Plan around EMI – 28/10/12

1 Summary

This memo provides an outline as to how to integrate the current EMI middleware activities and global tasks into EGI after the end of the EMI project. A similar strategy can be adopted after the end of the IGE project. Extensions will be necessary to the UMD Repository to support new use cases and two new coordination bodies (the UMD Release Team and UMD Coordination Meeting) will be run by EGI.eu. EGI.eu will also provide additional coordination around the product teams delivering integrated component into UMD.

2 Contributions to UMD

A number of different modes of operation are envisaged for engaging with individual Product Teams (PTs) and the contribution of software into UMD depending on the commitment that they are willing to make to EGI processes, the criticality of their software for EGI's Core Infrastructure Platform, and the broader adoption of their software components into Community Platforms. These are defined around the relationship that the PT has with the UMD in the following table.

UMD PT Type	MoU	SLA	PT QA	EGI.eu V & SR	Defined 3rd Line	URT	Benefits from EGI.eu
Integrated PT	Y	Y	Y	Y	Y	Y	Y
Contributing PT	Y	Expected	Y	Equivalent	Expected	Y	Limited
Community PT	N	N	Optional	Optional	Optional	N	N

PTs have the choice of releasing software through EPEL or other repositories. The UMD release will integrate these according to the following guidelines. Releases in UMD from the Integrated and Contributing PTs would be coordinated through the UMD Release Team (URT) with some of these components going through EGI.eu's Verification and Staged Rollout (V & SR) process. For Integrated PTs a link back to the PTs 3rd line support through the EGI Helpdesk would be expected with an associated SLA while equivalent support mechanisms would be expected for Contributing PTs (e.g. best effort through a community mailing list).The various PTs are classified according to their commitment to UMD and its related quality process by falling into one of the following categories:

- **Integrated into the UMD Distribution**: EGI requires an MoU & SLA with the PT in order to provide the required packages into a UMD release (verification and staged rollout coordination will be services provided by EGI.eu) Defined third line support will be provided by the PT where possible. PTs willing to make this commitment to EGI would have priority access to EGI events for training and access to other services such as dissemination, helpdesk, etc. Components foreseen to fall into this category are:

- o **Core Infrastructure Platform:** These are core items that EGI.eu must assure support for if the individuals PTs are not going to commit to an MoU and SLA.
  - Information Discovery: An assessment needs to be made if the long-term support for EMIR is more positive than the currently provided BDII and if EGI for its core infrastructure should plan for a change.
  - Virtual Organisation Management: Currently VOMS.
  - User Authorisation: Currently ARGUS.
- o **Community Platforms**: These are widely deployed items used by communities but it is these communities that must support the individual PT. The individual PT would have to support the software and its integration into EGI including APEL Parsers/Publishers and Nagios Plugins. A list of possible Community Platforms is provided later and the PTs that are in this integrated category would be expected to demonstrate the contribution of high-quality software into UMD.
- o **EMI products that are not currently seen as relevant for EGI:**
  - STS: It may be useful for EGI's integration with FedIDs and needs to be assessed at the end of EMI to see if further investment is needed.
- **Contributed into UMD Distribution**: An MoU would be needed to define the relationship as to how contributed packages from the different Community Platforms would be integrated into the UMD Distribution or VM Images provided into the EGI Image Marketplace. PTs would have access to a test instance of a UMD Release with which to integrate and test against. The infrastructure for software verification can be provided by EGI.eu as a service to the PT. Once the packages are ready they would become available in the UMD Repository for the community. Support would be provided by the contributor – the EGI Helpdesk could be used if that was desired. No direct EGI.eu QA would take place (i.e. verification) but the equivalent QA would be achieved – either by accepting the processes used by the PT as equivalent through audit or by the PT using EGI's processes 'as a Service'. EGI would review and approve the processes used at regular intervals (or more frequently if the quality is seen to drop). PTs just Contributing to EGI may be invited to present at EGI events but may have to pay for access to other EGI services.
- **Community driven software**: PTs may upload packages developed within their community for release through the UMD Repository for use by the community into an area of the repository that is separate from those components fully integrated into a UMD release. No quality assurance or support is given around the software and integration is carried out by that community independently of EGI.eu. Software in this area could include:

Many of the components within EMI and IGE are not needed for managing the infrastructure but provide functionality for end-users. Post EMI and IGE it is expected that these Community Platforms will be supported by the communities that benefit from them. Those communities can choose to make the commitment for those platforms and their PTs to be seen as contributing into UMD as: Integrated, Contributing or Community.

Community Platforms could consist of the following groupings and would be considered to have a single lead institute that would deliver the platform (and its components) on behalf of that community. These Community Platforms may be defined as collection of integrated services or just a single service.

- ARC HTC (Lead: Lund)
- Unicore HPC (Lead: FZJ)
- Data Intensive HTC (Lead INFN) consisting of CREAM, MPI,WN, UI,L&B, proxyrenewal
- dCache (Lead: DESY)
- STORM (Lead: INFN)
- DPM (Lead: ???)
- Hydra (Lead: ???)
- AMGA (Lead: ???)
- LFC (Lead: ???)
- WMS (Lead: INFN)
- FTS (Lead: CERN)

The confirmation of the named lead institute to support these platforms has not yet been obtained.

3   Transitioning from EMI's current coordination functions

EMI has provided an analysis of the Global Tasks they carry out on behalf of their affiliated PTs. This section explores what potential support might be available from EGI.eu to continue this coordination.

The comments below relate to the effort that could be delivered by EGI.eu (or partners) following on from the previous section.

- **Technical Coordination**: A monthly open 'UMD Coordination' meeting involving PTs involved in UMD (integrated and contributing PTs) would be held led by EGI.eu to present requirements coming from within the operations and user community side of EGI. This would become the venue for many of the technical discussions that currently take place in the TCB and require minimal additional EGI.eu effort. PTs would be expected to attend and review requirements as part of their MoU commitments.
- **Release Management**: This would be provided across the PTs that were part of the Integrated and Contributed sections in the UMD release. This coordination would be done weekly (?) by EGI.eu through the UMD Release Team (URT) meeting with representatives from PTs that are covered by an MoU. Its purpose would be to collect upcoming release plans and provide the coordination necessary to ensure that new releases from individual PTs do not break the existing contents of the UMD repository - a lightweight version of EMI's EMT meetings. EGI.eu effort would be small (0.5?) and would build on current resources used to do the existing UMD releases. The existing UMD release process would remain but EGI.eu would help resolve dependencies and technical conflict between PTs in order to synchronize PT releases.
- **Repository Management**: Extend the use and functionality of the UMD Repository to provide this function.

- **Certification Testbed**: The software produced by Integrated PTs will be placed onto a testbed for others to test against. Other PTs could also make running instances of their software available or provide VMIs for self-deployment as they wished. The CESGA virtualized testbed (and EGI's Federated Cloud from other sites) could provide the physical resources for this work.
- **Software Engineering Coordination**: This was provided by ETICS and is being phased out as a central service to be replaced by individual PT based solutions. No replacement needed.
- **Quality Assurance Coordination**: The mature and stable QA documents produced during EMI would be reviewed by EGI.eu and incorporated into its own QA documents where relevant. EGI.eu would update these documents as needed as part of its existing QA activities.
- **Quality Control Coordination**: Metrics produced automatically through ETICS using open source tools were used to generate management reports. This will not be carried on by EGI.eu.
- **User Support Coordination**: This activity can be transferred to the SA1.7 teams for the software that is supported within UMD (i.e. part of the Integrated components) by PTs using EGI's Helpdesk. PTs neither using EGI's Helpdesk nor having a defined support procedure would not be supported by the Helpdesk teams.
- **Dissemination**: Any PT can contact EGI.eu' Dissemination Team of they have news they wish to disseminate. EMI as a brand will not be disseminated. A focus will exist on the Integrated and Contributed components.
- **Training Coordination**: Any PT will be invited to offer training sessions at the EGI Forum's and other events.
- **Sustainability and Exploitation**: EGI.eu's focus will be on sustaining the Integrated components and exploiting them for its own use within the Infrastructure Platforms. These services and software will be provided for others to reuse as they wish.
- **Overall Project Coordination**: No longer applicable.

4   Open Issues

A few open issues remain. For the EMI collaboration:

- Investigate with EMI which institutes are willing to move into this new mode of operation after the end of EMI so we can establish MoUs and/or SLAs to achieve this model?
- What changes would be needed to the UMD Repository to support these new modes of interactions by individual PTs rather than large coordinated middleware projects?