any)

There are a number of existing documents. The OGSA V1 document describes a three level naming scheme. Further, the GGF GFS-WG has been developing a directory-based naming scheme that has been broken out into a separate document – the Resource Naming Service. We will use that document as a starting point. Similarly the GGF OGSA-WG has had a design team on naming for almost a year. The design team produced informal informational documents on both requirements for an abstract name to address naming scheme, as well as a draft document that describes a specification on WS-Addressing that could be used.

Exit Strategy

When the recommendation document is complete and has passed through necessary public comment and editor review, the working group will be dissolved.

Any other relevant information

The Seven Questions

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

The working group is very focused and already has draft documents to begin discussions.

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. Naming is central to distributed computing, and web-services.

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

The work has been done already in several places, SGNP, LSID, OGSI, and many others. This group is an attempt to codify that work into a single standard focused on Web-Services.

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

No. However, as stated above the RNS specification is an outgrowth of work that has already been done in the GFS-WG that was recognized as being broader in scope than just files.

Similarly, there is a concern that the WS-Naming specification is really a web-services issue – not just an issue for Grid. Therefore we are engaging major players in the web-services space such as Microsoft. There is a risk though, that once started this group may, for political reasons, need to move to a different venue to be effective.

There are other systems out there. I3C has LSID's, and we are building on WS-Addressing from W3C. CNRI has the Handle system, described at Handle.net – with licensing issues. XRI from OASIS may be relevant as well.

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. The people involved have done implementations of this type of service in the past. Further, there are commitments and interest from many members of the OGSA. Finally, the group members have a history on delivering on software and documents.

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. This includes the UK e-Sciences community, several companies, as well as grid researchers in the United States and Japan.

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

Yes. However, see comment above.