Jena SDB and MySQL setup

VIVO can optionally use MySQL as a backing store for Jena SDB. Whilst VIVO / Jena will create the necessary tables for the triple store, first SDB must be enabled and a database (schema) and authentication details need to have been created.

First, select and enable SDB in applicationSetup.n3 by replacing :hasContentTripleSource :tdbContentTripleSource ; with :hasContentTripleSource :sdbContentTripleSource ;

applicationSetup.n3

:application
  :hasSearchEngine :instrumentedSearchEngineWrapper ;
  :hasSearchIndexer :basicSearchIndexer ;
  :hasImageProcessor :iioImageProcessor ;
  :hasFileStorage :ptiFileStorage ;
  :hasContentTripleSource :tdbContentTripleSource ;
  :hasConfigurationTripleSource :tdbConfigurationTripleSource ;
  :hasTBoxReasonerModule :jfactTBoxReasonerModule .

Next, uncomment the block describing :sdbContentTripleSource

applicationSetup.n3

:sdbContentTripleSource

To create the backing database, log in to MySQL as a superuser (e.g. root)

$ mysql -u root -p
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.7.9 MySQL Community Server (GPL)
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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE DATABASE vitrodb CHARACTER SET utf8;
mysql> GRANT ALL ON vitrodb.* TO 'vitrodbUsername'@'localhost' IDENTIFIED BY 'vitrodbPassword';
mysql> FLUSH PRIVILEGES;

For MySQL 8+, the second command must be split into two commands like so:

mysql> CREATE USER 'vitrodbUsername'@'localhost' IDENTIFIED BY 'vitrodbPassword';
mysql> GRANT ALL PRIVILEGES ON vitrodb.* TO 'vitrodbUsername'@'localhost';
mysql> FLUSH PRIVILEGES;

Finally, you will need to edit runtime.properties and ensure that the VitroConnection properties are correct for your database engine. They should look something like this.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>VitroConnection.DataSource.url</td>
<td>jdbc:mysql://localhost/vitrodb</td>
</tr>
<tr>
<td>VitroConnection.DataSource.username</td>
<td>vitrodbUsername</td>
</tr>
<tr>
<td>VitroConnection.DataSource.password</td>
<td>vitrodbPassword</td>
</tr>
</tbody>
</table>