

Managing and Upgrading Plugins



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Breaking changes

Failing jobs

Manual fixes



Failed updates

Minimum versions

Successful jobs



Repeatable Jenkins install

OS & Java

Jenkins & plugin versions

Demo



Plugin updates and broken jobs

- Jenkins with plugins installed
- Update plugin with breaking change
- Existing build jobs fail

Plugin Updates: Breaking Changes



Breaking changes - data and validation logic



Plugin authors can flag incompatible updates



Update installs correctly



Every build fails...

Managing Breaking Changes

Release to staging

Dry-run in a separate environment

Plugin usage plugin

Track down which jobs use the affected plugin

Fix the jobs

Manually or with a script to update XML

Demo



Failed updates and successful jobs

- Jenkins with plugins installed
- Update plugin to incompatible version
- Installation fails

Plugin Updates: Installation Failures



Plugins define minimum Jenkins & Java versions



Not validated as part of update process



Old plugin version removed; new install fails



Builds silently ignore the plugin and succeed



Jenkins 2.x.y
git x.y.z
credentials x.y.z

Jenkins 2.x.y
git x.y.z
credentials x.y.z

Jenkins 2.x.y
git x.y.z
credentials x.y.z

Jenkins 2.x.y
git x.y.z
credentials x.y.z

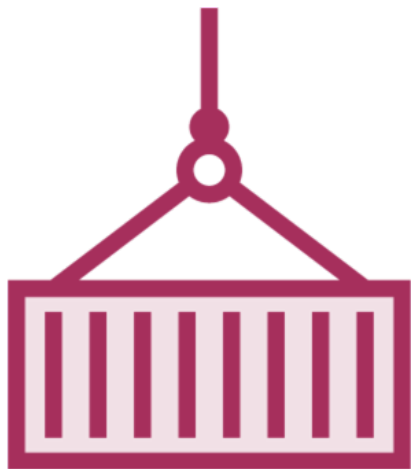


Demo



Repeatable Jenkins deployments

- Automating updates
- Backing up Jenkins data
- Upgrading and rolling back



Custom Docker image
Full control - from OS
Separate Jenkins data



Official Jenkins image
Maintained by Jenkins
Plugin automation



Config as code plugin
Scripted Jenkins setup
Any Jenkins runtime

Summary



Breaking changes

- Updated plugin logic
- Existing builds fail

Failed updates

- Updated plugin requirements
- Existing builds succeed
- Results unexpected

Automated Jenkins deployment

- Repeatable build, known versions
- Scripted rollout and rollback
- Jenkins data backup

We're Done!



So...

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