

# CVS Instructions

## Version 0.3

Edition 1

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## Revision History

Date	Modifications	Reason	Version
1999.03.03	Document created	CVS Instructions	0.1d
1999.04.29	Document contents formatted (JP)	Conformance to Style Specification	0.2d
1999.09.02	Document formatting updated (JP)	Reflect changes in Style	0.3

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# 1. CVS Access from a Unix-Based System

The `CVSROOT` is located in the directory " `/teamproj/cvsroot/teamb` "

All **Team Synergy** members have access to this Repository.

Before you access the repository, you have to set your `CVSROOT` environment variable. On **europa** this is best done by editing the `.login` file. The following command will append the appropriate setting to the file:

```
% echo "setenv CVSROOT /teamproj/cvsroot/teamb" >> .login
```

Otherwise you can edit the `.login` file using the UNIX Text Editor "vi".

Once this Environment variable is set up, you can access the Repository using the **cv**s command.

```
% cvs
```

It is highly recommend that you create a working directory for any checked out files you have. You should change to this directory before checking out any modules.

You can checkout (**co**) a module by typing:

```
% cvs co test1
```

This will create a directory called "test1" and download all the files to that directory.

You can then edit the files in this directory as you please.

When it compiles (**make must succeed**), and it has been peer reviewed (there will be a document on this) you can check it into the repository. To do this, change to the "test1" directory and type

```
% cvs ci
```

This will open vi and prompt you for your changes. You should describe the changes you made and save and exit.

The files will then be uploaded to the repository.

If there are conflicts, you will have to resolve them. (More info to come)

There is no requirement to check in any files. If you decide that you don't like what you have done, you can just delete the directory and start again.

Note that you can only check in files which belong to the repository. These files must be explicitly added. This must be done after a peer review. The command to add a file is:

```
% cvs add newfile
```

or

```
% cvs add -kb image.gif
```

Before the changes are made permanent, you have to commit them with the following command:

```
% cvs commit
```

Sometimes cvs will issue a warning and give an instruction such as "run teama commit". This is a bug in cvs and it means "run cvs commit".

This highlights an important point, CVS is for text files only. And binary files will become corrupted unless explicitly added with the "-kb" option. There are only a few types magically recognised and made binary, but it is best to specify. Don't delete any local files until you know they can be successfully checked out.

You can also delete file with the delete command

```
% cvs delete
```

The file is not deleted, but moved to the attic in case you ever need it back. Again, only do this after a peer review.

After you add a new file or delete a file, you must run a script on **europa** to set the file permissions to allow everybody the proper access to the files. The script is at **europa** in the directory:

```
/teamproj/hit3058b/teamb/fixcvs
```

Other commands you will want to know are update and release.

If you have a checked out version of a module which you have changed and someone else checks in a new version of a file, you can get the new version to your directory with the update command.

```
% cvs update Makefile
```

or

```
% cvs update
```

which will apply to files in the current directory and all sub-directories.

Release will release a module and optionally delete it. It will tell you about any changes you have made and is a good check before deleting files. Change to the parent directory before executing.

```
% cvs release -d test1
```

There are more details at <http://uranus.it.swin.edu.au/~jn/cvs/cvs.html#SEC151>

I recommend everybody look at this document. I know it is quite large but there is a lot of information in there. The best way to learn however is to do it. I expect that everyone will check out the test1 module, change at least one file and check it back in. If you work in pairs, you can try and resolve conflicts too. All developers should be competent at resolving conflicts.

Other notes:

- Only the Configuration Management person (John) should check out the CVSROOT module.
- Do not, under any circumstances change files in the CVS directory.

## 2. CVS Access from a Windows-Based System

CVS access is available from the labs. The procedure is similar to using it directly on **europa**, but there are a few issues to take care of.

To set the CVSROOT, there is a script at

```
h:\hit3058\teamb\cvs\setcvs.bat
```

This will look at your user name and set the CVSROOT appropriately. The easy way to do this is:

1. Start a command shell
2. drag the file setcvs.bat to the command shell
3. give the focus back to the command shell and press enter
4. type set and make sure that it is set up right.

Once this is done, you can log in to the cvs server using:

```
C:\temp> cvs login
```

This will prompt you for your password. Enter your **europa** password.

You can then checkout files as described in the original document.

**Caution:** When you type **cvs login**, your password is saved in what is essentially plain text in the file `$HOME/.cvspass`. This maps to `c:\temp\.cvspass` which is accessible to anybody who logs in to the machine. This is a *huge* security risk as the next person has access to the repository from that machine can get your password for **europa**.

You must either type

```
cvs logout
```

or manually delete the `.cvspass` file (ie. **not** just send the file to the Recycling Bin) before you log out of Windows NT.

Every file which is checked in to CVS should contain a line:

```
// $Header: /teamproj/cvsroot/teamb/docs/documentation/cvs-doc/index-content.html,v
1.3 1999/09/10 07:42:59 tp079554 Exp $
```

or

```
# $Header: /teamproj/cvsroot/teamb/docs/documentation/cvs-doc/index-content.html,v  
1.3 1999/09/10 07:42:59 tp079554 Exp $
```

or

```
<!-- $Header:  
/teamproj/cvsroot/teamb/docs/documentation/cvs-doc/index-content.html,v 1.3  
1999/09/10 07:42:59 tp079554 Exp $ -->
```

etc.

When CVS sees this, it expands it to contain version info and last update info.

There are others you may want. Look at the specification located at:

<http://uranus.it.swin.edu.au/~jn/cvs/cvs.html#IDX350>