Tvheadend - Feature #2610

swapping HD and SD LCN's (HD Simulcast support)

2015-01-09 18:52 - Pim Zandbergen

Status:	Fixed		**Start date:**	2015-01-09
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	100%
Category:	Service Mapping		**Estimated time:**	0.00 hour
Target version:				

Description

Tvheadend does not swap the HD and SD channel numbers on Ziggo DVB-C, like any HD TV would.

Example:
On a standard SD TV, BBC 1 is on channel 601.
On a standard HD TV, BBC 1 HD is on channel 601, and BBC 1 SD is on channel 971.
On Tvheadend, BBC 1 HD is on channel 971, and BBC 1 SD is on channel 601.

I would like Tvheadend to swap the channel numbers the same way my TV does.

Here's a screenshot from http://www.dtvmonitor.com/nl/ziggo-west that shows
both channel numbers are present in the nit-other table.
I was thinking of a checkbox that would force TVheadend to use the HD Simulcast
channel numbers if present.
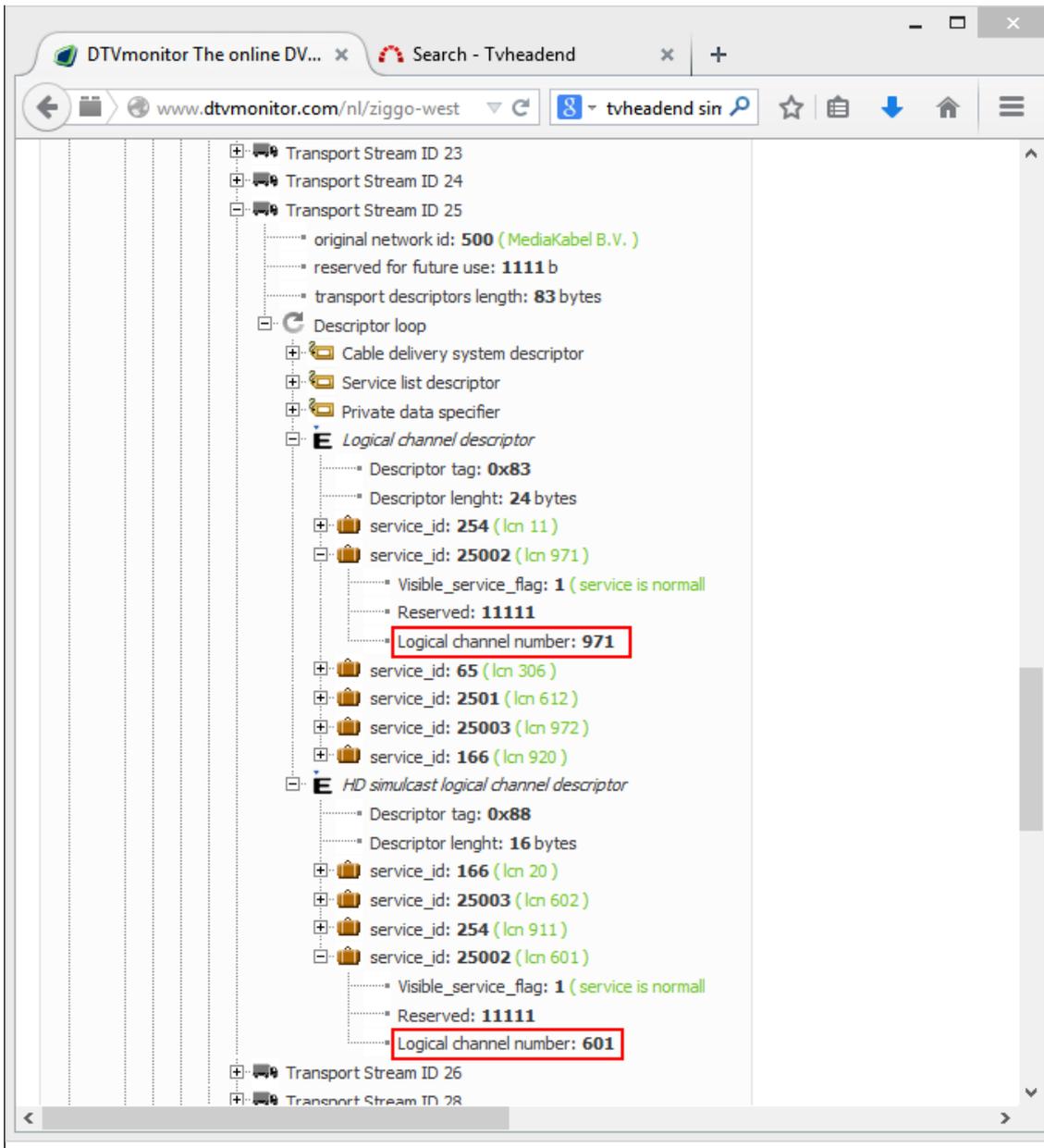
Associated revisions

Revision bfa463df - 2015-01-11 20:52 - Jaroslav Kysela

dvb_psi: prefer HD simulcast LCNs (if present), fixes #2610

History

#1 - 2015-01-09 19:02 - Pim Zandbergen

The path leading from http://www.dtvmonitor.com/nl/ziggo-west to this screenshot is

ts7 -> Tables -> NIT-Other -> Network ID 5555 -> section 3 -> Transport stream loop -> Transport Stream ID 25 -> Descriptor loop

#2 - 2015-01-09 22:31 - Jaroslav Kysela

Could you show also the contents of the private data descriptor (specifier) in the provided table ?

#3 - 2015-01-10 00:03 - Pim Zandbergen

dtvmonitor.com is a public website. Please see for yourself.
See my previous instructions how to get to the data in the screenshot.

#4 - 2015-01-10 11:24 - Jaroslav Kysela

OK, it's web app. The private descriptor is 00 00 00 28 .

#5 - 2015-01-11 21:53 - Jaroslav Kysela

- Status changed from New to Fixed

- % Done changed from 0 to 100

Applied in changeset tvheadend|bfa463df8b06d606543dd991cf05100d11969485.

#6 - 2015-01-11 21:53 - Jaroslav Kysela

No checkbox, HD channels are preferred. Could you test ? v3.9-2347-gbfa463d

#7 - 2015-01-11 23:10 - Hanspeter Müller

Is this something that should work on every network, or does "private descriptor" mean, the provider can use this at his discression (or not)? Should i be able to see this with dvbsnoop?

Regards,

/hp

#8 - 2015-01-12 01:02 - Pim Zandbergen

It works, excellent!
To my surprise, the channel swapping took place immediately, even for already mapped channels.
I was expecting to have to remap channels.

Unfortunately I will need to swap the user icons manually, I now have HD logos for SD channels and vice versa.

#9 - 2015-01-12 01:12 - Pim Zandbergen

Correction: my logo's are OK, no need to swap.

#10 - 2015-01-12 01:32 - Pim Zandbergen

This could well be something generic.
At least one other Dutch cable operator, Caiway, is using the same trick.
Their private descriptor is 0x5F.
See http://www.dtvmonitor.com/nl/caiway

#11 - 2015-01-12 09:34 - Jaroslav Kysela

The 0x5F is identifier for the private descriptor - it has 4 bytes 00 00 00 28 (hex), so it's same as Ziggo - so the current code should work for this DVB provider, too...

#12 - 2015-01-12 09:37 - Jaroslav Kysela

Hanspeter Müller wrote:

> Is this something that should work on every network, or does "private descriptor" mean, the provider can use this at his discression (or not)?
> Should i be able to see this with dvbsnoop?

All 0x80 and above tags are "custom" descriptors which may be used in any way by the contents provider / these custom tags usage. The private descriptor (tag 0x5F) with 4 bytes length usually identifies accurately the provider. Actually tvheadend uses/parses only descriptor with hexa bytes 00 00 00 28 and tag 0x88 for the HD simulcast.

#13 - 2015-01-12 09:39 - Jaroslav Kysela

Pim Zandbergen wrote:

> It works, excellent!
> To my surprise, the channel swapping took place immediately, even for already mapped channels.
> I was expecting to have to remap channels.

If you don't set (override) the channel number manually in the channel grid, the LCNs are taken from the service.

#14 - 2015-01-13 23:51 - Hanspeter Müller

Jaroslav Kysela wrote:

> Hanspeter Müller wrote:
>
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yeah something like this i meant, so it's not a standard, if there are two different descriptors on two different providers... I'm on UPC (Switzerland), and it's not working, i would presume they don't even have a field like this (normal TV's also dont swap SD/HD), but can someone tell me how to check this with a local tool (dtvmonitor does not have UPC-CH)...?

#15 - 2015-01-14 09:15 - Jaroslav Kysela

Hanspeter Müller wrote:

> Jaroslav Kysela wrote:
>
>> Hanspeter Müller wrote:
>>
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You can dump the NIT and SDT tables using '--trace nit,sdt' in tvheadend. But tvh must be compiled with --enable-trace .

#16 - 2015-01-14 12:38 - Pim Zandbergen

Hanspeter Müller wrote:

> I'm on UPC (Switzerland), and it's not working, i would presume they don't even have a field like this (normal TV's also dont swap SD/HD)

You cannot expect Tvheadend to swap HD and SD channels if that does not happen on regular TV's.
A colleague of mine is on UPC Netherlands. They don't swap, SD channels are on low numbers and HD on high numbers.
You can see in http://www.dtvmonitor.com/nl/UPC that UPC NL do not support HD Simulcast.
This might be the same for UPC CH.

By the way, you can contribute your network to dtvmonitor.com if you have a spare DVB adapter:
http://www.dtvmonitor.com/en/collect

Files

| dtvmonitor.png | 47.5 KB | 2015-01-09 | Pim Zandbergen |