

Vidyavardhini's College of Engineering and Technology

Department of Artificial Intelligence & Data Science

Experiment No. 3

Aim: To study and Implement Platform as a Service using AWS Elastic Beanstalk/ Microsoft Azure App Service

Objective: Understand the concept of PaaS and implement using Own Cloud which gives universal access to files through a web interface.

Theory:

- PaaS is a platform for programming developers and brings benefits SaaS is used for but from the software development point.
- It is the computer platform that provides the facility to use web applications quickly. With ease, without buying & maintaining web-development, PaaS has a similarity with that SaaS except that SaaS delivers software over the web.
- In contrast, PaaS provides a platform for the creating of software delivered over the web.
- PaaS has a feature of a point-and-click tool that allows non-programmers to develop web applications.
- App-Engine of Google & Force.com, Windows Azure, AppFog, Openshift, and VMware Cloud Foundry are PaaS examples. □ <u>Advantages of PaaS</u>:
- Scalability: of users ranges from hundreds to thousands.
- Prebuilt Business Plan: PaaS vendors provide pre-defined business functionality for users to directly start the project.
- Low Cost: Development via PaaS requires a computer & a good internet connection and less investment in hardware & software.
- Instant Community: PaaS providers facilitates user providing online communities where a developer can get new ideas & share their experience & advice. □ Simple & easy to use
- Disadvantages of PaaS are as follows:
- Vendor Migration: Migration from one PaaS vendors' application to another PaaS vendor will create some problem.
- Data-Privacy: The privacy of data can get hamper if it is not held within the company's boundary or organization.
- Mix-up Complexity: Some of the applications developed may be local while others are from the cloud, which may increase the complexity.

Steps:

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Step1: Login to AWS console and go to Elastic Beanstalk

Step 2: Click on Create Application

Step 3: Write Application information: Name, Tag, Platform etc.

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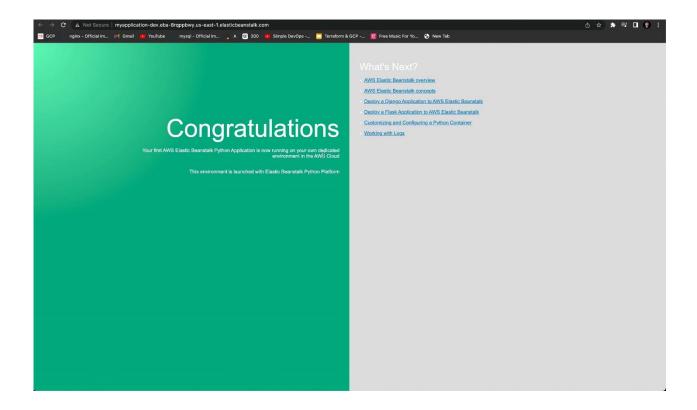
This will take a few minutes.

Step 5: Click on Environments -> Check the health of Environment wait till it becomes 'OK

Step 6: Click the URL

To Delete the application and Environment (Select it and in Action -Delete/Terminate : give conformation

Output/Observation:



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Conclusion:

AWS Elastic Beanstalk provides a simplified PaaS experience, making it easier to install and manage applications in the cloud. Developers can concentrate on code instead of managing infrastructure since it automates processes like scaling, load balancing, and provisioning. Multiple languages and platforms are supported by Elastic Beanstalk, which makes it adaptable to a wide range of applications. It's a useful tool for cloud application deployment and scaling because of its simplicity and adaptability.

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