

# Install A1200P/A800P with Dahdi

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Version:1.0

We release a1200p/a800p to support Dahdi. Users can download that from the A1200P/A800P category from our website, please rename back to opvxa1200.c after put into the source directory. Please keep in mind that, because, currently the version of Dahdi is not a stable version, and still under testing, if you want to test dahdi or play the new features, the version of dahdi should be ok. If you want to put it in to a production environment, we do not recommend doing that. Do not task a risk! To install a1200p/a800p with dahdi, you must install some support packages as zaptel requires, then please go through these steps:

Step 1) get dahdi-linux, dahdi-tools and asterisk

wget <http://downloads.digium.com/pub/asterisk/releases/asterisk-1.6.0.1.tar.gz>

wget <http://downloads.digium.com/pub/telephony/dahdi-linux/dahdi-linux-2.0.0.tar.gz>

wget <http://downloads.digium.com/pub/telephony/dahdi-tools/dahdi-tools-2.0.0.tar.gz>

please unzip and cpoy those files to /usr/src/dahdi/dahdi-com(please note that this my dir, you can set to /usr/src)

Step 2) cd /usr/src/dahdi/dahdi-com/dahdi-linux-2.0.0/drivers/dahdi

open Kbuild file and add the one line like this:

```
=====
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCT4XXP) += wct4xxp/
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCTC4XXP) += wctc4xxp/
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCTDM24XXP) += wctdm24xxp/
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCTE12XP) += wcte12xp/
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCTDM) += wctdm.o
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCTDM) += opvxa1200.o
// this is for a1200/a800p
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCT1XXP) += wct1xxp.o
obj-$(DAHDI_BUILD_ALL)$(CONFIG_DAHDI_WCTE11XP) += wcte11xp.o
=====
```

after edit the file, please download the opvxa1200.c to the directory.

Step 3) please change back to /usr/src/dahdi/dahdi-com/dahdi-linux-2.0.0

run: make, make install

Step 4) change the directory to /usr/src/dahdi/dahdi-com/dahdi-tools-2.0.0

run: ./configure, make, make install

Step 5) change to asterisk directory, in my case is /usr/src/dahdi/asterisk-1.6

5.1) ./configure

5.2) make

5.3) make install

5.4) make samples

Step 6) please edit the dahdi files

6.1) edit the system.conf under /etc/dahdi, some files are there:

```
[root@new-host-8 asterisk-1.6]# cd /etc/dahdi/
```

```
[root@new-host-8 dahdi]# ls
```

```
init.conf modules system.conf
```

please keep in mind that the system.conf works as zaptel.conf in zaptel

the part of system.conf will be like this:

```
# And change channel 2 to use the kb1 echo canceller.
```

```
#echocanceller=kb1,2
```

```
#
```

```
fxsks=1
```

```
fxsks=2
```

```
fxoks=3-12
```

6.2) edit the chan.dahdi.conf in /etc/asterisk

the part of chan\_dahdi.conf should be like this:

```
;stripmsd=1
```

```
;callerid=asreceived
```

```
group=0
```

```
signalling=fxs_ks
```

```
context=demo
```

```
channel => 1
```

```
channel => 2
```

```
signalling=fxo_ks
```

```
context=from-internal
```

```
channel => 3-12
```

the chan\_dahdi.conf works as zapata.conf, so do not be confused.

6.3) edit extensions.conf

for incoming line: // for example only

```
=====
```

```
[demo]
```

```
;
```

```
; We start with what to do when a call first comes in.
```

```
;
```

```
exten => s,1,Wait(1) ; Wait a second, just for fun
```

```
exten => s,n,Answer ; Answer the line
```

```
exten => s,n,Dial(dahdi/12) // zap has been changed to dahdi
```

```
exten => s,n,Hangup
```

```
=====
```

for internal:

```

=====
[from-internal]
exten => 1,1,Dial(dahdi/8|60|m(default)) // zap has been changed to daidi
exten => 1,2,hangup
exten => 2,1,Dial(dahdi/3|60|m(default)) // zap has been changed to dahdi
exten => 2,n,Hangup
=====

```

Step 7) **modprobe dahdi**

Step 8) modprobe opvxa1200

Step 9) **dahdi\_cfg -vvvvvvv** // note: ztcfg changes dahdi\_cfg. more commands are under /usr/sbin

```

=====result of dahdi_cfg=====

```

```

[root@new-host-8 ~]# dahdi_cfg -vvvvvvvv

```

DAHDI Tools Version - 2.0.0

DAHDI Version: 2.0.0

Echo Cancellor(s):

Configuration

```

=====
Channel map:

```

- Channel 01: FXS Kewlstart (Default) (Slaves: 01)
- Channel 02: FXS Kewlstart (Default) (Slaves: 02)
- Channel 03: FXO Kewlstart (Default) (Slaves: 03)
- Channel 04: FXO Kewlstart (Default) (Slaves: 04)
- Channel 05: FXO Kewlstart (Default) (Slaves: 05)
- Channel 06: FXO Kewlstart (Default) (Slaves: 06)
- Channel 07: FXO Kewlstart (Default) (Slaves: 07)
- Channel 08: FXO Kewlstart (Default) (Slaves: 0Cool
- Channel 09: FXO Kewlstart (Default) (Slaves: 09)
- Channel 10: FXO Kewlstart (Default) (Slaves: 10)
- Channel 11: FXO Kewlstart (Default) (Slaves: 11)
- Channel 12: FXO Kewlstart (Default) (Slaves: 12)

12 channels to configure.

Changing signalling on channel 1 from Unused to FXS Kewlstart

Changing signalling on channel 2 from Unused to FXS Kewlstart

Changing signalling on channel 3 from Unused to FXO Kewlstart

Changing signalling on channel 4 from Unused to FXO Kewlstart

Changing signalling on channel 5 from Unused to FXO Kewlstart  
Changing signalling on channel 6 from Unused to FXO Kewlstart  
Changing signalling on channel 7 from Unused to FXO Kewlstart  
Changing signalling on channel 8 from Unused to FXO Kewlstart  
Changing signalling on channel 9 from Unused to FXO Kewlstart  
Changing signalling on channel 10 from Unused to FXO Kewlstart  
Changing signalling on channel 11 from Unused to FXO Kewlstart  
Changing signalling on channel 12 from Unused to FXO Kewlstart

=====  
=====dmesg=====

```
dahdi: Telephony Interface Registered on major 196
dahdi: Version: 2.0.0
ACPI: PCI Interrupt 0000:02:0c.0[A] -> GSI 20 (level, low) -> IRQ 201
OpenVox A1200P version: 1.2
OpenVox A1200P passed register test
Module 0: Installed -- AUTO FXO (FCC mode)
Module 1: Installed -- AUTO FXO (FCC mode)
Module 2: Installed -- AUTO FXS/DPO
Module 3: Installed -- AUTO FXS/DPO
Module 4: Installed -- AUTO FXS/DPO
Module 5: Installed -- AUTO FXS/DPO
Module 6: Installed -- AUTO FXS/DPO
Module 7: Installed -- AUTO FXS/DPO
===== only show part of modules=====
```

Step 10) start asterisk by asterisk -vvvvvvvvc  
under asterisk console, run: dahdi show channels

```
=====  
*CLI> dahdi show channels
Chan Extension Context Language MOH Interpret Blocked State
pseudo from-internal default In Service
1 demo default In Service
2 demo default In Service
3 from-internal default In Service
4 from-internal default In Service
5 from-internal default In Service
6 from-internal default In Service
7 from-internal default In Service
8 from-internal default In Service
9 from-internal default In Service
10 from-internal default In Service
11 from-internal default In Service
12 from-internal default In Service
*CLI>
```

```
=====
11) make a inbound call:
*CLI> -- Starting simple switch on 'DAHDI/1-1'
-- Executing [s@demo:1] Wait("DAHDI/1-1", "1") in new stack
-- Executing [s@demo:2] Answer("DAHDI/1-1", "") in new stack
[Oct 15 21:18:01] WARNING[2908]: chan_dahdi.c:1700 dahdi_enable_ec: Unable to enable echo
cancellation on channel 1 (No such device) // here may has problem
-- Executing [s@demo:3] Dial("DAHDI/1-1", "dahdi/12") in new stack
-- Called 12
-- DAHDI/12-1 is ringing
-- DAHDI/12-1 is ringing
[Oct 15 21:18:06] WARNING[2908]: chan_dahdi.c:1700 dahdi_enable_ec: Unable to enable echo
cancellation on channel 12 (No such device) // here may be a problem
-- DAHDI/12-1 answered DAHDI/1-1
-- Native bridging DAHDI/1-1 and DAHDI/12-1
[Oct 15 21:18:13] WARNING[2908]: chan_dahdi.c:1700 dahdi_enable_ec: Unable to enable echo
cancellation on channel 1 (No such device)
[Oct 15 21:18:13] WARNING[2908]: chan_dahdi.c:1700 dahdi_enable_ec: Unable to enable echo
cancellation on channel 12 (No such device)
-- Hungup 'DAHDI/12-1'
== Spawn extension (demo, s, 3) exited non-zero on 'DAHDI/1-1'
-- Hungup 'DAHDI/1-1'
=====
```

this is only very brief info for dahdi and a1200p, later, I will add more details for that. if you have any problem, please always refer these links:

[voip-info.org](http://voip-info.org)

[asterisk.org](http://asterisk.org)

[openvox.com.cn](http://openvox.com.cn)

README file under dahdi-linux

regards!

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