

The purpose of this lab is to orient the participant with their virtual working environment and introduce them to changesets and changelogs concepts.

You can run the steps in this lab in your own pre-installed and configured Liquibase Pro enabled environment. It assumes you have a liquibase.properties file or environmental variables setup and referenceable in the git repo directory so that you can connect to a target database.

Clone the <https://github.com/lbjenn/vigilant-umbrella/> repo to your system where you will be running Liquibase Pro.

Anywhere you see reference to Visual Studio Code you can also substitute the editor of your choice.

### Applications needed for lab:

Visual Studio code

Command prompt session or shell session on mac or linux



1. Open Visual Studio Code(VSC) from the icon in the taskbar at the bottom of the screen. The changelogs that were covered in the demo of the lab, will open in 2 tabs - a master changelog, workshopChangelog.xml, and example child changelog, Release-1.0.0.sql. Open VSC from the task bar on the bottom. When it opens there should be two tabs. 1) parent changelog workshopChangelog.xml and 2) Release-1.0.0.sql.
2. Execute the 'workshop.bat' script via the shortcut on the desktop, by double clicking on it and that will open a CMD session that is open in the C:\Users\Administrator\git\vigilant-umbrella
3. execute 'liquibase status' and review output

→ Confirm running liquibase Pro version 4.29.1 is running

→ Five changesets are returned as available for application

4. In your CMD session type '`code Release-1.1.0.sql`'. This should open this file in Visual Studio Code and it should look like this:

```
--liquibase formatted sql
--changeset jenn:20240402-create-T_student-table labels:jira-219,r1
--comment: create T_student table
CREATE TABLE T_student(
  student_fname VARCHAR(50),
  student_lname VARCHAR(50),
  state CHAR(2),
  notes VARCHAR (355)
);
--rollback DROP TABLE T_student;

--changeset jenn:20240402-insert-a-row-student1 labels:jira-219,r1 context:dev
```

```
INSERT INTO T_student (student_fname, student_lname, state, testdml_rep, notes)
VALUES ('Viktor', 'Hargreeves', 'NY', 'Random comment for notes');
```

```
--comment: remove Jenn from student table
```

```
--rollback INSERT INTO T_student (student_fname, student_lname, state, testdml_rep,notes)
```

```
--rollback VALUES ('Viktor', 'Hargreeves', 'NY', 'Random comment for notes');
```

5. We will now add this file to the master changelog workshopChangelog.xml file. Switch to the tab for 'workshopChangelog.xml'. Uncomment line #4 from the workshopChangelog.xml file by placing cursor on this line and hitting Ctrl + /
6. Save the change to the file (Ctrl + S)
7. Rerun 'liquibase status' from the command line and see the 3 additional changesets for a total of 8
8. Execute 'liquibase checks show' in the CMS session and the top of the output returned should look like this:

```
C:\Users\Administrator\git\vigilant-umbrella>liquibase checks show
Jul 16, 2024 6:19:03 PM liquibase.license
INFO: Successfully installed license from Base64 string starting with 'ABwwGgQU3q' (Environment variable 'LIQUIBASE_LICENSE_KEY').

#####
##                                     ##
##  Liquibase                        ##
##                                     ##
##                                     ##
##                                     ##
## Get documentation at docs.liquibase.com      ##
## Get certified courses at learn.liquibase.com ##
##                                     ##
#####
Starting Liquibase at 18:19:05 (version 4.28.0 #2272 built at 2024-05-16 19:00+0000)
Liquibase Version: 4.28.0
Liquibase Pro 4.28.0 by Liquibase licensed to Liquibase_Sales until Mon Feb 18 04:59:59 GMT 2025

Generating report on current configuration of checks using settings in: liquibase.checks-settings.conf

WARNINGS: Additional checks have been added to 'liquibase.checks-settings.conf' and are disabled. To auto-enable new checks on upgrades, set '--auto-enable-new-checks=true'. Learn more at https://docs.liquibase.com/quality-checks

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| Short Name | Scope | Status | Severity | Customization | Description |
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| SqlGrantWarn | changelog | enabled | 0 | <None> | This check warns a user when SQL contains 'GRANT' statements so that they can ensure that the privilege being granted won't lead to security issues. |
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```

Review the output and come back to workshop session with any questions.

END OF LAB