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?

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.