

Lab 05: Using UVM Configuration Database

Objective: To learn how to set and get values in `uvm_config_db` with different scopes.

Step 1: Create the Test Class

- Create a file `test.sv`. Extend from `uvm_test`.
- Instantiate the `env` component.
- Create an instance of `env` using `type_id::create()`.

Step 2: Create the Environment Class

- Create a file `env.sv`. Extend from `uvm_env`.
- Declare and initialize integer variables (`i = 5, j = 9`).
- Instantiate the agent using `type_id::create()`.
- Use `uvm_config_db::set()` to store `i` and `j` in the database.

Step 3: Create the Agent Class

- Create a file `agent.sv`. Extend from `uvm_agent`.
- Declare two integer variables (`i` and `j`).
- Use `uvm_config_db::get()` to retrieve values from the database.
- Print the retrieved values in the build phase.

Step 4: Create the Top-Level Module

- Create `top.sv`.
- Call `run_test("test")` in an initial block.