

#####

<murray@FreeBSD.org>
#####: 43126

#####.

#. #####.

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

#####.

#####, ##### #

#####.

2013#11#07 #####.

#####

#####

#####

1. #####	2
2. #####	3
3. #####	9
4. #####	12
5. #####	13
6. #####, ##### 4.4	14
7. #####	15
8. #####	15

[1], ##
(#) #####
, #####

, #
, #
,
300
[5]
[6]

```
##### # ##### #####, ##### ## ##### ##,
#####, #####. ## ##### # ##### #
##### # ##### ## #####[2] ## ##### ## ##. #####
#####[7] ##### ##### ## ##, #####
## ## #. ##### #####, ##
##### # #####. ##### #####, ##
##### #####. # ##
##### #####. # ## #####
#, #####, ##
#####.
#####.
```

```
# #####
#####, #####
#####, #####
##### ftp://ftp.freebsd.org/pub/FreeBSD/snapshots/. #####
#####, # #####
##### # #make world#[7] #####
#####, ##
#####. #####.
```

2

- #####.
- #####.
- #####, #####.
- ##### # #####, ####, ###, #####, ##—##### ## #####.
- #####, ##### ##### #####, # #####.

15 #####

#####, ####

#####

#####.

```
##### ###, ## ## ##### ##### ##### #####-#####
##### # ## ##### ##### #####, ##### #####
##### #####.
```

```
##### # ##### #, ##### RELENG_X_Y ##### #-
##### # ##### #. ##### # ##### #
##### #, ## # ##### # ##### #-
### ##### RELENG_X, ## ##### #.
```

```
/usr/src# cvs rtag --b --rRELENG_4_8_BP RELENG_4_8 src
```

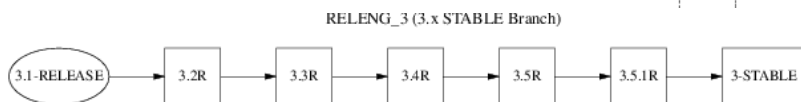
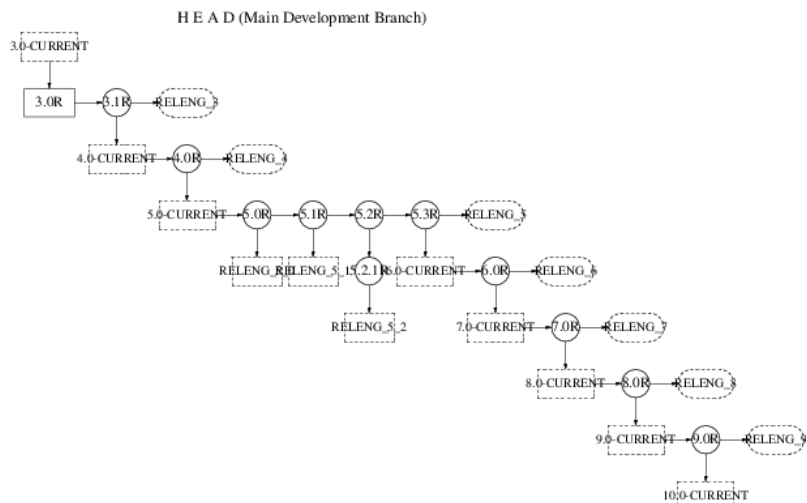
#####



#####

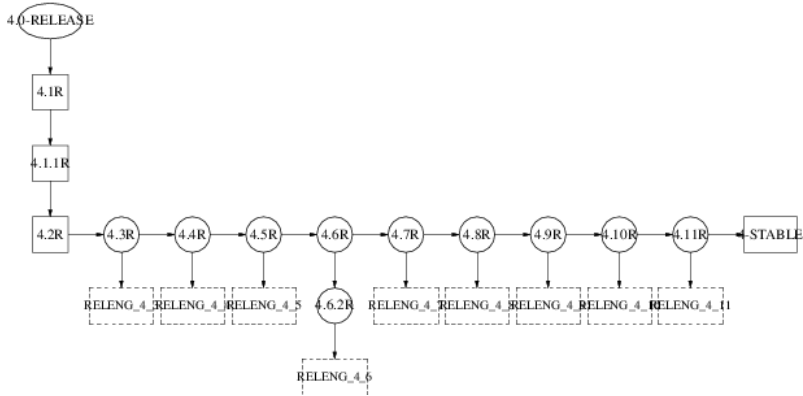
RELENG_* #####
CVS # #####

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

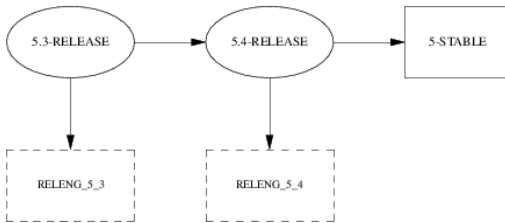


#####

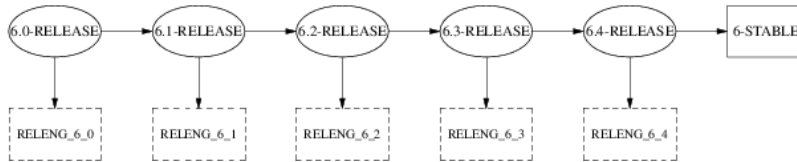
RELENG_4 (4.x STABLE Branch)



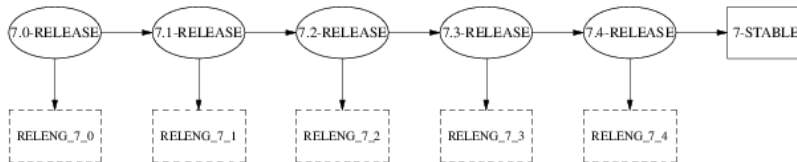
RELENG_5 (5.x STABLE Branch)



RELENG_6 (6.x STABLE Branch)



RELENG_7 (7.x STABLE Branch)

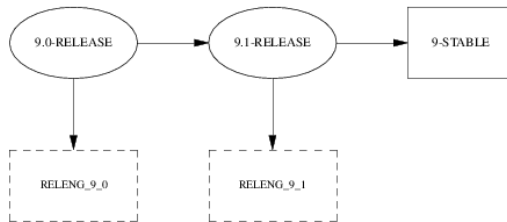


RELENG_8 (8.x STABLE Branch)



#####

RELENG_9 (9.x STABLE Branch)



2.2.2.

#####

- doc/ru_RU.KOI8-R/books/handbook/mirrors/chapter.xml
- doc/en_US.ISO8859-1/books/porters-handbook/book.xml
- doc/share/xml/freebsd.ent
- src/Makefile.inc1
- src/UPDATING
- src/gnu/usr.bin/groff/tmac/mdoc.local
- src/release/Makefile
- src/release/doc/en_US.ISO8859-1/share/xml/release.dsl
- src/release/doc/share/examples/Makefile.relnotesng
- src/release/doc/share/xml/release.ent
- src/share/examples/cvsup/standard-supfile
- src/sys/conf/newvers.sh
- src/sys/sys/param.h
- src/usr.sbin/pkg_install/add/main.c
- www/en/docs/man.xml
- www/en/cgi/ports.cgi
- ports/Tools/scripts/release/config

```
#####  
# ##### (# ####), # #####  
# #####/#####):
```

- ```

#####, ##### ## [4]. ## ##-
src/usr.sbin/sysinstall/dist.c.
```

- [doc/share/images/articles/releng/branches-relengX.pic](#)
- [www/share/xml/advisories.xml](#)
- [www/share/xml/includes.release.xml](#)
- [www/share/xml/includes.release.xsl](#)
- [www/en/releases/\\*](#)
- [www/en/releng/index.xml](#)
- [www/en/news/news.xml](#)
- [www/en/search/web.atoz](#)
- [src/share/misc/bsd-family-tree](#)

```

RELENG_6 #####

#####
```

- 2.2.4. #####

```
/usr/src# cvs rtag --rRELENG 4 8 RELENG 4 8 0 RELEASE src
```

8

#####

---

##### # #####, ## ##### ##### ##### #####—  
#####. ## ##### ## # #####, ## ##  
##### # ##### # ##### cvs tag -d tagname filename. #####  
#####, ##### ## ##### ##### #####  
#####. ##### ##### #####. #####—  
##### # #####.

### 3. #####

##### ##### ##### #####, #####—  
##### # ##### # #####. (## #####, ##  
## # ##### # !!! ##### #—  
#####.) #####  
##(4). ##### # #####, # #####  
#####(8) # #####  
#####. ##, ##—  
##### # ##### src/release. ##—  
#####. #####  
## # #####, #####  
##### # #####, #####  
##### # #####: make release.

#### 3.1. make release

##### /usr/obj, ##—  
##### make world ## make buildworld. ##, ##—  
#####  
#####:

- CHROOTDIR # #####, ##### # ##### #—  
#####.
- BUILDNAME # #####.
- CVSROOT # #####.
- RELEASETAG # ## ##, #####, ##### # #####.

##### # #####, ## # #####—  
##### # #####. /usr/share/examples/cvsup/cvs-  
supfile, #####

##### RELEASETAG #, ## # ##### HEAD (#####  
#####). #####, ##### # #####

```
make release CHROOTDIR=/local3/release \
BUILDNAME=4.7-RELEASE \
CVSROOT=/host/cvs/usr/home/ncvs \
RELEASETAG=RELENG_4_7_0_RELEASE
```

[illegible]

10

#####



#####

```
#####, ##### ## ##### /etc/make.conf ##### #####-
##, ##### #####. # #####, #####
#####, ##### ##-
CPUTYPE, ##### ##-
####.
```

### 3.2. ##### (#####)

##### 24,000 #####  
#####, #####. ##  
#####, #####-  
#### #  
##### <[portmgr@FreeBSD.org](mailto:portmgr@FreeBSD.org)>.

```
#####-
#####. ####-
#,
```

### 3.3. ##

```
4.4, #####-
##, ##### BSDi/Wind River Systems/FreeBSD Mall
##-
README.TXT, #####, #### CDROM.INF,
(8) ##-
#####, # filename.txt,
##.
```

```
/stage/cdrom# find -s -type f -exec sed -e 's/^|/|/' -exec sort > filename.txt
```

#####.

#### 3.3.1. ## 1

```
make release.
#####, ##### disc1, #####-
tools, #####-
tools ##-
##-
##,
```

#####

#### # #####  
#####(8) # #####(7), ##### # ##  
##### # src/release # src/usr.sbin/sysinstall. # src/usr.sbin/  
sysinstall ##### src/release/Makefile, dist.c, dist.h, menus.c, install.c #  
Makefile. ##### sysinstall.8.

### 3.3.2. #### 2

##### # ##### make release. ##  
#####(8) ##  
#####  
##### CVSROOT #  
##### commerce.

### 3.3.3. ##### 3 # 4

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

### 3.3.4. #####

#####  
##### INDEX, #####  
#####  
#####  
#####  
#####  
#####  
#####

## 4. #####

### 4.1. #####

#####  
#####  
#####  
##### ftp-master. #####  
##### ftp-master #####

/pub/FreeBSD/releases/arch/X.Y-RELEASE/

##### make release.

#####

---

/pub/FreeBSD/ports/arch/packages-X.Y-release/  
#####

/pub/FreeBSD/releases/arch/X.Y-RELEASE/tools  
#####

/pub/FreeBSD/releases/arch/X.Y-RELEASE/packages  
#####

/pub/FreeBSD/releases/arch/ISO-IMAGES/X.Y/X.Y-RELEASE-arch-\*.iso  
#####. ##### disc1, disc2 # #####. ##### disc1 #  
##### (######, #####  
#####), ## ##### # mini.

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

##### # ##### #, ## ftp-master,  
# # ##### 1## #####  
#####, # #####, # #####. #####  
#####, #####  
## #####  
## ##### #. #####  
# ##### # 24 # 48 #  
#####  
#####  
#####. # #####  
#####  
#####  
#####  
#####

#### 4.2. #####

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

### 5. #####

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





#####

##### 4.4, # ##### ## ### #####, #####  
#####, ##### ## #####. #####, ##### ## ## ##—  
### ## ##, ##### <asami@FreeBSD.org>, #####  
##### <steve@FreeBSD.org>, ##### #. ### <bmah@FreeBSD.org>, ##### <nik@FreeBSD.org>,  
##### <obrien@FreeBSD.org>, ##### <kris@FreeBSD.org>, #####  
<jhb@FreeBSD.org> # #####. # #####  
##### <rgrimes@FreeBSD.org> # #####  
<phk@FreeBSD.org>, # #####, ##### ##—  
#####. ### #####  
##### [13], ##### [10]  
# ##### (#####) ## #####  
##### [11].

## 9. #####

- [1] ### # ##### <http://www.cvshome.org>
- [2] ##### # ##### <http://www.polstra.com/projects/freeware/CVSup>
- [3] <http://pointyhat.FreeBSD.org>
- [4] ##### <http://www.FreeBSD.org/ports>
- [5] ##### [http://www.FreeBSD.org/doc/en\\_US.ISO8859-1/articles/contributors/staff-committers.html](http://www.FreeBSD.org/doc/en_US.ISO8859-1/articles/contributors/staff-committers.html)
- [6] ##### <http://www.FreeBSD.org/administration.html#t-core>
- [7] ##### [http://www.FreeBSD.org/doc/ru\\_RU.KOI8-R/books/handbook](http://www.FreeBSD.org/doc/ru_RU.KOI8-R/books/handbook)
- [8] #####: ### ## <http://www.gnu.org/software/gnats>
- [9] ##### ## <http://www.FreeBSD.org/prstats/index.html>
- [10] #####: ##### <http://www.NetBSD.org/developers/releng/index.html>
- [11] ##### <http://people.FreeBSD.org/~jhb/docs/releng.txt>
- [12] ### ##### [http://www.FreeBSD.org/doc/en\\_US.ISO8859-1/articles/pxe/index.html](http://www.FreeBSD.org/doc/en_US.ISO8859-1/articles/pxe/index.html)
- [13] #####, ##### #. #####, ### #####: *The Release Engineering of 4.3BSD*