**Okuma America Corporation**

# Okuma Machine Alert System
# Software User Manual

Document No.: S5061-004-05

# Revision History

| Date | Version | Description | Author |
| --- | --- | --- | --- |
| 11/08/2012 | S5061-004-00 | Initial Release | Thanh Huynh |
| 06/07/2013 | S5061-004-01 | Revise 2.2 | Linh Huynh |
| 03/11/2014 | S5061-004-02 | Add 1.4.1 section<br>Add 6.1.4 section<br>Add 4.2.1.3 Edit Misc. Setting | Linh Huynh |
| 08/06/2014 | S5061-004-03 | Revised section 2 | Linh Huynh |
| 06/04/2015 | S5061-004-04 | Revised section<br>2.2 Installation of Okuma Machine Alert System Software<br>4.2.1 Configuration Setting | Linh Huynh |
| 09/22/2021 | S5061-004-05 | Revised sections:<br>2. Software Installation<br>4. Usage<br>6.1.3 Unable to save Email configuration | Linh Huynh |

Okuma Machine Alert System 1

Document No.: S5061-004-05 1

Revision History 2

1. Introduction 5
   - 1.1 Purpose 5
   - 1.2 Scope 5
   - 1.3 Definitions, Acronyms and Abbreviations 5
   - 1.4 Overview 5
     - 1.4.1 Compatible 5
   - 1.5 Functions and Configuration 5
     - 1.5.1 Function 5
     - 1.5.2 Configuration 5
   - 1.6 References 5

2. Software Installation 6
   - 2.1 Installation of THINC-API 6
   - 2.2 Installation of Okuma Machine Alert System Software 6
     - 2.2.1 Installation of Microsoft .NET Framework 4.0 6
     - 2.2.2 Installation of Okuma Machine Alert System Software 7
   - 2.3 Installation of THINC Startup Service 13
   - 2.4 Setup Okuma Machine Alert System Software to Startup Automatically 13
   - 2.5 Installing Adobe Reader 13

3. Repair/Uninstall Okuma Machine Alert System Software 16
   - 3.1 Un-install Okuma Machine Alert System Software 16
   - 3.2 Repair/Un-install THINC Startup Service 17
   - 3.3 Repair/Uninstall THINC-API 18
   - 3.4 Repair/Uninstall Adobe Reader 18

4. Usage 20
   - 4.1 System Events Tab 22
     - 4.1.1 File Menu 22
     - 4.1.2 Clear Events Menu 23
     - 4.1.3 Trace ON/OFF Menu 24
     - 4.1.4 Minimize To System Tray Menu 24
     - 4.1.5 Minimize To Taskbar Menu 25
     - 4.1.6 About Menu 25
   - 4.2 Configurations Tab 25
     - 4.2.1 Configuration Setting 26
     - 4.2.2 Register User Account 34
     - 4.2.3 Group Registration 38
     - 4.2.4 Notification Registration 43
     - 4.2.5 Alarm Registration 45
     - 4.2.6 Views 50

5. Event Log 51

5.1 Error Event Log 51

6. Trouble Shooting 53

6.1 Common Errors 54

6.1.1 Unable to check carrier - Failure sending mail 54

6.1.2 Email server - Failure sending mail 55

6.1.3 Unable to save Email configuration 57

6.1.4 No notification of current alarm is sending after registering for alarms 57

# Okuma Machine Alert System Installation Manual

## 1. Introduction

### 1.1 Purpose

The purpose of this document is to provide the instruction of installing Okuma Machine Alert System. It also provides information on how to repair, and uninstall this software.

### 1.2 Scope

This manual will cover the installation, operation and trouble shooting for Okuma Machine Alert System.

### 1.3 Definitions, Acronyms and Abbreviations

Refer to Glossary Document of Okuma Machine Alert System.

### 1.4 Overview

The Machine Alert System will allow user to assign machine alarms to be sent to user by email, text message, and dial to a mobile phone. The system will interface with THINC control through THINC-API to monitor machine alarm status. The system will interface with email server to send alarm info to a pc or mobile device.

#### 1.4.1 *Compatible*

This application requires running on OSP-P controls. It also requires to be installed on Windows XP SP3 or Windows 7 operating system.

### 1.5 Functions and Configuration

#### 1.5.1 *Function*

- This application will start after NC is started up.
- The Machine Alert System supports both Okuma machining center and lathe machines.
- The system will send out email or text messages for each registered group
- The system will raise an event message as following:
  - ❖ OSP issues an alarm
  - ❖ Coolant Monitoring System issue alarm via external alarm when concentration level or pH level has reached the upper/lower threshold limit.

#### 1.5.2 *Configuration*

- The system will allow user to register different account
- The system will allow user to register multiple user name in each user group
- The system will allow user to select alarm content for each user group
- The system will allow user to activate or deactivate user group
- The system will allow user to register selected alarm to be notified for each group

### 1.6 References

[1] Installation Manual for THINC-API

[2] Installation Manual for Startup Service

# 2. Software Installation

It is important that the order of installation must be carried out as specifying here and current user must have an administrative level to install the applications.

## 2.1 Installation of THINC-API

Refer to THINC-API 'Installation Manual.pdf' for instructions.

*Tip: Try to run THINC-API Demo Application and see if it runs normally to make sure THINC-API is properly installed.*

Install the latest version of THINC-API on the machine if possible.

## 2.2 Installation of Okuma Machine Alert System Software

Run the 'Setup.exe' in the 'Okuma Machine Alert System' folder in installation disk to install Okuma Machine Alert System Software. The setup program automatically checks

If Microsoft .NET framework 4.0 is installed then refer to section Installation of Microsoft .NET Framework 4.0.

Note: The installation must be performed in Windows mode only and must be run from DVD disk or local hard drive on machine. No USB or flash drive installation is allowed.

### 2.2.1 *Installation of Microsoft .NET Framework 4.0*

The next dialog will be displayed if Microsoft .NET framework 4.0 is not installed.

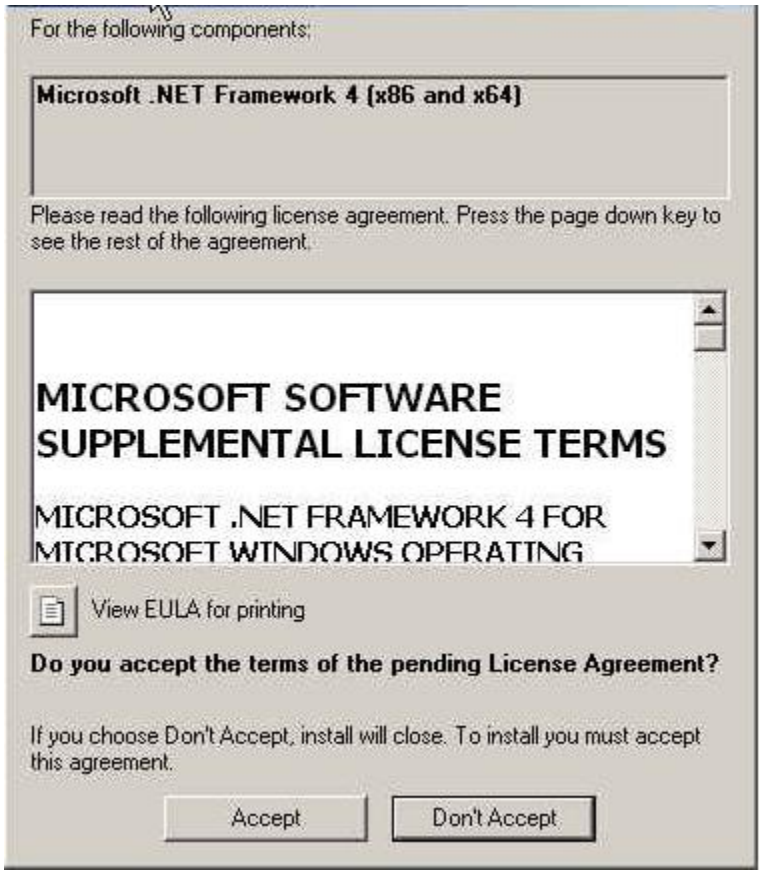



Figure: .NET framework 4.0 license agreement dialog

Click ‘Accept’ to install .NET framework 4.0.

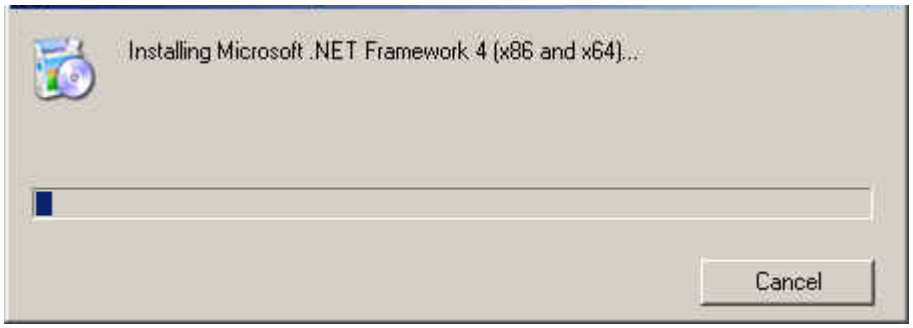
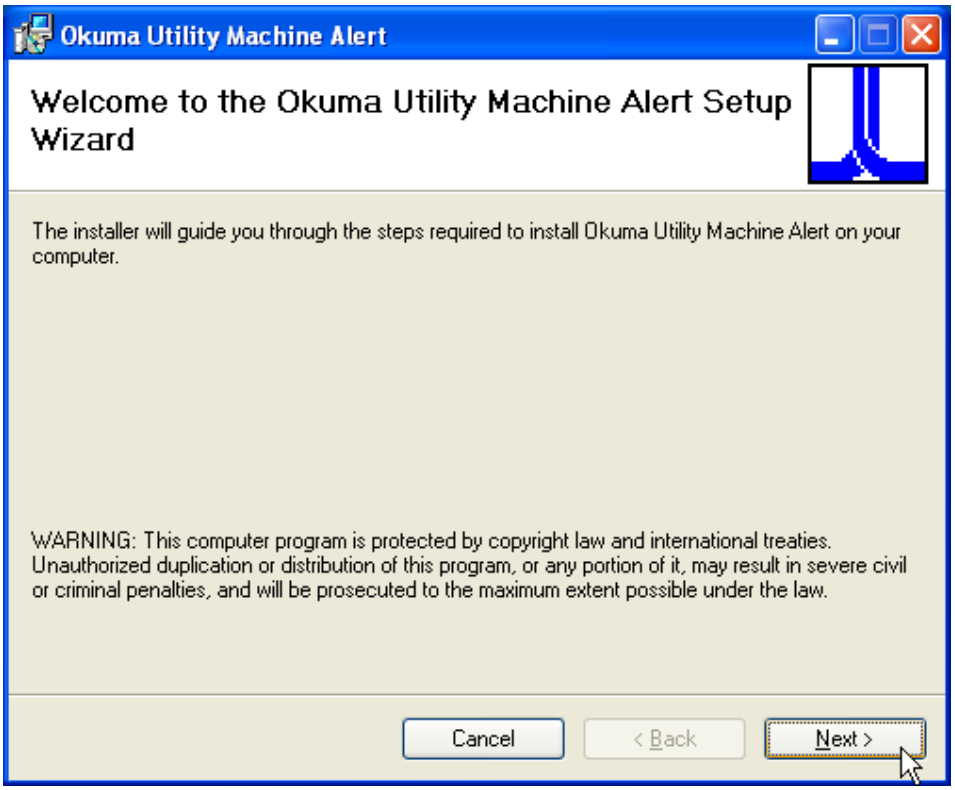


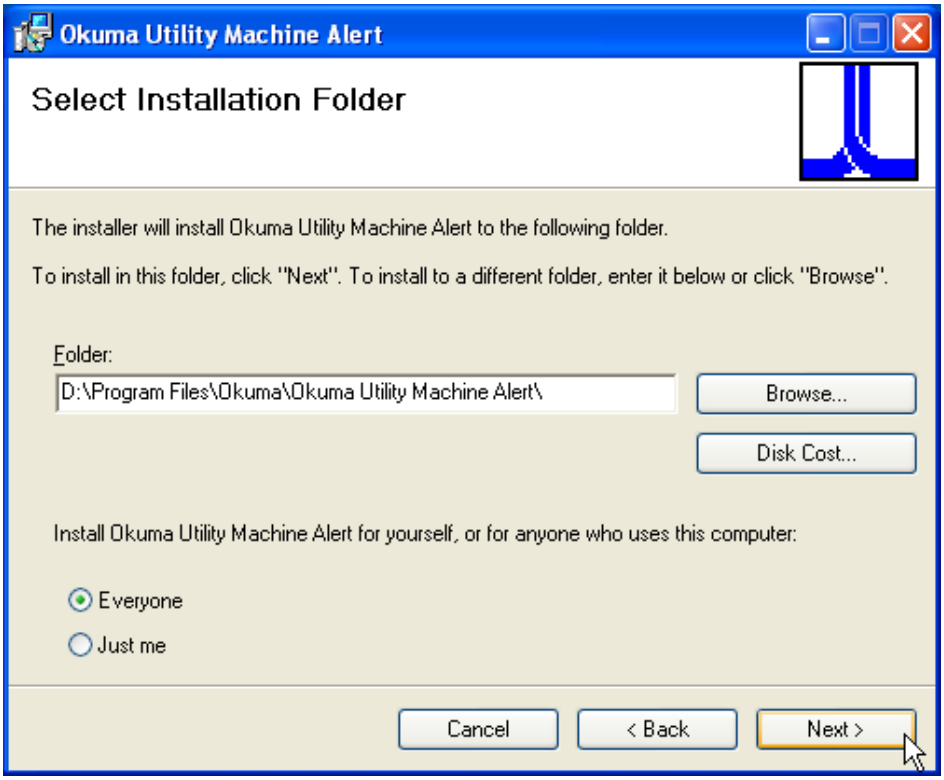

Figure: .NET framework 4.0 installation dialog

If the .NET installation requires rebooting then it needs to reboot the machine to continue the installation again.

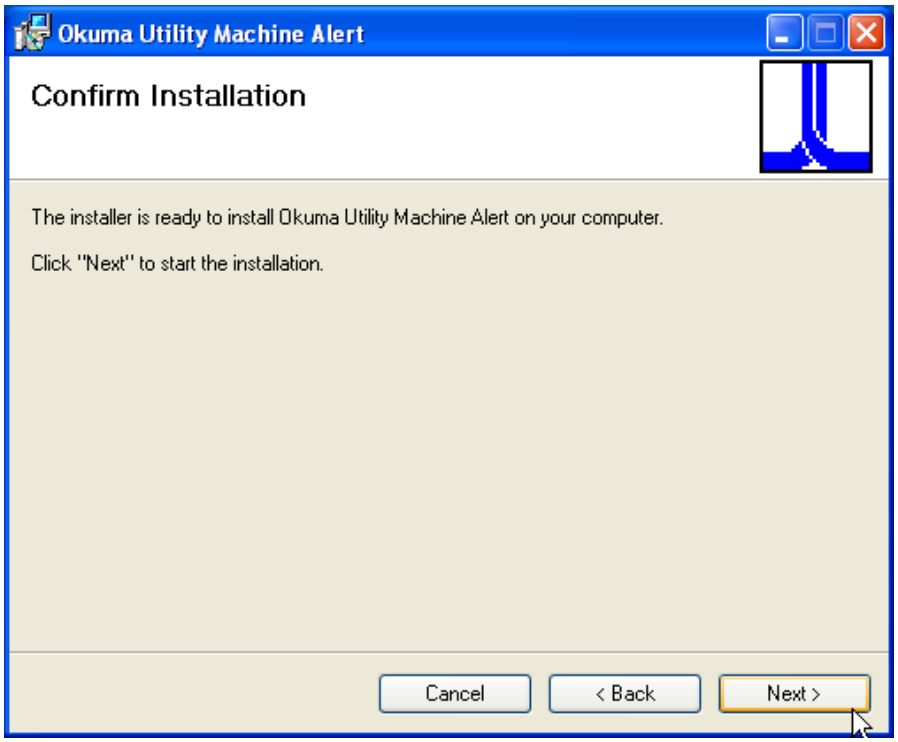
2.2.2 *Installation of Okuma Machine Alert System Software*



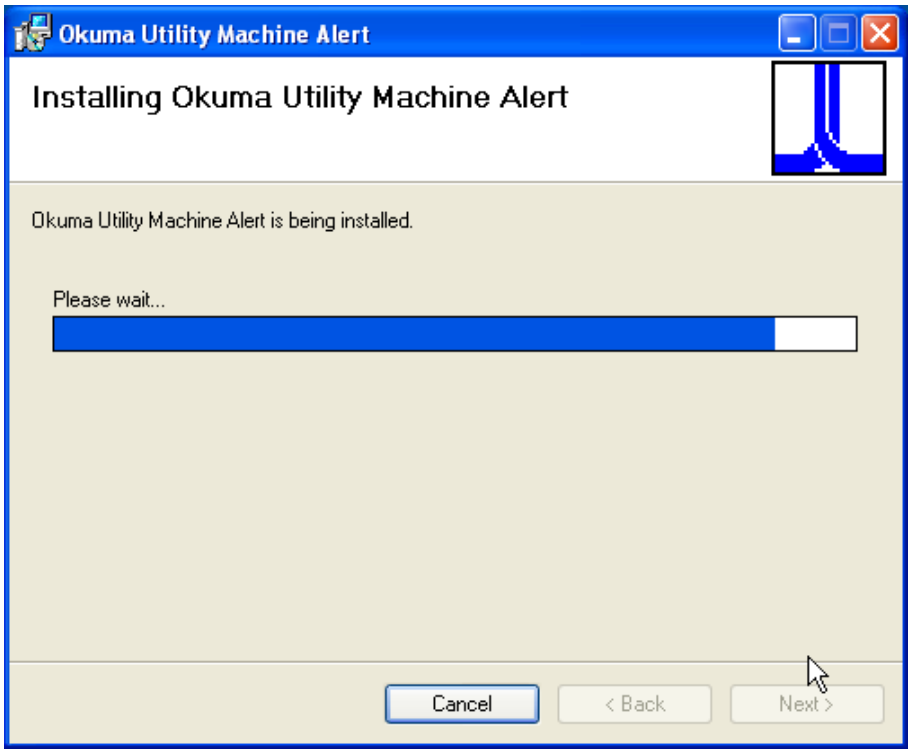

- Click Next

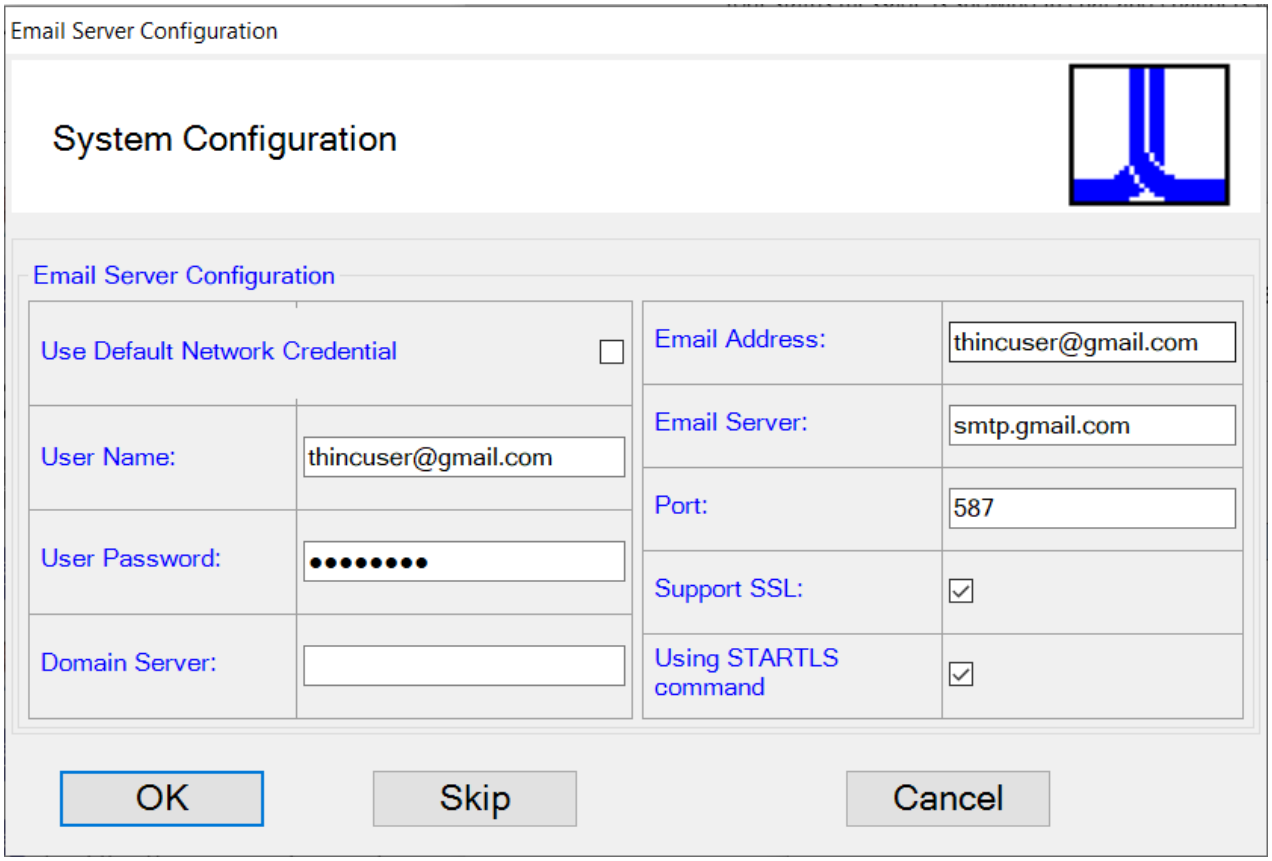



- Click Next


Okuma Utility Machine Alert
Confirm Installation
The installer is ready to install Okuma Utility Machine Alert on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

- Click Next


Okuma Utility Machine Alert
Installing Okuma Utility Machine Alert
Okuma Utility Machine Alert is being installed.
Please wait...
Cancel
< Back
Next >



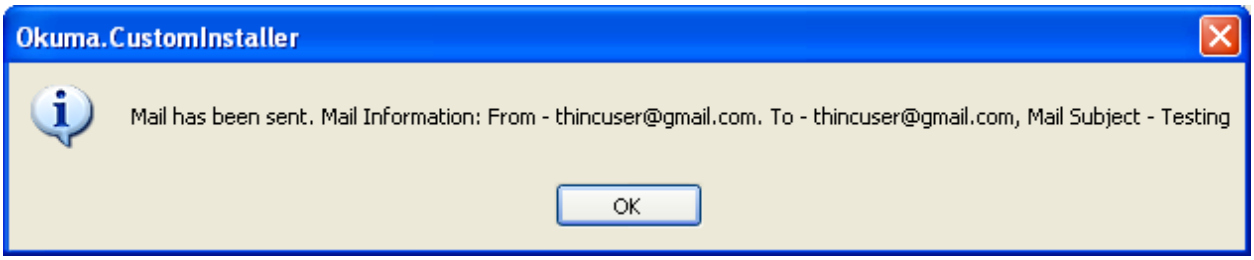

- MUST consult IT person to change Email Server, Port, and Domain Server, and Enable SSL check box setting as necessary
  - User Default Network Credential: If checked the system will use current user account to send email.
    *Note: if checked the User Name/Password/Domain Server will be cleared as shown above.*
  - Email Address: Enter an email address to be sent for testing purpose.
    Note: it could be the same User Name where the test email will be sent to the same account.
  - User Name: Enter an email address to log into Email Server account
  - User Password: Enter the password to log into Email Server account
  - Port: Enter port number that can be supported by the Email Server
  - Support SSL: Check the box if Email Server requires SSL connection.
  - Using STARTTLSCommand: Check the box if Email Server requires to use STARTTLS command

- Click Skip button if machine does not have internet connection and the system will skip to verify the email configuration.

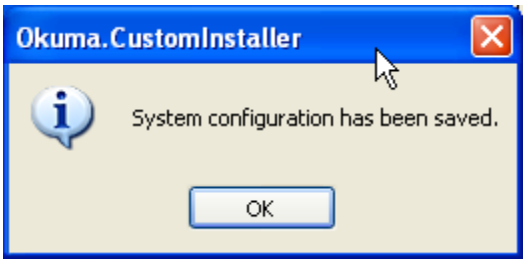
- Consult customer IT person to change Email Server, Port, and Domain Server, and Enable SSL check box setting as necessary

- Click OK button to continue if machine or pc already has internet connection

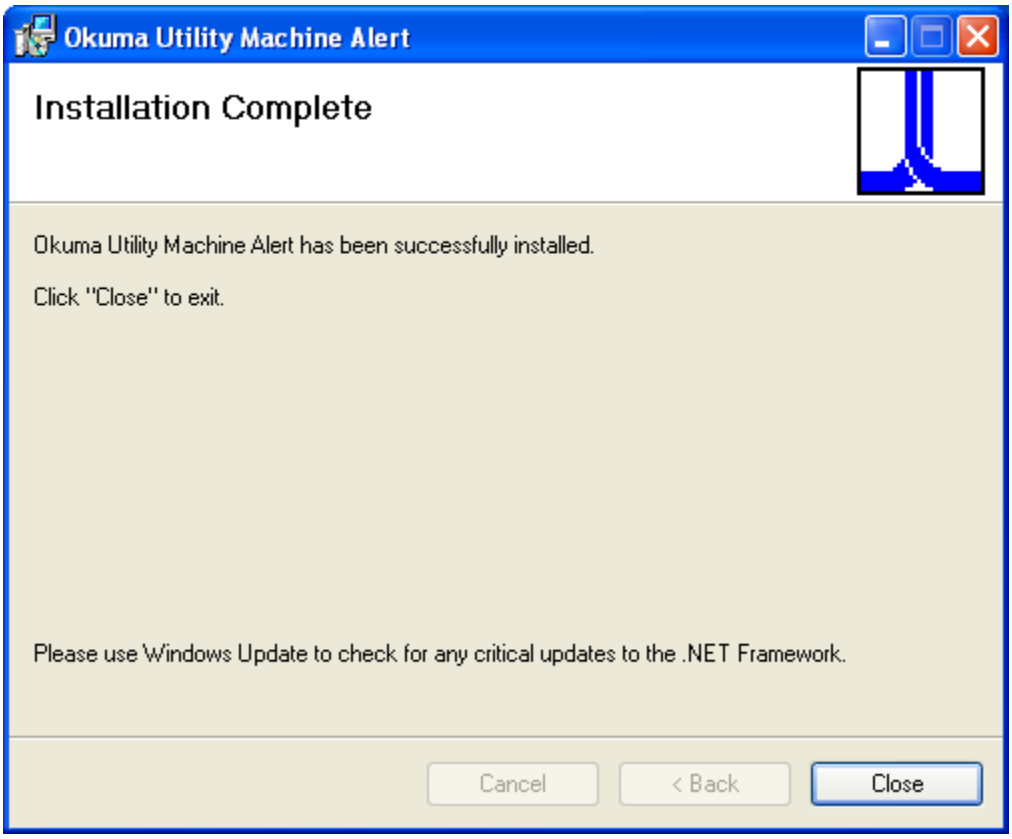
- Click Yes




- Click OK




- Click OK




- Click Close button to exit.

### 2.3 Installation of THINC Startup Service

Run the 'Setup.exe' in the Okuma Startup Service System DVD to install THINC Startup Service and refer to the installation manual of THINC Startup Service.

*Note: User needs to restart the machine to ensure that the startup service work properly.*

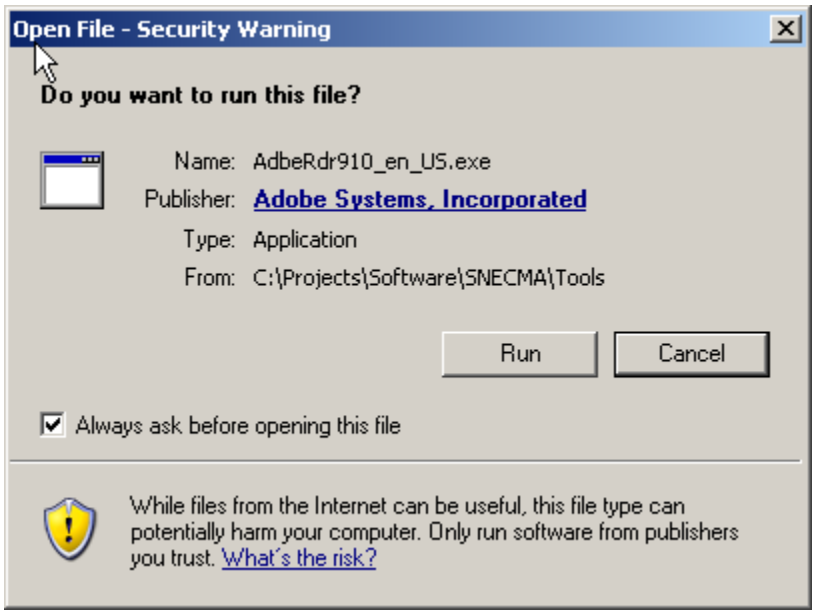
The application is automatically registered with Startup Service for running after NC is started. It can also be registered with Startup Service manually as shown in the section 2.4.

### 2.4 Setup Okuma Machine Alert System Software to Startup Automatically

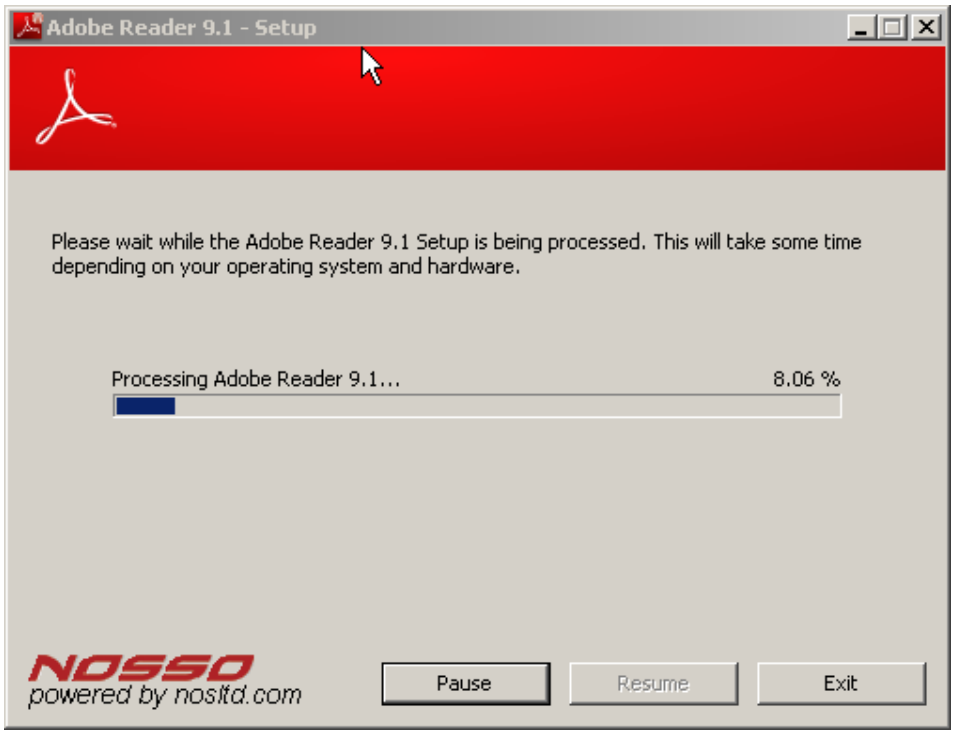
By default, the application is registered with the Startup Service during the installation. To manually register the application with the Startup Service, please refer to the Installation Manual of Startup Service for more information.

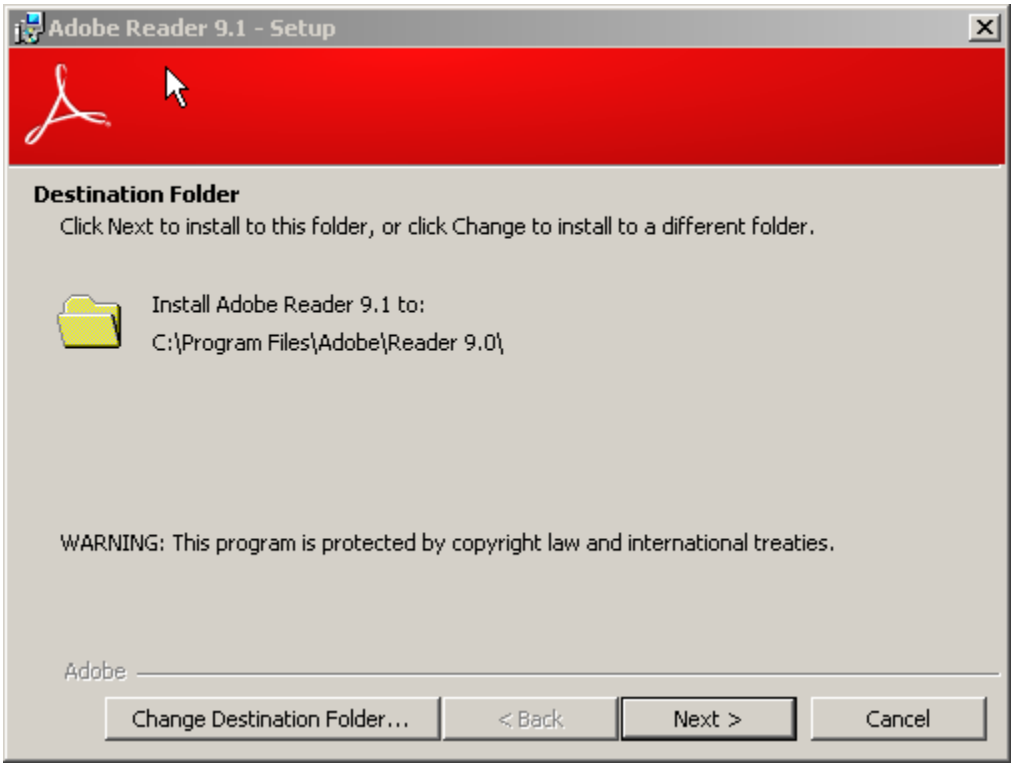
### 2.5 Installing Adobe Reader

- From the disk, go to folder 'Tools' and double click file 'AdbeRdr910_en_US.exe. Click 'Run' in the popup window below if it is displayed

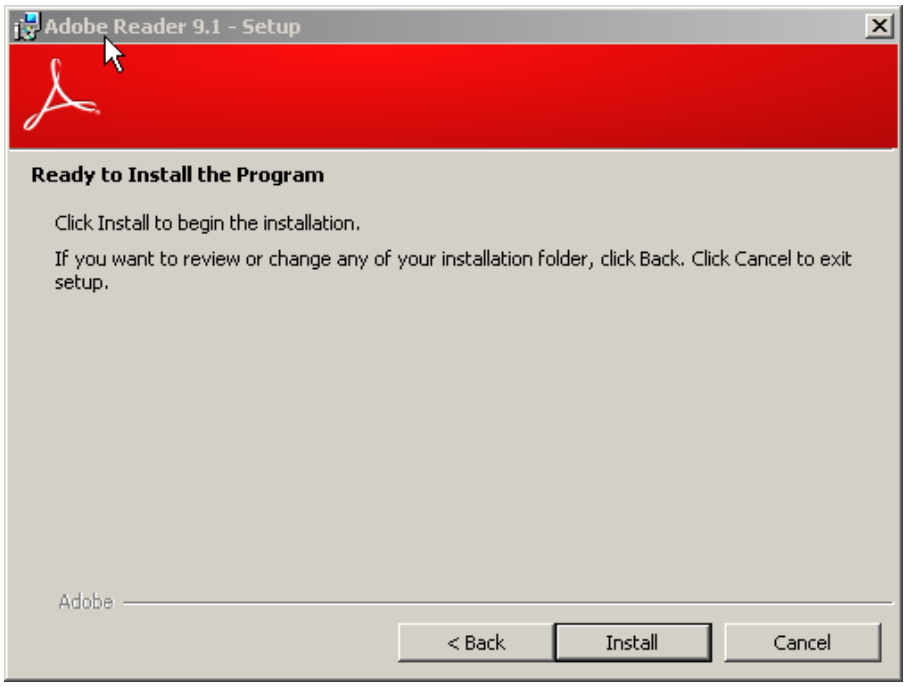



- Abode Reader will prepare for the installation on the machine.

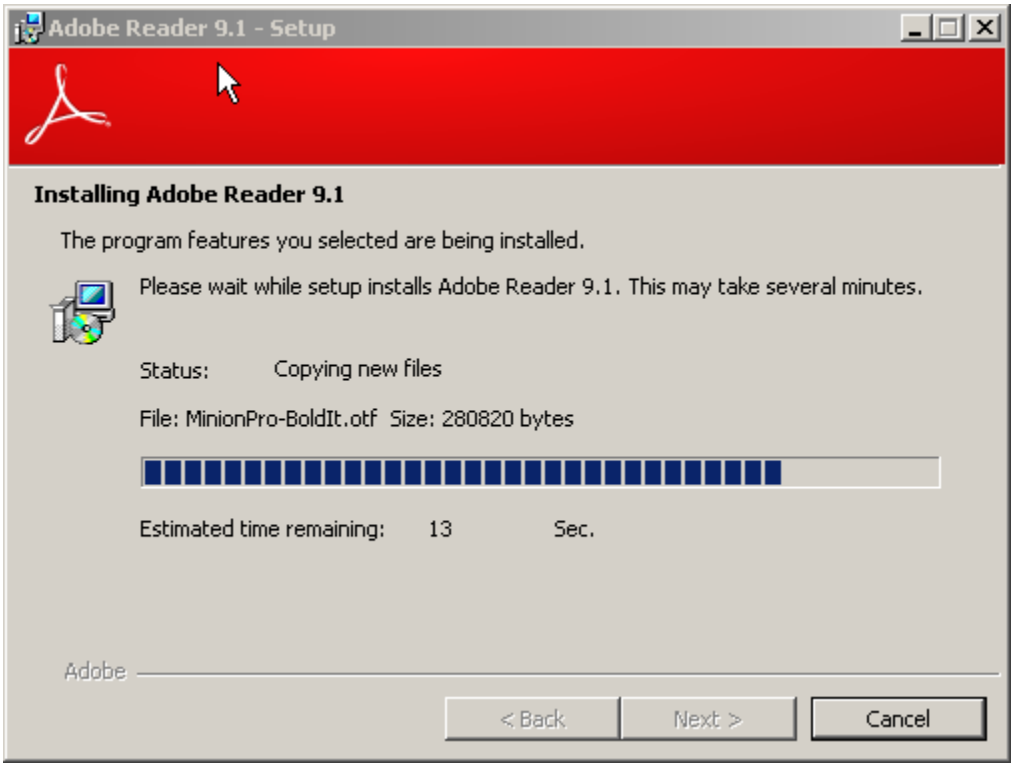


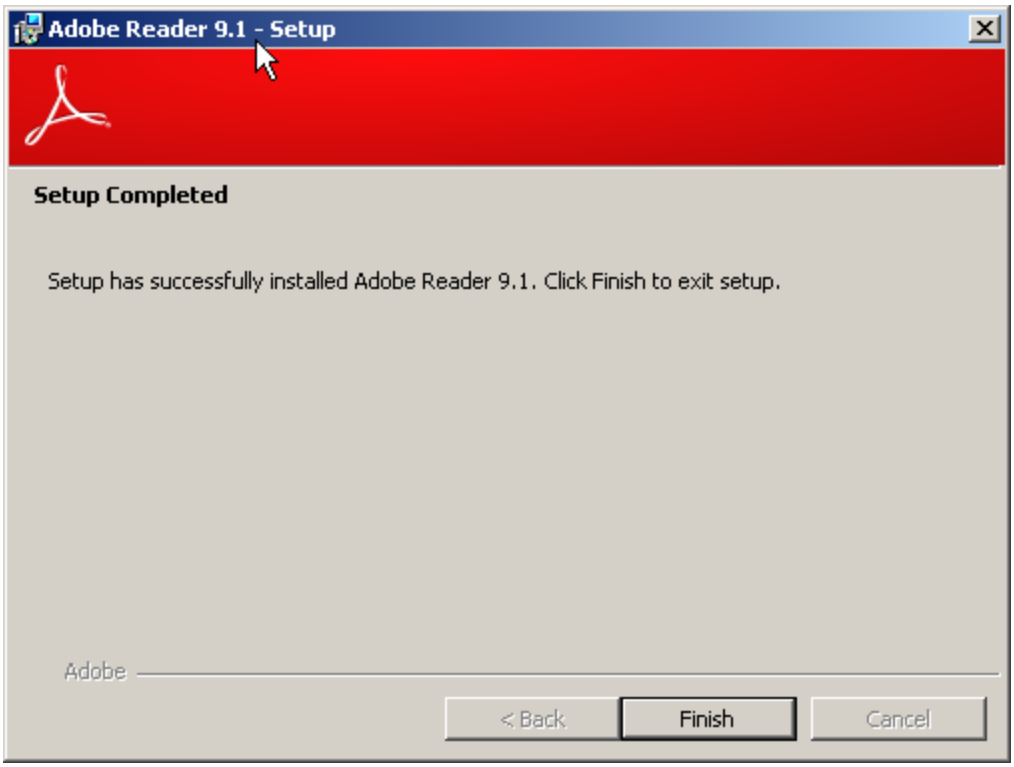




- Change the destination folder if needed and click ‘Next’




- Click Install to install the application





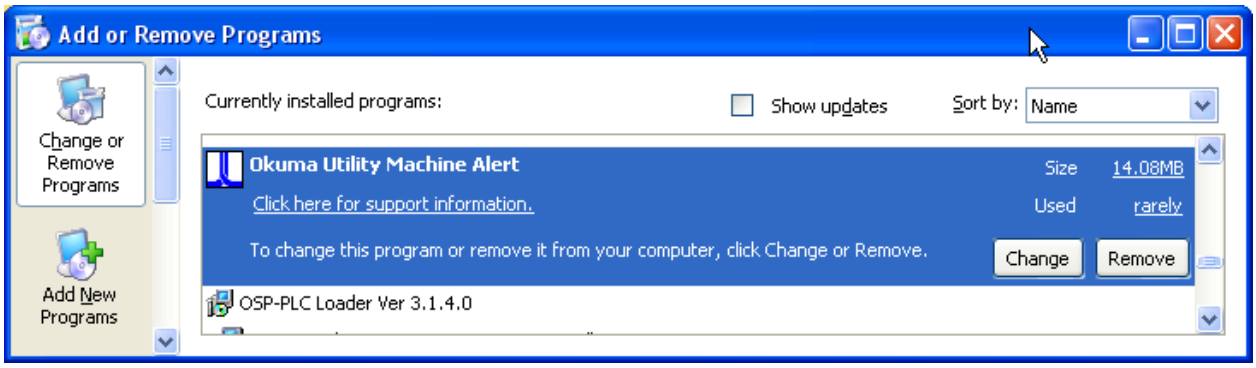

- Click finish to complete the installation

## 3. Repair/Uninstall Okuma Machine Alert System Software

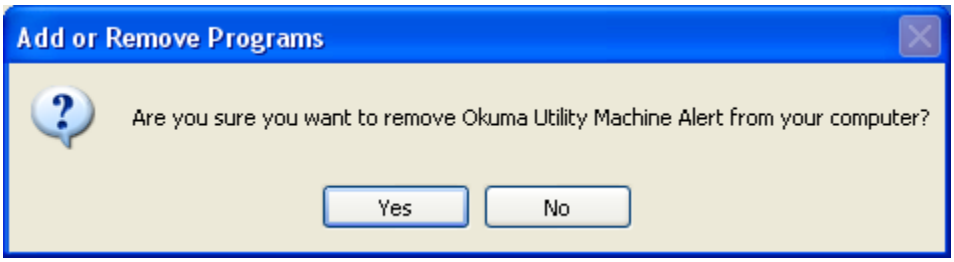
### 3.1 Un-install Okuma Machine Alert System Software

Start the machine in Windows only mode. Click 'Start' → Settings → 'Control Panel' to launch control panel. Double click 'Add or Remove Programs' in control panel, find the item 'Okuma Machine Alert System' and click 'Remove' to uninstall Okuma Machine Alert System Software.

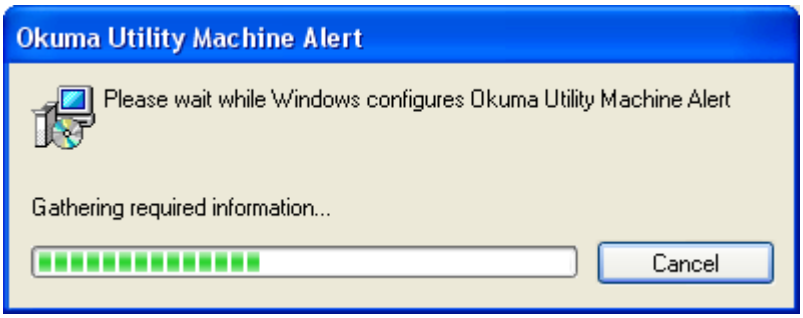
*Note: Before performing un-installing Okuma Machine Alert System application, please shutdown the Okuma Machine Alert System application if it is running.*




- Click Remove

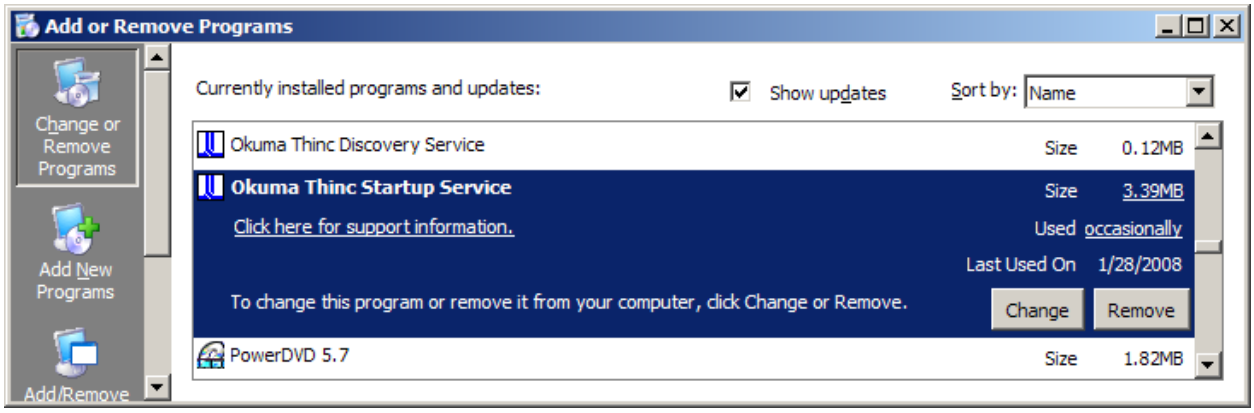



- Click ‘Yes’ to confirm uninstalling Okuma Machine Alert System Software.



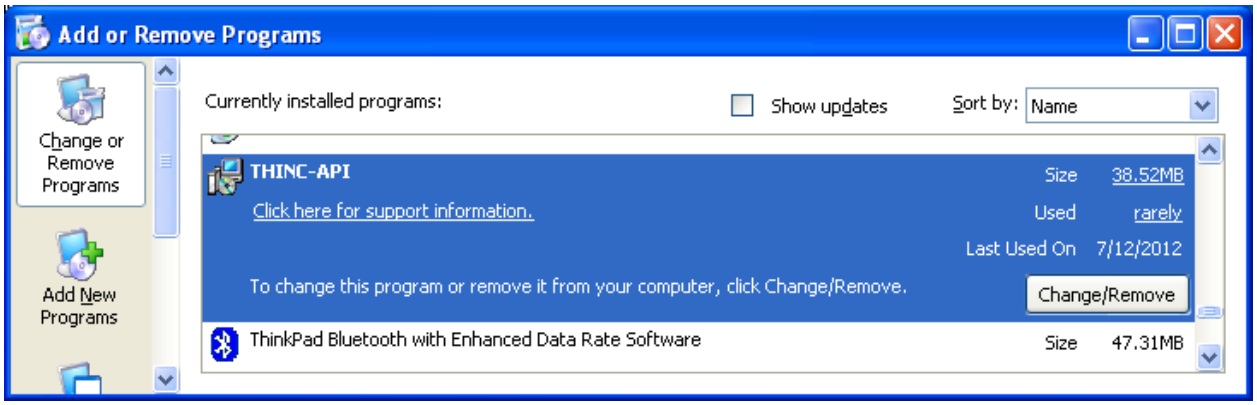

### 3.2 Repair/Un-install THINC Startup Service

Double click ‘Add or Remove Programs’ in control panel, find the item ‘Okuma THINC Startup Service’ and click ‘Remove’ to uninstall THINC Startup Service.



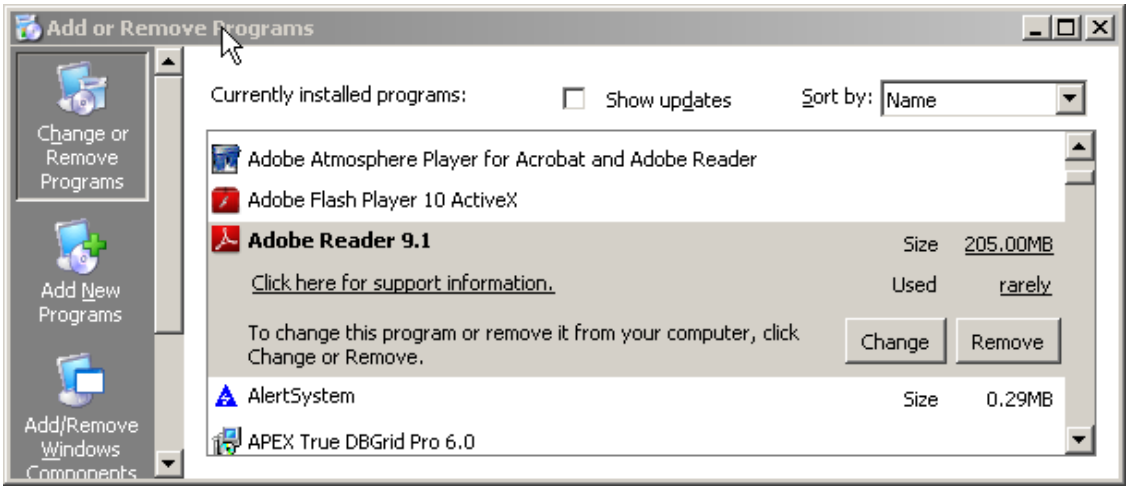

### 3.3 Repair/Uninstall THINC-API

Double click ‘Add or Remove Programs’ in control panel, find the item ‘THINC-API’ and click ‘Change/Remove’ to uninstall THINC-API.

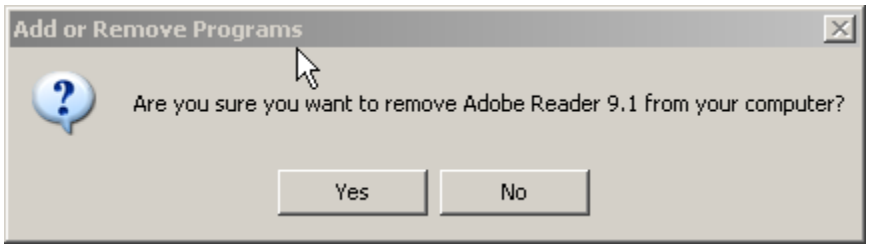



### 3.4 Repair/Uninstall Adobe Reader

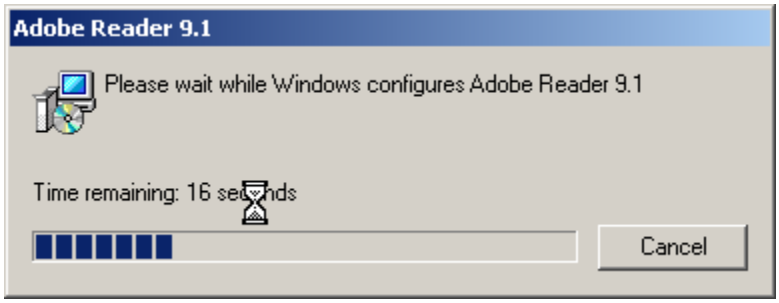
Double click ‘Add or Remove Programs’ in control panel, find the item ‘THINC-API’ and click ‘Change/Remove’ to uninstall THINC-API.



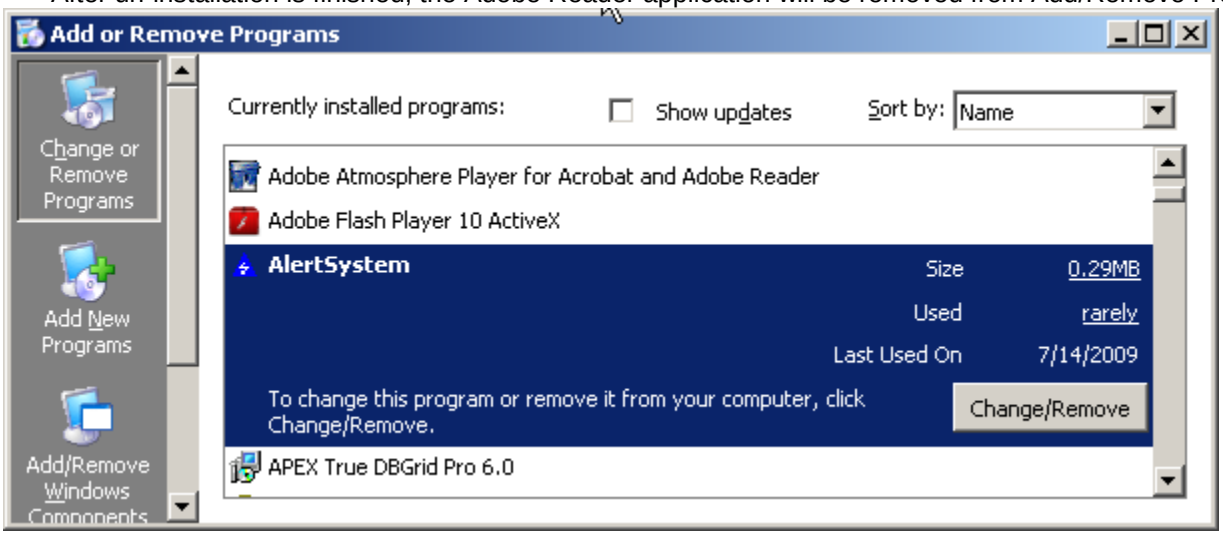

- Select ‘Remove’ and click ‘Yes’ in message box to remove the application




- Adobe Reader is being un-installing




- After un-installation is finished, the Adobe Reader application will be removed from Add/Remove Program



## 4. Usage

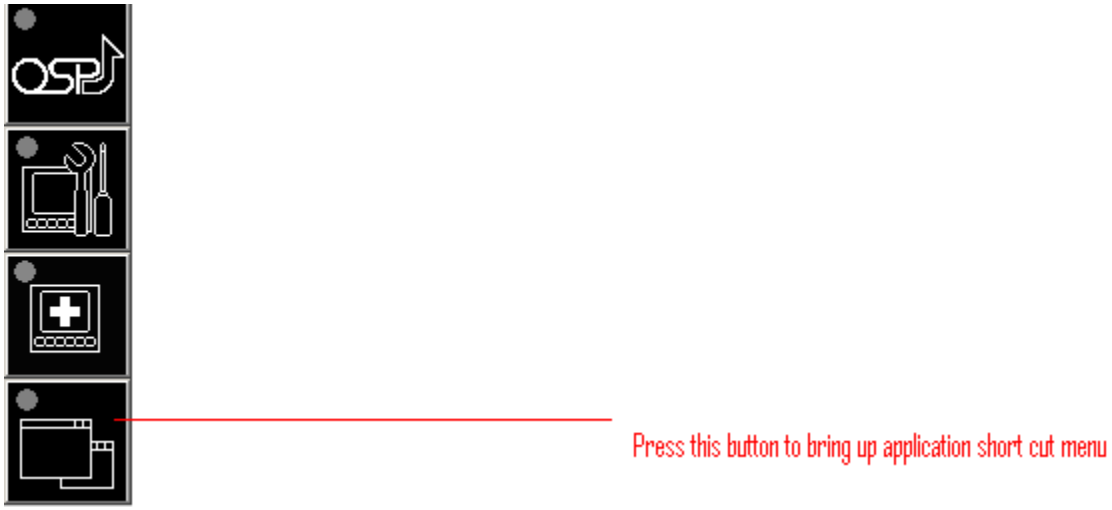
***Okuma Machine Alert System can be run under User account but appropriate security setting at the installation folder must be set.***
***If Okuma Machine Alert System is installed to run on non-OSP machine environment, certain GUI will not be available such as OSP Vertical ToolBar***

***The system will send notification to a group of registered user only if the registered alarms occur afterward.***

The Okuma Machine Alert System Software will be launched automatically by the Start-Up service after NC is started completely.

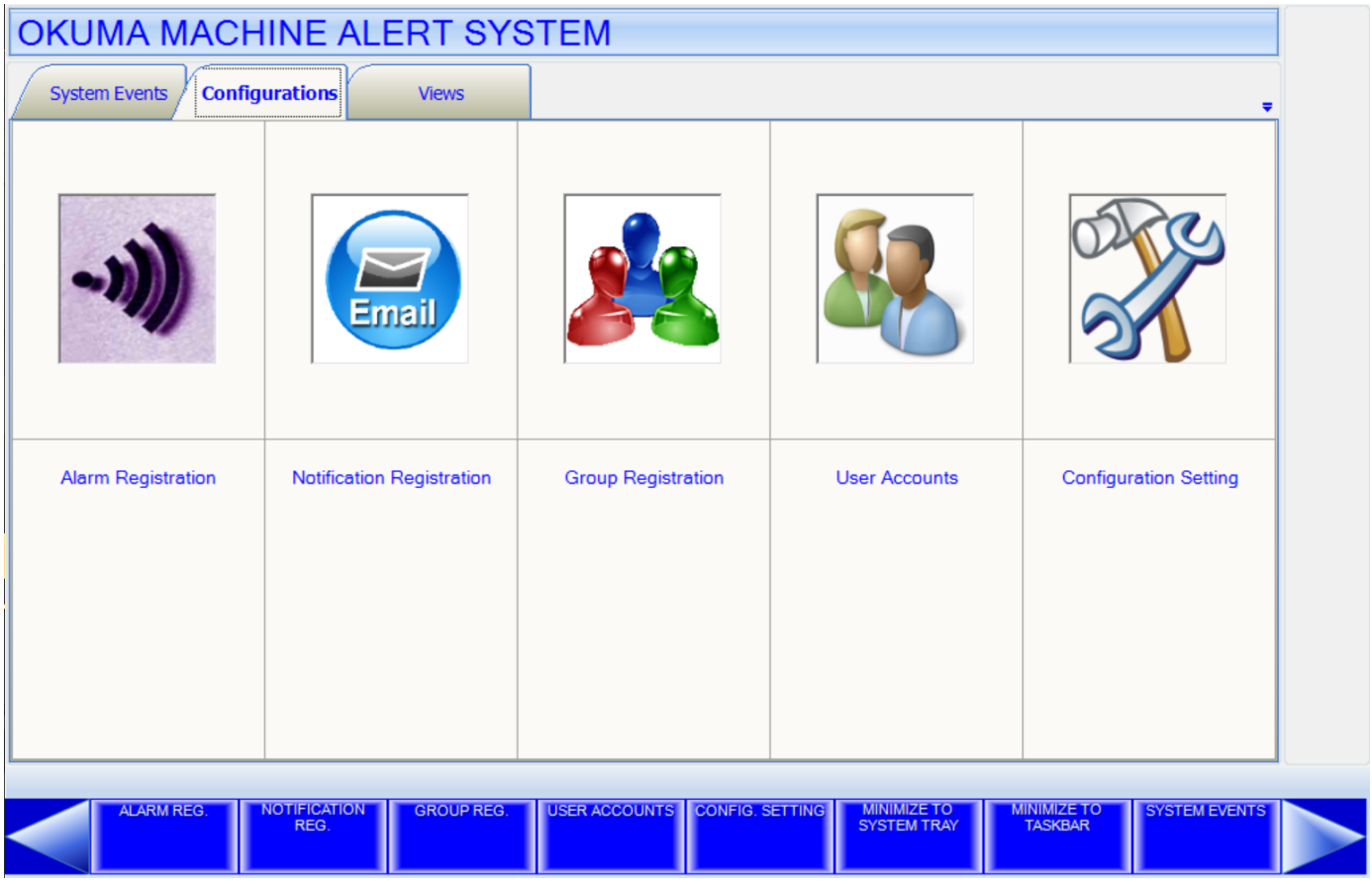
If user exits the software and wants to launch it again, press 'Ctrl + ⁄⁄' on the operation panel to pop up Start Menu, then click 'Programs' → 'Okuma' → 'Okuma Machine Alert System ' → 'Okuma Machine Alert System ' to activate Okuma Machine Alert System application or press OSP Vertical Key to launch or activate Okuma Machine Alert System application.

*Note: The OSP Vertical key can be used to bring Okuma Machine Alert System application to the front when it is minimized to system tray or system task bar or behind of other Windows applications.*




- Press the OSP Vertical shortcut button to activate the Okuma Machine Alert System application.

*Note: The detail messages displayed in the main user interface does depend on each machine configuration.*




The Machine Alert System operation has three tabs which are System Events, Configurations, and Views

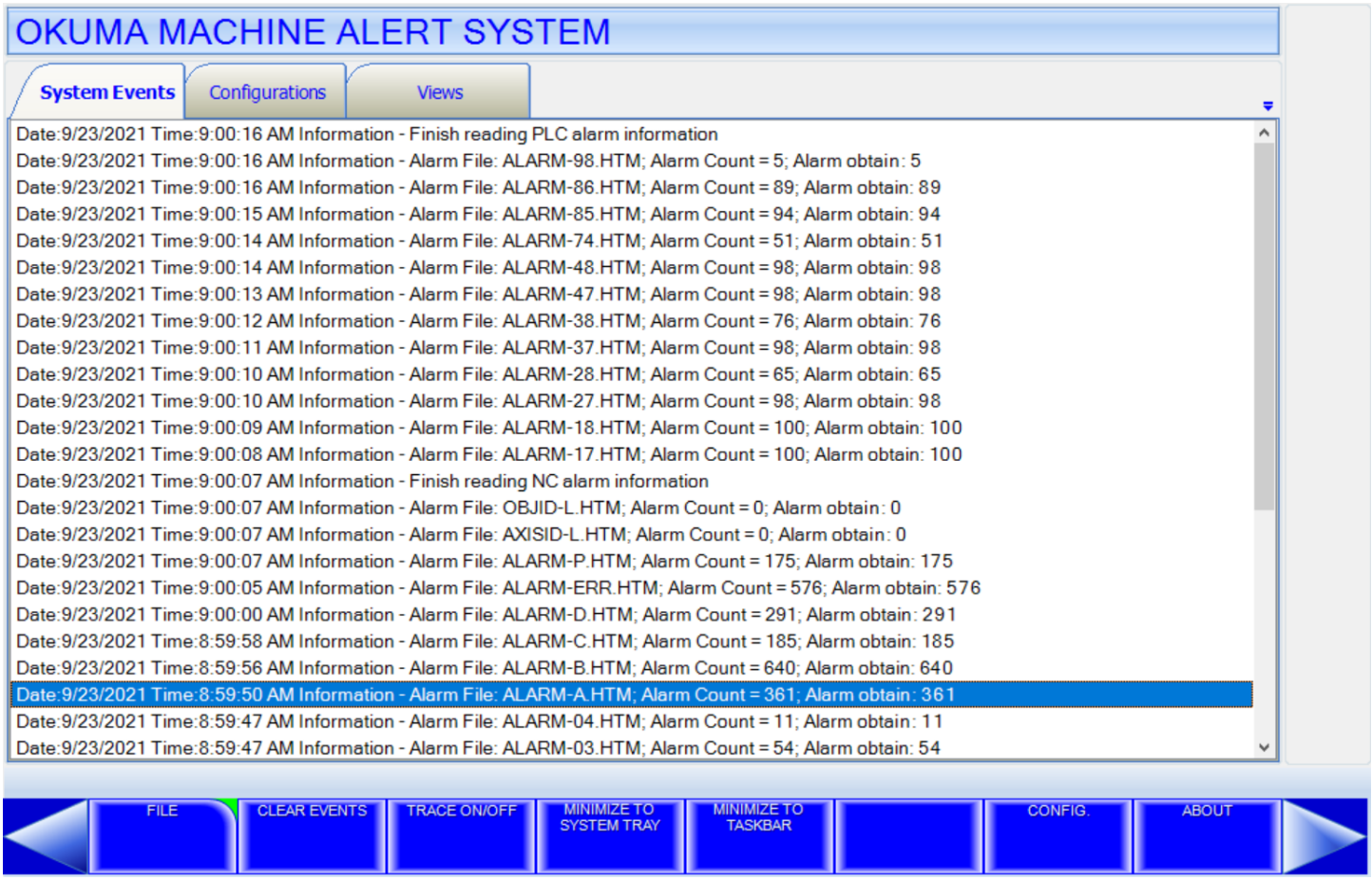
### 4.1 System Events Tab

By default, the system will write event messages to the System Events tab in the descending order such that newest event message will be displayed on the top of the list. If the 'Trace On' menu is active, all messages will be displayed on the main user interface, otherwise only pre-selected event messages by the system will be displayed.

Event messages are categorized into different event types as following:

- Information – Indicate normal event messages. It is in black color.
- Tracing – Indicate tracing event messages when Trace On mode is active. It is in blue color.
- Error – Indicate error event messages when system encounters. Error messages will be forced to display to main GUI and logged. It is in red color.
- Critical Error/Message – Indicate critical error event messages when system encounters. Error messages will be forced to display to main GUI and logged. It is in purple color.

By double clicking on the event message in each row, a message box will be displayed contained the message in the current selected row.

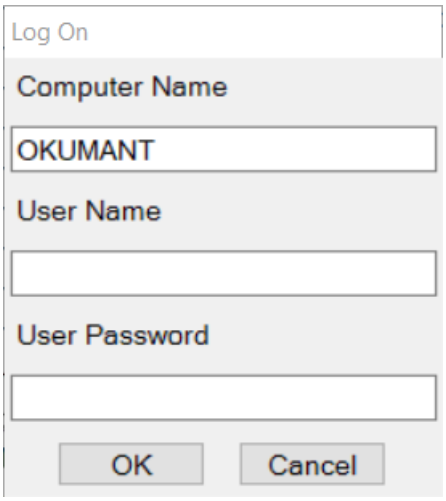



#### 4.1.1 *File Menu*

- When this menu item is pressed, the submenu is displayed as shown below.

- When the ‘Close’ submenu item is selected, it will return to the previous menu.

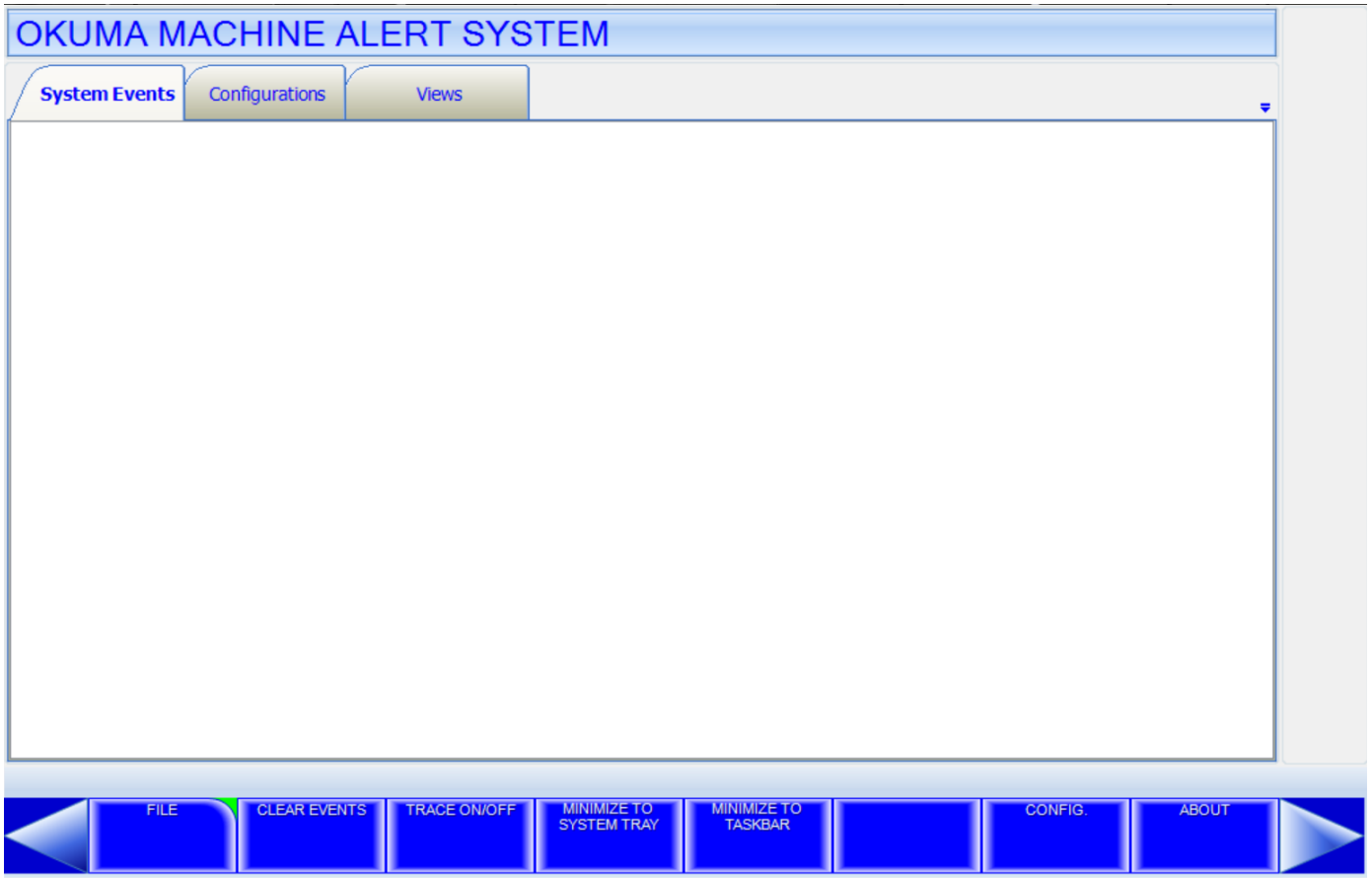
- When the ‘Exit’ menu item is selected, the application will be closed.




- Enter User Name and User Password and click OK to close the application.

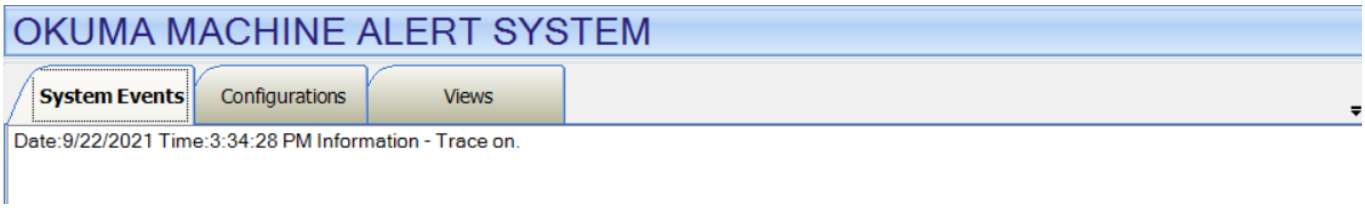
### 4.1.2 *Clear Events Menu*

When this menu item is pressed, it will clear all messages current displayed in the event list.




4.1.3 *Trace ON/OFF Menu*

- When this menu item is pressed, it will toggle current state of tracing message.
- It will turn ON if it is OFF and vice versa. A message will be displayed in the event to show the current Tracing status.
- When Trace is ON, all messages will be displayed on the event list, otherwise only pre-defined and error messages are displayed.

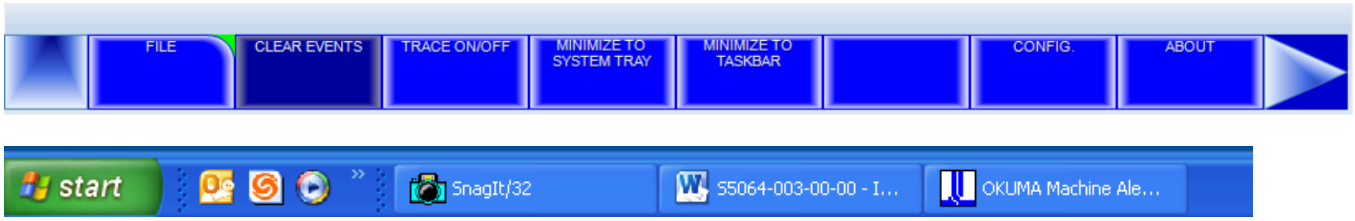



4.1.4 *Minimize To System Tray Menu*

- When this menu item is pressed, the main user interface is hidden and the icon for this application is shown in the system tray of windows task bar.

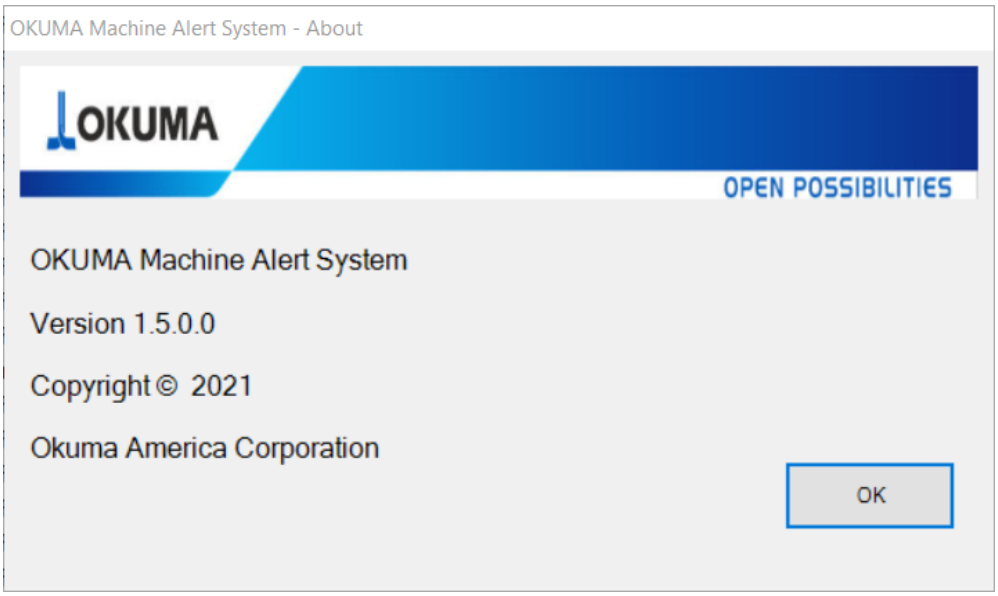
4.1.5 *Minimize To Taskbar Menu*

- When this menu item is pressed, the main user interface is minimized to Windows taskbar.




4.1.6 *About Menu*

- When this menu item is pressed, a dialog is displayed to show the information about this application.



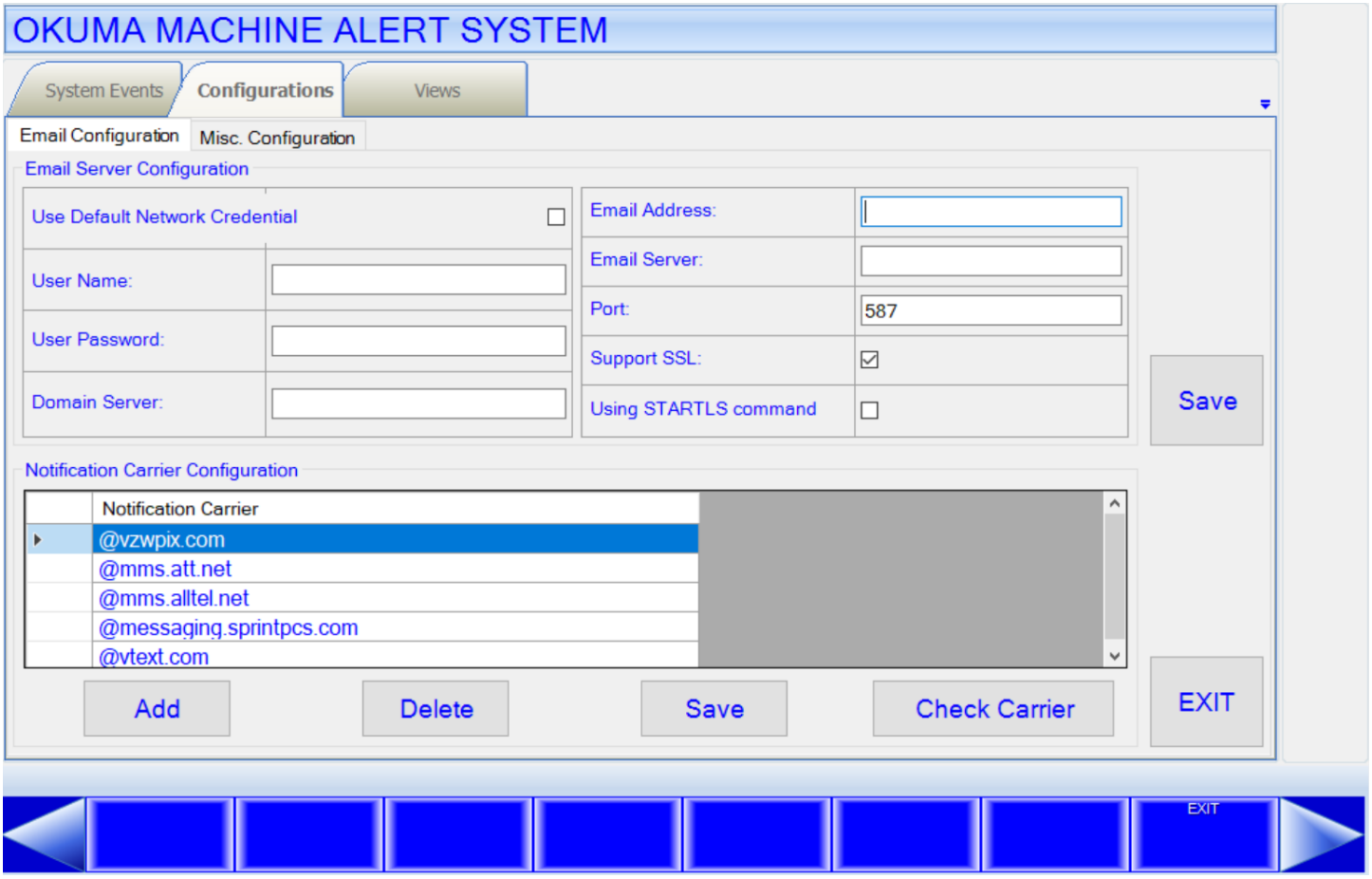

## 4.2 Configurations Tab

If user has entered the correct information during the installation, the Okuma Machine Alert System Software should be able to launch successfully without error. In case user did not specify the correct email server, port number, support SSL setting, domain server, etc… during installation, the software may not be able to initialize successfully. User needs to modify the software configuration to fix the problem.

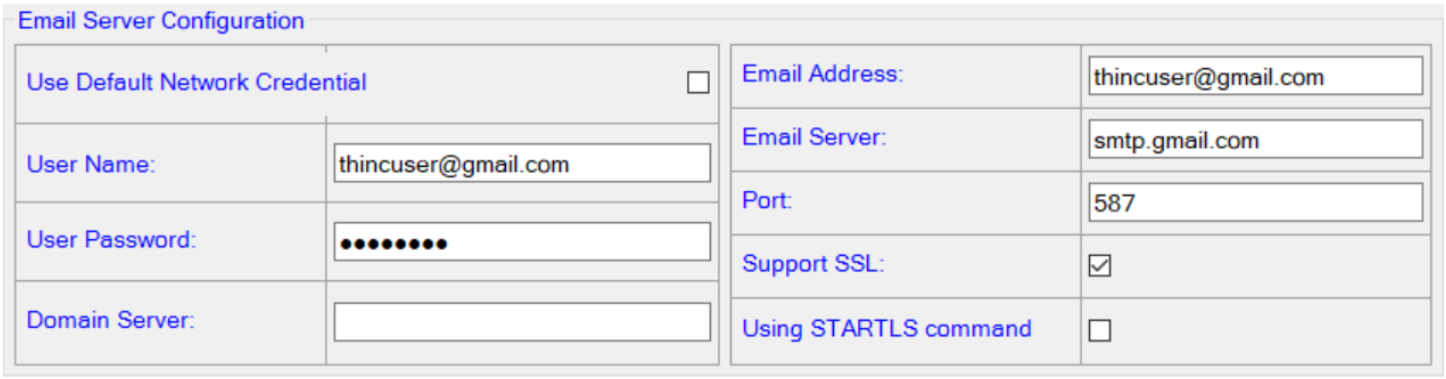
A valid user account needs to log on when user elects to save the current configuration setting.

4.2.1 *Configuration Setting*

- Click on Configuration Setting icon



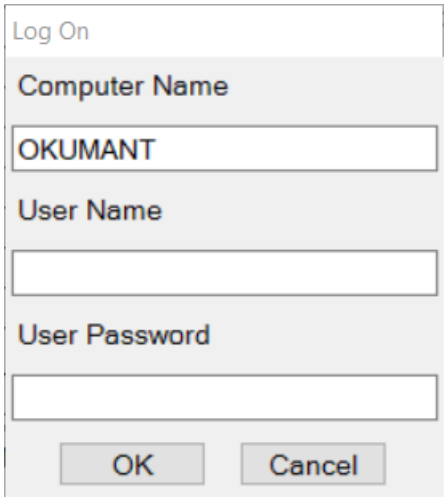

4.2.1.1 Edit Email Server Configuration



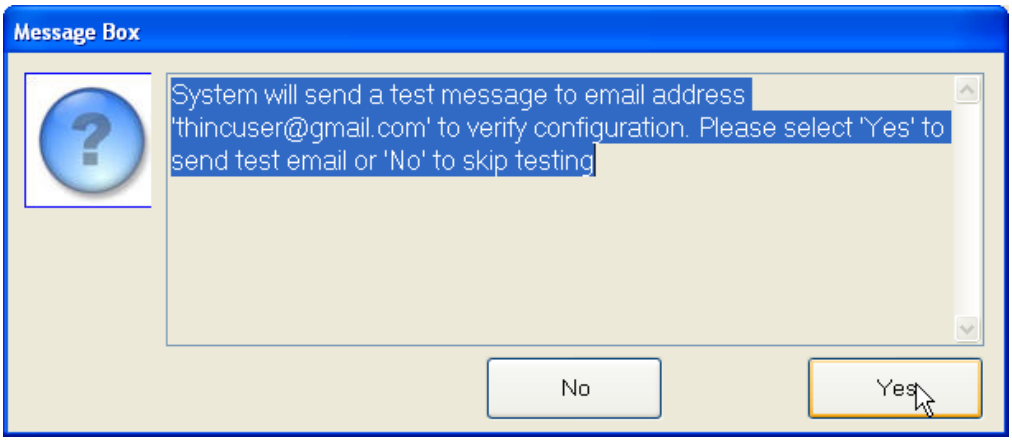

- Consult IT person to change Email Server, Port, and Domain Server, and Enable SSL check box setting as necessary
  - User Default Network Credential: If checked the system will use current user account to send email.
    *Note: if checked the User Name/Password/Domain Server will be cleared as shown above.*
  - Email Address: Enter an email address to be sent for testing purpose.
    Note: it could be the same User Name where the test email will be sent to the same account.
  - User Name: Enter an email address to log into Email Server account
  - User Password: Enter the password to log into Email Server account
  - Port: Enter port number that can be supported by the Email Server

- Support SSL: Check the box if Email Server requires SSL connection.
- Using STARTTLSCommand: Check the box if Email Server requires to use STARTTLS command

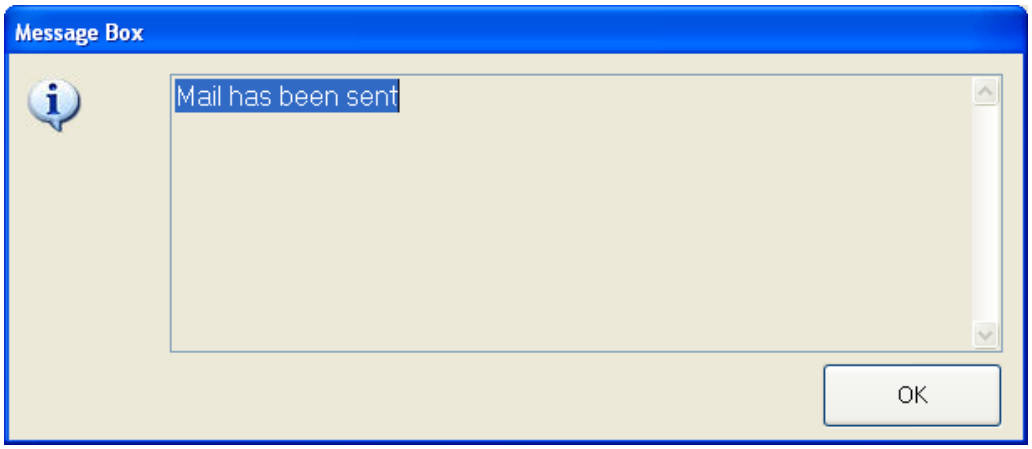
- Click Save




- Enter User Name and User Password and click OK to save new Notification Carrier.

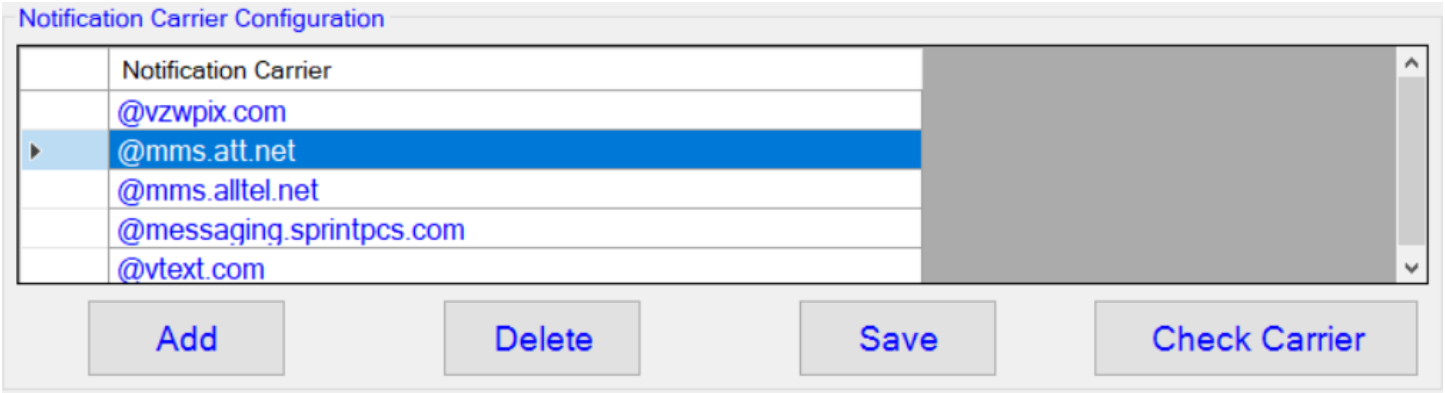



- Click Yes

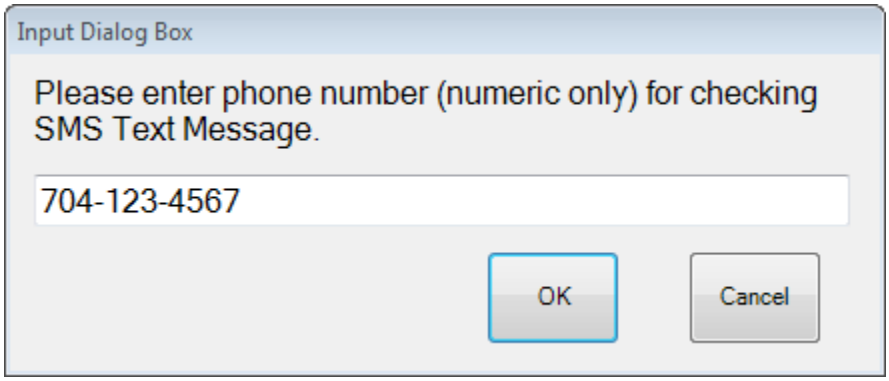



- Click OK

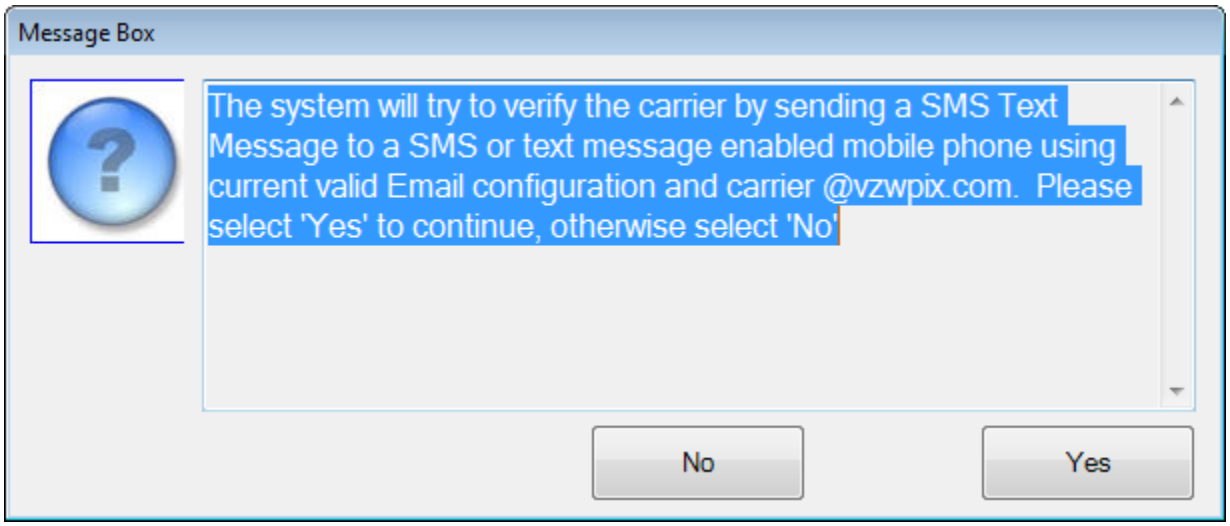
#### 4.2.1.2 Edit Notification Carrier Configuration



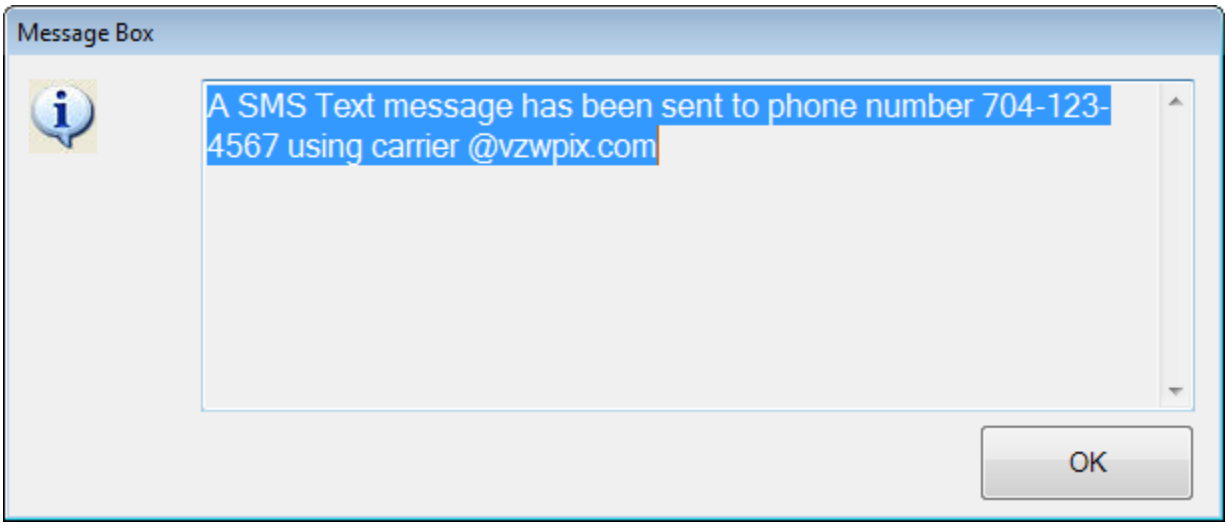

- Click Add. The system will add the new row. Type in the new carrier name with the same forma as shown above.
- Click Check Carrier to verify the new carrier will work.



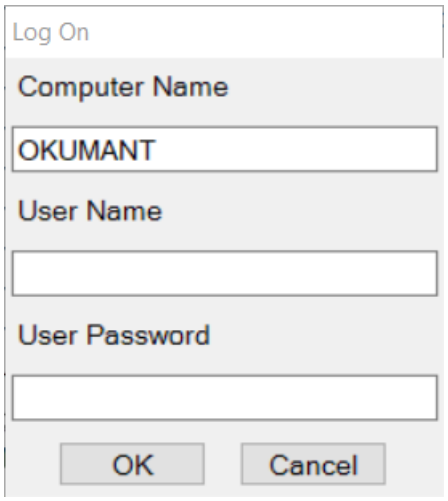

- Enter the phone number and click OK



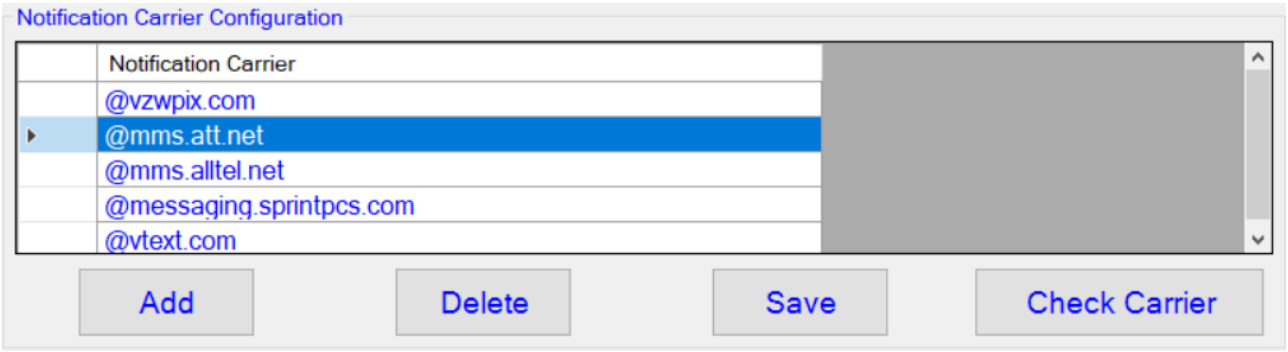

- Click Yes



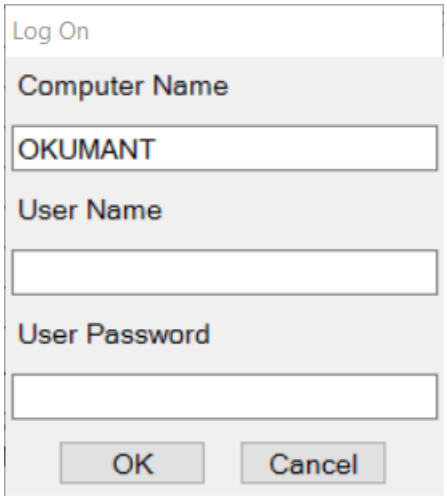

- Click OK and verify the phone will receive the text message then click Save.




- Enter User Name and User Password and click OK to save new Notification Carrier.



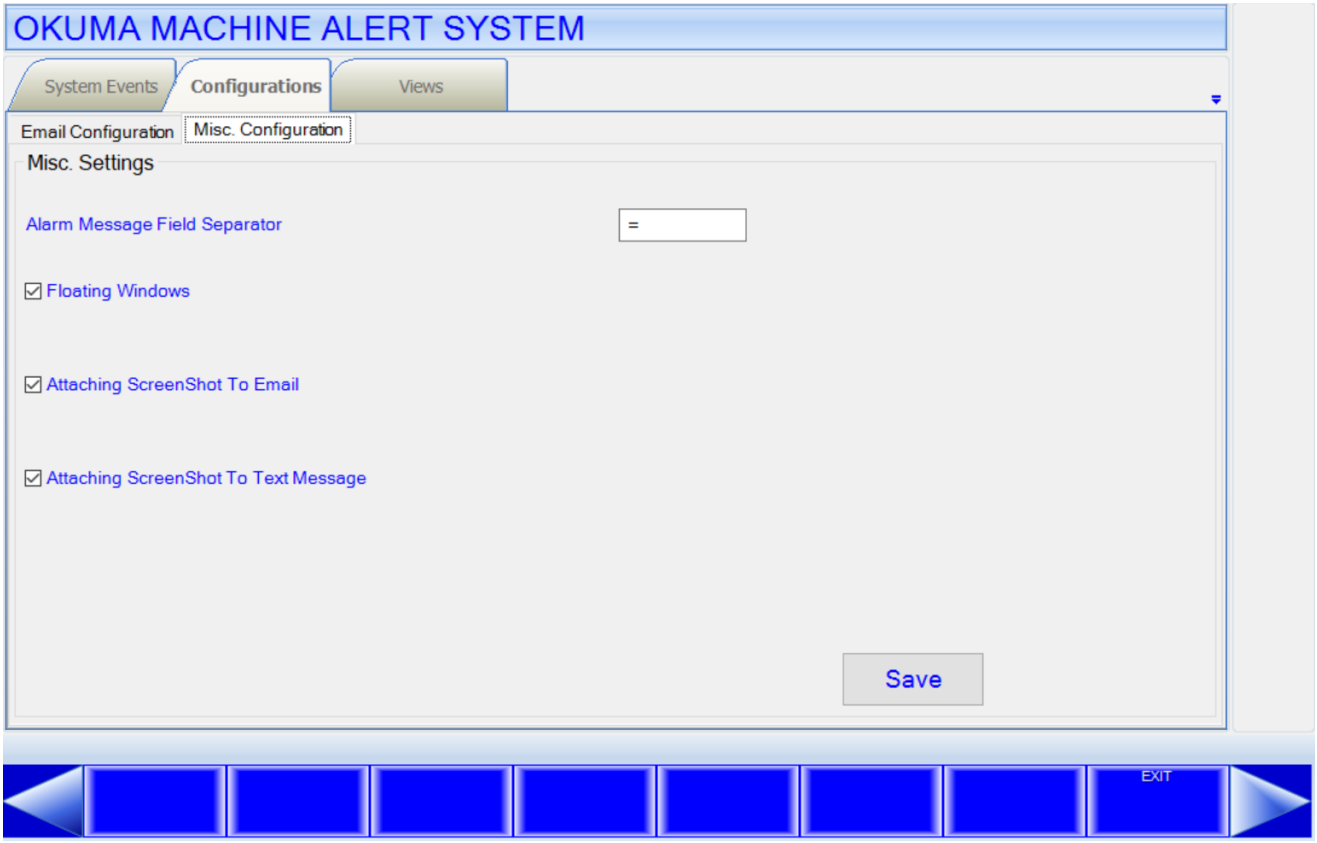

- Click to highlight the carrier that needs to be deleted and click Delete. The system will delete the highlighted carrier the click Save




- Enter User Name and User Password and click OK to save new configuration setting.

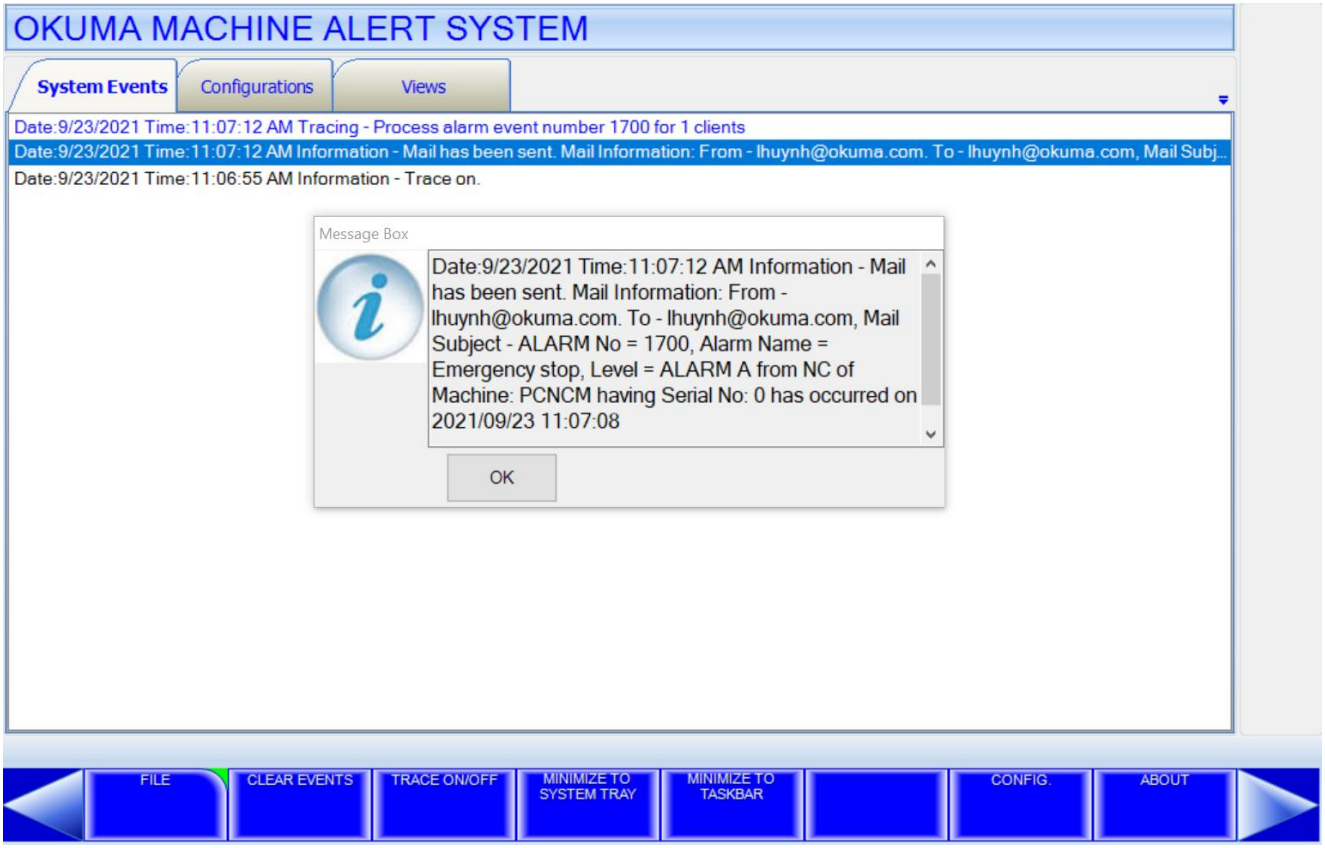
*Note: Only authorized users having administrator rights can save Machine Alert System configuration. A valid user account needs to log on when user elects to save the current configuration setting.*

#### 4.2.1.3 Edit Misc. Setting




##### 4.2.1.3.1 Alarm Message Field Separator

By default, the field separator is an equal sign. It can be changed to other printable character if needed.
Example:




#### 4.2.1.3.2 Floating Windows

By default, the checkbox is checked. When it is checked the application can be moved to different location by dragging the title bar of application.

#### 4.2.1.3.3 Attaching Screenshot to Email

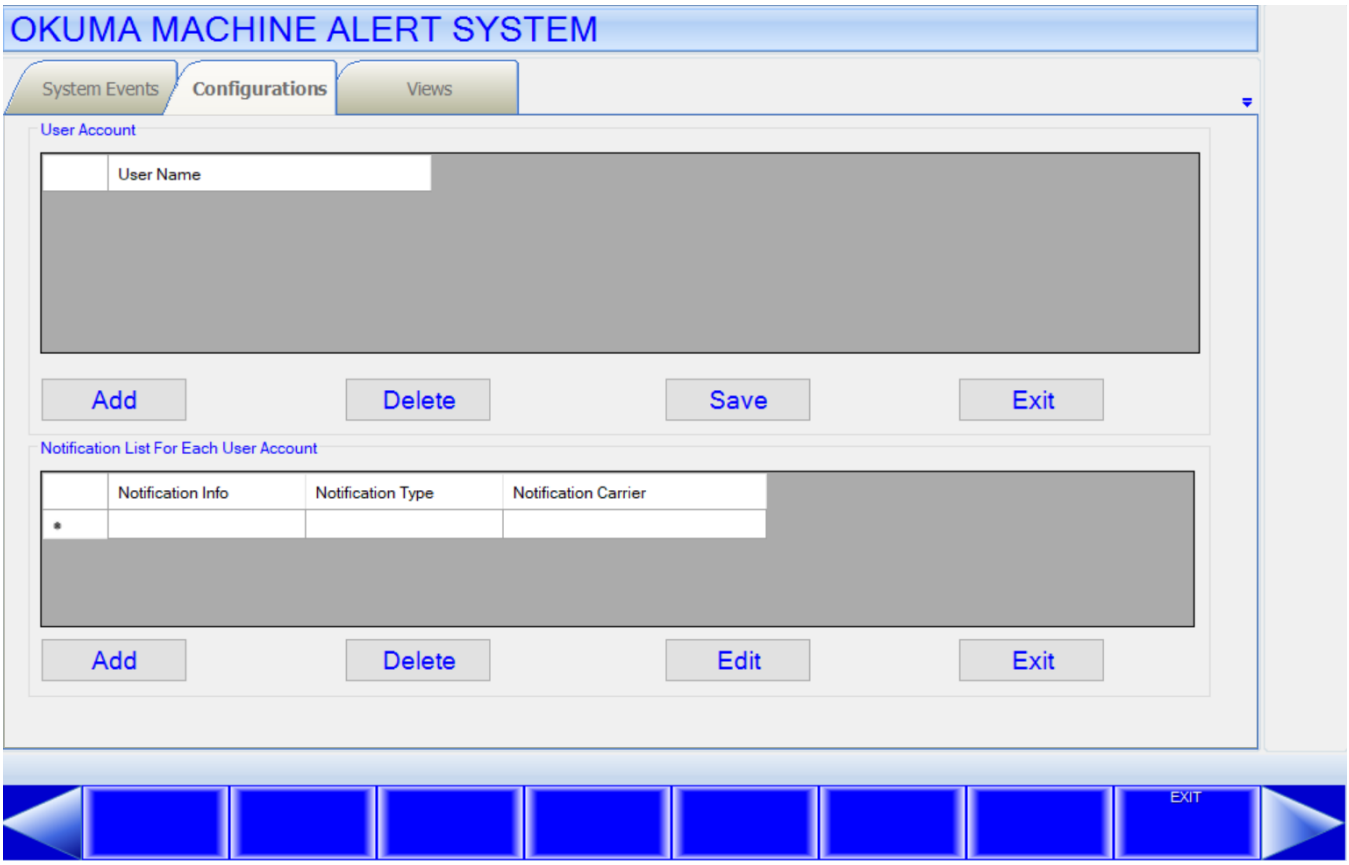
By default, the checkbox is checked. When it is checked the screenshot will be attached to an email and sent to notifier when alarm happened.

#### 4.2.1.3.4 Attaching Screenshot to Text Message

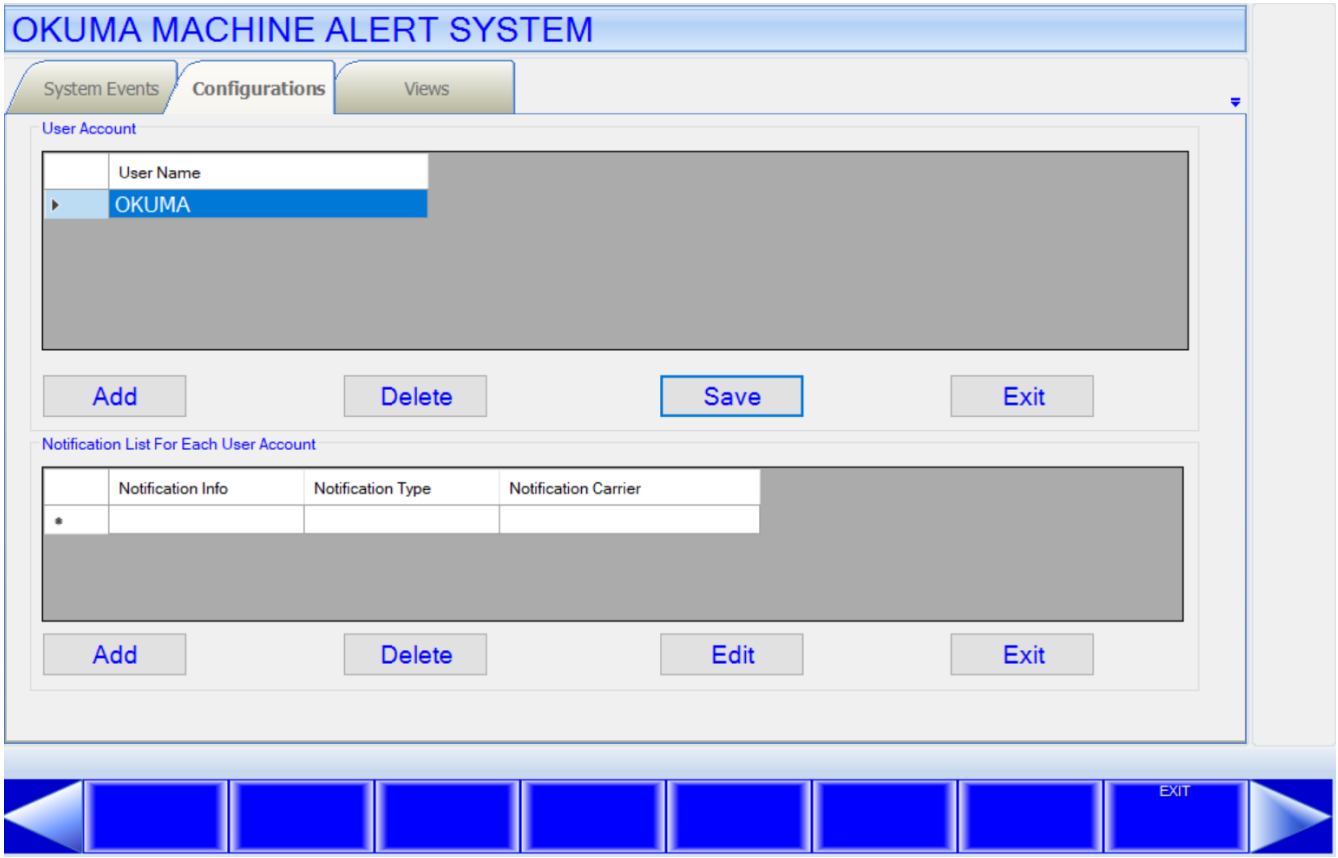
By default, the checkbox is checked. When it is checked the screenshot will be attached to a Text Message and sent to notifier when alarm happened.

4.2.2 *Register User Account*

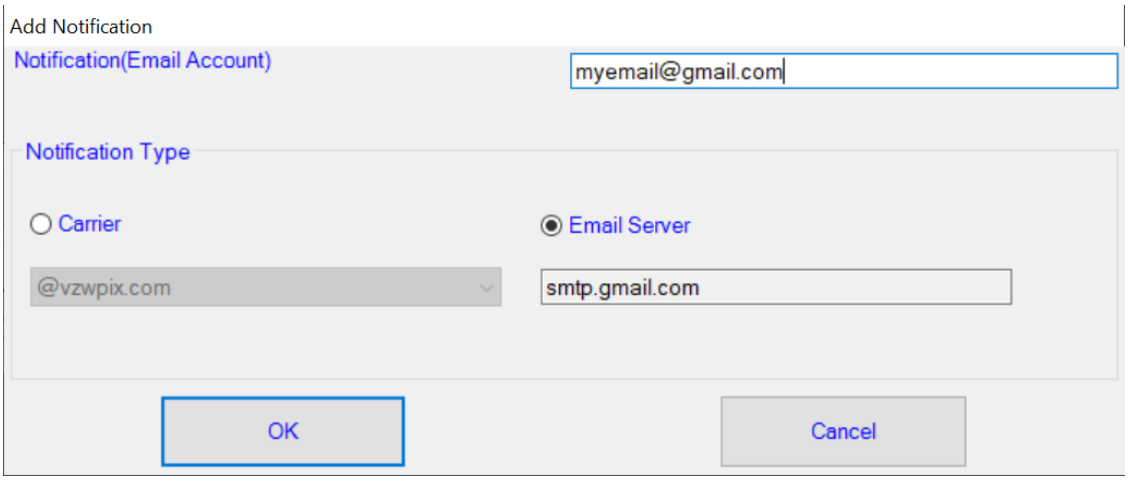
- From Configuration tab click on User Account icon



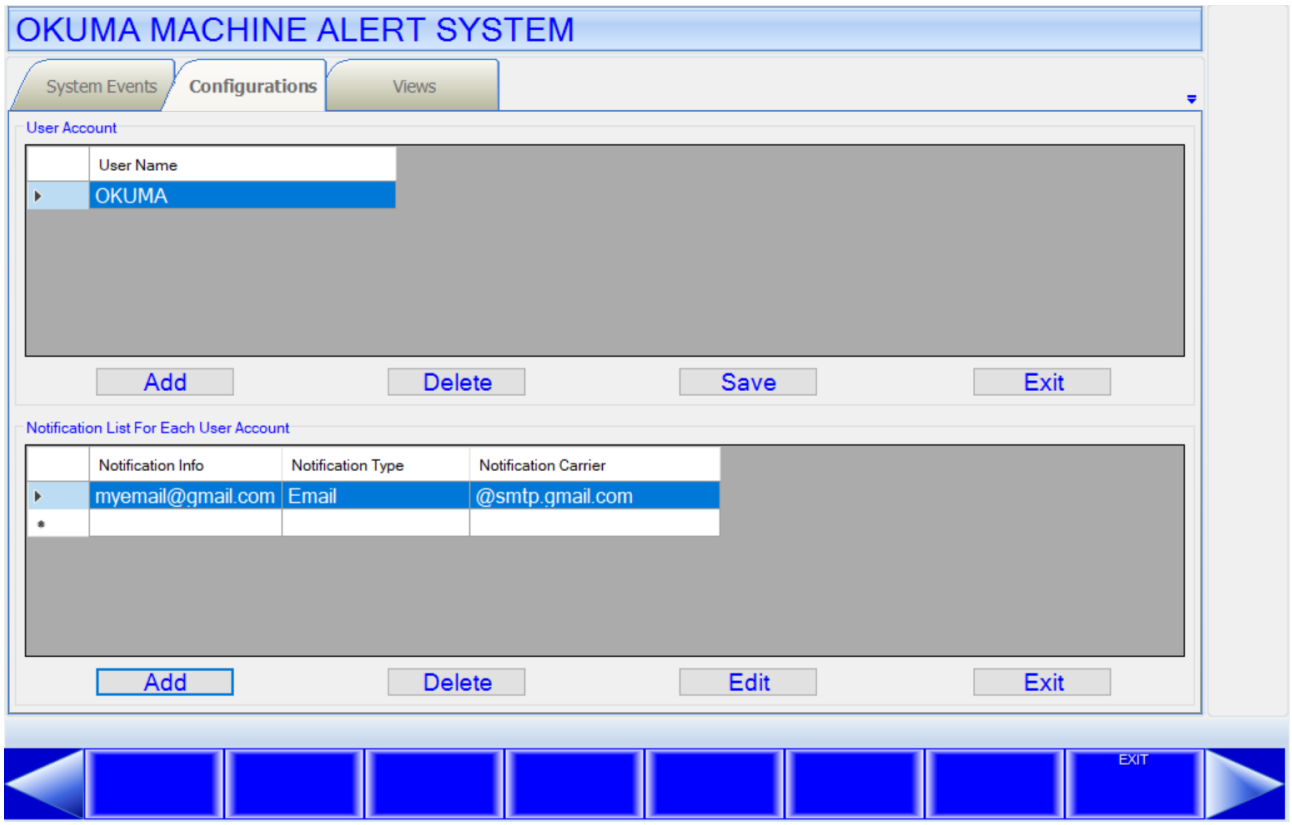

- Click Add button in the User Account group to add new User Name
- The system will add a new record row. Type in the new user name and click Save.




- The system saved the new user name. Select one of the user name and click on Add button under Notification list.

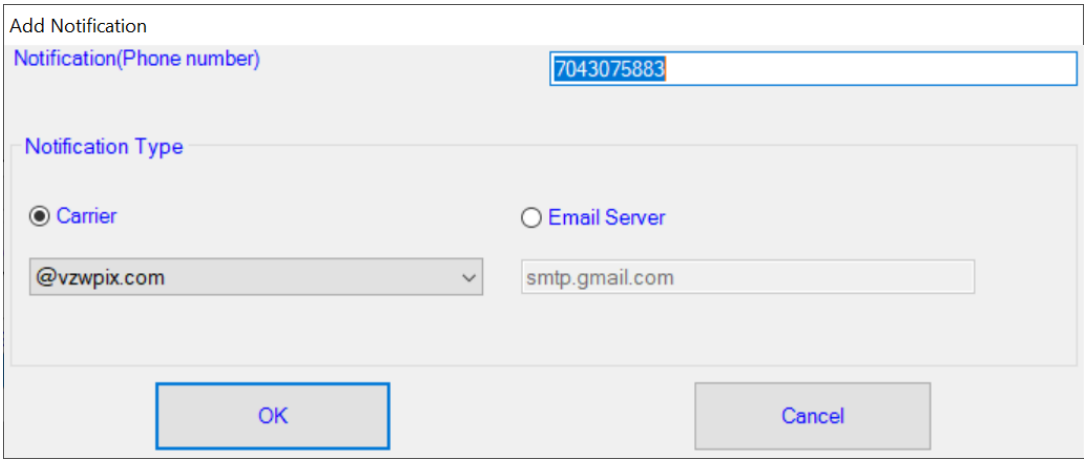



- Type in the new user email address and click OK to save the setting.

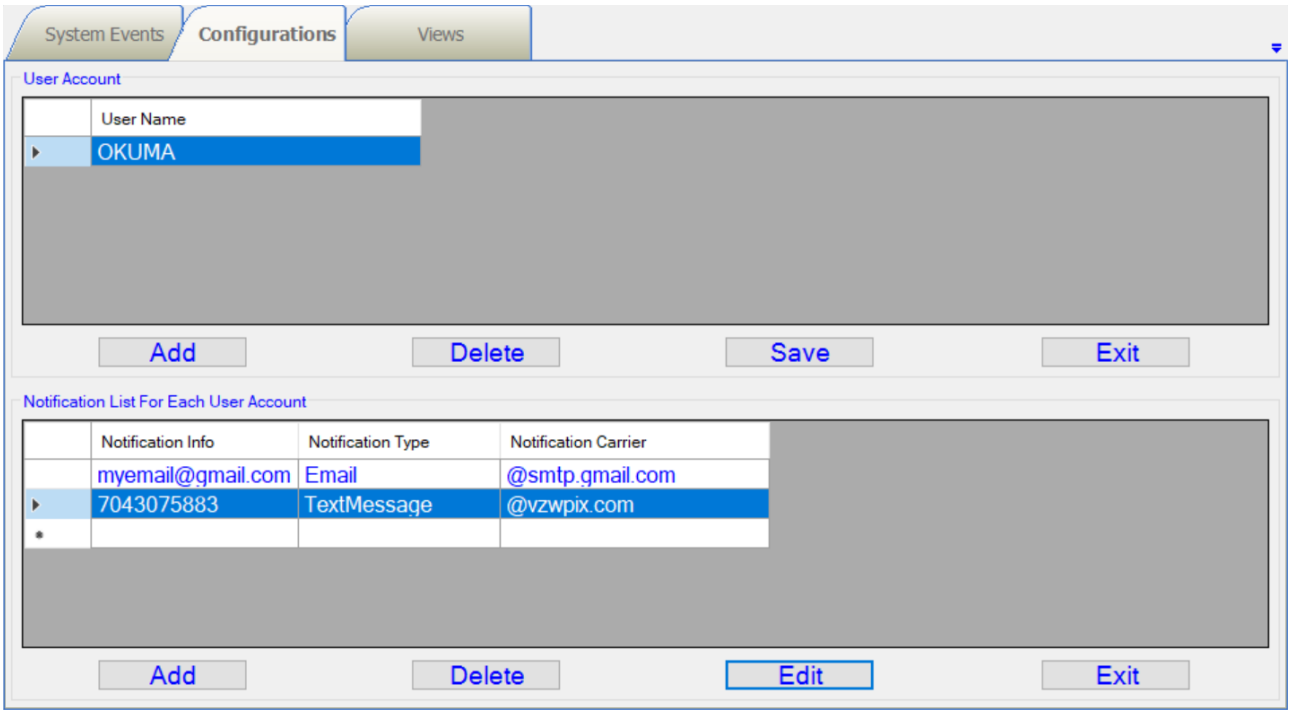



- The system saved the new user email address. Click on Add button under Notification list again.

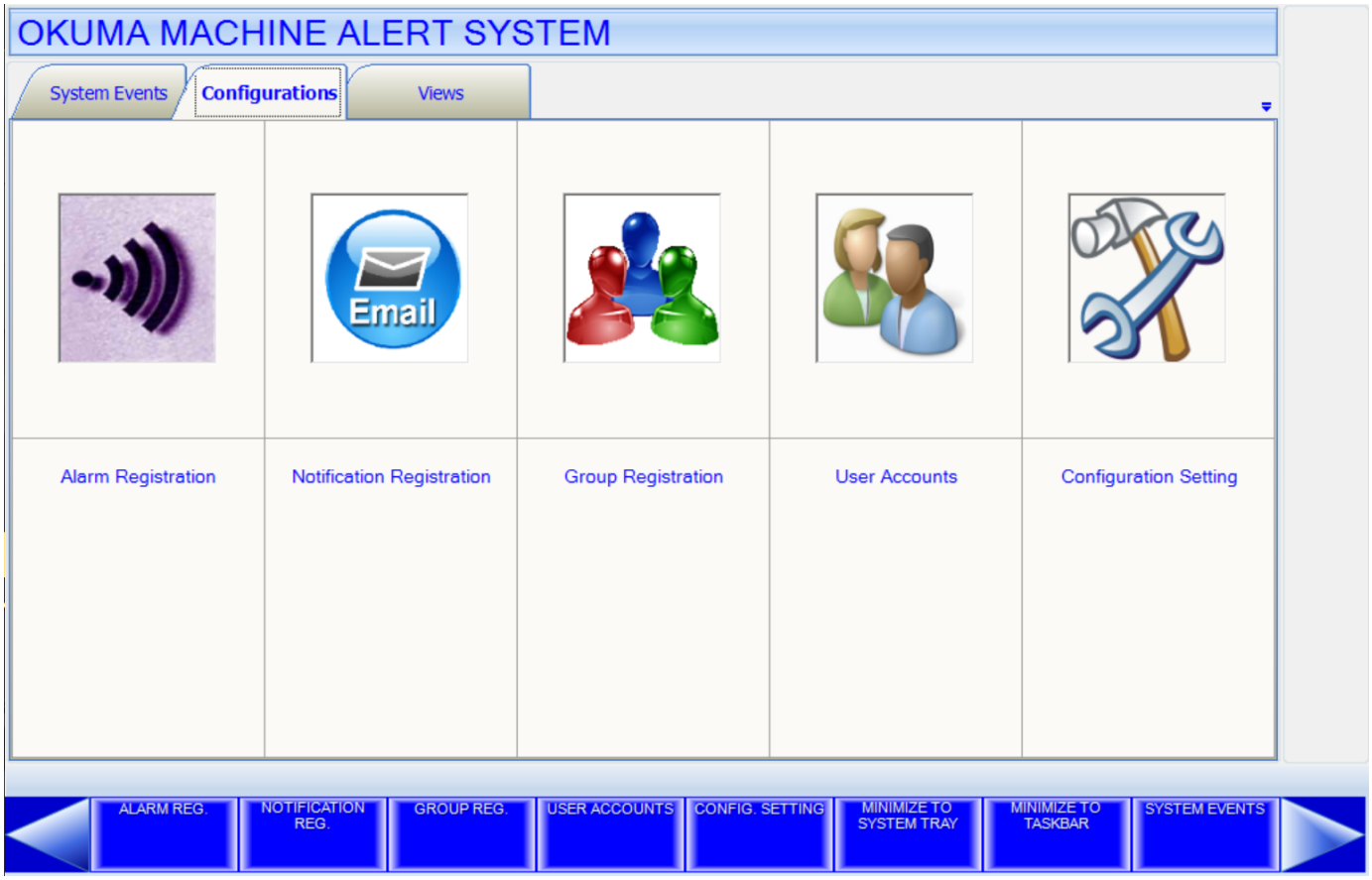
- Click on the Carrier and select the phone carrier for the entered phone number



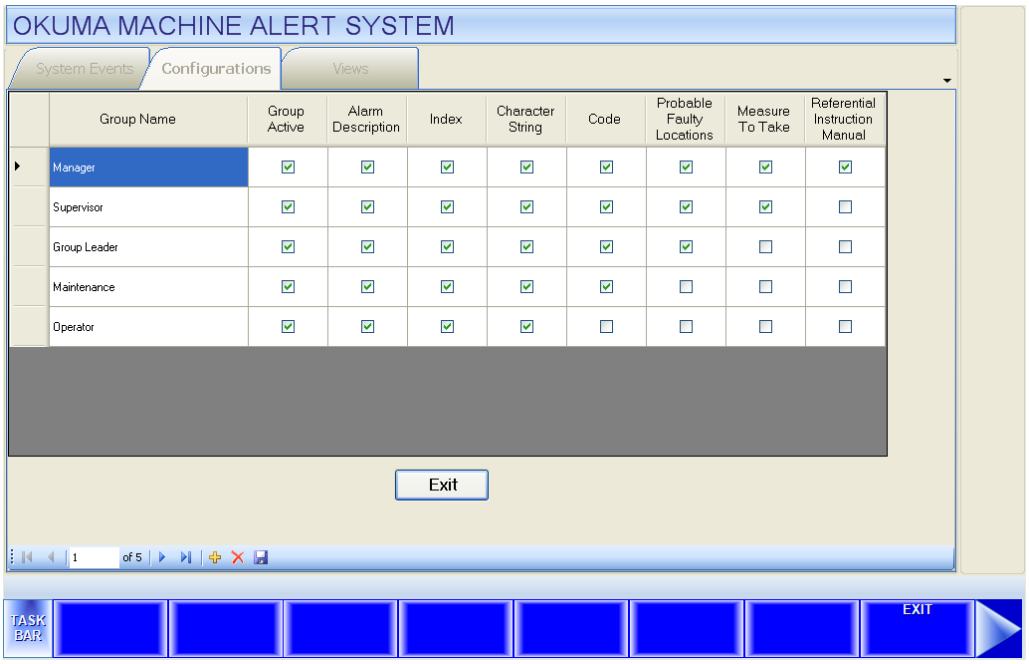

- Click OK to save the setting




4.2.3 *Group Registration*

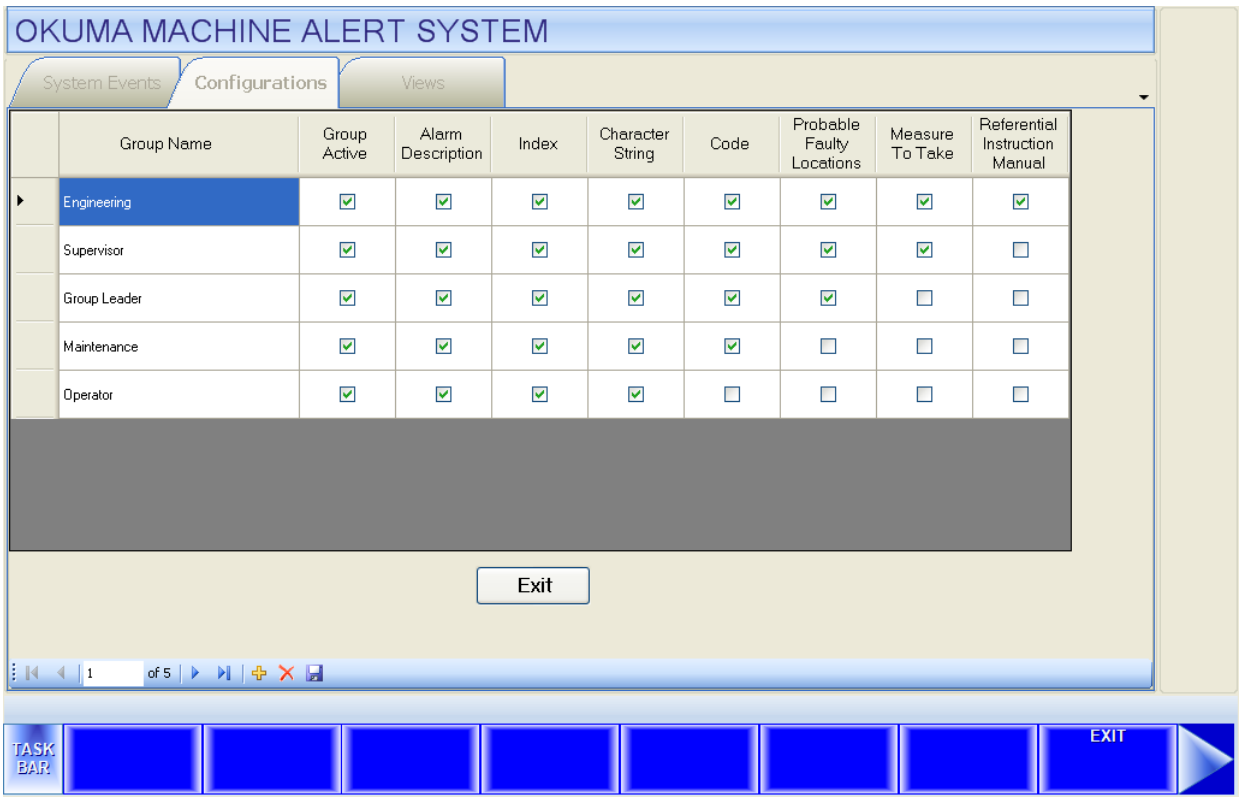



- From Configuration tab click on Group Registration icon

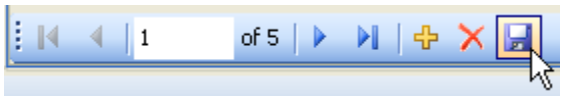



- There are five default groups in the system.

- **Edit Group Name**

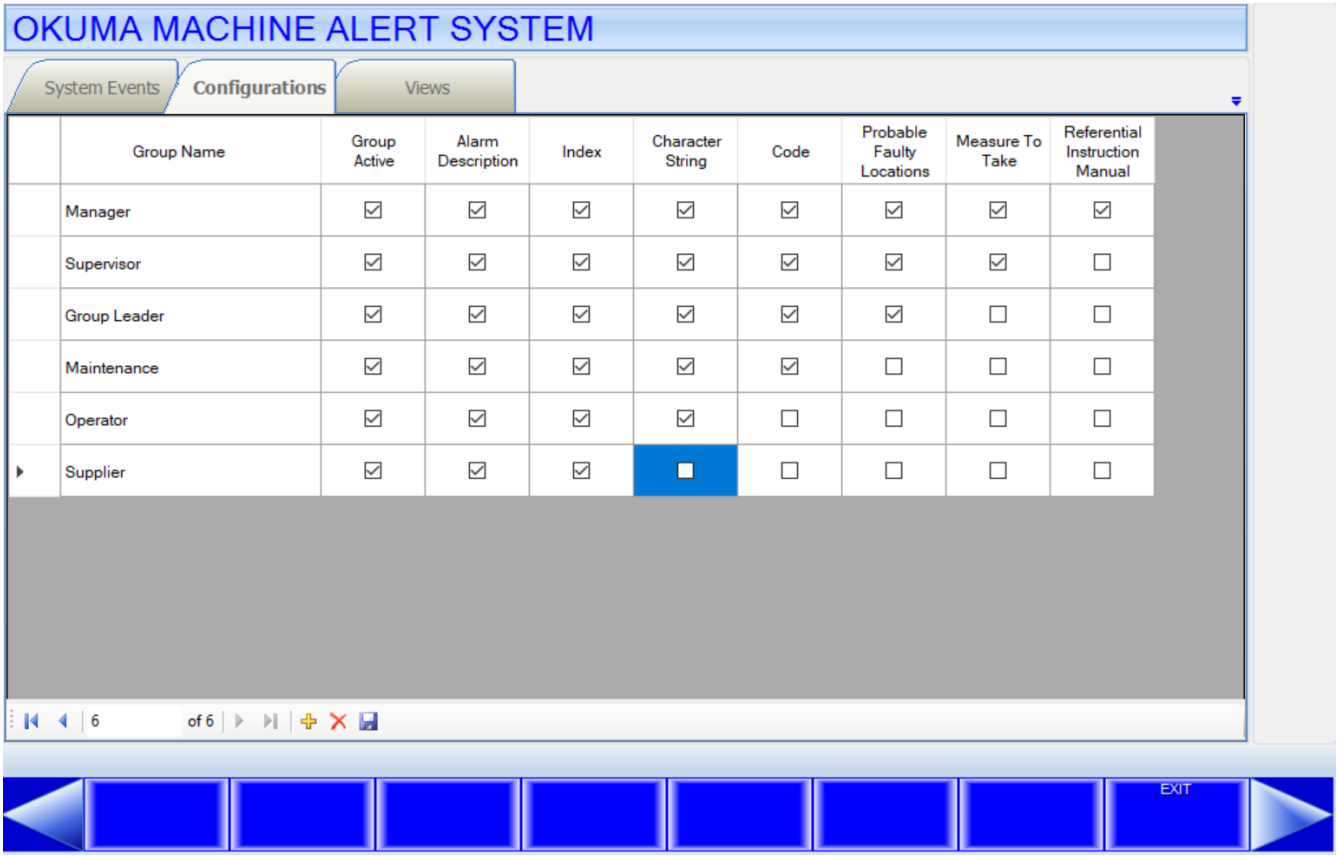


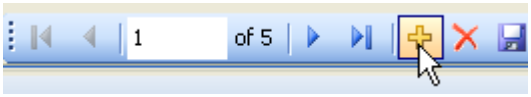

  - The group name can be changed by click on the field name and type in the new group name as shown.



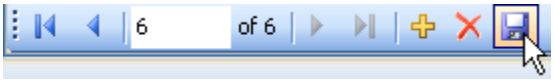

  - Click the floppy disk icon to save the new group name

- **Add New Group Name**



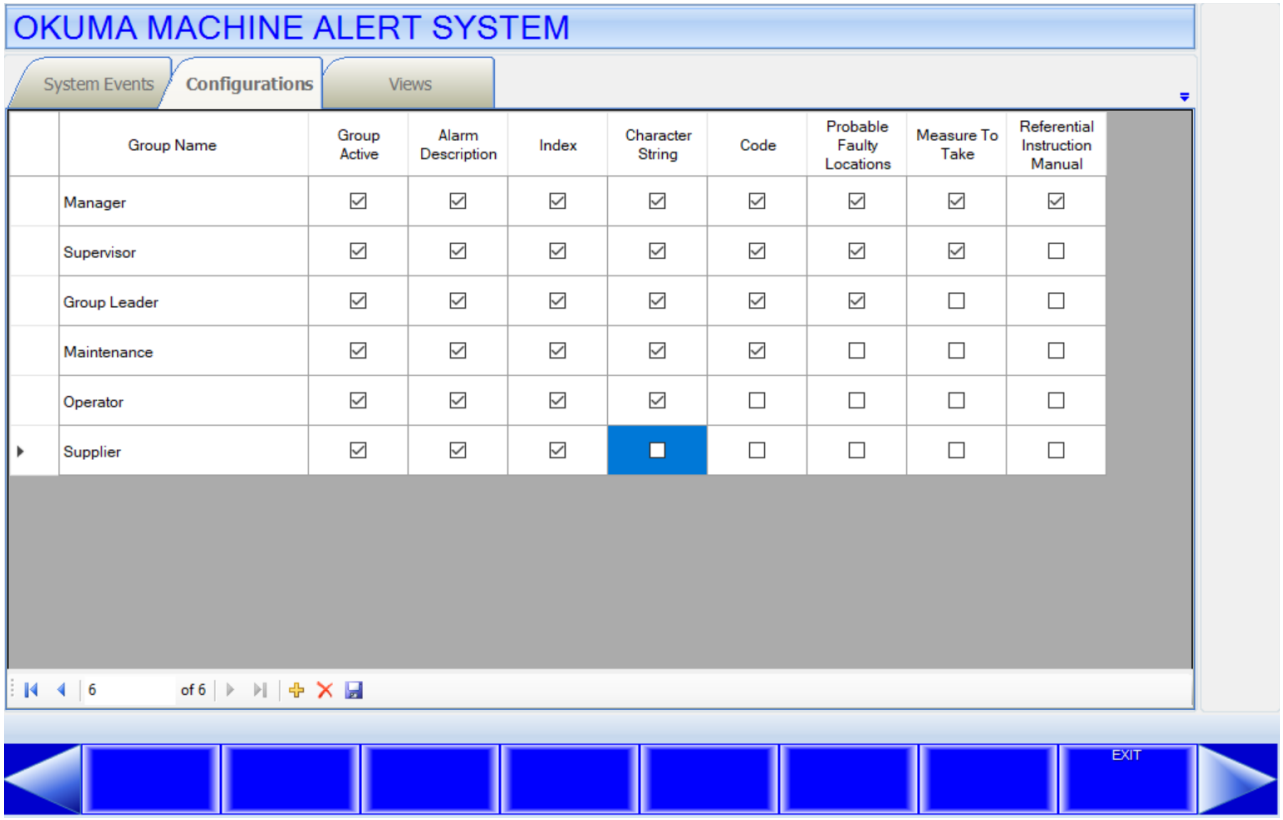




- The group name can be added by click on the plus icon and type in the new group name as shown.
- Click to select the alarm content for each group or activate only the group needs to be notified.

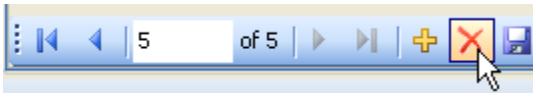



- Click the floppy disk icon to save the new settings and click Exit to go back the main configuration tab.

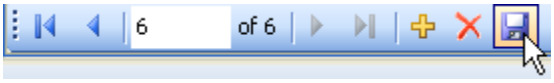
- **Delete Group Name**




- Click to highlight the group name row that needs to be deleted

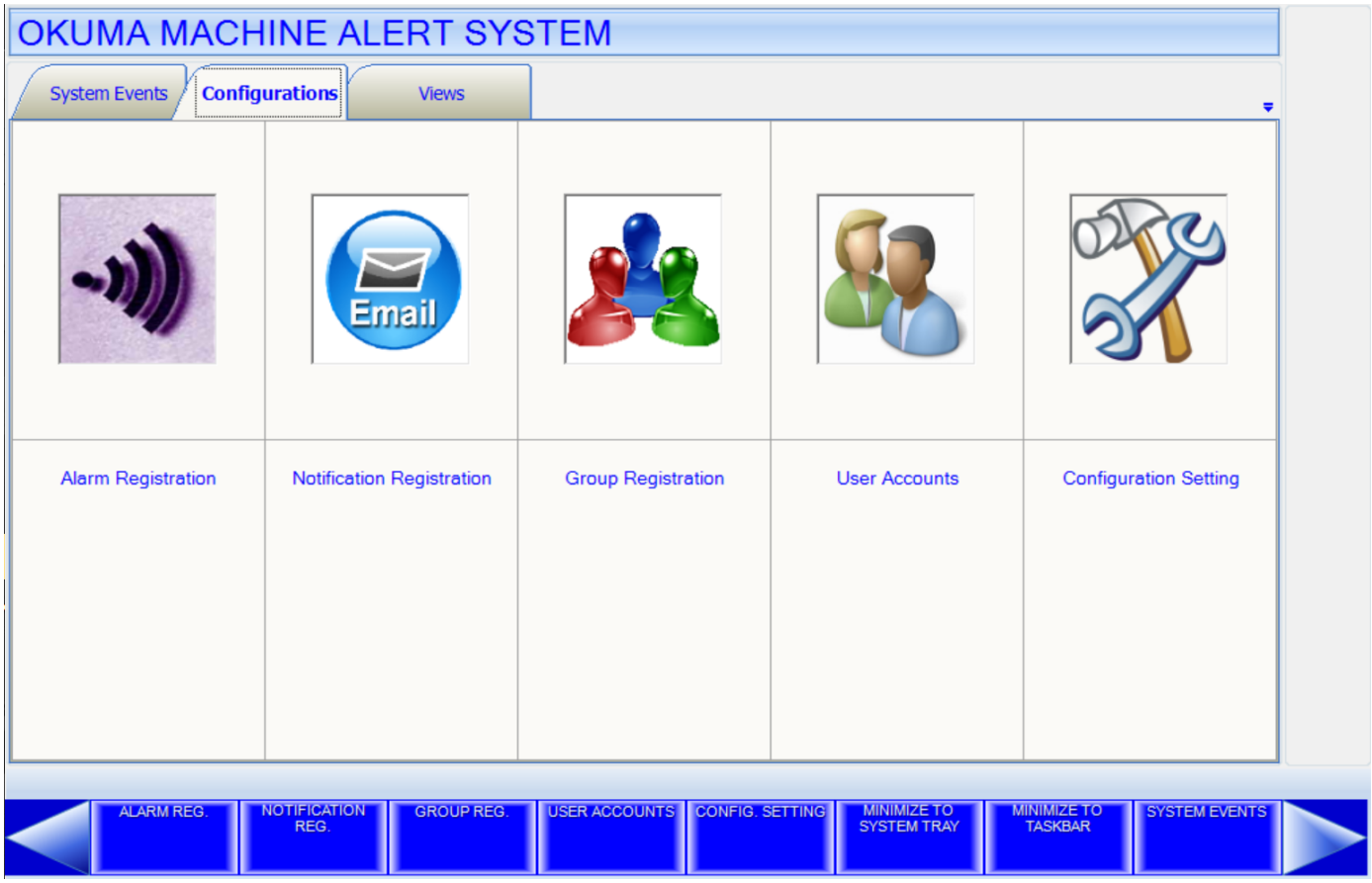



- Click the cross icon to delete the highlighted group name

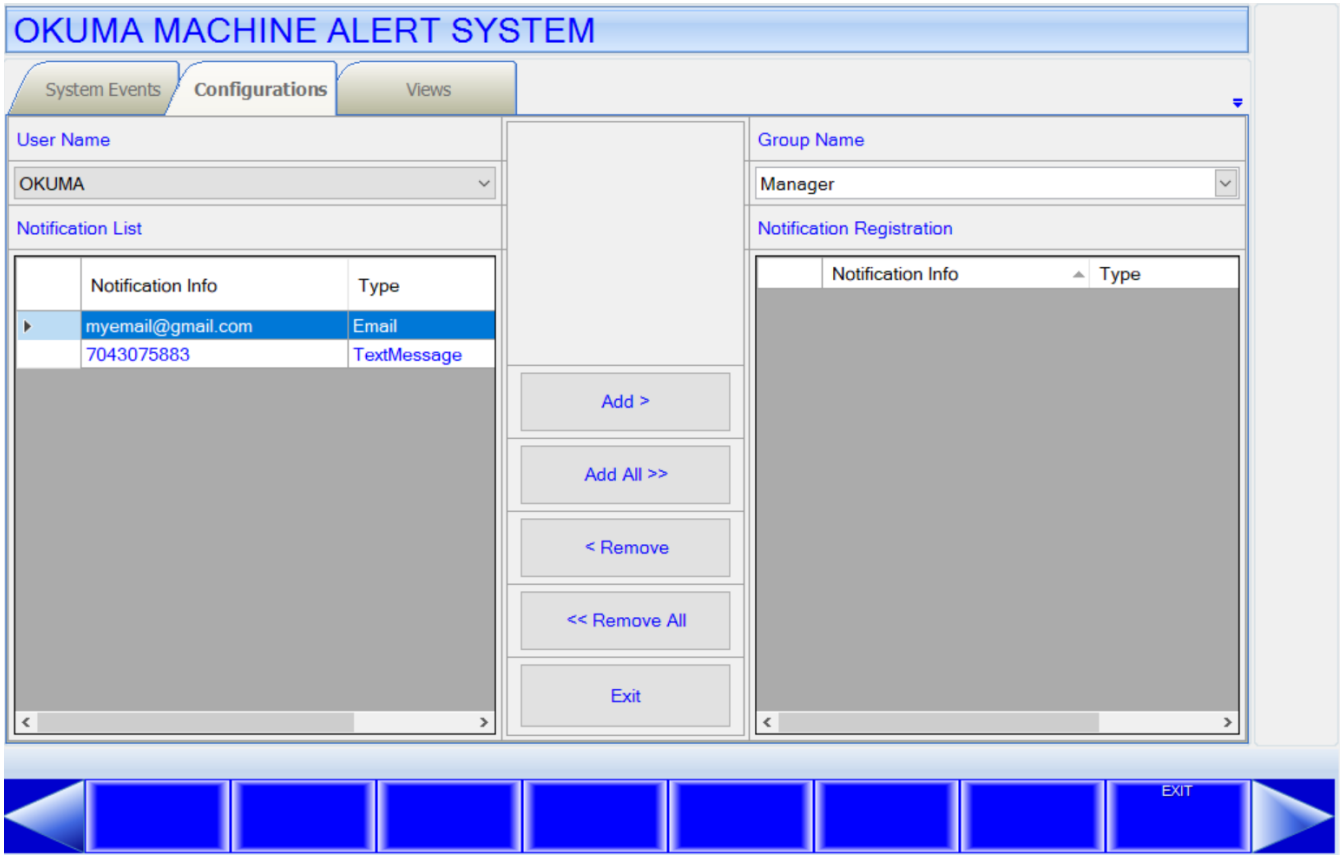



- Click the floppy disk icon to save the new settings and click Exit to go back the main configuration tab.

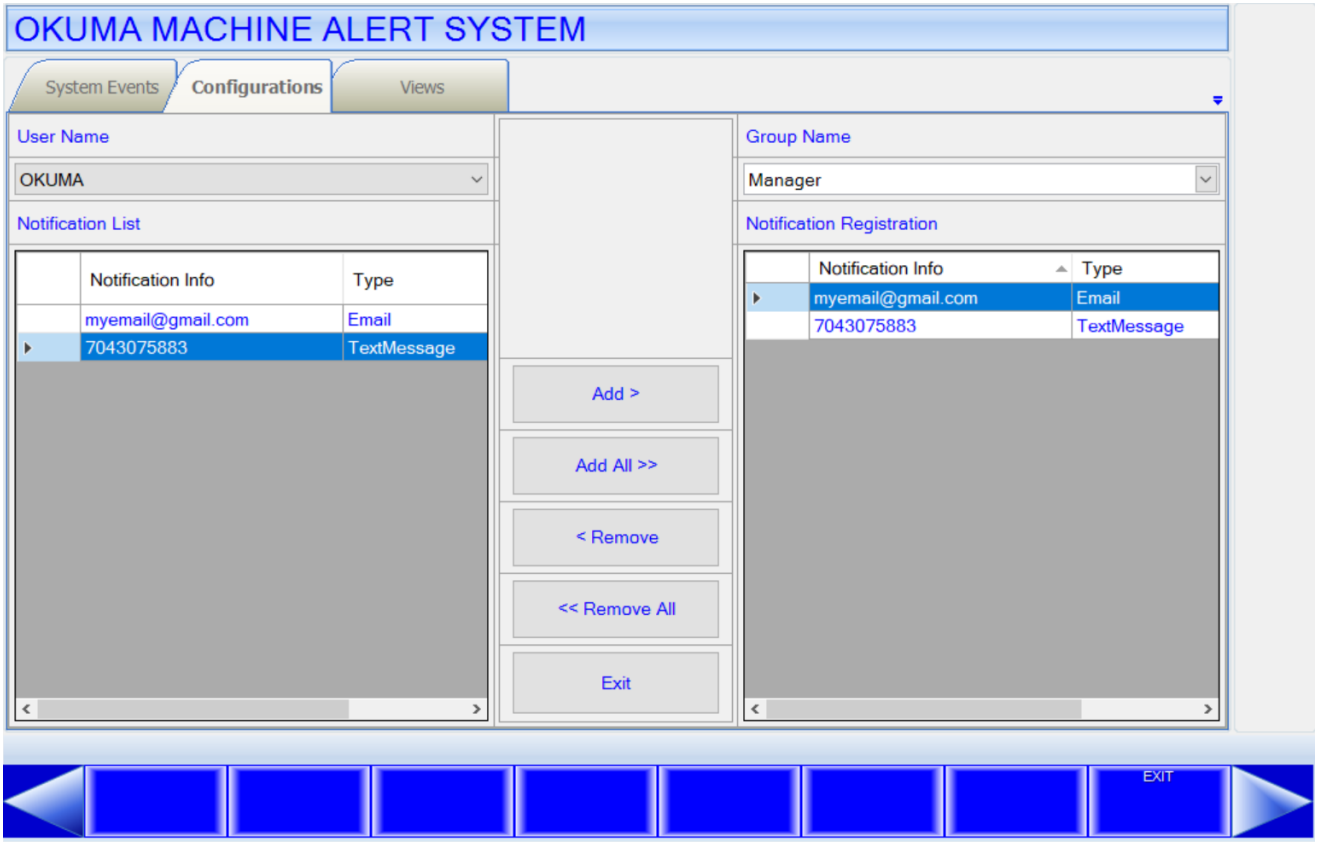
4.2.4 *Notification Registration*




- From Configuration tab click on Notification Registration icon




- Click on User Name arrow down to select user name from drop down menu list.
- Click on Group Name arrow down to select group name from drop down menu list.
- Click on Add button to add the individual highlighted notification info of each user name from Notification List box to Notification Registration box for that particular Group Name.
- Click on Add All button to add all notification info of each user name from Notification List box to Notification Registration box for that particular Group Name.



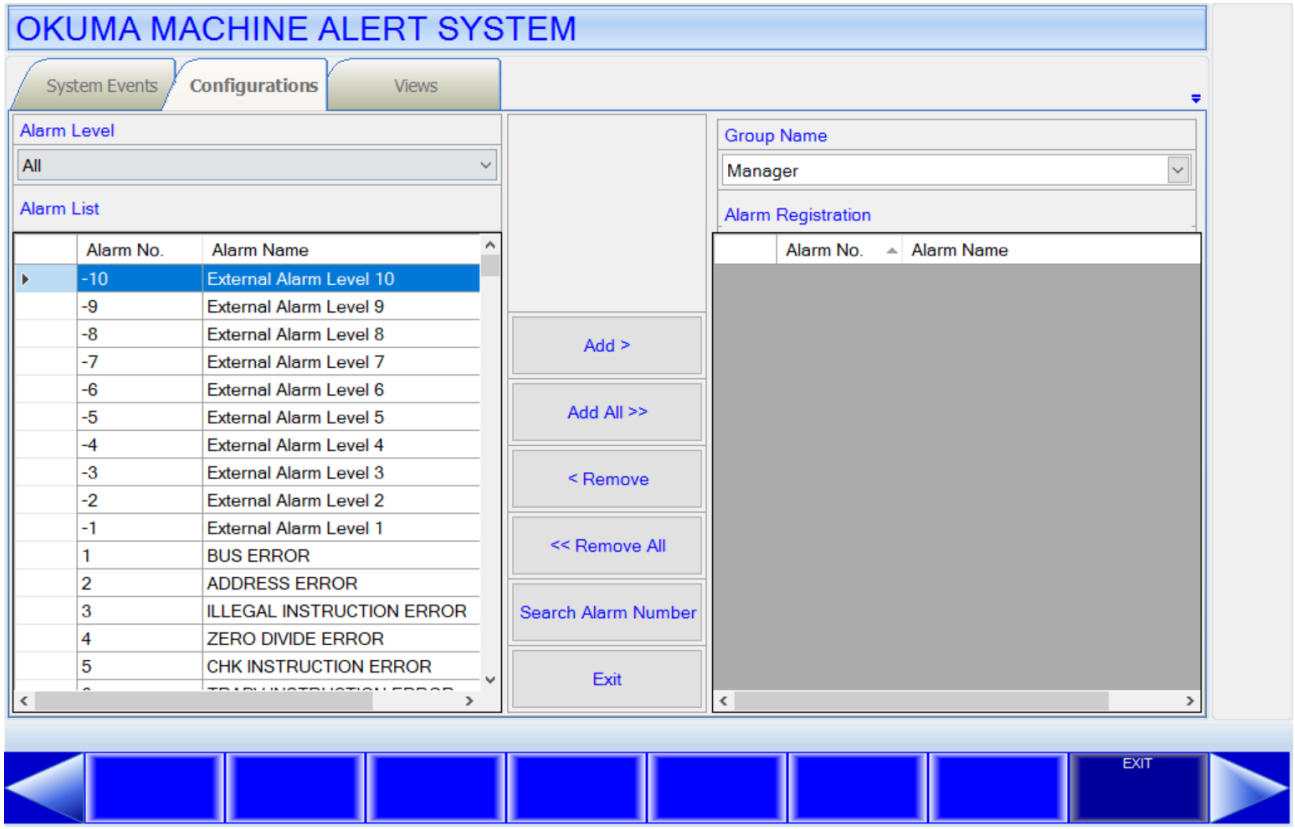

- Click on Remove button to remove the individual highlighted notification info from Notification Registration box for that particular Group Name.
- Click on Remove All button to remove all notification info from Notification Registration box for that particular Group Name.
- Click Exit button to go back to main Configuration tab.

### 4.2.5 *Alarm Registration*

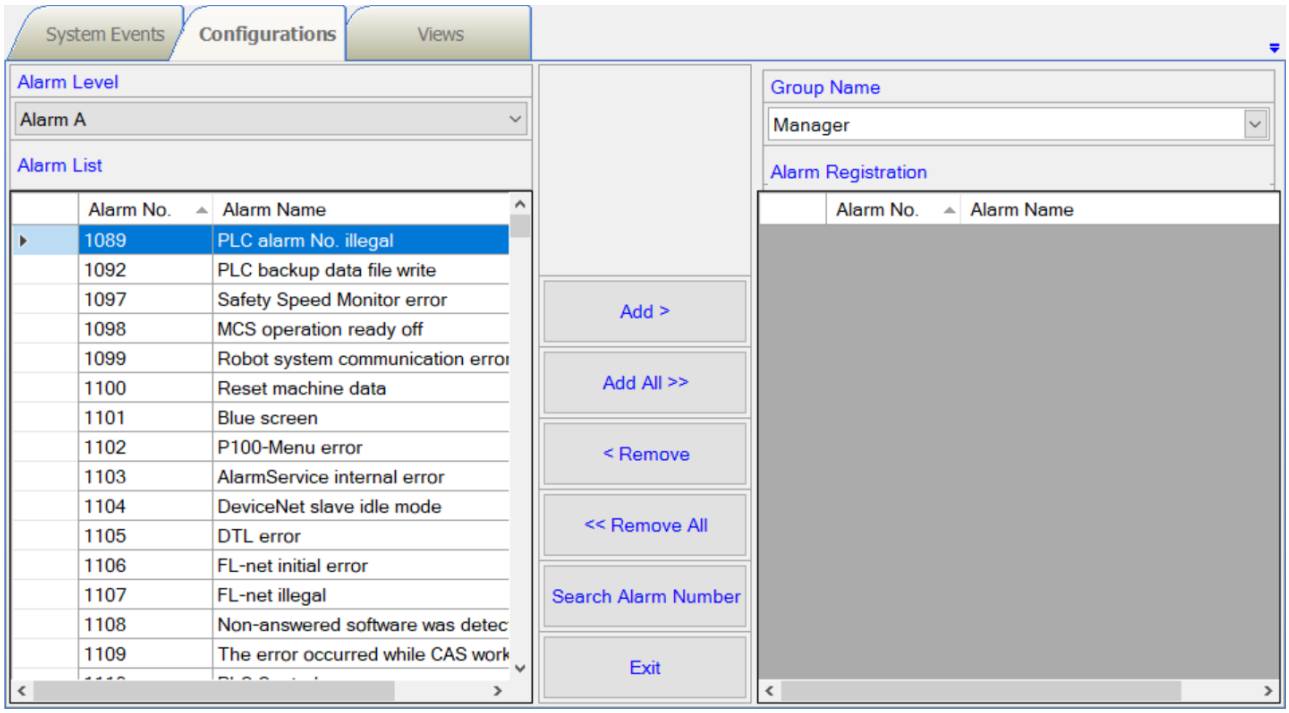
There are OSP alarms (Alarm A, B, C, D, P, Error) and External alarms (alarms are triggered by other applications such as OKUMA Monitoring Control System) that can be registered for each group name. The system will monitor the alarm status to send email or text message to each user name registered in each group.

***Note: Alarm events must be occurred after alarm number registered with system will be detected.***

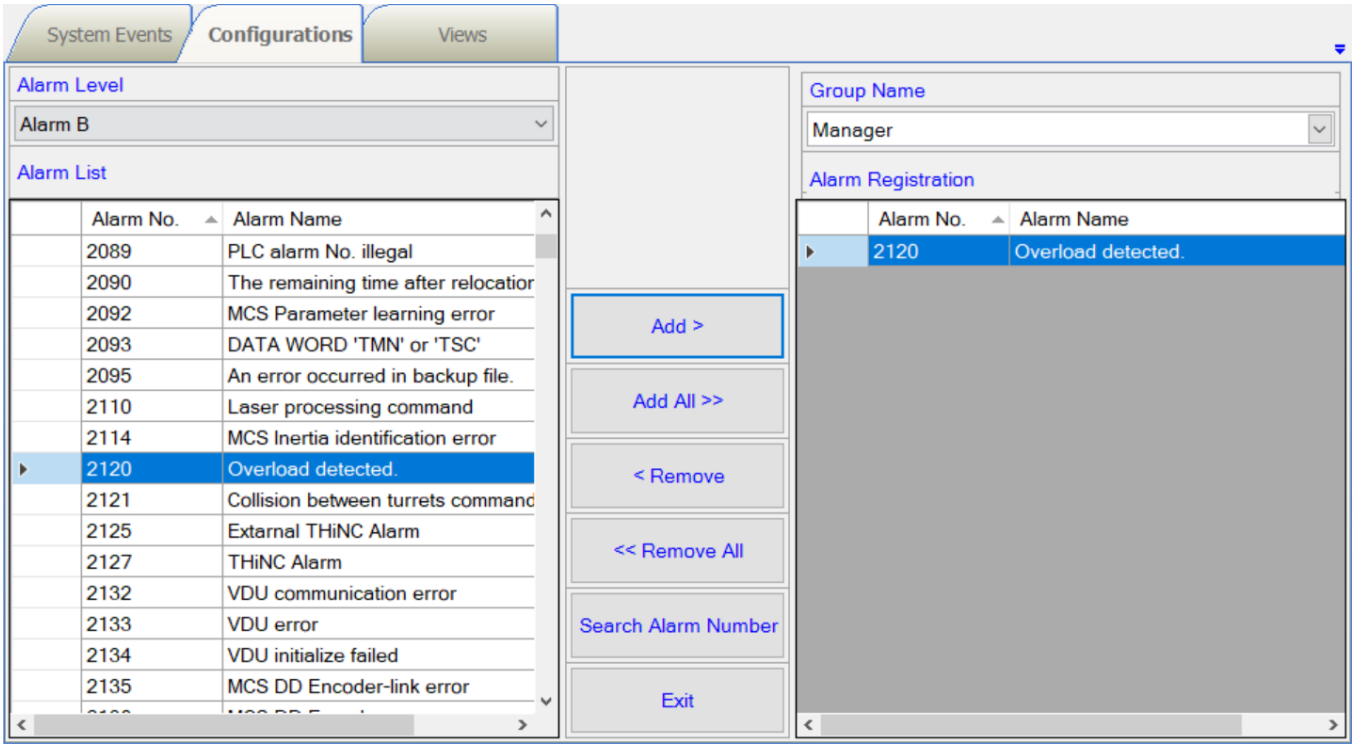
- From Configuration tab click on Alarm Registration icon




- Click on arrow down to select group of Alarm Level as shown from drop down menu list. The system will display all alarms belong to selected group of alarm level in the Alarm List window




- Click on arrow down to select Group Name as shown from drop down menu list.

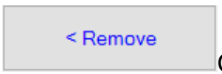



-

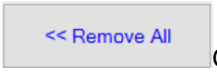
Click this button will add highlighted alarm number from Alarm List window to Alarm Registration window

-

Click this button will add all alarm numbers from Alarm List window to Alarm Registration window

- 

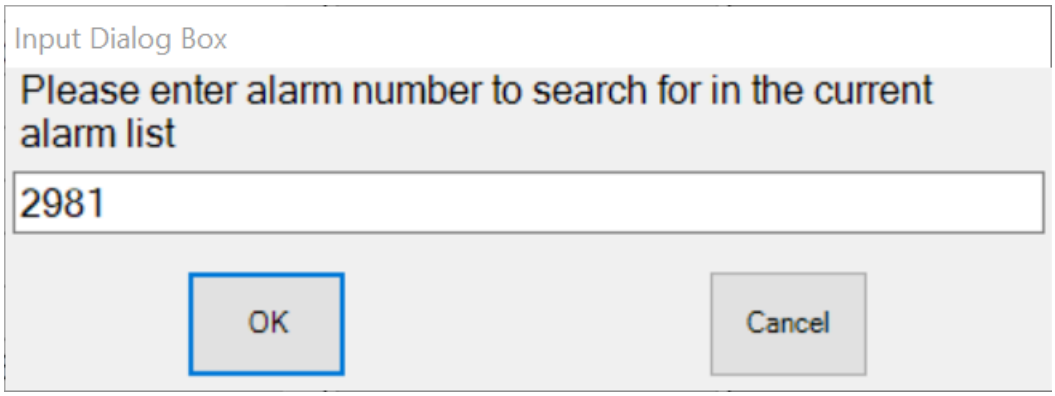
Click this button will remove highlighted alarm number from Alarm Registration window

- 

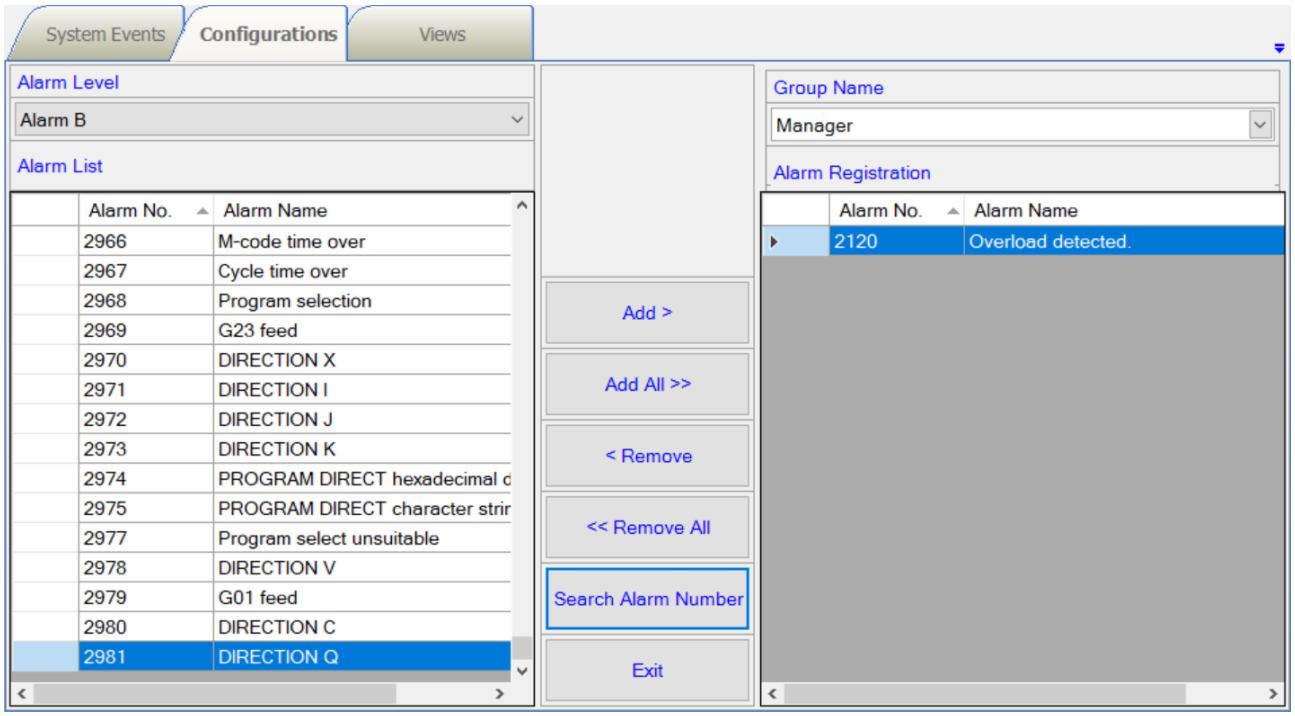
Click this button will remove all alarm numbers from Alarm Registration window

- Click

button.



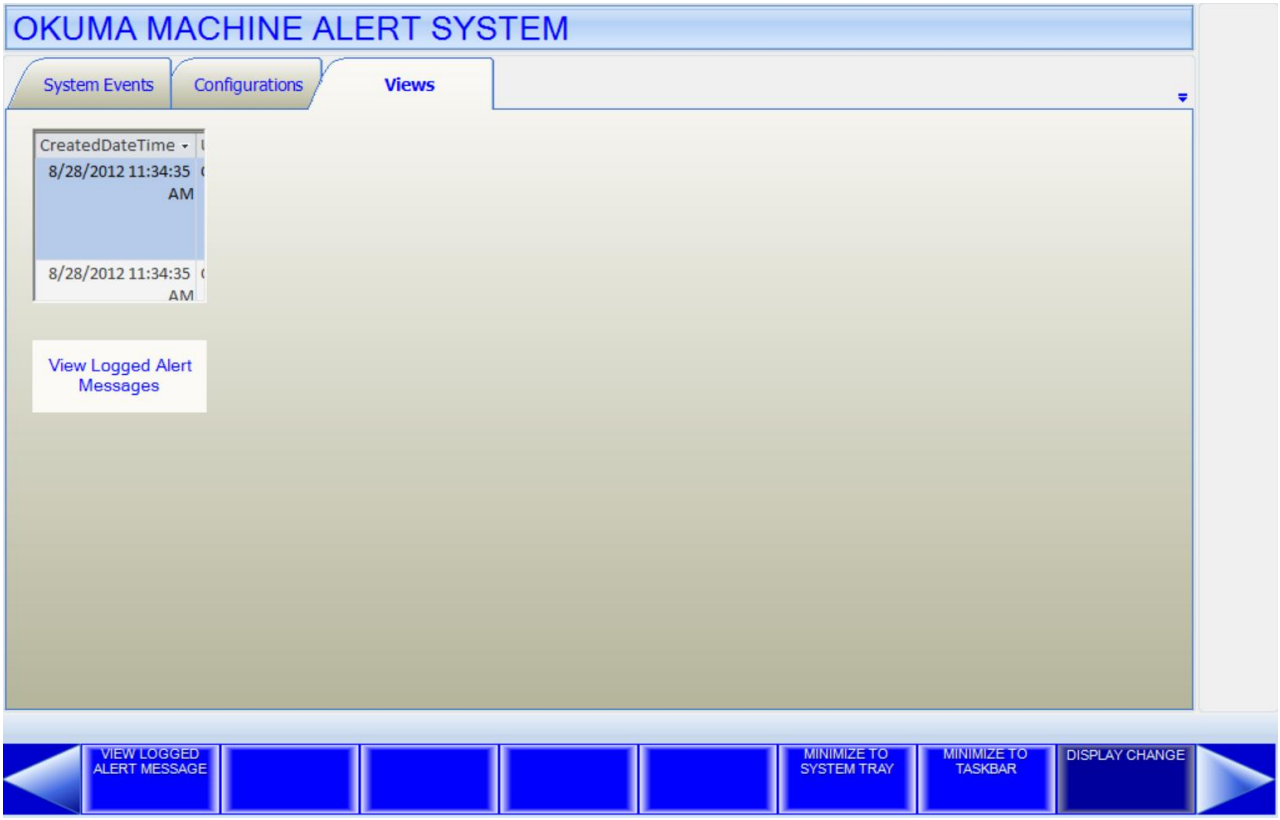

- Key in alarm number and click OK



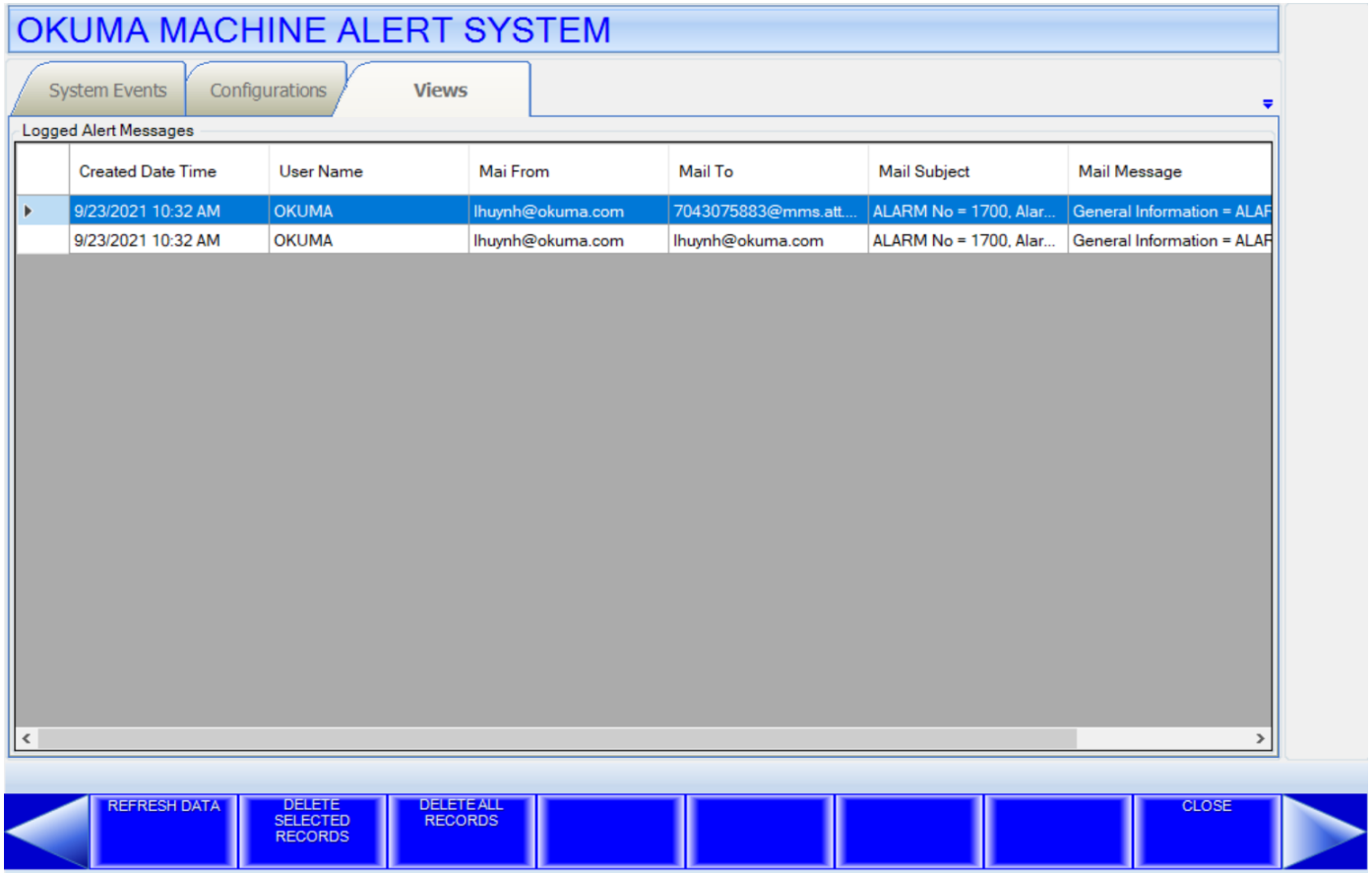

- The system will display and highlighted the alarm if found

4.2.6 *Views*

The system will log all alert messages under Views tab window.




- Click on View Logged Alert Messages icon



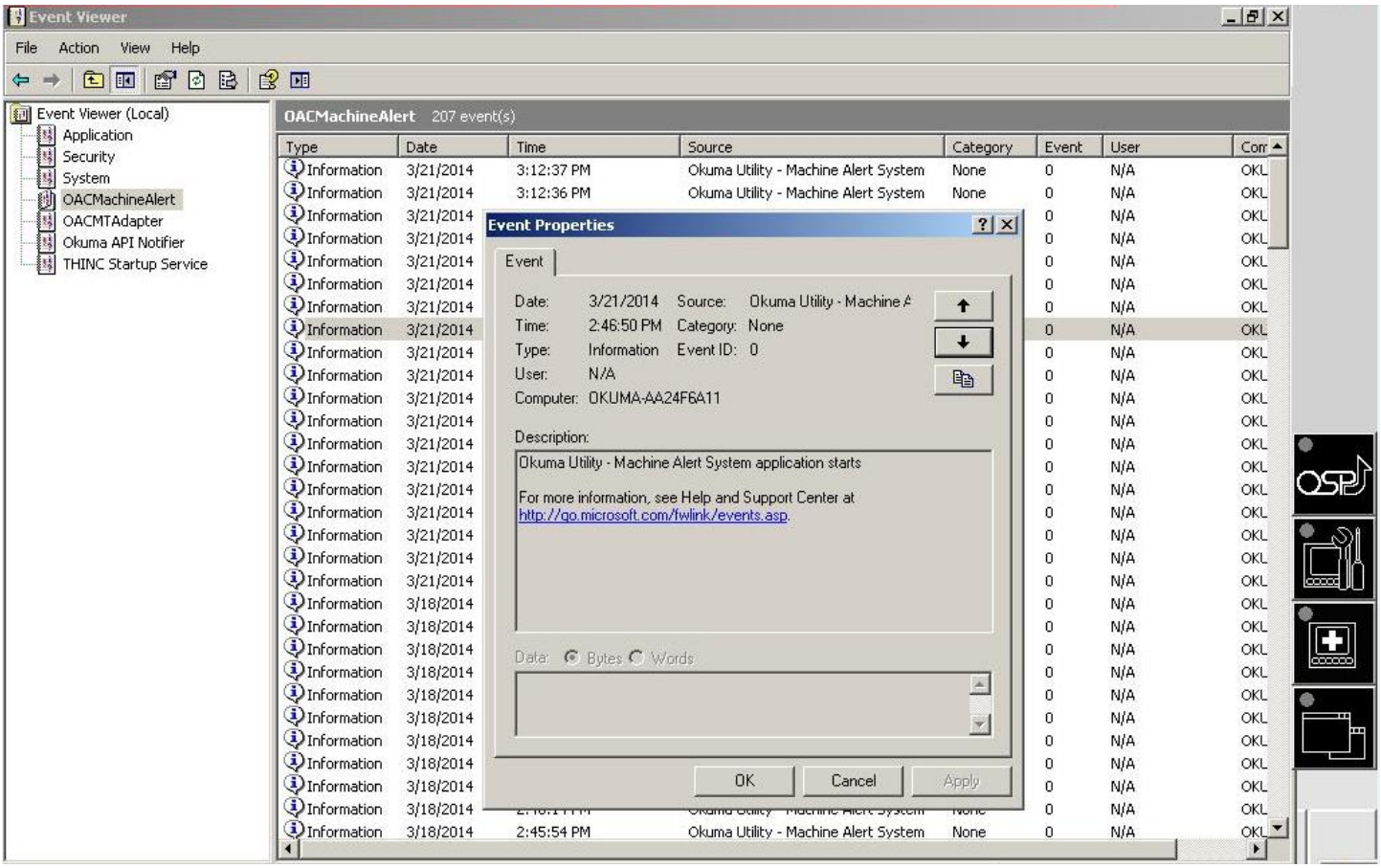

- Click on Close button to exit View Logged Alert Messages window

## 5. Event Log

### 5.1 Error Event Log

The error information for the application is logged in the Windows event log which user can read from Windows system 'Event Viewer'. The name of event log is 'MachineAlert'.

To view the event log, press 'Ctrl + ⫽' on the operation panel to pop up Start Menu, then click 'Settings' → 'Control Panel' → 'Administrative Tools' → 'Event Viewer' to launch windows event viewer, click 'MachineAlert' under 'Event Viewer (Local)' to see a list of events logged for Okuma Machine Alert System application. To see the detail of each event, double click the event item.


Event Viewer
File Action View Help
Event Viewer (Local)
Application
Security
System
OACMachineAlert
OACMTAdapter
Okuma API Notifier
THINC Startup Service
OACMachineAlert 207 event(s)
Type Date Time Source Category Event User
Information 3/21/2014 3:12:37 PM Okuma Utility - Machine Alert System None 0 N/A
Information 3/21/2014 3:12:36 PM Okuma Utility - Machine Alert System None 0 N/A
Information 3/18/2014 2:45:54 PM Okuma Utility - Machine Alert System None 0 N/A
Event Properties
Event
Date: 3/21/2014 Source: Okuma Utility - Machine A
Time: 2:46:50 PM Category: None
Type: Information Event ID: 0
User: N/A
Computer: OKUMA-AA24F6A11
Description:
Okuma Utility - Machine Alert System application starts
For more information, see Help and Support Center at
http://go.microsoft.com/fwlink/events.asp.
Data: Bytes Words
OK
Cancel
Apply

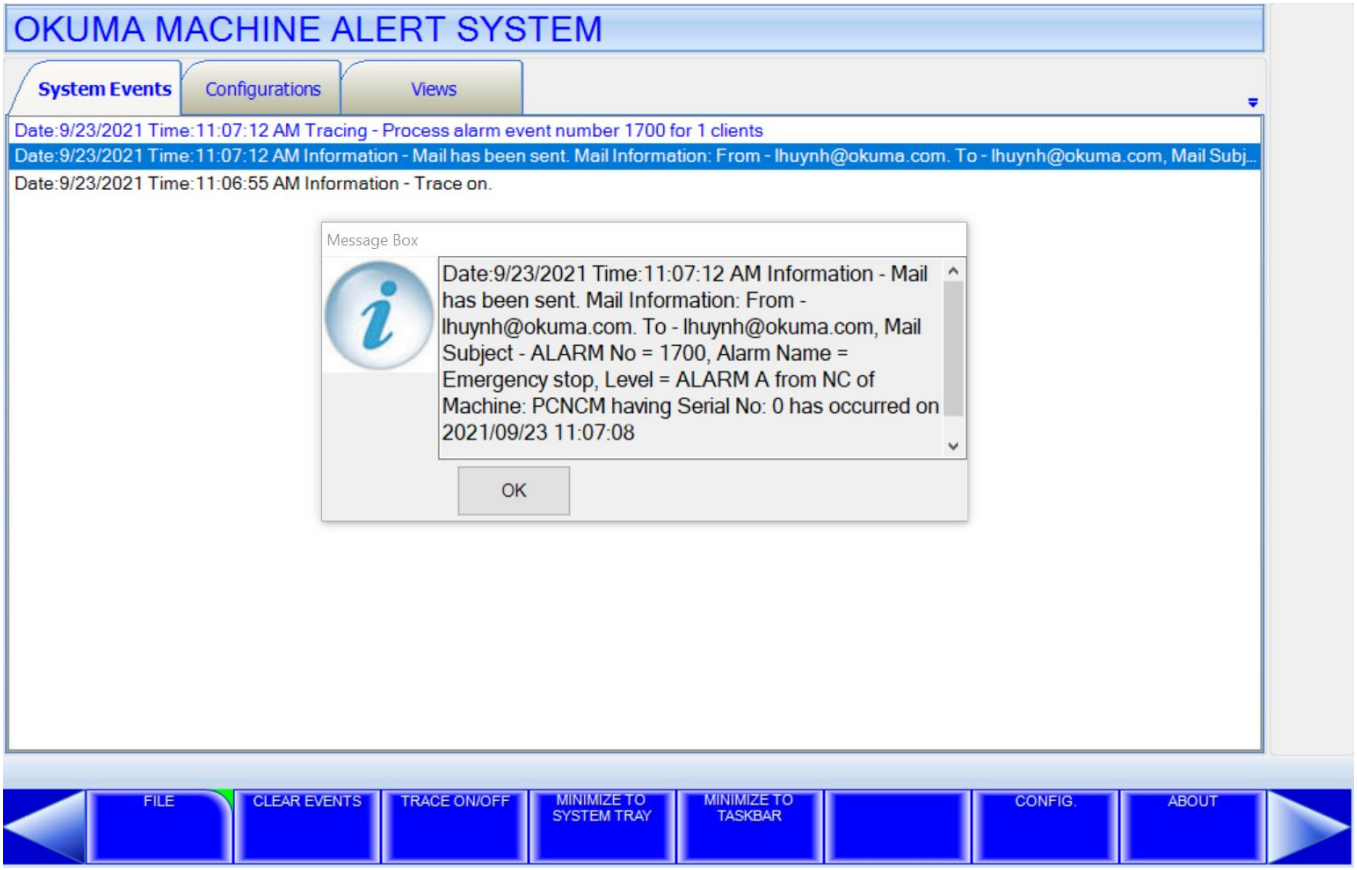
## 6. Trouble Shooting

By default, the system will write event messages to the System Events screen. If the 'Trace On' menu is checked, all messages will be displayed on the main user interface, otherwise only pre-selected event messages by the system will be displayed.

Event messages are colorized to categorize event type as following:

- Information – Indicate normal event messages. It is in black color.
- Tracing – Indicate tracing event messages when Trace On mode is active. It is in blue color.
- Error – Indicate error event messages when system encounters. Error messages will be forced to display to main GUI and logged. It is in red color.
- Critical Error/Message – Indicate critical error event messages when system encounters. Error messages will be forced to display to main GUI and logged. It is in purple color.

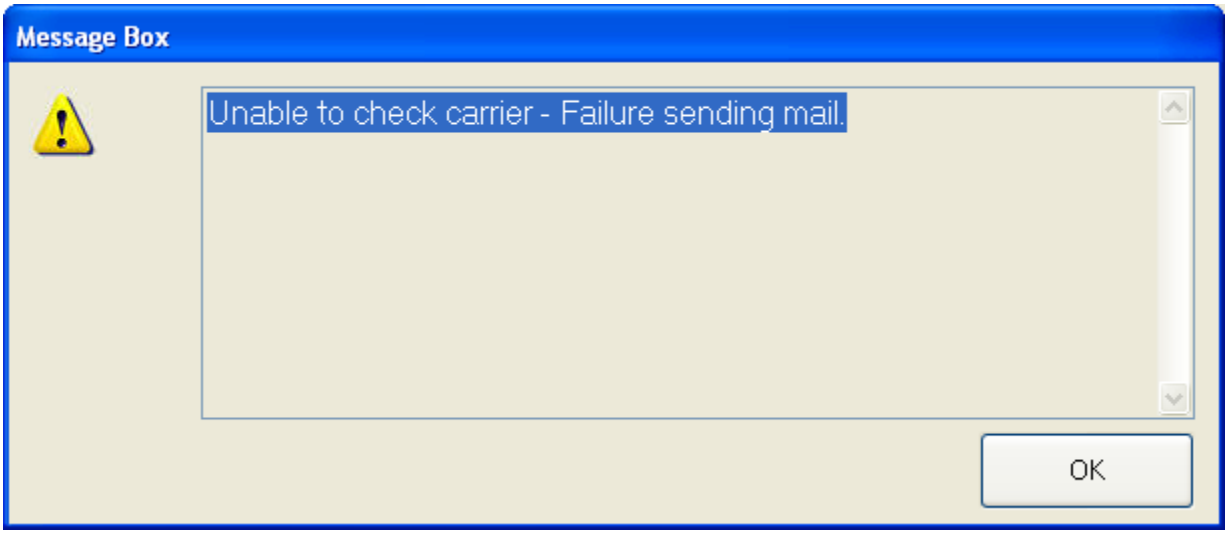
By double clicking on the event message in each row, a message box will be displayed contained the message in the current selected row.



## 6.1 Common Errors

### 6.1.1 *Unable to check carrier - Failure sending mail*

The system could not send a text message to an assigned phone to verify the Notification Carrier




Probable faulty locations:

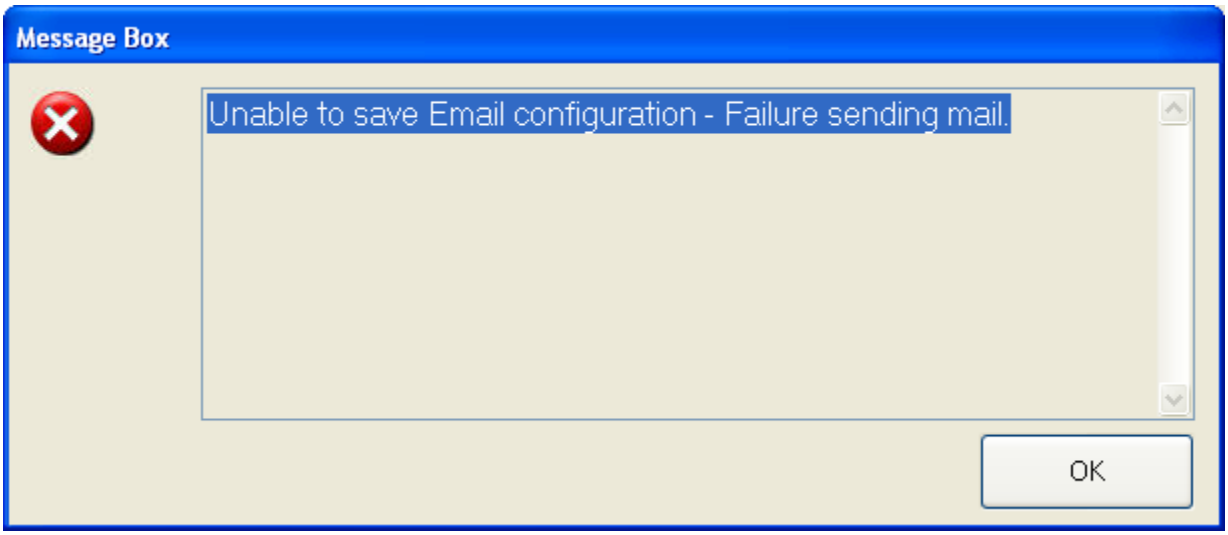
- Wrong or misspelling notification carrier SMS gateway
- No internet connection

Measure to take:

- Verify SMS gateway of Notification Carrier
- Verify the internet connection

6.1.2 *Email server - Failure sending mail*

The System could not send a test message to email address 'thincuser@gmail.com' to verify configuration.



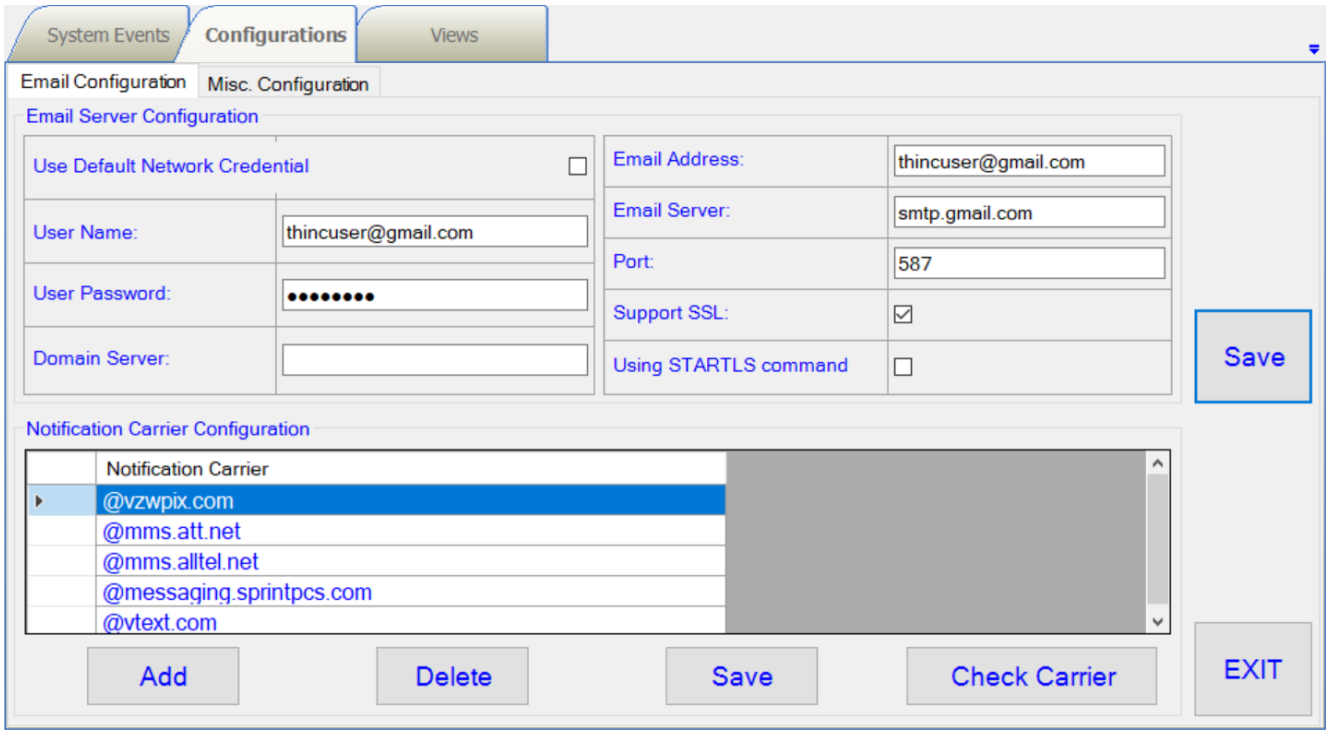

Probable faulty locations:

- Wrong email smtp server host name
- Wrong email server port number
- No internet connection

Measure to take:

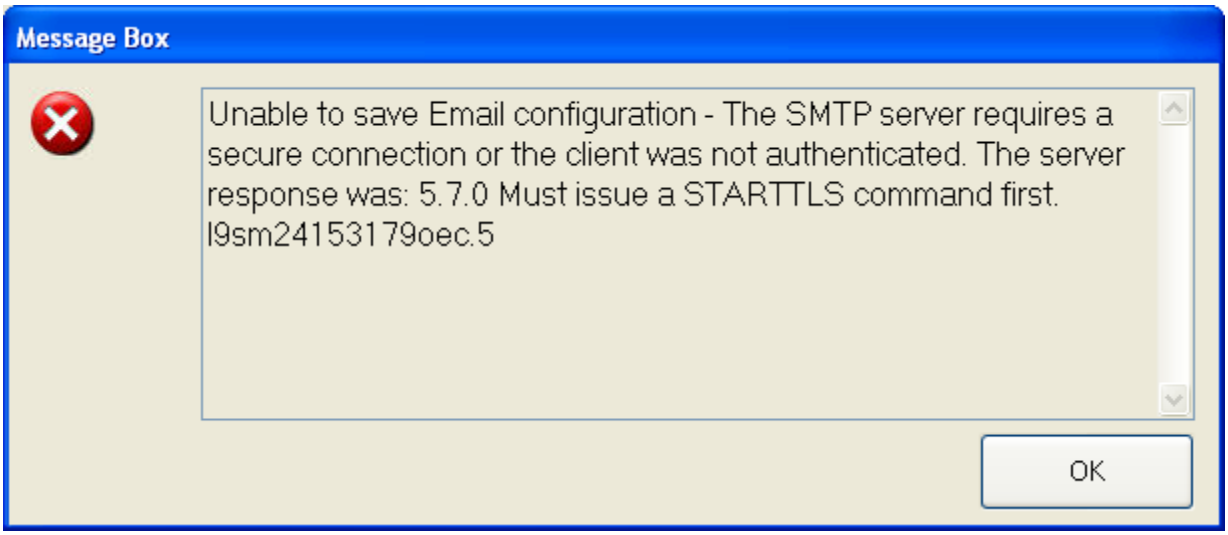
- Verify email smtp server host name
- Verify email server port number
- Verify internet connection

***Note: User must provide the email server account to send emails.***


System Events
Configurations
Views
Email Configuration
Misc. Configuration
Email Server Configuration
Use Default Network Credential
User Name:
thincuser@gmail.com
User Password:
Domain Server:
Email Address:
thincuser@gmail.com
Email Server:
smtp.gmail.com
Port:
587
Support SSL:
Using STARTLS command
Save
Notification Carrier Configuration
Notification Carrier
@vzwpix.com
@mms.att.net
@mms.alltel.net
@messaging.sprintpcs.com
@vtext.com
Add
Delete
Save
Check Carrier
EXIT

6.1.3 *Unable to save Email configuration*

The System could not save email configuration due SMTP server require a secure connection.

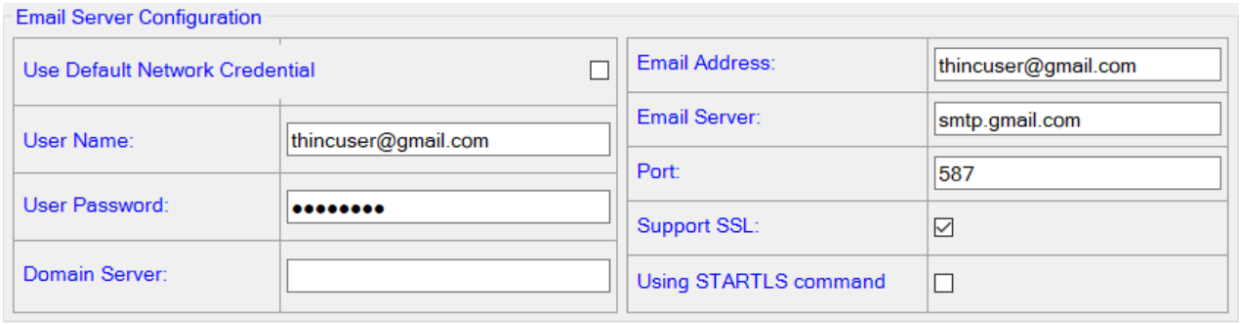



Probable faulty locations:

- Support SSL check box was not checked
- Using STARTTLCommand check box was not checked

Measure to take:

- Select Configuration tab, click on Configuration Setting icon, and click on the Support SSL check box as shown, and click Save




6.1.4 *No notification of current alarm is sending after registering for alarms*

Probable faulty locations:

- Alarms occurs in the past or before an alarm is registered with the system

Measure to take:

- Check assignment of user to group
- Check assignment of alarm to group
- Check notification of each user

- Check notification server
- Clear current alarm and generate the alarm condition again.