DIRAC & Rucio WS 2023

Summary and conclusions

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Numbers

- 44 registered participants
- 33 talks
- 12 hours of hackathon
- Thousands of miles earned
- Few hours of sleep

Agenda

Sessions:

- Communities reports
- Technology talks
- Q&A + hackathon

Communities reports

DIRAC and Rucio reports

11 community reports:

- 3 of them for both DIRAC & Rucio
- 4 of them for DIRAC only
- 4 of them of Rucio only

DIRAC common points

- Commonly mentioned issues: deployment and upgrades are complex
- Multi-VO support
- Using DIRAC client from CVMFS in the Pilots

Rucio common points

- Operations generally smooth and without major issues
- Tokens becoming a necessity for all communities
 - Documentation!
- Rucio repository for dashboard definitions
- Documentation needs improvements
 - Subscriptions, API, ...
- Multi-VO support important for communities, it exists, but needs more effort

DIRAC & Rucio common points

- Documentation to interconnect DIRAC and Rucio
 - Needs to be defined for DiracX
- Include Rucio catalog unit-tests into DiracX
- Better integration of Rucio in DiracX data manager
- Multi-VO between Rucio and DiracX needs special attention

Tech reports

DIRAC general takes

- DIRAC tech talks mostly on DiracX, but not only
- Presented a timeline for DIRAC and DiracX versions, including transitioning
- Rollout DIRAC 8.1 as DIRAC 9.0 (in Jan 2024)
- Transitioning support will be assured for whoever request it

Rucio general takes

- Tokens in Rucio
 - Trying to design a customisable, simple, and secure solution not easy
- Deployment via k8s, helm & co generally well received
- Cloud cost handling will become a necessity
- FTS is the data-backbone of Rucio
- Torrents anyone?

Rucio and DiracX Web

Somehow, ended up converging on very similar software stack.

Q&A + Hackathon

What was done

- DiracX hackathon
 - Functional demo was shown
- DIRAC
 - Pilot upgrades for JINR and Belle2
 - CloudComputingElement set up for Belle2
 - CloudComputingElement for OpenNebula clouds
- Rucio k8s demos
- Rucio & DiracX token discussion
- Lots of individual demos/discussions/problem fixes

Next appointments

DiracX hackathon: <u>CERN, Q1 2024</u>. Federico will send a doodle to decide on the exact dates.

DiracX & Rucio hackathon: <u>CERN, Q2 2024</u>: Tokens, common tests, deployment

Rucio community workshop: see next slide

DIRAC users workshop: Lyon, date and venue to be confirmed

Rucio workshop at SDSC in Fall

2024

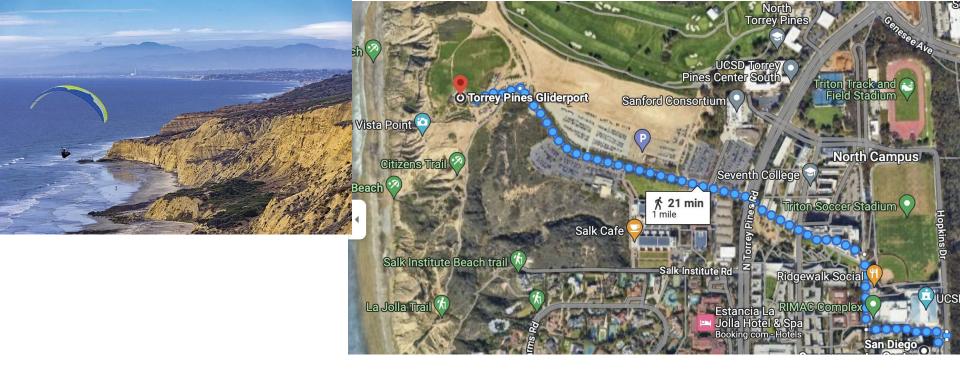
Frank Wuerthwein

Director, San Diego Supercomputer Center

Professor, UC San Diego







20min walk to some of the most stunning ocean views of San Diego

Lot's of hotels rated 4+ on google at all kinds of price points.

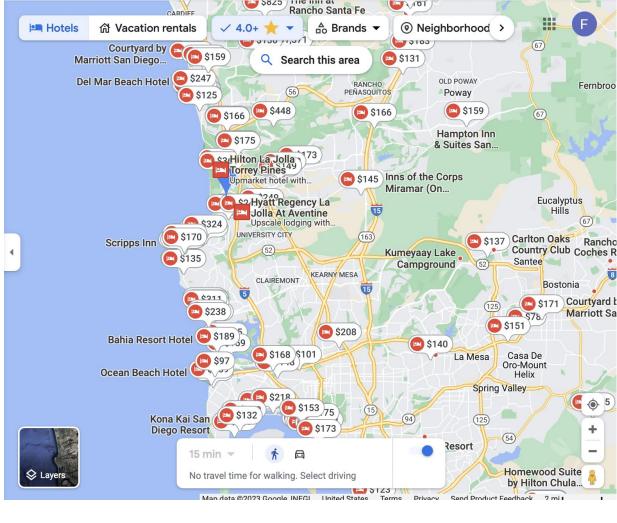
Reachable by public transportation: La Jolla by bus (33min) Del Mar by bus (26min) Downtown by tram (40-60min) (blue line all the way to Mexico)

Though, this is the USA, it's a car country.

Average high in January ~ average low in August

Temperatures (°F)





DIRAC consortium meeting

- The consortium approves DiracX
 - Recommendation: make all the efforts to ensure smooth migration DIRAC -> DiracX for the users
- Coordinators elections: Andrei and Federico re-elected as Coordinator and Technical Coordinator respectively

DIRAC & Rucio conclusions

- DIRAC & Rucio integration already reality for several communities
- Stronger interconnection and common planning are essential for future evolution
- This workshop was a major milestone and setup for future collaboration
 - Stay tuned!

Local organization

Just perfect!

Big thank you to Ueda-san, Hara-san, and team! 🤲 🙇





Bye! Safe travels!