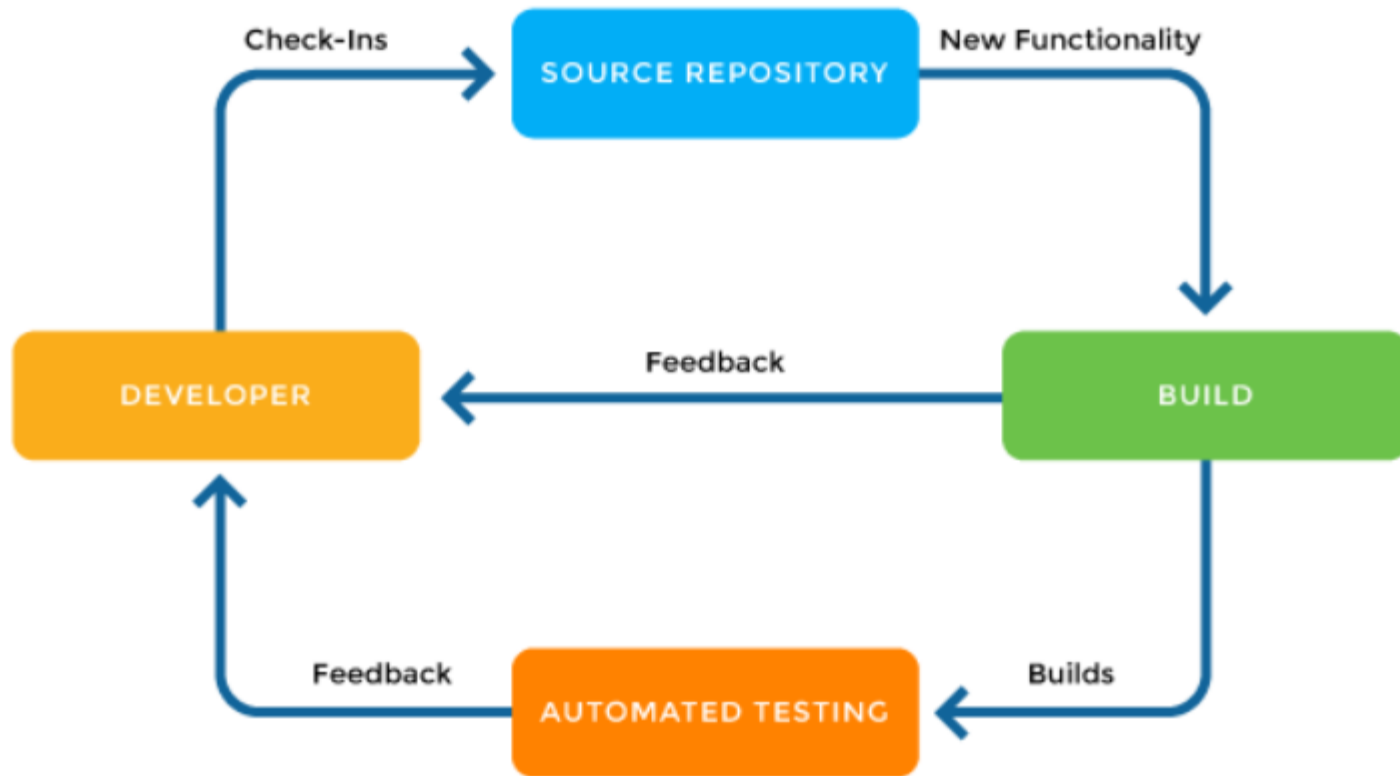


DevOps - Build Tools

Build Process



Build Tools



Getting Started

- Software build tools are used to automate the creation of executable applications from source code
- They script or automate a variety of tasks, such as downloading dependencies, compiling and packaging code, running tests, and deployment
- They are based on a specific language, E.g. Maven and Ant are XML-based tools, Grunt is JSON-based, and sbt is Scala-based
- Build Tools are used for –
 - Downloading the dependencies
 - Compiling source code to the form of binary code
 - Packaging that binary code
 - Running the tests
 - Deploying them to the production systems

Build Tools

- **Maven** – Apache maven, Dependency management and build automation tool based on project object model (POM). Uses xml to configure project
- **Apache Ant** – Java based build automation tool
- **Packer** – Free and open source, creating identical machine images. Used in infrastructure
- **Docker** – Enable developer to easily pack, ship and run any application as lightweight, portable self sufficient container which can run almost anywhere
- **Gradle** – Open source build automation tools designed for multi project builds. Combination of ant and maven
- **SBT** – Open source build tools by Scala for java and scala project
- **Terraform** – Infrastructure building tools. IAAC