

Six steps to install manually TDM800 driver module(ystdm8xx)

Step 1. Install kernel source code and zaptel source code

Step 2. Execute below commands to get “ystdm8xx.c” from yeastar website

```
#cd /usr/src
```

```
#wget http://www.yeastar.com/download/zaptel-1.2.16/ystdm8xx.c
```

Other version's files click [here](#)

Note: if you zaptel version is zaptel-1.4.1, The link is <http://www.yeastar.com/download/zaptel-1.4.1/ystdm8xx.c>

Step 3. Copy file “ystdm8xx.c” to zaptel source code directory
(e.g. /usr/src/zaptel-1.2.16/)

```
[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          wcusb.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     pciradio.c     tormenta2.vhd  ztd-loc.c
gendigits.c    pciradio.rbt  usbfxstest.c   ztdummy.c
hdlcgen.c      pciradio_vhdl.tar.gz wcfxo.c        ztdummy.h
hdlcstress.c   proslic.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
kblc_const.h   README.fxsusb  wctdm.c
kblc.h         README.Linux26 wctdm.h
```

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

(This step is for autoload the module when the OS start)

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" # YSTDM8XX - 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 Astribank Device
```

Step 5. 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 pccradio \  
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 6. 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)