

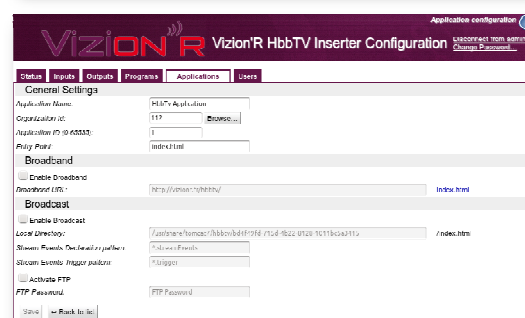
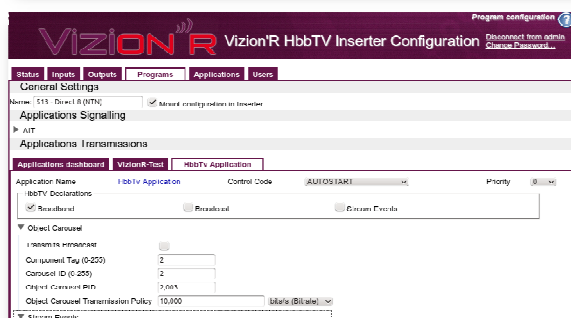
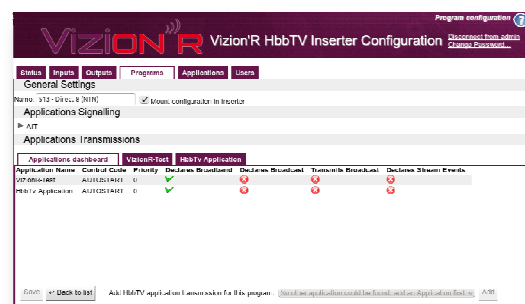
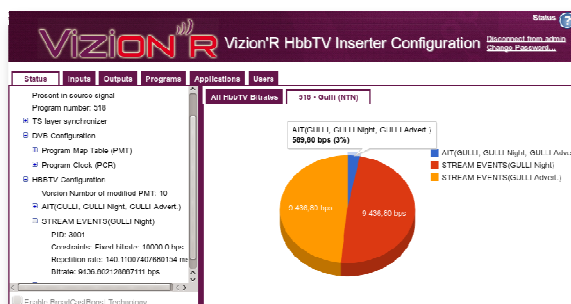
## UNYSSEA - HbbTV Inserter

The Unyssea solution is a real-time re-multiplexer enables to handle DVB/HbbTV applications insertion (interactive services, advertisings, quizzes, games etc...). Unyssea is designed for TV channel editors, broadcast network operators and broadcasters and is available in two settings: testing/lab use case and production use case. Unyssea can generate DSMCC Object Carousels, Streams events and all application signalling information (AIT and descriptors) that can be directly injected into any existing MPEG-TS compliant stream (Single/Multiple Program Transport Stream, including DVB-T/C/S Multiplexes)

### Unyssea main features

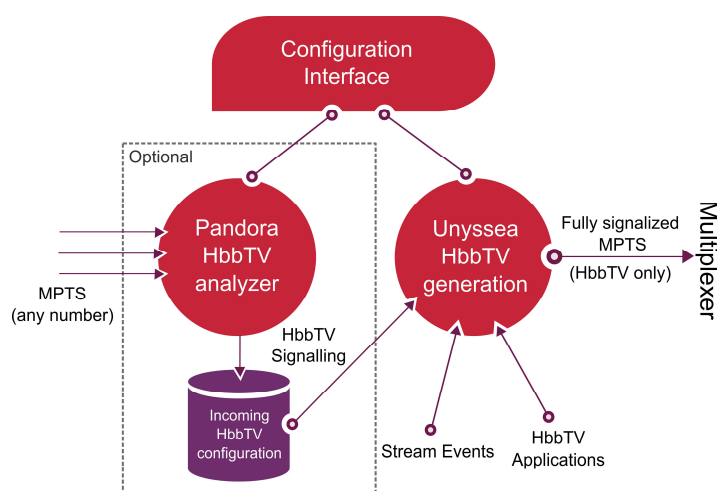
- Generation of application signaling information, object carousels and stream events
- HbbTV Transport Streams direct output or injection within existing Transport Stream
- Optional integration of Pandora HbbTV analyzer to allow HbbTV applications merging and top-level HbbTV application injection
- Multiple output type support: UDP, ASI, DVB-T/ T2/ S/ S2/ C modulations
- Application priority and carousel bitrate on the fly control API
- Multi-screen events publication API
- Ultra low latency (no buffering)
- Web-based interface allowing to configure/control all parameters while live running
- Control and monitoring through SNMP
- Can be installed on any kind of generic servers

### User-friendly web based interface

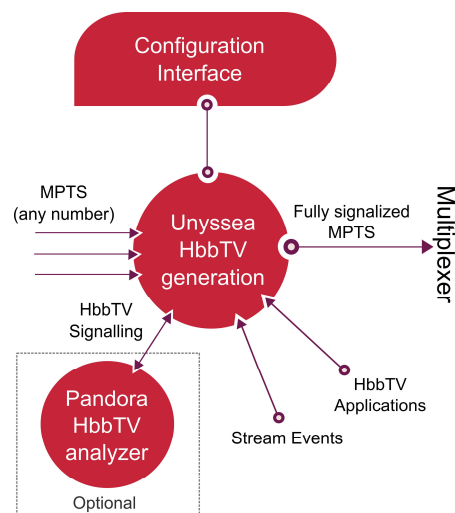


### Architecture: flexible set-up

The Unyssea solution integrates its own demultiplexer/multiplexer allowing to either directly inject HbbTV streams into any existing DVB stream (Single/Multiple Program Transport Stream) or produce an HbbTV Transport Stream dedicated to multiplexer. Thus, Unyssea can be used with two main set up.



Set up 1: for network operator or broadcaster



Set up 2: for simple TV channel editor or testing/lab

### Specifications

Input	<ul style="list-style-type: none"> <li>TS-188 (SPTS or MPTS) over UDP</li> <li>ASI input mode on Dektec cards (i.e: DTA 112, 115)</li> <li>Antenna input with most of DVB-T/C/S cards (Windows/Linux)</li> </ul>
Output	<ul style="list-style-type: none"> <li>TS-188 (SPTS or MPTS) over UDP</li> <li>ASI output mode on Dektec cards (i.e: DTA 110, 112, 115...)</li> <li>Modulated DVB-T/C/S output on Dektec cards (i.e: DTU 215, DTA 112, 115..)</li> </ul>
Services Insertion	<ul style="list-style-type: none"> <li>HbbTV application signaling information (AIT &amp; descriptors)</li> <li>HbbTV applications (DSM-CC Object Carousels)</li> <li>Stream Events</li> <li>Electronique Programming Guide (EIT p/f, schedule..)</li> </ul>
Control on broadcast parameters	<ul style="list-style-type: none"> <li>Bitrate or repetition period for each object</li> <li>Control and monitoring with a web user interface</li> <li>Control and monitoring through SNMP</li> </ul>
Os compatibility	<ul style="list-style-type: none"> <li>Windows, Mac OS or Unix platforms</li> <li>Hardware packaging on different servers (tower, 1U, 2U)</li> </ul>