SETTING UP YOUR 4G WIFI ROUTER

This guide will provide the steps taken to install a 4G sim into a 4G Wifi Router. Included are specific steps for configuring a PAYAZ or DAISY Sim Card for use in a TP-Link Router.
For checking the best solution for your contactless giving device and the necessary internet connection required you may find the 'Getting Connected Guide 2022' useful.

STEP1: ROUTER LOCATION

FINDING THE BEST LOCATION

4G Routers work best when they can receive a good 4G mobile data signal (connection to the mobile phone network), and good line of sight to the location of your contactless giving device (WIFI connection).
Think about where you would like to locate your WIFI 4G Router in your church building. You may want to have it out sight, and up high, away from risk of being tampered. Some churches can have it locked away in a cupboard. The WIFI signal can pass through objects, such as doors and walls, but the more obstacles the more the signal deteriates.
Once you've chosen the best place for your router you'll want to check that it can receive a good 4G mobile signal:

IN SITU SPEED TEST

A speed test can help to confirm whether you have a good 4G mobile data signal at the location you have chosen for your router.

- Turn off Wifi on your smart phone. (So that your phone is only using your mobile data connection.)
- Go to your phones internet browser application, such as Chrome, Safari or Edge/Bing and search for 'Internet Speed Test'.
- Once you've run the test on your phone this will tell you how fast your connection is from this location. You will need at least 1.1mbps for contactless giving, or contactless payment device.
- Make sure you try this on different networks (EE, 02, Vodafone and Three).

If the steps above don't work, i.e. you don't have a mobile signal you may have to look for a different location in your church for the router.
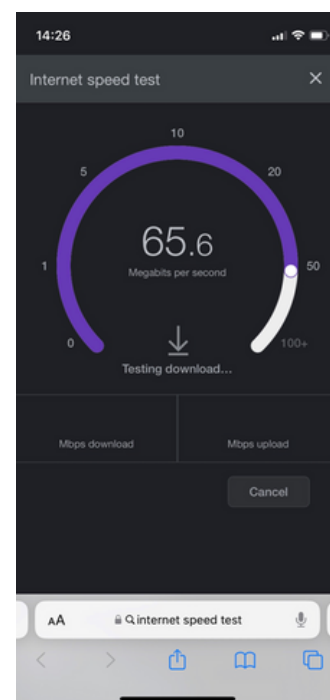
STEP 2: SETTING UP YOUR ROUTER

For the purposes of this guide we are using the TP-Link AC1200 Dual Band Wi-Fi LTE Router. The Mission Resources team have tested PAYAZ and Daisy sim cards on this router. Other routers are available and may well provide better coverage, however, in most cases the TP-Link router is sufficient for the most church settings.

UNBOXING AND SETUP

- Once opened you should connect the antennas and position them upwards.
- Connect the power adapter to the AC connector on the rear of the router, but don't plug it into to the wall socket yet.

INSTALL YOUR SIM CARD

- Most 4G sim cards like from PAYAZ or DAISY Communications come as a multisim card. Pictured here:
- The TP-Link router will only take the smallest sim card (Nano). You'll need to go ahead and punch out the nano sim card.
- The nano sim card can then be inserted into the nano sim slot in the rear of the router.

- Make sure that the gold plated sim circuit is facing down when you go to insert the card.
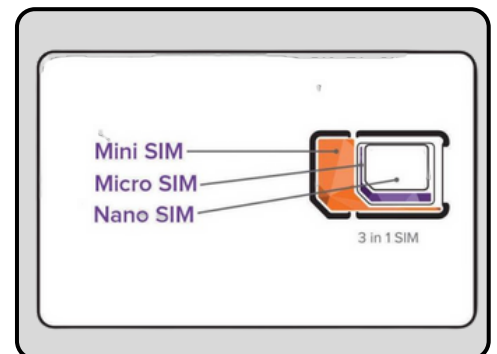
POWER UP YOUR ROUTER

- You can now go ahead plug your router into the wall socket and switch it on at the wall and on the back of the the router.

WHAT YOU SHOULD SEE

After a few seconds you should three illuminated icons appear on the top of your router:

This shows that it is powered up.

This shows that it is broadcasting a WIFI signal

This shows how strong the mobile signal is in your location

STEP 3: CONFIGURING YOUR ROUTER

If you are using a Three, O2, EE or Vodafone sim card you should also see an additional icon (that looks like a globe or planet. If this is illuminated and you have at least one bar of signal you are ready to go. You can now go ahead and connect your contactless device to your WIFI signal using the wifi router name and password printed on the underside of the router.

*Note: If you are using a PAYAZ or DAISY communications sim card then you will not see this icon and you should therefore read on for next steps.

CONFIGURING YOUR ROUTER FOR DAISY/PAYAZ SIM

Your router will be broadcasting a wifi signal (but it won't have internet access). Use a computer or phone to now connect to the WIFI signal by using the wifi name and password shown on the underside of the router.
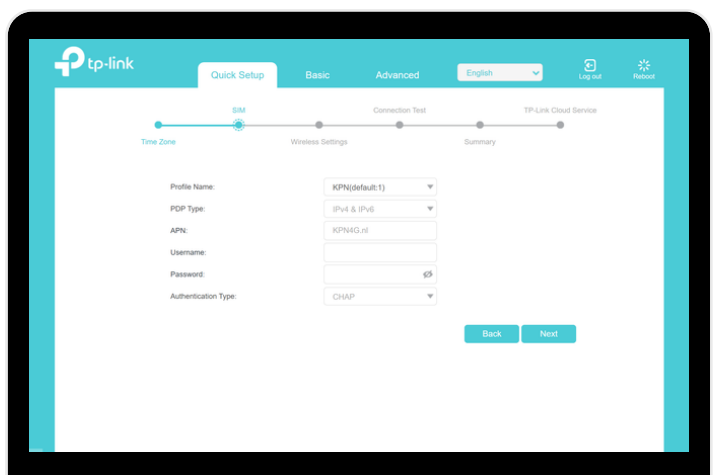
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Once you are connected Launch your web browser on your phone or laptop and type in: **http://tplinkmodem.net** and create a new password for your router.
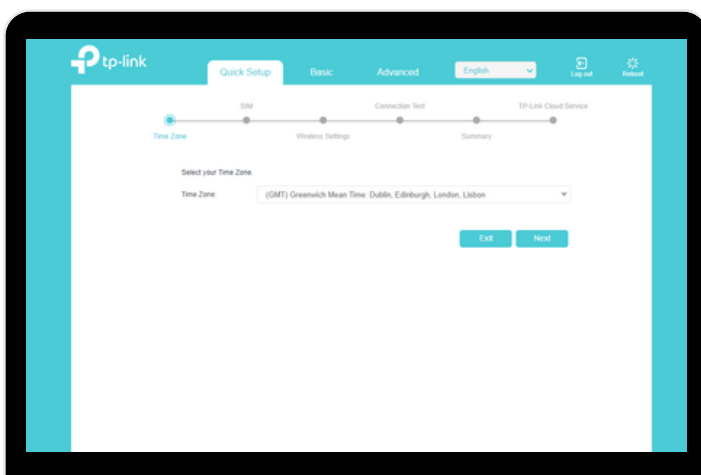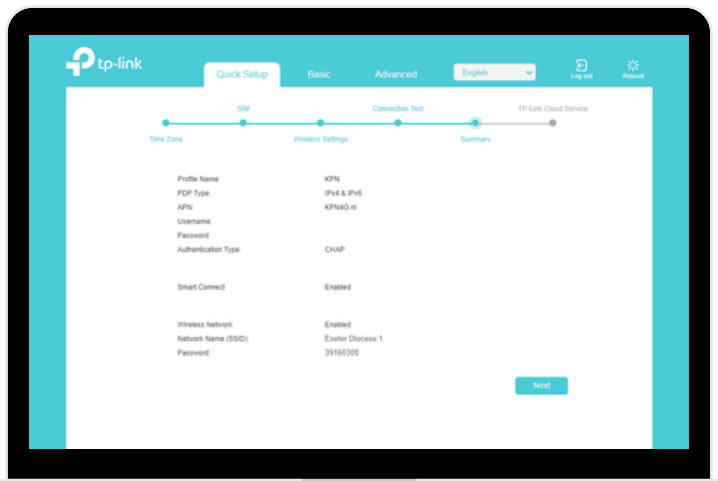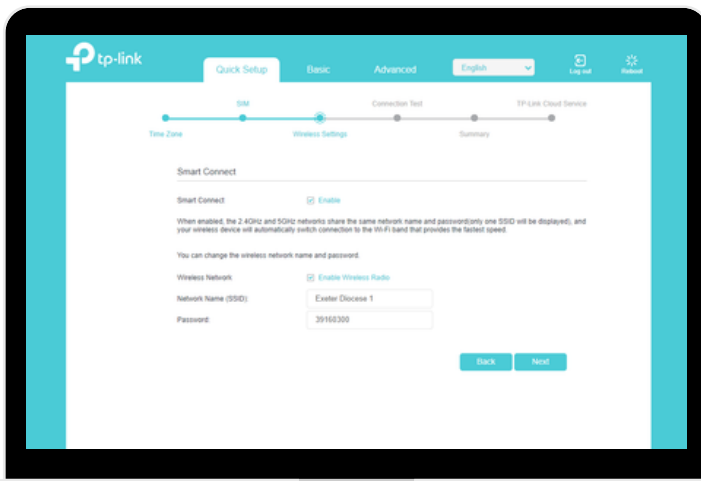
**2** Use the Quick Setup and select your location and time zone.

**3** Don't worry about changing anything on the 'sim' page just yet. We will come to that later.

4 You may like to customise your Network Name (this is the public name of your wifi signal, so you can easily identify which network your contactless can join). Click 'Next'. After searching for an internet connection you'll have a 'Sorry!' message appear. Do not worry!

6 The next page is a summary of the router's internet settings. Click 'next'.
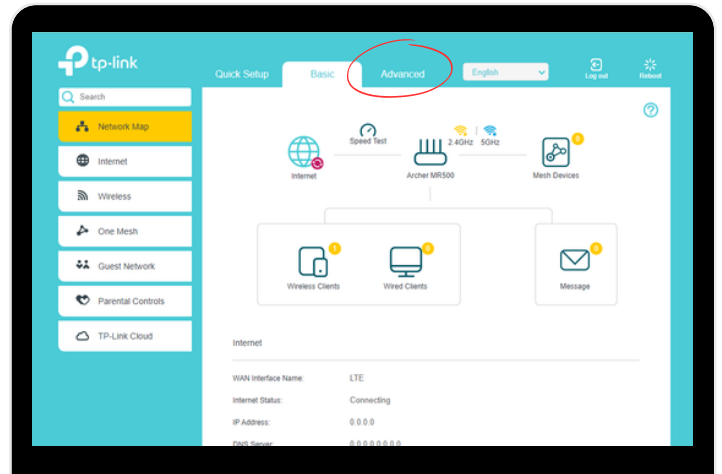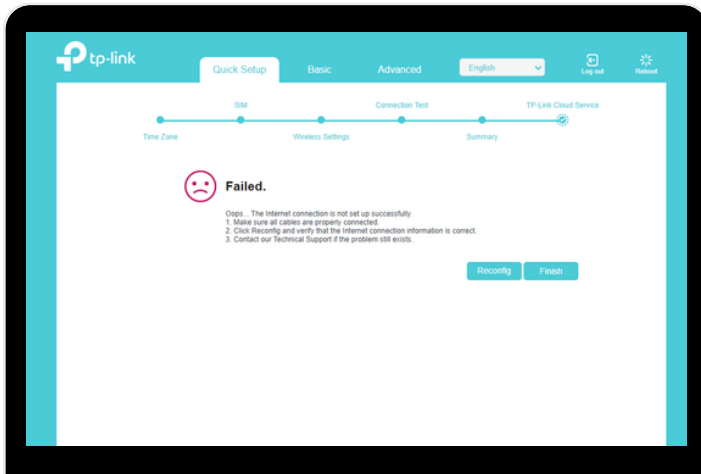
7 You'll now get a failed message. Do not worry. This is due to not yet configuring the sim settings.

8 The router will send you back to the Basic settings page. Click on the 'Advanced' tab, and then select 'Network' on the left menu, followed by 'Internet' beneath it.
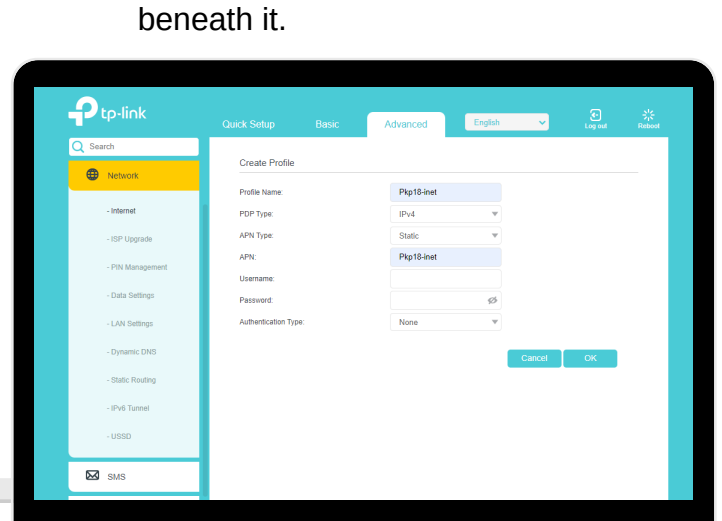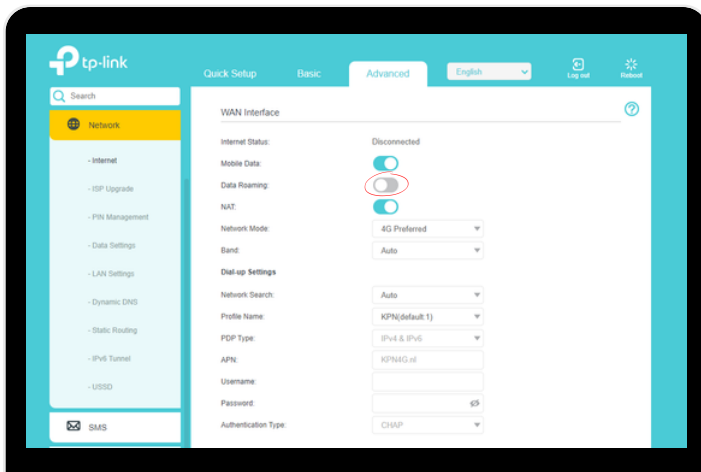
9 Make sure that Data Roaming is switched on. And then select the 'create profile' option at the bottom of the page.

10 Enter the details as shown on the next page.

ROUTER SETTINGS FOR PAYAZ AND DAISY SIM CARDS

Input the settings as they are below:

Create Profile

Profile Name:	Pkp18-inet
PDP Type:	IPv4 ▼
APN Type:	Static ▼
APN:	Pkp18-inet
Username:	
Password:	⌀
Authentication Type:	None ▼

The APN is case sensitive.

Leave the username and password blank.

After you've filled in the details hit 'OK'   OK

STEP 4: CHECKING THE ROUTER IS CONNECTED

You should see the additional icon (that looks like a globe or planet). If this is illuminated and you have at least one bar of signal you are ready to go. You can now go ahead and connect your contactless device to your WIFI signal using the wifi router name and password printed that you either selected in step 4, or the one that is printed on the underside of the router.

STEP 5: CONNECTING YOUR CONTACTLESS DEVICE

With your router now broadcasting you can now go ahead with connecting your contactless device to your router's wifi. You'll find guides on how to do this below.

For CollecTin go to:

https://vimeo.com/757155787

For PAYAZ go to:

https://www.youtube.com/watch?v=srMFwWi1Crk
start at the 2min mark in the video.

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