

#####  
#####

#####  
#####

#####: 43126

##### © 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011,  
2012 #####

#####.

#####, #####, #####, #386, #486, #####, #####,  
### ###  
#####  
#####.

#####, #####64, ###  
#####,  
#####,  
#####.

### ##  
#####.  
#####,  
#####  
#####.

2013#11#07 ###

#####

1. #####	2
2. #####	4
3. ##### Chroot	4
4. #####	5
5. #####	7
6. #####	13
7. #####	13
8. #####	15
9. #####	17

10.	#####	#####	###	###	#####	#####	.....	17			
11.	<i>Upload</i>	###	#####	.....				18			
12.	#####	##	Patches	#####	.....			20			
13.	###	#####	##	###	##	#####	##	#####	23		
14.	###	#####	##	###	branch	##	#####	.....	33		
15.	###	#####	##	branch	###	#####	##	###	#####	34	
16.	###	#####	#####	#####	##	#####	#####	#####	##	#####	35
17.	###	#####	###	###	#####	.....					35
18.	###	#####	##	###	##	#####	(#####	##	#####)	.....	38
19.	#####	#####	#####	###	#####	##	#####	.....			40

```
### # ##### ## ##### ##### ##### # ##### #
##### # # #####, # ##### ## Ports # ##### # # #
#Clusters ## #####. ##### # ##### cluster ## # # http://
pointyhat.FreeBSD.org.

#### ##### ## ##### ## cluster
```



```
#####  ### #####  ##### #####  ## #####  #####
### #####  ## #####  ###  ##  # #####  ## #####  ##
Ports
```

```
# ##### # ## # #### # ### /var/portbuild. # ##### # ## # ##### # #####, ##### # ##### ###### # #####. # ${arch} ##### #### ##### # ## ##### (#64, 386™, #64, #, #64®, # ${branch} ##### branch (####) (7, 7###, 8, 8###, 9, 9###, 10, 10###).
```



```
### ## ##### ##### ## ##### 4, 5 ## 6, #
##### # #####
```

```
#####  
#####
```

```
## scripts ##  
## base/projects/portbuild/scripts/.
```

```
#####  
#####;  
#####:
```

- ##### -STABLE
- ##### -CURRENT
- #####

## 1.2. #####

```
## 2010, ## scripts ##### pointyhat ##  
##### (#####). ##### ## 2010, #####  
##### ## hosts #####. #####  
#####:
```

- ##### string pointyhat #####
- ##### (#####)
- ##### # hostname ##### buildid (#####)
- ##### ## scripts ##### # links
- #####, ##### scripts #####

```
#####  
##### scripts, #####  
##### novo código base: ##### antigo código base:.
```



####

```
#### ## 2010, # pointyhat #####  
# #####, ## # #####  
#####.
```

```
##### ##  
#####
```



####

```
#####  
#####  
#####
```

## 2. ##### ##

```
## ##### #386™ ##### # pointyhat, ##### # boot ##  
# ##### ## (## conectados); ##### ## (## desconectados) ##  
##### ## boot ## hostpxe. ##  
## boot #####
```

```
# cluster #####, ## rsync, ## ## (# ## ports  
# ##, bindist tarballs, scripts, ##.) ##  
##### ## portbuild #####  
nullfs ## chroot.
```

```
# ##### ports-$(arch) ##### ## ##(1) #####  
###. ## # sudo # portbuild.hostname.conf ##
```

```
# script scripts/allgohans #####  
$(arch).
```

```
# script scripts/checkmachines # #####  
## ## ports. ## script ##  
##### ## script ##  
(### ##, pointyhat) ## boot ## loop ## ##(1).
```

## 3. ##### ## Chroot

```
# ##### # ## chroot, ##### script  
portbuild ##### ${arch}/${branch}/builds/${buildid}/bindist.tar.
```

```
# ##### # build world # #####  
${branch}/builds/${buildid}/src/ # ##  
##### -nocvs #####
```

```
/var/portbuild# scripts/makeworld ${arch} ${branch} ${buildid} [-nocvs]
```

```
#####  
#####
```

```
# ##### bindist.tar # ##### # world, #####, ##### script  
mkbindist. ##### root #####:
```

```
/var/portbuild# scripts/mkbindist ${arch} ${branch} ${buildid}
```

```
## tarballs ## ##### ${arch}/clients.
```

```
# ##### bindist.tar # ##### # #####  
#####, # ## ##### ## script dopackages.
```

### 3.1. #####

```
#### #####, ## # ${buildid} ##### latest, ####  
####.
```

## 4. #####

```
(# ##### # ##### # ##### # #####.)
```

```
#### ##### # ##### # ##### # make.conf  
##/## src.conf, ##### # ${arch}/${branch}/builds/${buildid}/make.conf.server # ${arch}/${branch}/  
builds/${buildid}/src.conf.server, #####. #####, ## ##  
#####.
```

```
## #####, ## ##### # make.conf ## lado do cliente, ####  
#### # ${arch}/${branch}/builds/${buildid}/make.conf.client.
```



####

```
##### # ##### # ##### # ##### #  
### ##### make.conf, # ##### # ${arch}/${branch}/builds/${buildid}/  
make.conf.client ### adicionado ## make.conf, # #####,  
#### # ##### # ${arch}/${branch}/builds/${buildid}/make.conf.server.
```



####

```
### ##### # ##### # ##### # ${arch}/  
${branch}/builds/${buildid}/src.conf.client (# #####?).
```

```
##### 1. ##### ## make.conf.target #####
# #####
```

```
(##### ##, ## #####) #####, #####, #####)
```

```
RUBY_DEFAULT_VER= 1.9
```

```
##### 2. ##### ## make.conf.target #####
#####
```

```
(##### ##, ## #####) #####, #####, #####)
#####)
```

```
.if -!defined(CC) -|| ${CC} == -"cc"
CC=clang
.endif
.if -!defined(CXX) -|| ${CXX} == -"c++"
CXX=clang++
.endif
.if -!defined(CPP) -|| ${CPP} == -"cpp"
CPP=clang-cpp
.endif
# Don't die on warnings
NO_WERROR=
WERROR=
```

```
##### 3. ##### ## make.conf.server #####
```

```
WITH_PKGNG=yes
PKG_BIN=/usr/local/sbin/pkg
```



```
dopackages.7 ${arch} ${buildid} [-options]
```

```
#### # dopackages.wrapper #####, ## #### links #####. ###  
#####:
```

dopackages.wrapper *{arch}* *{branch}* *{buildid}* [-options]

```
##### latest ##### # buildid.
```

```
[-options] ##### ### ####, ### ## ####, ### ##### #####:
```

- 8



- -continue # ##### (## ##). ## Ports ##  
#####.
- -incremental # ##### ## ##### INDEX ## # #####,  
##### # ##### ## log ## ports ##### ## ##  
##### # #####. ## ## # #####  
ports ##### ## ##.
- -cdrom # # #####  
##### NO\_CDROM # ## disfiles ##### ##  
#####.
- -nobuild # ##### ## #####  
#####.
- -noindex # ## INDEX #####.
- -noduds # ## ##### duds (ports ## ##  
## ##, ##### IGNORE, NO\_PACKAGE, ##.) #####  
#####.
- -nochecksubdirs # ## ##### SUBDIRS ## ## ports ## ##  
#####. (##### ## ##).
- -trybroken # ##### ports ##### BROKEN (#####  
## clusters ##64/386™ #####  
#####  
##### clusters ##  
## ports ##### BROKEN).



```
### -trybroken, #####  
fetch-original (#, ## #####, -unlimited-errors).
```

- 9

- -portscvs # ### ##### # ##### ## ports # ##### ## snapshot ## ##, ## ## ##### ##  
# ##### ## ## cvs update.
- -norestr # ### ##### ##### ports ##### ## RESTRICTED.
- -nolistcheck # ### ##### ##### ## ports ##### ##### ## ## ##  
#####.
- -nodistfiles # ### ##### ## distfiles ### ##### ## make checksum ##### ## ##  
*upload* ##### # ftp-master.
- -fetch-original # ##### # distfile # ##### ## MASTER\_SITES #####, ## ## # ftp-master.
- -unlimited-errors (##### ## ## ## ##) # ##### # ##### ## ##  
## ##### ## ## #####. ##### ## ## ##  
##### ## ## -restart ## ## ## ## ##  
#####, ## ## ## ## -trybroken. # ## ## ## ##.

```
# ##### ## ## ## -restart, -continue, ## -finish, ## links ##### ## ##
##### ## ## ##. ##### #, # link ##### ## ## previous
##### ## ## ## ## ## ## ## link ##### ## ## previous; # #
##### ## ## ## ## ## ## ## ## ## link ## latest/.
```

```
## # ##### ##### ## ## ##, ## ## ## ## ##.
## ## ## ## ##, ## ## ## # ## ## -nocleanup, ## ## ## ## ##
##### ## ## ##:
```

```
build cleanup ${arch} ${branch} ${buildid} -full
```

```
## ##### errors/, logs/, packages/, # ##### ## ##, ## ## ## scripts. ## ##
## ## ## ##, ##### ## ## ## ports/distfiles/. ## ## ##
latest; ## # ## ## ## ## ## ##.
```



####

```
# dosetupnodes ##### # ##### ## script dopackages
## ## ## -restart, ## ## ## ## ## ##
##### # ##### ##### ## ## ## ##
# ##### ## #####. ##### dosetupnode ##
#### ## ## ## ## ## ## ## ##
#####. (#### # ## ##).
```

```
##### # # ##### ## ## ## # ##### ${arch} ## ##
##### ## ## ${arch} ## ## ## ## ## ## ##.
```





```
#####  
#####
```

---

path/qmanager/packagebuild amd64 7-exp 20080904212103 aclock-0.2.3\_2.tbz

## 6. #####

```
#####  
##### -no #####  
#####
```

1. ##### ports ##### snapshot ##### [#]
2. ##### branch ##### src ##### snapshot ##### [#]
3. ##### ports ##### SUBDIR ##### Makefile #####  
##### [#]
4. ##### duds, ##### ports ##### ##### [#] [+]
5. ##### INDEX ##### [#] [+]
6. ##### ##### ##### [#] [+]
7. ##### ports ##### [#] [+]
8. ##### (#### 1) [++]
9. ##### ##### [#] [+]
10. ##### (#### 2) [++]

```
[#] # ##### build.log, #####  
# stderr # tty # dopackages #####
```

```
[+] # #####
```

```
[++] # #####  
#####  
#####  
##### logs # ##### logs # ##### logs #  
${branch}/errors.
```

```
##### docs #####  
#####
```

## 7. #####

```
#####
```

1. #####.
2. # pointyhat #####.

#####

3. # qmanager ##### # #####

7.1. #####

```
# ##### # ## ##### # # ##### #  
#####. ##### # ty # # # # #  
##### (# # ##### # ##(1) ##### # # # # #,  
# # ##### ps x #####). #### # # # #  
#### # ##### ty, #### # # # # #  
##### ps, # # # # #, ps -t p1 ##### # # # # # # # 1. # # #  
##### # # # # #, #### # # # # # # # # # # # # # # pkil  
-t pts/1; # # # # # # kill -HUP, # # # # #, ps -t pts/1 -o pid= | xargs kill -HUP. # # # # #  
##### # p1 #### ty #####.
```

```
# ##### ## ##### ##### make #### ## ##### ##### ## ## #####
##### ##### ##### (##### ## ps x #### ## ##### #####).
```

```
## ##### ## ##### ## ###(1), ## ## ##### ##### ##### ## #####. ##
##### ## ##### dopackages ## ## ##### ## #####. ## ## ##
##### ## ##### pdispatch, ##### ## (## #####) ## #####
## ##### ## #####.
```

7.2. #####

```
#####  
##### build cleanup. ###
```

```
% /var/portbuild/scripts/build cleanup i386 8-exp 20080714120411 --full
```

```
## ##### # chroot# ## #####  
##### 24 #####, # #####  
##### # pointyhat #####.
```

```
##### , ##### # ##### cat ~/loads/* ##### # ##### ## #####  
#####; # ##### # # ##### ## ##### ## ## #####  
##### , # #### # #### # #### # #### # #### . loads # ##### #  
#### 2 #####. ## ##### ## ps x | grep pdspatch # ## #####  
## ## ## ## loads ##### ## ##. ##### ## #####.
```

```
##### amount #####.##
##### script allgohans ##### ##(1)##
#####:
#####:
```

```
ssh -l root gohan24 df
```

```
#### #### #### ## df, #
```

```
allgohans -"umount --f pointyhat.freebsd.org:/var/portbuild/i386/8-exp/ports"
```

```
#####  
#####
```

```
allgohans -"umount --f pointyhat.freebsd.org:/var/portbuild/i386/8-exp/src"
```

```
#####  
#####  
#####  
#####  
#####
```



```
####
```

```
##### # #####:
```

```
umount: pointyhat.freebsd.org:/var/portbuild/i386/8-exp/ports: statfs: No -  
such file or directory  
umount: pointyhat.freebsd.org:/var/portbuild/i386/8-exp/ports: unknown file -  
system  
umount: Cleanup of -/x/tmp/8-exp/chroot/53837/compat/linux/proc failed!  
/x/tmp/8-exp/chroot/53837/compat/linux/proc: not a file system root directory
```

```
## #####  
##### # #####; ## #####
```

```
#### ##### # proefs.
```

```
#### #####  
#####  
#####
```

```
## #####  
##### # duds, # INDEX, ## #####
```

### 7.3. ##### build

```
#### ##### build:
```

- build destroy arch branch # ##### id ## #####.
- build list arch branch # ##### # ##### ids ## #####.
- build upload arch branch # ##### # #####.

## 8. #####

```
#### ##### qclient #####  
#####
```

```
python path/qmanager/qclient jobs
```

```
python path/qmanager/qclient status
```

```
# ##### cat /var/portbuild/*/loads/* ##### # load ##### # #####
##### #####. ##### #####
##### ##### online; #####
##### offline.
```



```
# ##### pdispatch ### # ##### ## ##### ##### # #####, #
##### ##### ## ##### ##### # ##### ## #####
##### ## #####. # ptimeout.host ##### #####
# ##### ## ##### # # ##### ##### # #####
## timeouts. ##### #####, ## ##### ##### 50 ##### pdispatch,
### ##### 4 ##### ##(1), ##### ### 46 #####
pdispatch## ##### #####. ##### ## ## ##### #####.
```

```
## # ##### ## port #####, # # ##### ## ##### ##### # #####
## ##### ## log, #### ##### # WRKDIR #### ##### #####.
#### ##### ##, #### ## ##### ##### .keep ## ##### ## port, #### ##
#####. #####. # ##### # WRKDIR #### ${arch}/${branch}/wrkdirs.
```

[illegible]

```
#####  
#####  
#####  
#####
```

```
##### # ##### ## ##### ## ##(1). ## # ##### ## ##### ## /var/portbuild #####  
#####. ##### #####.
```

```
# ##### ## ##### # ##### #### ##### ### ##### # ##### ## http://  
pointyhat.FreeBSD.org/errorlogs/packagestats.html. ##### buildenv # ##### #: 
```

- cvs date ## ##### ## cvsdone. # ### ##### ##### ##### #####  
# cvsdone ##### ##### #####, -exp (#####).
- ##### ## ##### log (latest log)



- ##### ## ##### ## INDEX
- # ##### ##### ## logs ## ##### (build logs)
- # ##### ## ##### ##### (packages)
- # ##### ## ##### (errors)
- # ##### ## ports ##### (####) (##### ##### skipped)
- # ##### missing ##### # ##### ##### # INDEX # ## ##### #####. ## #####  
##### ## ##### ## ## cvs update, ##### ##### ##  
##### # ##### ## #####, # ##### ##### #####. (# script # #####).
- ## ##### ## ##### running # completed ### ##### ##### ## ## **###(1)** ##  
build.log.

```
##### ## port ##### # ### ##### ##### ##### ##### ##
##### ##, # ### ## ##### (BROKEN). #####
##### ## ##### ##, ##### ## #####.
```

```
##### ports #####  
##### distfiles # ~ftp/pub/  
FreeBSD/distfiles. #####  
#####  
#####  
#####.
```

```
#####  
##### ports # src ##### tag #####  
##### -nocvs # -noportcvs.
```

```
#### ##### ## ##### ## ##### ## ## #####, ### # ##### -
cdrom ##### dopackages.
```

```
## ## ##### ## ##### ## cluster, ## -nodistfiles ##### ## distfiles
#####.
```

```
#### ##### # #####, ##### # ##### ## -restart -fetch-original
#### ##### ## distfiles #####. #####, ### ## ## ##### ## ##
#####, ##### ## ##### ## ##### ## #####:
```

```
% cd ${arch}/${branch}
% find distfiles > distfiles-${release}
```

```
#### ##### ## ##### ## ##### ## i386/${branch} ## ##
##### ## cluster.
```

```
#### # ##### ## ##### ## distfiles ## ftp-master. ##### # #####
## ##### ## distfiles ## ##### ## ## ## ##, #####
##### ## ## ##.
```

```
### ## ## # upload ## distfiles ##### ## ## (### ##), # ##### ##
##### ## ##### ## ## ##. ## ## ##, #####
# script ${arch}/${branch}/cdrom.sh ##### ## ## ## ##
##### ## ## ## distfiles #####. #####, #####
# ##### ${arch}/${branch}/packages ##### ${arch}/${branch}/packages-${release}. ## ## ##
##### ## ## ##, ##### # #####
## ## ## ## release.
```

```
##### ## ##### ## # #####.### ##### # timing # # ##### ##
##### ## release.
```

## 11. Upload ### #####

```
### ## ## # ##### ## ##, ## ##### #/## distfiles ##### ##
##### ## ## ftp-master ##### ## ## ## ## ##. ##
# ##### ## ## ## -nofinish, ##### ## ##
## ##### dopackages-finish ##### ## ##
(##### ## RESTRICTED ## ## NO_CDROM ## ## ##,
##### ## ## INDEX, ##### ## INDEX ## ## ##
##### ## ##, # ## ## CHECKSUM.MD5); # ## distfiles (#####
## ##### distfiles/pbtmp ##### # ##### distfiles/ # ##### ## distfiles
##### ## RESTRICTED # NO_CDROM).
```

```
# ##### ## ## ## ## scripts restricted.sh #/## cdrom.sh ##### #
##### ## dopackages, ##### ## ##. ##### # script restricted.sh ##### ##
```

```
##### # upload ##### # ftp-master, ## #####, ##### cdrom.sh ##### ## ##### #
##### ## ##### ##### ## release.
```

- packages-7.2-release
- packages-7-stable
- packages-8-stable
- packages-9-stable
- packages-10-current



```
##### ##### ##### ## ftp-master ### ## ##### links
#####.### #####:
```

- #####  
## ##### *real*, # ## links #####  
### #####.

```
# cd -/var/portbuild/${arch}/${branch}
# tar cvf -- packages/- | ssh portmgr@ftp-master tar xfC -- w/ports/${arch}/tmp/${subdir}
```

```
##### upload ##### # rsync #####  
#####.
```

19

##### ## Patches #####

##### ## ##### rsync #### # *upload* ##### ## #####:

```
# rsync --n --r --v --l --t --p ---delete packages/ portmgr@ftp-master:w/ports/${arch}/${subdir}/ -| tee log
```

## distfiles ##### ## ##### script cpdistfiles:

```
# /var/portbuild/scripts/cpdistfiles ${arch} ${branch} ${buildid} [-yesreally] -| tee log2
```

# ##### ##### ##### # ## #####.

## 12. ##### ## Patches #####

##### ## patches ##### ## ##### ## ##### ##  
##### ## ##### ## ##### ## ##### ## ports (#### #,  
bsd.port.mk), ## ##### ##### ## #####. # #####  
##### patches ## branchs #####, #### # 8-exp ##  
##### ##64.

#####, # ##### ## patches ##### ## ##### ##  
##### #####, ##### ## ## ## ## ## ##  
## ports #### # ##### #, ## ##, ##### ## ## patches. #### ##  
#####, #### ## ## ## ##:

```
% cvs --R update --dP > update.out  
% date > cvsdone
```

#### # # ##### ## ## ## ## script dopackages ###. (##### # cvsdone ####  
#####, ## ## ## ##.)

#### ##### # update.out #### ##### ## ## ## ## ^M, ^C,  
## ^? ## ## ## ##.

# ##### ## ## ## ## ## ## ## ## ## ## ## ## ##  
#####, ## ## ## ## ## ## ## ## ## ## ## ## ##  
# ##### ## ## ## commit ##, ## ## ## ## ## ## ## ## ##  
commit ##### ## ## ##.

#### ## ## ## ## ## ## ## ## ## ## ## ## ## ##  
#####, ##### ## ## ## ## ## ## ## ## ## ## ## ## ##  
freefall. ## ## # tmp/; ## ## # pointyhat ##### ## ## ## ## ## -CURRENT,  
#### ## ## ## ## ## ## ## ## ## ## ## ## ## ##.

#### ## ## ## ## ## ## ## ## ## ## ## ## ## ##  
#####, ## ## ## ## ## ## ## ## ## ## ## ## ## ##  
## ## patches ##### ## ## ## ## ## ## ## ## ## ## ## ## ##  
#### # # 8). ##### ## ## ## ## ## ## ## ## ## ## ## ## ## ## patches #####,

```
#####  
#####
```

```
#### # checkout ## ##### ## ports # ## src ### # ##### ##### ## ## ## #####  
# ##### ## #####. #### ## ##### ## ##### #####  
#####
```

```
### ## ##### # #####, ##### ## ##### ## #####  
### ## ## ##### patches #####. #####, ## ##  
##### (##### # branch 8 #### branch ## #####, # # 8-exp #### branch  
#####):
```

```
% cd -/var/portbuild/i386/8-exp/errors  
% find -. --name \*.log\* -| sort > -/tmp/8-exp-errs  
% cd -/var/portbuild/i386/8/errors  
% find -. --name \*.log\* -| sort > -/tmp/8-errs
```



####

```
## ## ## ##### ##### ## # #####  
### #####, ## logs #####  
#####2. ##### sort | sed  
's,\bz2,,g' ## ##
```

```
% comm -3 -/tmp/8-errs -/tmp/8-exp-errs -| less
```

```
#### ##### ## ##### ## #####. # #####  
##### ## ports ## ##### ## #####, ## ##  
patches #####; # ## ## ## port #####  
#####
```

- # port ## ##### ## # ##### ## #####, ##  
##### (#####  
#####)
- # port ## ##### patches #####
- # port ## ## ##### ## patches #####  
##

```
##### # port #####
```

- # port ## ##### patches ##### [1]
- # port ## ##### ## ##### [2]
- # port ## ##### ## ## (#####  
##, #####)

##### ## Patches #####

```
##### ## ##### ## ## ##### ## ## ##### #####
##### ## commit ## ##### ## patches #####. ##### ## [1] #
# [2] #####, ##### ## ##### ## ## branch ## #####:
```

```
% cd -/var/portbuild/i386/ports
```



####

```
##### ## ##### ## ## ## cvs update #### #
##### ## ## ## patches #####.
```

```
# ##### ## ## ## branch ## ## ## ##
(##### ##):
```

```
% /var/portbuild/scripts/dopackages.8 --noportscvs --nobuild --nocvs --nofinish
```

```
## ##### ## ## ## packages/All. ####
##### ## ## ## ## link ##### ##
## ## link ##### ## ## ## ##:
```

```
% cd -/var/portbuild/i386/packages/All
```

```
% ln -sf -./../Makefile -.
```

```
% make --k --j<#> <list of packages to build>
```



####

```
# <#> # # ##### ## ##### ## ##
##### ## # # ## ## ## /var/portbuild/
i386/mlist, # ##### ## ## ## ##
##### ## ## ##.
```

```
# ##### ## ## ## ## ## ## ## ##
## ## (##### ## ##) ## ## INDEX. #
PKGSUFFIX (#### #, .### ## .###) # #####.
```

```
#### ## ##### ## ## ## ## ##
#####.
```

```
#### ## ##### ## ## ## ## ## ##
##### ## ## ##.
```

```
##### commit ##
#####. ##### commit, ## #####
#####.## #####.#####.###, #####
#####.## #####.## #####
#####.## #####.## #####
#####.## #####.## #####
##### /usr/ports/CHANGES.
```

##### ## ##### ##### #####, ### #####, ##### ## # portngr.

```
##### # ##### # ##### # #####, # portmgr ### #### ###
##### ### ##### # ##### #386™ ## amd64. ##
#####, ### ##### ##### ##### # ##### #
##### tier-2.
```

- ##### ## ###: ##### ##### ## 500### ##### ## # #####  
# ##### ## #####.

```
### ##### ## ##### # ##### ## ##### #####
### #####, # ## ##### ##### # #####
### ##### ## 100% ## ##.
```



- 13.2. #####

- 13.3. ##### # src

- 24



```
#####  
#####
```

2. ## ##### pxeboot: #####  
#####. ##### /pxeroot,  
##### /pxeroot/\${arch}-\${branch}. ##### DESTDIR.
3. ## #####  
##### (cross-building), ##### TARGET\_ARCH=\${arch}.



####

##### ports #####  
#####.

4. ##### kernel. ##### GENERIC (##, ##  
##### 3.5# ##### #386™, # PAE).

#####:

options	NULLFS
options	TMPFS

#####:

options	GEOM_CONCAT
options	GEOM_STRIPE
options	SHMMAXPGS=65536
options	SEMMNI=40
options	SEMMNS=240
options	SEMUME=40
options	SEMMNU=120
options	ALT_BREAK_TO_DEBUGGER

#### # PAE, #####  
#####  
#####:

options	COMPAT_LINUX
options	LINPROCFS

##### # PAE, # 12/09/2011 #####  
#####:

nooption	NFSD	# New Network Filesystem Server
options	NFSCCLIENT	# Network Filesystem Client
options	NFSSERVER	# Network Filesystem Server



```
#####  
#####
```

- ##### cluster:

```
cp -/usr/share/zoneinfo/Etc/UTC etc/localtime
```

- ##### etc/rc.conf #####. (##### pxeboot, #####  
#####  
#####)

```
#####:
```

```
hostname="${hostname}"  
inetd_enable="YES"  
linux_enable="YES"  
nfs_client_enable="YES"  
ntpd_enable="YES"  
ntpddate_enable="YES"  
ntpddate_flags="north-america.pool.ntp.org"  
sendmail_enable="NONE"  
sshd_enable="YES"  
sshd_program="/usr/local/sbin/sshd"  
  
gmond_enable="YES"  
squid_enable="YES"  
squid_chdir="/usr2/squid/logs"  
squid_pidfile="/usr2/squid/logs/squid.pid"
```

```
#####:
```

```
vmware_guest_vmmemctl_enable="YES"  
vmware_guest_guestsd_enable="YES"
```

```
#####:
```

```
hostname=""  
ifconfig_em0="DHCP"  
fsck_y_enable="YES"  
  
inetd_enable="YES"  
linux_enable="YES"  
nfs_client_enable="YES"  
sendmail_enable="NONE"  
sshd_enable="YES"  
sshd_program="/usr/local/sbin/sshd"  
  
gmond_enable="YES"  
squid_enable="YES"  
squid_chdir="/usr2/squid/logs"  
squid_pidfile="/usr2/squid/logs/squid.pid"
```

```
# #####(8) não #####
```



```
#####  
#####
```

---



####

```
# #####  
##### # #####  
##### # #####  
##### # #####  
##### # pxeboot #####.
```

#####:

- ##### # usr/local/etc/gmond.conf:

```
21,22c21,22  
< name = -"unspecified"  
< owner = -"unspecified"  
---  
> name = -"${arch} package build cluster"  
> owner = -"portmgr@FreeBSD.org"  
24c24  
< url = -"unspecified"  
---  
> url = -"http://pointyhat.freebsd.org"
```

```
## #####  
(##### = ##), #####  
##### (.71, .72, ##).
```

- ##### # usr/local/etc/rc.d/portbuild.sh, ##### # scratchdir:

```
#!/bin/sh  
#  
# Configure a package build system post-boot  
  
scratchdir=/usr2  
  
ln --sf ${scratchdir}/portbuild -/var/  
  
# Identify builds ready for use  
cd -/var/portbuild/${arch}  
for i in */builds/*; do  
    if [ -f ${i}/.ready - ]; then  
        mkdir -/tmp/.setup-${i##*/}  
    fi  
done  
  
# Flag that we are ready to accept jobs  
touch -/tmp/.boot_finished
```

##### ## #####

- ##### # usr/local/etc/squid/squid.conf:

```
288,290c288,290
< #auth_param basic children 5
< #auth_param basic realm Squid proxy-caching web server
< #auth_param basic credentialsttl 2 hours
---
> auth_param basic children 5
> auth_param basic realm Squid proxy-caching web server
> auth_param basic credentialsttl 2 hours
611a612
> acl localnet src 127.0.0.0/255.0.0.0
655a657
> http_access allow localnet
2007a2011
> maximum_object_size 400 MB
2828a2838
> negative_ttl 0 minutes
```

##### ##### # usr/local ##### usr2 ## cache\_dir, access\_log, cache\_log, cache\_store\_log,  
pid\_filename, netdb\_filename, coredump\_dir.

# #####, ##### # ##### ## ##### ## cache\_dir, ## ufs ##### aufs (#  
##### ## #####).

- ##### # ssh: ##### ## ##### ## /etc/ssh ##### /usr/local/etc/ssh # #####  
NoneEnabled yes ## sshd\_config.
- ##### # usr/local/etc/sudoers:

```
38a39,42
>
> # local changes for package building
> %wheel ALL=(ALL) ALL
> ports-${arch} ALL=(ALL) NOPASSWD: ALL
```

### 13.5. ##### ## #####

1. ##### ## ##### port/package ### ##### ##, ### ##, cd /usr2.
2. ##### ## ##:

```
mkdir portbuild
chown ports-${arch}:ports-${arch} portbuild
mkdir pkgbuild
chown ports-${arch}:ports-${arch} pkgbuild
mkdir squid
mkdir squid/cache
mkdir squid/logs
chown --R squid:squid squid
```

```
#####  
#####
```

3. ## ## ##### # ##### ## /var/portbuild ##### ## #####  
#####, ##### ## ##### ##### # /tmp ## #####  
##### ## ##### ## ##### ## (### # script ##  
##### amd64). ##### ## chroots ##### ##  
##### ## ## # /tmp/boot\_finished.
4. ##### # #####.
5. #####, ##### # ##### ## squid:

```
squid --z
```

### 13.6. ##### ## pointyhat

```
##### ##### ## portmgr, ##### # ##### ports-  
${arch}, ## pointyhat.
```

1. ## ##### ## ##### ## ##### (#####), ##  
##### ## ## ssh ##### # ##### ## cronab.
2. ##### ## ## /home/ports-\${arch}/.ssh/config ##### #  
## ##, # ## ## # ssh, # ##, # #####  
#####.
3. ##### # /var/portbuild/\${arch}/clients/bindist-\${hostname}.tar.
  - ##### ## ##### ## ##### ## ## ##  
## ## #####.
  - ##### # etc/resolv.conf ##### # site #####.
  - ##### # etc/make.conf ##### # ##### ## ## ##. ####: #  
##### ## ##### MASTER\_SITE\_BACKUP ##### ## ## ##,  
## # ##### ## MASTER\_SITE\_OVERRIDE ##### ## ## ##  
#####. ## ##:

```
.if defined(FETCH_ORIGINAL)  
MASTER_SITE_BACKUP=  
.else  
MASTER_SITE_OVERRIDE=\  
ftp://friendly-local-ftp-mirror/pub/FreeBSD/ports/distfiles/${DIST_SUBDIR}/\  
ftp://${BACKUP_FTP_SITE}/pub/FreeBSD/distfiles/${DIST_SUBDIR}/  
.endif
```

- ##### ## tar # ##### # #####.

##### # ##

####: ##### ## ## ##### ##### #####; ## #####, ## #### ##  
##### ## ##### ##, ##### ##### ## ##### #####  
site (### #####, ## /var/portbuild/conf/clients/) # ##### ## link ##### ##### ##.

4. ##### # /var/portbuild/\${arch}/portbuild-\${hostname} ##### ## ## #####  
#####. # ##### ##### ##### ##### ## ##### ## /var/portbuild/  
\${arch}/portbuild.conf.

##### ## #####:

```
disconnected=1
http_proxy="http://localhost:3128/"
squid_dir=/usr2/squid
scratchdir=/usr2/pkgbuild
client_user=ports-${arch}
sudo_cmd="sudo --H"
rsync_gzip=-z

infoseek_host=localhost
infoseek_port=${tunnelled-tcp-port}
```

##### #####:

```
use_md_swap=1
md_size=9g
use_zfs=1
scp_cmd="/usr/local/bin/scp"
ssh_cmd="/usr/local/bin/ssh"
```

## ##### ##### ##### ## ##### ## portmgr ##### ## root ##  
pointyhat.

1. ##### # ##### ## ##### ## /etc/hosts.allow. (#####, #####  
##### ## ## # ##### ##### ##.)
2. ##### ## ##### data\_source ##### /usr/local/etc/gmetad.conf:

data\_source "arch/location Package Build Cluster" 30 hostname

#### ##### ## # gmetad.

### 13.7. ##### # ##

##### ##### ##### ##### ## portmgr ##### ## ports-arch ##  
pointyhat.

1. ##### ## # ssh ##### ##### ssh hostname.



```
#####  
#####
```

```
2. #####  
/var/portbuild/scripts/ #####  
dosetupnode arch major latest hostname. #####  
#####.
```

```
3. ##### telnet hostname portnumber. ##### 414 (#####  
#####) ##### arch  
# osversion; # ##### 8649 ##### XML ## ganglia.
```

```
##### portmgr ##### root ## pointyhat.
```

- ##### # qmanager ##### # ##. ### #####:

```
python path/qmanager/qclient add name=uniquename arch=arch osversion=osversion numcpus=number  
haszfs=0 online=1 domain=domain primarypool=package pools="package all" maxjobs=1 acl="ports-  
arch,deny_all"
```

## 14. ##### branch ## #####

```
##### branch # #####, # #####  
##### branch ##### HEAD. ##  
##### branch anterior:
```

- (#####) ##### # /var/portbuild/conf/server.conf #####
  - ##### *new-branch* ## SRC\_BRANCHES.
  - ##### # branch ## head, ##### # SRC\_BRANCH\_*branch*\_TAG #####  
RELENG\_*branch*\_0.
  - ##### SRC\_BRANCH\_*new-branch*\_TAG=. (#####).
- (#####) ##### # /var/portbuild/updatesnap #####.
- (#####) #####  
## #####:

```
zfs create a/snap/src-branch
```

- (#####): #####  
##### src #####

```
cvs -Rq --d -/r/ncvs co --d src-branch-r RELENG_branch
```

- (#####): ##### Tools/  
portbuild/portbuild.conf.
- (#####): #####  
##### # /var/portbuild/arch/portbuild.conf.

```
##### ## branch ### ##### ## ###
##### #####
```

- (##### ##### # ##### ##### ##): ##### # /var/portbuild/scripts/buildenv.
- (##### ##### # ##### ##### ##): ##### ## link ##### ##  
# /var/portbuild/scripts/dopackages ##### /var/portbuild/scripts/dopackages.branch.
- (##### ##### # ##### ##### ##): ##### ## #####  
HEAD\_BRANCH # NON\_HEAD\_BRANCHES ## ##### /var/portbuild/scripts/updatesnap.
- (##### ##### # ##### ##### ##): ##### # ##### snap ##  
##### /var/portbuild/scripts/zexpire.
- (##### ##### # ##### ##### ##): ##### ## links ##### ##  
## ##### ## ## ##### /var/portbuild/errorlogs/;

```
ln -s ../arch/branch/builds/latest/bak/errors arch-branch-full
ln -s ../arch/branch/builds/latest/bak/logs arch-branch-full-logs
ln -s ../arch/branch/builds/latest/errors arch-branch-latest
ln -s ../arch/branch/builds/latest/logs arch-branch-latest-logs
ln -s ../arch/branch/builds/latest/bak/packages arch-branch-packages-full
ln -s ../arch/branch/builds/latest/packages arch-branch-packages-latest
```

- ##### # ##### # branch #####:

build create *arch branch*

- ##### # bindist.tar.

```
15. ##### ## branch ### ##### ## ## #####
#####
```

```
##### ## branch ##### ##### ## #####, ##### ##### # #####
##### ##### ##### ##### #####.
```

- (#### #####) ##### # /var/portbuild/conf/server.conf # #### ## ##### #####:
  - ##### # *old-branch* ## ##### SRC\_BRANCHES.
  - ##### # SRC\_BRANCH\_*old-branch*\_TAG =whatever
- (#### # ##### #####): umount a/snap/src-old-branch/src; umount a/snap/src-old-branch; zfs destroy -r a/snap/src-old-branch
- (#### # ##### #####) ##### ##### ## #####  
##### # links ##### # /var/portbuild/errorlogs/ # ##### ## #####:
  - ##### \*old\_branch-failure.html
  - ##### buildlogs \*\_old\_branch-\*logs.txt

#####  
#####

- Links ##### \*-old\_branch-previous\*
- Links ##### \*-old\_branch-latest\*

## 16. ##### #####

##### 2011 # #####  
##### *na versão mais antiga suportada* ## branch. ## #####: ## # RELENG-8  
## #####: 8.1, 8.2, 8.3; ##### # packages-8-stable #####  
##### 8.1.

##### (End-Of-Life, ##### # [#####](#)), ##  
##### (#####!) #####  
#####.

#####:

- ##### # /var/portbuild/conf/server.conf # #####:
  - ##### # SRC\_BRANCH\_branch\_TAG ##### RELENG\_branch\_N ## # N # #####  
#####.
  - ##### # /var/portbuild/updatesnap #####.
  - ##### # dopackages ## # ##### -nobuild.
  - ##### # [#####](#).
  - ##### # dopackages ## # ##### -nobuild.
- #####

## 17. #####



####

## #####

- ##### # ##### ports-arch.
- `mkdir -/var/portbuild/arch`

#### #####

- #### ## ##### ## ##### ##:

```
zfs create --o mountpoint=/a/portbuild/arch a/portbuild/arch
```

- chown ports-arch:portmgr -/var/portbuild/arch;  
chmod 755 -/var/portbuild/arch;  
cd -/var/portbuild/arch

- #### # ##### # ##### .ssh.

- #### ## ##### ## logs ## ##### # #### ## logs ## #####:

```
mkdir -/dumpster/pointyhat/arch/archive
```



####

```
# ##### ## /dumpster/pointyhat ## ##### #####  
#####. ##### ##, ##### # ##### ##  
/dumpster/pointyhat/arch/archive # #### ## link ##### ##.  
(##### ##.)
```

- #### ## link #### # ##### ## ## ## ##:

```
ln --s -/dumpster/pointyhat/arch/archive archive
```



####

```
## ##### ## ## ## ## ##  
# ##### ports-arch.
```

- ## ##### /var/portbuild/arch #####:

```
mkdir clients
```

- ##### # ##### clients #### ## #####.

- mkdir loads


- mkdir lockfiles

- #### ## make.conf #####. ## ##### ## ## ##:

```
ln -../make.conf -./make.conf
```

- ```
cc pnohang.c -o pnohang-arch
```

- ```
mkdir -/var/portbuild/conf/arch
```

- |   |                                 |
|---|---------------------------------|
|  | ####<br><br>#### ## ## #### ##: |
|---|---------------------------------|

- ```
python path/qmanager/qclient add_acl name=ports-arch uidlist=ports-arch gidlist=portmgr sense=1
```

- ```
ln -s ../arch/branch/builds/latest/bak/errors arch-branch-full
```

```
#### ##### ## ## ##  
(##### ## #####)
```

```
In --s ../arch/branch/builds/latest/bak/logs arch-branch-full-logs  
In --s ../arch/branch/builds/latest/errors arch-branch-latest  
In --s ../arch/branch/builds/latest/logs arch-branch-latest-logs  
In --s ../arch/branch/builds/latest/bak/packages arch-branch-packages-full  
In --s ../arch/branch/builds/latest/packages arch-branch-packages-latest
```

- ##### links ##### # ##### ## ##### /var/  
portbuild/errorlogs/:

```
In --s ../arch/archive/buildlogs arch-buildlogs  
In --s ../arch/archive/errorlogs arch-errorlogs
```



####

##### ports-arch:

- ##### branch ## ## ##, ## # #####:
- ##### # ##### # branch ##:

```
build create arch branch
```

- ##### # bindist.tar.



####

### ##### # ##### # #####:

- (##### ## ## # ##### ##): ## ##### ## # #####  
##### ## ##### ## ## ## # #####: ##### # #####  
## /var/portbuild/scripts/dopackagestats.
- ##### ## ##### arch ##### # /var/portbuild/scripts/dologs ## crontab ##  
##### ##. (### # ## #####)

18. ##### ## ## ## (#####  
## #####)

#####.

### ##, ##### # ## ##### ## #####.

```
#####  
#####
```

---

### 18.1. #####

1. #####.
2. #####, ##### # ##### ports-\$(arch).  
##### wheel. ##### 's\*' #####. #####  
#####, # ##### ports # portmgr.
3. #####, ##### # /home/ports-\$(arch)/.ssh/ # ##### #  
authorized\_keys.
4. ##### # /etc/.ssh/.
5. ##### # ##### # /boot/loader.conf:  

```
console="vidconsole,comconsole"
```
6. ##### # ##### # /etc/sysctl.conf:  

```
kern.maxfiles=40000  
kern.maxfilesperproc=38000
```
7. ##### # ##### # /etc/ttys:  

```
ttyu0  -"/usr/libexec/getty std.9600"  vt100  on secure
```
8. #####.

### 18.2. #####

1. ##### a # ##### /a:  

```
# zpool create a mirror da1 da2 mirror da3 da4 mirror da5 da6 mirror da7 da8
```
2. ##### portbuild:  

```
# mkdir -p -/a/portbuild  
# cd -/a/portbuild  
# chown portmgr:portmgr -.  
# chmod 775 -.
```
3. #####.

### 18.3. ##### src

- #####.

### 18.4. ##### ports

1. ##### ports (#####) #####:  

```
databases/py-pysqlite23
```

#####

```
databases/py-sqlalchemy
devel/git (WITH_SVN)
devel/py-configobj
devel/py-setuptools
devel/subversion
net/nc
net/rsync
sysutils/ganglia-monitor-core (with GMETAD off)
sysutils/ganglia-webfrontend (WITHOUT_X11)
www/apache22 (with EXT_FILTER and THREADS)
```

## ##### ##### ##### #####:

```
databases/sqlite3
lang/perl-5.12
lang/python27
```

## ##### ports (## ##### #####) ## #####  
#####:

```
benchmarks/bonnie++
devel/ccache
mail/postfix
net/isc-dhcp41-server
ports-mgmt/pkg_cutleaves
ports-mgmt/pkg_tree
ports-mgmt/portaudit
ports-mgmt/portmaster
security/sudo
shells/bash
shells/zsh
sysutils/screen
sysutils/smartmontools
```

2. ##### # ##### ##### # #####: (##### # ### #####).

18.5. #####

- ##### # ### #####.

19. ##### ##### ##### ##### ## #####

##### ## ##### ## ## ##### ## ##### (### #####, ## panic ##### # ##### ##  
#####, ##.), ##### ##### ## ##### #####:

- ##### # ##### # # ##### ## ##### (### #####, ##### ##### ## ##### ## ##  
#####) ## /var/portbuild/\${arch}/reboots
- ##### ## ##### ##### #386, ##### # ##### ##### # ##### /SCRUB ## nfsroot (##  
#####, /a/nfs/8.dir1/SCRUB) # #####. ##### ## ##### ## dd if=/dev/zero of=/dev/ad0 #



##### # ##### # ##### ##### ## ##### ##### ##### #, ####  
## ## ##### ##### ##### #####. #### # ## ##### #####  
#### ##### # ##### ## #### # #### ##### ## ##### ## ## ##### ##  
## #####.



####

```
##### blade #386, #####  
# ##### # blade ##### # #####  
##### ##, #####.
```

```
##### ## ##### ##### ## ##### ## ## ##### ## ##### ## #####
##### ## ##### ## ##### (## #####, ## ##### ##64) #####
##### ## ## #####.
```

- `## # #####, ##### # #####. #####  
# ##### # mlist # (#### #) ##### # smartctl ## #####:`

```
smartctl --t long -/dev/ad0
```

#### ### ##### ##### ## 30 #####:

```
gohan51# smartctl --t long -/dev/ad0
smartctl version 5.38 [i386-portbld-freebsd8.0] Copyright (C) 2002-8
Bruce Allen
Home page is http://smartmontools.sourceforge.net/
```

## START OF OFFLINE IMMEDIATE AND SELF-TEST SECTION

Sending command: -"Execute SMART Extended self-test routine immediately in off-line mode".  
Drive command -"Execute SMART Extended self-test routine immediately in off-line mode" -  
successful.

Testing has begun.

Please wait 31 minutes for test to complete.

Test will complete after Fri Jul 4 03:59:56 2008

Use `smartctl --X` to abort test.

```
##### # ##### ##### #####, ##### # ##### smartctl -a /dev/ad0 ####
##### # ##### ## #####:
```

```
# SMART Self-test log structure revision number 1
# Num Test_Description      Status              Remaining
LifeTime(hours) LBA_of_first_error
# 1 Extended offline    Completed: read failure     80%   15252   319286
```

```

##### ##### ##
#####
### ##### #####, ##### ## log ### ##### ##### ##
#####. # ##### # ##### ##### ## ## ##### ## #####
##### ## ##### (### ##### ## #####).

##### ## #####, ### #####, ##### ## ##### ## cluster, ### ##
#####.

```