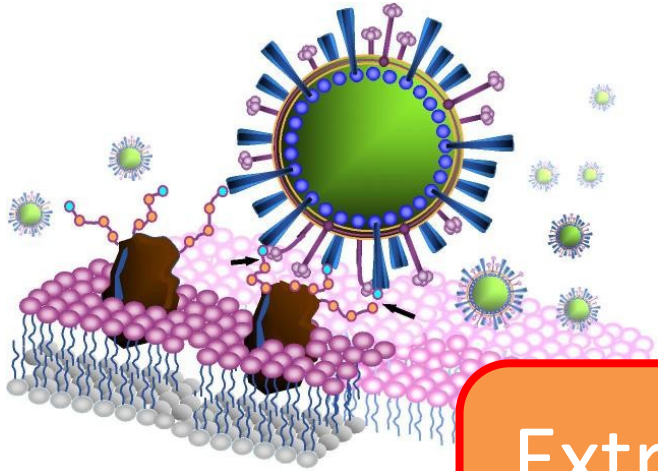
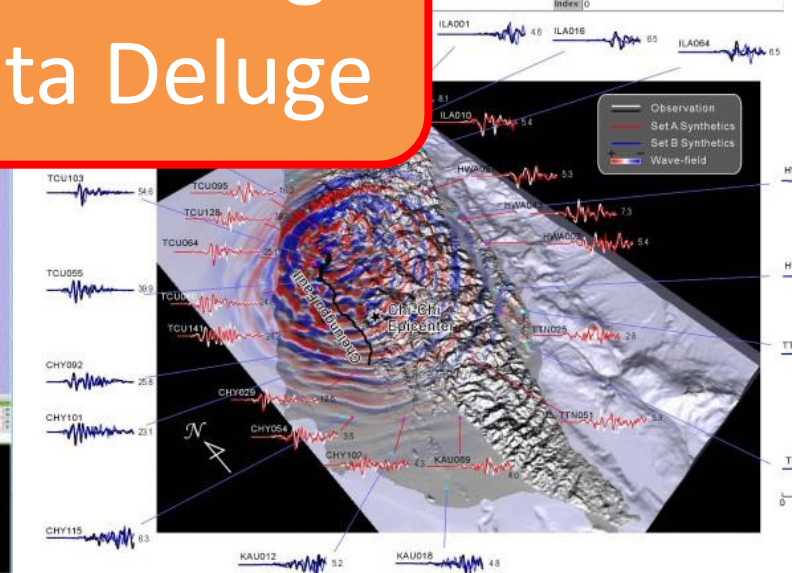
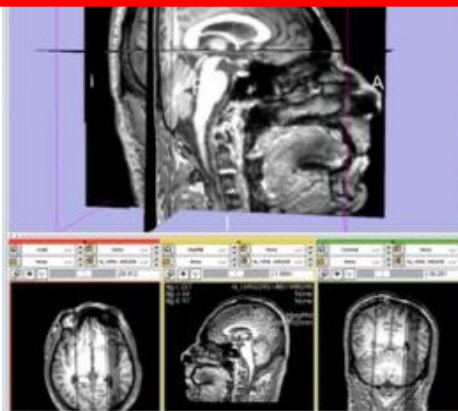


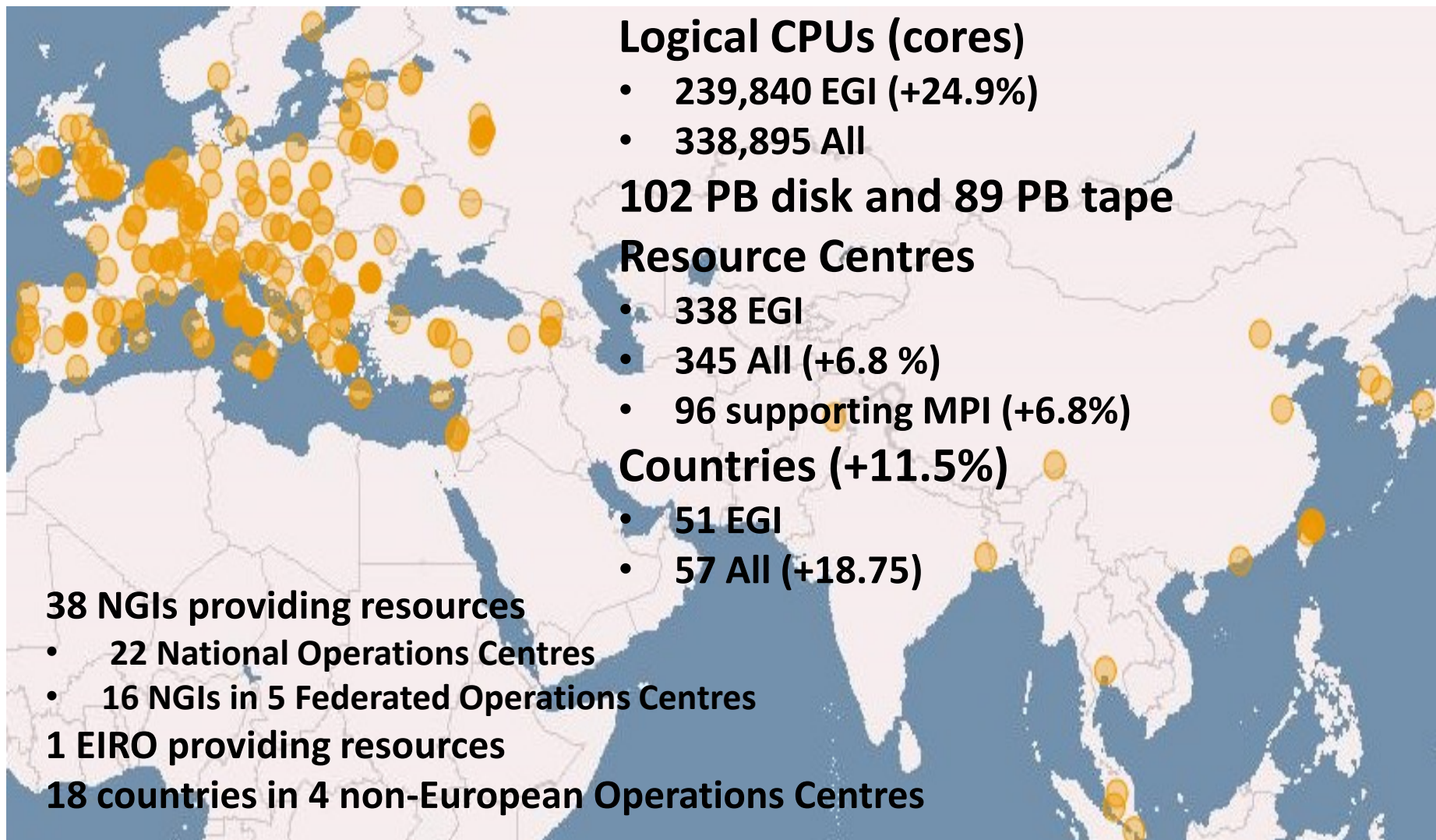
EGI - Identity Management

Steven Newhouse
Director, EGI.eu



Extracting Knowledge from the Data Deluge





Logical CPUs (cores)

- 239,840 EGI (+24.9%)
- 338,895 All

102 PB disk and 89 PB tape

Resource Centres

- 338 EGI
- 345 All (+6.8 %)
- 96 supporting MPI (+6.8%)

Countries (+11.5%)

- 51 EGI
- 57 All (+18.75)

38 NGIs providing resources

- 22 National Operations Centres
- 16 NGIs in 5 Federated Operations Centres

1 EIRO providing resources

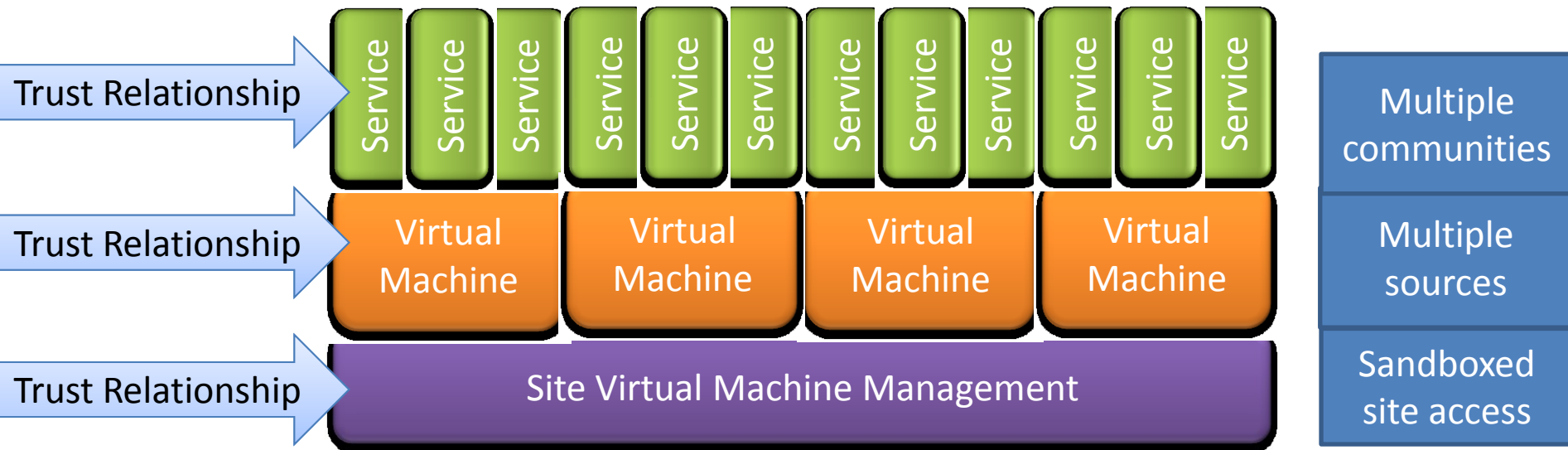
18 countries in 4 non-European Operations Centres

- Federated Pan-European Infrastructure
 - Need to deal with local laws & processes
 - Complex as part of a global collaboration
 - **Resource access needs to managed**
- Support multi-disciplinary user communities
 - Each community has different operating models
 - Different levels of technology expertise & use
 - **Resource access tuned to the community**

- Authentication token needs to be trusted
 - Requires auditable procedures to give value
 - e.g. EUGridPMA & IGTF (e.g. national X.509 CAs)
- Attribute declarations need to be trusted & traced
 - Based on the individual, e.g. staff/student
 - Based on their community e.g. VO membership VOMS
- Authorisation separated from authentication
 - Performed locally for each service, e.g. ARGUS
- Common policies underpinned by technology

- Major concern for the EGI Council
 - Local interpretation of international laws
 - Compliance needs to be demonstrated
- **Need: Nationality Attribute**
 - No attribute → may mean no access

- Virtualisation changes the relationships



- Multiple trust relationships
- Multiple trust levels

- Global interoperability is essential
 - e.g. X.509, Kerberos, SAML, ...
- Quality of attribute is very important
 - e.g. photo ID linked to IGTF X.509 certificate
 - e.g. verified email address linked to login
- Authorisation = Authentication + attributes
- Ease of use critical to wider adoption
 - e.g. short-lived certificate & security token servers
 - Convert 'normal' ID tokens to 'Grid' tokens

- Virtualisation changes the game
 - Can separate management from use
- Security of the whole infrastructure critical
 - Traceability across different tokens key
- Need solutions with global scope
 - Either deployment or interoperability

- Contact: director@egi.eu