eos-ns-inspect hands-on

Prepare the environment:

```
for i in {00001..10000}; do eos touch /eos/pilot/opstest/cristi/test_$i;
done
for i in {10001..20000}; do eos touch /eos/pilot/opstest/cristi/test_$i;
done
for i in {00001..10000}; do eos chown acontesc:it
/eos/pilot/opstest/cristi/test_$i; done
for i in {10001..20000}; do eos chown kristi:it
/eos/pilot/opstest/cristi/test_$i; done
```

Hands-on

The story

This will present a real use-case, of a power user removing a high number of files owned by him, but also by some other users. Moreover, this was on a shared instance with a high number of files in the recycle bin. I have prepared a similar setup at a smaller scale on our pilot instance.

List the files

```
# Let's list the files
eos ls /eos/pilot/opstest/cristi/
eos ls /eos/pilot/opstest/cristi/ | wc -l

time eos find -f --fileinfo /eos/pilot/opstest/cristi/
time eos newfind -f --fileinfo /eos/pilot/opstest/cristi/

# Now let's try to do the same thing, connecting directly to the QuarkDB
backend

time eos-ns-inspect scan --members eospilot-qdb.cern.ch:7777 --password-
file /etc/eos.keytab --path /eos/pilot/opstest/cristi/ --no-dirs

# as you can see the command is a bit more involved, as we need to point
to the QuarkDB members and provide the password file, then specifying we
only want to see files, not directories

# Now let's do some cleanup
```

```
eos ls -lad /eos/pilot/opstest/cristi/
eos ls -la /eos/pilot/opstest/cristi/_0001*
eos ls -la /eos/pilot/opstest/cristi/_1001*

# As I own the directory, let me run, as acontesc the rm:

eos -r acontesc it 'rm /eos/pilot/opstest/cristi/*'

# Ooops, i deleted too much, now what? Recycle bin to the rescue...

eos recycle ls

# Well, oddly enough this only prints me one file... owned by root... oh,
wait... i have deleted the files as acontesc, let's take acontesc's role

eos -r acontesc it recycle ls

## much better, let's restore these files, we need the RESTORE-KEY for
each file, let's do some awk magic:

eos -r acontesc it recycle ls 2>/dev/null | awk '$0 !~ /^#/ {print
"recycle restore " $10}' | tee restore_acontesc.eosh

eos -r acontesc it -b restore_acontesc.eosh

# Let's list the files again
eos ls /eos/pilot/opstest/cristi/
eos ls /eos/pilot/opstest/cristi/ | wc -l

# Hmm... we seem to be missing half of the files that were there; that is
because the EOS recycle stores the recycled files based on their owner,
not the user who removed them

eos ls -la /eos/pilot/proc/recycle

# As you can see there may be many users

eos-ns-inspect scan --members eospilot-qdb:7777 --password-file
/etc/eos.keytab --no-dirs --path /eos/pilot/proc/recycle/ 2>/dev/null |
grep '#:#eos#:#pilot#:#opstest#:#cristi#:#' | grep -oE 'uid=[0-9]+' | sort
| uniq
```