

IRTF updated

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Security in the EGI era

- Approximately 8–12 incidents (depending on how you count)
- 15 vulnerability advisories issued
 - ▶ 3 critical
 - ▶ 7 high
 - ▶ 4 moderate
 - ▶ 1 low

Incident causes

| | | |
|-----------------|------------------------------|-------------------------------------------------------|
| EGI-20110809-01 | NO | stolen ssh credentials |
| EGI-20110713-01 | CA | stolen ssh credentials |
| EGI-20110418-01 | IN | stolen ssh credentials |
| EGI-20110301-01 | FR | bruteforce ssh |
| EGI-20110121 | ES | web server misconfig |
| EGI-20111201-01 | PK | bruteforce ssh |
| EGI-20101018-01 | IT | bruteforce ssh |
| EGI-20100929-01 | FI, DK | stolen ssh credentials |
| EGI-20100722 | IT | bruteforce ssh |
| EGI-20100707-01 | CERN, CA | stolen ssh credentials/ remote vulns in CMSes |
| EGEE-20091204 | CH, DK, PL, DE, NL, BE... | stolen ssh credentials/ remote X keyboard sniffing |
| GRID-SEC-001 | Most of known world | stolen ssh credentials |

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0 incidents related to grid middleware!

11 of 12 incidents are due to defeating ssh authentication.

Identity crisis!

Passwords – stolen, reused by users across sites

SSH keys – stolen, can't be revoked

One-time passwords – RSA hack

Certificates – Comodo and DigiNotar incidents

“To reassess the implementation of the grid infrastructures that we use in the light of the experience with LHC data, and technology evolution, but never forgetting the important successes and lessons, and ensuring that any evolution does not disrupt our successful operation.”

Technical Evolution Group

Security Technical Working Group

- Should review risk analysis – what are the real threats now?
Where should we focus?
- Is the trust model still appropriate?
 - ▶ E.g. can we simplify the “glexec” issue?
- X509/VOMS/IGTF have been essential in having a world-wide use of resources
- But there are problems associated with proxies
- Can/should other federated ID management systems be integrated?

Technical Evolution Group

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Probable outcome: more holistic perspective on site security.

Federated identities

- Lots of traction
- Can improve user experience wrt X.509
- Possible to revoke compromised credentials!

Federated identities

But what happens when an IdP gets compromised?

One thing is certain

We won't be going out of business.