



Development server



- `bbrbuild01.cr.cnafe.infn.it`
 - `/opt/dirac/pro/SuperBDIRAC.<developer_name>`
- Guidelines for development
 - http://mailman.fe.infn.it/superbwiki/index.php/Dirac_testbed/SuperBDIRAC#Guidelines_for_SuperBDIRAC_developers
 - Please, suggest improvements in development guidelines
- Perform by hand commits on repo
 - Script to automatize procedure not yet ready



SuperBDIRAC report



- Latest version: SuperBDIRAC v0-pre2
- SimulationProductionSystem
 - for Simulation Production
 - SBKService running
- TestingSystem
 - free to use for experiments :)
 - Dummy Service SimpleMessage
 - Dummy Agent SimplestAgent
 - Dummy Web page Testing Menu

Sites Overview

draft

Site Overview

site	grid flavor	Site available	CE available	SE available	Worker Node OS	Architecture	FastSim enabled	FastSim supported	FullSim enabled	FullSim supported
CIT-HEP	OSG	from GridmonDB	from GridmonDB	from GridmonDB						
INFN-BARI	EGI	from GridmonDB	from GridmonDB	from GridmonDB						
CYFRONET-LCG2	EGI	from GridmonDB	from GridmonDB	from GridmonDB						

Sites Overview

functionalities

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Only a summary
Actions only via site details page

Sites Overview

actions

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Click on site name to enter site details page

Sites Overview

technical details

Site Overview

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sbk5

Table: site
Field: site

Sites Overview

technical details

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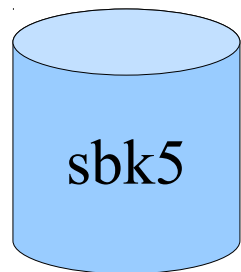


Table: site
Field: grid_flavor

Sites Overview

technical details

To define...

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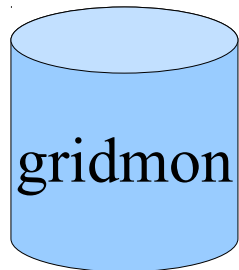


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Sites Overview

technical details

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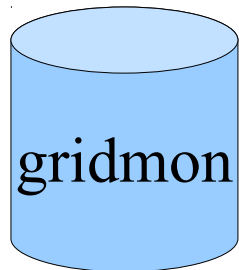


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Sites Overview

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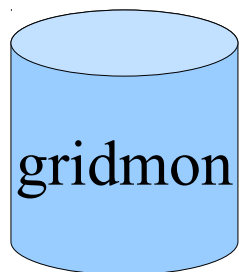


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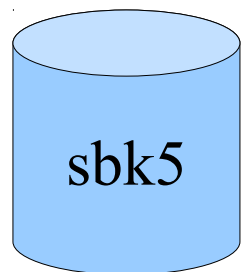


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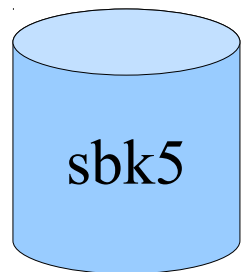


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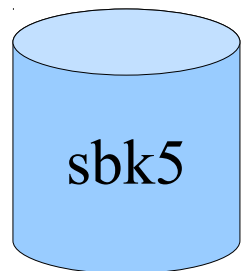


Table: session_site
Field: enabled

Sites Overview

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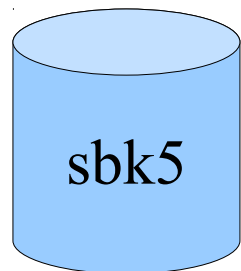


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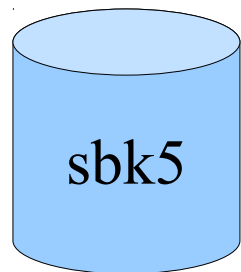


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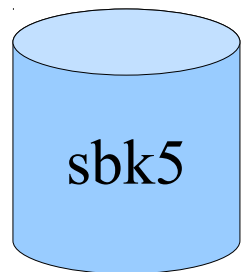


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Next meeting reminder



- SuperBDIRAC meeting
 - 20 December 2012 on Skype
- SuperB Collaboration Meeting @ Frascati
 - <https://agenda.infn.it/conferenceDisplay.py?ovw=True&confId=4442>
 - 10-14 December 2012
 - Participants:
 - **Armando** **confirmed**
 - **Bruno** **confirmed**
 - **Cristian** **confirmed**
 - **Giacinto** **confirmed**
 - **Marcin** **confirmed**
 - **Mylosz** **not participate**
 - **Rafal** **not sure**



Discussion time



- Proposal ?
- Suggestion ?
- Something not clear ?



BACKUP SLIDES



SuperBDIRAC module installation status



- `bbrbuild01.cr.cnaf.infn.it`
 - Production
- `sb-serv04.cr.cnaf.infn.it`
 - Development
- `gridtest-05.ba.infn.it`
 - Installation procedure test



SuperB DIRAC shared development



- /opt/dirac/pro
 - SuperB DIRAC.main
 - SuperB DIRAC.bruno
 - SuperB DIRAC.mylosz
 - SuperB DIRAC.marcin
 - SuperB DIRAC.rafal
- Symbolic link
 - SuperB DIRAC → SuperB DIRAC.main (for example)
- Working directly on sb-serv04
- Update SVN directly from sb-serv04



SVN usage



- Now, only sb-serv04 should be used for development purposes
 - If needed, also bbrbuild01 can be used for same task
 - especially when new DIRAC head node will be available
- `svn co https://sbrepo.pd.infn.it:8910/WebUi/trunk/DIRAC`
- `svn commit -m "Update from git release"`
- `svn push`
- SVN now available on sb-serv04 (thanks to Armando)



SVN usage improvements



- <https://sbrepo.pd.infn.it:8910/WebUi/trunk/DIRAC/SuperBDIRAC>
- Introduce trunk, tags and branches (one branch foreach developer
- .../SuperBDIRAC/trunk
- .../SuperBDIRAC/tags/<tagged_release>
- .../SuperBDIRAC/branches/<bruno|mylosz|rafal|marcin>
- Sync (automatically or via script) personal branches with personal SuperBDIRAC version
 - See previous slide



SuperBDIRAC status



- SuperBDIRAC installed and usable
 - New system defined: SimulationProductionSystem
 - Dummy service tested
- Now we can place all our code in proper places under SuperBDIRAC
- VMDIRAC properly installed
 - Together to SuperBDIRAC (SuperBDIRAC doesn't depends by VMDIRAC)
 - If occi or amazon cloud resources available, we can test job submssion to cloud



SimulationProductionSystem



- Easy to configure, transparent usage
- We can start using Mylosz code to create a working service (named SBKAlchemy ?)
 - To return site's data
 - Info needed to create Site Management webpage



Task assignement proposal



- Bruno
 - Solve repo troubles
 - Complete Severus porting under DIRAC
- Mylosz
 - Prepare a working service
 - To return Site's list
- Marcin, Rafal
 - Webpage to diplay site's list (taking data from Mylosz's service)
 - Permission management:
 - The same page (site's list) but adding an “edit” button foreach site
 - Page should be availble only for sb_productionmanager members



Credits



- Armando Fella – Pisa
- Bruno Santeramo – Bari
- Christian De Santis - Rome
- Giacinto Donvito - Bari
- Marcin Chrzaszcz - Kracow
- Miłosz Zdybał - Kracow
- Rafał Grzymkowski - Kracow

Thanks to DIRAC developers, expecially to
Andrei Tsaregorodtsev, Federico Stagni, Matvey Sapunov,
Krzysztof Daniel Ciba, Ricardo Graciani, Adrian Casajus



Groups



Groups and Role in VO and DIRAC

Group/Role	Type	Description	VO share	DIRAC mapping
/superbvo.org	Standard User	Generic user group	0	sb_user
/superbvo.org/Role=ProductionManager	Production Manager	User role related to MC production management	20	sb_productionmanager
/superbvo.org/Role=SoftwareManager	Software Manager	VO Software administrator	0	sb_softwaremanager
/superbvo.org/Role=Analysis	Standard User	User role related to analysis task	0	sb_analysis
	DIRAC administrator	DIRAC administrator		dirac_admin
	DIRAC pilot job	Useful for DIRAC		sb_pilot



Collaborative tools update



- SVN: <https://sbrepo.pd.infn.it:8911/projects/WebUi/browser/trunk/DIRAC>
 - Uploaded SuperBDIRAC module
 - Uploaded Severus (modified to work with DIRAC)

- Severus/version24/modules/fileManager.py
 - Line 109
 - Original
 - *out = self.lcgUtil.lfcLs(path)*
 - Modified
 - *out = self.lcgUtils.lcgLs(path)*
 - Why?: Workaround because surl starting with lfn:/ supposed to be accessed from CNAF (so Severus drop initial lfn:/ from surl and try to access input file locally)

- DIRAC job wrapper install its own python environment
 - Python version 2.6.6
- Severus tested to work with Python 2.4
 - Severus perform an intial python version check
 - Version24 directory contains all components
- Proposal
 - Test modified Severus with Python 2.6
 - New code under version26 directory
 - Modify severus.py to enable Python 2.6 usage



MC production via SuperBDIRAC



- SBK5 queries to be prepared - via SQLAlchemy and/or REST interface
 - SELECT count(runnum) as tot FROM "<session_name>"_Job " WHERE (prod_series = '<prod_series>') AND (runnum BETWEEN "<minrun>" AND "<maxrun>") AND (status!='prepared');
 - SELECT * FROM "<session_name>"_Job " WHERE (prod_series = '<prod_series>') AND runnum = '<runnum>';
 - UPDATE "<session_name>"_Job SET grid_job_id = "<job_id>", status = 'submitted', ts_submitted = cast(now) as timestamp(0) WHERE prod_series = '<prod_series>' AND runnum = "<runnum>" AND status = 'prepared';
 - UPDATE "<session_name>"_Submission SET bulk_job_id || ('<site>' => '<bulk_job_id>') WHERE uid = '<uid>' AND ts_prepared = '<timestamp>';



MC production via SuperBDIRAC



- Issue: SuperBDIRAC/ProductionSystem need to interact with SBK5
 - N.B. Now Severus can be properly launched only from CNAF (?)
 - SBK5 psql-like access only from CNAF
 - SBK5 access outside CNAF only via REST interface
 - Solution proposal:
 - Create a Service (temporary named SBK5Service) into SuperBDIRAC to cope (all?) SBK5 queries
 - Each site equipped with a DIRAC server and SBK5Service must be able to directly query SBK5
 - Enhance SBK5 REST interface by adding some views to simply perform needed queries from every DIRAC Server Instance
 - No changes to SBK5 access policy

- DIRAC webportal must replicate all WebUI features
- DIRAC/WebUI operations
 - Production creation → write
 - Production data retrieve → read
 - Request creation → write
 - Request data retrieve → read
 - Bulk job creation → write
 - Bulk job submission → read data for Severus
- Severus job wrapper
 - Job status report → write
 - Job Log registration → write



DIRAC API



- DIRAC offers a powerful set of API
 - We need a good quality documentation to speed up development
- API documentation
 - <http://diracgrid.org/files/docs/CodeDocumentation/API/index.html>
 - Epydoc generated – updated – maintained by developers



Useful links



- **DIRAC official site**
 - <http://diracgrid.org/>
- **DIRAC official forum**
 - <https://groups.google.com/forum/?hl=en&fromgroups#!forum/diracgrid-forum>
- **DIRAC repository**
 - <https://github.com/DIRACGrid>
- **DIRAC API documentation**
 - <http://diracgrid.org/files/docs/CodeDocumentation/API/index.html>
- **DIRAC testbed for SuperB wiki page**
 - http://mailman.fe.infn.it/superbwiki/index.php/Distributed_Computing/Dirac_testbed
- **DIRAC testbed webportals:**
 - bbrbuild01.cr.cnaf.infn.it
 - <https://bbrbuild01.cr.cnaf.infn.it:8443/DIRAC/>
 - sb-serv04.cr.cnaf.infn.it
 - <https://sb-serv04.cr.cnaf.infn.it:8443/DIRAC/>
- **Production WebUI**
 - https://bbr-serv09.cr.cnaf.infn.it:8443/~webui_sb5/
- **SuperB resources (google Doc)**
 - <https://docs.google.com/spreadsheet/ccc?key=0AsjxRpEZ2zEIIdHU2cjh4YTdrajdYdlNmajdBVGZWLWc#gid=0>
- **SuperB Production Shifter Guide wiki page**
 - http://mailman.fe.infn.it/superbwiki/index.php/Distributed_Computing/Production_Shift_Guide

WebUI workflow

