

## Ondems Media Gateway – Release 1.1

### Real-Time conversion between different I/O standards

#### 1. Overview:

In building heterogeneous Digital TV delivery systems, it is often required to interconnect equipment that has incompatible interfaces (ASI, Ethernet-IP). In this case a reliable solution is provided by *Ondems Media Gateway*.

#### 1.1. Product description:

Ondems Media Gateway is a software product used for transferring the MPEG2 Transport Stream packets between DVB-ASI interfaces and Multicast IP environment. It runs on a standard PC with Linux operating system. The interfaces used for I/O are an ASI card (provided by DEKTEC) and an Ethernet card. The most common use for the Media Gateway is in IP TV systems, where it is used to receive MPEG-2 multiplexes from professional DVB receivers with ASI output, demultiplex the received MPEG-2 multiplex and multicast the data based on configurable rules.

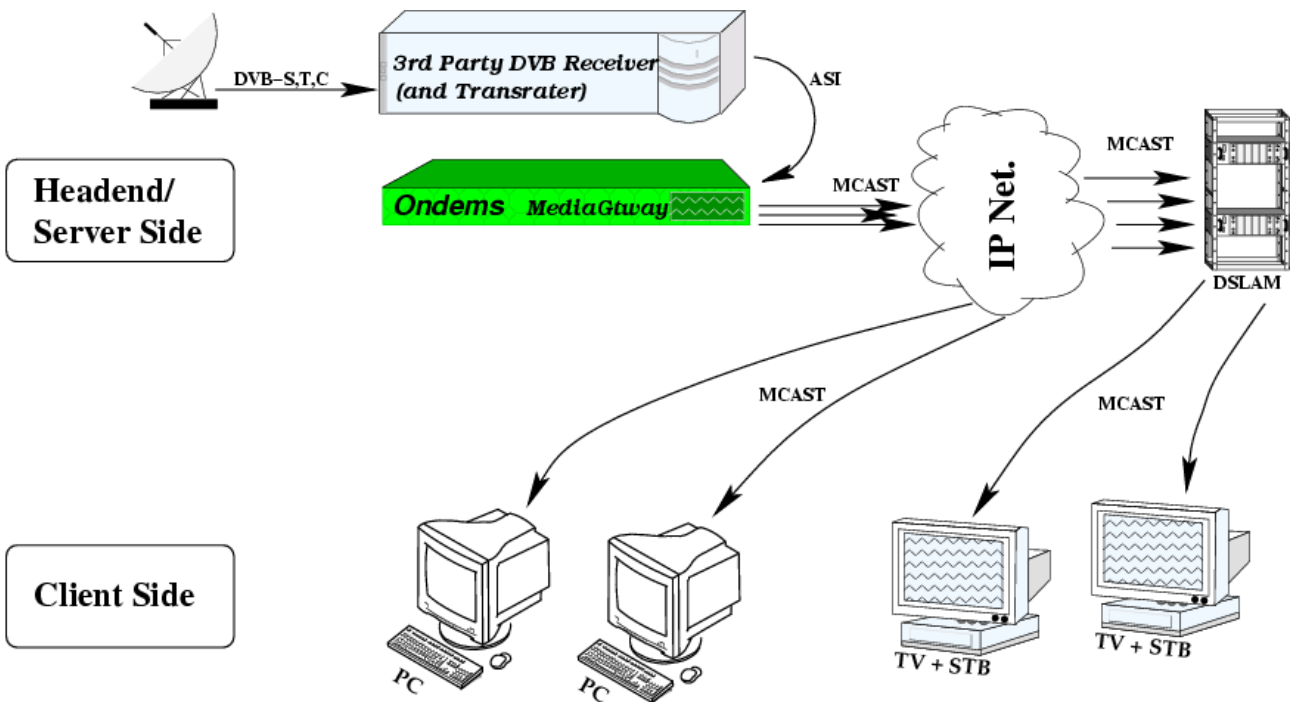


Figure 1: The use of Ondems Media Gateway in IP TV solutions

Ondems Media Gateway is de-multiplexing the MPEG2 Transport Stream and sends each packet to selected one or more multicast addresses. The selection is made on PID value. The packets are sent in the received order. The Media Gateway automatically modifies the Program Association Table (PID=0) in order to maintain the correct list of the channels on each transport stream sent to one multicast address.

## **1.2. Features (Technical specifications):**

Some of the options and features presented are customizable depending on the client requirements. The features marked with (\*) are currently under development. Please contact us for further details.

<b>Ondems Media Gateway</b>	
Target	Digital Television Systems, Other Streaming Systems
Media Formats	DVB compliant MPEG-2 Transport Stream: <ul style="list-style-type: none"><li>• Single-Program Transport Stream (SPTS)</li><li>• Multi-Program Transport Stream (MPTS)</li></ul>
Input/Output	<ul style="list-style-type: none"><li>• DVB ASI (DEKTEC DTA-120, DTA-140)</li><li>• IP Ethernet 10/100/1000 Base-TX<ul style="list-style-type: none"><li>• UDP, Multicast, RTP/Multicast</li><li>• Configurable TTL for Multicast</li></ul></li><li>• ATM AAL0/AAL5 electrical/optical (*)</li><li>• Up to 4 DVB ASI input cards (*)</li></ul>
Output rate control	<ul style="list-style-type: none"><li>• Same as input</li><li>• Constant (by Insertion/Removal of Null packets) (*)</li></ul>
Media Processing	<ul style="list-style-type: none"><li>• PID filtering</li><li>• PID value modifications</li><li>• PAT processing</li></ul>
Supported Linux Distributions (tested)	<ul style="list-style-type: none"><li>• Mandrake (9.1, 9.2)</li><li>• SuSE (9.0)</li><li>• RedHat (9.0)</li><li>• Other distributions should work as well. Please contact Ondems for details and support</li></ul>

## **1.3. Added features and major modifications**

### **1.3.1. From version 1.0 to version 1.1:**

- Better support for temporary licenses: improved help and messages
- Better driver handling in the start/stop script
- Improved documentation

## 2. Usage Scenarios

### 2.1. Receiving and multicasting one transponder

Ondems Media Gateway can be used to receive on Transponder (MPTS), extract each TV channel with all associated PIDS, and multicast each TV channel on a separate IP address, as a SPTS. PIDS specification and full transponder multicast are also possible.

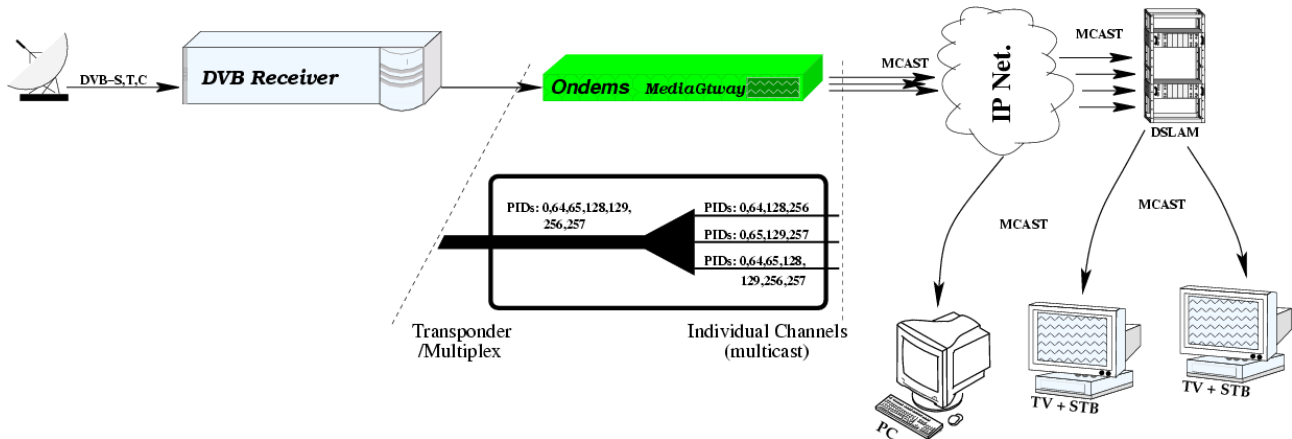


Figure 2: Using the Media Gateway for multicasting a single Transponder, received from a DVB receiver

### 2.2. Receiving and multicasting several multiplexed transponders, on a single ASI input

Ondems Media Gateway can be used to receive several multiplexed Transponders on a single ASI input, extract each TV channel with all associated PIDS, change the values of some PIDS (e.g. PAT, PMT), and multicast each TV channel on a separate IP address, as a SPTS. PIDS specification and full transponder multicast are also possible.

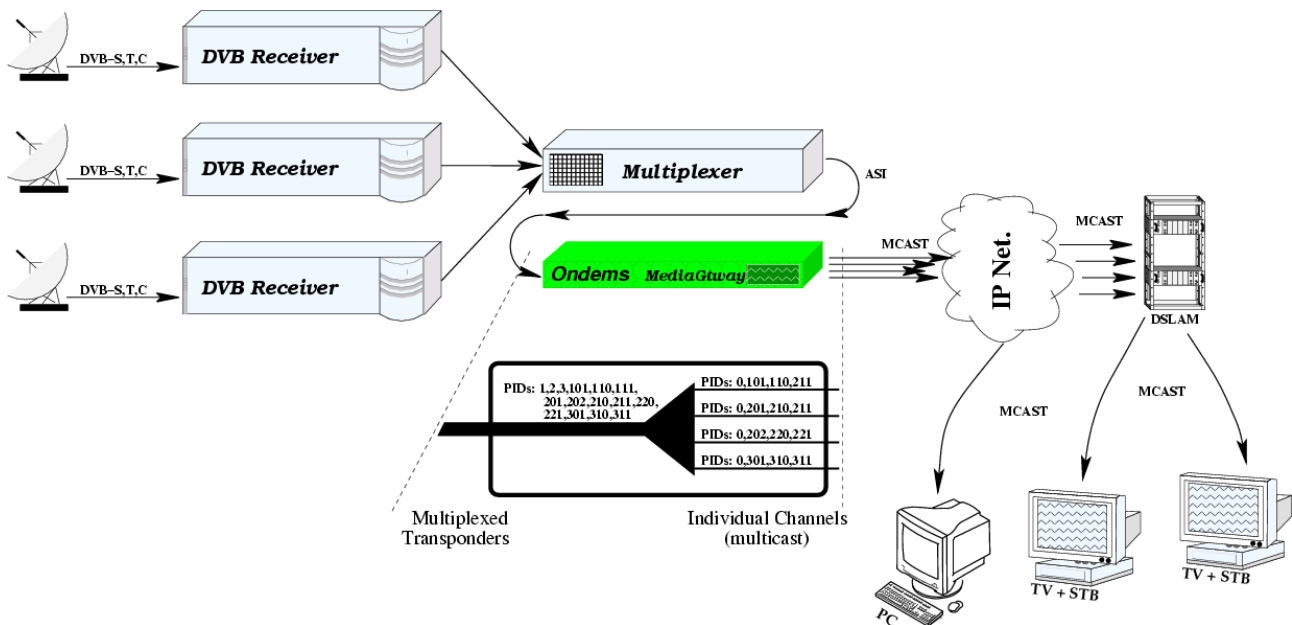


Figure 3: Using the Media Gateway for multicasting several multiplexed Transponders

### 3. Contact Information

For more information about Ondems Media Gateway and other Ondems products, please contact:

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### 4. Other solutions from Ondems

Ondems is a company creating software products in the area of transport of digital television streams (MPEG-2) over DVB or IP infrastructures. An important part of our policy is the customization of our products in order to fit the customers' needs. Customization work may include:

- Adding new features to existing products
- Modifying existing products to fit particular needs
- Designing and creating customized solutions in order to fit a certain purpose, specified by the client.

Please feel free to ask us for a quotation at: [info@ondems.com](mailto:info@ondems.com)

In addition to Media Gateway, Ondems also develops other products related with DVB-SI, IP TV and VoD.

For more information, please visit our web site at:

<http://www.ondems.com>