

The OS/2 port of bind 4.9.3

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1 What is it?

This is release 4.9.3 of bind¹ ported to OS/2. It relies on EMX² 0.9b fix 5 (or newer).

2 Installation

To install just take a look at the standard bind documentation³. The directory structure for the OS/2 port is laid down in *named/pathnames.h*. A re-compile is necessary to customize directory names – sorry. The EMX runtime and IBM TCP/IP have to be installed.

You will find the executables in the source directories (*named/*, *tools/*, *tools/nslookup*), make install does (of course) not work (yet).

It is a good idea to have *syslogd* running the first time you start *named*. Try parameter *-d* for extensive debug info and/or *-q* for query logging.

3 OS/2 specific stuff

3.1 What happened to the code?

Actual code is pretty unchanged, I adapted the makefiles, figured out a suitable *compat/lib/lib44bsd.a*, read *conf/protability.h* very carefully :) and while doing so my OS/2 box turned into a unix-lookalike⁴.

Look for `__EMX__` defines in the code (you won't find many) to see what changed.

3.2 Re-compiling

Especially *named/Makefile* contains one bad hardcoded hack (I was unable to get sed to work), I used tcsh 6.0.6.1 **and** bash 1.12, to me, it seems that these shells lack some features :) - well I'm very lost when it comes to shell setup/shell features - I am awaiting your hints...

News flash: Try ksh 5.27 to re-compile – works much better than tcsh and bash! Compiles the entire project in **one** pass, wow...

In order to re-compile the bind port you'll need a syslog library (on hobbes⁵ for IBM's CSet, a port of the port to EMX is available from the author) and flex.

I removed the *contrib/*, *shres/*, *doc/rfc/* directory from the original distribution, some postscript files about DNS security were also removed.

¹Berkley Internet Name Domain

²Eberhard Mattes eXtentions – a distribution of GCC for OS/2

³look at <http://www.vix.com/isc/bind.html> for a reference manual (BOG – Bind Operations Guide), FAQ, protocol definitions, ...

⁴you may wish to get GNU shell—file—text utilities from hobbes

⁵point your browser to <ftp://ftp-os2.nmsu.edu/os2> or <ftp://ftp-os2.cdrom.com>

3.3 Sending signals

Unix background daemons receive commands via signals that are sent to their pid⁶. bind 4.9.3 understands a number of signals: SIGINT, SIGQUIT, SIGIOT, SIGUSR1, SIGUSR2, SIGHUP, SIGALARM, SIGTERM.

A way to send signals under OS/2 is provided in the Apache httpd port⁷ in directory `emphApache/os2/`.

4 History of the OS/2 port

- June 14, 1996 — released *bind493a.zip*
- July 3, 1996 — *bind493b.zip* contains this wonderful \LaTeX -README and, more important, a fix for the "core dump" bug when set up as a secondary name server (well, now everything is linked static); some cleanups were done to the Makefiles; this is just an **update** release, it contains **only** executables and this README!

5 To do

- either replace makefiles with REXX scripts or craft'em right
- include a working sample configuration
- find and fix bugs in the port :)
- make named display some debug info in its window
- provide some means to send signals to *named*
- figure out a way to have dynamic linking **and** a working fork()

6 How to contact the author

I'm very interested in your comments and flames.

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7 Disclaimer

Beware: I am no DNS specialist. There may be serious bugs in the OS/2 port of bind 4.9.3 – use at your own risk! Insert your favourite disclaimer text below. . .

⁶a unique number identifying a process

⁷again on hobbes or <http://www.apache.org/>