DVBLink Server Network Pack

Installation and configuration manual

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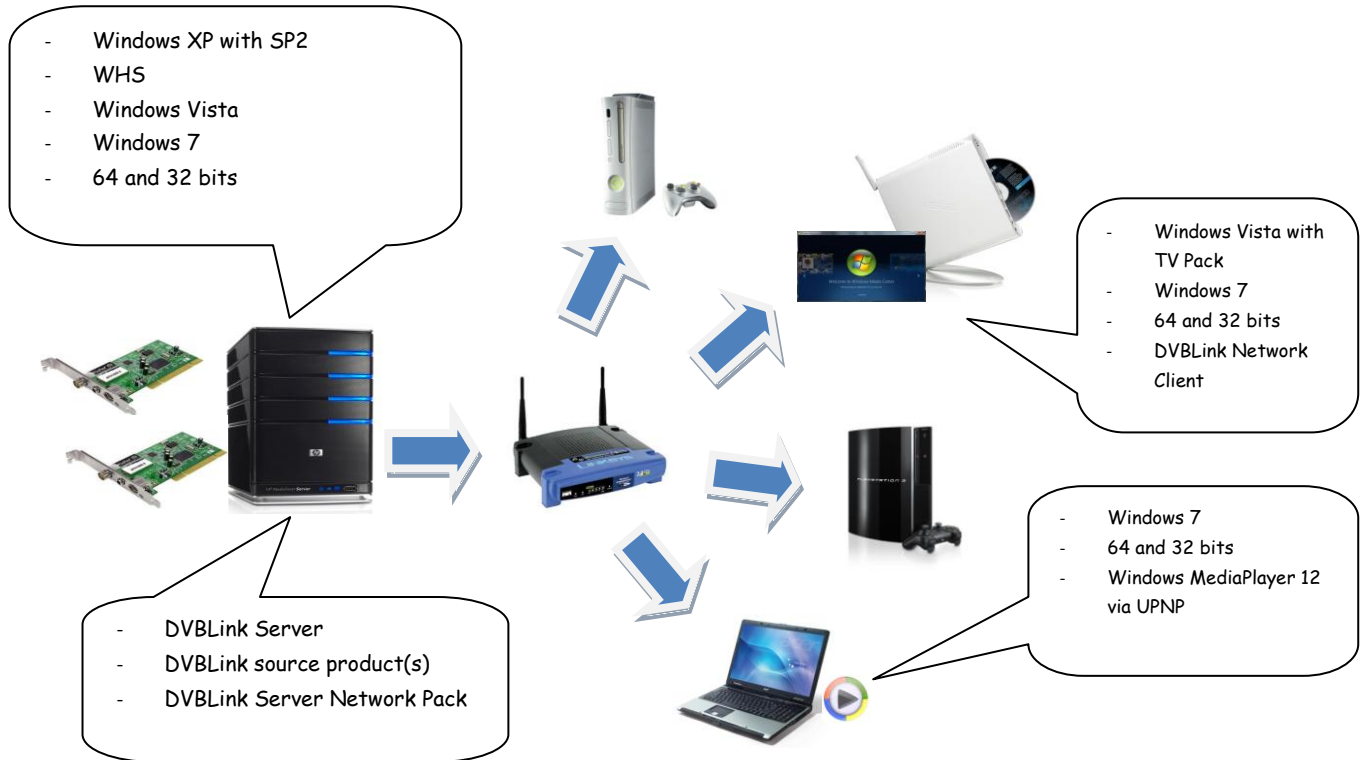
Introduction

DVBLink Server Network Pack lets you enjoy your favorite TV channels throughout your whole house – in Windows MediaCenter, running on network computers, on UPNP enabled clients such as Sony PlayStation3, on nettops and laptops, running Windows 7 and on XBox 360.

Next to that Network Pack turns your PC into a real Internet TV Server and lets you watch you favorite TV channels in the browser from anywhere outside your home.

The following figure shows the context of DVBLink Server Network Pack:

In this setup DVBLink Server Network Pack and one or more DVBLink source products (DVBLink TVSource, DVBLink for Dreambox, DVBLink for IPTV etc.) should be installed on a server computer. This computer also hosts all required tuner hardware – for example tuner cards in case of DVBLink TVSource. Server computer can run any Windows OS that is equal or higher than Windows XP with SP2. However if you also want to use server computer to watch the television on, you need to have either Vista with TV Pack or Windows7 OS.

DVBLink Server with Network Pack can stream live TV to different network clients such as:

- Computers, barebones, nettops and laptops running Windows 7 or Vista with TV Pack. You can watch TV on these clients in Windows MediaCenter with the help of DVBLink Network Client.
- Computers, barebones, nettops and laptops running Windows 7. You can watch live TV on these clients using Windows MediaPlayer as a UPNP client. No extra software installation is required in this case.
- Sony PlayStation3 as UPNP client
- XBox360 either as extender or UPNP client if combined with XBMC MediaCenter
- Other hardware or software UPNP clients
- Web clients, watching TV via web browser

DVBLink Server controls access of all clients to the installed tuners and takes care that tuner access conflicts are resolved according to "first come first served" principle. The maximum number of streams that DVBLink Server can serve at any moment of time is equal to the number of installed physical tuners.

Preconditions

DVBLink Server and one or more DVBLink source products have to be installed and configured on a server computer before the installation of Network Pack.

Installation files

Installation zip file contains two installation executables:

- DVBLink Server Network Pack installer (DVBLinkNetworkPack.msi). This one has to be installed on the machine where DVBLink Server runs.
- DVBLink Network Client installer (DVBLinkNetworkClient.msi). This one has to be installed on the client machine where Windows MediaCenter will be used to watch the television.

DVBLink Server Network Pack installation

To install DVBLink Server Network Pack start DVBLinkNetworkPack.msi installation file. Once it is started you will be presented with the installation wizard. Follow the instructions of this wizard to install the software.

DVBLink LAN server

DVBLink LAN server lets you watch your TV channels on different network clients within your home (e.g. inside your Local Area Network – LAN).
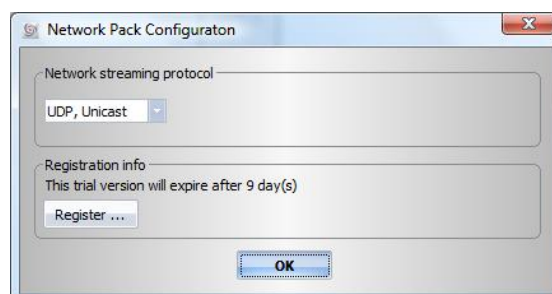
Configuration

DVBLink Server Network Pack does not require any specific configuration and is ready for use immediately after installation.

UDP unicast vs. RTP multicast

If you are using DVBLink Server Network Pack with wireless and/or heavy loaded network you may experience viewing artifacts on network computers like picture break-ups and stuttering. If this is the case you can switch network streaming protocol from UDP unicast, which is used by default, to RTP multicast. The latter is better suited for difficult network environments.

Please keep in mind however that not all network switches support multicast. To verify whether your network switch supports it refer to the user manual of your network equipment.

To switch DVBLink Server Network Pack to RTP multicast, launch DVBLink Server configurator and select *DVBLinkServer Network Pack* from its *Addons* menu. The Network Pack configuration dialog appears:

Select *RTP, Multicast* in the combobox and press ok. It may take up to a minute for clients to recognize a new setting and reconnect.

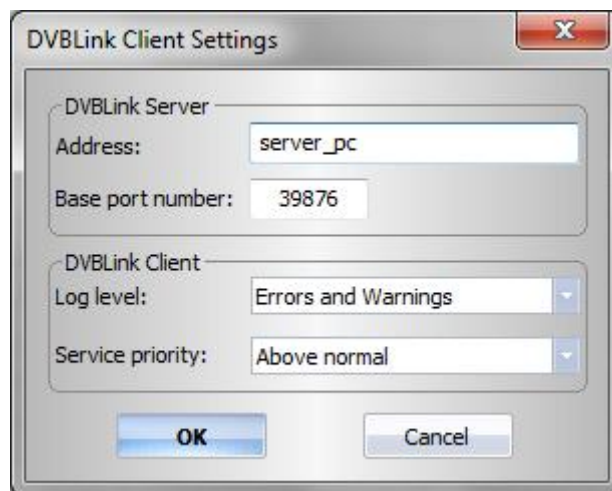# DVBLink Network Client for LAN server

Installation

To install DVBLink Network Client on a networked client computer start DVBLinkNetworkClient.msi installation executable. Once it is launched you will be presented with the installation wizard. Follow the instructions of this wizard to install the software. Once installation is completed you will be prompted to reboot the system. **Please reboot.**
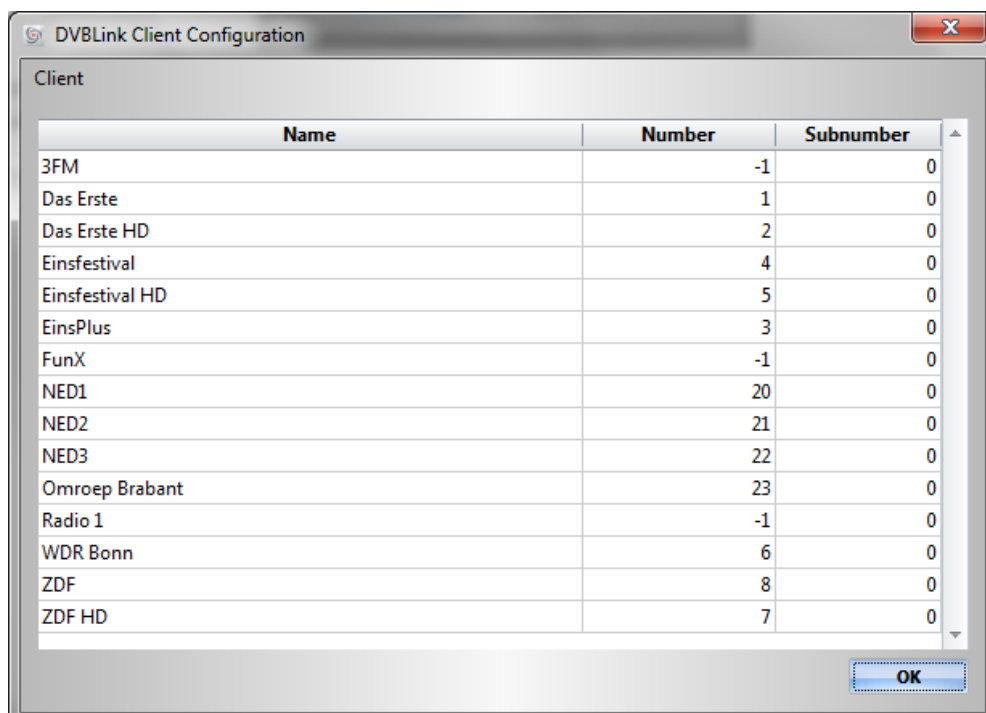
Configuration

Launch DVBlink Client configurator from Windows Start menu -> DVBLink -> DVBLink Client Configuration.

When started for the first time, DVBLink Client configurator will prompt you for the network location of DVBLink Server:

Enter IP address or a host name of the computer where DVBLink Server runs and press Ok. If connection to DVBLink Server succeeds, DVBLink Client configurator will display a grid with available channels:

Windows MediaCenter Setup

TV Setup

TV Setup should be performed only once when DVBLink Network Client is installed for the first time.

To do TV Setup start Windows MediaCenter and go to Settings -> TV -> Setup TV Signal. This starts a TV Setup wizard. Follow the steps of the wizard to setup your TV Signal:

- Select your actual Region
- Enter your actual postcode
- Agree to the terms of Guide services
- At this point Media Center starts downloading of latest TV setup data for your region
- If prompted to select which tuner you would like to setup – select **Satellite**! **DVBLink Tuners are virtual satellite (DVB-S) tuners**:

- Tuner selection: select all DVBLink Tuners. Unselect all other satellite tuners (if you have them present):

- Select a satellite: **Select any satellite from the list** (like ABS-1 satellite, shown in the picture below). **It does not matter which satellite you select here.** You will not see any channels from this particular satellite as they will be substituted with DVBLink channels during channel synchronization procedure.
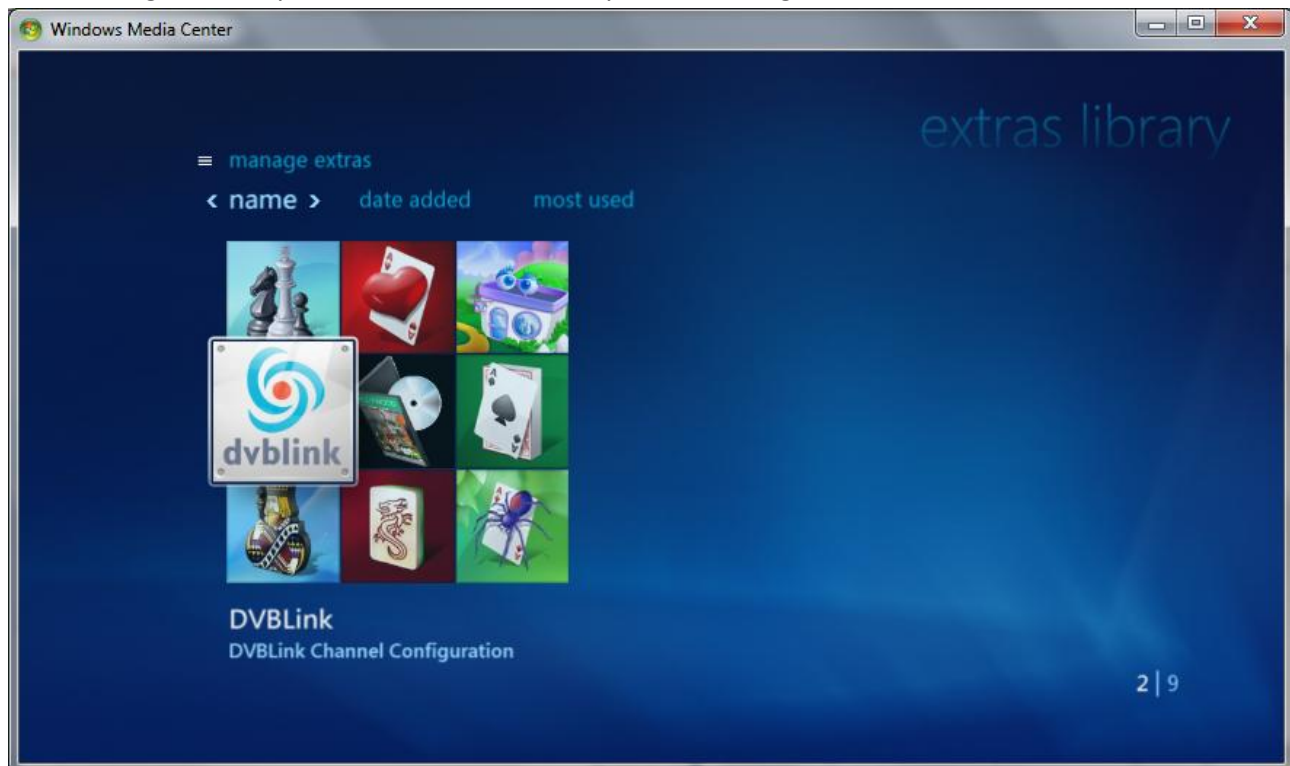

- Select LNB type: select Universal LNB type
- Press Next on the Satellite Summary screen
- At this point MediaCenter will ask you whether you want to configure other available tuners. You may want to configure additional tuners if you have them (*those which are not controlled by DVBLink Server!*).
- Review the TV Signal Configuration summary and press Next
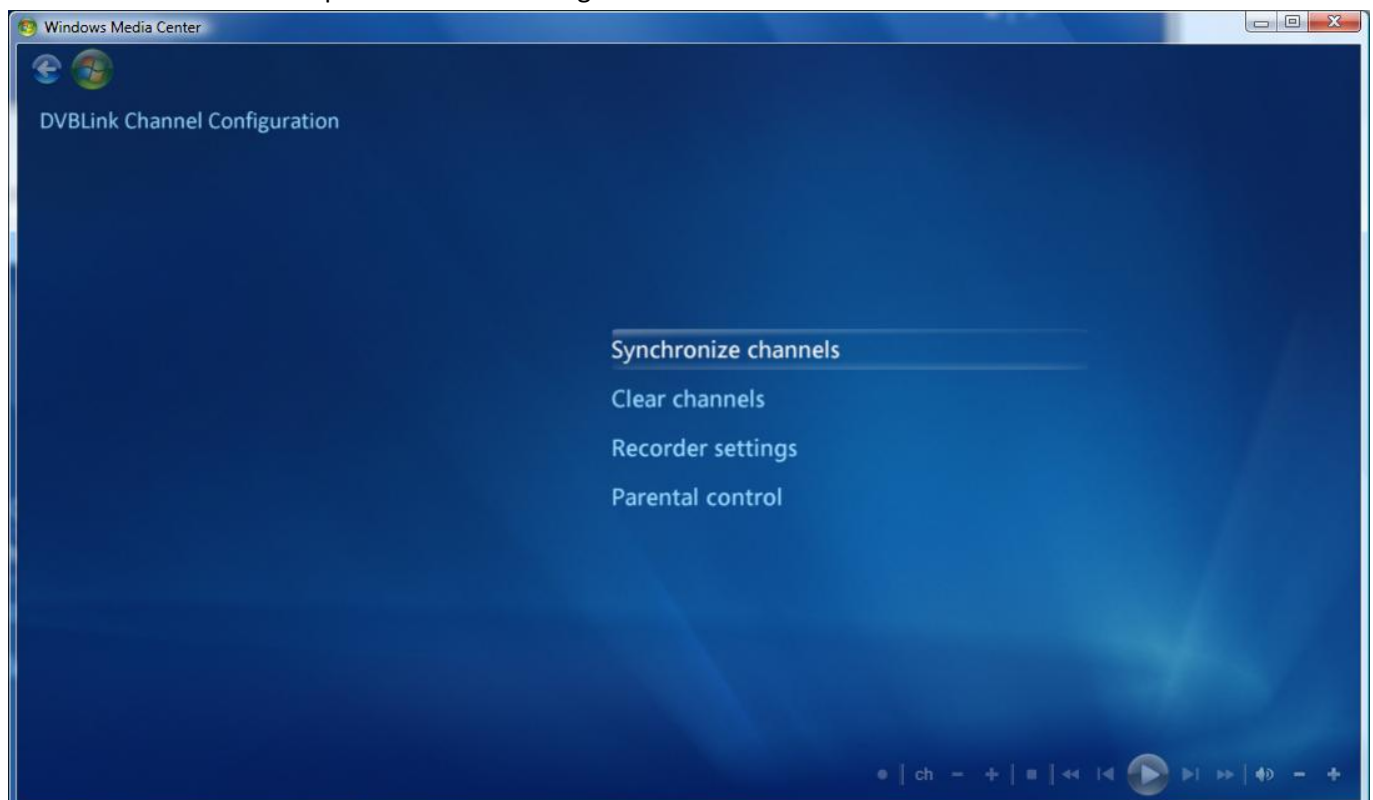- Press Finish to finish TV Signal setup

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DVBLink configuration

DVBLink channel synchronization is done via DVBLink Channel Configuration MediaCenter addin. This addin is located in

- Extras section of MediaCenter if you are running Win7
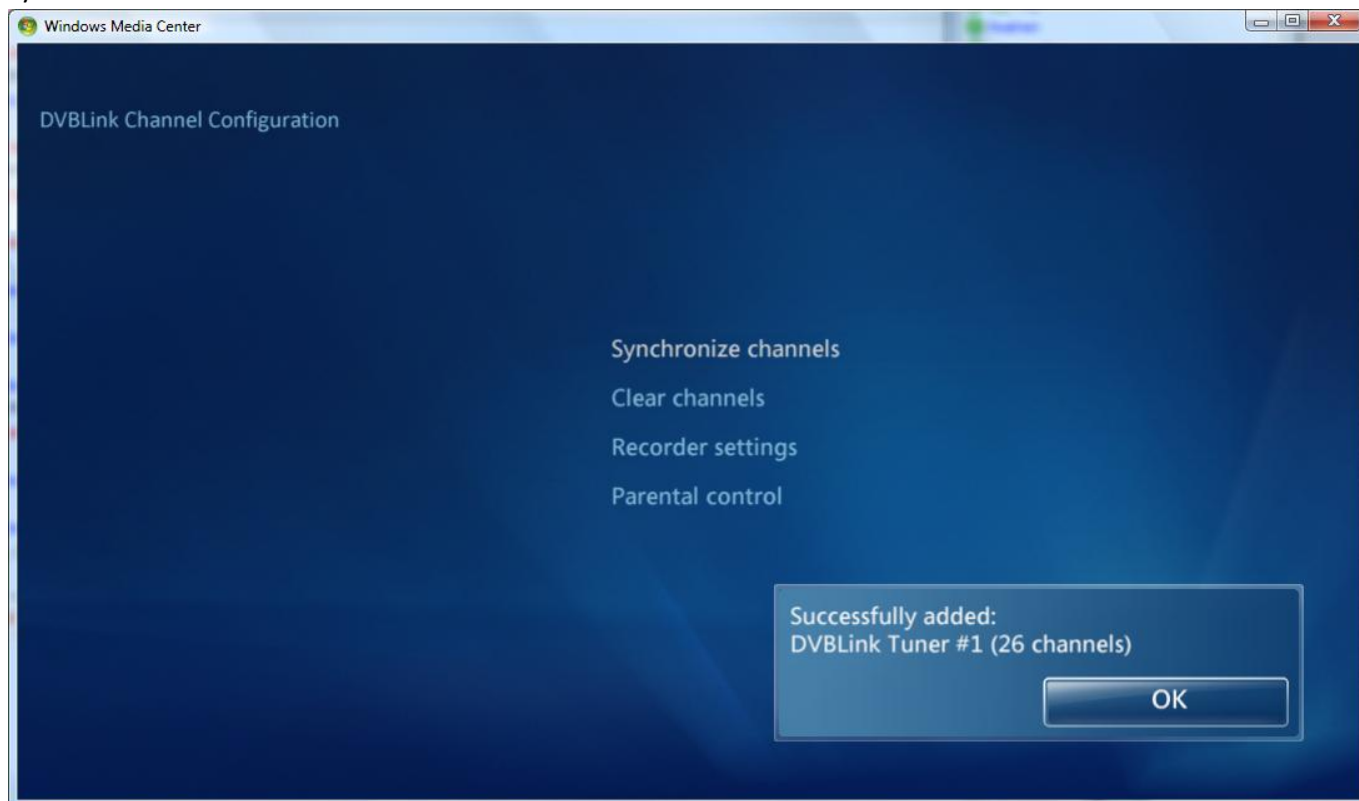- Program library section of MediaCenter if you are running Vista

When addin is launched it presents the following screen to a user:

Channel synchronization

When *Synchronize channels* button is pressed, addin starts channel synchronization. This procedure may take some time depending on the number of channels, which have to be synchronized and speed of your computer. When channel synchronization is finished, user will be presented with a dialog, showing DVBLink tuners for which synchronization was done:

Recorder settings

In a multi DVBLink client environment DVBLink Server allows for one MediaCenter to be a "**default recorder**". DVBLink Server guarantees that channel change requests from this MediaCenter will succeed even at the cost of other connected clients for your timer recordings to happen.

You can select whether this particular MediaCenter is the default recorder in the Recorder settings menu:

Press "Set as default" button to make this MediaCenter the default recorder.

Press "Reset" button to reset default recorder status.

At this point your DVBLink installation and configuration is completed and you can start watching TV in your Windows MediaCenter. Enjoy!
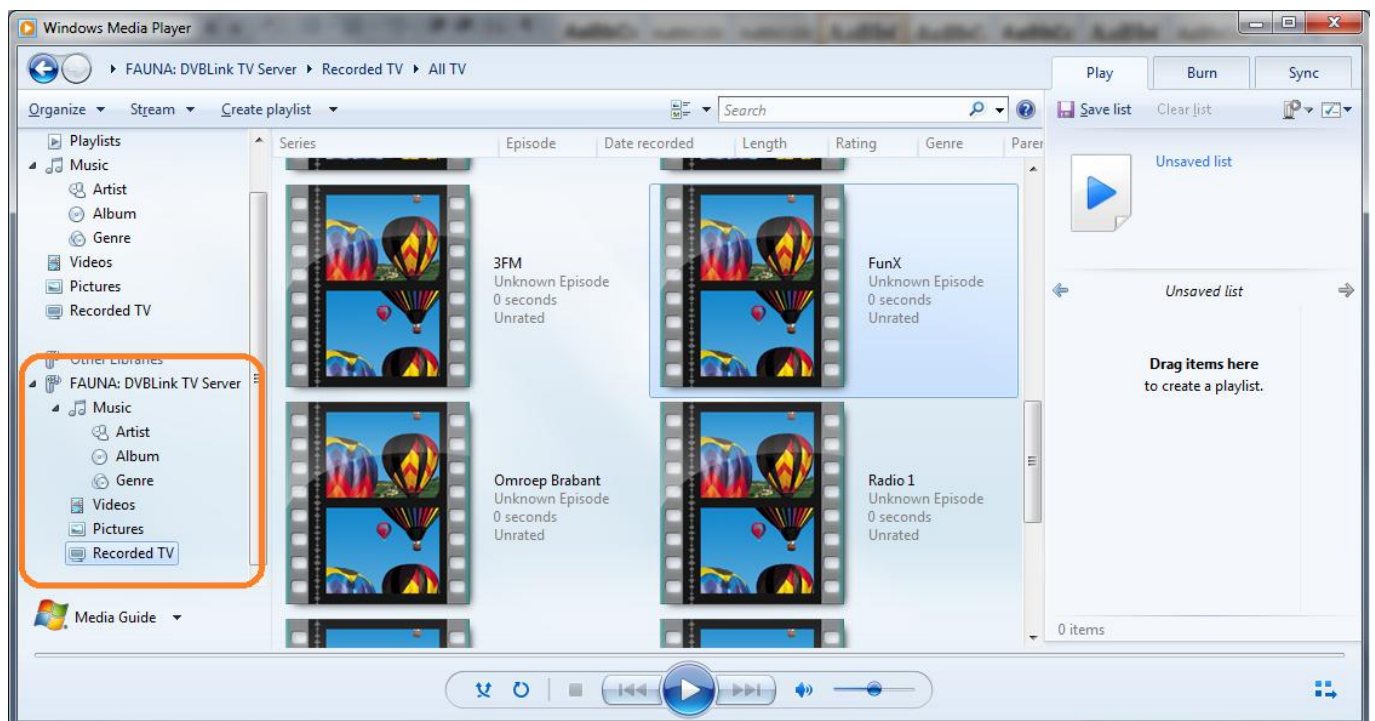
UPNP Server

DVBLink Server Network Pack includes a UPNP server, which makes all DVBLink channels available to UPNP-enabled hardware and software clients such as:

- Sony Playstation 3
- XBMC MediaCenter, running either on PC or on XBox
- Cyberlink PowerDVD
- Nero ShowTime
- Windows MediaPlayer 12
- Western Digital Live! Network player
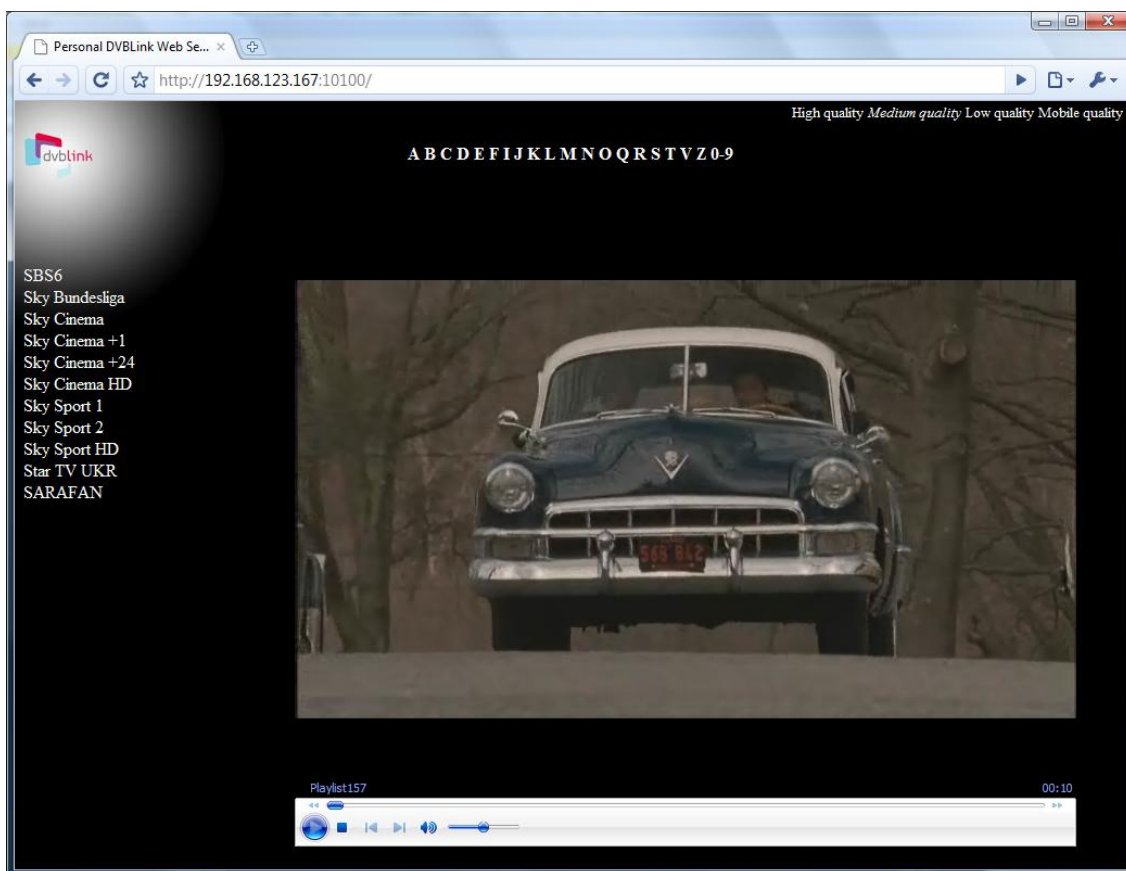- and others

DVBLink UPNP server does not require any special configuration and starts working immediately after installation.

If you are using Windows7 you can watch TV channels without installing any special software with Windows MediaPlayer 12. DVBLink channels appear under Recorded TV section:
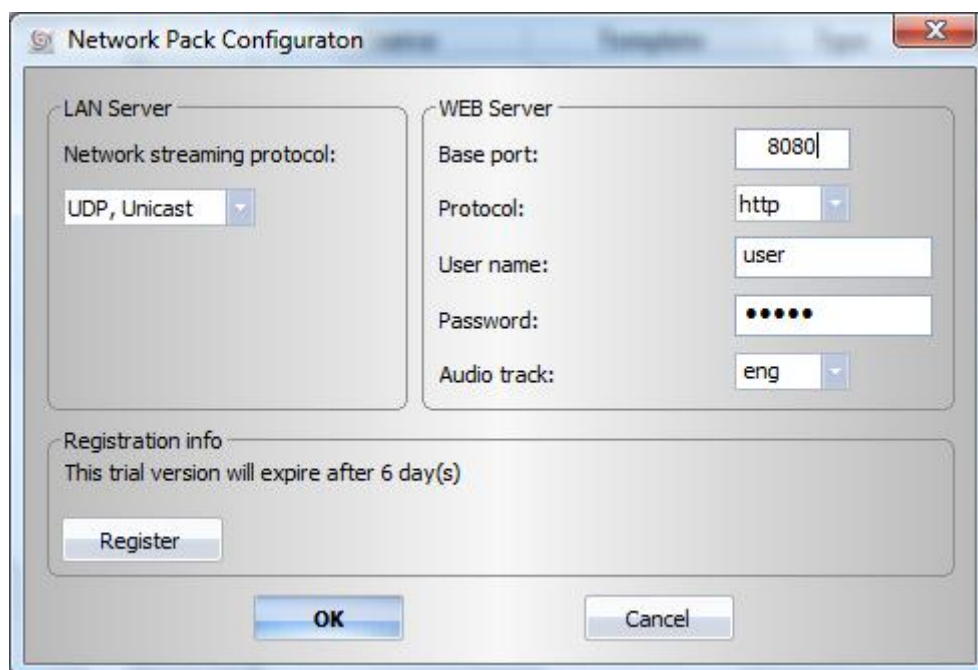
DVBLink WEB Server

DVBLink Web Server lets you enjoy your favourite TV channels outside of your home – via Internet using web browser interface:

Configuration

DVBLink Web server configuration is available via *Addons* menu of DVBLink Server Configuration utility:

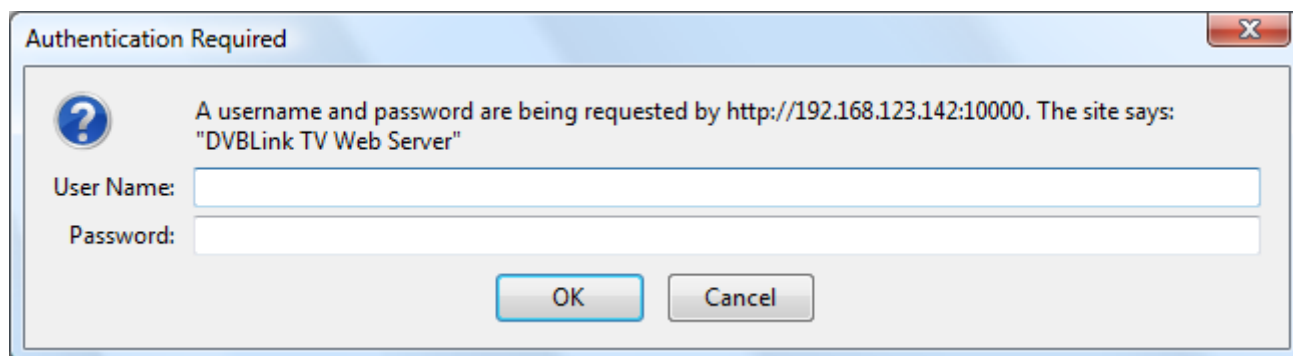This configuration lets you change the following settings:

- **Base port**. The server accepts incoming web connections on this port. It also uses up to 4 consecutive ports above the base port for actual streaming. The default base port value is **8080**.
  Important! To be able to connect to your server computer from outside of your home you need to open **base port and four consecutive ports** *on your ADSL modem's firewall and configure the port forwarding for these ports on your router. Please consult user manual of your network equipment on how to do it.*

- **Protocol**. This setting defines the communication protocol that server uses to communicate with client. By default it is set to **http**. You can also use secure version of this protocol – **https** – for communication.

- **User name and password**. When connecting to DVBLink web server, it will ask you for user name and password to protect your privacy and make sure that only authorized user can connect and watch your TV channels. The default values are: user name **user** and password **admin**.
  Important! It is strongly recommended that you change default values after system setup.

- **Audio track**. DVBLink web server can only stream one audio track out even if the original transport stream has several audio tracks. This setting lets you select the audio track language that will be used as a preferred audio track by the server.

Connection to the DVBLink web server
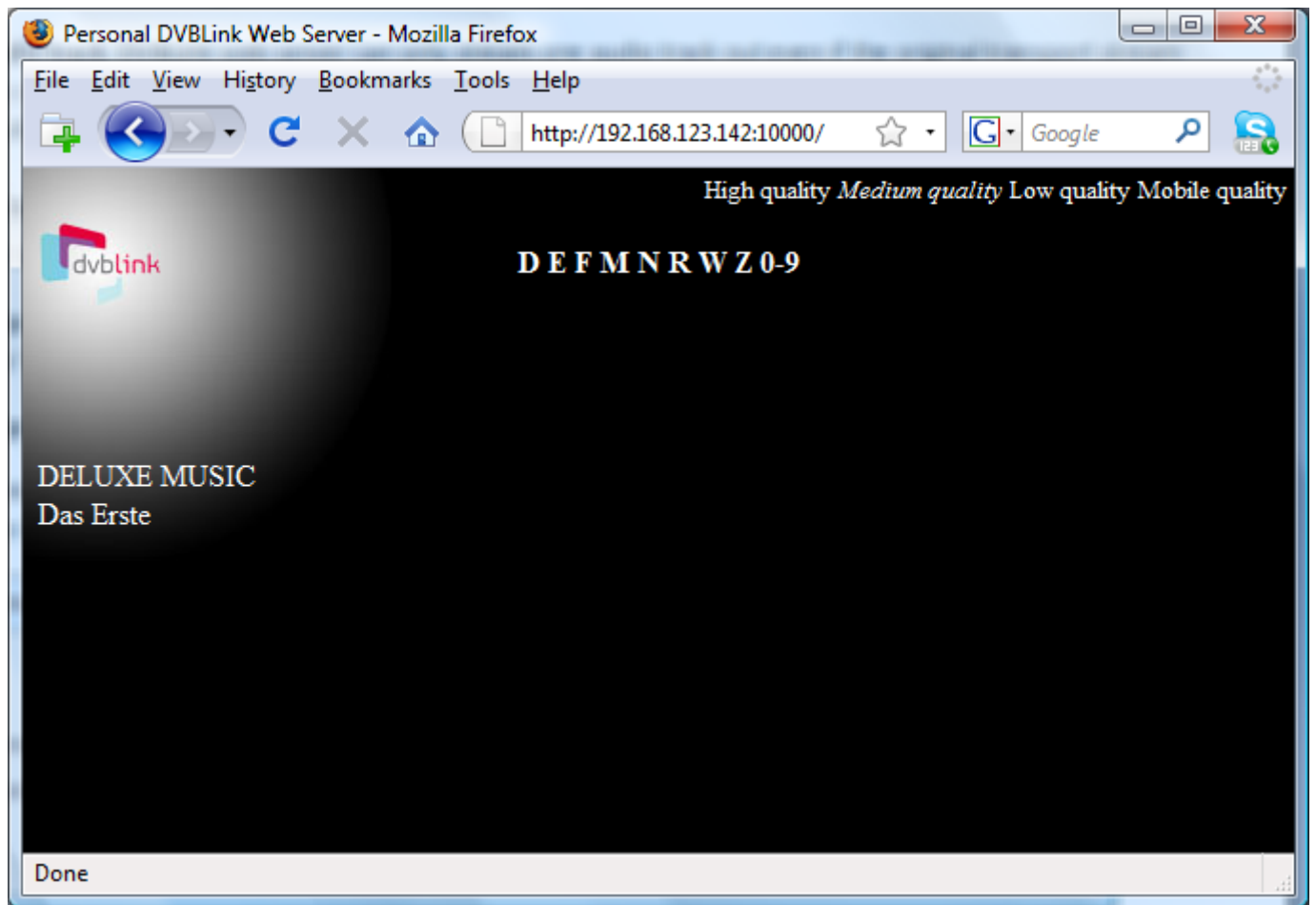
To connect to your DVBLink Web server, open internet browser and type the address of your server:

- **http://<your external ip address>:<base port>** if connecting from outside your home
  Tip! You can find out what your external IP address is by using http://www.whatismyip.com/

- **http://<internal server ip address>:<base port>** if connecting from inside your home (via LAN)

Upon successful connection you will get a screen, prompting for user name and password (the actual dialog depends on the browser that you are using):

Type your user name and password and press Ok button. After successful authentication you will be presented with the main screen showing first letters of all your channels at the top and list of channels that start with the actually selected letter on the left:

After you select a channel on the left, DVBLink web server will switch the channel, launch embedded MediaPlayer and start playback.

Tip! If you are using Mozilla FireFox or Google Chrome as your browser you would need MediaPlayer Plugin for Firefox to play DVBLink channels. The plugin can be downloaded here:

http://port25.technet.com/pages/windows-media-player-firefox-plugin-download.aspx
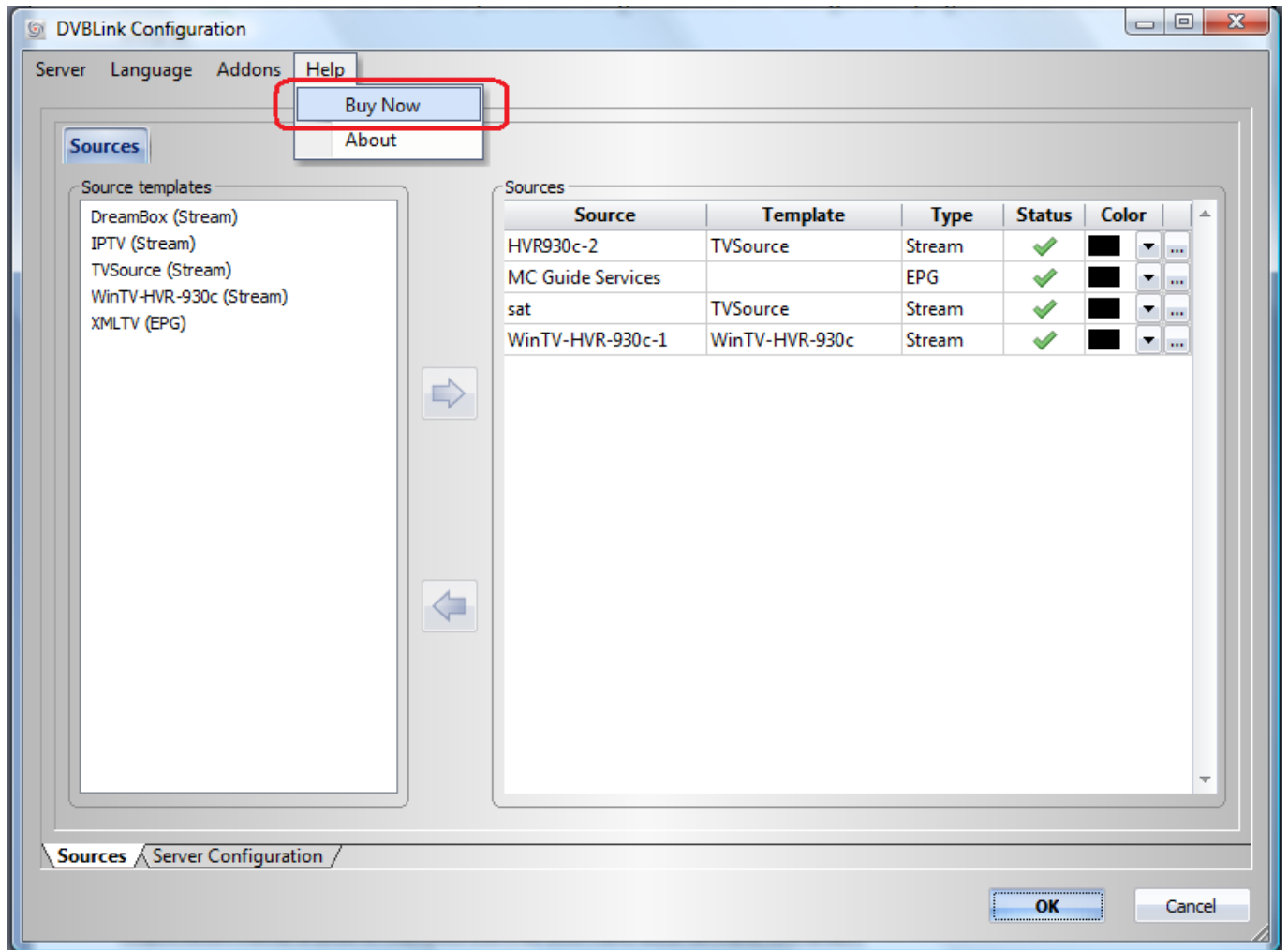
Quality levels

DVBLink Web Server provides several quality levels to balance the available bandwidth, processing power and video/audio quality. These quality levels are selectable via DVBLink server web page:

- **High**. Video resolution 720x576 with bitrate of 1024 kbits/sec using VC-1 video codec's *Main Profile*. Audio has bitrate of 128 Kbits/sec.

- **Medium**. Video resolution 720x576 with bitrate of 768 kbits/sec using VC-1 video codec's *Main Profile*. Audio has bitrate of 64 Kbits/sec.

- **Low**. Video resolution 352x288 with bitrate of 384 kbits/sec using VC-1 video codec's *Main Profile*. Audio has bitrate of 64 Kbits/sec.

- **Mobile**. Video resolution 176x144 with bitrate of 128 kbits/sec using VC-1 video codec's *Simple Profile*. Audio has bitrate of 64 Kbits/sec.

All profile information is stored in <dvblink2 install path>\Addons\Network Pack\profiles.xml. This file can be edited to achieve best performance/quality ratio for your particular system.
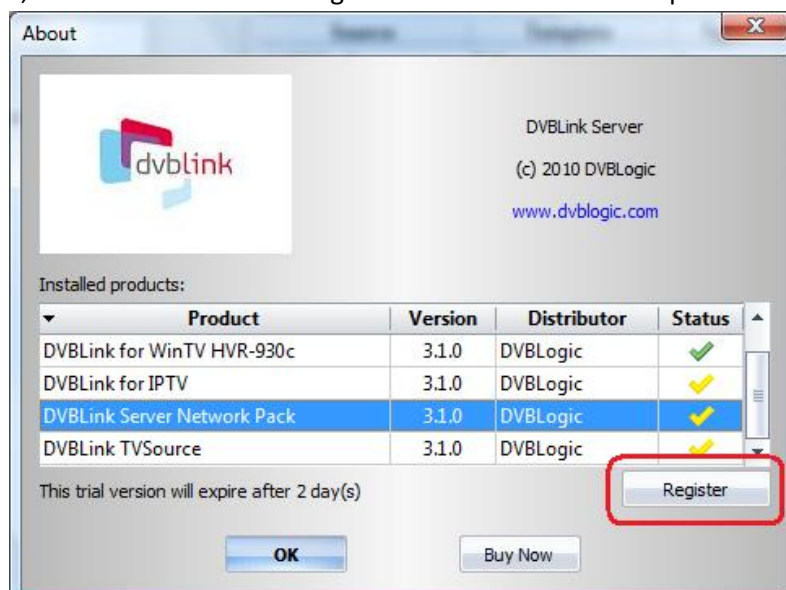
Software registration

DVBLink Server Network Pack license can be purchased via DVBLink Server Configuration:
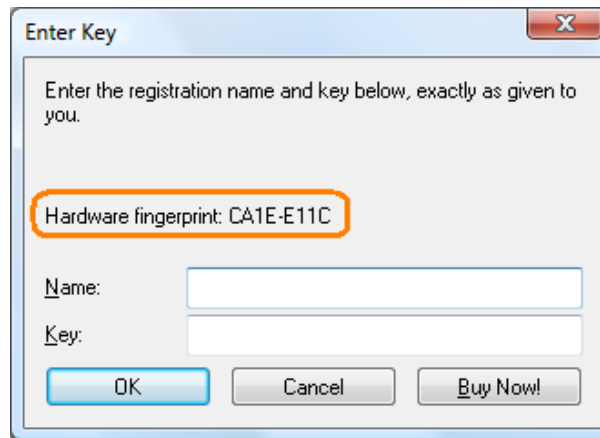

Once we have received your order, we will immediately send to you an e-mail containing information how to access our DVBLink License Portal.

To register your copy of DVBLink Server Network Pack you will need a **Hardware Fingerprint** of the machine where it runs.

To obtain this fingerprint, run DVBLink Server configurator and select menu Help->About:

Press Register button for Registration dialog to appear:

Enter this HW fingerprint in DVBLink License Portal to obtain registration key.

Please remember that registration information of DVBLink Server Network Pack is locked to a specific PC, where it is running. It might happen that after HW changes the registration information becomes invalid. If this is the case, please contact DVBLogic at **info@dvblogic.com** to get a new key.

Support

If you have problems to get DVBLink Server Network Pack running, visit our forums at
http://dvblogic.com/phpBB3/index.php
There you will be helped by our developers to solve your problem.