

Emdebian Extremadura worksession  
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# What is emdebian?

- Embedded Debian Project
- Tools and distribution
- For small/embedded systems
- Closely based on Debian



 emdebian

- Handhelds to Mainframes
- Many architectures:
  - alpha, amd64, arm, hppa, i386, ia64, mips, mipsel, powerpc, s390, sparc
- Very Large:
  - 10,783 source packages
  - 18,317 binary packages
  - 13GB per architecture
- About 1000 developers
- But not actually very good for handhelds/embedded



- For developers - quick prototyping
- Reduced package set
- Small packages
  - No docs
  - Split Languages
  - Reduced dependencies
- Cross-buildable
- Minimal Base set
  - No perl
  - Optional busybox
  - GPE for handhelds



- Started in 2000 - Frank Smith
- Toolchains, emdebsys
- Metadata and mechanism discussions, objective setting
- Various projects to explore options
  - STAG - Philippe de Swert 2004
  - STAGE - Ed Bartosh 2005/6
  - SLIND - Siemens 2006
  - Emdebian - Neil Williams



- Toolchains cross-buildable from Debian sources
- STAGE initial proof-of-concept
- SLIND announced but not available
- Everyone busy - limited progress
- Difficult to get involved



# Extremadura Meeting

- 12th-14th April - most significant people present



- Much discussion on metadata
- Scratchbox2 proof-of-concept and operation
- STAGE development
- EABI port name decision
- Toolchain work
- Slind/STAGE merge proposal





- Debconf, July, Mexico
- Linuxworld, London



- Toolchains much improved:
  - GCC versions: 3.3, 3.4, 4.0, 4.1
  - Targets: arm, ia64, m68k, mips, mipsel, powerpc, sparc
  - Hosts: i386, amd64
  - Suites: testing, unstable
  - Packages: gcc (C, C++), binutils, glibc
- Still Needed:
  - Automated builds
  - Powerpc host builds
  - Cross-gdb



- Much activity - Neil Williams is a star!
- Layout and package naming decided
- Tools written dpkg-cross apt-cross emchain emlocale emsetup emdebuild, empdebuild
- Now just about possible to build a distro
- More help very welcome



# Conclusions on Work Sessions

- Meeting seems disjoint and random
- Face-to-face very important for Debian
- Energised team
- Slightly longer meeting would be better (4 days, 1 cultural).
- Organisation, like this conference, was excellent
- Debian is very grateful for the support

