OS2ports

How to build open source software with OS2

Using the Buildenvironment of Paul Smedley

Michael Oehlhof

Introduction

- Info about me

- Info about Paul Smedley

- Installation of build environment

- Using the build environment

- Linux tools

- Q & A

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Speaker info

Michael Oehlhof

- Member of Team OS/2 Ruhr

- Advisor of AMP4eCS/AMPOS2

- Admin of WARPEVENTS.eu/WARPSTOCK.eu

Paul Smedley

- OS/2 user since 1993
  (started with OS/2 for Windows 2.1)

- Added USB support to Sane in 2005,

- then started working on porting other unix programs.

- Set up a build environment

- Offer his build environment on CD/DVD

  (2010-03-18)

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Installation of the build environment

- Buy the DVD

- Create a volume with drive u: assigned

- Instructions for setup:
  - Installation is only supported to drive u:
  - unzip buildenv_20100321.zip to u:\
  - run u:\folder.cmd to create a desktop folder

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Installation of the build environment (2)

To share a directory with a drive letter you can use NetDrive for OS/2 3.1.1

http://www.blueprintsoftwareworks.com/netdrive/download.html

1 month evaluation

Order from BMT Micro for $29

http://www.bmtmicro.com/BMTCatalog/os2/netdrive.html

- Volume → Attach a new volume → U:

- Resource → Mount resource

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Installation of the build environment (3)

To share a directory with a drive letter you can also use the Toronto Virtual File System 2.11

Download tvfs211.exe from Hobbes or
http://www.os2site.com/sw/drivers/filesystem/index.html

PM interface for TVFS
tvfscc10.zip

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Installation of the build environment (4)

Install to a different drive

Change the build scripts

folder.cmd   u:\   g:\

gcc*.cmd   u:\   g:\

gcc*.cmd   u:/   g:/

set*.cmd   u:/   g:/

Change config files in \moztools

config.site*   u:/   g:/

debug.cmd   u:/   g:/

Using the build environment

Building your first command line application:

- Launch a GCC command prompt
  (4.x suggested)

- change directory to u:\dev\wget-1.12

- type 'ash ./configure --prefix=/out/wget'

- once configure completes, run 'make'

- once make completes, run 'make install'

- wget executables will be found in /out/wget/bin

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Using the build environment (2)

Note on run 'make' for wget:

There will be an error building the doc directory

Edit doc\Makefile and change line 599 from
TEXI2POD = $(srcdir)/texi2pod.pl
to
TEXI2POD = perl $(srcdir)/texi2pod.pl

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Make

- Info about make
  http://www.gnu.org/software/make/manual/make.html

- Understanding software Installation
  (configure, make, make install)
  http://www.codecoffee.com/tipsforlinux/articles/27.html

- The GNU configure and build system
  http://en.wikipedia.org/wiki/GNU_build_system
  http://de.wikipedia.org/wiki/GNU_Build_System

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Linux Tools

Most executables can be found in /bin, /usr/bin

Try parameter „--help | more" to get information

- ash / ashnew / bash / ksh / sh
  command shell
- diff
  create a list of changes between source code

Linux Tools (2)

- cat, nl, tac, tail, wc
  type file, with line numbers, reverse, last lines, word count

- cp / mv
  copy, move

- rm
  delete recursively quite easily

- grep
  filter / search

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Linux Tools (3)

- df / du / find
  disk free, disk usage, find files

- md5sum
  print or check md5 checksums

- tee
  copy stdin to stdout and a file

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Scripting Languages

- Perl
  /perl   → Version 5.8.0
  /perl5   → Version 5.10.0

- Python
  /python26   → Version 2.6.4

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How to get source code

- Check out from a repository in the internet

- Repository tools

  - CVS
    /moztools   → Version 1.11.2

  - SVN / Subversion
    /subversion   → Version 1.6.9

- Netlabs repository   http://svn.netlabs.org/

- Free Software Directory   http://directory.fsf.org/

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Where to get the build environment?

- ## Paul Smedley
  http://os2ports.smedley.info/index.php?page=BuildEnvDVD

- ## Mensys
  Special WSE2010 offer

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Q & A

- Your Questions

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Thank you for very much for your attention

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