AI-04704 Old Dell Latitude Ubuntu Server

I have an Old Dell Latitude E4310, I found a docking station in my storage box, I forgot already, if I connect the E4310 to the docking station EPort Plus, will I have dual network port available. At the back of the docking station, I have an additional ethernet port and 2 display port. I want to build pf Sense firewall withit.

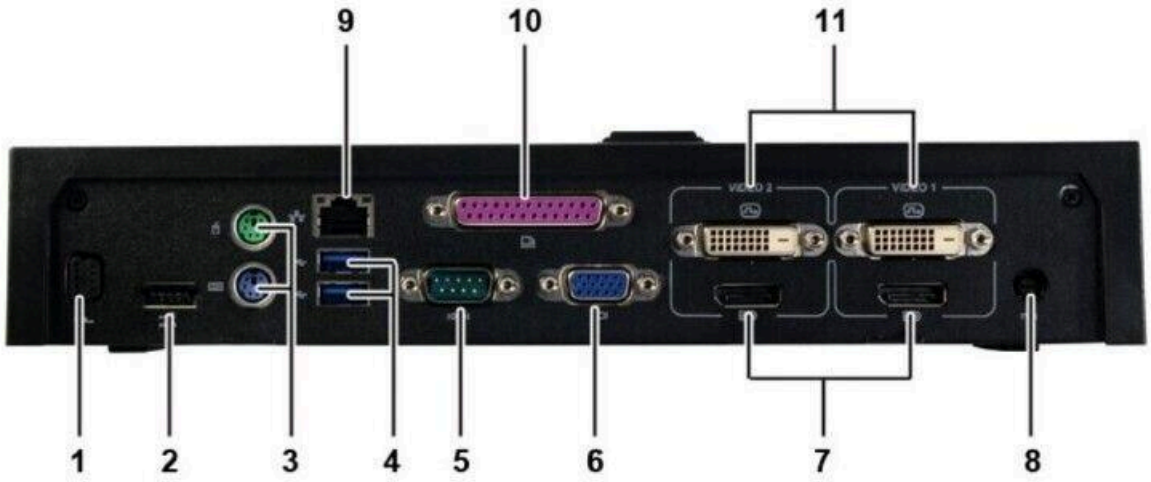
Yes—**your Dell Latitude E4310 + Dell E-Port Plus docking station can potentially give you two Ethernet interfaces**, which makes it an interesting candidate for a pfSense firewall.

However, there is one important distinction: **the docking station's Ethernet port is not automatically guaranteed to appear as a second network interface in pfSense.** Let's examine how it works.

1. Your Hardware Configuration


DELL
LATITUDE E4310

Rear View



(Fig.2 Rear View)

1	E-Monitor Stand Connector	2	USB 2.0 or eSATA Connector
3	PS/2 Connector x2	4	USB 3.0 Connector x2
5	Serial Connector	6	VGA Connector
7	DisplayPort Connectors	8	AC Adapter Connector
9	Network Connector	10	Parallel Connector
11	DVI Connectors		

Component	Network capability
Dell Latitude E4310	Built-in Intel 10/100/1000 Ethernet
Dell E-Port Plus	One additional RJ-45 Ethernet port
Dock connection	Proprietary Dell E-Family docking connector
Potential total	**2 Ethernet interfaces**

The E4310's internal network adapter is an Intel 10/100/1000 Ethernet controller. The E-Port Plus also has an RJ-45 network connector. (**manualzz.com**)

Important clarification

The E-Port Plus is a **port replicator**, not merely a passive cable adapter. Its Ethernet port has its own network controller, so it may be presented to the operating system as a separate network interface.

But whether pfSense detects it depends on the docking station's Ethernet chipset and whether the pfSense/FreeBSD version supports it.

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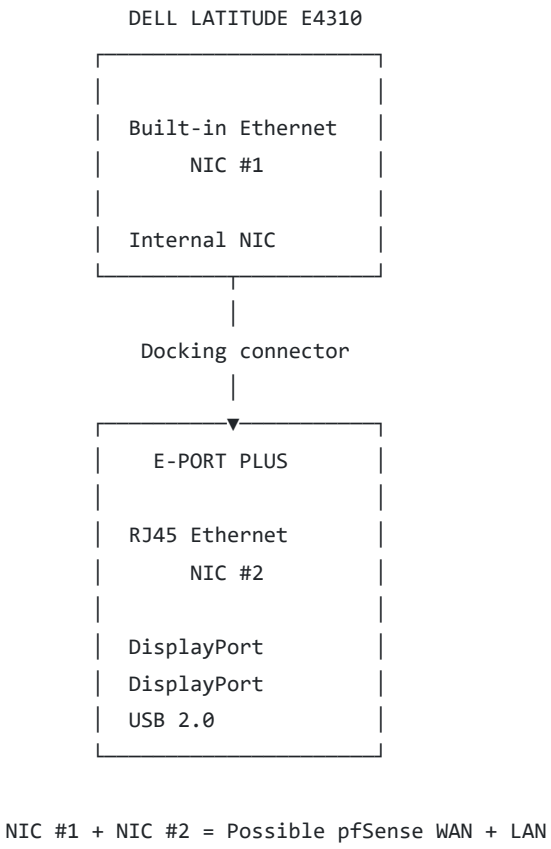
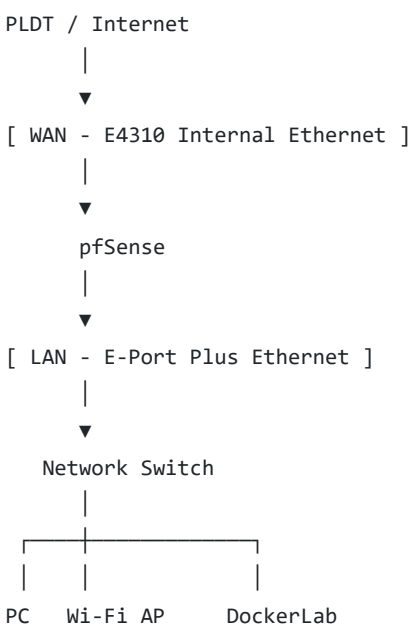
2. Will You Actually Have Two NICs in pfSense?

Expected arrangement



If both interfaces are detected, yes, you can use one for WAN and one for LAN.

For example:



Or reverse the assignments. pfSense does not care which physical port is WAN or LAN, as long as you identify them correctly.

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3. The Critical Question: Is the Dock Ethernet USB-Based or PCIe-Based?

This is the part I would verify before committing the E4310 to firewall duty.

The E-Port Plus connects through Dell's proprietary docking connector. The docking station exposes its Ethernet controller to the laptop through that connection. The exact controller and connection architecture depend on the dock model/revision.

The official E-Port Plus documentation confirms the RJ-45 network connector, but **the documentation alone does not establish that every E-Port Plus revision is supported by pfSense**. (Dell Downloads)

Why this matters

pfSense is based on FreeBSD. A network adapter can work perfectly in Windows or Ubuntu but fail to work in pfSense if its driver is unavailable or unreliable.

Therefore:

> Two physical RJ-45 ports ≠ guaranteed two pfSense-compatible NICs.

But your hardware is absolutely worth testing.

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4. My Recommended Testing Method

Before installing pfSense permanently, use a temporary Ubuntu boot or installation on the E4310.

Since you already work with Ubuntu servers, this should be straightforward.

Step 1 — Dock the E4310

1. Shut down the E4310.
2. Connect the laptop to the E-Port Plus.
3. Connect the dock's AC adapter.
4. Connect Ethernet cables to:

- The E4310's built-in Ethernet port.
- The E-Port Plus's Ethernet port.

Step 2 — Boot Ubuntu

Open a terminal:

```
ip -br link
```

Or:

```
nmcli device status
```

You may see something similar to:

```
lo        UNKNOWN
eth0      UP
eth1      UP
wlan0     UP
```

Modern Ubuntu may instead show names such as:

```
enp2s0
enx001122334455
```

The names do not matter. **Two separate Ethernet interfaces are what you want.**

Step 3 — Identify the physical ports

Unplug one Ethernet cable at a time and observe which interface loses link.

You can also use:

```
sudo ethtool enp2s0
```

Replace `enp2s0` with the actual interface name.

Look for:

```
Speed: 1000Mb/s
Link detected: yes
```

Repeat for the second interface.

Step 4 — Check the controller

Run:

```
lspci -nn | grep -i ethernet
```

And:

```
lsusb
```

Why both?

- The internal E4310 NIC may appear under `lspci`.
- A dock Ethernet controller may appear through another bus, depending on its design.
- `lsusb` can help identify USB-based Ethernet hardware.

If Ubuntu detects two separate wired interfaces, that is a very good sign—but pfSense still needs to recognize the underlying hardware.

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5. Testing in pfSense

Once you install or boot pfSense, go to the console.

The initial interface assignment process should show detected network ports. You may see something like:

```
Valid interfaces are:

em0
em1
```

Or:

```
igb0
ue0
```

The names depend on the drivers.

Example

```
WAN: em0
LAN: em1
```

Then connect:

```
PLDT modem/ONT → WAN
LAN → Switch
```

If only one interface appears

Possible causes:

1. The dock Ethernet controller is unsupported.
2. The dock is not powered.
3. The E4310 is not properly seated.
4. The specific E-Port Plus revision uses a controller without a usable pfSense driver.

5. The interface is present but not recognized during the initial assignment.

Do not assume the second port is defective until you identify its chipset.

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6. Is the E4310 Powerful Enough for pfSense?

Yes, for a basic home-lab firewall, it is likely more than adequate.

The E4310 is an older business laptop, but pfSense does not require a modern CPU for ordinary routing, NAT, firewalling, DHCP, VLANs, and VPN use.

Practical assessment

Task	E4310 suitability
Basic routing/NAT	✅ Good
Stateful firewall	✅ Good
DHCP/DNS	✅ Good
VLANs	✅ Good, assuming compatible NICs
Gigabit routing	⚠️ Test actual throughput
Multiple VPN tunnels	⚠️ Depends on encryption workload
IDS/IPS with heavy rules	⚠️ May be limited
10GbE routing	❌ Not a realistic target
Heavy Zenarmor/Snort workloads	⚠️ Potentially CPU/RAM constrained

The E4310 supports up to 8 GB DDR3 memory according to its service specifications. (manualzz.com)

For a small home network or lab, I would not reject it simply because of its age.

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7. One Major Concern: Power Consumption

For a **learning firewall**, the E4310 is useful.

For a **24/7 production firewall**, I would compare it against a small fanless appliance.

The E4310 is an older laptop, so consider:

- Fan noise
- Heat
- Battery condition
- Power adapter reliability
- Electricity consumption
- Whether the battery can act as a crude UPS

Interesting advantage

The laptop battery can provide a small amount of backup power during short outages.

However, **do not treat the old battery as a reliable UPS**. Its health and safety condition matter.

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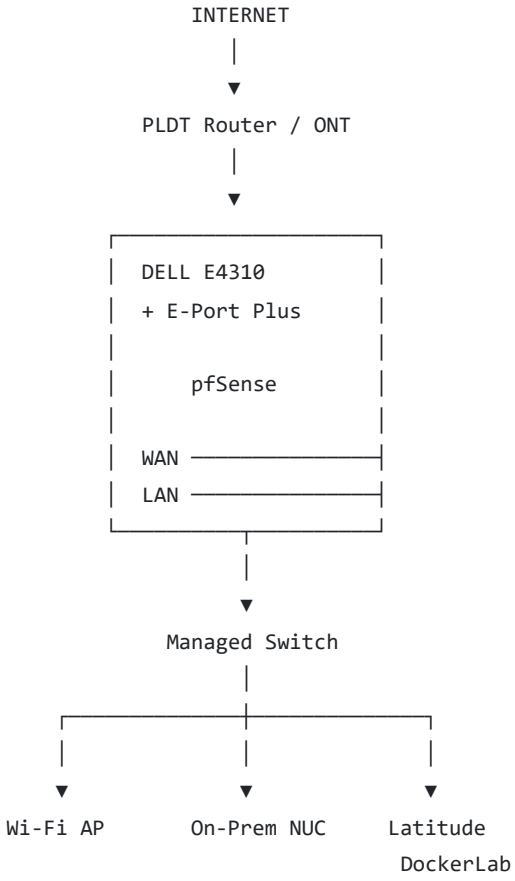
8. My Recommended Architecture for Your Lab

Given your existing DockerLab environment, I would use the E4310 as a **dedicated pfSense learning appliance**, not as a Docker host.



Better if you want to learn VLANs

```
pfSense
   │
   │ 802.1Q VLAN trunk
   │
Managed Switch
   ├── VLAN 10: Management
   ├── VLAN 20: Home LAN
   ├── VLAN 30: DockerLab
   ├── VLAN 40: Guest
   └── VLAN 50: IoT
```

But first get basic WAN + LAN working. Then introduce VLANs.

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9. My Verdict

Can you use the E4310 + E-Port Plus for pfSense?

Yes, potentially—and it is a clever way to reuse old Dell hardware.

Will the dock provide a second network port?

The dock physically provides an additional Ethernet interface. The E4310 already has its own Ethernet interface, so the hardware combination is capable of offering two network connections. (**Dell Downloads**)

Is it guaranteed to work in pfSense?

No. Verify that pfSense detects both NICs. This is the only significant technical uncertainty.

My recommendation

Test it before buying anything. If pfSense sees two stable Ethernet interfaces, you have a free firewall appliance for your lab.

And if the dock's Ethernet is unsupported, your fallback is simple:

> **E4310 internal Ethernet + USB 3.0-to-Gigabit Ethernet adapter**

Although, for a firewall, I would prefer **two natively supported Ethernet controllers** over relying on a USB adapter.

If you can send me a photo of the back of your E-Port Plus—especially the model number (for example, PR02X, K07A, or similar)—I can identify the exact dock revision and investigate whether its Ethernet controller is likely to work with pfSense.