L2 Managed Switch

Management and SSH

1. Full Configuration for Management and SSH

1.1. Access to the Management Interface

By default, the switch has an IP address of **192.168.1.1/24** in **VLAN 1**.
For the initial connection:

1.1.1. Set the network interface of your computer to the same subnet (**192.168.1.x, subnet mask 255.255.255.0**).
1.1.2. Connect to the switch through the **console port**.

1.2. Creating VLAN 100 for Management

Enter configuration mode and create the new VLAN:

```
Switch#
Switch# configure
Switch(config)# vlan 100
Switch(config-vlan)# name MGMT
Switch(config-vlan)# exit
Switch(config)#
```

1.3. Assigning a Port for Management

Select the physical port through which management will be done (for example, **GigabitEthernet 23**):

```
Switch(config)# ip address 192.168.100.100 mask 255.255.255.0
Switch(config)# ip default-gateway 192.168.100.1
Switch(config)# management-vlan vlan 100
Switch(config)#
```

After this, access via **192.168.1.1** will be disabled, and management will only be available through **192.168.100.100**.

1.4. Configuring SSH for Secure Management

Enable SSH and set it to use version 2:

```
Switch(config)# ip ssh v2
Generating a SSHv2 default RSA Key.
This may take a few minutes, depending on the key size.

*Jan 01 2000 08:06:27: %SYSTEM-4: CPU Usage 100%
Generating a SSHv2 default DSA Key.
This may take a few minutes, depending on the key size.

Switch(config)#
```

The system will automatically generate RSA and DSA keys for SSH. After generating the keys, activate SSH:

```
Switch(config)#
Switch(config)# ip ssh
SSH daemon enabled.
```

The switch will now accept SSH connections.

2. Configuring Management and SSH via Web Interface

2.1. Access the Web Interface

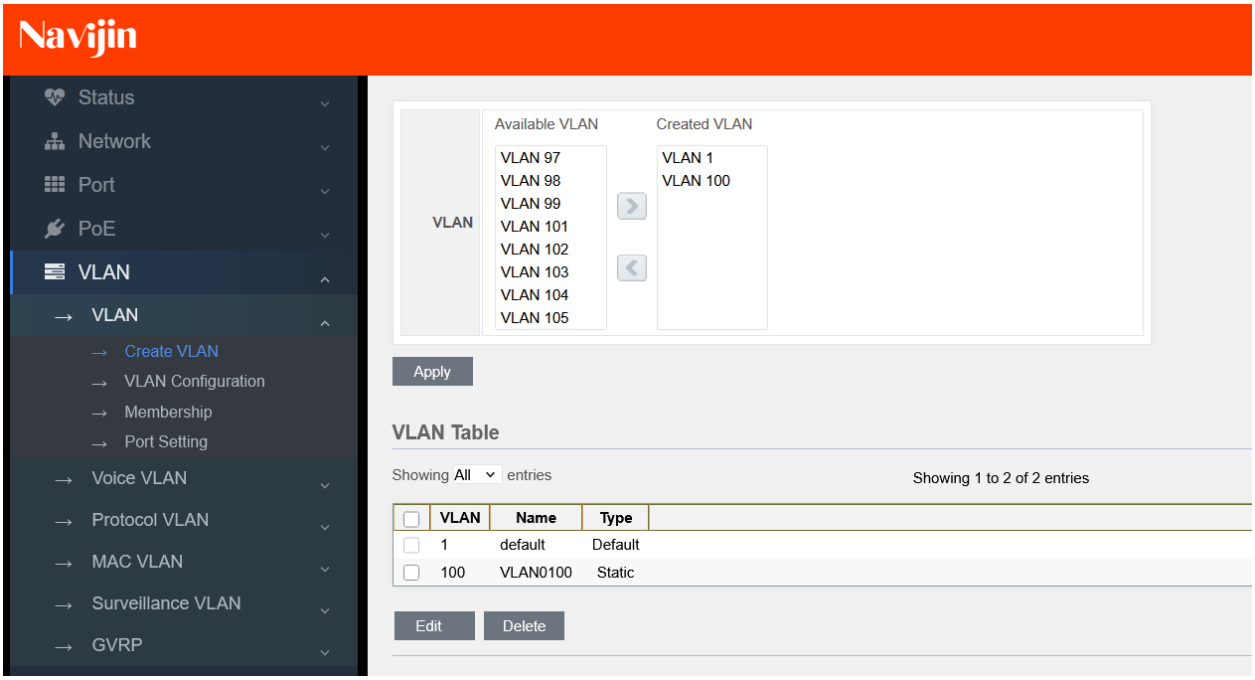
By default, the switch has an IP address of **192.168.1.1/24** in **VLAN 1**. To access the web interface for initial configuration:

2.1.1. Set the network interface of your computer to the same subnet (**192.168.1.x, subnet mask 255.255.255.0**).
2.1.2. Open a web browser and type the default IP address of the switch (**192.168.1.1**) in the address bar.
2.1.3. Log in using the default username and password (usually **admin**/**admin**).

2.2. Create VLAN 100 for Management

Once logged in, follow these steps to create VLAN 100:

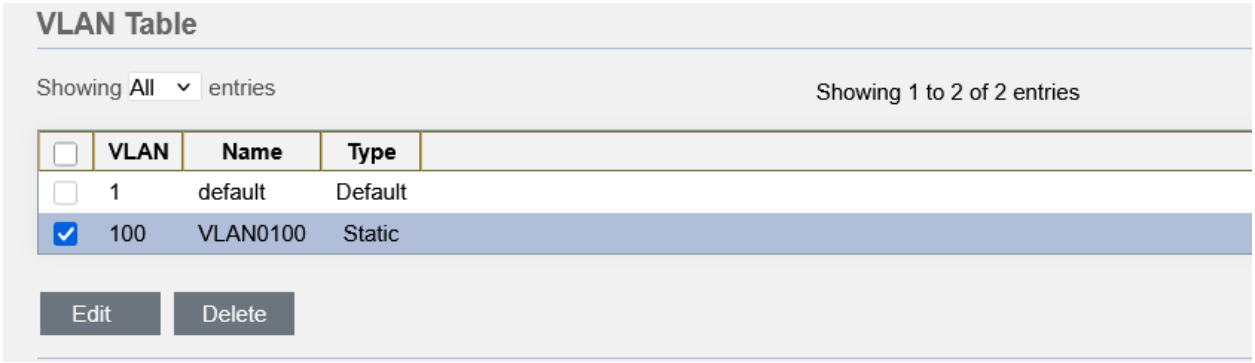
2.2.1. Navigate to the **VLAN** section from the main menu.
2.2.2. Go to the **Create** sub-section.
2.2.3. In the **Available VLANs** column, find **VLAN 100** and move it to the **Create VLAN** column.
2.2.4. Click the **Apply** button.
2.2.5. After applying, **VLAN 100** will appear in the **VLAN Table** on the same page.

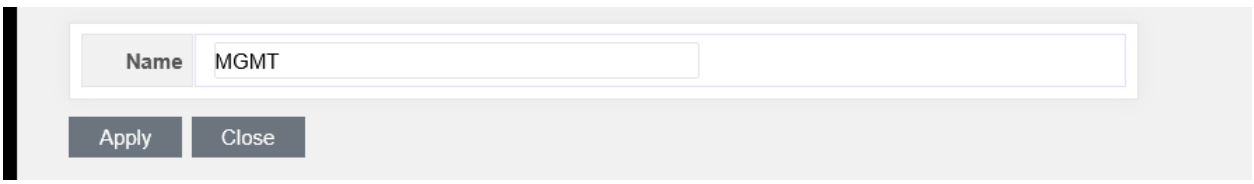


2.3. Assign a Name to VLAN 100

To assign a name to **VLAN 100**:

2.3.1. In the **VLAN Table**, check the box next to **VLAN 100**.
2.3.2. Click the **Edit** button.
2.3.3. Enter the name **MGMT** for the VLAN.
2.3.4. Click **Apply** to save the changes.

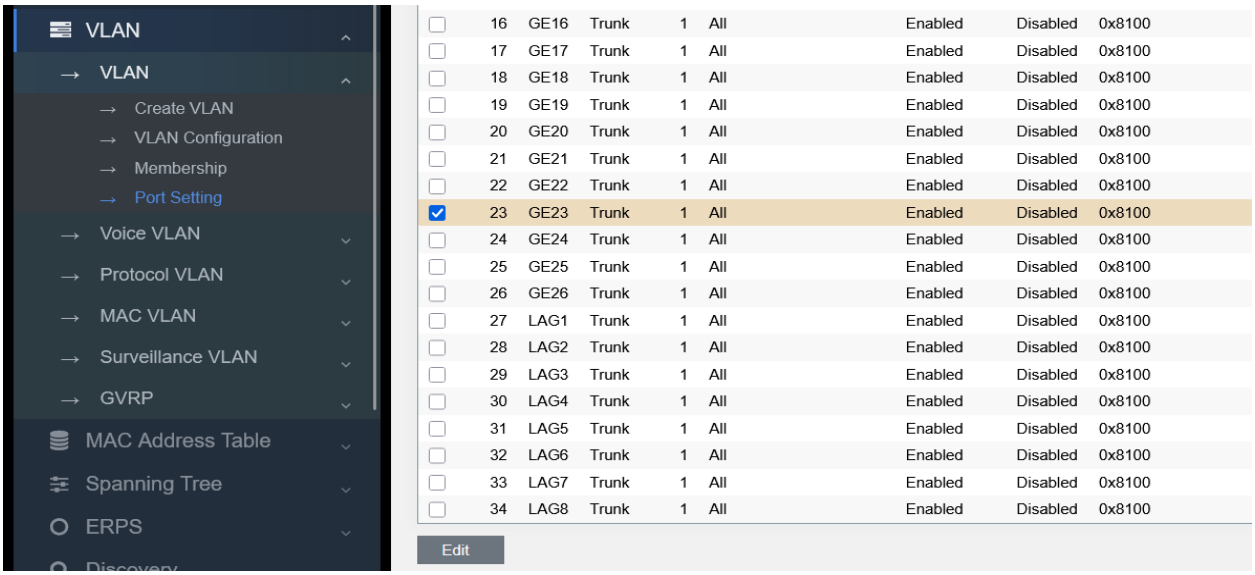


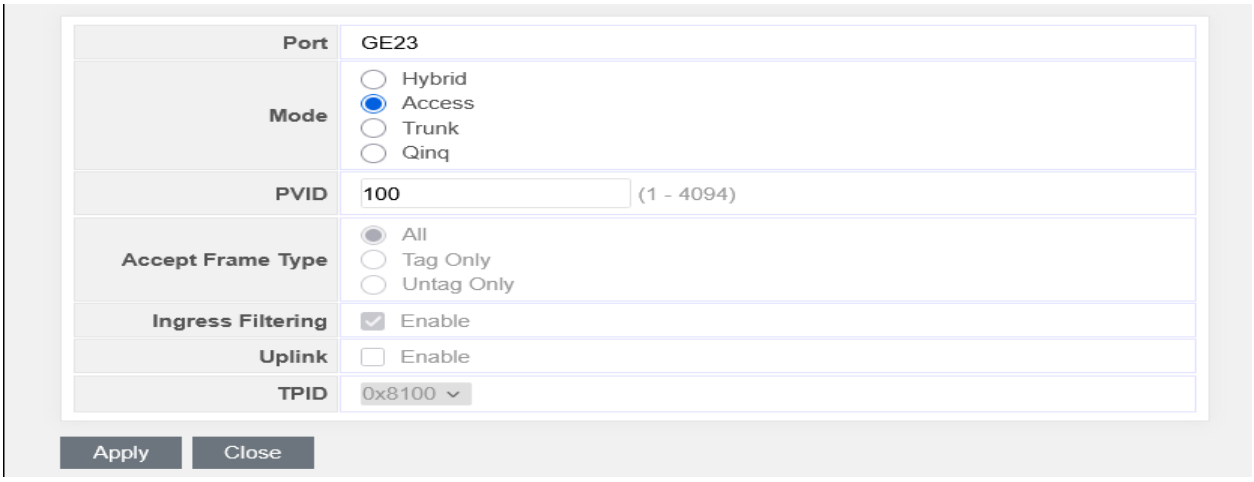


2.4. Assign VLAN 100 to Port 23

To assign **VLAN 100** to **port 23**:

2.4.1. Navigate to the **VLAN** section, then go to the **Port Settings** sub-section.
2.4.2. In the **Port Settings** list, find **Port 23** and check the box next to it.
2.4.3. Click the **Edit** button.
2.4.4. In the opened window, select **Access** mode for the port.
2.4.5. Change the **PVID** from **1** to **100**.
2.4.6. Click **Apply** to save the configuration.

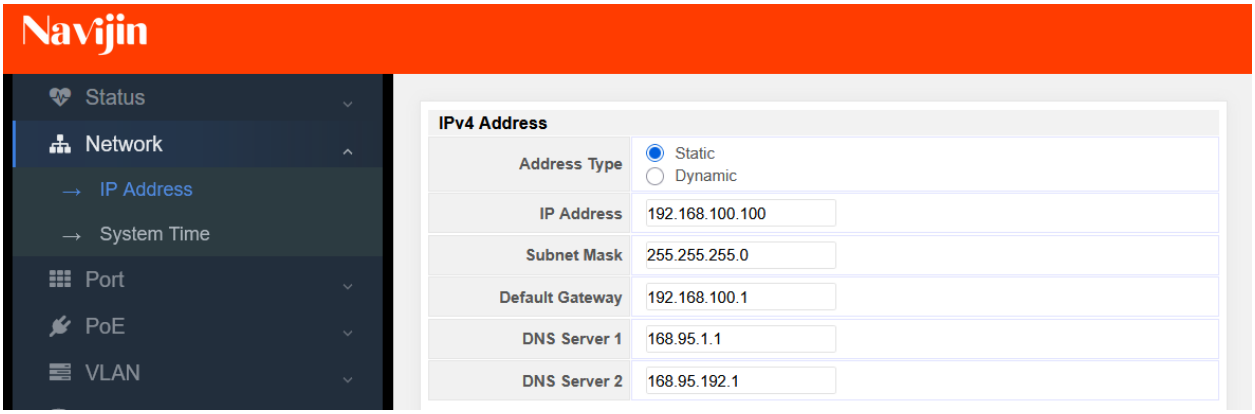




2.5. Assign the Switch IP Address and Set Management VLAN

To assign a new IP address for management:

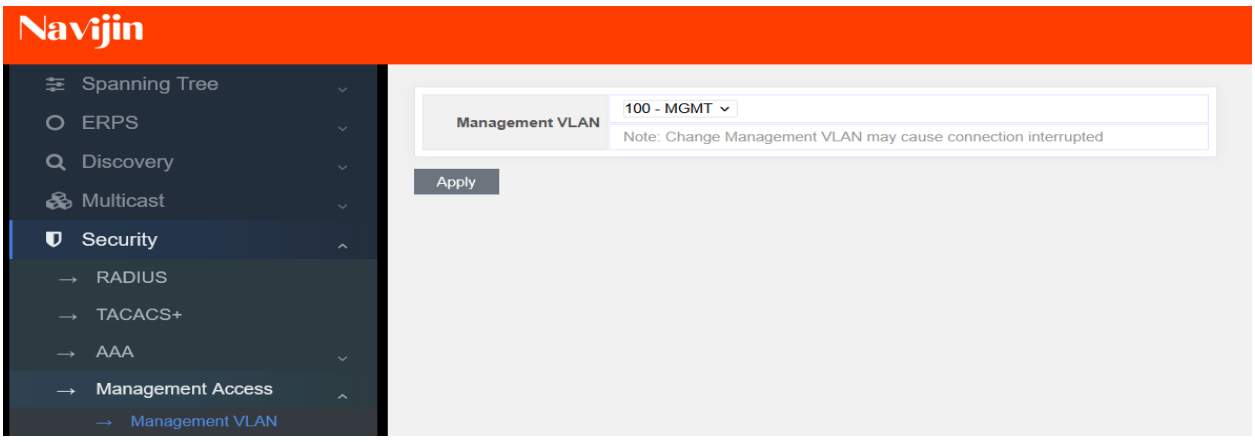
2.5.1. Navigate to the **Network** section, then go to the **IP Address** sub-section.
2.5.2. In the **IPv4 Address** window, select **Address Type: Static**.
2.5.3. Enter the IP address **192.168.100.100**, subnet mask **255.255.255.0**, and default gateway **192.168.100.1**.
2.5.4. Scroll down and click **Apply** to save the settings.
2.5.5. On your computer or laptop, change the IP to **192.168.100.2**, subnet mask **255.255.255.0**.
2.5.6. Access the switch using the new IP **192.168.100.100**.



2.6. Set the Management VLAN

To assign **VLAN 100** as the management VLAN:

2.6.1. Navigate to the **Security** section and go to the **Management Access** sub-section.
2.6.2. Then, go to the **Management VLAN** sub-section.
2.6.3. In the opened window, change the default VLAN from **1** to **100 (MGMT)**.
2.6.4. Click **Apply** to save the changes.
2.6.5. You will lose connection to the switch after this step.



2.7. Reconnect to the Switch

Since you have configured **VLAN 100** for management, to reconnect:

2.7.1. Connect your computer or laptop to **Port 23** on the switch.
2.7.2. On your computer, change the IP address to **192.168.100.2** with the subnet mask **255.255.255.0**.
2.7.3. Use the new IP address **192.168.100.100** to access the switch's web interface.

Now your switch operates in **VLAN 100**, and you can manage it via the web interface at **192.168.100.100**.

2.8. Enable SSH for Secure Management

To enable SSH for secure management:

2.8.1. Navigate to the **Security** section in the web interface.
2.8.2. Go to the **Management Access** sub-section.
2.8.3. Then, go to the **Management Service** sub-section.
2.8.4. In the opened window, find **SSH** and check the box next to it.
2.8.5. At the bottom of the page, click **Apply** to enable the SSH service.