

AI-04736 GFiber Upgrade Plan and Deployment

What is the default gateway address of a fresh Google Fiber Router new setup? Is it 192.168.1.1? Is the router capable of 2.4Ghz and 5GHz?

My current network from Spectrum are the following: I want a painless GFiber Wifi Network Setup.

AS IS:
Spectrum-Modem->Cisco 2901 (192.168.1.1)->Cisco 3790G PoE->WLAN 0,1,2->PVS5
TO BE:
GFiber Fiber Modem->GFiber Router->??

Educate me ahead of the ballgame. All my Hyper-V is connected on another Cisco 3790G (Non POE)
I understand the plan. I have the Cisco 2901 because I did not want to pay the Spectrum \$10/month router plus I wanted to train on Cisco routing in 2021. Believe me, my network has been running since 2019 without failure. The only issue is my WLAN was only 90Mbps on a good day but it did provide a good whole house wifi and plus it was a cool project with WAP on the ceiling like a real business office and also gave me a lot of training. Now, that it will be my daughter living here, the GFiber setup make sense. I did have a standby Linksys router handy for the single point of failure of Cisco 2901 that never happened. Thanks for the information.

Yes — **if you have the current Google Fiber setup using the typical** 192.168.1.x **LAN**, 192.168.1.1 is a very plausible/default gateway. Google documents GFiber LAN devices being assigned addresses such as 192.168.1.2 , 192.168.1.3 , etc., and the LAN address can be viewed/changed in the GFiber app. ([Google Help](#))

Your Google Fiber Wi-Fi

Yes, it supports both 2.4 GHz and 5 GHz. Google says GFiber Wi-Fi is automatically configured to use **both frequencies under the same SSID**. ([Google Help](#))

So your network will typically look like:

Setting	Typical GFiber setup
Router/LAN gateway	192.168.1.1
LAN subnet	192.168.1.0/24
Router DHCP	Enabled
2.4 GHz	
5 GHz	
SSID	Same name for both bands by default
Separate 2.4/5 GHz SSIDs	Possible
Wi-Fi 6	 on current GFiber Wi-Fi 6 hardware

Google's current Wi-Fi 6 router is the **GRAX210T**, while the Multi-Gig Router is **GFRG300**. ([Google Help](#))

For your PVS5 specifically

This is actually important for what you're doing tonight.

Your **SunPower PVS5 requires 2.4 GHz**, so you want the GFiber router to provide a 2.4-GHz connection. The good news is that GFiber's default configuration already broadcasts both 2.4 and 5 GHz. ([Google Help](#))

If you're trying to reconnect the PVS5 after changing from Spectrum to Google Fiber, I would **not change the GFiber LAN subnet** unless necessary. Keeping:

GFiber → 192.168.1.1

PVS5 → 192.168.1.124

would be ideal, because your existing PVS5 address 192.168.1.124 is already in that subnet.

You can verify the gateway from your Windows notebook immediately with:

```
ipconfig
```

Look for:

```
Default Gateway . . . . . : 192.168.1.1
```

If you paste your `ipconfig` output here, I can tell you exactly how your **GFiber** → **switch** → **PVS5** network is currently configured.

My current network from Spectrum are the following: I want a painless GFiber Wifi Network Setup.

AS IS:

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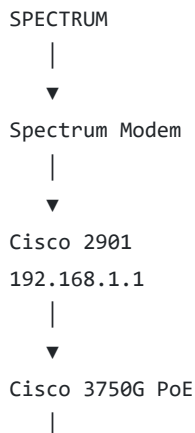
TO BE:

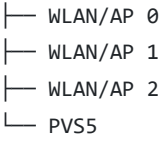
GFiber Fiber Modem->GFiber Router->??

Educate me ahead of the ballgame. All my Hyper-V is connected on another Cisco 3790G (Non POE)

Absolutely. The painless approach is to **let GFiber do routing/DHCP/Wi-Fi and keep your existing Cisco switching infrastructure as Layer-2 switches**. You do **not** need to recreate the old Cisco 2901 routing setup.

Your current network is essentially:



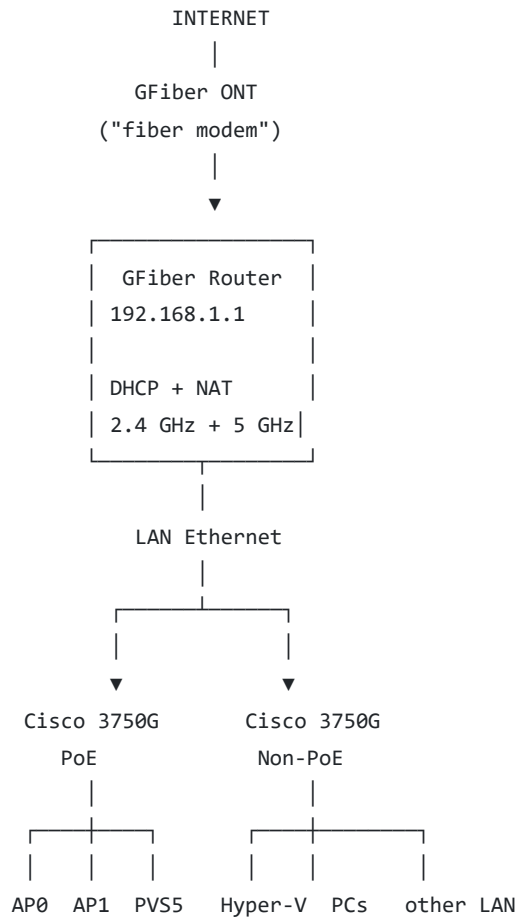


And separately:



What I would build with GFiber

Don't overcomplicate it.

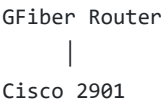


The key idea

The GFiber Router replaces the Cisco 2901.

Your Cisco 3750Gs remain **switches**.

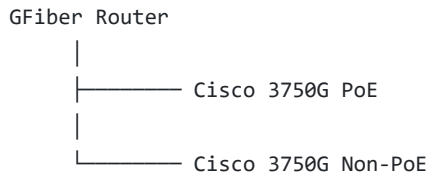
You don't want:



|
Cisco 3750G

That would introduce unnecessary routing/NAT/DHCP complexity.

Instead:



1. Your new GFiber router becomes 192.168.1.1

This is particularly convenient because your existing network is already:

192.168.1.0/24

with:

Router: 192.168.1.1
PVS5: 192.168.1.124

So **don't change the PVS5 unless we discover that GFiber uses a different subnet.**

The goal is:

GFiber Router
192.168.1.1

PVS5
192.168.1.124

Then your existing browser test should continue to work:

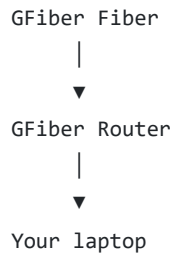
<http://192.168.1.124/vars>

That's a beautiful migration because you don't have to redesign your PVS5 setup.

2. The first thing I would NOT do

Don't immediately plug everything into the GFiber router.

Do this first:



Get the GFiber network working **by itself first**.

On Windows:

```
ipconfig
```

You want to see something approximately like:

```
IPv4 Address . . . . . : 192.168.1.xxx
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . : 192.168.1.1
```

Then verify:

```
ping 192.168.1.1
```

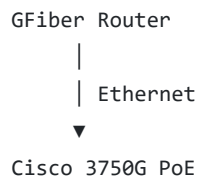
and:

```
ping 8.8.8.8
```

Then verify Internet access.

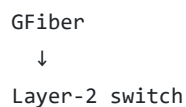
3. Then bring your PoE Cisco switch online

Once GFiber is confirmed working:



Don't configure the 3750G as a router.

Ideally it's simply:



↓
devices

Your PVS5 can then remain:

```
PVS5
192.168.1.124
|
▼
Cisco 3750G PoE
|
▼
GFiber Router
192.168.1.1
```

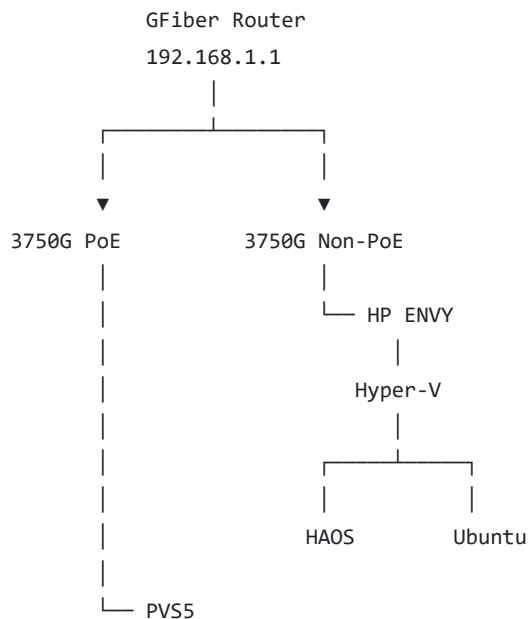
The PVS5's gateway would be:

192.168.1.1

4. Then your second Cisco 3750G

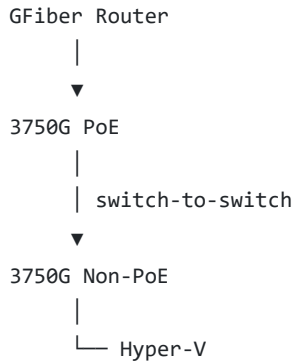
This is where your Hyper-V machine comes in.

I'd connect it like this:



But there is one important networking detail: if the two 3750Gs are currently interconnected, you don't necessarily need two separate cables back to the GFiber router.

For example:

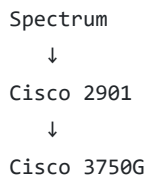


That is perfectly fine.

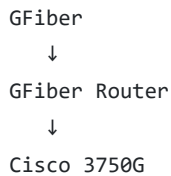
5. Your existing Cisco 2901 retires

This is probably the biggest simplification.

Today:



After GFiber:



The 2901 can be removed from the production network.

You don't need:

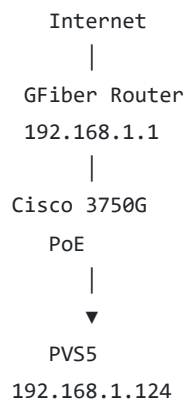
- Cisco routing
- Cisco NAT
- Cisco DHCP
- Cisco WAN configuration
- Cisco firewall configuration

for the basic home network.

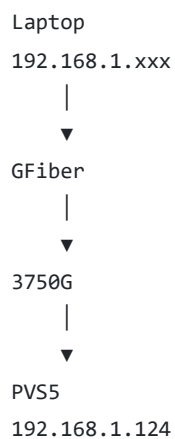
The GFiber router handles those functions.

6. And your PVS5 gets a very clean path

This is what I particularly like for your PVS5 project:



Your laptop:

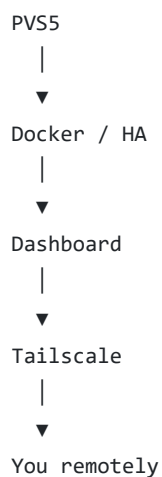


Therefore:

<http://192.168.1.124>

should continue to work.

And your eventual architecture becomes:

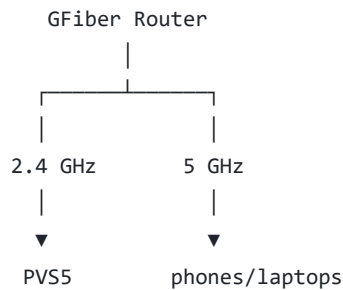


That's much cleaner than trying to make the PVS5 itself communicate directly with some cloud service.

7. What about Wi-Fi?

This is the one thing I'd pay attention to because of your PVS5.

GFiber Wi-Fi gives you:



The PVS5 needs **2.4 GHz**.

Modern GFiber equipment normally combines the bands under one SSID, allowing clients to select the appropriate band automatically.

But for the PVS5 migration...

I would **not assume the PVS5 will automatically reconnect** simply because the SSID has the same name.

The safest procedure is:

1. Give GFiber Wi-Fi the **same SSID** as the old Spectrum Wi-Fi.
2. Give it the **same Wi-Fi password**.
3. Ensure 2.4 GHz is enabled.
4. Reboot the PVS5 if necessary.
5. Check whether it reconnects.
6. Check your router's DHCP/client list.
7. Look for 192.168.1.124 .

If the PVS5 was using a static/reserved configuration, we'll deal with that separately.

8. One BIG thing to check before you unplug Spectrum

Your old network has:

192.168.1.1

and your PVS5:

192.168.1.124

That's excellent **if GFiber also uses** 192.168.1.1/24 .

But don't assume it.

After installing GFiber, check:

```
ipconfig
```

If you see:

```
Default Gateway . . . : 192.168.1.1
```

then we're in great shape.

If you see something like:

```
Default Gateway . . . : 192.168.86.1
```

don't panic.

Don't start changing Cisco or PVS5 configurations yet. We can make a deliberate decision about whether to change the GFiber LAN subnet or migrate the PVS5 address.

9. The migration order I'd use

Since you want **painless**, I'd do it in this exact order.

Phase A — GFiber alone

```
GFiber ONT
  ↓
GFiber Router
  ↓
Laptop
```

Verify:

- Internet
- Gateway
- DHCP
- Wi-Fi
- 2.4 GHz

Phase B — PoE switch

```
GFiber
  ↓
3750G PoE
```

Verify:

- laptop wired connection
- Internet
- DHCP

Phase C — PVS5

GFiber
↓
3750G PoE
↓
PVS5

Verify:

```
ping 192.168.1.124
```

Then:

```
http://192.168.1.124
```

and:

```
http://192.168.1.124/vars?name=/sys/info/model,/sys/info/serialnum
```

Phase D — Non-PoE switch

Bring your Hyper-V network back:

GFiber
↓
3750G
↓
HP ENVY
↓
Hyper-V
├─ HAOS
├─ Ubuntu
└─ other VMs

Phase E — Tailscale

Once everything is stable, configure Tailscale.

Don't combine the GFiber migration and Tailscale troubleshooting at the same time.

10. One thing I want to see before you touch anything

Because you have a fairly mature Cisco network, **I'd like to see the actual configuration of the two 3750Gs before you move cables.**

Especially:

```
show running-config
show vlan brief
show interfaces status
```

on the **PoE 3750G**, and:

```
show running-config
show vlan brief
show interfaces status
```

on the **non-PoE 3750G**.

We don't need to blindly erase anything.

There may be VLANs, trunking, DHCP configuration, static routes, or port configurations that matter.

The target architecture should be simple, but we should first understand what you already built.

If you give me those outputs, I can map your **actual Spectrum** → **Cisco network** into a **GFiber cutover diagram with exact ports/cables and what stays vs. what gets retired.**

I understand the plan. I have the Cisco 2901 because I did not want to pay the Spectrum \$10/month router plus I wanted to train on Cisco routing in 2021. Believe me, my network has been running since 2019 without failure. The only issue is my WLAN was only 90Mbps on a good day but it did provide a good whole house wifi and plus it was a cool project with WAP on the ceiling like a real business office and also gave me a lot of training. Now, that it will be my daughter living here, the GFiber setup make sense. I did have a standby Linksys router handy for the single point of failure of Cisco 2901 that never happened. Thanks for the information.

That context makes the whole setup make a lot more sense. 😊

The **2901 wasn't overkill—it was your lab**. You essentially got a real-world Cisco routing exercise for the price of electricity, avoided Spectrum's router rental, and ended up with a network that ran reliably for ~5 years. That's a pretty good outcome.

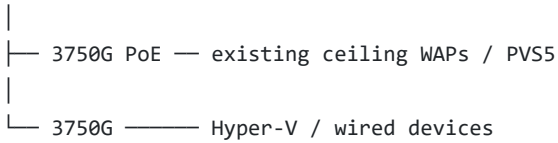
And I especially like the evolution:

2019–2026: Learning/networking project

```
Spectrum
|
Cisco 2901
|
3750G PoE
├─ ceiling WAP
├─ ceiling WAP
├─ ceiling WAP
└─ PVS5
```

Now: daughter's house

```
GFiber
|
GFiber Router
```



That's actually a **better engineering decision for the new mission**: fewer moving parts, modern Wi-Fi, much faster wireless, and your daughter doesn't have to depend on a Cisco 2901 that only its owner enjoys troubleshooting. 😊

And you get to keep the Cisco gear available for **lab duty** rather than making the house depend on it.

The **90 Mbps ceiling on the old WLAN** is also exactly the sort of thing GFiber should dramatically improve. Your wired Cisco infrastructure doesn't necessarily need to change at all; the major improvement is replacing the old wireless/routing edge.

One other thing I would *not* throw away: **keep that Linksys as your emergency router**. Your old philosophy of having a spare WAN router was sound. With GFiber, if the GFiber router ever dies, you have a known-good fallback rather than starting from zero.

Most importantly, **don't touch the working Cisco configuration yet**. When you're ready for the actual cutover, we can treat it like a controlled migration:

GFiber first → verify → connect PoE switch → verify PVS5 → connect non-PoE/Hyper-V → verify everything.

No Frankenstein surgery. 😊

My Google fiber installation is complete and new WiFi is running.

Create a step by step to migrate my old network as discussed previously

Perfect. Now that I can see the actual GFiber equipment and settings, we can make this a **controlled cutover rather than a redesign**.

Your new installation is particularly convenient:

- **Fiber Jack: GOXP330C**
- **GFiber router: GR6EXX0C — Wi-Fi 6E**
- **Mesh extender: GE6E220C — Wi-Fi 6E**
- Router LAN: **192.168.1.1**
- Subnet: **255.255.255.0 (/24)**
- DHCP: **192.168.1.100–192.168.1.254**
- Router firmware shown: **1.6.1**
- The router supports **2.4 GHz, 5 GHz and 6 GHz**; GFiber normally combines 2.4/5 GHz under the same SSID. ([GFiber](#))

Most importantly:

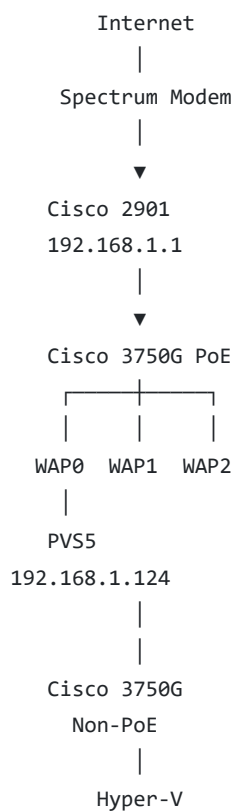
Your new GFiber LAN is exactly the same LAN as your old Cisco network.

That makes this migration unusually painless.

The migration plan

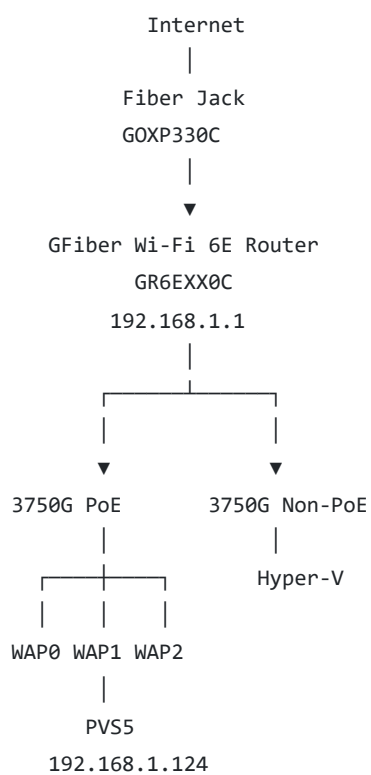
We're going from:

CURRENT – SPECTRUM



to:

NEW – GFIBER



GFiber Wi-Fi 6E
2.4/5/6 GHz
|
Daughter /
phones /
laptops

The **Cisco 2901 disappears from the production path.**

Phase 0 — DON'T disconnect Spectrum yet

This is important.

You now have **two functioning Internet networks**.

Leave the Spectrum/Cisco network running while we establish that GFiber is completely healthy.

Your old network is your rollback mechanism.

If something goes wrong:

Plug the old Cisco 2901 back in and you're back to the known-good network.

That is exactly how I'd do a production migration.

Phase 1 — Record the old Cisco configuration

 the **Cisco 3750G PoE** and save the configuration.

Run:

```
show running-config
```

Then:

```
show vlan brief
```

Then:

```
show interfaces status
```

And:

```
show ip interface brief
```

Do the same on the **non-PoE 3750G**.

Also save the configuration:

```
copy running-config startup-config
```

If you want an external backup:

```
copy running-config tftp:
```

You don't necessarily need TFTP; the important thing is that we have the configuration captured.

Don't change anything yet.

Your Cisco configuration represents five years of successful operation. There's no reason to "clean it up" during the migration.

Phase 2 — Confirm the GFiber router

You've already done this.

Your screenshot gives us:

```
Router
Model:      GR6EXX0C
Type:       GFiber Wi-Fi 6E Router
LAN IP:     192.168.1.1
WAN IPv4:   136.62.46.118
Firmware:   1.6.1
```

And:

```
LAN subnet: 255.255.255.0
DHCP:       192.168.1.100-254
```

That's **excellent**.

GFiber specifically allows the LAN address and DHCP range to be configured from the app, so your displayed configuration is the authoritative starting point. ([Google Help](#))

Do not change these settings.

Leave:

```
192.168.1.1
255.255.255.0
192.168.1.100-254
```

exactly as they are.

Phase 3 — Decide what happens to Wi-Fi

This is where I would make one deliberate choice.

Your old Spectrum/Cisco Wi-Fi had:

WLAN 0

WLAN 1

WLAN 2

and those ceiling WAPs gave you whole-house coverage.

Your new GFiber router + **GE6E220C Wi-Fi 6E Mesh Extender** can take over the wireless role.

The GE6E220C is specifically designed to extend the Wi-Fi 6E router's coverage. It can connect wirelessly or by Ethernet. ([GFiber](#))

My recommendation

Don't reconnect the three old Cisco WAPs initially.

First experience the house with:

GR6EXX0C

+

GE6E220C

You may discover that you don't need the old WAP infrastructure anymore.

This gives your daughter the simplest network.

Phase 4 — Configure GFiber Wi-Fi

In the GFiber app:

Network → Network Settings

Set the primary SSID/password.

GFiber's current configuration uses the same network name for the 2.4 GHz and 5 GHz radios by default. ([Google Help](#))

For your PVS5, that's useful because it needs 2.4 GHz.

If possible, use your old Wi-Fi credentials

If your old Spectrum Wi-Fi SSID/password were something you're comfortable continuing to use:

OLD SSID

OLD PASSWORD

↓

GFiber SSID

GFiber PASSWORD

This can allow existing Wi-Fi devices to reconnect without individually reconfiguring them.

But don't worry about this being perfect. You can change devices individually later.

Phase 5 — Test GFiber independently

Before connecting Cisco:

Connect your laptop directly to the GFiber router.

Run:

```
ipconfig
```

You should get approximately:

```
IPv4 Address . . . . . : 192.168.1.xxx  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . : 192.168.1.1
```

Then:

```
ping 192.168.1.1
```

Then:

```
ping 8.8.8.8
```

Then:

```
ping google.com
```

You want all three to work.

Phase 6 — Test Wi-Fi

Connect your phone/laptop to GFiber Wi-Fi.

Check:

Internet	✓
192.168.1.1	✓
2.4 GHz	✓
5 GHz	✓
6 GHz	✓

Your router is Wi-Fi 6E, so the additional **6 GHz** band is available for compatible clients. ([GFiber](#))

Don't expect every device to see 6 GHz.

That's normal.

Older devices will use 2.4/5 GHz.

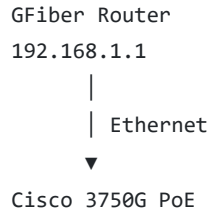
Phase 7 — Connect the Cisco 3750G PoE

Now we start bringing your old network back.

Disconnect the **Cisco 2901** → **3750G** connection.

Leave the 2901 disconnected.

Connect:



Important

Use the same Cisco switch port that previously connected toward the 2901 **unless your configuration tells us otherwise**.

Don't modify VLANs yet.

Phase 8 — Test the PoE switch

Connect your laptop to the 3750G PoE.

Run:

```
ipconfig
```

You should still receive:

```
192.168.1.xxx
```

with:

```
Gateway: 192.168.1.1
```

Then:

```
ping 192.168.1.1
```

and:

```
ping 8.8.8.8
```

If that works:

GFiber → Cisco 3750G is working.

Phase 9 — Bring the PVS5 back

Now connect:



Do **not** change the PVS5.

We want to preserve:

PVS5
192.168.1.124

From your laptop:

ping 192.168.1.124

Then:

http://192.168.1.124

Then:

http://192.168.1.124/vars

And your previous diagnostic query:

http://192.168.1.124/vars?name=/sys/info/model,/sys/info/serialnum

If those work:

🎉 **PVS5 migration is complete.**

One subtle thing about your DHCP range

Your GFiber DHCP pool is:

192.168.1.100
↓
192.168.1.254

Your PVS5 is:

192.168.1.124

That creates a potential issue **if the PVS5 is statically configured at .124** and GFiber DHCP could also hand .124 to another device.

I would eventually make:

192.168.1.124

a **DHCP reservation for the PVS5** if GFiber identifies it correctly.

GFiber supports IP reservations specifically to prevent another device from receiving that address. ([Google Help](#))

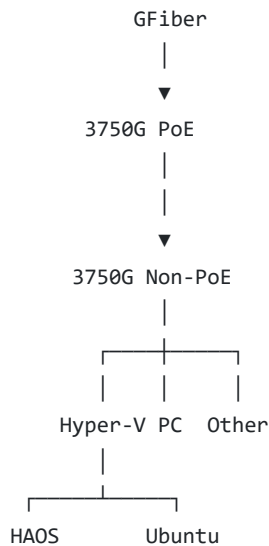
But **don't change it yet**.

First establish whether the PVS5 is actually static or DHCP.

Phase 10 — Bring back the second 3750G

Now reconnect your Hyper-V network.

The clean topology is:



You don't necessarily need a dedicated cable from GFiber to both switches.

The two 3750Gs can remain interconnected as they were, **provided their existing configuration supports that topology**.

That's why I want to see the switch configs before we alter anything.

Phase 11 — Hyper-V

Once the non-PoE switch is online:

On the Hyper-V host:

```
ipconfig
```

Verify:

```
192.168.1.xxx
```

```
Gateway 192.168.1.1
```

Then check:

```
Hyper-V
|
├─ HAOS
├─ Ubuntu
└─ other VMs
```

The VMs should continue working because we're intentionally keeping the same:

```
192.168.1.0/24
```

network.

Phase 12 — Don't configure Tailscale yet

This is important.

You already have a lot of moving parts:

```
GFiber
↓
3750G
↓
Hyper-V
↓
HAOS
↓
SunPower
```

Don't add Tailscale to the migration.

First get:

Internet → LAN → PVS5 → Hyper-V → HAOS

stable.

Then:

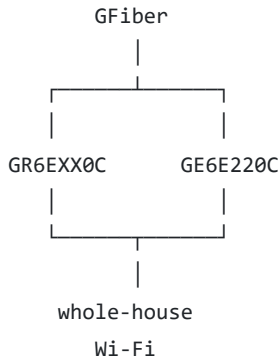
```
Tailscale
```

becomes a separate project.

Phase 13 — Decide whether you even need the old Cisco WAPs

After everything works, walk around the house with your phone.

Test:



Check:

- living room
- bedrooms
- kitchen
- garage
- upstairs/downstairs
- wherever your daughter actually uses Wi-Fi

If coverage is good:

retire the old WAPs.

If there's a weak area:

we can decide whether to use the GE6E220C strategically or repurpose the Cisco AP infrastructure.

The GE6E220C can be paired with the router and moved to an appropriate location after pairing. Google recommends positioning it between the router and the area needing coverage. ([GFiber](#))

Your migration checklist

I'd literally print/use this:

● Stage 1 — GFiber

- Fiber Jack installed
- GR6EXX0C online
- LAN = 192.168.1.1
- /24
- DHCP = .100-.254
- Wi-Fi working
- Internet working

- Speed test

● Stage 2 — Cisco

- Save 3750G PoE config
- Save 3750G non-PoE config
- Disconnect 2901
- GFiber → 3750G PoE
- Verify DHCP
- Verify Internet

● Stage 3 — PVS5

- Connect PVS5
- Ping 192.168.1.124
- Open PVS5 web UI
- /vars
- Verify inverter data
- Verify PVS5 Internet connectivity

● Stage 4 — Hyper-V

- Connect non-PoE 3750G
- Verify Hyper-V host
- Verify HAOS
- Verify Ubuntu
- Verify other VMs

● Stage 5 — Wi-Fi

- Test GFiber Wi-Fi throughout house
- Test 2.4 GHz
- Test 5 GHz
- Test 6 GHz
- Test GE6E220C coverage
- Decide whether old WAPs are still necessary

● Stage 6 — Final

- Reserve PVS5 .124
- Confirm DHCP clients
- Confirm printer/IoT/etc.
- Confirm daughter's devices
- Configure Tailscale
- Keep Linksys as emergency backup
- Retire Cisco 2901 from production

And here's the most important part

Do not destroy your old network yet.

For the first day or two, keep:

Cisco 2901
Cisco 3750G PoE
Cisco 3750G Non-PoE
old WAPs
Linksys

available.

Once you've confirmed:

GFiber
↓
192.168.1.1
↓
3750G
↓
PVS5 .124
↓
Hyper-V
↓
HAOS

is stable, **then** we can start removing the old pieces.

And because your GFiber LAN is **already exactly** 192.168.1.0/24 , we're not really migrating the *network*. We're mostly **changing the WAN/router at the edge** while preserving the LAN you've spent years building.

That's about as painless as a provider migration gets. ([Google Help](#))

Next step: before you unplug the Cisco 2901, send me the output of these four commands from **each 3750G**:

```
show running-config
show vlan brief
show interfaces status
show ip interface brief
```

I can then tell you **exactly which physical cable goes where**, without guessing about your existing Cisco topology.