



Enabling Grids for E-science

# Security Summary

*Åke Edlund, JRA3  
4<sup>th</sup> EGEE Conference  
Pisa, Italy  
28<sup>th</sup> October 2005*

[www.eu-egee.org](http://www.eu-egee.org)



# Recap, Erwin's summary on Monday - what have we done since Athens?

- Revised global **security architecture**. Secure **credential storage** procedures/recommendations document
- **Middleware security group (MWSG)** setting example for security **interoperability** between grid initiatives (EGEE, OSG, NAREGI)
  - To be used for GGF work. Official MWSG meeting at GGF16
- **Actively contributing to the gLite middleware**
- **EUGridPMA** continued work and was instrumental to
- **IGTF launched**,
  - Chaired by David Groep (JRA3)
  - Coordinating European, Asian, and American GridPMAs
- **Vulnerability analysis database created**
- **For remaining 2005**
  - Reinforce middleware **security component development** and **interoperability**
  - Overview and recommendation document on **accounting techniques**
  - Second revision of **security operational procedures** document.
  - Assessment of security infrastructure – *Security Challenge*



## Security related meetings in Pisa:

- Operational Security (OCST) - SA1
- Security training - NA3
- Quality Assurance Group (QAG) - JRA2
- Biomedical meeting - NA4
- Joint Security Policy Group (JSPG) - SA1
- Middleware Security Group (MWSG) - JRA3
- Encrypted Storage Demo - NA4, JRA1, (JRA3)

and many informal meetings, e.g. with Teragrid security and DILIGENT security.

## Focus in this presentation:

- IGTF
- MWSG
- OSCT
- “JRA3” in EGEE-II

## EUGridPMA

- All EU 6<sup>th</sup> framework e-Infrastructure projects
  - EGEE
  - DEISA
  - SEE-GRID
- LHC Computing Grid Project (“LCG”)
- Open Science Grid (US)
- National projects, like (non-exhaustive):
  - UK eScience programme
  - Virtual Lab e-Science, NL
  - ...

A large, hollow blue arrow pointing to the right, containing the text 'Next slides: the rest of the world'.

Next slides: the rest of the world

## APGridPMA

- **13 members from the Asia-Pacific Region, chaired by Yoshio Tanaka (AIST)**
  - AIST (.jp)
  - APAC (.au)
  - BMG (.sg)
  - CMSD (.in)
  - HKU CS SRG (.hk)
  - KISTI (.kr)
  - NCHC (.tw)
  - NPACI (.us)
  - Osaka U. (.jp)
  - SDG (.cn)
  - USM (.my)
  - IHEP Beijing (.cn)
  - ASGCC (.tw)
- **Launched June 1<sup>st</sup>, 2004**
- **4 ‘production-quality’ CAs**
- **Pioneered ‘experimental’ profile**

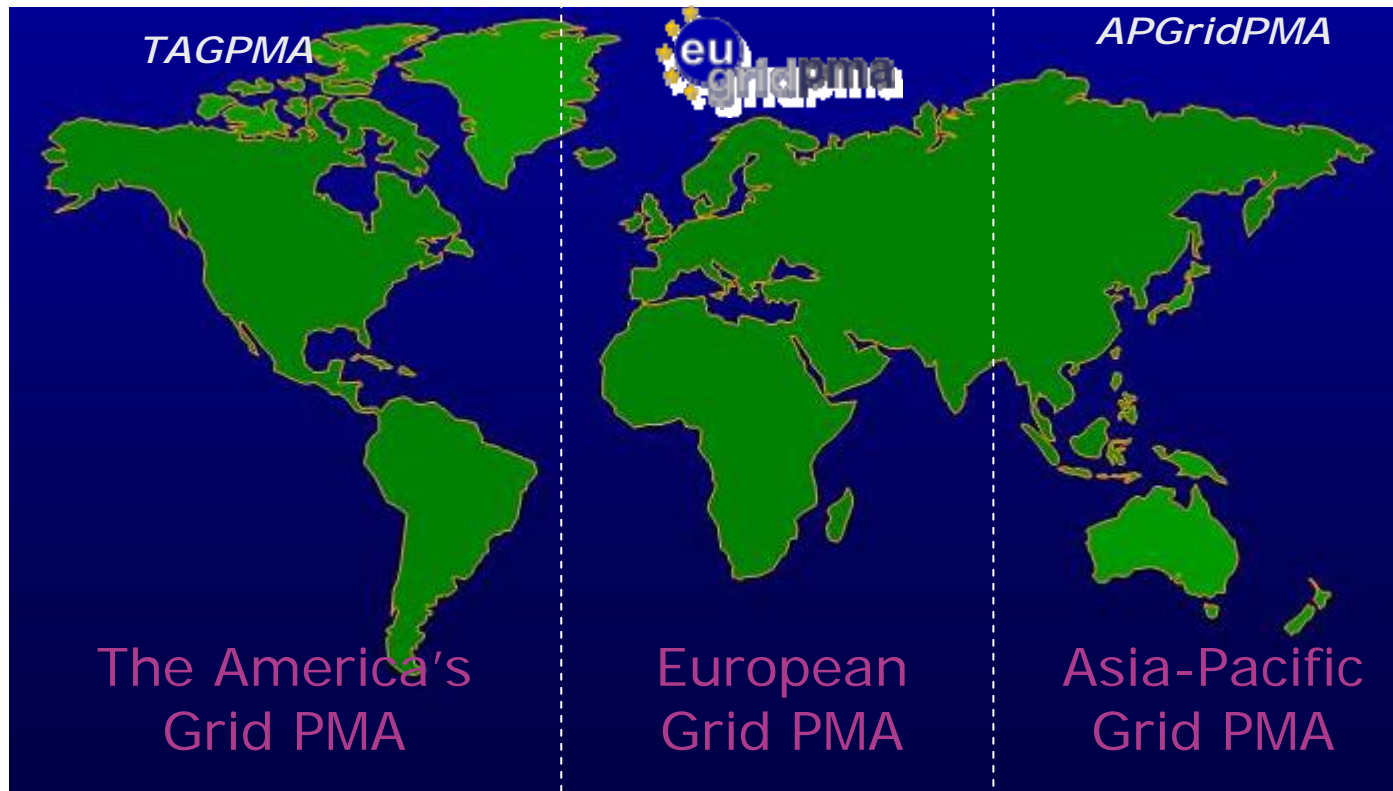
## TAGPMA

- **10 members to date,  
chaired by Darcy Quesnel (Canarie)**
  - Canarie (.ca)
  - OSG (.us)
  - TERAGRID (.us)
  - Texas H.E. Grid (.us)
  - DOEGrids (.us)
  - SDSC (.us)
  - FNAL (.us)
  - Dartmouth (.us)
  - Umich (.us)
  - Brazil (.br)
- **Launched June 28th, 2005**
- **Pioneered new “SLCGS”  
(Kerberos CA & al.)**

- **March 2005: IGTF Draft Federation Document GGF13**
- **June 28<sup>th</sup>: TAGPMA founded at GGF14**
- **July 27<sup>th</sup> : APGridPMA approved draft 0.7**
- **September: EUGridPMA meeting on approval**
- **October 3-4: formal foundation of the IGTF!**



- common, global best practices for trust establishment
- better manageability and response of the PMAs





**MWSG have had 6 two day meetings so far, the outcome have been very useful, esp. with regards to the OSG relationship:**

**- A good mix of people**

- Middleware developers
- Security specialists
- Operations
- Applications

**-A good mix of presentations and hands-on technical discussions**

**- Quite good spread of representatives**

- Europe: EGEE, DEISA(new), DILIGENT(new), GN2(invited), GRIDCC(new), SEEGRID(new)
- US: OSG, FNAL, SLAC
- Asia: NAREGI

At the Pisa meeting we had representatives from EGEE, OSG, DEISA, SEEGRID and D-GRID

**At Pisa we had some technical discussions regarding**

- Delegation
- glxec
- Service authZ for Encrypted Storage

**Planning for the GGF16, where EGEE security will have a more visible role than ever before:**

- Authz workshop
  - “Interop here and now”, planning for the next ~2 years
  - Dave Kelsey (lead), Von Welch and Ake Edlund
- MWSG info session
  - Outreach & dissemination (Ake Edlund)

**The 7th (2-day) MWSG meeting will be held at NIKHEF, Amsterdam, December 14-15**

**The Operational security Coordination Team (OSCT), lead by Ian Neilson (SA1),** intends to offer common actions, documents and procedures for ROCs, that are applicable also to sites.

### **Security Service Challenges by Pål Anderssen**

Described results and lessons from the Security Service Challenge 1 and planned more regional specific incident events tracking by ROC's and sites.

### **Grid Security Monitoring by Romain Wartel**

Described about currently added simple SFT (security functional tests) and rised the following questions:

1) How to extend SFT? What other SFT ext would be useful?

2) How to force convince site to do sec tests?

Common opinion - very difficult to add new items to Site FT

One suggestions - introduce security metrics and grade sites by security features. This may be important for some sensitive jobs/tasks. ROC can force sites but need good description of critical problems

3) How to implement check of patching status of Grid nodes?

- no commonly agreed solution suggested.

## Grid Incident Response presented by Ian Neilson

Requested more comments on the recently posted document.  
Meeting agreed that this work should be continued.

OSCT/ROC's incident response can not be outsourced to ordinary CSIRT (as somebody asked) because Grid Incident handling involves contacting ROC's and grid sites.

### JRA3 can contribute to:

- 1 - Incident response document
- 2 - defining new items for Security Functional Test based on vulnerabilities analysis
- 3 - providing feedback from Security challenge 2 to MWSG and JRA3

*NOTE: These minutes and comments by Yuri Demchenko, JRA3*

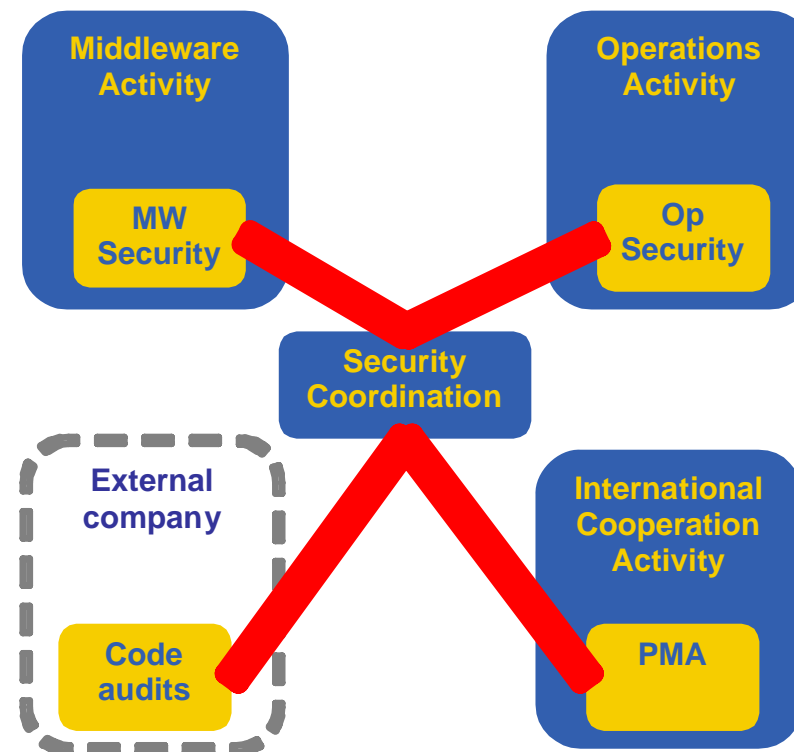
**EGEE-I Security is already a distributed activity:**

- Middleware security in JRA1
- Operational security in SA1
- EUGridPMA work, in SA1
- Possible external security audit work

**The changes in EGEE-II are not very big:**

- The EGEE-I/JRA3 developers will become EGEE-II/JRA1 developers
- The EGEE-I/JRA3/Security Architect will become EGEE-II/JRA1/Security Architect
- The operational security work will continue to be handled by SA1(JSPG, OSCT)

**New:** Security Coordination Group, lead by the Security Head. Described on the next slide.



*EGEE-II Security*

**New:** Shibboleth project (JRA1), lead by SWITCH (\*).

(\*Interoperability of Shibboleth-based Authentication and Authorization Infrastructures with EGEE Security Framework (Christoph Witzig <witzig-AT-switch-DOT-ch>)

## The Security Coordination Group (SCG)

is responsible for ensuring overall EGEE-II security coordination, includes architecture, deployment, standardisation and cross-project concertation.

The goal is to **ensure the relationship between the various security-related work items** inside the project do not:

- adversely overlap (leading to duplication of effort) or
- leave gaps that could be exploited.

In addition, the SCG is to **coordinate a new security auditing activity**. This activity will monitor both operations and middleware for security issues and report periodically on status and progress of the issues identified.

The security audit will leverage the work of the Grid vulnerability issues group.

## The Security Head (JRA2)

- will lead the Security Coordination Group (SCG) and the security audit task.
- responsible for representing the security aspects of the project in EU security concertation bodies and, ultimately in collaborations with other projects.
- will have a continue to have a position on the Project Execution Board (PEB) to ensure security aspects are represented at the project management level.

## Security Coordination Group (SCG) members:

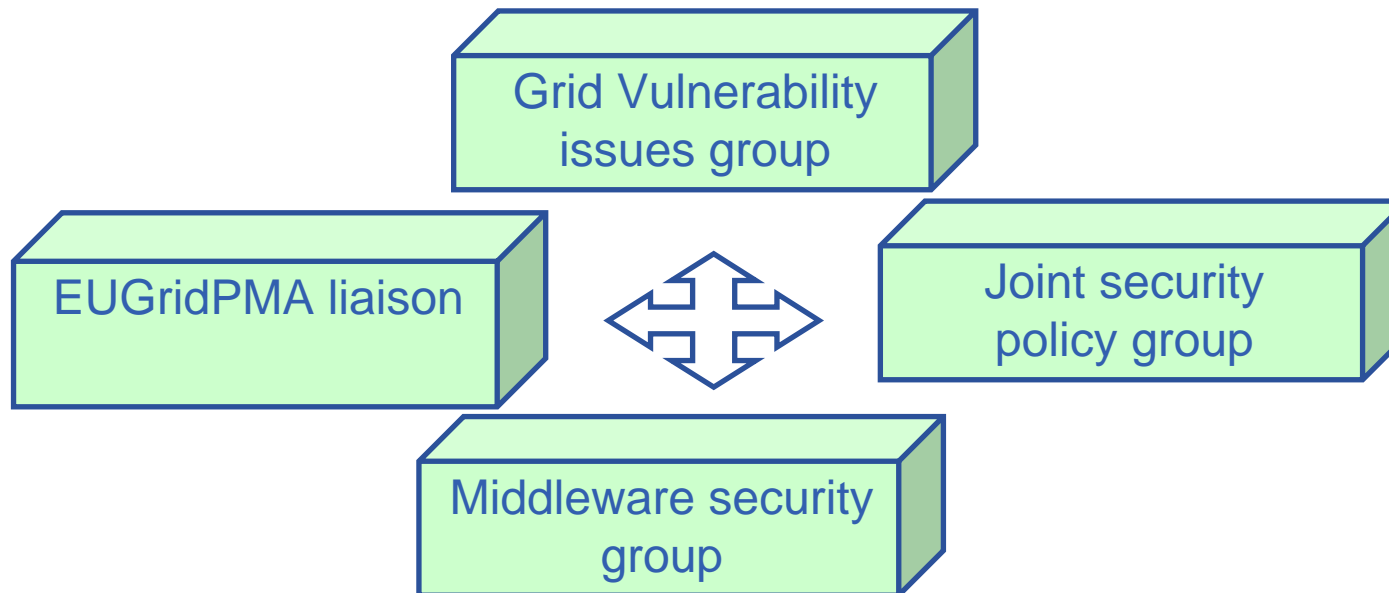
The Security Head, chair of the SCG (JRA2)

The chair of the Middleware Security Group (JRA1)

The chair of the Joint Security Policy Group (SA1)

The EUGridPMA liaison (SA1)

The chair of the Grid vulnerability issues group (SA1)



**What else to report from Pisa?**

**Well.....**



