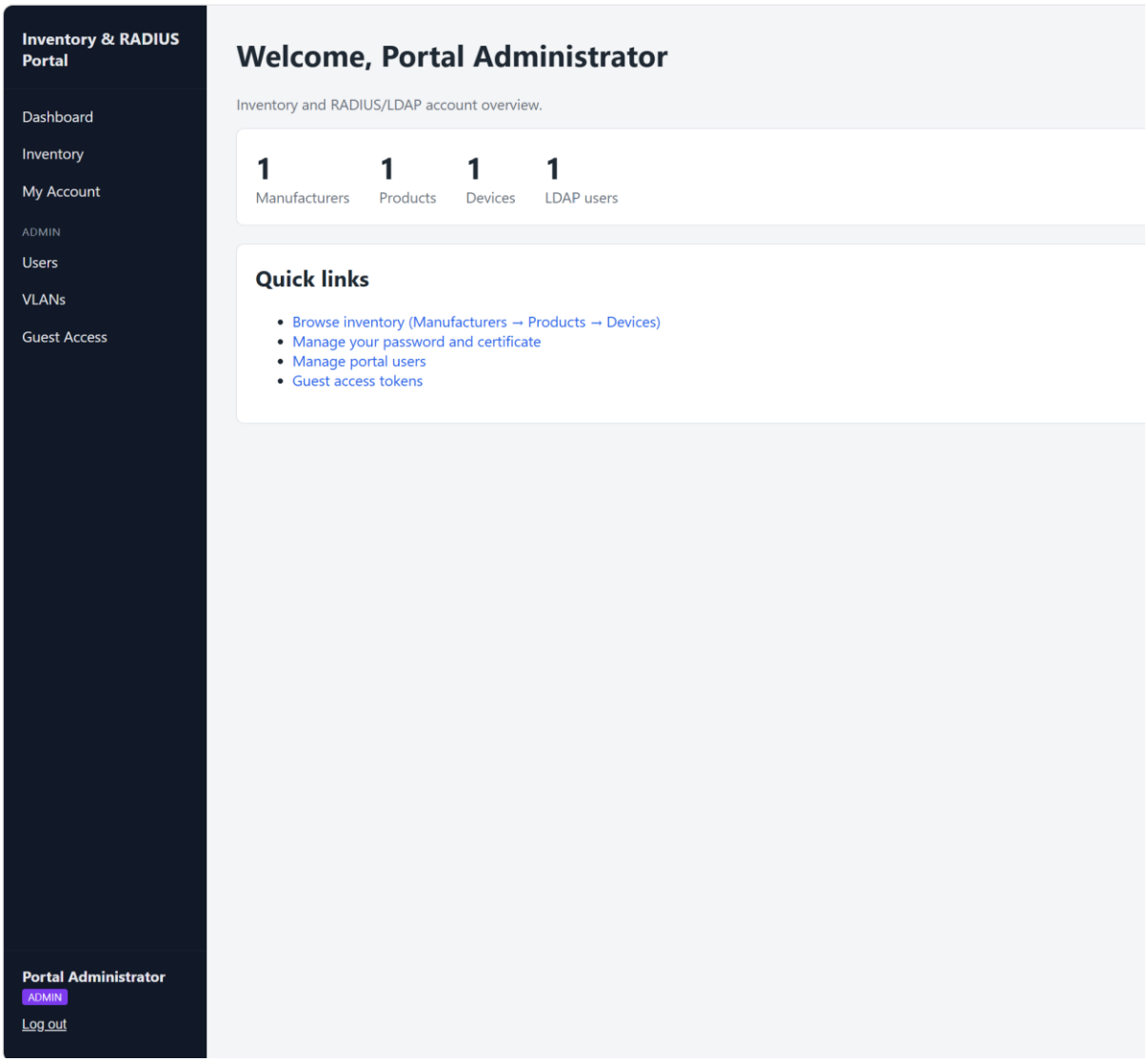
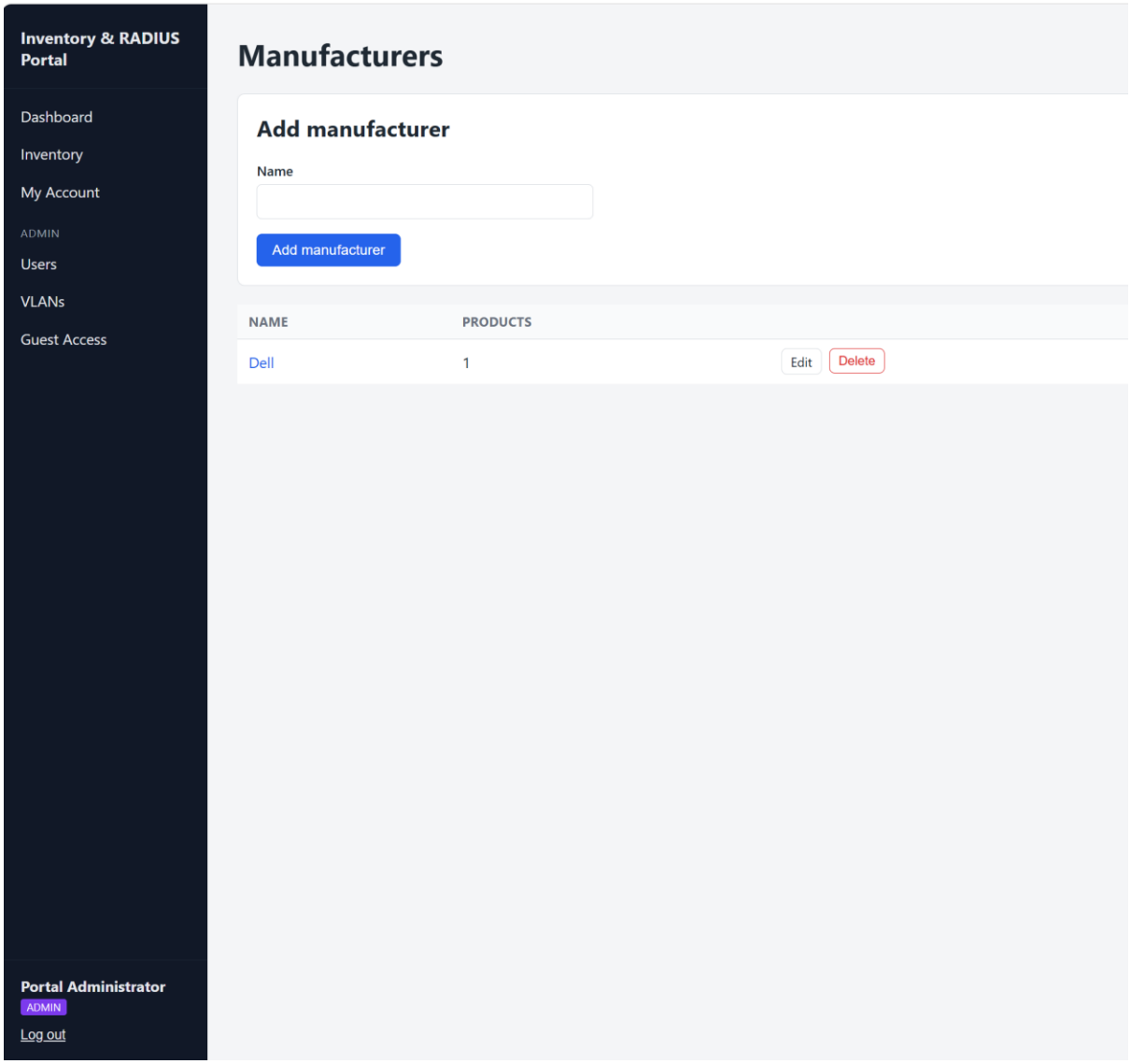
The Greatest Challenge in Networks

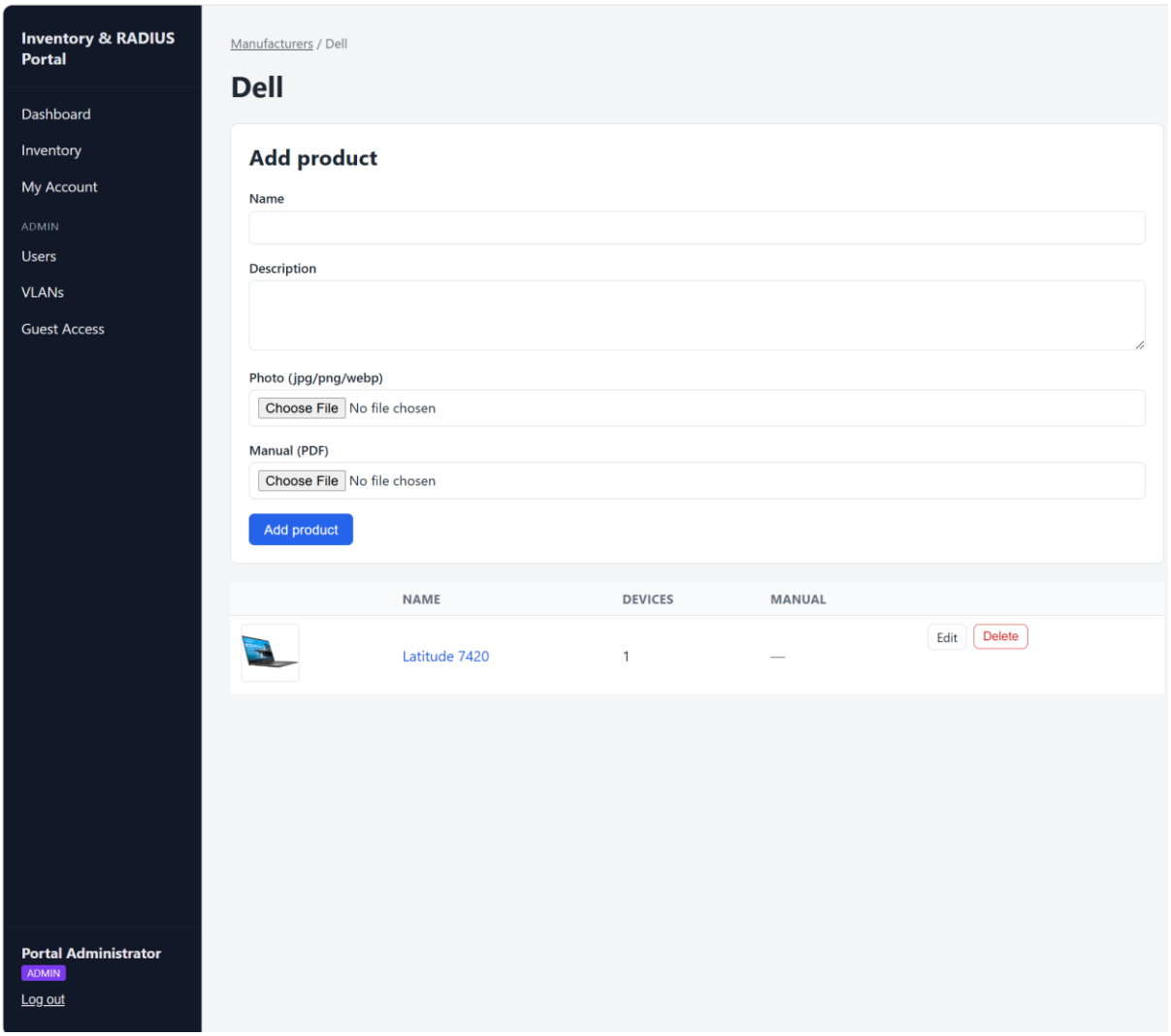
A portal that automates device to VLAN Assignment

The Dream

We all want to just “get on with our work”. Ideally, a network should be like a utility power socket. With this, it approaches that simplicity. This tool allows users and admins alike to make that happen! Demonstration is better than conversation. To that end, here are some screenshots, and a link at the bottom to the open Repository on GitHub. I’m always available to talk through this, and address questions. Enjoy!




Inventory & RADIUS Portal
Dashboard
Inventory
My Account
ADMIN
Users
VLANs
Guest Access
Portal Administrator
ADMIN
Log out
Manufacturers
Add manufacturer
Name
Add manufacturer
NAME
PRODUCTS
Dell
1
Edit
Delete


Inventory & RADIUS Portal
Dashboard
Inventory
My Account
ADMIN
Users
VLANs
Guest Access
Portal Administrator
ADMIN
Log out
Manufacturers / Dell
Dell
Add product
Name
Description
Photo (jpg/png/webp)
Choose File No file chosen
Manual (PDF)
Choose File No file chosen
Add product
NAME
DEVICES
MANUAL
Latitude 7420
1
—
Edit
Delete
]

Inventory & RADIUS Portal

- Dashboard
- Inventory
- My Account

ADMIN

- Users
- VLANs
- Guest Access

Portal Administrator

ADMIN

Log out

Manufacturers / Dell / Latitude 7420



Latitude 7420

Edit product | Delete product

Add device

Serial number

MAC address

aa:bb:cc:dd:ee:ff

Owner (LDAP username)

optional

VLAN

None

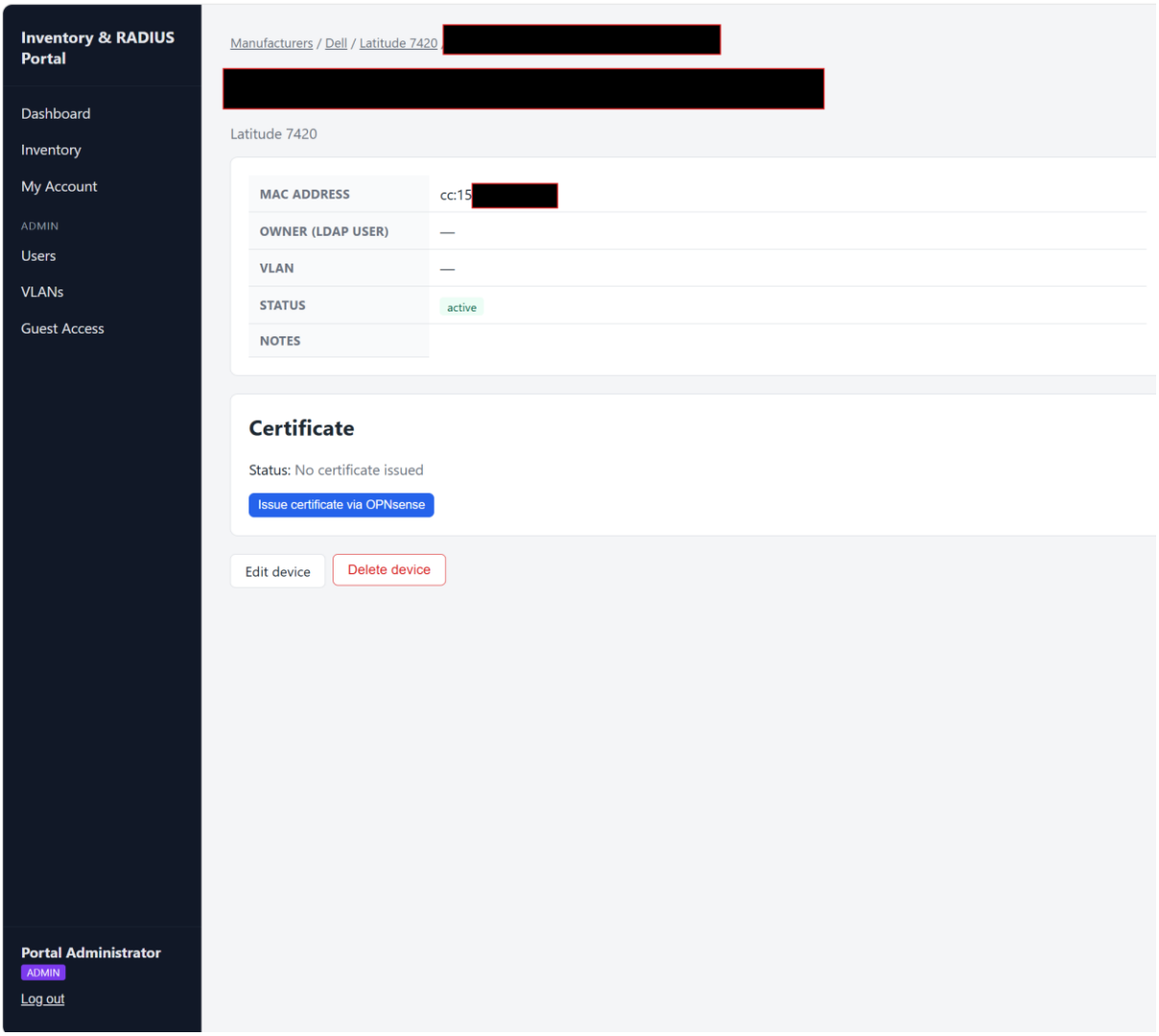
Status

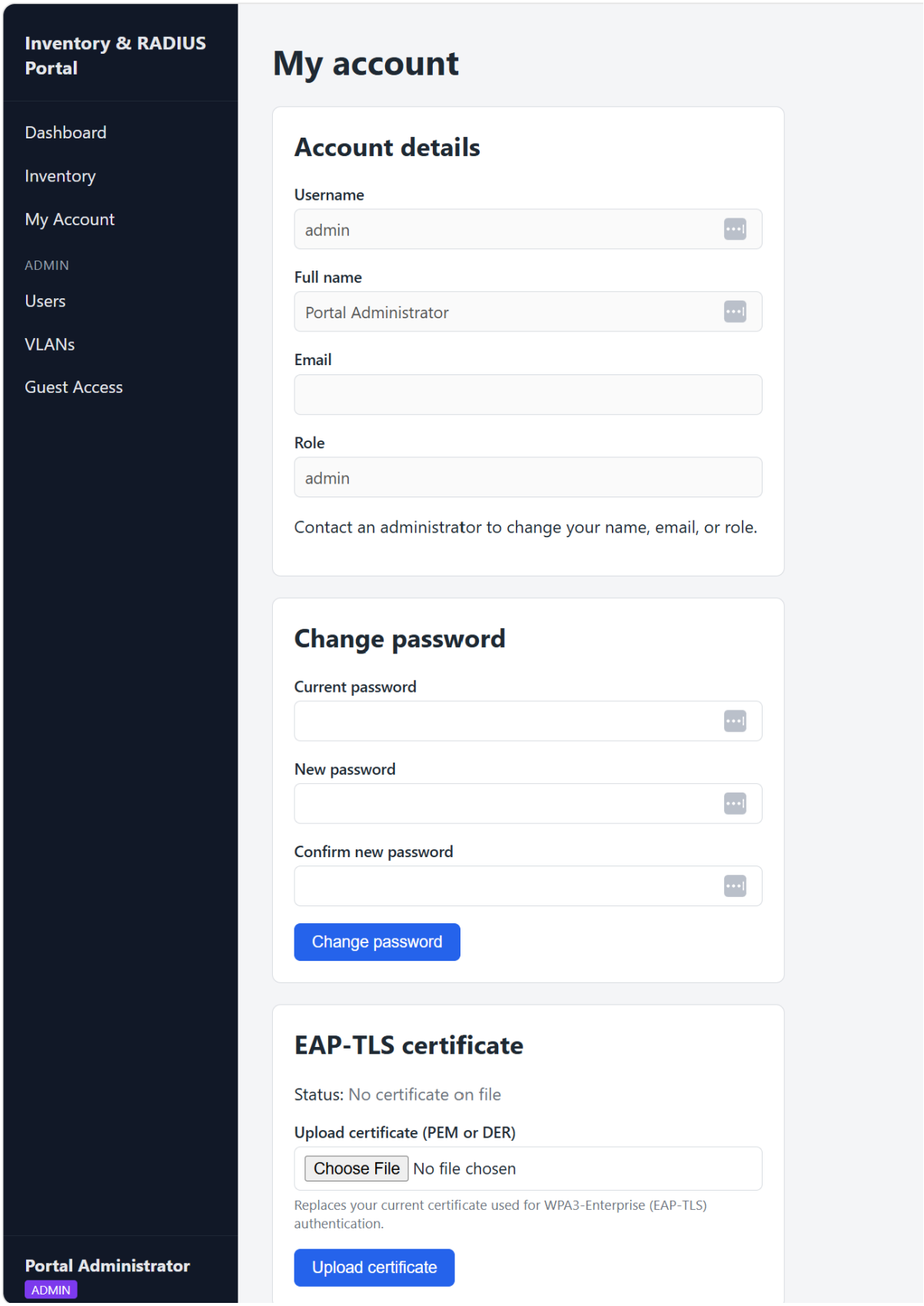
Active

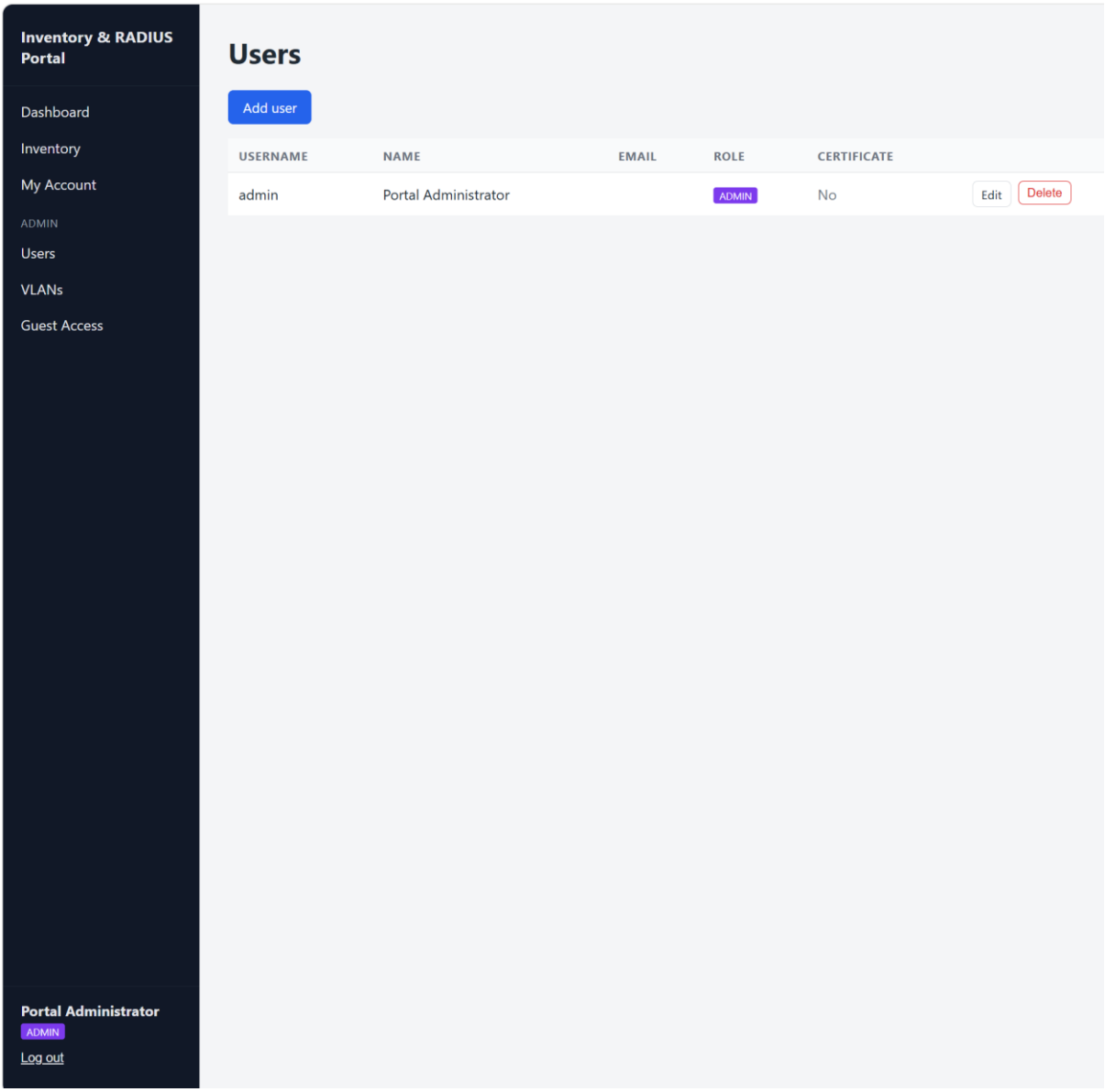
Notes

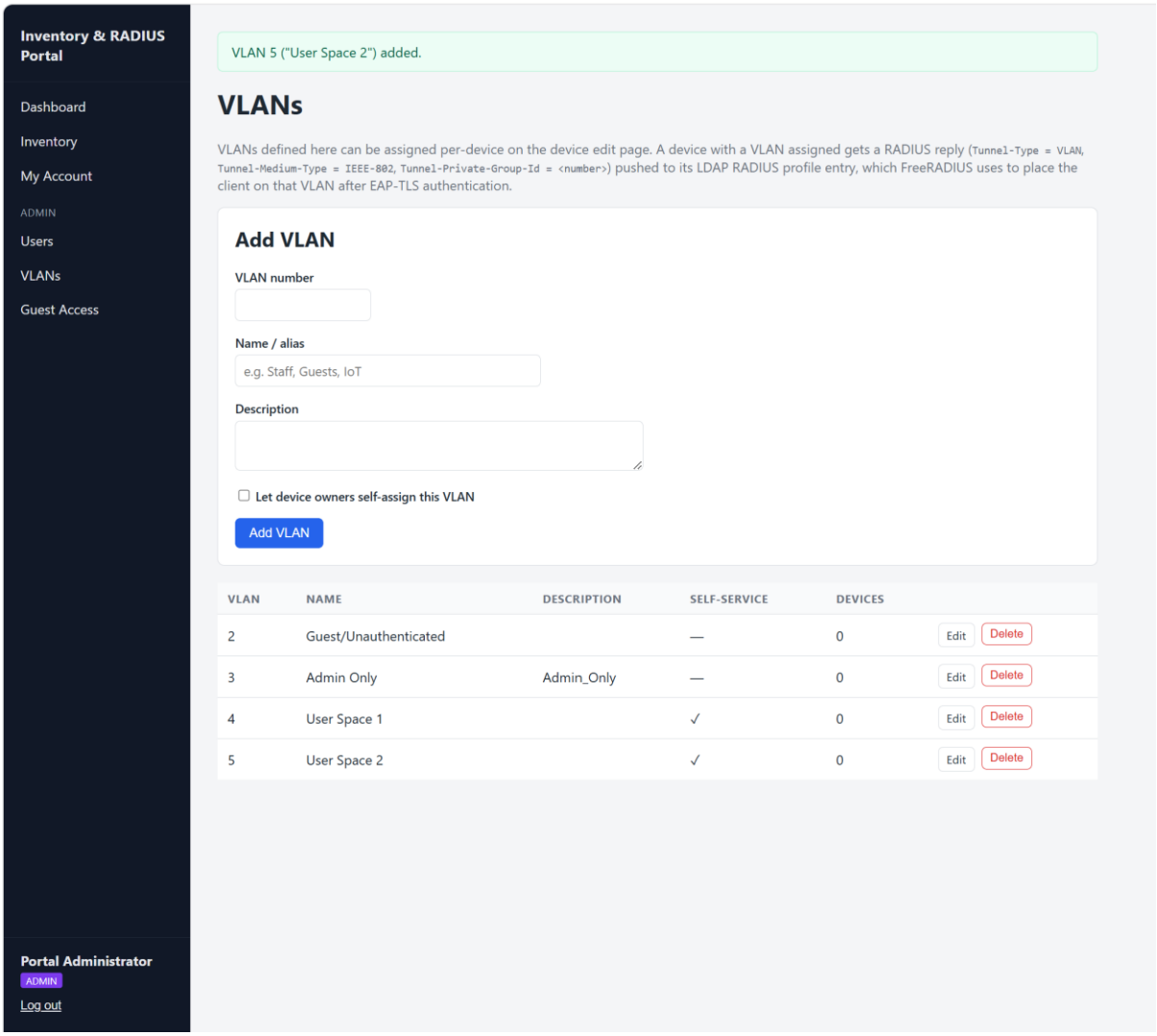
Add device

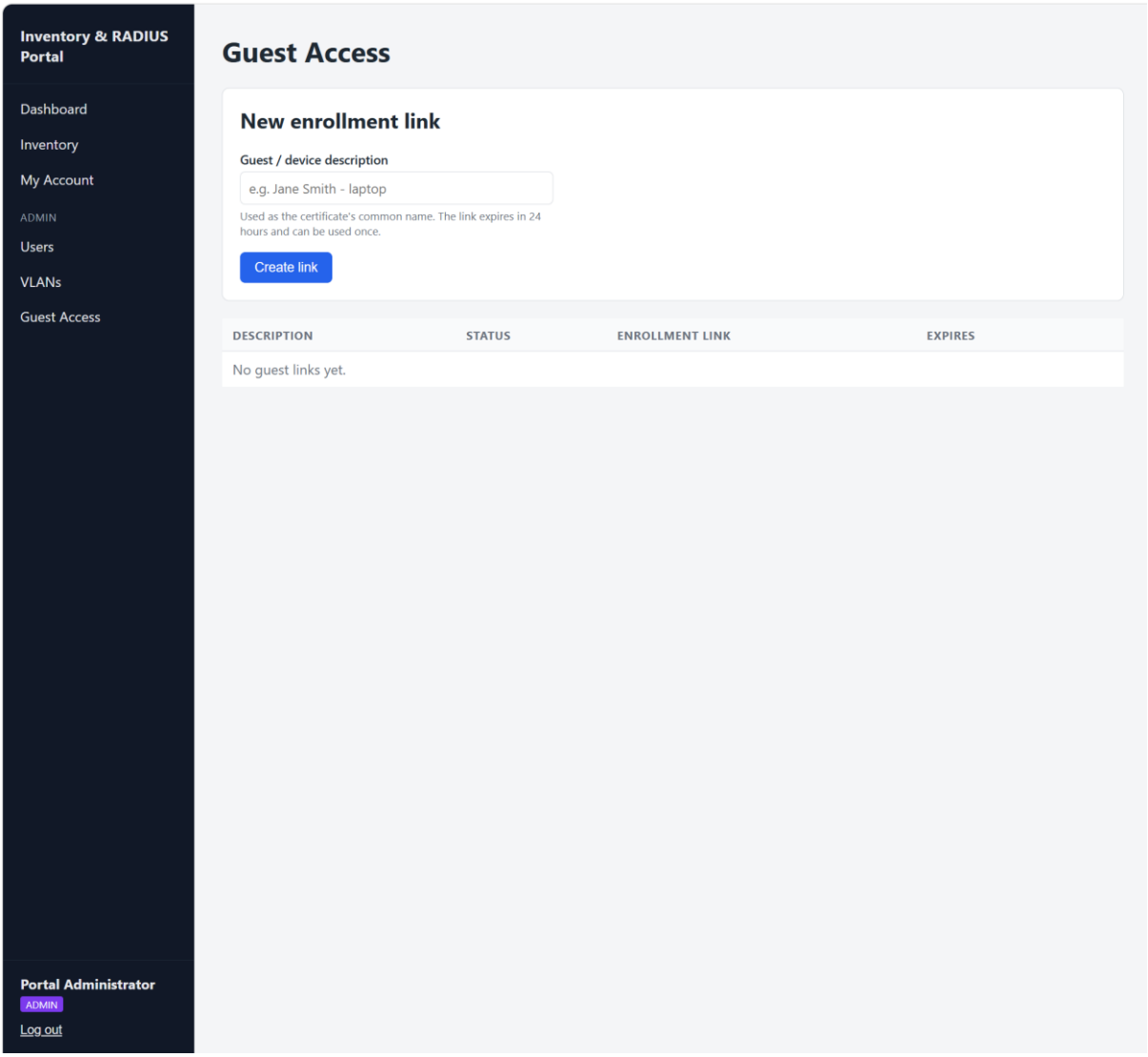
SERIAL	MAC ADDRESS	OWNER	VLAN	STATUS	CERTIFICATE	
[redacted]	cc:15[redacted]		—	active	None	Edit


Inventory & RADIUS Portal
Dashboard
Inventory
My Account
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ADMIN
Log out
Manufacturers / Dell / Latitude 7420
Latitude 7420
MAC ADDRESS
cc:15
OWNER (LDAP USER)
—
VLAN
—
STATUS
active
NOTES
Certificate
Status: No certificate issued
Issue certificate via OPNsense
Edit device
Delete device


Inventory & RADIUS Portal
Dashboard
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My Account
ADMIN
Users
VLANs
Guest Access
Portal Administrator
ADMIN
My account
Account details
Username
admin
Full name
Portal Administrator
Email
Role
admin
Contact an administrator to change your name, email, or role.
Change password
Current password
New password
Confirm new password
Change password
EAP-TLS certificate
Status: No certificate on file
Upload certificate (PEM or DER)
Choose File
No file chosen
Replaces your current certificate used for WPA3-Enterprise (EAP-TLS) authentication.
Upload certificate


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ADMIN
Log out
Users
Add user
USERNAME
NAME
EMAIL
ROLE
CERTIFICATE
admin
Portal Administrator
ADMIN
No
Edit
Delete


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ADMIN
Log out
VLAN 5 ("User Space 2") added.
VLANs
VLANs defined here can be assigned per-device on the device edit page. A device with a VLAN assigned gets a RADIUS reply (Tunnel-Type = VLAN, Tunnel-Medium-Type = IEEE-802, Tunnel-Private-Group-Id = <number>) pushed to its LDAP RADIUS profile entry, which FreeRADIUS uses to place the client on that VLAN after EAP-TLS authentication.
Add VLAN
VLAN number
Name / alias
e.g. Staff, Guests, IoT
Description
Let device owners self-assign this VLAN
Add VLAN
VLAN NAME DESCRIPTION SELF-SERVICE DEVICES
2 Guest/Unauthenticated — 0 Edit Delete
3 Admin Only Admin_Only — 0 Edit Delete
4 User Space 1 ✓ 0 Edit Delete
5 User Space 2 ✓ 0 Edit Delete



Suggestion:

This gives an outline on the simplicity that should exist, to make life easier. How often, as a user do you have to wait around for an admin? How often, as an admin do you just want the users to take care of that thing they know how to solve? This tries to create a secure, but productive edge.

It is online to download and deploy at:

kdwalsh1/radius-manager