



E-infrastructure shared between Europe and Latin America

EELA Infrastructure (WP2)

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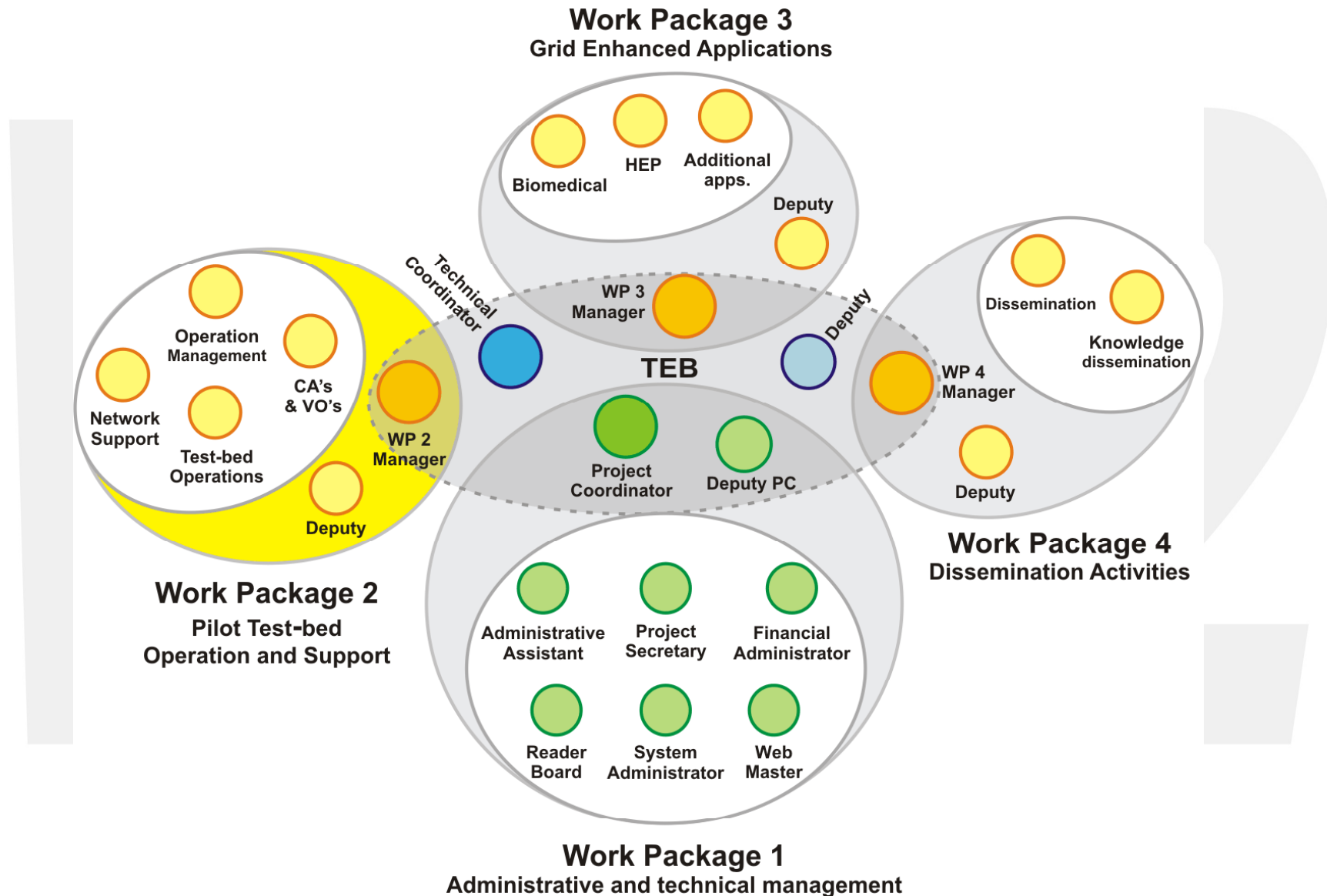
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WP2 in the EELA Organisation





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Infrastructure

- **Production sites: 13**
- **Certification sites: 7**
- **1700 CPUs**
- **62 TB**
- **A brand new PKI in LA**



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Network Status

- Rec1: Sustainable network is a pre-requisite for regional Grids.
- **The LA backbone is reliable, however the last mile is always an issue.**
- **The EU-LA link breaks apart the EELA infra (A Fat Pipe of 220ms x 1Gbps).**
- **Besides HEP, no special requirements.**



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Infrastructure and Sites

- Rec2: Regional Grids should continue to act as incubators for new sites, new applications and new data layer integration.
- **There is no specific plan to be integrated by EGEE. However, every site is free to participate on both infrastructures. As example: UFRJ is under CERN's ROC and UNAM is in the ALICE Production Environment.**



- Rec4: Organize in federations with clear relations and modus operandi. Distribute Grid and management services to spread the know-how and ensure joint responsibility and control.
- **Grid and management services are spread between Europe and Latin America ensuring cooperation and spread of knowledge.**



- Rec5: A minimum technical specification and requirements for a self-standing ROC need to be defined. Procedure for assignment of countries/sites to ROCs has to be clear.
- **The EELA Operations Centre is based on a Latin America partner.**
- **...then the assignment of RC to the only ROC is straightforward**
- **There's no strategy for a new ROC to be integrated into EGEE/EGI.**



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Country Level Operations

- Rec6: Aim to have possibility of stand-alone operations, independent on related federated Grids and projects, but interoperable and interoperational.
- **In Latin America, only Brazil is about to have the critical mass necessary to have its own federation.**



- Rec7: Catch-all VOs on regional and national level prove to be flexible and efficient for deployment of new applications on-the-fly. A hierarchy of regional and national VOs should be established.
- **EELA has only one VO (eela) that is used to explore the technology and the infrastructure. Another VO (edteam) is only dedicated to operations.**



- Rec8: Collaboration on SLA definitions over regions is important.
- **EELA has preliminary internal developments in this area, ranging from Network to Resource Centres.**



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Contributions to Standards

- Rec9: Contribution to standards and community groups like GIN OGF is important. Regional projects should contribute to standards in a coordinated way.
- **No interoperability issues have arisen in EELA. They are foreseen in EELA-2 .**



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Join Development Areas

Rec10: Collaboration of regional Grid projects on joint development and deployment of operational and infrastructural tools (or sharing of already developed tools) should be encouraged.

Interoperation with EGEE (III)

- Middleware issues e.g. what happens if a user has a problem that cannot be solved inside the project because it is middleware? How can the project send request for middleware in EGEE and this taken into account
 - How can we send our own middleware and be included in the official gLite release?
 - How can we give our own operational tools to EGEE-III
 - How can middleware be passed to EGEE?
- EGEE should have a mechanism for all these.

We fully agree on the importance of these questions. EGEE should have an answer to them.



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Training Infrastructure

- Rec15: Issue of providing a similar approach to training infrastructure should be considered by the regional Grid projects; this t-infrastructure must be reliable and must provide enough resources for timely execution of test jobs submitted during training events (the same for storage resources).
- **EELA has used GILDA as training infrastructure**
 - **16 Training events (the concept/format of Grid School invented and exported to other Projects)**
 - **~1800 participant · days of training delivered**



Success Stories: Authentication Infrastructure Before EELA

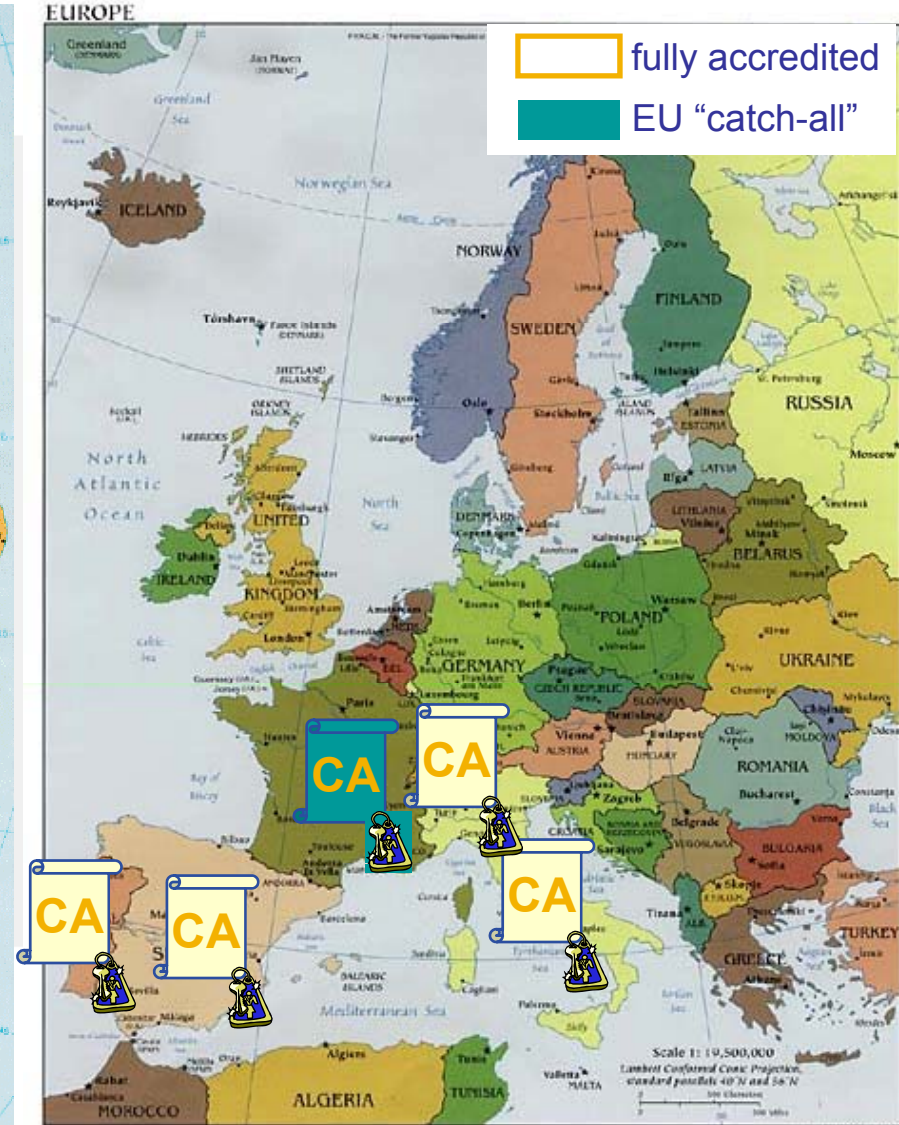
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Success Stories: Authentication Infrastructure right after the EELA Start-up

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Success Stories: EELA Certification Authorities Deployed Now

