Using HPCforge SCMs (CVS, Subversion, git ...) requieres the use of a public key cryptography, based on a public and a private key to encrypt and decrypt data. The basic concept of this procedure is that the public key can be safely sent to whatever computer you want to acces, whereas the private key remains on your computer. To further increase security, you should enter a passphrase to encrypt your key. This passphrase should contain at least three words and a number that can easily be remembered. You can find further information about passphrases at this address: http://en.wikipedia.org/wiki/Passphrase.

Note that using this authentification, you will not need to type your password eveytime a ssh connections to HPCforge interviene.

In order to create your public and private key, use the following instructions in your terminal:

%> ssh-keygen

Generating public/private rsa key pair.

Enter file in which to save the key (/your/home/path/.ssh/id_rsa): [RETURN]

Enter passphrase (empty for no passphrase): *TYPE_A_NON_EMPTY_PASSPHRASE*

Enter same passphrase again: *RETYPE_YOUR_PASSPHRASE*

Your identification has been saved in /your/home/path/.ssh/id_rsa.

Your public key has been saved in /your/home/path/.ssh/id_rsa.pub.

If you use ssh2, and only in this case, you will have to specify the method to use:

ssh-keygen -t rsa

When the public and private keys are created, they are stored in ~/.ssh directory.

Now, you need to send you public key to HPCforge. Log into your HPCforge account, at the bottom the 'My Account' page, you should see:

Shell Account Information Shell box: SSH Shared Authorized Keys: 0 Edit Keys

Update Reset Changes

Note: this frame will not appear if you do not belong to any project.

Click on Edit Keys and copy/paste the content of your public key /your/home/path/.ssh/id.pub in the 'Authorized keys' frame, then update. If you access HPCforge from several computers, you can insert as many public keys as needed. After a few hours, the system will be updated and you should be able to use the SCM commands.

Important: if you copy and paste your public key from a terminal, it is likely that the line breaks will be considered as carriage returns by HPCforge. If after submiting one key the number of key displayed is greater than expected, highlight you public key with the mouse, right-click and select copy, then right-click on the Authorized keys frame and select paste.