



Purpose: To explain the different ways Bandwidth parameters can be applied to Free Users on the NSE.

1. Mac Address entry in the subscriber database
2. User name and Password entry in the subscriber database
3. Group account entry in the subscriber database
4. Access Codes
5. Free billing plan
6. XML User Add with bandwidth
7. Default Bandwidth Policy and CBQ by Port Location
8. Default Valid Subscriber Bandwidth Up/Down

1. Mac Address entry in the subscriber database. From the Subscriber Administration menu, select Add and enter in the subscriber's Mac address and the desired bandwidth. Click Add to create the entry.

Add a Subscriber Profile to the Database

Subscriber Device Group Account Access Code

DHCP Address Type Private Public ⓘ

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 ⓘ



2. Username and Password entry in the subscriber database. From the Subscriber Administration menu, select Add and enter a username, password and the desired bandwidth. Click Add to create the entry.

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](#)



3. Group account entry in the subscriber database. From the Subscriber Administration menu, select Add. Select Group Account and enter a username, password, and the desired bandwidth. Click Add to create the entry.

Add a Subscriber Profile to the Database

Subscriber Device **Group Account** Access Code

Account valid until: Year [v] Month [v] Day [v] Hou: [v] Min [v] (24-hour clock)

DHCP Address Type: Private Public

Subnet: [text box]

Username: **Group1**

Password: [masked]

Expiration Time: [0] hrs [0] mins

Paid: USD [0.00]

User Definable 1: [text box]

User Definable 2: [text box]

Max Upstream Bandwidth: **5000** Kbps

Max Downstream Bandwidth: **20000** Kbps

Class Name: (none) [v]

QoS Policy: (no policy) [v]

Maximum users: [text box]

SMTP Redirection: **Enabled**



4. Access Code entry in the subscriber database. From the Subscriber Administration select menu select Add. Select Access Codes and click on Edit Plans. Enter Plan Name, Access Code prefix and suffix, Maximum Devices, Session Time, Activate by and BW Upstream/Downstream. For more information on Access Codes refer to [Access Code Authentication Configuration Instructions](#).

Access Codes
Manage plans for creating guest Internet access codes

Available Plans Edit Plans Reprint

Add or Edit a Plan
Please allow pop-ups for printing.

Plan Name: Lobby Access Codes: 1234 - nnnn-nn digits - 4321
Maximum Devices: 10 Session Time: 0 wks/ 1 days/ 0 hrs/ 0 mins
Activate By: 2020-02-26 12:00 AM
DHCP Type: Private DHCP Subnet: 0.0.0.0
BW Upstream: 5000 kbps BW Downstream: 20000 kbps
BW Class: QoS Policy:
Batch Print: 1

+ Add Save Create & Print Restore



5. Free Billing Plan.

Step 1. Enable AAA with New Users and either PayPal billing, or enable PMS billing. The gateway must be licensed for PMS if using PMS. In this example, PayPal billing is enabled.

Authentication Authorization and Accounting Settings

AAA Services Enable

Options	Internal Web Server <input checked="" type="radio"/>	External Web Server <input type="radio"/>
SSL Support	<input type="checkbox"/> Enabled i	
Encrypt only Sensitive Data	<input checked="" type="checkbox"/> Enabled	
Certificate DNS Name	<input type="text" value="ssl.certificate.com"/>	
Portal Page	<input type="checkbox"/> Enabled »	
Portal XML POST URL	<input type="text"/>	⚠ Caution
Portal XML Post Port	<input type="text" value="80"/>	
Username	<input checked="" type="checkbox"/> Enabled i	
New Subscribers	<input checked="" type="checkbox"/> Enabled	
Relogin After Timeout	<input type="checkbox"/> Enabled	
PayPal Service	<input checked="" type="checkbox"/> Enabled »	
Smart Client Support	<input type="checkbox"/> Enabled	



Step 2: Create a Zero Billing Plan. Set the bandwidth desired for each user.

Internal Billing Options Plan Setup

Plan

Enable

Label

Description of Service

Facebook Login

Plan Duration

Pricing

Free for PMS User ⓘ

Rate Per Minute

Rate Per Hour

Rate Per Day

Rate Per Week

Rate Per Month

Time Unit

Minute

Hour

Day

Week

Month

Wired for Business

Bandwidth

Maximum Uplink

Maximum Downlink

QoS Policy

DHCP Pool

Private

Public ⓘ

Class



6. XML User Add with bandwidth. Using the User Add XML command from an external server, a user can be added to the subscriber database with bandwidth applied. Please contact Nomadix Technical Support (support@nomadix.com) for the latest XML documentation.

To use XML from external server, the NSE must be configured to accept the commands from the server. In the AAA settings you will need to enable the XML Interface with the IP address of the server(s) that will be sending the commands. Alternatively the XML Server can use http authentication and should be configured as such if a static list of IP addresses is not desired.

Authentication Authorization and Accounting Settings

AAA Services Enable

Options: Internal Web Server (selected), External Web Server

Logout IP: 198.51.100.10

XML Interface

Configure

- Enable Authentication via XML [User Credentials](#) ⚠ Caution
- Enable Authentication via IP Address

XML SERVER 1 IP: 192.192.192.1

XML SERVER 2 IP: ::

XML SERVER 3 IP: ::

XML SERVER 4 IP: ::

Print Billing Command: Enabled

Print Server URL:

AAA Passthrough Port: Enabled

Port: 0

802.1X Authentication Support: Enabled

802.1X Reauth Period (secs): 0

Origin Server (OS) parameter encoding for Portal Page and EWS: Enabled

Failover to Internal Web Server Authentication if Portal Page/External Web Server is not reachable: Enabled

Port-based billing policies: Enabled

HTTPS Redirection: Enabled

Facebook Login: Enable »

Save Save then Reboot Restore



7. Bandwidth Policy & CBQ by Port Location. Requires VLAN network detailed configuration at [How to Assign Bandwidth Policy & CBQ by Port Location.pdf](#).

8. Default Valid Subscriber Max Up/Down Bandwidth. Default setting provides bandwidth caps to those users not assigned caps with other methods. All other methods overwrite these default settings. Requires AAA Services be enabled. Can be assigned by No Charge VLAN Port Location listing or “Add to Database” from Current table. Pending limits are applied to users who have not authenticated when access a Passthrough Address.

Bandwidth Management	
Bandwidth Management	<input checked="" type="checkbox"/> Enabled
Group Bandwidth Policies	<input type="checkbox"/> Enabled
Weighted Fair Queueing (WFQ)	<input type="checkbox"/> Enabled
	<input type="checkbox"/> Share Unused Bandwidth ?
Default Valid Subscriber Max Up Bandwidth	<input type="text" value="10000"/> (Kbps) ?
Default Valid Subscriber Max Down Bandwidth	<input type="text" value="20000"/> (Kbps) ?
Default Pending Subscriber Max Up Bandwidth	<input type="text" value="5120"/> (Kbps) ?
Default Pending Subscriber Max Down Bandwidth	<input type="text" value="5120"/> (Kbps) ?