



Elastic Beanstalk



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▶ Introduction to Elastic Beanstalk

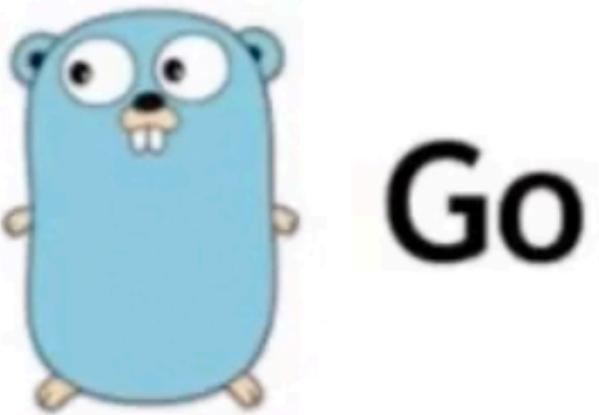
What is Elastic Beanstalk ?



- AWS Elastic Beanstalk is an easy-to-use service for **deploying and scaling web applications and services**.
- It is a kind of orchestration service offered by Amazon Web Services used to set up your application architecture.

Introduction to Elastic Beanstalk

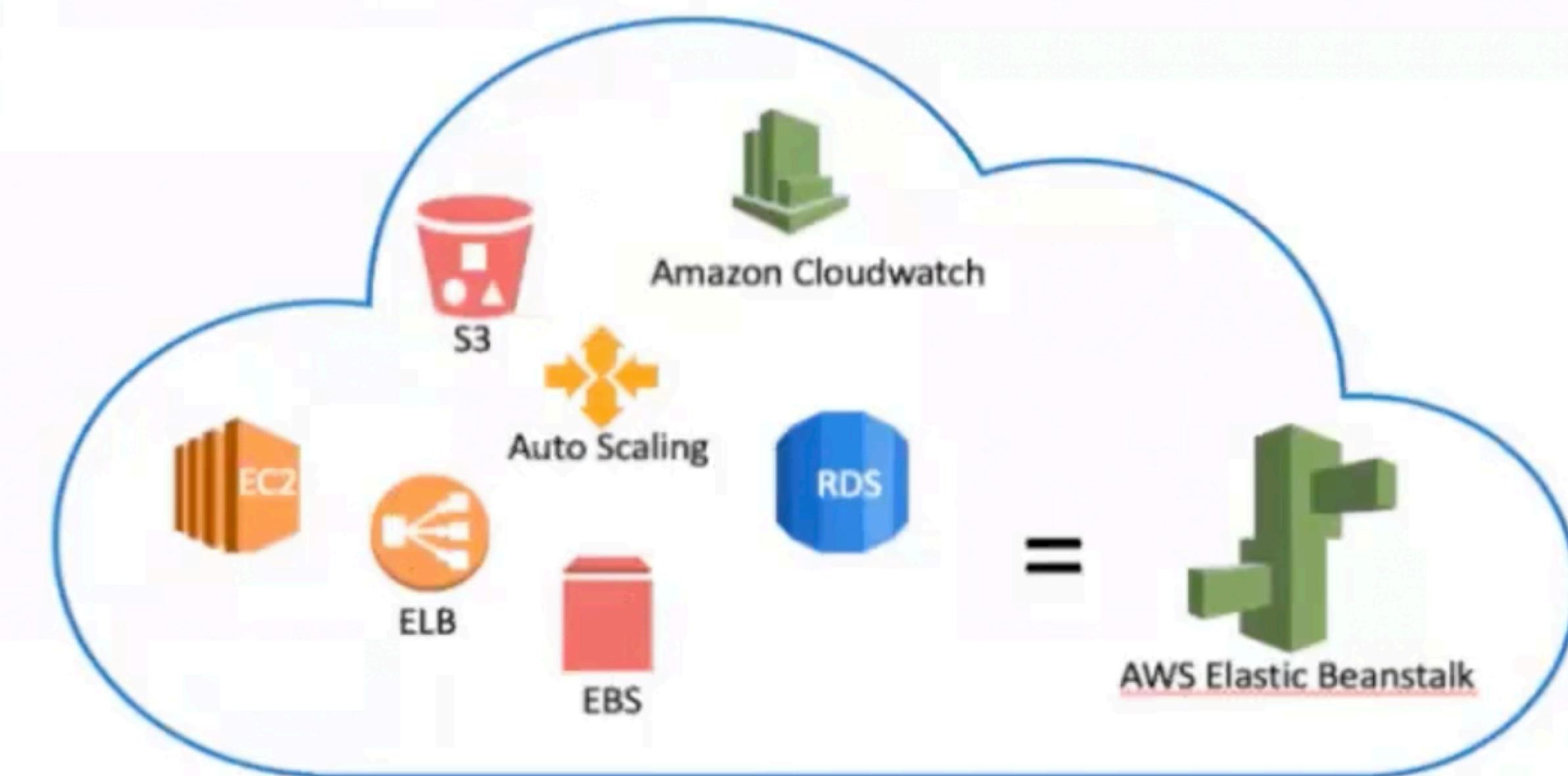
What is Elastic Beanstalk ?



- Elastic Beanstalk supports applications developed in Go, Java, .NET, Node.js, PHP, Python, and Ruby, etc. When you deploy your application, Elastic Beanstalk builds the selected supported platform version and provisions one or more AWS resources, such as Amazon EC2 instances, to run your application.

Introduction to Elastic Beanstalk

Why AWS Elastic Beanstalk?



- AWS Elastic Beanstalk automates the details of capacity provisioning, load balancing, auto scaling, and application deployment, creating an environment that runs a version of your application. You can simply upload your deployable code and AWS Elastic Beanstalk does the rest.

Introduction to Elastic Beanstalk

Why AWS Elastic Beanstalk?



Monitoring



Health Check

- Elastic Beanstalk automates management tasks—such as
 - Monitoring,
 - Application version deployment,
 - A basic health check—and facilitates log file access.
- By using Elastic Beanstalk, developers can focus on developing their application and are freed from deployment-oriented tasks, such as provisioning servers, setting up load balancing, or managing scaling.



Basic Concepts of Elastic Beanstalk

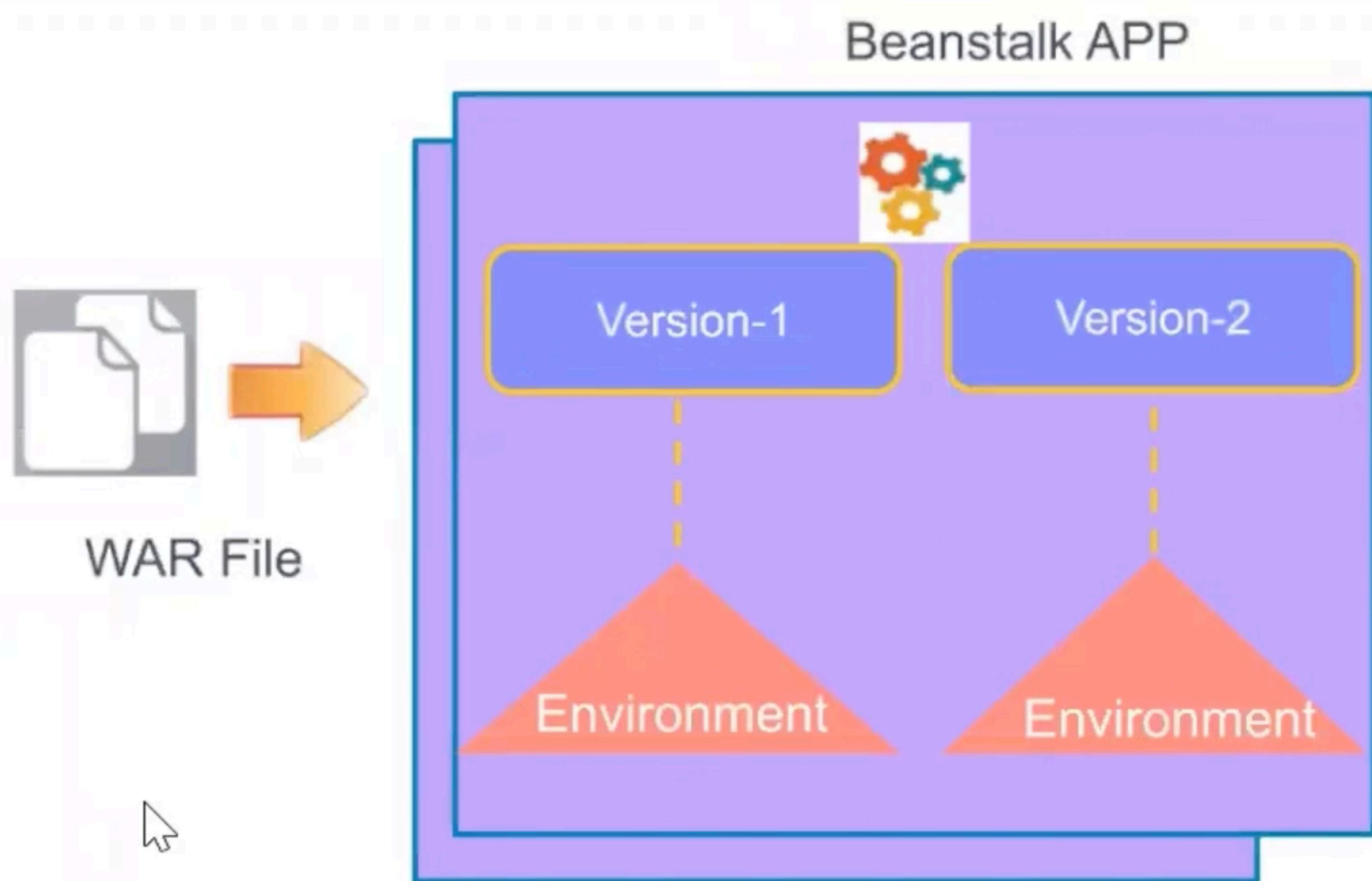


Application

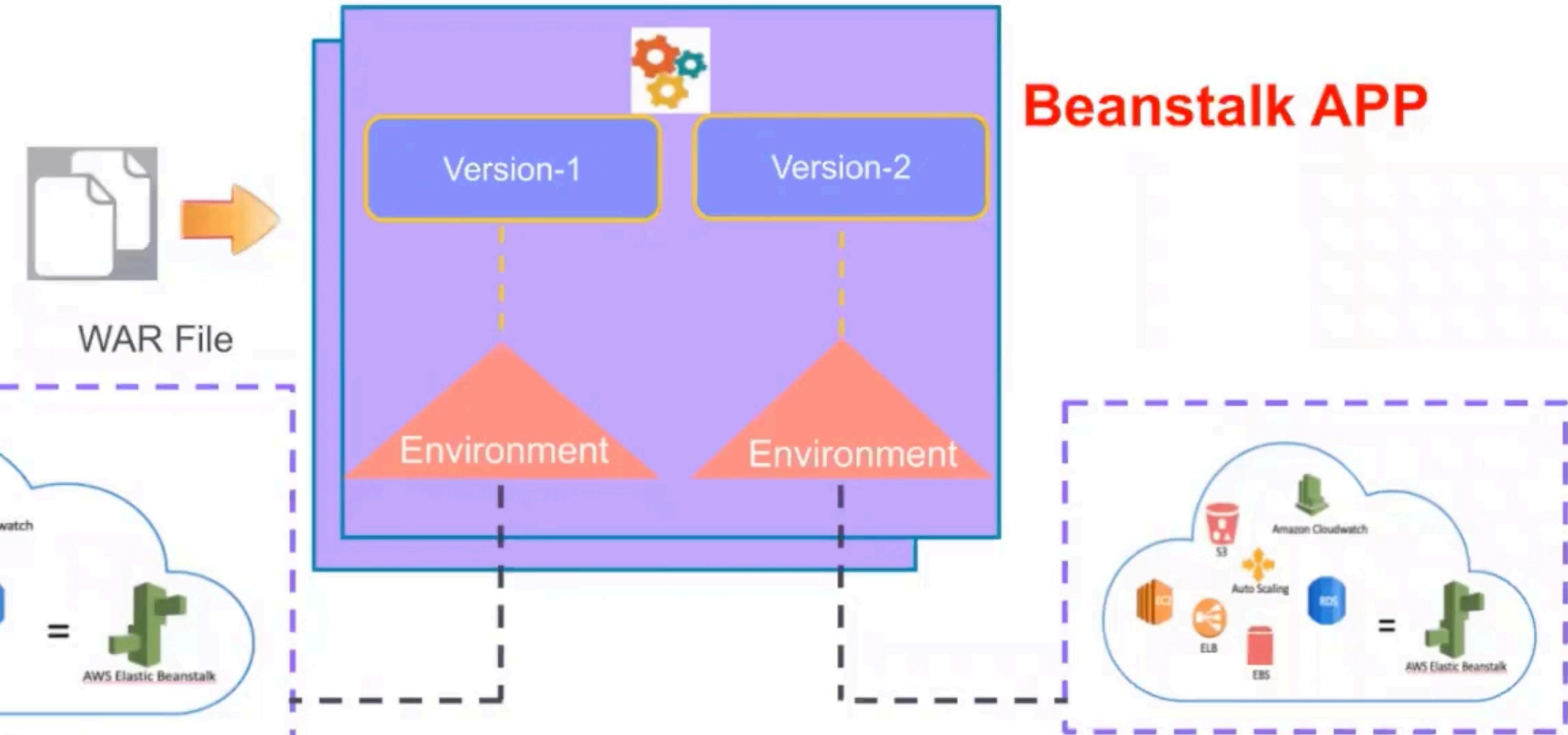
- An Elastic Beanstalk **application is a logical collection** of Elastic Beanstalk components, including **environments, versions, and environment configurations**. In Elastic Beanstalk an application is conceptually similar to a folder.

Application version

- An application version points to an Amazon Simple Storage Service (Amazon S3) object that contains the **deployable code, such as a Java WAR file**. An application version is part of an application. Applications can have many versions and each application version is unique.



Basic Concepts of Elastic Beanstalk

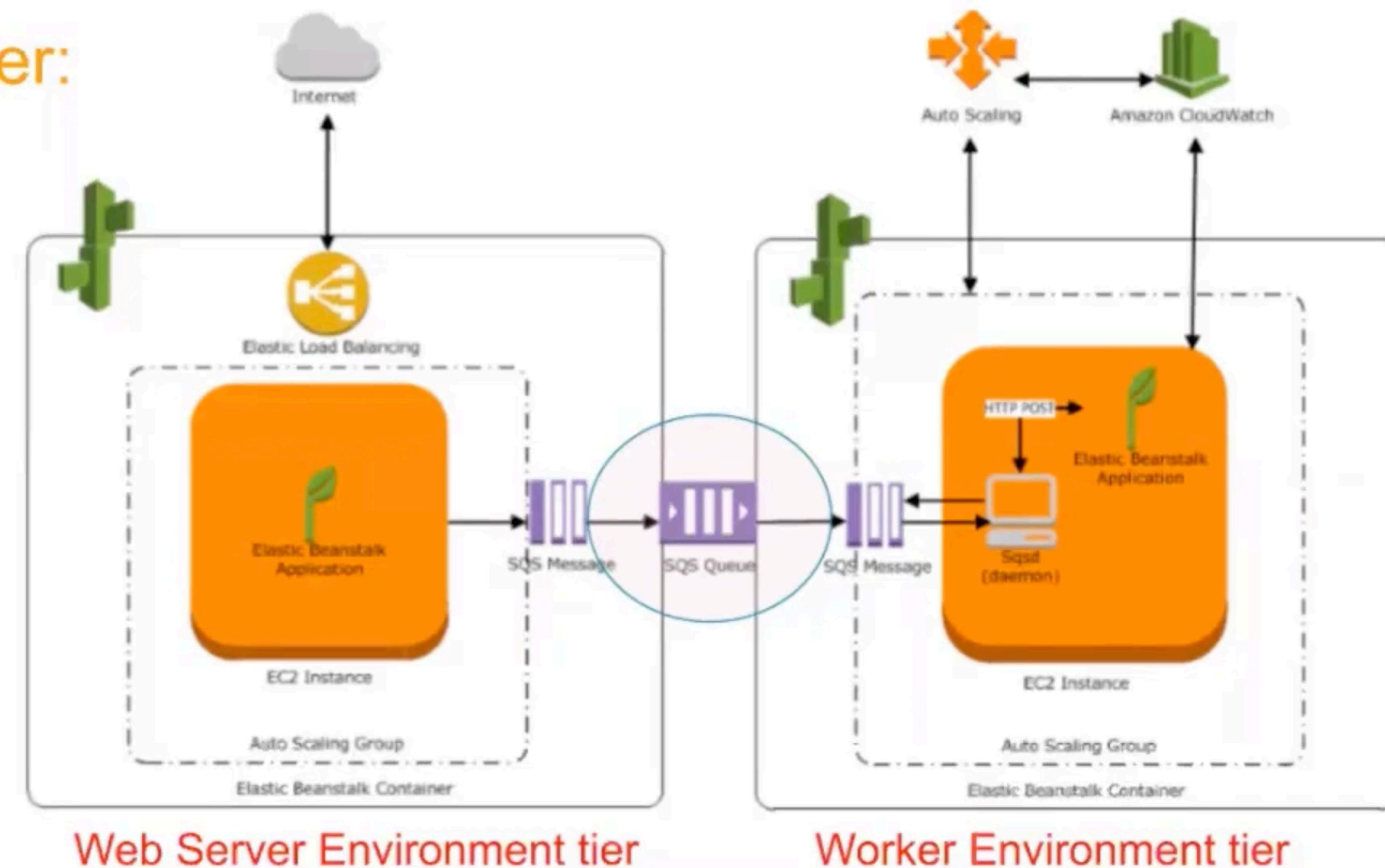


Environment

- An environment is **a collection of AWS resources** running an application version. Each environment runs only one application version at a time.

Basic Concepts of Elastic Beanstalk

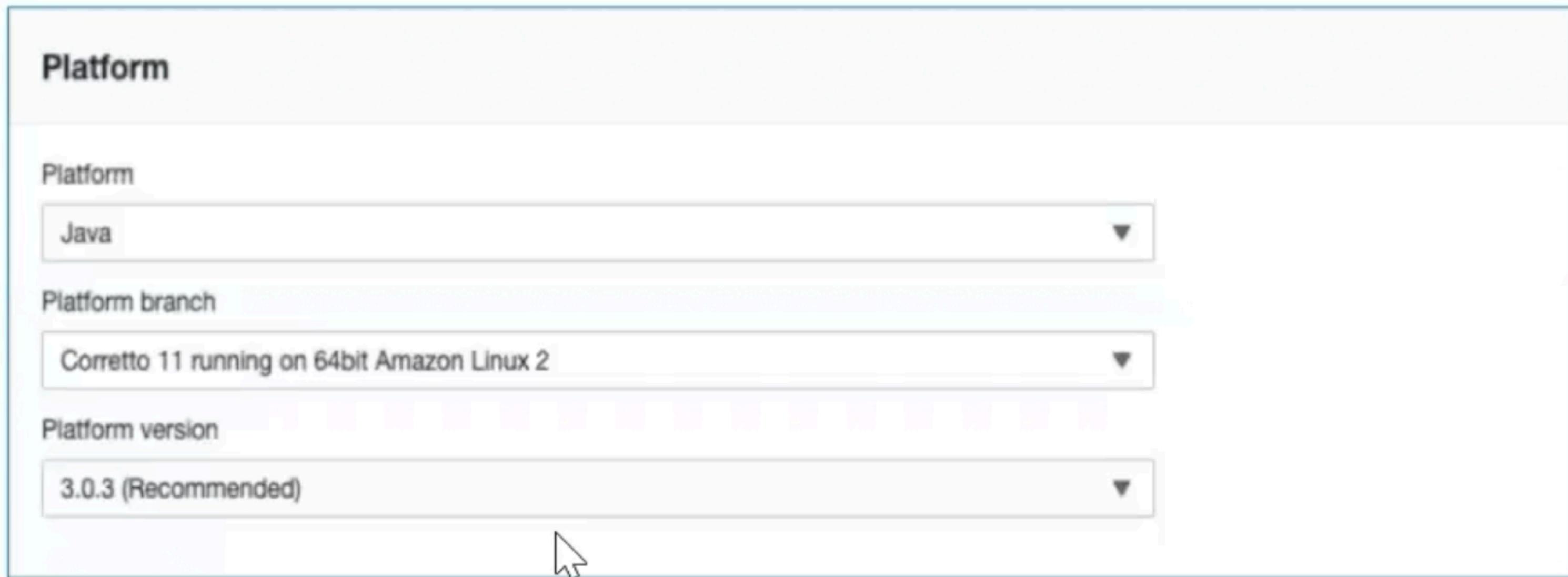
Environment Tier:



- The environment tier designates the type of application that the environment runs, and determines what resources Elastic Beanstalk provisions to support it. An application that **serves HTTP requests** runs in a **Web Server Environment tier**. An environment that pulls tasks from an **Amazon Simple Queue Service (Amazon SQS)** queue runs in a **Worker Environment tier**

Basic Concepts of Elastic Beanstalk

Platform:



Supported platform versions

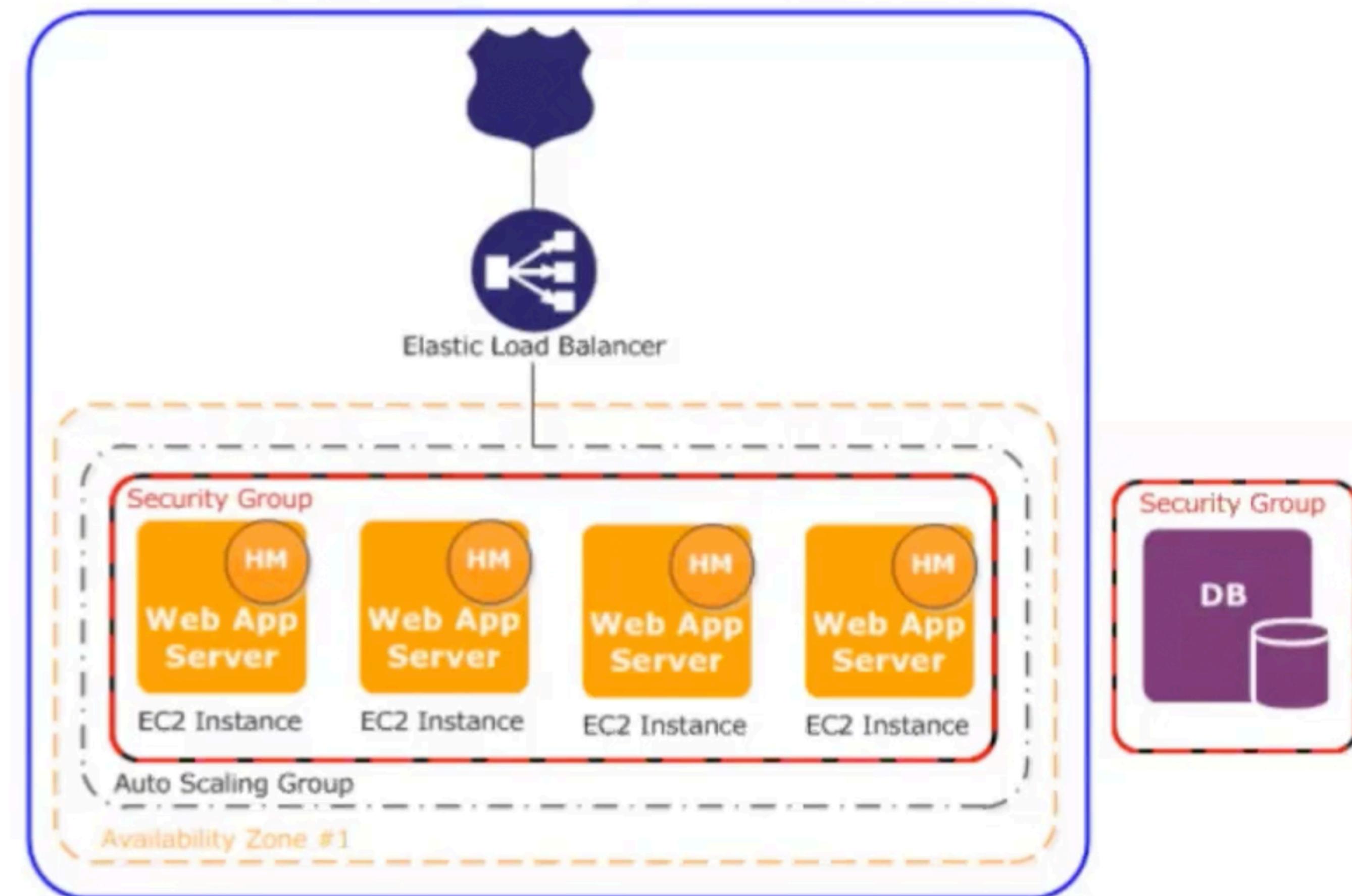
- Docker
- Multicontainer Docker
- Preconfigured Docker
- Go
- Java SE
- Tomcat
- .NET Core on Linux
- .NET on Windows Server
- Node.js
- PHP
- Python
- Ruby

- A platform is a **combination of an operating system, programming language runtime, web server, application server, and Elastic Beanstalk components**. You design and target your web application to a platform. Elastic Beanstalk provides a variety of platforms on which you can build your applications.

Basic Concepts of Elastic Beanstalk

Environment Tier:

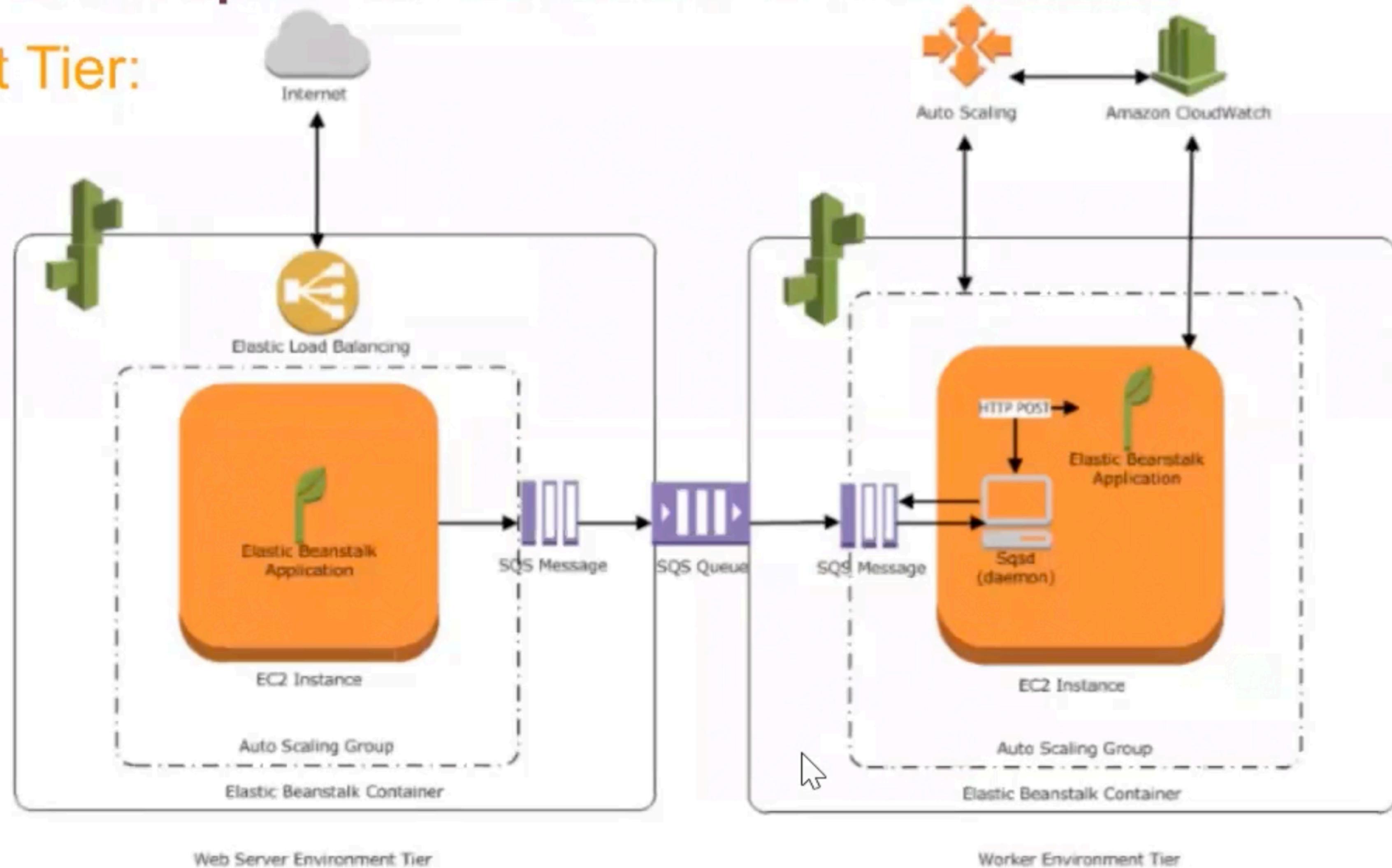
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Web Server Environment tier

Basic Concepts of Elastic Beanstalk

Environment Tier:



Worker Environment tier