



EGI-CSIRT Operational Security

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Activity update



Cloud Incident EGI-20160509 – Lessons Learned

- Forensic investigation done quite quickly,
- Communication to FedCloud sites and configuration service took additional time
- FedCloud sites are exposed to “normal” Internet attacks
- Successful attacker tend to keep working for long time
- New services may easily introduce new threats

Incident Prevention: VM-Endorsement/Contextualisation

- Concept: Users start from a "save" image.
- Policy developed, roles defined, etc, see <https://documents.egi.eu/public/ShowDocument?docid=771>
- Contributions from experts of various sites (incl. FedCloud)
- Discussion on technical issues like: non repudiation of the endorsement process, cryptographic signing of VM images etc.
- This is **expensive!** Multiple experts involved in creating/checking/maintaining Endorsed VM-images.
- This is very useful for a use model where VM end-users can not change the VM (examples: VO crafted WNs)
- It breaks when end-users get root and can install software/change configurations. Example:
Contextualisation

VM-Contextualisation

- Concept: Circumvent the limitations the VM-Endorsement imposes on Cloud usage.
- Very easy, cheap, just grab a random fabric management system and create your own grid in FedCloud.
- Problem: No security what so ever (incl. access control, monitoring etc etc.)
- Violates at least the gist of the VM-Endorsement and other EGI security policies

- VM-Endorsement concept makes sense in a certain use model
- FedCloud has not yet described a use model, so we can not create a security model, besides
- ... something like "Security groups" as in Amazon's EC2
- needs a technical discussion with the providers, if this is feasible.
- would provide flexibility for the end users and response possibilities for the (Site-) Security teams.
- a well tested concept.

- Hosting change for the nagios server used by EGI CSIRT
- New certificate used by the argus probe
- New ACL needed on NGI Argus
- (Please also keep the old one for now)

NGI Argus Servers New ACL for monitoring

- What?

- For:

- CN=secmon.egi.eu, O=Greek Research and Technology Network,
L=Athens, ST=Attica, C=GR, DC=tcs, DC=terena,DC=org

- Rights:

- POLICY_READ_LOCAL|POLICY_READ_REMOTE|CONFIGURATION_READ

- How?

```
pap-admin add-ace "CN=secmon.egi.eu, O=Greek Research and Technology  
Network, L=Athens, ST=Attica, C=GR, DC=tcs, DC=terena, DC=org"  
"POLICY_READ_LOCAL|POLICY_READ_REMOTE|CONFIGURATION_READ"
```