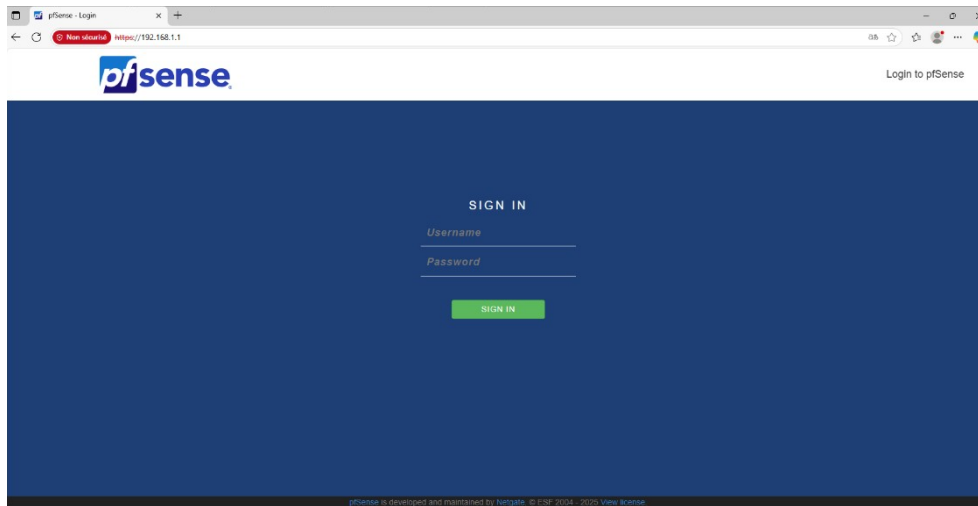


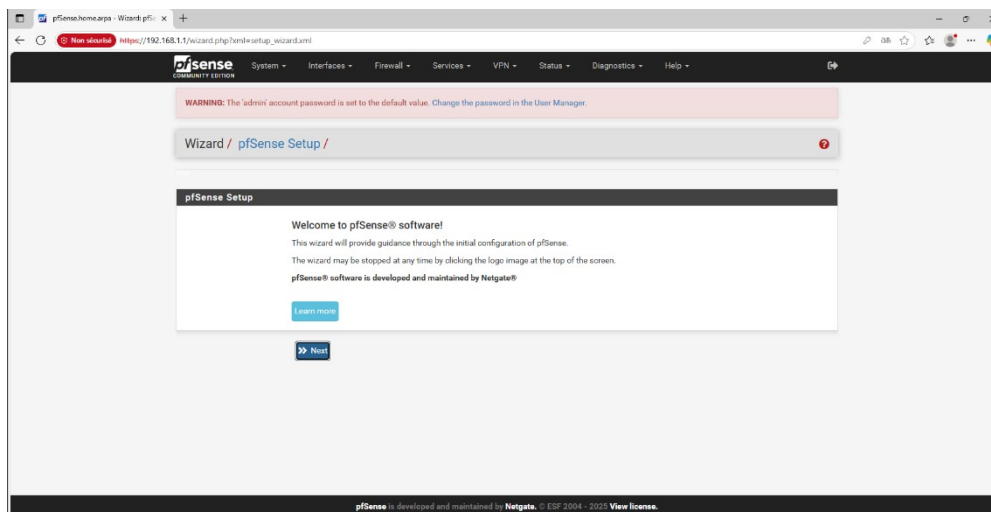
Mini-projet 2 : DHCP sur Pfsense

Mise en place des services DHCP et test de connectivité clients.

Installation de Pfsense :



Une fois l'installation terminée, nous pouvons nous rendre à la page web du pfSense. Cela sera plus simple pour le configurer. Nous pouvons donc se connecter avec admin comme username et pfsense comme password.



Une fois connecté nous allons pouvoir suivre l'assistant de configuration.

pfSense.home.arpa - Wizard pfSense: X

Non sécurisé https://192.168.1.1/wizard.php?xml=setup_wizard.xml

Step 2 of 9

General Information

On this screen the general pfSense parameters will be set.

Hostname
Name of the firewall host, without domain part.
Examples: pfSense, firewall, edgefw

Domain
Domain name for the firewall.
Examples: home.arpa, example.com

Do not end the domain name with 'local' as the final part (Top Level Domain, TLD). The 'local' TLD is widely used by mDNS (e.g. Avahi, Bonjour, Rendezvous, Airprint, Airplay) and some Windows systems and networked devices. These will not network correctly if the router uses 'local' as its TLD. Alternatives such as 'home.arpa', 'local.lan', or 'mylocal' are safe.

The default behavior of the DNS Resolver will ignore manually configured DNS servers for client queries and query root DNS servers directly. To use the manually configured DNS servers below for client queries, visit Services > DNS Resolver and enable DNS Query Forwarding after completing the wizard.

Primary DNS Server

Secondary DNS Server

Override DNS ☒
Allow DNS servers to be overridden by DHCP/PPP on WAN

[Next](#)

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Mise en place du nouveau nom du routeur

pfSense.home.arpa - Wizard pfSense: X

Non sécurisé https://192.168.1.1/wizard.php?xml=setup_wizard.xml

WARNING: The 'admin' account password is set to the default value. [Change the password in the User Manager.](#)

Wizard / pfSense Setup / Time Server Information

Step 3 of 9

Time Server Information

Please enter the time, date and time zone.

Time server hostname
Enter the hostname (FQDN) of the time server.

Timezone

[Next](#)

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Mise en place de la Timezone Paris

Non sécurisé https://192.168.1.1/wizard.php?xml=setup_wizard.xml

WARNING: The 'admin' account password is set to the default value. [Change the password in the User Manager.](#)

Wizard / pfSense Setup / Configure LAN Interface

Step 5 of 9

Configure LAN Interface

On this screen the Local Area Network information will be configured.

LAN IP Address
Type dhcp if this interface uses DHCP to obtain its IP address.

Subnet Mask

[Next](#)

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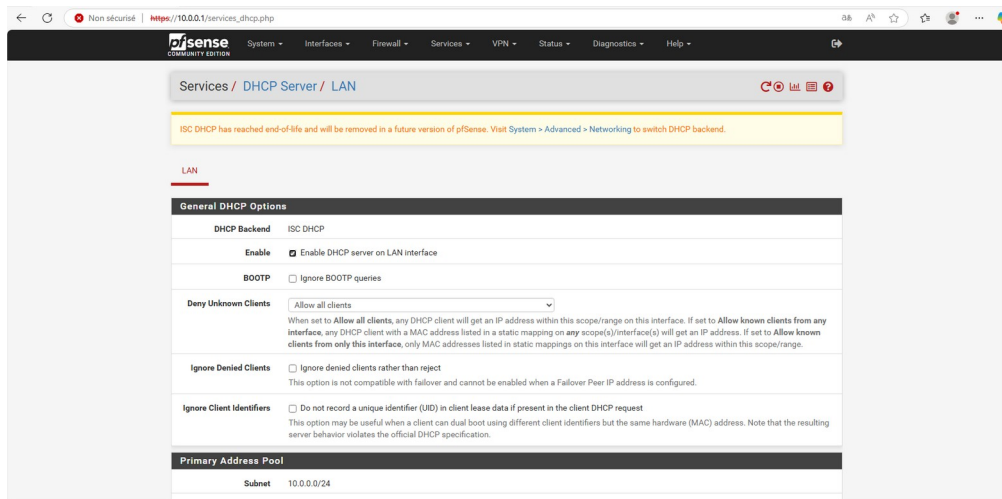
Mise en place d'une nouvelle adresse ip afin de personnaliser notre réseau

The screenshot shows the pfSense Setup Wizard at Step 6 of 9, titled "Set Admin WebGUI Password". A warning message at the top states: "WARNING: The 'admin' account password is set to the default value. Change the password in the User Manager." The wizard progress bar indicates the current step. Below the title, a note says: "On this screen the admin password will be set, which is used to access the WebGUI and also SSH services if enabled." There are two password input fields: "Admin Password" and "Admin Password AGAIN", both containing masked characters. A "Next" button is located at the bottom.

Changement du mot de passe en « adminadmin »

The screenshot shows the pfSense Login page. The header includes the pfSense logo and the text "Login to pfSense". The main content area has a dark blue background with the text "SIGN IN" in white. Below this, the username "admin" is entered in the first field, and the password is masked with asterisks in the second field. A green "SIGN IN" button is positioned below the password field. At the bottom, there is a small link: "pfSense is a trademark and product of NetBSD, Inc. All rights reserved. © 2009 NetBSD Foundation."

Nous voici sur la nouvelle page de connexion avec la nouvelle ip 10.0.0.1



Activation du DHCP

| Primary Address Pool | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subnet | 10.0.0.0/24 |
| Subnet Range | 10.0.0.1 - 10.0.0.254 |
| Address Pool Range | <div>10.0.0.5010.0.0.60</div> <div>FromTo</div> <p>The specified range for this pool must not be within the range configured on any other address pool for this interface.</p> |
| Additional Pools | <div>+ Add Address Pool</div> <p>If additional pools of addresses are needed inside of this subnet outside the above range, they may be specified here.</p> |
| Server Options | |
| WINS Servers | <div>WINS Server 1</div> <div>WINS Server 2</div> |
| DNS Servers | <div>10.0.0.10</div> <div>DNS Server 2</div> <div>DNS Server 3</div> <div>DNS Server 4</div> |

Mise en place de l'étendue pour la distribution d'adresses ip, puis on choisit le DNS qui sera notre Windows serveur

← ↻ Non sécurisée https://10.0.0.1/diag_ping.php

pfSense
COMMUNITY EDITION

System ▾ Interfaces ▾ Firewall ▾ Services ▾ VPN ▾ Status ▾

Diagnostics / Ping

Ping


Hostname

IP Protocol

Source address
Select source address for the ping.

Maximum number of pings
Select the maximum number of pings.

Seconds between pings
Select the number of seconds to wait between pings.

 Ping

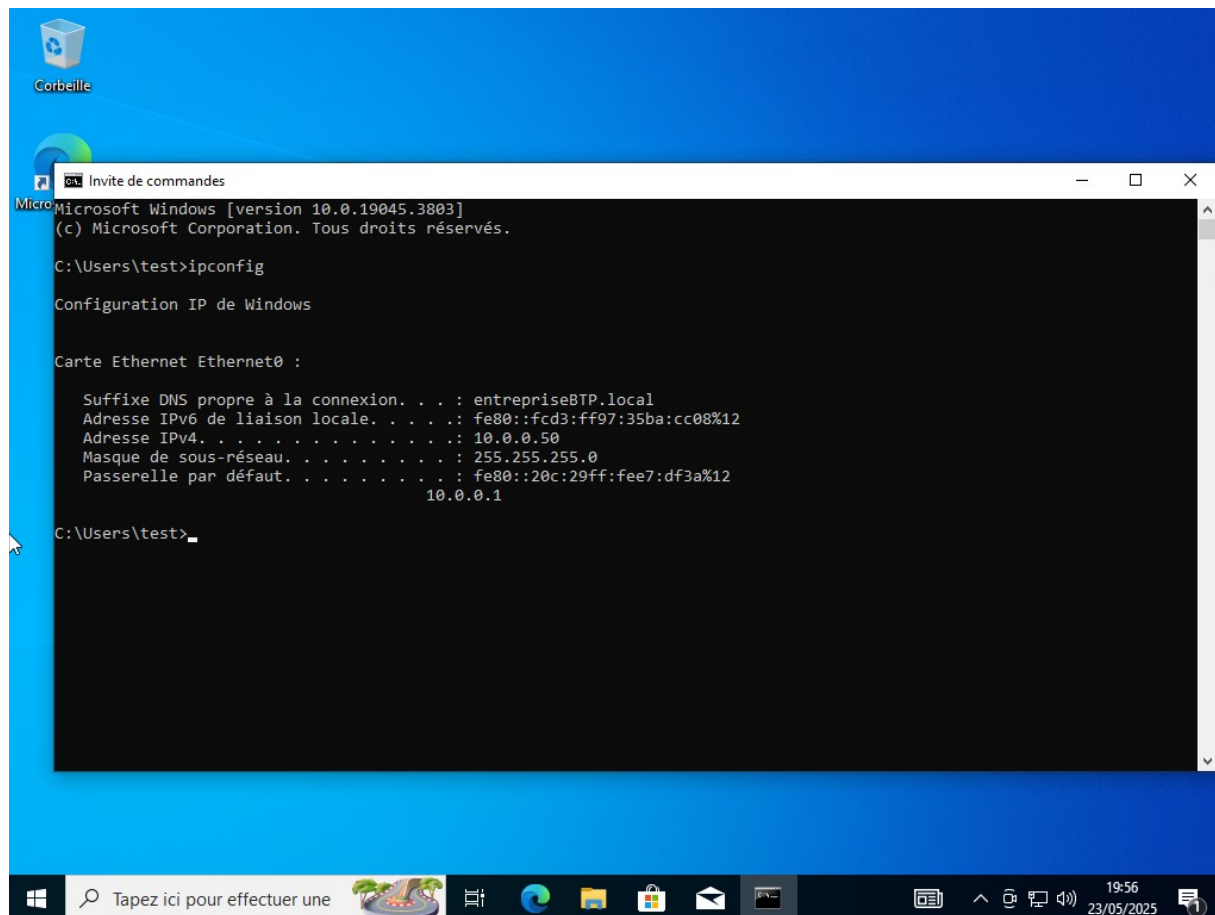
Results

```
PING 8.8.8.8 (8.8.8.8): 56 data bytes
64 bytes from 8.8.8.8: icmp_seq=0 ttl=128 time=13.461 ms
64 bytes from 8.8.8.8: icmp_seq=1 ttl=128 time=20.382 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=128 time=12.677 ms

--- 8.8.8.8 ping statistics ---
3 packets transmitted, 3 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 12.677/15.587/20.382/3.462 ms
```

Test de ping vers le DNS de google, ce qui confirme que pfSense a bien accès à internet depuis l'interface WAN

Test du DHCP sur une machin client :



Une fois l'installation terminée, nous pouvons voir que le pc a bien pris la bonne adresse ip venant du DHCP