



SOLARIS PACKAGES

Jaromír Sedláček

Tech Lead

Software Integration & Gatekeeping



Why packages?

Solaris (SVr4) package in 5 steps

1. Set permissions & ownership

2. Create prototype

```
pkgproto opt >prototype
```

3. Create pkginfo file containing attributes

```
PKG, NAME, ARCH, VERSION, CATEGORY
```

4. Add pkginfo entry into prototype

```
echo "i pkginfo" >>prototype
```

5. Create package

```
pkgmk -d . -r . SEJAczosugA
```

See example pkg1/README for details.

What is in our simple package

Package information files

pkginfo(4)

pkgmap(4)

2 f seja seja/bin/cat 0755 root root 1037 10276 1179087845

Payload

reloc/

Install/Uninstall package

pkgadd(1M)

```
pkgadd -d . SEJAczosugA
```

if -d <device> is omitted spool directory (/var/spool/pkg) is searched
device as well can be an URL pointing to stream package

pkgrm(1M)

```
pkgrm SEJAczosugA
```

Install/Uninstall package

Solaris package database

`/var/sadm/install/contents`

- installed objects database

`/var/sadm/pkg`

- package metadata store
- pkgsave

`pspool` directory

- used for zones

Adding functionality ...

prototype(4)

2 f seja seja/bin/cat 0755 root root

- Include files
- Build/Run time variables

package information files

depend(4), compver(4), space(4), copyright(4)

procedure scripts

request, checkinstall, preinstall, postinstall

preremove, postremove

Class Action Scripts (CAS)

i.CAS

r.CAS

See example pkg2/README for details.

Unattended installation

admin(4)

`/var/sadm/install/admin/default`

pkgask(1M)

responses to request script

Sign your SVr4 package

pkgadm(1M)

manage certificates

pkgtrans(1M)

translate package format

```
$ touch SEJAczosugB.signed.pkg
```

```
$ pkgtrans -g . SEJAczosugB.signed.pkg SEJAczosugB
```

See example pkg2/cert/README for details.

Hints for package creation

- Request is the only place where interaction with administrator is allowed.
 `echo "PARAM=VALUE" >> $1`
- checkinstall is only place where safely abort installation
 `exit 3`
- checkinstall can set variables for other procedure scripts
 `echo "PARAM=VALUE" >> $1`
- When pkg contain class `<> none`
 `add CLASSES=none class class1 ... into pkginfo(4)`
 create i.class and r.class which **MUST** deliver/remove object
- Any 'e' type object should have a class other than 'none'
 pkgm will delete any 'e' type object even it is still shared by other packages
 if r.class is missing!

Hints for package creation

- Do not install/remove objects in {pre,post}{install,remove}
use `installf(1M)`, `removef(1M)` if you need so. Keep in mind that `pspool` will not be updated (affects creation of new zones)
- Any package should be relocatable
use `BASEDIR`, `PKG_INSTALL_ROOT`
- See Application Packaging Developer's guide
<http://docs.sun.com/app/docs/doc/817-0406>

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It is easy!!!



Q & A

Jaromír Sedláček

Jaromir.Sedlacek@sun.com