

Magellan™ Control System

IP/SDI Routing, Control and Monitoring



Routing, Control and Monitoring

The **Magellan™ Control System** is a field-proven solution that provides SDI/IP signal routing, parametric control, and equipment monitoring capabilities through operator-centric, highly configurable monitoring and control surfaces. Magellan Control is the culmination of decades of protocol integrations north-bound and south-bound, forming one of the most interoperable control systems in the industry.

Magellan Control addresses the challenges associated with the transition to IP, supporting systems of the scope and scale that media companies face today. Magellan Control supports hybrid SDI/IP migration strategies in addition to green-field, all-IP deployments.

Magellan Control unifies system management and operations for IP, SDI, and hybrid routing systems. It offers a seamless path from SDI to IP and UHD, leveraging existing infrastructure while delivering scalability with the efficiency of IP systems.

Magellan Control provides operators the flexibility to create, save and recall their own routing, parametric and monitoring workflows. Its easy-to-use interface is context-aware, based on the needs of each operator role.

Magellan Control utilizes modern web technologies that enables operators to view switching of routing paths in real time via *PathView*, and drill in with *AlarmView* integrated alarm monitoring.

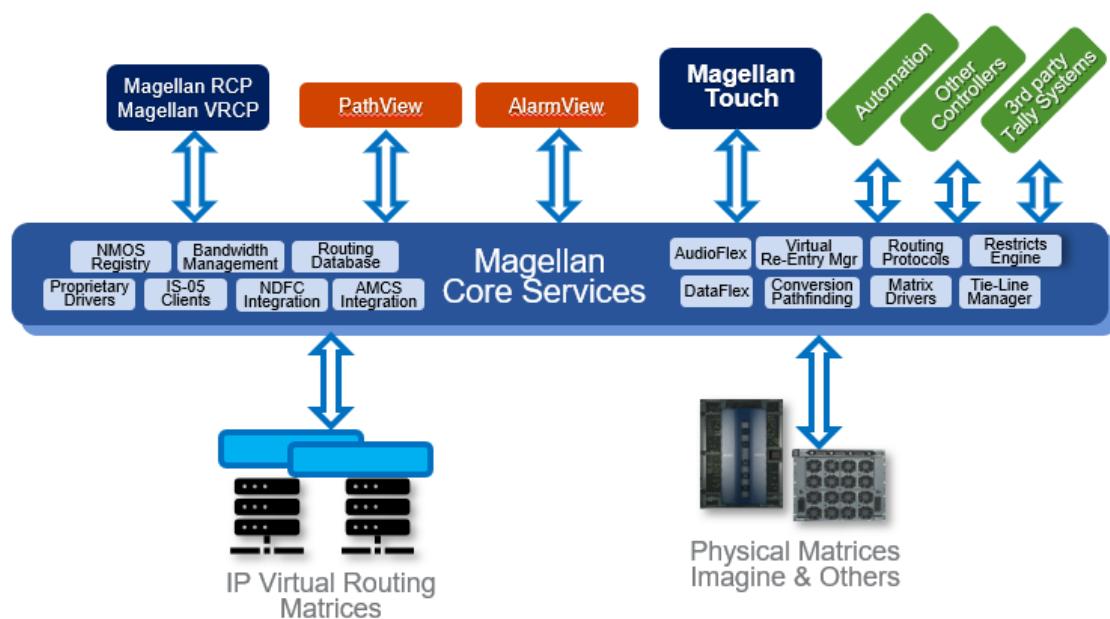
Magellan Control is equally at home in SDI plants of today, allowing IP systems and endpoints to be incorporated over time – no need to forklift an existing SDI infrastructure. A hybrid mix of SDI and IP systems is controlled by the single, common Magellan Control System.

Magellan Control supports AMWA NMOS IS04/05, allowing straightforward integration of any device supporting the AMWA IS-04/IS-05 specifications. Magellan Control includes an NMOS registry and supports registry redundancy as a part of its own redundancy mechanisms.

Magellan Control also supports a variety of bespoke drivers for IP endpoints, as well as legacy routing protocol drivers for system integration.



Magellan Control System



Features

Proven technology to orchestrate complete live production and playout systems

- SMPTE ST 2110 and ST 2022-6
- AMWA NMOS IS-04 and IS-05
- Native APIs and Open Protocols
- Supports SDI and IP Routing Environments
- High-Availability 1+1 Redundancy
- Implement a True COTS Solution Based on Open Standards

Integrated management environment across Imagine and third-party solutions

- PathView and AlarmView
- Live and Dynamic Signal-Path Display
- Real-Time Updates and Device Alarms
- Role-Based Combination of Controls
- Detail View of Active Color-Coded Alarms
- Tree-View of All Managed Devices and Available End-Points

Live operator-centric control systems making functionality easy and intuitive

- Dynamic Control Surfaces
- Rich Filtering and Organization
- Flexible Group Tagging
- Role-Based User Rights Management
- Comprehensive TALLY & UMD Support
- Browser-Based Interface
- Extensive Support of Third-Party Protocols

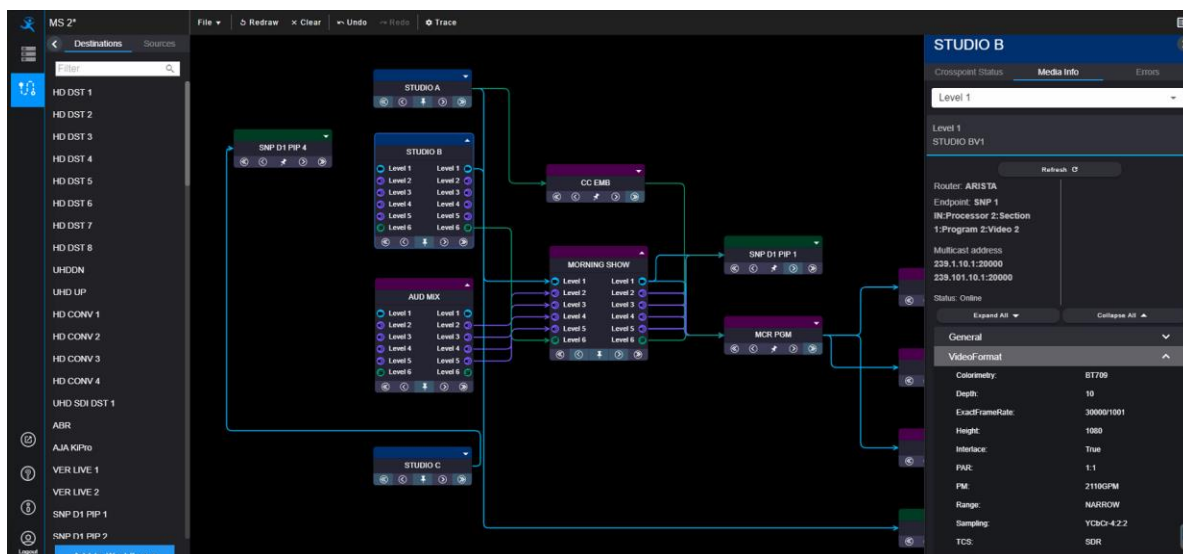
Integrated Operating and Monitoring Environment

The Magellan Control System's PathView and AlarmView features enable users to manage and monitor their IP, SDI and hybrid systems. Magellan PathView and AlarmView focus on the operator – putting the relevant controls and information in front of each user – enabling them to focus on the content, not the technology.

PathView

PathView is a live, dynamic, drag and drop organizational tool for IP and SDI routing paths.

- Live and dynamic signal-path display for SDI and IP routing environments managed by Magellan Control
- Drag and drop Source/Destination organization with paths drawn on PathView canvas
- Critical info such as signal format, SDP, audio levels/breakaway, and device alarms
- Updates instantly, providing each operator a real-time view of every route they are monitoring
- Dynamic signal-path display that integrate live telemetry and alarms – user-modifiable easily on the fly



PathView User Interface

Users simply drag and drop Source(s) or Destination(s) onto the PathView canvas, where PathView graphically fills in entire path of that signal. PathView is dynamically updated, providing each operator a real-time view of every route in the part of the system they are monitoring. Multicast address, RTP information and PTP clock details allow the user to quickly identify the source and cause of any issues that may arise.

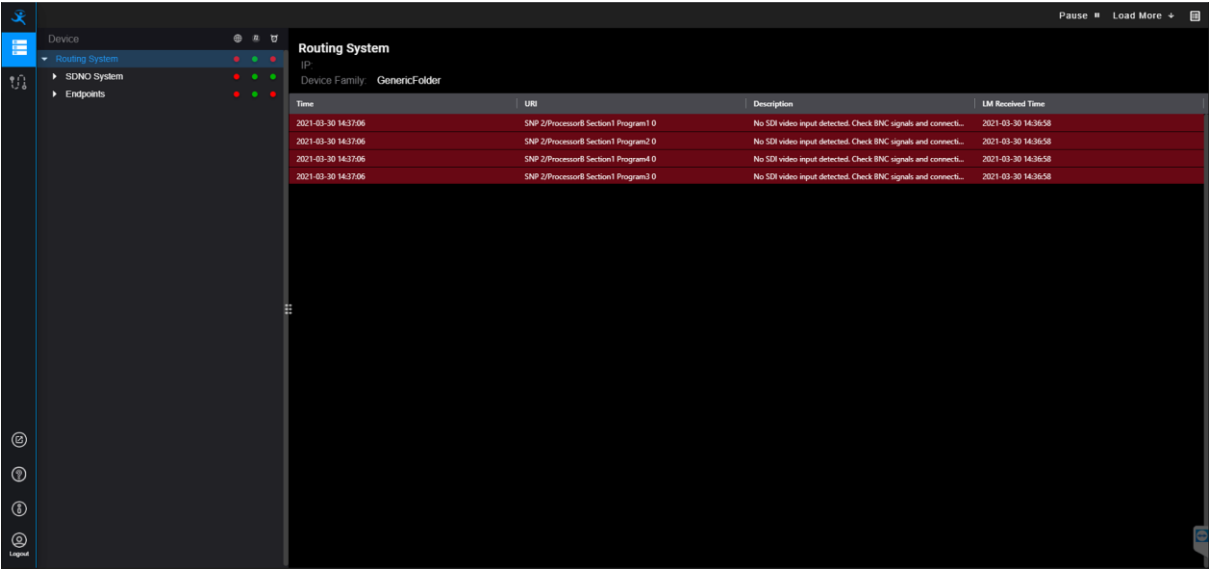
At the same time, PathView provides critical live telemetry information in the information panel related to Source or Destination being monitored, like full SDP information, audio levels/breakaway, as well as errors. Within the information panel, the user can easily see all the levels under "Crosspoint Status" section, within each level of information like router and end-point name and exact physical location of the source.

AlarmView

AlarmView monitors media network and control network connections. AlarmView provides detailed and color-coded views of active alarms.

- Tree-view of all devices being managed in the system
- Visual indicators to show IP end-points availability on the network, connections between the controller, and IP end-points, as well as alarm conditions
- Alarm panel provides a detailed view of all active (color-coded) alarms

Operator-Centric Flexibility Helps the User Control the Story



AlarmView User Interface

Monitoring and Visualization

The monitoring and visualization solution within the Magellan Control System – Magellan Touch – provides an intuitive operational layer for production and routing control.

Magellan Touch

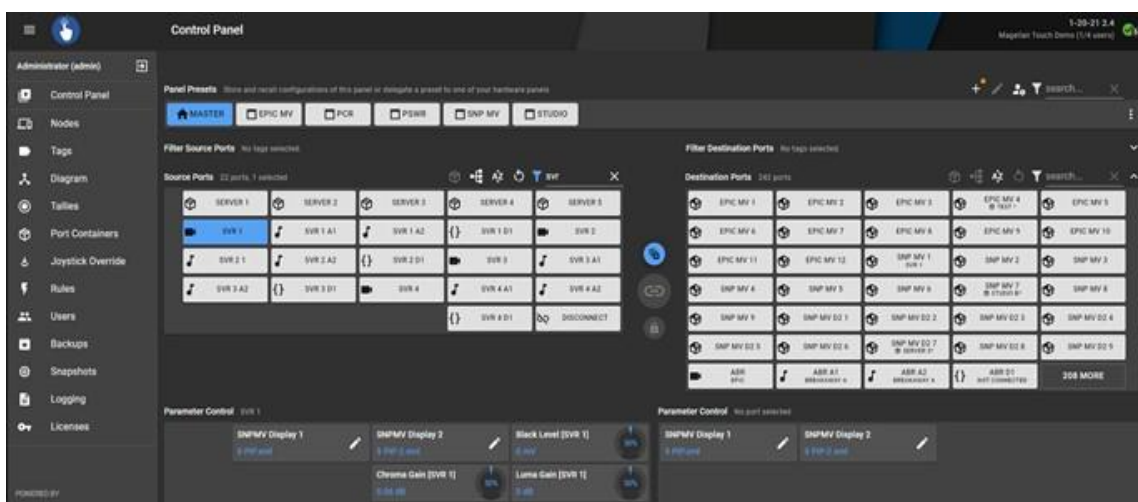
Magellan Touch is a production operations interface layer, designed for operators in live sports and playout environments. Magellan Touch integrates processing controls and routing in the same view, providing a highly configurable solution that can be changed on the fly by each operator. Magellan Touch supports numerous third-party parametric, routing, tally and switcher protocols.

Magellan Touch features:

- Live production operational control for media infrastructure
- Dynamic control surfaces combine routing and parametric controls
- Rich filtering and organizing capabilities utilizing flexible grouping tags
- Role-based user rights management
- Comprehensive TALLY & UMD
- Easy deployment, including mobile browsers, touch screens, tablets, and LCD push-button control panels

Parameter Control – In addition to routing control, parameters of supported devices can be adjusted on-the-fly without leaving the user interface. Magellan Touch can display the parameters in a contextualized way; only the currently relevant parameters are shown in the user interface. Reassigning parameters from the device's supported parameters is possible through a filterable parameter browser engine.

Routing Control – Magellan Touch connects to video, audio baseband or IP routing systems through standard protocols and dedicated integrations. Magellan Touch supports the readout of labels and configurations to minimize configuration and setup times. In addition to Imagines LRC protocol Magellan Touch supports number of third-party routing control protocols.



Magellan Touch Interface

UMD and Tally Information – An unlimited number of tallies can be calculated for all resources in the system. The majority of multiviewers and monitors can be controlled to display information like currently active source, tally signalization and other system metadata. Supports TSL V3/V5 protocols.

Magellan Touch (continued)

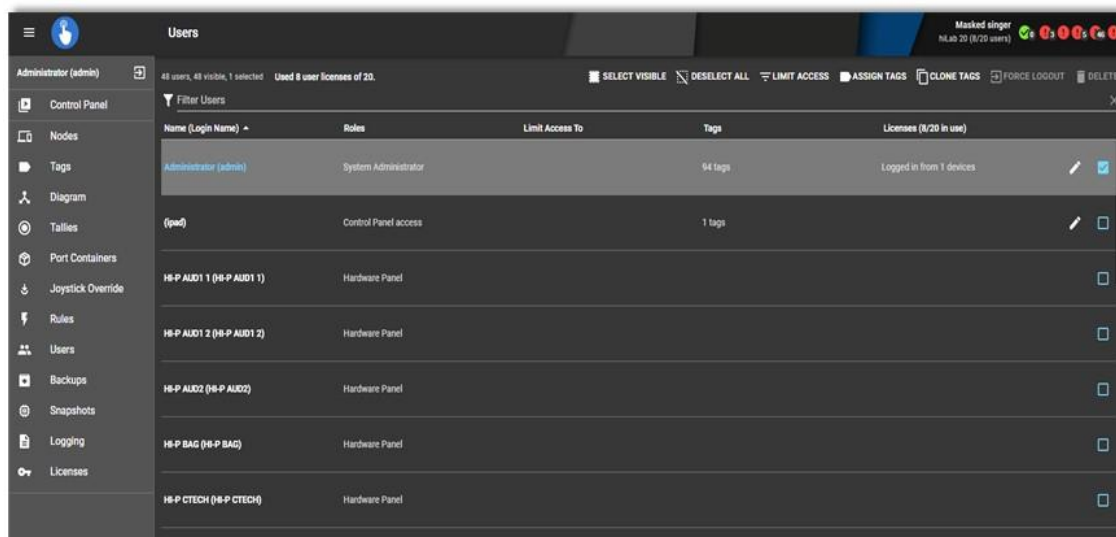
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Reduced Configuration Effort – The main paradigm of Magellan Touch is to reduce configuration effort, to enable users to fully control their system and deliver a clear and simple representation of the proceedings at all times. To achieve that, Magellan Touch provides pre-defined user interfaces of commonly used workflows and concepts to quickly and easily create personalized user interfaces for the specific workflow tasks.

Logical Tags – Layered logical tags can be created by an operator to describe attributes of resources available to them. Magellan Touch uses the tags to automatically generate control surfaces and operator can use tags to quickly filter the sources needed for given operations.

Tagging allows for the system to reduce the configuration effort. Changes in panel assignments or user rights can be reflected in changes of tag assignments and rolled out throughout the installation in real time without any further configuration effort.

User Rights Management – The User Rights Management system allows the restriction of access to operations or resources in the system and minimizes the potential of misconfiguration or human error. Multiple administrative users can configure the system simultaneously at any time. Operators only see resources available to them for the task or event they are working on.



Secure Per-Operator Access Control

Magellan Touch LCD Push Button Panels –

The Magellan Touch LCD push button hardware-based control panels are designed for ease of configuration using the same logic and features as the HTML5 based software control surfaces.

– See the Magellan Touch datasheet for more details –



Magellan Touch Panel

Protocols and Integration

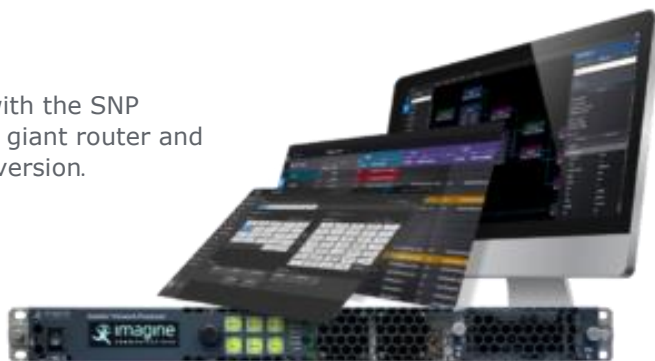
The Most Interoperable Control System in the Industry

Magellan Control System works seamlessly with all routing and end-point protocols, providing complete flexibility to customers' preferred vendor.



Magellan Control System + Selenio Network Processor = The Perfect Combination

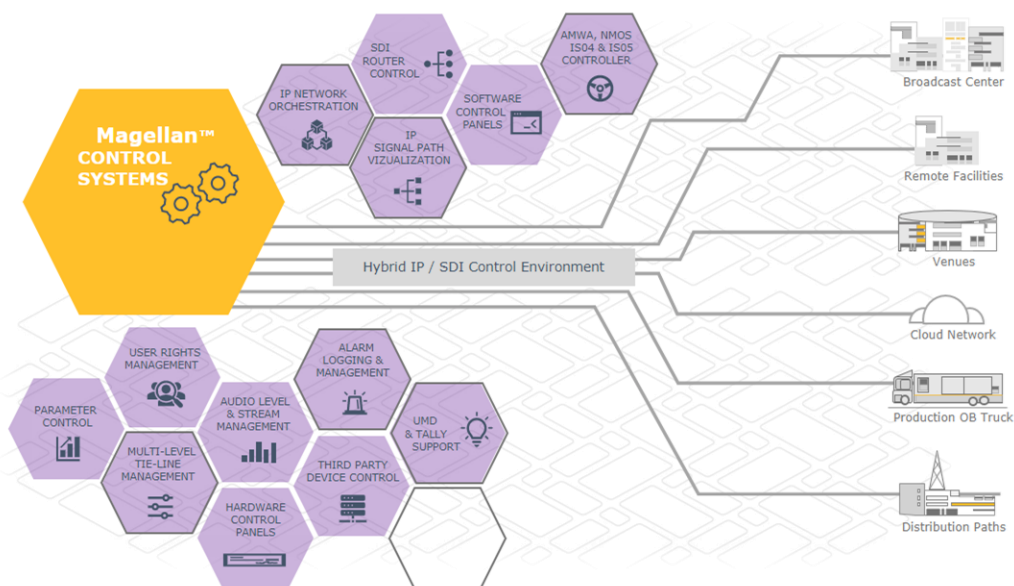
Magellan Control System combined with the SNP provides customers the power of one giant router and acts as an IP gateway for format conversion.



The Magellan Control System with the SNP allows media organizations to leverage existing SDI equipment in a hybrid SDI/IP environment to manage a cost-effective, self-paced transition to a full IP facility. As legacy equipment reaches its natural replacement cycle, any SNP units used as IP Gateways can be redeployed for other processing and multiviewer tasks with feature key upgrades.

Magellan Control System

Fast, Flexible, Reliable Control Solution for the Modern Facility



Embark on your facility's technology transformation from baseband to IP, meeting every investment, operational and workflow challenge along the way.

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

YOUR PATH. YOUR PACE.
Take it on with Imagine.