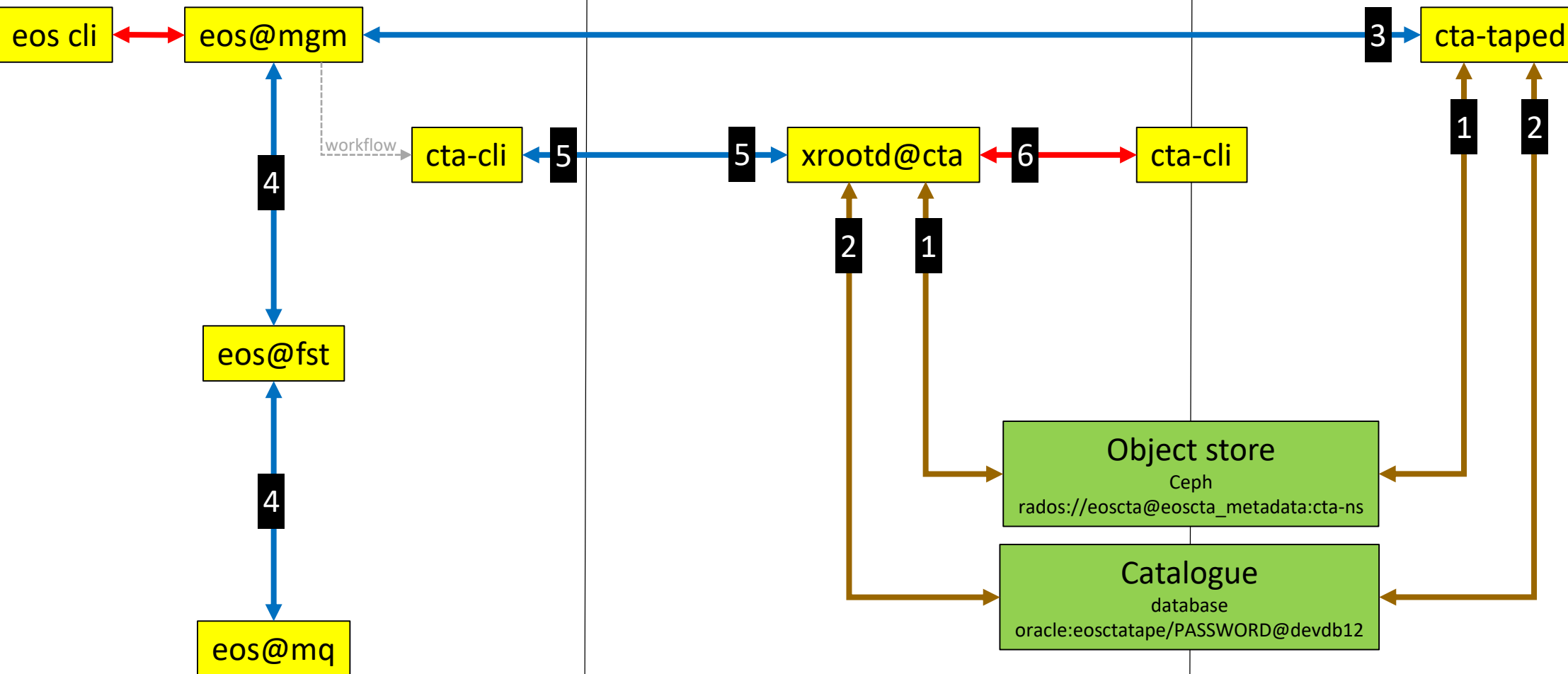


EOS
instance

CTA
frontend

Tape Server



— Simple Shared Secret
— Kerberos
— Other type

Legend (file names as on production system)

1. /etc/ceph/ceph.client.eoscta.keyring

- Contains the keyring needed to connect to Ceph pool
- Present on: CTA frontend, CTA tapeservers, Mode: 440, User: cta:cta – Distributed by Puppet from tbag

2. /etc/cta/cta-catalogue.conf

- Contains the CTA catalogue database password
- Present on: CTA frontend (as /etc/cta/cta_catalogue_db.conf for now because it is hardcoded in the CTA frontend XROOTD plugin), CTA tapeservers, Mode: 440, User: cta:cta – Distributed by Puppet from tbag

3. /etc/cta/cta-taped.sss.keytab

- Declared as value of XrdSecSSSKT in /etc/sysconfig/cta-taped
- Used to authenticate the connection back to eos@mgm
- Generated using: /usr/bin/xrdssadmin -k cta-taped -u cta -g cta add cta-taped.sss.keytab – Distributed by Puppet from tbag
- Present on: CTA tapeservers, Mode: 400, User: cta:cta
- *IMPORTANT: The content of this file will be added to other EOS keytabs so in order not to clash, the key number has been upped to 9999 (by running xrdssadmin repeatedly)*

```
[root@CTA-frontend ~]# ktutil
ktutil: read_kt /etc/cta/cta-frontend.krb5.keytab
ktutil: list
slot KVNO Principal
-----
1 52 tpsrv600$@CERN.CH
2 52 tpsrv600$@CERN.CH
3 52 tpsrv600$@CERN.CH
4 52 eosdev/tpsrv600.cern.ch@CERN.CH
5 52 eosdev/tpsrv600.cern.ch@CERN.CH
6 52 eosdev/tpsrv600.cern.ch@CERN.CH
7 52 host/tpsrv600.cern.ch@CERN.CH
8 52 host/tpsrv600.cern.ch@CERN.CH
9 52 host/tpsrv600.cern.ch@CERN.CH
[root@tpsrv600 ~]#
```

4. /etc/eos.keytab

- Declared in /etc/xrd.cf.fst, /etc/xrd.cf.mgm, /etc/xrd.cf.mq and /etc/xrd.cf.sync
- Used by EOS to authenticate internally between MGM and FST and other services. Should contain the content of the previous point 3. allowing every tape server to talk back to the EOS instance(s).
- Present on all EOS machines, Mode: 600, User: daemon:daemon – Distributed by EOS instance installation mechanism
- *IMPORTANT: See the point 3., this is the current content:*

```
[root@EOS-mgm ~]# xrdssadmin list /etc/eos.keytab
Number Len Date/Time Created Expires Keyname User & Group
-----
9999 32 05/29/17 18:18:03 ----- cta-taped cta cta
1 32 05/30/17 10:46:40 ----- eosdev daemon daemon
```

5. /etc/cta/cta-cli.sss.keytab

- Declared in /etc/cta/cta-frontend-xrootd.conf on frontend
- Declared in the CTA EOS closew and prepare workflows as value of the XrdSecSSSKT variable
- Simple shared secret needed to authenticate CTA CLI calls executed by EOS instance against the CTA frontend
- Generated using: /usr/bin/xrdssadmin -k cta-cli -u cta -g cta add cta-cli.sss.keytab
- Present on: CTA frontend, Mode: 400, User: cta:cta
- Present on: EOS MGM, Mode: 400, User: daemon:daemon

6. /etc/cta/cta-frontend.krb5.keytab

- Declared in /etc/cta/cta-frontend-xrootd.conf
- Service Kerberos 5 keytab to authenticate CTA service for human use of the CTA CLI
- Should contain eosdev service key, usually the same content as /etc/krb5.keytab of the CTA frontend machine
- Present on: CTA frontend, Mode: 400, User: cta:cta