One very common deployment case for Blueprints is to build a **Service Catalog that enables single-click deploys to a master server and multiple slave servers that are registered to the master**. This guide serves as a basic “Hello World” introduction to building the packages and Blueprint for this use case.

Definitions

Blueprints are collections of server configurations and packages arranged to support single-click deployments of an entire application suite or reference architecture. Blueprints align very closely to a typical Service Catalog offering.

Script and Software Packages are modular components used as the building blocks for Blueprints. These packages are collections of scripts and binaries grouped by a manifest file that defines how they are executed. A package manifest denotes a user-visible data collector and the execution environment for its included scripts.

The Packages

This use case requires at least two script packages – reference the two package files included for an example. In a real implementation there may also be one or more scripts that are executed on all servers regardless of role (for example to perform security hardening or a basic application install).

Install Master Node

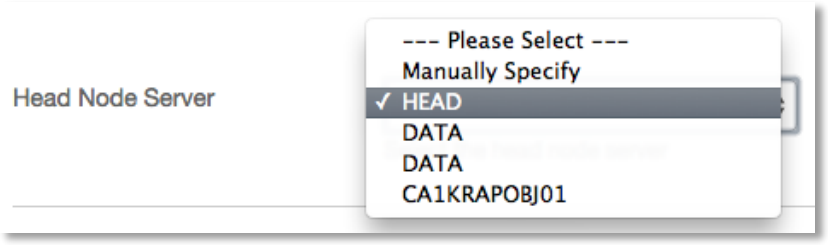
This package is typically used to bootstrap a master node that may have a distinct configuration from the other servers deployed in this grouping.

Install Master Node.zip

Install Slave Node

Install Slave Node.zip

This package is used to bootstrap any slave nodes – servers that are dependent on locating and communicating with the master server. In our basic example this package includes a parameter in the `package.manifest` XML file that generates a drop-down menu at deploy time to select the corresponding master node.



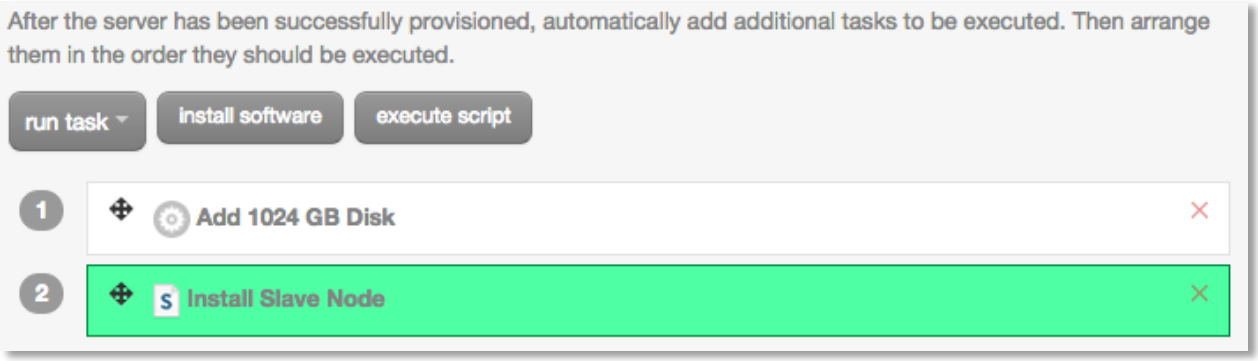
The Blueprint

This single Blueprint use case can be replicated by navigating to the Blueprint Designer and stepping through the four step wizard that defines the servers and packages to be included.

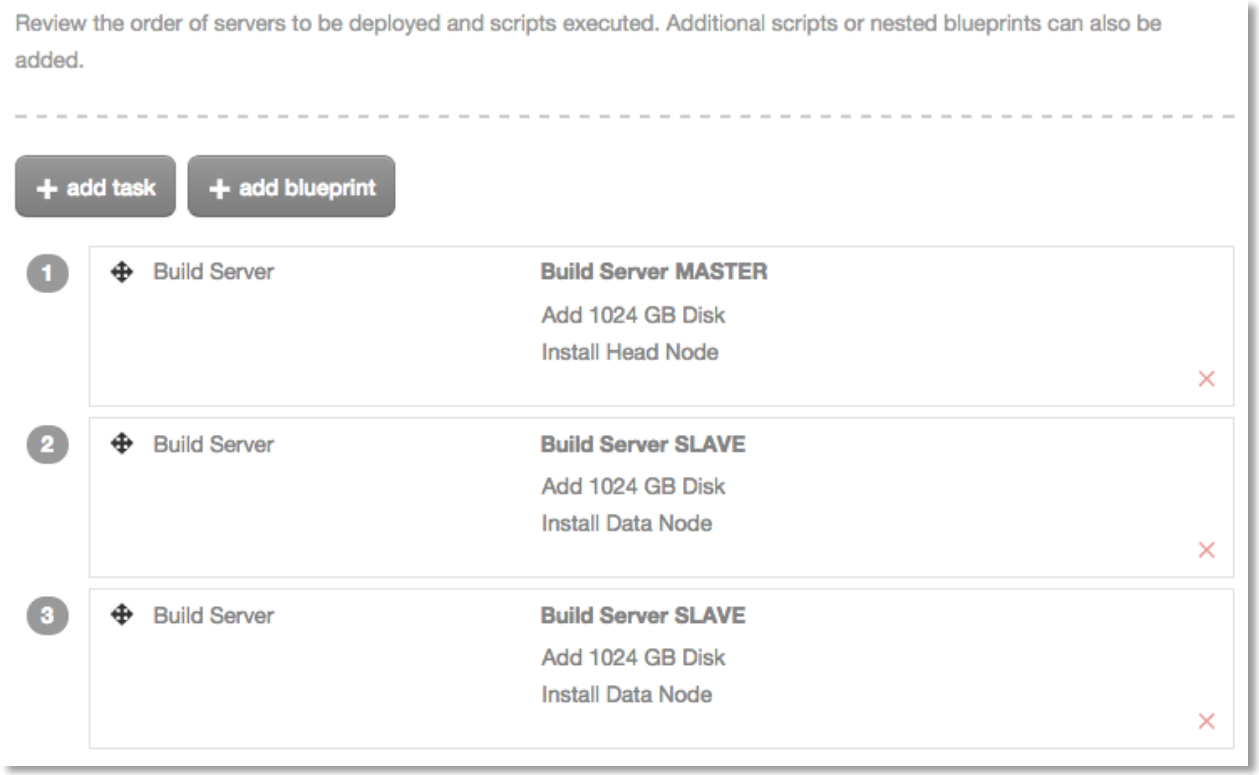
Below is a list of several servers aligning to our example – a master server and two slaves.

alias	cpu	memory	storage	server template	packages
...MASTER	2	4	1041 GB	CENTOS-6-64-TEMPLATE	2
...SLAVE	2	4	1041 GB	DEBIAN-6-64-TEMPLATE	2
...SLAVE	2	4	1041 GB	CENTOS-6-64-TEMPLATE	2

If we drill into one of the slave servers we see task (2) is to execute the package associated with the slave node.

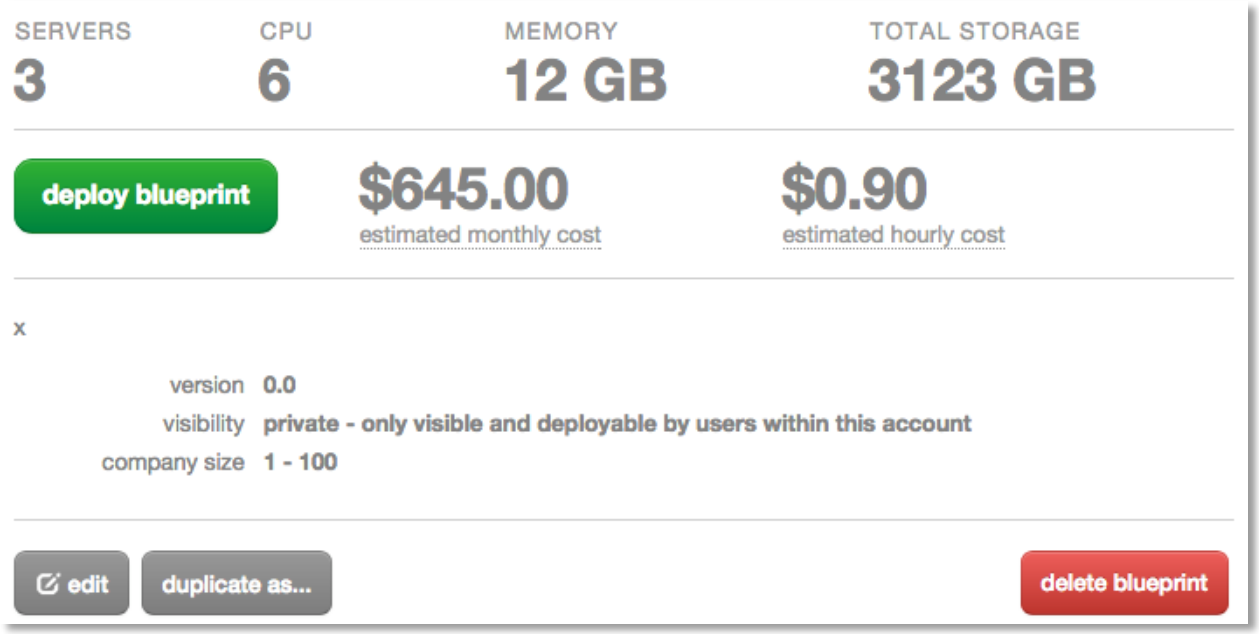


The final step in the wizard shows a global view of all tasks and enables ideal ordering so that dependencies like master servers are fulfilled before creating the dependent slaves.



Execution Experience

Blueprint deployment is available with a single button deploy from the service catalog as shown below.



The final step in the deployment wizard is to select the master server. This data collector will show all servers that currently exist as well as the servers which will be created as part of the Blueprint build. The IP address of the master server is passed along to the slaves.