

PRIME LIDIA User Guide

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The PRIME LIDIA feature allows users to trigger PRIME Actions from triggers embedded in the VANC data of a video input.

Configuration

From Primes runtime user interface in the “Config->Playout Configuration->External Data “menu to view the LIDIA settings.

The screenshot shows the "Playout Configuration" window with the "External Data" menu item selected in the left sidebar. The main panel displays settings for four features: LIDIA, TRACAB, UDP, and Cesium.

- LIDIA**:
 - ☒ Enabled
 - DID: 84 (0x54)
 - SDID: 34 (0x22)
 - Insert Packet Count: 2
 - Remove Packet Count: 4
- TRACAB**:
 - ☐ Enabled
 - Address: 127.0.0.1
 - UDP Port: 9006
 - Signal Port: 49001
- UDP**:
 - ☐ Enabled
 - Port: 21416
- Cesium**:
 - ☐ Enabled
 - Address: 127.0.0.1
 - Port: 7100
 - Delay: 0
 - Run Cesium Target Converter button

At the bottom right, there are three buttons: OK, Cancel, and Apply.

The LIDIA decoders detect a trigger signal on line 9 of the HD SDI **V**ertical **ANC**illary (VANC) data space.

DID is the **Data ID** word and is an 8-bit word in the range 50h-5Fh and C0h-DFh for unregistered data types.

SDID

is the **Secondary Data ID** word and has value in the range of 01-FEh. The SDID should be unique to the organization inserting the data. The Appendix contains the proposed SDID assignments by Network. *Set your DID and SDID based on your VANC data encoder settings.*

Insert Packet Count

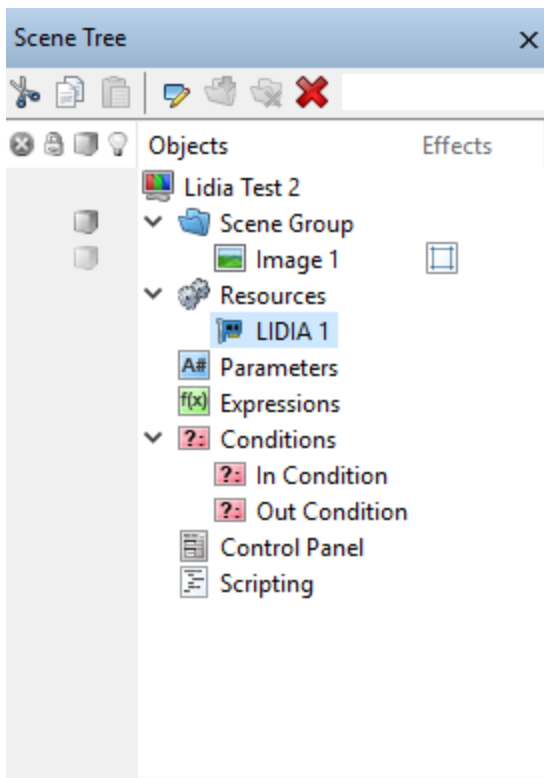
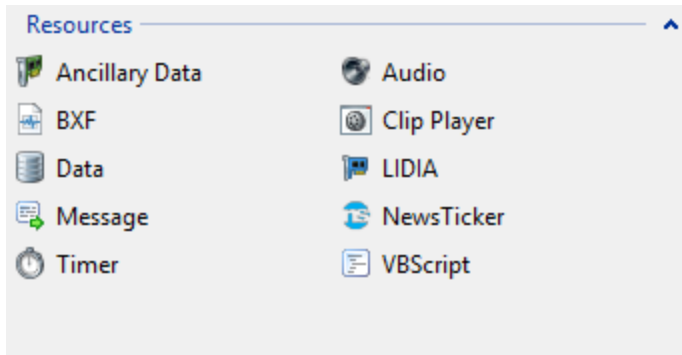
Some packets do not have the correct packet count. If the packet count is not sequential triggers will not happen. This value determines how many sequential packets required to execute a trigger on.

Remove Packet Count

Same as insert except in the reverse. This will allow triggering off if the number of packets are valid.

Designing your PRIME Scene

The LIDIA Resource object can be added from PRIME toolbox



LIDIA PRIME Properties

Properties

☒

▼ LIDIA

Input: Downstream Input

Target Logos: 0, 1, 2, 3, 4

Position: X Y

In Transition: 0

In Duration:

Out Transition: 0

Out Duration:

Logo Number:

Service Number:

Input: Select the input video source containing VANC triggers

Target Logos: See below

The following properties are READ ONLY and are defined in the VANC data stream. They can be used with PRIME Conditions & Expressions to execute logo insertion.

Position: Indicates the Position as defined in the VANC data

In Transition: Indicates the Transition name defined in the VANC data to bring the logo on air. (See the “Transition Types” table below)

In Duration: Indicate the PRIME Condition or Expression defined in the VANC data.

Out Transition: Indicates the Transition name defined in the VANC data to take the logo off air. . (See the “Transition Types” table below)

Out Duration: Duration in Frames to execute the PRIME out Action

Logo Number: Indicates the “Logo Number” defined in the VANC data.

Service Number: Indicates the “Service Number” defined in the VANC data.

Target Logos:

Specifies which Logo to target in your scene. The asterisk (*) means target all logos.

Sample VANC Logo numbers:

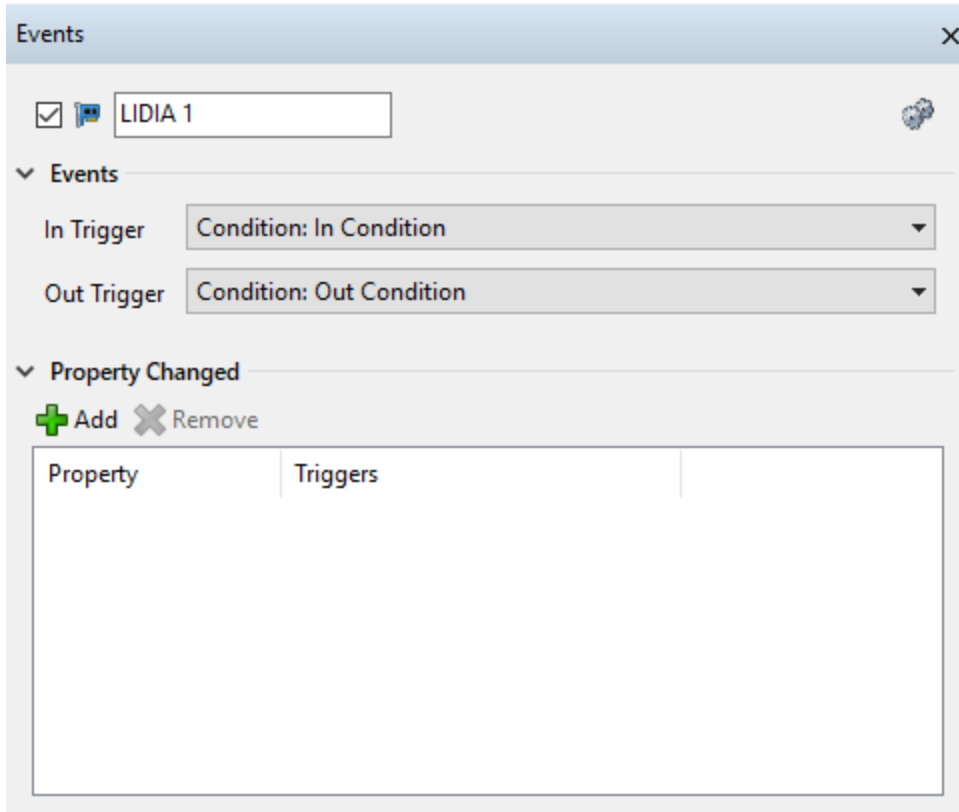
VANC Logo #	Local Station User logo #	Logo Description
0	1	Solid “Station logo” used with Network EYE
1	2	Translucent “Station logo” with Network EYE
2	3	Solid time and temperature (opacity = 100%)
3	4	Translucent time and temperature (opacity = 75%)
4	5	4:3 Solid black background text crawl and Solid time and temperature
5	6	16:9 Solid text crawl and Solid time and temperature
6	7	4:3 Translucent background text crawl and Solid time and temperature
7	8	16:9 Translucent background text crawl and Solid time and temperature
8-26	9-27	Reserved for Network use
27	28	4:3 text foreground
28	29	16:9 text foreground
29-99	30-100	Reserved for Network use
100	101	Local Station Logo
101	102	Local Logo, Time and Temperature
102	103	Local promotional Animation 1
103	104	Local promotional Animation 2
104	105	Local promotional Animation 3
105	106	Local promotional Animation 4
106	107	Local promotional Animation 5
107-199	108-200	Reserved for local use
200-255	200-256	Reserved for future use.

Transition Types:

Transition Number	Type	Description
0	Fade-IN/Fade-OUT	Fade the logo when trigger is present & out when it is absent
1	Cross Fade	Fades the current logo down and the same time fades the new logo up.
2	Fade-Take	Fade the current logo in and removes the logo in one frame(cut)
3	Take-Fade	Cuts the current log in and fades the logo up at start of trigger
4	Wipe Left to Right	Wipes the logo on screen from the left to right
5	Wipe Right to Left	Wipes the logo on screen from the right to left
6-255		Reserved

LIDIA PRIME Events

The LIDIA Resource object “Events” will automatically be triggered when the Video input object recognizes the embedded triggers.



The screenshot shows the "Events" configuration window for LIDIA 1. It features a checked checkbox and a text field labeled "LIDIA 1". Below this, there are two expandable sections: "Events" and "Property Changed". The "Events" section contains two dropdown menus: "In Trigger" set to "Condition: In Condition" and "Out Trigger" set to "Condition: Out Condition". The "Property Changed" section includes a green plus icon for "Add" and a grey X icon for "Remove". At the bottom, there is a table with two columns: "Property" and "Triggers".

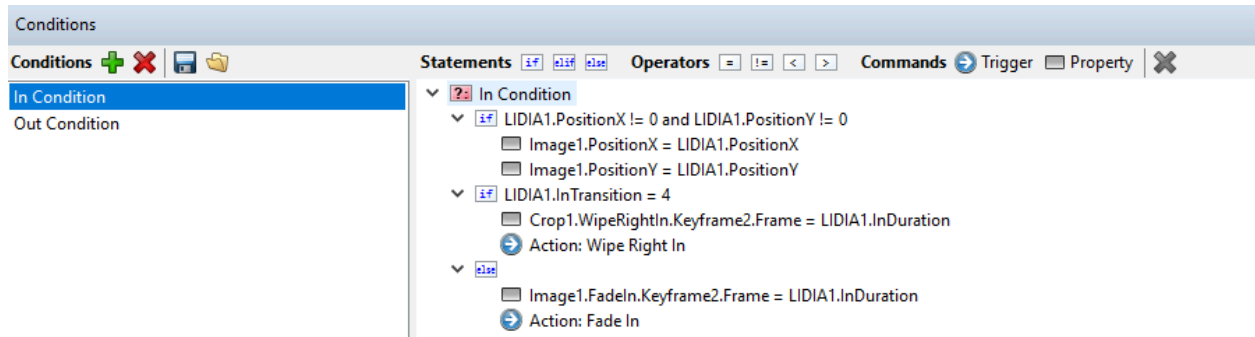
Property	Triggers
----------	----------

In the above example we define the “In” & “Out” Triggers to be triggered by the VANC triggers. In this example we will execute PRIME “Conditions” “Condition In” and “Condition Out” to evaluate what PRIME transition to execute upon receiving the VANC triggers.

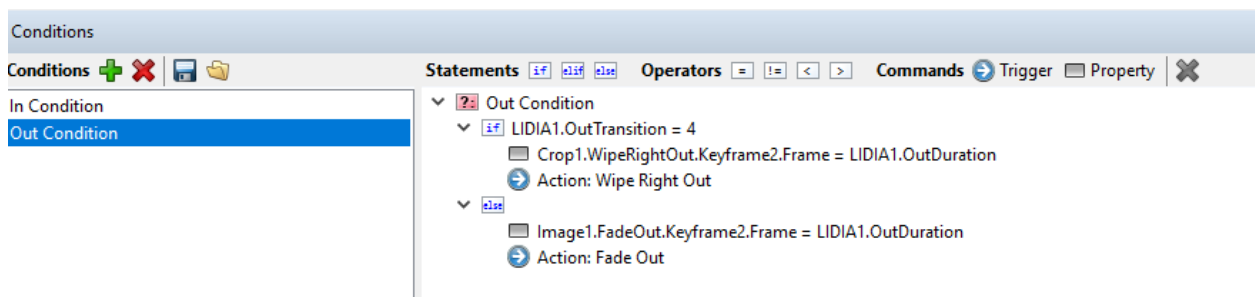
PRIME Example

In the following example, A VANC trigger raises an event in the PRIME LIDIA object. The event then executes PRIME conditions to evaluate what PRIME Scene Transition to execute.

PRIME “In Condition”



PRIME “Out Condition”



PRIME Actions

Timeline

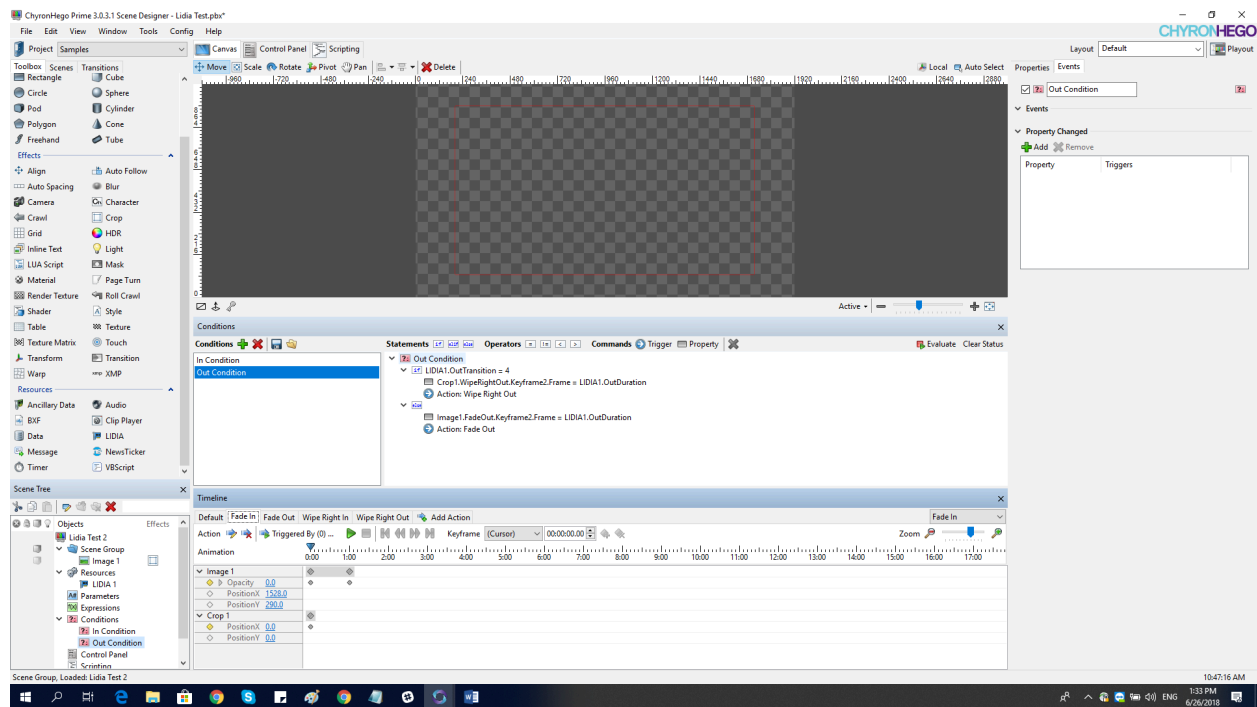
Default Fade In Fade Out Wipe Right In Wipe Right Out Add Action

Action Triggered By (0) ... Keyframe (Cursor) 00:00:00.00

Animation 0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00

Image 1	
Opacity 0.0	
PositionX 1528.0	
PositionY 290.0	
Crop 1	
PositionX 0.0	
PositionY 0.0	

View of the LIDIA Example scene:



ABOUT US

Chyron is ushering in the next generation of storytelling in the digital age. Founded in 1966, the company pioneered broadcast titling and graphics systems. With a strong foundation built on over 50 years of innovation and efficiency, the name Chyron is synonymous with broadcast graphics. Chyron continues that legacy as a global leader focused on customer-centric broadcast solutions. Today, the company offers production professionals the industry's most comprehensive software portfolio for designing, sharing, and playing live graphics to air with ease. Chyron products are increasingly deployed to empower OTA & OTT workflows and deliver richer, more immersive experiences for audiences and sports fans in the arena, at home, or on the go.

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