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#####: [43126](#)

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Übersetzt von Björn Heidotting.

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- ### **###(1)** ##### ## ##### #####, ## ## ##### ## #####
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- ##### ## ##### ##### ## ## #####, **##(1)**.

```
#####  ###  ###  #####  #####  #####  #####  #####  #####  #####  #####/
##### ,### #####  ###:
```

```
#####  ### 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=1275289200②
```

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

```
# 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:
```



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#####

#####

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

ersten #####.

```
# 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-RELEASE100% 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/hptr.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/ntp
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.



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#####, #####, #####
#####, #####
#####, #####, #####, #####—
#####. #####. #####
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|hptra.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)
ntpd 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
```

```
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
```



hochgeladene #####.

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



```
#####  
##### current ##### auf welches Sie aktualisieren wollen #####  
#####  
#####  
#####  
##### 7.1##### 7.2#####
```


#####.

6. #####

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

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

#####

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



#####

#####.

scripts/init.sh
#####.

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

Diff #####.

```
# 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)
ntpd 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
```

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

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 NUMMER ## ## 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.
SRV  0 1 80  host2.myserver.com.
SRV  0 0 80  host3.myserver.com.
```