CVS Notes

SEOC CVS repositories

There are six SEOC repositories seoc01, seoc02, seoc03, seoc04, seoc05 and seoc06 with their group memberships, respectively. To access them you need to setup your environment as follows:

```
export CVS_RSH=ssh
export CVSROOT=<username>@cvs.inf.ed.ac.uk:/disk/cvs/<seoc??>
```

You do not need the CVSROOT line if you are going to specify it on the command line, e.g.:

```
cvs -d <username>@cvs.inf.ed.ac.uk:/disk/cvs/<seoc??> checkout
```

You should then be able to access the repository using cvs.

How to access a cvs repository

The note below was written for our first SSH CVS repository, beetle, however the same principle applies for other SSH CVS repositories, just replace references to "beetle" with the name of your repository. Once you have your account, access the repository as follows.
   Set these environmental variables:

- For bash-like shells:

    ```
    export CVS_RSH=ssh
    export CVSROOT=username@cvs.inf.ed.ac.uk:/disk/cvs/beetle
    ```

    (where "username" is your DICE username)

- For csh-like shells:

    ```
    setenv CVS_RSH ssh
    setenv CVSROOT username@cvs.inf.ed.ac.uk:/disk/cvs/beetle
    ```

   You should then be able to access the repository using cvs. You may want to put these commands in your .brc (or equivalent) file, or create an alias for them, to save you having to enter them each time you want to access the repository.
   If you're new to CVS, there's some good help available at
   http://www.cvshome.org/docs/
   but the basics are, to check your connection to cvs do:

```
> cvs version
```

Client: Concurrent Versions System (CVS) 1.11.22 (client/server) Server: Concurrent Versions System (CVS) 1.11.22 (client/server)
   Day to day cvs commands are:

```
> cvs checkout
> cvs update
> cvs commit
```

   For more details, see the above web page, or try just:

```
> cvs help
> man cvs
```

How to stop cvs from asking for your password

On DICE machines CVS shouldn't ask for your password because authentication will be handled by Kerberos over ssh. However, from other machines you will be prompted for a password whenever you use CVS. To avoid this you can authenticate using an ssh key. To do this, generate an ssh key, then install the public part of that key on the CVS server.

1. Find out which protocol version your local ssh command supports. If the output to "`ssh -V`" mentions protocol version 2.0 then you are using ssh2. If it only mentions protocol version 1.5 then you are using ssh1.

2. Create a personal ssh key.

   ```
   (ssh1) ssh-keygen
   (ssh2) ssh-keygen -t rsa1
   ```

   ```
   or
   ```

   ```
   ssh-keygen -t rsa
   ```

   ```
   or
   ```

   ```
   ssh-keygen -t dsa
   ```

   When prompted to enter a passphrase, pressing Return will give you an empty passphrase. However for extra security you should enter a passphrase here.

3. Copy the file `identity.pub` or id_rsa.pub or id_dsa.pub to your home directory on `cvs.inf.ed.ac.uk`. One way of doing this is by using "`scp`", for example

   ```
   scp ~/.ssh/id_dsa.pub username@cvs.inf.ed.ac.uk
   ```

   (where "username" is your account name on the DICE network)

4. Add your ssh public key to your collection of keys on the CVS server:

   ```
   cat identity.pub >> ~/.ssh/authorized_keys
   ```

   ```
   or
   ```

   ```
   cat id_rsa.pub >> ~/.ssh/authorized_keys
   ```

   ```
   or
   ```

   ```
   cat id_dsa.pub >> ~/.ssh/authorized_keys
   ```

5. If you entered a passphrase when generating your ssh key, you will still have to type it to use the repository. However all is not lost: the "ssh-agent" program can remember the passphrase for you, making use of cvs considerably simpler.

   Alternatively, if you pressed Return at the ssh-keygen passphrase prompt, you won't have to enter a passphrase or use ssh-agent.

   You should now be able to use cvs without being prompted for a password.