

SDLC - Deployment Phase

Software instructions/ Source Code Repositories	GIT, CVS, VSS, .. Cloud based- GitHub, Bitbucket
Build Tools	Apache ANT, Gradle, Nexus, Jenkins, Atlassian bamboo
Continuous Integration	is the process of automating the build and testing of code every time a team member commits changes to version control.
Continuous Deployment	is a strategy for software releases wherein any code commit that passes the automated testing phase is automatically released into the production environment, making changes that are visible to the software's users.
Continuous Delivery	is the process to build, test, configure and deploy from a build to a production environment. Multiple testing or staging environments create a <i>Release Pipeline</i> to automate the creation of infrastructure and deployment of a new.
Application Release Automation (ARA)	<p>The 5 key components of ARA are:</p> <ol style="list-style-type: none">1. Packaging – of the items to be deployed2. Dependencies – modeling your application and infrastructure dependencies3. Promotion – delivering of tested packages to an environment of higher criticality (e.h. promotion from Dev to QA to Staging to Prod)4. Deployment – using the package contents to install the applications and configure their environments5. Compliance – documenting adherence to processes and audit requirements, and validating the configuration of the deployed application.

Automation is a crucial aspect of any CI/CD process and pipeline. Automatic verification is used in all stages, to validate artifacts, deployments, etc.