

Creating Stacks and Managing Configuration with OpsWorks




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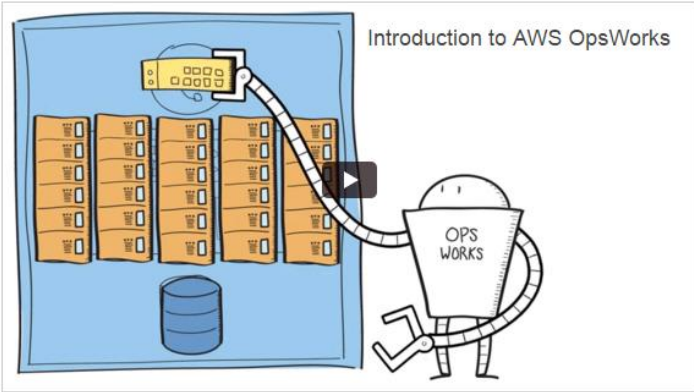
OpsWorks Key Concepts

 **AWS** ▾ **Services** ▾ **Edit** ▾

Select stack ▾

Welcome to AWS OpsWorks

AWS OpsWorks is a configuration management service that helps you build and operate highly dynamic applications and propagates changes instantly.



Introduction to AWS OpsWorks

Start fresh

Create an AWS OpsWorks stack to model your application components, deploy code, configure instances, automate tasks, and control the resources used by your application.

[Add your first stack](#)

Register existing instances

Use AWS OpsWorks with existing **Amazon EC2 instances**, as well as **on-premises servers**, for an easy way to install packages, run scripts, manage operating system users, and more.

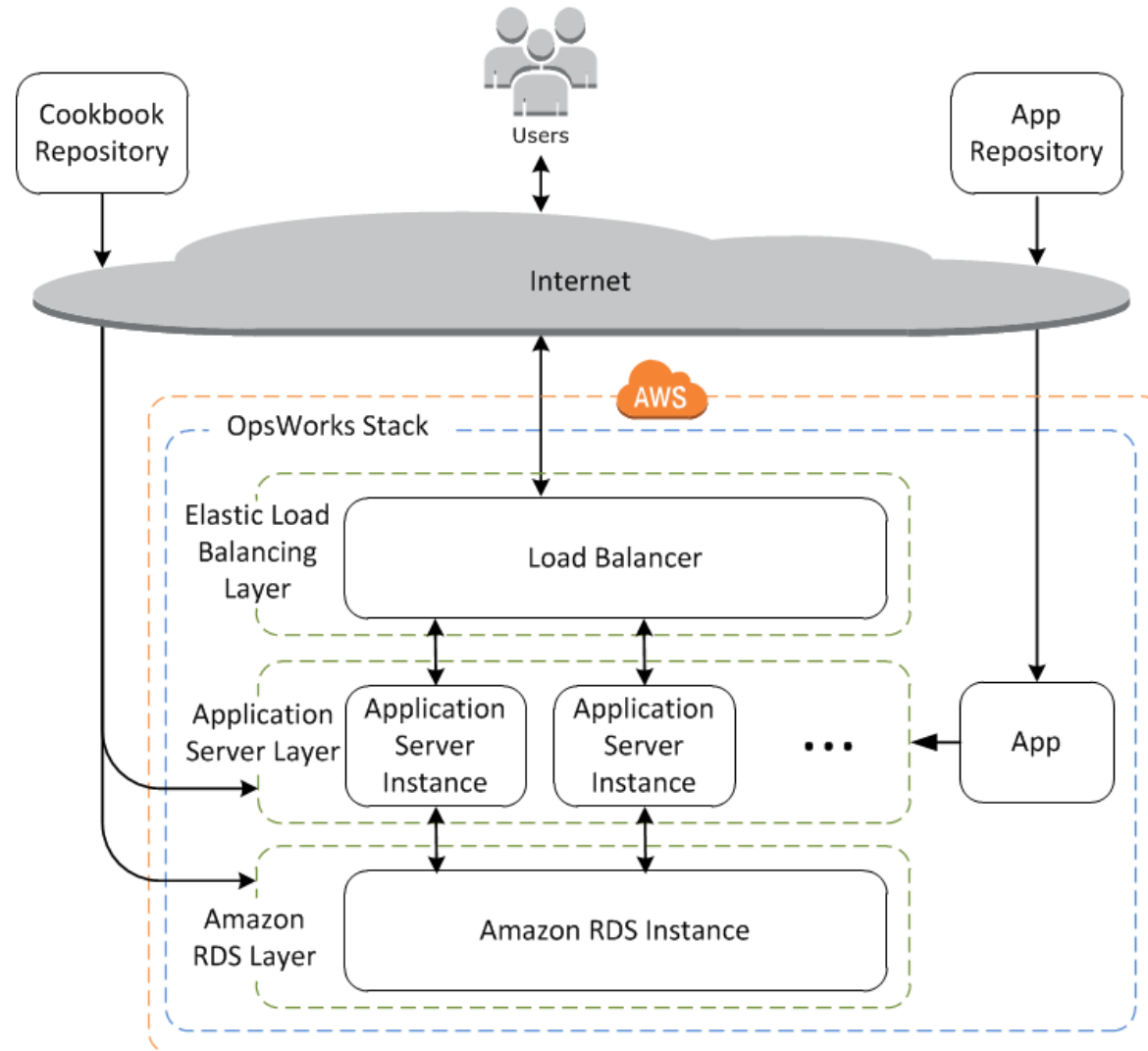
[Register instances](#)



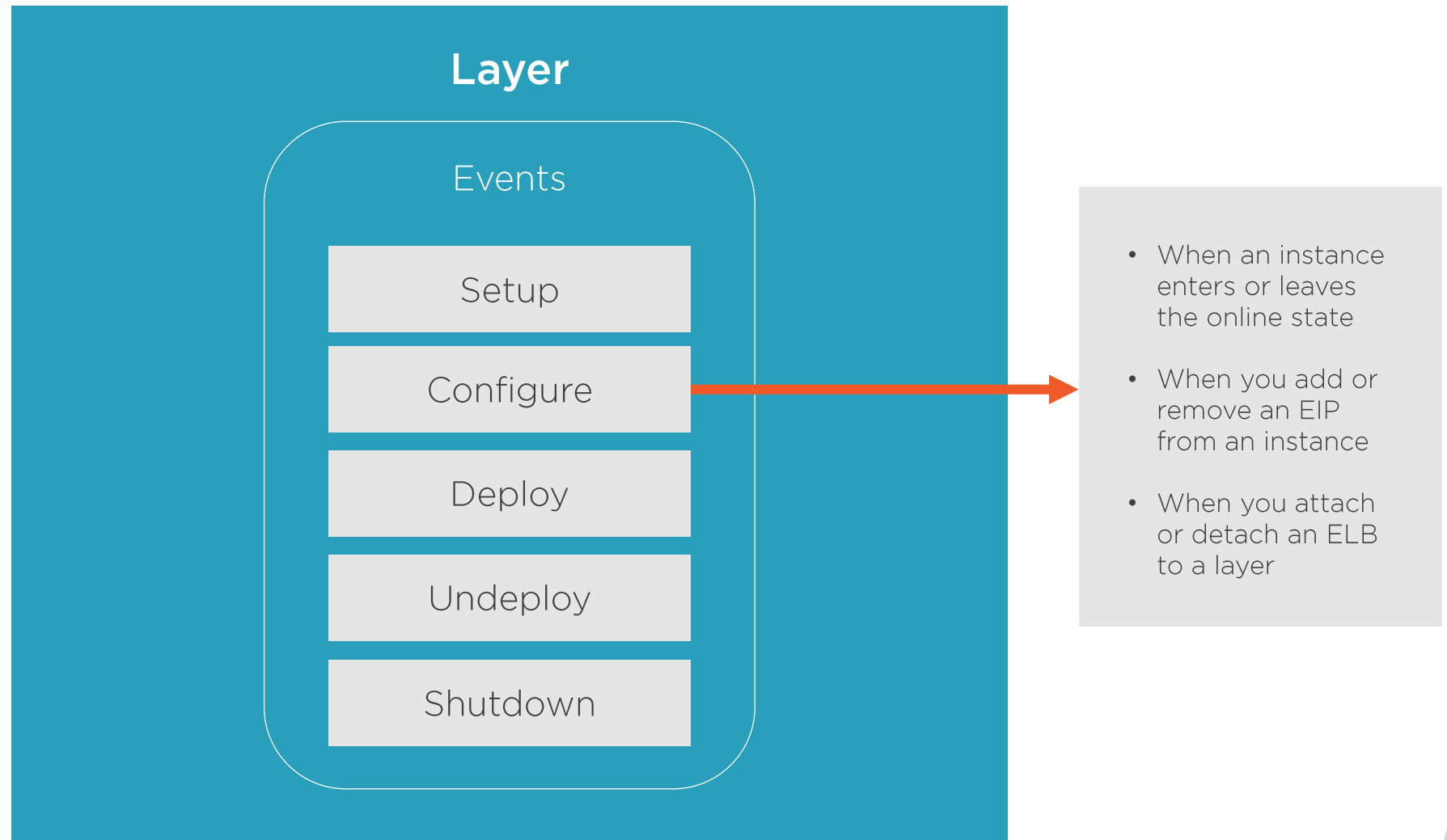
How is OpsWorks different
from CloudFormation or
Elastic Beanstalk?



OpsWorks Key Concepts




Understanding Lifecycle Events



Working with Cookbooks and Recipes

Add stack

Which type of stack do you want to create?

**Sam**
Explore AWS OpsWorks
Node.js

Chef version

☒ 11.10
☐ 11.4 DEPRECATED

Use custom Chef cookbooks ☒ Yes

Repository type

Repository URL


Repository SSH key

Branch/Revision

Manage Berkshelf ☒ Yes

Berkshelf version

Stack color

**Chef 11 stack**
Use built-in cookbooks for applications
and deployments



Working with Cookbooks and Recipes

```
source "https://supermarket.chef.io"

cookbook 'apt'
cookbook 'bluepill', '>= 2.3.1'
cookbook 'ark', git: 'git://github.com/opscode-cookbooks/ark.git'
cookbook 'build-essential', '>= 1.4.2', git: 'git://github.com/opscode-cookbooks/build-essential.git', tag: 'v1.4.2'
```



Replacing Failed Instances with Auto Healing

Layer **WebServer**

General Settings Recipes Network EBS Volumes Security

Settings

Name	<input type="text" value="WebServer"/>
Short name	<input type="text" value="webserver"/>
Instance shutdown timeout	<input type="text" value="120"/>
Auto healing enabled	Yes <input checked="" type="checkbox"/>
Custom JSON	<div><input type="text" value="Optional"/></div> <p>Enter custom JSON that is passed to your Chef recipes for all instances in this layer. You can use this to override and customize built-in recipes or pass variables to your own recipes. Learn more.</p>

[Cancel](#) [Save](#)



Auto Healing an Instance Store-backed Instance

1. Stops the Amazon EC2 instance, and verifies that it has shut down
2. Deletes the data on the root volume
3. Creates a new Amazon EC2 instance with the same host name, configuration, and layer membership
4. Reattaches any Amazon EBS volumes, including volumes that were attached after the old instance was originally started
5. Assigns a new public and private IP Address
6. If the old instance was associated with an Elastic IP address, associates the new instance with the same IP address



Auto Healing an EBS-backed instance

1. Stops the Amazon EC2 instance, and verifies that it has stopped
2. Starts the EC2 instance



Replacing Failed Instances with Auto Healing

Used when communication is lost with the instance

Stop instances with AWS OpsWorks console, CLI, or API

Use EBS volumes to store persistent data

The same OS is always used for an auto healed instance



Summary



OpsWorks Key Concepts

Understanding OpsWorks Lifecycle Events

Working with Cookbooks and Recipes

Replacing Failed Instances with Auto Healing

