Testing packages by using local per-package mirror

This page describes a way to install packages for testing, using local mirror, without the need of updating the rest of the system.

Disclamers:

> ⓘ Assumption is that you install package(s) form the trusted source **publisher** (in **IPS** terminology '**repository**' is called a publisher). <u>Do not install packages form untrusted source or from third parties unless you accept the risks of installing third-party binary packages.</u>
> Prior installing and testing be advised to make a clone of your current working **Boot environment** (**BE**) using **beadm** command (beadm list, beadm create, beadm activate).
> Prior installing and testing be advised make a snapshot of your home directories (/export/home) and other zfs **datasets** (filesystems) using **zfs** command. (zfs list, zfs snapshot, zfs rollback).
> Prior installing and testing be informed that **solaris zones** in **Openindiana hipster** (**OI** hipster) are linked-images by default and that adding IPS publisher <u>requires</u> adding it in linked-image zones as well.
> It is requred that you have appropirate role priviledges for installing packages,using administrative account and commands like **pfexec** or **sudo**

As an example we will use public binaries working repository **oi-userland** of Openindiana hipster maintainer,developer and contributor **Alexander Pyhalov** (**alp**,**leoric**), that is considered trusted party since most of OI hipster changes comes through he's maintenance, testing, porting and packages building.

Go to http://buildzone.oi-build.r61.net:1000/ and search for package name you want to test
(or provided exact package **FMRI** name for testing, like web/browser/firefox@43.0.0.6-2015.0.2.0:20151125T064357Z , replace **newpackagename** with it).

See if package version differs from already installed package:

```
pkg list | grep newpackagename
```

Make new **local mirror** publisher, populate it with testing package(s) and start **pkg.depotd** for serving packages: (assuming <u>/export/home/share/oi-userland</u> for mirror files location; **pkgrecv -r** recursively mirrors required packages.

```
mkdir /export/home/share/oi-userland
pfexec beadm create hipster-backup

pkgrepo create /export/home/share/oi-userland
pkgrepo set -s /export/home/share/oi-userland/ publisher/prefix=userland
pkgrecv -s http://buildzone.oi-build.r61.net:1000/ -d /export/home/share/oi-userland -r newpackagename
pkgrepo refresh -p userland -s /export/home/share/oi-userland
/usr/lib/pkg.depotd -d /export/home/share/oi-userland -p 10000
```

And adding new publisher to global zone and other linked-image **zones** and install packages for testing: (assuming zone location in <u>/zones/build/zone1</u>)

```
pfexec pkg set-publisher -g http://localhost:10000 userland
pfexec pkg -R /zones/build/zone1/root/ set-publisher -g http://localhost:10000 userland

pfexec pkg uninstall entire userland-incorporation
pfexec pkg install newpackagename
```

To communicate testing results, use **#oi-dev** IRC channel on Freenode.net, **oi-dev** Openindiana mailing list and Openindiana issues bug database.