

# Improving nanoBSD

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# Improving NanoBSD

- Removing media dependency
- Improving NanoBSD image-update scripts
- Adding Ports compilation/installation
- Include multi architectures support
- NanoBSD example of uses

# Removing media dependency

- NanoBSD use hard-coded disk name (`/dev/ad0` as example) preventing to generate “universal” disk image:
  - An image that use `/dev/ad0` can't be used from an USB stick
- Proposed patch (available in current, 8.2R):
  - Using UFS label in `/etc/fstab`

# Improving image-update scripts

- NanoBSD uses 2 image-update scripts:
  - updatep1 (for updating non-active partition1)
  - updatep2 (for updating non-active partition 2)
- Improvement proposed (already used in BSD Router Project):
  - Merge both scripts in only one (with autodection of the non-active partition)
  - Adapt the script for using UFS label
  - Fixing boot0cfg problem that no more change the “active” state of partition (using gpart)

# Ports compilation/Installation

- NanoBSD permit to install software package only
- Proposed NanoBSD config file that compile/install ports during NanoBSD image generation (used in BSD Router Project and FreeNAS)
  - Supports only amd64/i386 cross-compilation
  - FreeBSD ports doesn't support cross-compilation

# Include multi architectures support

- Available for i386  $\Leftrightarrow$  amd64
  - Only some ports meet problems
- Without the ports support:
  - Should be possible to merge the existing ARM code (didn't have hardware for working on it)
  - Works in progress for sparc64 (used in BSD Router Project)

# NanoBSD examples of uses

- FreeNAS 8 from iXsystems (<http://freenas.org>)
- BSD Router Project (<http://bsdrrp.net>)
- pfSense embedded (<http://www.pfsense.org>)

# Thanks

- Gitoyen NanoBSD Quagga router for their «port installation» patch
  - <http://www.gitoyen.net/Howto-NanoBSD-quagga-router>
- pfSense for their recommendation of using glabel