



## D-BLOG in AWS

<b>K.Shrinithi</b>	Computer science and department, Sri Shakthi Institute of Engineering and Technology.
<b>C.Prasanth</b>	Computer science and department, Sri Shakthi Institute of Engineering and Technology.
<b>A.Nuzhath Atheba</b>	Computer science and department, Sri Shakthi Institute of Engineering and Technology.
<b>Mrs.N.Nalini Nagulan</b>	Computer science and department, Sri Shakthi Institute of Engineering and Technology.

**ABSTRACT**

The project "D-Blog in AWS" is focused on deploying blog application in amazon web services (AWS). This will enhance our department students to write and manage their own blogs. In this project, Word Press is deployed and hosted using amazon cloud services. Word Press is an open-source blogging tool and content management system (CMS) based on PHP and MySQL. Blog in AWS will solve the issue of high traffic in traditional environment. It also reduces the overall cost when compared to traditional infrastructure.

**KEYWORDS :** AWS EC2 (Elastic Compute Cloud) servers - Virtual Servers on Cloud, AWS RDS (Relational Database Service) - Virtual Database Servers in Cloud, PHP, MySQL, word press, AWS Elastic Beanstalk - Platform as a Service

**INTRODUCTION**

A blog is basically a web log that a blogger makes use for chronological listing of blog posts. A blog has the most recent content shown first followed by the previously updated content.

Amazon Web Services (AWS) is a group of web services (also known as cloud services), provided by Amazon. They provide IT infrastructure like CPU and storage as a service instead of commodity. Thus unlike traditional IT infrastructure, there is no need for upfront hardware procurement based on projected usage. Instead, hundreds of servers can be spun up within a few minutes as and when traffic peaks. This saves costs and lets companies focus on their core business instead of worrying about procuring hardware resources.

Currently Amazon Web Services is one of the largest providers of cloud services and provides a highly reliable, scalable, low-cost infrastructure platform in the cloud that powers hundreds of thousands of businesses in 190 countries around the world. Below are the key advantages of AWS.

A website in return can be anything. Anything on the internet presented in HTML/CSS or Java/JavaScript/Python/Php, etc. comprises of a website. A website may be complimented with a blog, but the home page would be more for browsing other pages and not just posts.

**HARDWARE AND SOFTWARE SPECIFICATIONS****Hardware Requirements**

AWS EC2 (Elastic Compute Cloud) servers - Virtual Servers on Cloud  
AWS RDS (Relational Database Service) - Virtual Database Servers in Cloud

**Software Requirements**

PHP  
MySQL  
WordPress  
AWS Elastic Beanstalk - Platform as a Service

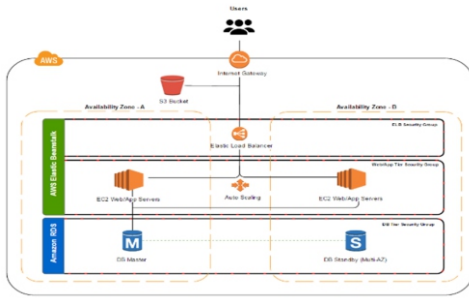
**PROPOSED SYSTEM**

The following are the benefits of deploying WordPress in cloud.

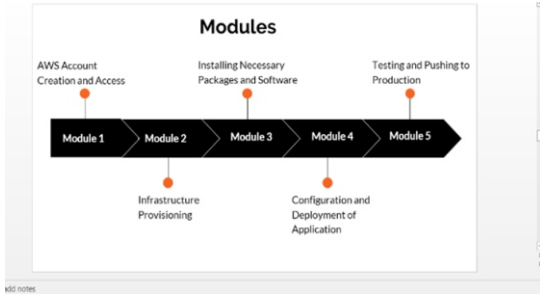
**Advantages:**

- **Low initial investment** – An application server can cost up to tens of thousands of dollars. The initial setup costs of cloud computing are much lower, and in many cases, the provisioning cost is zero.
- **Speed** – An on-premise solution can require days to launch and update. Cloud solutions can start in a matter of seconds, completely on demand.
- **Scalability** – Traditional servers usually have a capacity plateau. First, you are overcapacity, then ideal capacity, then under capacity, as your business grows. With cloud-based solutions, you can scale up or down as your business grows or your budget tightens.
- **Burstability** – Burst ability is when you need that extra capacity for a short period. The cloud offers this feature, while a dedicated server cannot.
- **No single point of failure** – Cloud datacenters have built in redundancies and backup. If one component fails, other parts, sometimes up to an entire redundant datacenter, take over in milliseconds.
- **Energy Efficient and good for the environment** – Cloud data centers are designed with efficiency in mind, and many get rated by the government and not-for-profit agencies for their green technology. Some even buy carbon offsets for a carbon-neutral business model.
- **Available anywhere, anytime, by anyone** – The cloud is not tied down to a single location. A cloud-based solution is a great fit for small offices spread throughout. If your business needs to collaborate on a project, cloud-based solutions can benefit you immensely.
- **Increased storage capacity** – The cloud offers nearly unlimited storage capacity, and at much lower costs than buying physical hard drives.

**ARCHITECTURE**



**MODULES**



**To start the project**

**Create an AWS account**

- >Go to AWS website [aws.amazon.com](http://aws.amazon.com) & login with your respective credentials
- >If you are an existing user then just sign in.
- >Enter the card details for payment of Rs.2 which will be credited you back after the activation.
- >Account will be created.
- >Go to AWS website [aws.amazon.com](http://aws.amazon.com) & login with your respective credentials
- >If you are an existing user then just sign in.
- >Enter the card details for payment of Rs.2 which will be credited you back after the activation.

**Account will be created.**

- >After the corresponding details are filled
- >It will take 24hrs or 48hrs for the activation
- >Later on a call will be received from the AWS customer care for the activation
- >After activation for a confirmation, Launch an instance.

**RELATIONAL DATABASE SERVICE (RDS)**

- >The basic building block of Amazon **RDS** is the Data Base (DB) instance.
- >A DB instance can contain multiple user-created databases, and you can access it by using the same tools and applications that you use with a stand-alone database instance.
- >It is a managed service from AWS which takes care of the entire overhead of the underlying servers such as OS, Software Patching, Replication, Automated Data backups etc.

**To Configure the Infrastructure - ELASTIC BEANSTALK**

- >There is a service called as “AWS Elastic Beanstalk” which is a managed service by AWS which helps in quickly deploying and managing applications in the AWS without worrying about the infrastructure that runs those applications.
- >AWS Elastic Beanstalk reduces management complexity without restricting choice or control.
- > It also takes care of most deployment tasks, such as changing the size of your fleet of Amazon EC2 instances or monitoring your application, directly from the Elastic Beanstalk web interface
- >From AWS console, choose Elastic Beanstalk from the list of AWS services
- >For **Platform**, choose **PHP**. For **App code**, choose **Upload your code**.
- >Choose **Upload** and navigate to the ZIP file you created for your

- WordPress files. Choose **Upload** to select your application code.
- >Choose **Configure more options**. For **Configuration presets**, select **Custom configuration**.
- >Choose **Change platform configuration** and select **64bit Amazon Linux 2016.09 v2.3.1 running PHP 5.6** from the drop down menu and then choose **Save**.
- INSTALL WORDPRESS**
- >Review all options and once you are satisfied with those options choose **Create app**.
- >Open the Elastic Beanstalk Console
- >Navigate to the management page for your environment.
- >Perform a standard installation
- >The wp-config.php file (wordpress configuration file) is already present in the source code & configure to read the database connection information from the environment, so you shouldn't be prompted to configure the connection.

**CONCLUSION**

Thus deploying the blogging platform in AWS will not only reduce the overhead of maintaining the traditional infrastructure but will result in cost savings

**REFERENCES:**

- [1] Aiello, M. A., and Leuzzi, F. (2010), "Waste Tyre rubberized concrete: Properties at fresh and hardened state." *Journal of Waste Management*, ELSEVIER, 30, 1696-1704.
- [2] Batayneh, M. K., Marie, I., and Asi, I. (2008), "Promoting the use of crumb rubber concrete in developing countries." *Journal of Waste Management*, ELSEVIER, 28, 2171-2176.
- [3] Egyptian Code Committee 203, (2003), "Experimental guide for testing of concrete materials." Part 3 of the Egyptian code of practice for the design and construction of reinforced concrete structures.
- [4] Eldin, N. N., and Senouci, A. B. (1993), "Rubber-Tyre particles as concrete aggregate." *Journal of Material in Civil Engineering*, ASCE, 5(4), 478-496.