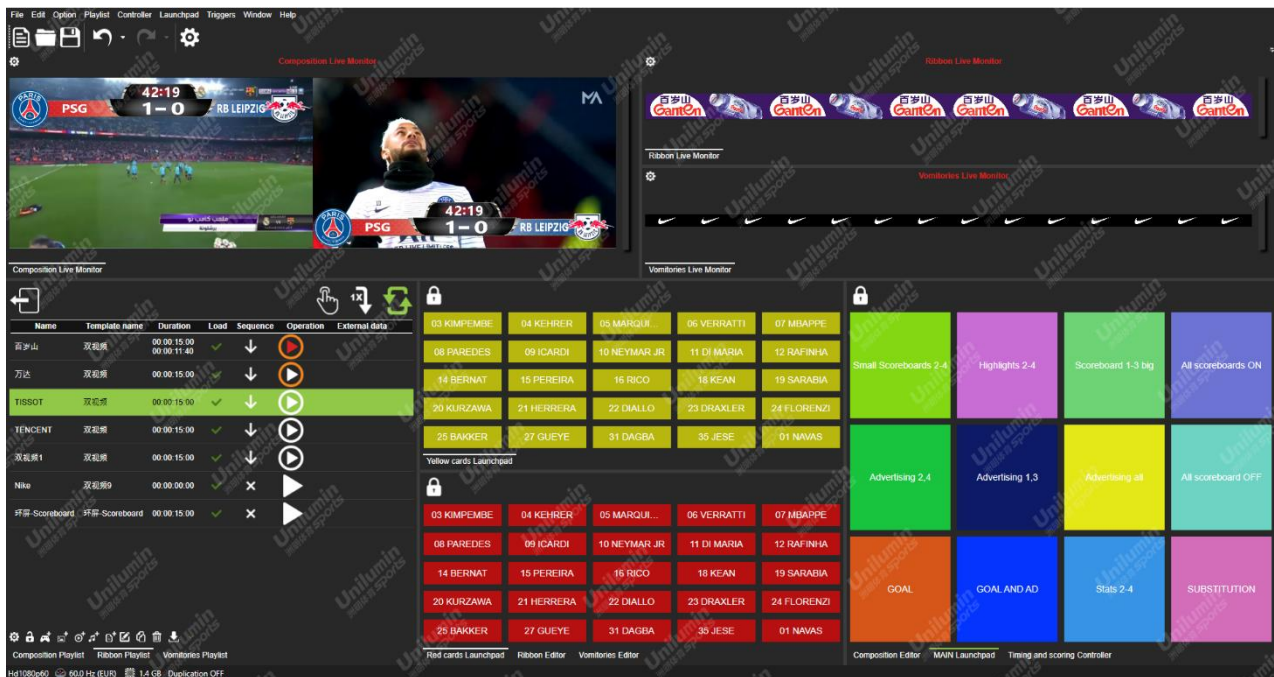


# Unilumin Sport CMS – multiscreen control system



System designed to control all the displays across arena from one workplace – scoreboards, ribbons, perimeters, cubes and even outdoor LED media displays – all can be controlled by one operator.

One-click control of all the arena displays. Playlist creation, on air update of dynamic content, media assets management – everything within one workplace. Powerful 3D template editor allows operator to have full control over the content creation.

## Main functions

- Real-time 2D and 3D graphics generation;
- Manual and automated mode;
- Frame accurate synchronization across multiple servers. Can control one extra-large LED screen from multiple servers.
- SD, HD, 4K, 8K formats support;
- Live video sources supported – HDMI, SDI, NDI, IP, SMPTE2110 (up to 8 streams active);
- YUV and YUV+K formats support;
- 3D template editor with animation;
- Multichannel non-linear layered playout;
- Content changing while playing;
- XML and Excel data integration and visualization with auto update;
- Built-in script editor;
- Timing/scoring UI (time, score, fouls, etc.) and seamless integration with timing and scoring;

- Wide range of media files supported (MXF, MOV, MP4, MKV, MPEG...) with alpha channel;
- Multichannel audio output;
- 3<sup>rd</sup> party systems integration via DMX, MIDI, GPI, REST API. Integrate your lights, audio, PAVA etc.;
- Timecode support.

## Mapping

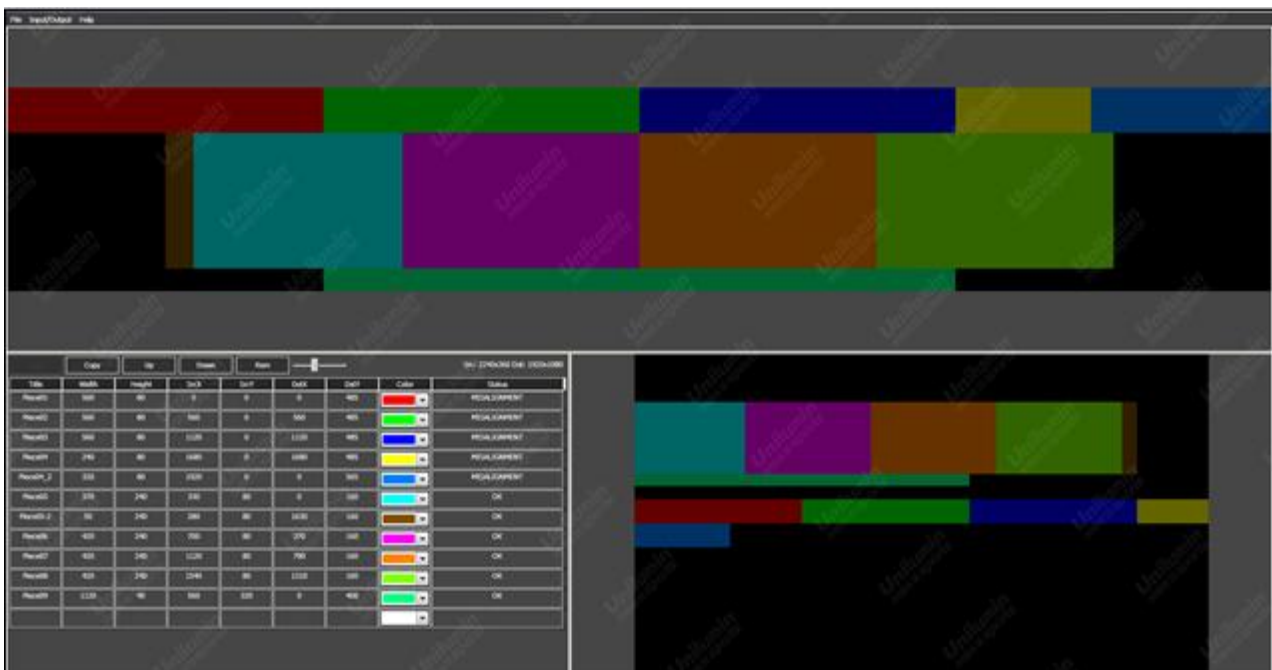
System can slice output video stream in real time to drive any screens of any resolution and configuration as one seamless surface or a set of independent displays.

You can create as many content zones as needed and combine/overlap them according to your needs.

Thanks to this feature you don't need to manually prepare and slice content for the system – it will be done automatically in real-time.

Up to 32 slices per each output;

Pixel mapping feature – can adjust position of every individual pixel in real-time.



### **Backup and redundancy**

System supports fully automated backup. Operator doesn't need to operate backup server during the match – all the content and operator's actions will be replicated from the main to the backup server automatically. In case of main server breakdown backup server will take over control and operator can continue event with no downtime.

Master and backup servers have frame-accurate synchronization of video and dynamic data over Genlock, PTP and Nvidia Sync.

Redundancy supported for both render servers and operator's workstation with complete automatic or manual failover.

### **Licensing and output capacity**

Various license levels available to cater to projects of different scale:

- Minimal – up to 2xHD outputs
- Middle 1 – up to 1x4K output
- Middle 2 – up to 2x4K outputs
- High – up to 3x4K outputs
- Scalable – infinite number of 4K/8K outputs available through clustering of multiple servers.
- Editor / Operator – license with no outputs, for the editing purposes. To prepare a show outside of the control room, on the editor's laptop/PC.



## Template editor

With template editor designers can create graphic templates which will be rendered in real-time with external data imported.

- Full-featured 3D editor (objects, lighting, materials, etc)
- Independent per-object animation on multiple timelines
- 3D text
- Importing and playing media files (MXF, MOV, MP4, MKV, MPEG...)
- Multilayered materials for objects
- Different rendering destinations (SDI, NDI, IP, RTP, file)
- Multipass rendering, postprocessing (chromakey, color correction, filters, etc.)
- Powerful script editor for more flexibility and control over the objects, layout and animation
- Import Adobe After Effect compositions



## Hardware specification:



#	Parameter	Value
1	Media server case type	19'' 4U
2	CPU	Up to 2*AMD EPYC / Intel Xeon
3	RAM	DDR4 RECC
4	GPU	Up to 2xProfessional NVIDIA RTX
5	Video outputs	Up to 4xDP1.2 3840x2160 outputs
6	Video inputs	Up to 8x3G-SDI 720p/1080i/1080p / 4*HDMI2.0 2160p@60 / 4*12G-SDI 2160p@60
7	Storage	480GB SSD for OS, 1.92TB SSD for data
8	OS	Windows 11 x64 Pro
9	LCD	Up to two 23.8'' 1920x1080 touch screen
10	Peripheral equipment	Mouse, keyboard, DMX interface box, GPI interface box, audio interface with XLR outputs.

Exact hardware specs may vary depending on the chosen license type.