



## Contents

<b>1</b>	<b>Messaging Configuration .....</b>	<b>1</b>
1.1	Adding, Deleting and Modifying Objects .....	1
1.1.1	Context Menus .....	1
1.1.1.1	Create a new object .....	1
1.1.1.2	Delete the selected object.....	1
1.1.2	Properties Pane .....	1
<b>2</b>	<b>Recipient View .....</b>	<b>1</b>
2.1	Recipient Tree View Pane .....	2
2.1.1	Recipient Groups .....	2
2.1.2	Email Recipients .....	2
2.1.3	Pager Recipient .....	2
2.1.4	Message Formats .....	3
2.1.5	Page Formats .....	3
2.1.6	Telephony Details .....	3
2.2	Recipient Properties Pane .....	3
2.2.1	Recipient Group Properties .....	3
2.2.1.1	Recipient Group Name .....	4
2.2.1.2	Recipient Group Description .....	4
2.2.2	Mail Recipient Properties.....	4
2.2.2.1	Mail Recipient Name .....	4
2.2.2.2	E-mail Address.....	5
2.2.2.3	Mail Recipient Description .....	5
2.2.2.4	Ack Key .....	5
2.2.2.4.1	Acknowledging Alarms using the Ack Key .....	5
2.2.2.5	Ack Mode .....	6
2.2.2.6	Override .....	6
2.2.2.7	User.....	6
2.2.2.8	Pattern Group.....	6
2.2.2.9	Time Zone .....	6
2.2.2.10	Disable .....	7
2.2.3	Message Format Properties .....	7
2.2.3.1	Mail Format Name.....	7
2.2.3.2	Subject .....	7
2.2.3.3	Body .....	7
2.2.4	Page Recipient Properties.....	7
2.2.4.1	Page Recipient Name .....	8
2.2.5	Page Format Properties .....	8
2.2.5.1	Page Format Name.....	8
2.2.5.2	Paging Message .....	8
2.2.5.3	Pre-Send Delay.....	8
2.2.5.4	Post-Send Delay .....	8
2.2.6	Telephony Details Properties .....	9
2.2.6.1	Telephony Format Name .....	9
2.2.6.2	Telephony Format Description.....	9
2.2.6.3	Pre-Dial Delay .....	9
2.2.6.4	Outside Line Access Number .....	9

- 2.2.6.5 Main Pre-Dial Delay ..... 9
- 2.2.6.6 Main Number..... 10
- 2.2.6.7 Post-Connect Delay ..... 10
- 2.2.6.8 Pre-Disconnect Delay ..... 10
- 2.2.6.9 Connection Loss Redial Attempts..... 10
- 2.2.6.10 Connection Loss Redial Delay..... 10
- 3 Routines View ..... 10**
- 3.1 Routines Tree View Pane ..... 11
- 3.1.1 Messaging Routine..... 11
- 3.1.2 Pattern Groups ..... 11
- 3.1.3 Alarm Patterns..... 11
- 3.1.4 Action Group..... 11
- 3.1.5 Action and Next Action ..... 11
- 3.1.6 Delay..... 12
- 3.1.7 Repeat ..... 12
- 3.1.8 Recipient Groups ..... 12
- 3.1.9 Email Recipients ..... 12
- 3.1.10 Pager Recipient..... 12
- 3.2 Routine Properties Pane ..... 12
- 3.2.1 Messaging Routine Properties ..... 12
- 3.2.1.1 Messaging Routine Name..... 13
- 3.2.1.2 Messaging Routine Description ..... 13
- 3.2.1.3 Disable All New Actions ..... 13
- 3.2.1.4 Disable All Actions ..... 13
- 3.2.2 Pattern Group Properties..... 13
- 3.2.2.1 Pattern Group Name ..... 14
- 3.2.2.2 Pattern Group Description ..... 14
- 3.2.3 Alarm Pattern Properties ..... 14
- 3.2.3.1 Alarm Pattern Name..... 15
- 3.2.3.2 Alarm Pattern Description ..... 15
- 3.2.3.3 Device Name..... 15
- 3.2.3.4 Object Name ..... 15
- 3.2.3.5 Base ..... 15
- 3.2.3.6 Extension ..... 16
- 3.2.3.7 Attribute..... 16
- 3.2.3.8 Priority ..... 16
- 3.2.3.9 Condition ..... 16
- 3.2.3.10 Access Area..... 16
- 3.2.3.11 Plant Area ..... 16
- 3.2.3.12 Trigger Action When Alarm Clears ..... 16
- 3.2.4 Delay Properties ..... 16
- 3.2.4.1 Days ..... 17
- 3.2.4.2 Hours..... 17
- 3.2.4.3 Minutes..... 17
- 3.2.5 Repeat Properties..... 17
- 3.2.5.1 Forever..... 17
- 3.2.5.2 Do Not Repeat ..... 17
- 3.2.5.3 Repeat Times..... 17

<b>4</b>	<b>Menus .....</b>	<b>17</b>
4.1	File Menu .....	18
4.1.1	New Connection .....	18
4.1.2	Close Connection .....	18
4.1.3	Export to File.....	19
4.1.4	Send Configuration to Database .....	19
4.1.5	Exit.....	19
4.1.5.1	Save Changes Before Exit.....	19
4.1.5.2	Exit Without Saving Changes .....	19
4.2	View Menu .....	19
4.2.1	Toggle Toolbar .....	20
4.2.2	Toggle Status Bar .....	20
4.2.3	Split Window Modification.....	20
4.2.4	Options .....	20
4.2.5	Options Dialog Connection Tab.....	20
4.2.5.1	Initial Database Enable .....	21
4.2.5.2	Initial Database Connection .....	21
4.2.5.3	Output File Tab .....	21
4.2.5.3.1	Output File Name.....	21
4.2.5.3.2	Browse Button .....	22
4.2.5.4	Colors Tab.....	22
4.2.5.4.1	Enable Tree view Background Color.....	22
4.2.5.4.2	Color Palette .....	22
4.2.5.5	Validation Tab .....	22
4.2.5.5.1	Blank Email Addresses.....	23
4.2.5.5.2	Duplicate Email Addresses.....	23
4.2.5.5.3	Missing Mail Format References .....	23
4.2.5.6	Signal Tag Tab.....	23
4.2.5.6.1	Signal Tag File Location .....	24
4.2.5.6.2	Signal Tag File Browse Button .....	24
4.2.6	View By Messaging Routine.....	24
4.2.7	View By Recipient Groups.....	24
4.2.8	Expand Tree (1 Level).....	24
4.2.9	Collapse Tree (1 Level) .....	24
4.3	Window Menu .....	25
4.3.1	Cascade.....	25
4.3.2	Tile.....	25
4.3.3	Arrange Icons .....	26
4.3.4	Currently Open Windows.....	26
4.4	Help Menu.....	26
4.4.1	About box.....	26
4.4.2	Messaging Config Help File.....	26
<b>5</b>	<b>Toolbar .....</b>	<b>26</b>
5.1	New Connection.....	27
5.2	Add Recipient Group.....	27
5.3	Create New Messaging Routine .....	27
5.4	Send Configuration to Database.....	27
5.5	Export to File .....	28

- 5.6 View By Recipient Groups ..... 28
- 5.7 View By Messaging Routine ..... 28
- 5.8 Collapse Tree (1 Level)..... 28
- 5.9 Expand Tree (1 Level)..... 28
- 5.10 About box..... 28
  
- 6 Context Menus ..... 28**
  - 6.1 Recipient View Context Menu ..... 29
    - 6.1.1 Add Recipient Group ..... 29
  - 6.2 Recipient Group Context Menu..... 29
    - 6.2.1 Add Recipient Sub-menu..... 29
      - 6.2.1.1 Add E-mail Recipient..... 30
      - 6.2.1.2 Add Pager Recipient ..... 30
    - 6.2.2 Permanently Delete Group ..... 30
    - 6.2.3 SQL Sub Menu ..... 30
      - 6.2.3.1 SQL Copy to Clipboard ..... 30
      - 6.2.3.2 Show SQL Dialog..... 30
    - 6.2.4 Context Menu Help..... 30
    - 6.2.5 Recipient Group Property Dialog..... 30
      - 6.2.5.1 Recipient Group Name ..... 31
      - 6.2.5.2 Recipient Group Description ..... 31
  - 6.3 Mail Recipient Context Menu ..... 31
    - 6.3.1 Remove Recipient from Group..... 31
    - 6.3.2 Permanently Delete Recipient..... 31
    - 6.3.3 Add Mail Format ..... 31
    - 6.3.4 Disable Page Delivery ..... 32
    - 6.3.5 Disable All Page Deliveries ..... 32
    - 6.3.6 SQL Sub Menu ..... 32
      - 6.3.6.1 SQL Copy to Clipboard ..... 32
      - 6.3.6.2 Show SQL Dialog..... 32
    - 6.3.7 Context Menu Help..... 32
    - 6.3.8 Mail Recipient Properties..... 32
      - 6.3.8.1 Mail Recipient Name ..... 33
      - 6.3.8.2 E-mail Address..... 33
      - 6.3.8.3 Mail Recipient Description ..... 33
      - 6.3.8.4 Ack Key ..... 33
        - 6.3.8.4.1 Acknowledging Alarms using the Ack Key ..... 33
      - 6.3.8.5 Ack Mode ..... 34
      - 6.3.8.6 Override ..... 35
      - 6.3.8.7 User..... 35
      - 6.3.8.8 Pattern Group..... 35
      - 6.3.8.9 Time Zone ..... 35
      - 6.3.8.10 Disable ..... 35
  - 6.4 Message Format Context Menu..... 35
    - 6.4.1 Remove Message Format Reference ..... 35
    - 6.4.2 Permanently Delete Message Format..... 35
    - 6.4.3 SQL Sub Menu ..... 35
      - 6.4.3.1 SQL Copy to Clipboard ..... 36
      - 6.4.3.2 Show SQL Dialog..... 36
    - 6.4.4 Context Menu Help..... 36

6.4.5	Message Format Properties .....	36
6.4.5.1	Mail Format Name.....	36
6.4.5.2	Subject .....	36
6.4.5.3	Body .....	37
6.5	Pager Recipient Context Menu .....	37
6.5.1	Remove Recipient from Group.....	37
6.5.2	Permantently Delete Recipient.....	37
6.5.3	Add Page Format .....	37
6.5.4	Add Pager Number.....	37
6.5.5	Disable Page Delivery .....	37
6.5.6	Disable All Page Deliveries .....	37
6.5.7	SQL Sub Menu .....	38
6.5.7.1	SQL Copy to Clipboard .....	38
6.5.7.2	Show SQL Dialog.....	38
6.5.8	Context Menu Help.....	38
6.5.9	Page Recipient Properties.....	38
6.5.9.1	Page Recipient Name .....	38
6.6	Page Format Context Menu .....	39
6.6.1	Add Next Page Format .....	39
6.6.2	Remove Reference.....	39
6.6.3	Permanently Delete .....	39
6.6.4	SQL Sub Menu .....	39
6.6.4.1	SQL Copy to Clipboard .....	39
6.6.4.2	Show SQL Dialog.....	39
6.6.5	Context Menu Help.....	40
6.6.6	Page Format Properties .....	40
6.6.6.1	Page Format Name.....	40
6.6.6.2	Paging Message .....	40
6.6.6.3	Pre-Send Delay.....	40
6.6.6.4	Post-Send Delay .....	40
6.7	Telephony Details Context Menu.....	40
6.7.1	Remove Telephone Details .....	41
6.7.2	Remove Telephone Reference.....	41
6.7.3	SQL Sub Menu .....	41
6.7.3.1	SQL Copy to Clipboard .....	41
6.7.3.2	Show SQL Dialog.....	41
6.7.4	Context Menu Help.....	41
6.7.5	Telephony Details Properties .....	41
6.7.5.1	Telephony Format Name .....	42
6.7.5.2	Telephony Format Description.....	42
6.7.5.3	Pre-Dial Delay .....	42
6.7.5.4	Outside Line Access Number .....	42
6.7.5.5	Pre-Dial Delay .....	42
6.7.5.6	Main Number.....	42
6.7.5.7	Post-Connect Delay .....	43
6.7.5.8	Pre-Disconnect Delay .....	43
6.7.5.9	Connection Loss Redial Attempts.....	43
6.7.5.10	Connection Loss Redial Delay.....	43
6.8	Routine View Context Menu .....	43
6.8.1	Create New Messaging Routine.....	43

6.9	Message Routine Context Menu.....	43
6.9.1	Delete Paging Routine.....	44
6.9.2	Add Pattern Group.....	44
6.9.3	Add Action Group .....	44
6.9.4	SQL Sub Menu .....	44
6.9.4.1	SQL Copy to Clipboard.....	44
6.9.4.2	Show SQL Dialog.....	44
6.9.5	Message Routine Properties .....	45
6.9.5.1	Messaging Routine Name.....	45
6.9.5.2	Messaging Routine Description .....	45
6.9.5.3	Disable All New Actions .....	45
6.9.5.4	Disable All Actions .....	45
6.10	Pattern Group Context Menu.....	45
6.10.1	Add Pattern .....	46
6.10.2	Delete Group.....	46
6.10.3	SQL Sub Menu.....	46
6.10.3.1	SQL Copy to Clipboard.....	46
6.10.3.2	Show SQL Dialog .....	46
6.10.4	Pattern Group Properties .....	46
6.10.4.1	Pattern Group Name.....	47
6.10.4.2	Pattern Group Description .....	47
6.11	Alarm Pattern Context Menu .....	47
6.11.1	Delete Pattern .....	47
6.11.2	Disable Pattern.....	47
6.11.3	SQL Sub Menu.....	47
6.11.3.1	SQL Copy to Clipboard.....	48
6.11.3.2	Show SQL Dialog .....	48
6.11.4	Context Menu Help .....	48
6.11.5	Alarm Pattern Properties.....	48
6.11.5.1	Alarm Pattern Name .....	49
6.11.5.2	Alarm Pattern Description.....	49
6.11.5.3	Device Name .....	49
6.11.5.4	Object Name .....	49
6.11.5.5	Base.....	49
6.11.5.6	Extension .....	50
6.11.5.7	Attribute.....	50
6.11.5.8	Priority.....	50
6.11.5.9	Condition.....	50
6.11.5.10	Access Area.....	50
6.11.5.11	Plant Area .....	50
6.11.5.12	Trigger Action When Alarm Clears .....	50
6.12	Action Group Context Menu .....	50
6.12.1	Delete Action Group.....	50
6.12.2	Add Action.....	50
6.12.3	SQL Sub Menu.....	50
6.12.3.1	SQL Copy to Clipboard.....	51
6.12.3.2	Show SQL Dialog .....	51
6.12.4	Context Menu Help .....	51
6.12.5	Properties.....	51
6.13	Action Context Menu .....	51

- 6.13.1 Delete Action ..... 51
- 6.13.2 Add Recipient Group ..... 51
- 6.13.3 Add Next Action ..... 52
- 6.13.4 SQL Sub Menu ..... 52
  - 6.13.4.1 SQL Copy to Clipboard ..... 52
  - 6.13.4.2 Show SQL Dialog ..... 52
- 6.13.5 Context Menu Help ..... 52
- 6.13.6 Properties ..... 52
  
- 7 Create New Object Dialog ..... 52**
  - 7.1 Create New Object Dialog ..... 52
  - 7.2 Create/Select New Object Dialog ..... 53
  - 7.3 New Object Name ..... 53
  - 7.4 Configured Object List ..... 53
  - 7.5 OK Button ..... 53
  - 7.6 Cancel Button ..... 53
  - 7.7 Help Button ..... 54
  
- 8 Glossary ..... 54**
  
- 9 Index ..... 55**



# 1 Messaging Configuration

The Messaging Configuration tool enables the user to configure OpenEnterprise Messaging. OpenEnterprise Messaging enables automated messages to be sent to email or paging recipients when specified alarm criteria appears within the 'Alarm Summary' table. Email recipients are able to acknowledge alarms by email.

The Messaging Configuration tool provides two main views: -

1. Recipient View - Enables the creation of new User Groups and Users
2. Messaging Routine View - Enables the creation of new Messaging Routines.

## 1.1 Adding, Deleting and Modifying Objects

The Messaging Configuration tool uses a highly intuitive, point and click interface to create and configure the objects needed for OpenEnterprise Messaging.

### 1.1.1 Context Menus

Whichever object is selected from the Tree view, if you right click, a context sensitive menu will allow you to either: -

#### 1.1.1.1 Create a new object

The new object will be of a type that exists below the selected object in the Tree hierarchy - e.g. if a Recipient Group is selected, the context menu allows you to create a new Email or Paging recipient.

#### 1.1.1.2 Delete the selected object

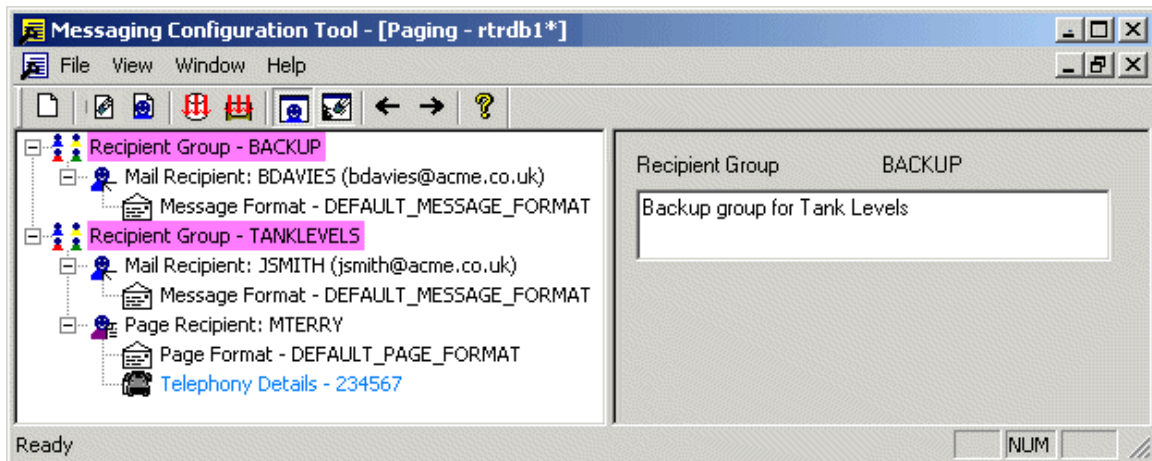
For example, if a Recipient Group object is selected, the context menu will allow you to delete the whole Recipient Group.

### 1.1.2 Properties Pane

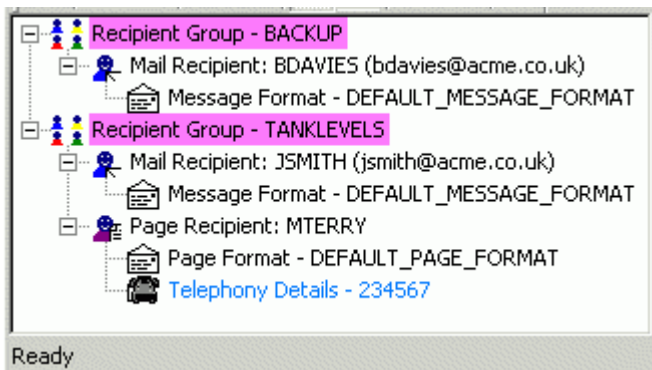
Whenever an object is selected, its Properties appear in the right pane of the interface, allowing you to modify it.

# 2 Recipient View

This is the default view of the Messaging Configuration tool's user interface. The left pane displays Recipient Groups, Recipients and each Recipient's Message or Page Format in a hierarchical tree format. The right pane displays the Properties of the item selected from the tree in the left pane.

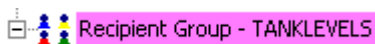


## 2.1 Recipient Tree View Pane



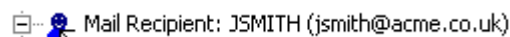
The left pane of the Messaging Configuration tool interface contains a Tree view, which displays the Messaging objects as a hierarchical tree. The objects that appear in the Recipient Tree View Pane are:-

### 2.1.1 Recipient Groups



Recipient Groups are groups of Recipients (either email or pager), who will be interested in being informed of certain alarm criteria. When a Recipient Group is selected from the Tree view pane, and the right mouse button is clicked, a context menu will appear, which enables you to perform useful tasks with the selected object.

### 2.1.2 Email Recipients



Email Recipients are users who are interested in being informed of certain alarm criteria via email. When an email recipient object is selected, and the right mouse button is clicked, a context menu appears, which enables you to perform useful tasks with the selected object.

### 2.1.3 Pager Recipient



Pager Recipients are users who are interested in being informed of certain alarm criteria via numeric pagers. When a pager recipient object is selected, and the right mouse button is clicked, a context menu appears, which enables you to perform useful tasks with the selected object.

### 2.1.4 Message Formats



Message Formats define the Subject and Message parts of the email message that will be sent to Email recipients in the event of a configured Alarm Pattern matching an alarm.

### 2.1.5 Page Formats



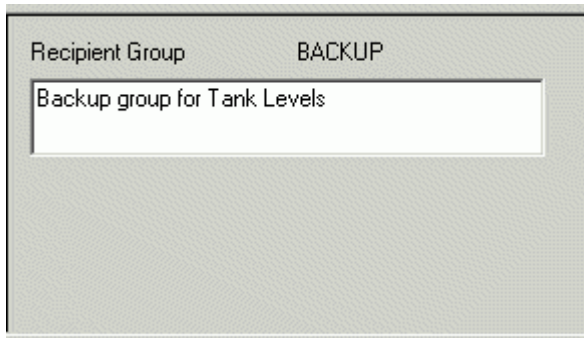
Page Formats define the message text, and pre and post send delays for pager messages.

### 2.1.6 Telephony Details



The Telephony Details consist of the Pager telephone number, as well as connection delay and re-dial settings.

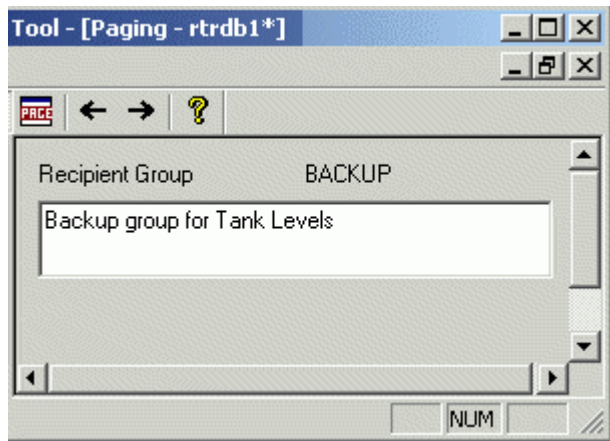
## 2.2 Recipient Properties Pane



The right pane displays the Properties for each object that is selected from the left Tree view pane. Recipient object properties are listed below.

### 2.2.1 Recipient Group Properties

When a Recipient Group object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



**2.2.1.1 Recipient Group Name**

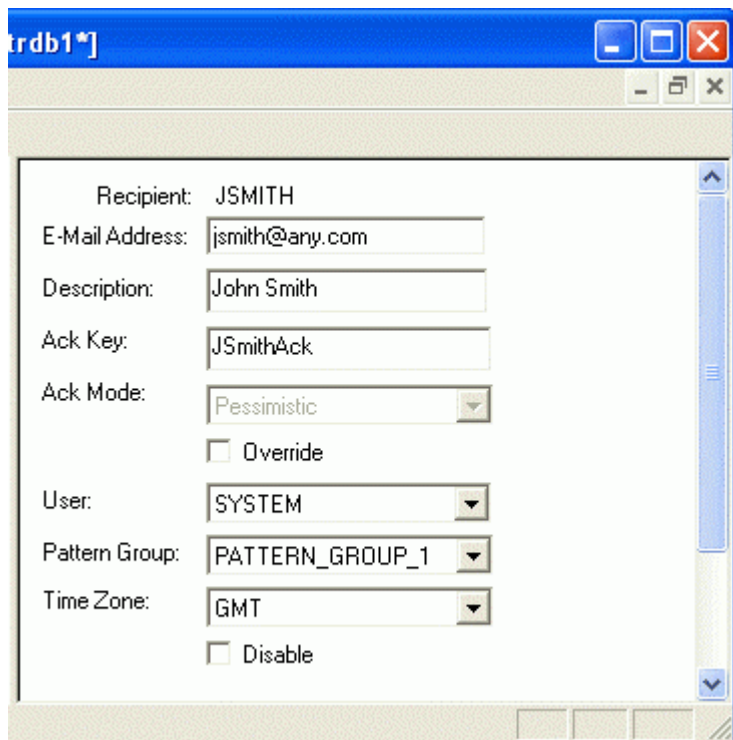
The non-editable name of the Recipient Group is displayed here.

**2.2.1.2 Recipient Group Description**

You can type a relevant description for the Recipient Group in here.

**2.2.2 Mail Recipient Properties**

When a Mail Recipient object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



**2.2.2.1 Mail Recipient Name**

The non-editable name of the Mail Recipient is displayed here.

**2.2.2.2 E-mail Address**

This editable field contains the email address of the Mail Recipient.

**2.2.2.3 Mail Recipient Description**

You may place any descriptive text here that will enable you to more clearly identify the Mail Recipient.

**2.2.2.4 Ack Key**

The text in this field is a string that the Mail Recipient will use to acknowledge alarms by email. The string that the recipient JSmith would use to acknowledge an alarm in the example on the Mail Recipient Properties topic is "JSmithAck".

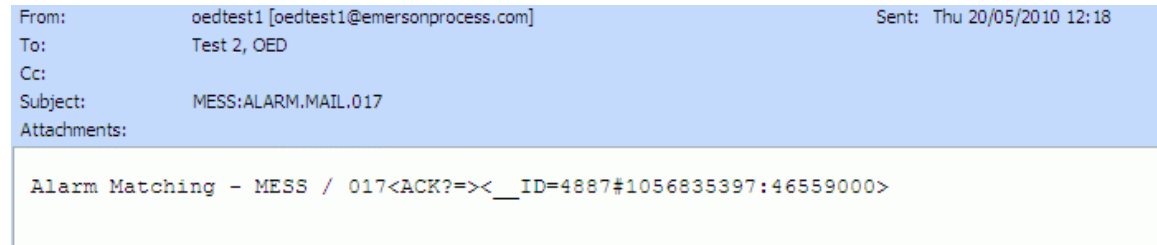
**2.2.2.4.1 Acknowledging Alarms using the Ack Key**

The following example shows how to use the Ack Key to acknowledge alarms via e-mail. In this example a user called "Test 1" has defined his Ack Key string as "oedtest2". The OEMessaging Server detects that an alarm pattern associated with this user has been matched in the alarm summary table. After waiting for the prescribed delay time, it sends an e-mail to "Test 1".

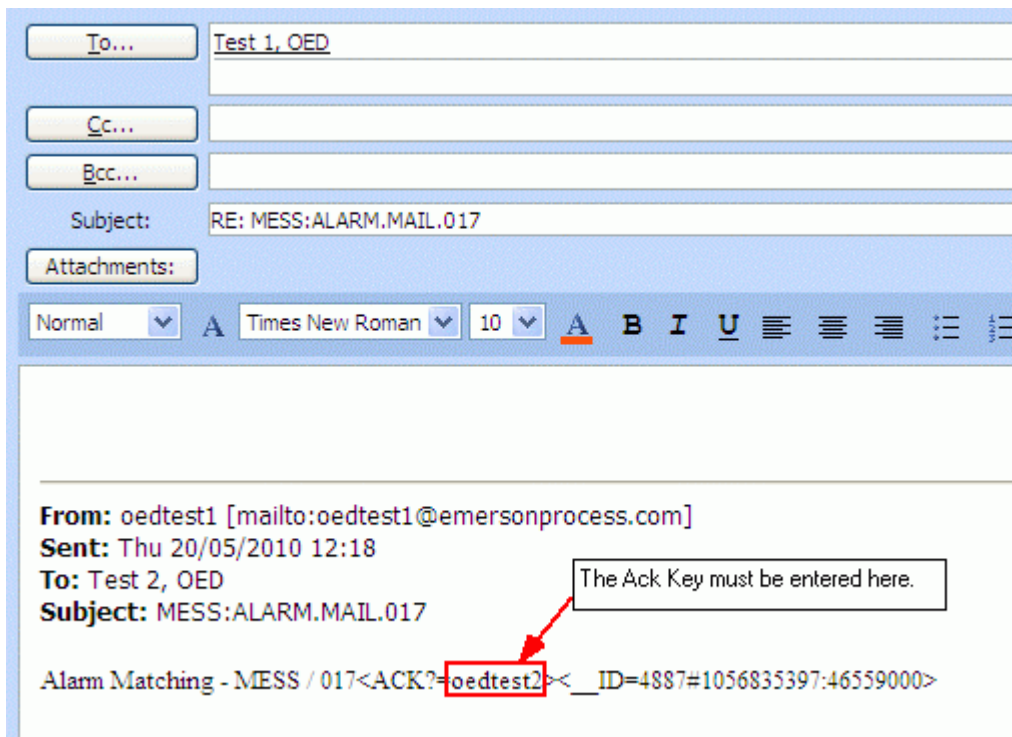
The body of the e-mail contains any text that was entered into the Mail Format assigned to this Mail Recipient, and at the end of this text the following tags are added by the Messaging server:-

`<ACK?=><__ID=<AlarmIDNumber>#<TimeCode>`

The "Test 1" user clicks Reply to the e-mail sent by the Messaging server, and prior to acknowledging the alarm this is the actual e-mail message that he sees:-



To acknowledge this alarm, before actually sending the reply, he places the text "oedtest2" immediately after the equals sign (=) in the tag that begins "ACK?". An example is shown below with the Ack Key in place:-



There is no need to enter any other text into the main body of the reply. The reply is sent, and when it is received by the OEMessaging Server, the alarm is acknowledged.

### 2.2.2.5 Ack Mode

The acknowledgement mode defaults to Pessimistic mode. The mode can be changed by selecting the *Override* check box and then selecting *Optimistic* from this list.

In Optimistic mode, only the alarm Id is sent in the Message Id. When a valid reply is received, the alarm is acknowledged regardless of the Occurrence Time. In Pessimistic mode, the Occurrence Time of the alarm will be included in the Message Id. When the reply is received, this must match the current Occurrence Time.

The need for this functionality comes from the fact that NW3000 alarms are generated at the RTU. This means that two instances of an alarm can have the same alarm Id but different occurrence times. Pessimistic mode ensures that the acknowledgement sent will only acknowledge the intended alarm.

### 2.2.2.6 Override

Check this box to enable the *Ack Mode* list. Then you can choose either *Optimistic* or *Pessimistic* mode from the list.

### 2.2.2.7 User

This is a list of configured OpenEnterprise users with whom the Mail Recipient will be identified. The Mail Recipient will inherit all of the security settings for this user.

### 2.2.2.8 Pattern Group

A Pattern Group with which the Mail Recipient will be associated.

### 2.2.2.9 Time Zone

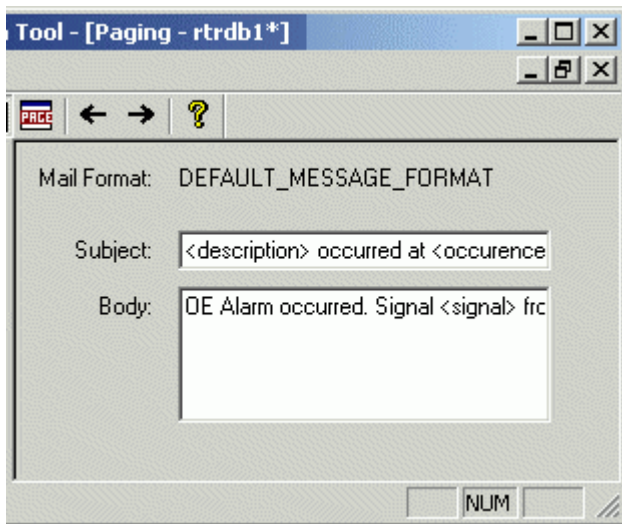
The time zone for the Mail Recipient. This is a mandatory field, so the correct time zone for the recipient must be selected.

**2.2.2.10 Disable**

Check this box to disable this Mail Recipient. When disabled, the Recipient will not receive alarm mail, even though they may belong to an enabled Messaging Routine.

**2.2.3 Message Format Properties**

When a Message Format object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



**2.2.3.1 Mail Format Name**

The non-editable name of the selected Mail Format is displayed here.

**2.2.3.2 Subject**

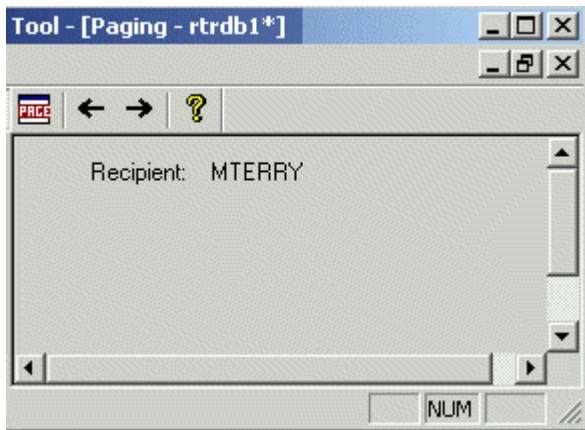
This editable field displays the text that will be placed into the Subject field of each email message that is sent to the associated Mail Recipient. The text in chevrons indicates aliases, that pick up actual values from the Alarm Pattern that matches the alarm being reported.

**2.2.3.3 Body**

This editable field displays the text that will be placed into the Message field of each email message that is sent to the associated Mail Recipient. The text in chevrons indicates aliases, that pick up actual values from the Alarm Pattern that matches the alarm being reported.

**2.2.4 Page Recipient Properties**

When a Page Recipient object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.

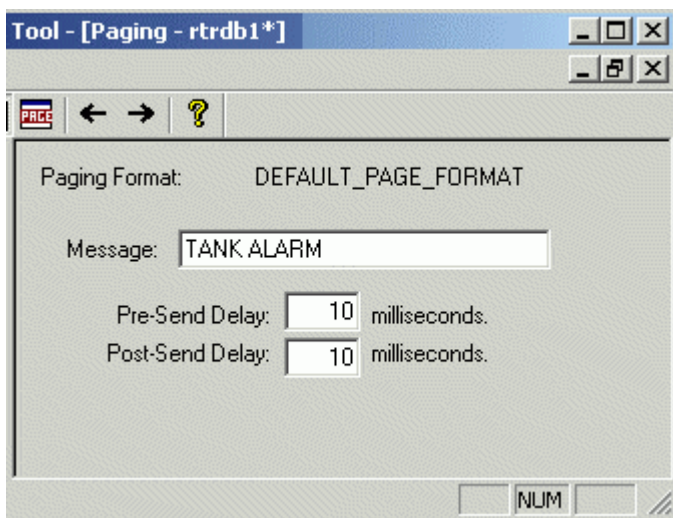


### 2.2.4.1 Page Recipient Name

The non-editable name of the Page Recipient is displayed here.

## 2.2.5 Page Format Properties

When a Page Format object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



### 2.2.5.1 Page Format Name

The non-editable name of the selected Page Format is displayed here.

### 2.2.5.2 Paging Message

This editable field contains the actual text that will be sent to the Page Recipient using this Page Format.

### 2.2.5.3 Pre-Send Delay

A value in milliseconds which the Messaging Server will wait after detecting associated Alarm Pattern criteria for a Routine before initiating the sending of the message.

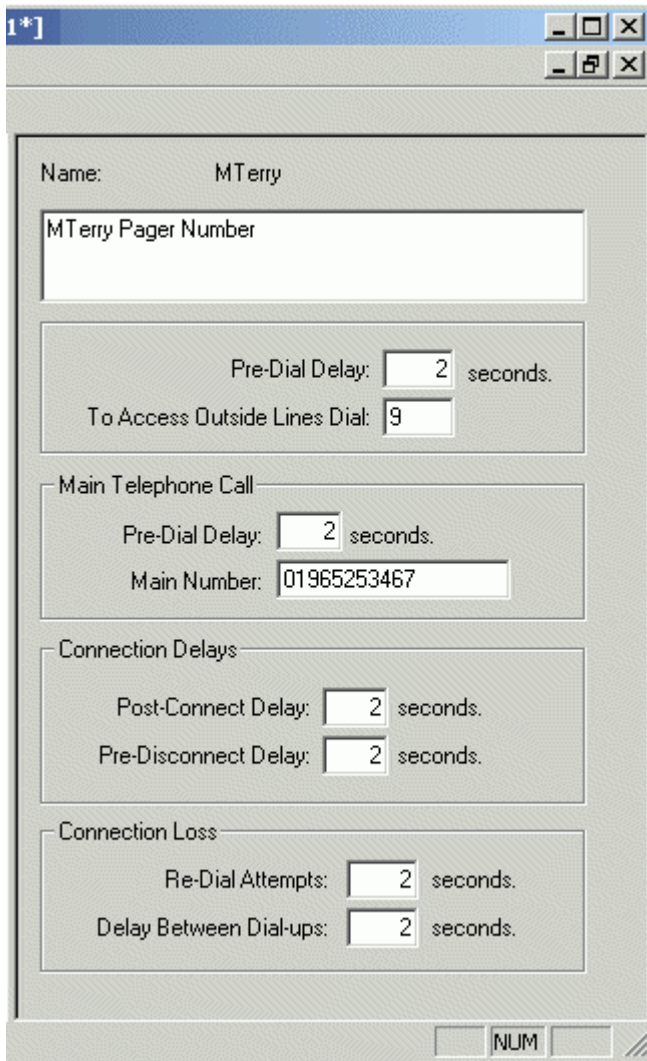
### 2.2.5.4 Post-Send Delay

A value in milliseconds which the Messaging Server will wait after sending the message before closing the message sending process.



### 2.2.6 Telephony Details Properties

When a Telephony Details object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



#### 2.2.6.1 Telephony Format Name

The non-editable name of the selected Telephony Format is displayed here.

#### 2.2.6.2 Telephony Format Description

A full description of the Telephony Format being used can be entered here.

#### 2.2.6.3 Pre-Dial Delay

A delay, in seconds which the Messaging Server will observe before entering the outside line number.

#### 2.2.6.4 Outside Line Access Number

Any number that is required to gain access to an outside line must be entered here.

#### 2.2.6.5 Main Pre-Dial Delay

A delay, in seconds, which the Messaging Server will observe before dialling the Pager Number.

2.2.6.6 Main Number

This is the actual number of the Pager used by the Page Recipient. Commas may be inserted to add second delays into the dialling process. This can be used to navigate through the automated telephone menus (e.g. 012345678,,,2,1,444).

2.2.6.7 Post-Connect Delay

A delay, in seconds which will be observed by the Messaging Server after making a connection to the Pager and sending the message.

2.2.6.8 Pre-Disconnect Delay

A delay in seconds, which will be observed by the Messaging Server after sending the message and before disconnection with the Pager.

2.2.6.9 Connection Loss Redial Attempts

This is the number of redial attempts which the Messaging Server will try, should the connection be lost, before aborting.

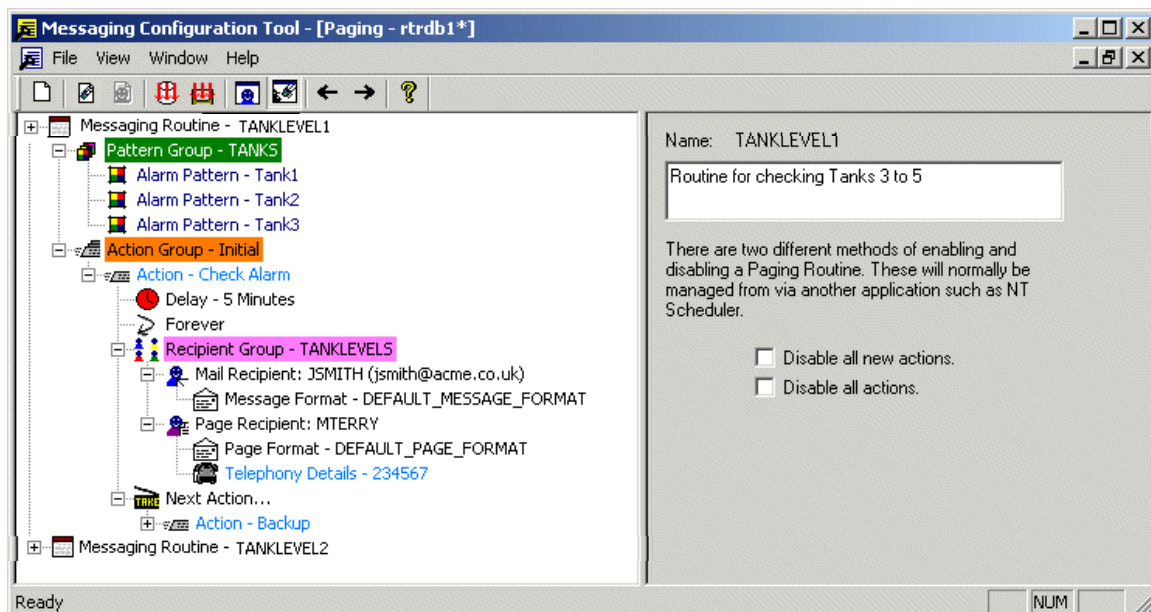
2.2.6.10 Connection Loss Redial Delay

The delay, in seconds, which will be used by the Messaging Server before redialling following a loss of connection with the Pager.

### 3 Routines View

The Messaging Routines View displays the whole hierarchy of configured OpenEnterprise Messaging objects. At the top of the hierarchy is the Messaging Routine. To be effective, each Messaging Routine must contain at least one Pattern Group, Alarm Pattern, Action Group, Action, Recipient Group, a Recipient having a Message or Page Format and optionally one or more Next Actions.



This View can be disabled by using the Security Configuration Tool to place the "MessagingRoutines" Custom Token in the 'Exclude' box for any user or User Group.



### 3.1 Routines Tree View Pane

The left pane of the Messaging Configuration tool interface contains a Tree view, which displays the Messaging objects as a hierarchical tree. The objects that appear in the Routine Tree View Pane are:-

#### 3.1.1 Messaging Routine

  Messaging Routine - TANKLEVEL1

A Messaging Routine contains all the information necessary to implement OpenEnterprise Messaging. This includes: -

1. One or more Alarm Patterns, which define the alarm criteria that will initiate the sending of messages to recipients.
2. One or more associated Actions, which determine whether the message should be re-sent, any delay period, and the number of times the message should be re-sent, if there is no response from the Recipients.
3. Optional further Actions, intended to escalate the Messaging process in the event that an alarm still exists and is unacknowledged after a defined number of repeats of a previously defined Action.
4. One or more Recipients. Recipients can be email or pager recipients.
5. An email address or pager number for each recipient.
6. A defined message format for each recipient.

#### 3.1.2 Pattern Groups

  Pattern Group - TANKS

A Pattern Group consists of one or more Alarm Patterns, which define the alarm criteria that will initiate the sending of messages to recipients.

#### 3.1.3 Alarm Patterns

  Alarm Pattern - Tank1

Alarm Patterns define alarm criteria which must exist in the database to initiate the sending of messages to recipients. Alarm Patterns contain a reference to a signal and an associated alarm condition. When this signal and alarm condition appear in the 'Alarm Summary' table, messaging commences.

#### 3.1.4 Action Group

  Action Group - Initial

An Action Group contains one or more Actions, which define message re-send delays and how many times messages should be sent before either being stopped or escalated to a Next Action.


#### 3.1.5 Action and Next Action

  Action - Check Alarm

  Next Action...


Actions contain a 'Delay' and a 'Repeat', which define a waiting period before commencing the Action, and how many times to repeat the Action (the Repeat can be set to not repeat, to repeat a number of times or to repeat forever).

### 3.1.6 Delay

 Delay - 5 Minutes

A Delay belongs to an Action. It defines the amount of time to wait before sending messages to recipients once an Alarm Pattern is recognized.

### 3.1.7 Repeat

 Forever


A 'Repeat' belongs to an Action, and defines the number of times a message should be sent to recipients, should the alarm continue in an unacknowledged state.

### 3.1.8 Recipient Groups

 Recipient Group - TANKLEVELS

Recipient Groups are groups of Recipients (either email or pager), who will be interested in being informed of certain alarm criteria. When a Recipient Group is selected from the Tree view pane, and the right mouse button is clicked, a context menu will appear, which enables you to perform useful tasks with the selected object.

### 3.1.9 Email Recipients

 Mail Recipient: JSMITH (jsmith@acme.co.uk)

Email Recipients are users who are interested in being informed of certain alarm criteria via email. When an email recipient object is selected, and the right mouse button is clicked, a context menu appears, which enables you to perform useful tasks with the selected object.

### 3.1.10 Pager Recipient

 Page Recipient: MTERRY

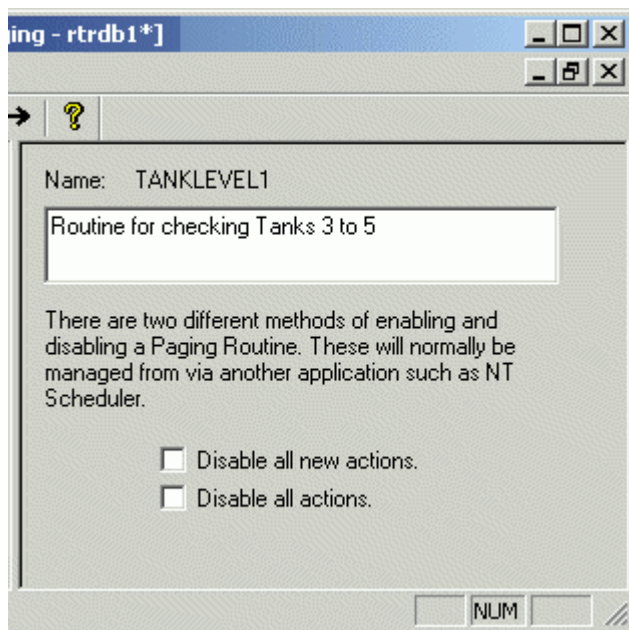
Pager Recipients are users who are interested in being informed of certain alarm criteria via numeric pagers. When a pager recipient object is selected, and the right mouse button is clicked, a context menu appears, which enables you to perform useful tasks with the selected object.

## 3.2 Routine Properties Pane

The right pane displays the Properties for each object that is selected from the left Tree view pane.

### 3.2.1 Messaging Routine Properties

When a Message Routine object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



### 3.2.1.1 Messaging Routine Name

The non-editable name of the selected Messaging Routine is displayed here.

### 3.2.1.2 Messaging Routine Description

A full description for the Messaging Routine can be entered here.

### 3.2.1.3 Disable All New Actions

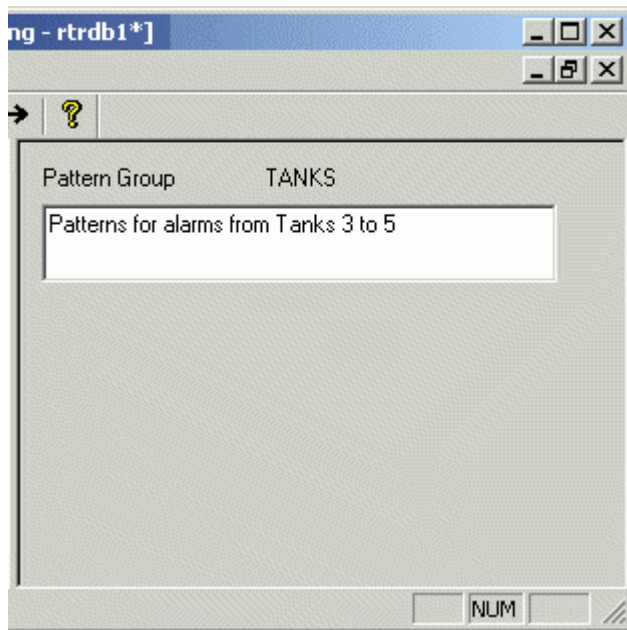
Placing a check in this box causes all newly configured Actions (since the last Export to Database operation) to be disabled.

### 3.2.1.4 Disable All Actions

Placing a check in this box causes all Actions to be disabled.

## 3.2.2 Pattern Group Properties

When a Pattern Group object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



### 3.2.2.1 Pattern Group Name

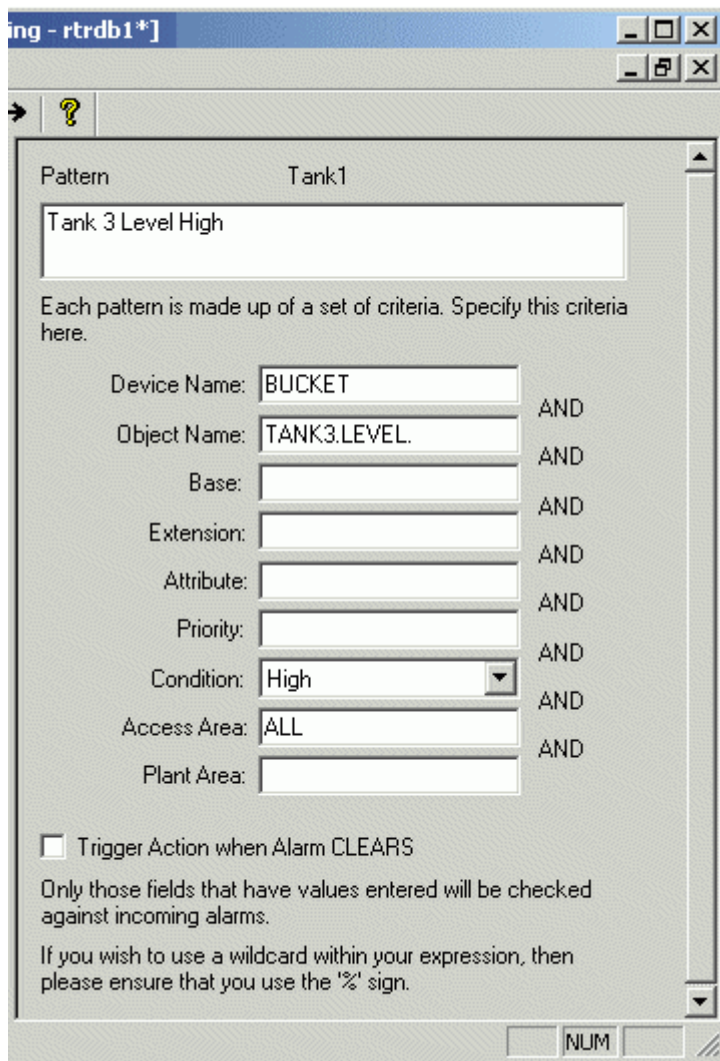
The non-editable name of the selected Pattern Group is displayed here.

### 3.2.2.2 Pattern Group Description

A full description of the Pattern Group can be entered here.

### 3.2.3 Alarm Pattern Properties

When an Alarm Pattern object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



**3.2.3.1 Alarm Pattern Name**

The non-editable name of the selected Alarm Pattern is displayed here.

**3.2.3.2 Alarm Pattern Description**

A full description of the Alarm Pattern can be entered here.

**3.2.3.3 Device Name**

The name of the logging device, controller or RTU from which OpenEnterprise is receiving alarm data regarding the signal of interest.

**3.2.3.4 Object Name**

The signal that will cause a Messaging Routine to begin should the alarm condition specified on this property page be found in the 'Alarm Summary' table.

**3.2.3.5 Base**

The first part of the signal name. Used with the ACCOL system of naming signals (i.e. <Base>.<Extension>.<Attribute>).

**3.2.3.6 Extension**

The second part of the signal name. Used with the ACCOL system of naming signals (i.e. <Base>.<Extension>.<Attribute>).

**3.2.3.7 Attribute**

The third part of the signal name. Used with the ACCOL system of naming signals (i.e. <Base>.<Extension>.<Attribute>).

**3.2.3.8 Priority**

The priority of the alarm condition selected from the Condition list.

**3.2.3.9 Condition**

The alarm condition for the selected signal that will initiate a Messaging Routine. Select the condition from the drop-down list.

**3.2.3.10 Access Area**

The Access Area of the signal. The value defaults to the Default Access Area if not specified here.

**3.2.3.11 Plant Area**

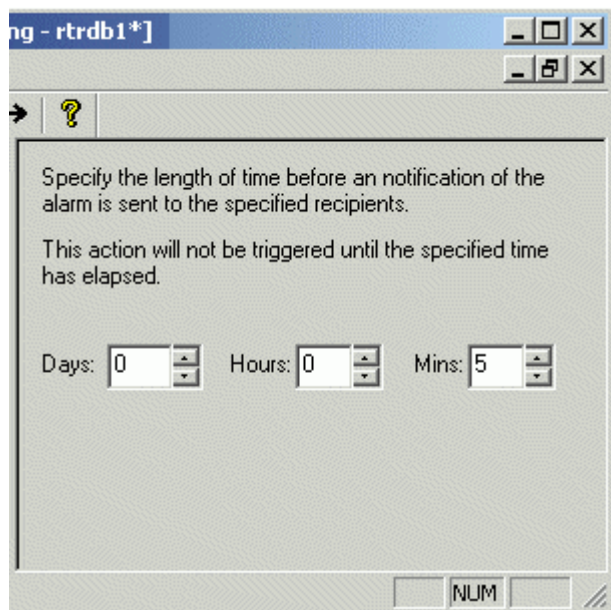
The Plant Area of the signal. Defaults to 'ALL' if not specified here.

**3.2.3.12 Trigger Action When Alarm Clears**

If this box is checked, the Messaging Routine will run when the alarm defined in the Alarm Pattern is matched in the Alarm Summary table, and also when it is cleared.

**3.2.4 Delay Properties**

When a Delay object is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.





**3.2.4.1 Days**

The number of days to wait before initiating the Messaging Routine after detection of alarm criteria specified in an Alarm Pattern. Type directly in, or use the spin controls.

**3.2.4.2 Hours**

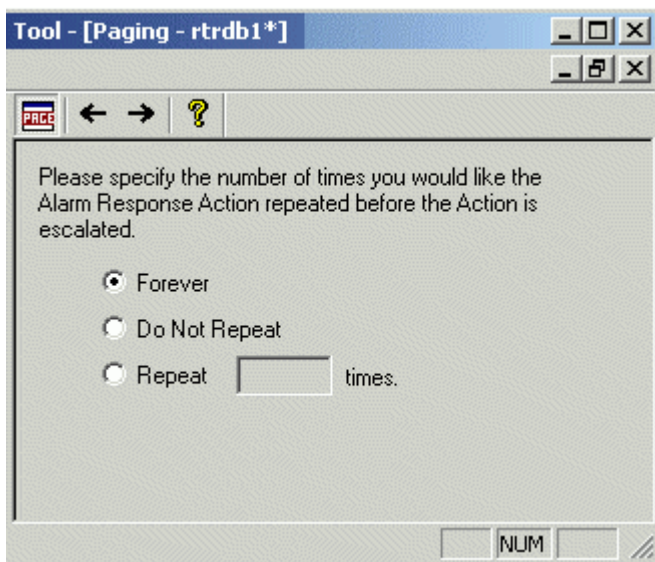
The number of days to wait before initiating the Messaging Routine after detection of alarm criteria specified in an Alarm Pattern. Type directly in or use the spin controls.

**3.2.4.3 Minutes**

The number of minutes to wait before initiating the Messaging Routine after detection of alarm criteria specified in an Alarm Pattern. Type directly in, or use the spin controls.

**3.2.5 Repeat Properties**

When a Repeat element is selected from the Tree view in the left pane, the right pane displays its Properties. Any enabled fields (usually having a white background) can be modified.



**3.2.5.1 Forever**

If this button is selected, the Messaging Server will continue repeating the Messaging Routine until the alarm is cleared or acknowledged.

**3.2.5.2 Do Not Repeat**

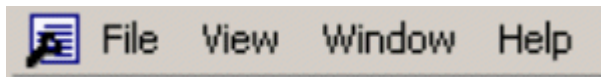
If this button is selected, the Messaging Server will not repeat the Messaging Routine once it has run one time, even though the alarm is not cleared.

**3.2.5.3 Repeat Times**

If this button is selected, the Messaging Server will continue repeating the Messaging Routine until the alarm is cleared or acknowledged, or for the number of repeats specified in the box to the right of the button. The box will be enabled for input when the button is checked.

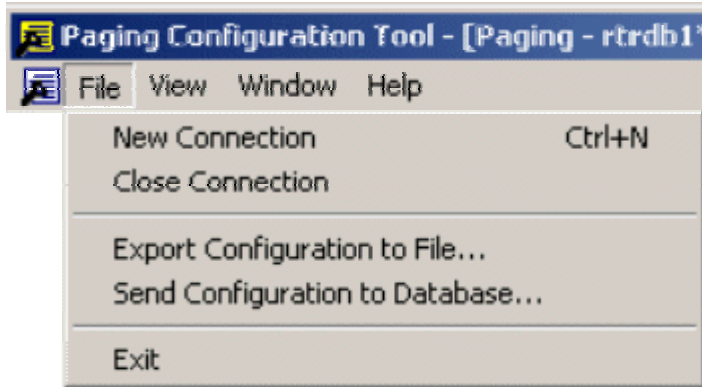
**4 Menus**

The menu bar provides access to a number of menu items.



## 4.1 File Menu

The File Menu provides access to a number of high level Messaging functions.



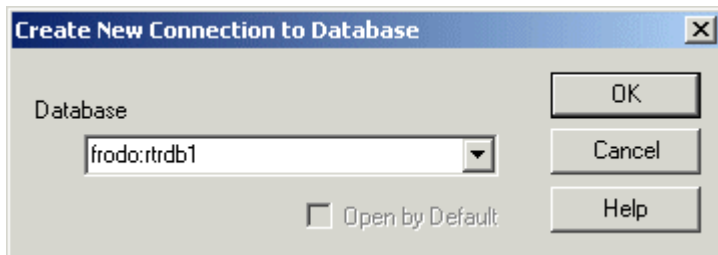
### 4.1.1 New Connection



(Toolbar button)

Opens up a new window within the user interface, having a new connection to the same or a different OpenEnterprise database. The Create New Connection to Database dialog will be displayed, prompting you to enter an OpenEnterprise database connection string into the text field.

OpenEnterprise remote database connection strings are defined by *<Computer Name>:<TCP service name>*, as shown in the example below.



A brief progress dialog will appear informing you that the Messaging Configuration tool is querying the database.

### 4.1.2 Close Connection

Selecting this option will close the currently selected window, which represents the Messaging configuration for a specific OpenEnterprise database. A brief progress dialog will appear with a message that the Messaging Configuration tool is closing all of its queries with the database.



### 4.1.3 Export to File



(Toolbar button)

Exports the current Messaging configuration to an SQL script file with the extension sql, which can be run from the SQL Client to restore the current configuration at any time. If a file name has already been configured using the Options dialog (obtained from the View menu), the file will be automatically saved to that, and a message will inform you of the success of this operation. Otherwise you will be prompted for a file name.

### 4.1.4 Send Configuration to Database

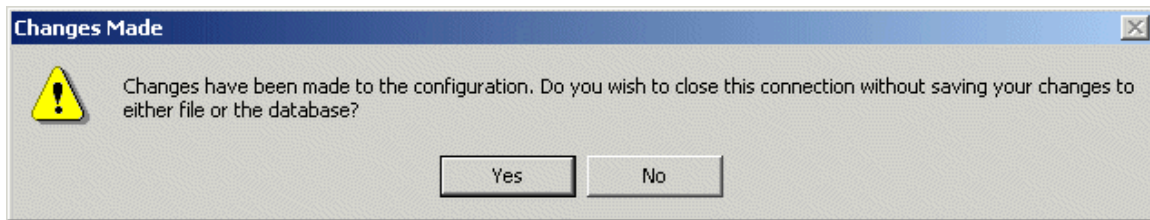


(Toolbar button)

Will export the current Messaging settings to the OpenEnterprise database. Any changes you have made since opening the Messaging Configuration tool will be saved to the database.

### 4.1.5 Exit

This option closes the Messaging Configuration tool. If you have made changes that you have not yet exported to the database, you will be prompted to do so with this message: -



#### 4.1.5.1 Save Changes Before Exit

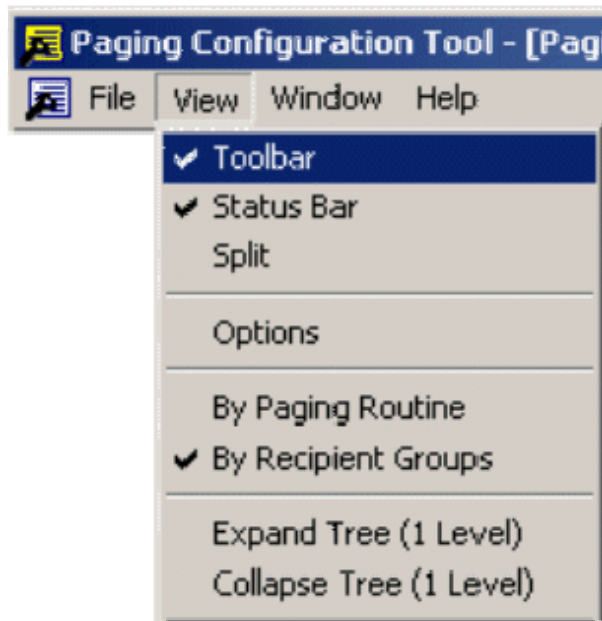
If you want to save your changes before closing down, select the **[No]** button. The message box will close and you will be returned to the Messaging Configuration tool's interface. From there select the 'Send Configuration to Database' option from the file menu. You will then be able to exit the application.

#### 4.1.5.2 Exit Without Saving Changes

If you select the **[Yes]** button, the Messaging Configuration tool will close without saving the new changes you have made, they will be lost, and you will have to enter them again.

## 4.2 View Menu

The View menu provides access to features which affect the display settings of the Messaging tool's user interface.



#### 4.2.1 Toggle Toolbar

Selecting this option toggles visibility of the Toolbar in the Messaging Configuration tool's user interface. A tick resides next to the option, if it has been selected until it is de-selected.

#### 4.2.2 Toggle Status Bar

Selecting this option toggles visibility of the Status Bar in the Messaging Configuration tool's user interface. A tick resides next to the option, if it has been selected until it is de-selected.

#### 4.2.3 Split Window Modification

When this option is chosen, the cursor is placed automatically over the split line between the left (Tree view) and right (Properties) pane of the user interface, enabling you to move it to the right or the left.

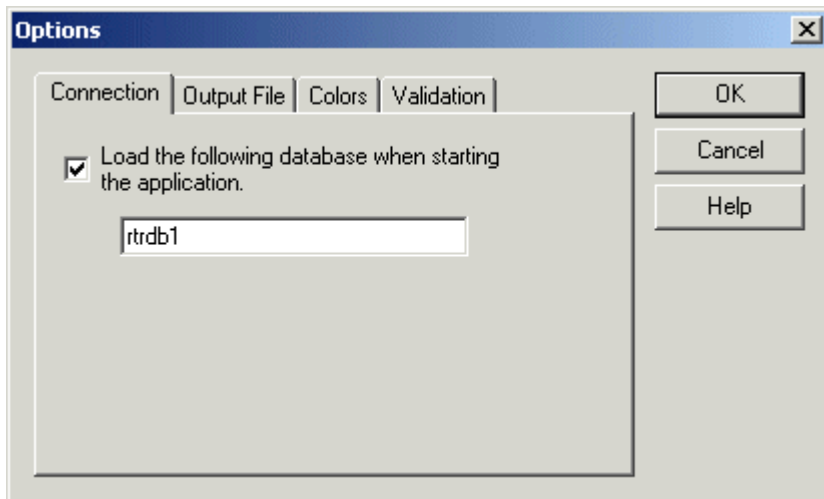
#### 4.2.4 Options

This menu item makes the Options Dialog available, which enables you to configure advanced features of the Messaging Configuration Tool.

ptions Dialog Connection Tab

#### 4.2.5 Options Dialog Connection Tab

The Options dialog enables further configuration of the Messaging Configuration tool. The Connections tab is shown on top. It enables you to define the database that the Messaging Configuration tool will connect with when it starts.



**4.2.5.1 Initial Database Enable**

Checking this box will enable the setting of an initial database that the Messaging Configuration tool will automatically connect to each time it is started.

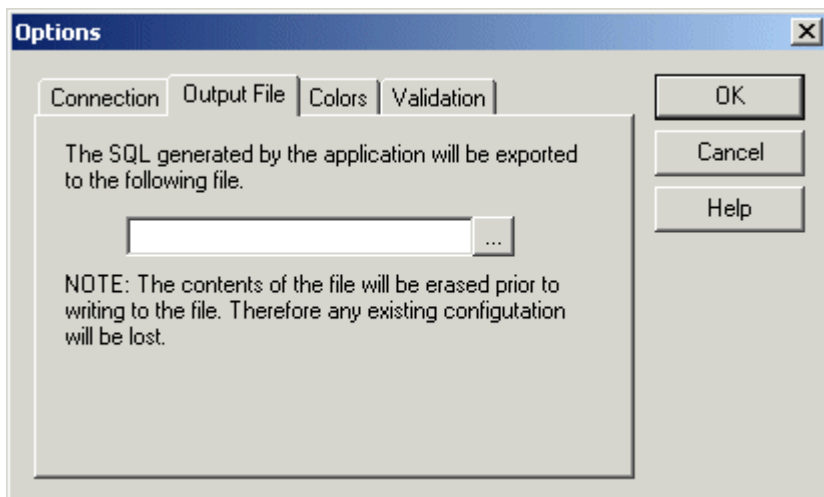
**4.2.5.2 Initial Database Connection**

The OpenEnterprise database connection string should go here. If one is not provided here, the Messaging Configuration tool will try first to connect to the default TCP service offered by a local OpenEnterprise database (*rtrdb1*).

TCP services are defined by default in the *C:\Winnt\System32\Drivers\etc\Services* file. OpenEnterprise remote database connection strings are defined by *<Computer Name>:<TCP service name>*.

**4.2.5.3 Output File Tab**

This tab enables an SQL script export filename to be pre-configured.



**4.2.5.3.1 Output File Name**

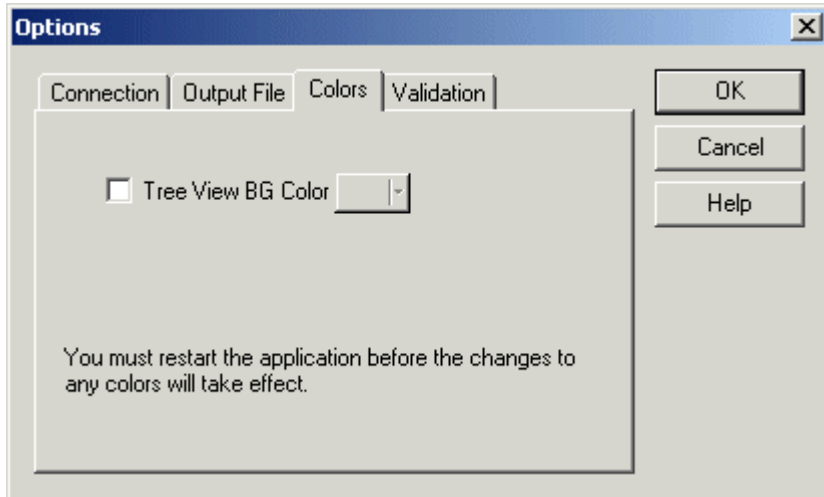
You can type the name of the file in here, or browse for a directory and file using the browse [...] button. You must provide the full path name unless you wish the file to be saved to the root directory.

**4.2.5.3.2 Browse Button**

Select this button to open a Windows file dialog from which you can navigate to a directory for the output file. The filename will be placed in the Output File Name text box.

**4.2.5.4 Colors Tab**

This tab enables the background color of the Tree view to be changed.



**4.2.5.4.1 Enable Tree view Background Color**

When this box is checked, the drop down Color Palette box to the right becomes enabled. A new color from the palette can be chosen to replace the background color of the Tree view.

**4.2.5.4.2 Color Palette**

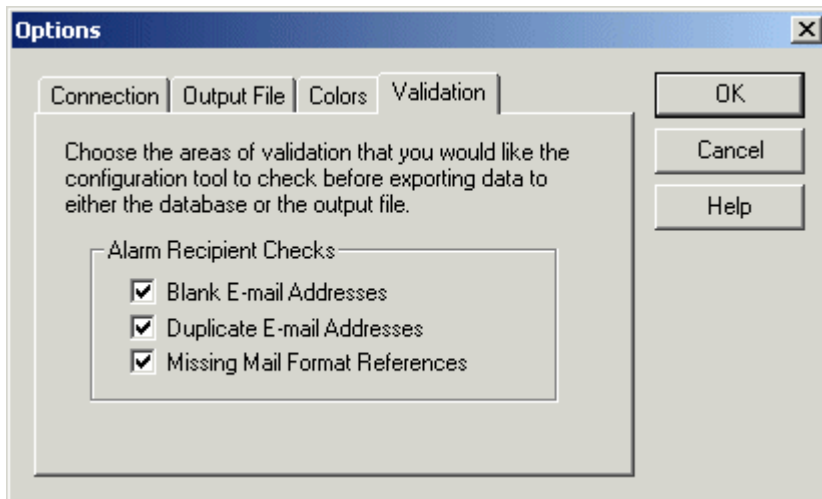
When the box to the left of the palette is checked, this Color Palette becomes available.



The color you select from this palette will become the new background color of the Tree view.

**4.2.5.5 Validation Tab**

This dialog enables you to set some validation tests when creating new Alarm Recipients.



**4.2.5.5.1 Blank Email Addresses**

If this box is checked, then validation will be performed before sending new Alarm Recipient configuration to the database that the Alarm Recipient does not have a blank email address. A message box will inform you if this is the case, and the configuration will not be saved to the database. You will have to provide an email address for the new Alarm Recipient, and attempt the 'Export to Database' operation again.

**4.2.5.5.2 Duplicate Email Addresses**

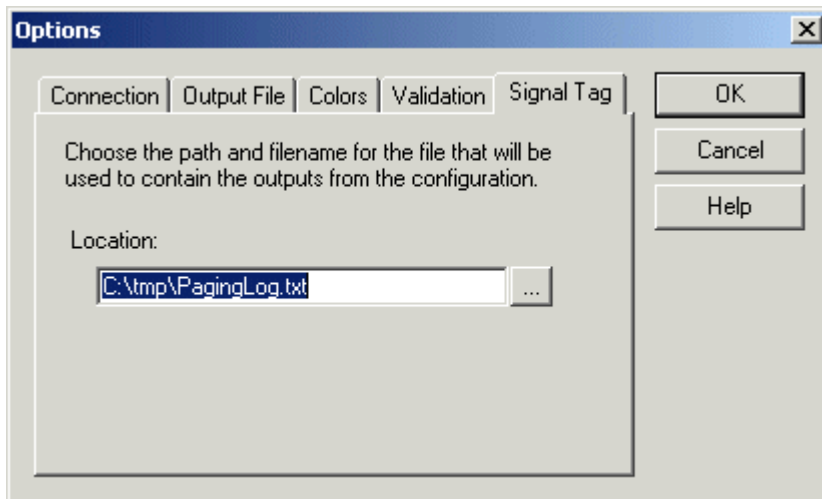
If this box is checked, then validation will be performed before sending new Alarm Recipient configuration to the database that the Alarm Recipient is not providing a duplicate email address. A message box will inform you if this is the case, and the configuration will not be saved to the database. You will have to provide a unique email address for the new Alarm Recipient, and attempt the 'Export to Database' operation again.

**4.2.5.5.3 Missing Mail Format References**

If this box is checked, then validation will be performed before sending new Alarm Recipient configuration to the database that the Alarm Recipient does not have a missing Mail Format Reference. A message box will inform you if this is the case, and the configuration will not be saved to the database. You will have to provide a Mail Format reference for the new Alarm Recipient, and attempt the 'Export to Database' operation again.

**4.2.5.6 Signal Tag Tab**

This tab is only available if the database has been built so that Signal Tag Descriptions are enabled.



**4.2.5.6.1 Signal Tag File Location**

The name and location to save the Signal Tag file. The directory must be shared in order for the Messaging Configuration tool to access it.

**4.2.5.6.2 Signal Tag File Browse Button**

Select this button to open a Windows file dialog from which you can navigate to a directory for the Signal Tag file. The filename will be placed in the Location text box.

**4.2.6 View By Messaging Routine**



Sets the Tree view to the Routine View, so that Messaging Routine objects are at the highest (left most) position in the hierarchy.

**4.2.7 View By Recipient Groups**



Sets the Tree view to the Recipient View, so that Recipient Group objects are at the highest (left most) position in the hierarchy.

**4.2.8 Expand Tree (1 Level)**



Expands all elements of the Tree view by one element.

**4.2.9 Collapse Tree (1 Level)**

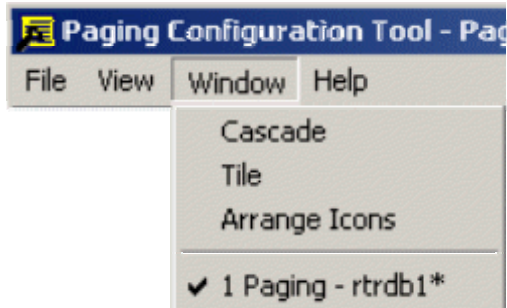


Collapses all elements of the Tree view by one element.



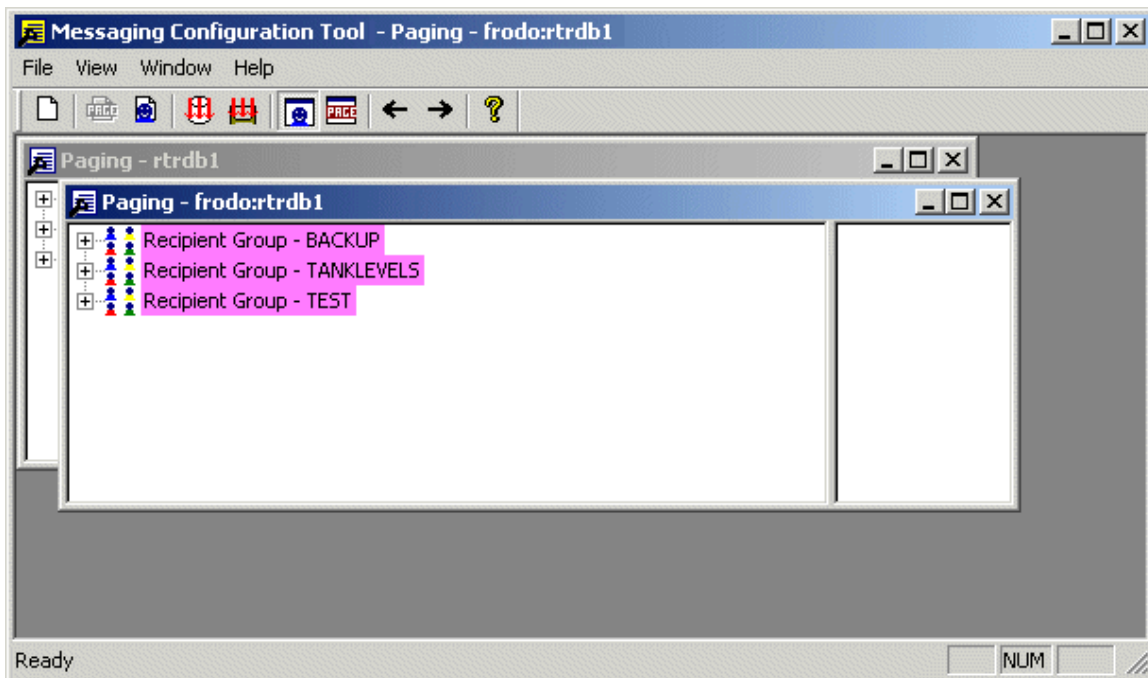
### 4.3 Window Menu

The Window menu provides access to features which affect the Window settings of the Messaging tool's user interface.



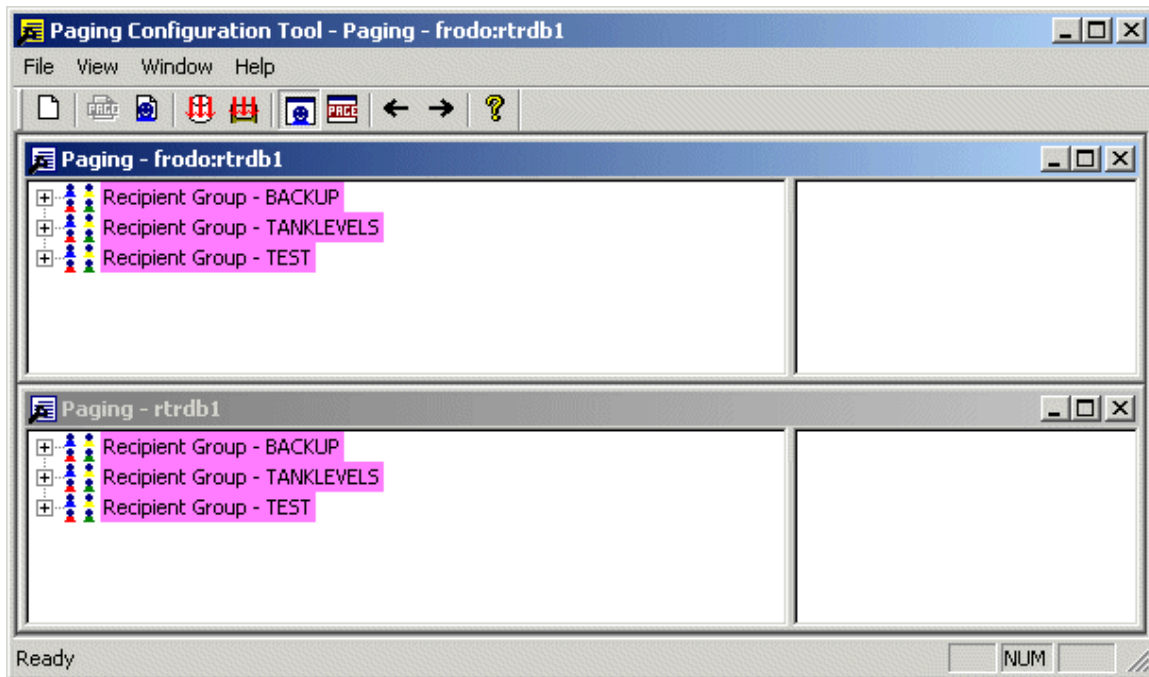
#### 4.3.1 Cascade

If there are multiple connection windows open, they will be cascaded one behind the other.



#### 4.3.2 Tile

If there are multiple database connection windows open, they will be tiled within the user interface.



### 4.3.3 Arrange Icons

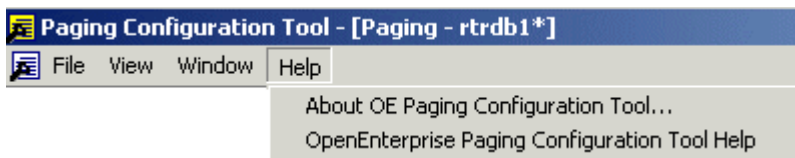
If there are multiple minimized database connection windows inside the Messaging Configuration tool's user interface, they will be placed in a row from the bottom left corner of the interface window.

### 4.3.4 Currently Open Windows

Displays a list of currently open windows. Each window represents a new connection with an OpenEnterprise database.

## 4.4 Help Menu

This menu provides access to the 'About' box, and also to this help file.



### 4.4.1 About box

The About box provides version and contact details for this OpenEnterprise component.

### 4.4.2 Messaging Config Help File

This item provides access to the Messaging Configuration tool's help file.

## 5 Toolbar

The Toolbar provides quick access to commonly used Message Configuration tool functions.



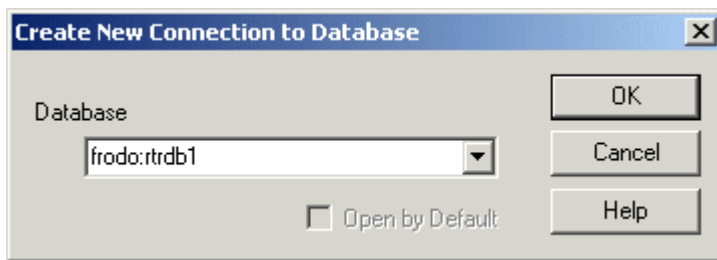
## 5.1 New Connection



(Toolbar button)

Opens up a new window within the user interface, having a new connection to the same or a different OpenEnterprise database. The Create New Connection to Database dialog will be displayed, prompting you to enter an OpenEnterprise database connection string into the text field.

OpenEnterprise remote database connection strings are defined by *<Computer Name>:<TCP service name>*, as shown in the example below.



A brief progress dialog will appear informing you that the Messaging Configuration tool is querying the database.

## 5.2 Add Recipient Group




When selected, the standard New Object dialog is displayed, ready for you to create a new Recipient Group, or select a previously configured one from a list. The Recipient Group will then 'belong' to this Messaging Routine.

## 5.3 Create New Messaging Routine



When selected, the standard *New <Item>* dialog is displayed, ready for you to type in a new name for the *Messaging Routine* you are about to add.

When this function is selected from the Toolbar icon displayed as , it will only be available if the Tree view is currently in Routine View.

## 5.4 Send Configuration to Database



(Toolbar button)

Will export the current Messaging settings to the OpenEnterprise database. Any changes you have made since opening the Messaging Configuration tool will be saved to the database.

## 5.5 Export to File



(Toolbar button)

Exports the current Messaging configuration to an SQL script file with the extension sql, which can be run from the SQL Client to restore the current configuration at any time. If a file name has already been configured using the Options dialog (obtained from the View menu), the file will be automatically saved to that, and a message will inform you of the success of this operation. Otherwise you will be prompted for a file name.

## 5.6 View By Recipient Groups



Sets the Tree view to the Recipient View, so that Recipient Group objects are at the highest (left most) position in the hierarchy.

## 5.7 View By Messaging Routine



Sets the Tree view to the Routine View, so that Messaging Routine objects are at the highest (left most) position in the hierarchy.

## 5.8 Collapse Tree (1 Level)



Collapses all elements of the Tree view by one element.

## 5.9 Expand Tree (1 Level)



Expands all elements of the Tree view by one element.

## 5.10 About box

The About box provides version and contact details for this OpenEnterprise component.

## 6 Context Menus

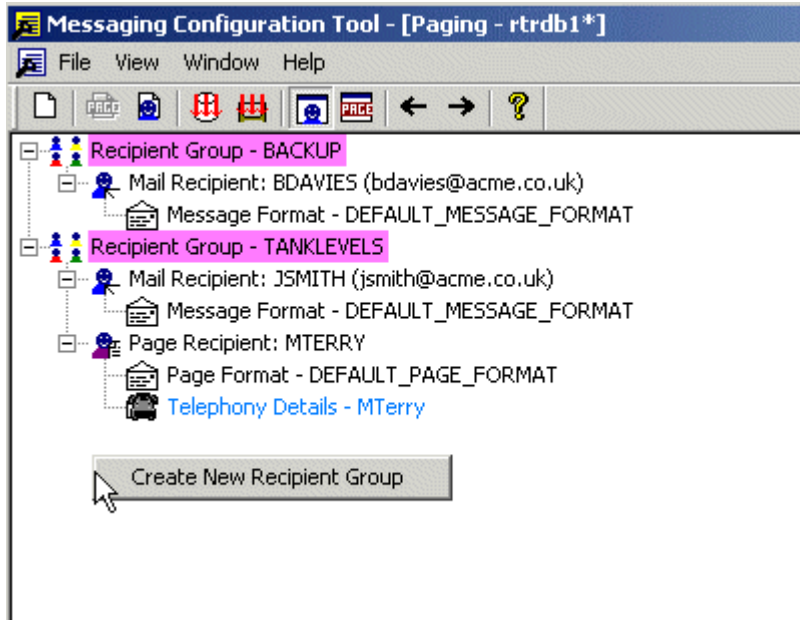
Whenever you right click on an object or any area of the Tree View Pane, whether you are in Recipient View or Routines View, a context menu will be displayed:-



These are the context menus that are available:-

## 6.1 Recipient View Context Menu

To create a new Recipient Group, select an empty area of the left pane while in 'Recipient View' mode and right click. A *Create New Recipient Group* context menu item will become available.



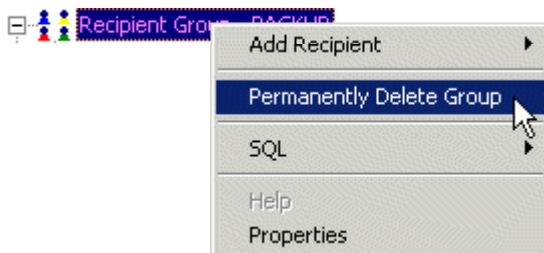
### 6.1.1 Add Recipient Group



When selected, the standard New Object dialog is displayed, ready for you to create a new Recipient Group, or select a previously configured one from a list. The Recipient Group will then 'belong' to this Messaging Routine.

## 6.2 Recipient Group Context Menu

To add Recipients to a Recipient Group, select the Recipient Group and right click to show the context menu. The context menu has other options also.



### 6.2.1 Add Recipient Sub-menu

The *Add Recipient* sub-menu provides access to two further menu items, which enable you to add either an E-Mail or Pager Recipient. The appropriate dialog will appear to help you in this process.



**6.2.1.1 Add E-mail Recipient**

The New Object dialog will appear, enabling you to add a new E-Mail Recipient to the selected Recipient Group, or to select a previously configured one.

**6.2.1.2 Add Pager Recipient**

The New Object dialog will appear, enabling you to add a new Pager Recipient to the selected Recipient Group, or to select a previously configured one.

**6.2.2 Permanently Delete Group**

Selection of this item will permanently delete it from the database when the *Export to Database* option is chosen later from the Menu bar or Toolbar. At that time, you will be shown a message, allowing you to abort the database export and exit the Messaging Configuration tool without saving any changes to the database.

**6.2.3 SQL Sub Menu**

The SQL sub menu is available on the context menu for any object selected from the Tree view.

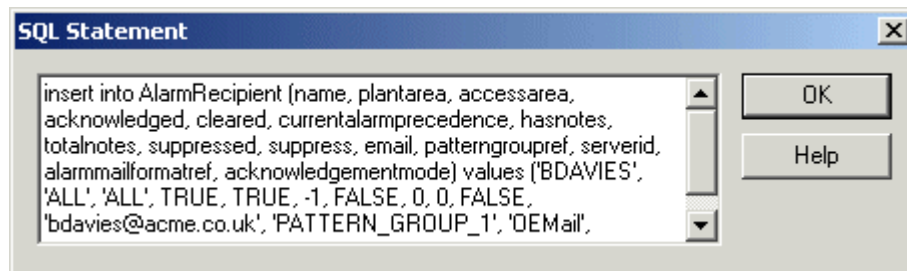


**6.2.3.1 SQL Copy to Clipboard**

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

**6.2.3.2 Show SQL Dialog**

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

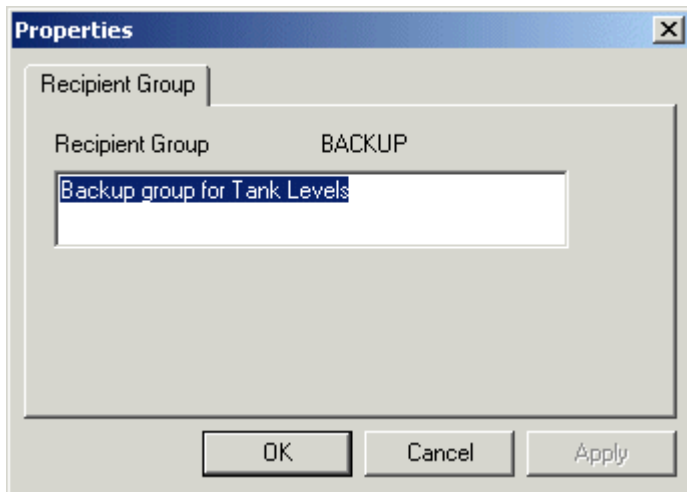


**6.2.4 Context Menu Help**

Selection of this option will display context sensitive help from this help file.

**6.2.5 Recipient Group Property Dialog**

The Recipient Group property dialog enables you to change certain aspects of the Recipient Group object selected from the Tree view. It is exactly the same as the Properties which are displayed in the right pane when the object is selected.



**6.2.5.1 Recipient Group Name**

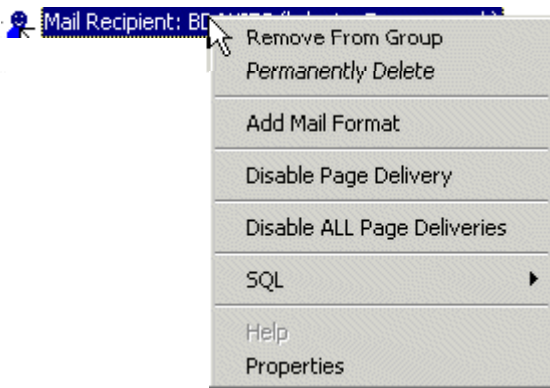
The non-editable name of the Recipient Group is displayed here.

**6.2.5.2 Recipient Group Description**

You can type a relevant description for the Recipient Group in here.

**6.3 Mail Recipient Context Menu**

The appearance of this context menu will vary, depending on whether the selected Mail Recipient has already been assigned a Mail Format.



**6.3.1 Remove Recipient from Group**

The Recipient will be removed from the Recipient Group, but will not be removed from the database when the 'Export to Database' operation is performed.

**6.3.2 Permanently Delete Recipient**

The Recipient will be permanently deleted from the database when the next 'Export to Database' operation is performed.

**6.3.3 Add Mail Format**

The New Object dialog will appear, enabling you to add a new Mail Format for the selected Mail Recipient, or to select a previously configured one.

### 6.3.4 Disable Page Delivery

Disables Messaging delivery for the selected Mail Recipient in this Recipient Group only. If the Recipient is in other Recipient Groups, messaging will not be disabled for the Recipient in those other groups.

### 6.3.5 Disable All Page Deliveries

Disables Messaging deliveries for this Mail Recipient in all Recipient Groups to which he belongs. Message deliveries will not be disabled for other Recipients in this group or any other group that the currently selected Recipient belongs to.

### 6.3.6 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

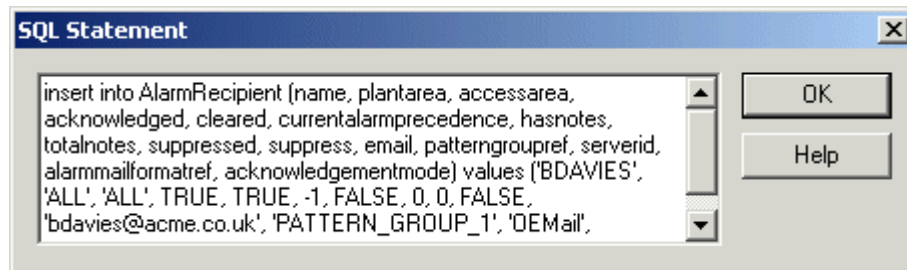


#### 6.3.6.1 SQL Copy to Clipboard

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

#### 6.3.6.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.



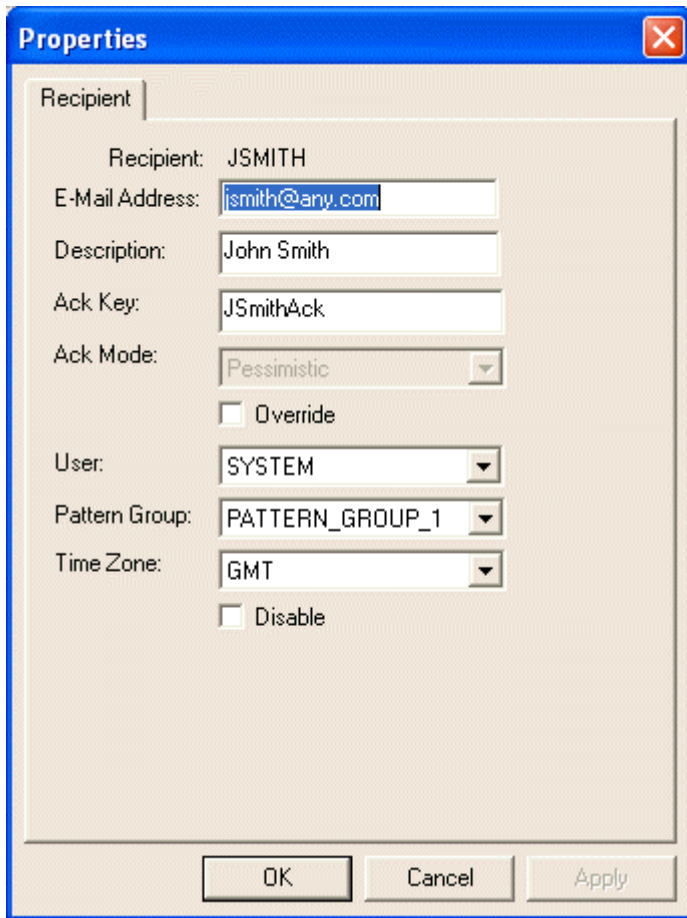
### 6.3.7 Context Menu Help

Selection of this option will display context sensitive help from this help file.

### 6.3.8 Mail Recipient Properties

The Mail Recipient property box enables you to change certain aspects of the Mail Recipient object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected.





**6.3.8.1 Mail Recipient Name**

The non-editable name of the Mail Recipient is displayed here.

**6.3.8.2 E-mail Address**

This editable field contains the email address of the Mail Recipient.

**6.3.8.3 Mail Recipient Description**

You may place any descriptive text here that will enable you to more clearly identify the Mail Recipient.

**6.3.8.4 Ack Key**

The text in this field is a string that the Mail Recipient will use to acknowledge alarms by email. The string that the recipient JSmith would use to acknowledge an alarm in the example on the Mail Recipient Properties topic is "JSmithAck".

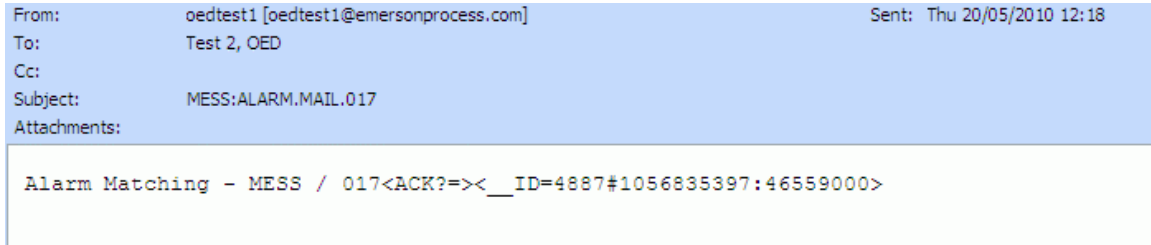
**6.3.8.4.1 Acknowledging Alarms using the Ack Key**

The following example shows how to use the Ack Key to acknowledge alarms via e-mail. In this example a user called "Test 1" has defined his Ack Key string as "oedtest2". The OEMessaging Server detects that an alarm pattern associated with this user has been matched in the alarm summary table. After waiting for the prescribed delay time, it sends an e-mail to "Test 1".

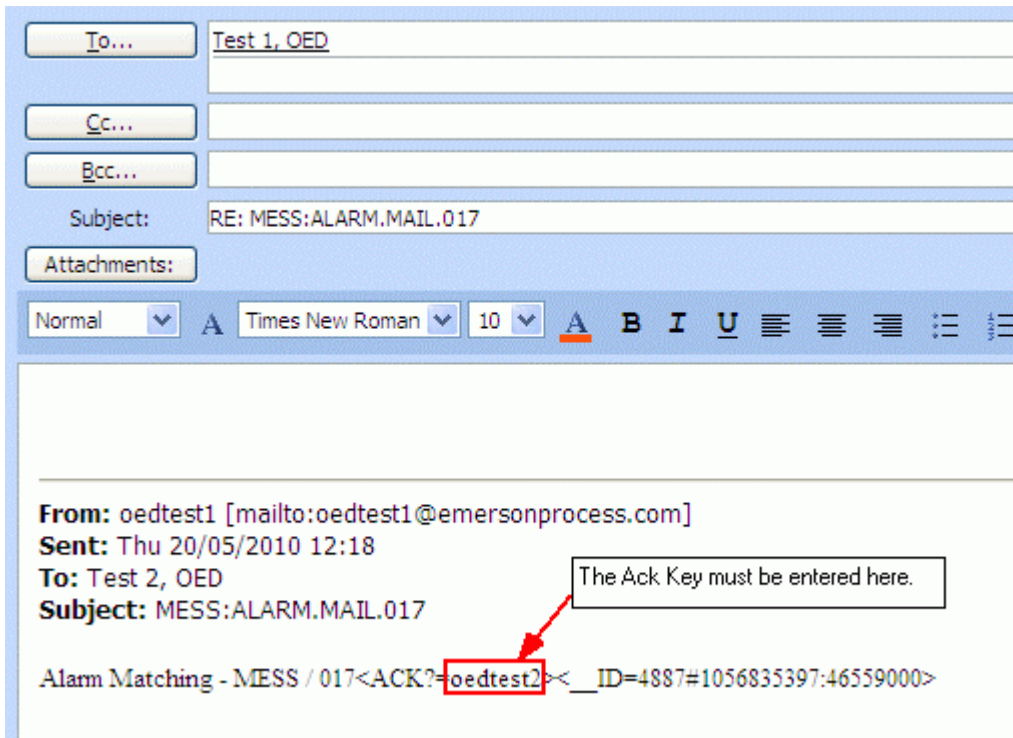
The body of the e-mail contains any text that was entered into the Mail Format assigned to this Mail Recipient, and at the end of this text the following tags are added by the Messaging server:-

<ACK?=><\_\_ID=<AlarmIDNumber>#<TimeCode>

The "Test 1" user clicks Reply to the e-mail sent by the Messaging server, and prior to acknowledging the alarm this is the actual e-mail message that he sees:-



To acknowledge this alarm, before actually sending the reply, he places the text "oedtest2" immediately after the equals sign (=) in the tag that begins "ACK?". An example is shown below with the Ack Key in place:-



There is no need to enter any other text into the main body of the reply. The reply is sent, and when it is received by the OEMessaging Server, the alarm is acknowledged.

6.3.8.5 Ack Mode

The acknowledgement mode defaults to Pessimistic mode. The mode can be changed by selecting the *Override* check box and then selecting *Optimistic* from this list.

In Optimistic mode, only the alarm Id is sent in the Message Id. When a valid reply is received, the alarm is acknowledged regardless of the Occurrence Time. In Pessimistic mode, the Occurrence Time of the alarm will be included in the Message Id. When the reply is received, this must match the current Occurrence Time.

The need for this functionality comes from the fact that NW3000 alarms are generated at the RTU. This means that two instances of an alarm can have the same alarm Id but different occurrence times. Pessimistic mode ensures that the acknowledgement sent will only acknowledge the intended alarm.

**6.3.8.6 Override**

Check this box to enable the *Ack Mode* list. Then you can choose either *Optimistic* or *Pessimistic* mode from the list.

**6.3.8.7 User**

This is a list of configured OpenEnterprise users with whom the Mail Recipient will be identified. The Mail Recipient will inherit all of the security settings for this user.

**6.3.8.8 Pattern Group**

A Pattern Group with which the Mail Recipient will be associated.

**6.3.8.9 Time Zone**

The time zone for the Mail Recipient. This is a mandatory field, so the correct time zone for the recipient must be selected.

**6.3.8.10 Disable**

Check this box to disable this Mail Recipient. When disabled, the Recipient will not receive alarm mail, even though they may belong to an enabled Messaging Routine.

**6.4 Message Format Context Menu**

This context menu appears when a Message Format object is selected from the Tree view and the right mouse button is clicked.



**6.4.1 Remove Message Format Reference**

Removes the reference to the Message Format for the selected Mail Recipient, but leaves the Message Format in the database for further use.

**6.4.2 Permanently Delete Message Format**

Permanently deletes the Message Format from the database so that it will no longer be available to any user.

**6.4.3 SQL Sub Menu**

The SQL sub menu is available on the context menu for any object selected from the Tree view.

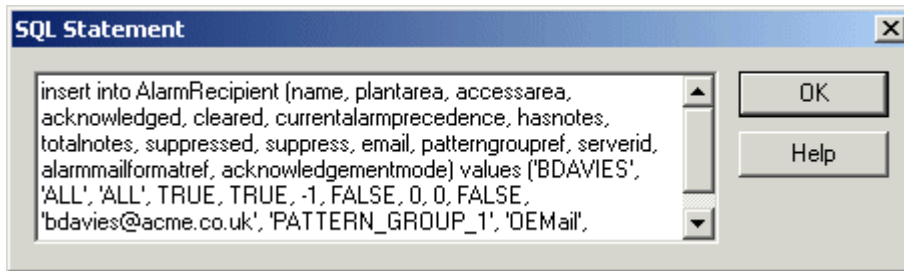


**6.4.3.1 SQL Copy to Clipboard**

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

**6.4.3.2 Show SQL Dialog**

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

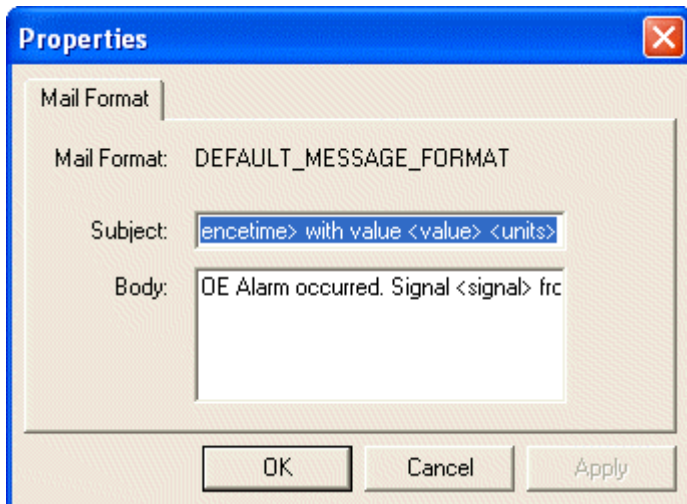


**6.4.4 Context Menu Help**

Selection of this option will display context sensitive help from this help file.

**6.4.5 Message Format Properties**

The Message Format property box enables you to change certain aspects of the Message Format object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected.



**6.4.5.1 Mail Format Name**

The non-editable name of the selected Mail Format is displayed here.

**6.4.5.2 Subject**

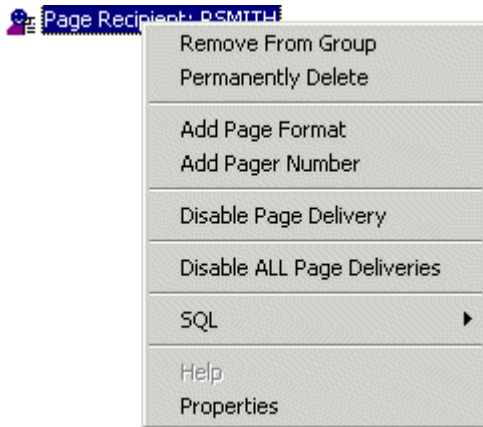
This editable field displays the text that will be placed into the Subject field of each email message that is sent to the associated Mail Recipient. The text in chevrons indicates aliases, that pick up actual values from the Alarm Pattern that matches the alarm being reported.

**6.4.5.3 Body**

This editable field displays the text that will be placed into the Message field of each email message that is sent to the associated Mail Recipient. The text in chevrons indicates aliases, that pick up actual values from the Alarm Pattern that matches the alarm being reported.

**6.5 Pager Recipient Context Menu**

The appearance of this context menu will vary, depending on whether the selected Page Recipient has already been assigned a Page Format or Pager Number.



**6.5.1 Remove Recipient from Group**

The Recipient will be removed from the Recipient Group, but will not be removed from the database when the 'Export to Database' operation is performed.

**6.5.2 Permanently Delete Recipient**

The Recipient will be permanently deleted from the database when the next 'Export to Database' operation is performed.

**6.5.3 Add Page Format**

The New Object dialog will be shown. This will enable you to add a new Page Format for the selected Page Recipient, or to assign a previously configured one.

**6.5.4 Add Pager Number**

The New Object dialog will be shown, to enable you to add a new Telephony Details object for the selected Page Recipient, or to assign a previously configured one.

**6.5.5 Disable Page Delivery**

Disables Messaging delivery for the selected Mail Recipient in this Recipient Group only. If the Recipient is in other Recipient Groups, messaging will not be disabled for the Recipient in those other groups.

**6.5.6 Disable All Page Deliveries**

Disables Messaging deliveries for this Mail Recipient in all Recipient Groups to which he belongs. Message deliveries will not be disabled for other Recipients in this group or any other group that the currently selected Recipient belongs to.

### 6.5.7 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

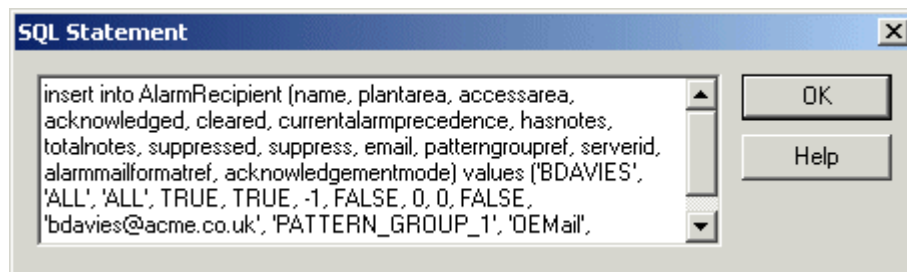


#### 6.5.7.1 SQL Copy to Clipboard

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

#### 6.5.7.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

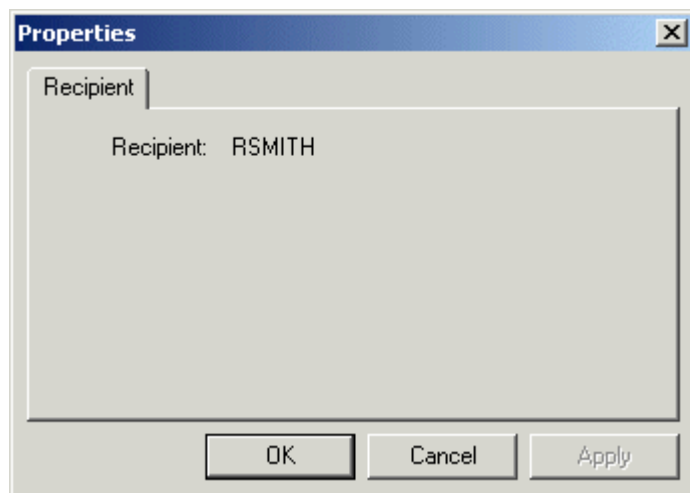


### 6.5.8 Context Menu Help

Selection of this option will display context sensitive help from this help file.

### 6.5.9 Page Recipient Properties

The Pager Recipient property dialog enables you to change certain aspects of the Pager Recipient object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected.

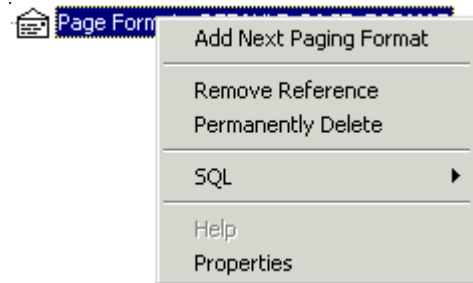


#### 6.5.9.1 Page Recipient Name

The non-editable name of the Page Recipient is displayed here.

## 6.6 Page Format Context Menu

This context menu appears when a Page Format object is selected from the Tree view and the right mouse button is clicked.



### 6.6.1 Add Next Page Format

Adds a new Page Format for this Page Recipient. The new Page format is sent if there has to be a repeat sending of the message.

### 6.6.2 Remove Reference

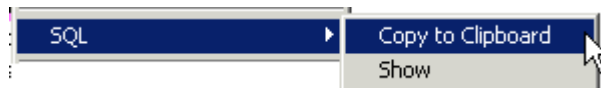
Removes the reference to this Page Format under the Page Recipient in the Tree view, but does not remove it from the database when the next 'Export to Database' operation is performed.

### 6.6.3 Permanently Delete

Removes the Page Format from the database when the next 'Export to Database' operation is performed.

### 6.6.4 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

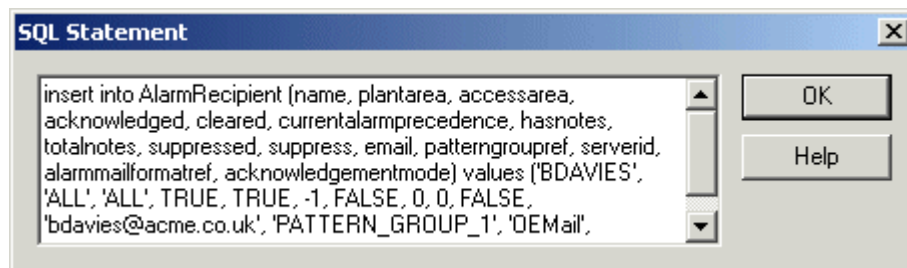


#### 6.6.4.1 SQL Copy to Clipboard

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

#### 6.6.4.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

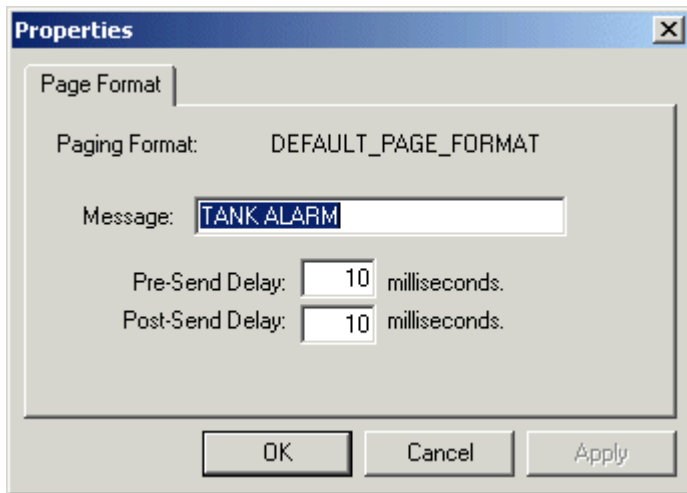


### 6.6.5 Context Menu Help

Selection of this option will display context sensitive help from this help file.

### 6.6.6 Page Format Properties

The Page Format property box enables you to change certain aspects of the Page Format object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected.



#### 6.6.6.1 Page Format Name

The non-editable name of the selected Page Format is displayed here.

#### 6.6.6.2 Paging Message

This editable field contains the actual text that will be sent to the Page Recipient using this Page Format.

#### 6.6.6.3 Pre-Send Delay

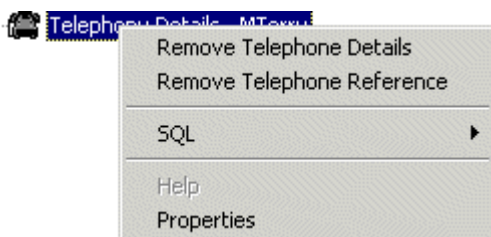
A value in milliseconds which the Messaging Server will wait after detecting associated Alarm Pattern criteria for a Routine before initiating the sending of the message.

#### 6.6.6.4 Post-Send Delay

A value in milliseconds which the Messaging Server will wait after sending the message before closing the message sending process.

## 6.7 Telephony Details Context Menu

This context menu appears when a Telephony Details object is selected from the Tree view and the right mouse button is clicked.





### 6.7.1 Remove Telephone Details

Removes the Telephone Details object from the database when the next 'Export to Database' operation is performed.

### 6.7.2 Remove Telephone Reference

Removes the reference to this Telephone Details object under the Page Recipient in the Tree view, but does not remove it from the database when the next 'Export to Database' operation is performed.

### 6.7.3 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

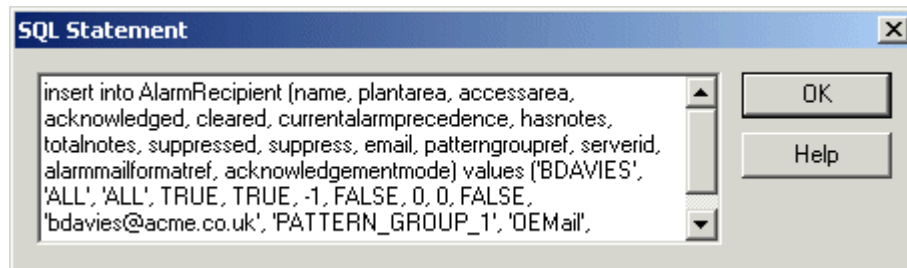


#### 6.7.3.1 SQL Copy to Clipboard

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

#### 6.7.3.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

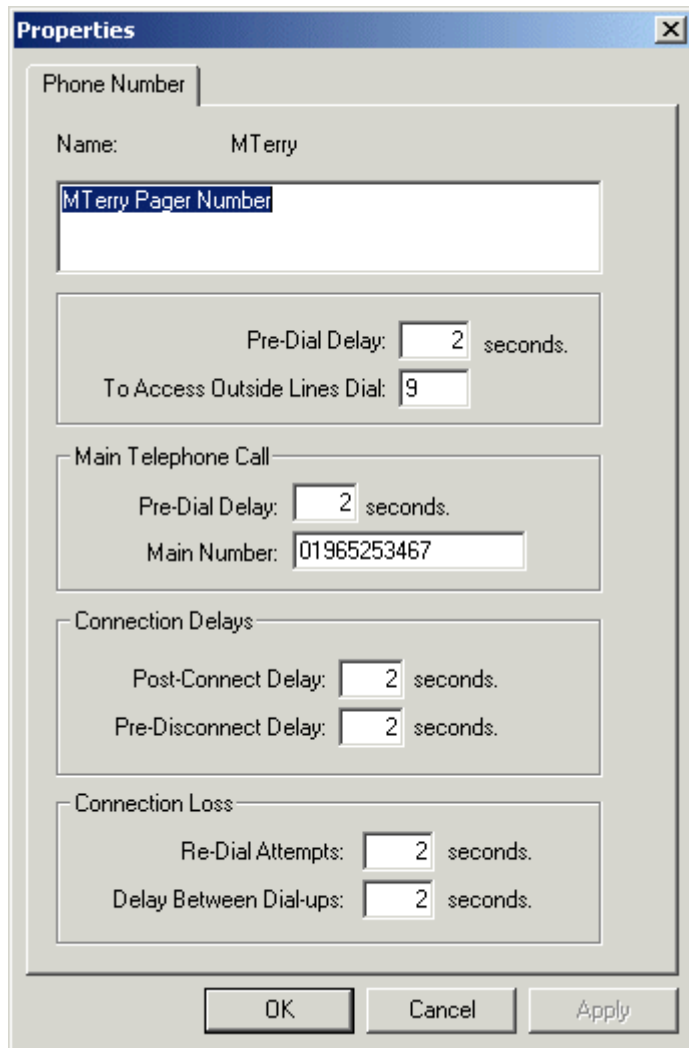


### 6.7.4 Context Menu Help

Selection of this option will display context sensitive help from this help file.

### 6.7.5 Telephony Details Properties

The Telephony Details property dialog enables you to change certain aspects of the Telephony Details object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected.



**6.7.5.1 Telephony Format Name**

The non-editable name of the selected Telephony Format is displayed here.

**6.7.5.2 Telephony Format Description**

A full description of the Telephony Format being used can be entered here.

**6.7.5.3 Pre-Dial Delay**

A delay, in seconds which the Messaging Server will observe before entering the outside line number.

**6.7.5.4 Outside Line Access Number**

Any number that is required to gain access to an outside line must be entered here.

**6.7.5.5 Pre-Dial Delay**

A delay, in seconds which the Messaging Server will observe before entering the outside line number.

**6.7.5.6 Main Number**

This is the actual number of the Pager used by the Page Recipient. Commas may be inserted to add second delays into the dialling process. This can be used to navigate through the automated telephone menus (e.g. 012345678,,2,1,444).

**6.7.5.7 Post-Connect Delay**

A delay, in seconds which will be observed by the Messaging Server after making a connection to the Pager and sending the message.

**6.7.5.8 Pre-Disconnect Delay**

A delay in seconds, which will be observed by the Messaging Server after sending the message and before disconnection with the Pager.

**6.7.5.9 Connection Loss Redial Attempts**

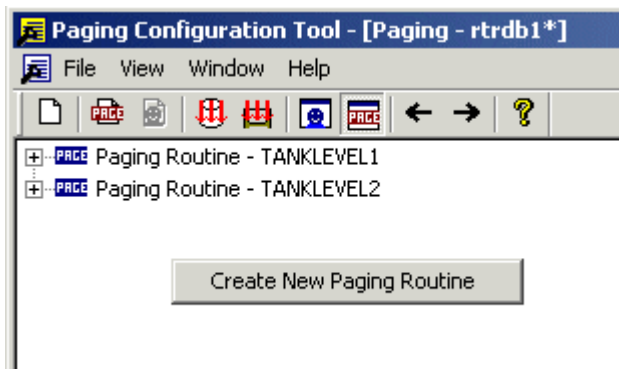
This is the number of redial attempts which the Messaging Server will try, should the connection be lost, before aborting.

**6.7.5.10 Connection Loss Redial Delay**

The delay, in seconds, which will be used by the Messaging Server before redialling following a loss of connection with the Pager.

**6.8 Routine View Context Menu**

To create a new Messaging Routine, select an empty area of the left pane while in 'Message Routine View' and right click. A *Create New Messaging Routine* context menu item will become available.



**6.8.1 Create New Messaging Routine**

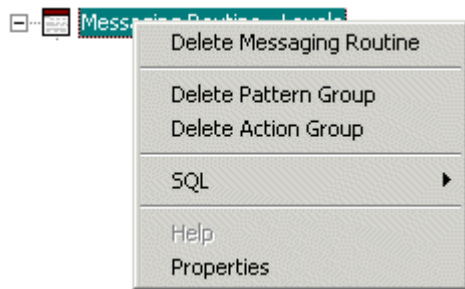


When selected, the standard *New <Item>* dialog is displayed, ready for you to type in a new name for the *Messaging Routine* you are about to add.

When this function is selected from the Toolbar icon displayed as , it will only be available if the Tree view is currently in Routine View.

**6.9 Message Routine Context Menu**

This context menu appears when a Messaging Routine object is selected from the Tree view and the right mouse button is clicked.



### 6.9.1 Delete Paging Routine

Selecting this option will delete the Messaging Routine from the database when the next 'Export to Database' operation is performed.

### 6.9.2 Add Pattern Group

This option enables you to add a new Pattern Group to this Routine. Note that if there is already a Pattern Group assigned to this Routine, that this option will be shown as *Delete Pattern Group*.

### 6.9.3 Add Action Group

This option enables you to add a new Action Group to this Routine. Note that if there is already an Action Group assigned to this Routine, that this option will be shown as *Delete Action Group*.

### 6.9.4 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

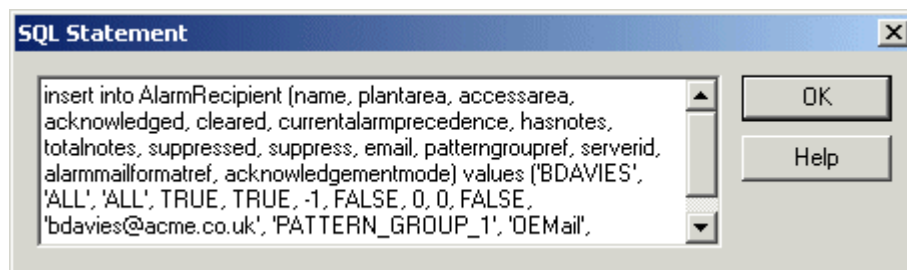


#### 6.9.4.1 SQL Copy to Clipboard

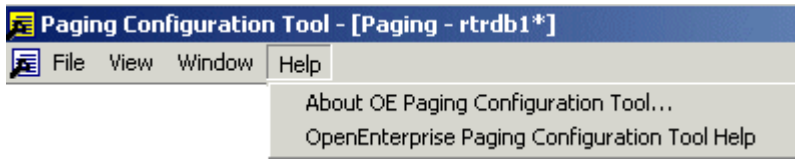
Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

#### 6.9.4.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

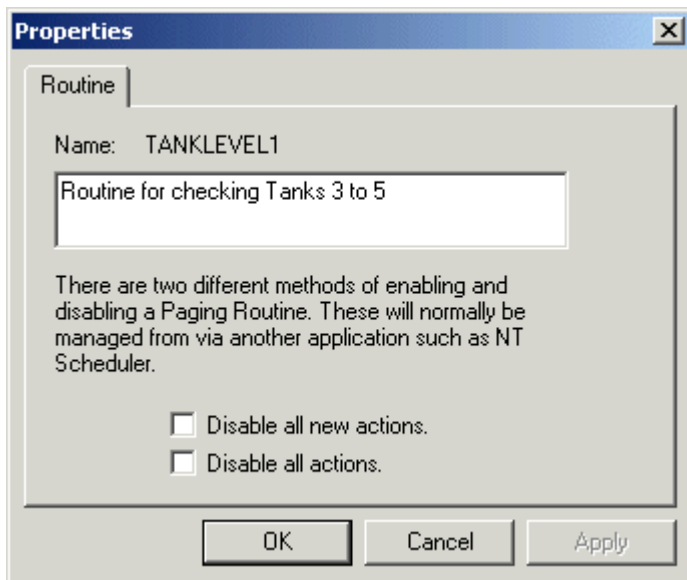


This menu provides access to the 'About' box, and also to this help file.



### 6.9.5 Message Routine Properties

The Routine property dialog enables you to change certain aspects of the Routine object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected. Click on the hotspots\* in the image below for further help on the features of the dialog.



#### 6.9.5.1 Messaging Routine Name

The non-editable name of the selected Messaging Routine is displayed here.

#### 6.9.5.2 Messaging Routine Description

A full description for the Messaging Routine can be entered here.

#### 6.9.5.3 Disable All New Actions

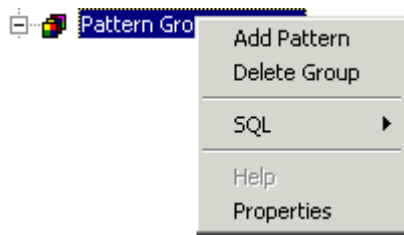
Placing a check in this box causes all newly configured Actions (since the last Export to Database operation) to be disabled.

#### 6.9.5.4 Disable All Actions

Placing a check in this box causes all Actions to be disabled.

### 6.10 Pattern Group Context Menu

This context menu appears when a Pattern Group object is selected from the Tree view and the right mouse button is clicked.



### 6.10.1 Add Pattern

Enables you to create a new Pattern to add to the selected Pattern Group.

### 6.10.2 Delete Group

Enables you to delete the selected Pattern Group.

### 6.10.3 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

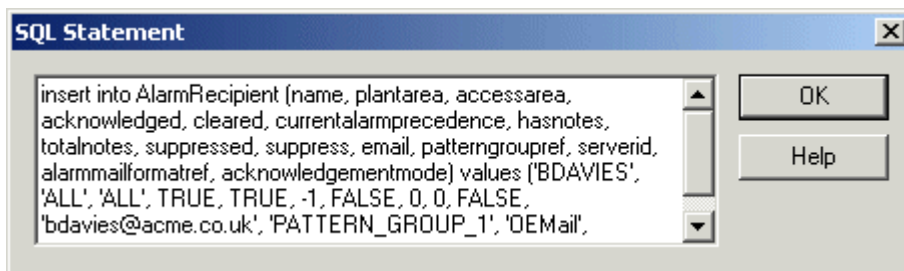


#### 6.10.3.1 SQL Copy to Clipboard

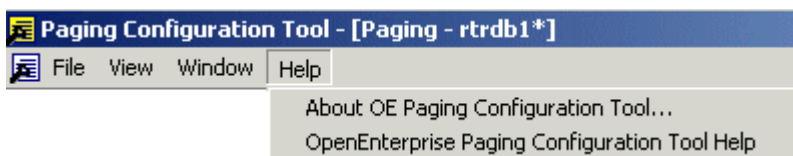
Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

#### 6.10.3.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

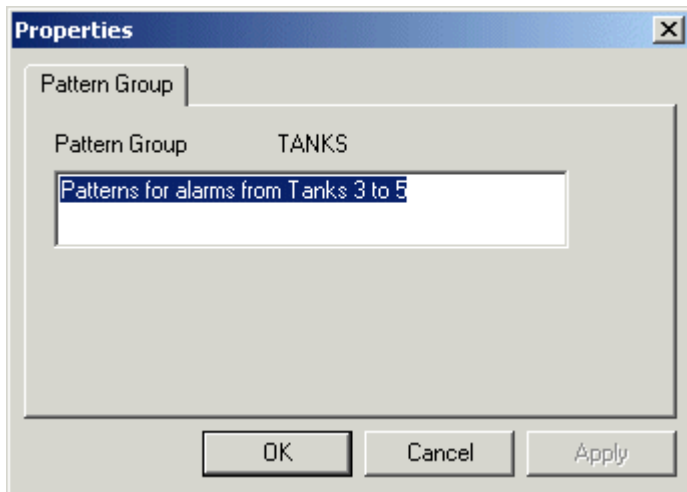


This menu provides access to the 'About' box, and also to this help file.



### 6.10.4 Pattern Group Properties

The Pattern Group property dialog enables you to change certain aspects of the Pattern Group object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected.



#### 6.10.4.1 Pattern Group Name

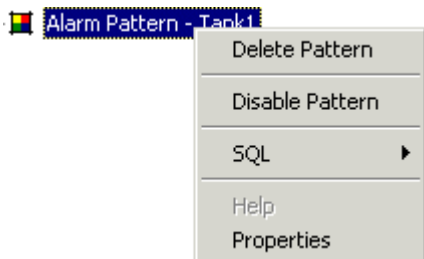
The non-editable name of the selected Pattern Group is displayed here.

#### 6.10.4.2 Pattern Group Description

A full description of the Pattern Group can be entered here.

### 6.11 Alarm Pattern Context Menu

This context menu appears when an Alarm Pattern object is selected from the Tree view and the right mouse button is clicked.



#### 6.11.1 Delete Pattern

This option deletes the selected Pattern. Note that the deletion is only made if you Export to Database before closing the Messaging Configuration tool.

#### 6.11.2 Disable Pattern

This option disables the selected Pattern. Note that the change will only be saved to the database if an Export to Database is performed before closing the Messaging Configuration tool.

#### 6.11.3 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

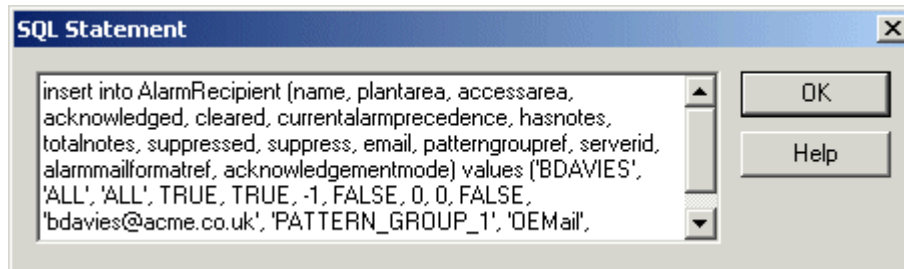


**6.11.3.1 SQL Copy to Clipboard**

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

**6.11.3.2 Show SQL Dialog**

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.

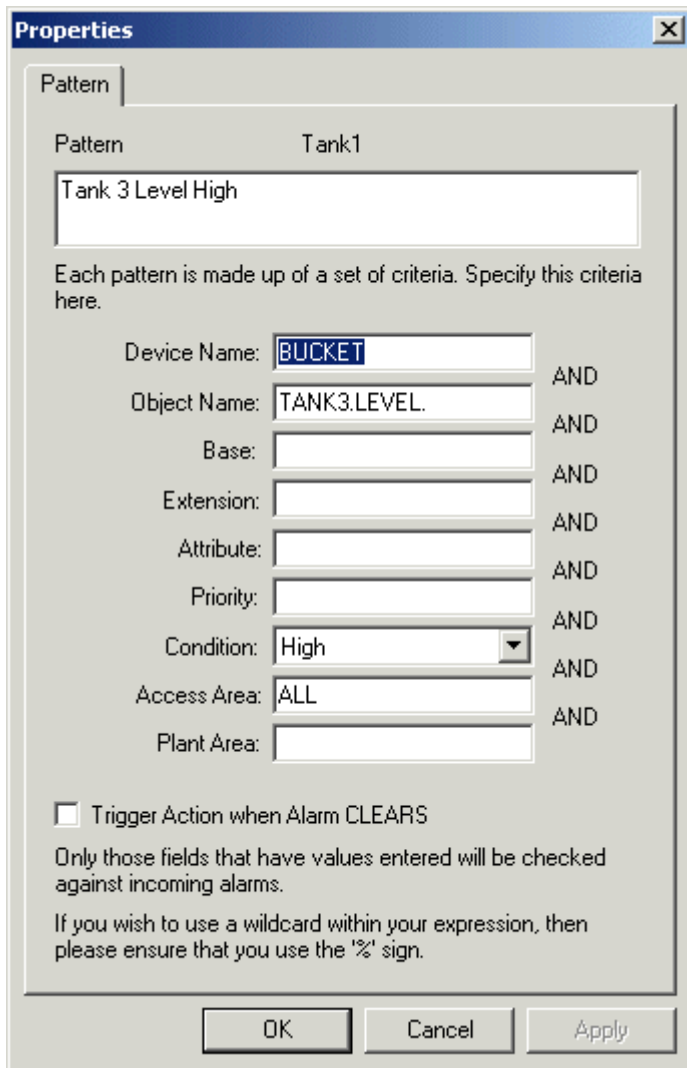
**6.11.4 Context Menu Help**

Selection of this option will display context sensitive help from this help file.

**6.11.5 Alarm Pattern Properties**

The Alarm Pattern property dialog enables you to change certain aspects of the Pattern Group object selected. It is exactly the same as the Properties which are displayed in the right pane when the object is selected. Click on the hotspots\* in the image below for further help on the features of the dialog.





**6.11.5.1 Alarm Pattern Name**

The non-editable name of the selected Alarm Pattern is displayed here.

**6.11.5.2 Alarm Pattern Description**

A full description of the Alarm Pattern can be entered here.

**6.11.5.3 Device Name**

The name of the logging device, controller or RTU from which OpenEnterprise is receiving alarm data regarding the signal of interest.

**6.11.5.4 Object Name**

The signal that will cause a Messaging Routine to begin should the alarm condition specified on this property page be found in the 'Alarm Summary' table.

**6.11.5.5 Base**

The first part of the signal name. Used with the ACCOL system of naming signals (i.e. <Base>.<Extension>.<Attribute>).

**6.11.5.6 Extension**

The second part of the signal name. Used with the ACCOL system of naming signals (i.e. <Base>.<Extension>.<Attribute>).

**6.11.5.7 Attribute**

The third part of the signal name. Used with the ACCOL system of naming signals (i.e. <Base>.<Extension>.<Attribute>).

**6.11.5.8 Priority**

The priority of the alarm condition selected from the Condition list.

**6.11.5.9 Condition**

The alarm condition for the selected signal that will initiate a Messaging Routine. Select the condition from the drop-down list.

**6.11.5.10 Access Area**

The Access Area of the signal. The value defaults to the Default Access Area if not specified here.

**6.11.5.11 Plant Area**

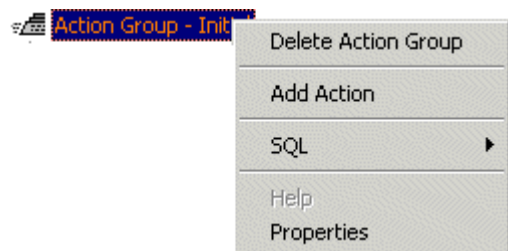
The Plant Area of the signal. Defaults to 'ALL' if not specified here.

**6.11.5.12 Trigger Action When Alarm Clears**

If this box is checked, the Messaging Routine will run when the alarm defined in the Alarm Pattern is matched in the Alarm Summary table, and also when it is cleared.

**6.12 Action Group Context Menu**

This context menu appears when an Action Group object is selected from the Tree view and the right mouse button is clicked.



**6.12.1 Delete Action Group**

The Action Group will be deleted the next time you perform an 'Export to Database' operation.

**6.12.2 Add Action**

Adds an Action to the currently selected Action Group.

**6.12.3 SQL Sub Menu**

The SQL sub menu is available on the context menu for any object selected from the Tree view.

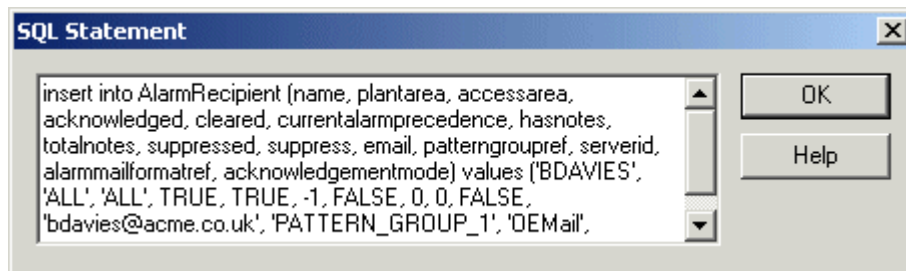


### 6.12.3.1 SQL Copy to Clipboard

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

### 6.12.3.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.



### 6.12.4 Context Menu Help

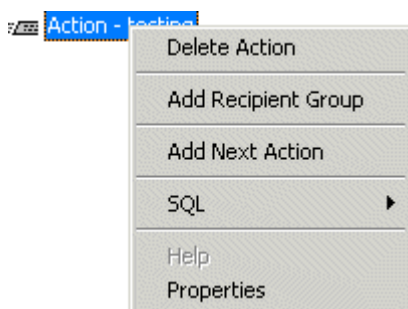
Selection of this option will display context sensitive help from this help file.

### 6.12.5 Properties

This object currently has no properties of its own to be configured.

## 6.13 Action Context Menu

This context menu appears when an Action or 'Next Action' object is selected from the Tree view and the right mouse button is clicked.



### 6.13.1 Delete Action

The currently selected Action will be deleted when the 'Export to Database' operation is next performed.

### 6.13.2 Add Recipient Group



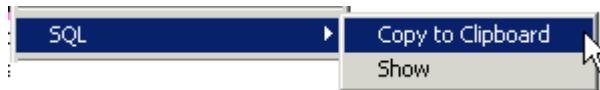
When selected, the standard New Object dialog is displayed, ready for you to create a new Recipient Group, or select a previously configured one from a list. The Recipient Group will then 'belong' to this Messaging Routine.

### 6.13.3 Add Next Action

When selected, the standard *Create/Select <Item>* dialog is displayed, ready for you to type in a new name for the Next Action you are about to add.

### 6.13.4 SQL Sub Menu

The SQL sub menu is available on the context menu for any object selected from the Tree view.

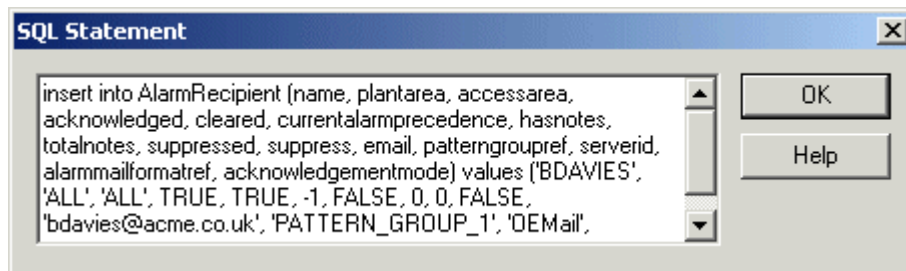


#### 6.13.4.1 SQL Copy to Clipboard

Causes the SQL statement that would be necessary to insert this item into the database to be copied to the Windows clipboard.

#### 6.13.4.2 Show SQL Dialog

Causes the SQL statement that would be necessary to insert the selected item into the database to be displayed as shown in the example below. The actual SQL statement will vary depending on the object selected from the Tree view.



### 6.13.5 Context Menu Help

Selection of this option will display context sensitive help from this help file.

### 6.13.6 Properties

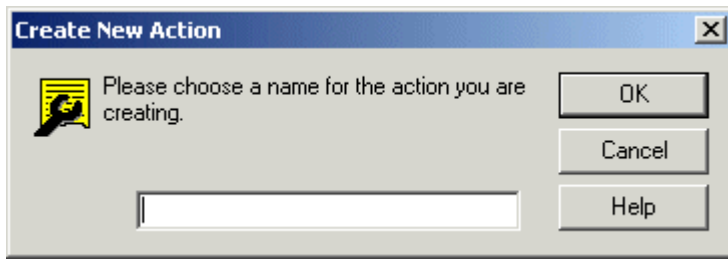
This object currently has no properties of its own to be configured.

## 7 Create New Object Dialog

When creating new objects or associating previously configured Recipients with Recipient Groups or Recipient Groups with Messaging Routines, you will see a different dialog, depending on the object that has been selected from the Tree view.

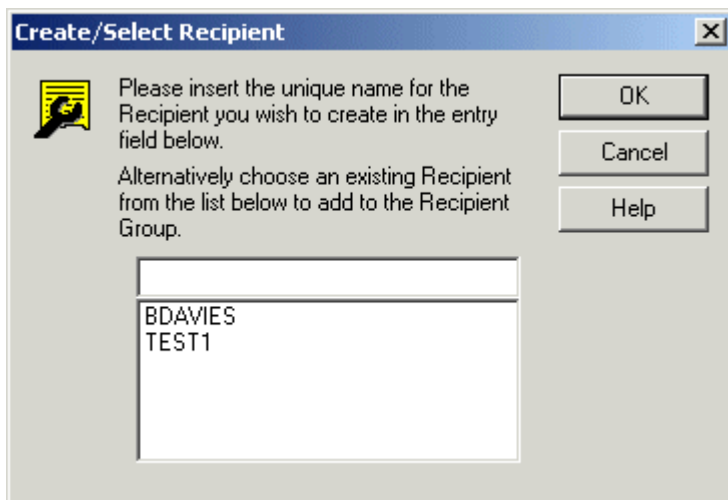
### 7.1 Create New Object Dialog

For instance, if an Action Group object is selected from the Tree view, and the 'Add Action' option is chosen from the context menu, this is the dialog you will see. You have to create a new Action object every time.



## 7.2 Create/Select New Object Dialog

However, if you have selected a Recipient Group, and have already created one or more Recipients, the dialog will give you the opportunity to select one of those Recipients to associate with the Group. For instance, in the example below, two Recipients called 'BDAVIES' and 'TEST1' have already been created. A Recipient Group object is then selected, and the 'Add Recipient' option is selected. The 'Create/Select Recipient' dialog is displayed, enabling you to select one of these previously created Recipients to be associated with the Recipient Group.



## 7.3 New Object Name

If you are going to create a completely new object, the name must be typed in here. It must be unique to objects of this type.

## 7.4 Configured Object List

If you are going to select an object that has previously been added to the database, select an object from this list. It will be automatically entered into the Name field. Then select the OK button.

## 7.5 OK Button

If adding a new object, the new object will be added to the List or Tree view, depending on the dialog. The object will not be added to the database until you perform a new 'Export to Database' operation.

If setting an interface option, the option will be saved, and will become effective the next time Messaging Configuration tool is started.

## 7.6 Cancel Button

The dialog will be closed, but any new object will not be added to the List or Tree view (depending on the dialog).

## 7.7 Help Button

This context sensitive help topic will be displayed from the Messaging Configuration tool help file.

## 8 Glossary

**DPC:** Digital Process Control device.

**HMI:** Human Machine Interface. Basically, the data that is presented to the Control room operator from the processing plant. This consists typically of graphical displays that mimic the processing plant. It will also usually include trend displays that show a signal's value over a period of time and an Alarm View display that enables the operator to see and acknowledge alarms. The OpenEnterprise HMI utilizes these and many other ways of presenting data to the user.

**OPC:** Object linking and embedding for Process Control applications. A set of seven open standards for connectivity and interoperability of industrial automation and the enterprise systems.

**RDI:** Remote Device Interface. The OpenEnterprise driver and the related tables that provide an interface to a remote device for data collection.

**RTU:** Remote Telemetry Unit. A device which interfaces objects in the physical world to a SCADA system by transmitting telemetry data to the system and/or altering the state of connected objects based on control messages received from the system.

**SCADA:** Supervisory Control and Data Acquisition system. Standard systems include a processing plant connected to data collection devices, communication systems to transmit the data back to a Control room Server database, and Workstations which display the data.

**TCP:** Transmission Control Protocol. Together with Internet Protocol (IP), TCP is one of the core protocols underlying the Internet. The two protocols are usually referred to as a group, by the term "TCP/IP." TCP enables two computers to establish a connection and exchange information. TCP guarantees delivery of data and also guarantees that information packets will be delivered in the same order in which they were sent.

## 9 Index

### A

About box ..... 29, 31

Access Area ..... 20, 52

Action ..... 15, 18, 20, 48, 52, 53, 54

Action Context Menu ..... 53

Action Group ..... 15

Action Group Context Menu ..... 52

Add ..... 30, 32, 40, 47, 54

Add Action ..... 53

Add Action Group ..... 47

Add Email Recipient ..... 32

Add Mail Format ..... 34

Add Next Action ..... 54

Add Next Page Format ..... 42

Add Pager Number ..... 40

Add Pager Recipient ..... 33

Add Pattern ..... 48

Add Recipient Sub Menu ..... 32

Alarm Pattern Context Menu ..... 50

Alarm Pattern Description ..... 19, 52

Alarm Pattern Properties ..... 18

Alarm Pattern Property Box ..... 51

Alarm Patterns ..... 15, 18, 19, 52

Arrange Icons ..... 29

Attribute ..... 20, 52

### B

Base ..... 19, 52

Blank Email Addresses ..... 26

Body ..... 11, 39

box ..... 49

Browse Button ..... 25

### C

Cancel Button ..... 56

Cascade ..... 28

Clipboard ..... 33, 35, 38, 41, 42, 44, 47, 49, 50, 53, 54

Close Connection ..... 22

Collapse Tree ..... 27, 31

Color Palette Dropdown ..... 25

Condition ..... 20, 52

Configured Object List ..... 56

Connection Loss Redial Attempts ..... 14, 46

Connection Loss Redial Delay ..... 14, 46

Context Menu Help ..... 33, 35, 39, 41, 42, 44, 51, 53, 54

Create New ..... 30, 46

### D

Database ..... 23, 30

    Send Configuration ..... 23, 30

Days ..... 20

Delay Properties ..... 20

Delete ..... 6, 47

Delete Action ..... 54

Delete Action Group ..... 53

Delete Group ..... 49

Delete Pattern ..... 50

Device Name ..... 19, 52

Disable All Actions ..... 18, 48

Disable All New Actions ..... 18, 48

Disable All Page Deliveries ..... 35, 40

Disable Page Delivery ..... 35, 40

Disable Pattern ..... 50

Duplicate Email Addresses ..... 26

### E

Email Address ..... 9, 36

Email Recipients ..... 7, 16

Enable Treeview Background Color ..... 25

Exit ..... 23

Expand Tree ..... 27, 31

Export ..... 22, 30

Extension ..... 20, 52

### F

Forever ..... 21

Forever Object ..... 16

### G

Group ..... 34, 40

### H

Help ..... 29, 47, 49

Help Button ..... 56

Hours ..... 21

### I

Initial Database Connection ..... 24

Initial Database Enable ..... 24

<i>Interface Paging Routines View</i> .....	14	<i>Page Formats</i> .....	8, 12, 40, 43
<i>Interface Recipient View</i> .....	6	<i>Page Recipient Name</i> .....	12, 41
<b>L</b>		<i>Page Recipient Properties</i> .....	12
<i>Level</i> .....	27, 31	<i>Page Recipient Property Box</i> .....	41
<b>M</b>		<i>Pager Recipient</i> .....	7, 16
<i>Mail Format Name</i> .....	11, 39	<i>Pager Recipient Context Menu</i> .....	40
<i>Mail Format References</i> .....	26	<i>Paging</i> .....	12, 29, 43
<i>Mail Recipient Context Menu</i> .....	34	<i>Paging Routine</i> .....	27, 31
<i>Mail Recipient Name</i> .....	9, 36	<i>Pattern Group Context Menu</i> .....	48
<i>Mail Recipient Properties</i> .....	9	<i>Pattern Group Description</i> .....	18, 50
<i>Mail Recipient Properties Dialog</i> .....	35	<i>Pattern Group Properties</i> .....	18
<i>Main Number</i> .....	14, 45	<i>Pattern Group Property Box</i> .....	49
<i>Main Pre-Dial Delay</i> .....	14	<i>Pattern Groups</i> .....	15, 18, 47, 49, 50
<i>Message</i> .....	6, 12, 17, 29, 30, 43, 46, 47, 48	<i>Permanently Delete</i> .....	33, 34, 40, 42
<i>Message Format Properties</i> .....	11	<i>Permanently Delete Group</i> .....	33
<i>Message Formats</i> .....	8	<i>Permanently Delete Recipient</i> .....	34, 40
<i>Messaging Config Help File</i> .....	29	<i>Plant Area</i> .....	20, 52
<i>Messaging Configuration Overview</i> .....	6	<i>Post-Connect Delay</i> .....	14, 46
<i>Minutes</i> .....	21	<i>Post-Send Delay</i> .....	13, 43
<i>Missing</i> .....	26	<i>Pre-Dial Delay</i> .....	13, 45
<i>Modifying Objects</i> .....	6	<i>Pre-Disconnect Delay</i> .....	14, 46
<b>N</b>		<i>Pre-Send Delay</i> .....	12, 43
<i>Name</i> .....	11, 12, 17, 18, 19, 39, 41, 43, 48, 50, 52, 55	<i>Priority</i> .....	20, 52
<i>New</i> .....	55	<i>Properties</i> .....	53, 55
<i>New Connection</i> .....	22, 30	<i>Properties Pane</i> .....	8
<i>New Object Dialog</i> .....	55	<b>R</b>	
<i>Not Repeat</i> .....	21	<i>Recipient Group Context Menu</i> .....	32
<b>O</b>		<i>Recipient Group Description</i> .....	9, 34
<i>Object</i> .....	6, 16, 19, 52, 55, 56	<i>Recipient Group Name</i> .....	8, 34
<i>OK Button</i> .....	56	<i>Recipient Group Properties</i> .....	8
<i>Options</i> .....	24	<i>Recipient Group Properties Box</i> .....	33
<i>Options Dialog Colors Tab</i> .....	25	<i>Recipient Groups</i> .....	7, 8, 16, 27, 30, 31, 32, 54
<i>Options Dialog Connection Tab</i> .....	24	<i>Recipient View Context Menu</i> .....	31
<i>Options Dialog Output File Tab</i> .....	25	<i>Remove Recipient</i> .....	34, 40
<i>Options Dialog Signal Tag</i> .....	26	<i>Remove Reference</i> .....	42
<i>Options Dialog Validation Tab</i> .....	26	<i>Remove Telephone Details</i> .....	43
<i>Output File Name</i> .....	25	<i>Remove Telephone Reference</i> .....	43
<i>Outside Line Access Number</i> .....	13, 45	<i>Repeat Properties</i> .....	21
<b>P</b>		<i>Repeat Times</i> .....	21
<i>Page Format Context Menu</i> .....	41	<i>Routine Context Menu</i> .....	46
<i>Page Format Properties</i> .....	12	<i>Routine Description</i> .....	17, 48
<i>Page Format Property Box</i> .....	42	<i>Routine Properties</i> .....	17
		<i>Routine Property Box</i> .....	48



<i>Routine View Context Menu</i> .....	46	<i>Telephony Details</i> .....	8
<i>Routines</i> .....	14, 15, 17, 27, 30, 31, 46, 47, 48	<i>Telephony Details Context Menu</i> .....	43
<b>S</b>		<i>Telephony Details Properties</i> .....	13
<i>Send Configuration</i> .....	23, 30	<i>Telephony Details Property Box</i> .....	44
<i>Database</i> .....	23, 30	<i>Telephony Format Description</i> .....	13, 45
<i>Show SQL</i> 33, 35, 39, 41, 42, 44, 47, 49, 51, 53, 54		<i>Telephony Format Name</i> .....	13, 45
<i>Signal Tag File Browse Button</i> .....	27	<i>Tile</i> .....	28
<i>Signal Tag File Location</i> .....	27	<i>Toggle Status Bar</i> .....	24
<i>Split Window Modification</i> .....	24	<i>Toggle Toolbar</i> .....	24
<i>SQL Copy</i> 33, 35, 38, 41, 42, 44, 47, 49, 50, 53, 54		<i>Tree View Pane</i> .....	7
<i>Clipboard</i> 33, 35, 38, 41, 42, 44, 47, 49, 50, 53, 54		<b>V</b>	
<i>SQL Sub Menu</i> 33, 35, 38, 40, 42, 43, 47, 49, 50, 53, 54		<i>View Menu</i> .....	23
<i>Subject</i> .....	11, 39	<b>W</b>	
<b>T</b>		<i>Windows Open</i> .....	29

## Reference Guide

D301499X412

April 2012

---

### DISCLAIMER

Bristol, Inc., Bristol Babcock Ltd, Bristol Canada, BBI SA de CV and the Flow Computer Division, are wholly owned subsidiaries of Emerson Electric Co. doing business as Remote Automation Solutions ("RAS"), a division of Emerson Process Management. ROC, FloBoss, ROCLINK, Bristol, Bristol Babcock, ControlWave, TeleFlow and Helicoid are trademarks of RAS. AMS, PlantWeb and the PlantWeb logo are marks of Emerson Electric Co. The Emerson logo is a trademark and service mark of the Emerson Electric Co. All other marks are property of their respective owners.

The contents of this publication are presented for informational purposes only. While every effort has been made to ensure informational accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. RAS reserves the right to modify or improve the designs or specifications of such products at any time without notice. All sales are governed by RAS' terms and conditions which are available upon request. RAS does not assume responsibility for the selection, use or maintenance of any product. Responsibility for proper selection, use and maintenance of any RAS product remains solely with the purchaser and end-user.

Engineered and supported by:

Remote Automation Solutions,

Blackpole Road, Worcester, WR3 8YB, UK

Registered office: Meridian East, Leicester, LE19 1UX

Registered in England and Wales, Registration No. 00671801

VAT Reg No. GB 705 353 652

**Emerson Process Management**  
**Remote Automation Solutions**  
1100 Buckingham St  
Watertown, CT 06795  
T 1 (860) 945 2200  
F 1 (860) 945 2278  
[www.EmersonProcess.com/Remote](http://www.EmersonProcess.com/Remote)  
[binfo@EmersonProcess.com](mailto:binfo@EmersonProcess.com)

**Emerson Process Management**  
**Remote Automation Solutions**  
Blackpole Road  
Worcester, WR3 8YB  
T 44 (0) 1905 856848  
F 44 (0) 1905 856930  
[www.EmersonProcess.com/Remote](http://www.EmersonProcess.com/Remote)  
[oedsupport@EmersonProcess.com](mailto:oedsupport@EmersonProcess.com)

