DIRAC Project status

A. Tsaregorodtsev,
CPPM-IN2P3-CNRS, Marseille,
DIRAC@IN2P3 meeting,
27 February 2023

- Status of releases
- Ongoing developments
- EGI/FG-DIRAC service
- Conferences

- ## 2 patch releases since last meeting
  - V7r3p35 – no changes
  - 8.0.15
  - Minor fixes (following LHCb going 8.0 in production)
    - Fixes for AREX CE
    - Support for sqlalchemy 2.0
    - Removed Google forum from docs
    - Multiple minor fixes

- ## No change for 8.1.0
  - 8.1.0a8 is compiled
    - 4 hackthons already passed
  - 8.1.0 features
    - Moving all the services to HTTPs
      - ☐ StorageElement ? No solution yet
    - Remove Setup concept and related codes
    - Support for non-DIRAC clients: REST, HTTPs
    - Deprecate dirac-proxy-init -> dirac-login
    - Remove VMDIRAC
      - ☐ Use CloudComputingElement instead
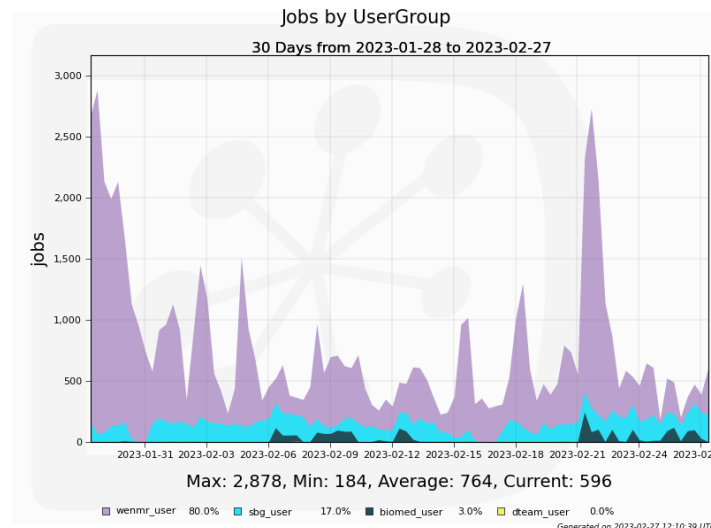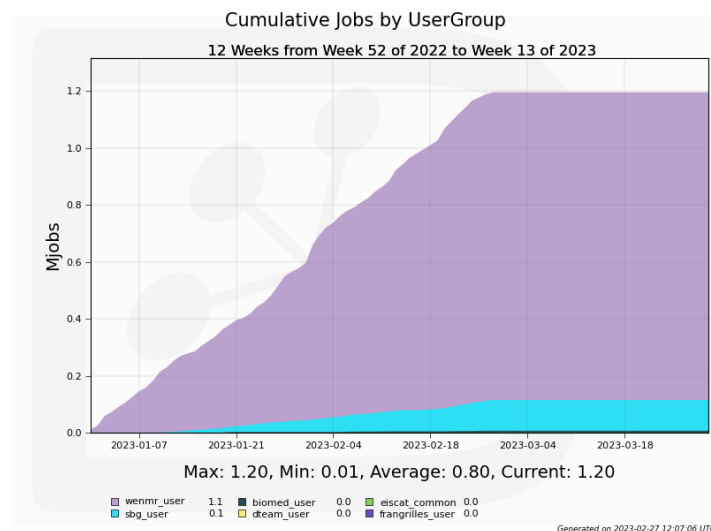   - Support for centralized pilot logging

- ## OAuth/OIDC AuthN/AuthZ
  - Regular meeting with the Check-In developers
    - Working on tokens introspection
      - ☐ Group embedded in the Check-In token
    - Considering moving biomed to Check-In VO management

  - CC team dev effort (Vanessa, Bernard, Martin, Guillaume)
    - Token Manager Web application
    - cctbdiracXX development servers
    - Tests of https services
    - Work meeting 2-3 March in Marseille

- ## ARC/HTCondorCE/Cloud with tokens
  - Making the full chain : SiteDirector-TokenManager
  - Tested with HTCondorCE and WLCG dev tokens
    - CC, IC, OSG
    - oidc-agent based solution completely abandoned
  - Solution based on the TokenManager/TokenDB is being tested
    - HTCondorCE at CC
  - ARC6/AREX is to be fully tested yet
  - Will be included into the hackthon certification on the 2nd March

▶ WebAppDIRAC

  ▶ Token Manager

▶ COMDIRAC

  ▶ Merged with DIRAC in 8.0.14

- **New development environment at CC**
  - cctbdirac01, cctbdirac02
  - Shared by several developers
    - CC, CPPM, others
  - Elastic Search support to be added

▸ ## Running more or less smoothly

  ▸ ### Since beginning 2022

   □ > 1.2M jobs

   □ Up to 3k concurrent jobs

     □ ~800 on average last month

▸ ## Servers installation

  ▸ ### Smooth server running

  ▸ ### ccdirac06 at 8.0.0

   □ TokenManager

   □ AuthServer

  ▸ ### Have to plan migration to 8.0.X

   □ ccdirac01 at 8.0.4

   □ No fire, but should be done

     □ After studying the fixes needed by LHCb following the migration to 8.0

Cumulative Jobs by UserGroup — 12 Weeks from Week 52 of 2022 to Week 13 of 2023
Max: 1.20, Min: 0.01, Average: 0.80, Current: 1.20

Jobs by UserGroup — 30 Days from 2023-01-28 to 2023-02-27
Max: 2,878, Min: 184, Average: 764, Current: 596

- CloudComputingElements
  - OK: IJCLab(complex), Padova(enmr.eu), CESNET(dteam), CNIC(eiscat.se), IPHC(biomed)
  - ICESGA, IFCA, BARI
    - Set up but Application Credentials not authorized – sorting out site by site
  - ULAKBIM
    - Server certificate problem

- EC Procurement - dossier abandoned
  - Too complex
  - Unclear management and benefits

- Other projects
  - Infra TECH-01-01 call (~5M)
    - **GreenDIGIT** – technologies and practices for sustained RI computing environments
  - More standard procedure
    - Lump sum type financing
  - CNRS: CPPM, IPHC, CC
    - Asking for ~30PMs support
    - Algorithms for environment friendly job scheduling
  - Proposal is being written now

▸ ESCAPE

  ▸ NTR

▸ Galaxy

  ▸ Discussions with Galaxy developers restarted

    ▸ Setting up testing environment

      ☐ Interested in a custom Pilot Factory with custom scheduling algorithms

- ## Budget DIRAC 2023 12K euros
  - ### Managed by CPPM
  - ### Requests by other labs to be transferred to CPPM
    - #### First attempt done – successful ?

- ## Technical Coordinator
  - ### *Johan*

- DIRAC Community workshop at the EGI Conference 2023 (suggested by EGI)
  - June 2023
  - We will do it most likely to be confirmed

- Joint DIRAC + Rucio Workshop
  - 16-20 October 2023
  - KEK

14

- CHEP 2023 abstracts
  - General DIRAC dev overview (Federico)
  - CTA Production (Alice)
    - Mission ?
- ISGC abstract
  - DIRAC OIDC/OAuth2 (Andrei)
    - Remote presentation
    - Publication should follow

15

▶ Consortium Agreement Amendment can now go

  ▶ Stalled at the CNRS/IN2P3 signature stage

    ▶ Should be soon resolved (hopefully)

    ▶ The UM participation to the Consortium will be stopped

      ☐ The letter is being prepared now

      ☐ Necessary prerequisite for restarting the Amendment signature