



HOST Project and H2020 collaboration perspectives

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HOST project



- **Goal:** transformation of the Research Center in CS of UVT in the following directions:
 - widen the research & development knowledge & experience in HPC services & their applications;
 - raise no. users of the services of the data centre;
 - achieve status of EU-regional supercomputing centre & stakeholder in national & international e-Infra initiatives;
 - become a centre for supporting innovation & regional development.
- **Funded:**
 - by EC, FP7-REGPOT, programme, Jan 2012-Dec 2014
- **Action plan:**
 - collaborations with EU stakeholders in HPC (CINECA, EPCC, INRIA, PSNC, UEX)
 - upgrades of the e-infrastructure,
 - employment of experienced researchers
 - the organization of scientific events.





HOST project



- **Details at:** <http://host.hpc.uvt.ro>
- **GPU cluster**
- **Research directions & new positions:**
 - HPC-as-a-Service
 - Scheduling
 - Satellite data processing
 - Large scale numerical computations
 - HPC-based artificial intelligence
- **7 workshops to organize (3 in 2014)**
- **Open access (including mobilities)**
 - For the teams interested to collaborate with the project team



Infrastructure



Label	Computing power	Computing units	Internal memory	External memory
[InfraGRID*] Cluster	1.5 TFlops	400 cores	500 GB	13.5 TB
[ICAM] BlueGene/P	13 TFlops	4096 cores	4 TB	28 TB
Total before HOST	14.5 Tflops	4496 cores	4.5 TB	41.5 TB
[HOST] GPU Cluster	3.6 Tflops	3100 CUDA cores	224GB + 42GB (GPU)	16.5 TB
Total after HOST:	18 TFlops		4.8 TB	58 TB

Horizon 2020 Structure

