

Project Number: 034702
Project Acronym: BEinGRID
Project Title: Business Experiments in Grid
Instrument: Integrated Project
Thematic Priority: Advanced Grid Technologies, Systems and Services

D5.3.5-R3 – Periodic 6 Monthly Releases From Month 18

Activity 5: Toolset repository building

WP 5.3: Repository releases, documentation and maintenance

Due Date:	M24	
Submission Date:	xx/05/2008	
Start Date of Project:	01/06/2006	
Duration of Project:	42 months	
Organisation Responsible for the Deliverable:	HLRS	
Version:	0.2	
Status	Draft	
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Reviewer(s)		

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group specified by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	

Version History

Version	Date	Comments, Changes, Status	Authors, contributors, reviewers
0.1	04.04.08	Initial Draft	Eugen Volk, HLRS
0.2	22.05.08	Updated Draft	Eugen Volk, HLRS

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Table 3: Metadata Schema for Software Components _____ **Erreur ! Signet non défini.**

1. Executive summary

The following document is an updated version of the D5.3.5-R2[1] of this series of deliverables. Its main objective is to provide an inventory report, updated regularly. Spoken in a figurative language, it represents a sort of a “captain’s logbook”.

The main changes in terms of content of Gridipedia are the component descriptions, related documentation like common technical requirements, common capabilities, and design patterns. One of the important changes was the adding of the GridDic-Grid Computing Glossary, which contains short description of Grid related terms and links to corresponding Gridipedia pages.

Apart from these changes, some features regarding quality guarantee and measurement have been used continuously since D5.3.5-R2. This document is heavily related to another series of internal documents, D5.1.3, whose main objective is the identification of candidate items. The difference between both documents is, that D5.1.3 lists all suggested candidate items, whereas this document lists only from moderator committee accepted candidate items, which were published on Gridipedia.

As already noted in D5.3.5-R2[1], there is a need to have frequent inventory reports for two reasons first for quality purposes, second for documentation updates and quality of the content of the repository. The documentation aspect fulfilled by this document relates to the idea of having regular inventory reports. These reports are not considered as backup solution, in a sense of restoring lost content in case of heavy system breakdowns, but the content structure and its description are considered part of the main values of Gridipedia.

2. Introduction

The document is structured as follows:

The following section 3 is related to the inventory report (management change). Section 4 gives a brief report on the usage of the Gridipedia websites. Section 5 explains the wget tool and provides some initially gathered data on the amount of content on Gridipedia. Annex A contains the BEinGRID License conditions and finally, Annex B provides a list of accepted candidate items from PM18 to PM24.

2.1 Purpose

The purposes of this deliverable template are as follows:

- Inventory Report for Release 3 (PM24)
- Evaluation Report on candidate items
- Usage Report with webalizer statistics
- Population measurement

2.2 References

- [1] D5.3.5-R2 Periodic 6 monthly releases from month 12, Deliverable of the BEinGRID Project, Public
- [2] ID5.1.2 Updated version of the Process for contributing to the BEinGRID Repository, Internal Report of BEinGRID project, Confidential
- [3] ID5.1.3 List of Candidate Items, Internal Report of BEinGRID project, Confidential
- [4] AWStats Website, <http://awstats.sourceforge.net/>

2.3 Glossary of Acronyms

Acronym	Definition
BEinGRID	Business Experiments in Grid
CC	Common Capabilities
CTR	Common Technical Requirements
D	Deliverable
DRS	Document Review Sheet
DP	Design Patterns
EC	European Commission
PM	Project Manager
PO	Project Officer
TS	Technical Solution
WP	Work Package

3. Inventory Report of the Public Gridipedia Workspace

3.1 Coarse-Grain Comparison with Second Release (PM18)

The previous release was the second version of the Public Gridipedia Workspace. This release has only minor changes, compared with the previous release.

The table below shows the coarse-content on Gridipedia from PM18, taken from D5.3.5-R2.

Section	Description/Major Changes	Status (PM 18)
HOME	Explicit mentioning of BEinGRID was removed.	Basic information, OK
TECHNICAL SOLUTIONS	The TS section was filled with the description of CTR, CC, DP and component descriptions.	Completed (Act1), open for external contributions, OK
GRID BUSINESS	Subsite on various business aspects (e.g. market studies, legal aspects)	Basic input of Act2, OK
ANNOUNCEMENTS	Two announcements are in place.	Weak, need for continuous maintenance
GRID MIDDLEWARE	Continuously added new links to middleware.	Still growing, OK
EXISTING GRIDS	List of existing Grids	Still growing, OK
GRID LINKS	List of various Grid-related links	OK
PUBLICATIONS	This new section allows the publication or linkage of technical or business oriented papers.	Not enough publications
FEEDBACK	The new feedback form allows external contributor to give some feedback or to suggest new content/candidate items.	OK, submission form will be complete

Table 1: Main Menus of PGW (R2, PM18)

The Table 2 shows the new content, which has been delivered by the BEinGRID Project.

Section	Description/Major Changes	Status (PM 24)
HOME	General description of Gridipedia.	Basic information, OK
TECHNICAL SOLUTIONS	New subsection (“Programming Environment”) and new components descriptions were added.	Completed (Act1), open for external contributions, OK
GRID BUSINESS	Subsite on various business aspects; added subsite GridDic – the Grid Computing Glossary	Basic input of Act2, OK

ANNOUNCEMENTS	Two announcements are in place.	Weak, need for continuous maintenance
GRID MIDDLEWARE	Continuously added new links to middleware.	Still growing, OK
EXISTING GRIDS	Added new general section on Existing Grids	Still growing, OK
GRID LINKS	List of various Grid-related links	OK
PUBLICATIONS	This new section allows the publication or linkage of technical or business oriented papers.	Not enough publications, growing
FEEDBACK	The feedback form allows external contributor to give some feedback	OK
CONTRIBUTION*	The new contribution form allows internal and external contributor to submit new content/candidate items.	OK, several contribution were submitted through the contribution form
SITEMAP*	Contains sitemap of Gridipedia pages	OK
COMPONENT ACCESS*	Contains registration form, which provides access to components.	Draft
WHAT IS THE GRID*	General Section describing the Grid concept.	Draft

Table 2: Main Menus of PGW (R3, PM24), * new section

3.2 Evaluation Report on Candidate Items

Most of the suggested candidate items came directly out of BEinGRID Project. They have been considered as mature enough for publication. The list of accepted Candidate Items from PM18 to PM24 can be found in Annex B. There are currently about 10 Candidate Items which are waiting for being approved by the moderator committee, they are not listed in Annex B.

3.3 Technical Changes to the Repository

The sites www.beingrid.eu and www.gridipedia.eu shared originally the same typo3-server and -environment. This caused that pages from www.beingrid.eu and www.gridipedia.eu were accessible from the both URLs, which leads to problem on proper indexing of sites. The two sites were recently separated and the content of each site is placed on two different physically separated servers.

In February 2008, there was a Gridipedia workshop, which leads to the decision on redesign of Gridipedia. The new redesign of Gridipedia is currently under development and will be published soon. The changes connected to new redesign of Gridipedia will be listed and explained in the next release of this document.

4. Usage Report

The statistics for: <http://www.gridipedia.eu> are available at <http://www.gridipedia.eu/awstats/awstats.pl?config=www.gridipedia.eu>. The monthly report for Dec 07 is shown in Figure 1; the monthly report for Mai 08 is shown in Figure 2. The log-file analyzer *awstats* [4] was used for creating the reports.

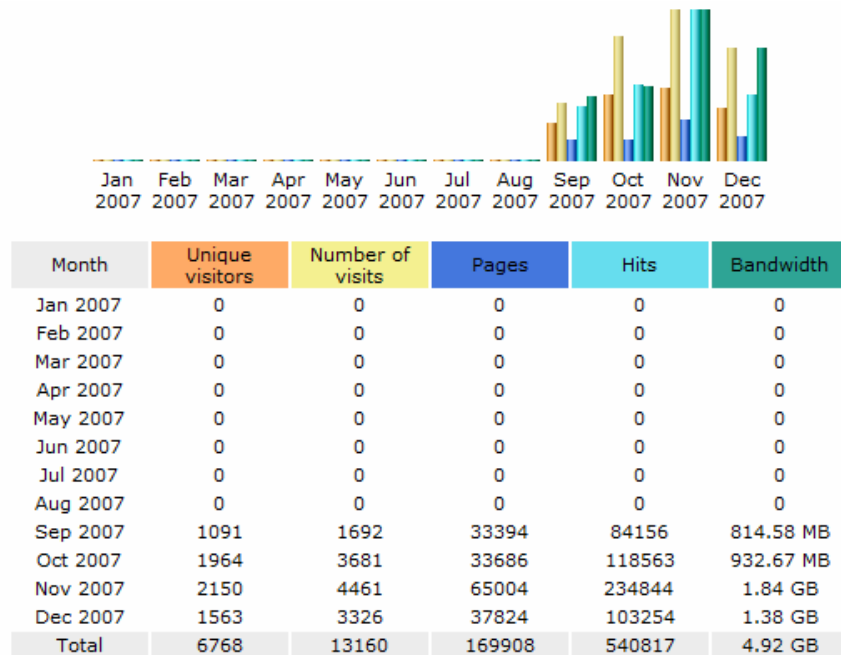


Figure 1 awstats Monthly Report for December 07

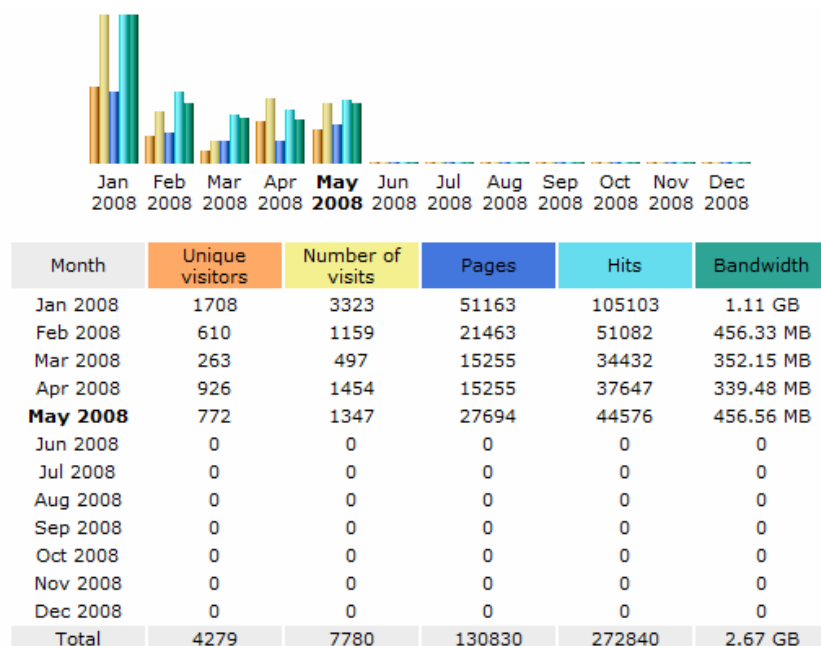


Figure 2: awstats Monthly Report for Mai 2008, 22/05/2008

The Gridipedia website was announced its opening on 26th of September 2007 during the European Services, Software and Grid Technology Days 07 in Brussels. A brief evaluation of the numbers – especially the number of unique visitors – allows the conclusion, that there is a moderate interest in Gridipedia. The average number of unique visitors from Sep. 07 to Jan 08 was about 1700 visitors per month, showed an increased interest in Gridipedia. From Feb 08 to Apr 08 there was a decrease of number of visitors, due to technical problems, which prevented Gridipedia to be indexed by Google.

However, after nine month, due to recent technical problems, a reliable prediction on the general interest in Gridipedia cannot be made yet.

As already mentioned in D5.3.5-R2[1], the numbers of visits, pages, hits, and bandwidth do not allow a clear conclusion on the success of Gridipedia at this point of time. For instance, some of the bandwidth is used or will be used by the wget tool, which is described later on. Similar examples for the previously mentioned indicators can be found very easily.

The tool *awstats* was announced as implemented and running on 26th of September 2007. The tool gathered statistics starting September 2007. Those earlier log files are available, but they have not evaluated and included in the report yet.

5. Population Measurement

The content of Gridipedia grows continuously. In order to show the progress of increasing content in Gridipedia between releases, one can measure the content size of all Gridipedia sites. *GNU wget* is a tool for downloading all files from a given URL <http://www.gridipedia.eu> to a local directory. The GNU *wget* tool was already introduced in D5.3.5_R2 [1].

The first measurement was done on 29th of November 2007. These measurements will be repeated on a monthly basis.

5.1 GNU *wget*

GNU wget is a free utility for non-interactive download of files from the Web. It supports http, https, and ftp protocols, as well as retrieval through http proxies. The GNU *wget* tool was already introduced in D5.3.5_R2 [1]. The current version of GNU *wget* is 1.11.1, which was used for recent measurements.

The full command line used for downloading Gridipedia was:

```
wget -p -k -rH -Dgridipedia.eu www.gridipedia.eu
```

In the following, the options used for the download are described briefly by the main page of *wget* (<http://www.gnu.org/software/wget/manual/wget.html>):

- **-p: --page-requisites:** This option causes *wget* to download all the files that are necessary to properly display a given html page. This includes such things as inlined images, sounds, and referenced stylesheets.
- **-k: --convert-links:** After the download is complete, it converts the links in the document to make them suitable for local viewing. This affects not only the visible hyperlinks, but also any part of the document that links to external content, such as embedded images, links to style sheets, hyperlinks to non-html content, etc.
- **-rH:** The *-H* option turns on host spanning, thus allowing *wget*'s recursive run to visit any host referenced by a link. Unless sufficient recursion-limiting criteria are applied depth, these foreign hosts will typically link to yet more hosts, and so on until *Wget* ends up using up much more data than you have intended.
- **-D:** The *-D* option allows to specify the domains that will be followed, thus limiting the recursion only to the hosts that belong to these domains.

The downloaded pages can be found in the directory “www.gridipedia.eu”. In order to check whether all Gridipedia related sites have been downloaded, the safari browser (<http://www.apple.com/safari/>) can be used. Other browsers like firefox or internet explorer have problems with browsing through the local copy. They are able to show only local sites ending with “.html” as HTML-site.

5.2 Results of measurements

The total number of files is a good indicator of the number of relevant webpages. The compressed size is taken as indicator for the amount of information on Gridipedia in general.

The results of the measurement are:

Nov 07- PM18: 565 files, packed size 3.629.044 Bytes, uncompressed 6.172.139 Bytes

Feb 08 - PM21: 740 files, packed size 4.618.338 Bytes, uncompressed 7.374.400 Bytes

Mar 08 - PM22: 741 files, packed size 4.646.426 Bytes, uncompressed 7.478.930 Bytes

Apr 08 - PM23: 1081 files, packed size 5.705.085 Bytes, uncompressed 10.358.275 Bytes

The increasing number of files shows that the content on Gridipedia continuous to increase. The awaiting contributions from the BEs, will continue the growth of Gridipedia content.

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Annex B. List of Accepted Candidate Items

B.1 Introduction

For the listing of accepted Candidate Items is used the following table-form:

Name of Artefact	Type of Artefact	Submission Date	Submitted by

Table 3: Metadata Schema for accepted Candidate Items

The column “Name of Artefact” describes the name of the accepted artefact or contribution.

The “Type of Artefact” describes the type of the contribution: Component, Design Pattern, Publication, Common Capabilities, Business Report, Middleware Description.

The “Submission Date” describes when the contribution was submitted.

The “Submitted by” describes the former of the contribution, and improves traceability of contribution for legal issues.

This inventory report is closely related to the list of candidate items in ID5.1.3 [2], which lists all suggested candidate items (e.g. description of design patterns from Activity1) for a certain timeframe. Rejected or pending candidate items are those, which are listed in ID5.1.3 but not in this document.

B.2 Accepted Candidate Items

The List of candidate items presented here, shows accepted candidate items, submitted between December 2007 and Mai 2008.

Name of Artefact	Type of Artefact	Submission Date	Submitted by
EnginFrame Grid-Portal	Component	03.12.2007	Francesco Ruffino
Evolving use of SLAs	Publication	09.01.2008	Francesco D'Andria
CFD Automatic Optimisation using OpenFOAM in Grid Environment	Publication	09.01.2008	Dimosthenis Kyriazis
Enhanced Strategy for SLA Management	Publication	10.01.2008	Francesco D'Andria
GRID superscalar	Component	13.02.2008	Rosa M. Badia
Policy Decision Point	Component	14.01.2008	David Brossard
GridWay	Component	15.02.2008	Constantino Vázquez