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**2068-8**

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

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**Introduction to the e-lab Gforge Portal and svn Server**

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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](http://qe-forge.org) → Quantum ESPRESSO related projects
- [gforge.escience-lab.org](http://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 items like Home, My Page, Project Tree, Code Snippets, Project Openings, Admin, and Reporting. A search bar is present with a dropdown for 'Software/Group' and a 'Search' button. A 'Subscribe/Login' button is highlighted with a grey box and an arrow pointing to the 'Log Out', 'My Account', and 'Get Help' links. A table titled 'Active Projects' lists various project groups and their registration times. A 'Projects List' box at the bottom has an arrow pointing to the table. A 'Latest News' section contains a post about a 'RegCM project short meeting'.

**Active Projects**

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

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

The screenshot shows the qeForge website for the Quantum ESPRESSO project. The browser window title is "qeForge: Quantum ESPRESSO: Project Info (on debian)". The URL is "https://qe-forge.org/projects/q-e/". The page has a navigation bar with tabs: Home, My Page, Project Tree, Code Snippets, and Quantum ESPRESSO. Under Quantum ESPRESSO, there are sub-tabs: Summary, Activity, Tracker, Lists, Docs, News, SCM, Files, and Wiki. The "Summary" tab is active.

The main content area includes a description of Quantum ESPRESSO, a list of project details, and a "Developer Info" section. A grey box with the text "Members List" and a list of roles is positioned over the "Developer Info" section. An arrow points from this box to the "Developer Info" section, which is circled in red. The "Developer Info" section lists the Project Admins and Developers.

**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 Sciauero  
Geoffrey Stenuit  
Layla Martin-Samos  
Lorenzo Paulatto  
Matteo Calandra  
Osman Baris Malcioglu  
Paolo Umari  
Stefano Cozzini  
Stefano de Gironcoli  
Stefano Pao ini

[View Members]  
[Request to oin]

**Latest File Releases**

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

[View All Project Files]

**Public Areas**

[Project Home Page](#)

**Latest News**

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

The browser's taskbar at the bottom shows several open windows, including "albecamp@debian: ~", "In arrivo (569 in totale...", "albecamp@democrit...", "Tutorial\_qe-forge.org...", "qeForge: Quantum ES...", and "Starting Take Screens...".

# GFORGE TUTORIAL: Project summary page 2/2

The screenshot shows the qeForge project summary page for Quantum ESPRESSO. The browser window title is "qeForge: Quantum ESPRESSO: Project Info (on debian)". The page is divided into several sections:

- Members:** A list of project members: Paolo Umari, Stefano Cozzini, Stefano de Gironcoli, and Stefano Paolini. Links for "[View Members]" and "[Request to join]" are provided.
- Latest File Releases:** A table listing recent releases with columns for Package, Version, Date, Notes / Monitor, and Download.
- Public Areas:** A list of project features including Project Home Page, Tracker (Bugs, Support, Patches, Feature Requests), DocManager, Mailing Lists, and SCM Repository.
- Latest News:** A section for project news, currently showing "Quantum-ESPRESSO v.4.1" by Paolo Giannozzi.

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

- 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.)*

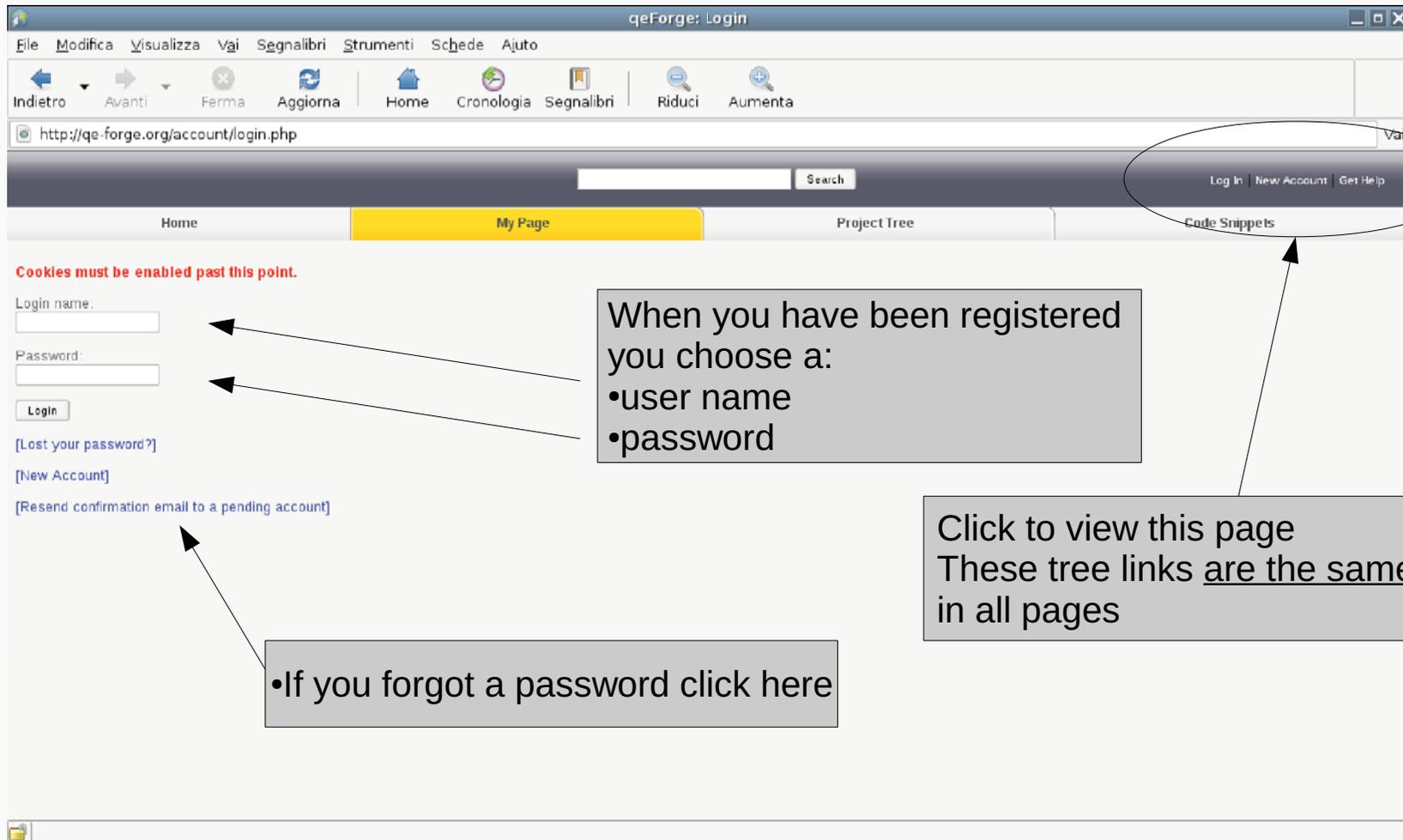
Fields marked with \* are mandatory.

Register

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

powered by  
Fusion Forge

# GFORGE TUTORIAL: Login Page



# GFORGE TUTORIAL

- Introduction to [qe-forge.org](http://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 contains "http://qe-forge.org/account/". The browser's menu bar includes "File", "Modifica", "Visualizza", "Vai", "Segnalibri", "Strumenti", "Schede", and "Ajuto". The toolbar shows navigation buttons like "Indietro", "Avanti", "Ferma", "Aggiorna", "Home", "Cronologia", "Segnalibri", "Riduci", and "Aumenta". The page has a search bar and a "Quick Jump To..." dropdown. The main navigation tabs are "Home", "My Page" (highlighted), "Project Tree", and "Code Snippets".

Under the "My Page" tab, 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".

Below this, a form displays user details:

Member since:	2008-09-01 12:12
User ID:	105
Login name:	campagnari <a href="#">[Change Password]</a>
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 <a href="#">[Change Email Addr]</a>
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/".

A callout box on the right side of the page contains the text: "Here you can change your personal information".

# GFORGE TUTORIAL: Personal Page - 2/2

The screenshot shows a browser window titled "qeForge: 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 user 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 input]
- Address: [Empty text input]
- Phone: [Empty text input]
- FAX: [Empty text input]
- Title: [Empty text input]

**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 contains 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 are sub-tabs for 'Summary', 'Activity', 'Forums', 'Tracker', 'Lists', 'Tasks', 'Docs', 'Surveys', 'News', 'SCM', and 'Files'. The main content area includes a project description, registration information, 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 'Developer Info' sidebar. The sidebar also lists project administrators (Stefano Cozzini) and developers (Alberto Giuseppe Campagnari, Martin Scarcia), along with links for '[View Members]' and '[Request to join]'. Below the main content, there are sections for 'Latest File Releases' (showing no releases), 'Public Areas' (with links to Project Home Page and Tracker), and 'Latest News' (showing no news items).

# 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 browser's menu bar includes options like 'File', 'Modifica', 'Visualizza', 'Vai', 'Segnalibri', 'Strumenti', 'Schede', and 'Ajuto'. The browser's toolbar shows navigation buttons: 'Indietro', 'Avanti', 'Ferma', 'Aggiorna', 'Home', 'Cronologia', 'Segnalibri', 'Riduci', and 'Aumenta'. The website header features the 'eScience LAB' logo, a search bar with the text 'Search the entire project', and links for 'Log Out', 'My Account', and 'Get Help'. The main navigation menu includes 'Home', 'My Page', 'Project Tree', 'Code Snippets', 'Project Openings', and 'hpc-exercises'. The 'hpc-exercises' section is highlighted in yellow. Below the navigation menu, there are sub-menus 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 this field is a 'Submit' button, which is circled in red. A callout box with a black border and white background contains the text 'Click the button' and an arrow pointing to the 'Submit' button.

In the bottom right corner of the page, there is a logo that says 'powered by Fusion Forge'.

# 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)

Applicazioni Risorse Sistema 14 °C mer 14 ott, 17.45

qeForge: Quantum ESPRESSO: Mailing Lists for Quantum ESPRESSO

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

https://qe-forge.org/mail/?group\_id=10

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

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
<a href="#">q-e-announce Archives</a>	ML for official announcements	<a href="#">Subscribe/Unsubscribe/Preferences</a>
<a href="#">q-e-commits Archives</a>		<a href="#">Subscribe/Unsubscribe/Preferences</a>
<a href="#">q-e-users Archives</a>		<a href="#">Subscribe/Unsubscribe/Preferences</a>

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## Mailing List:

Mailman integration as back-end

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

# GFORGE TUTORIAL: Mailing lists

Applicazioni Risorse Sistema 14 °C mer 14 ott, 17.45

qeForge: Quantum ESPRESSO: Mailing Lists for Quantum ESPRESSO

File Modifica Visualizza Vai Segnalibri Strumenti Schede Ajuto

Indietro Avanti Ferma Aggiorna Home Cronologia Segnalibri Riduci Aumenta

https://qe-forge.org/mail/?group\_id=10

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

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
<a href="#">q-e-announce Archives</a>	ML for official announcements	<a href="#">Subscribe/Unsubscribe/Preferences</a>
<a href="#">q-e-commits Archives</a>		<a href="#">Subscribe/Unsubscribe/Preferences</a>
<a href="#">q-e-users Archives</a>		<a href="#">Subscribe/Unsubscribe/Preferences</a>

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

qeForge: Quantum E...

# 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. The page content includes a navigation menu with tabs for Home, My Page, Project Tree, Code Snippets, and Quantum ESPRESSO. Below the navigation menu, there are links for Submit new documentation, View Documentation, Search in documents, and Admin. A text box explains that the Document Title refers to the relatively brief title of the document (e.g. How to use the download server) and the Description is a brief description to be placed just under the title. The form fields include: Document Title (required, at least 5 characters), Description (required, at least 10 characters), Upload File (with a Browse... button), Language (set to English), and Group that document belongs in (set to PVecf). A Submit Information button is at the bottom of the form. A callout box points to the Upload File field with the text: "It is possible add new category to Documentation Tree You can upload documentation in different formats: Txt, ps, pdf, Tex ...". The Fusion Forge logo is visible in the bottom right corner.

Submit new documentation | [View Documentation](#) | [Search in documents](#) | [Admin](#)

**Document Title:** Refers to the relatively brief title of the document (e.g. How to use the download server)  
**Description:** A brief description to be placed just under the title

**Document Title** :\*(at least 5 characters)

**Description** :\*(at least 10 characters)

**Upload File** :\*

**Language** :  
English

**Group that document belongs in** :  
PVecf

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**Fusion Forge**

# GFORGE TUTORIAL: Wiki

Applicazioni Risorse Sistema

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

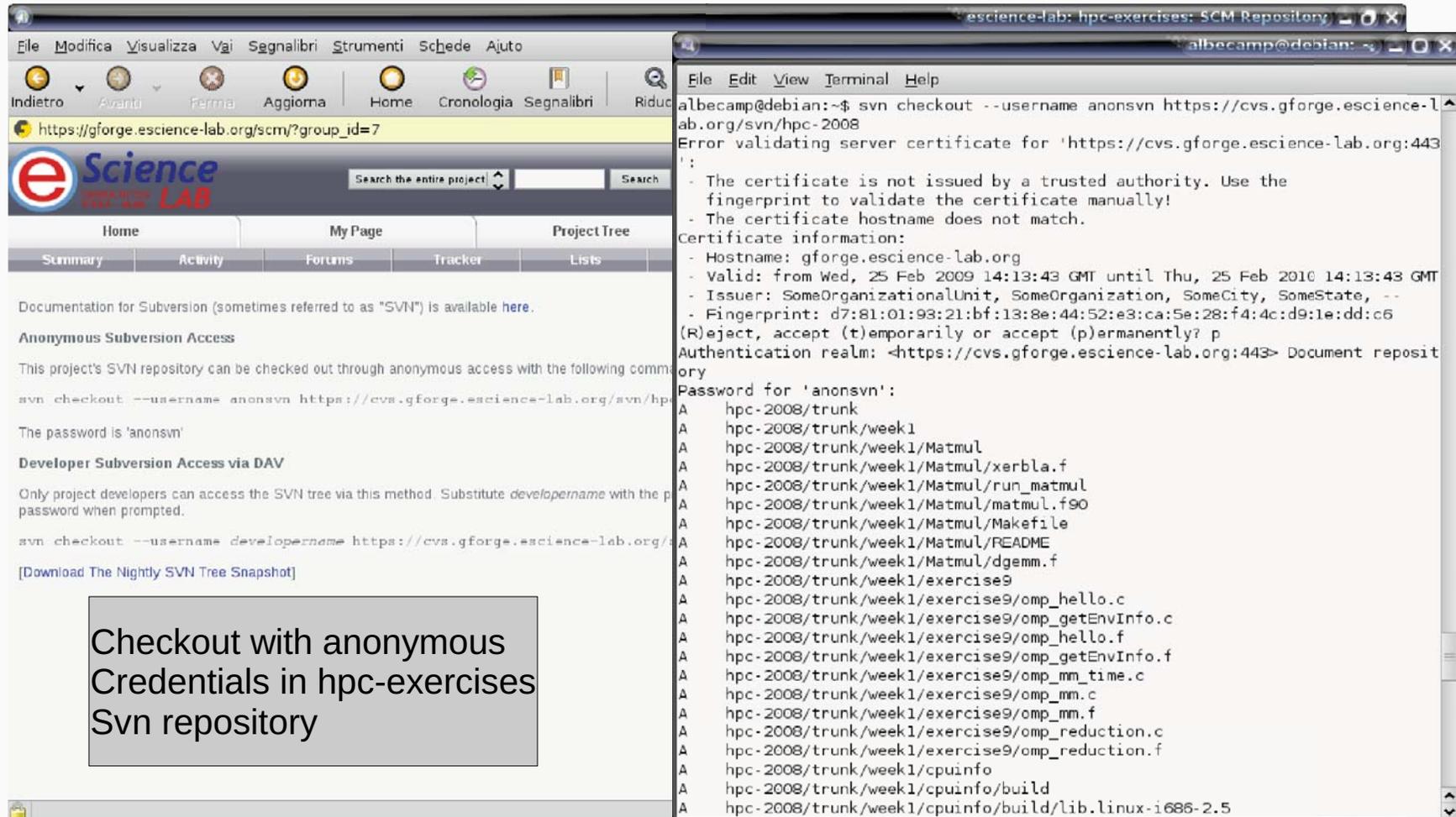
- [User Guide](#) (also in Printable Quantum-Espresso Documentation?).
- [Tutorials and Examples](#)
- [Input Data Description?](#)
- [Developer Manual?](#)
- [Methodological Background?](#)
- [Frequently Asked Questions?](#)
- [Citing Quantum-ESPRESSO?](#)
- [Bibliography?](#)

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 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

# 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](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 SVN checkout command. The output shows the directory structure of the repository, including the trunk directory and its subdirectories like week1, Matmul, and exercise9.

```
albecamp@debian:~$ svn checkout --username anonsvn https://cvs.gforge.escience-lab.org/svn/hpc-2008
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. The browser address bar displays [https://qe-forge.org/frs/?group\\_id=10](https://qe-forge.org/frs/?group_id=10). The page title is "qeForge: Quantum ESPRESSO: Project Filelist". The navigation menu includes "Home", "My Page", "Summary", "Activity", "Tracker", and "Lists". Below the navigation, a text box states: "Below is a list of all files of the project. Before downloading, you may want to read Release Notes".

A text box with a grey background and black text is overlaid on the right side of the page, containing 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 rows in the table below.

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

# 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
<a href="#">Bugs</a>	Bug Tracking System	4	7
<a href="#">Support</a>	Tech Support Tracking System	0	0
<a href="#">Patches</a>	Patch Tracking System	0	0
<a href="#">Feature Requests</a>	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 text 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 this is a sub-navigation bar with tabs for Summary, Activity, Tracker, Lists, Docs, News, SCM, Files, and Wiki. The main content area is titled "Bugs: Browse | Download .csv | Submit New | Reporting | Monitor | Admin".

On the left side, there is a form for submitting a bug. It includes a "Submit" button at the top. Below it, the project is identified as "Quantum ESPRESSO". The form contains several dropdown menus: "Hardware:", "Operating System:", "Version:", "Resolution:", "Product:", "Component:", "Severity:", "Assigned to: (?)", and "Priority: (?)". The "Assigned to:" dropdown is currently set to "Nobody (Admin)". There is a "Summary: (\*)" text input field and a "Detailed description:" text area with a rich text editor icon.

On the right side, there is a "Attach Files:" section with five "Browse..." buttons and a "Submit" button at the bottom.

A grey text box in the center of the page contains the following text: "Wen you **submit a bug** you must specify all possible information available using scroll menu on the left, summary field and detailed description field;"

A red warning message is displayed in a white box: "DO NOT enter passwords or confidential information in your message! (?)".

# 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