

Matrox DSX Core

100% Software-Only Modules for Virtualized Broadcast Infrastructures

Matrox DSX Core is specifically designed for OEMs to build IP- and file-based video applications such as ingest and playout servers, channel-in-a-box, encoders and transcoders for broadcasters and service providers to use in media datacenters. It provides flexibility by allowing users to create software-defined channels using COTS machines that can be repurposed easily. DSX Core features built-in redundancy and disaster recovery, a flexible licensing model and a large selection of software modules.



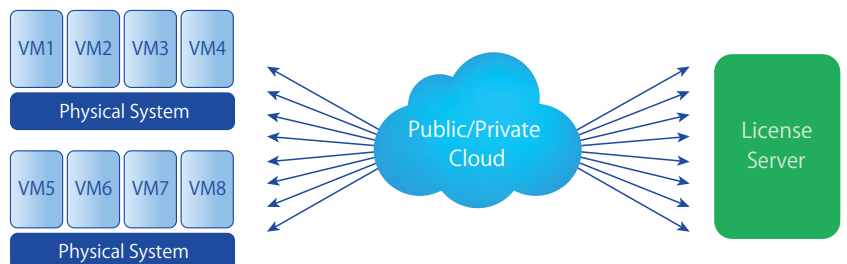
Key features

- Designed specifically for the cloud
- Built-in redundancy & disaster recovery
- Frame accurate control for AV sync
- Extensive file formats support to ensure interoperability
- Share same SDK with other hardware platforms

Instant Channel Deployment

DSX Core is designed with flexibility that lets users move their applications from one virtual machine to another, or even to different datacenters. Developers can create virtualized IP channel solutions in private or public cloud with DSX Core and let customers quickly and cost-effectively deploy specialty and event-based channels. Such software-only broadcast solutions can be easily repurposed as needed without any additional capital expenditure.

DSX Core Setup Diagram



Floating License

DSX Core uses a floating license scheme that can be easily managed in a local network or cloud environment. The typical setup of the DSX Core follows a client and server model, where a DSX Core dongle is located in a system acting as a license server for virtual machines (VMs) that run the final applications. DSX Core provides a license management application for users to check the status and to modify and upgrade the licenses. APIs are also available for developers to build customized license management.

DSX Core licenses are purchased through online applications and can be upgraded and modified remotely. Please refer to the DSX Core Installation Guide for operation procedures.

Frame Accurate Control

One of the important features in DSX Core is the system clock based on NTP (Network Time Protocol). It's designed to work in virtual machines to provide the accurate frame control and AV synchronization that is essential for real-time media processing in broadcast workflows. The system clock provides precisely the same number of ticks per field or frame as a hardware-based clock to ensure users always know the exact timing.

Software Media Processing Modules

Matrox DSX Core is supported by the Matrox DSX Software Development Kit that provides the essential building blocks for cloud-based video applications. Main software modules include:

License Models and Service Plan

DSX Core offers both perpetual and rental licenses. Whether the need is to set up special event channels for a short period or have permanent playout channels, DSX Core will fit your requirement at the right price point.

- A perpetual seat allows for lifelong operation and comes with a built-in one year service including DSX SDK updates. Additional service plans can be purchased and applied to each DSX Core license in the future.
- A rental seat on the other hand allows for a pre-established timeframe of operation only. Once the rental seat expires, the license is no longer functional.
- New licenses can be added to the existing setup with a Matrox field upgradable online application.

Built-In Fail-Safe

DSX Core provides a default grace period to guarantee broadcaster applications continue to operate even in cases of catastrophic events such as network failure or license server breakdown. It also provides optional three-way redundancy for building backup license servers for a second level of fail-safe when needed.



Robust File Reader and Playlist



Versatile Video Effects



High-Performance Software Compositor



Standards-Compliant File Writer



Advanced Ancillary Data Handling



Built-In IP Streaming



Extensive File Formats and Codecs



Precise Time Stamping



High-Quality Software Scaler

For detailed information about these software modules, please refer to the Matrox Developer's Product datasheet.

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Digital Video Solutions

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