## AROS - AmiWest 2012

History and Development Update

#### History of AROS

- Development start in 1995 by Aaron Digulla
- Original development targeted a Unix hosted environment
  - DOS and Exec only no graphics
  - Goal was (and still is) AmigaOS 3.x source level compatibility
- By 2009, supported pc-i386 as its primary platform - a large number of 3rd party applications are available for AROS v0, for the pc-i386 platform

#### AROS v0 (Stable)

- pc-i386, with multiple distributions:
  - Icaros (http://vmwaros.blogspot.com)
  - Broadway (http://www.aros-broadway.de)
  - AROS Aspire (https://sites.google.com/site/arosaspireone/)
- pc-x86\_64 developers only
- What's new:
  - Printing support for PostScript printers
  - AHCI support (limited)
  - icon.library improvements
  - Stability improvements

## AROS v1 (Experimental)

- Improved pc support
  - APIC/ACPI
  - 3d graphics (Gallium) for NVidia, Intel, and AMD
- New hosted targets:
  - o linux-arm, android-arm, darwin-ppc, etc.
- New native targets
  - o m68k-amiga, ppc-sam460
- AROS Vision m68k Distribution
  - http://www.natami-news.de/html/aros\_vision. html
- Improved AmigaOS 3.x compatibility
  - Filesystems now use DOS Packets
  - Datastructures aligned to AmigaOS layouts
- Improved POSIX C runtime library

#### **AROS Open Development**

- Cross-compilation env. for Linux and OS
  X
- AROS builds its own cross-compilation environment - just download the sources and "./configure"
- Primary repository is in SVN, but many developers use GIT clones of the SVN tree:
  - http://gitorious.org/aros
  - http://repo.or.cz/w/AROS.git
- License derived from Mozilla Public Lic.

### Target: Raspberry Pl

- Target type is linux-arm
- Raspberry Pl is:
  - ARMv6
  - VFP floating point
  - 256M (512M now available)
  - Ethernet/SD/DVI/Composite/Audio/USB
  - o \$35!
- Linux provides input, video, and storage
- Everything else (scheduler, tasks, etc)is AROS

#### Target: Sam460ex

- Target type is sam440-ppc
- Sam460ex is:
  - AMCC ppc460 CPU
  - SM502 graphics/audio
  - USB/SD/PCI/PCIe x4/Ethernet
- All drivers are AROS native
  - SM502 video
  - ATA interface
  - USB 1.1
  - Ethernet
- Pre-release demo shown today

#### Target: FPGA Replay Arcade

- Target is amiga-m68k
- FPGA Replay Arcade is:
  - Amiga 1000 Amiga 1200 emulation
  - SD/DVI/Serial/Joystick/PS2 Mouse & Keyboard
  - Not yet in full production...
- Runs most AmigaOS 3.x applications and games
  - Including WHDLoad!
- AmigaOS 3.x ABI compatibility (95% there)

Optimization pooded (0010, for

# AROS - Kitty Doesn't Play Favorites

- If you have a system you want AROS on:
  - Sponsor a bounty at http://www. power2people.org
  - or.. Donate hardware to a willing developer
  - or.. Use the Source, Luke!
- We support ARM, PPC, m68k, i386, x86\_64

# **Any Questions?**

# Thanks for your time!