

Chef Habitat

Introduction to Habitat

Workshop - level 100

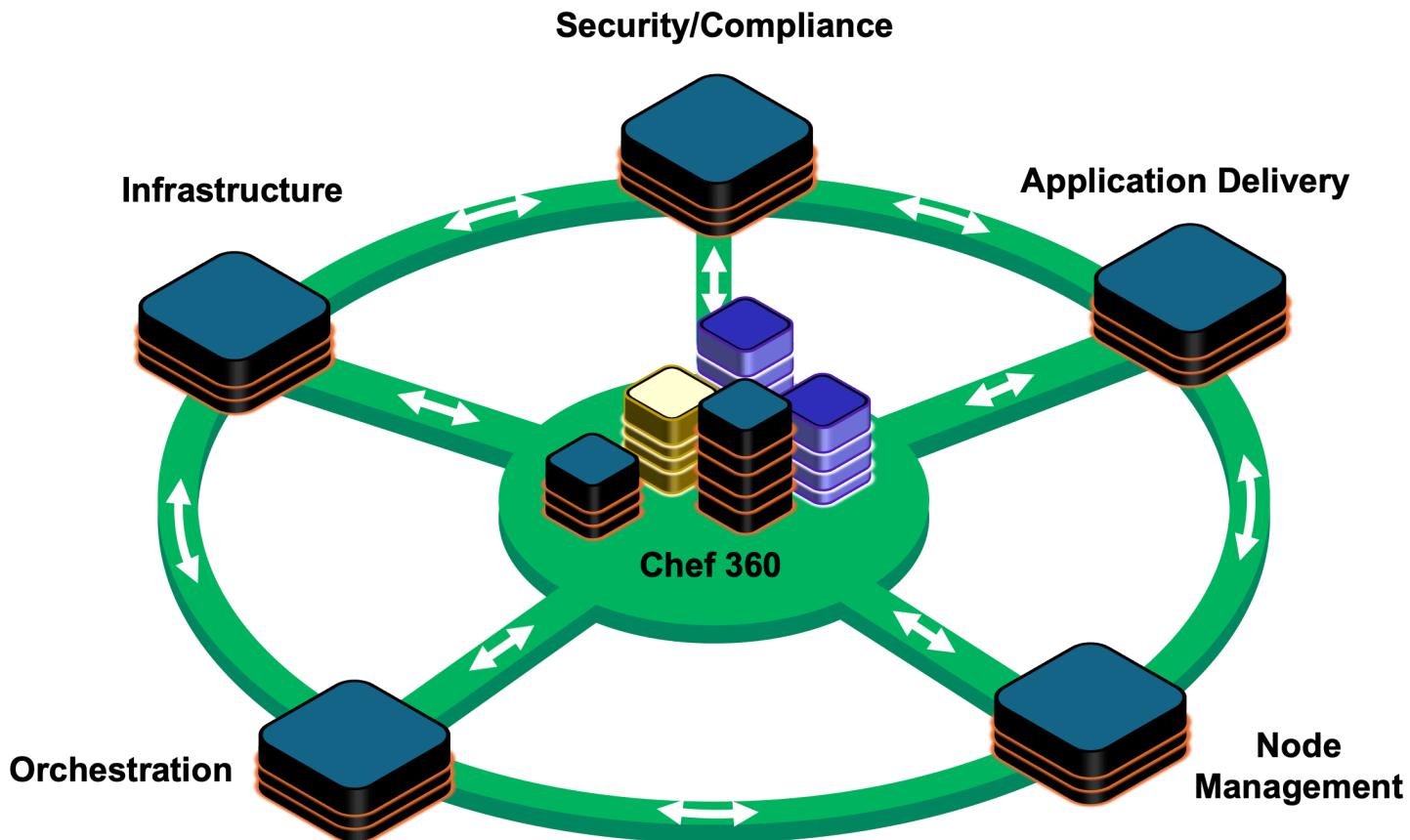


What is Habitat?



Five Pillars of DevOps

- Security/Compliance
- Infrastructure
- Node Management
- Orchestration
- Application Delivery

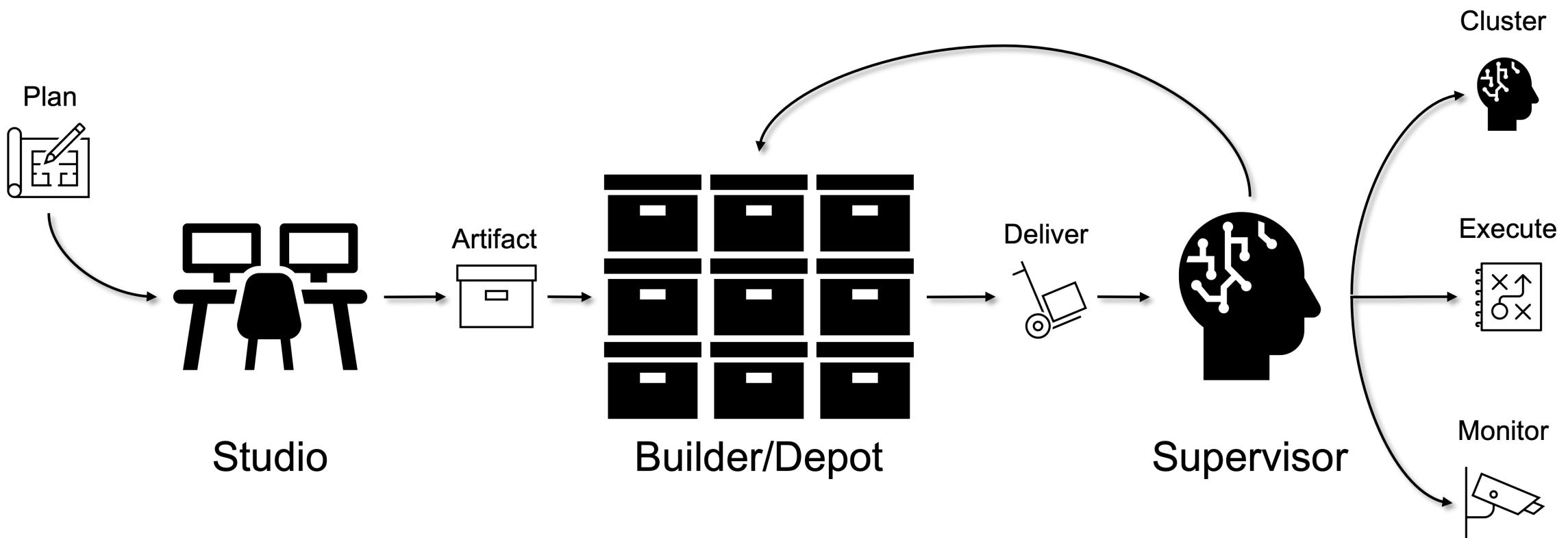




Components

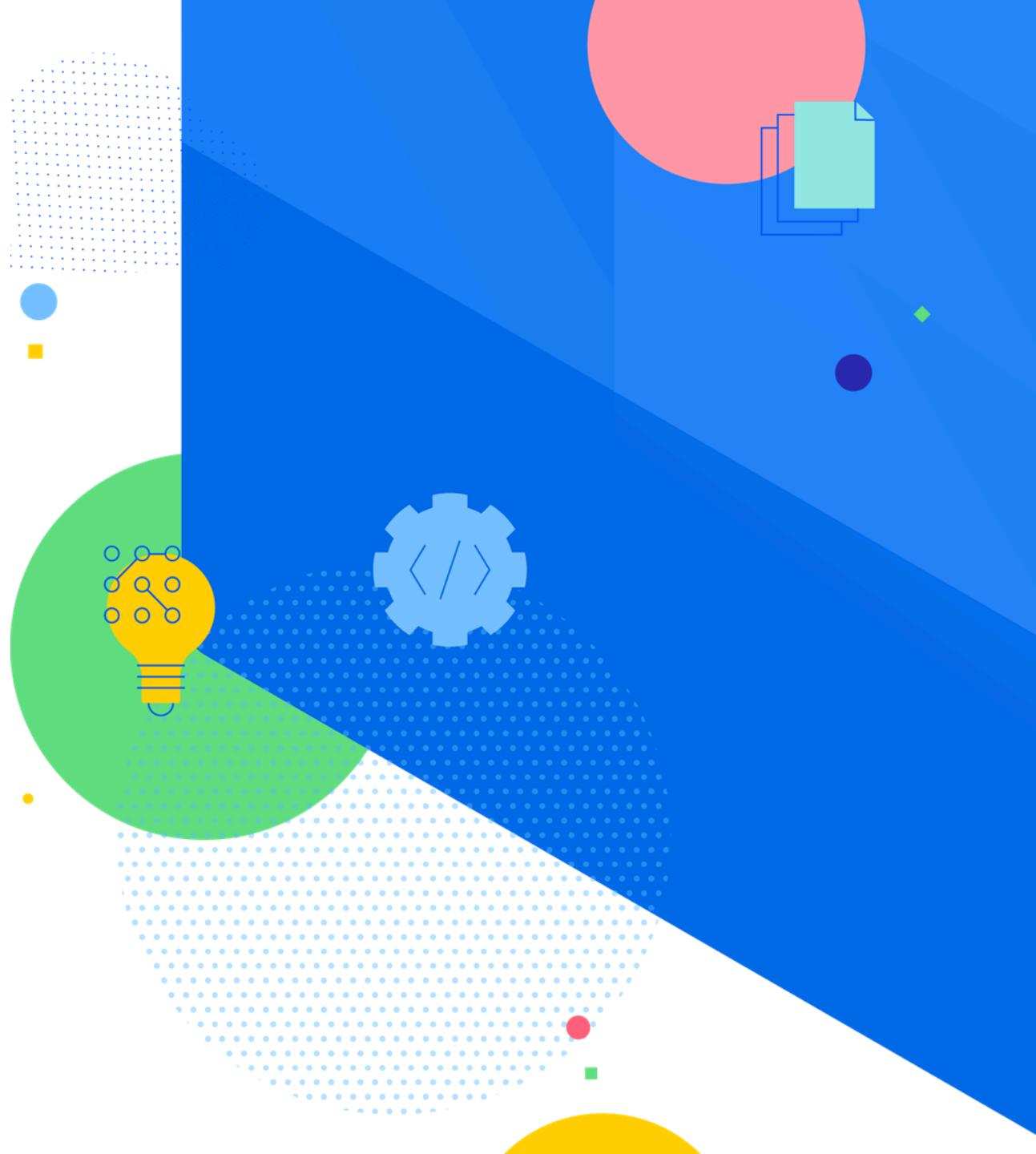
- Package Manager
- Packaging System
- Build System
- Deployment System
- Service Supervisor
- Service Clustering

Chef Habitat Anatomy



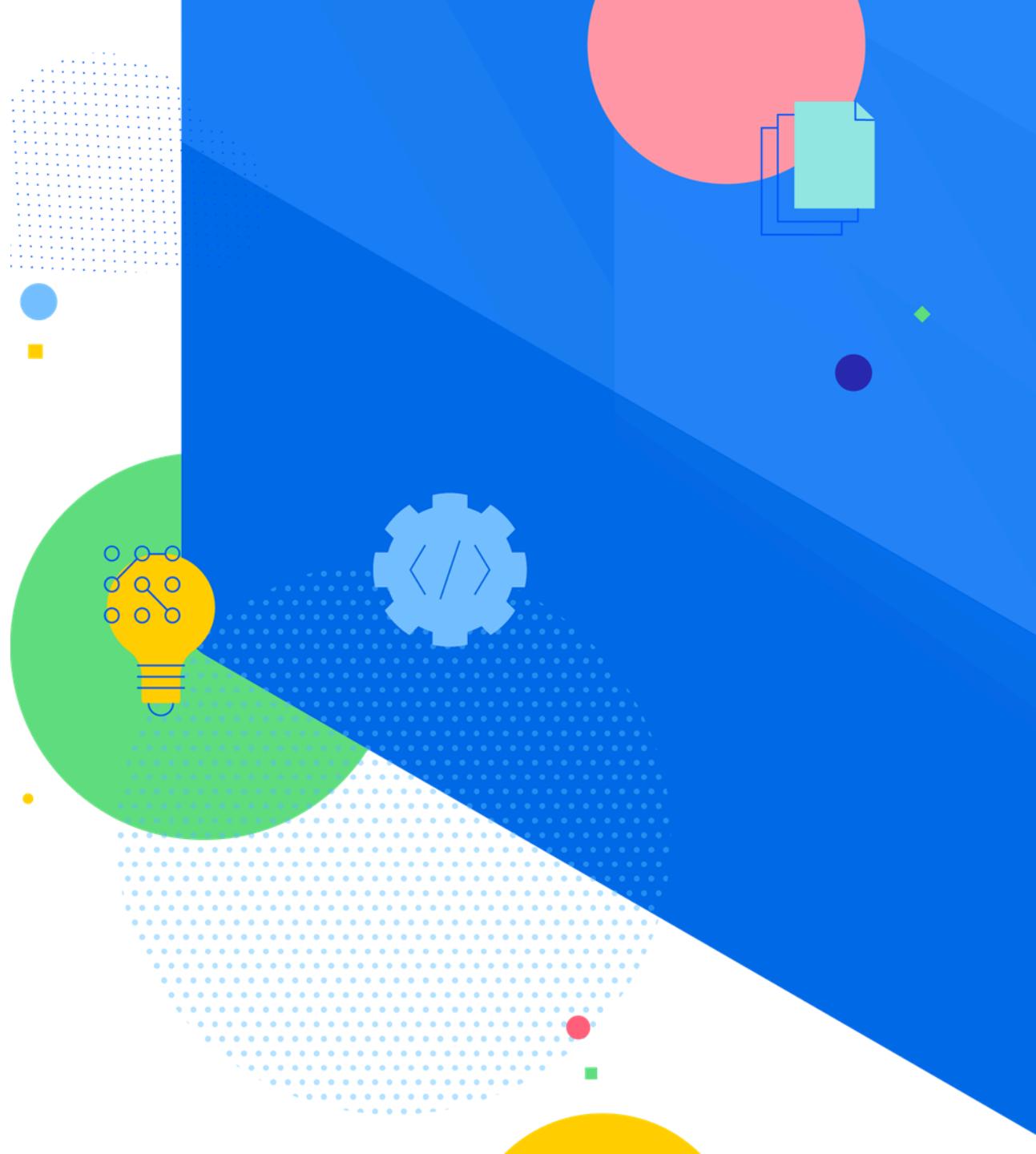
Package Manager

Habitat is a lightweight package manager, that uniquely allows multiple versions of a package to coexist on the same system.



Package System

Habitat Artifacts are immutable signed bundles that contain the build instructions, configuration instructions, and runtime settings.



Build System (Plan)

Plans instruct Chef Habitat on how to build, deploy, and manage your application.

Artifacts may also include application lifecycle hooks and service configuration files describing the running service's configuration and behavior.

Metadata

pkg_origin
pkg_name
pkg_version
pkg_license
pkg_maintainer
pkg_description

Dependences

pkg_deps
pkg_build_deps

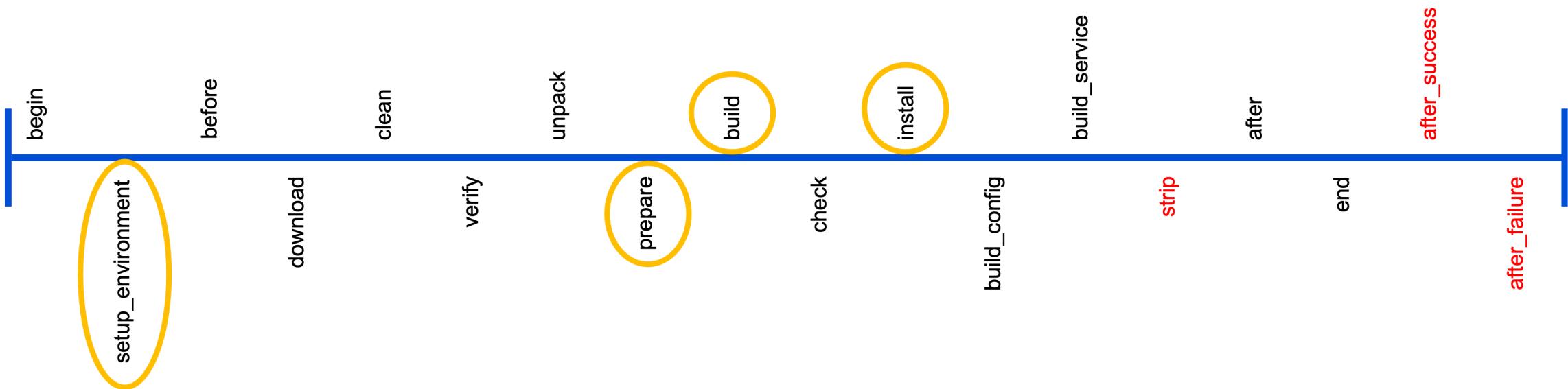
Package Paths

pkg_lib_dirs
pkg_include_dirs
pkg_bin_dirs

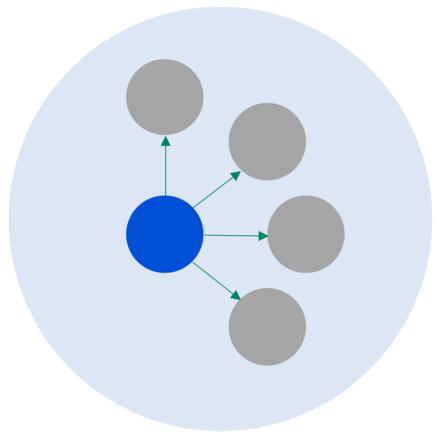
Remote Source

pkg_upstream_url
pkg_source
pkg_filename
pkg_dirname
pkg_shasum

Habitat Studio Build Pipeline

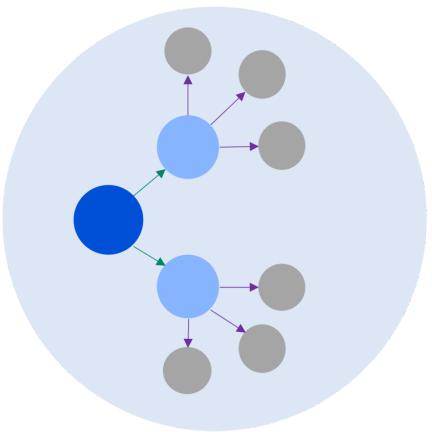


Deployment System



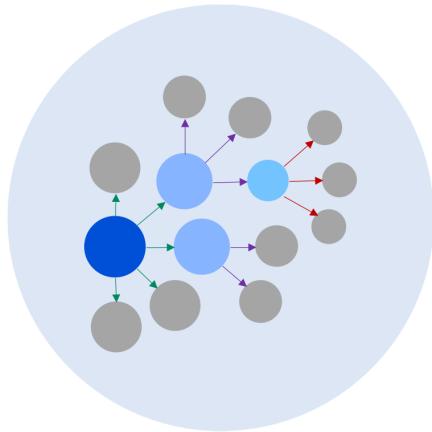
Centralized

Deployment decisions are controlled by a central “group”



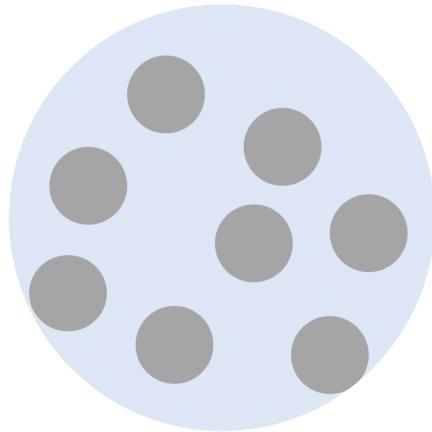
Decentralized

Deployment decisions are controlled by independent parties



Hybrid / Tiers

Some centralized and some decentralized deployment decision



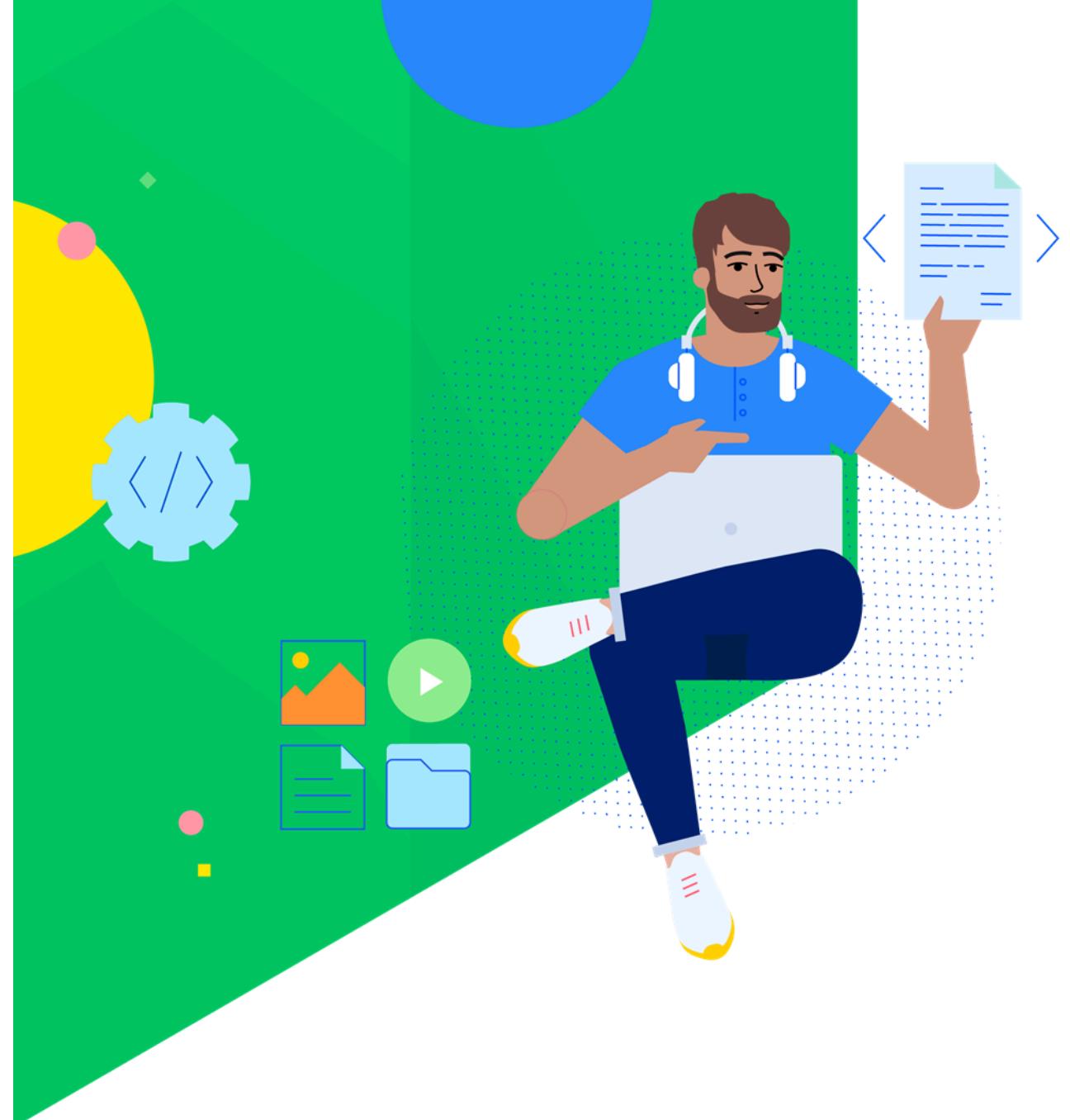
Custom

Customizing the delivery flow to meet unique requirements

Service Supervisor

The supervisor is a lightweight process manager.

- systemd
- upstart
- openrc
- sysvinit
- runit
- nssm
- srvstart





Mental Model: Ring

