

CVS exercises
Network Management Workshop, Apricot 2009

1. Install cvs

```
# apt-get install cvs
```

2. Init a new CVS ROOT:

NOTE Do this exercise as the normal user, NOT ROOT!!!

- First, set the environment variable "CVSROOT" to the path
- Where your CVS repository will be created:

Note: "MYUSERNAME" is your user home dir, i.e.: "netmanage"

```
> CVSROOT=/home/MYHOMEDIRECTORY/cvs
> export CVSROOT
```

- Now create the directory

```
> mkdir $CVSROOT
> cvs init
```

- Check that it was created correctly!

```
> ls -l /home/MYHOMEDIRECTORY/cvs
```

- You should see a directory called "CVSROOT"
- Look at the contents of the directory.

3. Let's create a project in CVS for the configuration files on your system and import these files into the CVS!

```
> mkdir /home/MYHOMEDIRECTORY/temp
> cp /etc/smokeping/config /home/MYUSERNAME/temp/config.smokeping
```

- Now we need to import these files into CVS:
- Let's make a new project called "configs"

```
> cd /home/MYHOMEDIRECTORY/temp
> cvs import configs before_cvs start
```

(Note: the "before_cvs" and "start" are just names to say that we are importing from "before we used CVS, and this is the start of the new project")

- When you see this:

```
CVS: -----
CVS: Enter Log. Lines beginning with `CVS:' are removed automatically
CVS:
CVS: -----
```

... just enter a message saying what you did, for example:

"This is a first import of our config files"

... Then save the file + quit.

You should see the following message:

```
File /tmp/cvsh3EOVw saved
N configs/config.smokeping
^
(new file)
```

No conflicts created by this import

3b. Look at the contents of /home/MYHOMEDIRECTORY/cvs/configs

```
> ls -l /home/MYHOMEDIRECTORY/cvs/configs
total 36
-r--r--r--  1 netmanage  wheel      799 Aug 31 17:26 config,v
```

4. Now we can remove our temp directory, and check out the configs/ project from CVS!

```
> cd /home/MYHOMEDIRECTORY
> rm -rf temp

- Let's now check out from cvs :

> cvs -d /home/MYHOMEDIRECTORY/cvs co configs

- You should see the following:
```

```
cvs checkout: Updating configs
U configs/config.smokeping
```

```
> ls -l /home/MYHOMEDIRECTORY/configs/

- Notice the CVS directory in /home/MYHOMEDIRECTORY/configs/

*NOTE* remember, never modify the CVS/ directory by hand!!
It is only for experienced CVS users...
```

5. Let's modify the files, add another one, and check things in again:

```
> cd /home/MYUSERNAME/configs
> vi config.smokeping
```

Modify the config - for example, you could add a comment or a new target. Then save and quit.

- Add the APT sources.list file to the directory:

```
> cp /etc/apt/sources.list .
```

- Tell cvs to show us the status:

```
> cvs status
```

- Add it to the CVS:

```
> cvs add sources.list
```

- You should see this:

```
cvs add: scheduling file `sources.list' for addition
cvs add: use `cvs commit' to add this file permanently
```

- You are now ready to commit!

> cvs commit

- If all goes well, you should have this in your editor window:

```
CVS: -----
CVS: Enter Log.  Lines beginning with `CVS:' are removed automatically
CVS:
CVS: Committing in .
CVS:
CVS: Modified Files:
CVS:    config.smokeping
CVS: Added Files:
CVS:    sources.list
CVS: -----
```

... add a message:

Importing APT sources.list, and modifying smokeping config

... then save + quit

You should see this:

```
File /tmp/cvs3CyXND saved
/home/inst/cvs/configs/config.smokeping,v <-- config.smokeping
new revision: 1.2; previous revision: 1.1
/home/inst/cvs/configs/sources.list,v <-- sources.list
initial revision: 1.1
```

6. Let's see the history for the config.smokeping file:

> cvs log config.smokeping

... notice the output

- Finally, let's try and see the difference between two versions of the config.smokeping file:

> cvs diff -r 1.1 -r 1.2 config.smokeping

- What do you notice ?