

OraBench - Auxiliary Scripts.

1 `run_bench_all_drivers`

This script executes the following driver specific sub-scripts:

- `src_c/scripts/run_bench_odpi`
- `src_elixir/scripts/run_bench_oranif`
- `src_erlang/scripts/run_bench_oranif`
- `src_go/scripts/run_bench_godror`
- `src_java/scripts/run_bench_jdbc`
- `src_kotlin/scripts/run_bench_jdbc`
- `src_python/scripts/run_bench_cx_oracle`
- `scripts/run_finalise_benchmark`

The possible exclusion of drivers made before is taken into account.

2 `run_collect_and_compile`

Depending on the desired drivers, the script collects the libraries necessary for compilation and then compiles the `ora_bench` software in the appropriate programming languages:

- C++ (gcc) -- creation of the C++ (gcc) specific property file -- cleaning existing binaries -- compilation with `make`
- Elixir -- creation of the Elixir specific property file -- providing `hex` -- cleaning existing dependencies -- load dependencies -- compilation with `mix`
- Erlang -- creation of the Erlang specific property file -- compilation with `rebar3`
- Go -- providing the `godror` driver
- Python 3 -- creation of the Python 3 specific property file

3 `run_create_bulk_file`

This script is used to create a bulk file.

4 `run_db_setup`

This script downloads the Docker image with the requested database version from Docker Hub and prepares it for further processing:

- stops a currently running Docker container `ora_bench_db` and deletes it together with its image
- creates the Docker network `ora_bench_net`
- Docker image with the requested database version is downloaded from Docker Hub
- the new Docker container `ora_bench_db` is started as part of the network `ora_bench_net`

- the database schema **SCOTT** is set up in the database with the necessary rights and the corresponding database table

5 **run_finalise_benchmark**

In this script, OraBench.java is used to reset the following configuration parameters to the value 'n/a':

- **benchmark.comment**
- **benchmark.database**
- **benchmark.driver**
- **benchmark.host.name**
- **benchmark.id**
- **benchmark.language**
- **benchmark.number.cores**
- **benchmark.os**
- **benchmark.user.name**
- **connection.service**
- **sql.create**

6 **run_properties_standard**

This script is executed for one of the supported databases with standard properties. The script performs the following tasks:

- **run_collect_and_compile** - collects the libraries necessary for compilation and then compiles the ora_bench software,
- **run_db_setup** - downloads the Docker image from Docker Hub and prepares its database for further processing and
- **run_bench_all_drivers** - executes the driver specific sub-scripts.

7 **run_properties_variations**

This script is executed for one of the supported databases. The script performs the following tasks:

- **run_collect_and_compile** - collects the libraries necessary for compilation and then compiles the ora_bench software,
- **run_db_setup** - downloads the Docker image from Docker Hub and prepares its database for further processing and
- **run_bench_all_drivers** - is running for each of the following parameter combinations:

| batch.size | core.multiplier | transaction.size |
|-------------------|------------------------|-------------------------|
| default value | default value | default value |
| default value | 1 | default value |
| 0 | default value | default value |
| 0 | default value | 0 |
| 0 | 1 | default value |

| batch.size | core.multiplier | transaction.size |
|------------|-----------------|------------------|
| 0 | 1 | 0 |

8 run_show_environment

Logs the ora_bench specific environment variables and the installed software versions.