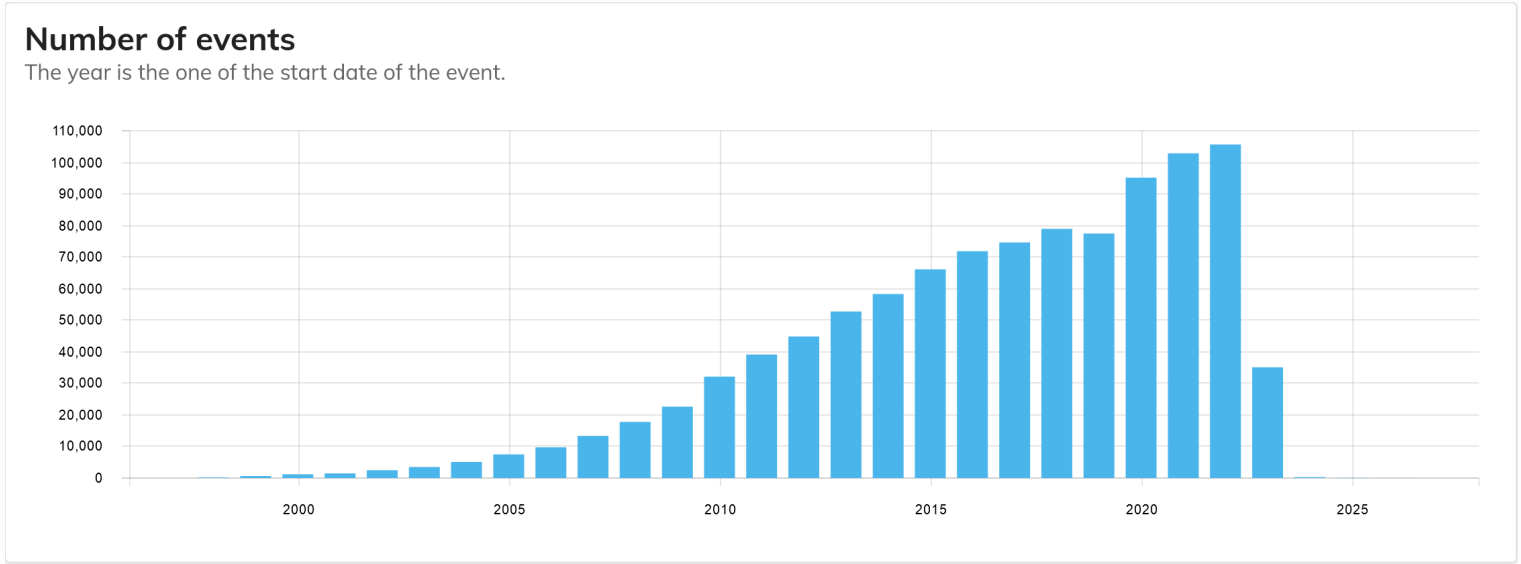
Indico 3.5
Workshop

Indico @ CERN

- **~10k** people on campus
  - spread over multiple sites
- **~220** meeting rooms
- **~100k** events/year
  - **>1M** events total
- (Distributed) meetings
- Conferences, workshops
- Lectures

Adoption



- Strong growth, big boost thanks to *The Plague*

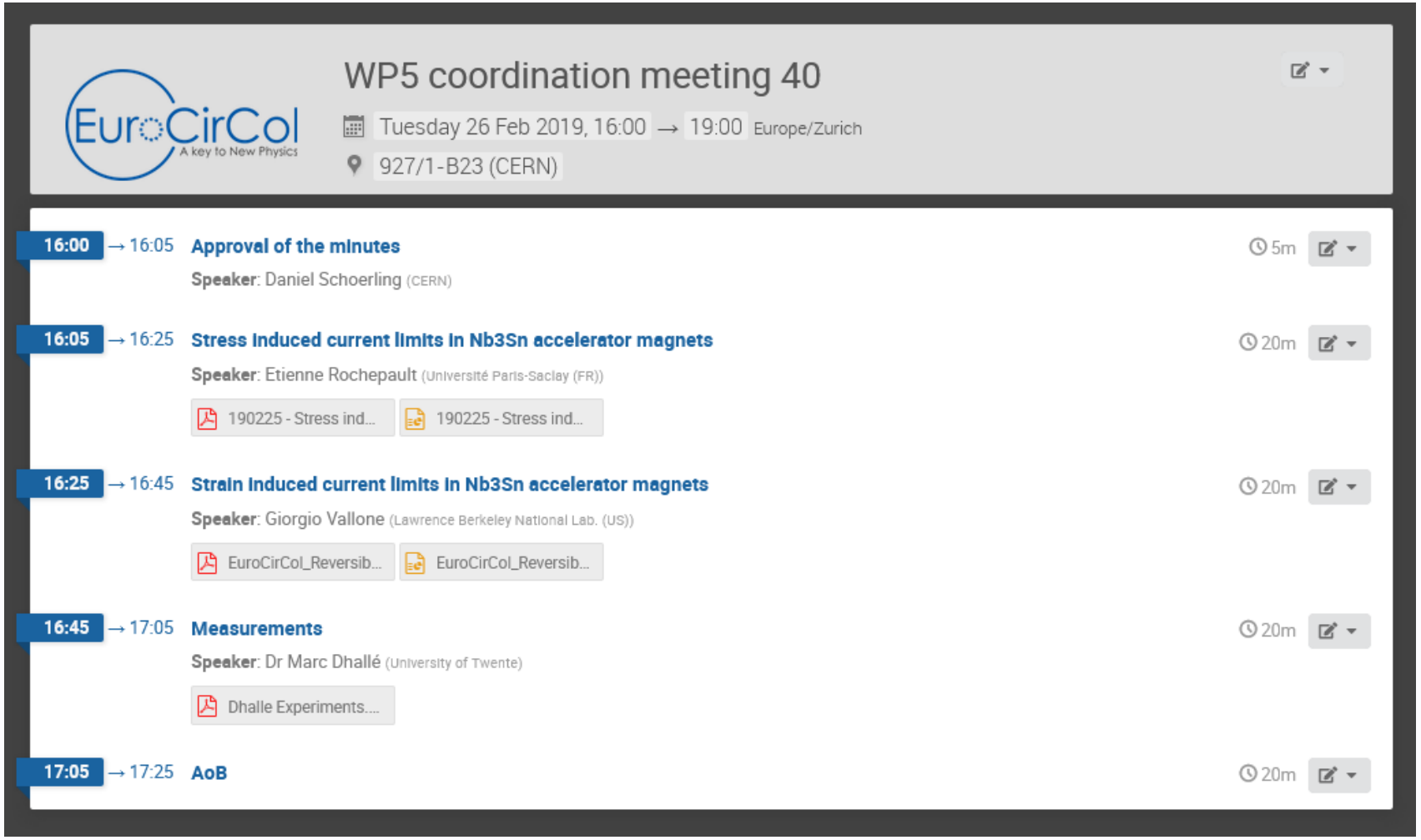
Philosophy

- Indico itself is **CERN-agnostic**
- CERN features through **plugins** 🧩
- Custom **themes** & templates 🎨

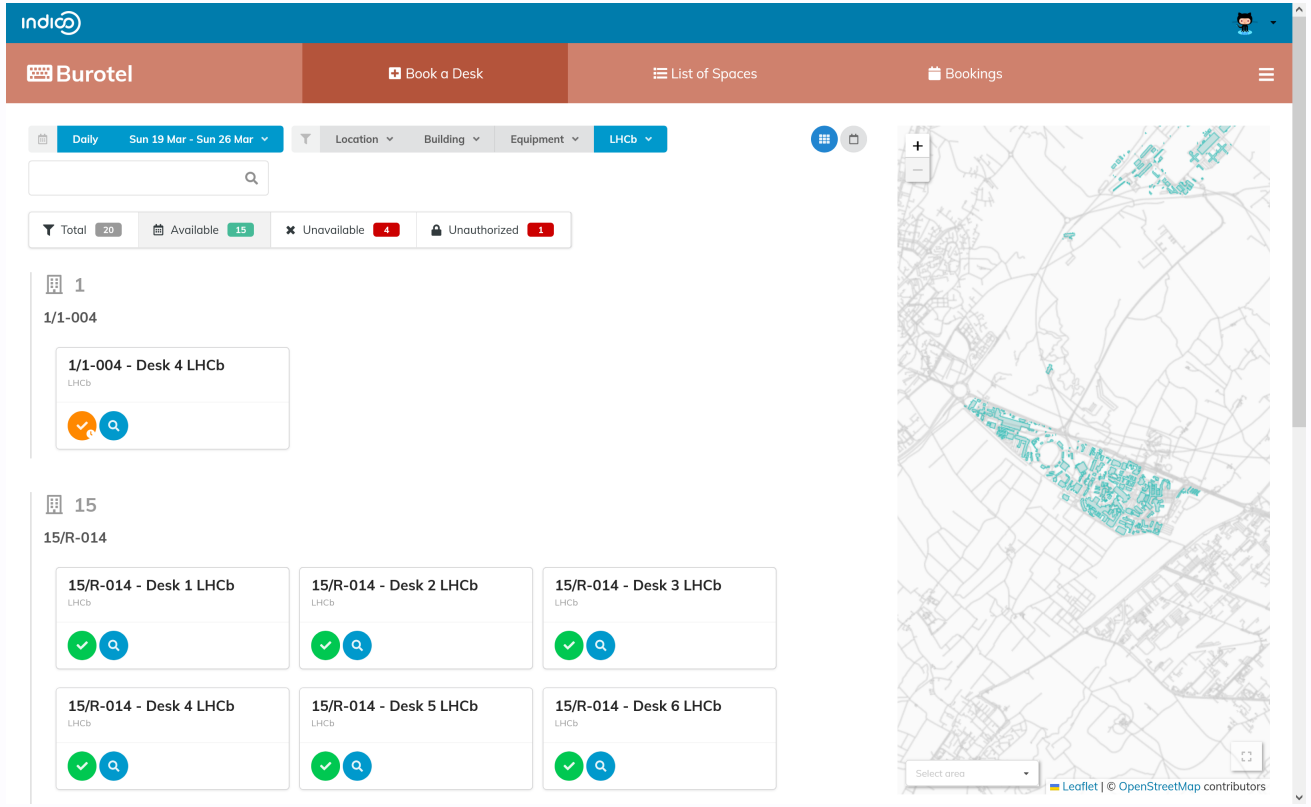
Integrations

- Video conferencing (Zoom) 📹
- Webcast/recording service 📡 🎥
- Conference room assistance 🆘
- CERN visitor badges 👮
- Room/desk booking 🏛️ 🪑
- Event payment (PostFinance) 💰
- Automatic conversion to PDF 🖨️
- Search (Citadel) 🔎
- Storage (S3) 💾
- URL shortening 🔗

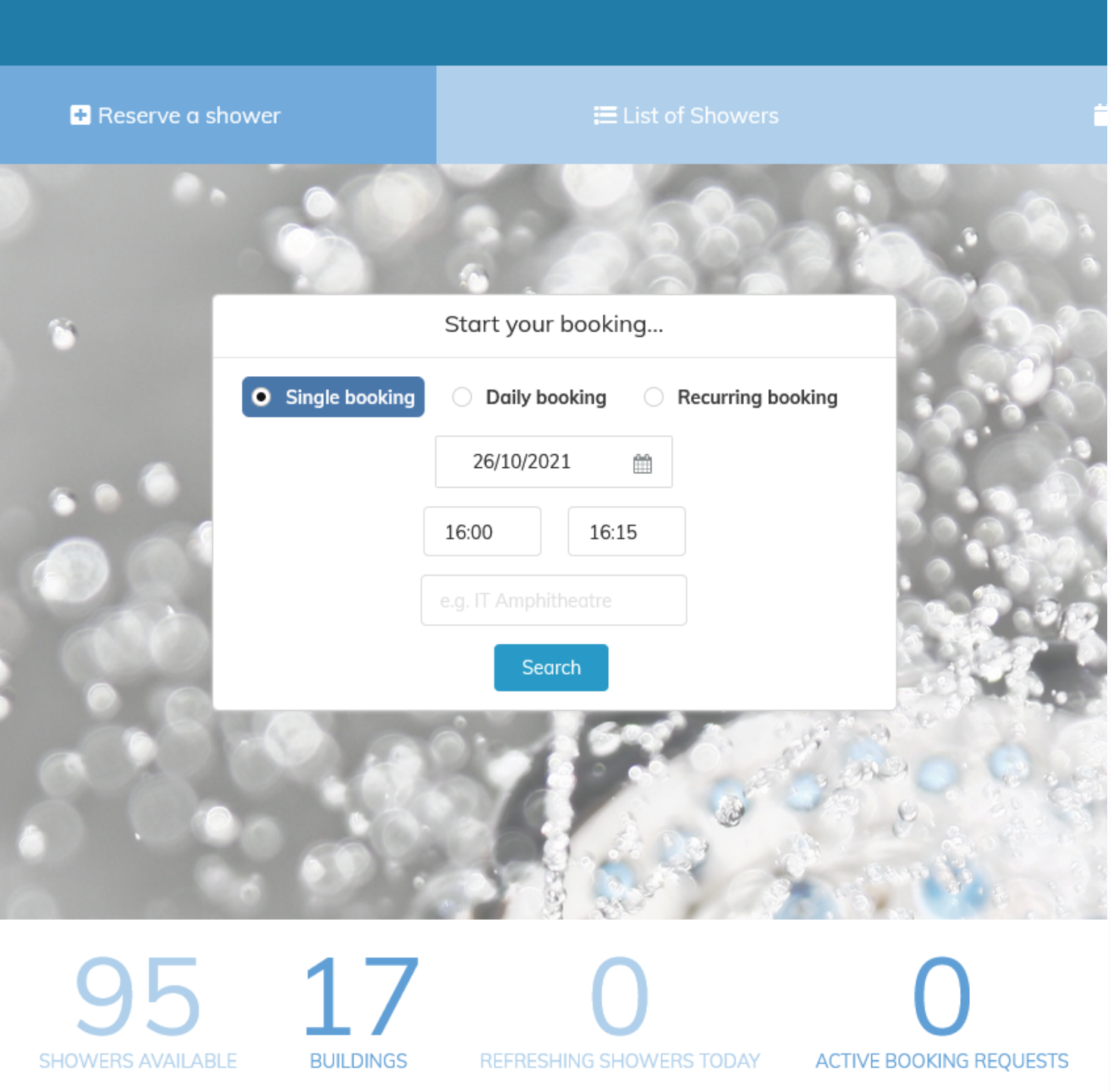
Custom meeting themes



Hotdesking



- Separate "Burotel" instance
- Customized Room Booking module via plugin



Hot... showering?

🚿

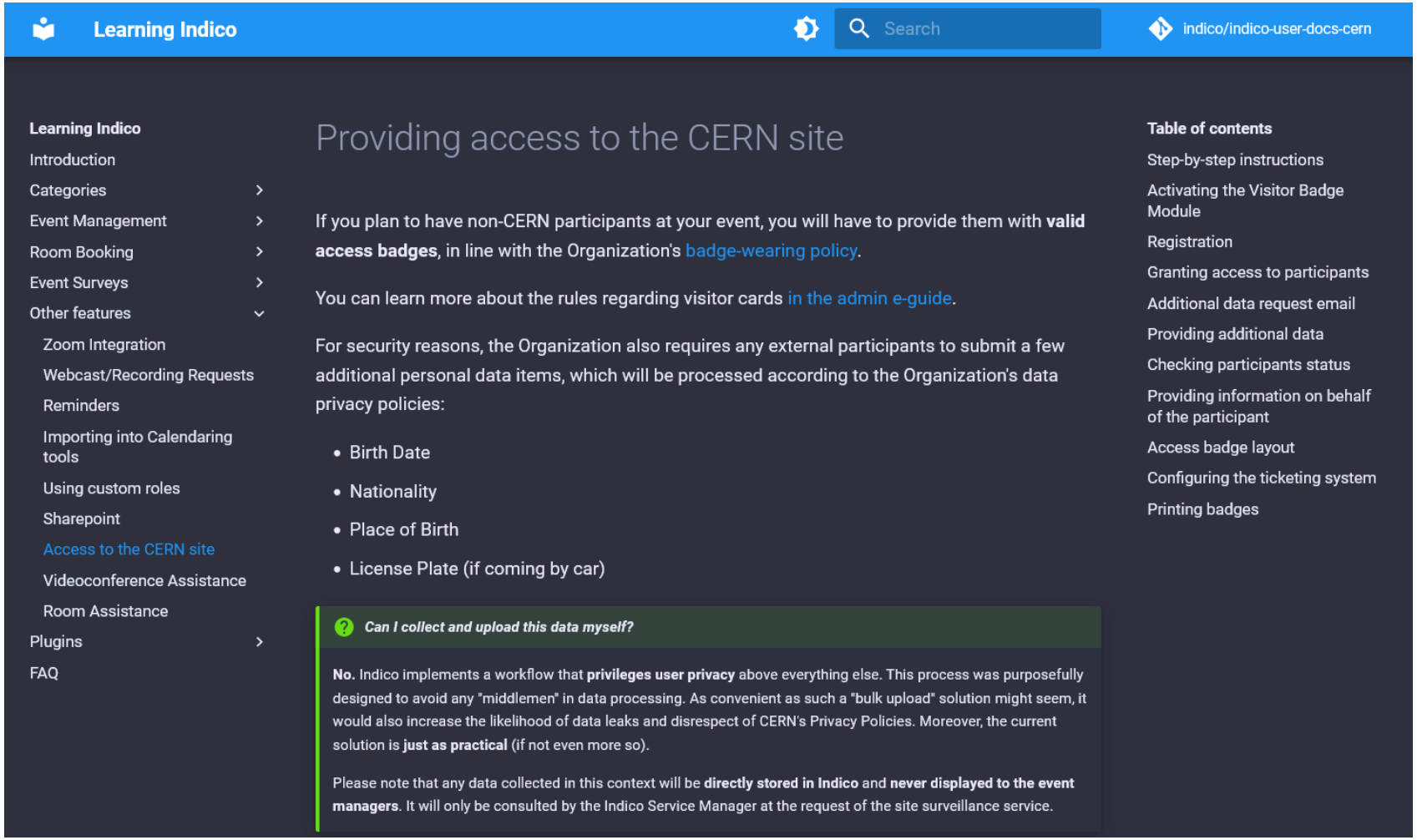
- Similar to Burotel
- 750 users signed up within a day!
- First test of new Room Booking module
- April fools 2019 🐟

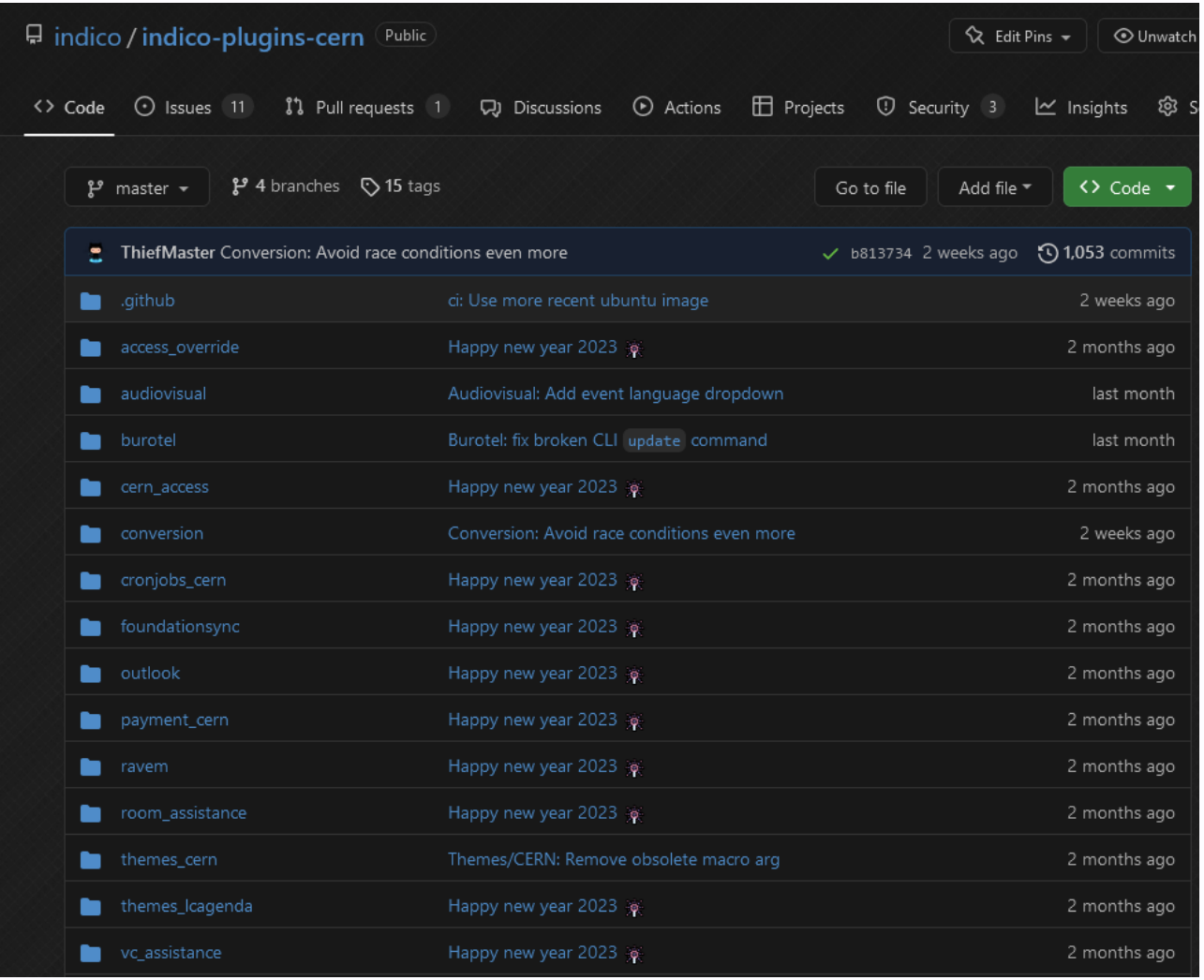
Best of shower ~~thougths~~ bookings 🚿🏆

- This is SOOOO great ! With the recurring booking feature, I'll never forget a monthly shower anymore !
- IR-ECO-CO team building event including foam party etc.
- Test of my new dinghy boat. Catastrophic flooding expected.
- Not allowed to wash walrus in office.
- Hadronic shower collaboration meeting. Bubble chamber section after coffee break. Vidyo not available, bring your own soap
- Rubber duck collaboration meeting 🦆🦆🦆
- Need to test my new armrests in a safe environment
- I'll be using it with a friend (We're pretty sure this would break a few CERN rules)

Source: https://indico.cern.ch/news/40-cern-showers & https://indico.cern.ch/news/41-april-fools-day

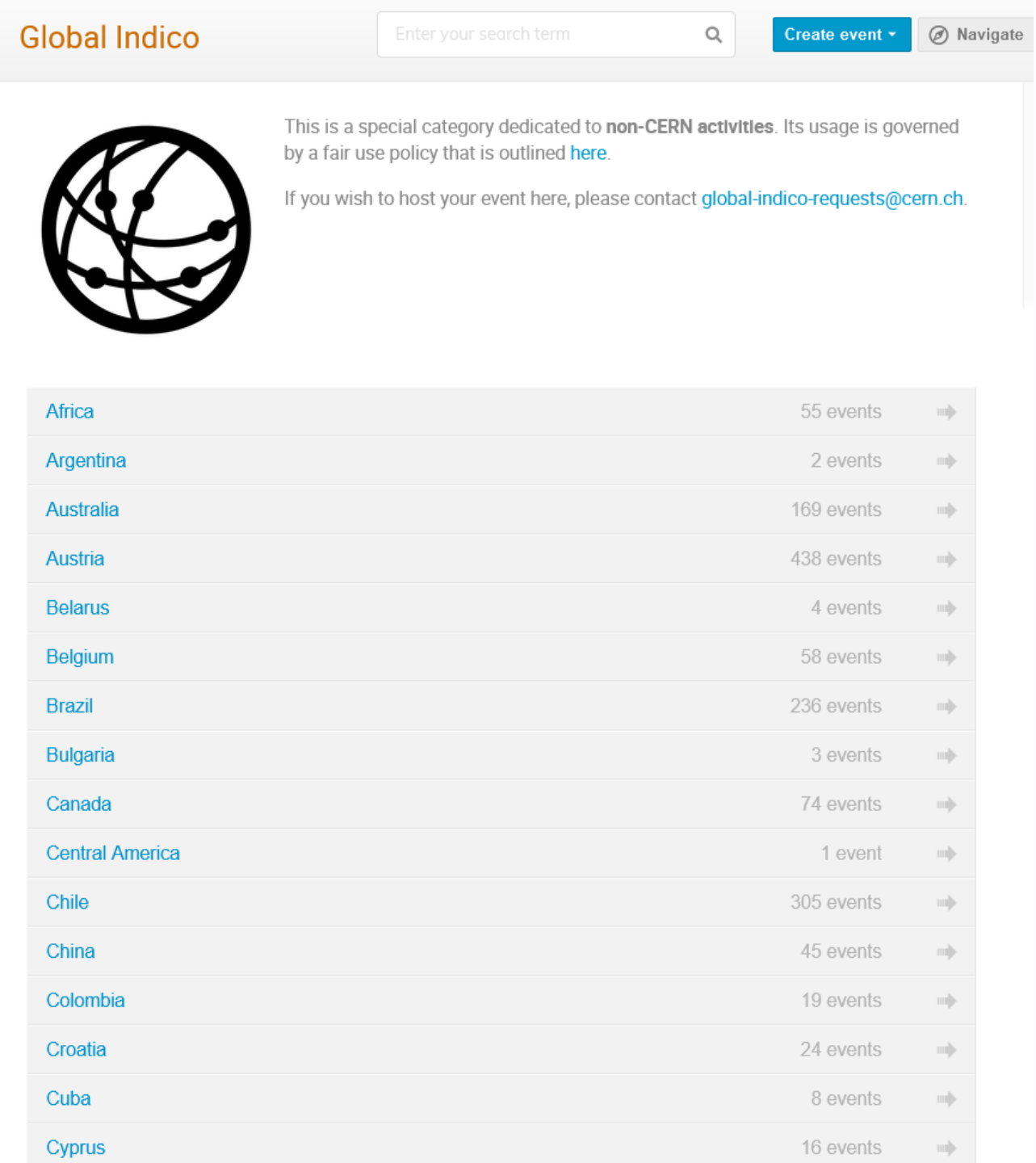
Extended user documentation





Fully Open Source

- Useful examples for more complex plugins
- API credentials are of course not public - so no self-made visitor passes for you ;)

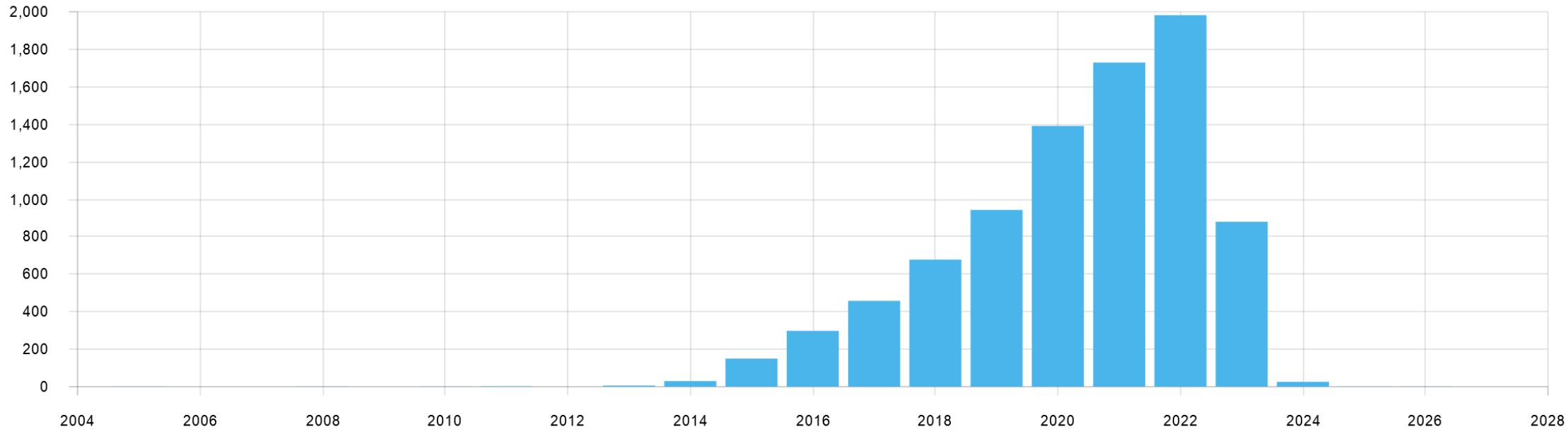


Global Indico

- Subcategory on indico.cern.ch
  - May switch to stand-alone instance in the future
- "Fair use" policy
- No CERN Zoom service
- Best-effort support
- Soft quotas (per community)
  - max. 50 events / year
  - max. 200 participants / event

Number of events

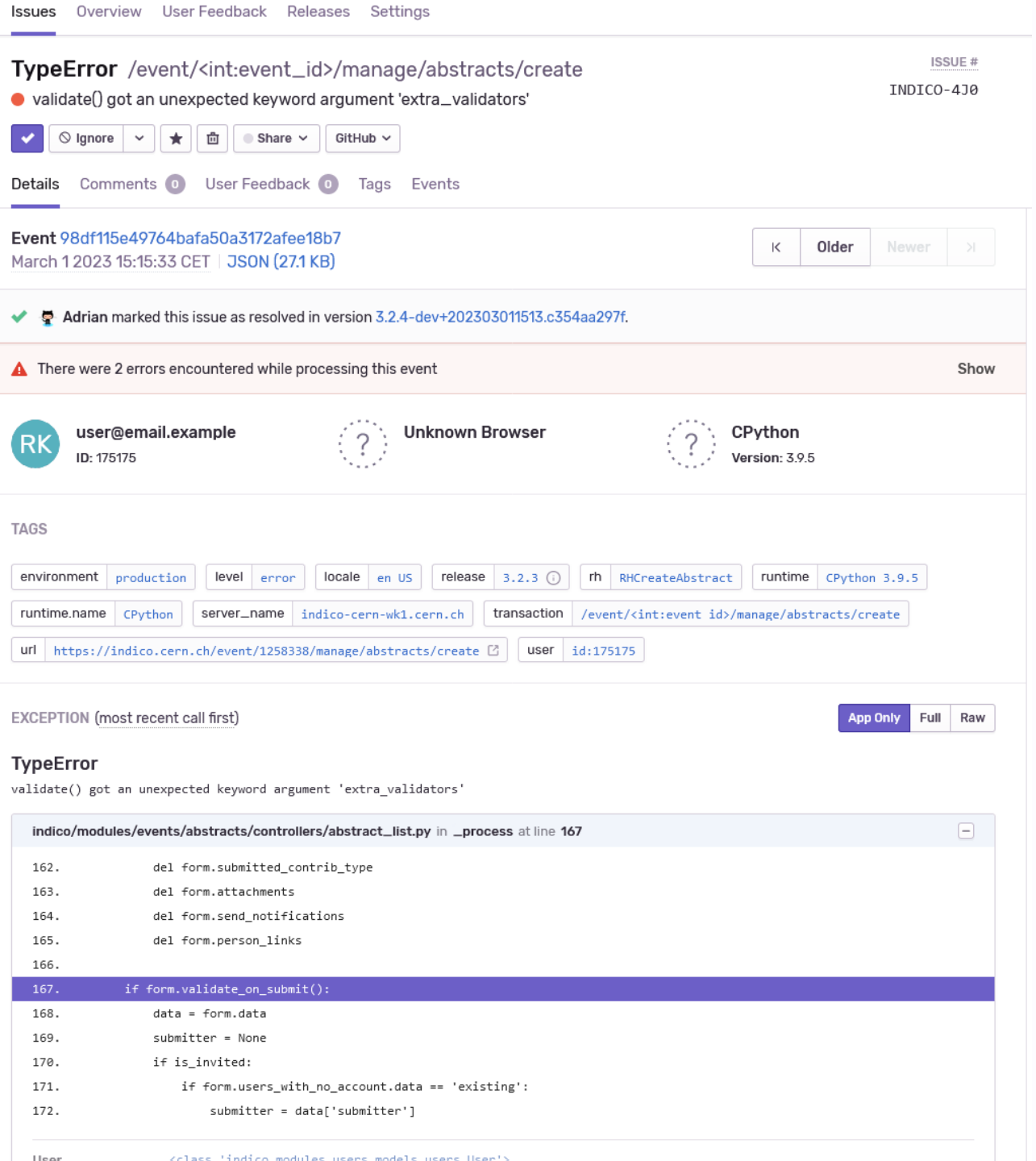
The year is the one of the start date of the event.



8,579	64,087	55,029
TOTAL NUMBER OF EVENTS	TOTAL NUMBER OF CONTRIBUTIONS	NUMBER OF ATTACHMENTS

Infrastructure

- DNS round-robin for indico.cern.ch
- 2 haproxy loadbalancers (4 cores, 8 GB)
- 4 web workers (16 cores, 32 GB)
- 1 celery worker (likewise)
- 1 redis cache (2 cores, 4 GB)
- 1 Postgres database (IT-managed, ~45GB used)
- S3 storage (Ceph-based, ~17 TB used)



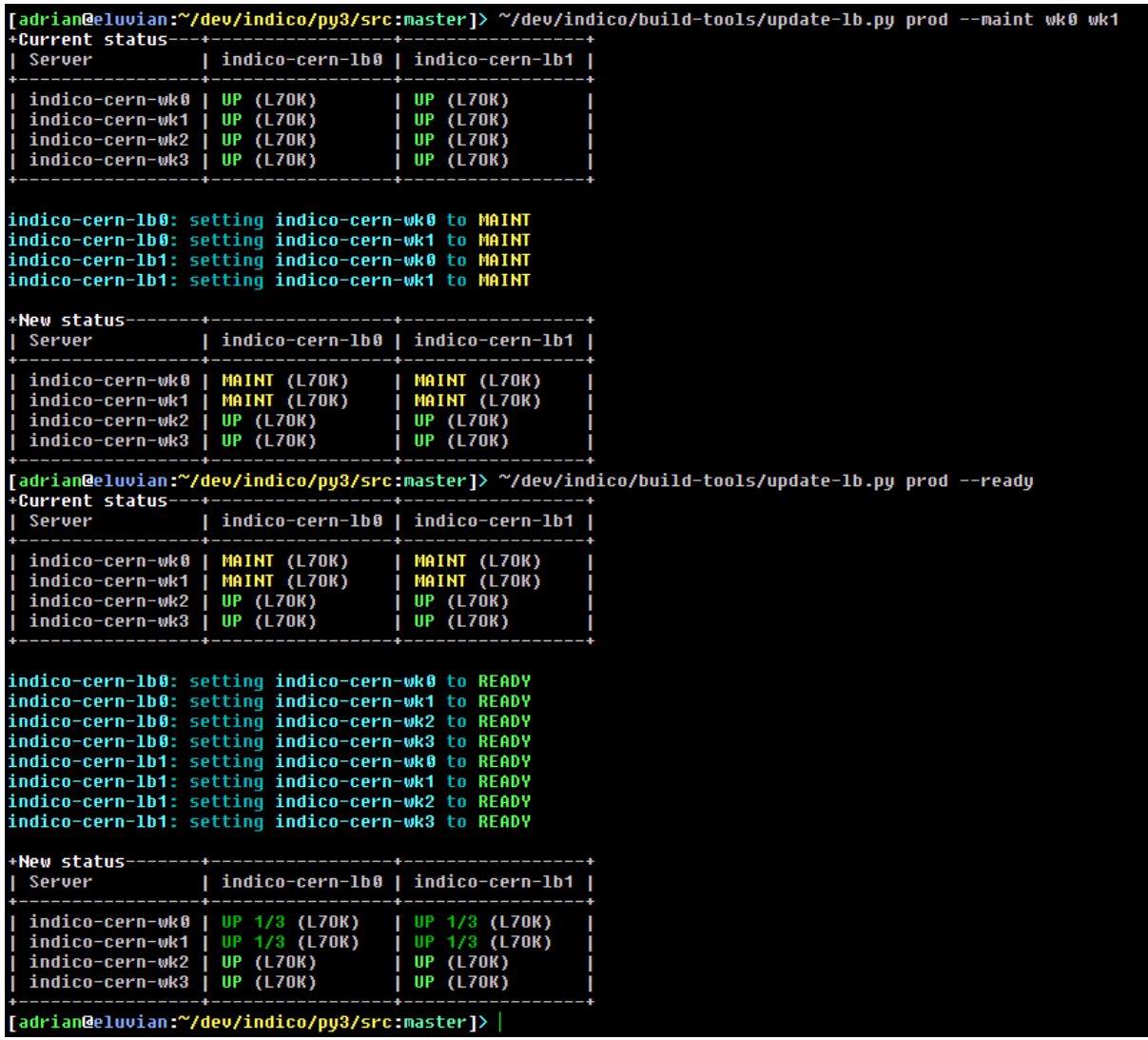
Monitoring with Sentry

- No annoying error emails!
- Self-hosted (FOSS), but Cloud is also possible
- Much more insight than just error and traceback:

form	<indico.modules.events.abstracts.util._AbstractForm object at 0x7f526e013880>
form.users_with_no_account.data == 'existing'	True
is_invited	True
self	<indico.modules.events.abstracts.controllers.abstract_list.RHCreateAbstract object
self.event	<Event(1258338, 2023-04-23 22:30:00+00:00, 2023-04-26 21:59:00+00:00): "Applicatio
self.list_generator	<indico.modules.events.abstracts.lists.AbstractListGeneratorManagement object at 0

Zero-downtime upgrades

- Take two workers out of haproxy
- Update + restart them
- Bring them back up
- Take the rest out
- Update + restart those
- Bring them back



Backups

- **Postgres**
  - Daily backups done by IT DB service
  - `pg_dump` to EOS every 6h
- **S3**
  - `rclone` sync to backup S3 host every 15min
  - Also syncing to EOS every night
  - ...because we REALLY wouldn't want to lose people's slides etc

So far we never needed to roll back to our backups BTW! :)

indico