OSS Challenges and Scope

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Abstract: Today oss becomes most popular in software community due to its free availability to users. But some issues are also identified by users while using such softwares. this paper includes challenges faced in the use of oss, features of oss, emerging applications of oss.

Keywords: **OSS(Open Source Software)**

1. INTRODUCTION

Closed source and open source software are two geners of software. But open source softwares are become most popular nowdays. Any user can detect open source software code , can refine and can enrich the code to meet the growing needs of stakholders.Normally users do not have wisdom of code of application they use. application working can be directed by developers as they can operate the code due to its free availability. Due to code availability programmers can point out flaws in it, can add features to it in order to increase usability of that software . Most popular open source softwares are linux, libreoffice etc. Oss allows programmers collabratively work on software to share their knowledge of code, to make changes into the source code in order to add required features into their project. But, open source software also have issues in its use.

2. LITERATURE SURVEY

In this section we see how computer programmers need to develop open source software for their real time projects. In early days of information technology, computers are with already installed os and software applications. But as the software is going to become standalone product, software vendors restricts to access their code freely by other in order to avoid inspection of their important software details. So computer users are become dependant on software vendors for maintenance, technical support and inclusion of additional features of software. For this they are pay high cost to software vendor. As a result of this their was great need of accesing the source code freely in order to meet the increasing needs of application by modifying and enhancing that code. So, in early 70's open source software movement was start. [3] Richard M Stallman play important role in this movement. He introduced concept "copyleft" which consists General Public License for software which allows anyone to freely use, distribute and modify the sourcecode at no charge. Also introduction of Linux by Linus torvalds forwards the open source software movement in 1991[3]. He implements linux os on intel based computers. 25% of servers and 2.8% of desktop computers were use linux in 2002[4]. Still companies were not interested for investing in open source software. In1998 Netscape releases sourcecode of its webbrowser which motivates free software developers to improve quality of software by working collabratively together in a way that no company can achieve this indiviually. Major open source software project Apache web server software occupies 60% of the market[5]

I. 3. APPLICATIONS OF OSS

1.LIBRA OFFICE

It is open source alternative to microsoft office.it becomes popular because it preserves microsoft office format with support for documents, spreadsheets, databases, presentations and mathematical formulae.[7]

2.VLC MEDIA PLAYER

It is created by open source development group known as videoLAN project.audio and video file in any format can be opened by VLC media player.it is also used for sreaming media such as online radio stations.[7]

3.SHOTCUT

It is open source program for advanced video editing.it supports nondestructing audio and video editing without any quality loss.[7]

4.LINUX

It is open source operating system.it is released in 1991.most of servers are developed in linux.it becomes popular due to its security and less vulnerability to virus.[7]

4. FEATURES OF OSS

1.Community Control

Most of people prefer oss because they have more control on it.as source code is available to all freely people can examine the code to ensure that code do not doing anything that they do not want it to do.they can make changes in source code as per requirement of application.[11]

2.Free Use

Nonprogramers also get advantage from oss as they can use software for any purpose as they wish which is not happen in case of closed source software users have to use software in the way as its vendor thinks.[11]

3.Training

OSS helps people to become better programers.as in oss source code freely accessible even students can easily study that code and learn various programming techniques from it to develop feasible software. by adding new features to source code students can share their work.also they can invite suggestions, comments about their work. also people can discover mistakes in programs source code and they can share those mistakes with others to avoid same mistakes done by them.[11]

4.Security

as source code of oss is freely available to all, many people are working on same piece of code.so if any error is their in oss they all are working on that error to remove that error.as many eyes on same piece of software, it is less vulnerable to threats.[11]

5.Stability

Usually many people prefer oss for long term projects.as source code of oss is distrubuted publicly, so even if original vendor [11] of project stop working on source code then also other programers can rely on that software tools.so oss gives more stability as compared to closed source software.

5. CHALLENGES

1.Training

Generally oss do not provide great set of training manuals and resources.so end user must ensure that he is able to implement right training strategy for his team when he choose to use open source software application.[10]

2.Lack of Customer Support

It is found that one issue with oss is lack of customer support.one way to overcome this problem is by giving answers to the questions asked by end user in forums.if someone found something about software he must share it in forum[9]

3.Threats in Security by Mystery Resources

As source code of oss is freely available to community, it may be risk for business owner that hackers may make unwanted changes in that code. So security of that oss may be challenged.[10].

4.Lack of Policy

It is challenge for business owner to outline a policy for their open source usage. without policy developers may use any component for any purpose which may cause issues down the line.so establishing clear written policy is the best way to avoid such issues.

5.Complex Nature

There are ton of valuable software across all sectors.but due to complex nature of oss, it is not easy for developer to built a large project by using such software.also end users have to practice a lot with such software.[9]

6.Consumption is More than Security

As oss is freely accessible to all, people are more consuming the software for their business but people are less contrubuting towards further development of software.[9]

Appendix

OSS-Open Source Software.

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List and number all bibliographical references that has important contribution on the paper, (if possible, limit to 30, which only are necessary citations are recommended). 9-point Times New Roman, fully justified, single-spaced, at the end of your paper. When referenced in the text, enclose the citation number in square brackets, for example [1]. Do not abbreviate the months. Don't forget to put period (.) at the end of each reference. (See examples below)

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