

EDGeS

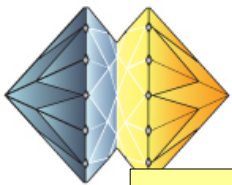
How to connect your SG system to EDGeS?

**Joint EGEE and EDGeS Summer School
on Grid Application Support**

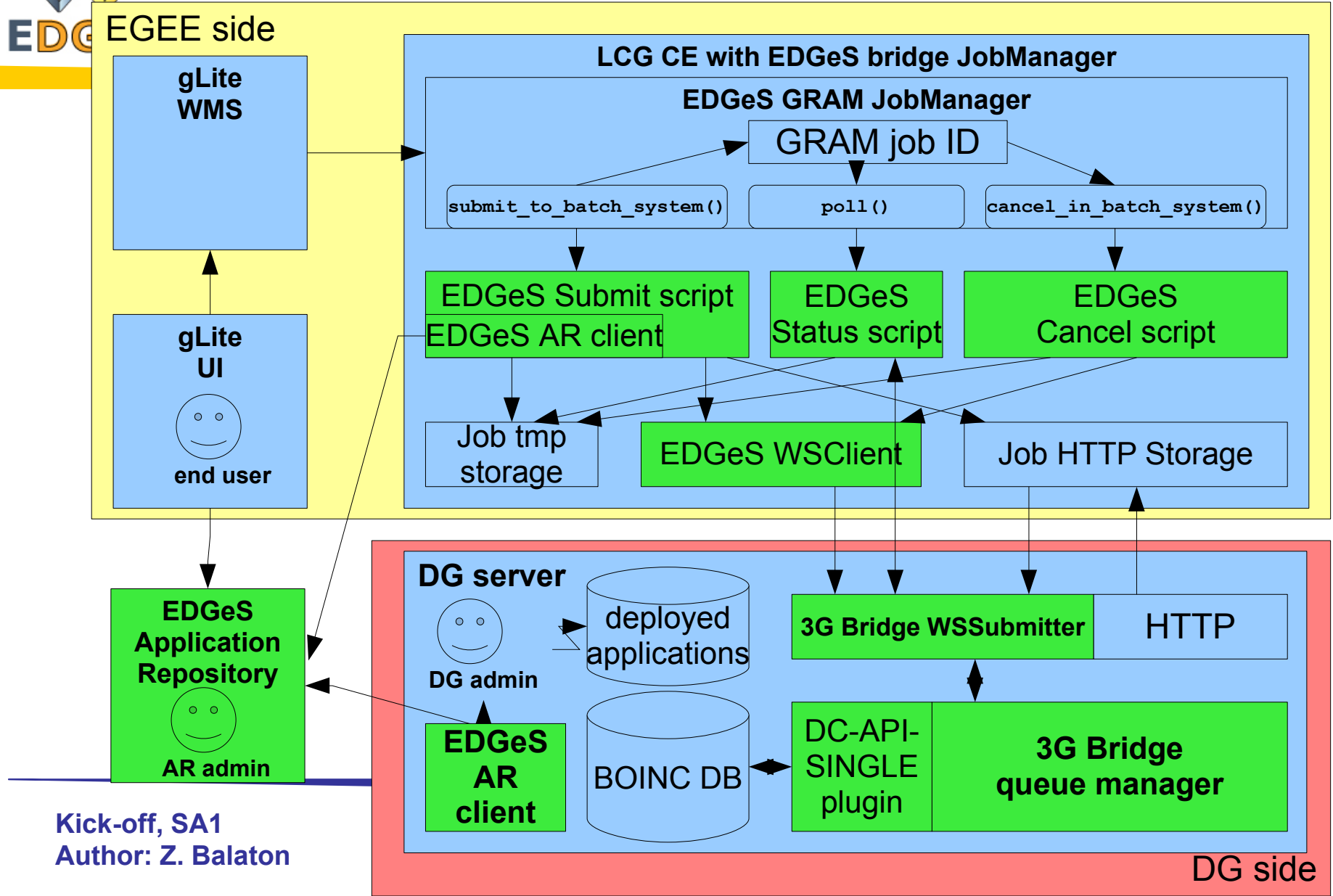


How to connect your SG system to EDGeS?

- This is about setting up the EGEE⇒DG bridge
- The title assumes user view (i.e. you want your jobs in your SG to go to DGs in EDGeS)
- From the admin view it requires more work from the DG admin and may look more like adding DGs to an SG, but don't get confused by this
- In this session you will prepare your DG set up earlier to accept EGEE jobs (as a DG admin)
- Will only show the EGEE side



The Big Picture



What can be bridged?

- Let there be a validated version of an application in the AR with executables for EGEE and different DG systems (and on DGs for different platforms)
- This application (the client part) is deployed on a DG that is connected to the bridge and this DG is registered in the AR as supporting the application
- An EGEE VO is also registered in the AR as an allowed source of jobs for this application



How does bridging work?

- When a job is submitted to an EDGeS bridge CE it checks the following:
 - Executable matches the one in the AR for the source VO by MD5 hash
 - 1.The source VO must be allowed
 - 2.The application executable must be allowed
 - The target DG is registered as supporting the application (the DG version is deployed there)
- If the above are true the job is bridged
if false then the job is rejected



What needs to be set up?

- On the DG side:
 - 3g-bridge queue manager
 - 3g-bridge wssubmitter service
- To get applications from the AR to be installed locally and to register installed applications:
 - gemlcacli and gridftp clients
- On the EGEE side
 - An lcg-CE with edges-BRIDGE
- Connecting the EGEE CE to the wssubmitter(s)

How to do it?

- You will do the DG side only now on your DG server (vm1xx.terem)
- You should be able to do it with the help of the grid deployment page for admins at:

http://intraweb.edges-grid.eu/public/grid_deployment/

- On this page follow this link:
“Preparing a desktop grid to accept EGEE jobs”

Cheat Sheet

1. Checking prerequisites:

- MySQL, glib, BOINC and DC-API are OK
- xsltproc and stylesheets can be skipped (we don't change documentation so no need to rebuild it)
- you can get curl with apt-get install libcurl3-dev
- gsoap is not met (Read the note! We are “living on the Etch”. ☺)
this must be installed by hand from source:
configure --prefix=\$HOME; make; make install
but doing this you will find that it will fail unless you
install what it hints (but not explicitly tells):
apt-get install flex bison make g++ bzip2

Cheat Sheet

- Compiling the 3g-bridge and creating the master package

The right configure command is:

```
configure --prefix=$HOME  
--with-gsoap=$HOME  
--with-dcapi
```

Then:

```
make; make install; make package
```

But first:

```
apt-get install libmysql++-dev libglib2.0-dev uuid-dev  
libdcapi-boinc-dev
```

(errors about mmap can be safely ignored on vm1xx)

Cheat Sheet

- Config files to be modified are in
/var/lib/boinc/sample/master/3g-bridge
- Make sure you set everything correctly
- Don't forget to setup your database
- Don't forget to change apache2 config and reload it
Alias /sample/ws-upload
/var/lib/boinc/sample/master/3g-bridge/ws-upload