

Eazy Muxer Aggregate Source Function (Auto Failover Mode)



Description is valid for software version [2.11.0](#) and newer.

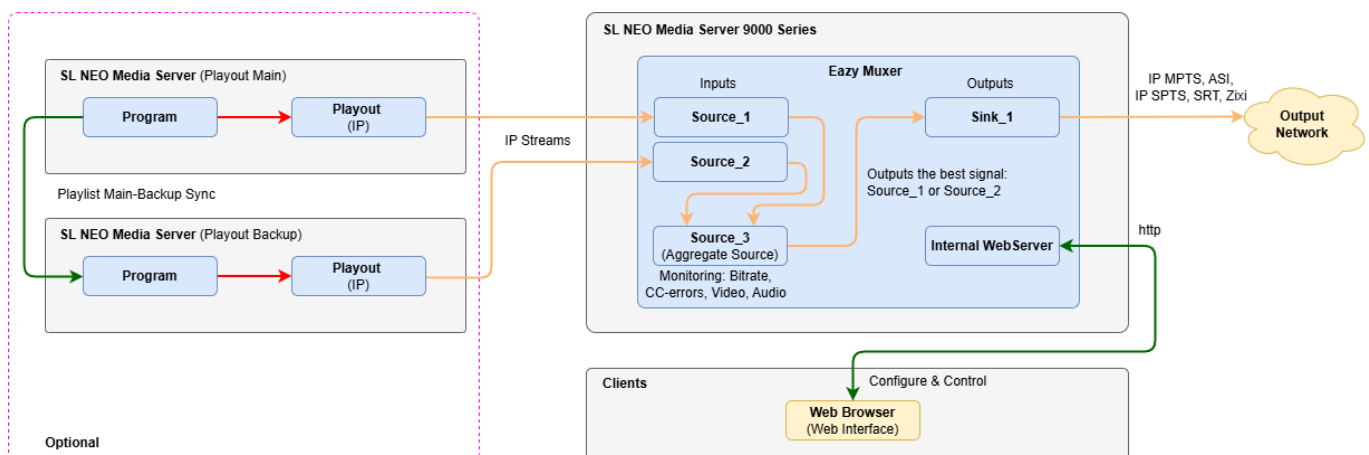
In the [2.9.96](#) version, [Eazy Muxer](#) was updated with a mode to switch transport streams automatically using Aggregate Source when an input stream failover is detected.

Aggregate Source enables to take two transport stream sources as an input and switch between them depending on the number of detected alarms during [quality check](#). The best available source is determined and used by the Aggregate Source to generate a stream at its output, which in turn can be used as a source for re-multiplexing or for transmission to [Sinks](#).

Scheme

The image shows a scheme of functional component interactions:

- the signal of the program is generated independently by a pair of servers,
- the signal from the primary and backup server is fed to the input of Eazy Muxer,
- QC is performed for both signals and they are transmitted to the Aggregate Source input,
- the output of the Aggregate Source is the best version of the signal which is used to generate the signal at the output of the Eazy Muxer.



Conditions for Automatic Switching

The best source is selected based on flow and alarm data from the [input stream quality check](#) function. Switching is performed when:

- bitrate loss,
- exceeding the CC Errors threshold,

- image alarm detection,
- audio alarm detection.

Configuration

Source Creation

To start configuration you need to receive two signals at the Eazy Muxer input which you plan to switch between. To receive these signals, the corresponding sources must be configured on the [Source](#) tab.

Add a new source of Aggregate Source type: Eazy Muxer→Source→New Source....

Local - Edit Source

Source Name:
aggregate_stdnet_udp_localhost:2000_stdnet_udp_localhost:2001_@cc_abs=1.00_@cc_rel=1.50_@switch_tout=2.00

Port Type:
Aggregate Source

Port Number:
1

Protocol:
Aggregate

Address:

Multicast Source:

☐ Enable FEC

Aggregate Src1:
stdnet_udp_localhost:2000

Aggregate Src2:
stdnet_udp_localhost:2001

CC Err switch tres:
1.0

CC Err switch ratio:
1.5

Switch timeout:
2.0

Preferred Src:
Neither

Password:

Latency (ms):

StreamID:

☐ Ignore DTLS Error

ClientID:

FEC Overhead (%):

☐ Enable TimeDelay

Delay:
0 : 0 : 0

Encryption Type:
None

Encryption Key:

☐ Disable Pkt Drop

Buffer path:

EPG Folder:

EPG Days to Keep
5

Add

Edit

Delete

Main Source

Watch List

Ok

Cancel

Select Port Type = Aggregate Source, and fill in the fields below:

Parameter	Description
Aggregate Src1 and Aggregate Src1	Fields for assigning previously created sources to be switched between in Aggregate Source.
Preferred Src	The setting enables to specify a priority source. If a priority source is specified, Eazy Muxer will try to return to it when normalising the stream parameters. If this option is not enabled (Preferred Src=Neither), Eazy Muxer will stay on the currently active source. It was added in version 2.10.159 .

CC Errors Data Processing

In the Aggregate Source settings editing window, you can configure the parameters for responding to received CC Error data in input streams.

Local - Edit Source

Source Name:
aggregate_stdnet_udp_localhost2000_stdnet_udp_localhost2001_@cc_abs=1.00_@cc_rel=1.50_@switch_tout=2.00

Port Type:
Aggregate Source

Port Number:
1

Protocol:
Aggregate

Address:

Multicast Source:
☐ Enable FEC

Aggregate Src1:
stdnet_udp_localhost2000

Aggregate Src2:
stdnet_udp_localhost2001

CC Err switch tres:
10

CC Err switch ratio:
1.5

Switch timeout:
2.0

Preferred Src:
Neither

Password:

Latency (ms):

StreamID:

☐ Disable Pkt Drop

☐ Ignore DTLS Error

ClientID:

FEC Overhead (%):

Encryption Type:
None

Encryption Key:

☐ Enable TimeDelay

Delay: 0 : 0 : 0

Buffer path:

EPG Folder:

EPG Days to Keep
5

Add

Edit

Delete

Main Source...

Watch List

Ok

Cancel

Parameter	Description
CC Err switch tres	The minimum number of CC Errors in the last 10 minutes that will allow switching based on CC Errors.
CC Err switch ratio	The minimum CC Errors ratio that will cause a switch based on CC Errors. The default is 1.5 - i.e. the number of CC Errors on the currently used input in the last 10 min is 1.5 time higher than the number of CC Errors in the last 10 min on the other input.

Trigger Delay

In the Aggregate Source settings edit window you can configure the response delay settings for the received input stream data.

Local - Edit Source

Source Name:
aggregate_stdnet_udp_localhost2000_stdnet_udp_localhost2001_@cc_abs=1.00_@cc_rel=1.50_@switch_tout=2.00

Port Type:
Aggregate Source

Port Number:
1

Protocol:
Aggregate

Address:

Multicast Source:
☐ Enable FEC

Aggregate Src1:
stdnet_udp_localhost2000

Aggregate Src2:
stdnet_udp_localhost2001

CC Err switch tres:
10

CC Err switch ratio:
1.5

Switch timeout:
2.0

Preferred Src:
Neither

Password:

Latency (ms):

StreamID:

☐ Disable Pkt Drop

☐ Ignore DTLS Error

ClientID:

FEC Overhead (%):

Encryption Type:
None

Encryption Key:

☐ Enable TimeDelay

Delay: 0 : 0 : 0

Buffer path:

EPG Folder:

EPG Days to Keep
5

Add

Edit

Delete

Main Source...

Watch List

Ok

Cancel

Parameter	Description
Switch timeout	The number of seconds that a switching condition (no bitrate, CC Errors or alarms) must persist for switching to occur. The default is 2 seconds. This delay is needed to prevent switching when alarms or errors change on both sources at the same time. It was added in version 2.10.77.

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Permanent link:
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