Web OS & WebTop Cloud Computing on Web Based Applications

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Abstract

WebOS (Web predicated operating system) is an incipient form of Operating Systems. You can utilize your desktop as a virtual desktop on the web, accessible via a browser, with multiple integrated built-in applications that sanction the utilizer to facilely manage and organize her data from any location. Desktop on web can be designated as WEBtop. An incipient form of computing kenned as cloud computing can avail us to design web predicated operating systems for future. This paper commences with a exordium of WebOS and its benefits. The Web OS transcends rudimental desktop functionality. It withal includes many of a traditional OS's capabilities, including a file system, file management, and productivity and communications applications. In the case with Web-predicated applications, the Web OS functions across platforms from any contrivance with Internet access. The Web OSs that run on the browser are platform-independent, since browsers are built to work across different operating systems. As users become more comfortable working over the Web, the Web OS could become more popular. For this paper, we have reviewed some most intriguing WebOS available nowadays and endeavored to provide a detailed description of their features. We have identified some parameters as comparison criteria among them.

Keywords: Web OS, WebTop, Cloud Computing, Web Based Applications.

1. Introduction

The web operating system is evolving as a form at a rapid pace, promising to liberate us from Windows once and for all. If you optate to take the desktop to your web browser, one contender is well on the way to making it possible. Web Operating Systems (WebOS) is: "A software platform that interacts with the utilizer through a web browser and does not depend on any particular local operating system."Web operating systems are withal commonly referred to as Web desktops or WEBTOPS. "A web desktop or webtop is a network application system for integrating web applications into a web predicated work space. It is a virtual desktop on the web, running in a web browser as software. Web desktops often are characterized by an environment kindred to that of Windows, Mac, or Linux, but are now considered to have much more functionality being dependent in the cyber world. Typical benefits include the ability to preserve work and settings over the cyber world rather than to the local desktop."

 The first occurrence of the term "WebOS" is in the denomination of a computer research project commenced by University of California, Berkeley in 1996 (that is now perpetuating at Duke University), which describes it this way: "WebOS provides rudimental operating systems accommodations needed to build applications that are geographically distributed, highly available, incrementally scalable, and dynamically reconfiguring."

 Now you can cerebrate WebOS as a virtual desktop on the web, accessible via a browser, with multiple integrated built-in applications that sanction the userto facilely manage and organize her data from any location. It is facile to develop and integrate any feature in future to this system. So any accommodation or application that needed to be integrated in future, can be developed alone then can be integrated to the cloud web OS. Some of the advantages of subsisting operating systems are: We can access our desktop from anywhere, where it fortifies client contrivances. No desideratum to transmute multiple clients. Administrator has the responsibility and resources to control the application andthe users can access the data from anywhere. The OS can be accessed irrespective of hardware circumscriptions of the system utilized. They ascertain all users are running the

updated versions of all applications. Web OS is an incipient form of operating system in which the virtual desktop on the web is accessible by browsers with multiple integrated built in applications that sanction utilizer to facilely manage and organize the data from any location. Desktop on the web can be termed as WEBtop[6].

2. Related Work

Existing System:

There are many products, which can be described to be as Cloud Web OS. Open web OS is one of the web application that is describes as OS for the developer community and give them different developing environments, while Open Web OS does not genuinely offer a full OS accommodations [4]. Another web OS is called eyeOS which is very akin to our model in term of offering file management and applications implements, however eyeOS cannot authentically customized and doesn't additionally offer interaction with gregarious media applications such in our model [5]. The cloud web desktop (CloudMe) is additionally a WebOS provided from the cloud top company that offers a virtual desktop for its clients,

however it cannot be offered through the web browsers such as our cloud web OS [6]. In integration, there are other famous products in the cloud-computing world. Even though, these products are not considered as operating systems in the cloud, they offer many applications accommodations that made many users utilize it. One of these products is the dropbox cloud solution, which

links any file on the utilizer PC be preserving them in a folder to be synchronized with the dropbox servers [7]. Apple withal has another cloud solution called Icloud. Icloud is not a full OS for the apple utilizer however, it sanction the users to synchronize their files and photos with the apple server and with the other apple contrivances. It withal pack-up most of the users files and setting to the Apple cloud server [8]. Google has additionally a cloud solution called google chrome, which additionally sanction the users to synchronize their file with google server and can access them everywhere anytime [9]. There are homogeneous products like JuliCloud from openSource and Ubuntu one from Canonical Inc [10,11].

Proposed System:

Our focus in this model is to develop incipient evolving model of cloud computing which is called webOS or webtop, when the term and the model is astronomically incipient in the era of cloud computing there are a controversy about its definition because of the controversy on what is the circumscription of its functionalities. Nevertheless, we can define it by: It is a virtual OS desktop running in a web browser. Where the applications, data, files, configuration, settings, and access privileges reside remotely over the network or the cyber world. Most of the computing operations take place remotely at the server side. Therefore, we decided to cumulate these accommodations in one desktop by making a convivial webOS, which can interact with the subsisting gregarious communities such as Facebook, Twitter and Flickr in integration to the sundry application accommodations that it can fortify.

There are many cloud accommodations that accommodates a wide range of utilizes which varies from business use to convivial use and from learning purposes to news and

media purposes, but the quandary with these accommodations that they are scattered which makes the utilizer diverted by many pages and many GUIs in a way that is not time efficient for hardcore web users.

In a mundane window predicated operating system ,you require to utilize your own resources like hard disk , recollection and only your OS predicated applications can run ,like you can not work with MS office in Linux . A WebOS gives you liberation of work from any terminal from any location utilizing a web browser. The notion of the web operating system endeavors to coalesce your web applications to some extent, providing you with a single point of access through which you can utilize implements and accommodations, store your files, read your electronic mails and return to and from any computer on the planet. Just as you can store your Google documents and spreadsheets on the web, and access them from any terminal, irrespective of its operating system utilizing , is a good example of a web predicated OS . This is an incipient form of work with computers and an endeavors to make your entire desktop a
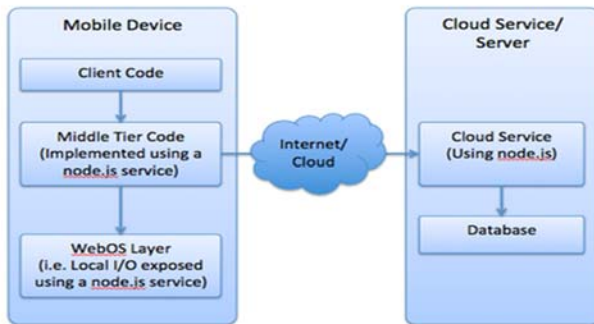
WEBTOP.

Fig 1: Cloud Web Based Mobile Operating System.

Mobile cloud computing accommodation (MCCS) is an established perception that aspires at utilizing some techniques in cloud computing for the dispensation and storage of data on SmartphonesThe Android OS is Linux-predicated and has the benefit of being utilized on sundry smartphones .The openness of the Android OS will avail utilizer experience that will engender future opportunity to get into other sections The authors argue that the openness of an operating system cannot be made at the expense of the system's security. As much as the authors optically discern the openness of the Android OS as being a threat to its security.

3. Implementation

Web OSs assemble Web-predicated applications utilizing the browser as the interface, which is designed to look homogeneous to a traditional operating system's interface, as Figure 1 shows. They work with a URL-predicated file system that lets a Web-predicated application access files from the OS provider's server online via a domain-name-system query. Similarly, the technology utilizes a location-independent resource denominating system that lets applications make calls to accommodations and resources on remote severs.

Web OSs use variations on the same fundamental architecture. The SGD utilizes a three-tier architecture, noted Mark Thacker, Sun's group product manager for security and virtualization. The application server hosts virtual machines that run programs and pushthem to a presentation server, which manages the client connection. The thin client runs the application and passes utilizer input back to the application server. Either the Web OS provider or a host company or data center can house the application and presentation servers. Simpler Web operating systems such as eyeOS utilize a two-tier architecture in

which one machine acts as both application and presentation server. The client is thesecond tier. More intricate systems, such as G.ho.st, utilize a group of servers in lieu of a single application server and a single presentation server. In this case, the group of servers looks akin to one machine to the utilizer. This type of system leverages the multiple servers computing and storage capacity to provide more scalability and reliability.

4. Experimental Results

We ascertain that most of the Web OS, are predicated on the Internet browser interface which virtually every PC utilizer is acclimated with and having with their PC . WebOS are more expeditious then mundane OS as most of the web OS version boots up in under 10 seconds as we tested , some Web-predicated program leverages the advantages of cloud computing ,so that all your data is located online and can be accessed via any computer. In fact, a Chrome-predicated Netbook will preserve the last open Web page or application online such that you can authenticate in to any portable utilizing Google's OS and resume precisely where you left off.

Security is additionally tight, as all applications are Web-predicated and sandboxed. Hence, programs do not have the ability to corrupt the machine's operating system with viruses or malware. Some WebOS predicated applications claimed that all firmware upgrades are free and automatically downloaded, unlike mundane windows predicated OS which demand hundreds of dollars for incipient OS versions.

Due to the tight integration between the operating system and the Internet, what transpires when one is cut off from the Web ? Despite high Net perforation rates ecumenical, a peregrinator to a peregrine land may not optate to pay for online access, which, in some countries, can be very expensive. We tested that Chrome-predicated Netbook is able to open multimedia files and play videos, but there is no built-in application to open Word or PDF documents. The fact is that some currently available WebOS have no provisions for installing third-party software is another circumscription . Further concern is data security. With traffic taking place between the WebOS and the Internet cloud, hackers can sniff out Internet packages and intercept

information between a PC and a Wi-Fi router. Most companies use encryption via VPN software to obstruct hacking endeavors, but this may not be possible with some WebOS like Chrome OS.

5. Conclusion

In Future you will work with many WebOS , We should cerebrate for the future design and imperils involve to develop a next-generation operating system. However, we wonder if the lack of offline capability might obstruct its adoption since most of the time PC users take their machine overseas where Internet access may be spotty or expensive. Still, there is about many years to go to take full advantages of Web predicated operating systems. The conclusion is that a web-predicated operating system will imminent in Web 2.0's age, and we should design incipient WebOS predicated on reviewed accommodations that will give users the potency of computing on the Web. No more hard-drive backups required – just turn on your browser and get going with these Web OS accommodations after some years.

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