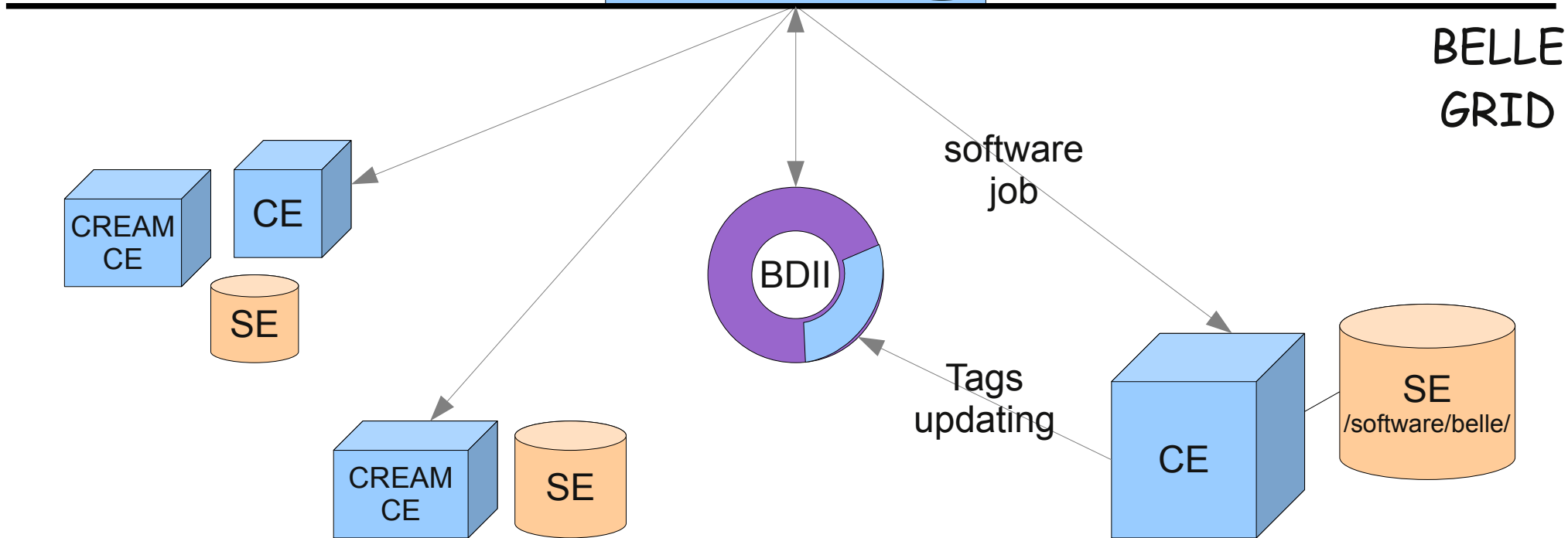
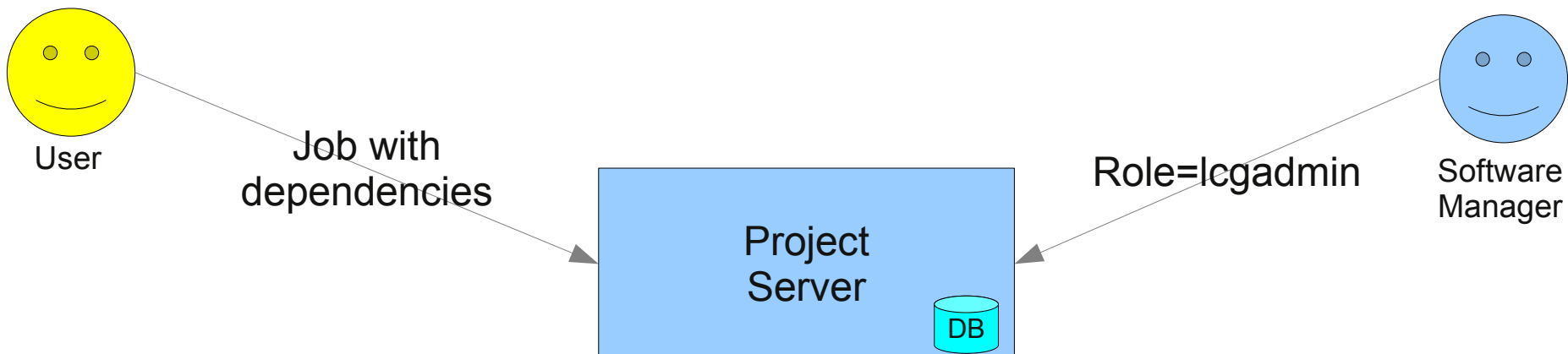
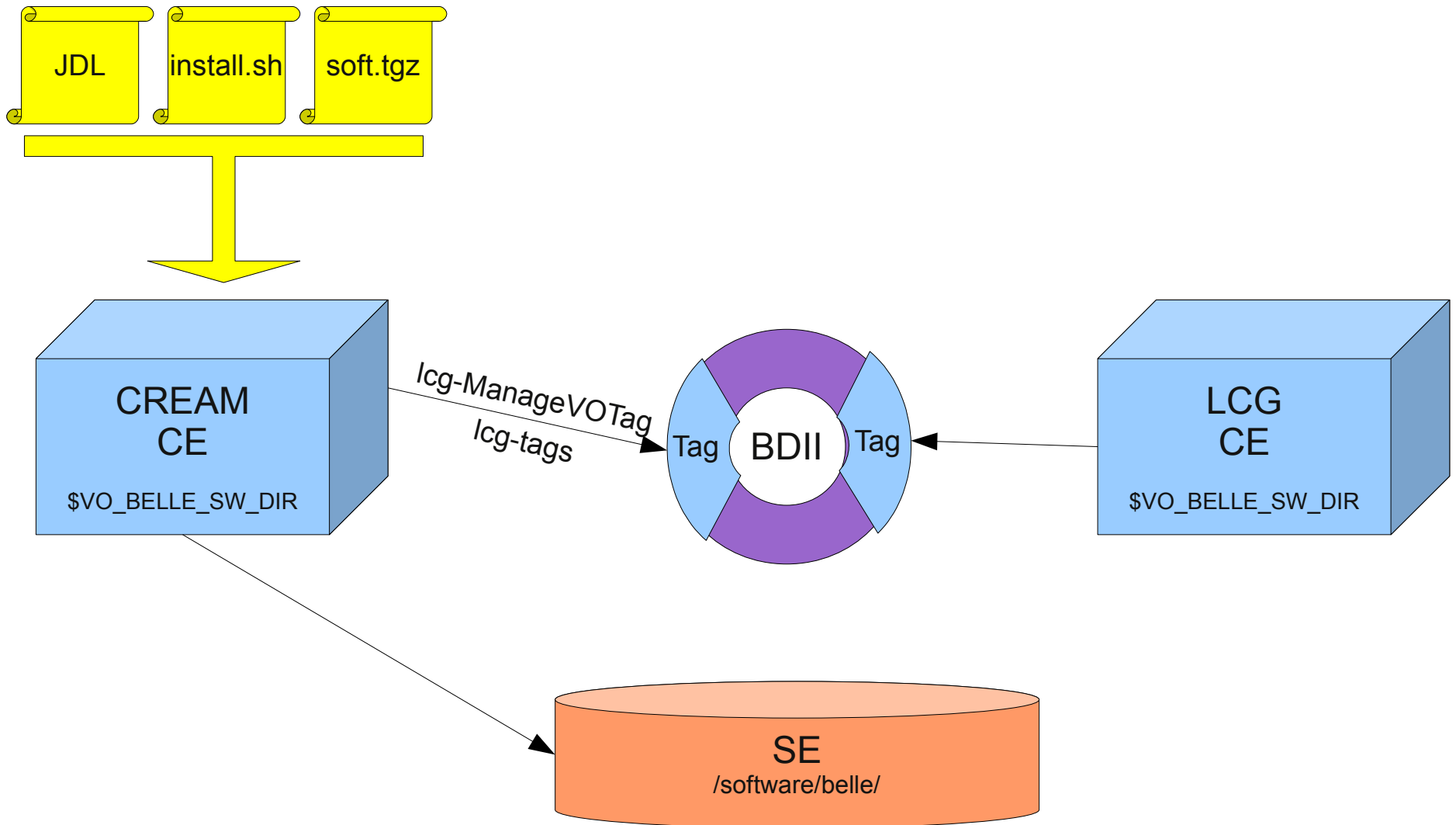


GRID Software management for the Belle II

Rafał Grzymkowski
Kraków, IFJ PAN

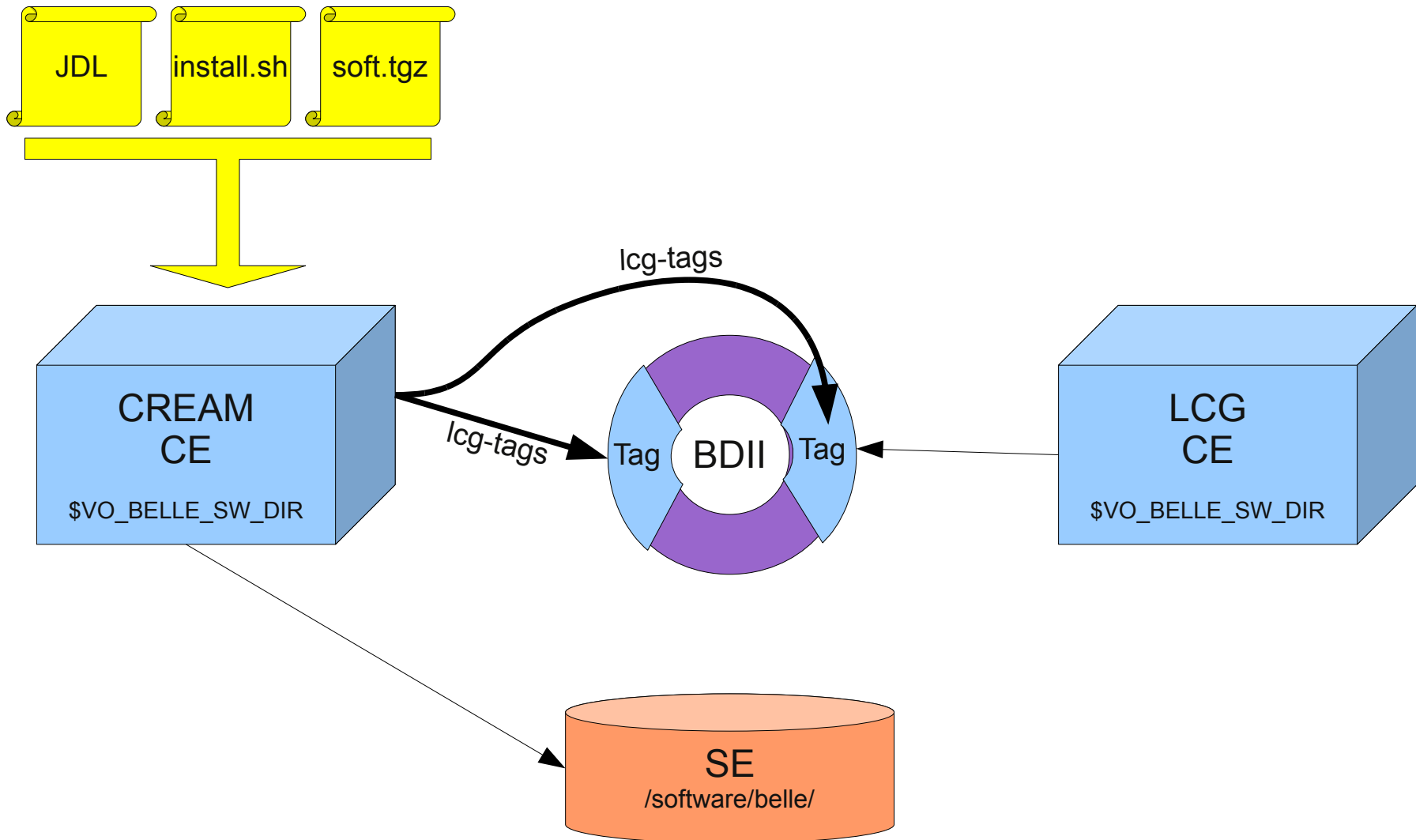


Software installation in Grid



Software installation in Grid

(full tag propagation to site BDII)



GLUE schema in BDII

GlueSubCluster object

GlueHostApplicationSoftwareRunTimeEnvironment attribute which is a multivalued string with installed software tags in the format VO-<vo>-<sw name version>

GlueLocation object - deprecated in GLUE 1.3 - but we still using it :)

GlueSoftware object (new in GLUE 1.3 - but it's still not in use)

When we adopt Glue 2 into BDII?

Grid for Belle

14 June 2010

SITE	CE	Cluster Info
FZK-LCG2 /grid/fzk.de/mounts/nfs/software/belle/lcg2	ce-2-fzk.gridka.de ce-3-fzk.gridka.de ce-4-fzk.gridka.de cream-1-fzk.gridka.de CREAM cream-2-fzk.gridka.de CREAM cream-3-fzk.gridka.de CREAM	SL 5.3 SL 5.3 SL 5.3 SL 5.3 SL 5.3 SL 5.3 <i>full software tag propagation</i>
JP-KEK-CRC-02 /opt/exp_soft/belle	kek2-ce01.cc.kek.jp kek2-ce03.cc.kek.jp kek2-ce04.cc.kek.jp kek2-ce05.cc.kek.jp kek2-ce06.cc.kek.jp	RH Enter. AS 4 SL 5.3 SL 5.3 SL 4.8 SL 4.8
Australia-ATLAS /opt/exp_soft/SL5/belle	agh2.atlas.unimelb.edu.au agh5.atlas.unimelb.edu.au CREAM	SL 5.4 / Roles: lcgadmin, production SL 5.4 / Roles: lcgadmin, production
SiGNET /net/pikolit/d0/nfs/grid/lcgsoft/belle	lcgce.ijs.si creamce.ijs.si CREAM	SL 5.4 / Roles: lcgadmin, production SL 5.4 / Roles: lcgadmin, production
PRAGUE_CESNET_LCG2 /home/_vo_software/belle	ce1.egee.cesnet.cz ce2.egee.cesnet.cz	SL 5.2 SL 5.2
CYFRONET-LCG2 /software/sl4/belle	ce.cyf-kr.edu.pl	SL 4.7
MPPMU /t2/sw/vo/belle	grid-lcgce.rzg.mpg.de	SUSE 10
KR-KISTI-GCRT-01 /opt/exp_soft/belle	ce-alice.sdfarm.kr ce02.sdfarm.kr	SL 4.6 SL 5.2

How other VOs are installing software?

2008

Geant4 - lcg-ManageVO Tag to add software tags

CMS - perl script generates JDL
- lcg-tags to add software tags

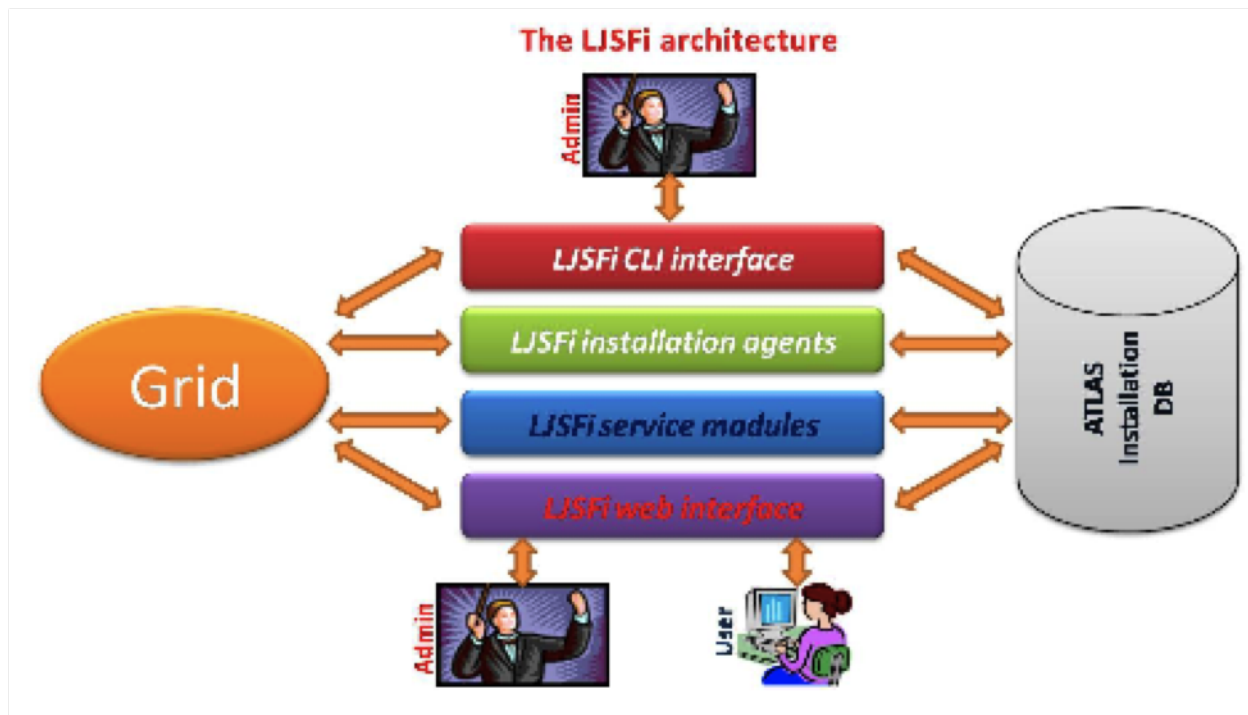
LHCb - SAM jobs run at all sites and install and validate software if it is missing. They subsequently add or remove software tag depending on the validation status. The validation tests are running continuously via SAM. lcg-ManageVO Tag to add software tags

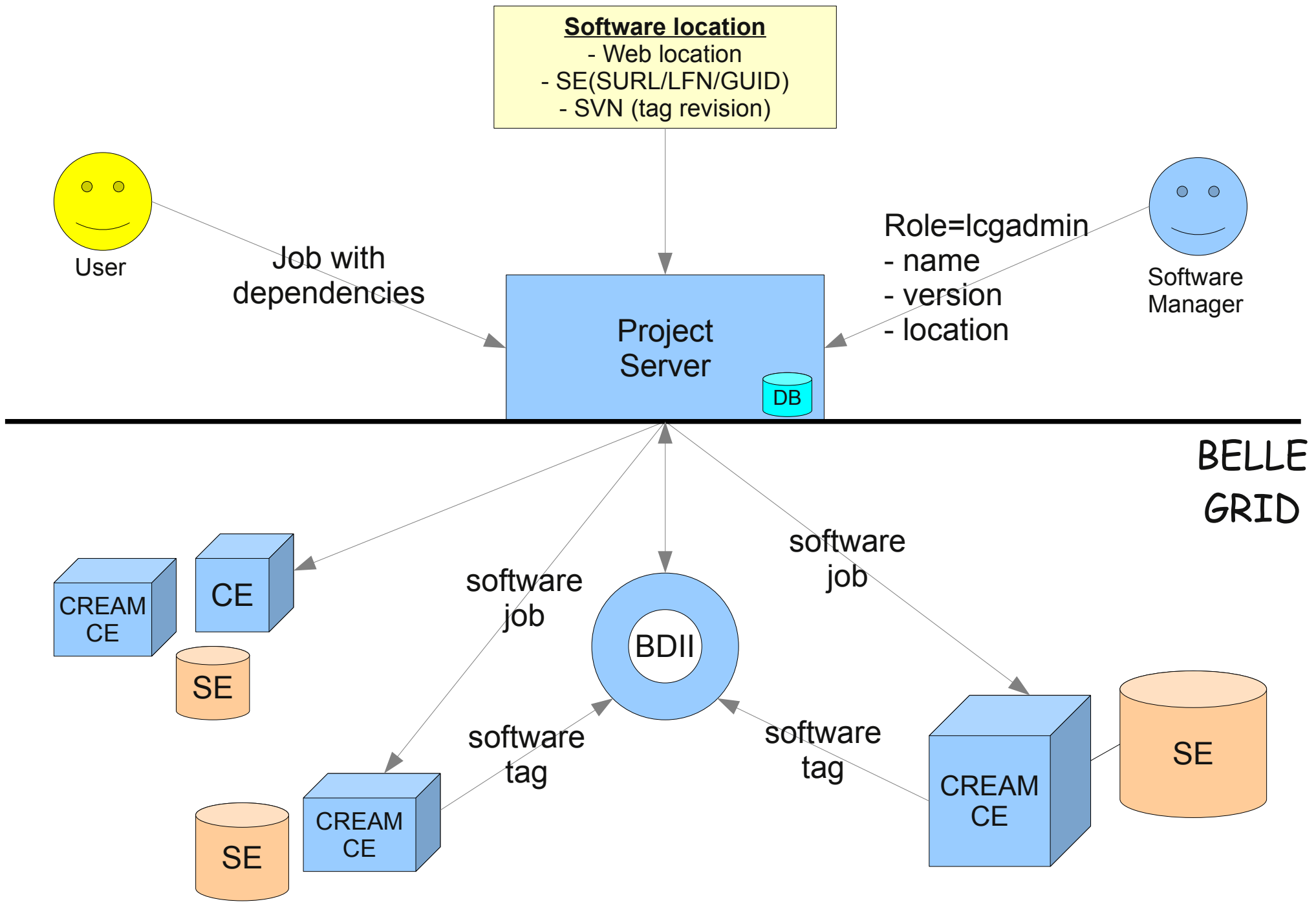
ATLAS - framework LJSFi (next slide)
- lcg-tags to add software tags

LJSFI

(Light Job Submission Framework for Installation)

- BELLE II TDR 4.2 Code Management (TDR Review 12.3)
- requirements: PHP, MySQL, Apache
- don't provide CREAM agent's submission :(
- The proxy renewal mechanism doesn't work :(
- Automatic deployment in all sites supporting the VO is not working :(





Summary

- Waiting for the *GLUE 2* adoption
- Special *VOMS* Role for the software manager ?
- My scripts is using *CREAM* CEs to install software what is more efficiently than using *gLite's WMS*. Information about software management will be stored in bookkeeping database on Project Server.
Idea with additional states of software tags
(processing-install, processing-remove, processing-validate)