Challenges
and future plans for Nexenta

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Agenda

...what is Nexenta...
...(technical) and other challenges...
...future plans...

What is Nexenta

Community driven project

OpenSolaris Core combined with
Ubuntu Linux Userland

dpkg/apt powered
OpenSolaris distribution

...which means that you get...

dtrace, mdb, zfs, pstack, zoneadm,
binary compatibility,
enterprise hardware support, ...

and

dpkg, apt-get, dpkg-buildpackage
tons of applications, **clean upgrade path**
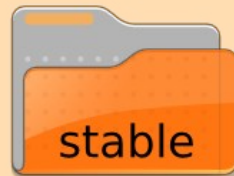build **processes**, transparent **QA**, ...

Nexenta structure

**Nexenta Repositories
follow the Ubuntu** structure.

Packages **originate**
in **Ubuntu** and Debian/GNU Linux.

Nexenta centric development
concentrates around **seamless
integration** of **OpenSolaris** (ONNV)
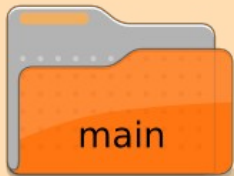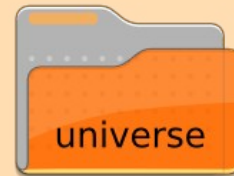and **Ubuntu** world.

http://apt.gnusolaris.org

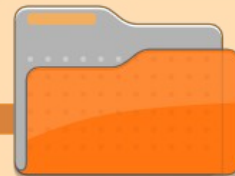**stable** **testing** **unstable**

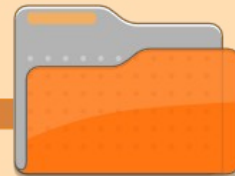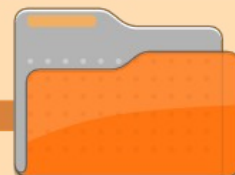**main** **restricted** **universe** **multiverse**

source

```
app-1.0.orig.tar.gz
app_1.0-1.diff.gz
app_1.0-1.dsc
```

binary-all

binary-solaris-i386

```
app_1.0-1.deb
app-doc_1.0-1.deb
```

Repository components

main contains
free and supported software

restricted contains
non-free but supported software

universe / **multiverse** contain
free / non-free and unsupported software

Upstream

foo-1.0.tar.gz

Debian/GNU

foo_1.0.orig.tar.gz
foo_1.0-1.diff.gz
foo_1.0-1.dsc

foo_1.0-1.deb
foo-dev_1.0-1.deb

Ubuntu

foo_1.0.orig.tar.gz
foo_1.0-1ubuntu1.diff.gz
foo_1.0-1ubuntu1.dsc

foo_1.0-1ubuntu1.deb
foo-dev_1ubuntu1.0-1.deb

Nexenta

foo_1.0.orig.tar.gz
foo_1.0-1nexenta1.diff.gz
foo_1.0-1nexenta1.dsc

foo_1.0-1nexenta1.deb
foo-dev_1.0-1nexenta1.deb

sources

binaries
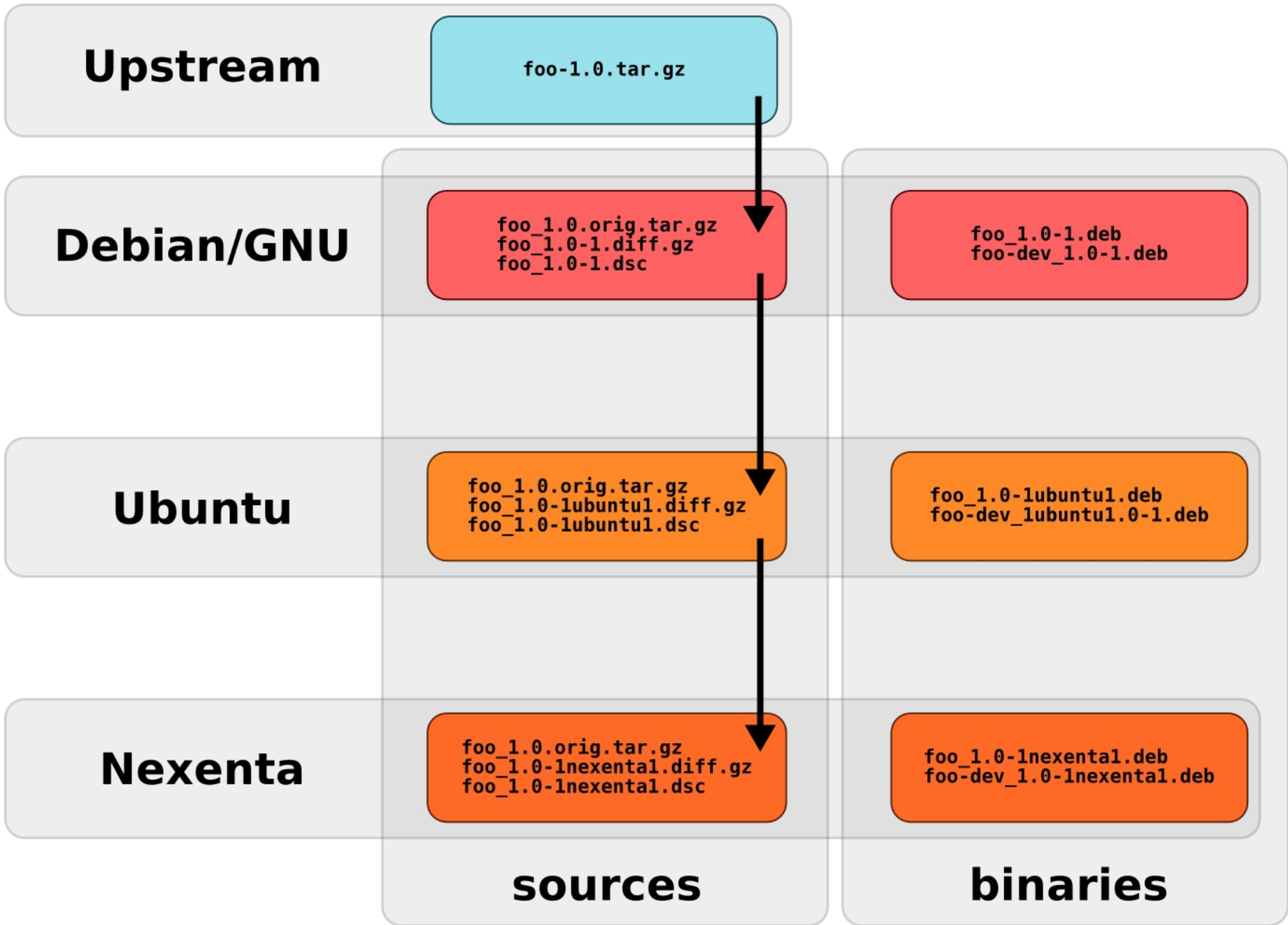
DEMO 1

What Personality do I have?

Challenge

Compatibility with OpenSolaris and Ubuntu

commandline compatibility
what is my **ps**, **ifconfig**, **ls**, **ed**, **awk**, ...
which package contains **grep**, ...
(how to adjust Build-Depends)
what **compiler/linker** should I use?

Challenge

The Toolchain

GNU (gcc, ld, as)
or
Sun (cc, ld, as)
or
even some other combination

Challenge

ONNV compilation

undocumented Build-Depends
not componentized, see also WOS
contains packages conflicting with Ubuntu
(hal, glib, ...)

(compare with XFree86 vs. Xorg)

Challenge

Setting the expectations correctly

are we still alpha?

Challenge

OpenSolaris community Debian/GNU community Ubuntu community

can they cooperate?

Challenge

Getting people involved

Need to understand OpenSolaris as well as Debian/GNU and Ubuntu (Linux).

OpenSolaris needs more **Murdocks**

DEMO 2

Rebuilding Ubuntu packages under **Nexenta** with **BrandZ** and **ZFS**

Plans for the near Future

Launching **http://nexenta.org**
(integration with launchpad.net, build
processes, documentation, ...)

Releasing **Nexenta Core Platform 1.0**
(having a stable platform, getting more
people involved, more packages)

Nexenta Core Platform 1.0

ZFS Root/Boot support

Zones integrated with **dpkg/apt-get**
BrandZ with preconfigured support for
Debian/GNU and **Ubuntu Linux**

Stable Toolchain

Server/Storage software support

Looking ahead

more **cooperation** with **opensolaris.org**

Nexenta as official
OpenSolaris port of **Debian/GNU**

Helping
to shape **launchpad.net**
to better **support Ubuntu clones**

Getting Involved

(coming soon)
http://nexenta.org
http://launchpad.net/nexenta

(for the time being)
http://www.gnusolaris.org

Questions and Answers

Thank you
for **your** time.