Building and Enabling SASL with the InnoDB memcached Plugin

By default, an SASL-enabled `daemon_memcached` plugin is not included in MySQL release packages, since an SASL-enabled `daemon_memcached` plugin requires building `memcached` with SASL libraries. To enable SASL support, download the MySQL source and rebuild the `daemon_memcached` plugin after downloading the SASL libraries:

1. Install the SASL development and utility libraries. For example, on Ubuntu, use `apt-get` to obtain the libraries:

   ```
   sudo apt-get -f install libsasl2-2 sasl2-bin libsasl2-2 libsasl2-dev libsasl2-modules
   ```

2. Build the `daemon_memcached` plugin shared libraries with SASL capability by adding `ENABLE_MEMCACHED_SASL=1` to your `cmake` options. `memcached` also provides *simple cleartext password support*, which facilitates testing. To enable simple cleartext password support, specify the `ENABLE_MEMCACHED_SASL_PWDB=1` `cmake` option.

   In summary, add following three `cmake` options:

   ```
   cmake ... -DWITH_INNODB_MEMCACHED=1 -DENABLE_MEMCACHED_SASL=1 -DENABLE_MEMCACHED_SASL_PWDB=1
   ```

3. Install the `daemon_memcached` plugin, as described in Section 15.20.3, “Setting Up the InnoDB memcached Plugin”.

4. Configure a user name and password file. (This example uses `memcached` simple cleartext password support.)

   a. In a file, create a user named `testname` and define the password as `testpasswd`:

      ```
      echo "testname:testpasswd:::::::" >/home/jy/memcached-sasl-db
      ```

   b. Configure the `MEMCACHED_SASL_PWDB` environment variable to inform `memcached` of the user name and password file:

      ```
      export MEMCACHED_SASL_PWDB=/home/jy/memcached-sasl-db
      ```

   c. Inform `memcached` that a cleartext password is used:

      ```
      echo "mech_list: plain" > /home/jy/work2/msasl/clients/memcached.conf
      export SASL_CONF_PATH=/home/jy/work2/msasl/clients
      ```

5. Enable SASL by restarting the MySQL server with the `memcached -S` option encoded in the `daemon_memcached_option` configuration parameter:

   ```
   mysqld ... --daemon_memcached_option="-S"
   ```

6. To test the setup, use an SASL-enabled client such as SASL-enabled libmemcached.

   ```
   memcp --servers=localhost:11211 --binary  --username=testname
     --password=password myfile.txt

   memcat --servers=localhost:11211 --binary --username=testname
     --password=password myfile.txt
   ```

   If you specify an incorrect user name or password, the operation is rejected with a `memcache error AUTHENTICATION FAILURE` message. In this case, examine the cleartext password set in the `memcached-sasl-db` file to verify that the credentials you supplied are correct.