Magellan SDN Orchestrator

Software Control System for Hybrid Baseband/IP Facilities

As media companies embark on the technology transformation of their facilities from baseband to IP, they face investment, operational and workflow challenges. To achieve the promised economies and agility, software-defined networks require sophisticated control. The Magellan™ SDN Orchestrator (SDNO) from Imagine Communications is a proven software control solution deployed in multiple installations worldwide. It delivers full support for SMPTE ST 2110 and ST 2022-6, plus the most comprehensive list of third-party IP endpoints via native APIs and open protocols, making it ideal to orchestrate complete live production and playout operations. Magellan Live Manager (LM) is an integrated management environment across various Imagine products. Operating hand in hand with Magellan SDNO, LM consists of "LM-Apps" including PathView and AlarmView, which provide high-value user interaction and information.

Book A Demo Today

Benefits

- Leverage existing SDI infrastructure investments
- Incorporate IP at your desired pace
- Implement a true COTS solution based on open standards
- Manage hybrid environments in the transition to full IP

Features

- Simplifies management/operations, makes everything 'look like a router'
- Maximizes infrastructure investments, delivering scalability, efficiency of IP-based systems
- Utilizes COTS IP switching, leveraging the latest generation of IP routers
- Offers easiest path from SDI to IP and UHD, leveraging existing infrastructure
- Field-proven router control system, managing SDI and IP matrices simultaneously
- Supports host of Imagine IP end-points, as well as 3rd-party end-points using native and open APIs
- Leverages AMWA NMOS IS-04 and IS-05 to integrate compliant 3rd party devices without special drivers

Features of Magellan Live Manager

- PathView
  - Presents live and dynamic signal-path display for both SDI and IP routing environments managed by SDNO
  - Allows users to simply drag and drop Source(s) or Destination(s) into Pathview canvas, where Pathview will draw the entire path of that signal
  - Provides critical information such as signal format, SDP info, audio levels/breakaway, and device alarms
  - Updates instantly, providing each operator a real-time view of every route they are monitoring

- AlarmView
  - Provides tree-view of all devices being managed by SDNO
  - Presents visual indicators to show IP end-points availability on the network, connections between SDNO controller, and IP end-points, as well as alarm conditions
  - Features alarm panel that provides detail view of all active (color-coded) alarms

Applications

- Supports IP/SDI hybrid networks; works within existing workflow – no operational disruptions
- Features a mix of physical and virtual processing functions
- Provides control framework for hybrid SDI/ASI/IP facilities
- Utilizes current routing protocols and control panels
- Controls and monitors the virtual plant, providing operational visibility

- Presents a unified control environment for operations
- Offers compatibility with automation, tally, multiviewer, other devices in the facility
- Manages IP switching and connectivity
- True audio/video/data breakaway capability in the IP domain in a SMPTE ST 2110 environment
- Supports switching of compressed and uncompressed signals per SMPTE ST 2022 standards
- Delivers high availability through 1+1 redundant configuration
- Enables clean switching of uncompressed IP sources
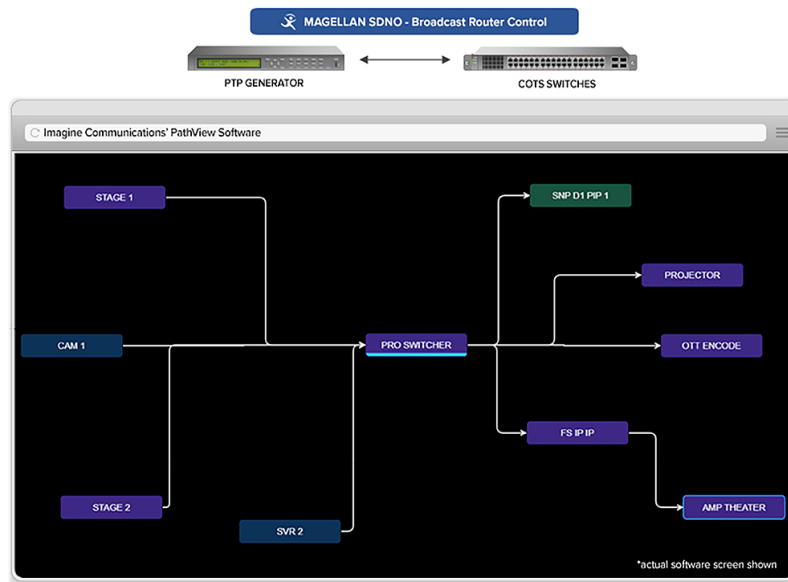- Facilitates seamless redundancy switching in main and backup network configuration (SMPTE 2022-7)

Specifications

N/A

Ordering Information

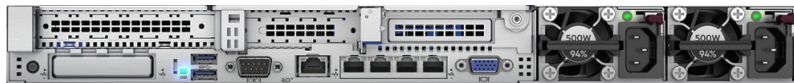|	
MSDNO-SVR	Magellan SDNO Server – 1RU with Redundant hot swappable PSU, 8 Ethernet Ports
MSDNO-IP-RTR	Magellan SDN Orchestrator IP Routing Control Feature License
MSDNO-IP-RTR-R	Magellan SDN Orchestrator IP Routing Control Feature Redundant License
MSDNO-SDI-RTR	Magellan SDN Orchestrator SDI Routing Control Feature License
MSDNO-SDI-RTR-R	Magellan SDN Orchestrator SDI Routing Control Feature Redundant License
MSDNO-VReEntry	Magellan SDN Orchestrator Virtual RE-Entry Feature License
MSDNO-VReEntry-R	Magellan SDN Orchestrator Virtual RE-Entry Feature Redundant License
MSDNO-3RD-DRV	Magellan SDN Orchestrator 3rd Party End-Point Device Driver License
MSDNO-3RD-DRV-R	Magellan SDN Orchestrator 3rd Party End-Point Device Driver Redundant License
MSDNO-IP-END-1	QTY 4 IP End-Point Devices – Valid for 4-40 Devices in a single SDNO System
MSDNO-IP-END-2	QTY 4 IP End-Point Devices – Valid for 41-80 Devices in a single SDNO System
MSDNO-IP-END-3	QTY 4 IP End-Point Devices – Valid for 81+ Devices in a single SDNO System
MSDNO-IP-END-2IO	Capacity License For 1 End-Point Device with Up To 2 IP Inputs or Outputs

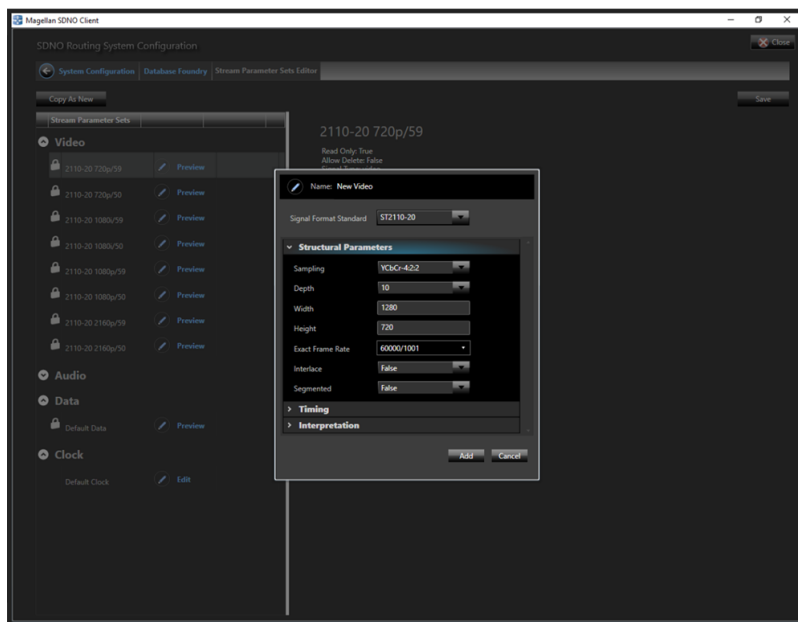## Images/Diagrams

PathView Layout Example
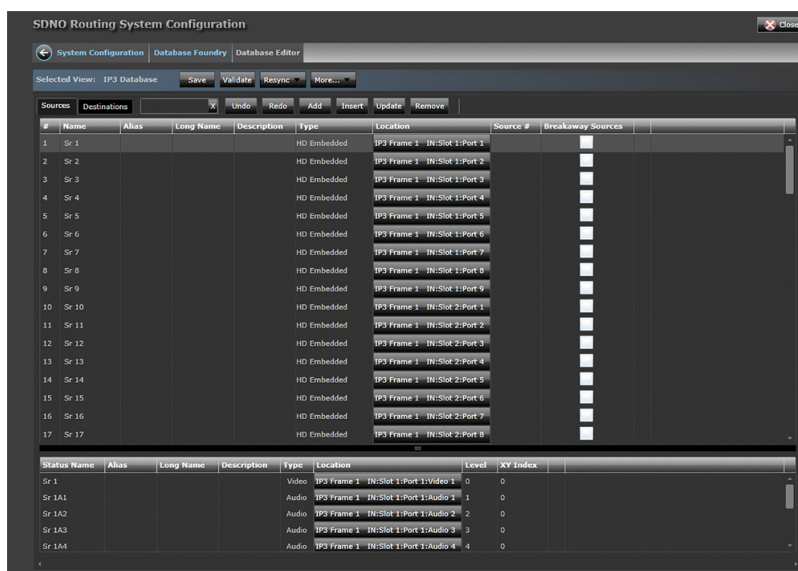

MSNDO front panel hardware

HPE Gen 10 hardware used with MSNDO

HPE Gen 10 hardware, the back panel, used with MSNDO

Screen shot of the MSNDO client software

Screen shot of the MSNDO routing system software