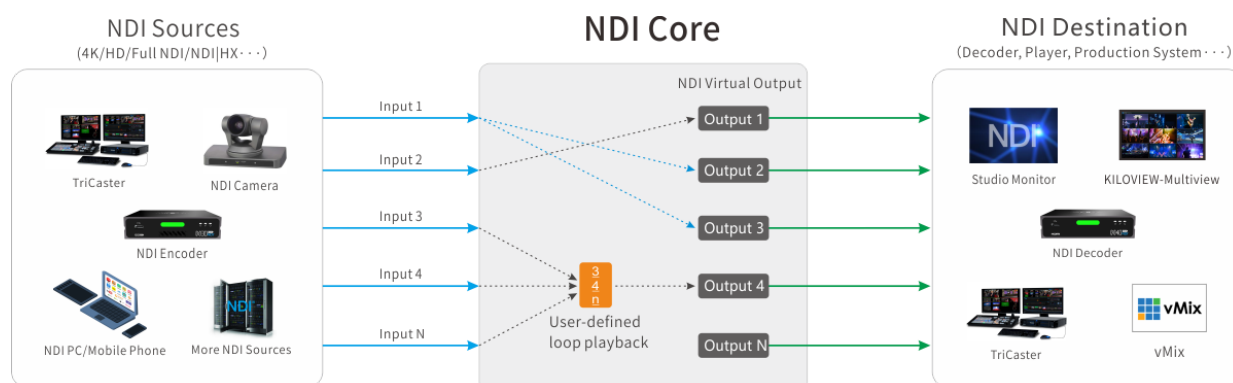# Kiloview NDI Core

NDI Core is a centralized system for your NDI sources to Control, Organize, Route and Everything, managing sources from dozens to thousands and building smooth and seamless switching channels for those sources. It supports various formats of NDI stream input and output, NDI signal copy and output, centralized management, and higher IP management ability. All make it suitable for such applications as Broadcast and TV program production, multi-channel NDI projection, multi-channel NDI conference.

Highlights

Centralized Management

Automatically discover and add the NDI devices in the local network

NDI Signal Amplification

Different from the general NDI switching matrix (which only realizes the switching function), key feature of our NDI Core is to copy and amplify the NDI signal. For example, one front-end signal input can replicate multiple NDI signal outputs.

The signal amplification delay at the matrix end is <= 1 frame.

Note: The NDI signal processing capability is mainly related to the performance of your hardware server.

NDI Signal Switching

- Smooth and seamless switching, no frame synchronization device required, switching without blank screen，stagnation，blurred.

- Two switch panels, IO panel and cross-point for your choice (only available with NDI Core Pro and Customized Hardware version).

- Input and output in various panels are to set independently, adapting to a variety of input and output business modes.

- To manually switch sources or automatically switch at regular intervals to realize playlist playback.

- The signal switching delay at the matrix end is only about 1 frame.

High Compatibility

- Full NDI and NDI|HX, UHD/HD, horizontal/vertical sources are supported. It is seamlessly connected with various NDI conference cameras, NDI smart

phones/computers, NDI codecs, NDI production system, and other NDI-enabled software and hardware system.

- HTTP API is available and it can be called by third-party system to complete real-time matrix switching.

- # Loop Playback (Only available with NDI Core Pro and Customized Hardware version)

- Playlist is used to build a relationship with a group of output and input sources auto switching. You can make one output point auto switch to different NDI sources according to the settled time.

- Playlist consists of multiple ordered NDI sources and play duration.

- NDI sources can be added repeatedly.

- Sequence is adjustable under the playlist by drag them.

- Single playback: It continues to play the last NDI source after finished.

- Loop playback: After the end of the playlist, it will return to the first NDI source to continue the loop playlist.

Logs

To show recently all users' operation and update the dynamics of user modifications in real time.

Server

- Support single server deployment

- NDI output can be received by multiple (2 or more) users simultaneously.

NDI Core				
Types		Basic	Pro	Max (Hardware)
Free Trail		15-day free trial for limited 4 inputs and 4 outputs	15-day free trial for limited 4 inputs and 4 outputs	No
Max NDI Input	Kiloview/New Tek	Unlimited	Unlimited	Unlimited
	Others	16	Unlimited	Unlimited
Max NDI Output		16	Unlimited	Unlimited
NDI Output Connections		Unlimited (Depends on bandwidth)	Unlimited (Depends on bandwidth)	Unlimited (Depends on bandwidth)
Number of Control Panel		Unlimited	Unlimited	Unlimited
Max Input/Output Resolution		4K P60	4K P60	4K P60
Input NDI Version		NDI/NDI|HX	NDI/NDI|HX	NDI/NDI|HX
Output NDI Version		Same as input	Same as input	Same as input
Switch Panel		Crosspoint	IO panel and Crosspoint	IO panel and Crosspoint
PTZ/TALLY/METADATA Support		Yes	Yes	Yes
API		Yes	Yes	Yes
NDI Decoding		Yes	Yes	Yes
Auto Switching by Playlist		/	Yes	Yes
NDI Relay		Yes	Yes	Yes
Seamless Switch		Yes	Yes	Yes
Switching Delay		1 Frame	1 Frame	1 Frame
Role Management		/	YES	Yes
Log Management		Yes	Yes	Yes
Server Requirement	OS	Linux (Windows supported, but not recommended)	Linux (Windows supported, but not recommended)	Linux (Windows supported, but not recommended)
	Deployment environment	Docker	Docker	Docker
	CPU	X86/x86-64, not less than 4 cores, and the dominant frequency is not less than 1.5GHz	X86/x86-64, not less than 4 cores, and the dominant frequency is not less than 1.5GHz	Intel i7-11700K, 8-core 16-thread, 3.6G dominant frequency
	RAM	Not less than 8GB	Not less than 16GB	32G dual channel DDR4 3200MHz

	Network	Gigabit Ethernet. The rate of single network card shall not be lower than 4Gbps or the total rate of multiple network cards shall not be lower than 4Gbps.	At least Gigabit Ethernet (10GbE recommended). The rate of single network card shall not be lower than 10Gbps or the total rate of multiple network cards shall not be lower than 10Gbps.	Intel 82599 chip PCI-E 10 Gigabit SFP+ x2 Gigabit adaptive electrical port x1
Service		Response on questions via email/message	Remote online guidance	Remote online guidance

Note: Kiloview also provides customized NDI Core hardware, feel free to contact us via info@kiloview.com.