

# Users' Software Repository

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## Introduction

PSDM uses Subversion (SVN) for the code management and versioning task. Currently, official LCLS code such as PSANA, PYANA, etc. is located in the [Software Repository](#) which is enabled to LCLS software development team only. For those users who would like to develop their own code, contribute to the LCLS project, and share their code with other user groups, there is a users' software repository,

```
https://pswww.slac.stanford.edu/svn/userrepo    (this IS NOT a web reference, it is to be used with various "svn" commands)
```

In the psana environment, this address is assigned to environment variable `SIT_SVN_USER`.

## Creating Your Own User Repository

For most of these commands to work (except read-access to the readonly repo) you need a SLAC "kerberos ticket". You can see your tickets with the command "klist". You can get a ticket with the "kinit" command like this:

```
kinit mySlacAccountName@SLAC.STANFORD.EDU    (the CAPS are required for SLAC.STANFORD.EDU!)
```

Create your local release directory and set environment:

```
cd <one-of-your-directories>

newrel ana-current <my-local-release-directory-name>
cd <my-local-release-directory-name>
sit_setup
```

Create package sub-directory with a few files:

```
newpkg <my-new-package-name>
```

Use the following command to create your own new package in SVN:

```
psvn -u newpkg <my-new-package-name>
```

The package name should not include the "<>" above. Once you have created your package you can check it out of the repository with:

```
svn co https://pswww.slac.stanford.edu/svn/userrepo/<my-new-package-name>/trunk <my-new-package-name>
```

If you don't have a kerberos ticket, you can get readonly access to the repository (anywhere in the world!) like this:

```
svn co https://pswww.slac.stanford.edu/svn-readonly/userrepo/<my-new-package-name>/trunk <my-new-package-name>
```

If you are working in a psana "test release" instead of the above, you can checkout your code with:

```
addpkg -u <my-new-package-name>
```

You can check modified code back into the repository by switching to your package directory and using the command:

```
svn commit -m "my message describing changes"
```

## Difference Between `userrepo` and `psdmrepo`

Within local release directory the difference in creation of the package in `userrepo` is in additional `-u` option in two commands

```
psvn -u newpkg <my-new-package-name>  
addpkg -u <my-new-package-name>
```

All other commands are the same for `userrepo` and `psdmrepo`.

## Repository Browsing

Repositories content can be viewed using URLs as follows

### `userrepo`

- <http://pswww-dev.slac.stanford.edu:8080/svn/repos/userrepo/list/>
- <https://pswww.slac.stanford.edu/svn-readonly/userrepo/>

### `psdmrepo`

- <http://pswww-dev.slac.stanford.edu:8080/svn/repos/psdmrepo/list/>
- <https://pswww.slac.stanford.edu/svn-readonly/psdmrepo/>
- <https://pswww.slac.stanford.edu/svn/psdmrepo>

### `pcds`

- <http://pswww-dev.slac.stanford.edu:8080/svn/repos/pcds/list/>

### `pdsrepo`

- <http://pswww-dev.slac.stanford.edu:8080/svn/repos/pdsrepo/list/>
- <https://pswww.slac.stanford.edu/svn-readonly/pdsrepo/>