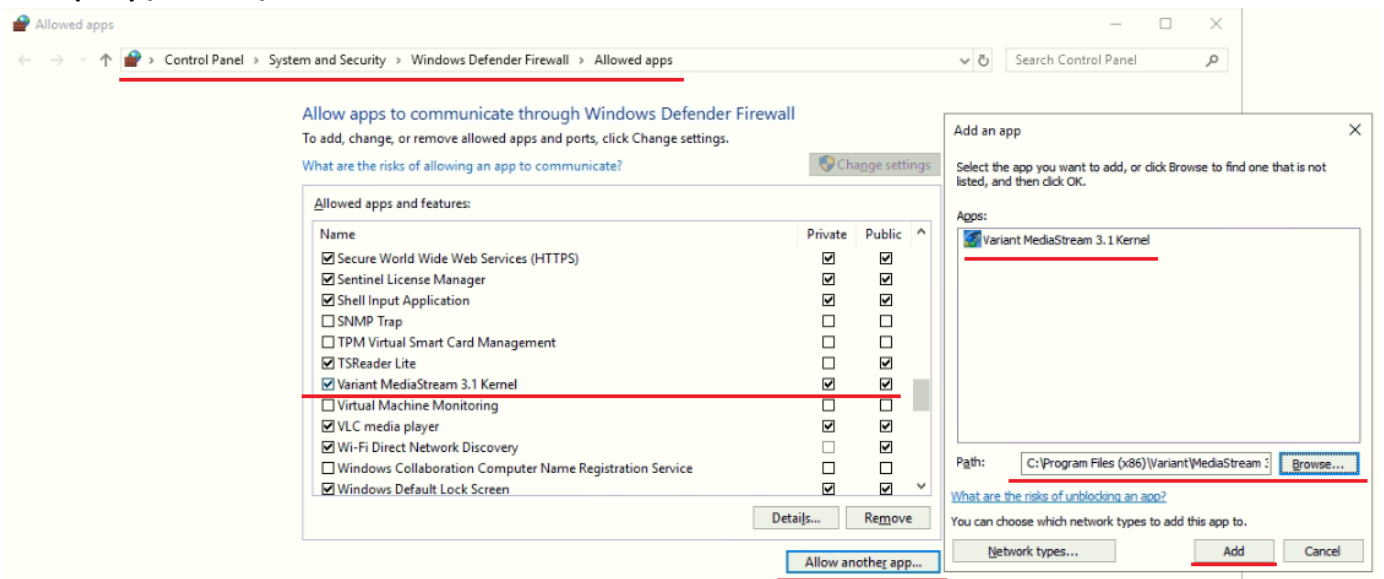# MediaStream TSCast installation

1. Download the demo-package from http://variant.digital/variant.digital/ftp_share/presentation/srt/
   3 files: **MediaStream 3.1 Applications.msi, MS31WebSetup.exe, MLic_up_to_2020****.zip**
2. Installation should be done under administrator rights (account).
3. Run **MediaStream 3.1 Applications.msi**, perform installation with "default" settings.
4. Restart the computer.
5. Unpack the archive **MLic_up_to_2020****.zip.** Copy the file **MLic_up_to_2020****.ini** to the folder **C:\ProgramData\Variant\Licenses** (system hidden folder)**.**
6. Run **MS31WebSetup.exe**, perform installation with "default" settings.
7. Add app **MKernel.exe** to allowed apps of Windows Defender Firewall. The app is located **C:\Program Files (x86)\Variant\MediaStream 3.1**
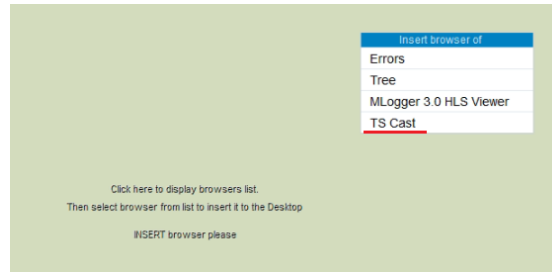

8. Go to WEB browser by the link **http://localhost:8080**, run TSCast WEB interface**.** Enter the user name and the password of your Windows account.
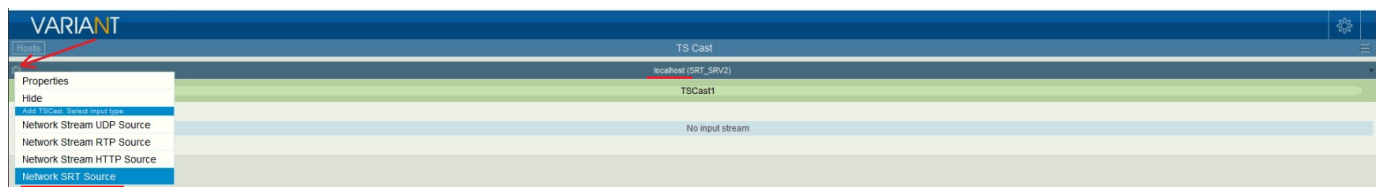   Supported browsers: **Chrome, Firefox**.

TSCast-client configuration

TSCast-client provides reception of SRT stream from TSCat-server (through the Internet), forms multicast stream, transmit multicast stream to a local network.
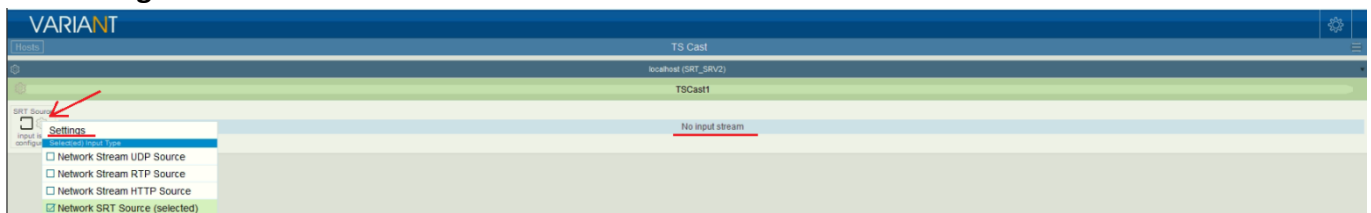
1. Run WEB interface. Configure the desktop in TS Cast mode. Click left mouse button on the desktop. In the drop down menu, choose «TS Cast».
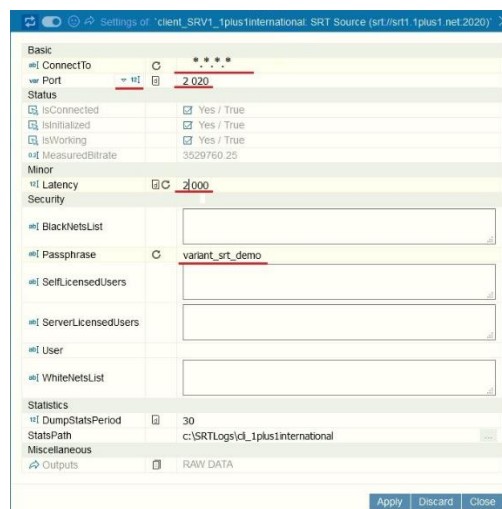

2. First, you should create new **TSCast** service in "Client" mode and select an input signal – SRT stream. Click "**Configuration**" on the left side of **Localhost** bar**,** in the drop down menu choose "**Network SRT Source**".

3. As a result, new **TSCast1** service is created for which you need to configure settings of input SRT stream. Press «**Configuration**» button on the left side of new **TSCast1** bar**,** in the drop down menu choose "**Settings"**.

4. Enter IP or DNS address of SRT-server - *__.*.*.* in Settings window, "Port" - **2020** (to enter a port choose "**Integer**" type of data), "Latency" – **2 000,** in "**Passphrase"** field enter the password - **variant_srt_demo**. Save settings by pressing "**Apply**".
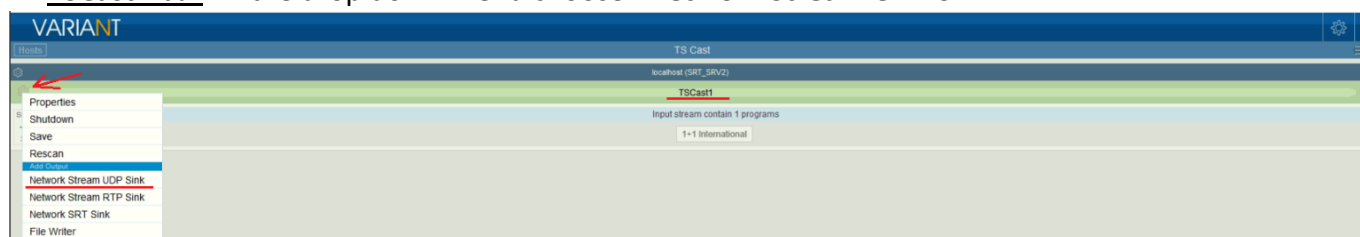
"**Latency**" compensates for the poor quality of IP channel. To ensure minimum signal delay, it is recommended to set "**Latency**" as four RTT values (round trip time between SRT server and SRT client). In our case (for the test purposes), we set the value - 2000 ms. The valid "**Latency**" range is from 120 to 8000 ms.
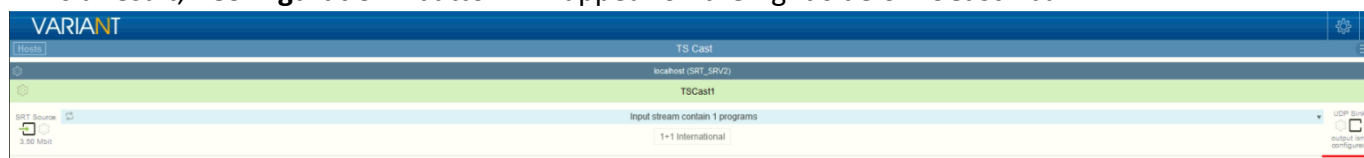
5. If settings are correct, on the left side of **TSCast1** bar an indicator of the input stream (green arrow) will appear, also bitrate value of the stream will be displayed.

6. Setting up output multicast stream of **TSCast1** service. Press "**Configuration**" button on the left side of **TSCast1** bar. In the drop down menu choose "**Network Stream UDP Sink**".
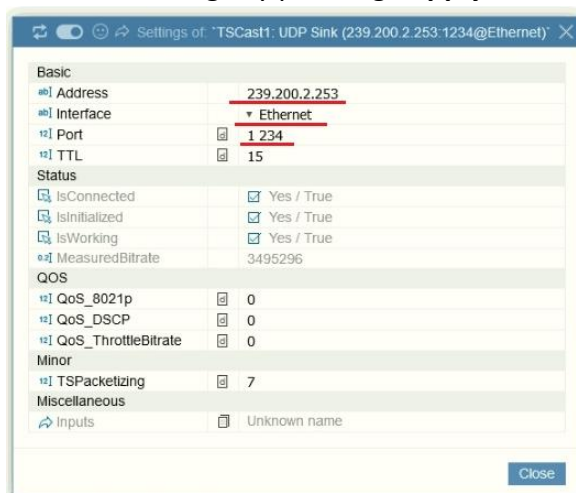

7. As a result, «**Configuration**» button will appear on the right side of **TSCast1** bar.

8. You should configure output multicast stream for **TSCast1** service. Press "**Configuration**" button on the right side of **TSCast1** bar. In the drop down menu choose "**Settings**".
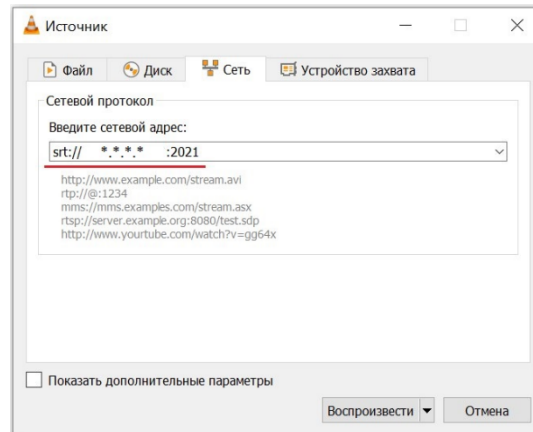

9. Enter multicast stream address in "**Adress**" field of Settings window, name of network interface (choose name from drop down list), port. Save settings by pressing "**Apply**".

10. If settings was done correctly on the right side of **TSCast1** bar an indicator of output stream (green arrow) will appear, also bitrate value of the stream will be displayed.
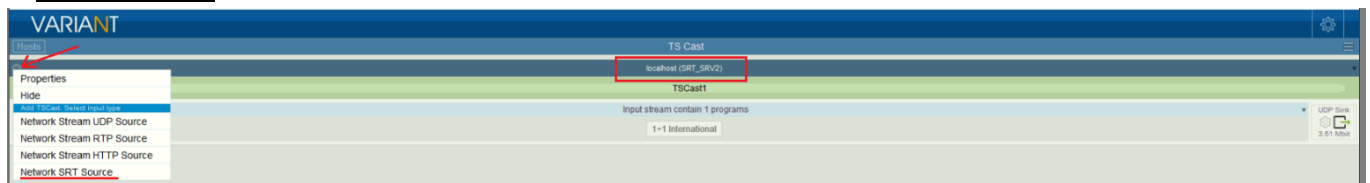

11. Done the last check - run VLC player, TSReader (or another stream analyzing software). Enter address of multicast stream, make sure, if there is the stream, and check the parameters.

12. To configure one more SRT stream repeat p. 2-11.
Pay attention – a new stream is set by "Configuration" button, which located <u>on the left side of Localhost bar</u>!

TSCast-server configuration

   TSCast-server receives multicast streams from a local network, forms SRT streams and broadcast them through UDP port to the Internet.
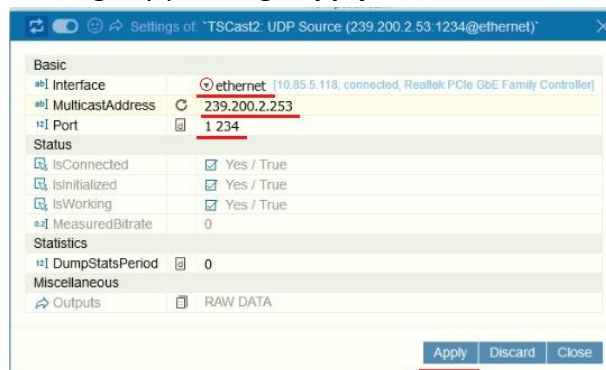
1. Run WEB interface.
2. First, you should create new **TSCast** service in "Server" mode, select an input signal – UDP Source. Click "**Configuration**" button on the left side of **Localhost** bar**,** in the drop down menu choose "**Network STREAM UDP Source**".
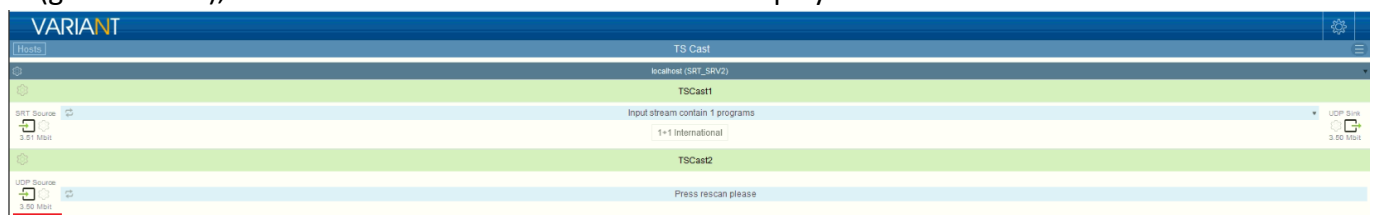

3. As a result, new **TSCast2** service is created for which you need to configure settings of UDP source. Press «**Configuration**» button on the left side of new **TSCast2** bar**,** in the drop down menu choose "**Settings**".
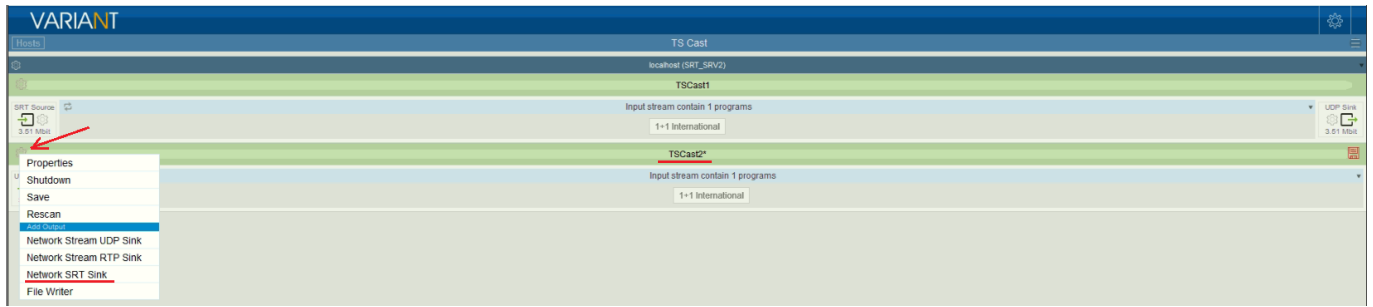

4. Enter network interface name (choose interface from drop down list) in Settings window, address of multicast stream, port. Save settings by pressing "**Apply**".

5. If setting was done correctly on the left side of **TSCast2** bar will appear an indicator of output stream (green arrow), and bitrate value of the stream will be displayed.
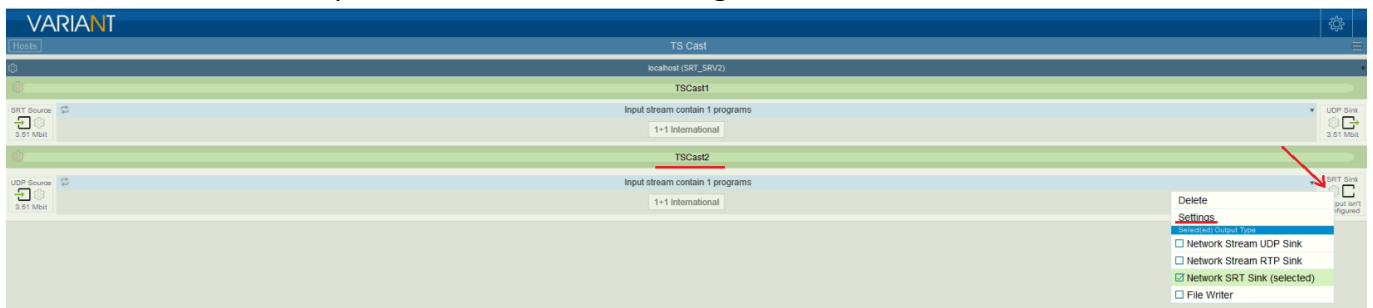

6. Setting up output SRT stream of **TSCast2** service. Press "**Configuration**" button on the left side of **TSCast2** bar**.** In the drop down menu choose "**Network SRT Sink**".
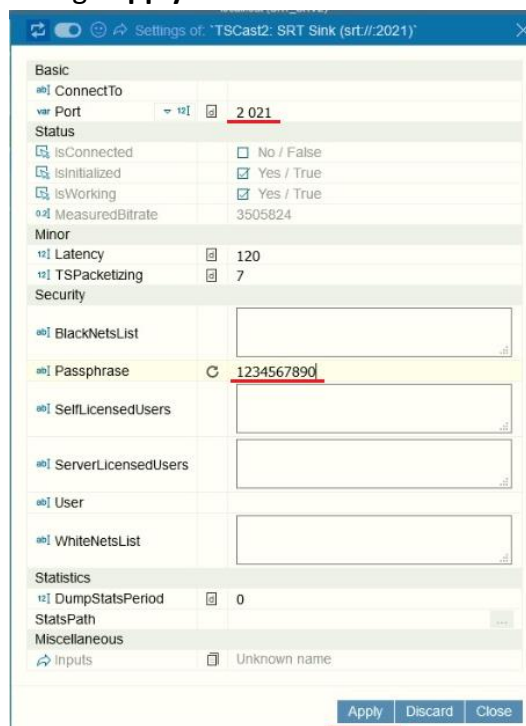
7. As result, «**Configuration**» button will appear on the right side of **TSCast2** bar.

8. You should configure SRT stream for **TSCast2** service. Press "**Configuration**" button on the right side of **TSCast2** bar. In the drop down menu choose "**Settings**".
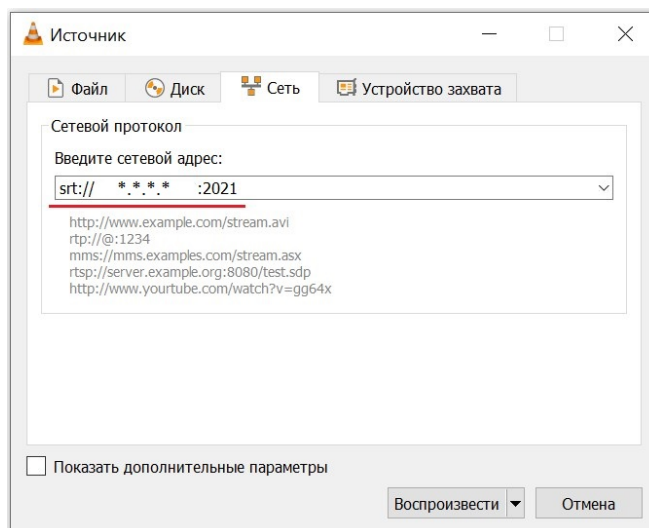

9. Enter UDP port (to enter port choose "**Integer**" type of data) in "**Port**" field of Settings window, password. Save settings by pressing "**Apply**".

10. If settings was done correctly on the right side of **TSCast2** bar an indicator of output stream (green arrow) will appear, also bitrate value of the stream will be displayed.

11. Done the last check - run VLC player. Enter SRT stream address (external IP address), password for decoding stream and check SRT stream receive.

12. TSCast server can be installed on PC with external or internal IP address. If you are using a PC with internal IP address, you should forward (NAT) the UDP port from internal network address to external.

If you got questions with software installation, please contact with Variant technical team. Leave your question/feedback on the company site
http://variant.digital/index.php/en/contact-eng

or contact with us: tel. +38 (050) 330-01-96, sale@variant.kiev.ua.