Compute Client
Harmonization opportunities

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Development of the Plan

- Participants

    Martin Skou Andersen (ARC)

    Marco Cecchi ("guest", gLite)

    Alvise Dorigo (gLite)

    Björn Hagemeier (UNICORE)

- Status

    - Survey of command-line options in the
    existing clients, done months ago

Phasing out Products

- Before thinking of phasing out components, we should stress the role of EMI in developing valuable software of real interest to user communities. With this in mind:

- Harmonization could easily be achieved by developing a new unified client from scratch

- Would this lead to phased out components?

EMI INFSO-RI-261611

Main Difficulties

- For the integration, some Clients are easier to extend than others

  UCC

  biased towards UNICORE, but extensible

  HiLA

  inherently extensible

  libarcclient

  inherently extensible, mapping internal states to EMI-ES states

Will there be a Single API?

- Yes, in several bindings

- Need different API for each of the implementation languages

    C

    Java

    Python

    Created by automatic mapping through SWIG

- Develpoed by

Client Libraries

- To be implemented in C and Java

  Automatic language mapping for Python API

  A9.1 (Java), A9.2 (C)

  Lot of this will drop out of service development

  Actually required for any further client developments, e.g. integration into existing clients or single EMI ES client

- Commonalities among gLite/ARC should

- Clean solution

- Would be Java based and available on all platforms

- Large effort

- Risk to be put on single partner's shoulders

- New client/definition language to be learned for existing users

EMI ES integration in EMI clients

- Fully-fledged solution in all middlewares

- More even partitioning of the work among all PTs

- Not adding another component (clients won't be dropped anyway)

- Implementation not as straightforward as when one starts from scratch, not trivial refactoring

Proposed Agreed Plan

- Focus on developing C and JAVA APIs for job submission based on EMI-ES

- Work in parallel on implementation/integration of EMI-ES into the exisisting clients

- Try to uniform the look and feel
  - For what can be done

- A unified client could be built on top of one of our APIs anyway
  - So why not using Y3 to try and get a unified client out JAVA APIs?