Linux for PlayStation® 2

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Background

- SCE is responsible for PlayStation®
- SCE Research and Development
- http://playstation2-linux.com
- Linux background
  - CSU, Chico
  - Sprint
  - VA Linux Systems
What are SCE’s goals for Linux?

- Expose developers to PlayStation®
- Investigate the uses of Linux on a game console
- Respond to consumer demand
- Allow game enthusiasts to create game content for the PlayStation® 2
Kit Contents

- Linux (for PlayStation® 2) software 1.0
- Monitor Cable Adaptor (for PlayStation® 2) (with Audio Connectors)
- Internal Hard Disk Drive (40GB) (for PlayStation® 2)
- Network Adaptor (Ethernet Only) (for PlayStation® 2) [10/100 Base-T]
- USB Keyboard (for PlayStation® 2)
- USB Mouse (for PlayStation® 2)
Additional Requirements

- PlayStation® 2 Computer Entertainment System
- Memory Card (8MB) (for PlayStation® 2)
- Sync-on-Green Monitor (recommended)
The Kernel

- 2.2.1 MIPS
- 2.2.18 USB
- Binary device driver modules
- xRhino and 2.2.19
The Distro

- **Kondara (Red Hat 5)**
  - Source-compatible
  - Not binary-compatible with x86 distros
- **Some updates from website**
  - Linux for PlayStation® 2 Community
  - CFYC
- **Pressed-disc updates unlikely**
- **Black Rhino (Debian/GNU)**
Hardware

- Emotion Engine
  - MIPS R5900
  - Vector Units
- Graphics Synthesizer
- I/O Processor*
- Sound Processing Unit*
- 32MB RAM

* Full hardware access not available.
Potential Uses

- Software Development
  - Games
  - Development tools
  - Productivity apps
- Home entertainment appliance
  - Digital music
  - Digital video
- Cluster applications
  - Scientific computing
  - Graphics processing
Licensing Issues

- DVD 1 – SCE Proprietary
  - Boot Loader
  - Runtime Environment
  - Hardware Manuals

- DVD 2 – GPL / Various
  - Linux for PlayStation® 2 software
Where can I get one?

- [http://us.playstation.com](http://us.playstation.com)
  - Purchase – Hardware
  - $199
Live Demos

- X11
- Mp3 jukebox
- Video for Linux
- Vector Unit Demo Competition