Ultrix

Ultristream
Multiviewer Distribution Using NDI

Ultriscape broke new ground by integrating multiviewer capability into a router platform, simply through a software license and no additional hardware. Whether utilizing SDI, Fiber, HDMI, or IP inputs, Ultriscape has unrestricted access for layout generation. Moreover, its comprehensive audio monitoring accommodating embedded SDI, IP and MADI inputs ensures the platform equally meets demands for audio and video monitoring.

Enter Ultristream, which elevates the capabilities of Ultriscape by expanding access. Ultristream enables facilities to extend Ultrix Ultriscape multiviewer outputs utilizing integrated NDI encoding, entirely bypassing the need for external converters.

For editors, operators, managers, or producers, Ultristream revolutionizes accessibility to multiviewers, transforming them from centralized viewing screens to resources that can be easily distributed wherever they find utility. Additionally, decoding can be done on various devices - from laptops to large displays, offering the freedom to choose the most suitable device depending on the situation. Information is vital to successful production and broadcast operations, and Ultristream makes distributing real-time monitoring more effortless than ever before.

Features

- Fully integrated within the Ultrix system, removing the need for external NDI converters.
- Supports NDI-equipped displays, hardware converters or software for decoding.
- With the use of traditional IP GbE networks, NDI eliminates the dependence on broadcast infrastructures for conveyance.
- Compatible with Ultrix FR1-NS, FR2-NS, FR5, FR5-NS and FR12, provided they are equipped with ULTRIX-HDX-IO and/or ULTRIX-MODX-IO cards along with Ultriscape licenses.
- Enables extension of one Ultriscape multiviewer per ULTRIX-HDX-IO or ULTRIX-MODX-IO card.
- Multiviewer output encoded at 1080P 50, 59.94 or 60 FPS.
- Supports Unicast rUDP transport (serving up to 6 destinations) **Note: Multicast not yet supported**
- GbE copper physical interface via RJ45 SFP+ installed in AUX-D port.
- Easy setup using DashBoard.

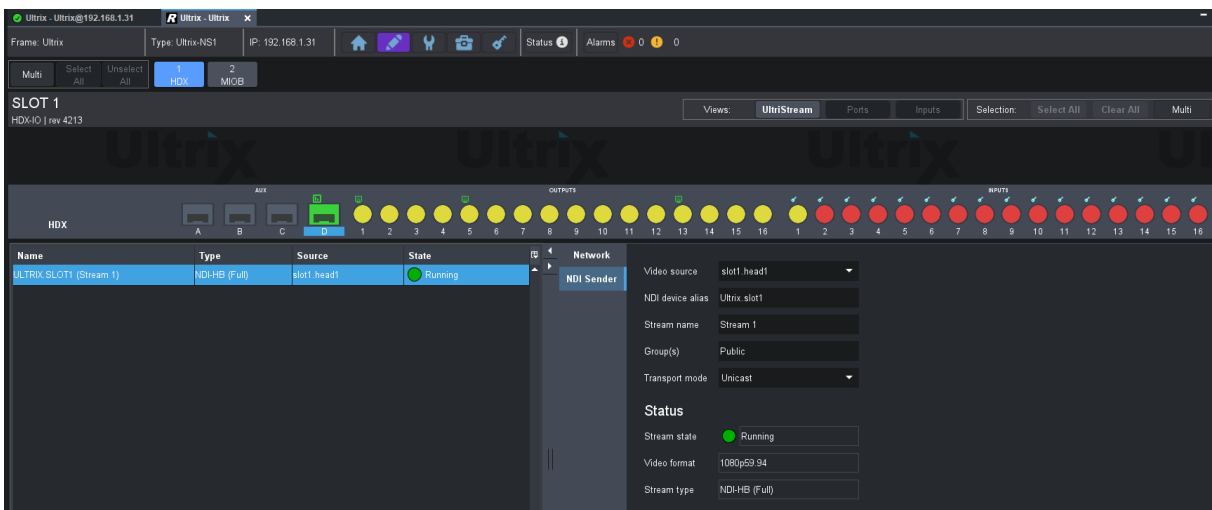## Licensing and Hardware Requirements

Each ULTRIX-MODX-IO or ULTRIX-HDX-IO card can support up to three Ultriscape multiviewer licenses. One Ultristream license can be activated per card, allowing the user to freely select and stream the output from any one of the available Ultriscape multiviewers. Ultristream utilizes the AUX-D SFP+ port on the selected card, which must be equipped with an SFP. Note that Ultrimix-Dante (Dante audio I/O license) reserves AUX-D, so Ultrimix-Dante and Ultristream cannot be installed on the same card.

Configuration

With DashBoard, selecting the multiviewer source and setting Ultristream parameters becomes a breeze. In just a few intuitive moves, Ultriscape outputs are up and streaming.

1. Select the multiviewer head to be streamed
2. Enter an NDI Device Alias (or use the default)
3. Enter a Stream Name (or use the default)
4. Change the Group(s), if needed (Public is default)

Technical Info

Supported Hardware

- Ultrix Frames: FR1-NS, FR2-NS, FR5, FR5-NS and FR12
- Cards: ULTRIX-HDX-IO, ULTRIX-MODX-IO

Interfaces

- 1x GigE via SFP+ Copper module in AUX-D port

Video Support

- YUV422 8-bit
- 1080p 50/59.94/60

NDI

- Version 5
- Full bandwidth i-frame compression
- 1 stream of 1080p60/59.94/50 encode from multiviewer head 1, 2 or 3 (selectable)

Network

- Unicast rUDP transport (serving up to 6 destinations) **Note: Multicast not yet supported**
- Static IP and DHCP support

Maximum Ultristream Licenses per Card

- ULTRIX-HDX-IO: 1
- ULTRIX-MODX-IO card: 1

Maximum Ultristream Licenses per Frame

- FR1-NS: 1
- FR2-NS: 3
- FR5, FR5-NS: 9
- FR12: 16

Ordering

Ultristream	Software license to enable NDI multiviewer streaming from ULTRIX-HDX-IO or ULTRIX-MODX-IO. Maximum 1 streaming output per card.
SFP-RJ45-1G	1G Copper/RJ45 GbE SFP