

EGI-ACE Open Call no.1

3rd checkpoint meeting with shepherds

FERMI-LAT data analysis and interface with
Italian mirror data archive at SSDC

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Outline



- *Background about the scientific use case*
- *Capacity Requirements*
- *Timeline*

Background about the scientific use case

Objective of the use case

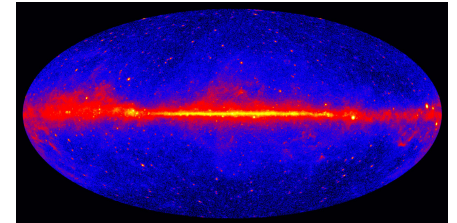
- this project aims at setting up a virtual data analysis facility for the FERMI-LAT collaboration, integrated with the Italian mirror data archive at SSDC (Space Science Data Center - ASI, Italian Space Agency)

Approach

- the data analysis facility to be put in production will be based on the DODAS technology for setting up on-demand virtual HTC clusters on cloud resources, together with a local cache, to be integrated in the production system

Adopter

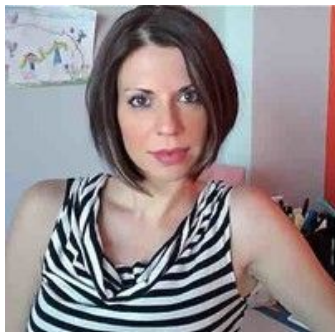
- INFN and Physics Department of the University of Perugia, Italy
- the FERMI-LAT collaboration



Background about the scientific use case

Team members

- Located at INFN PG (IT)
- Scientists are physicists, specialized in Gamma-ray astronomy, scientific computing and cloud solutions



S. Cutini
Principal Investigator
Researcher
INFN PG



D. Spiga
Cloud solution architect
INFN PG

Capacity Requirements



Cloud resources @ INFN-CLOUD-BARI:

- 150 vCPU cores
- 300 GB of RAM
- 20 TB of block storage

Cloud resources @ other providers (INFN-CNAF) to be defined

Timeline

Months

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Activities	A1	A1	A1	A1																	
A2	A2	A2	A2	A2																	
A3	A3	A3	A3	A3	A3	A3	A3	A3													
A4	A4	A4	A4	A4																	
A5					A5	A5	A5	A5	A5	A5	A5	A5									
A6					A6	A6	A6	A6	A6	A6	A6	A6									
A7													A7	A7	A7	A7	A7	A7	A7	A7	A7

The use case will last 21 months and it will cover the following activities:

- A1: resource provisioning
- A2: deployment of DODAS cluster
- A3: cache: integration and validation
- A4: analysis of the performances of the cache/data replication system
- A5: cluster federation
- A6: monitoring and accounting
- A7: operations

Current status (shepherd point of view)



- updated customer DB with current status
- technical plan finalized (currently respected)
- order placed in EOSC marketplace (in progress)
- resources provided by INFN-CLOUD-BARI (ReCaS-Bari)
- VO created (this week)
- local resources → accounting yet to be finalized (in progress)

Current status (project point of view)

- DODAS virtual cluster has been set up on INFN-CLOUD-BARI cloud resources
- cache has been integrated
- waiting for new providers (INFN-CNAF) to be added



Thank you!

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EGI-ACE receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 101017567.