

# **Global Grid Forum: Proposed Policy-RG Meeting Minutes August 4, 2003**

Minutes from 1<sup>st</sup> post-GGF8 conference call of the Proposed Policy RG, Monday, August 4, 2003, Noon Eastern / 9am Pacific.

## **Attendees:**

Darren Pulsipher (DP), Cadence, Co-President, Co-Chair  
Rob Strechay (RJS), Sandial, Co-President, Co-Chair  
John Moores (JDM), Sandial, Secretary  
Andrea Westerinen (AW), Cisco, GGF-DMTF Liaison

Notes attributed to individuals are generally synopses, not exact quotations.

## **1. Status of Charter**

- Charter has not been officially submitted to Steering Committee.
- Charter has been posted on reflector since 14 July 2003 for comment.
- No objections to current proposed charter were voiced during this conference call.
- RJS will submit charter to Cees de Laat of the Steering Group (GFSG) this week.
- Cees is expected to be on vacation over the next two weeks and may be less responsive than he usually is.
- It is hoped that the Policy-RG will be chartered by GGF9.
- RJS plans to request a timeslot at GGF9.

## **2. More on the Status of the Proposed Policy-RG**

- The Proposed Policy-RG is believed to add value to the GGF, as the group has already held numerous meetings and has produced documentation, despite being unchartered. Considerable enthusiasm for a policy group was expressed at GGF8.
- Certain GGF WGs, including OGSA and one or more WG in the Security Area, have expressed concern that the Proposed Policy RG could duplicate the work of, or create conflict with existing WGs.
- The Proposed Policy RG does not intend to duplicate the work of other groups, but intends to work with other groups towards a mutually beneficial and consistent policy framework.
- DP reminded the group of the "GGF for Dummies" document that lists each WG and the WG's self-description.
- OGSA may try to swallow the Proposed Policy-RG, but RJS and JDM feel that the Proposed Policy RG should develop a solid architecture that can enhance OGSA, rather than merely create an architecture that is driven by the OGSA.
- RJS has been writing a document in response to the "Seven Questions" of the GFSG for proposed groups. RJS intends to distribute this to the Proposed Policy RG today or tomorrow for feedback, and to send the document to Cees de Laat this week, along with the proposed charter.

## **3. Interaction with Organizations Outside the GGF**

- AW, the GGF-DMTF Liaison, pointed out that the GGF is an Alliance Partner with the DMTF. DMTF work can be shared with the GGF, with appropriate recognition and indication if the work is still in progress.

- AW recommended that someone from the Proposed Policy-RG sit in on DMTF meetings, and points out that this person could have voting privileges. This would help offload AW. The meetings are currently on Tuesdays at noon Pacific. DP asked AW for connection info.
- DP and RJS indicated they would look into the possibility of participating in DMTF. DP indicated that he has another candidate person who may be able to participate.

#### 4. "Policy Use Cases for Grid Systems" Document Review

##### 4.1 Executive Summary

- DP talked the group through the majority of this 18 page document. This document is more or less a subset of a much larger NPI-WG (New Productivity Initiative Working Group, in the Architecture Area) Use Cases document. The objective in this conference call was for DP to provide an overview of the 18 page document. Some modifications were suggested during the call. Some of these modifications will be incorporated into a revised document to be sent by DP to JDM. Other suggestions will be discussed in upcoming conference calls.
- DP said that Bill Nitzberg (Scheduling and Resource Management Area Co-Director) encouraged the Proposed Policy-RG to submit the entire 180pp. NPI-WG Use Cases document to the GGF for formal review.

##### 4.2 Details of Discussion

- The document was begun back when the group was called NPI. The group began discussing architecture at a high level, but decided to define use cases as a foundation. The group believed that policy, as well as job and resource description languages were fundamental to the architecture.
- Contributions to the use cases were made by Compaq/HP, Platform Computing, AMSYS, and Cadence Design Systems.
- RJS expressed hope that Rebekah Lepro (RSL) and NASA personnel could propose use cases relevant to them that could be incorporated into the Proposed Policy-RG's work.
- DP emphasized the value of use cases for building real systems, making the standard practical and usable.
- AW pointed out that much of the DMTF and IETF work on policy did not include generic use cases such as the ones in this document because of particular requirements to align to IPSec and other initiatives. However, there is one generic use case entitled "Policy, Pigs, and Ponder" that addresses a difficult problem and presents conditions, actions, and triggers. Storage and Load Balancing use cases also exist. All three use cases were discussed at the January face-to-face meeting of the DMTF. AW offered to send out the notes from the meeting.
- DP defined an actor, in this context, to be an entity that does something to policies or is used by policies. It is beyond the scope of this group to define policies.
- The Proposed Policy-RG should define interfaces to systems such as security systems, but should not define those systems.
- JDM: System administrators are listed as one type of actor. What if there are hierarchical system administrators with different roles and responsibilities? DP responded that there are other actors with different roles, such as the capacity planner.
- AW broadened the question suggesting introducing the concept of Roles. There would be a set of generic roles that could be assigned to actors. DP responded that there was a big discussion about this in NPI-WG. DP also suggested this could be achieved instead with the notion of superactor as a superclass, and actors would specialize but inherit attributes.
- AW pointed out that generic services could take on some of these roles. System Management Tools are applications that fulfill the roles of certain actors. DP: there is a

- note in the System Management Tools category explaining that it is an application. NPI-WG felt it was important to include this specific example. Other services could be described in notes. Can expand the definition of application. AW recommended clarification of the super/subclass relationship of the application and SMT actors. DP offered to modify the document to address the concepts of superactors and roles.
- DP pointed out that in the use case figures, multiple actors on the left (stick figures) indicate that each of these actor types can perform this function.
  - DP: A language or architecture requires: (1) PolicyID and (2) policy definition.
  - DP: This group should not define policy editors.
  - DP: SaveDelta – important for system to keep track of policy changes. Need audit trail.
  - JDM: What about the systems/resources/actors affected by a policy change? They need to be notified of the change. But that is not in the diagrams. Is that intentional? DP: Yes.
  - Additional discussion that a policy change may not even be valid. DP points out that the use cases include a validation step. JDM asks “but in the diagrams isn’t validation only with respect to security, but should include other systems?” DP says that in one or more later use cases, more than security is included.
  - DP: There was and is an upfront assumption that a scheduler or DRM (distributed resource management) system does not have absolute control over all resources assigned to it. This assumption creates a need for validation and simulation. Validation, at least with respect to security, is included explicitly. Simulation is not always included, and because it is optional and recommended but not required, it may only be included in notes.
  - DP pointed out that the assumption of lack of absolute control has been manifest in real-world systems, e.g. when a resource is assigned to multiple DRMs. DP cited Cadence Design Systems, ANSYS, and Platform Computing.
  - DP: deactivation and deletion of policies were intentionally separated. Deactivation could trigger certain events, could open security holes, etc., prior to deletion.
  - RJS: Leave this to the security people? DP: There are two calls to security system: one to determine if the actor is authorized to delete this policy and the second for the effects of deactivation.
  - RJS: Same thing in a DRM system. DP: Yes. RJS: Security and DRM validation.
  - DP gave an example of an authorized actor deactivating a company’s billing system. If the actor were authorized to do this, then the consequences are out of the hands of the Proposed Policy-RG. This is a possible application of simulation.
  - RJS: Possibly an arrow out, on the use case diagram. Possibly nested use cases. Simulate policy.
  - DP: Do we always want to simulate after deactivation? Seems too restrictive.
  - RJS: Can optional items be included in use case diagrams? Or can simulation be included in security’s responsibilities? Notify the DRM if scheduled.
  - DP: The DRM knows – arrow 3. We can add a note.
  - DP: Simulation could be a product differentiator.
  - DP: I have a hard stop in 2 minutes. I will make changes to the actors and beef up and polish up the document.
  - AW: Do we need any use cases describing the distribution of policies through the system? An actor can create/delete a policy within a repository, but not necessarily out to a resource. DP: The assumption is that the DRM will do this. Can you elaborate?
  - AW: I was worried about acknowledgment when a policy goes outside a DRM system to the resources themselves. Maybe it is the responsibility of the DRMs.
  - DP: We didn’t talk about pushing policies to resources. We don’t control them. We have a resource proxy inside the DRM. But the DRM/proxy does not have absolute control over the resources.
  - AW: In the IETF and DMTF, the case of a policy having an error was addressed. There was the notion of decision points and enforcement points. We might want to use these concepts. A resource may be policy-aware or might need to be proxied.
  - DP: Let’s talk about this next time.

- RJS: Andrea, where is this discussed? Can you point us to a document or URL?
- AW: It's in an old IETF framework draft. It never made it to RFC. I can send it out.
- RJS: Great.
- (DP and AW sign off).
- Leon Gommans (LG) of the U. of Amsterdam, and an auth-z member, signs on. RJS regretfully informs him that the time of the meeting is 9am Pacific, and that the next meeting should be in two weeks.

## 5. Action Items/Next Steps:

- ❖ Write and distribute meeting minutes. (JDM)
- ❖ Send charter to Cees de Laat / GFSG. (RJS)
- ❖ Seven Questions: complete, post on reflector, modify based on feedback, send to Cees de Laat / GFSG. (RJS)
- ❖ Revise "Policy Use Cases for Grid Systems" based on feedback from this meeting, including superactors/roles. Send to JDM. (DP)
- ❖ Post revised "Policy Use Cases for Grid Systems." (JDM)
- ❖ Request time slot for Proposed Policy-RG at GGF9 as if Policy-RG already chartered. (RJS)
- ❖ Identify candidate to sit on both Proposed Policy-RG and DMTF (DP, RJS, anyone else)
- ❖ Distribute notes from January DMTF F2F meeting. (AW)
- ❖ Send DMTF conference call connection information to DP. (AW)
- ❖ Distribute old IETF framework draft discussing the distribution of policies to resources, decision points, enforcement points. (AW)
- ❖ (Optional) Describe use cases relevant to NASA. (RSL)
- ❖ Decide whether to submit 180pp. NPI-WG use cases document to GFSL for formal review (Group)
- ❖ Continue discussion of modifications to "Policy Use Cases for Grid Systems." (Group)

Regards,

**Dr. John D. Moores**

Chief Architect

Sandia™ Systems, Inc.

222 International Dr., Suite 125

Portsmouth, NH 03801

P: 603-766-2700

F: 603-766-2793

jmooresNOSPAM@sandialNOSPAM.com