

White paper

- original plan was to write a document mainly addressed to Governments (Italian one, first of all) and Funding Agencies (or consulting committees reporting to them)
- due to faster-than-anticipated interaction with the Italian Gov. this main goal is no longer considered so important
- Accelerator Detector and Computing groups are therefore free to establish the goals, the format and the production timing for such a document
- Detector group is considering the possibility of writing a “status report” that can be used for example when interacting with possible new collaborators, institutions, agencies, etc.

Computing white paper goals (I)

- provide a reference description of the overall strategy of development of SuperB computing
- provide an overview of the system that we are building for completing the detector TDR (special emphasis in the distributed computing approach)
 - can be used for interaction with parties interested to collaborate, computing centers managers, institutional oversighting bodies, etc.
 - in INFN we have two groups of referees that examine the SuperB financial requests
 - publication(s) documenting the original work done in the TDR phase?
- if it has to be used to make the case for the allocation of computing resources to SuperB, it should be ready by the December meeting
- part of the material could be used also for the public part of the web site

Computing white paper goals (II)

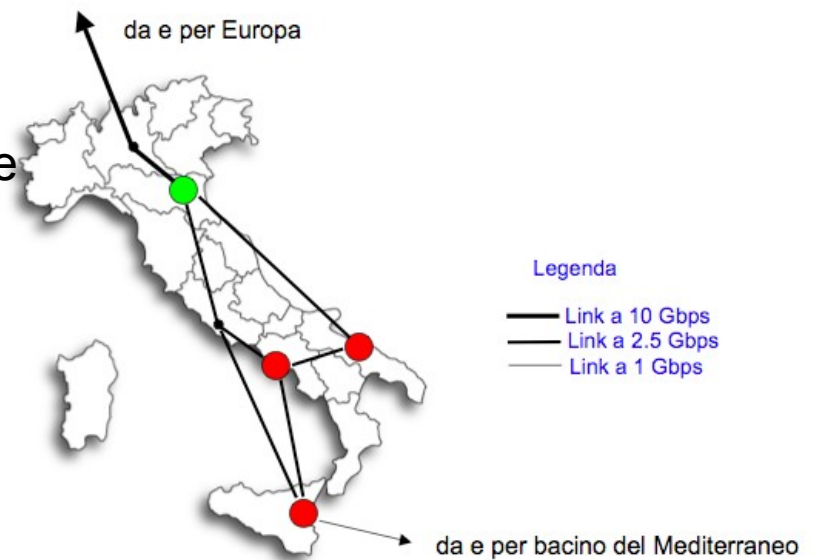
- a second goal could be to describe the plan of R&D activities that we think should be preliminary to the definition of the SuperB computing Model (Computing TDR)
 - could be used to get the resources we need for implementing the plan and more people interested and involved with the development of the SuperB Computing system
- the timescale depends on the our rate of progress in definining the key questions that the R&D plan should address
 - a planning group was setup last year to work on this, but, for various reasons, there hasn't been much activity of the group during 2009
 - the proposal, agreed within the group today, is to organize a workshop in February next year specifically dedicated to R&D issues and planning
 - timescale could then be the March collaboration meeting

Comp. white paper proposal

- description of overall strategy and global timeline
 - SuperB planning group work
 - the baseline computing model
 - CDR description
 - the computing requirements
 - updated CDR numbers
 - the computing services and tools for the SuperB TDR phase
 - introduction: motivations, goals, timescale
 - the simulation tools
 - the distributed production environment
 -
- (to be added by March):
- the SuperB R&D program

Distributed resources model ?

- the SuperB computing resources
 - combined offline and lattice QCD needs
 - the distributed approach
 - justification (CDR)
 - the GRID paradigm (CDR)
 - services and resources at the experimental site (new)
 - services and resources elsewhere (new)
 - INFN computing centers (new)
 - participation of the Italian sites
 - the model



- Futuri centri di calcolo e nodi GRID per SuperB
- Centro di calcolo INFN per LHC

Personnel

- Not much progress since September
- INFN allocated money for 2-years post-doc positions
 - requirements for candidates:
 - younger than 35
 - any previous period in this positions sums up against the total time limit
- a couple of weeks ago we didn't have candidates; now we may have a couple of fellows, one in Ferrara (34 years old) and one in Padova
- for technical people post-doc are not very well matched; we need contracts for temporary positions (Art. 15 and Art. 23)

More about manpower

- large generics + bkg productions have changed significantly the scope and the size of the TDR-phase supporting effort
 - distributed production environment
 - becoming a large project
 - operational issues:
 - operation coordinator
 - production
 - validation
- all this is fun, but what is real size of the problem ?
- what manpower do we need now with the highest priority ?

Activity	Manpower	Detailed tasks	Prerequisites	Site
Software development support OK for now	1 FTE	develop and support Subversion server scripts that implement the SuperB code repository policy develop and support tools (scripts) to support SuperB packages (package creation, tagging, migration, comparison, ...) develop and support tools (scripts) for the development and distribution of SuperB software releases develop and support tools for evaluating and managing SuperB software dependencies develop and support tools for building SuperB software release binaries	High school diploma in Computer science; Univ. degree in Computer science or equivalent preferable; experience with scripting languages and programming; knowledge of Linux operating system	Padova
Collaborative and administration tools support we have the person, not the position	1 FTE	design and implement the SuperB user DB at LNF with associated user interfaces and complete the design of the LDAP DB to be used as the base for the AA services; develop the tool to produce and update a LDAP directory service install and configure additional collaborative tools (e.g.: Hypernews system) complete the integration of the collaborative tools with the AA system (Sympa, Joomla, Indico...) configure Sympa to manage dynamic mailing list and sender's lists migrate to LNF the basic collaborative tools provide user support including training and documentation provide steady state maintenance	High school diploma in Computer science; Univ. degree in Computer science or equivalent preferable; basic experience with relational DB, LDAP directory services; experience with script and OO programming	LNf
Offline infrastructure support no candidate for currently available post-doc positions	1 FTE	facilitate the migration of selected BaBar offline software packages to SuperB offline software standards and new infrastructure packages work with physicists to define SuperB requirements on infrastructure software packages evaluate existing (non-BaBar) infrastructure software packages for use in SuperB. This involves characterizing the performance, maintainability, interface, and design of these packages in the context of the SuperB requirements test prototypes of infrastructure software packages for use in SuperB	Univ. degree in Physics; experience with Object Oriented programming in C++; experience with software development at a recent HEP experiment; experience with BaBar software is preferable	Padova with periods at LBL
Simulation Support no candidate for currently available post-doc positions	1 FTE	support the integration of full simulation background information into the fast simulation development of core functionalities of full simulation support the integration of the sub-detector simulation code into the full simulation. development software to compare the fast and full simulation descriptions of the SuperB detector development software to allocate and handle the performance of the full and fast SuperB simulations	Univ. degree in Physics Basic experience in Object Oriented programming in c++ Some experience with Geant4 toolkit is preferable	Torino/Roma2
Data bookkeeping, distributed computing should be OK	1 FTE	design and develop a distributed framework for analysis and simulation job submission and data storage design and develop a data bookkeeping system setup and maintain a Grid site setup and maintain the Grid infrastructure for the SuperB experiment verify the compatibility of the experiment offline software with the Grid infrastructure	Univ. degree in Computer Science or equivalent; experience with Linux operating system and DBMS; knowledge of Grid computing preferable	Ferrara/CNAF