Sangoma Synchronous Cards

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This document applies to V3.0

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General Information

Summary

The MikroTik RouterOS supports the following Sangoma Technologies WAN adapters:

- Sangoma S5141 (dual-port) and S5142 (quad-port) PCI RS232/V.35/X.21 (4Mbit/s - primary port and 512Kbit/s - secondary ones)
- Sangoma S5148 (single-port) and S5147 (dual-port) PCI E1/T1

Specifications

Packages required: ***synchronous***
License required: ***level4***
Home menu level: ***/interface sangoma***
Standards and Technologies: ***X.21, V.35, T1/E1/G.703, Frame Relay, PPP, Cisco-HDLC***
Hardware usage: ***Not significant***

Synchronous Interface Configuration

Home menu level: ***/interface sangoma***

Description

With the introduction of 2.8 release, MikroTik RouterOS supports wide range of Sangoma Technologies WANPIPE cards. These cards provide a router with the ability to communicate over T1, E1, RS232, V.35 and X.21 links directly, without the need of external CSU/DSU equipment.

Property Description

active-channels (*all* | *integer*; default: **all**) - for T1/E1 channels only. Specifies active E1/T1 channel set

chdlc-keepalive (*time*; default: **10s**) - Cisco-HDLC keepalive interval in seconds

clock-rate (*integer*; default: **64000**) - internal clock rate in bps

clock-source (*internal* | *external*; default: **external**) - specifies whether the card should rely on supplied clock or generate its own

frame-relay-dce (*yes* | *no*; default: **no**) - specifies whether the device operates in Data Communication Equipment mode. The value yes is suitable only for T1 models

frame-relay-lmi-type (*ansi* | *ccitt*; default: **ansi**) - Frame Relay Line Management Interface Protocol type

framing mode (*CRC4* | *D4* | *ESF* | *ESF-JAPAN* | *Non-CRC4* | *Unframed*; default: **ESF**) - for T1/E1 channels only. The frame mode:

- **CRC4** - Cyclic Redundancy Check 4-bit (E1 Signaling, Europe)
- **D4** - Fourth Generation Channel Bank (48 Voice Channels on 2 T-1s or 1 T-1c)
- **ESF** - Extended Superframe Format
- **Non-CRC4** - plain Cyclic Redundancy Check
- **Unframed** - do not check frame integrity

line-build-out (*0dB* | *7.5dB* | *15dB* | *22.5dB* | *110ft* | *220ft* | *330ft* | *440ft* | *550ft* | *660ft* | *E1-75* | *E1-120*; default: **0dB**) - for T1/E1 channels only. Line Build Out Signal Level.

line-code (*AMI* | *B8ZS* | *HDB3*; default: **B8ZS**) - for T1/E1 channels only. Line modulation method:

- **AMI** - Alternate Mark Inversion
- **B8ZS** - Binary 8-Zero Substitution
- **HDB3** - High Density Bipolar 3 Code (ITU-T)

line-protocol (*cisco-hdlc* | *frame-relay* | *sync-ppp*; default: **sync-ppp**) - line protocol

media-type (*E1* | *T1* | *RS232* | *V35*; default: **V35**) - the hardware media used for this interface

mtu (*integer*; default: **1500**) - Maximum Transmission Unit for the interface

name (*name*; default: **sangomaN**) - descriptive interface name