#######

<jgh@FreeBSD.org>

#########: 54301

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

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

2020#06#28 07:16:58 ## ##########.

#########

######. ### ##################### ## ####### ## ##### ######## <cperciva@FreeBSD.org>, ######## ####### ######## ## #######. ### ##### #### ##### ## ## ########## ## ###### ##### ####### ####### ## ######## ###### ######, ######## ##### ### ####### ###### ###### ### #### ## ###### ### ############# ## ########## ################ ####### ######## ## ## ######### # ##### ###### #### #### ##### ###### ####### ### # ###### ## ########.

########

1.

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2.

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

3.

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

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

- # #### ####### #### ## ##### 4 ## ## ######### #####. #### #### ##### ### ######## ## ####### ### 7.1 ### 7.2, ### ### ##### ##### ############ ### ###### #### ####### ## #######.
- ## ###(1) ####### ## # ###### ####### ## ###### ########### #######.
- # ### ######, #### ######, #### #### #### ## ### ##### ######## ### ### #####. ### ########, #### ###### ### 7.1 ### 7.2 ####### # ##### ###### ## 4 ##, ### ### ######### ##### ###### ## ########## ##### ####### ## 2.6 ##.
- ##### ######### ## ##### ######### #### ###### #####, ##(1).

4. ##############: ############# &

######## ### ##################### ######## ## ########## #####/########## ### ######–##/##_####_###, ### #######:

```
% svn co https://svn.freebsd.org/base/user/cperciva/freebsd-update-build freebsd-update-server
```

scripts/build.conf #############. ## ## ####### ###### ### ##### ##########.

build.conf, ##### ###### ## ######## ## #### #### ###########.

```
# Main configuration file for FreeBSD Update builds.  The
# release-specific configuration data is lower down in
# the scripts tree.

# Location from which to fetch releases
export FTP=ftp://ftp2.freebsd.org/pub/FreeBSD/releases❶

# Host platform
export HOSTPLATFORM=‘uname -m‘

# Host name to use inside jails
export BUILDHOSTNAME=${HOSTPLATFORM}-builder.daemonology.net❷

# Location of SSH key
export SSHKEY=/root/.ssh/id_dsa❸

# SSH account into which files are uploaded
MASTERACCT=builder@wadham.daemonology.net❹

# Directory into which files are uploaded
MASTERDIR=update-master.freebsd.org❺
```

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

❶ #### ## ### ######## ##### ### ###### ### ########## #### (## ### fetchiso() ########## ## scripts/build.subr). ### ######## ########## ## ### ####### ## ### ####. ### ### ###### ######### ## ######## #####(1) ####### ###### #### ####.

############## ## ### fetchiso() #### ### ## ######### ## ####### ### ####### build.subr ###### ## ### ####### ### ##################### #### ## scripts/RELEASE/ARCHITECTURE/build.subr ### ######## ##### #######.

❷ ### #### ## ### ##### ####. #### ########### #### ## ######### ## ####### ####### #### #######:

```
% uname -v
```

❸ ### ### ### ### ######### ##### ## ### ###### ######. # ### #### ### ## ####### ## ###### ssh-keygen -t dsa. #### ######### ## ########; ######## ######## ############## #### ## #### ## # ######## ############## ###### #### SSHKEY ## ### #######.

##########(1) ###### #### ### #### ######## ########### ##### ### ### ### ########### ##### ### ######## ### ##### ###.

❹ ####### ### ######### ##### ## ### ###### ######.

❺ ######### ## ### ###### ###### ##### ##### ### ######## ##.

build.conf ####### #### ### ##################### ####### ## ######## ### ######## #386 ##–###### ## #######. ## ## ####### ## ######## ## ###### ###### ### ##### #############, ### ######### ##### ####### ### ############# ####### ###### ### ###64:

1. ###### # ##### ########### ### ###64:

```
% mkdir -p /usr/local/freebsd-update-server/scripts/7.2-RELEASE/amd64
```

2. ####### # build.conf ## ### ##### ####### ##### #########. ### ##### ############# ####### ### ####### 7.2######## ## ###64 ###### ## ####### ##:

```
# SHA256 hash of RELEASE disc1.iso image.
export RELH=1ea1f6f652d7c5f5eab7ef9f8edbed50cb664b08ed761850f95f48e86cc71ef5❶

# Components of the world, source, and kernels
export WORLDPARTS="base catpages dict doc games info manpages proflibs lib32"
export SOURCEPARTS="base bin contrib crypto etc games gnu include krb5  \
            lib libexec release rescue sbin secure share sys tools  \
            ubin usbin cddl"
export KERNELPARTS="generic"

# EOL date
export EOL=1275289200❷
```

❶ ### ###256(1) #### ### ### ### ####### #######, ## ######### ###### ### ########## ####### ############.

❷ ## ######## ### #### ## ##### ###### ### build.conf, ##### ## ### ########## #### ###### ## ### ####### ######## #######. ### ##### ## EOL ### ## ####### #### ### #### ###### ## ### ### ####, ##### ### ####(1) #######, ### #######:

```
% date -j -f '%Y%m%d-%H%M%S' '20090401-000000' '+%s'
```

5. ######## ######

scripts/make.sh. #### #### ##### #### ########, ###### ###########, ### ######## ## ### ####### ### #### ### ######### ######. ## #### ####, # ########## #### #### ## ## ######## ### ### ##### ######## ## ### ####### ###.

```
# sh scripts/make.sh
cc -O2 -fno-strict-aliasing -pipe   findstamps.c  -o findstamps
```

```
findstamps.c: In function 'usage':
findstamps.c:45: warning: incompatible implicit declaration of built-in function 'exit'
cc -O2 -fno-strict-aliasing -pipe   unstamp.c  -o unstamp
install findstamps ../bin
install unstamp ../bin
rm -f findstamps unstamp
Generating RSA private key, 4096 bit long modulus
...............................................................................++
..................++
e is 65537 (0x10001)

Public key fingerprint:
27ef53e48dc869eea6c3136091cc6ab8589f967559824779e855d58a2294de9e

Encrypting signing key for root
enter aes-256-cbc encryption password:
Verifying - enter aes-256-cbc encryption password:
```

####

###########. #### ##### ## ######## ## /etc/freebsd-update.conf ### ###### #######.

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

```
# cd /usr/local/freebsd-update-server
# sh scripts/init.sh amd64 7.2-RELEASE
```

initial ##### ###.

```
# sh scripts/init.sh amd64 7.2-RELEASE
Mon Aug 24 16:04:36 PDT 2009 Starting fetch for FreeBSD/amd64 7.2-RELEASE
/usr/local/freebsd-update-server/work/7.2-RELE100% of  588 MB  359 kBps 00m00s
Mon Aug 24 16:32:38 PDT 2009 Verifying disc1 hash for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 16:32:44 PDT 2009 Extracting components for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 16:34:05 PDT 2009 Constructing world+src image for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 16:35:57 PDT 2009 Extracting world+src for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 23:36:24 UTC 2009 Building world for FreeBSD/amd64 7.2-RELEASE
Tue Aug 25 00:31:29 UTC 2009 Distributing world for FreeBSD/amd64 7.2-RELEASE
Tue Aug 25 00:32:36 UTC 2009 Building and distributing kernels for FreeBSD/amd64 7.2-RELEASE
Tue Aug 25 00:44:44 UTC 2009 Constructing world components for FreeBSD/amd64 7.2-RELEASE
Tue Aug 25 00:44:56 UTC 2009 Distributing source for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 17:46:18 PDT 2009 Moving components into staging area for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 17:46:33 PDT 2009 Identifying extra documentation for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 17:47:13 PDT 2009 Extracting extra docs for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 17:47:18 PDT 2009 Indexing release for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 17:50:44 PDT 2009 Indexing world0 for FreeBSD/amd64 7.2-RELEASE

Files built but not released:
Files released but not built:
Files which differ by more than contents:
Files which differ between release and build:
kernel|generic|/GENERIC/hptrr.ko
kernel|generic|/GENERIC/kernel
src|sys|/sys/conf/newvers.sh
world|base|/boot/loader
world|base|/boot/pxeboot
world|base|/etc/mail/freebsd.cf
world|base|/etc/mail/freebsd.submit.cf
world|base|/etc/mail/sendmail.cf
world|base|/etc/mail/submit.cf
world|base|/lib/libcrypto.so.5
```

```
world|base|/usr/bin/ntpq
world|base|/usr/lib/libalias.a
world|base|/usr/lib/libalias_cuseeme.a
world|base|/usr/lib/libalias_dummy.a
world|base|/usr/lib/libalias_ftp.a
...
```

#####, #### ##### #######. # #### ######## ########### ### ## ##### ## scripts/build.subr.

#######

#####, ### ####### #### ######## ######, ####(8), ## ###### ###. ### ##### ######## <cperciva@FreeBSD.org>, ######## ####### ######## ## #######, #### #################### ##### #### ##### ## ######## ########## ##### ### ###### ## ##### ## #### #### ### ## ####### #### ######### ###### ## ######### ##### ##### #### ## ## #######. #### ################# ##### ## ##### ### ###### 400 #### ##### ### ######### ### #######.#

```
Mon Aug 24 17:54:07 PDT 2009 Extracting world+src for FreeBSD/amd64 7.2-RELEASE
Wed Sep 29 00:54:34 UTC 2010 Building world for FreeBSD/amd64 7.2-RELEASE
Wed Sep 29 01:49:42 UTC 2010 Distributing world for FreeBSD/amd64 7.2-RELEASE
Wed Sep 29 01:50:50 UTC 2010 Building and distributing kernels for FreeBSD/amd64 7.2-RELEASE
Wed Sep 29 02:02:56 UTC 2010 Constructing world components for FreeBSD/amd64 7.2-RELEASE
Wed Sep 29 02:03:08 UTC 2010 Distributing source for FreeBSD/amd64 7.2-RELEASE
Tue Sep 28 19:04:31 PDT 2010 Moving components into staging area for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 19:04:46 PDT 2009 Extracting extra docs for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 19:04:51 PDT 2009 Indexing world1 for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 19:08:04 PDT 2009 Locating build stamps for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 19:10:19 PDT 2009 Cleaning staging area for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 19:10:19 PDT 2009 Preparing to copy files into staging area for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 19:10:20 PDT 2009 Copying data files into staging area for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 12:16:57 PDT 2009 Copying metadata files into staging area for FreeBSD/amd64 7.2-RELEASE
Mon Aug 24 12:16:59 PDT 2009 Constructing metadata index and tag for FreeBSD/amd64 7.2-RELEASE

Files found which include build stamps:
kernel|generic|/GENERIC/hptrr.ko
kernel|generic|/GENERIC/kernel
world|base|/boot/loader
world|base|/boot/pxeboot
world|base|/etc/mail/freebsd.cf
world|base|/etc/mail/freebsd.submit.cf
world|base|/etc/mail/sendmail.cf
world|base|/etc/mail/submit.cf
world|base|/lib/libcrypto.so.5
world|base|/usr/bin/ntpq
world|base|/usr/include/osreldate.h
world|base|/usr/lib/libalias.a
world|base|/usr/lib/libalias_cuseeme.a
world|base|/usr/lib/libalias_dummy.a
world|base|/usr/lib/libalias_ftp.a
...
```

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

```
Values of build stamps, excluding library archive headers:
v1.2 (Aug 25 2009 00:40:36)
v1.2 (Aug 25 2009 00:38:22)
@(#)FreeBSD 7.2-RELEASE #0: Tue Aug 25 00:38:29 UTC 2009
FreeBSD 7.2-RELEASE #0: Tue Aug 25 00:38:29 UTC 2009
    root@server.myhost.com:/usr/obj/usr/src/sys/GENERIC
```

```
7.2-RELEASE
Mon Aug 24 23:55:25 UTC 2009
Mon Aug 24 23:55:25 UTC 2009
##### built by root@server.myhost.com on Tue Aug 25 00:16:15 UTC 2009
##### built by root@server.myhost.com on Tue Aug 25 00:16:15 UTC 2009
##### built by root@server.myhost.com on Tue Aug 25 00:16:15 UTC 2009
##### built by root@server.myhost.com on Tue Aug 25 00:16:15 UTC 2009
Mon Aug 24 23:46:47 UTC 2009
ntpq 4.2.4p5-a Mon Aug 24 23:55:53 UTC 2009 (1)
 * Copyright (c) 1992-2009 The FreeBSD Project.
Mon Aug 24 23:46:47 UTC 2009
Mon Aug 24 23:55:40 UTC 2009
Aug 25 2009
ntpd 4.2.4p5-a Mon Aug 24 23:55:52 UTC 2009 (1)
ntpdate 4.2.4p5-a Mon Aug 24 23:55:53 UTC 2009 (1)
ntpdc 4.2.4p5-a Mon Aug 24 23:55:53 UTC 2009 (1)
Tue Aug 25 00:21:21 UTC 2009
Tue Aug 25 00:21:21 UTC 2009
Tue Aug 25 00:21:21 UTC 2009
Mon Aug 24 23:46:47 UTC 2009

FreeBSD/amd64 7.2-RELEASE initialization build complete.  Please
review the list of build stamps printed above to confirm that
they look sensible, then run
# sh -e approve.sh amd64 7.2-RELEASE
to sign the release.
```

####### ### ##### ## ########## ## #######. #### ########### ## ########### #### ### ## ##### ## ### ########### ###### #### ##### USAGE. ####### scripts/approve.sh, ## ########. #### #### #### ### #######, ### #### ########## #### # ####### #### ######## ### #########.

```
# cd /usr/local/freebsd-update-server
# sh scripts/mountkey.sh
```

```
# sh -e scripts/approve.sh amd64 7.2-RELEASE
Wed Aug 26 12:50:06 PDT 2009 Signing build for FreeBSD/amd64 7.2-RELEASE
Wed Aug 26 12:50:06 PDT 2009 Copying files to patch source directories for FreeBSD/amd64 7.2-RELEASE
Wed Aug 26 12:50:06 PDT 2009 Copying files to upload staging area for FreeBSD/amd64 7.2-RELEASE
Wed Aug 26 12:50:07 PDT 2009 Updating databases for FreeBSD/amd64 7.2-RELEASE
Wed Aug 26 12:50:07 PDT 2009 Cleaning staging area for FreeBSD/amd64 7.2-RELEASE
```

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

```
# cd /usr/local/freebsd-update-server
# sh scripts/upload.sh amd64 7.2-RELEASE
```

####

###########, #### ### ## #### ## ######## ## ### ###### ############# ######### ### ### ###### ####### ### ######## ########## ## ### *uploaded* ####.

```
# cd /usr/local/freebsd-update-server/pub/7.2-RELEASE/amd64
# touch -t 200801010101.01 uploaded
```

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

KeyPrint ### ServerName ## /etc/freebsd-update.conf, ### ####### ####### ## ########## ## ### ####### ###### ####### ## ### ########.

> **#########**
>
> ## ##### ### ####### ###### ###### ## #### ########, ####### ### #### ### *current* ####### ### ### ####### *one wants to upgrade to* #### ## ## #####. #### ## ######### ### ########### ### ########### ## ##### ####### ########. ### #######, #### ######### # ####### ###### #### 7.1######## ## 7.2########, ####### #### #### ## ## ##### ### ######## ## #### ############ ###### ### #### ########.

#########, ### ###### ### ## init.sh ## ########.

6. ######## #

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

#######, 7.1######## #### ## ####.

#####:

- ##### ### ####### ######### ######### ### ### ####### #####.
- ####### ## ####### ##### ### 7.1########.

/usr/local/freebsd-update-server/patches/.

```
% mkdir -p /usr/local/freebsd-update-server/patches/7.1-RELEASE/
% cd /usr/local/freebsd-update-server/patches/7.1-RELEASE
```

#######, #### ### ##### ### #####(8). #### ### ########, ### #### ### ######### #### #### ####### ######## ##########. #### ########### ## ############ ### ########, ### ## ##### ## ### ####### ########.

#####, #### ######## ## ###### SA-09:12.bind. ##### ########### ### ####, ## ## ######## ## ###### ### #### ## ## ########### ##### #####. ## ## ######### ## #### #### ########## #### ######## ####### ##### ######, ### ### #### ### ## ###### ######. ### #### #####, ### ## ###### ### ######### ########### ######## ## ####### ### #### #### p7. ###### ### ####:

```
% cd /usr/local/freebsd-update-server/patches/7.1-RELEASE/; mv bind.patch 7-SA-09:12.bind
```

> **####**
>
> #### ####### # ##### ##### #####, ## ## ####### #### ######## ####### ### ## #####. #### # ##### ##### ## ###, ## #### ### ### ####### ######### ## ### ##### #########.
>
> ##### ### ## ###### ####### ##### ## ### #####. ### ### ###### ####, ## ### ##### ######.

#######

#####.

#####, # *diff* ## ##### ## ## #####. ### ######## ###### ##### ## ### ## # scripts/init.sh ### #### ### ## ### ########## ####### ##### ## ####### ### #### #####.

```
# cd /usr/local/freebsd-update-server
# sh scripts/diff.sh amd64 7.1-RELEASE 7
```

differential ##### ###.

```
# sh -e scripts/diff.sh amd64 7.1-RELEASE 7
Wed Aug 26 10:09:59 PDT 2009 Extracting world+src for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 17:10:25 UTC 2009 Building world for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 18:05:11 UTC 2009 Distributing world for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 18:06:16 UTC 2009 Building and distributing kernels for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 18:17:50 UTC 2009 Constructing world components for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 18:18:02 UTC 2009 Distributing source for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 11:19:23 PDT 2009 Moving components into staging area for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 11:19:37 PDT 2009 Extracting extra docs for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 11:19:42 PDT 2009 Indexing world0 for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 11:23:02 PDT 2009 Extracting world+src for FreeBSD/amd64 7.1-RELEASE-p7
Thu Sep 30 18:23:29 UTC 2010 Building world for FreeBSD/amd64 7.1-RELEASE-p7
Thu Sep 30 19:18:15 UTC 2010 Distributing world for FreeBSD/amd64 7.1-RELEASE-p7
Thu Sep 30 19:19:18 UTC 2010 Building and distributing kernels for FreeBSD/amd64 7.1-RELEASE-p7
Thu Sep 30 19:30:52 UTC 2010 Constructing world components for FreeBSD/amd64 7.1-RELEASE-p7
Thu Sep 30 19:31:03 UTC 2010 Distributing source for FreeBSD/amd64 7.1-RELEASE-p7
Thu Sep 30 12:32:25 PDT 2010 Moving components into staging area for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:32:39 PDT 2009 Extracting extra docs for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:32:43 PDT 2009 Indexing world1 for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:35:54 PDT 2009 Locating build stamps for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:36:58 PDT 2009 Reverting changes due to build stamps for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:37:14 PDT 2009 Cleaning staging area for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:37:14 PDT 2009 Preparing to copy files into staging area for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:37:15 PDT 2009 Copying data files into staging area for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:43:23 PDT 2009 Copying metadata files into staging area for FreeBSD/amd64 7.1-RELEASE-p7
Wed Aug 26 12:43:25 PDT 2009 Constructing metadata index and tag for FreeBSD/amd64 7.1-RELEASE-p7
...
Files found which include build stamps:
kernel|generic|/GENERIC/hptrr.ko
kernel|generic|/GENERIC/kernel
world|base|/boot/loader
world|base|/boot/pxeboot
world|base|/etc/mail/freebsd.cf
world|base|/etc/mail/freebsd.submit.cf
world|base|/etc/mail/sendmail.cf
world|base|/etc/mail/submit.cf
world|base|/lib/libcrypto.so.5
world|base|/usr/bin/ntpq
world|base|/usr/include/osreldate.h
world|base|/usr/lib/libalias.a
world|base|/usr/lib/libalias_cuseeme.a
world|base|/usr/lib/libalias_dummy.a
world|base|/usr/lib/libalias_ftp.a
...
Values of build stamps, excluding library archive headers:
v1.2 (Aug 26 2009 18:13:46)
v1.2 (Aug 26 2009 18:11:44)
@(#)FreeBSD 7.1-RELEASE-p7 #0: Wed Aug 26 18:11:50 UTC 2009
```

```
FreeBSD 7.1-RELEASE-p7 #0: Wed Aug 26 18:11:50 UTC 2009
    root@server.myhost.com:/usr/obj/usr/src/sys/GENERIC
7.1-RELEASE-p7
Wed Aug 26 17:29:15 UTC 2009
Wed Aug 26 17:29:15 UTC 2009
##### built by root@server.myhost.com on Wed Aug 26 17:49:58 UTC 2009
##### built by root@server.myhost.com on Wed Aug 26 17:49:58 UTC 2009
##### built by root@server.myhost.com on Wed Aug 26 17:49:58 UTC 2009
##### built by root@server.myhost.com on Wed Aug 26 17:49:58 UTC 2009
Wed Aug 26 17:20:39 UTC 2009
ntpq 4.2.4p5-a Wed Aug 26 17:29:42 UTC 2009 (1)
 * Copyright (c) 1992-2009 The FreeBSD Project.
Wed Aug 26 17:20:39 UTC 2009
Wed Aug 26 17:29:30 UTC 2009
Aug 26 2009
ntpd 4.2.4p5-a Wed Aug 26 17:29:41 UTC 2009 (1)
ntpdate 4.2.4p5-a Wed Aug 26 17:29:42 UTC 2009 (1)
ntpdc 4.2.4p5-a Wed Aug 26 17:29:42 UTC 2009 (1)
Wed Aug 26 17:55:02 UTC 2009
Wed Aug 26 17:55:02 UTC 2009
Wed Aug 26 17:55:02 UTC 2009
Wed Aug 26 17:20:39 UTC 2009
...
```

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

```
New updates:
kernel|generic|/GENERIC/kernel.symbols|f|0|0|0555|0|7c8dc176763f96ced0a57fc04e7c1b8d793f27e006dd13e0b499e1474ac47e10|
kernel|generic|/GENERIC/kernel|f|0|0|0555|0|33197e8cf15bbbac263d17f39c153c9d489348c2c534f7ca1120a1183dec67b1|
kernel|generic|/|d|0|0|0755|0||
src|base|/|d|0|0|0755|0||
src|bin|/|d|0|0|0755|0||
src|cddl|/|d|0|0|0755|0||
src|contrib|/contrib/bind9/bin/named/update.c|f|0|10000|0644|0|
4d434abf0983df9bc47435670d307fa882ef4b348ed8ca90928d250f42ea0757|
src|contrib|/contrib/bind9/lib/dns/openssldsa_link.c|f|0|10000|0644|0|
c6805c39f3da2a06dd3f163f26c314a4692d4cd9a2d929c0acc88d736324f550|
src|contrib|/contrib/bind9/lib/dns/opensslrsa_link.c|f|0|10000|0644|0|
fa0f7417ee9da42cc8d0fd96ad24e7a34125e05b5ae075bd6e3238f1c022a712|
...
FreeBSD/amd64 7.1-RELEASE update build complete.  Please review
the list of build stamps printed above and the list of updated
files to confirm that they look sensible, then run
# sh -e approve.sh amd64 7.1-RELEASE
to sign the build.
```

#####:

```
# sh -e scripts/approve.sh amd64 7.1-RELEASE
Wed Aug 26 12:50:06 PDT 2009 Signing build for FreeBSD/amd64 7.1-RELEASE
Wed Aug 26 12:50:06 PDT 2009 Copying files to patch source directories for FreeBSD/amd64 7.1-RELEASE
Wed Aug 26 12:50:06 PDT 2009 Copying files to upload staging area for FreeBSD/amd64 7.1-RELEASE
Wed Aug 26 12:50:07 PDT 2009 Updating databases for FreeBSD/amd64 7.1-RELEASE
Wed Aug 26 12:50:07 PDT 2009 Cleaning staging area for FreeBSD/amd64 7.1-RELEASE

The FreeBSD/amd64 7.1-RELEASE update build has been signed and is
ready to be uploaded.  Remember to run
# sh -e umountkey.sh
to unmount the decrypted key once you have finished signing all
the new builds.
```

#####, ###### ### ########:

```
# cd /usr/local/freebsd-update-server
# sh scripts/upload.sh amd64 7.1-RELEASE
```

#########, ### ###### ### ## diff.sh ## ########.

7.

- ## # ###### ####### ## ##### ##### ### ###### make release #########, ##################### #### #### #### #### #### #######. ## ## #######, # ####### ####### ##### ## ############# ### ## ##### ## #####– ### ############# ########## ## ############# ########### findextradocs (), addextradocs () ### ######## ### ######## ######## ## fetchiso (), ############, ## scripts/build.subr. ## # #### ####, ###### ### ###256(1) #### ## build.conf ##### #### ########## ####### ### ############ ### ### ### ##### ## ##### ### #### ###### #######.

```
# Compare ${WORKDIR}/release and ${WORKDIR}/$1, identify which parts
# of the world|doc subcomponent are missing from the latter, and
# build a tarball out of them.
findextradocs () {
}

# Add extra docs to ${WORKDIR}/$1
addextradocs () {
}
```

- ###### -j *NUMBER* ##### ## buildworld ### obj ####### ## ### scripts/build.subr ###### ### ##### ## ########## ######### ## ### ######## ####, ####### ## ## ### #########. ##### ##### ##### ## ##### ####### ## ### ###########, ## ## ### ##### ### ##### ## ###### ##########.

```
        # Build the world
    log "Building world"
    cd /usr/src &&
    make -j 2 ${COMPATFLAGS} buildworld 2>&1

  # Distribute the world
    log "Distributing world"
    cd /usr/src/release &&
    make -j 2 obj &&
    make ${COMPATFLAGS} release.1 release.2 2>&1
```

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

```
_http._tcp.update.myserver.com.  IN SRV   0 2 80   host1.myserver.com.
    IN SRV   0 1 80   host2.myserver.com.
    IN SRV   0 0 80   host3.myserver.com.
```