Third-party Software Video Streaming

This is a somewhat advanced concept. If you are new to video streaming, please [consider using MAS' tools (/scoring/create-match/sources/mas)](/scoring/create-match/sources/mas) instead.

The MAS video ingest server is capable of receiving video feed directly from a third party source. If you have a piece of software or hardware that can produce an [RTMP stream (https://en.wikipedia.org/wiki/Real-Time_Messaging_Protocol)](https://en.wikipedia.org/wiki/Real-Time_Messaging_Protocol) (i.e. H.264/AAC in FLV) then you do not have to use the opinionated MAS tooling for streaming and can instead use tools you are already familiar with.

You may wish to do this if:

- You are already familiar with using OBS/vMix/XSplit, and/or;
- You are doing a sophisticated local production (e.g. multiple cameras, other professional hardware, and things like instant-replay), and/or;
- You want to output to destinations not supported by MAS (e.g. *[Twitch (https://twitch.tv)](https://twitch.tv)*), and/or;
- You don't like the way MAS does its video compression (the "best-case" MAS will do is 1080P @ 30FPS in a 6000k bitrate - making for a "flat" looking *Full HD* picture).

Otherwise, the recommended way to send MAS video is to stream [through a laptop using desktop Chrome web browser (/scoring/create-match/sources/mas)](/scoring/create-match/sources/mas).

You have two options to consider when streaming this way:

1. [Use MAS to relay video](#) and (optionally) print the overlay to your video, or;
2. Just use [MAS to create the overlay](#), you will need to send directly to YouTube/Twitch/Facebook/whatever yourself.

Continue Using MAS for Video Processing

MAS may still provide some utility if you are new to these third party tools, or you want us to handle printing overlays, creating replays, and dispatching out to YouTube/Facebook/Twitch for you.

You may wish to consider this if you're just getting started, but bare in mind MAS resamples video to 1080P/30FPS, and has strict rules about dropping frames/not sending a continuous reliable video stream (you will be timed out after 10 minutes of inactivity for example). It is strongly recommended to instead consider using [MAS to just create the overlay](#) and you handle the rest of the broadcast yourself.

Configuring the Video Server (optional)

By default the MAS video server will draw the overlay to the video you send it. If you are using a third party, [turn this off (/scoring/create-match/sources/advanced-settings#rendering-overlay)](/scoring/create-match/sources/advanced-settings#rendering-overlay) when you are setting up your match in the "Advanced Settings" section so the server does not ruin your production by re-drawing this unnecessarily.

Use cloud server to render overlay to incoming video	ⓘ	🔵

Turn this setting to "off" (it is on by default like this) when setting up your match on MAS.

RTMP

The default way of receiving video on the MAS server is RTMP. If you have a software product that can send an RTMP stream to our server, MAS should be able to ingest it.

Of important note: video is restricted to 1920x1080 @ 30FPS (1080P30) maximum - resolutions lower than this (e.g. 720P) will be *upscaled* to 1080P. If you need to stream in a lower resolution without this upscaling, you will need to print the overlay locally and send directly to your receiver *and* MAS (and just ignore the MAS version).

The video server will resize anything not in a 16:9 resolution.

Finding the Video Server

When a match is started (and *not beforehand*), a video ingest server is dynamically allocated to your match - it will take up to two minutes for the server to be "ready" (during this time it will report as being Not available - don't worry it is spinning up!), and you then have a following 10 minutes to start sending it video.

Advanced Stream Settings

rtmp://34.27.22.110/live/gm_bG7Uj918AVfvYlpO

https://srv-tk0bbbcgqcvv4f9a-5.encoders.myactionsport.com/websocket

Use either of these as an output destination in external products like *vMix* or *OBS* if you are doing local production. Prefer RTMP.

An example of the RTMP URL you will need to copy and paste. Note, this is created every match, these exact above values will not work for you, they are just an example.

To find the RTMP endpoint:

- [Open the match settings dialog](#) - Scroll down to [Advanced Settings](#) - Copy the RTMP URL taking the structure `rtmp://{server_address}/live/{game_id}` - Paste this into your software's RTMP destination

Sending the Result to MAS

If you decide to draw the overlay locally and/or stream directly to your YouTube, Facebook or elsewhere you must still send MAS a video feed to keep the overlay server alive **and must do this within 10 minutes of a match beginning**.

This has the added benefit that MAS will continue to create highlights for you on your platform backend (/platform/highlights) - even if you don't make your video public elsewhere inside MAS (i.e. on Watch (/watch)).

Only Using MAS for Overlays

If you're already using a third party tool for video production, you may as well just skip the MAS video rendering pipeline and instead consume the overlay and control your own outputs.

In this case, you aren't bound by MAS' opinions for the video (1080P/30FPS), or the rules for attaching video (must be done within 10 minutes, dropped frames could result in an "error" message to users etc.).

You need to opt-in to this process by:

- [Disabling MAS as a video consumer (/scoring/account/#streaming-to-mas)](/scoring/account/#streaming-to-mas) in your account settings dialog, then;
- [Disabling MAS video (/scoring/create-match/streaming)](/scoring/create-match/streaming) when creating each match and setting up to just receive the overlay

Note: by not sending a video feed to MAS, [platform (/platform)](/platform) features such as post-match replays will not be available. Streams/matches do not automatically end - you will need to hit "end stream"/"end game" in you match to clean these up.

There is no penalty for not doing so, and allows you to continue using old games in the future for whatever reason, but will eventually cause your scoring dashboard to become quite messy.

Finding the Overlay Server

In either case, when a match is started (and *not beforehand*), the MAS overlay server will start drawing an HTML graphic to a webpage. This is how MAS creates and works with overlays behind the scenes - generating HTML graphics and printing these over the top of the video you send us. When using a third party video production tool like [OBS (/scoring/create-match/sources/third-party/obs)](/scoring/create-match/sources/third-party/obs), [vMix (/scoring/create-match/sources/third-party/vmix)](/scoring/create-match/sources/third-party/vmix), or [XSplit (/scoring/create-match/sources/third-party/xsplit)](/scoring/create-match/sources/third-party/xsplit) (amongst anything that can take in a web browser/HTML source) you can read this HTML graphic directly and draw it to your video broadcast.

Unlike the [video server](#), the overlay is available immediately so you can (in theory):

- Start a game in MAS
- Attach video and overlay graphics to your [OBS (/scoring/create-match/sources/third-party/obs)](/scoring/create-match/sources/third-party/obs)/[vMix (/scoring/create-match/sources/third-party/vmix)](/scoring/create-match/sources/third-party/vmix)/[XSplit (/scoring/create-match/sources/third-party/xsplit)](/scoring/create-match/sources/third-party/xsplit)/[whatever (/scoring/create-match/sources/third-party/ffmpeg)](/scoring/create-match/sources/third-party/ffmpeg)
- Send MAS video server the result (optional)

In that order so you're not just waiting for the MAS video server to become ready.

Overlay Settings

Preview the current overlay on the viewfinder

https://overlays.myactionsport.com/basketball?game=gm_cUTRVNwzl4O6zOuT

Use this as an input source in external products like *vMix* or *OBS* if you are doing local production.

An example of the Overlay URL you will need to copy and paste. Note, this is created every match, these exact above values will not work for you, they are just an example.

To find the Overlay endpoint:

- [Open the match settings dialog](#) - Scroll down to [Overlay Settings](#) - Copy the Overlay URL taking the structure `https://overlays.myactionsport.com/{scoring_keyboard}?game={game_id}` - Paste this into your software's HTML/web browser input source