



OCM-G TEST REPORT

SOFTWARE TEST AND VALIDATION REPORT

WP4 TASK4 - Verification and Quality Control

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Abstract: This report describes the validation performed on the package OCM-G developed by CrossGrid WP 3 task 3.3.1. The tests were performed by Santiago González and Javier Sánchez on the behalf of the CrossGrid task 4.4 testbed verification and quality control. OCM-G is an application monitoring system which collects information about running applications.



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1. CONTEXT

Test and validation of the package OCM-G version 1.9.2 developed by CrossGrid WP 3 task 3.3.1. The OCM-G is an application monitoring system which collects information about running applications.

1.1. TEST REQUEST

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

The software URL provided in the “Test Request” was correct. A Web link is provided where the installation manual and other documentation can be found:

<http://www.icsr.agh.edu.pl/ocmg>

Instructions on how to test the package are given in the file:

http://savannah.fzk.de/cgi-bin/viewevs.cgi/crossgrid/crossgrid/wp3/wp3_3-moninfr/wp3_3_1-ocm-g/README

The test requester was Bartosz Balis (balis@agh.edu.pl) from AGH Cracow, WP3, task 3.3.1 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 IFIC Cross Grid testbed has been used to make the tests. This testbed has the tag CG_2_0_4 installed which is LCG-2_0_0 compatible. The User Interface (loki02.ific.uv.es), Computing Element (loki01.ific.uv.es) and the Worker Nodes ([loki0\[4-6\].ific.uv.es](http://loki0[4-6].ific.uv.es)) were involved in the tests. The UI was used to compile the application and run the “Service Manager” and “Tracer” tool and submit the instrumented application. The CE and WNs were used to run the application.

2. TEST AND VALIDATION

2.1. SOFTWARE INSTALLATION

The production testbed was used: CG_2_0_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. The LCFGng configuration files (local-cfg.h) were modified to include the new packages in the machines involved:

```
#ifdef ISNODE_CE
+cg-wp3.3-ocmg-1.9.2-1
#endif

#ifdef ISNODE_UI
+cg-wp3.3-ocmg-1.9.2-1
+cg-wp3.3-ocmg-libmpich-1.9.2-1
+cg-wp3.3-ocmg-app-devel-1.9.2-1
+cg-wp2.4-gpm-0.6.0-1
#endif

#ifdef ISNODE_WN
+cg-wp3.3-ocmg-1.9.2-1
#endif
```

Three RPMs have been loaded from the FZK repository:

- cg-wp3.3-ocmg-1.9.2-1.i386.rpm
- cg-wp3.3-ocmg-libmpich-1.9.2-1.i386.rpm
- cg-wp3.3-ocmg-app-devel-1.9.2-1.i386.rpm

Before actual installation, the RPMs were analyzed to check dependencies. The installation itself was successful. No issues were found. It installs:

```
[root@loki02]# rpm -qlp cg-wp3.3-ocmg-1.9.2-1.i386.rpm
/opt/cg/bin/cg-ocmg-monitor
/opt/cg/man/man1/cg-ocmg-monitor.1
```

```
[root@loki02]# rpm -qlp cg-wp3.3-ocmg-libmpich-1.9.2-1.i386.rpm
/opt/cg/lib/applib/libmpich.a
/opt/cg/lib/applib/libmpichg2.a
```

```
[root@loki02]# rpm -qlp cg-wp3.3-ocmg-app-devel-1.9.2-1.i386.rpm
/opt/cg/bin/cg-ocmg-cc
/opt/cg/bin/cg-ocmg-check-app
/opt/cg/bin/cg-ocmg-mpich-instr
/opt/cg/bin/cg-ocmg-terminate
/opt/cg/bin/cg-ocmg-tool
/opt/cg/bin/cg-ocmg-tracer
/opt/cg/etc/descriptions
/opt/cg/etc/descriptions/mpi.omis
/opt/cg/etc/profile.d
/opt/cg/etc/profile.d/cg-ocmg.csh
/opt/cg/etc/profile.d/cg-ocmg.sh
/opt/cg/include/OCM/app_globals_any.h
/opt/cg/include/OCM/app_info_any.h
/opt/cg/include/OCM/dynarray.h
/opt/cg/include/OCM/evmgmt_any.h
/opt/cg/include/OCM/expansion_context.h
/opt/cg/include/OCM/hooks_any.h
/opt/cg/include/OCM/ocm_errdefs.h
/opt/cg/include/OCM/ocm_errno.h
/opt/cg/include/OCM/ocm_error.h
/opt/cg/include/OCM/ocm_std_defs.h
/opt/cg/include/OCM/ocm_token_any.h
/opt/cg/include/OCM/omis.h
/opt/cg/include/OCM/omis_flags.h
/opt/cg/include/OCM/omis_reply.h
/opt/cg/include/OCM/omis_types.h
/opt/cg/include/OCM/parlist_any.h
/opt/cg/include/OCM/parlist_utils_any.h
/opt/cg/include/OCM/reply.h
/opt/cg/include/OCM/reply_utils.h
/opt/cg/include/OCM/service_protos.h
/opt/cg/include/OCM/service_registry_any.h
/opt/cg/include/OCM/shmem_any.h
/opt/cg/include/OCM/shmem_app.h
/opt/cg/lib/applib/libAppMonitor.a
/opt/cg/lib/applib/libAppOcmbasic.a
/opt/cg/lib/applib/libAppOcmcore.a
/opt/cg/lib/applib/libAppOcmpa.a
/opt/cg/lib/applib/libAppOcmpatop.a
/opt/cg/lib/applib/libAppOcmsymtab.a
/opt/cg/lib/applib/libAppOcmtrace.a
/opt/cg/lib/applib/libomis.a
/opt/cg/lib/libCommon.a
/opt/cg/lib/libGsi_comm.a
/opt/cg/lib/libIc.a
/opt/cg/lib/libOmis.a
/opt/cg/libexec/cg-ocmg-libinstr
/opt/cg/libexec/cg-ocmg-linecmds
/opt/cg/libexec/cg-ocmg-rensymlib
/opt/cg/man/man1/cg-ocmg-cc.1
/opt/cg/man/man1/cg-ocmg-mpich-instr.1
/opt/cg/man/man1/cg-ocmg-terminate.1
```

Correct dependencies to mpich libraries have been added for package cg-wp3.3-ocmg-libmpich-1.9.2-1:

```
[root@loki02 root]# rpm --requires -qp cg-wp3.3-ocmg-libmpich-1.9.2-1.i386.rpm
cg-wp3.3-ocmg-app-devel = 1.9.2
gcc3 >= 3.2.2
mpich-p4 = 1.2.5.2-cg2
mpich-g2 = 1.2.5.2-cg2
rpmllib(PayloadFilesHavePrefix) <= 4.0-1
rpmllib(CompressedFileNames) <= 3.0.4-1
```

In this version of OCM-G instrumented mpich libraries have been included in a new RPM called cg-wp3.3-ocmg-libmpich-1.9.2-1.i386.rpm. This makes unnecessary to run a post installation script to create them and permits a pure binary distribution.

2.2. ADDITIONAL TESTBED MODIFICATIONS

No additional modifications were needed in the testbed machines for the present test.

2.3. TEST DEVELOPMENTS

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 and WN's at IFIC. The tests were performed with mpich-g2 using Fork and PBS jobmanagers. The application was running in the WN's using the following RSL file:

```
+
( &(resourceManagerContact="loki01.ific.uv.es:2119/jobmanager-pbs")
  (count=2)
  (label="subjob 0")
  (environment=(GLOBUS_DUROC_SUBJOB_INDEX 0))
  (executable=$(GLOBUSRUN_GASS_URL) # "ping_ocm")
  (arguments=10 --ocmg-appname app --ocmg-mainsm c1885a6b:4e23)
  (stdout=$(GLOBUSRUN_GASS_URL) # output.0)
  (stderr=$(GLOBUSRUN_GASS_URL) # error.0)
)
```

or in the CE using the following RSL file:

```
+
( &(resourceManagerContact="loki01.ific.uv.es:2119/jobmanager-fork")
  (count=1)
  (label="subjob 0")
  (environment=(GLOBUS_DUROC_SUBJOB_INDEX 0))
  (executable=$(GLOBUSRUN_GASS_URL) # "ping_ocm")
  (arguments=10 --ocmg-appname app --ocmg-mainsm c1885a6b:4e20)
  (stdout=$(GLOBUSRUN_GASS_URL) # output.0)
  (stderr=$(GLOBUSRUN_GASS_URL) # error.0)
)
( &(resourceManagerContact="loki01.ific.uv.es:2119/jobmanager-fork")
  (count=1)
  (label="subjob 1")
  (environment=(GLOBUS_DUROC_SUBJOB_INDEX 0))
  (executable=$(GLOBUSRUN_GASS_URL) # "ping_ocm")
  (arguments=10 --ocmg-appname app --ocmg-mainsm c1885a6b:4e20)
  (stdout=$(GLOBUSRUN_GASS_URL) # output.1)
  (stderr=$(GLOBUSRUN_GASS_URL) # error.1)
)
```

As stated in the README file, some modifications 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:

```
MPICC=/opt/mpi/mpich-g2/bin/mpicc
MPIRUN=/opt/mpi/mpich-g2/bin/mpirun
```

2.4. USABILITY

One should have in mind that the purpose of the OCM-G is to provide information about running application to application-development-support tools, specifically performance analyzers or visualizers. OCM-G is a package which should be integrated and used through the G-PM performance-measuring tool developed by WP2 task 2.4.

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

Using the Installation Guide [2] and the short installation manual [3] the installation procedure and its test were easy.

The output values from the Tracer tool and also the one shown in output files produced by the running application seem to be correct.

The interactive response time seems good. The starting of the several command-line tools are fast, as well as the output sent by those tools to the terminals during the execution of an instrumented application.

2.5. FUNCTIONALITY

The following steps were done:

1. Compilation of a simple mpi application (ping.c) with the OMC-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 Tracer tool.
5. Checks the outputs to the terminals and the output files after job termination.

2.5.1. Unit tests

Following the instructions described [3], the tester downloaded “crossgrid/wp2/wp2_5-integration/src/gpm_tests” from the FZK CVS repository, consisting of:

```
-rw-r--r-- 1 sgonzale exp 694 Sep 29 16:34 Makefile
-rw-r--r-- 1 sgonzale exp 609 Sep 29 16:34 README
-rw-r--r-- 1 sgonzale exp 1234 Sep 29 16:34 ring.c
-rw-r--r-- 1 sgonzale exp 52 Sep 29 16:34 probes.c
-rw-r--r-- 1 sgonzale exp 1391 Sep 29 16:34 check_trace.pl
-rw-r--r-- 1 sgonzale exp 629 Sep 29 16:34 config.h
-rw-r--r-- 1 sgonzale exp 26 Sep 29 16:34 machines
-rw-r--r-- 1 sgonzale exp 2067 Sep 29 16:34 ping.c
-rw-r--r-- 1 sgonzale exp 580 Sep 29 16:34 ping.rsl
-rw-r--r-- 1 sgonzale exp 634 Sep 29 16:34 ping_ocm.rsl
```

The “ping.c” and “ring.c” programs were successfully compiled with the mpich-g2 instrumented library and with Globus 2.4 IO libraries:

```
-rwxr-xr-x 1 sgonzale exp 397586 Sep 29 15:10 ping
-rwxr-xr-x 1 sgonzale exp 668674 Sep 29 15:10 ping_ocm
-rw-r--r-- 1 sgonzale exp 22632 Sep 29 16:37 ring.o
-rwxr-xr-x 1 sgonzale exp 1648329 Sep 29 16:37 ring_ocm
```

The OCM-G libraries were included in the programs:

```
[sgonzale@loki02]# cg-ocmg-check-app ping_ocm
Application is linked with OCM-G
Instrumented libraries: libmpichg2.a
Probes files: probes.c
```

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

```
[sgonzale@loki02]# cg-ocmg-monitor  
  
Main SM connection string: 939ca3a0:4e20
```

The Tracer Tool was also started in a new shell on the User Interface without errors:

```
[sgonzale@loki02]# cg-ocmg-tracer app --num procs 2 --terminate --ocmg-mainism  
939ca3a9:4e20 > /tmp/trace  
Parsing: Main SM conn. is:  
  939ca3a0:4e20  
authorization callback: peer identity: /C=ES/O=DATAGRID-ES/O=IFIC/CN=Santiago Gonzalez  
de la Hoz  
SDDFA  
/*  
 * "Creation Date" "Wed Sep 29 17:30:08 2004"  
 * "Machine" "OCM tracer 1.0"  
*/ ;;-  
  
#0: "host_add"  
{  
    int "sec";  
    int "usec";  
    int "tid";  
    char "name"[];  
    char "alias"[];  
};;  
  
#1: "newtask"  
{  
    int "sec";  
    int "usec";  
    int "tid";  
    int "ptid";  
    int "host";  
    char "aout"[];  
};;
```

2.5.2. System tests

The system tests correspond to job submission through “globusrun” command to the IFIC Computing Element (loki01.ific.uv.es) or to IFIC Worker Nodes (loki[4-6].ific.uv.es) and checking the output produced by the SM and Tracer tool while the application is running, and also the output files produced when the application terminates.

The RLS files for the job submission to the CE or to the WNs were the shown in section 2.3. It is necessary to edit the job RSL to match the contact port. The job was submitted using globus-job-run:

```
[sgonzale@loki02]# globusrun -s -f ping_ocmg.rsl &
```

The screen outputs are shown bellow. For the SM interface with the application running in the CE:

```
[sgonzale@loki02]# cg-ocmg-monitor
authorization callback: peer identity: /C=ES/O=DATAGRID-ES/O=IFIC/CN=Santiago Gonzalez
de la Hoz

gsi_displayConnections:
Connections in the queue:
mid      pid      type      mess. part      peer addr      peer name
00100001 25929    SLAVE     NO               939ca39f       loki01.ific.uv.es
00000000 16244    SiteSM    NO               939ca3a0       loki02.ific.uv.es
```

For the SM interface with the application running in the WNs:

```
[sgonzale@loki02]# cg-ocmg-monitor
authorization callback: peer identity: /C=ES/O=DATAGRID-ES/O=IFIC/CN=Santiago
Gonzalez de la Hoz

gsi_displayConnections:
Connections in the queue:
mid      pid      type      mess. part      peer addr      peer name
00100002 29211    SLAVE     NO               939ca3a3       loki05.ific.uv.es
00100001 30363    SLAVE     NO               939ca3a2       loki04.ific.uv.es
00000000 16605    SiteSM    NO               939ca3a0       loki02.ific.uv.es
```

The Tracer interface with the application running in the CE:

```
"host_add" { 0, 0, 0, [20] { "loki01.ific.uv.es" }, [20] { "loki01.ific.uv.es" } };;  
"newtask" { 0, 0, 0, -1, 0, [5] { "data" } };;  
"newtask" { 0, 0, 1, -1, 0, [5] { "data" } };;  
  
#2: "MPI_Barrier-START"  
{  
    int "sec";  
    int "usec";  
    int "process";  
};;  
  
"MPI_Barrier-START" { 1096471818, 114824, 1 };;  
"MPI_Barrier-START" { 1096471818, 115775, 0 };;  
  
#3: "MPI_Barrier-END"  
{  
    int "sec";  
    int "usec";  
    int "process";  
    int "result";  
};;  
  
.....  
"MPI_Ssend-END" { 1096471819, 221192, 0, 0 };;  
"MPI_Recv-START" { 1096471819, 221214, 0, 1, 0 };;  
"MPI_Ssend-START" { 1096471819, 524043, 1, 0, 0, 100 };;  
"MPI_Recv-END" { 1096471819, 630897, 0, 0, 100 };;  
"MPI_Barrier-START" { 1096471819, 631064, 0 };;  
"MPI_Ssend-END" { 1096471819, 704119, 1, 0 };;  
"MPI_Barrier-START" { 1096471819, 704132, 1 };;  
"MPI_Barrier-END" { 1096471819, 714266, 0, 0 };;  
"MPI_Barrier-END" { 1096471819, 714314, 1, 0 };;  
"MPI_Recv-START" { 1096471819, 714323, 1, 0, 0 };;  
"MPI_Ssend-START" { 1096471820, 423993, 0, 1, 0, 1000 };;  
"MPI_Recv-END" { 1096471820, 514193, 1, 0, 1000 };;  
"MPI_Ssend-END" { 1096471820, 514237, 0, 0 };;  
"MPI_Recv-START" { 1096471820, 514249, 0, 1, 0 };;  
"MPI_Ssend-START" { 1096471820, 823972, 1, 0, 0, 100 };;  
"MPI_Recv-END" { 1096471820, 930743, 0, 0, 100 };;  
"MPI_Barrier-START" { 1096471820, 930793, 0 };;  
"MPI_Ssend-END" { 1096471821, 699, 1, 0 };;  
"MPI_Barrier-START" { 1096471821, 713, 1 };;  
"MPI_Barrier-END" { 1096471821, 120722, 0, 0 };;  
.....
```

The Tracer interface with the application running in the WNs:

```
"host_add" { 0, 0, 0, [20] { "loki06.ific.uv.es" }, [20] { "loki06.ific.uv.es" } };;
"host_add" { 0, 0, 1, [20] { "loki04.ific.uv.es" }, [20] { "loki04.ific.uv.es" } };;
"newtask" { 0, 0, 0, -1, 0, [5] { "data" } };;
"newtask" { 0, 0, 1, -1, 1, [5] { "data" } };;

#2: "MPI_Barrier-START"
{
    int "sec";
    int "usec";
    int "process";
};;

"MPI_Barrier-START" { 1096473650, 120174, 1 };;
"MPI_Barrier-START" { 1096473650, 218128, 0 };;

#3: "MPI_Barrier-END"
{
    int "sec";
    int "usec";
    int "process";
    int "result";
};;
.....

"MPI_Ssend-END" { 1096473650, 928061, 0, 0 };;
"MPI_Recv-START" { 1096473650, 928074, 0, 1, 0 };;
"MPI_Ssend-START" { 1096473651, 229482, 1, 0, 0, 100 };;
"MPI_Recv-END" { 1096473651, 229800, 0, 0, 100 };;
"MPI_Ssend-END" { 1096473651, 229907, 1, 0 };;
"MPI_Barrier-START" { 1096473651, 229918, 1 };;
"MPI_Barrier-START" { 1096473651, 229953, 0 };;
"MPI_Barrier-END" { 1096473651, 230118, 0, 0 };;
"MPI_Barrier-END" { 1096473651, 230251, 1, 0 };;
"MPI_Recv-START" { 1096473651, 230262, 1, 0, 0 };;
"MPI_Ssend-START" { 1096473651, 937390, 0, 1, 0, 1000 };;
"MPI_Recv-END" { 1096473651, 950375, 1, 0, 1000 };;
"MPI_Ssend-END" { 1096473651, 950485, 0, 0 };;
"MPI_Recv-START" { 1096473651, 950496, 0, 1, 0 };;
"MPI_Ssend-START" { 1096473652, 259451, 1, 0, 0, 100 };;
"MPI_Recv-END" { 1096473652, 307539, 0, 0, 100 };;
"MPI_Barrier-START" { 1096473652, 307583, 0 };;
.....
```

The output file corresponding to loki01.ific.uv.es, “outputfile.0” contains the following:

```
5912: Program Started
MPI initialized
OCMG registered
Hello from 0 of 2
0: Send_volume =      660 B/s
0: Recv_volume =       66 B/s
0: Recv_delay =  27.038 %
0: Send_volume =      769 B/s
0: Recv_volume =       77 B/s
0: Recv_delay =  32.043 %
0: Send_volume =      718 B/s
0: Recv_volume =       72 B/s
0: Recv_delay =  28.233 %
0: Send_volume =      711 B/s
0: Recv_volume =       71 B/s
0: Recv_delay =  26.057 %
0: Send_volume =      553 B/s
0: Recv_volume =       55 B/s
0: Recv_delay =  23.000 %
0: Send_volume =      769 B/s
0: Recv_volume =       77 B/s
0: Recv_delay =  31.533 %
0: Send_volume =      779 B/s
0: Recv_volume =       78 B/s
0: Recv_delay =  30.671 %
0: Send_volume =      615 B/s
0: Recv_volume =       77 B/s
0: Recv_delay =  32.043 %
```

The output file corresponding to loki01.ific.uv.es, “outputfile.1” contains the following:

```
25927: Program Started
MPI initialized
Parsing: Main SM conn. is:

 939ca3a0:4e20

authorization callback: peer identity: /C=ES/O=DATAGRID-ES/O=IFIC/CN=Santiago Gonzalez
de la Hoz
LM: SITE CE IS: loki01.ific.uv.es

Site SM is at 939ca39f:4e3c ...connecting...

gsi_displayConnections:
Connections in the queue:
mid      pid      type      mess. part      peer addr      peer name

authorization callback: peer identity: /C=ES/O=DATAGRID-ES/O=IFIC/CN=Santiago Gonzalez
de la Hoz
[ic]      fifo fd: 10
*** Process 1 (pid 25927) of application 'app' registered at 'loki01.ific.uv.es'!
*** Process 0 (pid 25912) of application 'app' registered at 'loki01.ific.uv.es'!
OCMG registered
Hello from 1 of 2
```

The output file corresponding to loki04.ific.uv.es and loki05.ific.uv.es, “outputfile.0” contains the following:

```
*** Process 0 (pid 27987) of application 'app' registered at 'loki06.ific.uv.es'!  
*** Process 1 (pid 30547) of application 'app' registered at 'loki04.ific.uv.es'!  
OCMG registered  
Hello from 1 of 2  
OCMG registered  
Hello from 0 of 2  
0: Send_volume = 988 B/s  
0: Recv_volume = 99 B/s  
0: Revc_delay = 29.822 %  
0: Send_volume = 928 B/s  
0: Recv_volume = 93 B/s  
0: Revc_delay = 33.130 %  
0: Send_volume = 893 B/s  
0: Recv_volume = 89 B/s  
0: Revc_delay = 36.576 %  
0: Send_volume = 818 B/s  
0: Recv_volume = 82 B/s  
0: Revc_delay = 24.686 %  
0: Send_volume = 667 B/s  
0: Recv_volume = 67 B/s  
0: Revc_delay = 49.878 %  
0: Send_volume = 909 B/s  
0: Recv_volume = 91 B/s  
0: Revc_delay = 35.437 %  
0: Send_volume = 825 B/s
```

In both cases, the perl script, check_trace.pl, was invoked in order to check that the trace file is OK.

```
[sgonzale@loki02]# ./check_trace.pl trace  
trace file is consistent  
2 processes in trace file (VERIFY THIS!)  
10 passes in trace file (VERIFY THIS!)
```

The number of processes and the number of passes printed by the script correspond to the values specified in the tracer tool and in the ping.c application.

In either test, the “cg-ocmg-monitor” and the “cg-ocmg-tracer” terminate after the application has finished running. In the window where cg-ocmg-monitor has been started, some messages are printed after cg-ocmg-monitor has terminated. Just press RETURN and you get a shell prompt and the program really terminated. The application printed a couple of warnings when it terminates; this is not an error.

2.5.3. Stress tests

The stress test would involve a large number of WNs 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 OCM-G depends are distributed by CrossGrid, see section 2.1 for more details.

2.7. SECURITY AND NETWORKING

As far as we know, the libraries on which the OCM-G tool depends don’t have any security issues.

The SM tool has to be run from a user account in the UI with a previously created proxy, since the communications are performed through the Globus IO libraries including GSS security.

No security issues were found.

2.8. PREVIOUSLY REPORTED ISSUES

This was the third version to be tested [5].

According to software issue001:

This has been solved. Dependencies on mpich-p4 and mpich-g2 have been added to RPM file cg-wp3.3-ocmg-libmpich-1.9.2-1.i386.rpm

According to software issue002:

This has been solved. A new RPM called cg-wp3.3-ocmg-libmpich-1.9.2-1.i386.rpm has been provided. This makes unnecessary to run a post installation script to create the instrumented mpich libraries and permits a pure binary distribution.

According to software issue003:

This hasn’t been solved.

According to documentation issue001:

Since last review the installation guide has been improved. A simple procedure to test the successful installation of the OCM-G has been provided. On the other hand, a formal User Guide should be written inside CrossGrid documentation.

3. ISSUES FOUND

3.1. ISSUES FOUND IN THE SOFTWARE

3.1.1. Issue 001 bugs #479

(Severity: medium Priority: medium)

Bug tracker reference:

http://savannah.fzk.de/bugs/?func=detailitem&item_id=479

Port number of the Service Manager does not seem to be configurable.

3.2. ISSUES FOUND IN THE DOCUMENTATION

3.2.1. Issue 001 bugs #480

(Severity: medium Priority: high)

Bug tracker reference:

http://savannah.fzk.de/bugs/?func=detailitem&item_id=480

An installation guide has been written which explain how obtain the software, the packages dependencies and the software, services and tools configuration and an simple procedure to test the OCM-G packages.

A README file can be found in the CVS repository and it describes a simple procedure to test successful installation of OCM-G packages.

No “User Manual” was provided. A formal and complete User Guide should be written and available for the CrossGrid collaboration.

4. RECOMMENDATION

It would be desirable that a formal User manual would be written at this state of the project.

Recommendation for the Crossgrid ITEAM is to deploy the packages cg-wp3.3-ocmg-1.9.2-1, cg-wp3.3-ocmg-libmpich-1.9.2-1 and cg-wp3.3-ocmg-app-devel-1.9.2-1 in the testbed in the Computing Element, Worker Nodes and User Interfaces.

5. REFERENCES

- [1] <http://www.eu-crossgrid.org/m6-drafts-login/M24deliverables-drafts/CG3.0-D3.5-v1.0-PSNC010-Proto2Status.doc>.
- [2] OCM-G Grid-enable OMIS-Compliant Monitoring System. Installation Guide. <http://www.icsr.agh.edu.pl/ocmg/>.
- [3] <http://www.icsr.agh.edu.pl/ocmg>.
- [4] OCM-G Test and Validation Report, CG-4.4-REP-v1.1-LIP102-OCM-G. http://www.lip.pt/computing/projects/crossgrid/task4/softvalidation/107659095358.6653977007703/CG-4.4-REP-v1.1-LIP102-OCMG_TestReport.pdf
- [5] OCM-G Test and Validation Report, CG-4.4-REP-v2.0-CSIC015-OCMG-Testreport. <http://www.lip.pt/computing/projects/crossgrid/task4/softvalidation/108939511633.9158014002354/CG-4.4-REP-v2.0-CSIC015-OCM-TestReport.pdf>

6. INTEGRATION/VALIDATION REQUEST

Request id : 10946321096.10091861608488

Request date : 08/Sep/2004

COMPONENT:

- Component name : OCM-G

- Component version : 1.9.2

- Request priority : 2

- Package description :

OCM-G application monitoring system with multi-site support

CODE:

- Source code in X# CVS : Y

- Autobuild generates RPMs : Y

- Software URL : sources from CVS or autobuild rpms

- List of RPMs produced :

cg-wp3.3-ocmg-app-devel-1.9.2-1 (ocmg-devel)

cg-wp3.3-ocmg-libmpich-1.9.2-1 (ocmg-mpich)

cg-wp3.3-ocmg-1.9.2-1 (ocmg-runtime)

CHANGES:

- List of bugs fixed :

Among others, issues mentioned in the previous report were addressed.

- Backwards compatibility :

DOCUMENTATION:

- Installation manual URL : <http://www.icsr.agh.edu.pl/ocmg>

- Users manual URL :

- Development manual URL :

- Soft requirements URL :

- Soft design URL :

FILES:

- List of config files :

- List of log files :

- List of LCFG config obj :

- List of daemons :

- List of init.d scripts :

DEPLOYMENT:

- Machine types and packages:

UI - ocmg-devel, ocmg-mpich

WN - ocmg-runtime

CE - ocmg-runtime

- Component dependencies :
- globus_io on all
- mpich on devel-machine (UI)
- Service credentials :
- Service ports :
- Who comm. with the service:

Tool communicates from outside to Main Service Manager which can on UI or locally

- Service ports range :

MainSM -- inbound, within GLOBUS_TCP_PORT_RANGE. By default, MainSM is executed automatically on CE.

TEST AND VALIDATION:

- Unit tests performed :
- Features to test :

Refer to installation guide, Section 4.

- Features not to test :
- Test download URL : <http://www.crossgrid.org>

OTHER CONSIDERATIONS :

CONTACTS:

- Requester name : Bartosz Balis
- Requester wp : WP3
- Requester task : WP3.3.1
- Requester partner : CYFRONET
- Requester email : balis@agh.edu.pl
- Developer name : Bartosz Balis
- Developer project : crossgrid
- Developer wp : WP3
- Developer task : WP3.3.1
- Developer partner : CYFRONET
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