

Five steps to install manually TDM800 driver module(ystdm8xx)

Step 1. Install kernel source code and zaptel source code

Step 2. Copy file **"ystdm8xx.c"** to zaptel source code directory
(e.g. /usr/src/zaptel-1.2.11/)

```
[root@asterisk1 zaptel-1.2.11]# pwd
/usr/src/zaptel-1.2.11
[root@asterisk1 zaptel-1.2.11]# ls
arith.h          LICENSE          README.udev      wctellxp.c
biquad.h        Makefile        sec-2.h          wcusbc.c
bittest.h       makefw.c         sec.h            wcusb.h
build_tools     mec2_const.h    sethdlc.c        xpp
ChangeLog       mec2.h           sethdlc-new.c   ystdm8xx.c
checkstack      mec3-float.h    timertest.c      zaptel.c
complex.cc      mec3.h           tonezone.c       zaptel.conf.sample
complex.h       mec.h            tonezone.h       zaptel.h
digits.h        mg2ec_const.h   tor2.c           zaptel.init
doc             mg2ec.h          tor2.ee          zaptel.sysconfig
ecdis.h         mkfilter.h       tor2ee.c         zconfig.h
fasthdlc.h      mknotch.cc       tor2-hw.h        zonedata.c
fir.h           oct612x         torisa.c         ztcfg.c
fxotune.c       orig.ee          torisa.h         ztcfg-dude.c
fxotune.h       patgen.c         torisatool.c    ztcfg.h
fxsdump.c       patlooptest.c   tormenta2.rbt   ztd-eth.c
fxstest.c       pattest.c        tormenta2.ucf   ztdiag.c
genconst.c      pccradio.c       tormenta2.vhd   ztd-loc.c
gendigits.c     pccradio.rbt    usbfxtstest.c  ztdummy.c
hdlcgen.c       pccradio_vhdl.tar.gz wcfxc.c         ztdummy.h
hdlcstress.c    proslc.h         wcfxsusb.c      ztdynamic.c
hdlctest.c      raddiag.tar.gz  wcfxsusb.h      ztmonitor.c
hdlcverify.c    README           wct1xxp.c       ztspeed.c
ifcfg-hdlc0     README.Astribank wct4xxp         zttest.c
ifup-hdlc       README.fxotune   wctdm24xxp.c   zttool.c
kb1ec_const.h  README.fxusb     wctdm.c
kb1ec.h         README.Linux26   wctdm.h
[root@asterisk1 zaptel-1.2.11]#
```

Step 3. Modify file **zaptel.sysconfig** in zaptel source code directory

(This step is for autoloading the module when the OS starts)

Add the red line to **"zaptel.sysconfig"** and being made before blue line
"MODULES="\$MODULES wctdm" ...". see below

```
TELEPHONY=yes
#DEBUG=yes

# Un-comment as per your requirements; modules to load/unload
#Module Name          Hardware
MODULES="$MODULES tor2"    # T400P - Quad Span T1 Card
                        # E400P - Quad Span E1 Card

MODULES="$MODULES wct4xxp" # TE405P - Quad Span T1/E1 Card (5v version)
                        # TE410P - Quad Span T1/E1 Card (3.3v version)

MODULES="$MODULES wct1xxp" # T100P - Single Span T1 Card
                        # E100P - Single Span E1 Card

MODULES="$MODULES wcte11xp"    # TE110P - Single Span T1/E1 Card

MODULES="$MODULES wctdm24xxp" # TDM2400P - Modular FXS/FXO interface (1-24 ports)

MODULES="$MODULES wcfxo"    # X100P - Single port FXO interface
                        # X101P - Single port FXO interface

MODULES="$MODULES ystdm8xx"  # YSTD8XX - Modular FXS/FXO interface (1-8 ports)

MODULES="$MODULES wctdm"    # TDM400P - Modular FXS/FXO interface (1-4 ports)
#MODULES="$MODULES wcfxs"  # either above or this

MODULES="$MODULES wcusb"    # S100U - Single port FXS USB Interface
#MODULES="$MODULES wcfxsusb" # either above or this

#MODULES="$MODULES torisa"  # Old Tormenta1 ISA Card

#MODULES="$MODULES ztdummy" # UHCI USB Zaptel Timing Only Interface

#MODULES="$MODULES xpp_usb" # Xorcom Atribank Device
```

Step 4. Modify file [Makefile](#) in zaptel source code directory

(1) Add the red word to "[Makefile](#)" of zaptel (in zaptel source code directory)

```
MODULES:=zaptel tor2 torisa wcusb wcfxo ystdm8xx wctdm wctdm24xxp \  
ztdynamic ztd-eth wct1xxp wcte11xp pciradio \  
ztd-loc
```

(2) and modify [blue](#) line to [red](#) line in config section

Original:

```
config:
if [ -d $(INSTALL_PREFIX)/etc/rc.d/init.d ]; then \
    install -D -m 755 zaptel.init $(INSTALL_PREFIX)/etc/rc.d/init.d/zaptel; \
    $(CHKCONFIG) --add zaptel; \
elif [ -d $(INSTALL_PREFIX)/etc/init.d ]; then \
    install -D -m 755 zaptel.init $(INSTALL_PREFIX)/etc/init.d/zaptel; \
    $(CHKCONFIG) --add zaptel; \
fi
if [ -d /etc/default ] && [ ! -f /etc/default/zaptel ]; then \
    install -D -m 644 zaptel.sysconfig $(INSTALL_PREFIX)/etc/default/zaptel; \
fi
if [ -d /etc/sysconfig ] && [ ! -f /etc/sysconfig/zaptel ]; then \
    install -D -m 644 zaptel.sysconfig $(INSTALL_PREFIX)/etc/sysconfig/zaptel; \
fi
if [ -d /etc/sysconfig/network-scripts ]; then \
    install -D -m 755 ifup-hdlc
$(INSTALL_PREFIX)/etc/sysconfig/network-scripts/ifup-hdlc; \
fi
```

New:

```
config:
if [ -d $(INSTALL_PREFIX)/etc/rc.d/init.d ]; then \
    install -D -m 755 zaptel.init $(INSTALL_PREFIX)/etc/rc.d/init.d/zaptel; \
    $(CHKCONFIG) --add zaptel; \
elif [ -d $(INSTALL_PREFIX)/etc/init.d ]; then \
    install -D -m 755 zaptel.init $(INSTALL_PREFIX)/etc/init.d/zaptel; \
    $(CHKCONFIG) --add zaptel; \
fi
if [ -d /etc/default ]; then \
    install -D -m 644 zaptel.sysconfig $(INSTALL_PREFIX)/etc/default/zaptel; \
fi
if [ -d /etc/sysconfig ]; then \
    install -D -m 644 zaptel.sysconfig $(INSTALL_PREFIX)/etc/sysconfig/zaptel; \
fi
if [ -d /etc/sysconfig/network-scripts ]; then \
    install -D -m 755 ifup-hdlc
$(INSTALL_PREFIX)/etc/sysconfig/network-scripts/ifup-hdlc; \
fi
```

Step 5. Excute below commands to update

```
# make clean;make install
# make config
# reboot
```

After reboot, you can find ystdm8xx module being loaded and TDM800 LED being lighted

(Finish)