# Subversion Tips

## Automatically add Revision Number to Code[¶](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/SubversionTips#AutomaticallyaddRevisionNumbertoCode)

The Subversion revision number and date can easily be added to a file using special keywords embedded in the file and setting appropriate properties in the Subversion repository. Since most local applications are scripts rather than compiled programs, this is very effective in identifying exactly which versions is being used. When a file is checked out, the keywords will be replaced with a Revision and Date string. This example shows how to add the Revision and Date keywords, but there are more svn keywords which can also be used.

* Add the keyword strings $Revision$ and $Date$ to the file. Normally this is done in a comment line within the code:
* # SVN: $Revision$ $Date$
* Use the svn propset command on the file. Note the keywords in the quotes below represent a list of keywords, not how they are used in the file:
* svn propset svn:keywords "Revision Date" file
* Commit your changes for them to take affect.

When viewing the file directly from the repository (like through the Browse Source tab), it will still have the $Revision$ $Date$ literal strings. However, when the file is checked out, it will have a line like:

# SVN: $Revision: 57 $ $Date: 2009-09-22 13:03:10 +0000 (Tue, 22 Sep 2009) $

For this to work, files in Subversion must be downloaded using the svn export or svn checkout commands. Do not download files from the repository from a web page including web pages on this Wiki.

## Setting up Subversion Environment[¶](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/SubversionTips#SettingupSubversionEnvironment)

It is highly recommended to use the Revision and Date keywords in script based local applications and Python files. In fact, you can set up your environment so that the svn propset is done automatically when you add new files. Edit $HOME/.subversion/config and turn on auto-props. Then for specific file name patterns, define the properties to be set. There's lots of good stuff in the file for customizing. Here's an extract from my config file as an example:

[miscellany]

### Set global-ignores to a set of whitespace-delimited globs

### which Subversion will ignore in its 'status' output, and

### while importing or adding files and directories.

global-ignores = \*.pyo \*.pyc \*.o \*.tar \*.gz \*.tgz

### Set use-commit-times to make checkout/update/switch/revert

### put last-committed timestamps on every file touched.

use-commit-times = yes

### Set enable-auto-props to 'yes' to enable automatic properties

### for 'svn add' and 'svn import', it defaults to 'no'.

### Automatic properties are defined in the section 'auto-props'.

enable-auto-props = yes

### Section for configuring automatic properties.

[auto-props]

### The format of the entries is:

### file-name-pattern = propname[=value][;propname[=value]...]

### The file-name-pattern can contain wildcards (such as '\*' and

### '?'). All entries which match will be applied to the file.

### Note that auto-props functionality must be enabled, which

### is typically done by setting the 'enable-auto-props' option.

\*.sh = svn:eol-style=native;svn:executable;svn:keywords=Author Date Id Revision

\*.csh = svn:eol-style=native;svn:executable;svn:keywords=Author Date Id Revision

\*.py = svn:eol-style=native;svn:keywords=Author Date Id Revision

\*.tcl = svn:eol-style=native;svn:keywords=Revision Date Author Id

\*.txt = svn:eol-style=native

If you set up something like this, then all you have to do is remember to add the keyword strings like $Revision$ and $Date$ to your file.

Note the use of global-ignores in the example to exclude tar files from the repository. This is only for automatic inclusion, you can still explicitly add any file with svn add file (but including tar/compressed files in the repository is discouraged).