

# User Guide Addendum Nomadix Service Engine (NSE) - Release 2008.3 August 2009

## Introduction

This User's Guide Addendum provides information and procedures that will enable system administrators to configure and use the specific features introduced in Release 2008.3 for the Nomadix Access Gateway product line.

The features covered are:

<i>Subscriber Profile with Group Account Enhancements</i> .....	2
<i>Zone Migration</i> .....	6

# Feature Configurations

## Subscriber Profile with Group Account Enhancements

### Overview

Several changes have been made to improve the NSE's handling of group account administration.

- Group accounts can now be configured with a maximum user value, which limits the number of subscribers that can be logged in through the account at any given time.
- Group accounts can now be added via XML using the GROUP\_ADD command.
- The overall layout and behavior of the WMI Subscriber Profile page has been modified to better reflect the configuration status of different account types, and to better support the Group Account changes:
  - The method of identifying an account as "group" has been modified. Instead of simply selecting a checkbox on the Subscriber page, group accounts now constitute a separate account "type" (along with Subscriber and Device). The Group Account checkbox has been removed from the bottom of the page, and replaced with a 'Group Account' button in the profile selection at the top.
  - A 'Maximum Users per Group' field has been added to allow setting the group user limit.
  - For any account type that is selected (Subscriber, Device, or Group Account), fields that are not pertinent to that type will not be displayed.

## Configuration of Subscriber Profiles

This functionality can be accessed under the following Menus:

- **WMI Configuration**
  - Go to Subscriber Administration -> Add
- **CLI Configuration**
  - Go to Subscribers -> Add
- **SNMP Configuration**
  - Go to aaa -> aaaSubscriber -> aaaAuthSubTable

A different "view" of the page will be presented depending on the account type selected (Subscriber, Device, or Group Account). In each case, fields that are not applicable to the type selected will not be shown:

### Subscriber View

The screenshot shows a web browser window titled "AG 5000 Administration: QA - Mozilla Firefox". The main content area is titled "Add a Subscriber Profile to the Database". There are three radio buttons for account type: "Subscriber" (selected), "Device", and "Group Account". Below this, there are several form fields and options:

- DHCP Address Type: Private  Public  Only used if subscriber is configured for DHCP
- MAC Address:
- IP Address:
- Subnet:
- Username:
- Password:
- Expiration Time: 0 hrs 0 mins
- Paid: USD 0.00
- User Definable 1:
- User Definable 2:
- Min Upstream Bandwidth: 0 Kbps
- Max Upstream Bandwidth: 0 Kbps
- Min Downstream Bandwidth: 0 Kbps
- Max Downstream Bandwidth: 0 Kbps
- QoS Policy: select a policy
- Count-down after Login:  Enable
- SMTP Redirection:  Enable Note: Global SMTP Redirection must be enabled for subscriber SMTP Redirection to take effect, see SMTP page under Configuration options

At the bottom of the form, there are "Add" and "Reset" buttons. Below the form is a section titled "Available NIS Services" with two links: "Nomadix Support Services" and "SMTP Relay".

**The following fields are not displayed:**

- Proxy Arp for Device (since subscriber-side communication is limited to Devices)
- Maximum Users per Group

## Device View

AG 5000 Administration: QA - Mozilla Firefox

File Edit View History Bookmarks Tools Help

AG 5000 Administration: QA

AG 5000 ( Lab )

- Configuration
- Network Info
- Port-Location
- Subscriber Administration
  - Add**
  - Current
  - Delete by MAC
  - Delete by User
  - DHCP Leases
  - Expired
  - Find by MAC
  - Find by User
  - List by MAC
  - List by User
  - RADIUS Session History
  - Statistics
- Subscriber Interface
- System

Logout

### Add a Subscriber Profile to the Database

Subscriber  Device  Group Account

Proxy Arp For Device  Enable

802.1Q Device Port  Only if device and Port-Location is 802.1Q two-way

MAC Address

IP Address

Subnet

Username

User Defnable 1

User Defnable 2

Min Upstream Bandwidth  Kbps

Max Upstream Bandwidth  Kbps

Min Downstream Bandwidth  Kbps

Max Downstream Bandwidth  Kbps

QoS Policy

SMTP Redirection  Enable Note: Global SMTP Redirection must be enabled for subscriber SMTP Redirection to take effect, see SMTP page under Configuration options

### Available NIS Services

[Nomadix Support Services](#) -- Software, hardware and call center support for your NSE Gateway

[SMTP Relay](#) -- Application prioritization service designed to limit SMTP (SPAM) abuse

Done

*The following fields are not displayed:*

- DHCP Address type
- Expiration Time
- Paid
- Count-down after Login
- Password (the Username field is still useful for identification)

## Group Account View

AG 5000 Administration: QA - Mozilla Firefox

File Edit View History Bookmarks Tools Help

AG 5000 Administration: QA

AG 5000 ( Lab )

- Configuration
- Network Info
- Port Location
- Subscriber Administration
  - Add**
  - Current
  - Delete by MAC
  - Delete by User
  - DHCP Leases
  - Expired
  - Find by MAC
  - Find by User
  - List by MAC
  - List by User
  - RADIUS Session History
  - Statistics
- Subscriber Interface
- System

Logout

### Add a Subscriber Profile to the Database

Subscriber  Device  Group Account

DHCP Address Type Private  Public  Only used if subscriber is configured for DHCP

Subnet

Username

Password

Expiration Time  hrs  mins

Paid USD

User Defnable 1

User Defnable 2

Min Upstream Bandwidth  Kbps

Max Upstream Bandwidth  Kbps

Min Downstream Bandwidth  Kbps

Max Downstream Bandwidth  Kbps

QoS Policy

Maximum users per group

SMTP Redirection  Enable Note: Global SMTP Redirection must be enabled for subscriber SMTP Redirection to take effect, see SMTP page under Configuration options

### Available NIS Services

[Nomadix Support Services](#) -- Software, hardware and call center support for your NSE Gateway

[SMTP Relay](#) -- Application prioritization service designed to limit SMTP (SPAM) abuse

Done

*The following fields are not displayed:*

- Proxy Arp for Device
- 802.1Q Device Port
- MAC Address
- IP Address
- Count-down after Login

## **Zone Migration**

### **Overview**

Zone migration is an expansion of the NSE's "re-login after migration" capability, which currently allows the system to force a subscriber to log in again if the subscriber moves from one port location to another. Zone migration significantly expands this capability via the following means:

- It allows the creation of multiple zones, which are then constituted by groupings of multiple port locations. These groupings can be made up of any combination of desired ports (port values do not have to be sequential in order to be grouped within a given zone).
- The re-login requirement can then be configured so that subscribers can move from one port to another within a zone without being required to re-login. However, when moving between ports in different zones, the re-login requirement is enforced.
- It is also possible to configure a zone so that migration between ports within the zone requires the user to re-login.
- In addition, the re-login after migration function was previously limited to RADIUS and PMS users. This capability has now been extended to other subscriber login types.

The full Zone Migration capability is supported when the feature is included with the user license. However, if Zone Migration is not enabled in the license, basic port-to-port re-login after migration is still supported.

## Configuration of Zone Migration

This functionality can be accessed under the following menus:

- **WMI Configuration**
  - Go to Configuration -> Zone Migration
- **CLI Configuration**
  - Go to Configuration -> zonemigration
- **SNMP Configuration**
  - Go to system -> zoneMigration

The screenshot shows the AG 5000 Administration web interface in Mozilla Firefox. The left sidebar contains a tree view of configuration options, with 'Zone Migration' highlighted. The main content area is titled 'Zone Migration Settings' and includes the following sections:

- Zone Migration Settings:** A checkbox for 'Relogin after migration' is currently disabled. A 'Submit' button is present.
- Zone-Based Migration:** A section titled 'Add a new Zone:' with input fields for 'Zone Name', 'Port-Locations', and 'Description'. Below these fields are radio buttons for 'Relogin within Zone' (set to 'Disabled') and 'Enabled'. 'Add Zone' and 'Reset' buttons are at the bottom.
- Existing Zones:** A table listing existing zones with columns for Zone Name, Port-Locations, Relogin within Zone, and Actions.

Zone Name	Port-Locations	Relogin within Zone	Actions
One	1-2	Disabled	<a href="#">Edit</a> <a href="#">Delete</a>
Two	3	Disabled	<a href="#">Edit</a> <a href="#">Delete</a>

2 Zones are defined

**Available NIS Services**

- [Nomadix Support Services](#) -- Software, hardware and call center support for your NSE Gateway
- [SMTP Relay](#) -- Application prioritization service designed to limit SMTP (SPAM) abuse

### ***Relogin after migration Enable***

This is how you enable or disable the Zone Migration feature.

*Note: If the unit license does not include Zone Migration, the rest of this page will be inactive. However the Enable checkbox can still be selected to allow activation of simple port-to-port based Relogin after Migration capability.*

### ***Add a new Zone***

In this section, new zones can be added and initially configured, using the following parameter fields:

**-Zone Name** - Allows entry of a name appropriate for the zone to be created. The name must be unique, cannot exceed 16 characters, and cannot contain characters that are not alphanumeric, dash, underscore, or space.

**-Port-Locations** - This is where the port configuration for the zone is entered. The data must be entered as a string between 1 and 128 characters in length. The string must contain either an individual numeric value ("211"), a comma-separated list of numeric values ("211, 212"), a range of numeric values with dash-separated delimiters ("211-899"), a list of ranges of numeric values ("211-300, 301-899"), or a comma-separated list of individual numeric values and ranges ("211, 212, 213-899").

**-Description** - Allows entry of a description for the zone. This must be a string between 0 and 128 characters in length, and cannot contain characters that are not alphanumeric, dash, underscore, or space.

In each of these fields, any leading or trailing spaces will be removed by the NSE when the page is submitted.

### ***Relogin within Zone***

This selection provides the option to require relogin after migration between ports that are within a given zone. The default is Disabled.

### ***Existing Zones***

Zones that have already been defined are listed here, and can be edited or deleted. (*Note: The description field is not displayed in the list view.*)