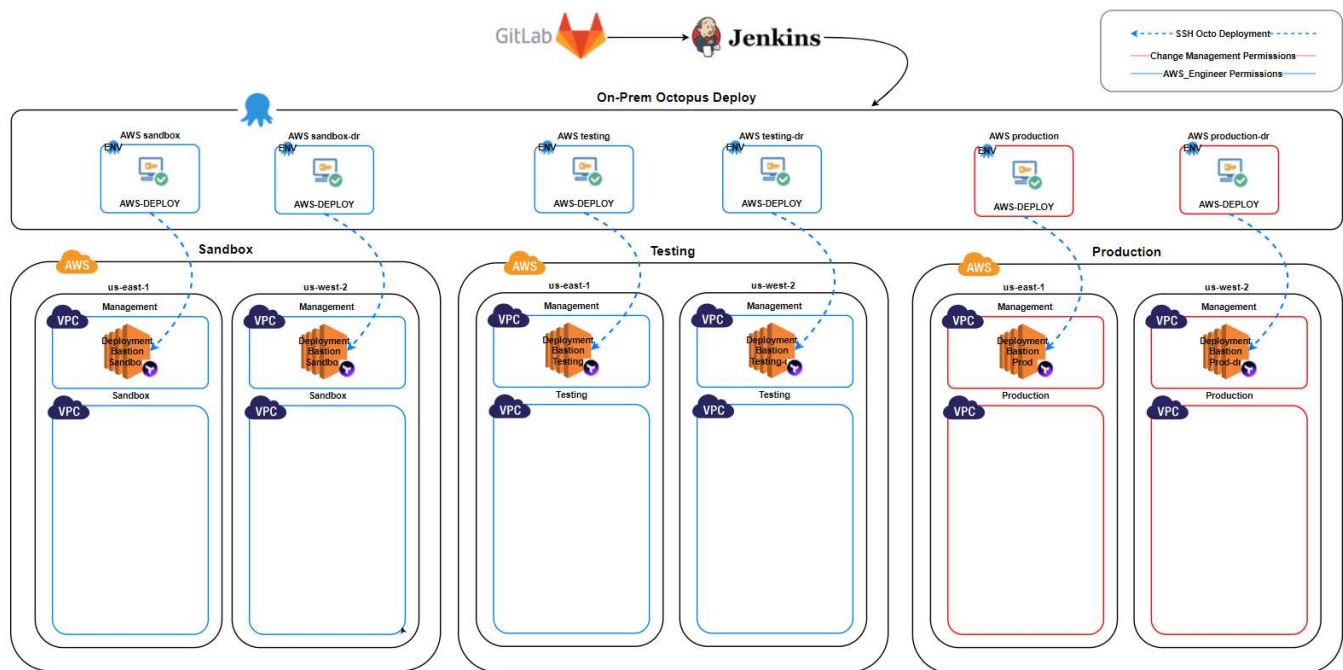


# Overview

Infrastructure deployment in to AWS is controlled by a combination of Octopus Deploy permissions and AWS IAM roles. Octopus Deploy uses teams and environments to control which users can deploy to the AWS Octopus Deploy environments. Each Octopus Deploy environment contains a deployment bastion that belongs to an AWS IAM role giving it access to deploy AWS resources to the corresponding AWS VPC. The following sections contain details about the Octopus Deploy side of this model.



## Environments

The following environments will contain an AWS deployment bastion that has permission to deploy infrastructure components into the corresponding AWS VPC(s). Permission to deploy to these environments will be controlled by the two Octopus Deploy teams listed below.

- AWS sandbox
- AWS testing
- AWS testing-dr
- AWS production
- AWS production-dr

# Teams

The following teams control which Octopus Deploy environment their members can deploy to, and consequently which AWS VPCs its members can deploy to.

- AWS Engineer
- Domain group: PROD\_Octopus\_Deploy\_AWSEngineer
- Deployer permissions to "AWS sandbox", "AWS sandbox-dr", "AWS testing", and "AWS testing-dr" Octopus environments
- Project Contributor and viewer permissions to "AWS Production" and "AWS production-dr" Octopus Environments
- Change Management
- Domain group: RLSE\_SoftwareDeployment\_Management
- Deployer permission to all AWS environments

## Deployment Lifecycles

- AWS Deployment
- AWS sandbox (automatic)
- AWS sandbox-dr (manual)
- AWS testing (manual)
- AWS testing-dr (manual)
- AWS production (manual)
- AWS production-dr (manual)

## Roles

- AWS-DEPLOY
- Used by AWS Engineering and Change Management to deploy cloud core and application related infrastructure

## Tentacles

The following tentacles are Linux SSH targets running in AWS with appropriate AWS IAM roles attached. The tentacles have terraform installed to deploy AWS resources.

- devops-production-deployment-bastion
- devops-production-dr-deployment-bastion
- devops-testing-deployment-bastion
- devops-testing-dr-deployment-bastion
- devops-sandbox-deployment-bastion


- devops-sandbox-dr-deployment-bastion

## AWS Project Requirements

The following are Octopus Deploy project configuration requirements for deploying through a deployment bastion

- "OctopusBypassDeploymentMutex" project variable must exist and be set to "true" for all AWS environments the project will deploy to

### Project Variables

	Name	Value
	OctopusBypassDeploymentMutex	True

This will allow multiple projects to deploy through one bastion at the same time. Without this variable multiple project deployments will queue. - Reference:

<https://octopus.com/docs/how-to/run-multiple-processes-on-a-tentacle-simultaneously>