Introduction to the e-lab Gforge Portal and svn Server

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GFORGE Tutorial

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Tutorial for
Code Developers
GFORGE Tutorial

• Introduction to gforge web portal
  – What is GForge;
  – Which gforge web portals are actually available;
  – General information about web site home page and project home page;
  – Getting start: register as new user
  – Login...

• Developer User Guide
GFORGE Tutorial: what is gforge

• Gforge is a web application written in PHP that helps code developers in managing the entire development life cycle
• A tool to create and control all the aspects of a software project:

  Main features:
  - CVS and Subversion;
  - mailing lists;
  - Doc management;
  - bug tracking system;
  - wiki, forum and news;
GFORGE TUTORIAL: gforge web portals

- qe-forge.org → Quantum ESPRESSO related projects
- gforge.escience-lab.org
  - eLab projects
  - I.C.T.P. projects
GFORGE TUTORIAL: Home Page

GForge.escience-lab.org is a service offered to facilitate the scientific collaborations of people working at the joint Democritos/Sissa laboratory for escience.

This forge is an integrated set of tools or components that facilitates collaboration on software projects. It provides tools for version control, bug tracking, task management, and tools for communication (newsgroups, web pages, wiki, mailing lists, etc.). A forge makes scientific technical collaboration easier; the tools adapt to a variety of needs. The objective is to provide everyone working in the eLab with an infrastructure for their scientific-technical collaborations with internal and external partners.

A forge gives the eLab people tools that promote good practices for collaborative work and that help in the dissemination of their work (inside and outside of the laboratory). It permits an evolving collaboration around a project. Thanks to its associated public and private project spaces, the working environment evolves and adapts as the project does. It's a resource to help the eLab project and people in their work and its visibility.

Projects List
Members List
- Admins
- Developers → Junior → Senior → Support Tech
Summary of all features enabled for the project:
- News
- Packages downloads
- Tracking system (bug, patch, )
- Documentation
- Mailing lists
- Repository (cvs or svn)
GFORGE TUTORIAL: New Account - 1/2

Insert your data as required
GFORGE TUTORIAL: New Account - 2/2

This email address will be verified before account activation. You will receive a mail forward account of <username@users.geforge.org> that will forward to this address.

Receive Email about Site Updates (Very low traffic and includes security notices. Highly Recommended.)

Receive additional community mailings (Low traffic.)

Fields marked with * are mandatory.

Register

[Resend confirmation email to pending account]
GFORGE TUTORIAL: Login Page

When you have been registered you choose:
- user name
- password

Click to view this page
These tree links are the same in all pages

If you forgot a password click here
GFORGE TUTORIAL

- Introduction to qe-forge.org web portal
- Developer User Guide
  - After Logged in: your personal pages;
  - Join to a project;
  - Quick overview of main features available;
  - FRS and SCM: Download source code or packaged distribution;
  - Submit a bug;
GFORGE TUTORIAL: Personal Page

Here you can change your personal information
GFORGE TUTORIAL: Personal Page - 2/2
GFORGE TUTORIAL: Project Page
GFORGE TUTORIAL: join to a project - 1/2

Click here to join to the project
GFORGE TUTORIAL: join to a project - 2/2

You can request to join a project by clicking the submit button. The administrator will be emailed to approve or deny your request.

If you want, you can send a comment to the administrator:

Click the button
GFORGE TUTORIAL: Activity Project Page

Activity of project:
Each new
- forum post
- tracker activity
- file release
Are available here.
You can reach quickly the section into the portal clicking on the link

Build-query panel
GFORGE TUTORIAL: Mailing Lists (mailman)

Mailing lists provided via a GFOrge version of GNU Mailman. Thanks to the Mailman and Python crews for excellent software.

Choose a list to browse, search, and post messages.

<table>
<thead>
<tr>
<th>Mailing list</th>
<th>Description</th>
<th>Subscription</th>
</tr>
</thead>
<tbody>
<tr>
<td>q-e-announce</td>
<td>ML for official announcements</td>
<td>Subscribe/Unsubscribe/Preferences</td>
</tr>
<tr>
<td>q-e-commits</td>
<td></td>
<td>Subscribe/Unsubscribe/Preferences</td>
</tr>
<tr>
<td>q-e-users</td>
<td></td>
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**Mailing List:**
Mailman integration as back-end
- default ml: [project_name]-commits
- Admin project can create any ml needed
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<td></td>
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</tr>
<tr>
<td>q-e-users Archives</td>
<td></td>
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Subscribe to mailing list; if you are developer subscribe to [project_name]-commits ml to receive information about all commits.
GFORGE TUTORIAL: Add documentation

It is possible add new category to Documentation Tree
You can upload documentation in different formats: Txt, ps, pdf, Tex ...
This is phpwiki; you can use this wiki to write documentation or to create a very basic website of your project and then point your home page link in Summary panel.
Checkout with anonymous Credentials in hpc-exercises Svn repository
GFORGE TUTORIAL: Access to source code repository (Quantum ESPRESSO cvs repository)

First checkout with developer credentials
File Release System:
Web interface to distribute your software packaged; it is available different packages and each package has different releases.
GFORGE TUTORIAL: Tracking System (Manage a bug 1/3)

Tracking system: Bugs Supports Patches
Powerful feature to follow developing project
GFORGE TUTORIAL: Manage a Bug - 2/3

List of all bugs (open and closed)
Click to have more info, to leave a message and give a patch
Wen you submit a bug you must specify all possible information available using scroll menu on the left, summary field and detailed description field;
Conclusion

- **Powerful tool**
  - Speedup code development
  - Needed by collaborative software projects

- **A project (hpc-exercises) is available for this school**
  - Interact with it
  - You are welcome to join the project