

## I. Setting up WinCVS (v. 1.2) on your Windows 98/NT/2000 (x86) computer to access the moonjelly CVS source code repository.

- 1). To install WinCVS 1.2 on your computer please go to: [\\Tempest\Tempbox\salamy](http://Tempest\Tempbox\salamy) and copy the “WinCVS120” folder to your [C:\Program\\_Files](C:\Program_Files) folder.
- 2). Next, open the WinCVS120 folder and double click on the **Setup.exe** icon. WinCVS should install on your computers’ harddrive as [C:\Program\\_Files\GNU\WinCVS\\_1.2](C:\Program_Files\GNU\WinCVS_1.2)
- 3). Once installed, open WinCVS (Startmenu – Programs – GNU – WinCVS\_1.2 - WinCVS).

The following edits will need to be performed for the GUI to “view” the moonjelly CVS repository.

- Under **Admin** on the main menu – click **Preferences**. Under the *General* tab enter your ID name and repository information where it says “ENTER THE CVSROOT” . An example of this would be ([salamy@moonjelly:/home/cvs](mailto:salamy@moonjelly:/home/cvs)) . Users would type this in exactly, replacing only their ID names for “salamy”. This sets the path to the moonjelly repository (/home/cvs) and logs in the user. Note: Your ID name is your e-mail name (the part before the @mbari.org).
  - Still under the *General* tab, set the AUTHENTICATION: setting to - “*passwd*” file on the cvs server
  - Finally, click the *WinCVS* tab and set your “home” directory (aka. working directory or sandbox). This directory is where you will download repository files to make edits or add files. It is suggested to place this directory on the MBARI network (e.g., Tornado, Tempest) where it will be backed up nightly. Also, indicate the editor that you would like to view repository files with (e.g., CodeWarrior, emacs, etc.).
- 4). **PLEASE NOTE:** To actually use this GUI on the moonjelly repository you will first need:
- An encrypted CVS repository password. Telnet to moonjelly with your MBARI UNIX account (NIS password) and at the initial prompt type the command “**encryptCVS**pw”. This runs a script requesting you to create and verify a password for the CVS repository. It outputs an encrypted version of that password. Please copy and e-mail the ENCRYPTED password (exactly as listed) to the CVS administrator ([salamy@mbari.org](mailto:salamy@mbari.org)). You will receive an e-mail verification stating that the password account has been updated. You should then be able to access the repository.

**NOTE:** A good way to maneuver through the repository with your GUI is to have your

web browser open to: <http://moonjelly.shore.mbari.org/cgi-bin/cvsweb.cgi/> at the same time in order to “view” the module’s directory structure. This will greatly simplify your use of the system if you know exactly where the files are to be stored or retrieved.

- 5). Next, click **Admin** on main menu – click **Login**. Type in your requested repository password (normal text – not the scripts’ encrypted text!). If you were able to log in properly you should see a line that says **\*\*\*\*CVS exited normally with code 0\*\*\*\***. Odd as it seems, this is correct.

## II. Working in the moonjelly repository with WinCVS

- 6). **Creating a project.** Due to the need for proper organization of files and file permissions, ALL projects (*not including subdirectories*) in the CVS repository on moonjelly are to be set-up by the repository administrator. Set-up involves creating project groups to restrict unauthorized users from editing or destroying files. New repository projects (modules) are generally set-up at the request of project managers, although any person who wishes to use the repository can make a request for a new project. To have a project (module) created, please e-mail the desired project name and list of users who will need access to the CVS administrator (salamy@mbari.org). Examples of previous projects are *tiburón*, *isi*, *nmc*.
- 7). **Checking out a module.** To check out a module (project or folder) in the repository, click **Create** on main menu then click **Checkout Module....** In the checkout module section, type in the module name you will be working with (no need to indicate /home/cvs). If this is a new project with no previous files in it or if you wish to check out all files in a project, check out the project (e.g., new project name “toolsled” – type in the word *toolsled*). If you desire a particular subdirectory already created in a project enter the following (*projectname/subdirectoryname*, OR, to checkout an individual file from that project, enter *projectname/subdirectoryname/filename*). The latter will checkout the one file and all listed subdirectories. Be sure to set your home directory before checking files out as the default is to place all files on your computer's hard drive. If this works, you should see the GUI display folders and files checked out. Folders will be in orange, while files will be shown in green.
- Note:** If you plan to work on files in your home directory that you already checked out previously, it is a good idea to first update the copy with the most recent version in the CVS repository. This is important as the file may have been edited by another group user since you last worked on it. To Update a project, folder or file in your home directory, simply click on the directory item and then on the menu bar click **Modify – Update Selection**. You may also click on the user interface button (white rectangle with a downward pointing green arrow). The WinCVS command line will show file and folder updates.
- 8). **Adding files to a project.** In CVS, users edit and create new files in their home directory (a.k.a. a working directory or sandbox). *To set up your home directory see Item # 3 above*).

**To add a new file to a directory, follow these steps:**

- Step 1:** You must first have a working copy of the directory (See item # 7).  
**Step 2:** Create the new file(s) inside your checked-out working copy of the directory.  
**Step 3:** In WinCVS, use the explore window (usually in left upper corner of screen) to browse to your home directory and view the new file(s) you have added. Click the new file(s) with your mouse and add the file(s) by either:

- 1) Clicking on menu bar **Modify – Add Selection**. If the file contains binary data click **Modify – Add Selection Binary**. OR
- 2) Clicking on the user interface button (white rectangle with a red “plus” sign on it). If the file is a binary, click the binary add button which is white with a red “plus” sign and 01 on it.

**NOTE:** (Holding the shift key down allows the addition of more than one file at a time).

- Step 4:** Commit the selection. This step actually “Adds” (checks-in) the file(s) to the repository. This can either be done with the file menu or with the user interface button.

- 1) Clicking on menu bar **Modify – Commit Selection**. OR

2) Clicking on the user interface button (white rectangle with a red arrow pointing left on it).

**NOTE:** (Holding the shift key down allows the addition of more than one file at a time).

**You can also add new directories to a project.** However, you must first add the directory in a separate step before adding any files to it. Unlike other CVS commands, the **add** options are not recursive.

9). **Removing files from a project.** To remove a file, but remain able to retrieve old revisions follow these steps:

- Step 1:** Make sure that you have not made any uncommitted modifications to the file. This can be done by using the **diff** command. You can also use the **status** or **update** commands. If you remove the file without committing your changes, you will not be able to retrieve the file as it was immediately before you deleted it.
- Step 2:** Remove the file from your working copy of the directory. This can be done by first highlighting the file and then clicking the main menu item **Modify – Remove Selection**.
- Step 3:** Indicate to CVS that you want to delete the file. This can be done in WinCVS by first highlighting the file and then clicking the main menu item **Modify – Remove Selection**. CVS should then highlight the file in red.
- Step 4:** Remove the file from the repository. Click the commit GUI button or click on menu bar **Modify – Commit Selection**.

When you commit the removal of the file, CVS records the fact that the file no longer exists. It is possible for a file to exist on only some branches and not on others, or to re-add another file with the same name later. CVS will correctly create or not create the file, based on the revision number or date options specified during **checkout** or **update**. **NOTE:** When you remove a file, it is removed only on the branch that you are working on. You can later merge the removals to another branch if you want.

**You can also remove directories from a project.** The concept of removing directories is similar to removing files – you want the directory to not exist in your current working directories, but you also want to be able to retrieve old releases in which the directory existed.

The way that you remove a directory is to remove all files in it. You do not remove the directory itself; there is no way to do that. Instead you specify the “prune empty directories” option to and update or checkout. This will cause CVS to remove empty directories from working directories. Probably the best way to do this is to always specify “prune empty directories”. If you want an empty directory then put a dummy file (e.g., ‘keepme’) in it to prevent the “prune empty directories” option from removing it.

It is best to become familiar with the WinCVS GUI and its checkout options before working in the repository. WinCVS has a “Help” menu that is useful. For more in-depth information, go to the CVS main web page <http://www.cvshome.org/> and download the CVS manual.

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