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Hosting a Static Website on AWS

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Abstract: It's almost impossible to overstate the importance of website ownership to businesses, large and small alike. The Internet gives even the smallest of startup companies a chance to connect with millions of potential customers. A well-designed small business website is your best chance of making a lasting impression on your target audience. Nowadays mostly everyone probably knows the importance of having their business on the internet. AWS itself provides a free tier type of access for one year for new users to try different services. They provide almost all types of infrastructure services required for internet-connected audience and businesses. The simplest form of website architecture is the static website, where users are served static content. Some examples include brand microsites, marketing websites, and intranet information pages. Static websites are straightforward, but they can still have demanding requirements in terms of scalability, availability, and service-level guarantees. For example, a marketing site for a consumer brand may need to be prepared for an unpredictable onslaught of visitors when a new product is launched. This paper cover comprehensive architectural guidance for developing, deploying, and managing static websites on Amazon Web Services (AWS) while keeping operational simplicity and business requirements in mind. We also recommend an approach that provides 1) insignificant cost of operation, 2) little or no management required, and 3) a highly scalable, resilient, and reliable website. This paper first reviews how static websites are hosted in traditional hosting environments. Then, we explore a simpler and more cost-efficient approach using Amazon Simple Storage Service (Amazon S3). Finally, we show you how you can enhance the AWS architecture by encrypting data in transit and to layer on functionality and improve quality of service by using Amazon CloudFront

Keywords: CDN, AWS, Amazon S3, CloudFront, Amazon Route 53, Instance

I. INTRODUCTION

A static website delivers content in the same format in which it is stored. No server-side code execution is required. For example, if a static website consists of HTML documents displaying images, it delivers the HTML and images as-is to the browser, without altering the contents of the files. Static websites can be delivered to web browsers on desktops, tablets, or mobile devices. They usually consist of a mix of HTML documents, images, videos, CSS style sheets, and JavaScript files. Static doesn't have to mean boring—static sites can provide client-side interactivity as well. Using HTML5 and client-side JavaScript technologies such as jQuery, AngularJS, React, and Backbone, you can deliver rich user experiences that are engaging and interactive. Some examples of static sites include:

1) Marketing websites
2) Product landing pages
3) Microsites that display the same content to all users
4) Team homepages
5) A website that lists available assets (e.g., image files, video files, and press releases) allows the user to download the files as-is
6) Proofs-of-concept used in the early stages of web development to test user experience flows and gather feedback

Static websites load quickly since content is delivered as-is and can be cached by a content delivery network (CDN). The web server doesn't need to perform any application logic or database queries. They're also relatively inexpensive to develop and host. However, maintaining large static websites can be cumbersome without the aid of automated tools, and static websites can't deliver personalized information.

II. PROPOSED SYSTEM

A web hosting service is a type of Internet hosting service that allows individuals and organizations to make their website accessible via the World Wide Web. Web hosts are companies that provide space on a server owned or leased for use by clients, as well as providing Internet connectivity, typically in a data center. Web hosts can also provide data center space and connectivity to the Internet for other servers located in their data center, called colocation. Far more static website can not be accesed by people unless given permissions to do so, Static website needed to allow public access than only will be seen publically so the technology is secured .

III. SCOPE OF THE WORK

A website matters more than anything, when it comes to reaching out to customers online. A website is the representation of the business online. These days, every business realizes the need for having a website and are putting in efforts to design and develop the best site for taking their products or services online. This is where we can see a great deal of scope for web development and design. With the tremendous progress in the launch of websites, people who can create exemplary designs and platforms for their online presence is what businesses are searching for. Web developers and designers are bringing in all the best of their technical expertise and skills to develop and unique design websites that are capable of pulling the crowd. Most web developers and designers are familiar with the latest tools, techniques, technologies, and frameworks that will help them get beautiful sites up in a short span of time. The development time of websites has come down with the agile technologies that make development easier. Here, we will cover the scope and future of web development.

IV. APPLICATIONS

A. Online Presence

Domain name will provide an online identity to your business. People will search using your brand name on search engines like Google, Bing, Facebook, Linkedin, Twitter and Pinterest. Your brand name should be a reflection of your values, goals, mission, products and services and the overall industry domain your brand delivers solutions for. Your branding and online presence takes a hit if your domain name is not search engine optimized.

B. User Engagement

The right domain name increases customer engagement, daily traffic and helps acquire more customers. Let's say, you own a website that reviews hosting platforms, the domain name "hosting.review" will help you attract more visitors who are interested in finding out reviews by real hosting experts. Google and Bing will also start showing your results in better ways than in the past if your pages are search engine and content optimised for your target audience.
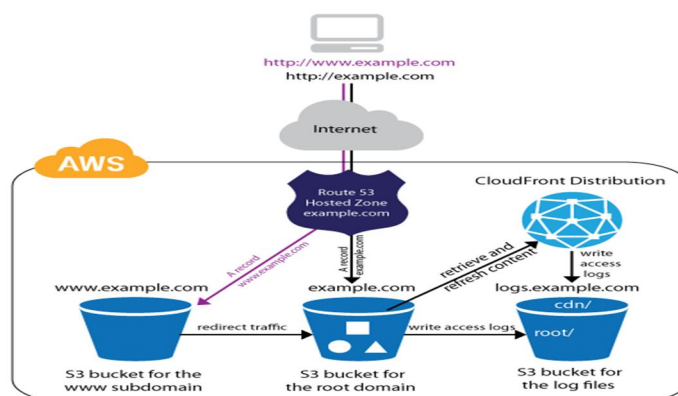
C. Professional Email Addresses

Professional email addresses help you close the deal faster as compared to public email addresses. Having a professional email address for yourself as well as your employees helps build a better relationship with your customers and organizational partners. The message around your branding gets more visibility.Customers are more likely to work with companies that have a professional email address of your are in the service and solutions industry.

V. ADVANTAGES

Static Websites are beneficial in many ways, and the below are few of them,
1) One of the biggest advantages of using static websites and not the dynamic websites is that the static websites require less or no maintenance at all, as the contents once placed are not required to be changed for a certain period of time.
2) Faster web page loading speed, as the fixed items in the website, doesn't have to contact the backend systems every time the page loads.
3) Accommodates to any kind of user traffic, may it be lesser user flow or the higher user flow into the website.
4) Coding knowledge required for building a static website is nil or very less.

VI. BLOCK DIAGRAM

VII. RESULT

Web hosting is a term accustomed to everyone who knows the technical side of the internet or maybe knowing deeper if he/she has ever developed or managed a website before. Do you why does one needs a web hosting service? The service of web hosting is nothing but just allowing firms and companies to introduce their website to the public through the internet. A web host provider of a web hosting company serves the businesses with the appropriate services and updated technologies that they would require to involve for better access of the website online. The web hosting company gather the requirements from the client and allocate the needed space in the server

VIII. CONCLUSION

This whitepaper began with a look at traditional (non-AWS) architectures for static websites. We then showed you an AWS Cloud-native architecture based on Amazon S3, Amazon CloudFront, and Amazon Route 53.

The AWS architecture is highly available and scalable, secure, and provides for a responsive user experience at very low cost. By enabling and analyzing the available logs, you can you understand your visitors and how well the website is performing. Fewer moving parts means less maintenance is required. In addition, the architecture costs only a few dollars a month to run

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