9 - Configuring the SHRINE Data Steward

To configure the Data Steward, you must first make sure that you have created a user with Data Steward privileges. To create a Data Steward, please follow the instructions here:

8.3 - Setting up the Data Steward user

After setting up the Data Steward user, you will need to configure the steward section within SHRINE's configuration file - shrine.conf. You must first enable the authorization type to be "shrine-steward" within the queryEntryPoint section and then configure the shrineSteward block as well.

> ⓘ **Note**
>
> Note that we have used the 'qep' user that we have created in Chapter 8.1

```
authorizationType = "shrine-steward"

    shrineSteward {
      qepUserName = "qep"
      qepPassword = "password"
      stewardBaseUrl = "https://localhost:6443"
    }
```

After templating that section, proceed further down in shrine.conf until you reach the steward section {}. This section governs how the steward application behaves and contains the ability to send audit emails to the Data Steward. Here, please make sure you have a valid email address in the 'From' and 'To' fields.

```
steward {
    createTopicsMode = Approved

    emailDataSteward {
      sendAuditEmails = true                                    //false to turn off the whole works of emailing
the data steward
      interval = "1 day"                                        //Audit researchers daily
      timeAfterMidnight = "6 hours"               //Audit researchers at 6 am. If the interval is less than 1
day then this delay is ignored.
      maxQueryCountBetweenAudits = 30               //If a researcher runs more than this many queries since
the last audit audit her
      minTimeBetweenAudits = "30 days"                   //If a researcher runs at least one query, audit those
queries if this much time has passed

      //You must provide the email address of the shrine node system admin, to handle bounces and invalid
addresses
      from = "shrine-admin@example.com"
      //You must provide the email address of the data steward
      to = "shrine-steward@example.com"

      subject = "Audit SHRINE researchers"
      //The baseUrl for the data steward to be substituted in to email text. Must be supplied if it is used in
the email text.
      stewardBaseUrl = "https://localhost:8443/steward/"

      //Text to use for the email audit.
      //AUDIT_LINES will be replaced by a researcherLine for each researcher to audit.
      //STEWARD_BASE_URL will be replaced by the value in stewardBaseUrl if available.
      emailBody = """Please audit the following users at STEWARD_BASE_URL at your earliest convenience:
AUDIT_LINES"""
      //note that this can be a multiline message

      //Text to use per researcher to audit.
      //FULLNAME, USERNAME, COUNT and LAST_AUDIT_DATE will be replaced with appropriate text.
      researcherLine = "FULLNAME (USERNAME) has run COUNT queries since LAST_AUDIT_DATE."
    }

    database {
      dataSourceFrom = "JNDI"
      jndiDataSourceName = "java:comp/env/jdbc/stewardDB"
      slickProfileClassName = "slick.jdbc.MySQLDriver$"
                              //slick.driver.MySQLDriver$
                              //slick.driver.PostgresDriver$
                              //slick.driver.SQLServerDriver$
                              //slick.driver.OracleDriver$
                              //slick.driver.MSSQLServerProfile$
    }
  } // end steward
```

> (i) If you wish to not send emails, you can simply switch sendAuditEmails = false in this section.

Also, please make sure that you have the email {} section populated in **shrine.conf**. SHRINE sends emails from postfix on port 25 by default, but you can use another service if you want. For example, we have listed AWS SES as an alternative way:

```
email {
    //add javax mail properties from https://www.tutorialspoint.com/javamail_api/javamail_api_smtp_servers.htm
here
    javaxmail {
      mail {
        smtp {
          //for postfix on localhost
                  //comment out if you want to use an alternative host and port
          //host = localhost
          //port = 25

          //for AWS SES - See http://docs.aws.amazon.com/ses/latest/DeveloperGuide/send-using-smtp-java.html
                  //comment out if you want to just use postfix over port 25
          host = email-smtp.us-east-1.amazonaws.com
          port = 25
          transport.protocol = smtps
          auth = true
          starttls.enable = true
          starttls.required = true
        }
      }
    }

    //Must be set for AWS SES. See http://docs.aws.amazon.com/ses/latest/DeveloperGuide/send-using-smtp-java.
html
    authenticator {
        username = yourSESUsername
        password = yourSESPassword
    }
  }
} //end email section
```