

DevOps Flow

- | | | |
|----------------------------|---|---------------------|
| ➤ Continuous Development | - | N/A (Visual Studio) |
| ▪ Source Code Management | - | Git |
| ➤ Continuous Integration | - | Jenkins |
| ▪ Unit Test | - | N/A |
| ▪ Build | - | Maven |
| ▪ Code Analysis | - | Sonarqube |
| ▪ Build Artifacts | - | Nexus |
| ➤ Continuous Deployment | - | Ansible |
| ▪ Infrastructure | - | AWS/Docker/K8ts |
| ▪ Configuration Management | - | Ansible |
| ➤ Continuous Testing | - | N/A |
| ▪ Post Deployment Testing | - | N/A |
| ➤ Continuous Monitoring | - | Nagios |

Continuous Development

- ✓ Developers use various tools to develop the code. Developed code gets pushed to source code management.



- ✓ Most of the cases DevOps engineers doesn't write application code.
- ✓ DevOps engineers are responsible to maintain the code using "source code management tools"

Source Code Management



Continuous Integration

Code analysis:



Code build :



Artifact repository :



Continues Integration



Continuous Integration

Multiple steps are involved in Continuous integration.

- Unit Testing – **Junit, Nunit (plugin)**
- Code Build – **Maven, ANT, Gradle (Plugin & Setup)**
- Code Analysis – **Veracode, SonarQube (Plugin & Setup)**
- Code Artifacts – **Nexus, Artifactory (Plugin & Setup)**

Continuous Deployment



ANSIBLE

urban
{code}



Jenkins



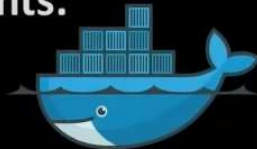
puppet

AWS
CodeDeploy



Infrastructure

Continuous deployment need target test/QA/Prod etc... environments.



docker



kubernetes



Data Center



amazon
web services



Azure

Configuration Management



ANSIBLE



CHEF™



SALTSTACK



puppet

Continuous Testing



APACHE

JMeter™



TRICENTIS

Continuous Monitoring

Nagios[®]

ZABBIX

 **Prometheus**

Priority



ANSIBLE



kubernetes



Jenkins



docker



Next



git

 Sonatype
Nexus

maven

sonarqube 

Nagios®