

# Autres systèmes réseau

Procédures pour les autres OS réseau

- [Commandes de base MikroTik](#)
- [Configuration de base VyOS](#)
- [Aruba](#)
  - [Hard Reset](#)
  - [Perte du mot passe admin](#)
  - [Initialisation & configuration basique](#)
  - [vLAN & DHCP](#)

# Commandes de base MikroTik

## Commandes principales

### Navigation

Nom de la commande dans l'arborescence	Description
[admin@MikroTik] ip address>.. [admin@MikroTik] ip>	La commande « .. » permet de revenir au niveau inférieur.
[admin@MikroTik] ip address> / [admin@MikroTik] >	La commande « / » permet de revenir à la racine peu importe le niveau où le prompt se trouve.

### Gestion de la configuration

Nom de la commande dans l'arborescence	Description
[admin@MikroTik] system backup> save name=test	Sauvegarder la configuration sous le nom test
[admin@MikroTik] > system backup load name=test Restore and reboot? [y/N]: y	Restaurer la configuration au redémarrage du matériel.
[admin@MikroTik] > system reset-configuration	Effectue un hard reset du matériel (toutes les configurations seront perdu.)
[admin@MikroTik] > system reboot	Redémarrer le matériel

### Commandes de visualisation

Nom de la commande dans l'arborescence	Description
[admin@MikroTik] > file print	Afficher les fichiers stockés sur le matériel
[admin@MikroTik] > ip address print	Afficher les adresses IP affectées aux différentes interfaces
[admin@PB-Router] ip route> print	Afficher la table de routage sur un routeur
[admin@MikroTik] > interface print	Afficher les différentes interfaces présentes (Physiques / virtuelles)
[admin@MikroTik] ip arp> print	Afficher la table arp
[admin@MikroTik] interface ethernet> print detail	Afficher les détails d'une interface.

[admin@MikroTik] interface ethernet> monitor ether1,ether2	Permet le monitoring d'interfaces (Détection des liens / vitesse etc...)
[admin@MikroTik] system console> print	Afficher les différentes consoles
[admin@MikroTik] system package> print	Afficher les différents packages
[admin@office2]> ping 192.168.1.1	Effectue un ping vers la destination spécifiée.
[admin@office2]> ping 8.8.8.8 src-address=192.168.10.254	Permet d'émuler un ping provenant d'une adresse source (sur le réseau local par exemple) vers une adresse de destination (sur Internet)

## Commandes de modification

Nom de la commande dans l'arborescence	Description
[admin@MikroTik] system package> uninstall security [admin@MikroTik] system package> enable ipv6 [admin@MikroTik] > reboot	Exemple de gestion des package : désinstallation du package "Security", Installation du package "ipv6", redémarrage du matériel pour prendre en compte les modifications.
[admin@MikroTik] > interface enable ether1	Activer une interface, dans le cas présent : Activation de l'interface ether 1
[admin@MikroTik] ip address> add address=10.10.10.1/24 interface=ether2	1ère commande : affecter l'adresse 10.10.10.1 et le masque 255.255.255.0 à l'interface nommée "ether2"
[admin@MikroTik] ip route> add dst-address=10.1.12.0/24 gateway=192.168.0.253	Ajouter une route statique vers un réseau (illustration avec le réseau 10.1.12.0/24)
[admin@MikroTik] ip route> add gateway=10.5.8.1	Ajouter une passerelle (10.5.8.1) pour la route par défaut (0.0.0.0)

## Vlan

Nom de la commande dans l'arborescence	Description
[admin@MikroTik] interface vlan> add name=test vlan-id=1 interface=ether1	Ajouter le VLAN 1 nommé test sur l'interface ether 1
[admin@MikroTik] interface vlan> print	Afficher les différents VLAN
[admin@MikroTik] ip address> add address=10.10.10.1/24 interface=test	Ajouter une adresse IP à une interface virtuelle de VLAN (sous-interface par rapport à l'interface physique).

## Services

### DHCP

Etape	Nom de la commande dans l'arborescence	Description

1	[admin@MikroTik] > ip pool add name=dhcp-pool ranges=192.168.1.1-192.168.1.100	Créer une plage d'adresses distribuée par le serveur DHCP : de 192.168.1.1 à 192.168.1.100
2	[admin@MikroTik] > ip dhcp-server network add address=192.168.1.0/24 gateway=192.168.1.254 \ dns-server=159.148.147.194,159.148.60.20	Ajouter la passerelle par défaut et les adresses vers les DNS primaire et secondaires sur dans la plage DHCP configurée précédemment.
3	[admin@MikroTik] > ip dhcp-server add interface=wlan1 address-pool=dhcp-pool	Spécification de l'interface sur laquelle le serveur DHCP doit travailler et de la plage d'adresses IP distribuée.
[admin@MikroTik] ip dhcp-server lease> print		Afficher les adresses IP attribuées par le serveur DHCP.

## Monitoring (Graphiques)

Nom de la commande dans l'arborescence	Description
[admin@MikroTik] tool graphing interface> add interface=ether1	Cette commande active les graphiques pour l'interface ether 1
[admin@MikroTik] tool graphing resource> add allow-address=192.168.0.0/24	Cette option affichera le graphique uniquement pour le réseau 192.168.0.0 /24

## Mises à jour & Mises à niveau

Nom de la commande dans l'arborescence	Description
[admin@MikroTik] > /system package update check-for-updates	Vérifie les mises à jour de paquets
[admin@MikroTik] > /system package update install	Installe les mises à jour de paquets et redémarre automatiquement à la fin
[admin@MikroTik] > /system routerboard print	Affiche si un mise à jour est disponible pour le firmware de la carte-mère
[admin@MikroTik] > /system routerboard upgrade	Effectue la mise à niveau du firmware de la carte-mère
[admin@MikroTik] > /interface lte firmware-upgrade lte1	Affiche si un mise à jour est disponible pour le firmware de la carte LTE lte1
[admin@MikroTik] > /interface lte firmware-upgrade lte1 upgrade=yes	Effectue la mise à niveau du firmware de la carte LTE lte1

## Bonus

L'administration est aussi possible via les logiciels **The Dude** et **Winbox**

# Configuration de base VyOS

*Brouillon*

VyOS est un OS de routeur virtuel à placer dans une VM ou sur une petite 1u

Le lien de téléchargement de Vyos :

<https://downloads.vyos.io/?dir=rolling/current/amd64>

## Configuration minimale

```
conf
set interfaces ethernet eth0 description WAN
set interfaces ethernet eth0 address dhcp
set interfaces ethernet eth1 description LAN
set interfaces ethernet eth1 address 192.168.2.1/24

set service dhcp-server shared-network-name dhcpperiod authoritative
set service dhcp-server shared-network-name subnet 192.168.2.0/24 default-router 192.168.2.1
set service dhcp-server shared-network-name subnet 192.168.2.0/24 dns-server 192.168.2.1
set service dhcp-server shared-network-name subnet 192.168.2.0/24 range 0 start 192.168.2.10
set service dhcp-server shared-network-name subnet 192.168.2.0/24 range 0 stop 192.168.2.200

set nat source rule 99 description LAN2WAN
set nat source rule 99 outbound-interface eth0
set nat source rule 99 source address 192.168.2.0/24
set nat source rule 99 translation address masquerade

commit
save
```

## Configuration simple

```
sudo dpkg-reconfigure keyboard-configuration # Tant qu'a faire, autant mettre le clavier en français...
conf

set interfaces ethernet eth0 address '192.168.1.253/24'
set interfaces ethernet eth0 description 'WAN'
set interfaces ethernet eth1 address '192.168.2.1/24'
set interfaces ethernet eth1 description 'LAN'

set nat source rule 100 outbound-interface 'eth0'
set nat source rule 100 source address '192.168.2.0/24'
set nat source rule 100 translation address 'masquerade'

set service dhcp-server disabled 'false'
set service dhcp-server shared-network-name LAN authoritative 'disable'
set service dhcp-server shared-network-name LAN subnet 192.168.2.0/24 default-router '192.168.2.1'
set service dhcp-server shared-network-name LAN subnet 192.168.2.0/24 dns-server '192.168.2.1'
set service dhcp-server shared-network-name LAN subnet 192.168.2.0/24 domain-name 'lan-interne'
set service dhcp-server shared-network-name LAN subnet 192.168.2.0/24 lease '86400'
set service dhcp-server shared-network-name LAN subnet 192.168.2.0/24 start 192.168.2.128 stop
'192.168.2.255'
set service dns forwarding cache-size '0'
set service dns forwarding listen-on 'eth1'
set service dns forwarding name-server '9.9.9.9'
set service dns forwarding name-server '1.1.1.1'
set service snmp community public authorization 'ro'
set service snmp community public network '192.168.2.0/24'
set service snmp community public network '192.168.1.0/24'
set service snmp contact 'Somebody <someone@somewhe.re>'
set service snmp listen-address 0.0.0.0 port '161'
set service snmp location 'Some hypervisor'
set service ssh port '22'

set system gateway-address '192.168.1.1'
set system host-name 'routeur-NAT'
set system login user vyos authentication plaintext-password 'un mot de passe, pour changer...'
set system login user vyos level 'admin'
set system ntp server '0.pool.ntp.org'
set system ntp server '1.pool.ntp.org'
set system ntp server '2.pool.ntp.org'
set system time-zone 'Europe/Paris'
```

```
set firewall all-ping 'enable'
set firewall broadcast-ping 'disable'
set firewall receive-redirects 'disable'
set firewall send-redirects 'enable'
set firewall source-validation 'disable'
set firewall syn-cookies 'enable'
set firewall twa-hazards-protection 'disable'

# On crée une règle pour autoriser les connexions http https et ssh a arriver depuis le WAN
set firewall name OUTSIDE-IN default-action 'drop'
set firewall name OUTSIDE-IN rule 10 action 'accept'
set firewall name OUTSIDE-IN rule 10 state established 'enable'
set firewall name OUTSIDE-IN rule 10 state related 'enable'
set firewall name OUTSIDE-IN rule 20 action 'accept'
set firewall name OUTSIDE-IN rule 20 destination port '80'
set firewall name OUTSIDE-IN rule 20 protocol 'tcp'
set firewall name OUTSIDE-IN rule 20 state new 'enable'
set firewall name OUTSIDE-IN rule 21 action 'accept'
set firewall name OUTSIDE-IN rule 21 destination port '443'
set firewall name OUTSIDE-IN rule 21 protocol 'tcp'
set firewall name OUTSIDE-IN rule 21 state new 'enable'
set firewall name OUTSIDE-IN rule 22 action 'accept'
set firewall name OUTSIDE-IN rule 22 destination port '22'
set firewall name OUTSIDE-IN rule 22 protocol 'tcp'
set firewall name OUTSIDE-IN rule 22 state new 'enable'

# On crée une règle pour autoriser les connexions déjà établies ainsi que ping ntp et ssh a se connecter au
routeur
set firewall name OUTSIDE-LOCAL default-action 'drop'
set firewall name OUTSIDE-LOCAL rule 10 action 'accept'
set firewall name OUTSIDE-LOCAL rule 10 state established 'enable'
set firewall name OUTSIDE-LOCAL rule 10 state related 'enable'
set firewall name OUTSIDE-LOCAL rule 20 action 'accept'
set firewall name OUTSIDE-LOCAL rule 20 icmp type-name 'echo-request'
set firewall name OUTSIDE-LOCAL rule 20 protocol 'icmp'
set firewall name OUTSIDE-LOCAL rule 20 state new 'enable'
set firewall name OUTSIDE-LOCAL rule 30 action 'drop'
set firewall name OUTSIDE-LOCAL rule 30 destination port '22'
set firewall name OUTSIDE-LOCAL rule 30 protocol 'tcp'
set firewall name OUTSIDE-LOCAL rule 30 recent count '4'
```

```
set firewall name OUTSIDE-LOCAL rule 30 recent time '60'
set firewall name OUTSIDE-LOCAL rule 30 state new 'enable'
set firewall name OUTSIDE-LOCAL rule 31 action 'accept'
set firewall name OUTSIDE-LOCAL rule 31 destination port '22'
set firewall name OUTSIDE-LOCAL rule 31 protocol 'tcp'
set firewall name OUTSIDE-LOCAL rule 31 state new 'enable'
set firewall name OUTSIDE-LOCAL rule 40 action 'accept'
set firewall name OUTSIDE-LOCAL rule 40 destination port '161'
set firewall name OUTSIDE-LOCAL rule 40 protocol 'udp'
set firewall name OUTSIDE-LOCAL rule 40 state new 'enable'

set interfaces ethernet eth0 firewall in name 'OUTSIDE-IN'
set interfaces ethernet eth0 firewall local name 'OUTSIDE-LOCAL'

commit
save
```

## Script de sauvegarde de configuration

```
#!/bin/vbash
source /opt/vyatta/etc/functions/script-template

run show configuration commands > $HOME/$(date +%Y%m%d)-$(hostname)-vyos.conf.txt
```

# Aruba

A été utilisé un Aruba S2500-24p-4x10g

# Hard Reset

Au niveau de l'écran LCD

- Allez dans le menu Maintenance et sélectionnez "Factory Default"
- Effectuer via le menu le reboot du switch

## **Information de login par défaut**

admin/admin123

# Perte du mot passe admin

En console

```
Utilisateur: mot de passe
Mot de passe: forgetme!
(Aruba) > activer
Mot de passe: activer
(Aruba) #configure terminal entrez les commandes de configuration, une par ligne. Fin avec
CNTL/Z
Aruba) (config) #mgmt-User Admin mot de passe root: < new admin password >
Re-tapez mot de passe: < new admin password >
(Aruba) (config) #exit
(Aruba) #exit
(Aruba) > Exit
```

```
Utilisateur: admin
Mot de passe: < new admin password >
(Aruba) > activer
Mot de passe: activer
(Aruba) #configure terminal entrez les commandes de configuration, une par ligne. Fin avec
CNTL/Z
(Aruba) (config) #enable secret
Mot de passe: < new enable password >
Re-tapez mot de passe: < new enable password >
(Aruba) (config) #write mémoire
```

# Initialisation & configuration basique

## Notes pré installation :

Les câbles console de chez Cisco fonctionne très bien.

Baud Rate	Data Bits	Parity	Stop Bits	Flow Control
9600	8	None	1	Off

## Configuration via GUI quick config

The screenshot shows the Aruba Quick Setup Wizard interface. The top right corner displays the Aruba Networks logo. The main title is "Basic Information for the Device". A sub-instruction says "Specify the name, password, tunneled server IP address, and data/time for the Device." Below this, there are fields for Name (ArubaS2500-24P), Country Code (FR-France), Password for user "admin", Retype, Password for Enable Mode, Retype, and Tunneled Server IP Address. Date & Time settings include options for NTP or manual entry, with specific date (May 21, 2020), time (18:40:00), and timezone (GMT +02:00) selected. Navigation on the left shows steps 1 (Basic Info), 2 (Management), and 3 (Finish). At the bottom right are "Next" and "Cancel" buttons.

Workflow Help Time remaining to complete the quick setup wizard: 00:03:11

## Management

You can specify the following management interface options for your device.

- VLAN:** Specify the VLAN ID for this device.
- IP Address Configuration:** Select the source of IP address for this device. You can assign static IP address or assign IP address using a DHCP server. To assign **Static IP**, enter the following details:
  - IP Address:** Enter the static IP address. This device supports IPv4 and IPv6 address types.
  - Netmask:** Specify the netmask IP address for your IP address.
  - DNS:** Specify the DNS server for the device.
  - Default Gateway:** Specify the default gateway IP address for this device.
- Select **DHCP** to use IP address assigned by your DHCP server.

Inband management VLAN interface:

VLAN: 1

All Ports:	Upstream Ports:
	GE-0/0/0 GE-0/0/1 GE-0/0/2 GE-0/0/3 GE-0/0/4 GE-0/0/5 GE-0/0/6 GE-0/0/7 GE-0/0/8 GE-0/0/9

IP address assignment:

Static  
 DHCP

IP Address : 192.168.1.201  
 Net Mask : 255.255.255.0  
 Default Gateway : 192.168.1.1

Out of band management interface:

IP Address :   
 Net Mask :

Configure Airwave Management(AMP) Parameters:

Back Next Cancel

La mise en page sous IE est étrange, mais l'important est de pouvoir la valider la configuration basique.

### Ready to Push Configuration to ArubaS2500-24P

The settings you have specified are summarized below. [More...](#)

#### Device Setup Summary

18:43:37, Thu May 21 2020



##### Basic Info

Name: ArubaS2500-24P  
 Location: FR-France  
 Date: 2020 May 21  
 Time: 18:40:00 (hr min sec)  
 TimeZone: GMT +02:00 FRA

##### Management

VLAN: 1  
 Upstream Ports : GE-0/0/0,GE-0/0/1,GE-0/0/2,GE-0/0/3,GE-0/0/4,GE-0/0/5,GE-0/0/6,GE-0/0/7,GE-0/0/8,GE-0/0/9,GE-0/0/10,GE-0/0/11,GE-0/0/12,GE-0/0/13,GE-0/0/14,GE-0/0/15,GE-0/0/16,GE-0/0/17,GE-0/0/18,GE-0/0/19,GE-0/0/20,GE-0/0/21  
 IP address assignment: Static  
 IP Address : 192.168.1.201  
 Net Mask : 255.255.255.0  
 Default Gateway : 192.168.1.1

To display the summary information in a separate window so you can print or save it, [click here](#)

>To complete the wizard and apply the settings you have specified, click the **Finish** button below.

NOTE: When you click **Finish**, your Ethernet connection will go away if DHCP is not configured on this VLAN.

Back | **Finish** | Cancel

# Casser le staking présent par défaut

```
(ArubaS2500-24P) (config) #show interface brief
```

Interface	Admin	Link	Line Protocol	Speed/Duplex
GE0/0/0	Enable	Up	1 Gbps	/ Full
GE0/0/1	Enable	Down	Down	N/A
GE0/0/2	Enable	Up	100 Mbps	/ Full
GE0/0/3	Enable	Down	Down	N/A
GE0/0/4	Enable	Up	100 Mbps	/ Full
GE0/0/5	Enable	Down	Down	N/A
GE0/0/6	Enable	Up	100 Mbps	/ Full
GE0/0/7	Enable	Down	Down	N/A
GE0/0/8	Enable	Up	100 Mbps	/ Full
GE0/0/9	Enable	Down	Down	N/A
GE0/0/10	Enable	Down	Down	N/A
GE0/0/11	Enable	Down	Down	N/A
GE0/0/12	Enable	Down	Down	N/A
GE0/0/13	Enable	Down	Down	N/A
GE0/0/14	Enable	Down	Down	N/A
GE0/0/15	Enable	Down	Down	N/A
GE0/0/16	Enable	Down	Down	N/A
GE0/0/17	Enable	Down	Down	N/A
GE0/0/18	Enable	Down	Down	N/A
GE0/0/19	Enable	Down	Down	N/A
GE0/0/20	Enable	Down	Down	N/A
GE0/0/21	Enable	Down	Down	N/A
GE0/0/22	Enable	Down	Down	N/A
GE0/0/23	Enable	Down	Down	N/A
GE0/1/0	Enable	Down	Down	N/A
GE0/1/1	Enable	Down	Down	N/A
MGMT	Enable	Down	Down	N/A

```
(ArubaS2500-24P) (config) # show stacking interface
```

**stack1/2**

-----
stack1/2 is administratively Enabled, link is Down, line protocol is Down
Speed: N/A, MTU: 9224 bytes, Link flaps: 0
Last update of counters: 0d 00:00:00 ago
Last clearing of counters: 0d 00:00:00 ago
Link status last changed: 0d 00:00:00 ago
Statistics:

```
Received 0 frames, 0 octets
0 pps, 0 bps
0 broadcasts, 0 runts, 0 giants, 0 throttles
0 error octets, 0 CRC frames
0 multicast, 0 unicast
Transmitted 0 frames, 0 octets
0 pps, 0 bps
0 broadcasts, 0 throttles
0 multicast, 0 unicast
0 errors octets, 0 deferred
0 collisions, 0 late collisions
```

### **stack1/3**

---

```
stack1/3 is administratively Enabled, link is Down, line protocol
is Down
```

```
Speed: N/A, MTU: 9224 bytes, Link flaps: 0
```

```
Last update of counters: 0d 00:00:00 ago
```

```
Last clearing of counters: 0d 00:00:00 ago
```

```
Link status last changed: 0d 08:13:09 ago
```

```
Statistics:
```

```
Received 0 frames, 0 octets
```

```
0 pps, 0 bps
```

```
0 broadcasts, 0 runts, 0 giants, 0 throttles
```

```
0 error octets, 0 CRC frames
```

```
0 multicast, 0 unicast
```

```
Transmitted 0 frames, 0 octets
```

```
0 pps, 0 bps
```

```
0 broadcasts, 0 throttles
```

```
0 multicast, 0 unicast
```

```
0 errors octets, 0 deferred
```

```
0 collisions, 0 late collisions
```

```
(ArubaS2500-24P) (config) # delete stacking interface stack 1/2
```

```
(ArubaS2500-24P) (config) # delete stacking interface stack 1/3
```

```
(ArubaS2500-24P) (config) #show interface brief
```

### Interface Admin Link Line Protocol Speed/Duplex

---

```
-----  
GE0/0/0 Enable Up Up 1 Gbps / Full
```

```
GE0/0/1 Enable Down Down N/A
```

```
GE0/0/2 Enable Up Up 100 Mbps / Full
```

```
GE0/0/3 Enable Down Down N/A
```

```
GE0/0/4 Enable Up Up 100 Mbps / Full
```

```
GE0/0/5 Enable Down Down N/A
```

```
GE0/0/6 Enable Up Up 100 Mbps / Full  
GE0/0/7 Enable Down Down N/A  
GE0/0/8 Enable Up Up 100 Mbps / Full  
GE0/0/9 Enable Down Down N/A  
GE0/0/10 Enable Down Down N/A  
GE0/0/11 Enable Down Down N/A  
GE0/0/12 Enable Down Down N/A  
GE0/0/13 Enable Down Down N/A  
GE0/0/14 Enable Down Down N/A  
GE0/0/15 Enable Down Down N/A  
GE0/0/16 Enable Down Down N/A  
GE0/0/17 Enable Down Down N/A  
GE0/0/18 Enable Down Down N/A  
GE0/0/19 Enable Down Down N/A  
GE0/0/20 Enable Down Down N/A  
GE0/0/21 Enable Down Down N/A  
GE0/0/22 Enable Down Down N/A  
GE0/0/23 Enable Down Down N/A  
GE0/1/0 Enable Down Down N/A  
GE0/1/1 Enable Down Down N/A  
GE0/1/2 Enable Down Down N/A  
GE0/1/3 Enable Down Down N/A  
MGMT Enable Down Down N/A
```

## Ajout d'un utilisateur

```
(ArubaS2500-24P) (config) #mgmt-user ?
```

```
<username> Name of the user (maximum 16 characters).  
localauth-disable Disable Local authentication event if RADIUS  
authentication timeout.  
password-recovery-dis.. Disable recovery login  
ssh-pubkey SSH login of management users by public key  
authentication  
webui-cacert CA Certificate used to sign management user's  
certificate
```

```
(ArubaS2500-24P) (config) #mgmt-user nida ?
```

```
<rolename> Role name from one of the following:  
root - super user role  
guest-provisioning - guest provisioning role  
network-operations - Network operator role
```

read-only - Read only role  
location-api-mgmt - Location API Management Role

```
(ArubaS2500-24P) (config) #mgmt-user nida root
Password:*****
Re-Type password:*****
```

```
(ArubaS2500-24P) (config) #show mgmt-user
```

Management User Table

-----  
USER PASSWD ROLE STATUS  
-----

```
admin ***** root ACTIVE
nida ***** root ACTIVE
```

## Jumbo Frames

```
(ArubaS2500-24P) (config) #show interface gigabitethernet 0/0/0
```

GE0/0/0 is administratively Up, Link is Up, Line protocol is Upq  
Hardware is Gigabit Ethernet, Interface is GE0/0/0, Address is  
00:0b:86:aa:a6:c2  
Encapsulation ARPA, Loopback not set  
Configured: duplex (Auto), Speed (Auto), FC (Off), Autoneg (On)  
Negotiated: duplex (Full), Speed (1 Gbps)  
Interface index: 1  
**MTU 1514 bytes**

```
(ArubaS2500-24P) (config) #interface gigabitethernet 0/0/0
```

```
(ArubaS2500-24P) (gigabitethernet "0/0/0") #mtu ?
```

<mtu> Set MTU on interface between 64 and 9216

```
(ArubaS2500-24P) (gigabitethernet "0/0/0") #mtu 9216
```

```
(ArubaS2500-24P) (config) #show interface gigabitethernet 0/0/0
```

GE0/0/0 is administratively Up, Link is Up, Line protocol is Up  
Hardware is Gigabit Ethernet, Interface is GE0/0/0, Address is  
00:0b:86:aa:a6:c2  
Encapsulation ARPA, Loopback not set  
Configured: duplex (Auto), Speed (Auto), FC (Off), Autoneg (On)

Negotiated: duplex (Full), Speed (1 Gbps)  
Interface index: 1  
**MTU 9216 bytes**

## Configuration SNMP v2

```
(ArubaS2500-24P) (config) #show snmp community

SNMP COMMUNITIES
-----
COMMUNITY ACCESS VERSION
-----
Zer0t0uchpr0visi0ning READ_ONLY V1, V2C

(ArubaS2500-24P) (config) #hostname ArubaS2500-24P
(ArubaS2500-24P) (config) #syscontact monitoring
(ArubaS2500-24P) (config) #syslocation France
(ArubaS2500-24P) (config) #snmp-server community public
(ArubaS2500-24P) (config) #snmp-server enable trap
(ArubaS2500-24P) (config) #snmp-server host 192.168.1.205
community public
(ArubaS2500-24P) (config) #snmp-server engine-id ?

<engineid>    Engine ID of SNMP server in HEX (10-64 chars) eg.
800039e703000b86112233

(ArubaS2500-24P) (config) #snmp-server engine-id
800039e703000b86112233
```

## Configuration SNMP v3

# vLAN & DHCP

## Création d'un vLan

```
(ArubaS2500-24P) (VLAN "4") #vlan 10  
(ArubaS2500-24P) (VLAN "10") #description lab  
(ArubaS2500-24P) (VLAN "10") #exit
```

## Attribution d'une IP

```
(ArubaS2500-24P) (vlan "10") #ip address 172.16.255.250 255.255.0.0  
(ArubaS2500-24P) (vlan "10") #mtu 1500  
(ArubaS2500-24P) (vlan "10") #exit
```

## Configuration du switching-profile pour le vLAN

```
(ArubaS2500-24P) (config) #interface-profile switching-profile vlan10-sw  
(ArubaS2500-24P) (switching profile "vlan10-sw") #switchport-mode access  
(ArubaS2500-24P) (switching profile "vlan10-sw") #access-vlan 10  
(ArubaS2500-24P) (switching profile "vlan10-sw") #native-vlan 10  
(ArubaS2500-24P) (switching profile "vlan10-sw") #exit
```

## Application du vLAN à un port

```
(ArubaS2500-24P) (config) #interface gigabitethernet 0/0/0  
(ArubaS2500-24P) (gigabitethernet "0/0/8") #switching-profile vlan10-sw  
(ArubaS2500-24P) (gigabitethernet "0/0/8") #exit
```

## Application du vLAN à un groupe de ports

```
(ArubaS2500-24P) (config) #interface-group gigabitethernet vlan10-grp  
(ArubaS2500-24P) (gigabitethernet "vlan10") #apply-to 0/0/0-0/0/3  
(ArubaS2500-24P) (gigabitethernet "vlan10") #trusted port  
(ArubaS2500-24P) (gigabitethernet "vlan10") #no shutdown  
(ArubaS2500-24P) (gigabitethernet "vlan10") #switching-profile vlan10  
(ArubaS2500-24P) (gigabitethernet "vlan10") #exit  
(ArubaS2500-24P) (config) #exit  
(ArubaS2500-24P) #write memory
```

---

## Ajout ou suppression d'interface à un vLAN

```
(ArubaS2500-24P) (gigabitethernet "vlan10") #apply-to [add | remove] <interface-list>
```

---

## DHCP

```
(ArubaS2500-24P) (config) #ip dhcp pool vlan10-pool
(ArubaS2500-24P) (dhcp server profile "vlan10-pool") #
(ArubaS2500-24P) (dhcp server profile "vlan10-pool") #?
clone          Copy data from another dhcp server profile
default-router DHCP default router in A.B.C.D format
dns-server     DNS servers in A.B.C.D format
domain-name   Specify domain name
exclude-address Configure exclude address
hardware-address MAC address of the device
lease          DHCP server pool lease time (Default: 12 hours)
netbios-name-server Configure netbios name servers in A.B.C.D format
network        DHCP server network pool
no             Delete Command
option         Configure server option
vendor-class-identifi.. Configure vendor-class-identifier (Default: ArubaAP)
```