## **Debug with More Verbose Logs**

If you still encounter problems with Kerberos on Linux, you can start both mongod and mongo (or another client) with the environment variable KRB5\_TRACE set to different files to produce more verbose logging of the Kerberos process to help further troubleshooting. For example, the following starts a standalone mongod with KRB5\_TRACE set:

```
env KRB5_KTNAME=/opt/mongodb/mongod.keytab \
KRB5_TRACE=/opt/mongodb/log/mongodb-kerberos.log \
/opt/mongodb/bin/mongod --dbpath /opt/mongodb/data \
--fork --logpath /opt/mongodb/log/mongod.log \
--auth --setParameter authenticationMechanisms=GSSAPI
```

## **Common Error Messages**

In some situations, MongoDB will return error messages from the GSSAPI interface if there is a problem with the Kerberos service. Some common error messages are:

**GSSAPI error in client while negotiating security context**. This error occurs on the client and reflects insufficient credentials or a malicious attempt to authenticate.

If you receive this error, ensure that you are using the correct credentials and the correct fully qualified domain name when connecting to the host.

**GSSAPI error acquiring credentials.** This error occurs during the start of the mongod or mongos and reflects improper configuration of the system hostname or a missing or incorrectly configured keytab file.

If you encounter this problem, consider the items in the *Kerberos Configuration Checklist* (page 380), in particular, whether the SPN in the *keytab file* (page 332) matches the SPN for the mongod or mongos instance.

To determine whether the SPNs match:

1. Examine the keytab file, with the following command:

```
klist -k <keytab>
```

Replace <keytab> with the path to your keytab file.

2. Check the configured hostname for your system, with the following command:

```
hostname -f
```

Ensure that this name matches the name in the keytab file, or start mongod or mongos with the --setParameter saslHostName=<hostname>.

## See also:

- *Kerberos Authentication* (page 331)
- Configure MongoDB with Kerberos Authentication on Linux (page 372)
- Configure MongoDB with Kerberos Authentication on Windows (page 376)

## **Implement Field Level Redaction**

The \$redact pipeline operator restricts the contents of the documents based on information stored in the documents themselves.