

The GridPP DIRAC project: Implementation of a multi-VO DIRAC service

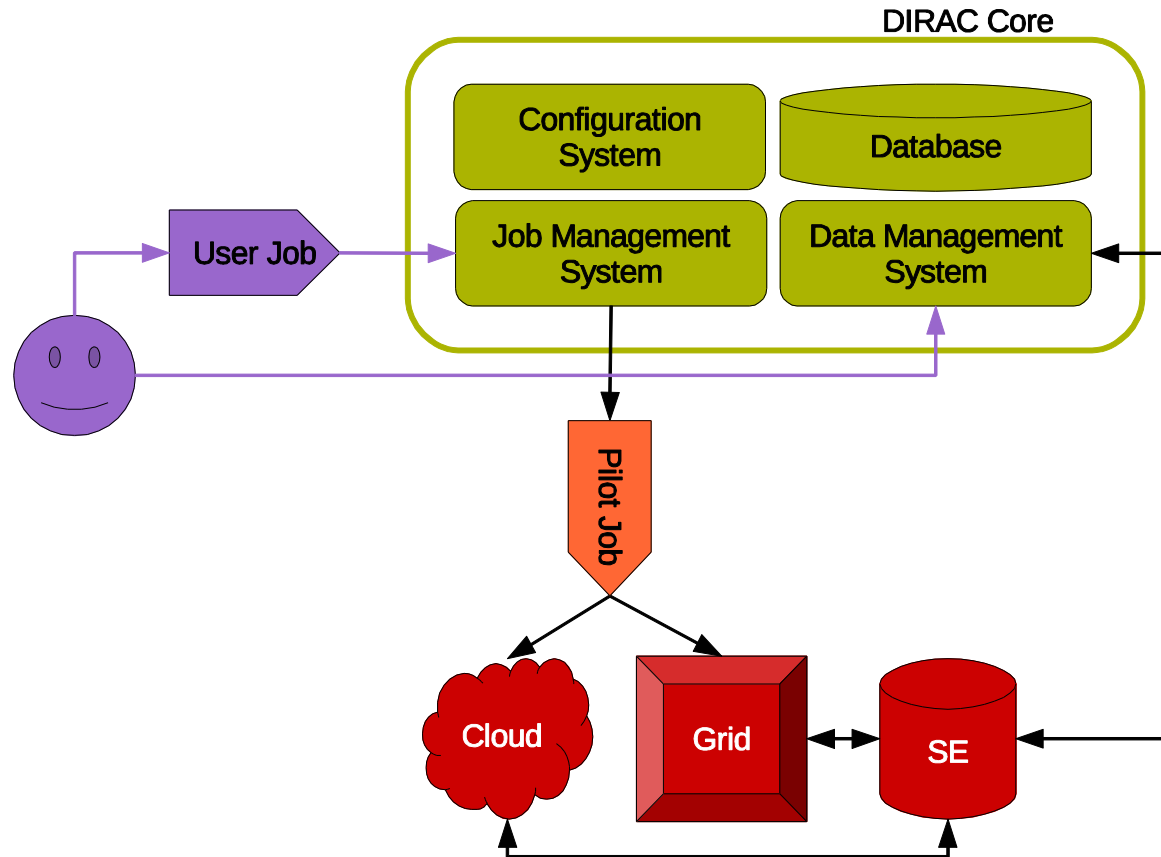
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Overview

- Introduction to multi-VO DIRAC.
- GridPP DIRAC module.
- Actual Implementation.
- Conclusions.

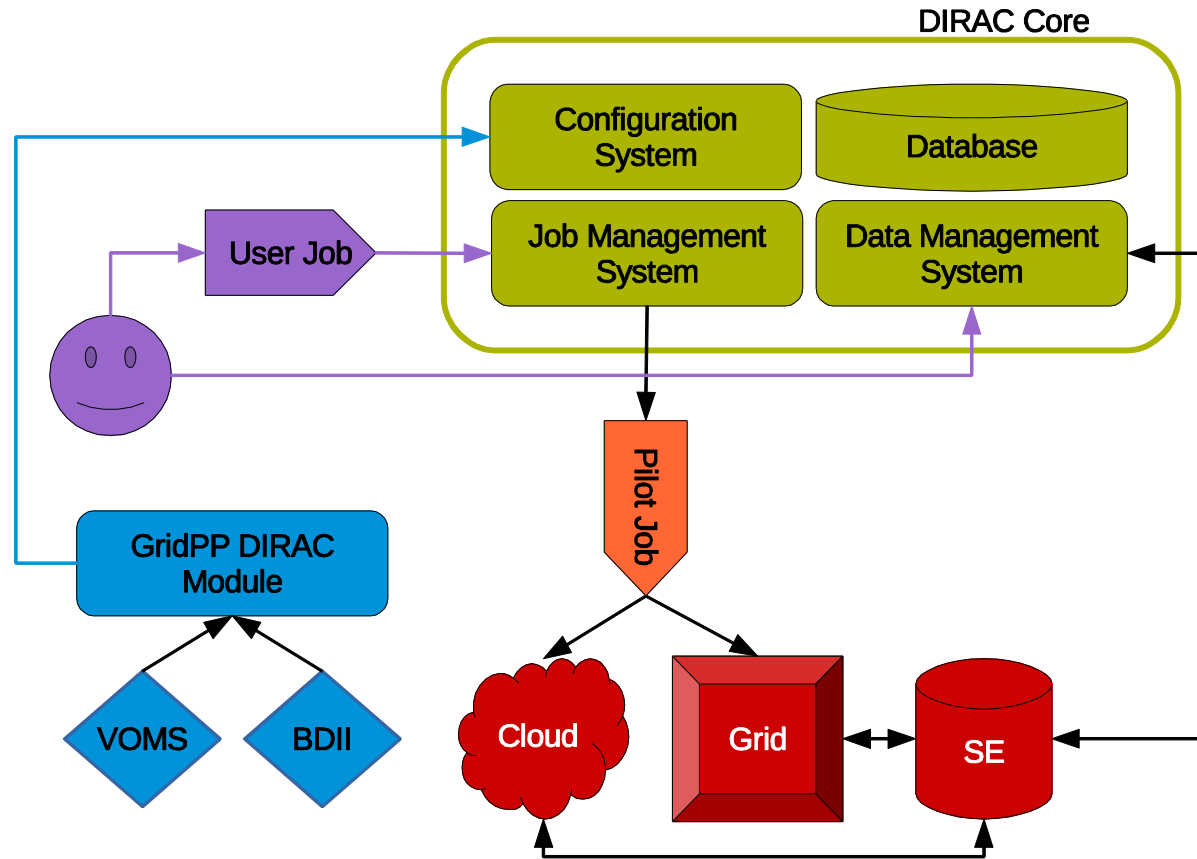
Introduction to DIRAC



Multi-VO Issues

- Based on our experience of running a multi-VO DIRAC server with the generic DIRAC version (See our related talk by J. Martyniak from Monday).
- Maintenance effort quickly scaled by number of VOs supported – Too much manual intervention:
 - SE Paths
 - Manual User Creation
 - VO creation prone to errors

GridPP DIRAC



Users & Groups Agent

The Users and Groups agent fetches user lists from the VOMS server and adds them to the DIRAC authentication DB.

Multi-VO modifications:

- Multiple VOMS Servers (one per VO)
- Extended for multiple VOMS Roles -> Group Mappings

AutoBDII2CS Agent

DIRAC base agent searches the BDII for all CE and SE resources and e-mails the admin with any of these that are not yet configured.

- Fully Automated Adding of Resources.
- Deals with multiple SEs and creates a path mapping section for each one.
- Ignores resources matching a set of regular expressions (currently work in progress).

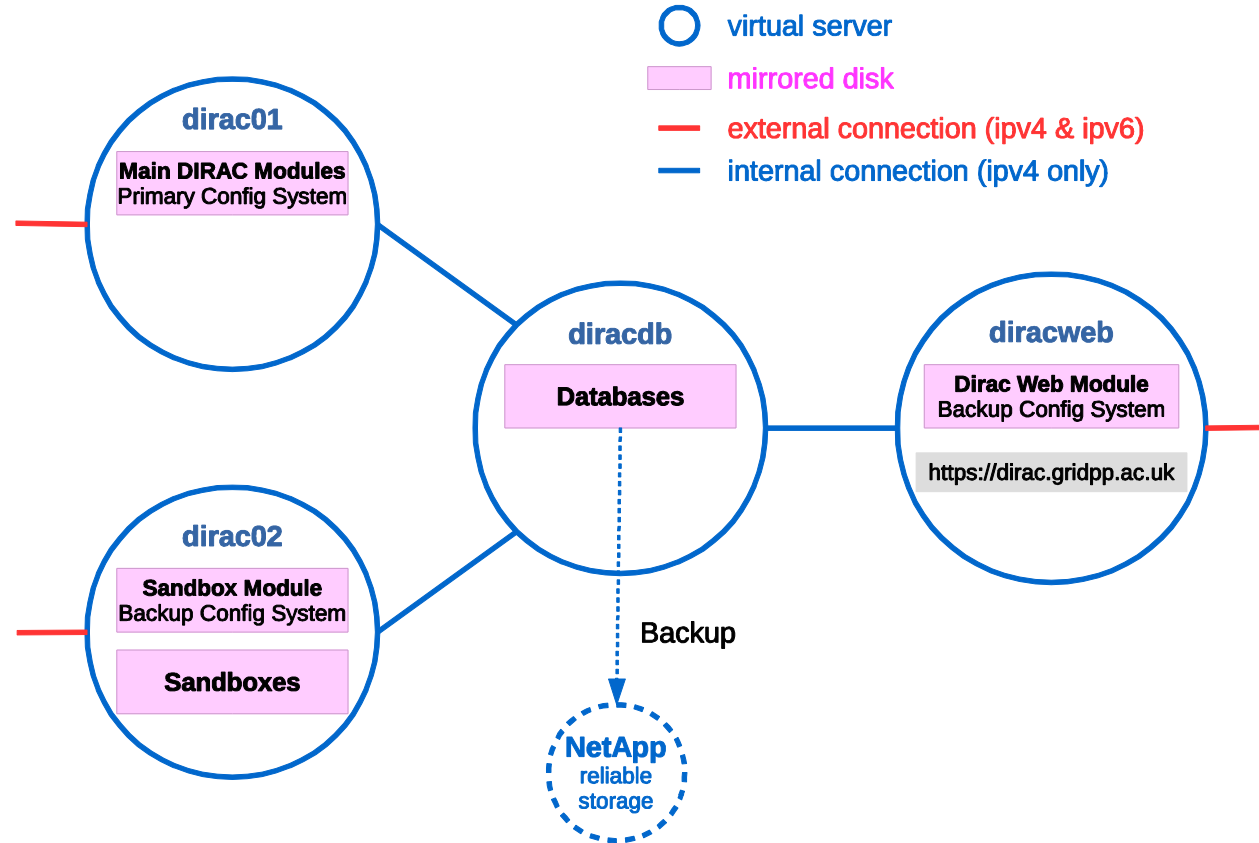
User Support

We are hosting DIRAC for a diverse group of small VOs. Most of these have no or minimal central computing support.

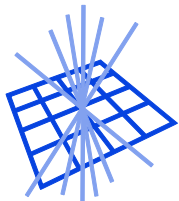
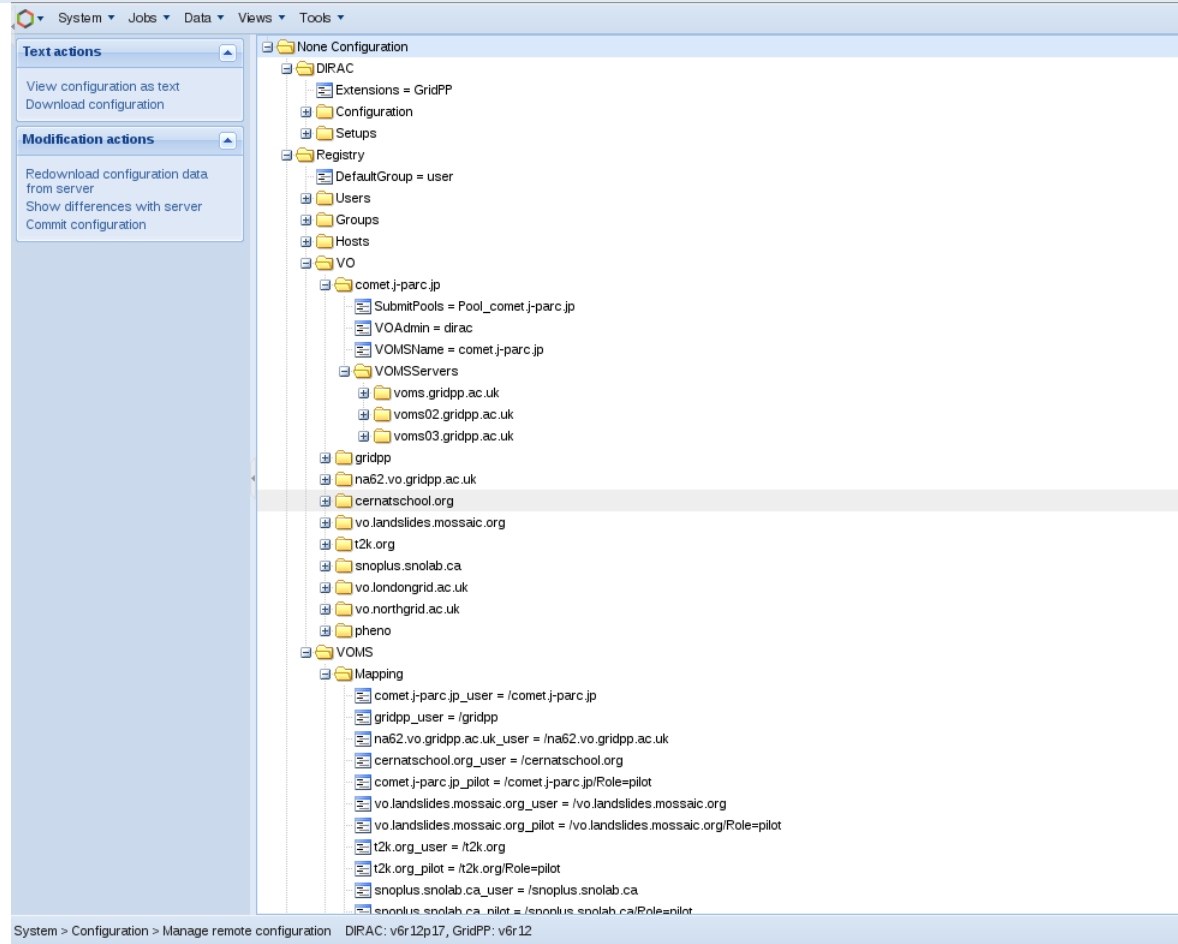
Getting started can be daunting:

- Wiki to get users started including a checklist of prerequisites.
- Improved error messages.
- Added debugging options.
- Support mailing list.

Production Setup



Production Setup (cont)



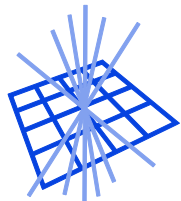
Conclusions & Future Work

- Modular design of DIRAC allows for easy modifications
- GridPP DIRAC module simplifies running of a multiVO instance.
- Future Work:
 - VO specific controls (site mask..).
 - Automatic downtime management.
 - More testing of data management system against VO requirements

Additional Info

- New user checklist:
https://www.gridpp.ac.uk/wiki/DIRAC_new_user_checklist
- GridPP DIRAC overview & work:
<https://www.gridpp.ac.uk/wiki/Dirac>
- GridPP DIRAC module homepage:
<https://github.com/ic-hep/GridPPDIRAC>
- Official DIRAC wiki:
<https://github.com/DIRACGrid/DIRAC/wiki>

Thanks for Listening



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