

Tvheadend - Feature #3477

Multistream T2-MI

2016-01-05 11:32 - usuf negro

Status:	New	Start date:	2016-01-05
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:			
Description			
Hello, is it possibly to add T2 MI stream settings to Satellite to use on this transponder: Astra 4A & SES 5 at 4.9°E Provider ZEONBUD 12188 H 30000-3/4 8PSK DVB-S2 multistream stream 20 T2-MI PLP 0 type = "S2", mac = "00:xx:xx:xx:xx:xx", tp = "12188:H:30000", lnb = "9750:10600:11700", modulation="PSK8", stream_id="20", t2mi = true, t2mi_pid=4096, t2mi_plp=0,			

History

#1 - 2016-01-07 21:07 - Jaroslav Kysela

It seems like too much work: https://www.etsi.org/deliver/etsi_ts/102700_102799/102773/01.01.01_60/ts_102773v010101p.pdf

#2 - 2016-01-08 10:03 - usuf negro

is it not already maked for DVB-T on Tvheadend?

#3 - 2016-01-08 10:26 - Jaroslav Kysela

From my understanding, t2-mi is the 'raw' DVB-T/T2 stream encapsulated to the MPEG-TS which is used as input to DVB-T/T2 transmitters (modulators).

TVH accepts MPEG-TS streams only at the moment, so the parser for the 'raw' DVB-T/T2 stream is required to extract the useable MPEG-TS from it.

DVB-S2 multistream (multistream handled in hw decoder): DVB-S2 MPEG-TS (received by TVH): T2MI stream at PID 4096: 'raw' DVB-T/T2 stream: DVB-T/T2 MPEG-TS (you need this)

#4 - 2016-01-08 14:45 - usuf negro

there are 2 transponders on Astra 4A & SES 5 at 4.9°E Provider ZEONBUD, with 4 streams and only one stream encapsulated with t2-mi to transmit then by DVB-T2. This stream can be watching on DVB-S2 by astra-sm (<https://gitlab.com/berdyansk/astra-sm>) config showing top.

#5 - 2016-01-08 16:15 - Jaroslav Kysela

The t2-mi decoder is here: <https://gitlab.com/berdyansk/astra-sm/blob/master/src/mpegts/t2mi.c>

#6 - 2016-01-08 16:31 - usuf negro

so is it possibly to add to TVH?

#7 - 2016-01-09 20:48 - Jaroslav Kysela

Everything is possible, but my interest is low for this.

#8 - 2016-04-24 23:18 - Adam W

I think this system (T2-MI) is likely to be used more and more over time, as countries (especially here in Europe) move to DVB-T2 from DVB-T.

Spain have already apparently tested T2-MI for their terrestrial feeds via Hispasat 30W, and this may be the replacement for their current proprietary encrypted "Full TS" system (one full DVB-T multiplex TS which is encapsulated within a data PID on the DVB-S2 transponder and encrypted with BISS) which actually seems to have similarities with T2-MI. It's unknown whether Spain will move to T2-MI or ACM/VCM Multistream, but they have done tests with T2-MI.

It's already used a lot in Russia (on 90E) and for the Ukrainian channels mentioned on this feature request. If more and more interesting channels become available using this modulation it might be more interesting to implement! biggrin.png

#9 - 2016-05-22 22:23 - Adam W

There's a simple command line tool here -

<https://github.com/newspaperman/t2-mi>

This takes the T2-MI PID as input (I guess there could be a section on the mux settings in TVH to set the T2-MI PID and PLP? A bit like the multistream settings), then outputs the TS.

One way you can do it with that tool is to take the transponder URL from TVHeadend, remove "/play" from it, and do on the command line -

You need the dvbstream package (for ts_filter tool) and also the 'precise' version of VLC (Ubuntu 12.04 version, any newer won't accept input from a pipe)

```
curl [TVH Transponder URL] | ts_filter 4096 | ./t2-mi 4096 1 | cvlc - --ts-out 239.255.100.1:5004
```

This dumps out the final stream to a UDP stream on your LAN. You can then add this stream as an IPTV multiplex in TVHeadend.

I use something similar to this for the full TS feeds on 30W (curl TVH transponder URL | ts_filter PID | cvlc BISS decrypt PID | Python script to strip TS packet headers | cvlc Output to UDP stream).

#10 - 2016-06-01 16:59 - usuf negro

it is simply to use astra-sm

#11 - 2020-05-30 00:05 - Smit Whm

how can i play T2Mi on tvheadend on ubuntu server?