Running Tests in Parallel

In this topic, we will see how to run tests in parallel and how to control the thread count.

WE'LL COVER THE FOLLOWING

- How to control parallelism?
- Types of parallelism

How to control parallelism?

TestNG provides features to run tests in parallel. This parallelism and the thread count can be controlled from ***testng.xml***.

Parallelism and thread count can be set at `suite` level or `test` level like below.

```
<suite name="Sample Test Suite" parallel="tests" thread-count="5">
```

```
<test name="Sample Test" parallel="tests" thread-count="5">
```

Types of parallelism

TestNG supports the following parallelism:

- `methods` run test methods in parallel in different threads. All dependent methods will be run in different threads, respecting the priority of tests.
- `tests` run *<test>* tags in parallel in separate threads.
- `classes` run test classes in parallel in separate threads, but test methods in those test classes will run in the same thread.
- `instances` run instances of test methods/classes in parallel in different threads.

In the case of `@DataProvider`, the parallelism can be controlled using the

attribute `@DataProvider(parallel = true)`. By default, it is set to ***false*** and

default dataprovider thread count is **10** which is considered only when parallel is enabled.

Now that you are familiar with running tests in parallel, in the next lesson, you will learn about grouping the tests.