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IGE: TOWARDS A PROCESS FOR MANAGING REQUIREMENTS

Introduction

- IGE aims to address EU community needs for Globus through
  - *Development* of Globus solutions
    - e.g. standards-based Globus support
  - *Delivery* of solutions
    - e.g. through EGI's UMD
  - Must understand those communities!
- Need to address different requirement types
  - Technical: Globus, standards
  - Non-technical: legal, licensing, MoUs, SLAs
- Need for requirements representation
  - Within Globus e.g. core development team
  - Within standards bodies e.g. OGF, OASIS, W3C
- How to do this: specific WP within IGE for handling and representing requirements

IGE: The voice of Globus community needs in Europe!

Overview – Handling Requirements through Outreach

- Two key mechanisms:
  - European Globus Community Forum (EGCF)
  - European Globus Liaison Office (EGLO)

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EU Projects

DCI Projects

Conferences, Projects, Email, etc.

Internal Development

EGCF

Coordination / Requirements Handling

MoUs / SLAs / Roadmaps

EGLO

Globus Representation

Standards Representation

EGI-InSPIRE

EMI

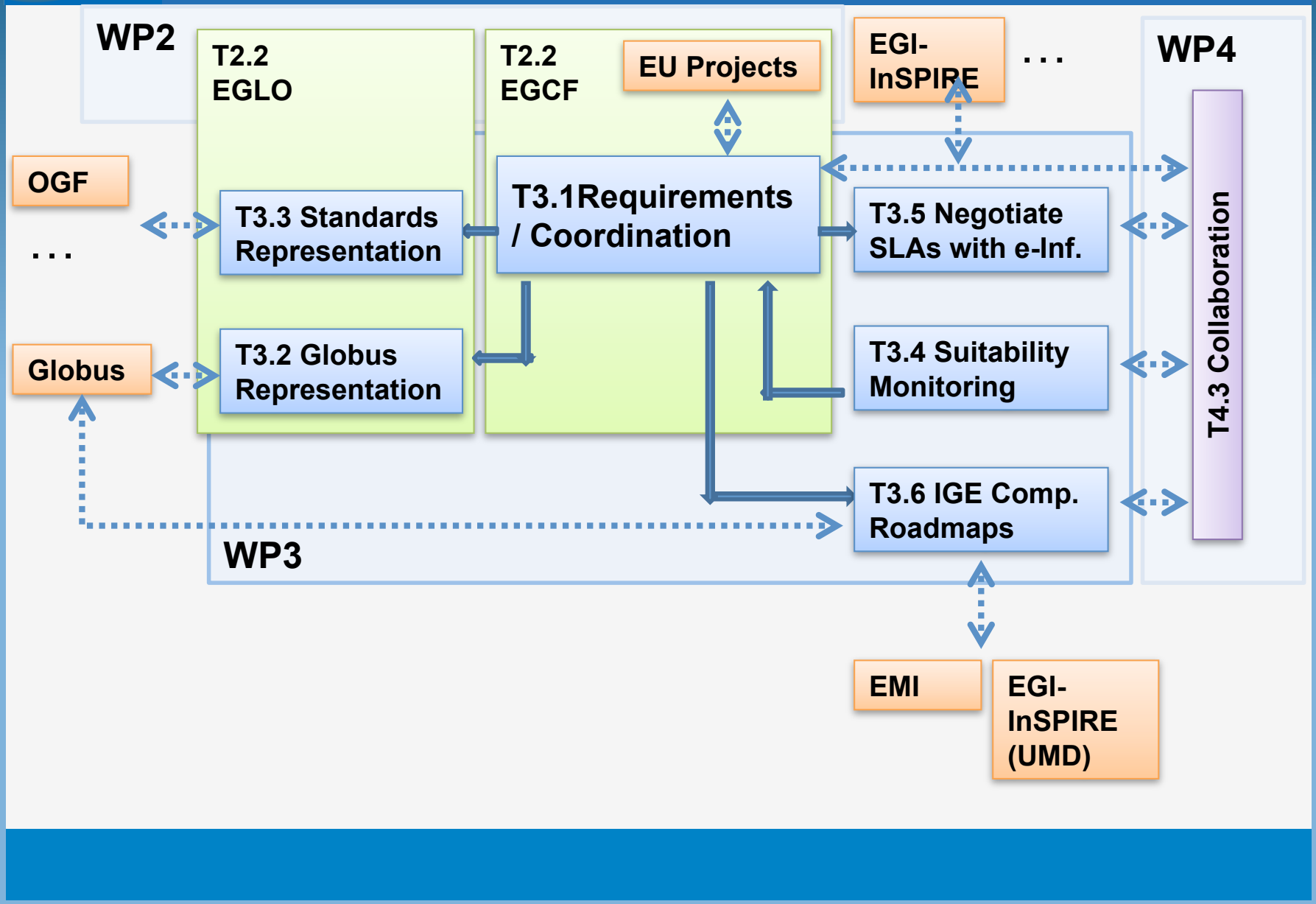
Globus

...

OGF

...

In More Detail…

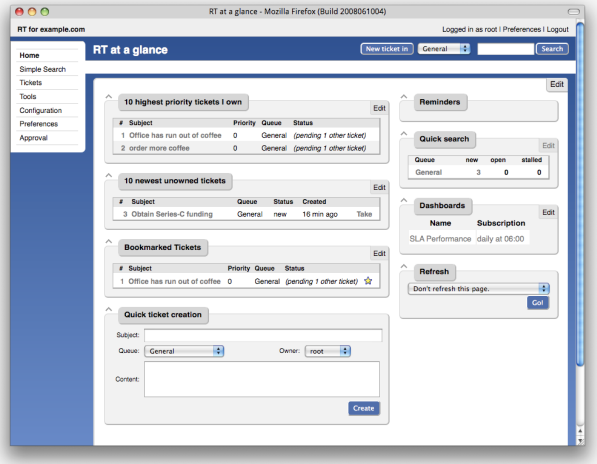


How to Handle Requirements?

- One of our first steps (and deliverables)!
- Requirements need to be (for example):
  - *Captured* from community users
  - *Understood* within community domain
  - *Categorised* as type of requirement
  - *Verified* as an outstanding requirement
  - *Delegated* for implementation/representation
  - Either:
    - *Represented* within appropriate organisations
    - *Implemented* within IGE's development activities
  - *Progressed* in a visible way
  - *Validated* when resolved – e.g. met quality criteria?
  - *Finalised* when representation is complete
- Complex lifecycle – need a well-defined publicly accessible process!

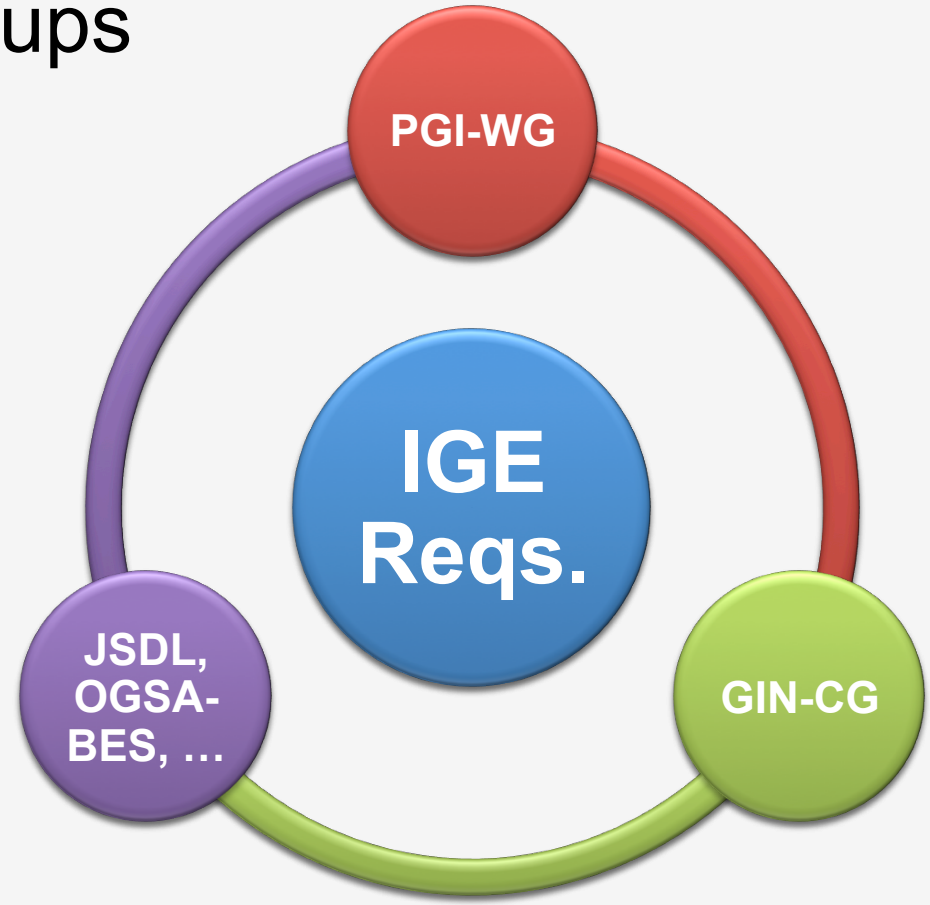
Requirements Handling Process

- Process needs to consider
  - Requirements lifecycle
  - Working with other requirements gathering activities across EU e.g. EGI-InSPIRE
  - Roles and responsibilities
    - e.g. delegator, delegatee(s)
  - Categorisation of requirement types and states
  - Identification of appropriate communication channels
  - Internal interactions e.g. delegation
  - Infrastructure
- Next WP3 task within IGE!



Handling Standards-based Requirements

- Number of IGE members active in many OGF groups



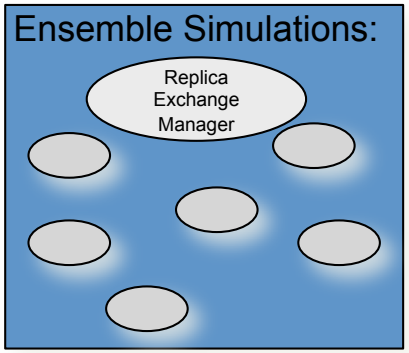
Use Case Description

Virtual Physiological Human network of excellence

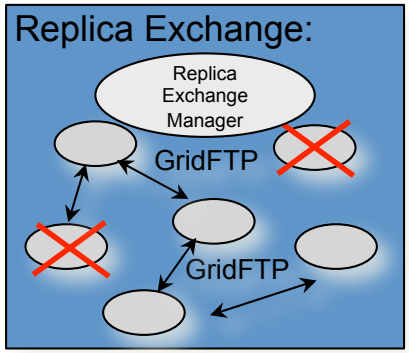
- **Goal**: Computer models of personalized patient specific healthcare.
- **Customers**: Scientists participating in the VPH project.
- Molecular Dynamics Simulations

Process:

1st step:



2nd step:



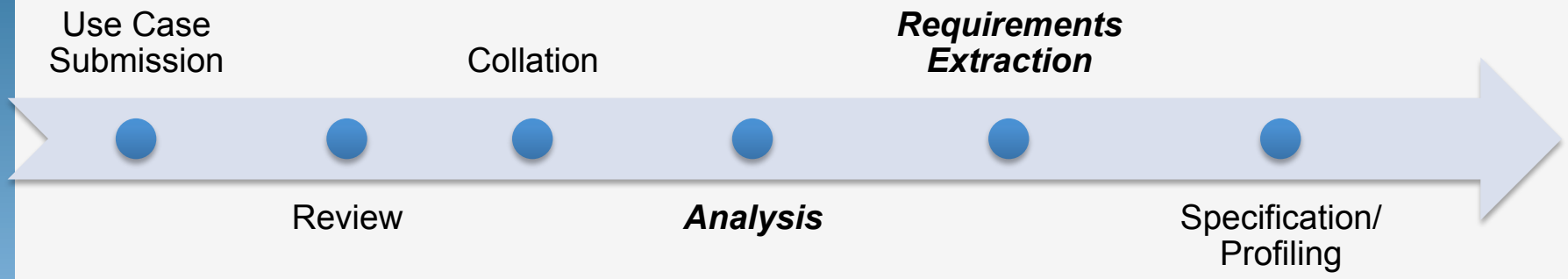
- Using SAGA for workflow orchestration
- Use of “pilot jobs”
- Minimal data exchange using GridFTP

Resources:

- HPC resources from DEISA and TeraGrid

PGI-WG Use Case Submission

- PGI-WG - OGF29: back to use cases

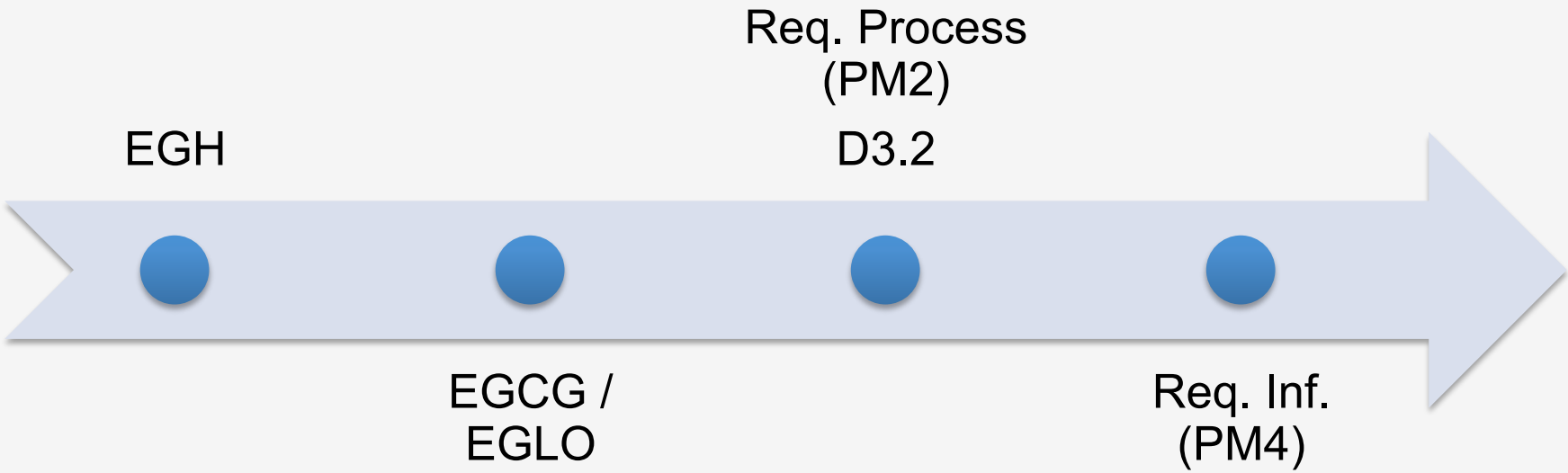


- Process for use case authorship/review

- Enter IGE's SAGA/Globus VPH use case…
- Use case accepted for PGI-WG Use Case v1.0 document

- EGI Use Case…
  - OGSA-BES/JSDL-based interoperability
- PGI-WG – future iterations of use cases possible

Timeline



Requirements Collected from DEISA

- IBM LoadLeveler Batch System Adaptor for Globus GT5 GRAM
  - already done
  - licensing issues being resolved now
  - actively used at SARA
  - to be installed at FZJ soon

Requirements Collected from EGI

- Information system
- BES, JSDL, HPC-Basic profile for GRAM5 and GridWay
- OGSA-DAI porting to GT5
- Metadata catalogue for globusonline.eu
- Lightweight file transfer agent for upload/download of files into/from Grids
- Move away from httpg to https
- User management through VOMS, connection to GT5, AdHoc as GUI frontend
- LCAS/LCMAPS for fine grained authorization