



Finanziato
dall'Unione europea
NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani

PIANO NAZIONALE
DI RIPRESA E RESILIENZA



Centro Nazionale di Ricerca in HPC,
Big Data and Quantum Computing



Centro Nazionale di Ricerca in HPC,
Big Data and Quantum Computing

UC2.2.2 - Quasi interactive analysis of big data with high throughput

Tommaso Diotallevi (UniBO), Francesco G. Gravili (UniSalento)

WP2 Meeting - 11 February 2025

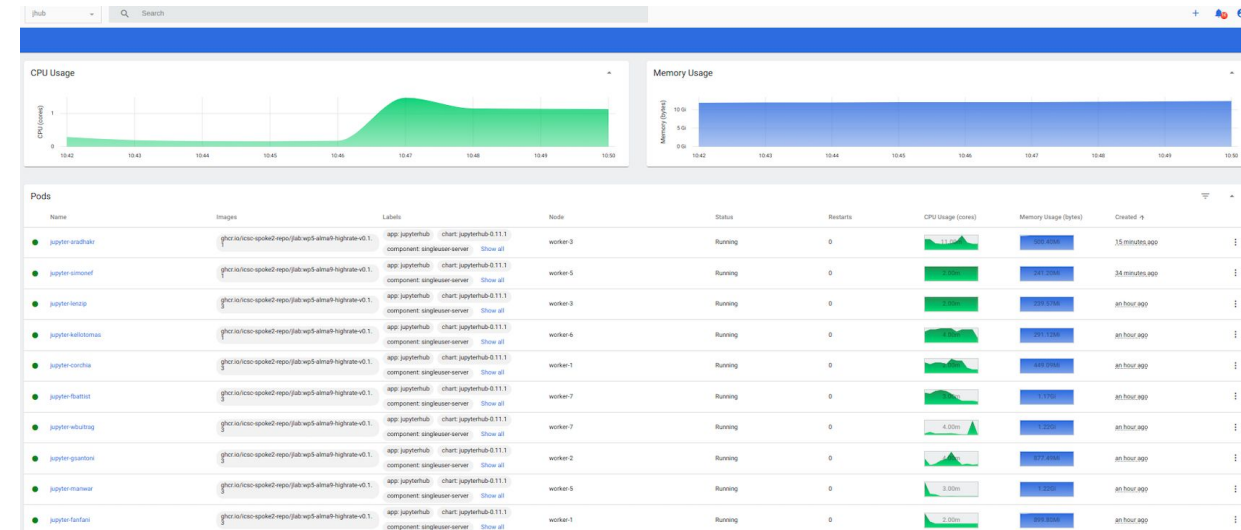
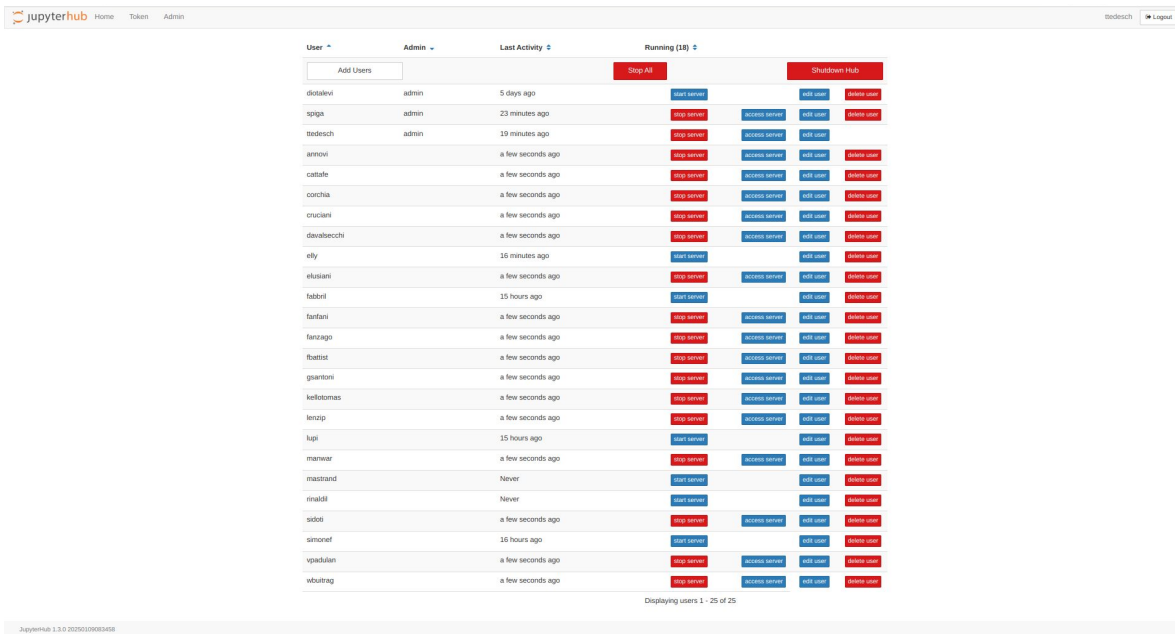
ICSC Workshop on Analysis Facilities

- The workshop was held in Bologna, from the 8th to the 10th of January. [Agenda](#).



ICSC Workshop on Analysis Facilities

- During the event, we reached a top activity on the facility of **~20 simultaneous connections.**



ICSC Workshop on Analysis Facilities

- Recently, we opened a survey (for the workshop participants) to gather feedbacks on the organisation and to collect possible new use-cases.
 - For now, only 3 people replied to the survey, but one of those was interested to continue working on the platform.
 - A few reminders will follow. At the end, we are going to disseminate the results.

KPI - Key Performance Indicator

KPI ID	Description	Acceptance threshold	Status
KPI2.2.2.1	Implementation of N data analyses in the AF	$N \geq 2$	>100%
KPI2.2.2.2	Reference documentation of the AF	≥ 1 dedicated web site	100%
KPI2.2.2.3	Hands-on workshops for AF users	≥ 1 workshops	100%
KPI2.2.2.4	Scaling up the testbed AF infrastructure, serving k tenants, for a total of N data analyses	$\geq (200 \cdot N)$ cores	32% (1 of 2 batches)
KPI2.2.2.5	Talks at conferences/workshops about AF activities	≥ 1 talk	>100%

KPI - Key Performance Indicator

KPI ID	Description	Acceptance threshold	Status
KPI2.2.2.1	Implementation of N data analyses in the AF	$N \geq 2$	>100%
KPI2.2.2.2	Reference documentation of the AF	≥ 1 dedicated web site	100%
KPI2.2.2.3	Hands-on workshops for AF users	≥ 1 workshops	100%
KPI2.2.2.4	Scaling up the testbed AF infrastructure, serving k tenants, for a total of N data analyses	$\geq (200 \cdot N)$ cores	32% (1 of 2 batches)
KPI2.2.2.5	Talks at conferences/workshops about AF activities	≥ 1 talk	>100%

Resource extension - Phase 2

- Following our RAC request, the first batch of resources given are:

7.1 Resources granted by INFN-CLOUD (PaaS)

vCPU (number of vCores and requested allocation time)

Number	Time	vCORE	Notes
*	*	*	time in hours
4	17520	32	

This resulted in the creation of 8 VM with 16 VCore and 32GB of RAM each.

These resources are cloud provided via INFN Cloud, and handled in IaaS (not via PaaS, for now).

Storage: 50TB of volumes for users quotas.

Resource extension - Phase 2

- Following our RAC request, the next batch of resources will be:

7.2 Resources granted by INFN-GRID (Batch processing)

CPU (number of Cores and requested allocation time)

Number	Time	vCORE	Notes
*	*	*	time in hours
21	17520	32	

The total amount (672 equivalent grid/HTC cores) is not allocated statically (all at once): we initially proposed a ramp-up during the last months of the project. **Any ideas?**

Storage: ??? We are currently relying on the WLCG resources for handling input data. We plan on continuing this, or some user is going to require separate storage? **We can ask up to 650TB.**

Resource extension - Phase 2

- After this discussion, we will proceed in the upcoming days to reopen the ticket with the ICSC support.
 - We are coordinating this effort with [WP5](#).
 - The group in Naples are willing to help using (and configuring) their grid ICSC resources.
- At some point, when the up-scaling is complete, we must begin some intensive testing and benchmarking of the platform, in line with the flagship objectives.
 - All the users that report in this flagship will be contacted soon!

Thank you

cn1-spoke2-wp2-analysisfacility@lists.infn.it (click [here](#) to subscribe or get in touch in case of issues)