



**The Abdus Salam
International Centre for Theoretical Physics**



2068-8

**Advanced School in High Performance and GRID Computing -
Concepts and Applications**

30 November - 11 December, 2009

Introduction to the e-lab Gforge Portal and svn Server

A. Campagnari
*SISSA
Trieste
Italy*

GFORGE Tutorial



Campagnari Alberto SISSA - eLab



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

The screenshot shows the GForge Home Page in a browser window. The browser's address bar displays <https://gforge.escience-lab.org/>. The page features a navigation menu with options like Home, My Page, Project Tree, Code Snippets, Project Openings, Admin, and Reporting. A search bar is present, and a 'Subscribe/Login' button is highlighted with a grey box and an arrow pointing to the 'Log Out' link in the top right corner. A table titled 'Active Projects' is circled in black, and a 'Projects List' box at the bottom has an arrow pointing to the table. The table lists various project groups and their registration times.

Active Projects

Currently active projects on escience-lab (as of 14):

Group Name	Register Time
MPI-programming	2009-10-19 15:41
RegCM	2009-09-15 17:37
C4 - Cluster Command&Control Console	2009-05-18 11:41
Gridseed	2009-04-29 14:02
FLOWSB	2009-04-01 15:29
Protein Servers	2009-03-25 16:27
pbsacct	2009-03-04 19:06
Modules for HPC environment	2009-03-04 15:58
GRID and HPC benchmarks statistics	2009-03-02 19:45
Consorzio Rinave	2009-02-27 12:18
eLab - Grid	2009-02-25 16:41
ef-plugin-benchmarking	2009-02-25 16:41
hpc-exercises	2009-02-25 16:39
eLab Benchmarking Suite	2009-02-25 16:38

If you want to add a [new project](#), open a [new account](#), wait the mail confirmation, sent to the email address used for register your account, and then, after logged in, open a new project.

Projects List

GFORGE TUTORIAL: Project Summary Page 1/2

Applications Places System 12:12 PM

qeForge: Quantum ESPRESSO: Project Info (on debian)

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

https://qe-forge.org/projects/q-e/

Log In New Account Get Help

Home My Page Project Tree Code Snippets **Quantum ESPRESSO**

Summary Activity Tracker Lists Docs News SCM Files Wiki

Quantum ESPRESSO is an integrated suite of computer codes for electronic-structure calculations and materials modeling at the nanoscale. It is based on density-functional theory, plane waves, and pseudopotentials (both norm-conserving and ultrasoft).

- Development Status: 5 - Production/Stable
- Intended Audience: Developers, End Users/Desktop
- License: GNU General Public License (GPL)
- Programming Language: C, Fortran, Tcl
- Topic: Density-Functional Theory calculation

Registered: 2008-09-22 15:02
Activity Percentile: 66.66%
View project [Statistics](#) or [Activity](#)
View list of [RSS feeds](#) available for this project.

Members List

- Admins
- Developers
 - Junior
 - Senior
- Support Tech

Developer Info

Project Admins:
[Paolo Giannozzi](#)

Developers:
[Alberto Giuseppe Campagnari](#)
[Alexander Smogunov](#)
[Andrea Dal Corso](#)
[Anton Kokal](#)
[Ari Paavo Seitsonen](#)
[Carlo Cavazzoni](#)
[Davide Ceresoli](#)
[Federico Zipoli](#)
[Gabriele Sciauzero](#)
[Geoffrey Stenut](#)
[Layla Martin-Samos](#)
[Lorenzo Paulatto](#)
[Matteo Calandra](#)
[Osman Baris Malcioglu](#)
[Paolo Umari](#)
[Stefano Cozzini](#)
[Stefano de Gironcoli](#)
[Stefano Paoletti](#)

[\[View Members\]](#)
[\[Request to join\]](#)

Latest File Releases

Package	Version	Date	Notes / Monitor	Download
Complete QE distribution	4.1.1	September 9, 2009		Download
QE-ABINIT converter	0.0.1	April 3, 2009		Download
QE Benchmarks	Large-size CP and PW benchmark	July 20, 2009		Download

[\[View All Project Files\]](#)

Public Areas

[Project Home Page](#)

Latest News

Quantum-ESPRESSO v4.1
Paolo Giannozzi - 2009-02-11 16:12

albecamp@debian: ~ In arrivo (569 in totale... albecamp@democrit... Tutorial_qe-forge.org... qeForge: Quantum ES... Starting Take Screens...

GFORGE TUTORIAL: Project summary page 2/2

Applications Places System 12:13 PM

qeForge: Quantum ESPRESSO: Project Info (on debian)

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

https://qe-forge.org/projects/q-e/

Paolo Umari
Stefano Cozzini
Stefano de Gironcoli
Stefano Paolini
[View Members]
[Request to join]

Latest File Releases

Package	Version	Date	Notes / Monitor	Download
Complete QE distribution	4.1.1	September 9, 2009	[icon] [icon]	Download
QE-ABINIT converter	0.0.1	April 3, 2009	[icon] [icon]	Download
QE Benchmarks	Large-size CP and PW benchmark	July 20, 2009	[icon] [icon]	Download

[View All Project Files]

Public Areas

- Project Home Page
- Tracker
 - Bugs (4 open / 7 total) Bug Tracking System
 - Support (0 open / 0 total) Tech Support Tracking System
 - Patches (0 open / 0 total) Patch Tracking System
 - Feature Requests (4 open / 6 total) Feature Request Tracking System
- DocManager: Project Documentation
- Mailing Lists (3 public mailing lists)
- SCM Repository (CVS: 2,269 commits, 292 adds)

Latest News

Quantum-ESPRESSO v.4.1
Paolo Giannozzi - 2009-02-11 16:12 (0 Comment) [Read More/Comment]

[News archive]
[Submit News]

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

qeForge: User Account Registration

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

http://qe-forge.org/account/register.php

Search Log in New Account Get Help

Home My Page Project Tree Code Snippets

Login Name (do not use uppercase letters):*

Password (min. 6 chars):*

Password (repeat):*

Title:

First Name:*

Last Name:*

Language Choice:
Italian

Timezone:
GMT

Theme
Default Theme

Country:
ITALY

@Email Address:*

This email address will be verified before account activation. You will receive a mail forward account at <loginname@users.qe-forge.org> that will forward to this address.

Insert your data as required

GFORGE TUTORIAL: New Account - 2/2

qeForge: User Account Registration

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

http://qe-forge.org/account/register.php

Timezone:
GMT

Theme
Default Theme

Country:
ITALY

@Email Address.*
This email address will be verified before account activation. You will receive a mail forward account at <loginname@users.qe-forge.org> that will forward to this address.

Address:
Address:
Phone:
FAX:

Receive Email about Site Updates *(Very low traffic and includes security notices. Highly Recommended.)*
 Receive additional community mailings *(Low traffic.)*

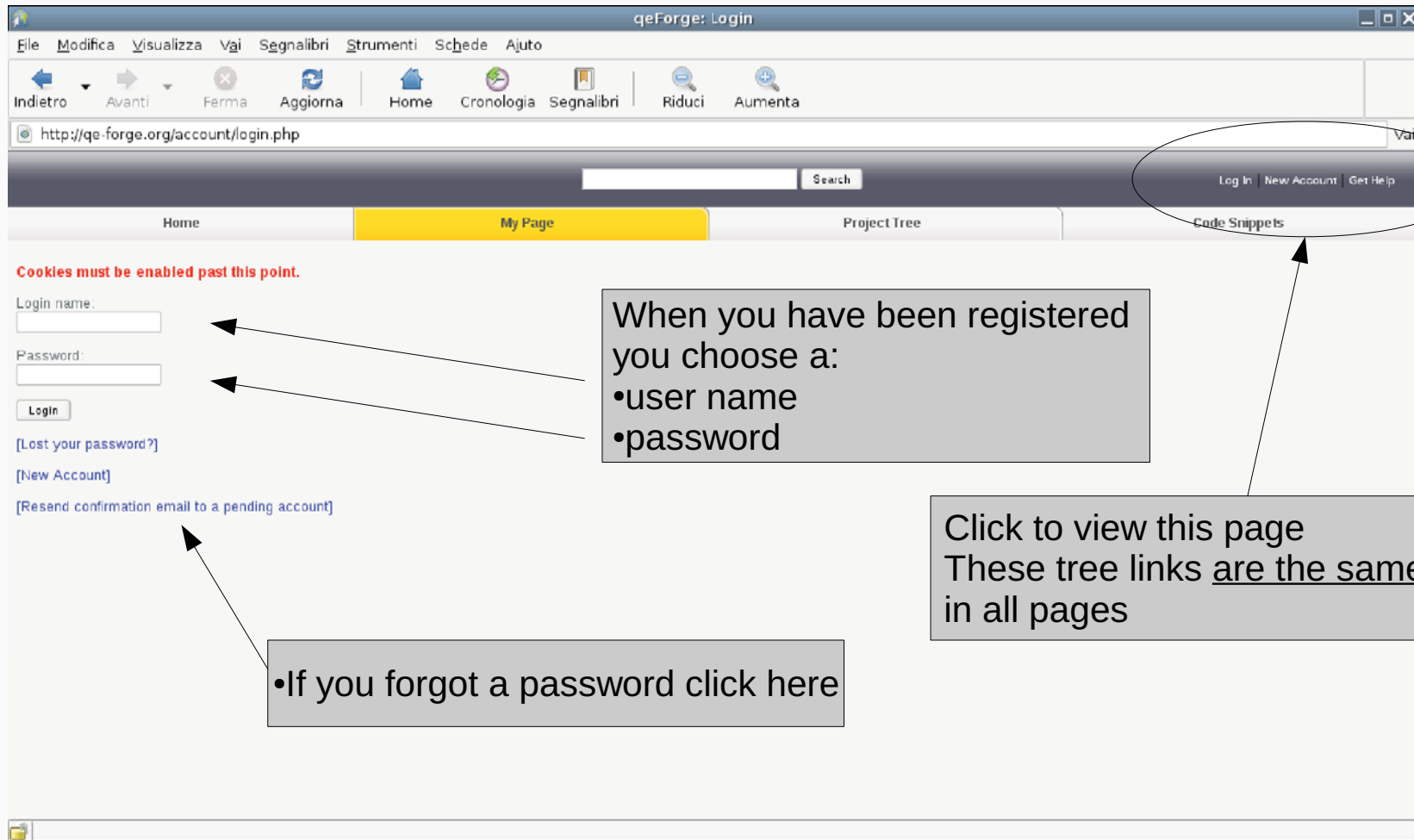
Fields marked with * are mandatory.

Register

[\[Resend confirmation email to a pending account\]](#)

powered by
Fusion Forge

GForge Tutorial: Login Page



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

The screenshot shows a web browser window titled "qeForge: Account Maintenance". The address bar shows "http://qe-forge.org/account/". The browser's menu bar includes "File", "Modifica", "Visualizza", "Vai", "Segnalibri", "Strumenti", "Schede", and "Ajuto". The toolbar contains navigation buttons like "Indietro", "Avanti", "Ferma", "Aggiorna", "Home", "Cronologia", "Segnalibri", "Riduci", and "Aumenta". The page header includes a search bar, "Log Out", "My Account", "Get Help", and a "Quick Jump To..." dropdown. The main navigation tabs are "Home", "My Page" (highlighted in yellow), "Project Tree", and "Code Snippets".

Below the navigation, there are links for "My Personal Page", "Diary & Notes", "Account Maintenance", and "Register Project". A section titled "Account Maintenance" contains a welcome message: "Welcome Alberto Giuseppe Campagnari." and "Account options:" with a link to "View My Developer Profile".

The user profile information is displayed as follows:

Member since:	2008-09-01 12:12
User ID:	105
Login name:	campagnari [Change Password]
First Name:	<input type="text" value="Alberto Giuseppe"/>
Last Name:	<input type="text" value="Campagnari"/>
Language:	<input type="text" value="Italian"/>
Timezone:	<input type="text" value="Europe/Vatican"/>
Theme:	<input type="text" value="Default Theme"/>
Country:	<input type="text" value="ITALY"/>
Email Addr:	albecamp@gardasoluzioniinformatiche.net [Change Email Addr]
Address:	<input type="text"/>
Address:	<input type="text"/>
Phone:	<input type="text"/>

The browser's address bar at the bottom shows "http://qe-forge.org/users/campagnari/".

Here you can change your personal information

GFORGE TUTORIAL: Personal Page - 2/2

The screenshot shows a browser window titled "GForge: Account Maintenance" with the URL "http://qe-forge.org/account/". The browser's menu bar includes "File", "Modifica", "Visualizza", "Vai", "Segnalibri", "Strumenti", "Schede", and "Ajuto". The toolbar contains icons for "Indietro", "Avanti", "Ferma", "Aggiorna", "Home", "Cronologia", "Segnalibri", "Riduci", and "Aumenta".

The main content area displays the following account information and settings:

- Member since: 2008-09-01 12:12
- User ID: 105
- Login name: **campagnari** [Change Password]
- First Name: Alberto Giuseppe
- Last Name: Campagnari
- Language: Italian
- Timezone: Europe/Vatican
- Theme: Default Theme
- Country: ITALY
- Email Addr: **albe camp@gardasoluzioniinformatiche.net** [Change Email Addr]
- Address: [Empty text box]
- Address: [Empty text box]
- Phone: [Empty text box]
- FAX: [Empty text box]
- Title: [Empty text box]

Preferences

- Receive Email about Site Updates (Very low traffic and includes security notices. Highly Recommended.)
- Receive additional community mailings. (Low traffic.)

Buttons: [Update] [Reset Changes]

Footer: powered by Fusion Forge

GForge TUTORIAL: Project Page

The screenshot shows a web browser window titled "qeForge: Personal Page For campagnari". The browser's address bar displays "http://qe-forge.org/my/". The page features a navigation menu with "Home", "My Page" (highlighted), "Project Tree", and "Code Snippets". Below the menu, there are links for "My Personal Page", "Diary & Notes", "Account Maintenance", and "Register Project". A secondary navigation bar includes "Assigned Artifacts", "Assigned Tasks", "Submitted Artifacts", "Monitored Items", "My Bookmarks", and "Projects". The main content area displays a table with the following data:

Remove	My Projects	My Roles
	Multi Scale Modeling Simulation	Support Tech
	PSIlibrary	Support Tech
	Quantum ESPRESSO	Support Tech
	Quantum Monte Carlo	Support Tech
	TDDFPT	Support Tech
	Test Project II	Admin
	Test project IV	Admin
	Yambo	Support Tech

The bottom right corner of the page features the "powered by Fusion Forge" logo.

GFORGE TUTORIAL: join to a project - 1/2

The screenshot shows a web browser window displaying the GForge project page for 'hpc-exercises'. The browser's address bar shows the URL 'https://gforge.escience-lab.org/projects/hpc-2008/'. The page features a navigation menu with tabs for 'Home', 'My Page', 'Project Tree', 'Code Snippets', 'Project Openings', and 'hpc-exercises'. Below the navigation, there is a search bar and a 'Log In' link. The main content area includes a project description, registration details, and a 'Developer Info' sidebar. A callout box with the text 'Click here to join to the project' points to the '[Request to join]' link in the sidebar. The sidebar also lists project administrators and developers, along with a '[View Members]' link. Below the main content, there are sections for 'Latest File Releases' (showing no releases) and 'Public Areas' (including a project home page and a bug tracking system). The browser's status bar at the bottom shows the text 'Inserire un indirizzo web da aprire, o una frase da cercare'.

escience-lab: hpc-exercises: Project Info

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

https://gforge.escience-lab.org/projects/hpc-2008/ Vai

Science LAB

Search the entire project Search Advanced search Log In New Account Get Help

Home My Page Project Tree Code Snippets Project Openings hpc-exercises

Summary Activity Forums Tracker Lists Tasks Docs Surveys News SCM Files

This project comprises all the small pieces of software that will be used during all the HPC/GRID school starting from 2008

This project has not yet categorized itself in the Trove Software Map

Registered: 2009-02-25 16:39
Activity Percentile: 50%
View project [Statistics](#) or [Activity](#)
View list of [RSS feeds](#) available for this project.

Developer Info
Project Admins:
[Stefano Cozzini](#)
Developers:
[Alberto Giuseppe Campagnari](#)
[Martin Scarcia](#)
[\[View Members\]](#)
[\[Request to join\]](#)

Click here to join to the project

Latest File Releases

Package	Version	Date	Notes / Monitor	Download
This Project Has Not Released Any Files				

[\[View All Project Files\]](#)

Public Areas
[Project Home Page](#)
[Tracker](#)
Bugs (0 open / 0 total)
Bug Tracking System

Latest News
No News Items Found
[\[Submit News\]](#)

Inserire un indirizzo web da aprire, o una frase da cercare

GFORGE TUTORIAL: join to a project - 2/2

The screenshot shows a web browser window with the address bar displaying `https://gforge.escience-lab.org/project/request.php?group_id=7`. The page header features the Science LAB logo and a search bar. The navigation menu includes tabs for Home, My Page, Project Tree, Code Snippets, Project Openings, and hpc-exercises. The hpc-exercises tab is active, showing sub-tabs for Summary, Activity, Forums, Tracker, Lists, Tasks, Docs, Surveys, News, SCM, and Files. The main content area contains the following text:

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:

Below this text is a large empty text input field. At the bottom left of the input field is a "Submit" button, which is circled in red. A callout box with the text "Click the button" and an arrow points to the "Submit" button.

The footer of the page includes the "powered by Fusion Forge" logo.

GFORGE TUTORIAL: Activity Project Page

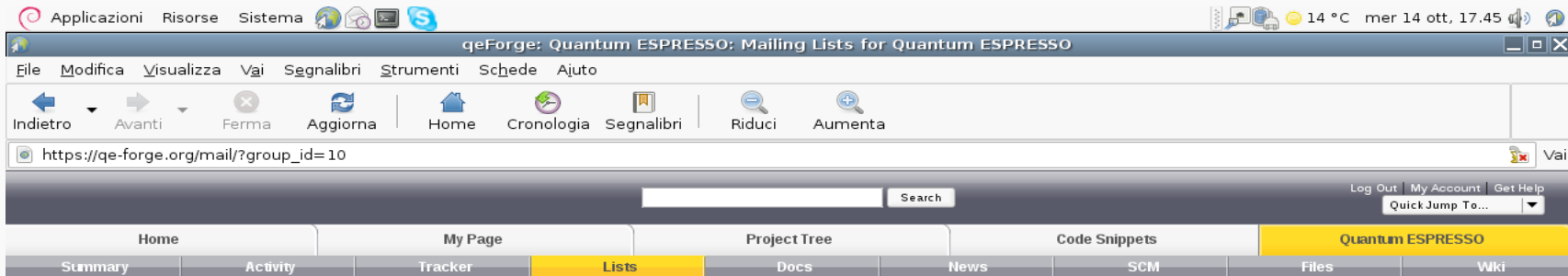
Activity of project:
Each new
-forum post
-tracker activity
-file release
Are available here.
You can reach quickly the section into the portal
clicking on the link

Time	Activity	By
2009-10-01		
11:32:37	Tracker Item [#25 Printing final cell variables at the end of fixed-cell run (Tone)] Opened	Paolo Giannozzi
2009-09-29		
17:20:17	Tracker Item [#17 constant of motion in CP dynamics] Closed	Nobody
2009-09-18		
15:11:18	Tracker Item [#24 Weird results for a simple system: H far away from graphene] Opened	Paolo Giannozzi

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.

Mailing list	Description	Subscription
q-e-announce Archives	ML for official announcements	Subscribe/Unsubscribe/Preferences
q-e-commits Archives		Subscribe/Unsubscribe/Preferences
q-e-users Archives		Subscribe/Unsubscribe/Preferences

powered by
Fusion Forge

Mailing List:

Mailman integration as back-end

- default ml: [project_name]-commits
- Admin project can create any ml needed

GFORGE TUTORIAL: Mailing lists

The screenshot shows the qeForge website interface. The browser address bar displays `https://qe-forge.org/mail/?group_id=10`. The navigation menu includes Home, My Page, Project Tree, Code Snippets, and Quantum ESPRESSO. The Quantum ESPRESSO section is expanded to show Summary, Activity, Tracker, Lists (highlighted), Docs, News, SCM, Files, and Wiki.

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.

Mailing list	Description	Subscription
q-e-announce Archives	ML for official announcements	Subscribe/Unsubscribe/Preferences
q-e-commits Archives		Subscribe/Unsubscribe/Preferences
q-e-users Archives		Subscribe/Unsubscribe/Preferences



Subscribe to mailing list; if you are developer
subscribe to [project_name]-commits ml
to receive information about all commits

GFORGE TUTORIAL: Add documentation

The screenshot shows a web browser window with the URL `http://qe-forge.org/docman/new.php?group_id=10`. The browser's address bar and menu bar are visible. Below the browser, a navigation menu includes 'Home', 'My Page', 'Project Tree', 'Code Snippets', and 'Quantum ESPRESSO'. A secondary menu below it includes 'Summary', 'Activity', 'Tracker', 'Lists', 'Docs', 'News', 'SCM', 'Files', and 'Wiki'. The 'Docs' menu item is highlighted in yellow.

The main content area displays the 'Submit new documentation' form. The form includes the following fields and options:

- Document Title** :*(at least 5 characters):
- Description** :*(at least 10 characters):
- Upload File** :*
- Language** : English (dropdown menu)
- Group that document belongs in** : PVecf (dropdown menu)
-

A circular callout highlights the 'Upload File' field. A text box to the right of the form contains the following text:

It is possible **add new category** to Documentation Tree
You can **upload documentation** in different formats: Txt, ps, pdf, Tex ...

At the bottom right of the page, there is a logo that reads 'powered by Fusion Forge'.

GFORGE TUTORIAL: Wiki

Applicazioni Risorse Sistema 14 °C mer 14 ott, 17.52

qeForge: q-e -

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

https://qe-forge.org/wiki/q-e/HomePage

Log Out My Account Get Help Quick Jump To...

Home My Page Project Tree Code Snippets Quantum ESPRESSO

Summary Activity Tracker Lists Docs News SCM Files Wiki

Navigation

- Discussion
- HomePage
- News
- Search
- LikePages
- BackLinks
- Preferences

Edition

- Edit
- PageHistory
- Diff
- PageInfo

[HomePage](#)

This wiki is under construction; please be patient if some link are still missing

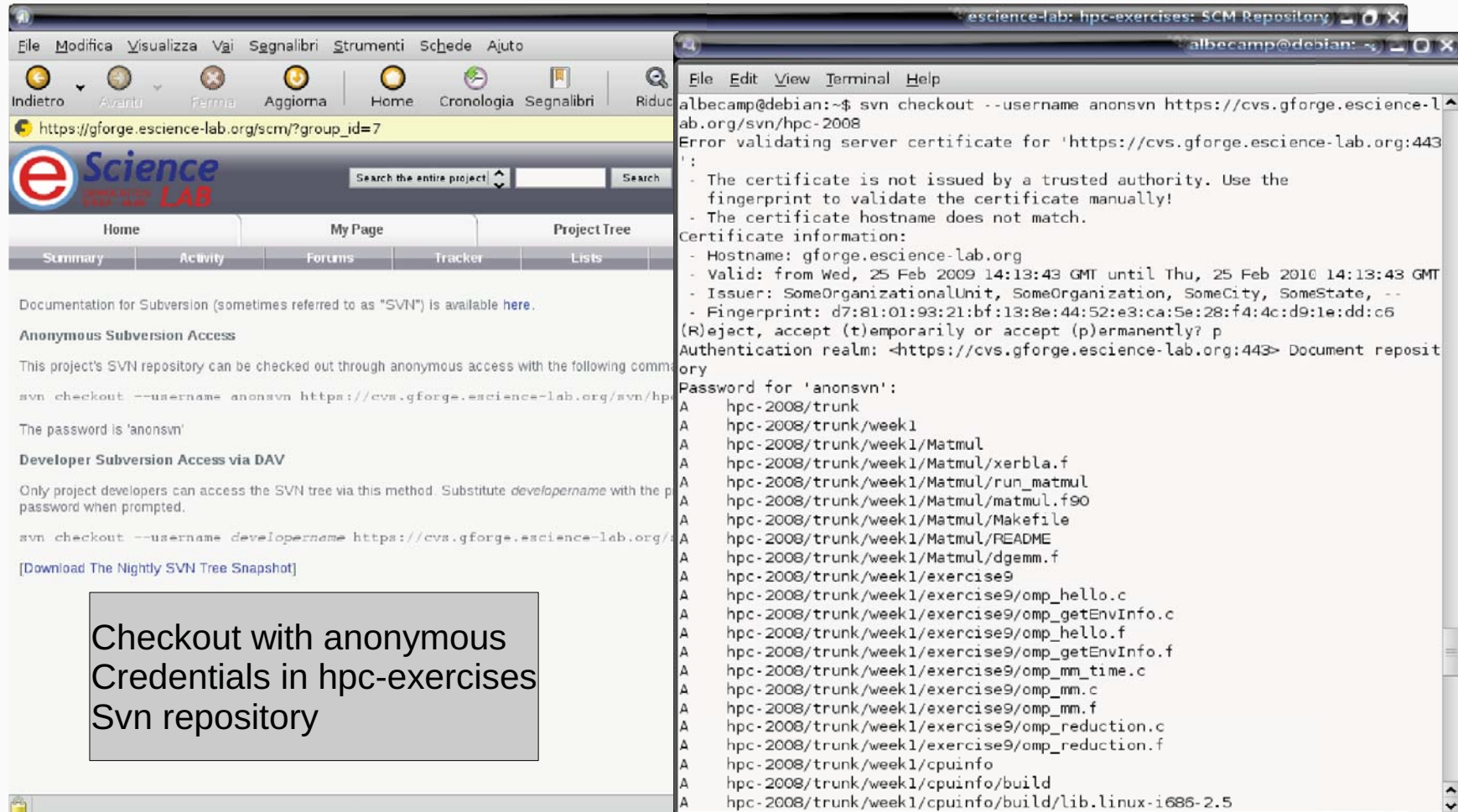
- User Guide (also in Printable Quantum-Espresso Documentation?).
- Tutorials and Examples
- Input Data Description?
- Developer Manual?
- Methodological Background?
- Frequently Asked Questions?
- Citing Quantum-ESPRESSO?
- Bibliography?

Before contributing, read first [How to edit the Quantum-ESPRESSO Wiki pages](#).

Owner: "Project Administrators" Last edited on May 5, 2009 16:50 by "Alberto Giuseppe Campagnari"

This is phwiki;
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

GFORGE TUTORIAL: Access to source code repository (hpc-exercises repository)



The image shows a web browser window displaying the GForge repository page for hpc-exercises. The URL is https://gforge.escience-lab.org/scm/?group_id=7. The page includes a search bar and navigation tabs for Home, My Page, and Project Tree. A section titled "Anonymous Subversion Access" provides instructions for checking out the repository using the command: `svn checkout --username anonsvn https://cvs.gforge.escience-lab.org/svn/hpc-exercises`. The password is 'anonsvn'.

Overlaid on the bottom right is a terminal window showing the execution of the same command. The output shows the checkout process, including the certificate information and the list of files being checked out:

```
albecamp@debian:~$ svn checkout --username anonsvn https://cvs.gforge.escience-lab.org/svn/hpc-exercises
Error validating server certificate for 'https://cvs.gforge.escience-lab.org:443':
- The certificate is not issued by a trusted authority. Use the fingerprint to validate the certificate manually!
- The certificate hostname does not match.
Certificate information:
- Hostname: gforge.escience-lab.org
- Valid: from Wed, 25 Feb 2009 14:13:43 GMT until Thu, 25 Feb 2010 14:13:43 GMT
- Issuer: SomeOrganizationalUnit, SomeOrganization, SomeCity, SomeState, --
- Fingerprint: d7:81:01:93:21:bf:13:8e:44:52:e3:ca:5e:28:f4:4c:d9:1e:dd:c6
(R)eject, accept (t)emporarily or accept (p)ermanently? p
Authentication realm: <https://cvs.gforge.escience-lab.org:443> Document repository
Password for 'anonsvn':
A   hpc-2008/trunk
A   hpc-2008/trunk/week1
A   hpc-2008/trunk/week1/Matmul
A   hpc-2008/trunk/week1/Matmul/xerbla.f
A   hpc-2008/trunk/week1/Matmul/run_matmul
A   hpc-2008/trunk/week1/Matmul/matmul.f90
A   hpc-2008/trunk/week1/Matmul/Makefile
A   hpc-2008/trunk/week1/Matmul/README
A   hpc-2008/trunk/week1/Matmul/dgemm.f
A   hpc-2008/trunk/week1/exercise9
A   hpc-2008/trunk/week1/exercise9/omp_hello.c
A   hpc-2008/trunk/week1/exercise9/omp_getEnvInfo.c
A   hpc-2008/trunk/week1/exercise9/omp_hello.f
A   hpc-2008/trunk/week1/exercise9/omp_getEnvInfo.f
A   hpc-2008/trunk/week1/exercise9/omp_mm_time.c
A   hpc-2008/trunk/week1/exercise9/omp_mm.c
A   hpc-2008/trunk/week1/exercise9/omp_mm.f
A   hpc-2008/trunk/week1/exercise9/omp_reduction.c
A   hpc-2008/trunk/week1/exercise9/omp_reduction.f
A   hpc-2008/trunk/week1/cpuintfo
A   hpc-2008/trunk/week1/cpuintfo/build
A   hpc-2008/trunk/week1/cpuintfo/build/lib.linux-i686-2.5
```

Checkout with anonymous Credentials in hpc-exercises Svn repository

GFORGE TUTORIAL: Access to source code repository (Quantum ESPRESSO cvs repository)



```
albecamp@debian:~$ export CVS_RSH=ssh
albecamp@debian:~$ cvs -d :ext:campagnari@scm.qe-forge.org:/cvsroot/q-e checkout
espresso
The authenticity of host 'scm.qe-forge.org (147.122.7.100)' can't be established.
RSA key fingerprint is 90:a9:b2:ef:d7:dc:de:9a:03:12:8f:da:e7:f6:ca:f7.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added 'scm.qe-forge.org' (RSA) to the list of known hosts.
campagnari@scm.qe-forge.org's password:
cvs checkout: Updating espresso
U espresso/.cvsignore
U espresso/License
U espresso/Makefile
U espresso/README
U espresso/TODO
U espresso/cl2html.pl
U espresso/configure
U espresso/cvs2cl.pl
cvs checkout: Updating espresso/CPV
U espresso/CPV/.cvsignore
U espresso/CPV/Makefile
U espresso/CPV/adjef.f90
U espresso/CPV/atoms_type.f90
U espresso/CPV/berry1on.f90
U espresso/CPV/bforceion.f90
U espresso/CPV/cg.f90
U espresso/CPV/cg_sub.f90
U espresso/CPV/cglib.f90
U espresso/CPV/chargedensity.f90
U espresso/CPV/compute_fes_grads.f90
```


GFORGE TUTORIAL: Get Packaged Version

The screenshot shows the qeForge website interface for the Quantum ESPRESSO project. A text box with a grey background and black text is overlaid on the page, explaining the File Release System. The text box contains the following text: "File Release System: Web interface to distribute your software packaged; it is available different packages and each package has different releases". Arrows point from this text box to various parts of the website interface, including the navigation menu, the main content area, and the table of releases.

Below is a list of all files of the project. Before downloading, you may want to read Release Notes

Package	Release & Notes
Complete QE distribution	
4.1.1	2009-08-09 11:54
espresso-4.1.1-examples.tar.gz	12,64 MB 13 Any Source .gz
espresso-4.1.1.tar.gz	8,81 MB 18 Any Source .gz
QE-ABINIT converter	
0.0.1	2009-04-03 11:22
QE-ABINIT.tar.gz	1,13 MB 79 Any .gz
QE Benchmarks	
Large-size CP and PW benchmark	2009-07-20 22:53
CNT10POR8.tgz	388 KB 19 Any .gz
Large-size PRACE benchmark	2009-07-20 22:51
GRIR686.tgz	957 KB 10 Any .gz
Medium-size PRACE benchmark	2009-07-20 22:49
GRIR443.tgz	955 KB 6 Any .gz
Large-size DEISA benchmark	2009-07-20 22:43
PSIWAT.tgz	494 KB 6 Any .gz
Medium size from DEISA benchmark	2009-07-20 22:33

GFORGE TUTORIAL: Tracking System (Manage a bug 1/3)

The screenshot shows the qeForge Quantum ESPRESSO web interface. The browser window title is "qeForge: Quantum ESPRESSO". The address bar shows "https://qe-forge.org/tracker/?group_id=10". The navigation menu includes "Home", "My Page", "Project Tree", "Code Snippets", and "Quantum ESPRESSO". The "Tracker" section is highlighted, showing a table of trackers.

Choose a tracker and you can browse/edit/add items to it.

Tracker	Description	Open	Total
Bugs	Bug Tracking System	4	7
Support	Tech Support Tracking System	0	0
Patches	Patch Tracking System	0	0
Feature Requests	Feature Request Tracking System	4	6

powered by
Fusion Forge

Tracking system: Bugs Supports Patches
Powerful feature to follow developing project

The taskbar shows a single window titled "qeForge: Quantum E...".

GFORGE TUTORIAL: Manage a Bug - 2/3

The screenshot shows the qeForge bug tracker interface. The browser address bar displays `http://qe-forge.org/tracker/index.php?group_id=10&atid=133`. The navigation menu includes Home, My Page, Project Tree, Code Snippets, and Quantum ESPRESSO. The Tracker section is active, showing a list of bugs with columns for ID, Summary, Open Date, Priority, Assigned to, and Submitted by. A callout box highlights the list and provides instructions: "List of all bugs (open and closed) Click to have more info, to leave a message and give a patch".

ID	Summary	Open Date	Priority	Assigned to	Submitted by
26	Massive memory leak	2009-10-15 13:10	4	Nobody	Lorenzo Paulatto
24	Weird results for a simple system: H far away from graphene	* 2009-09-18 15:11	4	Nobody	Paolo Giannozzi
22	After restart, symmetry is different from before	* 2009-09-07 13:01	3	Nobody	Paolo Giannozzi
21	disk_io low or none does not work with NEB	* 2009-09-05 20:08	3	Nobody	Lorenzo Paulatto
13	electron-phonon does not work if performed on saved dynamical matrix	* 2009-04-21 18:28	3	Paolo Giannozzi	Paolo Giannozzi
12	Missing value in UPF file copy in .save directory causes abort in GIPAW	* 2009-04-10 15:09	3	Nobody	Lorenzo Paulatto
10	error in phonon calculation	* 2009-04-08 10:52	3	Paolo Giannozzi	Ali Tavara
6	Parallelization problem leading to wrong charge	* 2009-03-10 10:29	3	Paolo Giannozzi	Paolo Giannozzi

GFORGE TUTORIAL: Manage a Bug - 3/3

The screenshot shows a web browser window with the URL `http://qe-forge.org/tracker/?func=add&group_id=10&atid=133`. The browser's address bar and menu bar are visible. The page content includes a navigation bar with tabs for Home, My Page, ProjectTree, Code Snippets, and Quantum ESPRESSO. Below the navigation bar, there are links for Bugs: Browse, Download .csv, Submit New, Reporting, Monitor, and Admin. The main form area contains several sections: 'For project' (Quantum ESPRESSO), 'Hardware' (None), 'Operating System' (None), 'Version' (None), 'Resolution' (None), 'URL', 'Assigned to' (Nobody), 'Summary' (?), 'Detailed description' (?), 'Product' (None), 'Component' (None), 'Severity' (None), and 'Priority' (?). A 'Submit' button is located at the top right of the form. A red warning message is displayed: 'DO NOT enter passwords or confidential information in your message! (?)'. Below the warning, there is an 'Attach Files' section with five 'Browse...' buttons and a 'Submit' button at the bottom.

When you **submit a bug** you must specify all possible information available using scroll menu on the left, summary field and detailed description field;

DO NOT enter passwords or confidential information in your message!
(?)
Attach Files:
Browse...
Browse...
Browse...
Browse...
Browse...
Submit

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