

## Triton Technology Solutions and Living As One How to Live Stream and Start Church Online

### **Engage** Your Community Through Church Live Streaming Virtual Events considering Coronavirus

Faced with the spread of coronavirus (COVID-19), churches around the world are finding ways to continue ministry in unique ways. Many have utilized live or virtual event (sim-live) streaming in order to continue to hold services and events virtually while not being able to meet physically.

We know that many of you are in a rush to get started with online church live streaming, and we are here to make the process simple and quick. We've created a simple step-by-step guide to help you get going with live or virtual event/simulated live streaming.



### What Makes Working with Living As One & Triton Technology Solutions **Different:**

Triton Technology will work with you and your team to get you streaming as quickly as possible. We can propose a solution with a single camera up to a multicamera solution with video switching, graphics, ability to tithe, and more. Working with your team, we can come up with and implement the solution very quickly.

With all other streaming options, whenever there is packet loss on your internet connection, your viewers will face a buffering wheel. After the second buffering interruption, 70% of your online viewers will have left your stream. Living As One has developed the only solution which corrects for this issue by resending and correcting data on a 2-minute delay. This enables reliable streaming even on bad internet

connections and reduces streaming complaints by over 85% on average. This results in a much more stable online viewing experience that increases viewer retention and your online audience size over time.

## Get Started **Quickly** with **Reliable** Online Church Live Streaming

### Step 1 – Plan your Video Gear

The first step when planning a video setup for online streaming starts with cameras, switchers, and other infrastructure to record the service and switch between sources. Talk to Triton Technology Solutions about different camera and switcher options. If you already have these pieces, skip to Step #2.

#### **Cameras**

Many cameras these days work great for online streaming, but camcorders usually work better than DSLR/mirrorless cameras, which usually have a time restriction on how long they can record for. Some things to look for when comparing cameras:

- Resolution: Resolution refers to the image size that a camera will record and/or stream at. Most churches are currently streaming at 1080p maximum resolution, but 4k cameras will future-proof your setup.
- Output: Most cameras will include an HDMI output which can be used for some encoders and switchers, but HDMI is limited by a maximum cable length of about 50 feet. SDI, which is a more professional standard, features locking connectors and a much longer maximum cable length of up to 300 feet.
- PTZ (Pan-Tilt-Zoom) cameras would allow you to have multiple views from positions that you could not put an operator, control multiple cameras with one operator, and have rapid installation with potentially no running of additional power to support the camera positions. You could install a single camera but moving them or zooming the picture while on air can result in a service that is distracting.
- We recommend two cameras at a minimum of either manned or PTZ cameras for the best production value.

#### **Switcher**

A camera switcher should be used if you'd like to mix between multiple cameras or video sources going to a stream, including graphics or videos (full screen or overlaid). Make sure that the outputs of your cameras (SDI or HDMI) will match the inputs of your switcher or purchase an HDMI to SDI converter. Triton can help you decide on a switcher, whether you only want one camera and a feed from your presentation system or multiple cameras, presentation feeds, and added streaming graphics or multiple views and mixes of sources.

#### **Audio**

For live stream audio, it's best to use a feed mixed specifically for broadcast which can either be on your existing mixer or a dedicated mixer, or at least from the house audio output of a mixer. We can work with you to determine the best path forward. Audio can either be run to a camera (usually with XLR inputs), into a switcher, or directly into a live stream encoder (often using an SDI audio embedder, which embeds the audio on the SDI signal, or an HDMI to SDI converter with embedder). Triton will help you get this setup and functioning as well as provide you with training and support.



## Step 2 – Purchase an Encoder

An encoder sends video data from a video system (such as cameras, video switchers, etc.) to online platforms such as Facebook, YouTube, and your website.

Living As One has three encoders to choose from, all of which provide perfect streaming by checking and resending the data, even on inconsistent connections.

- RAY | Low cost, portable encoder designed for web streaming – single HD-SDI input up to 1080p
- PRISM Single-Channel | Enterprise-grade encoder for multisite and web streaming – single HD-SDI or HDMI input up to 4k, single PSU
- PRISM Dual-Channel | Enterprise-grade encoder for multisite and web streaming with dual video transmission- two HD-SDI or HDMI inputs up to 1080p each, primary and redundant PSU

### **Note: Living As One Service Plans**

Living As One's monthly Web Platform service plan enables resilient streaming to your website, Facebook, YouTube, and other destinations (such as mobile apps, tv apps, etc.). The plans also include tools like automated scheduling and weekend phone/email support.

Some plan options include:

- Social Only: Stream to Facebook and YouTube simultaneously from LA1's cloud | \$99/mo
- Embed Only: Stream to website, Church Online Platform, etc. (1TB/mo bandwidth): \$229/mo
- Pro Web + Social: Stream to website (1TB/mo bandwidth, 3 bitrates cloud transcoding), social, apps, etc.: \$279/mo

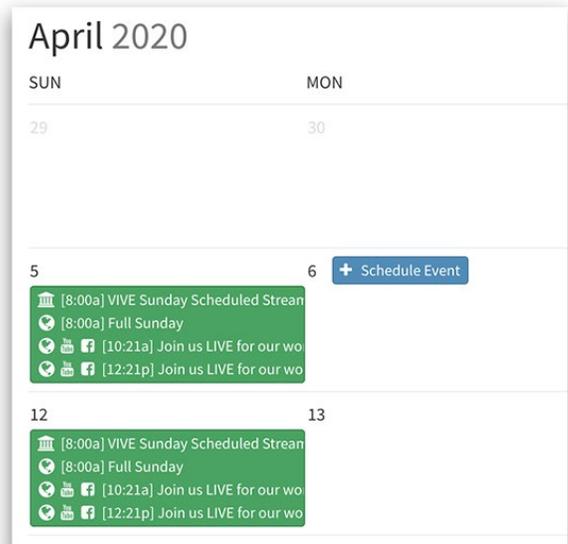
- Enterprise: Stream to website (2 TB/mo bandwidth, 5 bitrates cloud transcoding), social, apps, etc.: \$429/mo

### Step 3 – Install Your System and Get Set Up

Many churches think that an inconsistent or slow internet connection will prohibit their ability to stream reliably. Under normal circumstances this is true, but because of the way that the Living As One Platform transmits data and corrects for errors, high-quality streaming is possible even on a bad connection. Streaming in 720p resolution is possible on as low as around 5Mbps, or 1080p on 10Mbps. No internet connection at all? You can even use a portable wired internet connection such as 4g hotspots with an ethernet connection.

Living As One provides simple checklists for initial gear installation, followed by an onboarding call with a dedicated support team representative to complete setup and provide training.

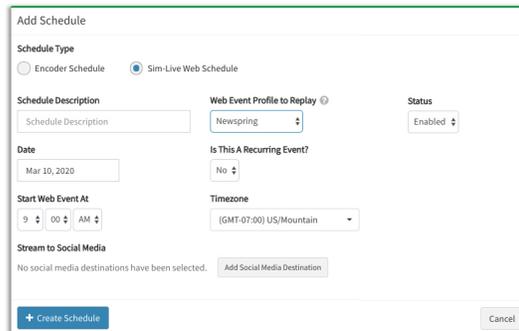
After setup, streaming is managed through the simple Living As One Control page. Recurring events can be set up along with Facebook and YouTube simulcasting from the cloud (in full 1080p with stereo audio!). Scheduled events with start and stop automatically, so you can set once and forget.



## Step 4 – Choose Your Streaming Destination(s)

For online church live streaming, most churches will prioritize engaging with their audience on their website. Life Church's [Church Online Platform](#) is a great way to set up an online campus virtual community, and it is easy and free! You can also display a Living As One player directly anywhere on your website using an embed code.

Social destinations such as Facebook and YouTube are great for church live stream marketing in order to reach attendees that would not normally come to your website, but often distract viewers from your content with other videos or content. Viewers will typically engage with church live stream content around 2-5 minutes on Facebook, 15-20 minutes on YouTube, and up to about 40-55 minutes on a church website. In order to have the best engagement with an online community, your website is usually the best primary streaming destination.



The screenshot shows a form titled "Add Schedule" with the following fields and options:

- Schedule Type:** Radio buttons for "Encoder Schedule" and "Sim-Live Web Schedule" (selected).
- Schedule Description:** A text input field.
- Web Event Profile to Replay:** A dropdown menu with "Newspring" selected.
- Status:** A dropdown menu with "Enabled" selected.
- Date:** A date picker showing "Mar 10, 2020".
- Is This A Recurring Event?:** A dropdown menu with "No" selected.
- Start Web Event At:** Time and AM/PM selectors showing "9:00 AM".
- Timezone:** A dropdown menu with "(GMT-07:00) US/Mountain" selected.
- Stream to Social Media:** A section with the text "No social media destinations have been selected." and a button "Add Social Media Destination".
- Buttons: "+ Create Schedule" and "Cancel".



### Virtual Events Through Simulated Live

Using Living As One, streaming to your website, Facebook, and YouTube can be scheduled to occur in real time or streamed as virtual events through "sim-live" broadcasts of previously-recorded content. This is a great way to stream content that was recorded at another time and enable an audience to view and interact with it concurrently. Due to COVID-19, many churches have utilized this method to stream a scheduled service to an online community that was recorded and produced earlier in the week. Simulated-live events can also be a great way to continue to engage an online campus throughout the week.

## Step 5 – Contact us

Please do not hesitate to contact us as we are available to help you through this process. We are happy to provide up to two hours of free consulting services to help you through this process.

Triton can be contacted at [949-388-3919](tel:949-388-3919) or [www.TritonTechnologySolutions.com](http://www.TritonTechnologySolutions.com)