LOFAR User Software

TOC:

Code repository

Organization of the repository

```
usg.lofar.org/svn
|-- code
|   |-- branches
|   `-- trunk
|   |   |-- build
|   |   |-- data
|   |   |-- external
|   |   `-- src
`-- documents
    |-- branches
    `-- trunk
```

Checking out code

As read-only access to the repository is not restricted in any ways, you can obtain a working copy of the source code by running

```
svn co http://usg.lofar.org/svn/code/trunk lofarsoft
```

In case you not only want a working version of the source code, but also of the various documents, you do have two options to options of retrieval:

1. Check out everything in a single go:

    ```
    svn co http://usg.lofar.org/svn usg
    ```

2. Check out a slightly cleaned-up version, omitting the `trunk` directories from your working version:

```
mkdir usg
cd usg
svn co http://usg.lofar.org/svn/code/trunk code
svn co http://usg.lofar.org/svn/documents/trunk docs
```

Updating your working copy

Go to the `build` directory and type

```
make update
```

In the simplest case this might be nothing but a wrapper around the `update` command of Subversion, but further actions might carried out if necessary.

Then build your target, for example “dal” with

```
make dal
```

You can also just build the target folder leaving everything else untouched using

```
cd dal
make rebuild_cache && make && make install
```

Write access to the repository

While (by design) the user software repository is world-wide readable, write access is being restricted to a list of registered users. The basic procedure for getting added to that list – which basically relies on a combination of a `username` and MD5 encrypted `password` – is described below:

The information which needs to be provided by the user is a combination of `username` and `password`, where the latter is being hashed using the MD5 algorithm. The encryption of the password can be done in a number of ways, depending on the tools available to the user requesting access:

- Using `htpasswd`:

```
htpasswd -nbm <username> <password>
```

- Using `openssl`:

```
openssl passwd -apr1 <password>
```

If none of the above mentioned tools are available, use can be made of an online htpasswd generator.

Depending on the command line tool being used, the output will contain the full string to be entered into the password file or the encrypted password only (in which case the username needs to be prepended):

```
lbaehren:$apr1$ziNPu...$YYKeohAqIiIzfz4YA12345    ## htpasswd
$apr1$9H8IBSvy$yswI9jLosDkDx1a6.12345             ## openssl
```