Latest Milestone Build of OpenOffice.org for Linux and other Operating Systems

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Abstract

The document briefs the development of the latest milestone of OpenOffice.org for different flavors of Linux as well as the Windows Operating system. The document is believed to prove useful to people building workable versions of OpenOffice.org for different flavors of Linux and the Windows operating system.

1. Introduction

The latest milestone of OpenOffice.org (OOo) available at the time of building was OpenOffice.org 2.1. The topic can be catorized into two categorized. The first one is to have support for all possible popular GNU/Linux distributions while the second one is to have support for other possible operating systems like Windows. Both of them were achieved in the October - December 2007 quarter.

Some of the popular GNU/Linux distributions are Debian, Ubuntu, Fedora, OpenSuse, etc. The distributions such as Debian and Ubuntu have dpkg as their package management system while the distributions such as Fedora and OpenSuse have rpm as theirs. Likewise, the dpkg package management systems use deb as their packaging format while rpm package management systems use rpm as theirs. The required install sets and language packs have been built for both the formats i.e. deb and rpm. So all the necessary packages will be put up in the website for downloading.

The steps for building OpenOffice.org for different GNU/Linux distributions:

Note: The instructions for building OpenOffice.org in this section of the report is for debian-based GNU/Linux systems. The default package management system for debian-based systems is dpkg and for rpm-based systems is rpm. The dpkg package management system already exists in the debian-based

system we build OOo on. So there is no need to install dpkg package while we need to install rpm package. So one needs to install rpm package before s/he proceeds to build OOo rpm install sets and langpacks.

Similarly, if one is building on rpm-based system and wants to build deb packages as well, s/he needs to install dpkg package first.

1. Download the source code tarball
2. (http://download.openoffice.org/680/index.html)
3. Unpack the tarball as follows:
4. tar zxvf Ooo_2.0.0_src.tar.gz
5. cd <Ooo_src>
6. cd config_office
7. ./configure --with-lang="ne" --with-package-format="deb rpm"
8. cd
9. source LinuxIntelEnv.Set.sh
10. . ./bootstrap
11. dmake
12. Get 2.x.x POT files for OOo's appropriate release from:
13. http://ftp.linux.cz/pub/localization/OpenOffice.org/devel/POT/
14. Extract the files using the POT2PO script which can be found at Pavel's site:
15. http://blog.janik.cz/archives/2004-11.html
16. The script generates a directory tree of associated PO files from the POT files. Then TRANSLATE.
17. Then obtain the translate tools from:
18. http://translate.sourceforge.net/
19. Install the translate toolkit which was just downloaded:
20. tar zxvf translate-0.8rc2.tar.gz
21. cd translate-0.8rc2
22. ./setup.py install
23. The next step is to generate the single big GSI/sdf file for all the translations
24. po2oo -i po -t en-US.sdf -o GSI_ne.sdf -l ne

25. Check the newly produced sdf file:
26. gsicheck -c -l "" GSI_ne.sdf
27. If there are no errors from above command, then merge it into the source:
28. localize -m -f GSI_ne.sdf -l ne
29. dmake
30. To generate the language packs that can be applied to English installations:
31. cd instsetoo_native/util
32. dmake ooolanguagepack
33. These are the steps to build OOo for both .deb and .rpm packages.

Please note that the '--with-package-format' option has to be used in order to build both debs and rpms.

Install sets and language packs for the Windows Environment

Likewise, the required install sets and language packs have been built for Windows environment. The necessary install packages have already been released as part of Nepali Open CD v1.0. They will also be put up in the website for downloading in the days to come.

Steps for building OpenOffice.org for Windows Environment

The steps for building OpenOffice.org for Windows environment are pretty much similar to that of building on GNU/Linux. The steps for building OOo in both the environments are generic. But the build requirements are different than that of GNU/Linux.

Note: Please note that we have followed the build process from OpenOffice.org website and the wiki for troubleshooting the errors.

Software Requirements

-Windows NT Version 4 Service Pack 3 or higher, Windows 2000 SP 2 or higher or Windows XP

-A Microsoft Visual C++ .NET Compiler. MS Visual C++ .net 2003 (not available for free) is currently used for the official builds but Microsoft Visual C++ 2005 Express Edition (free download, as in free beer) is also expected (but not guaranteed) to work
-A Microsoft Platform SDK. The current version of the Platform SDK (Microsoft Windows Server 2003 SP1 Platform SDK - April 2005 Edition) can be downloaded from

http://www.microsoft.com/downloads/details.aspx?FamilyId=A55B6B43-E24F-4EA3-A93E-40C0EC4F68E5&displaylang=en

The following parts have to be installed:

- -Microsoft Windows Core SDK
- -Microsoft Web Workshop (IE) SDK
- -Microsoft Internet Information Server (IIS) SDK
- -Microsoft Data Access Services (MDAC) SDK
- -Microsoft DirectShow SDK Platform SDK Redistributable: GDI+
- (http://www.microsoft.com/downloads/details.aspx?familyid=6A63AB9C-DF12-4D41-933C-BE590FEAA05A&displaylang=en)
- -A DirectX 9.0 SDK. The Sun provided builds use DirectX 9.0 SDK
- Update - (Summer 2004) but that is no longer available for download from Microsoft. The current version of the DirectX SDK
- -DirectX SDK - (February 2006) can be downloaded from
- http://msdn.microsoft.com/directx/directxdownloads/
- -A Java 2 SDK is required. JDK 1.4.2
- -Cygwin Toolkit from http://www.cygwin.com. Use at least Cygwin DLL version 1.5.10. The official information about using setup.exe and installing Cygwin can be found at: http://cygwin.com/cygwin-ug-net/setup-net.html. More help and information on the Cygwin tools can be found at
- http://website.openoffice.org/support/en/howtos/1.html.

When installing Cygwin make sure you set the "Default Text File Type" to "Unix". This is the default setting. Please make sure that at least all the packages from the base category and the following packages are installed: bison, flex, make, patch, perl. And also: gcc, rxvt, tcsh, unzip, zip

- -The gpc general polygon clipper library release 2.31, located at

http://www.cs.man.ac.uk/aig/staff/alan/software/

- The Microsoft Layer for Unicode (unicows.dll). Get it from here:

http://download.microsoft.com/download/b/7/5/b7 5eace3-00e2-4aa0-9a6f- 0b6882c71642/unicows.exe

- The dbghelp.dll from Microsoft. Get it from here:

http://www.microsoft.com/downloads/release.asp? releaseid=30682

Ant Is required. This is a Java make utility. (HYPERLINK "http://ant.apache.org/" http://ant.apache.org/)

- -Nullsoft Scriptable Install System (NSIS) (http://nsis.sourceforge.net/)
- Mozilla libraries
- -Some Mozilla libraries are needed. One can either build the libraries using
- http://ftp.mozilla.org/pub/mozilla.org/mozilla /releases/mozilla1.7.5/source/, use the prebuild libraries WNTMSCI{inc,lib,runtile}.zip
- fromhttp://tools.openoffice.org/moz_prebuild /680/ and copy in into $SRC_ROOT/moz/download or not use the libraries by using the --disable-mozilla switch for configure.
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- Perl Modules:
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  -Archive::Zip - packing image lists, evtl. for further zipping needs XML::Parser - expat based parser for the new XML based build lists

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  In order to perform a full build, the following steps need to be preformed:
- -Getting the source code, either from the download page
- (http://download.openoffice.org/680/index.ht ml) or alternatively via a
- check-out from the cvs tree against a release tag, e.g. OpenOffice_2_0_0.
- -Running the configure script to check all the requirements and creating the script winenv.set
- Sourcing the winenv.set script to set all environment variables
  - - Creating the build tools using bootstrap

- -Building by typing dmake in $SRC_ROOT, or build --all in the instetoo_native module
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  Finally to generate the langpacks, the following commands need to be run:

- cd instsetoo_native/util
- dmake ooolanguagepack

2. Conclusion

With the Nepali OpenOffice.org install sets and language packs available in both deb and rpm format, and for Windows environment as well, a wide variety of users will now be able to use OOo in Nepali language in the days to come.

3. References

[1] "Tools"
http://tools.openoffice.org/dev_docs/build_linux.html
[2] "Windows"
http://wiki.services.openoffice.org/wiki/Windows
[3] http://ftp.linux.cz/pub/localization/OpenOffice.org/ devel/build/build