

DIOCESE OF JAMAICA AND THE
CAYMAN ISLANDS

Worship Beyond Walls

A Guide to Live Streaming in
Churches

ANDREW
HUTCHINSON



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Diocese of Jamaica & the Cayman Islands

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Introduction

The pandemic has really thrown the world, and indeed, our local Diocese, for a loop and our congregations have had to find ways to stay connected as a Church as well as still spread the Word. Many have done this through WhatsApp groups, through calls, Facebook, pre-recorded video presentations, and even WhatsApp voicenotes with a pre-recorded message. We have had to find new ways to communicate and keep our spiritual connections strong while physically distancing and being mindful of our health.

Some churches have gone the route of live streaming their services; whether within the church walls with a significantly reduced congregation or within homes via web conferencing software, such as Zoom. Either way, we have found creative ways to continue our mission.

This manual will give a basic and not-so-basic guide on how to set up live streaming for your congregation and the tools you will need to do this. Let's get started!

First things first

Before you consider live streaming to Facebook or YouTube, you will need to, of course, have a Facebook Page or a YouTube channel.

If you have a Facebook account, setting up a Page is easy. Follow Facebook's guide to setting up one for your church [here](#).

! NB.

You must be an admin or Editor on your Facebook Page before you can live stream. If you are not, contact the person who made the Facebook page so that they can add you as an administrator.

Setting up a YouTube channel is also easy. If you have a Gmail account, you can use it to sign into YouTube and you're halfway to setting up your channel. You can do that [here](#).

! NB.

Before you can live stream, you will need to create your YouTube channel at least 24 hours prior.

Now that you have your social media platforms, let's begin our preparation.

What you will need (basic users)

1. Smartphone or tablet (preferably mid to high-end device for quality purposes)
2. Tripod or stand to rest the device on
3. Strong, hi-speed WiFi (at least 5 Mbps upload speed)

What you may also need (advanced users)

1. Laptop
2. A video-switcher app (this is basically the software that will let your device communicate with the internet for the live stream)
 - a. For Apple phones, you may download **LiveAir Solo**

- b. For Android phones, you may download **Larix Broadcaster**
3. Multi-stream platform. If you will be simultaneously broadcasting to Facebook and YouTube, you will need to use a multi-streaming platform. Castr.io is a good platform but will cost you US \$15/month as a subscription. If you really do not need to stream to two places, it is recommended to just stream to YouTube and share the link on Facebook.

Setting Up

You will need to make sure that when you're ready to live stream, that the quality is spot on. You do not want any issues with sound or for your video to be dark because of poor lighting.

Read [this resource](#) on how to properly set up and frame before you can live stream.

Remember that though we are live streaming, we are still in a liturgical setting. Be mindful of how you position the tripod/stand before the altar. You need to ensure that you as well as your tripod/stand are not blocking anything central to the liturgy or that you do not unnecessarily move about during the service (e.g. standing in the way when the Gospel is being proclaimed or being distracting during prayers).

A recommendation would be to speak with your priest about pre-agreed locations where you can set up and when's the best time to move about to ensure that you capture various aspects of the service.

Let's go live! (Basic)

Now that you have got all you need to stream and have set up what you need to set up, you're ready to go live! The quickest way to go live is via your Facebook Page, especially if you will only be using your mobile device. Facebook, in recent times, has made it easier for us to go live and made it even easier for people to access the live stream - even without an account! To start your stream, follow the steps below on your mobile device:

1. Open Facebook app
2. Click Create Post at the top of your News Feed
3. Click Live Video
4. Write something about your live video (maybe First Sunday after Pentecost e.g.)
5. Rotate your mobile device to landscape (so that the phone is on its side) BEFORE you go live. Once you go live you cannot rotate. The Go Live button will be on the bottom of your screen if this is done correctly.
6. Click Go Live in the bottom right
7. You're now live
8. When finished, your video will be saved to your content library in Facebook Creator Studio
9. If you can, during or after the Live, go through the comments and reply to them to show that you value their time.

This Basic guide would probably be what most congregations need to start their live streaming journey. It is a quick and simple way to connect those who may not be able to make it to church as well as those abroad or not so close by, to feel like they are still worshipping and fellowshiping with their fellow congregants.

For a (much) more advanced guide to live streaming, continue to the next section of this guide.

Let's go live! (Advanced) – Single Platform

You have now become an expert in basic live streaming and want to know how you can make the technology work for you more. You may wish to schedule a live stream to let people know **when** you plan to live stream or maybe you would wish for better quality in your streams. (Basic Live on Facebook is a poorer quality in both video and sound). You may even wish to share the link to the live stream that you have scheduled beforehand so as many people as possible can get it. Here is a more advanced guide to do all the above and more!

! NB.

From here on out, a laptop with internet connection will be necessary.

Scheduling Facebook Live

To schedule a live stream beforehand, on your laptop, you will need to go to the Live Producer Studio on your Facebook Page. To get to the Live Producer Studio, follow the path below:

1. Go to your Page
2. Click the Publishing Tools tab at the top of the Page
3. On the left, under the Tools heading, click Creator Studio
4. Click Go Live on the right of the Page
5. You are now in the Live Producer Studio

You will see many buttons and links but do not be daunted. They are all pretty straightforward.

1. On the left of the screen click 'Schedule a live video'
2. Set the date and time for the live stream (NB. You can only set a live stream up to 7 days in advance)
3. Enter a title (e.g. First Sunday after Pentecost)
4. Enter a description (e.g. A celebration of the Holy Eucharist on the First Sunday after Pentecost...etc.)
5. If you have a graphic, you can add it by clicking 'Select an image'. This graphic will be shown as a post after you have scheduled the live stream. You may use www.canva.com to design your very own.

Let us go through each component of configuring the stream.

Settings

1. Stream: uncheck the box for 'end live video if stream stops'. This will ensure that if, by some chance, your feed is cut, that you will be able to re-join without changing any settings and avoid having to repost a new stream.
2. Unpublish after live ends: you may check this if you don't want the video to be posted after you have finished streaming. Not recommended as people may go back from time to time to watch.

3. You won't need to trouble the other settings.

Stream key

This is probably the most important component of your live stream. You will need to keep this key in mind when setting up your video-switcher to capture video. The slightest typo will result in no video being broadcast. It is important to ensure accuracy. Because of this, it is recommended to always copy/paste the key and never type it out. This will ensure that you capture all characters. It helps to email the links and keys to yourself so that they can be copied/pasted into the app.

Live tab URL

This is the link that will show all current, upcoming and past live streams for your Page. It is recommended to share this link for your Facebook Live streams all the time as it will always lead people back to the live streams.

Live video URL

This is the link for your specific live stream video (the one that you are now scheduling). Share this link so that people will be taken right to the feed without having to go through an extra step. Not recommended to share this unless you are absolutely sure that all will go smoothly when it is time to stream! This link will come up after you click 'Schedule live video'.

After you have input all parameters, then you can go ahead and click 'Schedule Live video'. Followers of your Facebook Page will receive a notification of your scheduled video and will have the option of indicating if they are interested in being notified close to the time.

Server URL

After scheduling, you will be given a Server URL. Copy and paste this somewhere as it will be important later on.

! NB.

It is recommended to click 'Manual Mode' at the left of the screen. This will ensure that your stream does not 'time out'. If you are in automatic mode and you do not go live 10 minutes before the time you had entered earlier, the scheduled post will disappear and you will have to do everything over. Also, if the scheduled time elapses and you still have not gone live, the post will disappear and you will have to create a new live video post.

Badges

If you have another church member who is an admin on the Page, you can assign them as a moderator in the comments and they can give information to those joining in the chat e.g. hymn announcements or where you are in the liturgy.

Scheduling YouTube Live

YouTube will offer some more versatility and is usually preferred for live streaming. With YouTube, you can share your link beforehand and on platforms like WhatsApp, the stream can be viewed within your church group chat instead of taking you to a different page. People who have smart TVs may also 'cast' the YouTube stream to their TVs so that they can

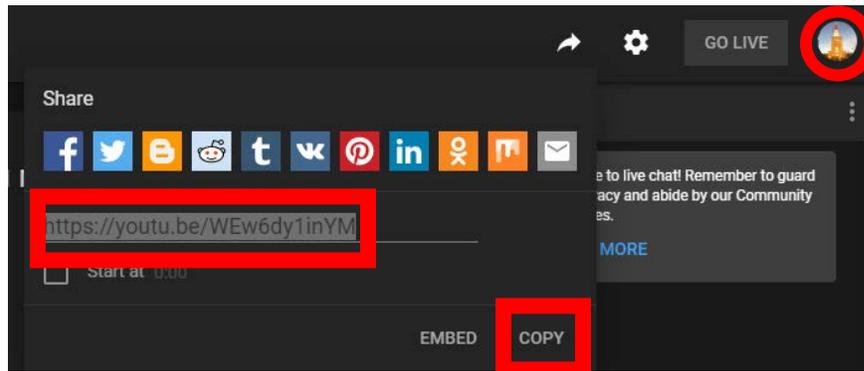
watch it there on a larger screen instead of on their phones. After the stream, you will also have the option of archiving your stream as a video on your channel so people can go back to watch.

Let's start!

1. Go to www.youtube.com and log in with your Gmail account that you have already set up for your streams
2. Click the  icon at the top right
3. Click 'Go Live'
4. If you have not yet already verified your account to live stream, it will prompt you here. Follow the instructions to enable your channel to live stream. If you have already enabled live stream, you will be taken to the YouTube Studio
5. You will see four options on your left:
 - Stream
 - Camera
 - Manage
 - Stream Now Classic

We are concerning ourselves with 'Stream' for now. Click that option.

6. You will now see a dialog pop up titled 'New Stream'. This is where you will input your parameters and descriptions for your live stream.
7. Fill out the details.
8. Toggle the 'Schedule for later' switch. You will now see where you will input your date and time settings.
9. If you have a graphic for your stream (I recommend one), then select 'Upload Custom Graphic' and select it. You may use www.canva.com to design your very own.
10. Select 'No it's not made for kids' and then select 'Create Stream'
11. After selecting Create Stream, now you will see your Studio Dashboard. This will be what you need to focus on as you are live to ensure that everything is running as it is supposed to.
12. You will see the 'Stream Settings' tab at the bottom of the page.
13. Note the stream key and stream URL.
14. Click the Share icon in the top right corner to get the link to share with your congregants in your WhatsApp groups or on your Facebook Page.
15. You may also forward to the Diocesan Social Media Officer so that it may be shared on the Diocesan website.



Setting up your video switcher (your mobile device)

Now that you have set up your stream on your desired platform(s), you will now need to set up your 'lens' for the stream. Your mobile device will be the physical camera for your stream. Make sure it is fully charged and that you have a powerbank just in case you need to charge it. You don't want a situation where your camera dies before your service is finished!

! NB.

Once the live is running, you will not have access to your phone. You won't be able to switch between apps, answer messages or make calls. Be sure that you have a dedicated phone to the stream to ensure that your video is not cut off.

For Android users

Android users may go to the Play Store and download the **Larix Broadcaster** app.

Follow the instructions below to configure the video-switcher:

1. Click the gear icon next to the microphone icon. You will be taken to the Settings page.
2. On the settings page, tap 'Connections'
3. Tap 'new connection'
4. Give it a name to identify easily later on (e.g. YouTube, Facebook, Castr)
5. The URL is a combination of the server URL or server and the Stream key or Stream URL.
6. We will use a typical YouTube server URL and stream key for this example. For Larix Broadcaster it takes the following format:

Server: `rtmp://a.rtmp.youtube.com/live2`

+

Stream key: `abcd-efgh-abcd-efgh`

=

Larix Broadcaster URL: `rtmp://a.rtmp.youtube.com/live2/abcd-efgh-abcd-efgh`

Note the '/' that was added after the server URL.

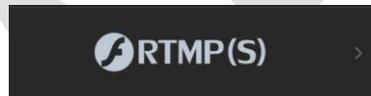
7. After you have entered the URL, you do not need to enter anything else. Ignore Login and Password and tap 'Save'.
8. Open settings and go to 'Video size'
9. Look for 1280x720 and select it. This will ensure that your stream is a high quality.
10. Leave everything else and exit settings.

You have now successfully configured your video-switcher.

For iPhone/iOS users

iOS/iPhone users may go to the App Store and download the **LiveAir Solo** app.

1. Before starting the app be sure to turn your volume all the way down as you will hear a very loud feedback.
2. Open the app.
3. On the screen, swipe to the right to access the video sources
4. Tap 'Add new source'
5. Tap 'iOS camera' and select it.
6. Swipe down on the screen to access settings.
7. Tap the blue settings icon on the left. You will now be taken to the Settings page.
8. Tap Broadcasting Destinations
9. Tap Manage Destinations



10. Scroll down the list and tap
11. The URL is the **server URL** or **server**, which you had noted earlier and Stream is the **Stream key**.
12. We will use a typical YouTube server URL and stream key for this example. Enter the server URL and the Stream:

Server: `rtmp://a.rtmp.youtube.com/live2`

Stream key: `abcd-efgh-abcd-efgh`

13. Toggle the 'auto-reconnect' switch to ON - just in case anything happens.
14. Leave everything else blank.
15. Tap Done.
16. Go back all the way to the Settings page.
17. Tap Encoder Settings
18. Select one of the Encoder Mode presets. 720p is recommended but if you have the bandwidth, you can go as high as 1080p. If you do not have a strong internet connection, then 480p is suggested.
19. Tap Done.

You have now successfully configured your video-switcher.

Lights, camera, action!

You have set up your platform for streaming and have now set up your video-switcher and are now ready to go live! Going live now is really the click of a button or two before your video is streaming through the internet and into people's homes.

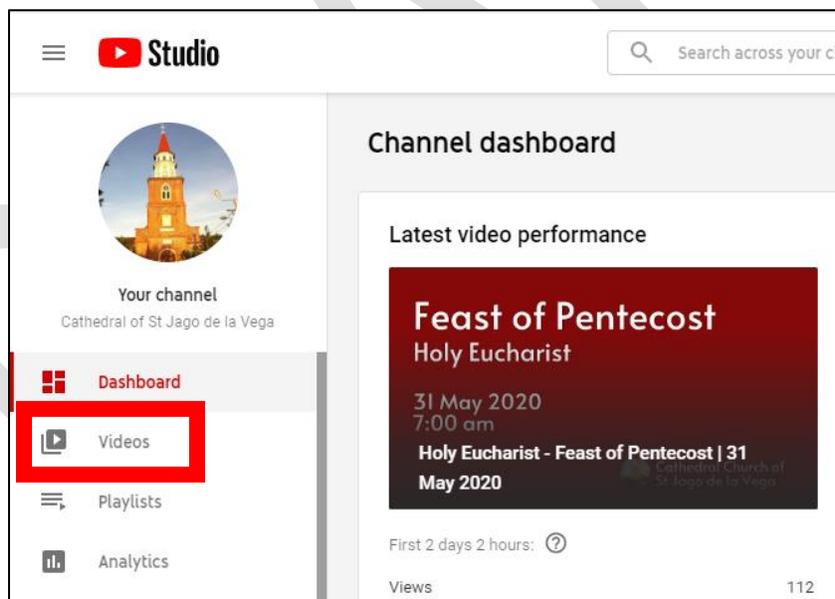
irst, we need to get back to our virtual 'studios' on our laptops, where we initially configured the streams and where we will monitor our stream.

For Facebook:

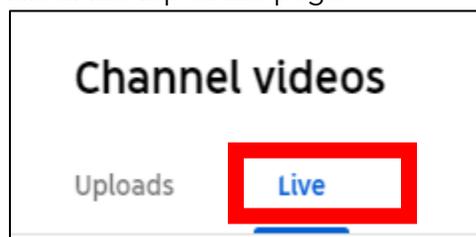
- a. Go to your Facebook Page
- b. Look for the scheduled stream post
- c. Tap 'Edit settings Admin'
- d. You will be taken to the Live Producer. Here you will be able to review all streaming settings.
- e. Alternatively, you can follow the steps under 'Scheduling Facebook Live' up above to get to the Live Producer.

For YouTube:

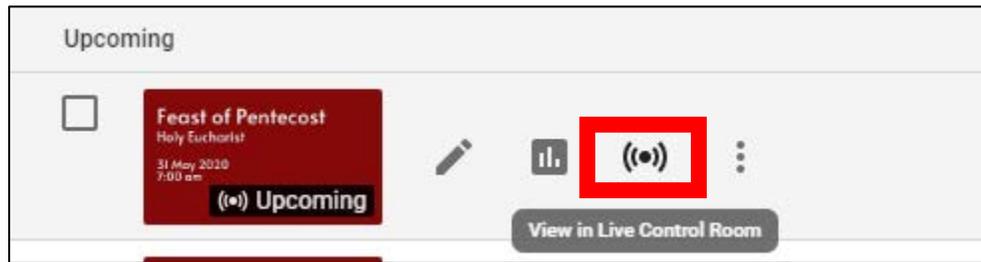
- a. Go to www.youtube.com
- b. Log in and tap the icon to the far right:
- c. Click YouTube Studio
- d. Click Videos on the far left of the page



- e. Click the Live tab at the top of the page



- f. Hover over your upcoming stream and click 'View in Control Room'



- g. You will be taken back to the YouTube Studio where you had configured your stream.

Now that we are back in our studio, we can activate our video switcher apps.

1. Open your video-switcher app (Larix Broadcaster or LiveAir Solo)
2. Ensure all your stream settings are correct. That is, make sure your server and URL settings are accurate. Check against the settings in your studio dashboard.

Once all settings are correct, we are ready to preview our live stream.

1. In Larix Broadcaster or LiveAir Solo, tap the red button to publish our stream. Don't worry, we have not gone live yet - we are just previewing to make sure that all our settings are correct.
2. In Facebook, the black corner at the bottom right of your screen will show video if everything goes well.
3. Similarly, on YouTube, if you see video in the black screen on the left corner, it means you have correctly configured your settings.
4. If you are not seeing video, recheck your Server URL and Stream Key on your video-switcher app. It helps to email the links and keys to yourself so that you can copy/paste into the app.
5. If you are seeing video and hearing correctly, then you are ready to go live!

For Facebook:

- a. In the Live Producer, click the button in the bottom left corner that says Go live.
- b. You are now live and your Page followers will now see and hear your stream.

For YouTube

- a. In the YouTube Studio, tap 'Go live' in the top right corner of your page.
- b. You are now live and your audience will now see and hear your stream.

During the Live Stream

You will need to regularly check your stream to ensure that you stay connected and that everything runs well. Keep an eye on 'Stream Health' to ensure that you are receiving a constant stream of video and audio. Keep an eye on the comments too as some of the watchers will give an idea of anything that may be wrong (for e.g. low or muffled audio, poor visual etc.). Have someone stationed to constantly check on things just in case.

You may want to ensure that you capture as much of what is going on as possible. For example, when a procession is leading, you may want to capture when the clergy and servers go up to the altar, when a lector is reading or when the preacher is up on the pulpit. Be mindful of what you, as an ordinary churchgoer, would want to see as you follow the liturgy.

The good thing about the Anglican Church is that we have a set liturgy and can study our cues. For e.g. after the Collect of the Day in Holy Eucharist, we know that the first lesson will be read so we can move our camera towards the lectern. Be mindful of all these cues so that you can be in the right place at the right time to capture the moment.

Ending the Live Stream

When you are finished with your stream, on your laptop you can click 'End live video' on both the YouTube and Facebook platforms (they will be in the same position you clicked the Start Live stream button) to end your stream. End the video feed on your video-switcher apps. After this, you are no longer live and can begin your pull-down process.

Let's go live! (Even more advanced) – Multiple Platforms

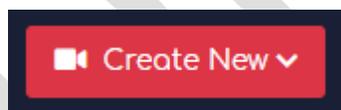
You may wish to go live on multiple platforms simultaneously to appeal to different audiences and attain a wider reach. You can do this using the instructions above plus a simulcast platform such as Castr. A multi-streaming platform is exactly what it sounds like – a platform where you can **simultaneously broadcast** (simulcast) your live stream on multiple platforms. There are many platforms to choose from but for the purposes of this guide, we will work with only Facebook and YouTube.

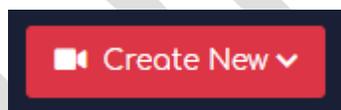
You will need an active subscription to Castr although you can test a 7-day trial for free to see what it's like. There are other platforms but Castr is preferred due to its user-friendliness and cost. Go to <https://castr.io/> and select solutions where you will see the range of options. The recommended solution is the Broadcaster X2.

! NB.

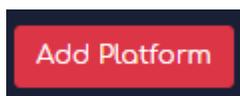
You will need to have access to a credit card or Visa Debit to pay for this service.

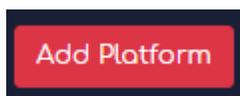
After you have signed up, made your payment/signed up for the trial, and logged in, you will be greeted with a blank dashboard. Follow these instructions to set up Castr.



1. Click on  in the top right corner.
2. Click on 'New Simulcast'
3. Input a stream name – (e.g. Cathedral Live Stream etc.)
4. Select a hosting region. Pick one that is close to you. For us in Jamaica, we can select US-East Miami.

Now that we are in our simulcast, we can add the platforms we will be casting to. Let us add Facebook Live and YouTube.



5. Click  beside the Toggle switch.
6. You will see the many various platforms to which you can stream.

Let us start with Facebook

7. Click Facebook Live

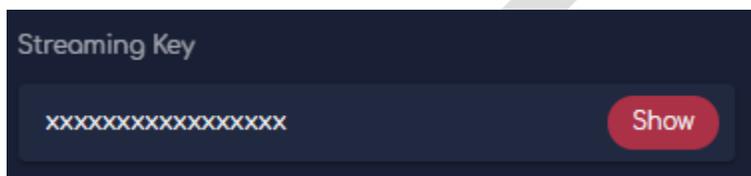
8. You will be prompted with "I would connect to my Facebook Live account" OR "I would provide server and stream key".
9. Click 'Setup with server/key'
10. Enter your **server URL** and your **stream key** into the respective fields
11. Click save

Similarly with YouTube

12. Click 'Setup with server/key'
13. Enter your **server URL** and your **stream key** into the respective fields
14. Click save

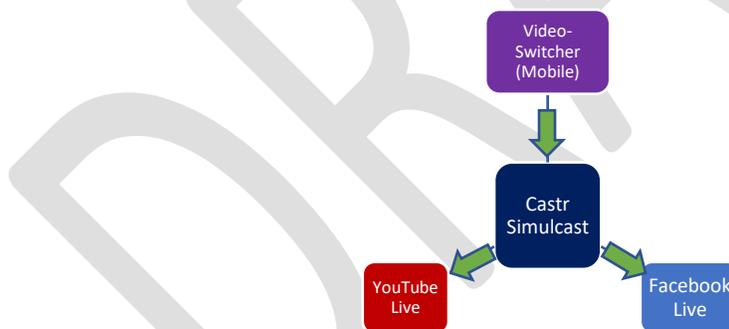
Now that you have added your platforms, we need to configure our video switcher (our mobile device).

15. Instead of inputting a Facebook or YouTube server/stream key in your video-switcher app, you will input the Castr server (**rtmp://mi.castr.io/static**) and stream key.



16. Click 'Show' to reveal the streaming key and copy/paste that key into your video-switcher app (Larix Broadcaster or LiveAir Solo).

Here's an illustration of what is happening when we use Castr's stream key to broadcast:



17. If you have input your server/stream key information correctly, when you activate your video-switcher, you will see a video feed on the right side of the screen (where there was 'waiting for stream'). That indicates that everything is configured correctly and you are ready to go live.



18. Toggle on all platforms to begin previewing the live video. You're not live yet! If you had entered the correct stream key information, at this point, you will see the preview feed coming in on Facebook and YouTube. Just as you had previewed your video on Facebook and YouTube through the Single Platform method earlier, it is the same concept - just an extra step added.
19. When you're ready to go live, you can click Go Live on Facebook and YouTube and you are good to go!

You can end your multicast stream the same way you end your single platform stream this time you're adding an extra step:

- a. End live on Facebook/YouTube
- b. Toggle off all platforms
- c. Stop broadcasting on your video-switcher app.

You can now start your pull down process.

Conclusion

COVID-19 has certainly brought on a mini-Renaissance of the digital age in churches across the globe, within the Anglican Communion and certainly within this Diocese. Those who were timid of using the technology now have to find themselves becoming mini-experts so that they can spread the Word. This can all certainly seem daunting but let us never forget that we are a people of hope and that we can do all things through Him who strengthens us.

Many thanks to the Rev. Hilda Vaughan and the Diocesan Social Media Officer, Mrs Clavia Watson-Reid for having inspired me to compile this manual. Also, many thanks to Sister Christine Broadbelt for the title inspiration and Brother Craig Walters for his editing suggestions.

To the users of this document, I pray that this guide was useful and that your ministry is better off for having used it.

God bless,

Andrew Hutchinson

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