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UNIFIED MIDDLEWARE DISTRIBUTION (UMD) RELEASE SCHEDULE

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Policy Statement

This document describes the release schedule and plans for the Unified Middleware Distribution (UMD).

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I. AUTHORS LIST

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II. DOCUMENT LOG

Version	Date	Comment	Author/Organization
6.0	19 May 2011	First publishable version, also using correct document template	Michel Drescher, EGI.eu
8.0	25 May 2011	Revised release schedule	Michel Drescher, EGI.eu

III. APPLICATION AREA

This document is a formal EGI.eu policy or procedure applicable to all participants and associate participants, beneficiaries and Joint Research Unit members, as well as its collaborating projects.

IV. POLICY/PROCEDURE AMENDMENT PROCEDURE



Reviews and amendments should be done in accordance with the EGI.eu “Policy Development Process” (<https://documents.egi.eu/document/169>).

V. ORGANISATION SUMMARY

To support science and innovation, a lasting operational model for e-Infrastructure is needed – both for coordinating the infrastructure and for delivering integrated services that cross national borders. The objective of EGI.eu (a foundation established under Dutch law) is to create and maintain a pan-European Grid Infrastructure in collaboration with National Grid Initiatives (NGIs) in order to guarantee the long-term availability of a generic e-infrastructure for all European research communities and their international collaborators.

In its role of coordinating grid activities between European NGIs, EGI.eu will:

- Operate a secure integrated production grid infrastructure that seamlessly federates resources from providers around Europe
- Coordinate the support of the research communities using the European infrastructure coordinated by EGI.eu
- Work with software providers within Europe and worldwide to provide high-quality innovative software solutions that deliver the capability required by our user communities
- Ensure the development of EGI.eu through the coordination and participation in collaborative research projects that bring innovation to European Distributed Computing Infrastructures (DCIs)

The EGI.eu is supporting ‘grids’ of high-performance computing (HPC) and high-throughput computing (HTC) resources. EGI.eu will also be ideally placed to integrate new Distributed Computing Infrastructures (DCIs) such as clouds, supercomputing networks and desktop grids, to benefit the user communities within the European Research Area.

EGI will collect user requirements and provide support for the current and emerging user communities. Support will also be given to the current heavy users of the infrastructure, such as high energy physics, computational chemistry and life sciences, as they move their critical services and tools from a centralised support model to one driven by their own individual communities.

The EGI community is a federation of independent national and community resource providers, whose resources support specific research communities and international collaborators both within Europe and worldwide. EGI.eu, coordinator of EGI, brings together partner institutions established within the community to provide a set of essential human and technical services that enable secure integrated access to distributed resources on behalf of the community.

The production infrastructure supports Virtual Research Communities – structured international user communities – that are grouped into specific research domains. VRCs are formally represented within EGI at both a technical and strategic level.



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1 UNIFIED MIDDLEWARE DISTRIBUTION (UMD) RELEASE PLAN

The UMD Release Plan describes the planned release schedule for UMD major and minor releases. UMD Major releases (such as UMD 1.x, UMD 2.x, etc.) will be supported and updated while EGI is provided with updates from its technology providers for, in total, two consecutive years from the date of their initial release. UMD major releases will be made when non-backwards compatible changes need to be made to the software components within it. Minor releases within a major series (i.e. UMD 1.0.x and UMD 1.1.y) may introduce new functionality but existing interfaces and behaviours will remain.

Note: While EGI aspires to follow this plan as closely as possible, the UMD Release Plan is dependent on the software provided by our external technology providers and the quality of information (if provided) and their ability to meet their announced release dates. Therefore there will be no guarantee on release dates and contents other than the timely communication of changes as they become apparent. In particular, the time taken to include a product into a certain UMD release greatly depends on diligent and volunteer based StagedRollout activity [R 4]. If no volunteer picks up this Product and exposes it to the Production Infrastructure then that given Product is in danger of not being included in the planned UMD release and will be shipped later.

The following release plans provide information about the products that are due to be shipped in each UMD release. This plan follows the requests presented from the operations (OMB & COO) and user community (UCB & CCO) to the TCB on several occasions [R 1], [R 2]. The result is a prioritised list of products with individual priorities tagged as “A” (highest priority) to “D” (lowest priority) or no letter (no priority).

Paramount to planning UMD releases in the beginning is to provide the most critical services, and those services that either have reached, or will reach end of support in 2011. Therefore a fixed publication date for UMD 1.0 has been set to 4 July 2011, striving to provide all products of category “A”, and “B”, and as much as possible from categories “C”, “D” and “uncategorised”.

IGE products are tentatively scheduled for inclusion in UMD 1.1. IGE products are fully integrated into the EGI monitoring infrastructure and confirmation is expected on other critical functionality at the next TCB (20/5/11).

1.1 Unified Middleware Distribution 1

The following provides a planned schedule of UMD 1. For the major, and each minor release, more detailed release plans are provided in subsequent sections.

Release	Release date	Supported OS	Architecture	Notes	End of Support
1.0	4 Jul 2011	SL5	x86_64		30 Apr 2013
1.1	5 Sep 2011	SL5	x86_64		

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1.1.1 UMD 1.0 Detailed release plan

EGI plans to release UMD 1.0 on 4 Jul 2011.

The first, major release of UMD-1 (UMD 1.0.0) will contain only the most critical products agreed by the TCB and defined in this document.

UMD Capability	Provider	Product (technical short name)	Notes
Attribute Authority	EMI	VOMS 2.0.0 (voms)	Includes: - VOMS-Admin 2.6.1 Available integrations are: - VOMS for MySQL - VOMS for Oracle
Authorisation	EMI	ARGUS 1.3.0 (argus)	ARGUS EES seem not included? What is the relationship here?
Credential Mgmt.	EMI	Proxyrenewal 1.3.19 (proxyrenewal)	
Info Discovery	EMI	siteBDII 1.0.0 (bdii-site)	
Info Discovery	EMI	top BDII 1.0.0 (bdii-top)	
File Access (also Storage Management?)	EMI	DPM 1.8.1 (dpm)	Includes: - DPM head node (DPM_mysql) - DPM disk node (DPM_disk)
File Access, Storage Mgmt.(?)	EMI	StoRM 1.7.0 (storm)	Not part of EMI-1 initial release. Will be dropped to UMD 1.1 if it is not certified in time.
Metadata Catalogue	EMI	LFC 1.8.1 (lfc)	Available integrations are: - LFC for Oracle - LFC for MySQL
Job Execution (partial, requires EMI-WN)	EMI	CREAM 1.13 (cream)	Includes internal libraries such as DGAS, LCAS, LCMAPS etc. Includes also: - EMI Cluster 1.0.0 - CREAM/Torque integration: o CREAM TORQUE module 1.0.0 o TORQUE WN Config 1.0.0 o TORQUE SERVER config 1.0.0 - CREAM/LSF integration
Job Execution (partial, requires EMI-CREAM)	EMI	WN 1.0.0 (wn)	Internal libs such as GFAL etc are included here Includes also: - glExec for WN 0.8.10
Parallel Job	EMI	gLite MPI 1.0.0 (mpi)	

Job Scheduling	EMI	WMS 3.3.0 (<i>wms</i>)	Includes also: - L&B 3.0.10
Accounting	EMI	APEL publisher 3.2.7 (<i>apel</i>)	
Info discovery	EMI	ARC InfoSys 1.0.0 (<i>arc-infosys</i>)	
Job Execution	EMI	ARC CE 1.0.0 (<i>arc-ce</i>)	
Client API(?)	EMI	ARC Clients 1.0.0 (<i>arc-client</i>)	
Client API(?)	EMI	EMI UI 1.0.0 (<i>ui</i>)	
Authentication(?) Authorisation		UNICORE Gateway 6.4.0 (<i>unicore-gateway</i>)	
Client API(?)	EMI	UNICORE Client 6.4.0 (<i>unicore-client</i>)	
Client API(?)	EMI	UNICORE HILA 2.2.0 (<i>unicore-hila</i>)	
Attribute Authority	EMI	UNICORE XUADB 1.3.2 (<i>unicore-xuadb</i>)	
Attribute Authority	EMI	UNICORE UVOS 1.4.1 (<i>unicore-uvos</i>)	
Info Discovery	EMI	UNICORE Registry 6.4.0 (<i>unicore-registry</i>)	
Execute Job, Parallel Job (<i>partial, requires UNICORE-TSI</i>)	EMI	UNICORE WS 6.4.0 (<i>unicore-ws</i>)	
Execute Job, Parallel Job (<i>partial, requires EMI-WN</i>)	EMI	UNICORE TSI 6.4.0 (<i>unicore-tsi</i>)	

The following diagram illustrates the verification and StagedRollout order within the EGI Software Provisioning process.

<< to be updated >>

1.1.2 UMD 1.1 Detailed release plan

EGI plans to release UMD 1.1 on 5 Sep 2011.

UMD 1.1 is planned to provide EMI products of priority “C”, “D” and “uncategorised”. Three products were not included in the EMI-1 release [R 3] as opposed to initial plans: StoRM, HYDRA and FTS. However, all three products are expected to be part of the EMI 1.1 release due in a couple of weeks, and inclusion in UMD 1.1 is reasonable.



UMD 1.1 also tentatively features IGE products, subject to resolution of its accounting issues, or a decision by sites to request it nonetheless¹.

UMD Capability	Provider	Product	Notes
Credential Mgmt.	IGE	Globus MyProxy 5.0.3 (<i>globus-myproxy</i>)	
File Access, Storage Mgmt.(?)	EMI	dCache 1.9.12 (<i>dcache</i>)	
File Transfer	IGE	Globus GridFTP 5.0.3 (<i>globus-gridftp</i>)	
Metadata catalogue	EMI	AMGA 2.1.2 (<i>amga</i>)	
Metadata catalogue	IGE	Globus RLS 5.0.3 (<i>globus-rls</i>)	
File Encryption	EMI	Hydra 1.0.1 (<i>hydra</i>)	Not part of EMI-1 initial release.
File Transfer Sch.		FTS 2.2.6 (<i>fts</i>)	Not part of EMI-1 initial release.
Job Execution, Parallel Job	IGE	Globus GRAM 5.0.3 (<i>globus-gram</i>)	

The following diagram illustrates the verification and StagedRollout order within the EGI Software Provisioning process.

<< to be updated >>

¹ The SA1 IGE/Globus Task Force will meet at 18 May 2011 and discuss, among other, this very issue.



2 USING THE EGI SOFTWARE REPOSITORY

The EMI Software Repository provides one public distribution point for production quality software within EGI.eu.

Note: The following sections provide an outline of the planned contents. It will be completed in the following days.

2.1 Prerequisites

2.2 General procedures

- How and where to get the repo files
 - The Repo Files for each corresponding Major are available in the repofiles directory inside their corresponding Major e.g.
<http://repository.egi.eu/sw/production/umd/1/repofiles>
- Dedicated RSS channel for publication of products into the UMD Production repository (TBC)
- Release notes (TBC)
 - Where to get them
 - What they contain (for major and minor) (TBC)

2.3 Production Sites

- The Production Service sites will need to configure the following repositories
 - The Main OS Repository e.g for SL5
 - EPEL repository: <http://fedoraproject.org/wiki/EPEL>
 - UMD Repository is located at
 - UMD-1: <http://repository.egi.eu/sw/production/umd/1>
 - UMD-2: <http://repository.egi.eu/sw/production/umd/2> (TBA, EXPECTED July 2012)

2.4 Early Adopters (SR) Sites

- Necessary repositories
 - Platform (such as SL5 64bit)
 - EPEL repository: <http://fedoraproject.org/wiki/EPEL>
 - UMD Repository: use the same as production sites above
 - UMD Early Access
 - The Repo Files for each corresponding Major are available in the repofiles directory inside their corresponding Major e.g.
<http://repositry.egi.eu/sw/early-access/umd/1/repofiles>
 - PPA repository for the product in StageRollout
 - Early Adopters should use the repository link in the ticket that is assigned to them in RT.





3 REFERENCES

R 1	OMB F2F in Vilnius, https://www.egi.eu/indico/conferenceDisplay.py?confId=267
R 2	Email conversations and meetings, between COO, CTO, TM, 3 May 2011
R 3	EMI-1 Kebnekaise release, 12 May 2011, http://www.eu-emi.eu/emi-1-kebnekaise
R 4	EGI Staged Rollout, https://wiki.egi.eu/wiki/Staged-Rollout
R 5	