Cloud Computing, it's Security & Services

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Abstract:

Cloud Computing is the result of evolution and adoption of existing technologies and paradigms. The goal of cloud computing is to allow users to take benefit from all of these technologies, without the need for deep knowledge about or expertise with each one of them. The cloud aims to cut costs, and help the users focus on their core business instead of being impeded by IT obstacles.

Cloud computing has several distinct characteristics that distinguish it from a traditionally hosted computing environment:

• Users often have on-demand access to scalable information technology capabilities and services that are provided through Internet-based technologies.

• These resources run on an external or third party service provider's system instead of on locally hosted servers unlike traditional systems directly under the user's personal or institutional control; cloud computing services are fully managed by the provider.

• Typically, many unaffiliated and unconnected users share the service provider or vendor's infrastructure.

• Using cloud services reduces the need to carry data on removable media because of network access anywhere, anytime.

I. Introduction:

When you store your photos online instead of on your home computer, or use webmail or a social networking site, you are using a "cloud computing" service. If you are an organization, and you want to use, for example, an online invoicing

service instead of updating the in-house one you have been using for many years, that online invoicing service is a "cloud computing" service.

Cloud computing is so named because the information being accessed is found in the "clouds", and does not require a user to be in a specific place to gain access to it. Companies may find that cloud computing allows them to reduce the cost of information management, since they are not required to own their own servers and can use capacity leased from third parties. Additionally, the cloud-like structure allows companies to upgrade software more quickly.

Examples of cloud services include online file storage, social networking sites, webmail, and online business applications. The cloud computing model allows access to information and computer resources from anywhere that a network connection is available. Cloud computing provides a shared pool of resources, including data storage space, networks, computer processing power, and specialized corporate and user applications.

Cloud computing offers benefits for organizations and individuals. There are also privacy and security concerns. If you are considering a cloud service, you should think about how your personal information, and that of your customers, can best be protected. Carefully review the terms of service or contracts, and challenge the provider to meet your needs.

II. Cloud Computing Security:

Our mobile, social, and collaborative lifestyles have transformed the way we use technology at home, at work, and everywhere in between. We want – and need – to secure our devices, personal information, and business data; to keep our families safe online, and our employees productive; to take advantage of all that new technologies can offer us while minimizing the risk.

Figure showing Security benefits of cloud computing.

The **Cloud Computing Security will do following**:

- Smart protection that's layered, intelligent, and works in real time
- Simple to manage protection that's purpose-built, easy to deploy, and light on system resources

- Security that fits a dynamic environment, adapting to new technologies and anticipating new threat trends

III. Cloud Computing Services:

In marketing, cloud computing is mostly used to sell hosted services in the sense of Application Service Provisioning that run client server software on a remote location. Such services are given popular acronyms like 'SaaS' (Software as a Service), 'PaaS' (Platform as a Service). End users access cloud-based applications through a web browser or a light-weight desktop or mobile app while the business software and user's data are stored on servers at a remote location

SaaS:

SaaS is a software delivery method that provides access to software and its functions remotely as a Web-based service. Software as a Service allows organizations to access business functionality at a cost typically Also, because the software is hosted remotely, users don't need to invest in additional hardware. Software as a Service removes the need for organizations to handle the installation, set-up and often daily upkeep and maintenance. Software as a Service may also be referred to as simply hosted applications.
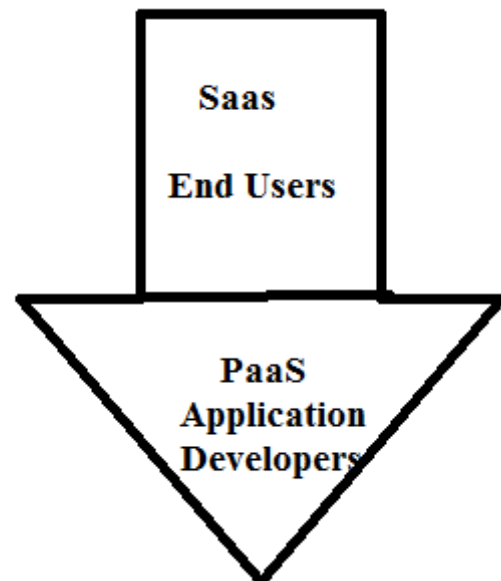

Figure showing SaaS and PaaS

PaaS:

"Cloud computing" has dramatically changed how business applications are built and run. Delivering a new application is now as fast as opening your internet browser. Platform as a service-- or PaaS-- is a proven model for running applications without the hassle of maintaining the hardware and software infrastructure at your company. Enterprises of all sizes have adopted PaaS solutions like Salesforce.com for the simplicity, scalability and reliability. PaaS applications that always have the latest features without constant upgrade pain.

The Platform brings the same trust and speed at the core of all our products to building and deploying apps in the cloud, faster than any on-premise application platform.

V CONCLUSION

The popularity of the cloud computing can be attributed to its use in marketing to sell hosted services in the sense of application service provisioning that run client server software on a remote location.

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