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Git HOWTO

GIT ^[1]

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Configuring Git

How do I set the CERN CA certificate for root.cern.ch

Here are the steps to get the CERN CA into your Ubuntu system (I suspect others work similarly) such that Git doesn't complain anymore:

1. Download the CERN Root Certification Authority certificate ("CERN CA certificate") from <https://ca.cern.ch/ca/root/Download.aspx> ^[2].
2. Convert it:

```
openssl x509 -inform DES -in CERN\ Root\ CA.crt -out CERN\ Root\ CA.pem -outform PEM
```

3. Copy to system location and **rename** (also the suffix):

```
sudo cp ~/Downloads/CERN\ Root\ CA.pem /usr/share/ca-certificates/CERN_Root_CA.crt
```

4. Install certificate:

```
sudo dpkg-reconfigure ca-certificates
```

5. It will ask confirmation, select `CERN_Root-CA.crt`, OK

In case one has no sudo access on the machine you can do the following:

```
cp ~/Downloads/CERN\ Root\ CA.pem <path>/CERN_Root_CA.crt  
git config --global http.sslcainfo <path>/CERN_Root_CA.crt
```

Storing Passwords

Git can store your password in a secure way using a git-credential-helper. As of git 1.8 these are

- cache
- gnome-keyring
- osxkeychain
- wincred
- netrc (not secure, password in cleartext)

To get the gnome helper (on most current Linux distros) you will need to get git and build the helper yourself:

```
git clone https://github.com/git/git.git [3]  
cd git/contrib/credential/gnome-keyring  
make  
sudo cp git-credential-gnome-keyring /usr/local/bin  
git config --global credential.helper /usr/local/bin/git-credential-gnome-keyring
```

On OSX machines, the osxkeychain helper is by default installed, to use it do:

```
git config --global credential.helper osxkeychain
```

In a terminal environment on Linux you can use the 'cache' authentication helper that is bundled with git 1.7.9 and higher:

```
git config --global credential.helper 'cache --timeout 3600'
```

After enabling credential caching any time you enter your password it will be cached for 1 hour (3600 seconds).

Official GitHub mirror

For the people who like interacting or browsing code via GitHub, we have setup an official, continuously updated, [mirror](#) [4]. We won't apply pull requests from this mirror, so please keep sending us patches directly or via JIRA.

Git HowTos

See a few simple [Git Tips and Tricks](#) [5].

For simple changes and to facilitate the use of branches and merging while still nicely tracking changes we recommend the "[No Switch Yard](#)" (NoSY) workflow [6].

There are tons of additional Git how-tos on the web. One very nice one is [githowto.com](#) [7].

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Source URL: <http://root.cern.ch/drupal/content/git-howto>

Links:

[1] <http://root.cern.ch/drupal/category/package-context/git>

[2] <https://ca.cern.ch/ca/root/Download.aspx>

[3] <https://github.com/git/git.git>

[4] <https://github.com/root-mirror/root>

[5] <http://root.cern.ch/drupal/git-tips-and-tricks>

[6] <http://root.cern.ch/drupal/suggested-work-flow-distributed-projects-nosy>

[7] <http://githowto.com>