

Mock

A “chroot” system

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What is mock?

- chroot creation
 - uses defined list of rpms to preinstall
 - yum repo defines where to get rpms

mock details

- create skeleton root area
- populate with /proc , /sys ...
- install predefined set of rpms using a metadata package which just has alot of install dependencies
- if building src rpm
 - install all “build depends” of the srpm that is to be built
 - rpmbuild the src rpm

mock details

- configuration files in `/etc/mock`
- defines
 - yum repo(s)
 - destination directory
 - legal arch(s)
 - `config_opts['legal_host_arches'] = ('x86_64',)`
 - target arch
 - `config_opts['target_arch'] = 'x86_64'`

mock details

- How does the rpms to be installed by default work
 - `config_opts['chroot_setup_cmd'] = 'install buildsys-build'`
 - installs the “buildsys-build” rpm
 - The “buildsys-build” rpms has to be located in one of the yum repos defined
 - The “buildsys-build” has many install “requires”
 - These get installed

buildsys-build “requires”

```
rpm -qp --requires /mnt/src/5/buildtools/buildsys-  
build-0.7-2.el5.noarch.rpm
```

bash	gzip	unzip
buildsys-macros	make	which
bzip2	patch	
cpio	perl	
diffutils	rpm-build	
gcc	sed	
gcc-c++	tar	

mock config files

- /etc/mock config files provide by mock rpm
 - RHEL 5 , RHEL 6 - from epel
 - samples for epel
 - yum repo points to centos
 - samples for fedora

mock setup

- customize config file
 - copy example `/etc/mock/` config file as you own
 - modify as needed
- user/group (mock will not run as root)
 - add `<user>`
 - add `<user>` to “mock” group
- need ample disk space for `/var/lib/mock/`

mock example – build rpm

- `su – mockbuild`
- `mock -r <config file> --rebuild <src.rpm name>`
 - Real config file name is `/etc/mock/epel-6-x86_64.cfg`
 - `<config file>` is relative to `/etc/mock/`
 - no need for `.cfg`
- `mock -r epel-6-x86_64 --rebuild <src.rpm name>`

mock example – test

- `su – mockbuild`
- `mock -r epel-6-x86_64 --init`
 - populates chroot area
- `mock -r epel-6-x86_64 --install <rpm name>`
 - optionally install some more rpms from repo defined in epel-6-x86_64
- `mock -r epel-6-x86_64 --shell`
 - now in chroot

mock

- mock cleans the chroot area before “rebuild”
- `mock -r epel-6-x86_64 --no-clean --rebuild <src rpm>`
 - does not clean
- `--rebuild` is assumed if no command is given
 - `mock -r epel-6-x86_64 --rebuild <src.rpm>`
 - `mock -r epel-6-x86-64 <src.rpm>`

mock -- debugging

- chroots are in /var/lib/mock
- sub directory defined by “root” option in config
 - config_opts['root'] = 'epel-6-x86_64'
- buildroot.lock - file to prevent multiple users of this area
- result/
 - build.log - rpmbuild log
 - root.log - “mock –init” results
 - state.log - what states have we done
- root/
 - actual chroot area