



G - P M T E S T R E P O R T

S O F T W A R E T E S T A N D V A L I D A T I O N R E P O R T

WP4 TASK4 - Verification and Quality Control

Document Filename: **CG-4.4-REP-v1.0-CSIC015-GPM_TestReport.doc**

Work package: **WP4 TASK4 - Verification and Quality Control**

Partner(s): **CSIC**

Lead Partner: **CSIC**

Config ID: **CG-4.4-REP-v1.0-CSIC015-GPM_TestReport**

Document classification: **PUBLIC**

Abstract: This report describes the validation performed on the package G-PM developed by CrossGrid WP 2 task 2.4.1. The tests were performed by Javier Santiago González and Javier Sánchez on the behalf of the CrossGrid task 4.4 testbed verification and quality control.



Delivery Slip

	Name	Partner	Date	Signature
From				
Verified by				
Approved by				

Document Log

Version	Date	Summary of changes	Author
1-0-DRAFT-A	31/05/2004	Draft version	Santiago González, Javier Sánchez
1-0-FINAL	31/05/2004	Final version	Santiago González, Javier Sánchez, Jorge Gomes

CONTENTS

1. CONTEXT.....	4
1.1. TEST REQUEST	4
1.2. TEST TEAM.....	4
1.3. RESOURCES INVOLVED.....	4
2. TEST AND VALIDATION.....	5
2.1. SOFTWARE INSTALLATION.....	5
2.2. ADDITIONAL TESTBED MODIFICATIONS	9
2.3. TEST DEVELOPMENTS	9
2.4. USABILITY	11
2.5. FUNCTIONALITY	11
2.5.1. <i>Unit tests</i>	11
2.5.2. <i>System tests</i>	12
2.5.3. <i>Stress tests</i>	17
2.6. COMPATIBILITY.....	17
2.7. SECURITY AND NETWORKING.....	17
2.8. PREVIOUSLY REPORTED ISSUES	17
3. ISSUES FOUND.....	18
3.1. ISSUES FOUND IN THE SOFTWARE	18
3.1.1. <i>Issue 001</i>	18
3.1.2. <i>Issue 002</i>	18
3.1.3. <i>Issue 003</i>	18
3.1.4. <i>Issue 004</i>	18
3.1.5. <i>Issue 005</i>	18
3.1.6. <i>Issue 006</i>	18
3.1.7. <i>Issue 007</i>	18
3.2. ISSUES FOUND IN THE DOCUMENTATION.....	19
3.2.1. <i>Issue 001</i>	19
4. RECOMMENDATION	20
5. REFERENCES	21
6. INTEGRATION/VALIDATION REQUEST	22

1. CONTEXT

Test and validation of the package G-PM version 0.4.0 developed by CrossGrid WP 2 task 2.4.1. G-PM is a system for Grid Application Performance Measurement and Visualization. G-PM analyses and visualises performance data provided by OCMG (task 3.3.1).

1.1. TEST REQUEST

A properly formatted request test form was sent by e-mail on 8 April 2004, through the “test and validation” web form. The request received the identifier 108142348743.4345149741606.

The software URL provided in the “Test Request” was correct, containing the packaged RPMs of the G-PM tool.

The URLs for the documentation were correctly provided however they were just links to the deliverables which is a failure to comply with the validation request and CrossGrid release policies. The documentation provided a short User and Installation Manuals with insufficient information for testing purposes and general use. The unit test provided by the developers is not enough and some more documentation should be provided.

Installation manual URL: <http://www.eu-crossgrid.org/Deliverables/M24pdf/CG2.0-D2.5-v1.2-FZK019-2ndPrototypeReport.pdf>

Users manual URL:

http://www.eu-crossgrid.org/Deliverables/1stYear-revised_deliverables/CG2.4.1-D2.3-v1.0-CYF001-PrototypeDoc.pdf

Development manual URL:

<http://www.eu-crossgrid.org/m6-drafts-login/M15deliverables-drafts/CG2.4.1-D2.4-v0.3-CYF001-ReportDoc.doc>

Software requirements URL: <http://www.eu-crossgrid.org/Deliverables/M3pdf/CG-2.4-DOC-CYFONET001-SRS.pdf>

Software design URL:

<http://www.eu-crossgrid.org/m6-drafts-login/M6deliverables-drafts/CG-2.4-DOC-CYFRONET001-DES.doc>

The test request asked specifically for the testing of the efficiency and stability of the tool. But first according with the validation guidelines we concentrated on the installation, security and documentation.

The test requester was Wlodzimierz Funika (funika@agh.edu.pl) from Cyfronet WP2, task 2.4.1 on behalf of the developers Arodz Tomasz (tomek@pds.net.pl) and Kurdziel Marcin (marcink@pds.net.pl) from Cyfronet Cracow, WP2, task 2.4.1 The test was authorized by Jorge Gomes (Jorge@lip.pt) from the WP4 Iteam.

1.2. TEST TEAM

The tests were performed by task 4.4 members from CSIC-IFIC

- Santiago González (Santiago.Gonzalez@ific.uv.es)
- Javier Sánchez (Javier.Sanchez@ific.uv.es)

1.3. RESOURCES INVOLVED

The following resources were used in the tests: A User interface (cg02.ific.uv.es) and one computing element (cg01.ific.uv.es). All resources are located at the IFIC site. The UI was used to compile the application and run the “Service Manager (OCM-G)”, the G-PM tool and submit the OCM-G instrumented application. The CE is used to run the application.

2. TEST AND VALIDATION

2.1. SOFTWARE INSTALLATION

The production testbed was used: LCG-1_1_4, which runs RH7.3 installed through a LCFGng server. Globus version 2.4 was used, installed under /opt/cg, and providing the development packages needed for mpich-g2 usage.

During the tests, 4 different files were downloaded at different dates from the repository for the same package: cg-gpm-0.4.0-1.i386.rpm. Different files were found inside for the same version. This is probably due to the autobuild process. This should be solved and once the RPM was built (manually or automatically) it should remain without modification. If some new code or corrections should be included, a new package with a new version should be compiled. A RPM dump shows (last columns were omitted):

```
[root@cg02.ific.uv.es]# rpm --dump -qlp cg-gpm-0.4.0-1.i386.rpm

8-mar-2004:
/opt/cg/bin/gpm      1198212 1078700316 2ca8fce55db8946687d56be7f1077a9c
/opt/cg/bin/gpmCli  777476  1078700316 9028e1f02c7118b079f97a375324da9c

30-apr-2004:
/opt/cg/bin/gpm      1198212 1083330601 8349f3d267f7cecd0d9e3e875b9e9c37
/opt/cg/bin/gpmCli  777444  1083330601 f63136640a322518101b93ac1504a883

2-may-2004:
/opt/cg/bin/gpm      1198212 1083514187 8349f3d267f7cecd0d9e3e875b9e9c37
/opt/cg/bin/gpmCli  777444  1083514187 f63136640a322518101b93ac1504a883

7-may-2004:
/opt/cg/bin/gpm      1363716 1083935036 529366a4d5a3b7a2ee52372e357c6b0e
/opt/cg/bin/gpmCli  914884  1083935036 d37517be576188282f012e363f229491
```

File size and md5sum are shown in the second and fourth column respectively. Three different generations could be seen.

The following RPMs were added to the cg02.ific.uv.es RPM list:

- cg-gpm-0.4.0-1
- cg-wp3.3-ocmg-1.2.4-1
- cg-wp3.3-ocmg-app-devel-1.2.4-1

The package cg-wp3.3-ocmg-1.2.4-1 was added because G-PM tool is based on the OCM-G tool. Thus, the OCM-G is required, as well as all the tools and software components required by the OCM-G. The OCM-G release version installed was the tested and validated by LIP [1,2,3]. The OCM-G

version that has to be used is not mentioned in [1,2]. The version of OCM-G should be specified as an installation requirement for the tool.

These packages are part of the latest RPM list distributed through the FZK CVS repository for the CrossGrid Testbed.

The installation of the packages `cg-gpm-0.4.0-1` and `cg-wp3.3-ocmg-1.2.4-1` was successful, although some minor errors occur with respect to GPM.

```
warning: user autobuild does not exist - using root
warning: group gp_autobuild does not exist - using root
```

It installs the following files (directories were omitted in the listing):

```
[root@cg02.ific.uv.es]# rpm -ql cg-gpm-0.4.0-1
/opt/cg/bin/gpm
/opt/cg/bin/gpmCli

[root@cg02.ific.uv.es]# rpm -ql cg-wp3.3-ocmg-1.2.4-1
/opt/cg/bin/cg-ocmg-monitor
```

Checking the requirements for G-PM:

```
[root@cg02.ific.uv.es]# rpm -requires -q cg-gpm-0.4.0-1
cg-wp3.3-ocmg
rpmlib(PayloadFilesHavePrefix) <= 4.0-1
ld-linux.so.2
libX11.so.6
libXext.so.6
libXi.so.6
libc.so.6
libcrypto_gcc32dbg.so.0
libdl.so.2
libgcc_s.so.1
libgdk-1.2.so.0
libglib-1.2.so.0
libglobus_common_gcc32dbg.so.0
libglobus_gsi_callback_gcc32dbg.so.0
libglobus_gsi_cert_utils_gcc32dbg.so.0
libglobus_gsi_credential_gcc32dbg.so.0
libglobus_gsi_proxy_core_gcc32dbg.so.0
libglobus_gsi_sysconfig_gcc32dbg.so.0
libglobus_gss_assist_gcc32dbg.so.0
libglobus_gssapi_gsi_gcc32dbg.so.0
libglobus_io_gcc32dbg.so.0
libglobus_oldgaa_gcc32dbg.so.0
libglobus_openssl_error_gcc32dbg.so.0
libglobus_openssl_gcc32dbg.so.0
libglobus_proxy_ssl_gcc32dbg.so.0
libgmodule-1.2.so.0
libgtk-1.2.so.0
libgtkextra-0.99.so.17
libm.so.6
libssl_gcc32dbg.so.0
libstdc++-libc6.2-2.so.3
libc.so.6(GLIBC_2.0)
libc.so.6(GLIBC_2.1.3)
libc.so.6(GLIBC_2.2)
libm.so.6(GLIBC_2.0)
rpmlib(CompressedFileNames) <= 3.0.4-1
```

There is not an explicit version requirement for ocmg.

2.2. ADDITIONAL TESTBED MODIFICATIONS

The developers told us to use the globus libraries from /opt/cg/globus/lib in order to run the gpm executable. LD_LIBRARY_PATH variable should be set to this directory to accomplish that. Even though, this leads to other problems resolving libraries which can be solved making some symbolic links in /opt/cg/globus/lib.

```
ln -s libglobus_io_gcc32dbg.so.0.0.0 libglobus_io_gcc32dbg.so.0
ln -s libglobus_gss_assist_gcc32dbg.so.0.0.0 libglobus_gss_assist_gcc32dbg.so.0
ln -s libglobus_gssapi_gsi_gcc32dbg.so.0.0.0 libglobus_gssapi_gsi_gcc32dbg.so.0
ln -s libglobus_gsi_proxy_core_gcc32dbg.so.0.0.0 libglobus_gsi_proxy_core_gcc32dbg.so.0
ln -s libglobus_gsi_credential_gcc32dbg.so.0.0.0 libglobus_gsi_credential_gcc32dbg.so.0
ln -s libglobus_gsi_callback_gcc32dbg.so.0.0.0 libglobus_gsi_callback_gcc32dbg.so.0
ln -s libglobus_oldgaa_gcc32dbg.so.0.0.0 libglobus_oldgaa_gcc32dbg.so.0
ln -s libglobus_gsi_sysconfig_gcc32dbg.so.0.0.0 libglobus_gsi_sysconfig_gcc32dbg.so.0
ln -s libglobus_gsi_cert_utils_gcc32dbg.so.0.0.0 libglobus_gsi_cert_utils_gcc32dbg.so.0
ln -s libglobus_openssl_gcc32dbg.so.0.0.0 libglobus_openssl_gcc32dbg.so.0
ln -s libglobus_proxy_ssl_gcc32dbg.so.0.0.0 libglobus_proxy_ssl_gcc32dbg.so.0
ln -s libglobus_openssl_error_gcc32dbg.so.0.0.0 libglobus_openssl_error_gcc32dbg.so.0
ln -s libssl_gcc32dbg.so.0.0.0 libssl_gcc32dbg.so.0
ln -s libcrypto_gcc32dbg.so.0.0.0 libcrypto_gcc32dbg.so.0
ln -s libglobus_common_gcc32dbg.so.0.0.0 libglobus_common_gcc32dbg.so.0
```

A weird side effect of setting LD_LIBRARY_PATH to "/opt/cg/globus/lib:/opt/globus/lib:/opt/cg/lib:/usr/local/lib:/opt/globus/lib:/opt/edg/lib" is that some applications may not work, for example:

```
[root@cg02.ific.uv.es]# grid-proxy-init
grid-proxy-init: relocation error: grid-proxy-init: undefined
symbol: globus_gsi_proxy_handle_attrs_set_time_valid
```

2.3. TEST DEVELOPMENTS

The purpose of the tests is to use the G-PM tool to analyse and visualise performance data provided by OCM-G.

An example program was used for the tests: crossgrid/wp2/wp2_5-integration/src/gpm_tests/ping.c obtained from the FZK CVS repository. No modifications were made.

An example Globus RSL file was also obtained. This RSL was modified in order to submit with "globusrun" to the CE's at IFIC. The tests were performed with mpich-g2 using the fork jobmanager (not PBS), so the application was running in the CE's and not in the WN's.

```
+
( &(resourceManagerContact="cg01.ific.uv.es:2119/jobmanager-fork")
  (count=1)
  (label="subjob 0")
  (environment=(GLOBUS_DUROC_SUBJOB_INDEX 0))
  (executable=$(GLOBUSRUN_GASS_URL) # "ping_ocm")
  (arguments=1000 --ocmg-appname app --ocmg-mainsm
c1885a6b:4e25)
  (stdout=$(GLOBUSRUN_GASS_URL) # output.0)
  (stderr=$(GLOBUSRUN_GASS_URL) # error.0)
)
( &(resourceManagerContact="cg01.ific.uv.es:2119/jobmanager-fork")
  (count=1)
  (label="subjob 1")
  (environment=(GLOBUS_DUROC_SUBJOB_INDEX 1))
  (executable=$(GLOBUSRUN_GASS_URL) # "ping_ocm")
  (arguments=1000 --ocmg-appname app --ocmg-mainsm
c1885a6b:4e25)
  (stdout=$(GLOBUSRUN_GASS_URL) # output.1)
  (stderr=$(GLOBUSRUN_GASS_URL) # error.1)
)
)
```

Some modification in the Makefile were made in order to be able to compile the ping.c application with mpich-g2 instrumented library and Globus 2.4 IO libraries as stated in the OCMG validation report.

```
SHLIB_PATH=/opt/cg/globus/lib
SASL_PATH=/opt/cg/globus/lib/sasl:/opt/globus/lib/sasl
GLOBUSBINDIR=/opt/cg/globus/bin
LD_LIBRARY_PATH=/opt/cg/globus/lib:/opt/cg/lib:/usr/local/lib:/opt/edg/lib:/opt/cg/
mpichg2/lib
GLOBUS_LOCATION=/opt/cg/globus
CG_LOCATION=/opt/cg
MPICH_CLINKER=/opt/cg/mpichg2/bin/mpich-globus2-cc
PYTHONPATH=/opt/cg/lib
LIBPATH=/opt/cg/lib/applib/lib:/opt/cg/globus/lib:/usr/lib:/lib:/opt/cg/mpichg2/lib
GLOBUS_PATH=/opt/cg/globus
MPICH_CC=/opt/cg/mpichg2/bin/mpich-globus2-cc
PATH=/opt/cg/globus/bin:/opt/cg/globus/sbin:/opt/cg/bin:/bin:/usr/bin:/usr/X11R6/bi
n:/usr/java/j2sdk1.4.1_01/bin:/opt/edg/bin:/opt/edg/sbin:/opt/cg/mpichg2/bin
#
export MPICH_CLINKER MPICH_CC SHLIB_PATH SASL_PATH GLOBUSBINDIR \
LD_LIBRARY_PATH GLOBUS_LOCATION PYTHONPATH LIBPATH GLOBUS_PATH PATH
#
```

2.4. USABILITY

One should have in mind that the G-PM tool is based on the OCM-G tool developed by WP3 task 3.3.1.

The G-PM tool was considered easy to deploy in the testbed, the installation issues were reported in the previous sections.

From the documentation provided to the testers, it is no easy and clear to understand how to test the tool. The user manual [1] provided is not clear enough and the installation manual [2] provides not clear information for testing the tool.

2.5. FUNCTIONALITY

The following steps were done:

1. Compilation of a simple mpi application (ping.c) with the OCM-G instrumented MPICH-G2 library.
2. Start up of the “Service Manager”.
3. Job submission of the application to the testbed.
4. Start up of the G-PM.
5. In the UI select the appropriated metrics to monitorise using the “Measurement Definition” window.
6. In the UI configure the graphs to display from the metrics using the “Visualization Definition” window.
7. Start the application in the main window under the “File” menu bottom.
8. While the program is running go through the steps 5 and 6 to add or delete measurements.

2.5.1. Unit tests

To test G-PM as a simple mpi application (ping.c) with the OCM-G instrumented MPICH-G2 library were compiled using the guidelines given in the OCM-G test and validation report [3]. Please see this document for more details.

The SM is a command-line program. It was successfully started in the UI:

```
[root@cg02.ific.uv.es]# cg-ocmg-monitor  
  
Main SM connection string: 939ca37f:4e24
```

It is necessary to edit the job RSL to match the contact port.
The job was submitted using globus-job-run:

```
[root@cg02.ific.uv.es]# globusrun -s -f ping_ocmg.resl &
```

The G-PM tool was started in the UI without errors:

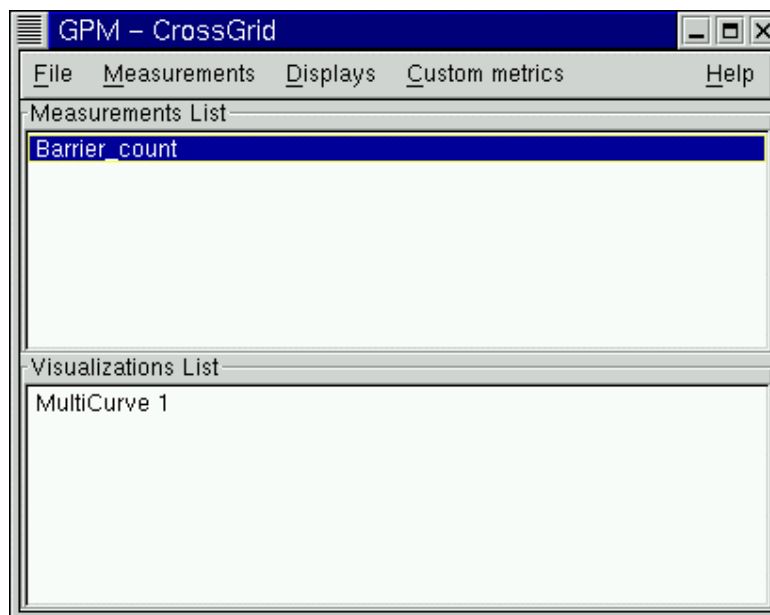
```
[root@cg02.ific.uv.es]# gpm app --num-procs 2 --ocmg-mainsm  
939ca37f:4e24
```

When the program starts running the SM report its connection, and later the connection from the G-PM UI.

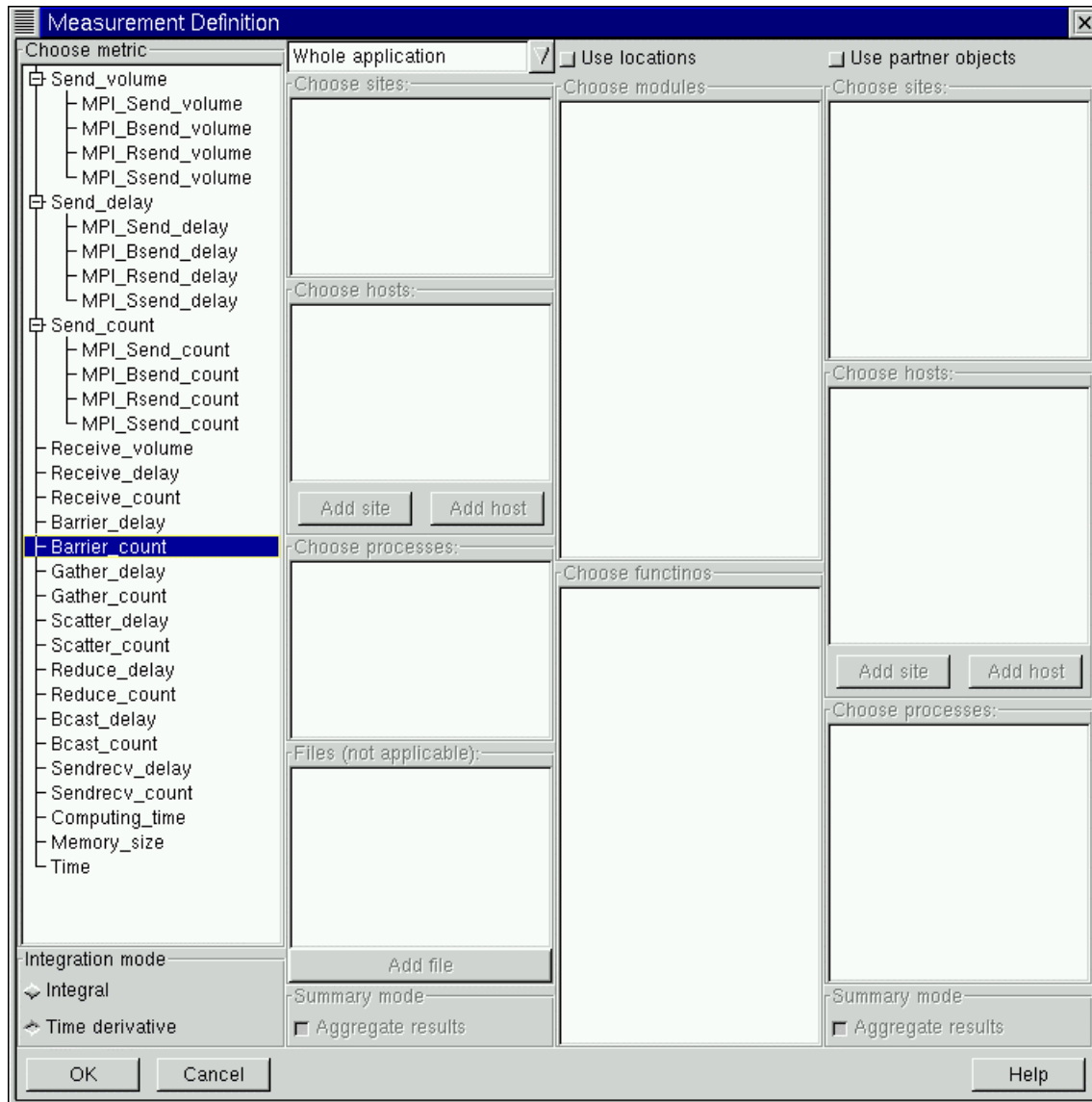
```
authorization    callback:    peer    identity:    /C=ES/O=DATAGRID-  
ES/O=IFIC/CN=Fco. Javier Sanchez Martinez  
0 PEER [ rendes ]    TYPE STATE    0xMID SOCK/OFF  
PID    SHMID PROCESS  
0 MID RSHPID CONNECTED  
authorization    callback:    peer    identity:    /C=ES/O=DATAGRID-  
ES/O=IFIC/CN=Fco. Javier Sanchez Martinez
```

2.5.2. System tests

A first test was performed displaying the “Barrier_count” metric.
The main window looks like this:



After clicking in the Measurement menu item, sub item “new”, the “Measurement Window” appears .

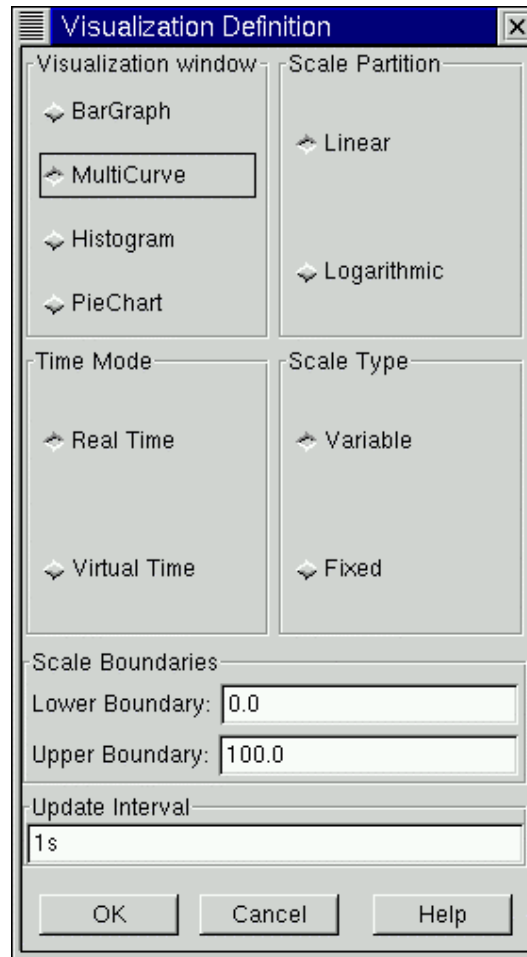


This interface does not correspond exactly with the one exposed in [2]. In particular, the following items are missed:

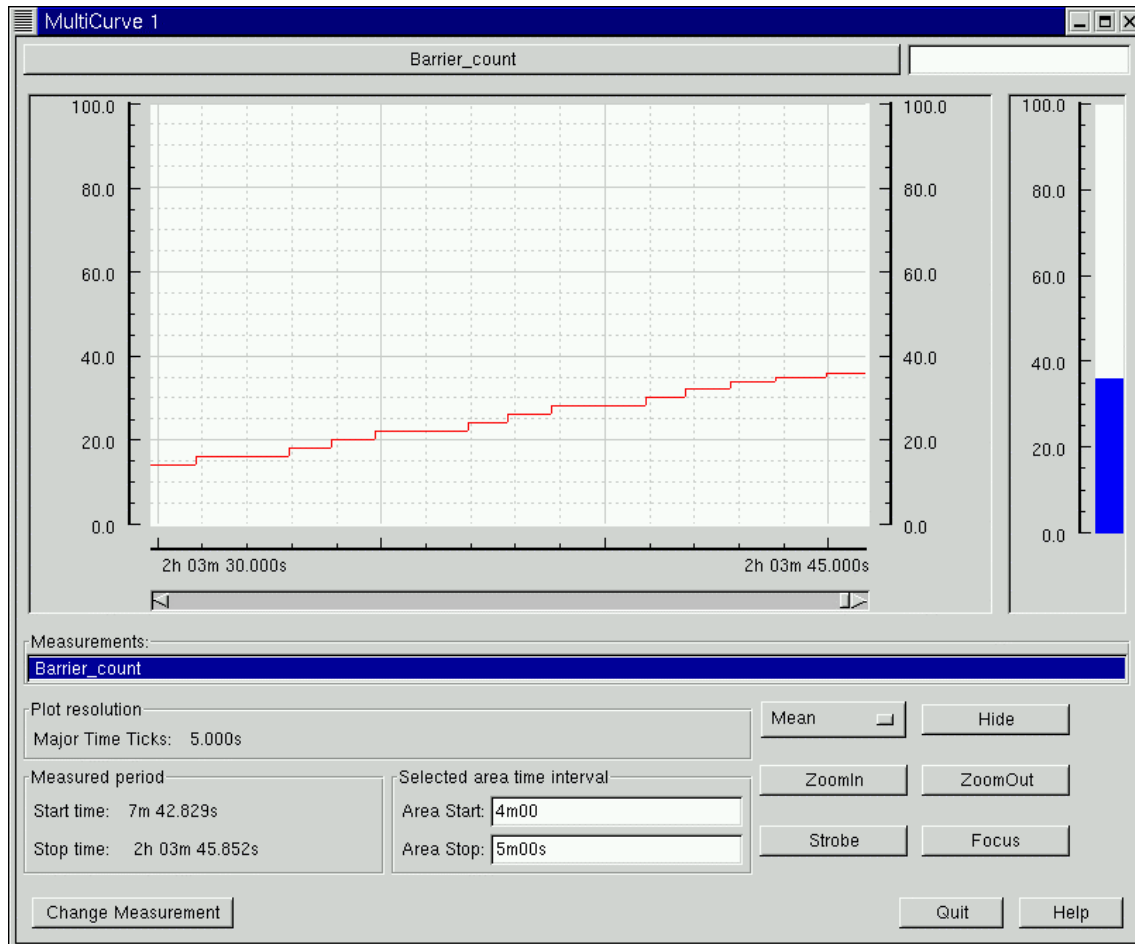
- Synchronization delay
- Synchronization invocation count
- Group communication delay
- Group Communication invocation count

These metrics were supposedly introduced in the second prototype.

A “Barrier Count” metric is created using this window. Afterwards the “Visualization definition” is invoked to define the graph.



The “Matrix Diagram” button does not appear. It corresponds also to the second prototype [2]. A “MultiCurve” graph was selected.

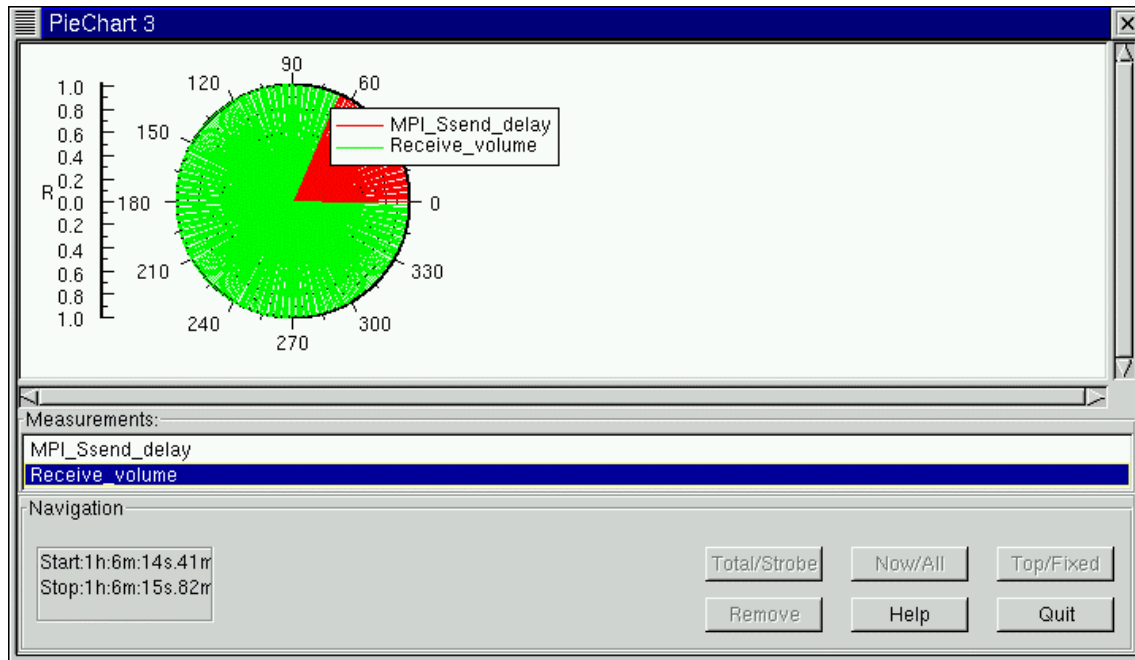


After clicking in the main window under the “File” menu entry, the “Start Program” item, the application begins to run and data start to be collected and displayed. The result can be shown in the picture above.

The basic functionality was tested. Results seem to be coherent with the application being run.

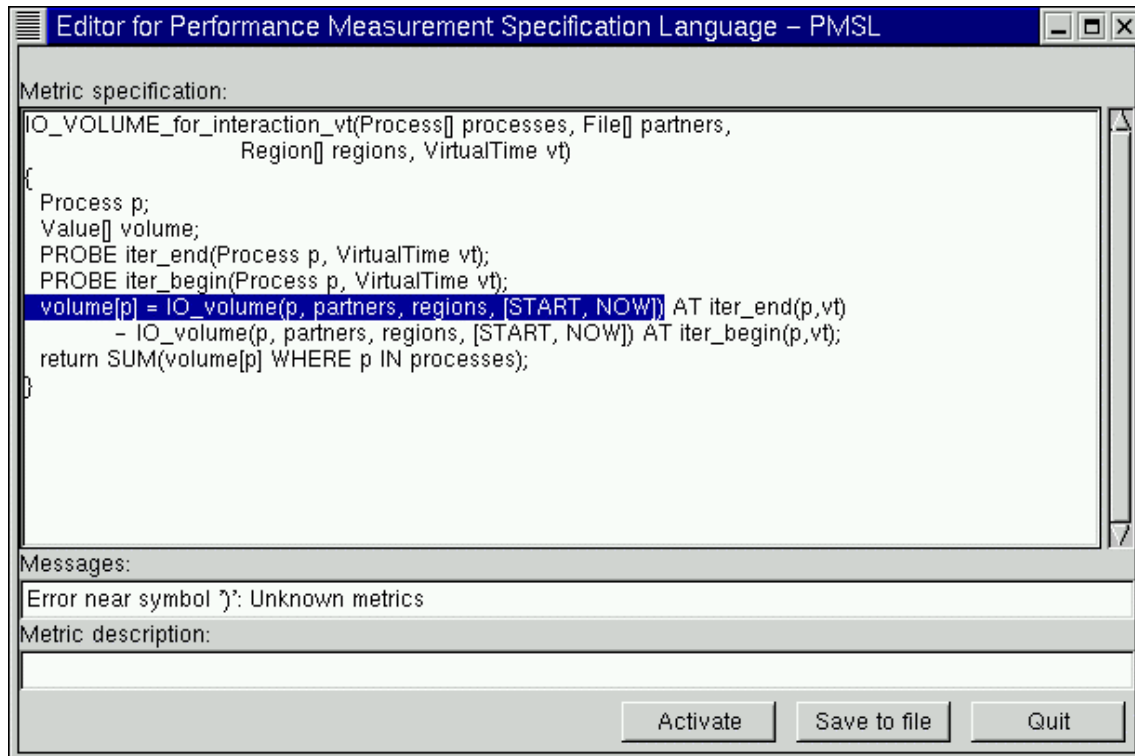
2.5.2.1. UI functionality

We ran again the program in order to check the whole functionality. For this purpose, we selected the metrics corresponding to the MPI calls: MPI_Bcast, MPI_Ssend and MPI_Recv, which are used in the ping.c application. We had the correct functionality for the four visualization graphs, but for the PieChart, which doesn't correspond to the one shown in the user manual document [1,2]. Besides, it seems that a debug flag was activated and a lot of useless information, from the user point of view, is sent to the output.



2.5.2.2. Custom metrics

Following the User Manual [1,2] we tried to create a custom metric using the “Editor for Performance Measurement Specification Language”. We got an error and we did not get enough information from the manual to correct this, so it was not able to continue to test this issue.



2.5.3. Stress tests

The stress test would involve a large number CE's for the application to run. This was not performed since the application ping.c is limited to 2 processes.

2.6. COMPATIBILITY

The software is compatible with the other components of the middleware installed in the "production" testbed. The packages on which the G-PM depends are distributed by CrossGrid.

There are no software backwards compatibility issues, since this is the first version of the tool to be tested.

2.7. SECURITY AND NETWORKING

The G-PM tool communicates with the "Service Manager" (SM) through the Globus IO libraries including GSS security.

No security issues were found.

2.8. PREVIOUSLY REPORTED ISSUES

This was the first version to be tested.

3. ISSUES FOUND

3.1. ISSUES FOUND IN THE SOFTWARE

3.1.1. Issue 001

(Severity: critical Priority: high)

In the repository there were different files for the same package version at different times. One package version should contain always the same files.

3.1.2. Issue 002

(Severity: low Priority: low)

RPM installation needs an autobuild user and a gp_autobuild group. An existing user/group should be used or created instead.

3.1.3. Issue 003

(Severity: medium Priority: medium)

Because the G-PM is closely tied to the OCM-G package an explicit version requirement should be included in the RPM dependency list.

3.1.4. Issue 004

(Severity: medium Priority: medium)

It was impossible to rebuild the package from the source RPM.

3.1.5. Issue 005

(Severity: critical Priority: high)

In order to run the G-PM user interface, LD_LIBRARY_PATH should contain in the first place /opt/cg/globus/lib. A side effect is that grid-proxy-init doesn't work. Besides, several symbolic links had to be done in the User Interface. This is not acceptable in a binary distribution.

3.1.6. Issue 006

(Severity: medium Priority: medium)

Metrics in the measurement definition window don't correspond to the documented second prototype.

3.1.7. Issue 007

(Severity: medium Priority: medium)

Graphs options in the Visualization Definition window don't correspond to the documented second prototype. The Matrix diagram button is missed and the PieChart graph is different from the User Manual.

3.2. ISSUES FOUND IN THE DOCUMENTATION

3.2.1. Issue 001

(Severity: high Priority: high)

The installation and user manuals are not very clear. The user manual is very incomplete regarding the functionality tests that can be performed, such as Edit custom metric window.

The RPM's don't contain any "man pages" or any other kind of documents.

The lack of documentation and also of an example program did not make possible to perform further tests.

4. RECOMMENDATION

Our first recommendation is for the developers to provide a step by step example in order to review the full functionality of G-PM.

The documentation must be improved; specific user and installation manuals must created.

The critical problems found are not directly related with the software components, but with the package building processes and distribution.

We had found a lot of problems with the RPM's and with the installation process. For this reason, our recommendation to the CrossGrid ITEAM is not to deploy the G-PM package in the testbed.

5. REFERENCES

- [1]http://www.eu-crossgrid.org/Deliverables/1stYear-revised_deliverables/CG2.4.1-D2.3-v1.0-CYF001-PrototypeDoc.pdf
- [2]http://www.eu-crossgrid.org/Deliverables/M24pdf/CG2.0-D2.5-v1.2-FZK019_2ndPrototypeReport.pdf
- [3]http://www.lip.pt/computing/projects/crossgrid/task4/softvalidation/107659095358.6653977007703/CG-4.4-REP-v1.1-LIP102-OCMG_TestReport.pdf

6. INTEGRATION/VALIDATION REQUEST

Component name: G-PM

Version (CVS tag): v0_4_0

Request priority: 2

Package brief description: Grid Application Performance Measurement and Visualization Tool of Task 2.4.1. Analyses and visualises performance data provided by OCMG (WP3.3.1)

Code:

Source code in X# CVS ? (Y/N): Y

Autobuild generates RPMs ? (Y/N): Y

Software download URL: <https://savannah.fzk.de/distribution/crossgrid/autobuilt/i386-rh7.3-gcc2.95.2/wp2/RPMS/cg-gpm-0.4.0-1.i386.rpm>

List of RPMs produced: cg-gpm-0.4.0-1.i386.rpm

Changes:

List of all bugs fixed by this release: Detailed description is provided in following document: <http://www.eu-crossgrid.org/m6-drafts-login/M15deliverables-drafts/CG2.4.1-D2.4-v0.3-CYF001-ReportDoc.doc>

List of backwards compatibility issues (installation, configuration or run-time: None
Documentation:

Installation manual URL: <http://www.eu-crossgrid.org/Deliverables/M24pdf/CG2.0-D2.5-v1.2-FZK019-2ndPrototypeReport.pdf>

Users manual URL: http://www.eu-crossgrid.org/Deliverables/1stYear-revised_deliverables/CG2.4.1-D2.3-v1.0-CYF001-PrototypeDoc.pdf

Development manual URL: <http://www.eu-crossgrid.org/m6-drafts-login/M15deliverables-drafts/CG2.4.1-D2.4-v0.3-CYF001-ReportDoc.doc>

Software requirements URL: <http://www.eu-crossgrid.org/Deliverables/M3pdf/CG-2.4-DOC-CYFONET001-SRS.pdf>

Software design URL: <http://www.eu-crossgrid.org/m6-drafts-login/M6deliverables-drafts/CG-2.4-DOC-CYFRONET001-DES.doc>

Files:

List of all configuration files (with full path): None

List of all log files (with full path): None

List of LCFG configuration objects (and versions): N/A

List of daemons provided: None

List of init.d scripts and supported directives (start, stop, restart, etc.): N/A

Deployment:

Affected machine types (UI, WN, CE, SE, etc) and packages to be deployed on each: UI Component dependencies (required libraries, packages, etc.): cg-wp3.3-ocmg-app-devel-1.2.5-1.i386.rpm;cg-wp3.3-ocmg-1.2.5-1.i386.rpm

Credentials (if any) used by the service: Credential required by OCMG (WP3.3.1)

List of service ports (inbound,outbound): N/A

Who communicates with the service and from where: N/A

Range of temporary ports used by the service (inbound, outbound): N/A
Testing and Validation:

Unit tests that have been performed on the package: Detailed description provided in following document:

<http://www.eu-crossgrid.org/Deliverables/M24pdf/CG2.0-D2.5-v1.2-FZK019-2ndPrototypeReport.pdf>

Features to be tested: Stability of the UIVC, HLAC and PMC modules. Efficiency of the tool during high volume of measured performance data. Correspondence between measured performance data and real application behaviour.

Features not to be tested: None

Test programs download URL: None - the tool is GUI based. Tests have been performed manually
Other considerations: None

Contacts:

Test requester:

Name: Wlodzimierz Funika

WP: 2

Partner: Cyfronet

Task: 2.4.1

E-mail funika@agh.edu.pl

Developer/origin:

Name:

[ArodzTomasz](#)

[Kurdziel Marcin](#)

Project: eu-crossgrid

WP: 2

Partner: Cyfronet

Task: 2.4.1

E-mail: tomek@pds.net.pl marcink@pds.net.pl