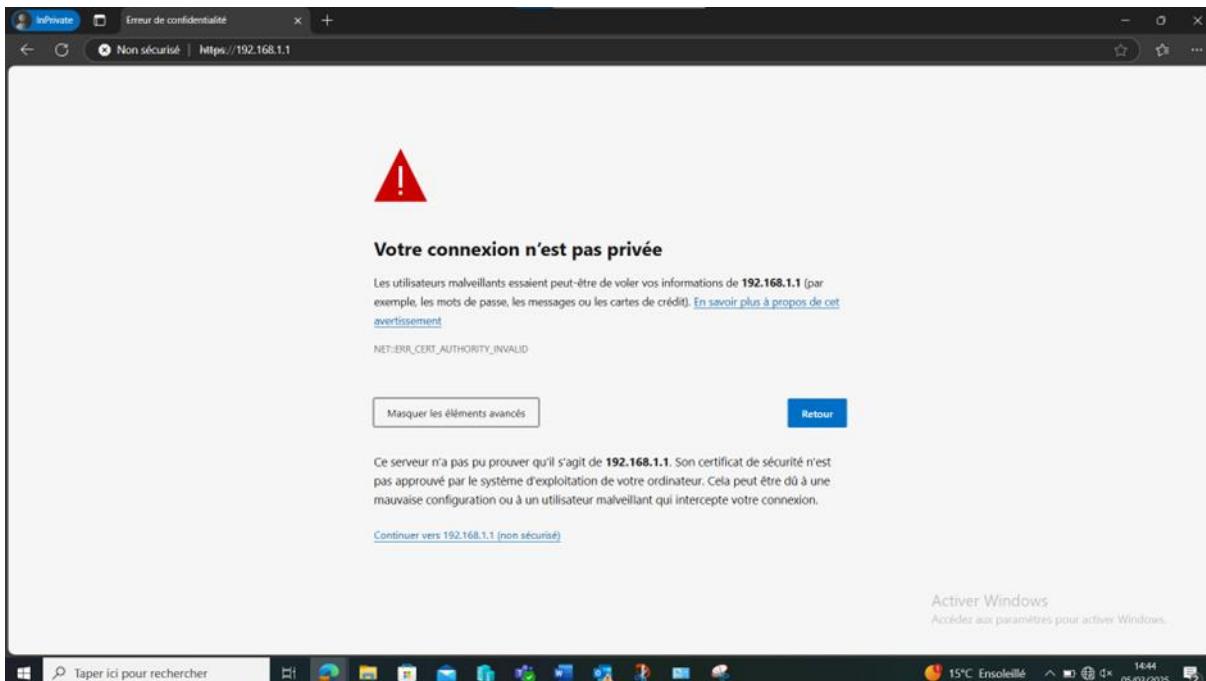


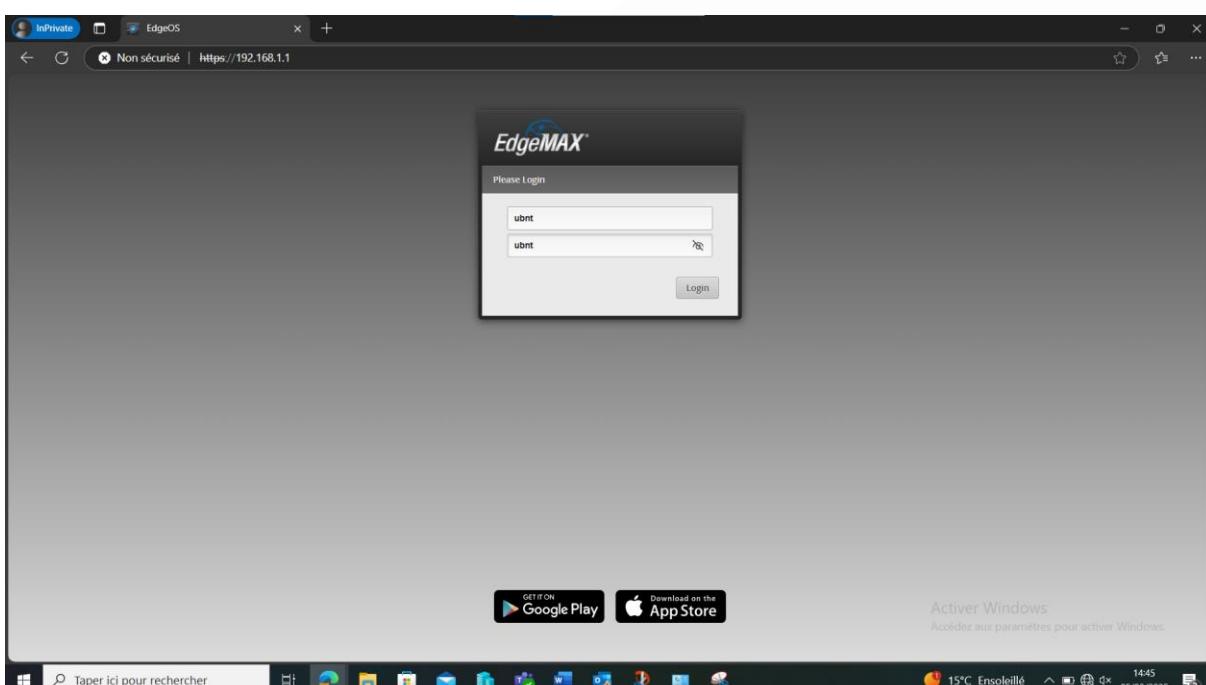
CONFIGURATION MATERIELLE BAIE

Routeur Ubiquiti

J'ai configuré l'adresse IP de mon ordinateur sur le réseau 192.168.1.0/24 afin d'attendre l'adresse par défaut du routeur : **192.168.1.1**.



Je me suis ensuite connectée avec les identifiants par défaut qui sont : **ubnt ubnt**



J'ai changé les identifiants du routeur pour plus de sécurité, ainsi que son adresse IP. Ceux-ci sont désormais :

Configuration de mon routeur et de mes switches

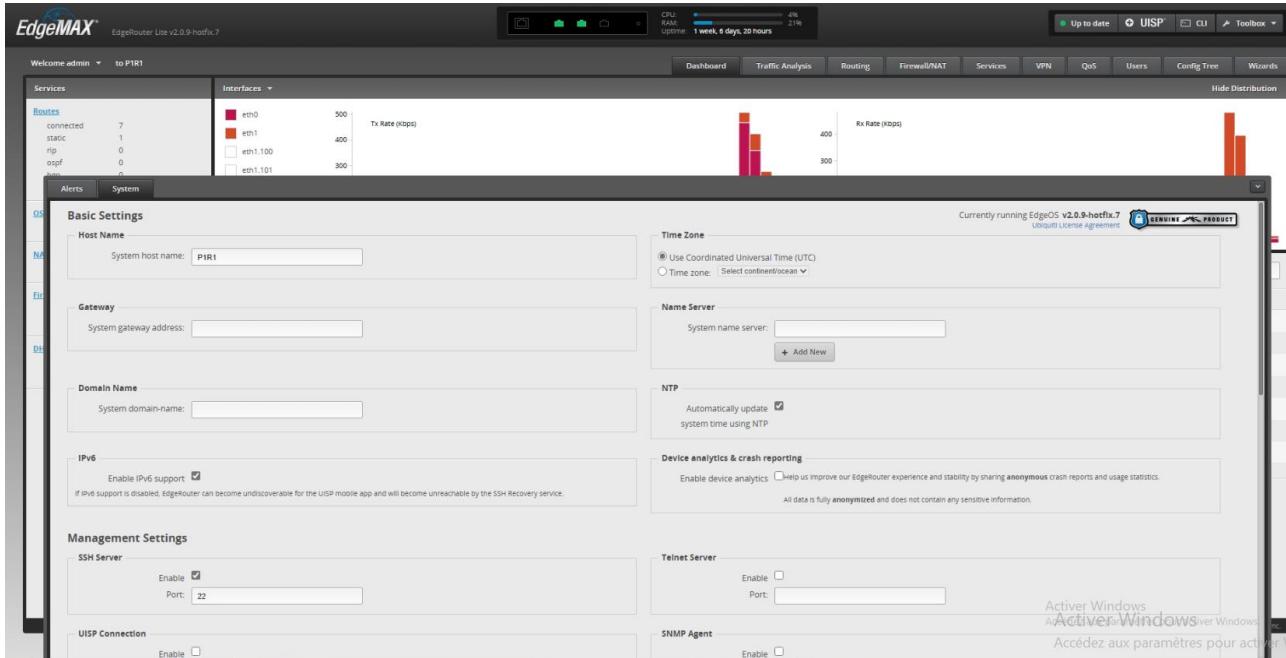
ID : admin

MDP : P@ssw0rd

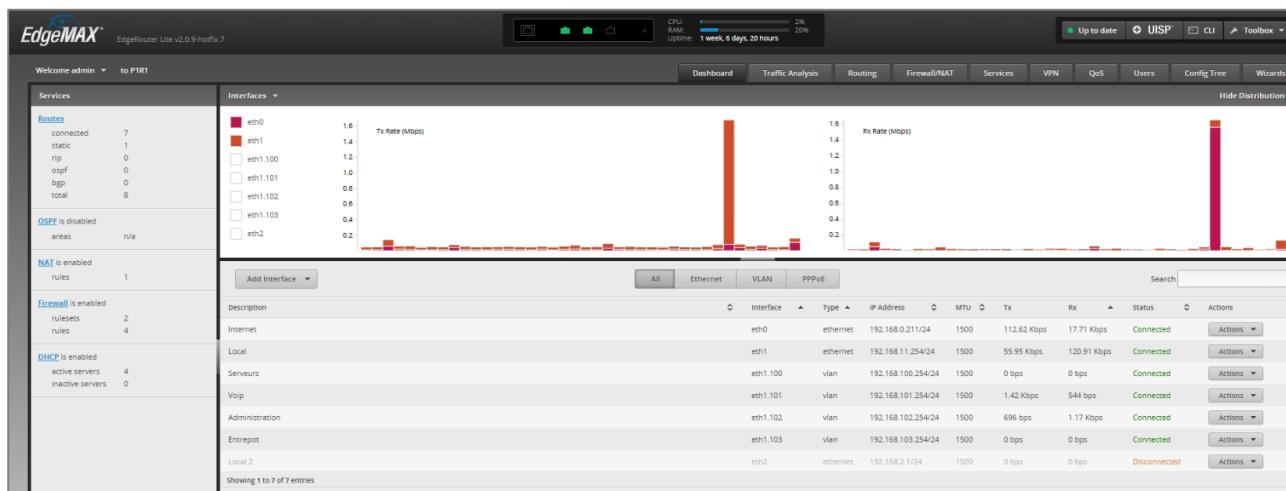
IP : 192.168.11.254

Voici la **configuration** appliquée à mon routeur :

J'ai débord nommé mon routeur **P1R1**.



J'ai configuré mon EdgeRouter avec l'interface eth0 connectée à Internet et eth1 utilisée pour le réseau local. Sur eth1, j'ai créé plusieurs VLANs : eth1.100 pour les serveurs, eth1.101 pour la VoIP, eth1.102 pour l'administration et eth1.103 pour l'entrepôt.



J'ai configuré quatre serveurs DHCP sur mon routeur, chacun associé à un sous-réseau différent :

- **LAN1** : 192.168.1.0/24, avec une plage de 256 adresses IP disponibles.
- **Vlan101** : 192.168.101.0/24, avec une plage de 16 adresses (+4 réservées).

Configuration de mon routeur et de mes switches

- **Vlan102** : 192.168.102.0/24, avec une plage de 20 adresses.
- **Vlan103** : 192.168.103.0/24, également avec une plage de 20 adresses.

Le serveur DHCP est actif sur chacun de ces réseaux pour attribuer automatiquement les adresses IP aux appareils connectés. Je peux aussi voir combien d'adresses sont actuellement louées ou encore disponibles.

Name	subnet	Pool size	Leased	Available	static
LAN1	192.168.11.0/24	206	1	205	0
Vlan101	192.168.101.0/24	16	3	13	4
Vlan102	192.168.102.0/24	20	1	19	0
Vlan103	192.168.103.0/24	20	1	19	0

Sur le DHCP de mon Vlan 101, celui de la VOIP, j'ai réalisé une réservation pour 4 appareils afin que leur adresse IP demeure fixe. Il s'agit des téléphones SIP 1, 2, 3 et du standard Asterisk.

Name	MAC Address	IP Address
StandardAsterisk	00:15:5d:01:c9:9e	192.168.101.7
TelSIP1	24:9a:d8:6e:3a:e6	192.168.101.8
TelSIP2	24:9a:d8:6e:38:7e	192.168.101.9
TelSIP3	00:08:5d:28:8e:66	192.168.101.10

J'ai mis en place une file intelligente (Smart Queue) nommée VoIP-QoS sur l'interface eth1.101, qui correspond au VLAN dédié à la VoIP. Cette configuration fait partie de la gestion de la qualité de service (QoS) afin de prioriser le trafic vocal. J'ai défini une limite de 2000 Kbit/s en upload et 1000 Kbit/s en download, appliquée aux flux montants et descendants, pour assurer une bande passante stable et suffisante aux communications VoIP.

Switches Cisco

Dans le cadre de mon projet, j'ai mis en place une infrastructure réseau composée de plusieurs switches interconnectés entre eux, avec une agrégation de liens entre eux. J'ai également activé le protocole Spanning Tree (STP) afin de gérer la redondance et la tolérance aux pannes.

Agrégation de liens entre switches

L'agrégation de liens (souvent appelée LACP – Link Aggregation Control Protocol lorsqu'elle est dynamique) permet de combiner plusieurs ports physiques entre deux switches pour créer un lien logique unique. Cela présente plusieurs avantages :

- ➔ **Amélioration de la bande passante** : les données peuvent circuler sur plusieurs liaisons en parallèle, ce qui augmente la capacité totale entre les switches.
- ➔ **Équilibrage de charge** : le trafic réseau est réparti entre les liens agrégés, évitant les saturations sur un seul lien.
- ➔ **Continuité de service** : si un câble ou un port tombe en panne, le trafic passe automatiquement par les autres liens du groupe agrégé.

Spanning Tree Protocol (STP)

Le STP est activé pour éviter les boucles réseau, qui peuvent rendre le réseau instable. Il détecte les chemins redondants et désactive temporairement ceux qui ne sont pas nécessaires, tout en gardant une alternative prête si un lien principal échoue.

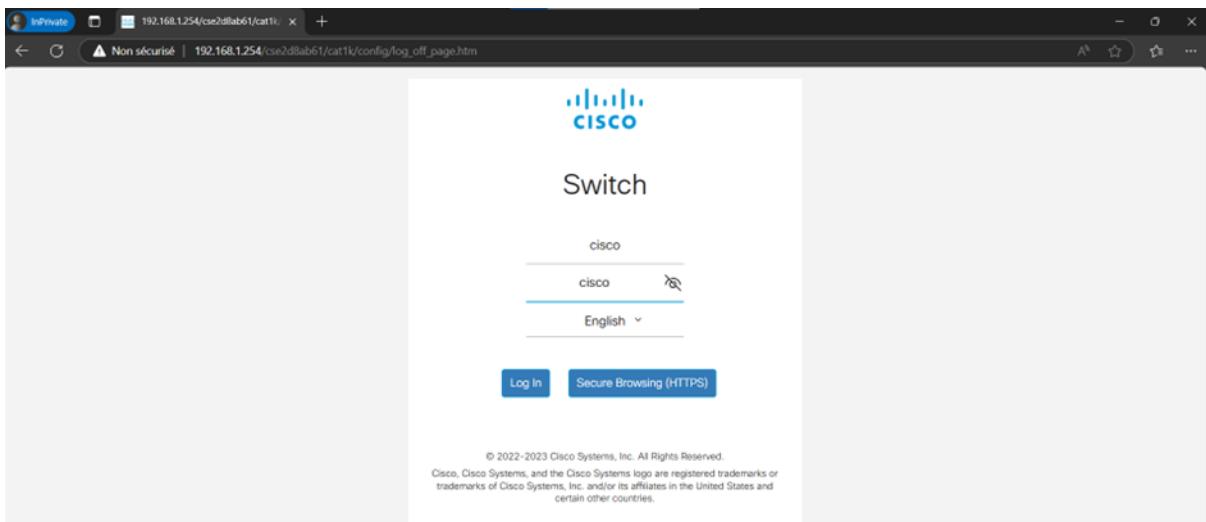
Avantages de cette architecture

Redondance et tolérance aux pannes :

- ➔ Grâce à l'agrégation et au STP, le réseau peut continuer à fonctionner même en cas de défaillance d'un lien ou d'un switch.
- ➔ Performance accrue : L'agrégation permet de mieux gérer les flux importants entre switches.
- ➔ Fiabilité : Le réseau est protégé contre les boucles qui pourraient le faire cracher.

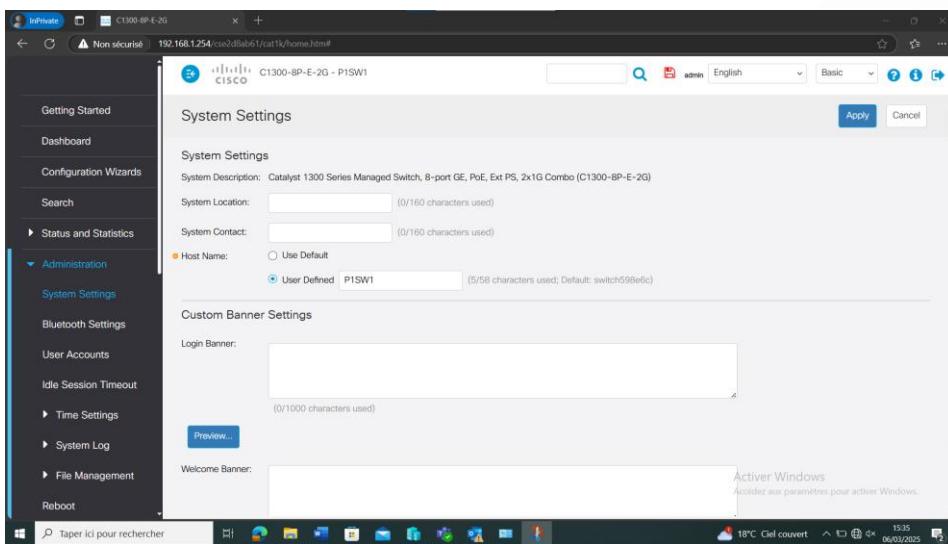
Pour chacun de mes switches, j'ai commencé par les connecter à l'adresse IP par défaut 192.168.1.254 en ayant pris soin d'attribuer une adresse ip sur le même réseau à mon ordinateur, et ai utilisé les identifiants par défaut : cisco cisco.

Configuration de mon routeur et de mes switches



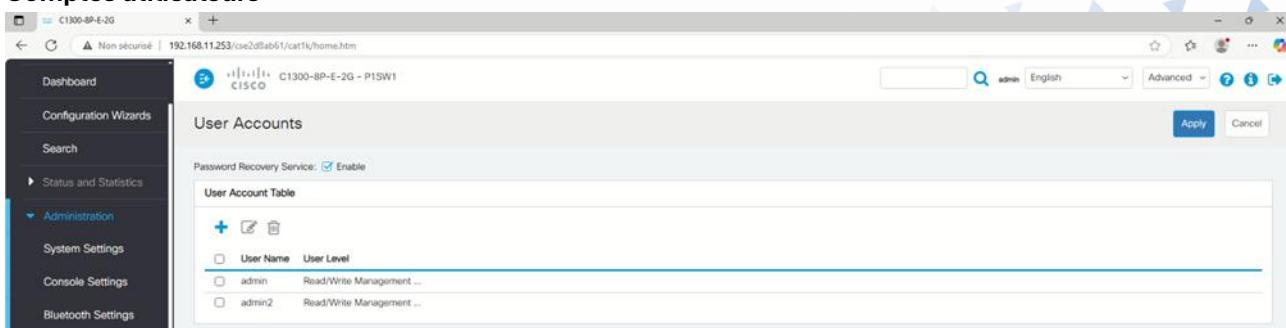
J'ai ensuite changé les identifiants et mots de passe pour chacun de mes switches. C'est la première étape proposée lors de la première connexion.

Ensuite, j'ai changé le nom de mes appareils. Respectivement : P1SW1, P1SW2 et P1SW3, comme étiqueté dans ma baie.



Configuration de mon switch SW1

Comptes utilisateurs



Configuration de mon routeur et de mes switches

Ports actifs

The screenshot shows the 'Port Management' section with 'Port Settings' selected. It displays the configuration for 10 ports (GE1 to GE10). All ports are set to 1000M-Copper, Up, Enabled, and have a protection state of Unprotected.

Entry No.	Port	Port Type	Operational Status	Link Status	Time Range	Name	State	Port Speed	Duplex Mode	LAG	Protection State
○ 1	GE1 (P1-SW2)	1000M-Copper	Up	Enabled				1000M	Full	1	Unprotected
○ 2	GE2 (P1-SW2)	1000M-Copper	Up	Enabled				1000M	Full	1	Unprotected
○ 3	GE3 (P1-SW2)	1000M-Copper	Up	Enabled				1000M	Full	1	Unprotected
○ 4	GE4 (P1-SW3)	1000M-Copper	Up	Enabled				1000M	Full		Unprotected
○ 5	GE5 (Hyper-V)	1000M-Copper	Up	Enabled				1000M	Full		Unprotected
○ 6	GE6 (P1-AD1)	1000M-Copper	Up	Enabled				1000M	Full		Unprotected
○ 7	GE7	1000M-Copper	Up	Enabled				1000M	Full		Unprotected
○ 8	GE8 (P1-R1)	1000M-Copper	Up	Enabled				1000M	Full		Unprotected
○ 9	GE9	1000M-ComboC	Down	Enabled							Unprotected
○ 10	GE10	1000M-ComboC	Down	Enabled							Unprotected

LAG Management

The screenshot shows the 'Port Management' section with 'LAG Management' selected. It displays the configuration for 8 LAGs (LAG 1 to LAG 8). All LAGs are disabled and have a link state of Link Not Present.

LAG	Name	LACP	Link State	Active Member	Standby Member
○ LAG 1		Disabled	Link Up	GE1, GE2, GE3	
○ LAG 2			Link Not Present		
○ LAG 3			Link Not Present		
○ LAG 4			Link Not Present		
○ LAG 5			Link Not Present		
○ LAG 6			Link Not Present		
○ LAG 7			Link Not Present		
○ LAG 8			Link Not Present		

LAG Settings

The screenshot shows the 'Port Management' section with 'LAG Settings' selected. It displays the configuration for 8 LAGs (LAG 1 to LAG 8). All LAGs are enabled, have a status of Up, and are using Auto Negotiation.

Entry No.	LAG	Type	Status	Link Status	Time Range	SNMP Traps	Name	State	Auto Negotiation	Speed	Flow Control	Protection State
○ 1	LAG 1	1000M	Up	Enabled					Enabled	1000M	Disabled	Unprotected
○ 2	LAG 2			Enabled								Unprotected
○ 3	LAG 3			Enabled								Unprotected
○ 4	LAG 4			Enabled								Unprotected
○ 5	LAG 5			Enabled								Unprotected
○ 6	LAG 6			Enabled								Unprotected
○ 7	LAG 7			Enabled								Unprotected
○ 8	LAG 8			Enabled								Unprotected

VLAN Membership

The screenshot shows the 'VLAN Management' section with 'VLAN Settings' selected. It displays the configuration for 4 VLANs (VLAN 1 to VLAN 103). All VLANs are static, enabled, and have a link status of Enabled.

VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status	SNMP Traps
○ 1	Administration	Default	Enabled	Enabled	
○ 100	Static	Enabled	Enabled		
○ 101	Static	Enabled	Enabled		
○ 102	Static	Enabled	Enabled		
○ 103	Static	Enabled	Enabled		

Configuration de mon routeur et de mes switches

VLAN GE5

Interface	Mode	Administrative VLANs	Operational VLANs	LAG
GE1 (P1-SW2)	Access	1U		1
GE2 (P1-SW2)	Access	1U		1
GE3 (P1-SW2)	Access	1U		1
GE4 (P1-SW3)	Access	1U	1U	
GE5 (Hyper-V)	Trunk	1U, 2-99, 100-103T, 100-103T	1U, 100-103T	
GE6 (P1-AD1)	Access	1U	1U	
GE7	Access	1U	1U	
GE8 (P1-R1)	Trunk	1U, 2-99, 100-103T, 100-103T	1U, 100-103T	
GE9	Access	1U	1U	
GE10	Access	1U	1U	

STP Settings

Entry No.	Interface	STP	Edge Port	Root Guard	BPDU Guard	BPDU Handling	Port Role	Path Cost	Priority	Port State	Designated Bridge ID	Designated Port ID	Designated Cost	Forward Tra
1	GE1 (P1-SW2)	Enabled	Disabled	Disabled	Disabled	STP	Disable	2000000	128	N/A	N/A	N/A	N/A	N/A
2	GE2 (P1-SW2)	Enabled	Disabled	Disabled	Disabled	STP	Disable	2000000	128	N/A	N/A	N/A	N/A	N/A
3	GE3 (P1-SW2)	Enabled	Disabled	Disabled	Disabled	STP	Disable	2000000	128	N/A	N/A	N/A	N/A	N/A
4	GE4 (P1-SW3)	Enabled	Disabled	Disabled	Disabled	STP	Designated	20000	128	Forwarding	32768-e4:a4:1c:59:8e:6c	128-4	10000	4
5	GE5 (Hyper-V)	Enabled	Enabled	Disabled	Disabled	STP	Designated	20000	128	Forwarding	32768-e4:a4:1c:59:8e:6c	128-5	10000	1
6	GE6 (P1-AD1)	Enabled	Enabled	Disabled	Disabled	STP	Designated	20000	128	Forwarding	32768-e4:a4:1c:59:8e:6c	128-6	10000	1
7	GE7	Enabled	Enabled	Disabled	Disabled	STP	Designated	20000	128	Forwarding	32768-e4:a4:1c:59:8e:6c	128-7	10000	1
8	GE8 (P1-R1)	Enabled	Enabled	Disabled	Disabled	STP	Designated	20000	128	Forwarding	32768-e4:a4:1c:59:8e:6c	128-8	10000	1
9	GE9	Enabled	Disabled	Disabled	Disabled	STP	Disable	2000000	128	Disabled	N/A	N/A	N/A	N/A
10	GE10	Enabled	Disabled	Disabled	Disabled	STP	Disable	2000000	128	Disabled	N/A	N/A	N/A	N/A

Spanning Tree State:	<input checked="" type="checkbox"/> Enable
STP Loopback Guard:	<input type="checkbox"/> Enable
STP Operation Mode:	<input type="radio"/> Classic STP <input checked="" type="radio"/> Rapid STP <input type="radio"/> Multiple STP <input type="radio"/> Per VLAN STP <input type="radio"/> Rapid Per VLAN STP
BPDU Handling:	<input type="radio"/> Filtering <input type="radio"/> Flooding
Path Cost Default Values:	<input type="radio"/> Short <input checked="" type="radio"/> Long
Bridge Settings	
Priority:	32768 (Range: 0 - 61440, Default: 32768)
Hello Time:	2 sec (Range: 1 - 10, Default: 2)
Max Age:	20 sec (Range: 6 - 40, Default: 20)
Forward Delay:	15 sec (Range: 4 - 30, Default: 15)
Designated Root	
Bridge ID:	32768-e4:a4:1c:59:8e:6c
Root Bridge ID:	32768-58:8b:1c:64:ba:7c
Root Port:	LAG1

Configuration de mon routeur et de mes switches

IPv4 Interface

The screenshot shows the Cisco WebUI interface for managing IPv4 interfaces. The left sidebar includes options like Getting Started, Dashboard, Configuration Wizards, Status and Statistics, Administration, Port Management, Smartport, VLAN Management, Spanning Tree, and MAC Address Tables. The main content area displays the 'IPv4 Interface' table with the following data:

Interface	IP Address Type	IP Address	Mask	Status
VLAN 1	Static	192.168.11.253	255.255.255.0	Valid
VLAN 100	Static	192.168.100.253	255.255.255.0	Valid
VLAN 101	Static	192.168.101.253	255.255.255.0	Valid
VLAN 102	Static	192.168.102.253	255.255.255.0	Valid
VLAN 103	Static	192.168.103.253	255.255.255.0	Valid

STP Settings

The screenshot shows the Cisco WebUI interface for RSTP settings. The left sidebar includes options like Administration, Port Management, Smartport, VLAN Management, Spanning Tree, and various IP-related configurations. The main content area displays the 'RSTP Interface Setting Table' with the following data:

Entry No.	Interface	Point-to-Point Operational Status	Port Role	Mode	Fast Link Operational Status	Port Status
1	GE1 (P1-SW2)	Enabled (LAG 1)	Disabled (LAG 1)	RSTP (LAG 1)	Disabled (LAG 1)	Disabled (LAG 1)
2	GE2 (P1-SW2)	Enabled (LAG 1)	Disabled (LAG 1)	RSTP (LAG 1)	Disabled (LAG 1)	Disabled (LAG 1)
3	GE3 (P1-SW2)	Enabled (LAG 1)	Disabled (LAG 1)	RSTP (LAG 1)	Disabled (LAG 1)	Disabled (LAG 1)
4	GE4 (P1-SW3)	Enabled	Designated	RSTP	Disabled	Forwarding
5	GE5 (Hyper-V)	Enabled	Designated	RSTP	Enabled	Forwarding
6	GE6 (P1-AD1)	Enabled	Designated	RSTP	Enabled	Forwarding
7	GE7	Enabled	Designated	RSTP	Enabled	Forwarding
8	GE8 (P1-R1)	Enabled	Designated	RSTP	Enabled	Forwarding
9	GE9	Enabled	Disabled	RSTP	Disabled	Disabled
10	GE10	Enabled	Disabled	RSTP	Disabled	Disabled

QoS Properties

The screenshot shows the Cisco WebUI interface for Quality of Service properties. The left sidebar includes options like MAC Address Tables, Multicast, IPv4 Configuration, IPv6 Configuration, General IP Configuration, Security, Access Control, and Quality of Service (with sub-options like General, QoS Properties, Queue, CoS/802.1p to Queue, DSQoS to Queue, Bandwidth, Egress Shaping Per Queue, and VLAN Ingress Rate Limit). The main content area displays the 'QoS Properties' table with the following data:

Entry No.	Interface	Default CoS
1	GE1 (P1-SW2)	0
2	GE2 (P1-SW2)	0
3	GE3 (P1-SW2)	0
4	GE4 (P1-SW3)	0
5	GE5 (Hyper-V)	0
6	GE6 (P1-AD1)	0
7	GE7	0
8	GE8 (P1-R1)	0
9	GE9	0
10	GE10	0

QoS Interface Settings

The screenshot shows the Cisco WebUI interface for Global Settings under Quality of Service. The left sidebar includes options like IPv6 Configuration, General IP Configuration, Security, Access Control, and Quality of Service (with sub-options like General, QoS Properties, Queue, CoS/802.1p to Queue, DSQoS to Queue, Bandwidth, Egress Shaping Per Queue, and VLAN Ingress Rate Limit). The main content area displays the 'Global Settings' table with the following data:

Trust Mode:	CoS/802.1p	DSCP	CoS/802.1p-DSCP
Override Ingress DSCP:	<input type="checkbox"/> Enable	<input checked="" type="radio"/> DSCP	<input type="checkbox"/> CoS/802.1p-DSCP

Configuration de mon routeur et de mes switches

Configuration de mon switch SW2

Comptes utilisateurs

The screenshot shows the 'User Accounts' section of the Cisco C1300-8P-E-2G switch configuration interface. The left sidebar includes options like Bluetooth Settings, User Accounts, and Reboot. The main area displays a table titled 'User Account Table' with two entries: 'admin' and 'admin2', both assigned to 'Read/Write Management' level.

Ports actifs

The screenshot shows the 'Port Settings' section of the Cisco C1300-8P-E-2G switch configuration interface. The left sidebar lists various port management settings. The main area displays a table titled 'Port Settings Table' listing ten ports (GE1 to GE10) with their respective configurations: speed (1000M), duplex mode (Full), and protection state (Unprotected).

LAG Management

The screenshot shows the 'LAG Management' section of the Cisco C1300-8P-E-2G switch configuration interface. The left sidebar includes LAG Management settings. The main area displays a table titled 'LAG Management Table' showing eight LAGs (LAG 1 to LAG 8) with their link states and member ports.

LAG Settings

The screenshot shows the 'LAG Settings' section of the Cisco C1300-8P-E-2G switch configuration interface. The left sidebar includes LAG Settings. The main area displays a table titled 'LAG Settings Table' showing eight LAGs (LAG 1 to LAG 8) with their properties like type, status, auto-negotiation, speed, flow control, and protection state.

Configuration de mon routeur et de mes switches

VLAN SETTINGS

The screenshot shows the 'VLAN Settings' page of a Cisco switch configuration interface. The left sidebar navigation includes 'Status and Statistics', 'Administration', 'Port Management', 'Smartport', 'VLAN Management' (selected), 'VLAN Settings' (under VLAN Management), 'Interface Settings', 'Port to VLAN', 'Port VLAN Membership', and 'Voice VLAN'. The main content area is titled 'VLAN Settings' and contains a 'VLAN Table' with the following data:

VLAN ID	VLAN Name	Originators	VLAN Interface State	Link Status	SNMP Traps
1	Default	Enabled	Enabled		
100	Serveurs	Static	Enabled	Enabled	
101	Voip	Static	Enabled	Enabled	
102	Administration	Static	Enabled	Enabled	
103	Entrepot	Static	Enabled	Enabled	

VLAN PORTS MEMBERSHIP

The screenshot shows the 'Port VLAN Membership' page of a Cisco switch configuration interface. The left sidebar navigation includes 'Status and Statistics', 'Administration', 'Port Management', 'Smartport', 'VLAN Management' (selected), 'VLAN Settings' (under VLAN Management), 'Interface Settings', 'Port to VLAN', 'Port VLAN Membership' (selected), 'Voice VLAN', 'Auto-Surveillance VLAN', 'Spanning Tree', 'MAC Address Tables', 'Multicast', and 'IPv4 Configuration'. The main content area is titled 'Port VLAN Membership' and contains a 'Port VLAN Membership Table' with the following data:

Interface	Mode	Administrative VLANs	Operational VLANs	LAG
GE1 (P1-SW1)	Access	1U		1
GE2 (P1-SW1)	Access	1U		1
GE3 (P1-SW1)	Access	1U		1
GE4 (P1-SW3)	Trunk	IU, 100-103T	IU, 100-103T	
GE5 (Hyper-V)	Trunk	IU, 100-103T	IU, 100-103T	
GE6 (P1-AD2)	Access	1U	1U	
GE7	Access	1U	1U	
GE8 (P1-R1)	Trunk	IU, 100-103T	IU, 100-103T	
GE9	Access	1U	1U	
GE10	Access	1U	1U	

STP Settings

The screenshot shows the 'STP Interface Settings' page of a Cisco switch configuration interface. The left sidebar navigation includes 'Dashboard', 'Configuration Wizards', 'Search', 'Status and Statistics', 'Administration', 'Port Management', 'Smartport', 'VLAN Management', 'Spanning Tree' (selected), 'STP Status & Global Settings', 'STP Interface Settings' (selected), 'RSTP Interface Settings', and 'MAC Address Tables'. The main content area is titled 'STP Interface Settings' and contains a 'STP Interface Setting Table' with the following data:

Entry No.	Interface	STP	Edge Port	Port Role	Priority	Port State	Designated Bridge ID	Designated Port ID	Designated Cost	Forward Transitions	LAG
1	GE1 (P1-SW1)	Enabled	Disabled	Disable	128	N/A	N/A	N/A	N/A	N/A	1
2	GE2 (P1-SW1)	Enabled	Disabled	Disable	128	N/A	N/A	N/A	N/A	N/A	1
3	GE3 (P1-SW1)	Enabled	Disabled	Disable	128	N/A	N/A	N/A	N/A	N/A	1
4	GE4 (P1-SW3)	Enabled	Disabled	Designated	128	Forwarding	32768-58:8b:1c:64:ba:7c	128-4	0	1	
5	GE5 (Hyper-V)	Enabled	Enabled	Designated	128	Forwarding	32768-58:8b:1c:64:ba:7c	128-5	0	1	
6	GE6 (P1-AD2)	Enabled	Enabled	Designated	128	Forwarding	32768-58:8b:1c:64:ba:7c	128-6	0	1	
7	GE7	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
8	GE8 (P1-R1)	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
9	GE9	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
10	GE10	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	

Configuration de mon routeur et de mes switches

STP Status & Global Settings

Global Settings

- Spanning Tree State: Enable
- STP Loopback Guard: Enable
- STP Operation Mode:
 - Classic STP
 - Rapid STP
 - Multiple STP *
 - Per VLAN STP *
 - Rapid Per VLAN STP *
- BPDU Handling:
 - Filtering
 - Flooding
- Path Cost Default Values:
 - Short
 - Long

Bridge Settings

Priority:	32768	(Range: 0 - 61440, Default: 32768)
Hello Time:	2	sec (Range: 1 - 10, Default: 2)
Max Age:	20	sec (Range: 6 - 40, Default: 20)
Forward Delay:	15	sec (Range: 4 - 30, Default: 15)

Designated Root

Bridge ID:	32768-58:8b:1c:64:ba:7c
Root Bridge ID:	32768-58:8b:1c:64:ba:7c
Root Port:	0

[Activer Windows](#)
Accédez aux paramètres pour activer Windows.

IPv4 Interface

IPv4 Interface

IPv4 Routing: Enable

IPv4 Interface Table

Interface	IP Address Type	IP Address	Mask	Status
VLAN 1	Static	192.168.11.252	255.255.255.0	Valid
VLAN 100	Static	192.168.100.252	255.255.255.0	Valid
VLAN 101	Static	192.168.101.252	255.255.255.0	Valid
VLAN 102	Static	192.168.102.252	255.255.255.0	Valid
VLAN 103	Static	192.168.103.252	255.255.255.0	Valid

QoS Properties

QoS Properties

QoS Mode:

- Disable
- Basic
- Advanced *

An * indicates an advanced feature. Activate advanced display mode to fully configure this feature.

Interface CoS Configuration Table

Interface CoS Configuration Table		
Restore CoS Defaults		
Entry No.	Interface	Default CoS
1	GE1 (P1-SW1)	0
2	GE2 (P1-SW1)	0
3	GE3 (P1-SW1)	0
4	GE4 (P1-SW3)	0
5	GE5 (Hyper-V)	0
6	GE6 (P1-AD2)	0
7	GE7	0
8	GE8 (P1-R1)	0
9	GE9	0
10	GE10	0

QoS Interface Settings

Global Settings

Trust Mode:

- CoS/R02.1p
- DSCP
- CoS/R02.1p-DSCP

Override Ingress DSCP: Enable

Configuration de mon routeur et de mes switches

Configuration de mon switch SW3

Comptes utilisateurs

User Name	User Level
admin	ReadWrite Management ...
admin2	ReadWrite Management ...

Ports actifs

Entry No.	Port	Port Type	Operational Status	Port Speed	Duplex Mode	LAG	Protection State
1	GE1 (P1-SW1)	1000M-Copper	Up	1000M	Full		Unprotected
2	GE2 (P1-SW2)	1000M-Copper	Up	1000M	Full		Unprotected
3	GE3	1000M-Copper	Down				Unprotected
4	GE4	1000M-Copper	Down				Unprotected
5	GE5	1000M-Copper	Down				Unprotected
6	GE6	1000M-Copper	Down				Unprotected
7	GE7	1000M-Copper	Up	1000M	Full		Unprotected
8	GE8	1000M-Copper	Down				Unprotected
9	GE9	1000M-Copper	Up	1000M	Full		Unprotected
10	GE10	1000M-Copper	Up	100M	Full		Unprotected
11	GE11	1000M-Copper	Down				Unprotected
12	GE12	1000M-Copper	Down				Unprotected
13	GE13	1000M-Copper	Down				Unprotected
14	GE14	1000M-Copper	Down				Unprotected
15	GE15	1000M-Copper	Down				Unprotected
16	GE16	1000M-Copper	Down				Unprotected
17	GE17	1000M-Copper	Down				Unprotected
18	GE18	1000M-Copper	Down				Unprotected
19	GE19	1000M-Copper	Down				Unprotected
20	GE20	1000M-Copper	Down				Unprotected
21	GE21	1000M-Copper	Down				Unprotected
22	GE22	1000M-Copper	Down				Unprotected
23	GE23	1000M-Copper	Down				Unprotected
24	GE24	1000M-Copper	Up	1000M	Full		Unprotected
25	XG1	10G-FiberOptics	Down				Unprotected
26	XG2	10G-FiberOptics	Down				Unprotected
27	XG3	10G-FiberOptics	Down				Unprotected
28	XG4	10G-FiberOptics	Down				Unprotected

LAG Management

LAG	Name	LACP	Link State	Active Member	Standby Member
LAG 1			Link Not Present		
LAG 2			Link Not Present		
LAG 3			Link Not Present		
LAG 4			Link Not Present		
LAG 5			Link Not Present		
LAG 6			Link Not Present		
LAG 7			Link Not Present		
LAG 8			Link Not Present		

LAG Settings

Entry No.	LAG	Type	Status	Auto Negotiation	Speed	Flow Control	Protection State
1	LAG 1						Unprotected
2	LAG 2						Unprotected
3	LAG 3						Unprotected
4	LAG 4						Unprotected
5	LAG 5						Unprotected
6	LAG 6						Unprotected
7	LAG 7						Unprotected
8	LAG 8						Unprotected

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VLAN ID	VLAN Name	Originator	VLAN Interface State	Link Status	SNMP Traps
1	Default	Enabled	Enabled		
100	Serveur	Static	Enabled	Enabled	
101	Voip	Static	Enabled	Enabled	
102	Administration	Static	Enabled	Enabled	
103	Entrepot	Static	Enabled	Enabled	

VLAN PORTS MEMBERSHIP

Interface	Mode	Administrative VLANs	Operational VLANs	LAG
GE1 (P1-SW1)	Trunk	1U, 100-103T	1U, 100-103T	
GE2 (P1-SW2)	Trunk	1U, 100-103T	1U, 100-103T	
GE3	Access	1U	1U	
GE4	Access	1U	1U	
GE5	Access	1U	1U	
GE6	Access	1U	1U	
GE7	Access	101U	101U	
GE8	Access	101U	101U	
GE9	Access	101U	101U	
GE10	Access	101U	101U	
GE11	Access	1U	1U	
GE12	Access	1U	1U	
GE13	Access	1U	1U	
GE14	Access	1U	1U	
GE15	Access	1U	1U	
GE16	Access	1U	1U	
GE17	Access	1U	1U	
GE18	Access	1U	1U	
GE19	Access	1U	1U	
GE20	Access	1U	1U	
GE21	Access	1U	1U	
GE22	Access	1U	1U	
GE23	Access	1U	1U	
GE24	Trunk	1U, 100-103T	1U, 100-103T	
XG1	Access	1U	1U	
XG2	Access	1U	1U	
XG3	Access	1U	1U	

Port 24 = Borne Wifi

Port 7, 8, 9, 10 = Téléphones SIP

STP Settings

Entry No.	Interface	STP	Edge Port	Port Role	Priority	Port State	Designated Bridge ID	Designated Port ID	Designated Cost	Forward Transitions	LAG
1	GE1 (P1-SW1)	Enabled	Disabled	Alternate	128	Discarding	32768-e4:a4:1c:59:8e:6c	128-4	10000	4	
2	GE2 (P1-SW2)	Enabled	Disabled	Root	128	Forwarding	32768-58:8b:1c:64:bc:7c	128-4	0	1	
3	GE3	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
4	GE4	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
5	GE5	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
6	GE6	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
7	GE7	Enabled	Enabled	Designated	128	Forwarding	32768-84:5a:3e:83:48:de	128-7	20000	1	
8	GE8	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
9	GE9	Enabled	Enabled	Designated	128	Forwarding	32768-84:5a:3e:83:48:de	128-9	20000	1	
10	GE10	Enabled	Enabled	Designated	128	Forwarding	32768-84:5a:3e:83:48:de	128-10	20000	1	
11	GE11	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
12	GE12	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
13	GE13	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
14	GE14	Enabled	Enabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
15	GE15	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
16	GE16	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
17	GE17	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
18	GE18	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
19	GE19	Enabled	Disabled	Disable	128	Disabled	N/A	N/A	N/A	N/A	
20	GE20	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
21	GE21	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
22	GE22	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
23	GE23	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
24	GE24	Enabled	Enabled	Designated	128	Forwarding	32768-84:5a:3e:83:48:de	128-24	20000	1	
25	XG1	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
26	XG2	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
27	XG3	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	
28	XG4	Enabled	Disabled	Designated	128	Disabled	N/A	N/A	N/A	N/A	

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STP Status & Global Settings

Global Settings

Spanning Tree State: Enable

STP Loopback Guard: Enable

STP Operation Mode: Classic STP Rapid STP Multiple STP* Per VLAN STP* Rapid Per VLAN STP*

BPDU Handling: Filtering Flooding

Path Cost Default Values: Short Long

Bridge Settings

Priority:	32768	(Range: 0 - 61440, Default: 32768)
Hello Time:	2	sec (Range: 1 - 10, Default: 2)
Max Age:	20	sec (Range: 6 - 40, Default: 20)
Forward Delay:	15	sec (Range: 4 - 30, Default: 15)

Designated Root

Bridge ID:	32768-84:3e:03:04:b0:c0
Root Bridge ID:	32768-58:8b:1c:64:b0:c0
Root Port:	GE1/2
Root Path Cost:	20000
Topology Changes Count:	18
Last Topology Change:	788122

Active Windows Active Windows Active Windows

IPv4 Interface

IPv4 Interface

IPv4 Routing: Enable

IPv4 Interface Table

Interface	IP Address Type	IP Address	Mask	Status
VLAN 1	Static	192.168.11.251	255.255.255.0	Valid
VLAN 100	Static	192.168.100.251	255.255.255.0	Valid
VLAN 101	Static	192.168.101.251	255.255.255.0	Valid
VLAN 102	Static	192.168.102.251	255.255.255.0	Valid
VLAN 103	Static	192.168.103.251	255.255.255.0	Valid

QoS Properties

QoS Properties

QoS Mode: Disable Basic Advanced*

An * indicates an advanced feature. Activate advanced display mode to fully configure this feature.

Interface CoS Configuration Table

Port	Interface	Default CoS
1	GE1 (P1-SW1)	0
2	GE2 (P1-SW2)	0
3	GE3	0
4	GE4	0
5	GE5	0
6	GE6	0
7	GE7	0
8	GE8	0
9	GE9	0
10	GE10	0
11	GE11	0
12	GE12	0
13	GE13	0
14	GE14	0
15	GE15	0
16	GE16	0
17	GE17	0
18	GE18	0

Active Windows Active Windows Active Windows

QoS Interface Settings

Global Settings

Trust Mode: Cisco802.1p DSQoS Cisco802.1p+DSQoS

Override Ingress DSQoS: Enabled

DSCP Override Table