Installation of the Oracle19c Sample Schemas

Oracle provides the following sample schemas: `HR, OE, OC, PM`, and `SH`. You must download the installable zip file from the GitHub repository to use the sample schemas.

This section includes the following topics:

- Installing the Sample Schemas
- Installing the HR Schema
- Installing the CO schema

Installing the Sample Schemas

The Sample Schemas can be installed together using a single script.

The procedure to install sample schemas is as follows:

1. To find the latest version of the sample schemas installation scripts, go to the following GitHub location.

   For example, If you want a 19.2 version of the scripts, then go to the following location:

   ```
   https://github.com/oracle/db-sample-schemas/releases/tag/v19.2
   ```

2. Clone the GitHub repository, or download the ZIP bundle from GitHub and extract the files.

3. Change directory to `db-sample-schemas-19.2` in cmd terminal.

4. Use the following syntax from the SQL*Plus command-line interface:

   Sample Command

   ```
   sqlplus / as sysdba

   CONNECT system/systempw

   @mksample systempw syspw hrpw oepw pmpw ixpw shpw bipw users temp
   /your/path/to/log/ connect_string
   ```

   ```
   sqlplus / as sysdba

   CONNECT system/fenago

   @mksample fenago fenago fenago fenago fenago fenago fenago fenago users temp
   C:\App\oracle\demo\schema\log \ localhost:1521/orclpdb1
   ```

   You can also follow the instructions in the README file contained in the zip file.

   The `mksample` script expects 11 parameters. Provide the password for `SYSTEM` and `SYS`, and for schemas `HR`, `OE`, `PM`, `IX`, and `SH`. Specify a temporary tablespace and a default tablespace, and make sure that you end the name of the log file directory with a trailing slash.

The `mksample` script produces the following log files:

- `mkverify.log` - This is the Sample Schema creation log file.
- `hr_main.log` - This is the `HR` schema creation log file.

- `oe_oc_main.log` - This is the `OE` schema creation log file.
- `pm_main.log` - This is the `PM` schema creation log file.
- `pm_p_lob.log` - This is the SQL*Loader log file for `PM.PRINT_MEDIA`.
- `ix_main.log` - This is the `IX` schema creation log file.
- `sh_main.log` - This is the `SH` schema creation log file.
- `cust.log` - This is the SQL*Loader log file for `SH.CUSTOMERS`.
- `prod.log` - This is the SQL*Loader log file for `SH.PRODUCTS`.
- `promo.log` - This is the SQL*Loader log file for `SH.PROMOTIONS`.
- `sales.log` - This is the SQL*Loader log file for `SH.SALES`.
- `sales_ext.log` - This is the external table log file for `SH.COSTS`.

Note:

- Only `HR` and `SH` schemas can be installed independently. The rest of the schemas have dependencies and must be installed together using the @mksample script.
- The master script `@mksample` currently does not include the `CO` schema. You must install it separately.
- By installing any of the Oracle Database sample schemas, you drop any previously installed schemas that use the following user names: `HR`, `OE`, `PM`, `SH`, `IX`, `BI`, `CO`.
- Data contained in any of these schemas is lost if you run any of the installation scripts described in this section.

Installing the HR Schema

You can install the HR schema independently. All scripts necessary to create the Human Resource (`HR`) schema reside in the `human_resources` folder of the sample schema installation scripts downloaded earlier. You need to call only one script, `hr_main.sql`, to create all the objects and load the data.

Perform the following steps to install the `HR` schema:

1. Download the sample schema installation zip from GitHub and extract the files.
2. Navigate to the `human_resources` folder.
3. Log on to SQL*Plus as `SYS` and `connect` using the `AS SYSDBA` privilege:

   ```
   sqlplus connect sys as sysdba
   Enter password: password
   ```

4. To run the `hr_main.sql` script, use the following command:

   ```
   SQL> @hr_main.sql
   ```

5. Enter a secure password for `HR`:

   ```
   specify password for HR as parameter 1:
   Enter value for 1:
   ```

6. Enter an appropriate tablespace, for example, `users` as the default tablespace for `HR`:

```
specify default tablespace for HR as parameter 2:
Enter value for 2:
```

7. Enter `temp` as the temporary tablespace for `HR`:

```
specify temporary tablespace for HR as parameter 3:
Enter value for 3:
```

8. Enter the password for `SYS`:

```
specify password for SYS as parameter 4:
Enter value for 4:
```

9. Enter the directory path, for example, `C:\App\oracle\demo\schema\log \`, for your log directory:

```
specify log path as parameter 5:
Enter value for 5:
```

After the `hr_main.sql` script runs successfully and the `HR` schema is installed, you are connected as user `HR.` To verify that the schema was created, use the following command:

```
SQL> SELECT table_name FROM user_tables;
```

Running `hr_main.sql` accomplishes the following tasks:

1. Removes any previously installed `HR` schema.
2. Creates user `HR` and grants the necessary privileges.
3. Connects as `HR`.
4. Calls the scripts that create and populate the schema objects.

A pair of optional scripts, `hr_dn_c.sql` and `hr_dn_d.sql`, is provided as a schema extension. To prepare schema `HR` for use with the directory capabilities of Oracle Internet Directory, run the `hr_dn_c.sql` script. If you want to return to the initial setup of schema `HR`, use the `hr_dn_d.sql` script to undo the effects of the `hr_dn_c.sql` script.

Note:

Similarly SH schema can be installed independently.

Installing the CO schema

You can install the `CO` schema independently from GitHub. You cannot install the `CO` schema as part of the `@mksample` script.

The steps to install `CO` schema from GitHub is as follows:

1. Go to the following GitHub location:

```
https://github.com/oracle/db-sample-schemas/releases/tag/v19.2
```

2. Clone the GitHub repository, or download the ZIP bundle from GitHub and extract the files.

3. Navigate to the `customer_orders` folder.
4. Follow the instructions in the `README.txt` present in the `customer_orders` folder.
5. Review the `co_install.log` file in the extracted zip folder for errors.
6. To verify that the schema was created, use the following command:

```
SQL> SELECT table_name FROM user_tables;
```

7. To drop the `CO` schema, run the following script:

```
SQL> @co_drop_user.sql
```

Note:

- The Customer Orders(`CO`) schema is available from Oracle Database 12c onwards.
- The master script `@mksample` currently does not include the `CO` schema.