



EXDCI first project meeting WP4

Transversal vision and strategic prospective

François Bodin – Thierry Bidot

EXDCI first project meeting

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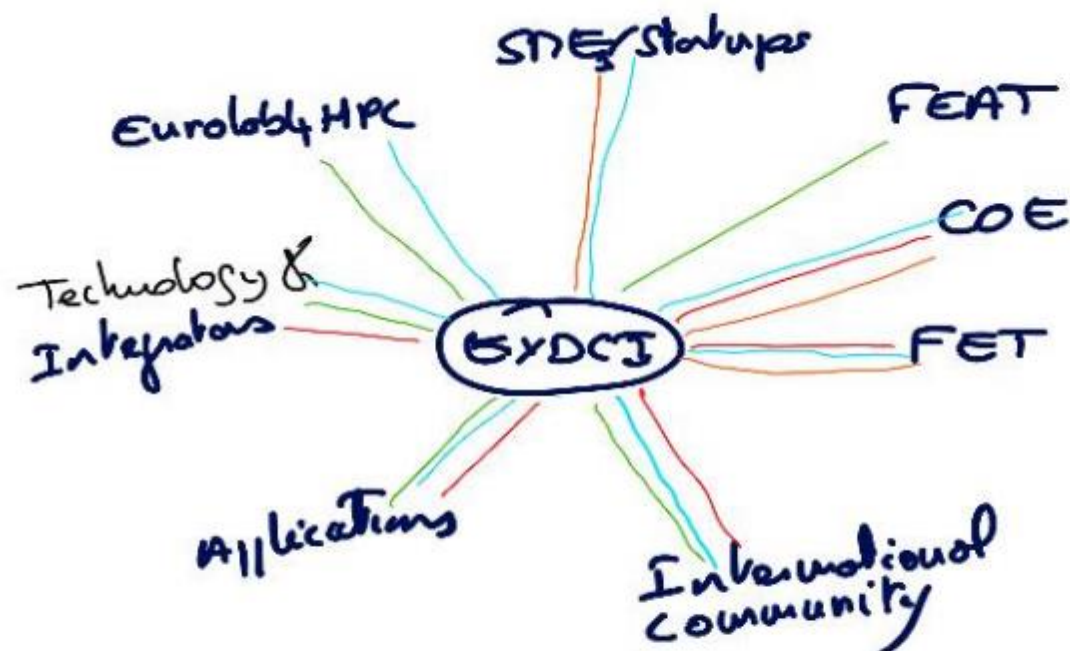
- T4.1 Cross cutting issues & disruptive innovations
- T4.2 SME support
- T4.3 Organization of internal technical project meetings
- T4.4 Transversal dialog to build a holistic vision

The first role of the WP4 as a transverse work package is to built together with the others workpackages an efficient communication network of stakeholders

WP4 – Building network

European HPC
Summit Week

17-19 May 2016
Korumbur



Joint events

Interviews
and survey
coordination
plan

Dissemination
workshops
(e.g. ISC)

This has been done in close relation with others work packages through numerous actions:

- Cross -participation of EXDCI and Eurolab4HPC to meetings
- Questionnaire sent to FET projects and CoE and feedback provided
- Portal for FET project components list and availability
- Joint events with CoE and FET projects at Rome and Prague
- Interviews done with Start-ups and SMEs
- Cross -participation of EXDCI and FEAT to meetings
- EXDCI workshop at HPC summit week 2016
- Common dissemination events with BDEC
 - BoF at SC15-SC16
 - ISC16 BDEC open workshop
- Joint European close BDEC workshop 2016
- Common BDEC white paper in preparation
- Booths at ISC16-Teratec forum 16-SC16
- Etc.

T4.1 Cross cutting issues & disruptive innovations

European HPC
Summit Week

From 25 to 28 May 2016
Paris, France

Cross cutting issues will strongly influence the design of future HPC and exascale systems and disruptive innovations will lead to a more competitive system design.

Cross-cutting issues

- Extreme Computing and Data Analytics Convergence
- Standardization Efforts
- Monitoring, analysis and data collection framework/tools in real time and at high frequency

Disruptive innovations

- Task based programming practices
- Non Volatile Memory
- Byte Addressable IO
- ARM based Architectures
- Photonics in Silicon
- Reconfigurable Supercomputing
- Integration and synergies between Quantum Computing and HPC
- Virtualization and Containers Technologies
- HPC Cloud

T4.1 Cross cutting issues & disruptive innovations

European HPC
Summit Week

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- The three cross-cutting issues and the nine disruptive innovation strategies, have been analysed identifying possible implementation strategies that minimize the technical risk as well as the economical ones
- The analysis is based on three main criteria:
 - TRL (Technology Readiness Level)
 - Potential impact on roadmaps and exascale systems
 - SWOT analysis
- For each cross-cutting issues and disruptive innovation, a set of specific recommendations have been proposed.
- The recommendations have been presented in Deliverable *D4.1 "First Report on cross-cutting issues and disruptive innovation strategies"*

T4.1 Cross cutting issues & disruptive innovations

European HPC
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KTH, Stockholm

Plans for Year 2

- Deeper and more complete analysis with a focus on innovation and the interest for the HPC Eco-system
- The presence of new cross-cutting issues and disruptive innovation strategies will be steadily monitored and in case, analysed
- For each topic we identify the FETHPC project and the CoE of interest, in order to involve them in further analysis.
- Feed back and discussions with SRA, PSC and eurolab4HPC

Topic 1:

Get overview about ideas and start-up projects emerging from the CoE/
FET projects and the support the projects to emerging start-up
projects

- Input via : EXDCI Survey
- Outcome :
 - Today, not many “start-up mature technologies” detected
 - Currently, support of the HPC projects seems weak

Topic 2:

Understand the main hurdles *as perceived* by the SMEs/Start-ups for getting into the market

- Input via :
 - interviews with start-ups/SMEs (14) and other partners of the HPC ecosystem (6)
- Outcome :
 - Administrative hurdles are high
 - Difficult to get into the market
 - and in consequence difficult to get into the market
 - Perceived reluctance to deploy new technologies on the client side

Both topics have been presented in Deliverable D4.2 "Report on start-up mature technologies"

T4.3 Organization of internal technical project meetings



- The task is on going under the responsibility of Teratec (Maïke) with the welcome support of BSC (Renata)
- *D4.4 Report on first technical workshop will be written soon...*
- Next year meeting will be in Italy under the responsibility of CINECA (Giovanni)

T4.4 Transversal dialog to build a holistic vision

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A dedicated slot is planned on Thursday for this topic

WP4 is a nice teamwork at the crossroad of numerous organisations, participants and actions

Thanks to all for your involvement !