

Tvheadend - Feature #6023

ATSC 3.0 Mux support for US markets.

2021-03-15 19:14 - Alan Z.

Status:	New	Start date:	2021-03-15
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:	DVB	Estimated time:	0.00 hour
Target version:			
Description			
Is there a possibility for the new ATSC 3.0 standard to be added to the pre-defined muxes?			
Configuration -> DVB Inputs -> Networks -> Edit network -> Pre-defined muxes.			

History

#1 - 2021-03-16 20:18 - saen acro

This standard is so unpopular

<https://git.linuxtv.org/dtv-scan-tables.git/tree/atsc>

dtv-scan-tables package need to include them

I wasn't search for tutorials how to scan this exotical standard used in 3 countries in world, but maby there is.

#2 - 2021-03-17 02:57 - Alan Z.

The ATSC3.0 (HEVC) is a new OTA standard in the US (as of February 2021), that supports up to 4K resolutions. There are already some stations available, that use it.

#3 - 2021-03-17 03:01 - Flole Systems

- Category changed from Muxers to DVB

If you (or someone else) submit a PR it will be considered for merging, just like every other PR. For obvious reasons someone who is in a region that uses it should do that, everything else would be super slow and inefficient.

#4 - 2021-03-17 07:58 - saen acro

Alan Z. wrote:

The ATSC3.0 (HEVC) is a new OTA standard in the US (as of February 2021), that supports up to 4K resolutions. There are already some stations available, that use it.

HEVC (video coding) noting to do with Transportation technology on similar standards.

ATSC3.0 will make TV hardware change with is nonsense.

ATSC 3.0 (Advanced Television Systems Committee) is a digital terrestrial broadcasting standard that has been substantially enhanced compared with the ATSC A/53 predecessor standard. ATSC 3.0 is designed to allow network operators more flexibility, greater robustness and more efficient operation. It employs state-of-the-art encoding and modulation technologies, enabling a significantly more effective use of the limited spectrum resources. In this way, capacity is created to transfer UHD video contents and immersive audio contents to the end user via terrestrial channels with minimal resources. The consistent focus on IP technology in the baseband makes it possible to merge cost-effective terrestrial broadcasting with other IP-based services.

ATSC 3.0 is the first ATSC standard to employ coded orthogonal frequency division multiplexing (COFDM). This modulation method uses a large number of orthogonal carriers, resulting in a signal that is robust against jamming. COFDM technology also makes it possible to set up spectrum-efficient ATSC 3.0 single-frequency networks (SFN).

Use of the latest low density parity check (LDPC) codes in combination with Bose-Chaudhuri-Hocquenghem (BCH) codes allows the usable channel capacity to approach the theoretical Shannon limit, as does the use of non-uniform constellations (NUC) for modulation. ATSC 3.0 employs multiple physical layer pipe (multiple PLP) technology, enabling a flexible use of the channel. With the latest technologies such as Layer Division Multiplexing (LDM), an effective simultaneous crossover can be realized both for mobile reception and for stationary reception.

DVB-T2 is still better wink.png read [comparision](#) betwin both

#5 - 2021-03-17 20:38 - Alan Z.

I have the HDHomeRun CONNECT 4K tuner, so if it could be used somehow to get needed information I would help to provide more details. I can't see anything useful from the device's menu, except for the channel frequencies.