



## How to Assign WAN Port Using Class-Based Queuing

### Function:

Class Based Queuing was introduced to prioritize and control shared bandwidth for users grouped into different classes and can be used to assign a specific WAN port to the group.

### Configuration:

Enable Configuration -> Class-Based Queuing and Add a Class to the interface the group of users will be assigned to. Users will use the class-designated interface for all traffic. All users assigned to this class will share the minimum and maximum configured speeds. Note: Only interfaces configured as WAN or OOS will be available to assign Classes to.

The screenshot displays the "Class-Based Queuing" configuration page. On the left, there is a sidebar with "Class-Based Queuing" checked and "Bandwidth Speed Specified as" selected. A "Save" button is visible. The main area shows "Current Classes" with a table listing the WAN interface and an "Add Class" button. A "Show Out-of-Service interfaces" button is also present. The "Add a Class" dialog box is open, showing the following configuration:

- Interface: WAN
- Parent: --
- Class Name: Prefer\_WAN
- Priority: 1
- Share Unused Bandwidth:
- Uplink Speed Min / Max: 1000 / 1000 Kbps
- Uplink Speed Min / Max: 0..100 / 1..100 %
- Downlink Speed Min / Max: 5000 / 5000 Kbps
- Downlink Speed Min / Max: 0..100 / 1..100 %

At the bottom of the dialog are "+ Add" and "Cancel" buttons.



**Class-Based Queueing**

Class-Based Queueing  Enabled

Bandwidth Speed Specified as  Kbps  Percentage [?](#)

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Current Classes

Interface	Class Name : Priority	Share Unused Bandwidth	Uplink Speed (Min / Max)	Downlink Speed (Min / Max)	
<a href="#">Show Out-of-Service interfaces</a>					
WAN	<a href="#">Add Class</a>		100000	100000	<a href="#">Throughput Estimator</a>
	<a href="#">+</a> <a href="#">-</a> Prefer_WAN : 1	Disabled	1000 / 1000 Kbps 0 / 100 %	5000 / 5000 Kbps 0 / 100 %	

Next, add the class to the Subscriber or Group internal database profile via XML, manual add or billing plan, or assign te Class to the Radius User Profile through the Nomadix VSA.



**Assign class to database user** – Go to Subscriber/Administration Add to create manual user entry and assign the Class

### Add a Subscriber Profile to the Database

Subscriber  Device  Group Account  Access Code

DHCP Address Type  Private  Public [i](#)

MAC Address

IP Address

Subnet

IPv6 Address

Username

Password

Expiration Time  hrs  mins

Paid USD

User Definable 1

User Definable 2

Max Upstream Bandwidth  Kbps

Max Downstream Bandwidth  Kbps

Class Name  ▼

QoS Policy  ▼

Count-down after Login  Enabled

SMTP Redirection  Enabled [i](#)



**Assign Class using a billing plan** – Go to Subscriber Interface/Billing Options and select the plan you wish to change, select the Class and select Save this Plan to update.

**Internal Billing Options Plan Setup**

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Plan 0

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Enable

---

Label

---

Description of Service

---

Facebook Login

Plan Duration

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**Pricing**

Free for PMS User  i

Rate Per Minute

Rate Per Hour

Rate Per Day

Rate Per Week

Rate Per Month

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**Time Unit**

Minute

Hour

Day

Week

Month

---

Wired for Business

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**Bandwidth**

Maximum Uplink

Maximum Downlink

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QoS Policy

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**DHCP Pool**

Private

Public  i

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Class

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**Assign class using Radius** – You will need to add the following attribute to your radius dictionary:

ATTRIBUTE Nomadix-Bw-Class-Name 27 string

And then assign it in the user profile

```
classuser      User-Password == "class"  
               Nomadix-Bw-Class-Name = "First"
```

**Assign class using XML** – Class can be assigned to user profiles using the User Add and User Payment XML commands. The following attribute is required  
<CLASS\_NAME> First</CLASS\_NAME>

You may also create Classes and List them via XML. Please refer to the latest XML.DTD, section 23 for details.