

Understanding Core Bamboo Features and Concepts



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Module Overview



Get an idea of Bamboo's position in the
CI/CD tool marketplace

Learn the components of a Bamboo build
plan and how they can be triggered

Learn how plans are executed by
Bamboo agents

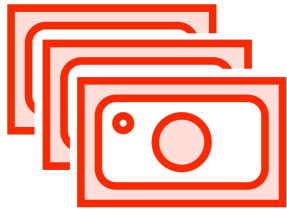
Learn the high-level basics of user and
permission management



Understanding Bamboo's Fit in the Marketplace



Bamboo Product Attributes



Commercial

There are low price options for small teams



On-premise

Not hosted in the cloud for you, instead run in your private cloud or on-premise server



Standalone

It's a product dedicated to CI/CD – not integrated with another product



Dedicated to CICD



Focused User Interface

UI makes it easy to create build pipelines and view results



Many Plugins

Rich set of third-party extensions



Highly Integrated with Atlassian Tools

Jira

- View build and deployment data from within Jira
- See issues included in builds and deployments from within Bamboo

Bitbucket

Confluence

Cloud and on-premise integrations both supported



Understanding Projects, Plans, and Triggers



Projects

A project is a collection of plans in Bamboo.

Primarily a grouping concept



Allow project and plan-level permissions to be maintained by a project admin

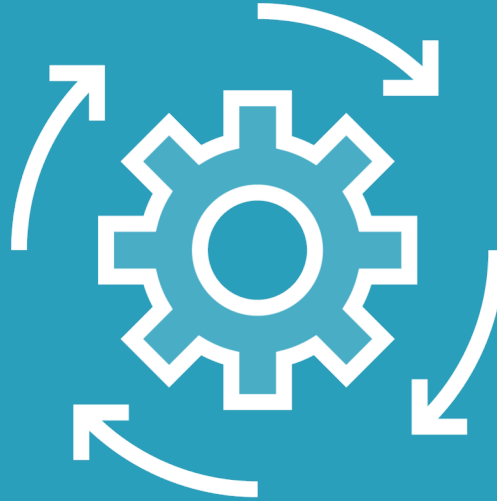


Allow definitions of variables at the project level



Allow project-level integrations with other products, like Jira



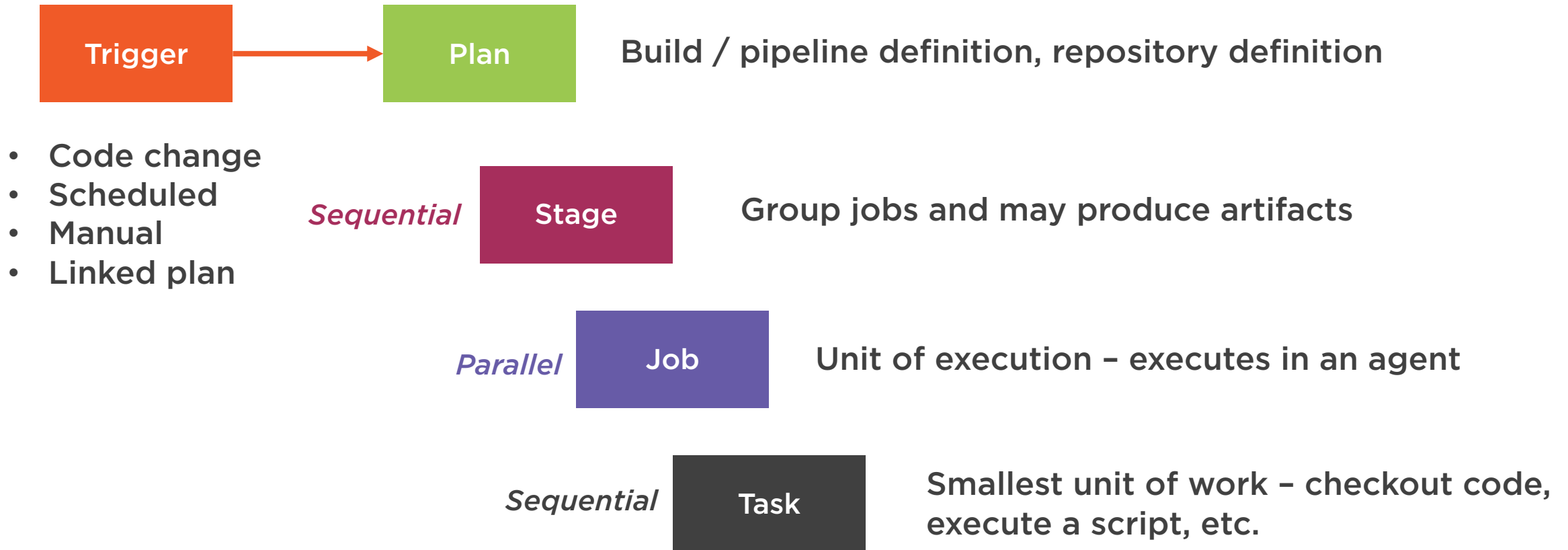


Plans do the work!

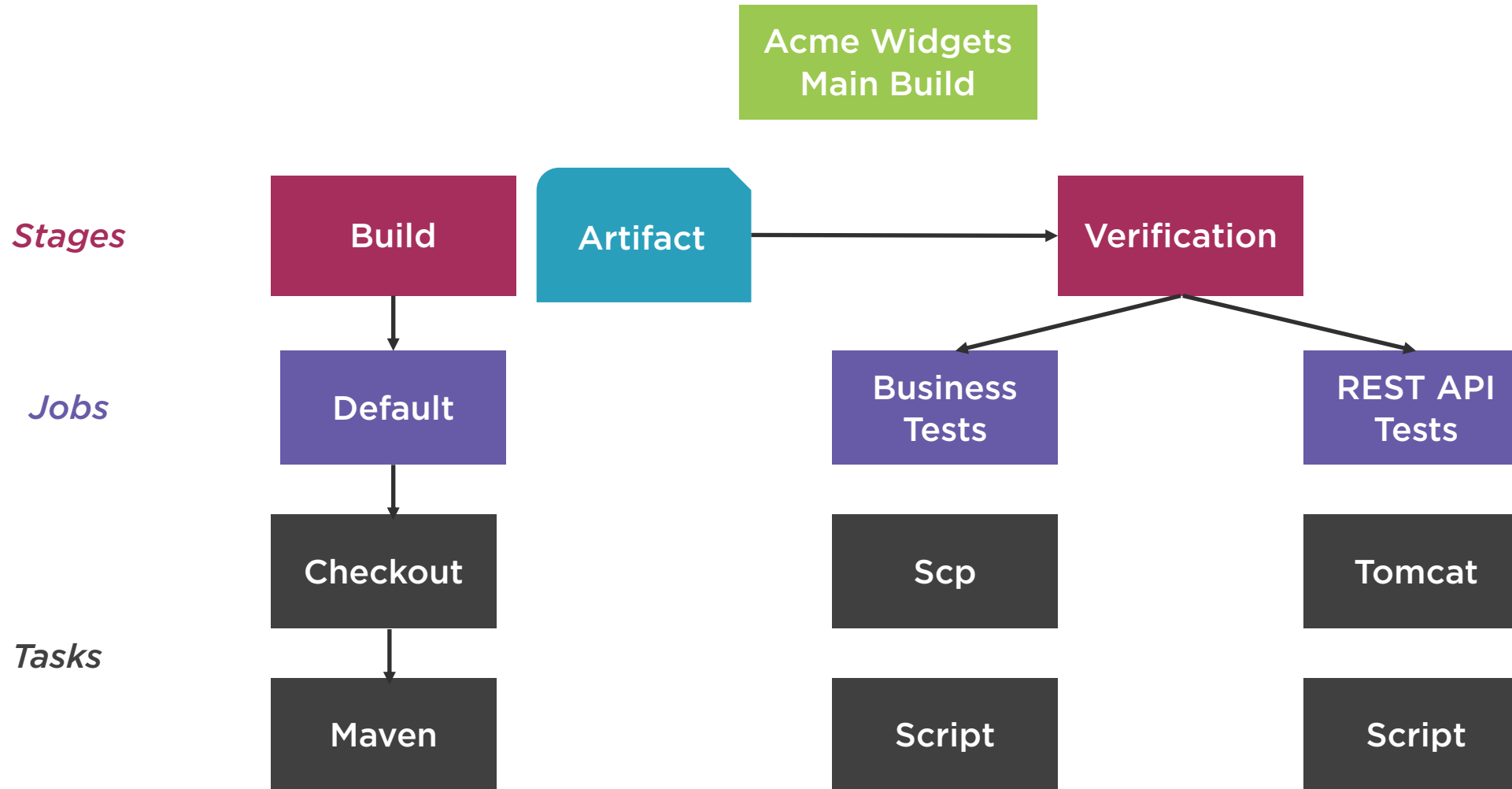
Build plans in Bamboo do all the work to build, test, and package an application – they're essentially a pipeline definition.



Plan Components



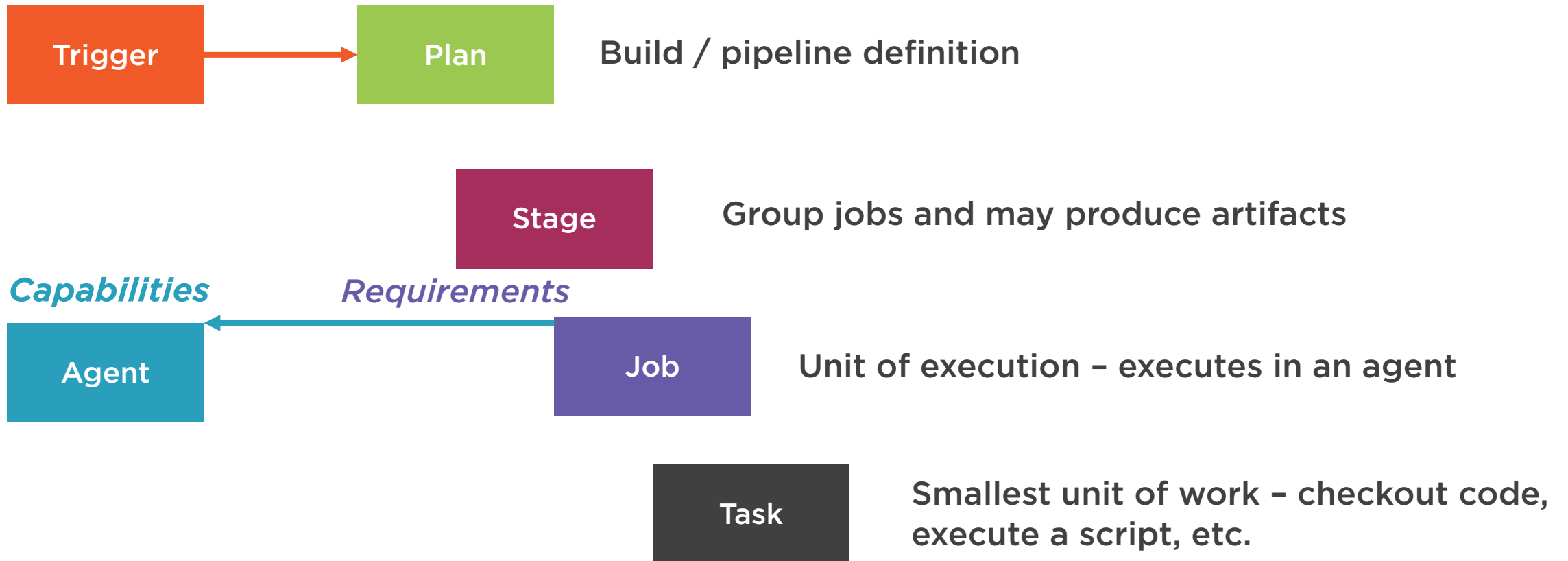
Example Plan



Understanding Job Execution By Agents



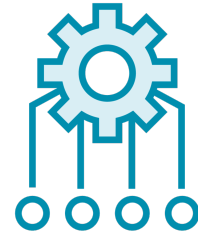
Job Execution



Bamboo Agents

A Bamboo agent is a service that runs jobs.

Corresponds to thread on Bamboo server if local



Can be local to Bamboo installation or remote



Can support job execution via Docker containers



Can be dedicated to a particular project, plan, or job





Agent administration can be critical!

Having an efficient number of agents and parallel jobs where possible can help keep busy Bamboo instances performant.



Understanding User and Permission Management



Users

By default, users are managed locally in the Bamboo installation

- A local admin account is created after first installing

External directories can be added:

- LDAP
- Microsoft Active Directory
- Atlassian Jira
- Atlassian Crowd

Each user should exist only once



Permissions

Permissions can be assigned to users at the global, project, and plan levels

- Groups can also be created and used to assign permissions

Where the same permission exists at multiple levels, it cascades downward

The project-level administration permission is a great delegation tool



Module Summary



Bamboo's strengths in the market

- Jira integration and focused product

Plans composed of stages, jobs, and tasks

- Jobs in a stage execute in parallel
- Plans triggered in a variety of ways

Bamboo jobs executed by agents

- Local or remote
- Must have capabilities matching requirements of all tasks in the job

User and permission management

- Internal and external user directories
- Permissions can be managed at multiple levels, with project-level delegation

