Survey on Web based Operating Systems

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Abstract: This survey has been done to collect the knowledge and make comparisons between the available web based operating system / webtop ,briefly mentioning the points and features of different webos and also the history of web os , their types, working methods and how useful and also covering the security of the available web operating system

IndexTerms - CMS, WEBOS, WEBTOP.

I. INTRODUCTION

An operating system (OS) is defined as special type of program that organizes and controls the hardware of your computer and software system. operating systems communicate directly with hardware system and functions as a platform for different applications. Let it be it's Windows, Linux, UNIX or mac OS X, your pc depends on its OS to operate. A Web OS can be defined as user interface (UI) that permits individuals to access applications keep fully or partly on the net. it would mimic the user interface of traditional pc operating systems like Windows, however it does not communicate directly with the computer's hardware. The user should still have a standard OS on his or her laptop

Some group of people use the term "WebOS" rather than web OS, however there's a issue with this term. WebOS is that the name of a project that the University of California, Berkeley began in 1996. The project is devoted to putting together wide space applications. It's not identical factor as a web OS, other individuals object to using the words "operating system" in the least and instead choose to say such applications "Web Desktop" or "Webtop" program. That's because internet OSs tend to mimic normal pc desktop applications.

Web operating systems are interfaces to distributed computing systems, significantly cloud or utility computing systems. In these systems, an organization provides pc services to users through a web site. The supplier runs a system of computers that embrace application servers and databases. With some systems, individuals access the applications accessing internet browsers like Firefox or web explorer. With alternative systems, users must have a program that makes a system-specific consumer. A consumer is software package that accesses info or services from alternative software. In either case, users access programs that are hold on not on their own computers, however on the online.

Common applications provided by the web os include: Calendars, E-mail, File management, Games, Instant messaging programs, Photo, video and audio editing programs, RSS readers, Spreadsheet programs, Word processing programs

1.1 Benefits of Web OS

In a traditional window based mostly OS, you need to use your own resources like magnetic disc, memory and solely your OS based mostly applications will run, like you cannot work with MS office in UNIX operating system. A WebOS offers you freedom of platform from any terminal from any location accessing though web browser. The notion of the online OS makes an attempt to unify your web applications to some extent, providing you with one point of access through that you'll utilize tools and services, store your files, browse your emails and come back to and from any pc on the world. even as you'll be able to store your Google documents and spreadsheets on the net, and access them from any terminal, no matter its OS using, may be a ideal of an internet based mostly OS. this is often a replacement sort of work with computers and a shot to create your entire desktop a WEBTOP

1.2 Working of Web OS

Basically Web OS isn't a real operating system as it does not directly interact with the computer hardware as the normal/ traditional operating system does, the Web OS is a kind of web application running on server, the reason why we are calling it as a web OS because it is providing the basic features that a operating system provides i.e. managing the files, reading and writing on file, editing the file, and photo, video, documents can be made and edited right there on the site without installing any extra applications and the user interface provided is mostly similar like that of traditional operating system

II. RESEARCH METHODOLOGY

For this paper, We tried and explored the various web operating system available, their features, working methodologies, and the technologies on which they were made also tried to provide a brief description of them and the features, which we are going to review ,we have combined and put them all in a single link to view and i.e. <u>http://shubhamkumar.science/project/M.Tech/</u> so that it would be easy to compare and analyze.

Comparisons and others have been done starting from very basic versions of web os which was made to the ones available latest, few of them might not be in service on in support service as various projects are closed after the launch of Chrome OS. Well We have not considered a chrome OS as webtop because it runs on the local system instead of running inside a web browser.

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A technical review is given with research design and future goals to design better web based operating systems is a part of this study. Findings of the study conclude this paper.

III. REVIEW OF WEB OS

Lets see various web operating system their look and features in brief, accessing all from the link where We have combined all i.e. <u>http://shubhamkumar.science/project/M.Tech/</u>, all the operating system here are opened inside a browser

3.1 Virtual legacy OS

These desktops contain all OS elements as well as web browser and Outlook programs. wherever possible, We actually have tried to incorporate in-built file transfer programs (Web commercial enterprise Wizard, net Folders), helpful system tools (System File Checker, System Restore) and bound wizards (Network Setup Wizard, web association Wizard). As a result, a number of the desktops are quite massive and may take a while to load. This contains eleven operating system all are basic and older versions of Windows and macintosh has very restricted options and choices , however runs as if you're running them for real. These are just the html versions of the operating system that can run on web browser. Only few features can be accessed not all.

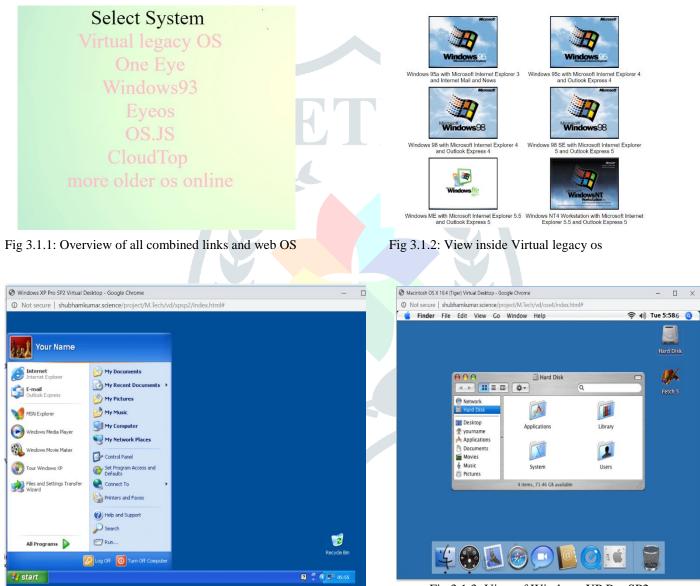


Fig 3.1.3: View of Windows XP Pro SP2

Fig 3.1.4: View of Macintosh OS X 10.4 (Tiger) **3.2 Oneye OS**

The oneye software system is an open source cloud software for your own server. It may be accessed from simply from every place on the earth with the browser of your selection and it doesn't offer your information solely, however provides you the chance to work with them in a very desktop-like atmosphere – all within your browser. oneye 0.9.0 is out and our second nice final unleash. It comes with a simple to use installer. simply transfer, extract, transfer and browse to your URL. This os is meant with the assistance of eye designer package one among the most effective webtop available

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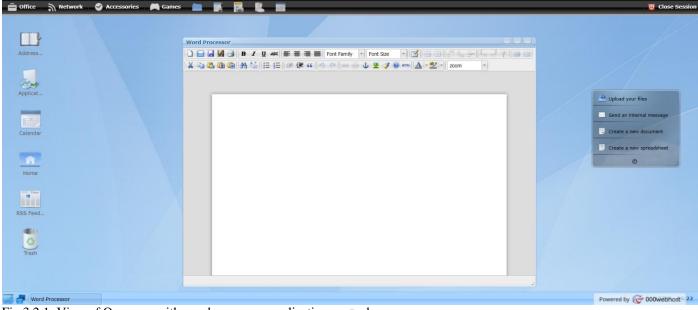


Fig 3.2.1: View of Oneye os with word processor application opened

3.3 Windows 93

The legacy OS is Windows ninety three comes from the wild minds of Jankenpopp and Zombectro. it's a great deal sort of a additional primitive and meme-filled edition of Windows 95—except rather than Solitaire and web browser, you've got Solitude and Cat person. There's conjointly a extremely improved version of MS Paint known as Piskel and a unreal program called Acid Box ninety three and a snarky version of Wolfenstein 3D called Castle GAFA 3D. This OS doesn't provide full features like storing file and editing file this was made just for fun but the look and working or applications are worth considering

| WINDOWS 93 | | | | | | | | |
|----------------------------------|-----------------------------|---------------------|---------------------|------------|-----------------------------|--------------|-----------|----------------|
| System (C.) | Storage (A:) | | | | | | | |
| Terminal | Cat Explorer | Trolbox | 93 Realms | ANSILove | 123 ASCII Gallery | HIDI Jukebox | Potato.yt | Recorder |
| Piskel | CodeHirror | HexEd | O 30 | Calc | Bananamp | CEUM3U | SAE . | Maze 3D |
| Poney | Byte Beat | Puke Data | Speech | | | Siltch GRLZ | EX EX | PokéFianbow |
| Jockey | Take this | Pokójiji | What If | Virtual PC | HAMPSTER | Half-Life 3 | DOSBox | |
| lernapng | Star | Corglitch | Doctor | DERG32EXE | Progress | Kof93 | Defrag | Modded |
| Virtual Girl | Wars.avi | Acid Box 93 | Marburg Arona 93 | SMS | Guiest Color Solitudo | Brian | GAFA 3D | BeepBox DMG |
| Totally not a | | 81 SIM 93 | contact us | Creditstxt | | | | |
| virusTrust me_im a dolphin | OF THE INTERWEBZ. gif | | | | | | | |
| 8 | | | | | | | | |
| 😭 Start | | | | | | | | |
| Fig 3. | 3.1: Vi | ew of | windo | ows 93 | runni | ng insi | de a l | prowser |

3.4 EyeOS

The Eyeos and the Oneye was developed using the same concept and same tool the eye designer and eye package was used to create the appications inside the OS for the the system i.e. Oneye and Eyeos. The Best amongst the all, the reason why we say it is best because it has got all the important features that one need in daily life and more apps and tools could be created using the eye designer, but unfortunately the developers have stopped giving services and support and stopped the project and the development, but the best thing is its still available and is open source, but this and Oneye both doesn't work on latest versions of php you need php version 5.6 to run this on your webserver and this is very easy to install. in this you can upload your files and all your files are upload in server. The Oneye doesn't needed the SQL or database but the Eyeos will need an SQL database and stores all of its data on the mysql database of the server

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| | Spreadsheet | | | | | | | | | | |
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| Address Trash | New Open Save | | s. Row Ins. Column | Del. Row D | el. Column Prin | | | | | Full Screen Help | |
| Book | A1 | | | | | | | | | Save 💥 | |
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| | 4 | | | | | | | | | | Upload your files |
| | 5 | | | | | | | | | | Send an internal message |
| lendar | 7 | | | | | | | | | | |
| | 8 | | | | | | | | | | Create a new document |
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3.5 **OS.JS**

OS is an open-source JavaScript internet Desktop implementation for your browser with a fully-fledged window manager, Application Apis, graphical user interface toolkits and filesystem abstraction. This operating system is completely made using html, CSS, NodeJS and ajax and this also has various applications to cover your daily life, but installing this to your own server on anywhere isn't a easy job, you need to install NodeJS first on your server and your server also must support NodeJS for that

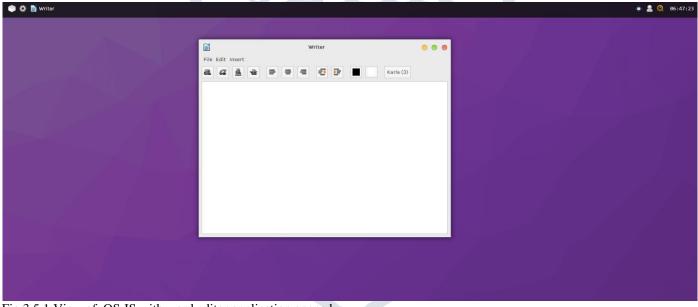


Fig 3.5.1:View of OS.JS with word editor application opened

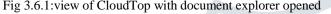
3.6 CloudTop

CloudTop is said to be a continuation of CloudMe Desktop that now not offers internet based mostly operation system/desktop. CloudTop still uses CloudMe for user verification and information saving purpose. The CloudMe internet disk is a end stop for CloudTop applications that store information within the CloudMe web disk.

The CloudTop runs from the desktop browser and is made on HTML5. This is not which you can install on your server, you have to access this through their website and in the free account the provide 3GB of space and if you need more space there are going to charge you for that, so for trial and review purpose We created a free account through which we accessed the webtop and explored all the details

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| | | 4 folders | 3GB available | |
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| Document Explorer | | | | |



3.7 More older OS online

These are the legacy operating system that someone has tried to run inside the browser they can just be viewed but cannot be fully accessed and files can't be uploaded to the os from clients system

| Quickstart |
|--|
| ReactOS (32 MB) - Restored from snapshot |
| Windows 95 (6.7 MB) - Restored from snapshot |
| FreeBSD 10.2 (13.0 MB) - Restored from snapshot |
| Oberon (16.0 MB) - Native Oberon 2.3.6 (via) |
| Windows 98 (12.0 MB) - Including Minesweeper and audio, additional sectors are loaded as needed |
| Arch Linux (10.1 MB) - A complete Arch Linux restored from a snapshot, additional files are loaded as needed |
| KolibriOS (1.4 MB) - Graphical OS, takes about 60 seconds to boot |
| Linux 2.6 (5.4 MB) - With busybox, Lua interpreter and test cases, takes about 20 seconds to boot |
| Linux 3.18 (8.3 MB) - With internet access, telnet, ping, wget and links. Takes about 60 seconds to boot. Run udhcpc for networking. Exchange files through /mnt/. |
| Windows 1.01 (1.4 MB) - Takes 1 second to boot |
| MS-DOS 6.22 (3.4 MB) - Takes 10 seconds to boot. With Enhanced Tools, QBasic and everything from the FreeDOS image |
| FreeDOS (0.7 MB) - With nasm, vim, debug.com, some games and demos, takes 1 second to boot |
| OpenBSD (1.4 MB) - Random boot floppy, takes about 60 seconds |
| Solar OS (1.4 MB) - Simple graphical OS |
| Bootchess (0.2 MB) - A tiny chess program written in the boot sector |

Fig 3.7.1: View of more older os online option

| Parase Ext Send Cdtr-Adt-Del Send Alt-Tab Seve State Load State Memory Dump Disable mouse Lock mouse Go fullscreen Take screenshot (only graphic modes) Scale: 1.0 |
|---|
| NU Constant Speed: 42921KIPS Avg speed: 4522KIPS Vg speed: 4522KIPS Vest Mode: Graphical Resolution: 1024x768 PP: 24 Provide Graphical Mouse: Yes |
| |
| System |
| |
| |
| |

Fig 3.7.2: View of windows 95 Running inside a browser

IV. CONCLUSION

All the operating system discussed run on inside a web browser you don't need to install it in your system, here we have not considered the chrome os because it needs to be installed in the system, it is a cloud system but that need to be installed inside the system and moreover comparing all of the above the Eyeos and the Oneye is best the provide a great features, they are open source, you can install them on your web hosting with php version 5.6, just the main drawback is they have stopped developing now, in future we need a complete system that can be accessed via web browser and provides all the features and functionality that a user needs, yes chrome os has that all but you need to install that in a system, eyes has almost features but with various bugs and biggest thing to look upon is the security as they are all online always that means hackers will definitely try to hack and because its in cloud it less secure compared to traditional operating systems available, apart from above discussed there are also a lot number of web os but they were not worth considering or not available currently. The demand of cloud services are rising and in near future one who can provide this webtop with all apps that are used in industries and by the home users and all the games with more security than we will see new generation of operating system, remote host and virtual machines provide that all but if this all is provided inside a browser which any user can login just with login Id and password this will create boom in the market of operating system

REFERENCES

[1]. T. Anderson, 2002, WebOS: operating system services for wide area applications, Institute of Electrical and Electronics Engineers, The Seventh International Symposium on High Performance Distributed Computing (Cat. No.98TB100244)

[2] George Lawton, 2008, Moving the OS to the Web, Institute of Electrical and Electronics Engineers, Volume: 41, Issue: 3, March 2008, page 16-19

[3] obadya ,2012, Security issues in eyeOS, http://hdl.handle.net/11250/262584

[4] Rajesh sharma, 2013, Applications of Web based Operating System, IJCRD, Volume: 1; Issue: 2; June -2013

[5] priti sharma, 2015, Web Operating System impediments, IARJSET, Vol. 2, Issue 1, January 2015, page 50-54

[6] Aaron Weiss, 2005, WebOS: say goodbye to desktop applications, Volume 9 Issue 4, December 2005

Pages 18 - 26

[7] Najib Kofahi and ahmad , 2005, Web Operating Systems and Computing on the Web, Information Technology Journal · April 2005, page 630-366



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