



---

*siteWRX*

**Centralized Alarm Monitoring Software**

# **User Manual**

**Document #: 050-015-0025**

**Revision: 03**

**July 2005**

**TASC Systems Inc. • Langley, BC • Canada**

### **Disclaimer**

TASC Systems Inc. will not be held responsible for any damages, direct or indirect, arising from the use of our materials or from any other causes. Any liability whatsoever is hereby expressly limited to replacement or repair of defective materials.

This manual contains proprietary information that is the intellectual property of TASC Systems Inc. Reproduction, disclosure, modification or distribution, wholly or in part, without prior written permission from TASC Systems Inc., is strictly prohibited.

TASC Systems is continuously working to improve system performance and expand product capabilities. Specifications and features contained within this document are subject to change without notice.

For additional copies of this publication contact:

TASC Systems Inc.	Tel. (604) 455-2000
9415 – 202 Street	Fax. (604) 888-9712
Langley, BC V1M 4B5	Toll Free: 1-800-663-0070
Canada	Website: <a href="http://www.tascsystems.com">www.tascsystems.com</a>

**Copyright 2005 TASC Systems Inc., Langley, BC Canada**

## PREFACE

---

This document describes the installation, configuration and operation of TASC Systems' *siteWRX* centralized alarm monitoring software.

Hardware and software described in this document are subject to on going development and improvement. Consequently there may be minor discrepancies between the information in this document and the performance and design of the hardware and software.

Refer to the glossary in the Appendices for the definition of any uncommon acronyms or terminology encountered while reading this document.

Additional documentation that is directly related to this manual includes:

- *sitePORTAL* Configuration Utility (SPCU) – Installation and User Manual (document number 050-015-0021)
- *sitePORTAL* Lite User Manual (document number 050-015-0012) for detailed instructions on *sitePORTAL* configuration and operations.



**Before using the software, the user is advised to read this document in its entirety. Correct functionality cannot be assumed unless the appropriate requirements are met. This document has been created for use at the Administrator level.**

<b>TABLE OF FIGURES</b> .....	<b>V</b>
<b>REVISION HISTORY</b> .....	<b>VI</b>
<b>1. PRODUCT OVERVIEW</b> .....	<b>1</b>
1.1. GENERAL DESCRIPTION.....	1
1.2. PRODUCT SUMMARY .....	1
<b>2. SYSTEM CONFIGURATION</b> .....	<b>2</b>
2.1. REQUIREMENTS.....	2
2.1.1. Computer Hardware Requirements .....	2
2.1.2. Computer Software Requirements.....	2
2.2. SNMP MANAGER .....	3
2.2.1. Management Information Base (MIB) .....	3
2.2.2. SNMP Trap Format .....	3
2.2.3. SNMP Operational Description .....	4
<b>3. INSTALLATION</b> .....	<b>5</b>
3.1. INSTALLING SITEWRX .....	5
3.2. STARTING THE SITEWRX SERVER .....	5
<b>4. CONFIGURING</b> .....	<b>6</b>
4.1. CONNECTING TO THE SERVER.....	6
4.2. LOGGING IN .....	7
4.3. MAIN MENU – ADMINISTRATION .....	8
4.3.1. Admin .....	8
4.3.2. Configuration .....	8
4.3.3. Users .....	9
4.3.4. Regions .....	11
4.3.5. Sites .....	14
4.3.6. Modems.....	16
<b>5. OPERATIONS</b> .....	<b>19</b>
5.1. MAIN MENU – REPORTS .....	19
5.1.1. Alarms .....	19
5.1.2. Graphs.....	19
5.1.3. Logs.....	20
<b>6. APPENDIX</b> .....	<b>21</b>
6.1. TROUBLESHOOTING.....	21
6.2. GLOSSARY.....	22

## TABLE OF FIGURES

---

Figure 1 - Typical siteWRX System Configuration .....	1
Figure 2 - siteWRX Server Window .....	5
Figure 3 - siteWRX Login Screen .....	6
Figure 4 - Main Menu .....	7
Figure 5 - Administration - Configuration Tab .....	8
Figure 6 - Administration - Users Tab.....	9
Figure 7 - Creating/Editing a User .....	10
Figure 8 - Administration - Regions Tab.....	11
Figure 9 - Creating/Editing a Region .....	12
Figure 10 - Viewing a Region .....	13
Figure 11 - Creating/Editing a Site .....	14
Figure 12 - Administration - Modem Tab.....	16
Figure 13 - Creating/Editing a Modem .....	16
Figure 14 - Reports - Alarms Tab .....	19
Figure 15 - Reports - Graphs Tab .....	20
Figure 16 - Reports - Logs Tab .....	20

## REVISION HISTORY

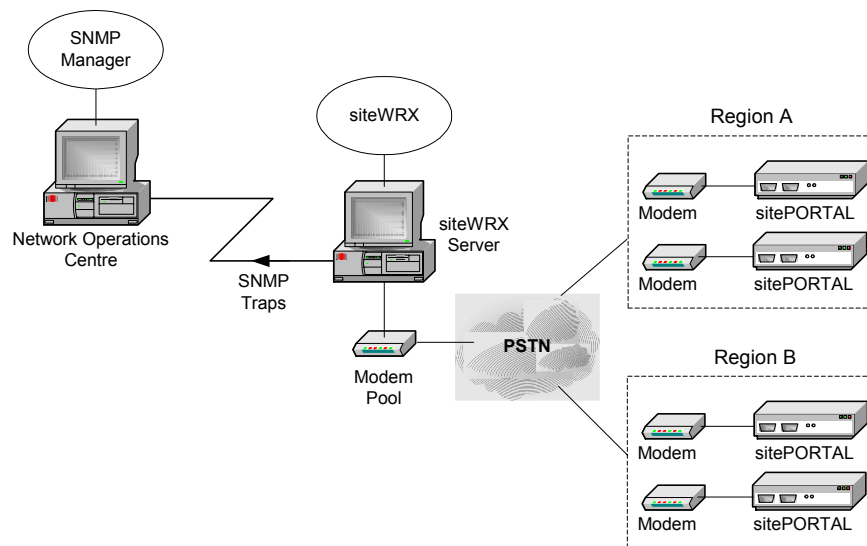
---

<b>Revision</b>	<b>Date</b>	<b>Changes</b>
R01	Dec 2004	<ul style="list-style-type: none"><li>• Original Document</li></ul>
R02	May 2005	<ul style="list-style-type: none"><li>• Added Auto Refresh</li><li>• Added Callout Time in Configuration Window</li><li>• Removed Auto-Logout feature</li></ul>
R03	July 2005	<ul style="list-style-type: none"><li>• Updated to include TCP/IP – capable TRIO-1200 R01 sPL units.</li></ul>

# 1. PRODUCT OVERVIEW

## 1.1. General Description

The siteWRX Server is used to manage the communications, logging, and alarm reporting of sitePORTAL Lite (sPL) modules. As shown below, siteWRX gathers alarm information from remote sitePORTAL Lite modules which are located in different regions and for the sPL's that are in an alarm state, sends SNMP traps to the Network Operations Control Centre (NOCC).



**Figure 1 - Typical siteWRX System Configuration**

siteWRX communicates to the remote sitePORTAL Lite modules by means of a modem(s) through the server computer COM Port(s). As many modems can be connected as there are COM Ports available. Additional modems provide the ability for simultaneous communication to multiple remote modules.

## 1.2. Product Summary

- Web Browser Interface
- Logging and Graphing Features
- Various Levels of User Permissions
- SNMP Trap Notification to a 3<sup>rd</sup> Party Manager
- Reliable Java Based Server
- Client/Server Architecture

## 2. SYSTEM CONFIGURATION

---

### 2.1. Requirements

#### 2.1.1. Computer Hardware Requirements

The following are the basic hardware requirements to install and operate siteWRX:

- PC: 1GHz Pentium III or equivalent
- 256MB RAM
- 10GB free hard disk space
- 10/100 Network Interface Card
- Keyboard and Mouse
- At least one free serial (COM) Port
- Modem (one per COM Port)



**The minimum hardware requirements will ensure that the aforementioned software will function. Performance will improve by exceeding the minimum requirements.**

#### 2.1.2. Computer Software Requirements

siteWRX is a software package based on the JAVA 2 Platform Run Time Environment provided by Sun Microsystems. The following are the basic software requirements to install and operate siteWRX:

- Operating System: Windows® 2000/XP
- J2SE Java Runtime Environment (JRE)
- Web browser



**siteWRX uses TCP Port 80 for the web server interface. If an instance of IIS or another web server is running on the same machine, ensure it uses a different TCP Port.**



## 2.2. SNMP Manager

### 2.2.1. Management Information Base (MIB)

The siteWRX server sends SNMP traps to the NOCC when site PORTAL Lite modules are in alarm state, cannot be contacted, or there are problems with the sitePORTAL Lite password. A management system will not be able to decode them unless the Management Information Base (MIB) is imported into the SNMP manager. The MIB is named TASC-SITEWRX-MIB.txt and is located in the 'mib' directory from which siteWRX was installed.

TASC has registered with IANA to obtain an enterprise OID number of 11902. The MIB details the SNMP trap format for the siteWRX Server module.

### 2.2.2. SNMP Trap Format

Two traps are sent for each alarm severity level. The first trap indicates that an alarm condition has begun, and the second trap indicates that the alarm condition is ceasing. The traps are as follows:

urgentAlarm

urgentAlarmCeasing

criticalAlarm

criticalAlarmCeasing

majorAlarm

majorAlarmCeasing

minorAlarm

minorAlarmCeasing

informationalAlarm

informationalAlarmCeasing

miscellaneousAlarm

miscellaneousAlarmCeasing

Each trap will contain the following informational fields.

**details** - The detail information string that the remote sPL sends in its alarm message.

**eventID** - A unique number representing the given alarm. This ID should be shared between a trap and its corresponding ceasing trap.

**object** - The name of the sPL sending the Alarm.

**objectDateTime** - The time that the sPL detected the alarm state.

**originator** - The name of the siteWRX server originating the trap.

**originatorDateTime** - The time the siteWRX server received the alarm. If the objectDateTime and originatorDateTime are significantly different, there may be a situation where the sPL has been out of contact for some period of time.

### 2.2.3. SNMP Operational Description

Upon receipt of an alarm from a sitePORTAL Lite module that contains a severity other than CEASING, siteWRX will attempt to locate a previous alarm with the same details in the siteWRX active alarm database. If there is no such alarm, a new one will be created and given a unique eventID. A trap named by severity will be sent to the NOCC. If an alarm already exists for the alarm condition, it does not send a further notification to the NOCC since the SNMP manager will already be displaying the alarm.

Upon receipt of an alarm with CEASING severity, the previously stored alarm will be located and its eventID will be used to send a trap named by the original severity indicating that the alarm state is now ceasing. The record in the active alarm database will be removed for that eventID after the trap is sent.

For example, imagine that a sitePORTAL Lite exists with the name Hwy7CarletonPlace. Attached to the input channel is a fuse to detect lightning strikes. There is a lightning strike and the sitePORTAL Lite sends an alarm to the NOCC stating 'Chn 1 Lightning Detected' with severity CRITICAL. siteWRX will store the alarm in its active alarm database giving it the entryID of 1024. It then sends an SNMP criticalAlarm trap to the NOCC with details 'Chn1 Lightning Detected' and object of 'Hwy7CarletonPlace'.

Sometime later, the service person arrives at the sitePORTAL Lite site, checks for lightning damage, and replaces the fuse attached to input channel. The sPL then sends another SNMP trap to the NOCC stating 'Chn1 Lightning Detected' with severity CEASING. The siteWRX looks up the entryID of 1024 corresponding to the last alarm, and fires a criticalAlarmCeasing with details 'Chn1 Lightning Detected' and object of 'Hwy7CarletonPlace'. This signals to the NOCC operator that the alarm state has ended, and that the fuse has been replaced.

## 3. INSTALLATION

### 3.1. Installing siteWRX

To install siteWRX:

Insert the CD containing the siteWRX software

If the CD Menu is automatically displayed, click the “Install siteWRX” button. If the menu is not displayed, locate the “siteWRX Setup.exe” file on the CD and double click on it.


Follow the directions included in the installation wrapper.

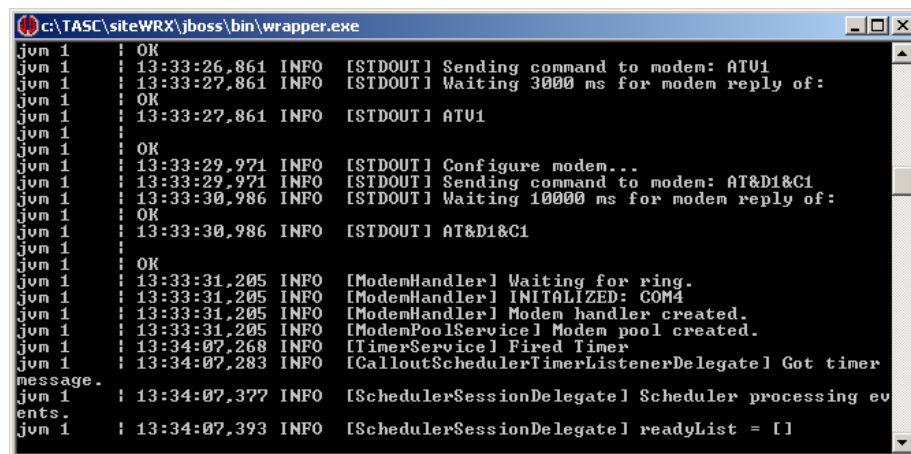
Once the installation has finished, reboot the computer to complete the installation.

### 3.2. Starting the siteWRX Server

siteWRX is designed to start automatically during the operating system load time. The siteWRX Server Window should appear upon successful login to Windows® (Figure 2 - siteWRX Server Window)

The server can be manually started and stopped by accessing the Windows® Services Console and locating the siteWRX server service.

Clicking on the  button in the window shown in Figure 2 will also stop the server (don't click on the 'end now' button when prompted).



```

c:\TASC\siteWRX\jboss\bin\wrapper.exe
jvm 1 : OK
jvm 1 : 13:33:26,861 INFO [STDOUT] Sending command to modem: ATU1
jvm 1 : 13:33:27,861 INFO [STDOUT] Waiting 3000 ms for modem reply of:
jvm 1 : OK
jvm 1 : 13:33:27,861 INFO [STDOUT] ATU1
jvm 1 :
jvm 1 : OK
jvm 1 : 13:33:29,971 INFO [STDOUT] Configure modem...
jvm 1 : 13:33:29,971 INFO [STDOUT] Sending command to modem: AT&D1&C1
jvm 1 : 13:33:30,986 INFO [STDOUT] Waiting 10000 ms for modem reply of:
jvm 1 : OK
jvm 1 : 13:33:30,986 INFO [STDOUT] AT&D1&C1
jvm 1 :
jvm 1 : OK
jvm 1 : 13:33:31,205 INFO [ModemHandler] Waiting for ring.
jvm 1 : 13:33:31,205 INFO [ModemHandler] INITIALIZED: COM4
jvm 1 : 13:33:31,205 INFO [ModemHandler] Modem handler created.
jvm 1 : 13:33:31,205 INFO [ModemPoolService] Modem pool created.
jvm 1 : 13:34:07,268 INFO [TimerService] Fired Timer
jvm 1 : 13:34:07,283 INFO [CalloutSchedulerTimerListenerDelegate] Got timer
message.
jvm 1 : 13:34:07,377 INFO [SchedulerSessionDelegate] Scheduler processing ev
ents.
jvm 1 : 13:34:07,393 INFO [SchedulerSessionDelegate] readyList = []

```

Figure 2 - siteWRX Server Window

## 4. CONFIGURING

### 4.1. Connecting to the Server

The siteWRX server is set up and configured through the use of an accepted web browser such as Microsoft® Internet Explorer or Netscape Navigator®.

To connect to the siteWRX server simply start the web browser and enter the IP address or DNS name of the siteWRX server followed by “/siteWRX”.

For Example:

http://192.168.0.100/siteWRX   **Or**   http://server/siteWRX

The login screen is shown below:

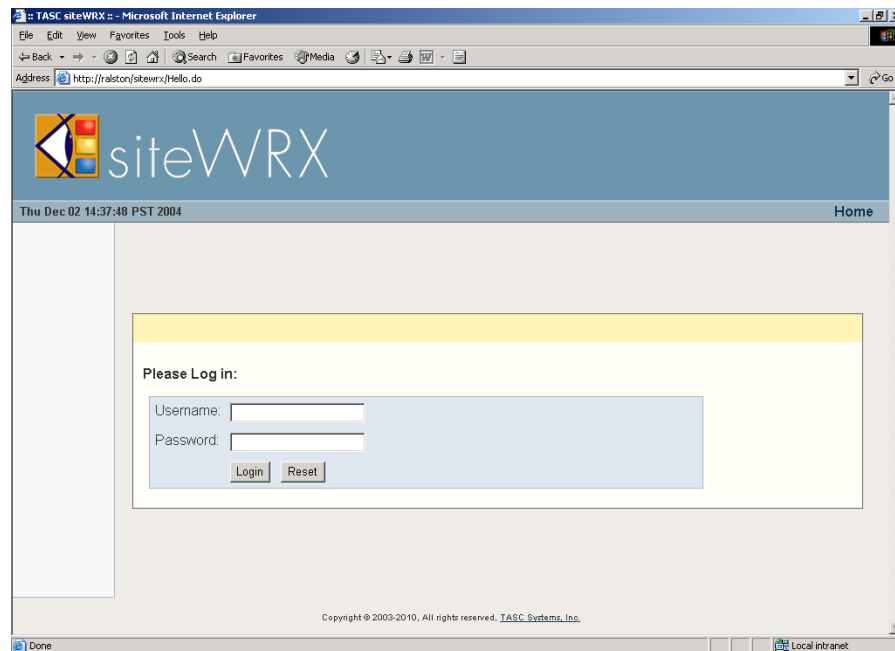


Figure 3 - siteWRX Login Screen

## 4.2. Logging In

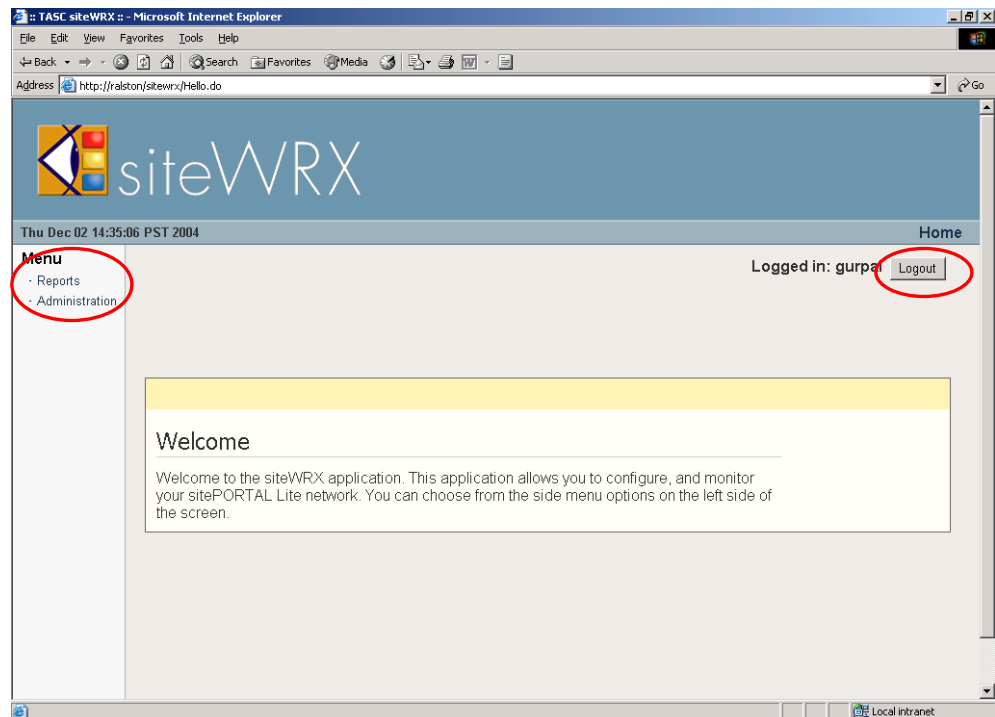
A valid username and password are required to gain access to the server. The default administrative account is:

- Username: admin
- Password: admin



**Please Note: For security purposes, it is recommended that the default account password be changed as soon as possible.**

The main menu will be presented on successful completion of the login process. The main menu provides access to the Reports and Administration sections and the ability to log out. The active window is refreshed every 30 seconds to insure that up to date information is displayed.



**Figure 4 - Main Menu**

## 4.3. Main Menu – Administration

### 4.3.1. Admin

The Admin tab provides information pertaining to the available tabs in this menu area and also the version of the software.

### 4.3.2. Configuration

The Configuration tab provides settings and entries for configuring different aspects of the siteWRX server.

**Figure 5 - Administration - Configuration Tab**

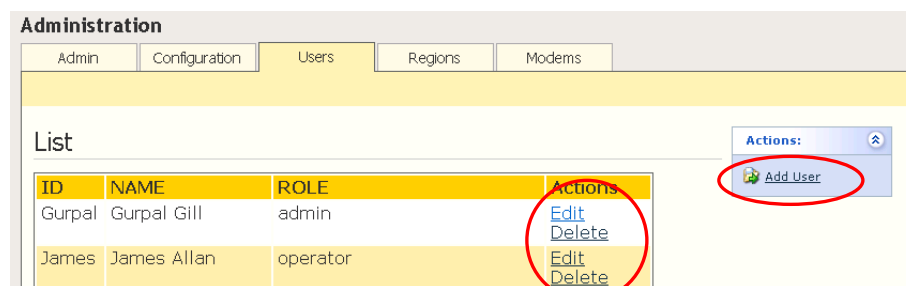
The following is an explanation of each field and its purpose.

- **System Name:** This name is used to create the remote connection to the sitePORTAL Lite. The sitePORTAL Lite logs the name of connection in its connection log.
- **SNMP Host:** This is the IP Address or NetBIOS name of the computer that is running the existing 3<sup>rd</sup> party SNMP Trap manager at the NOCC.
- **SNMP Community:** The community name is a plain-text password, which provides a weak degree of authentication during queries to agents of a managed network.
- **SNMP Port:** Enter the port number that the 3<sup>rd</sup> party SNMP Trap Manager is using to listen or query for alerts and updates. A typical value is 162.

- **Contact Retries:** This defines the number of times siteWRX will attempt to connect to the remote site prior to issuing a NO CONTACT trap to the SNMP system. This field will take on any value from 0 – 999999999.
- **Contact Period:** This is the time between successive status calls to a site (Units are Minutes). This field is only enabled if the Callout Time is set to 'Anytime'. This field will take on any value from 0 – 999999999.
- **Redial Period:** Defines the amount of time the siteWRX will wait prior to redialing a site which was previously non-responsive (Units are Minutes). This field will take on any value from 0 – 999999999.
- **Callout Jitter:** The Callout Jitter adds a random number of minutes to the callout time when polling sites. This field specifies the maximum number of minutes that will be added. This is useful in large networks where many sites are dialed simultaneously. With a Callout Jitter value in place, multiple calls will be spread out in a more manageable fashion (Units are Minutes). The value should not be set greater than the Contact Period as overlapping will occur. Zero means jitter is disabled. This field will take on any value from 0 – 999999999.
- **Max Log Age:** This is the amount of days siteWRX will log before beginning to replace the log file by over writing the oldest entries first (Units are Days). This field will take on any value from 0 - 999999999 as long as there is enough memory to store the data.
- **Callout Time:** siteWRX will poll sites at the time specified by this field. If 'Anytime' is selected, siteWRX will poll sites according to the Contact Period field. If 'Never' is selected, siteWRX will never poll sites.
- **TCP/IP Server Enabled:** Enables communication with TCP/IP equipped sPL units
- **TCP/IP Server Port:** The TCP port listens for reports from the TCP/IP sPL units.

### 4.3.3. Users

The Users Tab is where the user account management takes place. Accounts can be created, edited, and deleted. The limiting factor on the number of users that can be created is the amount of memory available to the database.



**Figure 6 - Administration - Users Tab**

## Creating a User Account

Create a user account by selecting “Add User” from the Actions box and complete the necessary fields in the “Edit” screen (Figure 7 - Creating/Editing a User).

The screenshot shows a web application interface titled "Administration". At the top, there are navigation tabs: "Admin", "Configuration", "Users", "Regions", and "Modems". The "Users" tab is selected. Below the tabs, the page is titled "Edit". The form contains the following fields:

- ID:** A text input field.
- Full Name:** A text input field.
- Description:** A large text area with a scroll bar.
- Password:** A text input field.
- Check Password:** A text input field.
- Roles:** A dropdown menu with the following options: "admin", "operator", "siteCreate", "siteDelete", and "siteEdit".

At the bottom of the form, there are two buttons: "Submit" and "Reset".

**Figure 7 - Creating/Editing a User**

The following is a description of each of the fields required to complete a new user account.

- **ID:** Represents the login name used to gain access to the siteWRX server. Any character or number combination is permissible.
- **Full Name:** For administration purposes, a Full Name can be assigned against a user ID which makes verifying records and usage easier.
- **Description:** This field is where descriptive information of the user is placed. This field accepts alphanumeric characters.
- **Password:** The password field is where a password is entered and associated with a particular ID. The password can consist of either numbers or letters and must be from 1 - 250 characters.
- **Check Password:** The password must be re-entered here to confirm accuracy prior to creating the account.
- **Roles:** The roles define what level of permission the user will have with respect to different areas of operation and configuration within siteWRX.
- **Admin:** An Administrator is allowed to change and view all properties in siteWRX.
  - **Operator:** An Operator is assigned to specific regions and can only call and view sites in those regions. An Operator can be given more authority by selecting any combination of the following:
    - **siteCreate:** Provides the ability to create sites.



- siteDelete: Provides the ability to delete sites.
- siteEdit: Provides the ability to edit sites.

To select more than one option, the 'Ctrl' key must be depressed while selecting other options.

- User: A User may only view reports. A User role is selected by not selecting any of the options available in the roles menu.

Once all information has been entered, click the *Submit* button to create the new account. Click the *Reset* button to clear the form.

### Editing a User

The main user list window provides the ability to change existing user accounts. Simply click on the "Edit" link next to the desired account (Figure 6 - Administration - Users Tab) and the "Edit" screen (Figure 7 - Creating/Editing a User) will appear. Once the new information has been entered, click the *Submit* button to update the database.

### Deleting a User

The main user list window provides the ability to delete existing user accounts. Simply click on the "Delete" link next to the desired account (Figure 6 - Administration - Users Tab).

## 4.3.4. Regions

The Regions Tab is where regions can be created, edited, and deleted. Regions enable easy management of sitePORTAL Lite modules on a per region or location basis. Regions are assigned Operators to maintain the sites located within each region. The limiting factor on the number of regions that can be created is the amount of memory available to the database.

**Administration**

Admin | Configuration | Users | **Regions** | Modems

List

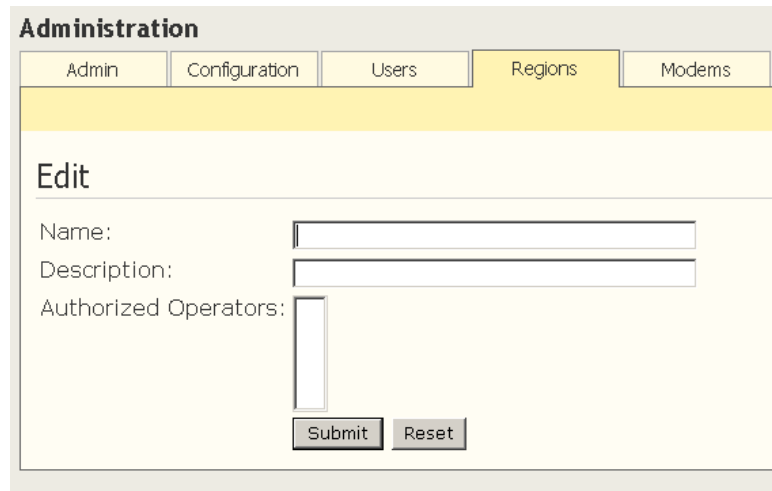
NAME	DESCRIPTION	Actions
TASC Systems Inc.	9415 202 Street, Langley BC V1M 4B5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>
Cartel Communication Systems Inc.	9415 202 Street, Langley BC V1M 4B5	<a href="#">View</a> <a href="#">Edit</a> <a href="#">Delete</a>

Actions: [Add Region](#)

**Figure 8 - Administration - Regions Tab**

## Creating a Region

Create a region by selecting “Add Region” from the Actions box and completing the necessary fields in the “Edit” screen (Figure 9 - Creating/Editing a Region).



The screenshot shows a web interface titled "Administration" with a navigation bar containing "Admin", "Configuration", "Users", "Regions", and "Modems". The "Regions" tab is selected. Below the navigation bar is a yellow header with the word "Edit". The main content area contains three input fields: "Name:", "Description:", and "Authorized Operators:". The "Name:" and "Description:" fields are single-line text boxes, while the "Authorized Operators:" field is a multi-line list box. At the bottom of the form are two buttons: "Submit" and "Reset".

**Figure 9 - Creating/Editing a Region**

The following is a description of the fields required to create a new region:

- **Name:** A brief name for the particular region. This field accepts alphanumeric characters.
- **Description:** This field is where a description pertaining to the region is placed. This field accepts alphanumeric characters.
- **Authorized Operators:** A list of Operators who are capable of maintaining the sPL's in the particular region. An Operator is created when creating a user (4.3.3 - Users). To select more than one Operator, the 'Ctrl' key must be depressed while selecting other operators.

Once all information has been entered, click the *Submit* button to create the new region. If the information entered is not correct, clear the form by clicking the *Reset* button.

## Viewing a Region

The main region list window provides the ability to view regions. Simply click on the “View” link next to the desired region (Figure 8 - Administration - Regions Tab). Here we have the ability to edit the region as well as add sites. The view list of a particular region presents a detailed list of the individual sitePORTAL Lite modules contained at sites within that region. Within this view list individual sites can be called, edited, deleted, and enabled/disabled.

**Administration**

Admin | Configuration | Users | **Regions** | Modems

**View**

Region: Cartel Communication Systems Inc.  
Description: 9415 202 Street, Langley BC V1M 4B5

**Sites**

Name	Type	Description	LastContacted	Actions
Cartel Lab Unit 1	sitePORTAL Lite	sitePORTAL Unit #1 S/N: 1142-072	Fri Nov 19 15:26:15 PST 2004	Call Edit Delete Enable
Cartel Lab Unit 2	sitePORTAL Lite	sitePORTAL Unit #2 S/N: 1142-085	Fri Nov 19 15:27:15 PST 2004	Call Edit Delete Enable

**Actions:**

- Edit Region
- Add Site

**Figure 10 - Viewing a Region**

## Editing a Region

The main region list window provides the ability to change existing regions. Simply click on the “Edit” link next to the desired region (Figure 8 - Administration - Regions Tab).

Clicking on the “Edit” link will activate the edit screen providing the ability to make changes to that particular region. Once the changes are made, click the “Submit” button to update siteWRX.

## Deleting a Region

The main region list window provides the ability to delete existing regions. Simply click on the “Delete” link next to the desired region (Figure 8 - Administration - Regions Tab).

### 4.3.5. Sites

#### Creating a Site

Sites can easily be added by selecting “Add Site” located in the blue action box in the “View” list of a region (Figure 10 - Viewing a Region). The limiting factor on the number of sites that can be created is the amount of memory available to the database.

The screenshot shows the 'Administration' web interface with the 'Edit' form for a site. The form is titled 'Edit' and is located under the 'Regions' tab. The fields are as follows:

- Device Type: TCP/IP sitePORTAL Lite (dropdown menu)
- Name: (text input field)
- Description: (text area)
- Deliver Alarms: IMMEDIATELY (24/7) (dropdown menu)
- Contact Address (Phone number, or internet address): (text input field)
- First Password: (text input field)
- Second Password (Optional): (text input field)

At the bottom of the form are 'Submit' and 'Reset' buttons.

**Figure 11 - Creating/Editing a Site**

After selecting “Add Site”, the site edit menu will be displayed (Figure 10 - Viewing a Region). All the information necessary to configure proper communication and alarm reporting between siteWRX and a sitePORTAL Lite module can be entered (Figure 11 - Creating/Editing a Site).

The following is brief description of the fields in the site edit form:

- Name: Represents the name given to the individual site.



**The name must match the name programmed in the sitePORTAL Lite module for the authentication process to function correctly during inbound and outbound communication (See SPCU Manual).**

- Description: A brief description to provide better detail concerning aspects of the particular site. This field could be used for location, maintenance group, etc.
- Deliver Alarms: This field controls the sending of SNMP traps to the NOCC. The five options are as follows:
  - Immediately (24/7): siteWRX will send SNMP traps immediately (24 hours a day/7 days a week).
  - Monday to Friday (24/5): siteWRX will send SNMP traps only from Monday to Friday (24 hours a day/5 days a week).
  - Monday to Friday from 8:00 to 20:00: siteWRX will send SNMP traps only from Monday to Friday from 8 am to 8 pm.

- Monday to Friday from 8:00 to 20:00 and Saturday from 8:00 to 17:00: siteWRX will send SNMP traps only from Monday to Friday from 8 am to 8 pm and Saturday from 8 am to 5 pm.
- Monday to Friday from 8:00 to 20:00 and Saturday to Sunday from 8:00 to 17:00: siteWRX will send SNMP traps only from Monday to Friday from 8 am to 8 pm and Saturday to Sunday from 8 am to 5 pm.
- Contact Address: This field is used by siteWRX to contact the site. Enter a phone number or static IP Address and port (i.e. 123.123.123.123:444) or just a port (i.e. :444) for dynamic IP Addresses.
- First Password: The password used to gain remote access to the sitePORTAL Lite must be entered here for the authentication process to function correctly during inbound and outbound communication. The password must be between 6 - 10 characters.
- Second Password: This is a future feature and is not currently required for proper operation with the sitePORTAL Lite modules.
- Once all information has been entered, click the *Submit* button to update siteWRX. If the information entered is not correct, clear the form by clicking the *Reset* button.

### **Calling a Site**

The View Region list window provides the ability to call an existing site. Simply click on the “Call” link next to the desired site (Figure 10 - Viewing a Region) and if a modem is available, the site will be called. Verification that a site has not been called can be seen in the Alarms tab, as there will be a No Connection alarm.

### **Editing a Site**

The View Region list window provides the ability to edit the configuration of an sPL at an existing site. Simply click on the “Edit” link next to the desired site (Figure 10 - Viewing a Region).

After clicking “Edit” the Site Edit form will be displayed where the necessary changes can be made. Once all information has been entered, click the *Submit* button to update the database.

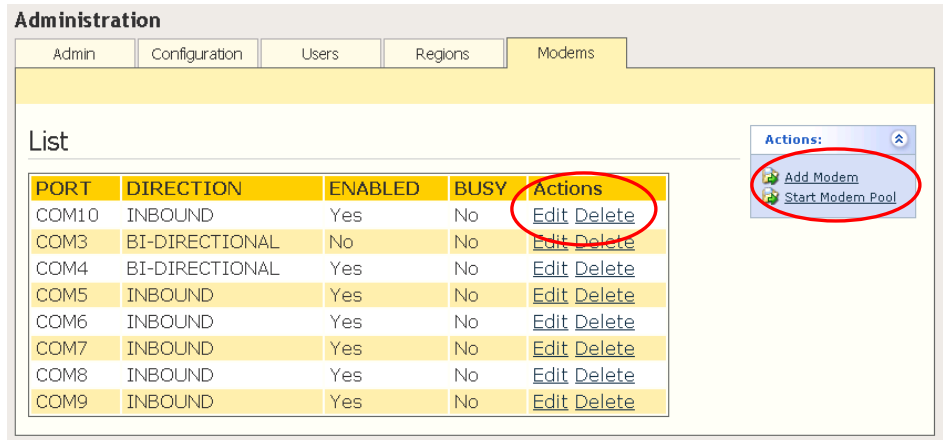
### **Deleting a Site**

The View Region list window provides the ability to delete existing sites. Simply click on the “Delete” link next to the desired sites (Figure 10 - Viewing a Region).

### **Enabling/Disabling a Site**

The View Region list window provides the ability to enable/disable sites as required. Simply click on the “Enable/Disable” link next to the desired site (Figure 10 - Viewing a Region). When a site is disabled, it will not be polled. In other words, the siteWRX server will not call that sPL to check its status.

### 4.3.6. Modems



**Figure 12 - Administration - Modem Tab**

The Modems Tab is where the list of available modems connected to the siteWRX PC can be created, configured, and removed. The administrator has the ability to start and stop the entire pool of available modems. The limiting factor on the amount of modems that can be created is the amount of serial COM ports the operating system will support.

#### Creating a Modem

Create a modem by selecting the “Add Modem” link inside the blue action box (Figure 12 - Administration - Modem Tab).

The “Edit” form will provide all the necessary fields and selection boxes to capture the information pertaining to the particular modem being created (Figure 13 - Creating/Editing a Modem).

The screenshot shows the 'Administration' interface with the 'Modems' tab selected. The 'Edit' form contains the following fields and controls:

- Port:
- Init String:
- Direction:
- Enabled:
- Port Speed:
- Data Bits:
- Parity:
- Stop Bits:
- Handshake:
- Submit
- Reset

**Figure 13 - Creating/Editing a Modem**

The following is a brief description of each field in the Modem “Edit” page:

- **Port:** This field represents the physical COM port on the computer. The COM port must be entered in text format. e.g. COM5
- **Init String:** The Init String allows for custom AT strings to be used. This is useful when the modem or telephone network being used require a specific modem configuration.
- **Direction:** This defines the direction in which the modem communicates to the remote sitePORTAL Lite. Inbound modems are only able to accept incoming calls from sitePORTAL Lite modules. Outbound modems are only able to make outgoing calls to the sitePORTAL Lite modules. Bi-Directional modems are capable of either making or receiving calls from sitePORTAL Lite modules.
- **Enabled:** This check box makes the modem active and allows siteWRX to allocate the COM port and modem into its modem pool. The modem pool must be stopped and restarted before this change will take effect.
- **Port Speed:** The port speed field defines the baud rate at which this particular port will operate. A predefined selection must chosen.
- **Data Bits:** Represents the number of data bits in every data packet sent to the modem.
- **Parity:** The parity bit provides simple error (parity) checking for the transmitted data.
- **Stop Bits:** This defines the number of stop bits to use at the end of a data packet.
- **Handshake:** This defines what type of handshake will be used between the selected COM Port and the attached modem. The options are either Hardware or Software.
- Once all information has been entered, click the *Submit* button to update siteWRX. If the information entered is not correct, clear the form by clicking the *Reset* button.



**Once all the parameters for the modem have been set, the modem pool must be stopped and then restarted for the new modem to be added to the modem pool.**

### Editing a Modem

The main modem list window provides the ability to edit existing modem configurations. Simply click on the “Edit” link next to the desired modem (Figure 12 - Administration - Modem Tab).

Clicking on the “Edit” link will activate the edit screen providing the ability to make changes to that particular modem.

Once the new information has been entered, click the *Submit* button to update the entry.



**Once the parameters have been changed, the modem pool must be stopped and then restarted for the changes to take effect.**

### **Deleting a Modem**

The main modem list window provides the ability to delete existing modem configurations. Simply click on the “Delete” link next to the desired modem (Figure 12 - Administration - Modem Tab).



## 5. OPERATIONS

### 5.1. Main Menu – Reports

#### 5.1.1. Alarms

The Alarms Tab provides information about outstanding alarms from various sites. It will also create a No Connection alarm if contact cannot be achieved at a site. The alarm is removed when a ceasing alarm is received or can be done manually by clicking on the “Delete” link.

The screenshot shows the 'Reports' section with tabs for 'Alarms', 'Graphs', and 'Logs'. The 'Alarms' tab is active, displaying 'Outstanding Alarms'. Below the heading, it states 'One alarm found.' To the right, there is an 'Actions:' dropdown menu with a 'Refresh' button circled in red. Below this is a table with one row of alarm data. The 'Actions' column for this row has a 'Delete' link circled in red.

DATE	SEVERITY	DETAILS	SITE	REGION	Actions
2004/11/24 17:23	CRITICAL	RF Output Power Low	Cartel Lab Unit 1	Cartel Communication Systems Inc.	Delete

Figure 14 - Reports - Alarms Tab

#### 5.1.2. Graphs

The Graphs Tab provides the alarms and connections activity graphically. The inbound and outbound connections graphs are cleared when the connections log is cleared but the alarms graph cannot be cleared and will display all alarms within the Max Log Age parameter set in the Configuration tab.

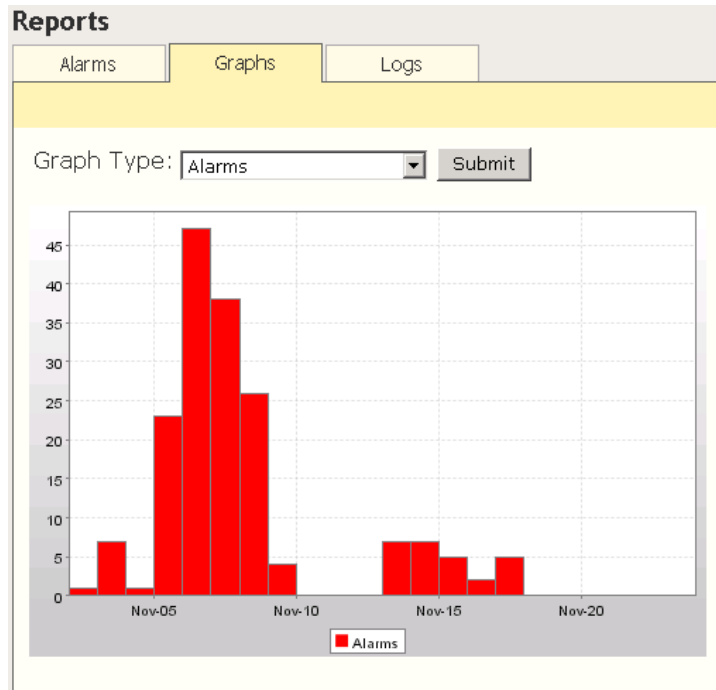


Figure 15 - Reports - Graphs Tab

### 5.1.3. Logs

The Logs Tab displays logs of connections, errors, logins, and SNMP traps. The log may be organized per each field by clicking on the field name. The ability to Clear an individual Log is provided by selecting “Clear Log” from the Actions box.

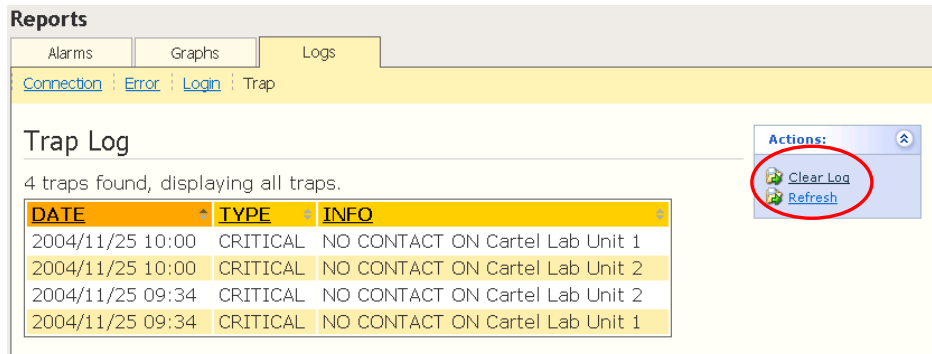


Figure 16 - Reports - Logs Tab

## 6. APPENDIX

---

### 6.1. Troubleshooting

<b>Problem</b>	<b>Possible Solution</b>
Cannot connect to sPL?	Verify the sitePORTAL Lite site name (using SPCU) and the name in siteWRX are identical. Otherwise an authentication mismatch error will result.  Verify the modem pool has been started and siteWRX can talk to the modem.  Verify the phone numbers in the sitePORTAL Lite and siteWRX are correct.
Cannot initialize modem?	Verify the init string is correct. Use terminal emulator program such as Hyper Terminal® to verify direct communication with the modem.
Cannot receive SNMP traps?	Verify the MIB file (TASC-SITEWRX-MIB.txt) has been compiled by the SNMP manager.

## 6.2. Glossary

SNMP – Simple Network Management Protocol, a set of protocols for managing complex networks.

sPL – sitePORTAL Lite, an alarm and remote monitoring unit produced by TASC Systems Inc..

NOCC – Network Operations Control Centre, the physical space from which a typically large telecommunications network is managed, monitored, and supervised.

PSTN - Public Switched Telephone Network, which refers to the international telephone system based on copper wires carrying analog voice data.

SPCU – sitePORTAL Lite Configuration Utility