

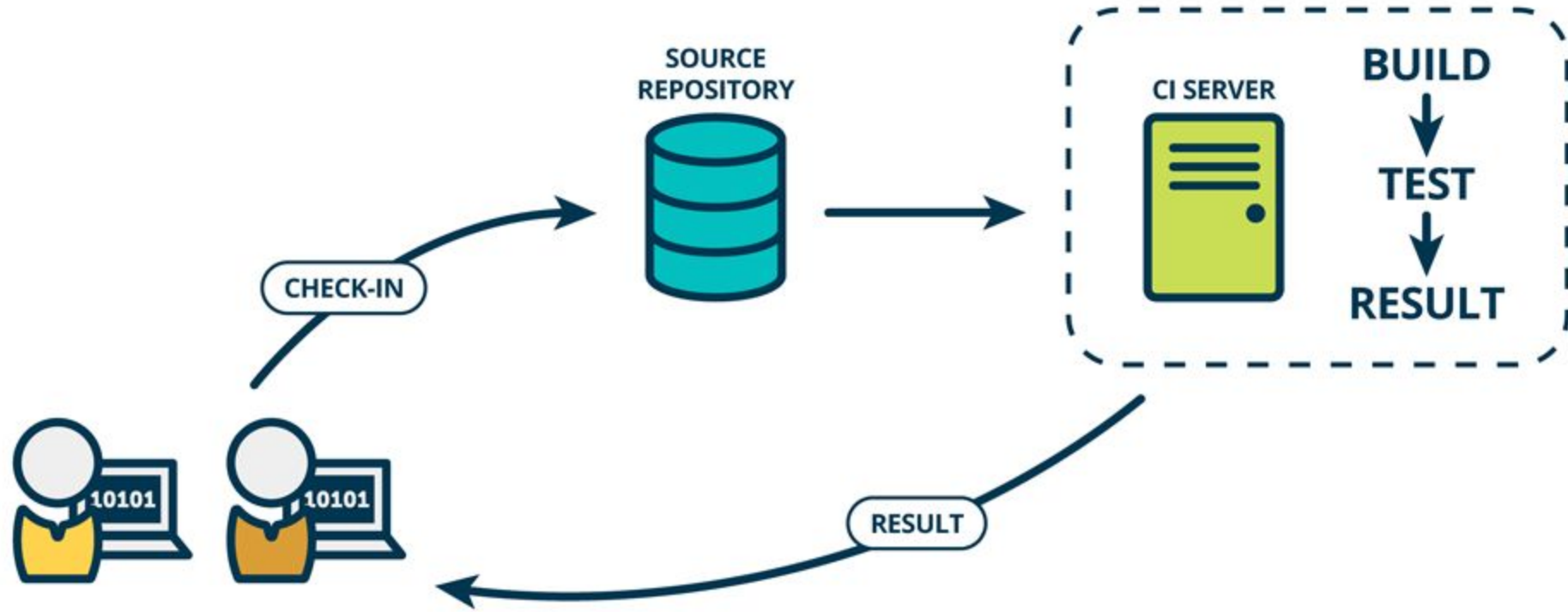


TEST AUTOMATION

18 SEP 2017

- **UI Automation. Selenium**
- **Test runs and project structure.**
 - Run with Maven
 - TestNg / JUnit
- **PageObjects. Locators. Page Factory.**
- **Selenide. Best Practices UI Testing.**
- **CI. Jenkins. Allure Reporting**
- **BDD. TDD. KDT. DDT.**

CONTINUOUS INTEGRATION



CI features

- Automatically build a product
- Automatically run the tests
- Notification on build/tests fails
- Integration with a bug tracking system
- Build version control
- Everyone can see the results

CI Team responsibilities

- Check in frequently
- Don't check in broken code
- Don't check in untested code
- Don't check in when the build is broken
- Don't go home after checking in until the system builds

JENKINS



Jenkins is the Hub of the CD/DevOps Ecosystem

Over 1000 Jenkins Plugins

Integration with over 100 DevOps Tools

Orchestration of the DevOps Toolchain

End-to-End CD Pipeline Management



Code & Commit

- git
- IBM Rational
- GitHub
- ca technologies
- Stash
- SERENA
- SUBVERSION
- PERFORCE
- Borland StarTeam
- mercurial
- artifactory
- Nexus
- Visual Studio
- eclipse

Build & Config

- maven
- gradle
- docker
- CHEF
- Apache Ant
- puppet labs
- ANSIBLE
- VAGRANT
- Gant
- Visual Studio
- amazon web services
- SALTSTACK
- IBM Rational

Scan & Test

- gerrit
- sauce LABS
- sonar
- BlazeMeter
- SOASTA
- gatling
- RedLine13.com
- Selenium WebDriver
- hp Loadrunner
- FitNesse
- JUnit
- cucumber

Release

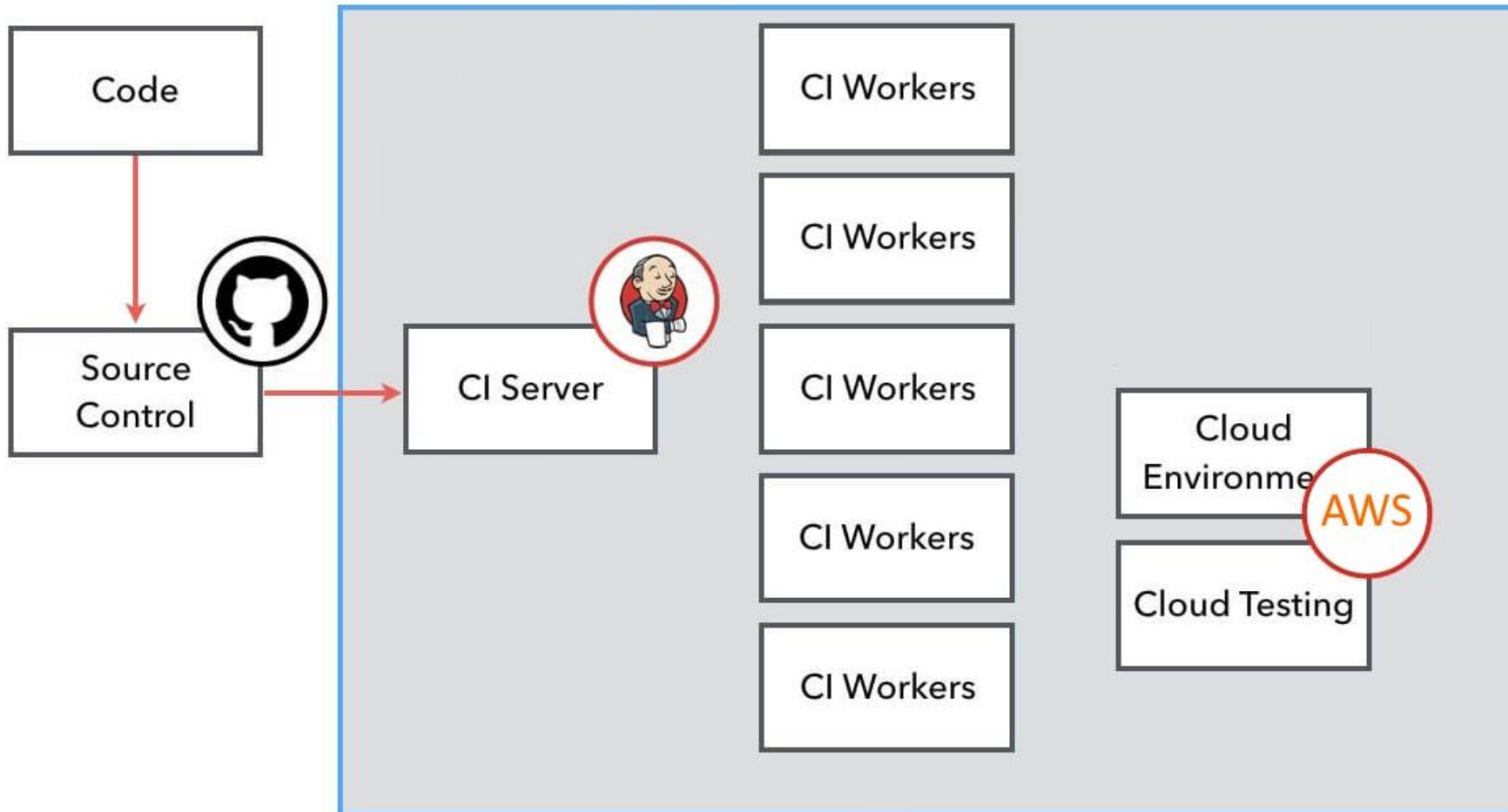
- uDeploy
- SERENA
- ca technologies
- CollabNet
- MidVision
- XL RELEASE

Deploy

- amazon web services
- Pivotal
- Azure
- docker
- vmware
- OPENSIFT
- JBoss
- Google Compute Engine
- Google App Engine
- Microsoft .net
- openstack
- WebSphere

© 2015 CloudBees, Inc. All Rights Reserved

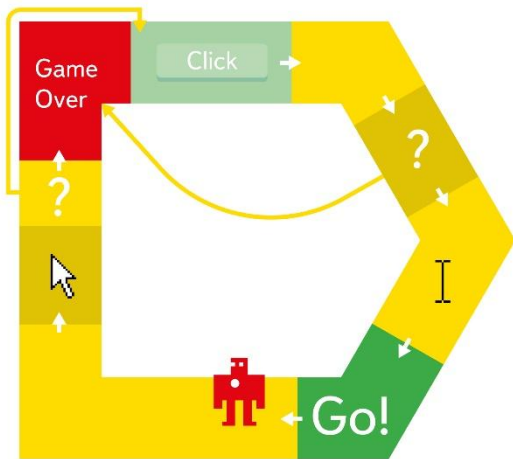
Client – Server model





ALLURE REPORT

The main idea is to create test execution reports that are **clear** to everyone in the team



<http://allure.qatools.ru/allure-testng-example>



Annotations:

- @Title
- @Description
- @Step
- @Attachment
- ...

```
@Title("This is our cool test suite")
>Description("In this cool suite we will test only cool
features")
public class MyTest {

    @Title("First cool check")
    @Description("In this cool test we will check cool thing")
    @Test
    public void testNumberOne() {
        assertTrue(...);
    }
}
```

```
public class AllureAttachmentListener extends TestListenerAdapter {

    @Attachment(value = "Attachment: {0}", type = "image/png")
    public byte[] makeScreenshot() {
        byte[] array = {1};
        try {
            return ((TakesScreenshot) getDriver()).getScreenshotAs(OutputType.BYTES);
        } catch (WebDriverException e) {
            e.printStackTrace();
        }
        return array;
    }

    @Override
    public void onTestFailure(ITestResult tr) {
        makeScreenshot();
    }

    @Override
    public void onTestSuccess(ITestResult tr) {
        makeScreenshot();
    }
}
```

- https://ci.qameta.io/job/allure2/job/master/Demo_Report/index.html
- <https://github.com/allure-examples/allure-testng-example>

- Intro. Automation testing
- UI Automation. Selenium
- Test runs and project structure.
 - Run with Maven
 - TestNg / JUnit
- PageObjects. Locators. Page Factory.
- Selenide. Best Practices UI Testing.
- CI. Jenkins. Allure Reporting
- **BDD. TDD. KDT. DDT.**



prox318is



danila_morokov@epam.com