

WHY LIVESTREAM?



Spreading the message of God



Leverage advances in technology for good



Bridge that connect our church to the world



Strategy for increased communication, outreach and mindshare inside our local community

And this gospel of the kingdom shall be preached in all the world for a witness unto all nations; and then shall the end come.

Matthew 24:14



STEPS TO BUILDING A LIVE STREAMING SYSTEM FOR CHURCHES

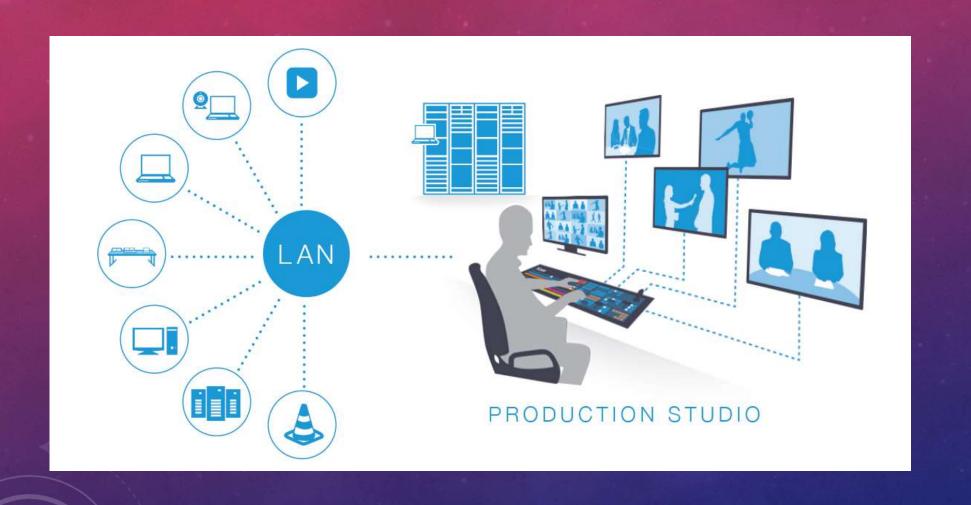
- 1. Leveraging existing equipment in the church
- 2. Selecting a video production switcher
- 3. Selecting cameras
- 4. Working with volunteers
- 5. Considering Christian music copyright law

I. LEVERAGING EXISTING EQUIPMENT IN THE CHURCH

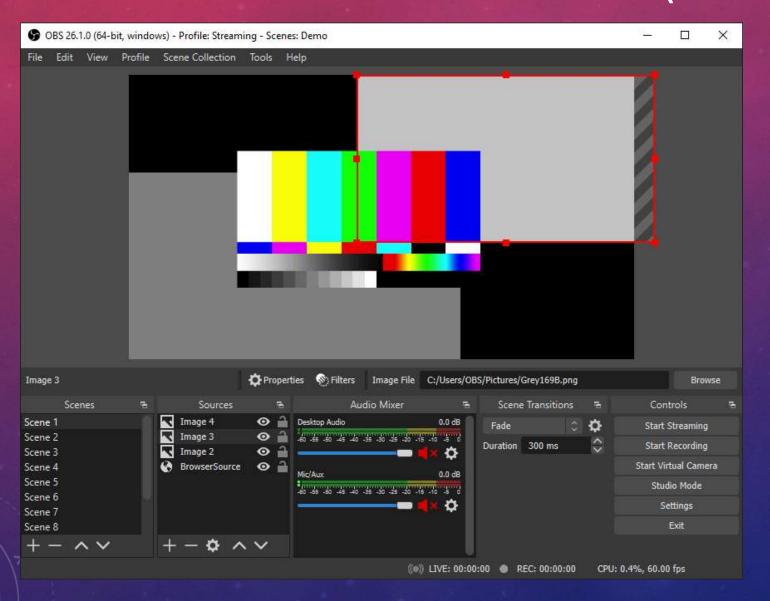
- 1. Audio equipment
- 2. TVs/Projectors
- 3. Computer
- 3. Network (Internet)

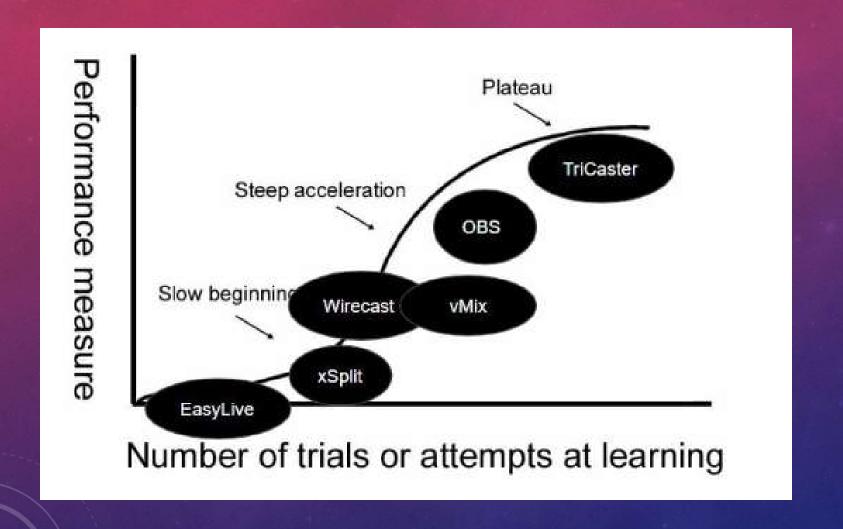
II. SELECTING A VIDEO SWITCHER

- 1. Support for NDI (NewTek Network Device Interface)
- 2. OBS (Open Broadcaster Software), VMix, Wirecast, XSplit
- 3. Learning curve (time to learn a new software)









III. SELECTING CAMERAS

- 1. Optical Zoom
- 2. Camcorders, PTZ (Pan-Tilt-Zoom) Cameras
- 3. Connections (HDMI, POE Power Over Ethernet, SDI, USB)
- 4. Resolution and Bandwidth



















Resolution	Pixel Count	Frame Rate	Quality	Bandwidth
4K 30fps	3840x2160	30fps	High	30Mbps
4K 30fps	3840x2160	30fps	Medium	20Mbps
4K 30fps	3840x2160	30fps	Low	10Mbps
1080p60fps	1920x1080	60fps	High	12Mbps
1080p60fps	1920x1080	60fps	Medium	9Mbps
1080p60fps	1920x1080	60fps	Low	6Mbps
1080p30fps	1920x1080	30fps	High	6Mbps
1080p30fps	1920x1080	30fps	Medium	4.5Mbps
1080p30fps	1920x1080	30fps	Low	3Mbps
720p30fps	1280x720	30fps	High	3.5Mbps
720p30fps	1280x720	30fps	Medium	2.5Mbps
720p30fps	1280x720	30fps	Low 1.5Mbps	

 A general rule of thumb says that you should only use half of your available upload speeds for live streaming (Download speeds don't help us with live streaming). Therefore, if you have 10 Mbps of available upload speed, you should only be live streaming with 5 Mbps.

Resolution and Bandwidth



Resolution: 1920x1080p Bitrate: 2Mbps



Resolution: 1920x1080p Bitrate: 6Mbps For example, if you have 10 Mbps of upload speed, you may create a 3 Mbps stream to YouTube and a 2Mbps stream to Facebook.

IV. WORKING WITH VOLUNTEERS

- 1. KISS (Keep It Sweet and Simple)
- 2. Church members interested in technology and video production
- 3. Leveraging members gifts
- 4. Training / Shadowing
- 5. Apply experiences in the job market
- 6. Scheduling / availability

MEDIA VOLUNTEER TASKS

- 1. Software set-up (Facebook and Youtube stream key retrieval)
- 2. Video switching
- 3. Camera operations (zoom, composition)
- 4. Audio mixing
- 5. Bible verse look-up and projection
- 6. Social media integration and comment queuing

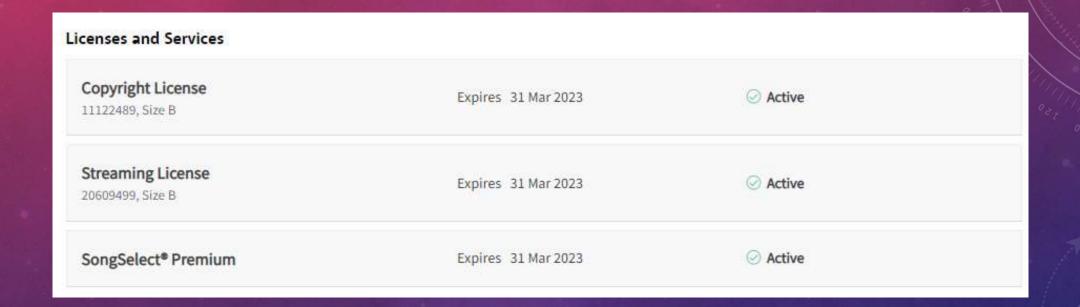
STEP BY STEP GUIDE TO LIVE STREAMING

- 1. Open your computer and check to see if the internet is working.
- 2. Schedule your live streams on YouTube and Facebook. Share the links out on social media and embed these videos on your website as needed. (Optionally your live streaming software may allow you to login to your CDN and start live streaming directly through the production interface).
- 3. Launch your live streaming software and check to see if all your cameras and audio sources are coming through properly.
- 4. Log in to either YouTube or Facebook and retrieve your streaming keys.
- 5. Enter your stream keys into your live streaming software and determine the bit-rates you will be live streaming in.
- 6. Start your live stream early and make sure you see the preview on Facebook and YouTube.

V. CHURCH COPYRIGHT LICENSES

- 1. Free music under public domain no copyright (www.pdinfo.com)
- 2. CCLI (Christian Copyright Licensing International)
- Storing Lyrics, Printing Songs, Recording Services, Making Custom Arrangements, Projecting Lyrics, Translating Songs
- 3. Add on licenses Rehearsal license, Streaming License
- live recorded audio, not music tracks from other musicians
- 4. IBBC group license

V. CHURCH COPYRIGHT LICENSES



V. CHURCH COPYRIGHT LICENSES (CONT.)

		Optional license add-ons		
Copyright License 3		Streaming ?	Rehearsal 3	
Size 🕜	Base Cost (Annually)	Additional (Annually)	Additional (Annually)	
AH: 1-24	\$70	\$73	\$100	
A: 25-99	\$150	\$76	\$128	
B: 100-199	\$256	\$93	\$162	
C: 200-499	\$348	\$110	\$192	
D: 500-999	\$487	\$143	\$251	
E: 1,000-1,499	\$594	\$208	\$311	
F: 1,500-2,999	\$735	\$277	\$371	
G: 3,000-4,999	\$831	\$345	\$491	
H: 5,000-9,999	\$1,049	\$410	\$610	
I: 10,000-19,999	\$1,257	\$542	\$610	
J: 20,000-49,999	\$1,672	\$672	\$610	
K: 50,000-99,999	\$2,506	\$1,002	\$610	
L: 100,000-199,999	\$4,228	\$1,332	\$610	
M: 200,000+	\$6,810	\$1,991	\$610	

Event License ?		
One-time Cost		
\$40		
\$63		
\$103		
\$141		
\$198		
\$239		
\$296		
\$332		
S <mark>4</mark> 19		
\$504		
\$669		
\$1,003		
\$1,693		
\$2,725		

V. CHURCH COPYRIGHT LICENSES (CONT.)



Sunday AM Service (03/06/2022) - Hebrews 4:12 "Examining Your Heart"

30 views • Streamed live on Mar 6, 2022



IBBC Main

354 subscribers

Thanks for joining our Sunday Morning Service. If you got blessed with this message, click like and share this video with your family and friends.

You can also check our Facebook page by clicking on this link.

https://www.facebook.com/ibbcmain/?mo...

For online giving please visit us at www.ibbcministries.com

Also, don't forget to fill up IBBC attendance information.

https://www.ibbcministries.com/attend...

Thank you again for joining us. Tune in again during our Sunday Evening Service.

-IBBC Main Media Team

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OUTREACH PROGRAMS AND ADDITIONAL BENEFITS

- 1. Record events (weddings, baptism, birthdays)
- 2. IBBA events
- 3. Workshops and Conferences
- 4. Audio and video recording
- 5. Podcasts, talk shows

YOUTUBE VS. FACEBOOK LIVESTREAMING

Youtube

- 1. Does not require viewers to create account
- 2. Quality
- 3. App access (Smartphone, SmartTV, computers)
- 4. Easy to share link to guests

Facebook

- 1. Dedicated audience
- 2. Quantity
- 3. App access (some SmartTV don't have Facebook app)
- 4. Can share to your Facebook feed

Like, Subscribe and Share!

COMMON ISSUES / TROUBLESHOOTING

- NETWORK INTERNET (BUFFERING)
- AUDIO/MICROPHONE DROPS DISCONNECTIONS
- CAMERA CONNECTIONS
- AUDIO FEEDBACK, STATIC SOUNDS
- TV SIGNAL DROP OUTS

WHAT IBBC MAIN CURRENTLY USE

- 2 PTZ CAMERAS
- 1 MIDAS M32 DIGITAL AUDIO MIXER
- 2 COMPUTERS (STREAMING SOFTWARE AND PRODUCTION SOFTWARE)
- 5 MONITORS
- 3 MAIN TV (PRESENTATION)
- 1 CONFIDENCE MONITOR
- 1- STREAM DECK
- 1 VMIX VIDEO SWITCHER
- 1 PROCLAIM PRESENTATION SOFTWARE
- 6 WIRELESS MICROPHONES
- 3 MICS FOR PIANO, AUDIENCE, ENSEMBLE
- MISC SPEAKERS, OUTDOOR SPEAKERS, 3 OUTDOOR TVS

