

ARM port(s) update

Where are we now, what's coming?



ARM[®]

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Agenda

- armel
- armhf
- Builds and hardware
- Elsewhere?
- New stuff!
- Take notes in gobby please!
 - `gobby.debian.org`
 - `debconf12/bof/arm-ports`



armel

- Current port, first released with Lenny
- Soft-float ABI, v4t
 - Still needed for older hardware
- Still supported upstream...



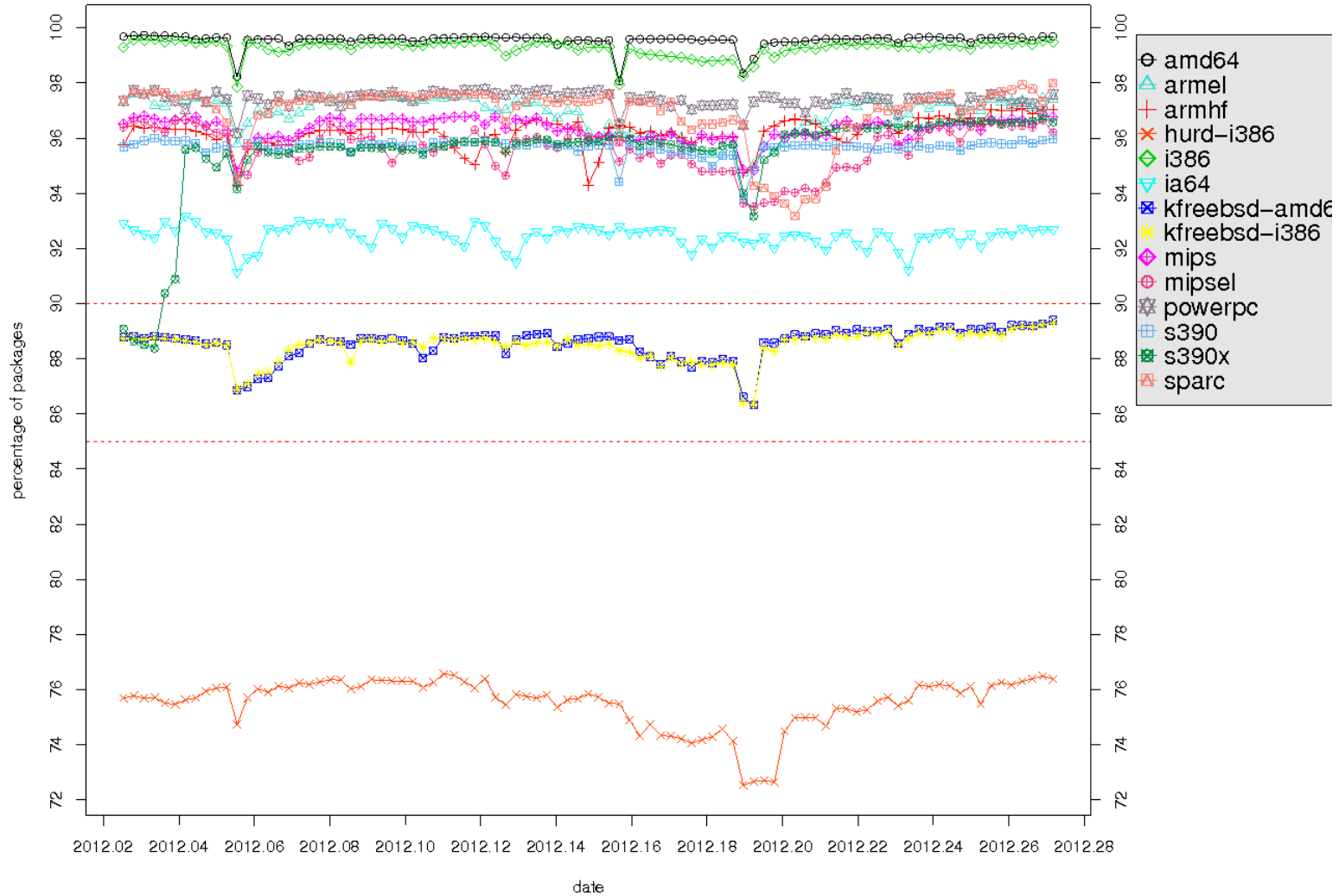
armhf

- Accepted for Wheezy release \o/
- Hard-float ABI, v7, VFPv3-D16
 - New standard for ARM Linux distros
- Linker path & multi-arch
- Well-supported upstream now
- Some porting/fixes still not done
 - Mono, libffi, ...



Keeping up

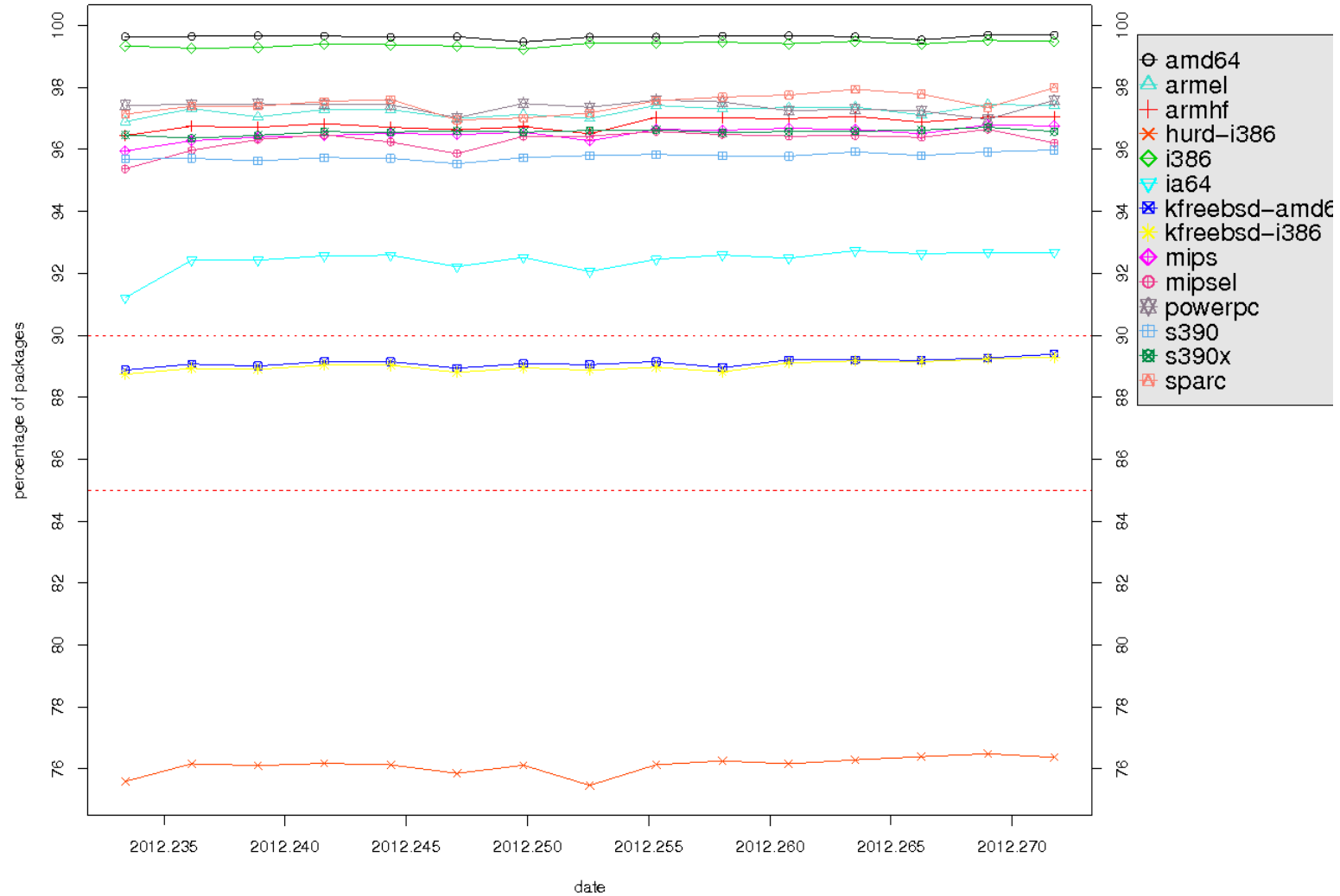
What percent is built for each architecture (past quarter)





Keeping up (2)

What percent is built for each architecture (past two weeks)





Builds and hardware

- Currently relying on dev boards:
 - Marvell Feroceon (v5) for armel
 - Freescale imx53 (v7) for armhf
- Issues
- New hardware – real servers
 - Common kernel → common builds?



Elsewhere

- Raspbian
 - v6hard-float ABI
 - Forwards-compatible with armhf
 - Good community work
- Ubuntu
 - armel ~~v7~~ v5, soft-float
 - armhf
 - 12.04 LTS release



Elsewhere, further

- OpenSUSE
 - Focus on v7 hard-float
 - Lower-priority v5 port
 - Hoping for 12.2 ARM release
- Fedora
 - Focus on v7 hard-float
 - Lower-priority v5 port
 - F17 ARM released; **be careful**

Elsewhere, even further



- Mageia
- Gentoo
- ChromeOS
- Android



New stuff

- Virtualisation
 - Many ARM instances
- LPAE
 - Lots of RAM
- UEFI
 - Standard boot architecture



More new stuff!

- ARMv8, 64-bit capable
- Come to “AArch64 planning”!



What else?

- More porters always welcome
- #debian-arm on irc.debian.org
- debian-arm@lists.debian.org



Thanks

The ARM logo, consisting of the letters 'ARM' in a bold, blue, sans-serif font with a registered trademark symbol (®) to the upper right.



And all the community!

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- Released under GPL v2 at <http://www.einval.com/~steve/talks/Debconf12-arm-ports/>