# Service migration from CYFRONET to CC/IN2P3

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- Strategy
- Migration steps
  - Configuration
  - ▶ FG-DIRAC software update
  - DB migration
  - EGI/FG-DIRAC services
- Planning
- Current status



#### Goal

- Have a combined EGI/FG DIRAC service
  - Optimized for maintenance and operations
  - Still keeping separate EGI/FG portals
    - □ Web portals
    - □ Accounting?

### Optimized

- Minimum redundant services and databases
- Single configuration
- The same administrators for all the service
- Single maintenance procedures



## Migration: Configuration

- Resources (Gino, Vanessa)
  - Single Sites description
    - ▶ LCG -> EGI domain
    - Checking for the description validity
      - □ Actual information
      - □ VO assignments
  - Storage elements
    - Merge the two descriptions
    - Leave only SEs with known data on them



## Migration: Configuration

- Registry (Andrei)
  - EGIVO information copy to the FG Configuration
    - Checking and sorting
  - EGI Group information copy
    - Checking and sorting
      - □ Only VO groups, no dirac\_admin
  - ▶ EGI users information copy
    - Clean-up as much as reasonable, checking and sorting
  - ▶ EGI Hosts information copy
    - ▶ Those hosts that are not at CYFRONET



# Migration: Configuration

## Operations (Andrei)

- VO information copy to FG
  - Keeping Setup EGI-Production
  - Setting services: FileCatalogs
  - Copying Pilot descriptions

#### Setup

- Keep EGI-Production setup
  - No client configuration update will be needed
- Dirac-Production and EGI-Production will share services as much as possible
  - Differencies for File Catalogs (may be)



## Software upgrade

- FG-DIRAC service software upgrade (Andrei)
  - DIRAC software to version v7rlp30
    - Now v7r0p2
- Configure to use Pilots3 (Andrei)
  - Setup pilots tarballs automatic creation
  - Serve tarballs from the FG Web portal
  - Update the SiteDirector configuration
  - Test pilot operations
- Enable the use of Elasticsearch DB (Andrei, Patrick, Michelle)
  - Following the CTA pattern
  - Setup ES user credentials and the name space
  - Start monitoring and WMS history
  - Retire RRD monitoring



## Migration: databases

- Migrate only databases with non-volatile information (Andrii)
- Accounting
  - Full migration (12GB of the dump size)
  - Separate Accounting service in the EGI-Production setup
- Security logging
  - Full migration just in case the information will be needed
    - No associated service
- File Catalogs
  - General File Catalog: full migration with an associated service in the EGI-Production Setup
  - Eiscat File Catalog: repopulation once a dedicated service will be in place
- Other databases will be just replaced by the FG databases
  - Jobs, requests, monitoring, user profiles, etc



## Migration: services

- Start the following services on the new hosts
  - CS slaves
  - File Catalogs
    - ► EGI, Eiscat
  - EGI Web Portal
  - Site Directors
  - Extra copies of WMS services for high availability and throughput
    - Using the same databases os FG services
  - ES Monitoring service
  - Transformation service



# Storage migration

- DIRAC-USER/CYFRONET-USER Storage Element
  - Setup a storage element at CC/IN2P3
  - rsync physical storage
  - Test compatibility with the File Catalog records
- Will need checking the files integrity with the File Catalog
  - Not so many useful data (if any)
  - Mostly used for failover and tutorials
    - Can be scrapped most likely



- Configuration ready by 8 March
  - Resources, Registry, Operations
- Test the setup of the FG hosts (done, to be confirmed)
  - Certificates
  - DIRAC software and components
- Testing with several VOs all the operations by 15 March
  - enmr.eu, opencoast, km3net
- Announcement of the EGI/FG service downtime for a day 16 March (à discuter)
  - Drain EGI jobs
  - Dump and migrate databases
  - Change the DNS alias names, wait for the info propagation
  - Restart the service

# **DIRAC**THE INTERWARE

### Current status

- Host are deployed
  - ccdiracli08-11
  - Certificates with EGI alias names
- Services are installed
  - Configuration
  - User services
  - Web portal
  - WMS
  - DMS
- Database dumps are tested
- Ready for the migration steps