
Selenium And spring boot Automation with Jenkins

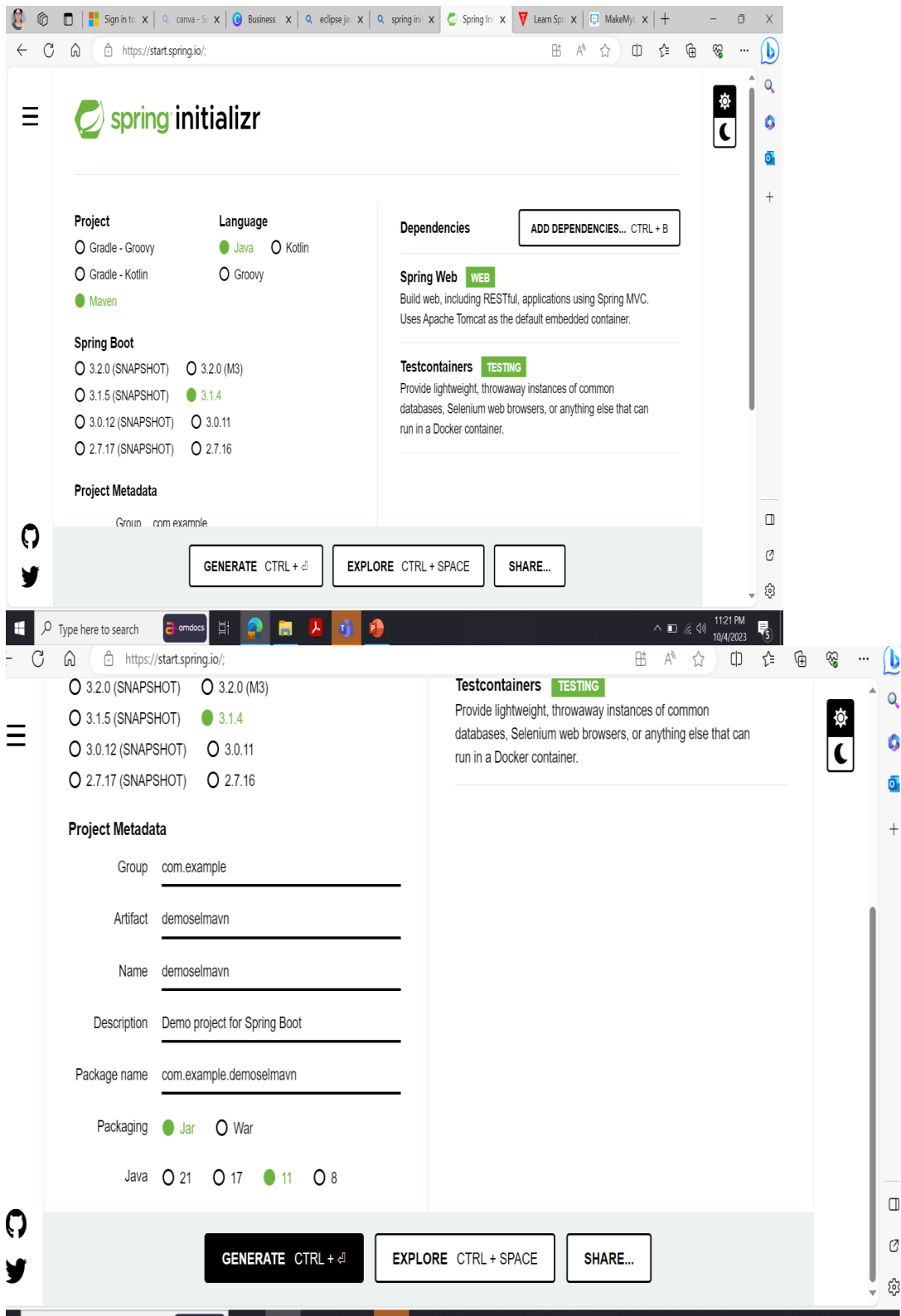
Spring Boot -

Spring Boot is a project that is built on the top of the Spring Framework. It provides an easier and faster way to set up, configure, and run both simple and web-based application.

Spring Initializr –

Spring Initializr is a Web-based tool that generates the Spring Boot project structure.

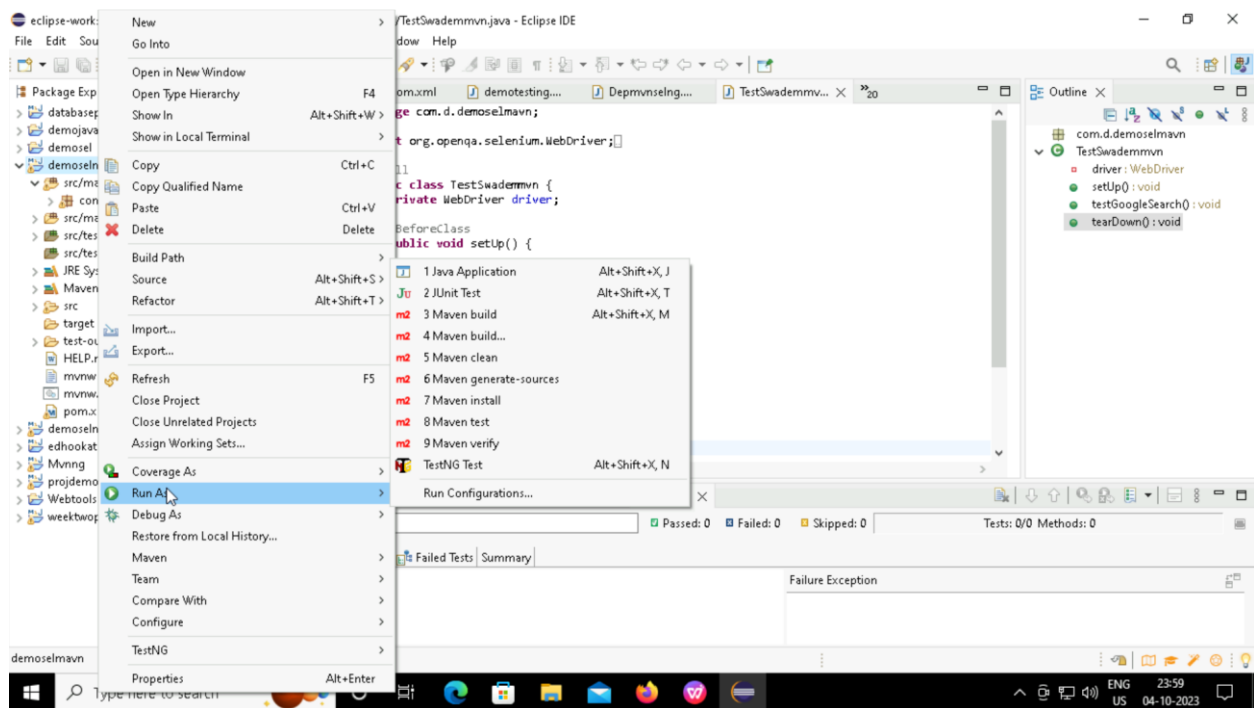
- Modern IDEs have integrated Spring Initializr that provides the initial project structure.
- Spring Initializer provides an extensible API to generate JVM-based projects,
- It is used to inspect the metadata which is used for generating projects, for instance to list the available dependencies and versions.



Zip file to be extracted and import to Eclipse which includes pom.xml ,maven dependencies.

Eclipse

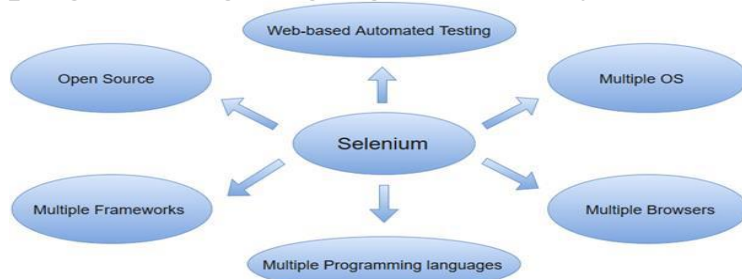
It is a powerful and versatile Integrated Development Environment (IDE) that provides essential tools for Java developers, including a Java IDE, Git client, XML Editor ,Etc.



Picture depicts workspace of Eclipse.

Selenium –

Selenium is an open-source tool that automates web browser. It provides a single interface that lets you write test scripts in programming languages like Ruby, Java, Python.



SOURCE CODE –

```
package com.d.demoselmavn;

import org.openqa.selenium.By;
import org.openqa.selenium.JavascriptExecutor;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.firefox.FirefoxDriver;

public class swademmvn {
    public static String browser="Firefox";
    public static WebDriver dr;
    public static void main(String[] args) {

// TODO Auto-generated method stub

        FirefoxDriver dr=new FirefoxDriver();
        dr.get("http://www.google.com");
        dr.manage().window().maximize();
        dr.findElement(By.id("APjFqb")).sendKeys("OrangeHRM");
        dr.findElement(By.xpath("/html/body/div[1]/div[3]/form/div[1]/div[1]/div[4]/center/input[1]")).click();
        dr.findElement(By.xpath("/html/body/div[5]/div/div[9]/div[1]/div[2]/div[2]/div/div/div[1]/div/div/div
/div/div/div/div/div[1]/div/span/a/h3")).click();
        dr.findElement(By.xpath("/html/body/nav/div/div[2]/ul/li[2]/a")).click();
        dr.findElement(By.xpath("/html/body/nav/div/div[2]/ul/li[2]/div/div/div/div/ul/li[1]")).click();
        dr.findElement(By.xpath("/html/body/nav/div/div[2]/ul/li[2]/div/div/div/div/ul/li[1]/div/div/h6[2]/a")
).click();
        JavascriptExecutor js=(JavascriptExecutor) dr;
        js.executeScript("window.scrollTo(0,500)");
        try {
            Thread.sleep(2000);
            dr.get("https://player.vimeo.com/video/855609648?h=a942e2d4de");
            dr.findElement(By.xpath("/html/body/div/div[7]/div[8]/div[1]/button/svg/path")).click();
            /* if(videoElement.getAttribute("paused").equals("true")) {
                videoElement.click();
            }*/
        }catch(InterruptedException e) {
            e.printStackTrace();
        }

    }

}
```

OUTPUT –

jenkins - Adobe Acrobat Reader (32-bit)

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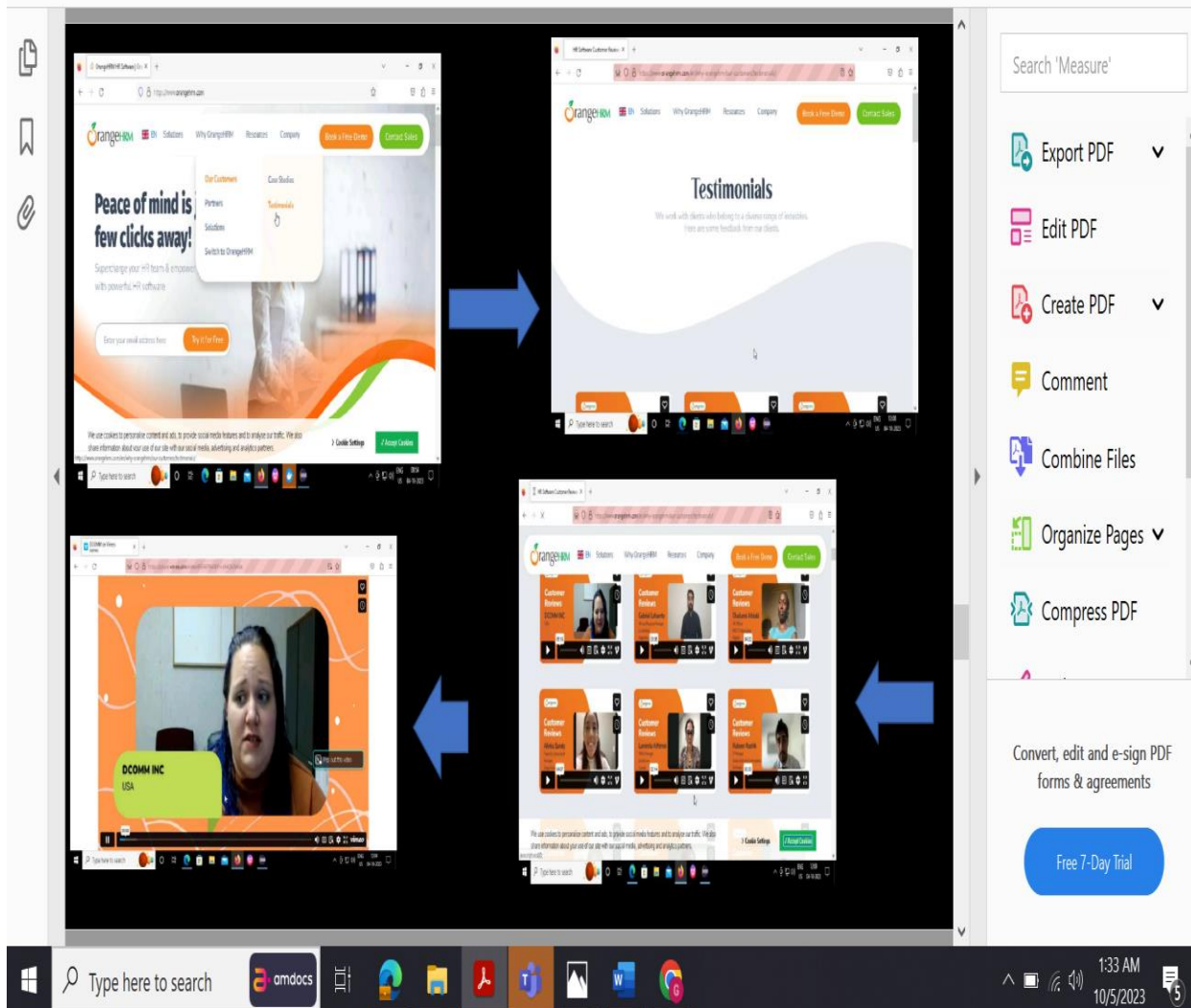
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The screenshot displays the Adobe Acrobat Reader application window. The title bar indicates the document is 'jenkins - Adobe Acrobat Reader (32-bit)'. The menu bar includes File, Edit, View, Sign, Window, and Help. The toolbar shows various navigation and editing tools. The main content area displays a PDF document. The PDF is divided into three panels. The top-left panel shows a Firefox browser window with the OrangeHRM logo and navigation links. The top-right panel shows a Google search for 'OrangeHRM' with results for the company's website and a free trial offer. The bottom panel shows the OrangeHRM website's main landing page with the headline 'Peace of mind is just a few clicks away!' and a 'Try it for Free' button. Blue arrows indicate the flow of information from the browser to the search results and then to the website content.



TestNG-

- TestNG is a very important framework when you are developing the framework from scratch level.
- TestNG provides you full control over the test cases and the execution of the test cases. Due to this reason, TestNG is also known as a testing framework.
- Cedric Beust is the developer of a TestNG framework.
- If you want to run a test case A before that as a pre-request, you need to run multiple test cases before you begin a test case A. You can set and map with the help of TestNG so that pre-request test cases run first and then only it will trigger a test case A. In such way, you can control the test cases.
- TestNG framework came after Junit, and TestNG framework adds more powerful functionality and easier to use.
- It is an open source automated TestNG framework. In TestNG, NG stands for "**Next Generation**".
- TestNG framework eliminates the limitations of the older framework by providing more powerful and flexible test cases with help of easy annotations, grouping, sequencing and parametrizing.

Source Code-

```
import org.openqa.selenium.WebDriver;
import org.testng.annotations.AfterClass;
import org.testng.annotations.BeforeClass;
import org.testng.annotations.Test;

public class TestSwademmn {
    private WebDriver driver;

    @BeforeClass
    public void setUp() {
        // Initialize your WebDriver here, e.g., create a FirefoxDriver instance.
        driver = new FirefoxDriver();
        driver.manage().window().maximize();
    }
}
```



```
}
```

@Test

```
public void testGoogleSearch() {  
    driver.get("http://www.google.com");
```

```
    // Your test steps go here. You can call the methods from the 'swademmnv' class.
```

```
    // For example:
```

```
    // swademmnv.searchOnGoogle(driver);
```

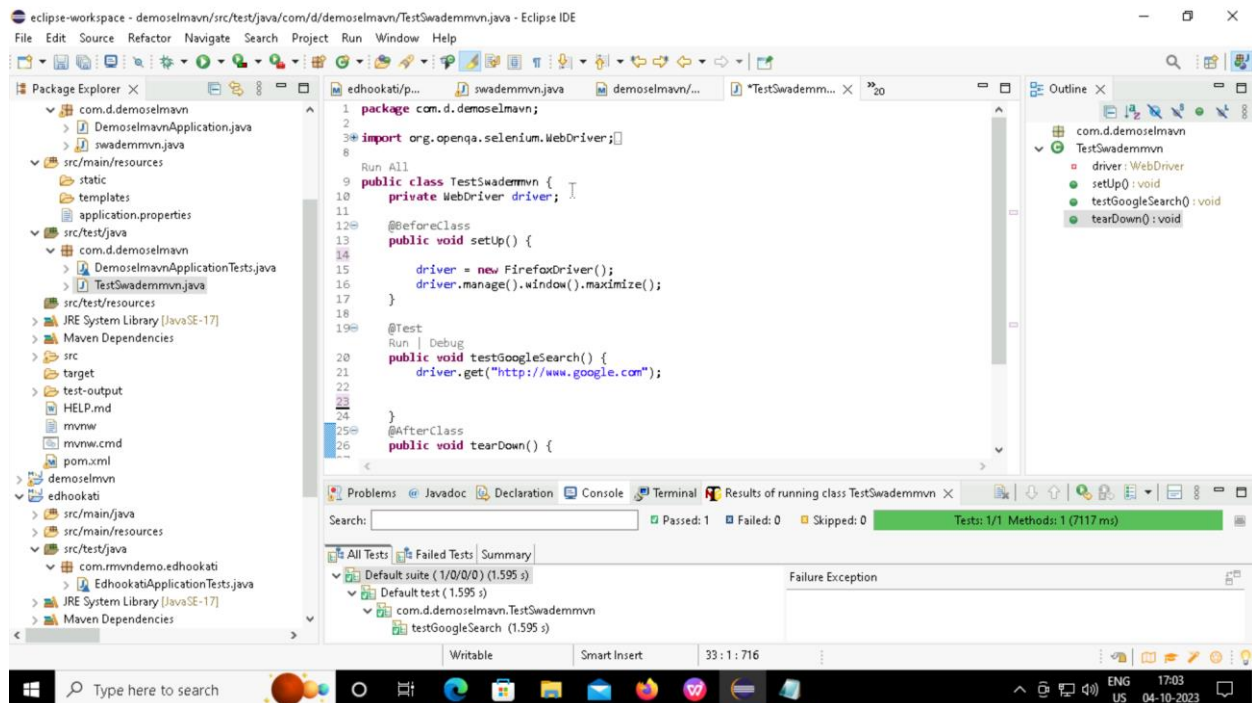
```
    // Add assertions or verifications here as needed.
```

```
}
```

@AfterClass

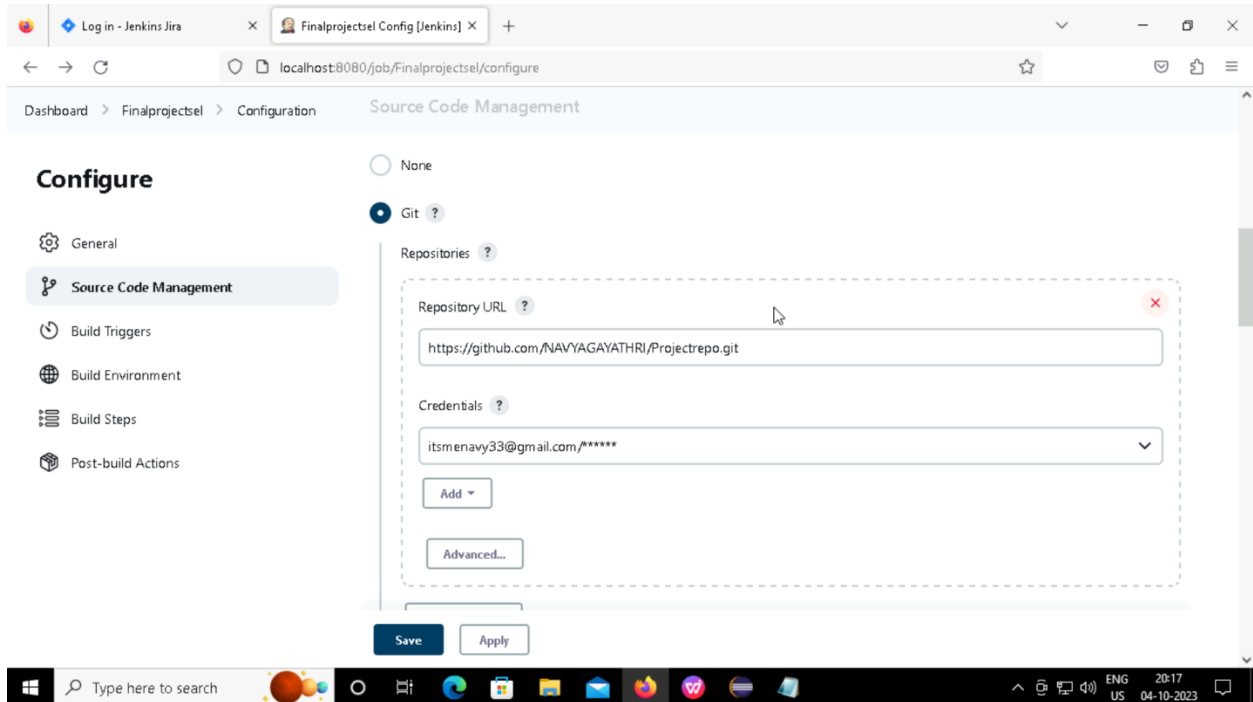
```
public void tearDown() {  
    // Clean up and close the WebDriver.  
    if (driver != null) {  
        driver.quit();  
    }  
}
```

Output –



JENKINS –

Jenkins is an open-source automation tool written in Java with plugins built for continuous integration. Jenkins is used to build and test your software projects continuously making it easier for developers to integrate changes to the project and making it easier for users to obtain a fresh build.



Jenkins Dashboard

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Add description

S	W	Name	Last Success	Last Failure	Last Duration
...	...	Demogamo	N/A	N/A	N/A
...	...	demojenkin	8 days 6 hr #1	N/A	5.4 sec
...	...	Finalprojectsel	3 min 35 sec #1	N/A	3.3 sec

Build Queue

No builds in the queue.

Build Executor Status

Icon: S M L

Icon legend

Atom feed for all

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Atom feed for just latest builds

Jenkins Project Finalprojectsel

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- Last successful build (#1), 4 min 45 sec ago
- Last completed build (#1), 4 min 45 sec ago

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trend

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