

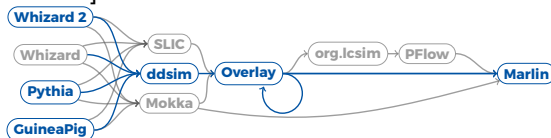
iLCDirac: a Dirac instance for ILC/CLIC/FCC/Calice

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CERN-EP-SFT

virtual DIRAC User Workshop
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- Interfaces/Workflow modules for software [J.Phys.Conf.Ser. 513 (2014) 032077]



- “Calibration System” for the Pandora particle flow reconstruction software [EPJ Web of Conferences 245, 03003 (2020)]
- “Overlay” system to provide random background files to reconstruction jobs
- Transformation Plugins
- Framework / WMS: some agents solving operational issues
 - ▶ Resetting requests, restarting services/agents/executors
 - ▶ Should really port to DIRAC

- DIRAC Version: v7r1p34+X (Hot FiXes)
- Servers running on CentOS7 with DiracOS v1r18
- CALICE VO migrated from the LFC to the DFC
- Incorporating the FCC VO
 - ▶ Will use DMS, WMS, TS
 - ▶ Added new application interfaces/Workflow modules
 - ▶ Fixed issues in VOMS2CS agent for users in multiple VOs
- Small fixes for Linear collider community

Dirac Functionality in (dis)Use



In use:

- Accounting
- Configuration
- Data Management
- Framework
- Monitoring
- Request Management
- Storage Management
- Transformation
- Workload Management
- WebApp

Not in use:

- RSS (beyond the minimum required)
- Production System

What is your biggest frustration with DIRAC?

- The RequestExecutingAgent getting stuck and operations are persisted in a bad state (FTS3 transfers, “Archiving”)

Magically add one feature to DIRAC?

- Type annotations for all functions <https://docs.python.org/3/library/typing.html>

Notable incidents from the last year

- Major network incident at CERN cut access to databases, took some hours to recover
- Missed adaptations to changes in transformation system before updating to v7r0/1

Other Systems Outside of DIRAC

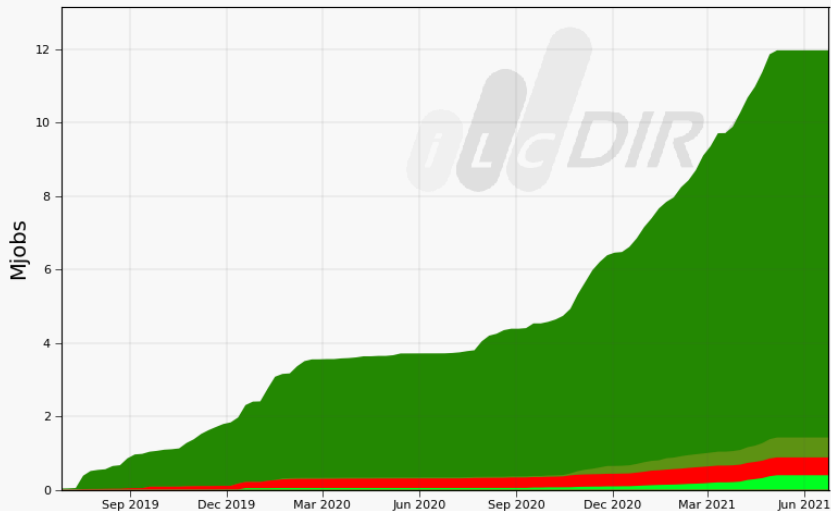
- CEs, SEs, FTS3, VOMS, Databases, Elasticsearch, Jira, puppet, git

How would you rate the communication?

- Five by Five

Cumulative Jobs by FinalMajorStatus

104 Weeks from Week 25 of 2019 to Week 25 of 2021



Max: 12.0, Min: 0.03, Average: 4.87, Current: 12.0

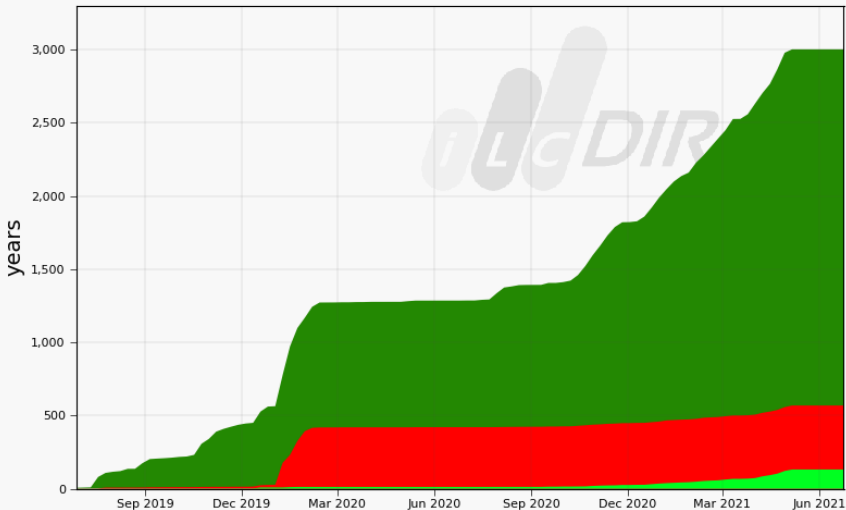
■ Done 10.5 ■ Rescheduled 0.5 ■ Failed 0.5 ■ Completed 0.4

Generated on 2021-05-07 11:41:24 UTC

Usage



CPU used by FinalMajorStatus
104 Weeks from Week 25 of 2019 to Week 25 of 2021



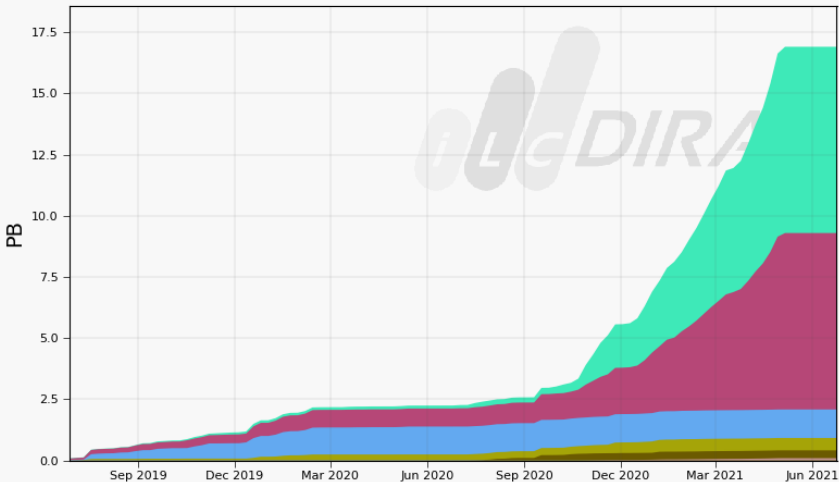
Max: 3,001, Min: 5.75, Average: 1,382, Current: 3,001

Done 2433.7 Failed 437.3 Completed 130.6 Rescheduled 0.0

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Transferred data by Protocol

104 Weeks from Week 25 of 2019 to Week 25 of 2021



Max: 16.9, Min: 0.08, Average: 4.79, Current: 16.9

■ srm	7.6	■ FTS3	0.5	■ dips	0.0	■ dfc	0.0
■ DataManager	7.2	■ gsiftp	0.3	■ http	0.0		
■ root	1.2	■ Stager	0.1	■ https	0.0		