

Connecting a G1100 router as primary to a Actiontec MI424-WR router as a bridge

Reason:

Downstairs wireless devices have poor signal to the router upstairs. As a result, browsing the internet was much slower. Therefore, the solution was to use an Actiontec MI424-WR, my original router, and connect it to the upgraded G1100 router through coax.

Topology:

Internet <- - -> ONT <- ETHERNET AND COAX CABLE -> G1100 ROUTER <- COAX -> MI424WR <- -> WI-FI devices

Notes:

Firmware Version: 20.21.10

Hardware Version: F

1ghz coax splitter is optional. Eg. Say for instance you have a settop box and a router located in the living room. You want the settop box to work as well as the router. Therefore a splitter is required.

Untested lan ports on the MI424WR router.

There may be a reboot when following these steps. Proceed with the reboot

MI424WR Configuration

1. Initially the MI424 router is not connected anything except a network cable connected to one of the lan port behind the MI424 router and to a pc.
2. Logon to your MI424WR by open a browser and typing in <http://192.168.1.1>
3. Type in your username and password. If you don't know the username and password. Do a hard reset by using a pen or paperclip to press the reset button in back of the MI424 router. Router must be on and the reset button hold down for 10 seconds. You'll be ask to insert a new password. Write it down.
4. Click on 'My network'. Located at the top
5. Click on 'Network Connections'. Located at the left

- Click on 'Network (home/Office) In Network Connections. See highlighted image below.

Network Connections

NOTE: Only advanced technical users should use this feature.

Name	Status	Action
 Network (Home/Office)	Connected	
 Ethernet	Disconnected	
 Wireless Access Point	Disconnected	
 Broadband Connection (Ethernet)	Cable Disconnected	
 Coax	Connected	
 Broadband Connection (Coax)	Disabled	
 WAN PPPoE	Disabled	
 WAN PPPoE 2	Disabled	
Add		

[Full Status](#) [Detect Broadband Connection](#) [Basic <<](#)

- Click on 'Settings' Located at the bottom

- Under Bridge. Place a check mark next to Ethernet, Coax, and Wireless Access Point.

Network (Home/Office) Properties

NOTE: Only advanced technical users should use this feature.

General						
Status:	Connected					
When should this rule occur?:	Always					
Network:	Network (Home/Office) ▼					
Connection Type:	Bridge					
Physical Address:	00:26:b8:56:61:6e					
MTU:	Automatic ▼ 1500					
Internet Protocol	Use the Following IP Address ▼					
IP Address:	192 . 168 . 1 . 200					
Subnet Mask:	255 . 255 . 255 . 0					
Bridge						
Name	VLANs	Status	STP	Action		
Network (Home/Office)	Disabled	Connected				
<input checked="" type="checkbox"/> Ethernet	Disabled	Disconnected	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/> Broadband Connection (Ethernet)	Disabled	Cable Disconnected	<input checked="" type="checkbox"/>			
<input checked="" type="checkbox"/> Coax	Disabled	Connected				
<input type="checkbox"/> Broadband Connection (Coax)		Disabled				
<input checked="" type="checkbox"/> Wireless Access Point	Disabled	Connected	<input type="checkbox"/>			
DNS Server						
Use the Following DNS Server Addresses ▼						
Primary DNS Server:	0 . 0 . 0 . 0					
Secondary DNS Server:	0 . 0 . 0 . 0					
IP Address Distribution						
Disabled ▼						
Routing Mode:	Route ▼					
Device Metric:	4					
<input type="checkbox"/> Default Route						
Routing Table						
Name	Destination	Gateway	Netmask	Metric	Status	Action
New Route						
Additional IP Addresses						
IP Address	Subnet Mask	Action				
New IP Address						

In the image above I have Broadband Connection (Ethernet) selected because I was using it initially. You are not required to have it checked marked as noted in Step 8.

9. Also in 'IP Address Distribution' select 'Disabled' in the dropdown box.
10. Click 'Apply'. Located at the bottom.
11. Back in 'Network Connections'. Select 'Wireless Access Point'
12. Click on 'Settings'
13. Make sure 'Network' is 'Network (Home/Office)' in the dropdown box.
14. Click 'Apply'
15. Then click 'Apply' one more time.
16. You should be in Network Connections. Click on 'Coax'.
17. Click on 'Settings'

18. I didn't change anything in Coax properties. Here's my configuration.

Coax Properties

NOTE: Only advanced technical users should use this feature.

General			
Status:	Connected		
When should this rule occur?:	Always		
Network:	Network (Home/Office) ▼		
Connection Type:	Coax		
Physical Address:	00:26:b8:56:61:70		
MTU:	Automatic ▼	1500	
Coax Link			
Channel:	1 - 1150MHz ▼		
Privacy:	<input type="checkbox"/> Enabled		
Password:	<input type="text"/>		
CM Ratio:	20 ▼		
DNS Server	Use the Following DNS Server Addresses ▼		
Primary DNS Server:	0	.0	.0
Secondary DNS Server:	0	.0	.0
IP Address Distribution	DHCP Server ▼		
Start IP Address:	192	.168	.2
End IP Address:	192	.168	.254
Subnet Mask:	255	.255	.255
WINS Server:	0	.0	.0
Lease Time in Minutes:	1440		
<input checked="" type="checkbox"/> Provide Host Name If Not Specified by Client			
IP Address Distribution According to DHCP Option 60 (Vendor Class Identifier)			
Vendor Class ID	IP Address	MAC Address	QoS
Routing Mode:	Route ▼		
Device Metric:	4		
<input type="checkbox"/> Default Route			
Additional IP Addresses			
IP Address	Subnet Mask	Action	
New IP Address			
Coax Connection Stats:		Go to LAN Coax Stats	

19. Click 'Apply' if you changed anything. Skip step 18 if you didn't make any changes.
20. Then click 'Apply' one more time.
21. You should be in Network Connections. Click on 'Broadband Connection (Coax)'
22. Click on 'Settings'

24. Click 'Apply'

25. This will take you back one step and select 'Disable'

26. Click 'Apply'

Finished! Give a couple of minutes and your wireless devices can now be connected to the MI424WR router which is now a bridge.