



# *Software development tools for the SuperB*

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# *SuperB development tools*

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- ◆ status of the subversion repository in Padova
- ◆ package distribution



## *subversion repository*

- ◆ installed in Padova and tested
  - ◆ <https://sbrepo.pd.infn.it:8910/>
- ◆ access through username/password managed by LDAP
  - ◆ the same accounts used for the SuperB wikis, mailing lists etc.
- ◆ at the moment one project hosted
  - ◆ **Bruno**: the Geant4 based full simulation
- ◆ available also a separate repository (**test**) for playing around
- ◆ the repository is set up to sent e-mails to the project coordinator
- ◆ we are ready to host the fast simulation and other projects



# *subversion repository*

- ◆ improvements:
  - ◆ send e-mail to commit author
  - ◆ create mailing lists where the commit notifications are automatically sent so anybody can follow the code evolution
    - ◆ one mailing list per project/package?
  - ◆ add repository browsing via web
  - ◆ others...
- ◆ TODO
  - ◆ learn subversion and organize real code release repository/repositories
  - ◆ authorization by project/group?
  - ◆ documentation



# *package repository*

- ◆ set up a yum repository for rpm packages:
  - ◆ <http://sbrpms.pd.infn.it:6611/>
- ◆ currently packages only for SL46 and SL51 built on 32 bit systems
  - ◆ in the future we may add other architectures
  - ◆ we may distribute in similar way packagings for other distributions (if needed)
    - ◆ Mac's
    - ◆ Solaris
      - ◆ need manpower with good knowledge of these systems
- ◆ built a pseudo package ([superb-sim](#)) keeping the dependencies needed for the Geant4 full simulation
  - ◆ install it and automatically all the other packages will be installed with the correct release



# *package repository*

- ◆ current packages:
  - ◆ CLHEP 2.0.3.2
  - ◆ GDML 2.10
  - ◆ Geant4 9.1.p01
  - ◆ root 5.18.00
  - ◆ xerces-c 2.8.0
- ◆ the CERN packages are installed under the path [/usr/local/cern/PACKAGE/VERSION](#)
- ◆ TODO:
  - ◆ create mailing list where to notify new releases
  - ◆ use of apt-get together with yum
    - ◆ can handle non root installation



## *package repository*

- ◆ how to use it:
  - ◆ download the yum configuration file  
<http://lxsuperb-v1.pd.infn.it:5511/superb.repo.SL46>  
(or .SL51)
  - ◆ copy it to /etc/yum.repos.d/superb.repo
  - ◆ download the signature file  
<http://lxsuperb-v1.pd.infn.it:5511/SUPERB-GPG-KEY>
  - ◆ install the key:
    - ◆ rpm --import SUPERB-GPG-KEY
  - ◆ clean the yum cache:
    - ◆ yum clean all
  - ◆ install the package superb-sim
    - ◆ yum install superb-sim
- ◆ instructions available at <http://lxsuperb-v1.pd.infn.it:5511/>