

A New Fedora Storage Utility

What: `fcsu`, an extensible command-line utility for working with Fedora storage.

Why: Due to Fedora's current web service API design, it can be tedious and time-consuming to make certain kinds of changes to a repository. This utility works at a lower level (but not too low) in order to allow efficient batch modifications that are either impossible or impractical when going through the public API.

What's the catch: `fcsu` is a very sharp tool and can be used to accidentally cause irreparable damage to your repository. It is always recommended that you test your changes against a backup copy rather than running modifications directly against your repository. In addition, certain types of changes you make with `fcsu` can necessitate a SQL or Resource Index rebuild.

A Few Examples

Once you configure it to point to your repository's data (see `conf/config.properties`), you can do things like the following. Note that by default there are two stores defined, 'legacy' and 'akubra', but you can define any number of them by adding a configuration file similar to the ones already found in `conf/stores/`.

Migrate from Fedora legacy storage to akubra-fs: (this can also be used to migrate from one akubra-based impl to another)

```
fcsu copy legacy akubra
```

List all objects whose pids match a given regular expression:

```
fcsu list store1 --pids=^demo:Smiley.*
```

For all objects, migrate DC, RELS-EXT, and RELS-INT datastreams from inline XML to managed content:

```
fcsu modify store1 --filter=inline-to-managed-xml --datastream-ids=DC,RELS-EXT,RELS-INT
```

For all objects in the hdl namespace, re-compute the size and sha1 checksum of all managed and inline datastreams, even if it's already defined:

```
fcsu modify store1 --filter=set-fixity --pids=^hdl:. * --algorithm=sha1 --force=true --control-groups=M,X
```

Make a complete copy of the repository but omit all AUDIT datastreams:

```
fcsu copy store1 store2 --filter=remove-datastreams --remove-datastream-ids=AUDIT
```

Want to Try It?

You can download [the latest test build here](#). The `fcsu` shell script can be found in the `bin` directory after unpacking. Note: It should work in Windows, but the `.bat` file isn't written for that yet.

See the various [filters](#), [stores](#), and [commands](#) for examples of how the utility can be used and extended.

Any questions or comments? Let me know here or via email. Thanks!