GGF Grid Policy - Research Group - Minutes GGF9 in Chicago

Date: 07 October 2003 Ohio meeting room

Administrative

Note Takers: Darren Pulsipher [darrenp@cadence.com] [DP} Rob Strechay [rstrechay@sandial.com] [RS] John Vollbrecht [jrv@umich.edu] [JV]

Other attendees by name: Dave Snelling [DS] Cees de Laat [delaat@science.uva.nl] [CL]

Reminded the group that by signing the agreement they agree to the GGF Intellectual Policy agreement

Note that we have people from both EU and Asia Talk about times to get people together

DP – go over the agenda Talk about spinning out WG after we have completed the research

Explaining why we exist as a group

Anything else you think we should cover? Asked what the Policy-Rg site is on?

RS – gridforge forge.ggf.com/projects/policy-rg answers

DP – Talk about the Charter but not specifically reading through it. Policy use cases came out of the Npi wg Use cases need to be broken into smaller pieces in order to

Comment from Group – The following indicate brief discussion and additions to the document [Tom Hacker] Negative Access Control added o Security Policies Scheduling policies – add user constraints

Under users you have constraints - user can only use certain software

Resources can be a licence, a machine, etc ... Add Audit to non-repudiation Make Authorization with note of Meta authorization – roles based – who can administer to who

For Billing: GESA SDEs (Service Data Elements) could be counted in here Add Audit to Non-repudiation What are privileges who authorizes

Reference: GESA-SDE in Billing policies

GRAAP reference to Reservation policies
Accounting Policies (accounting group closed but lot of groups spun off)
Add license management
Generic resource management
Performance polices GRAAP, Performance benchmarking group
Reservation policies - GRAAP – grid adv reservation policy
Performance Policies – other groups – GRAAP, Performance Benchmarking Groups,
Inter-cluster or grid services policies – OGSA, GRAAP

Monitoring policies – CGS

Accounting Policies – UR, RUS Add license management / generic resources besides Machines, etc ...

DS/DP - Usage Policies - an important category to add

- need to be able to police the usage of the data or applications for function
- Data protection issues (freedom of information act)

Question about usage policy e.g. have record for research but not allowed to pass on - add Data/Resource Usage polices

Freedom of information issues -

Lots of discussion of where Astronomical and toaster policies go. DP - Not here but place for them is allowed here. Some are being discussed in other groups

Version control policies –

- DP organizational policies are something that could be gotten at
- RS talk to question about framework and commonality based on David's question

DP – going through the generic use case for a user ...

- talks to the definition of a user

Roles Discussion: Use Case Actors in Policy

User

Programs are not users, but applications. Perhaps this is the same. (not clear what an application that uses user policy is)

Describe other actors.

Security system is actor because security is out of scope for this group. Question of if it is necessary, but seems to be necessary and helps make clear that security is excluded from policy system.

Capacity Planner actor is included because it is important and not in many things now.

Are programs users? DP – no applications are their own category

Does a resource have an owner?

- DP -no use a security box on the outside to determine that – not doing everything

Security System is outside of the policy framework

- DP and Dave agree leaving security policy in – boot strap problem that you have to talk to the security policy even to do security policy

Do we keep capacity planner in?

- David maybe abstract to a higher level
- Reason policy is built of actor capacity, lawyers, government

Policy Use Case discussed

[—phone conferences get very productive. Use both phone and web tool. –]

update policy use case SA / Management use case Includes manager Security an Policy system Comments: Needs to include timing Roll back capability Does include backup Audit trail of change with timestamp

Add policy use case Manager initiates Security validates Discussion

- add validate policy syntax before applying [point of this is to help define later requirements] delete policy use case

question about keeping old policy to allow old policy to remain in effect. This resulted in idea of changing say that changing policy could change application performance or ability to run. E.g. might have to remove a process to make way for higher priority.

Question of what happens if data policy changes while data is being used? Is policy dynamic or only in db? Decision is to allow both cases – no change to existing and change all

Use case for policy for specific date4

Gets old policy in place for a specific time (audit capability?)

Discussion – add publish policies to appropriate places

Administer policy:

* DS / et al - Need to add / have rollback or undo capabilities based on audit trails

* need to add a validate that the policy definition / criteria met (internal)

Create policy:

* need to add a validate that the policy definition / criteria met (internal)

*** came up from group - remind to talk about policy feedback when we get to **query** the policy

Policy Delete: Add line about audit – so that it is reverse able – maybe with a timelimit RS – can you lock the policy? DP – that is what the deactivate does ...

CL – policy that could run "no job should run more than five hours" can't change in the middle – using a certificate / ticket

DP – need to know when it is applied – beginning, middle, or end of the job

CL – use this example – no longer than 5 hours – and then change policy to 2 hours only for jobs – do not re-evaluate the jobs and let those that are running run

DP – we have to allow for both types

CL – does not think you need to have both – but not sure right now

DP / JV – need to add that "it may or may not effect currently running jobs"

Scheduling group is looking at this if something is revoked or not – really depends on the very specific use cases

RS - Policy group and time based are all the same thing

JV/DP/RS – need to be able to handle both cases ... is it implementation or is it an attribute of a policy?

How do I have different policies? DP – you don't have to have many policies from an invisionment (sp?) – like XML document

Might want to add publish policy – like update of a policy to other sites – and subscribe

RS – Covers the Policy Framework as presented in the Power point presentation

JV/RS – Each part of the system can use policies that have different semantics. For security systems they probably need to have the same semantic language. Other systems can actually have different semantics and still communicate. We are focusing on the exchange of the policies across systems, not the transport.

DS – The <action> part can contain a Boolean/execute something/ or evaluate another policy. When looking at policies make sure you remember the Security complex policies as well.

Framework Discussion

Decided to go on to Framework discussion and follow up on use cases on phone conference

RS – IETF/DMTF/SNIA are involved in the policy framework and we should try and use the work that is already done.

Framework is based on ietf work in policy framework. Manages storage rather than centralizing.

Focus on configuring grid behavior rather than individual components

Presents a schema and semantic definition (how like is it to concepts of enterprise network policy? The same I think)) how do the semantics of different domains keep the same? Without semantics between domains the rules between groups is hard.

Question- how does the semantics mesh across the net. What does clearance9 mean in all the groups using it? How is it translated if needed?

Semantic of control transfer is defined in this group, not semantics of a particular domain of information.

Policy rule is of form trigger/ condition/ action -- interesting fit with AAA group.

Policy system slides --

- define and update policy rules
- store and retrieve policy rules
- interpret implement and enforce Policy rules

Elements of Policy System policy management tool policy repository] policy consumer policy targ3et

The Diagram that contains relationships should show the cardinality between the objects. 1-1, 1-n, n-n n-1, etc...

JV – We possibly need to have location and meta-policy managers etc...

Policy and metapolicy in the system is not clear to me. Can have a schema with different access rights. Is there a schema across organizations?

Interaction between repositories is not clear. Also not clear is policy that is between them.

Wrap-up Administrative

Talked about time frame for calls

Good session. More on phone conference.

RS-

Time and Place of Meeting – Monday 9:00am PDT, 12:00 pm EDT, 17:00 pm GMT