BonFIRE

Building service testbeds on FIRE

BonFIRE Benefits and Open Access Approach
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- BonFIRE, as FP7 grant agreement number 257386 project has ended December 31st, 2013.
- BonFIRE has accepted new users since
  - http://www.bonfire-project.eu/access-now
- BonFIRE is rolling out new features
  - Developed for funded projects relying on the facility (Eco2clouds, Fed4FIRE)
  - Demoed during the project, but not pushed to production for all users
    - First important lesson : demoing new stuff for reviews and supporting a user base with stable features requires at least 2 flavours of your infrastructure : production and demo (in BonFIRE, we have production, qualification and integration)
  - Next update : next week
- **We have achieved some level of sustainability**

- Sustaining the user base
  - How to continue getting new users
- Sustaining operations
  - How to make sure the facility will stay operational
    - Bug fixes
    - General sysadmin work
    - User support
- Sustaining the facility
  - How to make sure the facility survives its current hardware
- Discussion

Sustain user base

- Keep attracting users
  - have an open access process ironed out during project lifetime
    - The process we run now is an optimized version, so it can be made sustainable
    - You cannot live in a world where all your users will be tied to the consortium aggreement
  - need to understand usage : think about the feedback needed early
    - This is seldom interesting from a research perspective, but we believe this is vital to sustainability.
  - Limit the cost of user support with very good documentation
- The BonFIRE project had key decisions decided by a Sustainability Impact Board quite early in the project
  - Example: real users share resources in between group members
    - Delayed fun technologies (from the consortium point of view)
    - Deep impact in our work program: missed Dow milestones for that

- A project has to make it possible to
  - keep the facility online after the end of the project
  - release updates to the software
    - at least for bug fixing or to follow library/OS updates
    - for components no longer maintained by their original author
  - to take decisions about the facility (new users, ...)
- For this, we have an exploitation agreement that creates the BonFIRE foundation.
  - plan/start transition from project to non-project operations at least 18 months before the end of the project. It took an age for the SIB to explore the options and get consensus between the partners.
  - creation of an efficient post project governance structure, you cannot continue with the management structures of an EC project
  - creating tools that are automated as much as possible to reduce costs. Tools/processes that are costing to maintain WILL NOT BE MAINTAINED no matter how interesting they are

Sustain the facility

- Where to get resources to expand the facility or the renew the hardware. BonFIRE has not cracked this.

- Discussed indirect funding, where funded project using the facility can direct money to the consortium running the facility for hardware. Don't believe
  - the facility consortium can become member of all projects using the facility (administrative overhead unmanageable)
  - facility providers can send invoices to projects, as it might end up be the same institution (Inria billing Inria will not work when justifying costs to the EC), or can run a collaborative project that will do that
  - the operational costs can simply be hidden in a follow-up project.
  - it is feasible to get paying customers in an ecosystem where new/other projects are running open calls (pay to use vs be payed to use !)

- Still an open issue for BonFIRE. It is still easier to fund new facilities, despite a very high setup cost, rather than sustain facilities as long as they have (innovating) users.

- Not good to promote dependable testbeds to reduce time to experiment.

- Today, BonFIRE Foundation has a distributed direct funding model where partners of the Foundation must secure direct funding to sustain their activities in BonFIRE

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Thank you for your attention