A Study on Open Source Server Technologies

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***Abstract*- Open source technology (OST) is an often-misused term; too often, users often think open source is synonymous with free. With the relatively recent rise of the Internet's influence on production and development of software, open source has become a popular vehicle to gain widespread use and support of some very popular software titles. This study paper is to put forward 10 new technologies for open source servers that will compiled a diverse list of projects and applications for developer to discover and explore. Many of these products are free of cost or close to it.**

Keywords-Open Source, Open Source Technologies, Zenoss, Mono, Apache, Drupal, OpenSolaris.

I. INTRODUCTION

The term "open source" specify to something people can adapt and share because its design is publicly accessible.

The term arise in the context of software development to designate a specific approach to construct computer programs. Today, however, "open source" nominates a broader set of values—what we call "the open source way." Open source projects, products, *or initiatives grasp and celebrate principles of open exchange, transparency, rapid prototyping, collaborative participation, meritocracy, and community-oriented developmen*t.

This paper discussed a definition of open source technology and new upcoming open source technologies. Although these software projects pair well with Linux, it isn't an integral part of any of the 10 listed. Software for open source servers do not refers to Linux-only environments for long. In fact, open source servers now cross all operating system boundaries, so much so, that Microsoft launched its own open source laboratory called Port 25, and it is a platinum-level sponsor of the Open Source Business Conference in San Francisco.

II. DEFINATION OF OST

Open source technology is defined as development philosophy and the production of allowing developers and end users to not only see the source code of software, but modify it as well. A one of the best-known examples of open source software technology is the Linux operating system.

Unlike Linux, Windows is built on a closed source paradigm that does not grant the end user the ability to see or edit the code that makes up the operating system.

III BUSINESS CHALLENGES

A backbone of today's dynamic service delivery infrastructures are servers, and therefore one of the most vital components in any monitoring solution.

Availability of hardware and operating system components and visualizing the performance, as well as the virtualization technologies that run on top of these platforms, is principal to delivering end-to-end service reliability.

IV NEW OPEN SOURCE SERVER TECHNOLOGIES

1. Zenoss

Technology for open source servers is about more than Linux. Here are 10 must-evaluate projects for open source servers in any enterprises considering making the leap. Zenoss is an open source IT Management suite. One can monitor and observe entire network using Zenoss. It composed of network discovery, an alert console, service monitoring , performance monitoring, and inventory modules. It is enterprise-ready, free, easy to install and maintain, and modular through ZenPacks.

2. Mono

Mono is the open source implementation of Microsoft's .NET technologies. When first heard about Mono Project, it' s difficult to put a Microsoft technology into the open source world category, but it has captured the attention of developers and businesses on a worldwide scale. Sponsored by Novell, this technology combines two incompatible worlds (*nix and Microsoft) into a single agile, open source and stable realm. Mono allows developing powerful and advanced server-side applications on Linux, Mac OS X and Windows.

3. Apache

The Apache Web Server is the Internet's most popular Web server, and the project everyone associates with apache.org. However, it might surprise to know that there are more than 70 other projects under the Apache umbrella. Enterprise-level projects include ActiveMQ, Geronimo, SpamAssassin and Tomcat. Although many of the Apache projects relate to Java (e.g., Geronimo and Tomcat), several are stand-alone projects (OFBiz), and a few directly enhance Apache (mod_perl). The Apache Software Foundation is a decentralized open source community of developers. The software they produce is distributed under the terms of the Apache License and is free and open source software (FOSS). The Apache projects are characterized by a collaborative, consensus-based development process and an open and pragmatic software license. Each project is managed by a self-selected team of technical experts who are active contributors to the project. Apache.org has morphed into more than the just

a URL from which you download the Apache Web Server; it's a repository of the most powerful open source software in the world.

4. SugarCRM

To use a customer relationship management (CRM) software suite with marketing model and a disruptive engineering, SugarCRM is the name. The SugarCRM team takes a unique approach to enterprise software marketing: Here one can get the product to use, and when needed the advanced functionality, engage SugarCRM for a commercial relationship. The company invest its effort and money into building the product, not sales or marketing efforts. This model has propelled "Sugar" into being the world's leading open source CRM product.

5. Drupal

Content management systems (CMSs) implement a collaborative environment for corporate Web sites, social networking sites, community portals, intranets, e-commerce applications and discussion sites. Drupal is a CMS that concede communities to share, publish and manage a variety of content on a Web server. Communities range from a few users to tens of thousands. Drupal is modular and has dozens of add-ons that strengthen its functionality and appeal, such as forums, photos, blogs, podcasting, newsletters, file uploading and downloading, collaborative authoring and e-commerce.

6. OpenSolaris

OpenSolaris is the x86 version of Sun's Solaris operating system. The two most exciting aspects of this operating system are that it contains all of the built-in enterprise components (virtualization and ZFS) as the standard Solaris offering and it runs on inexpensive x86 hardware. OpenSolaris hand over next-generation computing technology, commercial support and a worldwide development community. OpenSolaris uses a network-aware package management which is system called the Image Packaging System (also known as pkg(5)) to remove, add and manage installed software and to update to newer releases. Packages for development releases of OpenSolaris are disclosed by Oracle typically every two weeks to the /dev repository.

7. MySQL

MySQL, now owned by Oracle, is the world's most popular open source database software. It's available for almost any operating system, and it is drag-and-drop-capable with no modifications from one platform to another. MySQL gives power to Internet sites, business applications and enterprise tools, such as Zenoss. It is be in running with the most-expensive commercial relational database systems. Oracle shall continue to elaborate MySQL and make subsequent versions of MySQL, including Version 6, which are available under the GPL. Oracle will not release any new, enhanced version of MySQL Enterprise Edition without collectively releasing a new, also enhanced version of MySQL Community Edition licensed under the GPL. Oracle shall continue to make the source code of all versions of MySQL Community Edition publicly available at no charge.

8. Pentaho

Pentaho is a commercial company tha tender a community edition of its open source business intelligence product as free to explore, use and change at will. Both editions have query, reporting, interactive, analysis, dashboards, data integration and data mining. Pentaho's philosophy modifies the economics of enterprise-class business intelligence by serving up its commercial version for an annual subscription priced less than one-third of what its competitors charge. Its customer testimonials talk about volumes in favor of its claims of lowering the TCO for business intelligence software.

9. Magento

Magento eCommerce suite (the Community Edition) provide a free and open source method of driving ones business toward those Internet millions which heard so much about it. The Magento Enterprise Edition is a open source, but it holds a commercial license for advanced support and functionality. The Community Edition provide full e-commerce capabilities, such as catalog browsing, marketing tools, search engine optimization, analytics and reporting, mobile commerce, checkout, shipping and customer service modules and checkout,.

10. Java

Java technologies have effective enterprise applications since 1995. Java currently powers more than 2 billion handheld devices and 800 million PCs, and 3.5 billion smart cards as well as a host of set-top boxes, games, Web cams, medical devices and much more. With uptake by major companies such as Oracle (Java's new owner) and IBM, Java is a technology to watch and grasp for all levels of enterprise use. Java is open source because it has a version in which you could download its compiler source code. The best example would be Oracle NetBeans and Eclipse IDEs. Eclipse IDE is open source since its code writers openly post its entire source code for anyone to download, copy, redistribute them, which is usually part of the GPL (General Public License, the license that usually comes with open source software). On the other hand, Oracle NetBeans IDE is not open source (although it is still free), since it does not disclose its source code publicly. Some may also refer to such software as closed-source software.

V CONCLUSION

Although open source server is often free to download and use, open source licenses rarely transfer any ownership of the software to the end user or developer. Open source is not limited to server or software. Open source philosophies can be applied to everything over the Internet. The result is higher commitment and even cult status among the developers and users of open source technologies. This paper discussed ten new technologies of open source server which explaining the new open source technologies. Ultimately in the long run, the end user is the ultimate judge of which is a better solution. Without support from the user, developers and open source projects cannot continue except as a hobby or personal challenge for the developers.

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