

Parallel Testing with NUnit for SpecFlow(Selenium C#)

Agenda for this document. To discuss about how to achieve **Parallel Testing** using NUnit for **SpecFlow (BDD framework)**- Cucumber for .NET.

Why we need parallel testing : There are several use of Parallel testing, In case of Selenium, parallel testing gives us many benefits like.

- Cross -browser testing.
- Less execution time (as the script gets segregated)
- Testing with Different platforms using GRID many more.

Does NUnit supports Parallel testing : The answer to this question in a single word is **NO**.

Till date it does not support parallel testing in true way ,but there are way we can achieve parallel execution with NUnit by creating **category** and with the help of NUnit console.

How to Do.

- **Step1. Create category in Feature file.** In **Spec-flow** which is a **BDD** framework from **Selenium C#** we need to create feature file and write the test case **in ENGLISH-LIKE** language called **Gherkin**,there in every feature file we need to mention "**@CategoryName**"

NOTE: Here **@CategoryName** can be anything relevant like **@SmokeTest** or **@RegressionTest** or **@SuiteName**.

Now when you build your project you can see **category wise segregation** in the **Test Explorer in Visual Studio**.

- **Step2:** Create a Batch file and call project .dll(compiled code) file for test execution **mentioning categories** by using **nunit-console like**.

```
nunit-console /result:TestResults1.xml pathToDllFile /include:CategoryName1  
nunit-console /result:TestResults2.xml pathToDllFile /include:CategoryName2  
nunit-console /result:TestResults3.xml pathToDllFile /include:CategoryName3
```

You will be able to see **parallel execution by category wise** with **multiple browser instances**.