QUEST Proposal Status

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Outline

- Context

- QUEST Objectives

- Who? Links with the community?

- Where we are? What's next?

Context

- EC has opened 1 call about Distributed Computing Infrastructures

  - 5 subcalls, with 3 very EGI-related

- INFRA-2010-1.2.1.3: Middleware and repositories

  - From subcall 1.2.1.3 objectives:

    « Develop middleware that strengthens European presence by consolidating or even going beyond existing DCIs (e.g. exploiting emerging developments like virtualisation), while improving their stability, reliability, usability, functionality, interoperability, security, management, monitoring and accounting, measurable quality of service, and energy efficiency »

  - From call 1.2.1 expected impacts:

    « … the strengthening of the ability to exploit the rapidly changing hardware environments through appropriate software deployments; and the reinforcement of the European world position in software development and deployment with a resulting impact on innovation… »

- Call ends November the 24th, 5:00pm CET

Why QUEST in this call?

- Grid sustainability and reliability: Quattor is a unique tool to improve them
  - Despite its steep learning curve, it has a proven track of records demonstrating it eases grid site management
    - Quattor-managed sites are 10% more available and reliable according to EGEE stats
    - Quattor with QWG templates acts as a vector to distribute best practices as they are embedded in them

- New resource provisionning models: Quattor is a major player in sites trying to integrate virtualization
  - At EGEE'09, all presentations about virtualizations have been made by Quattor sites
  - Includes cloud-like resource provisionning

- Wider grid adoption: Quattor and the various management models it supports may ease start of new sites
  - Especially true for new, less-expertised NGIs

QUEST Objectives...

- QUEST = Quattor Enhancements
  - Usability: improve end-user tools and low-level componenents
    - Panc editor and debugger
    - Tooling for writing configuration modules
    - Support for package managers other than RPM
  - Scalability: number of nodes managed, integration with workflows and dynamic resource provisionning (clouds)
    - Aquilon integration into the core toolkit
    - IPv6
    - Hooks for integrating with mgt workflows or cloud managers
  - Maintainability
    - Review/refactor the code and enforce development best practices
    - Set up a build and test infrastructure for Quattor

... QUEST Objectives

- Grid and generic service configuration: QWG and related configuration module enhancements
  - Support for other MW and generic services
  - Integration with monitoring (Nagios)
  - Basic VM support: enhancement of what exists today

- Enlarge Quattor adoption through strong dissemination and training activities
  - Establish close contacts with new NGIs which could benefit from management models enabled by Quattor
  - Improve documentation, lower learning curve with appliances
  - Study feasibility/interest for a commercial support

- Long-term organization of the community
  - Study feasibility and best type of consortium
  - Study possibility to register Quattor as a trademark

Who?

- Currently 10 partners from 6 countries, mainly from the community
    - CNRS: LAL, LAPP, UREC/PLUME
        - Coordinating partner: Michel is the project coordinator
    - TCD
    - SFTC/RAL
    - FOM/NIKHEF
    - CERN
    - AUTH
    - Morgan Stanley
    - SixSq: expertise in agile SW development and build/test
        - Only non-Quattor user
- ULB intended to join but had to resign because of the lack of a specific expertise inside the project
    - Risk of being fired off at a later stage

Improving Quattor Accessibility

Link with the Community

- QUEST is a project to serve the Quattor community
  - The work plan comes from the discussions inside the community
  - Everything done will be contributed to the standard toolkit
- Quattor community is an explicit partner in the QUEST proposal
  - Quattor Workshop will be one of the major place for interactions between QUEST and the community
  - Quattor community will be asked for an early feedback about QUEST developments
  - No attempt to cover all the Quattor development needs
    - Focus on what is difficult to do on a best effort basis
- Ensure the long-term dynamism of the community
  - QUEST is only a focused 2-year project
  - We want Quattor to be in a better position to meet future challenges

Improving Quattor Accessibility

Where we are?

- Proposal (form B) is in pretty good shape
  - Still a lot of work to do for finalizing/polishing it before the deadline on Nov. the 24th
  - 8 WPs: 3 NA, 3 SA, 2 JRA
  - Difficult to circulate it because of confidentiality agreed in a MoU and because of the call competition
  - Draft from early October reviewed by several people with different profiles: positive feedback from everybody
- Administrative aspects mostly sorted out
  - Help received from CNRS
- Budget: total 2.8 M€, funded 2.4 M€
  - ~12 funded FTEs

Next steps

- Selection is a 2-step process
  - Proposal reviewed by experts who give a score for several criteria: need to get at least 3/5 for each critera
    - Answer end of March
  - Proposition ranked and negociations start: Spring
    - Budget is screened for every possible reduction…
    - As soon as there is no money left, other proposals are not funded
    - Need to get the best possible score
  - Call is expected to be very competitive…
- If selected, project may start Sept. 1st, 2010
  - Doesn't mean we'll get all the money we ask for
  - Attempt to be as good as possible
  - We believe we have a very strong and consistent proposal: need to polish the presentation

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