



neo**ConneX**

**A text messaging and GPS
application for *MOTOTRBO™***

neoConneX Web - Version 5.x



neo**ConneX**

NeoTerra Systems Inc.

48 Centennial Road #7, Orangeville, ON L9W 3T4

Tel: **519 940 0088**

Fax: **519 940 8813**

support@neoterra.ca

sales@neoterra.ca

www.neoterra.ca

neoConneX® is a registered trademark of NeoTerra Systems Inc.

TABLE OF CONTENTS

INTRODUCTION:..... 3
BEFORE INSTALLING THE SOFTWARE:..... 3
 CAUTION!..... 3
 NeoTerra[®] Systems Contact information:..... 4
INSTALLING NEOCONNEX[®] WEB SERVER:..... 4
 Minimum requirements:..... 4
 The MOTOTRBO™ Professional Digital Two-Way Radio System:..... 5
 Some value added inclusions within neoConneX[®]:..... 5

SECTION 2 - neoConneX Web Configuration:.....7
 Application Personality Tab:.....8
 Keys & Paths Tab:.....9
 Configuration Tab:.....10

SECTION 3 - Using the neoConneX[®] Web Application:.....11
 The neoConneX Web Application:.....12
 Bread Crum History:.....14

SECTION 4 - neoConneX Web E-Mail Configuration:.....15
 Login & Main Page:.....16
 Compose & Reply:.....17
 Notes:.....18



Before you Start:

Introduction:

Thank you for purchasing neoConneX[®], an application designed by NeoTerra[®] Systems for the Motorola MOTOTRBO™ Professional Digital Two-Way Radio System, to permit the user enhanced control capabilities. The application has been designed to accommodate the safe tracking of fleet and similar fixed locations that use the MOTOTRBO product. The application has an archiving reporting feature that reports on activity captured by various parts of the application.

NeoTerra[®] Systems has worked with the end users to streamline the application and make it simple to install, easy to use and understand.

Before Installing the Software:

It is IMPORTANT to ensure that prior to configuring neoConneX[®]; that your Computer route table has been appropriately updated; so that the MOTOTRBO™ radio network can be accessed.

The demonstration version of neoConneX[®] can be run as a stand alone, however, once purchased will require a USB “Key” to work with and validate the licensing agreement. This “Secure Key” will be supplied once the purchase has been approved.

CAUTION!

The purchased neoConneX[®] application is governed by a licence agreement that INCLUDES a USB license dongle, that compounds the security of the application for your exclusive use. This USB device is a Serialized Key that handshakes with your neoConneX[®] application to validate its licensing parameters and contains information that verifies these parameters which relates to the features purchased.

This USB “key” MUST be inserted into a usable USB port on the Computer and left in place at all times, while the purchased application is in use.

Failure to do so or removal of the key at any time will result in the termination of the neoConneX[®] application.

It is IMPERATIVE that the USB Secure Key be protected and secured at all times. In the event of loss or damage a replacement key can ONLY be purchased from NeoTerra[®] Systems.

NeoTerra[®] Systems Contact information:

NeoTerra[®] Systems Inc:
48 Centennial Road
Unit #7
Orangeville, Ontario.
Canada.
L9W3T4

support@neoterra.ca
sales@neoterra.ca

Business Number: +1-519-940-0088
Facsimile Number: +1-519-940-8813

*(Please use the process within your Country to allow for direct dialling.)
For your convenience you may wish to try: <http://www.countrycallingcodes.com/>*

For more information on NeoTerra[®] Systems please visit: www.neoterra.ca

Installing neoConneX[®] Web Server:

Minimum requirements:

A Microsoft Windows Platform – Windows XP Professional, Windows Vista Professional/Business/Ultimate, Windows 7 Professional/Business/Ultimate, or Windows Server 2008. neoConneX[®] will run on both 32-bit and 64-bit operating systems. Please note that the software component for conventional and capacity plus MotoTRBO systems, neoNytro Node, will not operate on any Windows Server operating system.

- **>= 2 GHz Quad-Core CPU**
- **At least 4GB of system memory (RAM)**
- **160 GB hard drive with at least 15 GB of available space (Minimum)**
- **Audio Output**
- **Local Area Network with IP Platform support**
- **Internet access for remote support**
- **Internet Domain (if hosting our web-based AVL, mailservice, or MultiSpeak web service)**
- **Internet Explorer 8+, Opera 10+, or Firefox 3.x+ web browser (for reporting and/or AVL Web solution).**

The installation disc contains files that will be used for the successful installation of neoConneX[®]. These folders & files are located under the “Server” folder”.

- 1) **Httpd-2.2.19-win32-x86-openssl-0.9.8.exe** – Contains the setup program for the web server to allow the web based reporting and AVL Web app to run. Found under the “Apache” folder. If this has already been installed, skip this step.
- 2) **neoConneXWeb.exe** – Contains the web-based reporting application. It is recommended to use the default installation path presented by the application. Found under the “neoConneX Web” folder on the CD.

The **MOTOTRBO™** Professional Digital Two-Way Radio System:

Some interesting “points” to remember about the **MOTOTRBO™ Professional Digital Two-Way Radio**



The Mobile radio has 5 terminal inputs and the Portable unit has 3 terminal inputs for use in telemetry.

NeoTerra[®] Systems has taken advantage of these terminals to accommodate various tasks that are efficiently controlled by the neoConneX[®] application.

Some value added inclusions within neoConneX[®]:

neoConneX[®] has some embedded assistance within the application:

1. Bundled geoMap maker for calibrating raster images for use in the GIS control.
2. Web-based archive reporting tool.
3. Bundled drivers in Quick start, which includes Motorola drivers using Ethernet over USB.
4. Ability to integrate Conventional, Capacity Plus, and Connect Plus systems together.
5. Mail service to negate the need to have a catch-all account or email aliases set up.
6. Mappoint GeoCoding service to make neoConneX[®] more robust.

There are 4 Protocols that neoConneX[®] uses with **MOTOTRBO™** devices:

1. Text Messaging – Can isolate a unit and send a unit-specific message to the device in question.
2. ARS (Automatic Registration Service) – Advises of devices that come on- line and go off-line.
3. Telemetry options – Sending automatic Text Messages that are based on actions taken by various operations at the remote location or vehicle.
4. GPS Tracking – Location based Services.

SECTION 2 - neoConneX Web Configuration

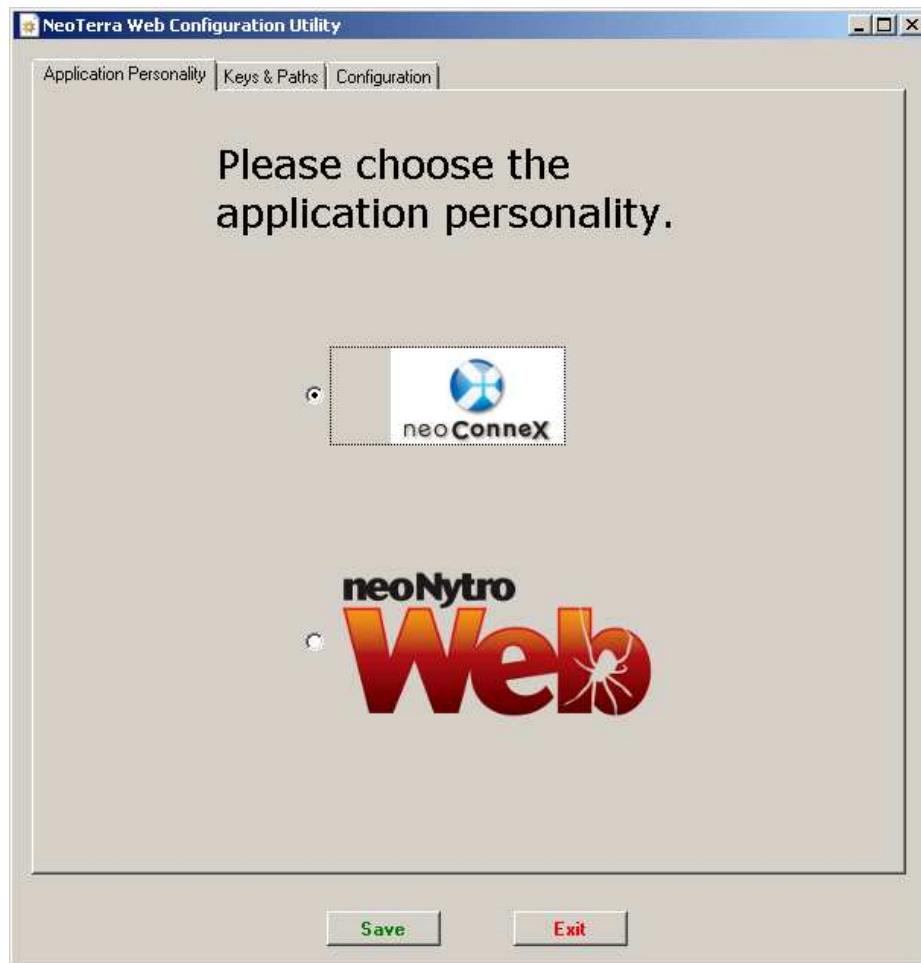
Setting up neoConneX[®] Web: See Apache Installation Manual

Application Personality Tab:

There is exists some additional setup for both the web reporting and AVL web applications.

Navigate to Start > Computer > C Drive > Inetpub folder > wwwroot folder > neoConneXWeb folder > and double-click the file neoWebCfg.exe to run it.

You will see a screen as below. The neoConneX application personality will already be selected, so all 3 tabs are visible in the configuration utility.



Keys & Paths Tab:

Data Paths – Contains a database path to a Microsoft Access database (neoNytro Only). You can ignore all of these for neoConneX.

Internal Web Application Keys – This setting does not apply to neoConneX Web. These contain separate URLs where the various online mapping sources are found. Google Earth requires what is called an API key for neoConneX to be able to use it. Simply click on the “Browse” button beside the maps key in question for a set of instructions and a web page that will take you right to the registration website. Once you have the key, copy and paste it after the “key=” in Google Earth.

External Web Application Keys – Same as above but these are used for those accessing this web application externally across the internet.

All keys, during the creation process need to refer to a PC NAME and NOT an IP! So, when signing up a PC for a google earth key with a name of RadioPC, you’d specify <http://RadioPC:8080> as the machine to register a key for.

Note: You cannot use an IP when creating an API key for Google Earth. The PC, whether internally or externally available, MUST resolve to a NAME!

The screenshot shows the 'NeoTerra Web Configuration Utility' window with the 'Keys & Paths' tab selected. The window is divided into three main sections for configuration:

- Data Paths:**
 - World Map Kit Data: c:\WorldMap
 - World Map Kit Cache Data: C:\WMKCache
 - Database Path: C:\ProgramData\NeoTerra Systems\neoNytro Server\data
- Internal Web Application Keys (needed for NeoTerra AVL & Reporting Web Apps):**
 - Google Maps: http://maps.google.com/maps?file=api&v=2.x&sensor=false&key=AB
 - Google Earth Maps: http://www.google.com/jsapi?key=ABQIAAAA7HcRkSkwVo_fw2v
 - Yahoo Maps: http://api.maps.yahoo.com/ajaxymap?v=3.8&appid=
 - Virtual Earth (Bing) Maps: http://dev.virtualearth.net/mapcontrol/mapcontrol.ashx?v=6.2
- External Web Application Keys (needed for NeoTerra AVL & Reporting Web Apps):**
 - Google Maps: http://maps.google.com/maps?file=api&v=2.x&sensor=false&key=
 - Google Earth Maps: http://www.google.com/jsapi?key=
 - Yahoo Maps: http://api.maps.yahoo.com/ajaxymap?v=3.8&appid=
 - Virtual Earth (Bing) Maps: http://dev.virtualearth.net/mapcontrol/mapcontrol.ashx?v=6.2

At the bottom of the window, there are 'Save' and 'Exit' buttons.

Configuration Tab:

Default Web Reporting Tab – This setting has been deprecated

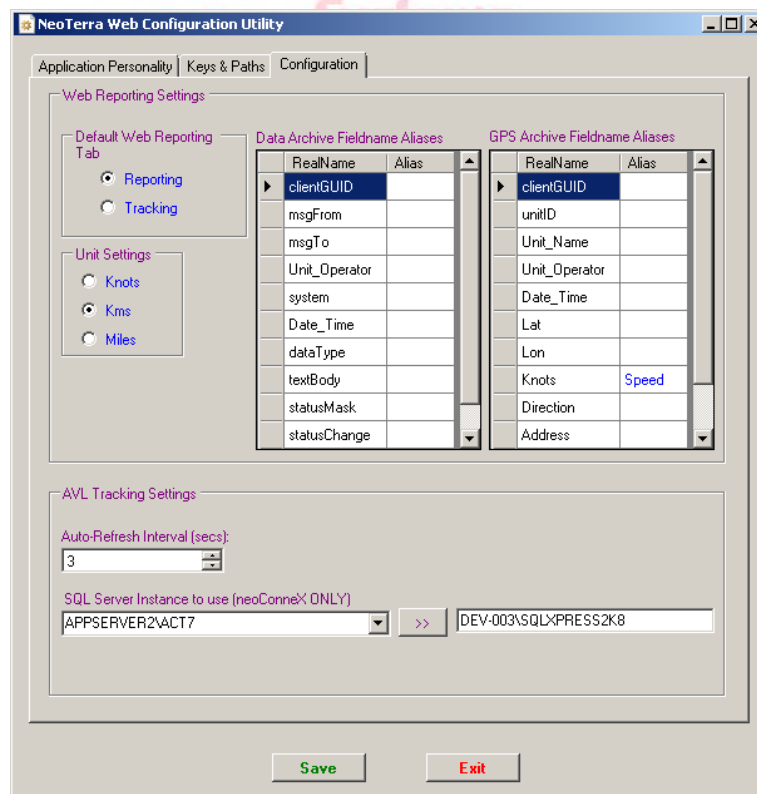
Unit Settings – Controls what units are used in the web reporting application by default.

Data Archive Fieldname Aliases – This gives the user the flexibility to assign more meaningful column names than those available by default on the sorting and criteria grid on the web reporting screen (default.aspx) for the data reports.

GPS Archive Fieldname Aliases – This gives the user the flexibility to assign more meaningful column names than those available by default on the sorting and criteria grid on the web reporting screen (default.aspx) for the GPS reports. The screenshot below shows that the “Knots” table column will be “renamed” to show “Speed” on the default.aspx record selection screen.

Auto-Refresh Interval (in secs) – This controls how often the map is updated in the neoConneX Web AVL application when the “Auto-Refresh” button is toggled on (neoConneX Web ONLY).

SQL Server Instance to use (neoConneX Web Apps ONLY) – This setting allows the selection of the PC and SQL Server database instance where the neoConneX database resides.



Section 3 - Using the neoConneX[®] Web Application

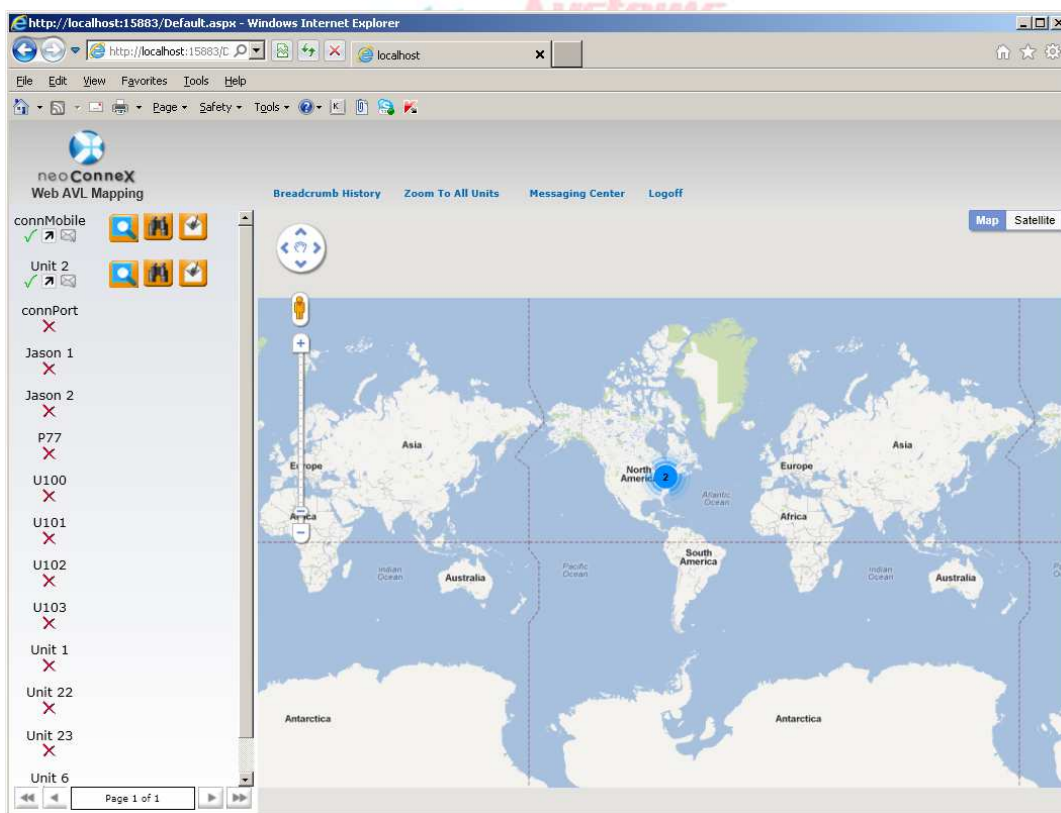


The neoConneX Web Application:

The first step in using the new neoConneX[®] Web Mapping tool is to login to it. By logging into the application, the server knows what units it should show to you since each login (client) is tied to a specific customer (end-user). These client names are set up in the neoConneX[®] Server Setup screen under the “Clients” tab. Only passwords are case-sensitive.



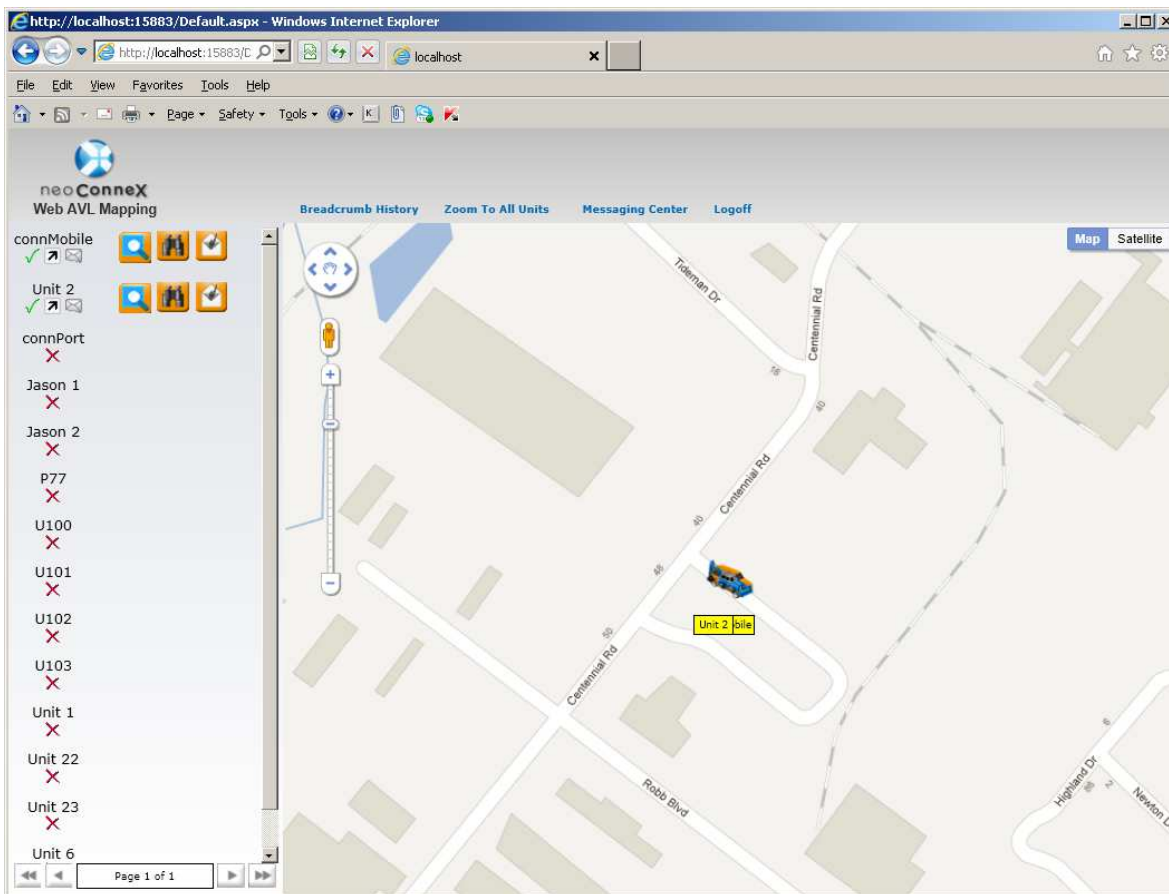
After successful login, the screen (seen below) will be shown in your web browser. You must be licensed to use this program. If you are not, no trucks will show up on the map. Using this application is simple. You can toggle on or off auto-refreshing of the maps data, select individual units to zoom to on the map, and click on a unit for more position-related detail. To find a particular unit, select it from the drop-down list and click the “Find” button. To show all units on the map, just click the “Zoom to All” button.



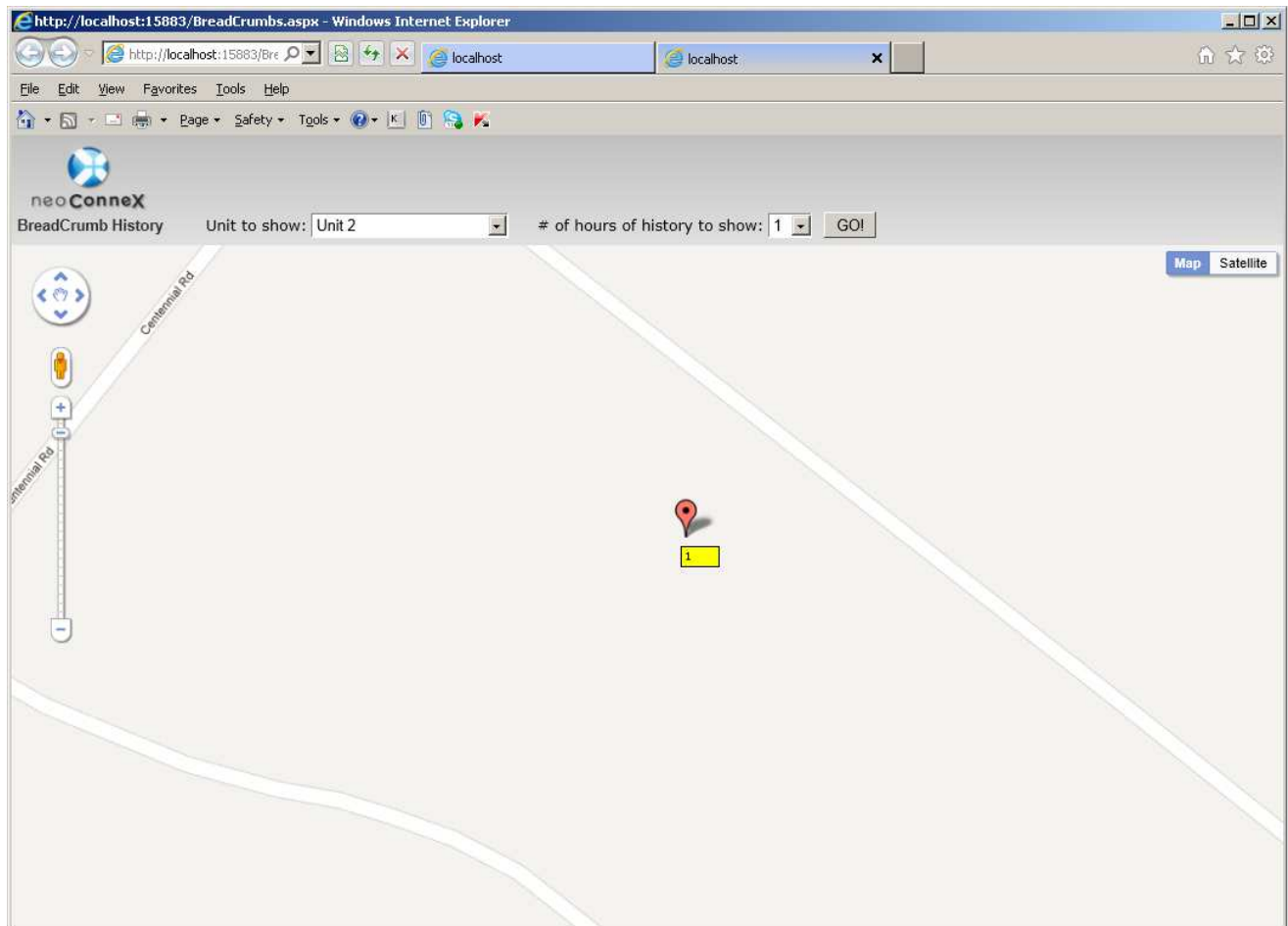
Troubleshooting Tips:

- If you are getting errors trying to login when typing in the correct username and password to any web application, or, if you are getting errors trying to run a query that says something regarding missing tables or being unable to execute a query, then you likely have to re-do the permissions for the neoConneX user. To do this, you will have to follow the instructions in the last step of the SQL Server installation instructions in the neoConneX Server Manual (in Appendix C).

Below is the Main page for the Web AVL this is where your units will populate, with their name & location



Bread Crumb History:



This allows the user to select a unit from the Units to show list, select how many hours of history on that unit & it will populate on the map where that unit has been in those past selected hours.

SECTION 4 - neoConneX Web Text Configuration



Login:



Could not verify your credentials, please login below. Make sure you are also "Enabled" to perform text messaging.

Client Username:

Password:

Login

The user login is the same as the login for the neoConneX Client

Main Page:



Below Is Search Messages Tab

Compose Message

Inbox (2)

Pending (2)

Sent (0)

Deleted (5)

Live Feed - **New Message** - From Unit 33: Test test test test tes...

Select Read Reply Delete

1 - 6 of 6

<input type="checkbox"/>	DanPort	testtsettest...	Nov 15 2011 03:11:19pm
<input type="checkbox"/>	DanPort	testtsettest...	Nov 15 2011 03:11:19pm
<input type="checkbox"/>	DanPort	testtsettest...	Nov 15 2011 03:11:19pm
<input type="checkbox"/>	DanPort	testtsettest...	Nov 15 2011 03:11:19pm
<input type="checkbox"/>	DanPort	testtsettest...	Nov 15 2011 03:11:19pm
<input type="checkbox"/>	DanPort	testtsettest...	Nov 15 2011 03:11:19pm
<input type="checkbox"/>	DanPort	testtsettest...	Nov 15 2011 03:11:19pm
<input type="checkbox"/>	DanPort	testtsettest...	Nov 19 2011

This is where all your messages from the subscriber units to dispatch will go if you need to access them from a remote location

Inbox: This is where all your new incoming messages will be placed

Pending: This is where all your outgoing messages will be stored until there sent out

Sent: This is where all your sent messages will be stored once they have been sent out to the subscribers

Deleted: This is where all your deleted messages will be placed

Select: This allows the user to select their messages that they wish to move into another folder or delete

Read: When selected this will open your selected message to allow you to read the message

Reply: This will allow the user to reply to any message in the E-Mail server, See Fig 2

Delete: When certain messages are selected when delete is selected it will send them to the deleted folder

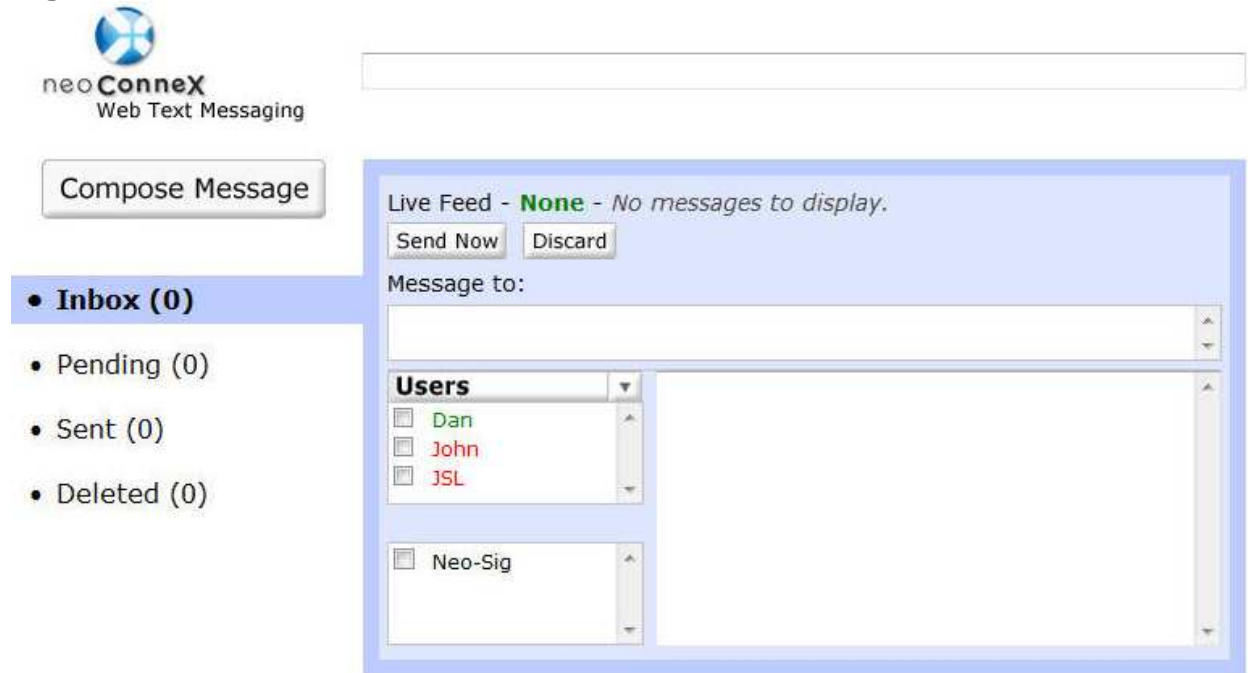
Refresh: This will refresh your E-Mail to check for new messages

Compose Message: This will allow the user to create a message to any subscriber or groups. See Fig 2

Search Messages: In this tab just start typing the contact or message and a list will display for the user to select

Compose & Reply:

Fig 2:



This is the Compose & Reply message control

Notes:

