

Migration to GForge

Version 1.2

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Revision History

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1.0	June 2, 2005	S Lee	Initial Revision
1.1	June 15, 2005	S. Lee	Added Sections 3.1 and 3.2
1.2	June 15, 2005	S. Lee	Fixed a bug in the CVS checkout command on page 4.

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1 Introduction

This document is written to help users and repository owners of source.cs.cornell.edu to move their projects to the new GForge server at gforge.cis.cornell.edu.

1.1 Document Organization

1. Introduction: this chapter contains document organization and references.
2. Users: this chapter contains instructions for regular users of source.cs.cornell.edu for switching to GForge.
3. Repository/Project Owners: this chapter contains instructions for CVS repository/project owners on how to move their projects from source.cs.cornell.edu to Gforge.

1.2 References

The following documents and web sites provide information referenced in this document:

GForge

1. GForge web site: <http://www.gforge.org>
2. Copeland, Tom, et al. *GForge Manual*, (October 24, 2004).
http://gforge.org/docman/view.php/1/34/gforge_manual.pdf
3. GForge Server: <http://gforge.cis.cornell.edu>

CVS

4. CVS web site: <http://www.cvshome.org>
5. Per Cederqvist et al., *Version Management with CVS for cvs 1.11.8*, Free Software Foundation, Inc., 2004. <https://cvs.cvshome.org/files/documents/19/532/cederqvist-1.11.18.pdf>

1.3 Where to Get Help

If you need additional assistance in migrating your project, more help is available:

1. On the [Help Forum](https://gforge.cis.cornell.edu/forum/forum.php?forum_id=18) on gforge.cis.cornell.edu,
https://gforge.cis.cornell.edu/forum/forum.php?forum_id=18
2. FAQs on gforge.cis.cornell.edu,
https://gforge.cis.cornell.edu/forum/forum.php?forum_id=60
3. By e-mailing gforge-admin@gforge.cis.cornell.edu.

2 Users

2.1 Apply for a GForge Account

Go to the GForge web site, <http://gforge.cis.cornell.edu>, and sign up for an account. You will receive an e-mail ask you to confirm your registration. Do so.

Send your user name to the owner of your project, who can then add you as a member and grant you the appropriate privileges.

If you belong to more than one project, you only need to sign up for one account. One account can belong to multiple projects.

2.1.1 Public Key Authentication

Use the following procedure if you would like to use a public key (as opposed to password) to access the new repository on GForge.

1. Use the "ssh-keygen -t dsa" command to generate a DSA public/private key pair. Here's a sample session:

```
$ ssh-keygen -t dsa
Generating public/private dsa key pair.
Enter file in which to save the key (/home/<username>/.ssh/id_dsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/<username>/.ssh/id_dsa.
Your public key has been saved in /home/<username>/.ssh/id_dsa.pub.
The key fingerprint is:
e2:eb:aa:23:0b:0f:15:6a:f6:39:eb:0f:3a:37:96:20 <username>@<hostname>
```

2. This creates a public/private key pair `~/.ssh/id_dsa.pub` (public key) and `~/.ssh/id_dsa` (private key). Make sure (using `ls -l`) they have the following permissions:

```
-rw----- 1 <user> <group> 672 Jul 17 11:19 id_dsa
-rw-r--r-- 1 <user> <group> 616 Jul 17 11:19 id_dsa.pub
```

If the permissions differ, run:

```
chmod 600 ~/.ssh/id_dsa
chmod 644 ~/.ssh/id_dsa.pub
```

to set them correctly.

3. Upload the ssh key to GForge:
 - Log into GForge's web interface at <http://gforge.cis.cornell.edu>.
 - Under the "My Page" tab, click on "Account Maintenance."
 - In the "Shell Account Information" section near the bottom of the page, click on

“Edit Keys.”

- Paste the content of your public key file (`~/.ssh/id_dsa.pub`) in the “Authorized Keys” field.



Illustration 1 Upload ssh Key

2.2 Before the Repository Move

Before the repository is moved from source.cs to GForge, you should commit all the changes you want to keep. You can identify all the modified files that have not been committed using the “`cvs update`” command. Look for the files that are marked with “M”.

After committing all the changes you want to keep, wait for your project owner to tell you the repository has been moved to GForge. Any changes not committed at this point will not be carried forward and lost forever.

2.3 After the Repository Move

After the project owner moves the repository to GForge, you can use the following procedures to check out the new repository:

1. Add the following content to the `~/.ssh/config` file on your client machine. Replace `<gforge_user_name>` and `<gforge_project_name>` with appropriate values:

```
Host <gforge_project_name>-gforge
  Protocol 2
  HostName gforge.cis.cornell.edu
  IdentityFile ~/.ssh/id_dsa
  FallBackToRsh no
  ForwardX11 no
  User <gforge_user_name>
```

2. Set the CVS_RSH environment variable to ssh.

```
% setenv CVS_RSH /usr/bin/ssh    (In csh, tcsh on Linux hosts), or
$ export CVS_RSH=/usr/bin/ssh    (In bash on Linux host)
```

3. Check out a new working copy from the new repository on GForge:

```
% cvs -d :ext:<gforge_project_name>-gforge:/cvsroot/<gforge_project_name> co .
```

Note 1: <gforge_project_name> should match the Host line in your ~/.ssh/config file.

Note 2: Note the period in the above command after “co”.

3 Repository/Project Owners

Repository owners should use the following procedures to migrate their projects to the GForge server:

1. Register for an account for yourself on GForge.
2. Register for a project on GForge: Log into the GForge web interface. Under the “My Page” tab, click on “Register Project”. Fill out the web form.

The screenshot shows the GForge web interface. At the top, there is a navigation bar with the GForge logo, a search box labeled "Software/Group" with a dropdown arrow and a "Search" button, and a "Log Out My Account" link. Below the navigation bar are five tabs: "Home", "My Page", "Project Tree", "Code Snippets", and "Project Openings". The "My Page" tab is selected. The main content area displays a registration form with the following sections:

To apply for project registration, you should fill in basic information about it. Please read descriptions below carefully and provide complete and comprehensive data. All fields below are mandatory.

1. Project full name

You should start with specifying the name of your project. The "Full Name" is descriptive, and has no arbitrary restrictions (except a 40 character limit).

Full Name:

2. Project Purpose And Summarization

Please provide the following information about your project:

1. Please describe your project. What does it do? Note: This will NOT be used as the project public description (see below).
2. What's the purpose of this project? (Research or course work?)
3. Explain how this project satisfies the project registration and sponsorship policy. Provide name of the sponsor if required.

3. Project Public Description

This is the description of your project which will be shown on the Project Summary page, in search results, etc. It should not be as comprehensive and formal as Project Purpose description (step 2), so feel free to use concise and catchy wording. Maximum length is 255 chars.

Illustration 2 Project Registration

3. Ask everyone in your group to register for their own account on GForge and send you their user names.
4. As the project administrator, you can add everyone in your group to the project.
5. Ask everyone in your group to commit all the changes they'd like to keep to the old repository on source.cs.
6. Contact gforge-admin@gforge.cis.cornell.edu to arrange for moving the CVS repository from source.cs to GForge. Once the repository is moved to GForge, the old repository

on source.cs will no longer be accessible.

7. Tell everyone in your group that the migration is complete and they can check out code from the new repository on GForge.

3.1 Get Commit E-Mail

If you utilized the CVS commit e-mail feature on source.cs and would like to have the same feature on GForge, please read the following FAQ:

https://gforge.cis.cornell.edu/forum/forum.php?thread_id=179&forum_id=60

3.2 Keep Your Project/Repository Private

By default, your repository is readable by all GForge users, i.e. pretty much anyone in the world. Follow these steps to limit access to members of your own group:

1. Log onto GForge's web interface.
2. Under your project's SCM tab, click on the "Administration" Link.
3. *Uncheck* "Enable anonymous CVS".
4. *Unchecking* "enable pserver" is highly recommended since the pserver protocol is unencrypted and passwords will be transmitted in the clear.
5. Click on the "Update" button.

This change should take effect in an hour.

If you'd like to have all references to your project removed from the GForge main web site, please e-mail gforge-admin@gforge.cis.cornell.edu and request your project to be made "private." The only links to your project will then appear under the "My Page" tab of your group members, not anywhere else.