

## Architecture of JUnit5:

JUnit 5 consists of a Platform and an API. Platform is the core that comprises of the library of JUnit i.e., IDEs and Built Tools and it is not where the developer or the tester directly interact with. Developer or the tester interact with the JUnit API.

JUnit 5 is the first version of JUnit which separates the API for discovering and running test called JUnit Platform and the API for writing tests called JUnit Jupiter. JUnit Jupiter is the API used by developers for writing unit tests.

The JUnit **Jupiter** provides a Test Engine for running Jupiter based tests on the platform.

JUnit **Vintage** provides a Test Engine for running older JUnit test such as JUnit 3 and JUnit 4 based tests on the platform.

**Ext or Third Party** is used to deal with your own extensions/api within the same platform to run your tests.

For using new JUnit i.e., JUnits5 syntax, we need to add two main corresponding dependencies. These are Jupiter dependency and core platform dependency. And if you want to add some older test into your code than you need Vintage dependency and Extend dependency or third Party dependency is for extend.

IDE uses the platform to run the tests. A lot of IDE is support by JUnit5 today's and some are Eclipse, IntelliJ IDEA, Maven etc.

## Testing without using JUnit:

Suppose let us say if we have lot of test cases and the only way we know if they pass or fail is by looking at the terminal. So if we have a lot of test cases than that would be time consuming and very difficult to identify which test cases pass and which test cases fails.

## Installation of JUnit5 :

JUnit is a *Testing framework* used to test the Java-based application. So before installing JUnit, you need to configure and verify that java development kit (JDK) and Maven is downloaded in your machine.