X-Force Alarm Web

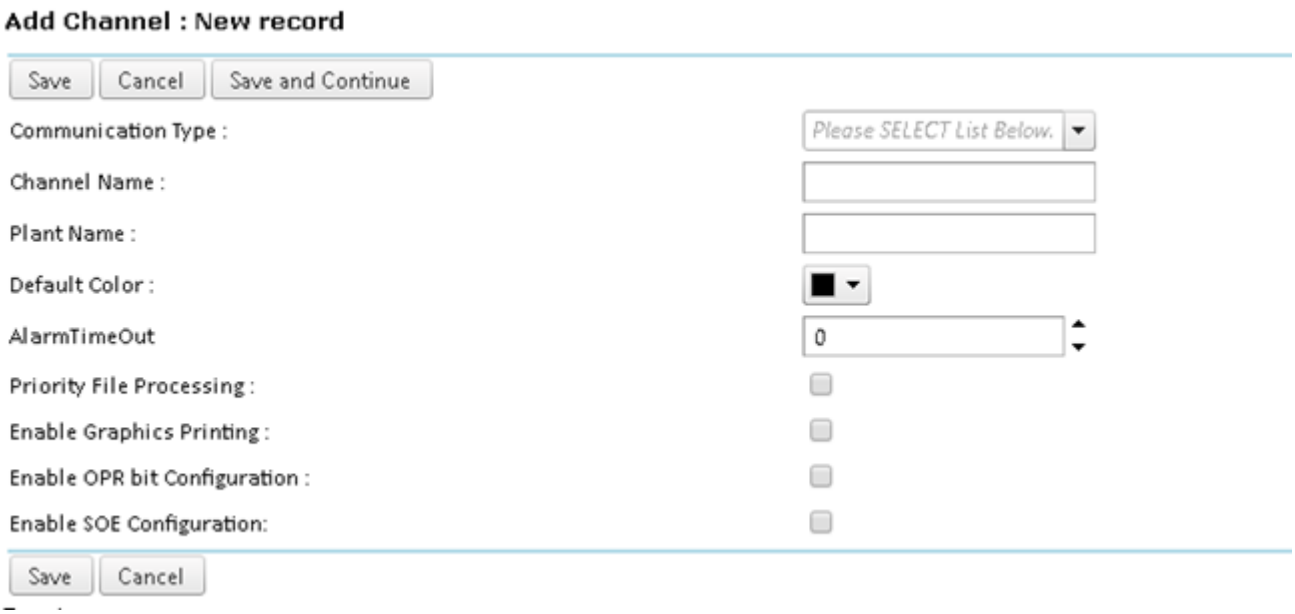
Its web hosted application on IIS server which is used for configuration of Help, DCS Configuration, adding Reports features, adding Schedule, adding Critical alarms, adding user then Providing Roles & Rights, adding Devices i.e. PLC/ADAM/GSM modem for notification and Manual Suppression of the alarm etc… This application is secured using user authentication by providing roles and rights to access or data manipulation.

Channel Configuration

Channel Configuration is used to configure channels.

To Add new channel click on Channel Configuration tab

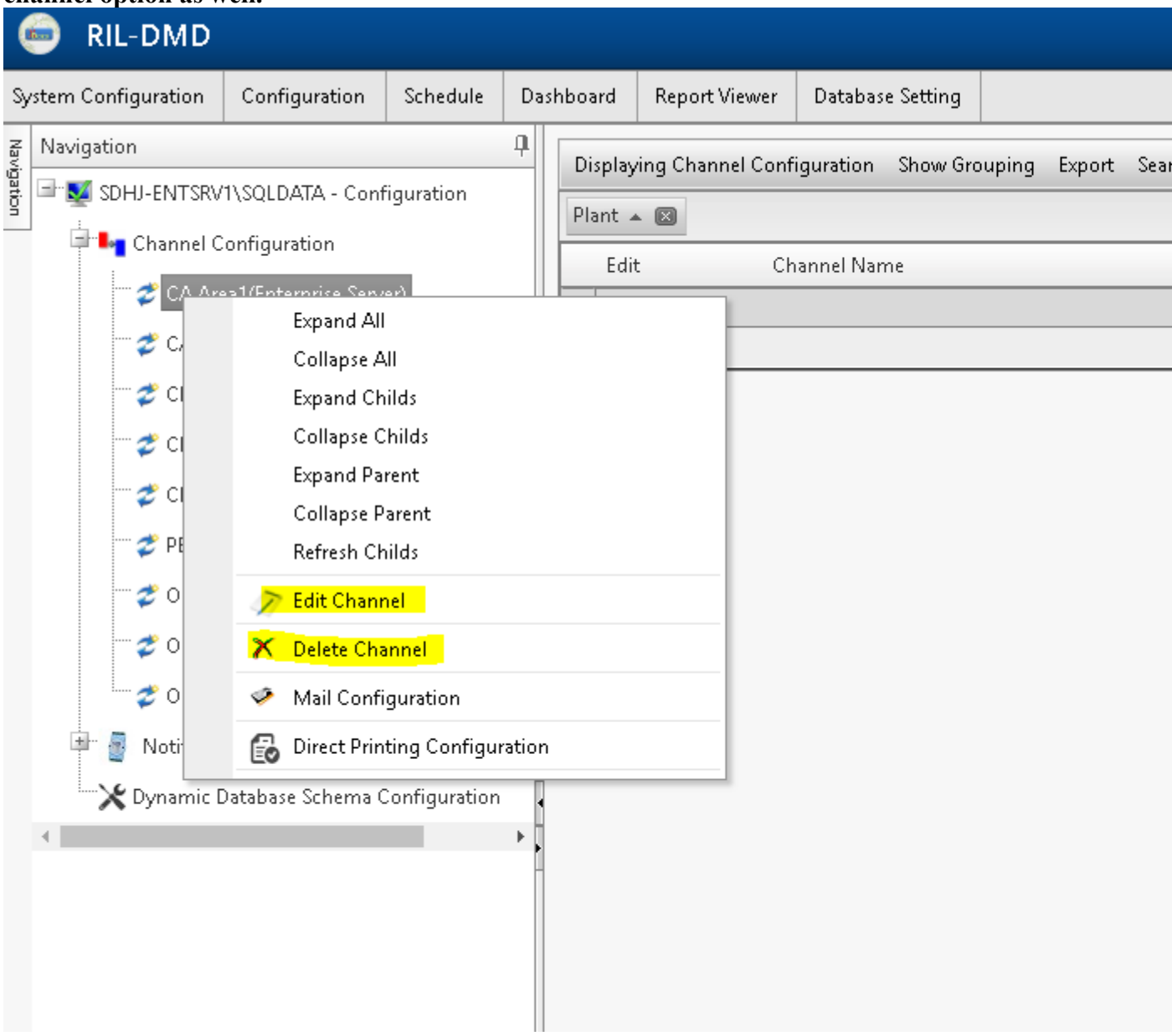
In Navigation bar select channel configuration and on right click on it select Add Channel option which allows to set the parameter required for the channel configuration .



SR NO	FIELD NAME	DESCRIPTION
1	Communication Type	Communication type like Serial Communication, Network Communication, Enterprise, etc.
2	Channel Name	Name of the Channel
3	Plant Name	Plant name of the System
4	Default Color	Color of the channel
5	Alarm Time out	Duration for 1 alarm line ,Or timespan upto that applucation will wait for complete alarm line

6	Priority File Processing	Whether it is Priority channel or not
7	Enable Graphics Printing	Whether to enable graphics printing for the channel or not
8	Enable OPR bit Configuration	Whether to enable OPR bit calculation or not for the channel
9	Enable SOE Configuration	Whether to process SOE data or not

On Right click of any created channel user get option to edit channel details and delete channel option as well.

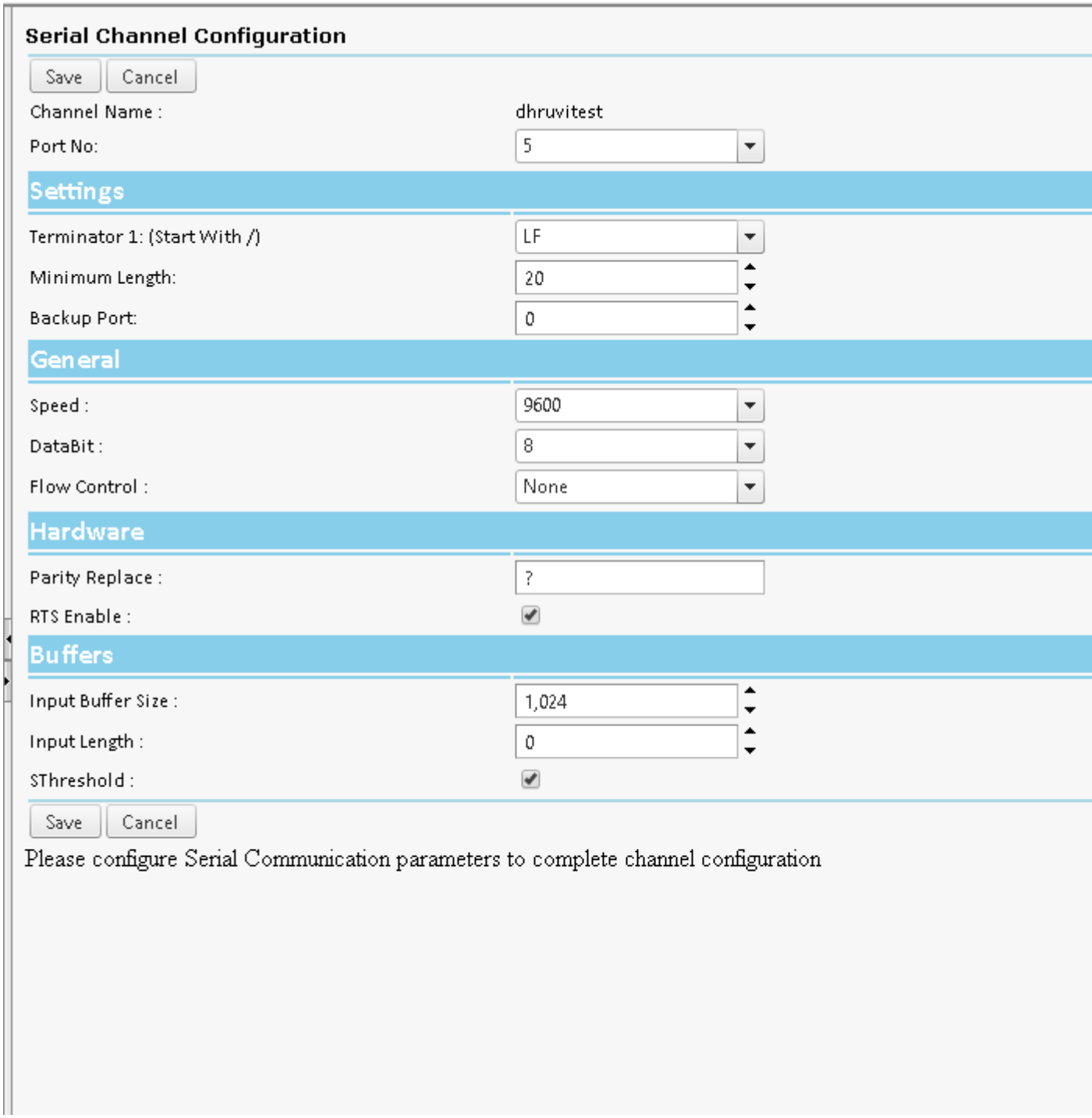


Based on channel type selection page will redirect
On click of save
For serial : Redirect to serial configuration page
For network : Redirect to network communication page

Serial Communication

User can use serial communication when data is coming through serial port.

As shown in image user can do configuration for serial communication.



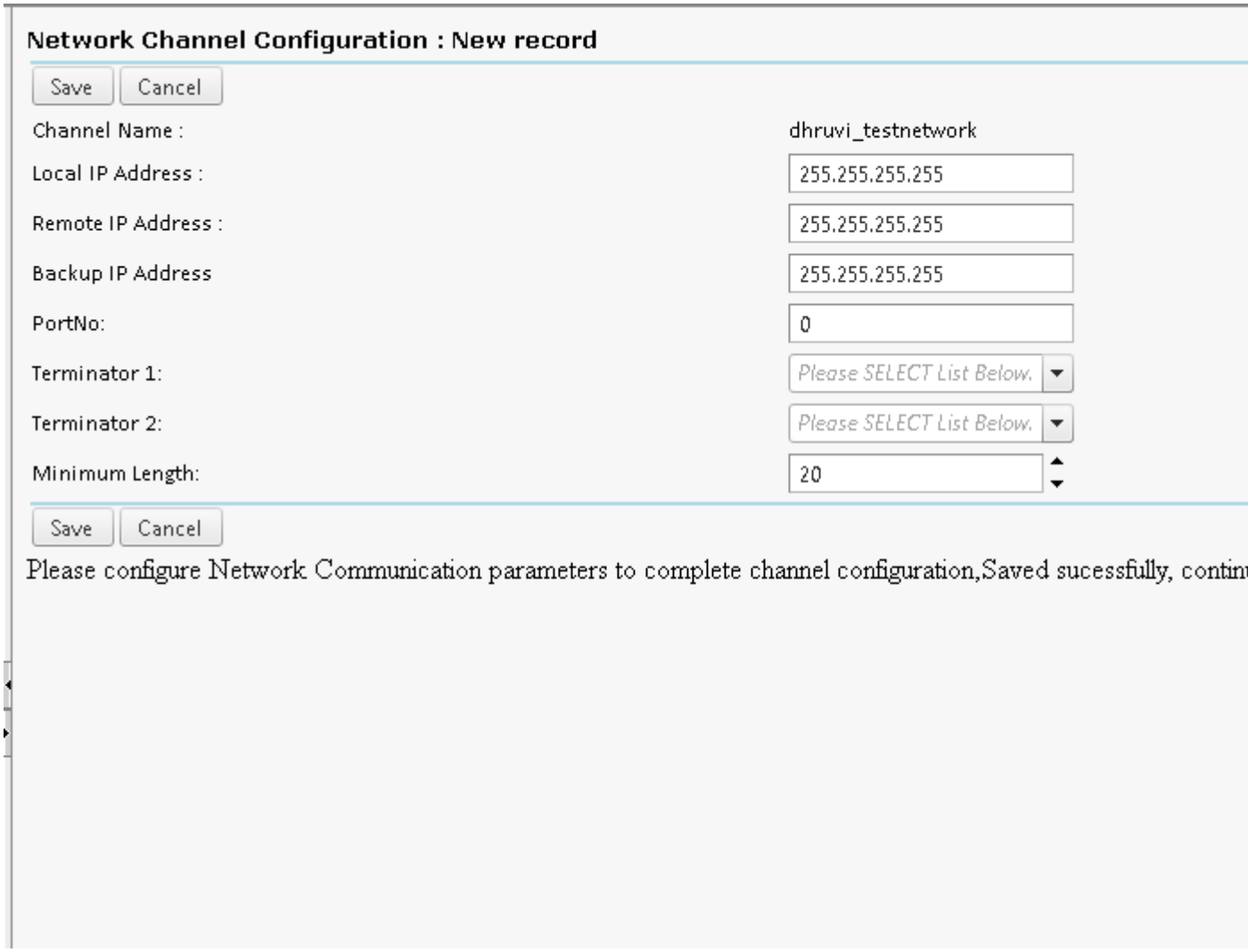
Please configure Serial Communication parameters to complete channel configuration

SR NO	FIELD NAME	DESCRIPTION
1	Channel Name	Name of the Channel
2	Port No	The Comport through which the Communication is going to take place. Pair between the two comport required that are used for the communication
3	Terminator 1	The break of the line that is used by the DCS so that we can break the captured alarm into single alarm line.
4	Terminator 2	Same as the Terminator 1
5	Minimum Length	Maximum No of Alarm Line
6	Backup Port	The Port for backup if one not working.
7	Speed	The rate at which information is transferred in a communication channel
8	Stopbit	Stop bits separate each unit of data on an asynchronous serial
9	DataBit	Two bytes are sent, each consisting of a start bit, followed by data bits
10	Parity	Parity bit in the communication
11	Flow Control	The extra input and outputs used on the serial device to perform this type of handshaking.
12	Parity Replace	To replace the parity bit during Communication
13	Discard Null	Gets or sets a value indicating whether null bytes are ignored when transmitted between the port and the receive buffer.
14	RTS Enable	To Enable the ''Request To Send"
15	DTR Enable	DATA Terminal READY
16	Input Buffer Size	Size of the input buffer For sending data
17	Output Buffer Size	Size of the input buffer For Receiving data
18	Input Length	The Length of the data while Receiving
19	EOF Enable	To enable disable "END OF FILE"
20	SThreshold	Threshold Value for "Request To Send"

21	RThrshod	Threshold Value for "Request To Receive"

Network communication

Network communication can be performed using printer ,User have to configure printer in network and can throw data on printer .



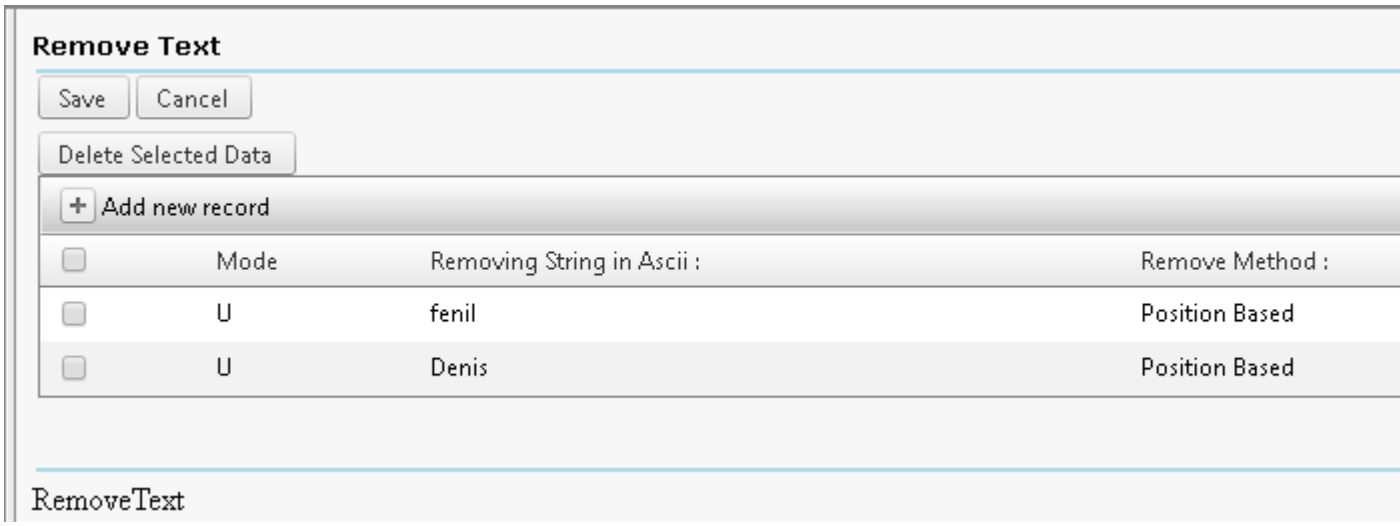
SR NO	FIELD NAME	DESCRIPTION
1	Channel Name	Name of the Channel

2	Local IP Address	Local IP Address of the system
3	Remote IP Address	Remote IP Address of the system
4	Backup IP Address	Backup IP Address of the system
5	PortNo	The Comport through which the Communication is going to take place. Pair between the two comport required that are used for the communication(if printer is configured then printer port no need to configure here)
6	Terminator 1	The break of the line that is used by the DCS so that we can break the captured alarm into single alarm line.
7	Terminator 2	Same as the Terminator 1
8	Minimum Length	Maximum No of Alarm Line

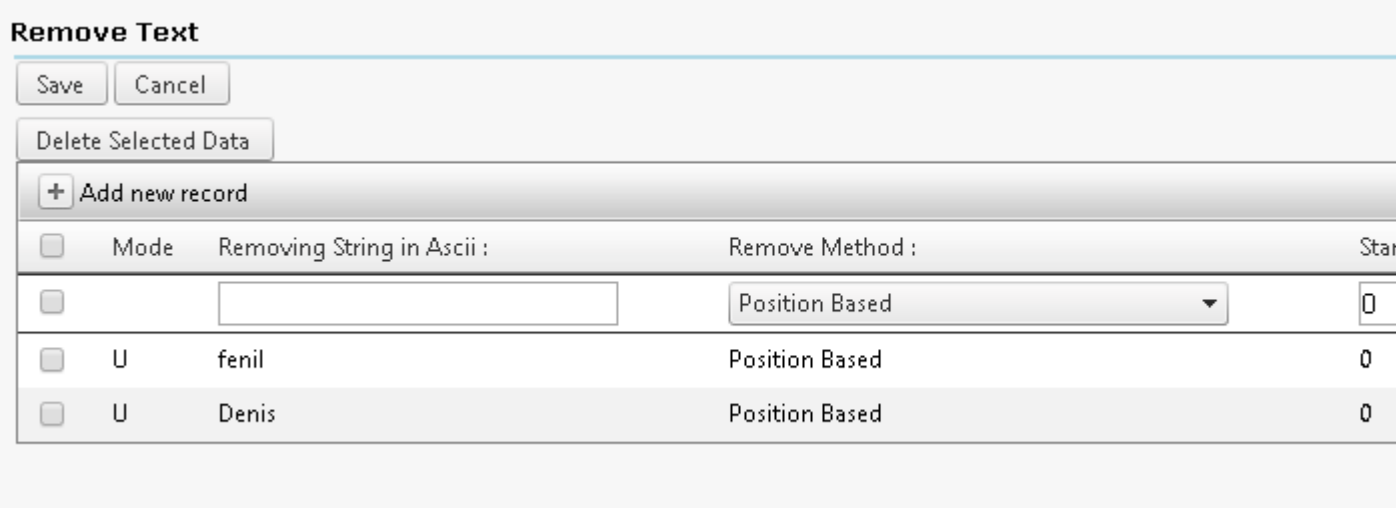
Remove Text

Here you can specify the text string/ ASCII code of texts to be removed from messages. It is useful to remove escape sequence trails from the messages and some formatting command send to printer by control system.

Against each channel on click of **Remove text button** user can see the list of string that are configured for that channel to remove.



On click on **Add New Record** button in existing grid one row will be editable to add new entry.

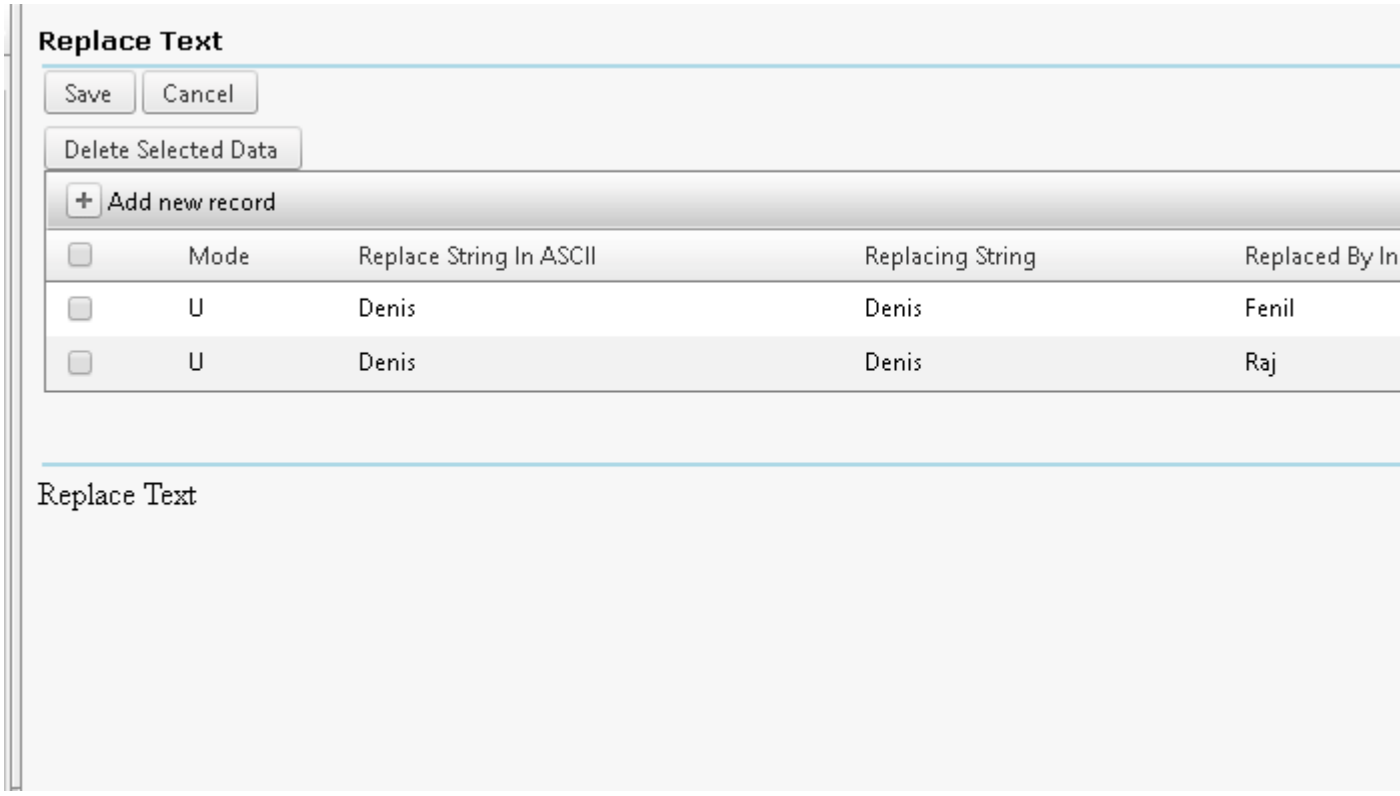


User need to insert value for all required field

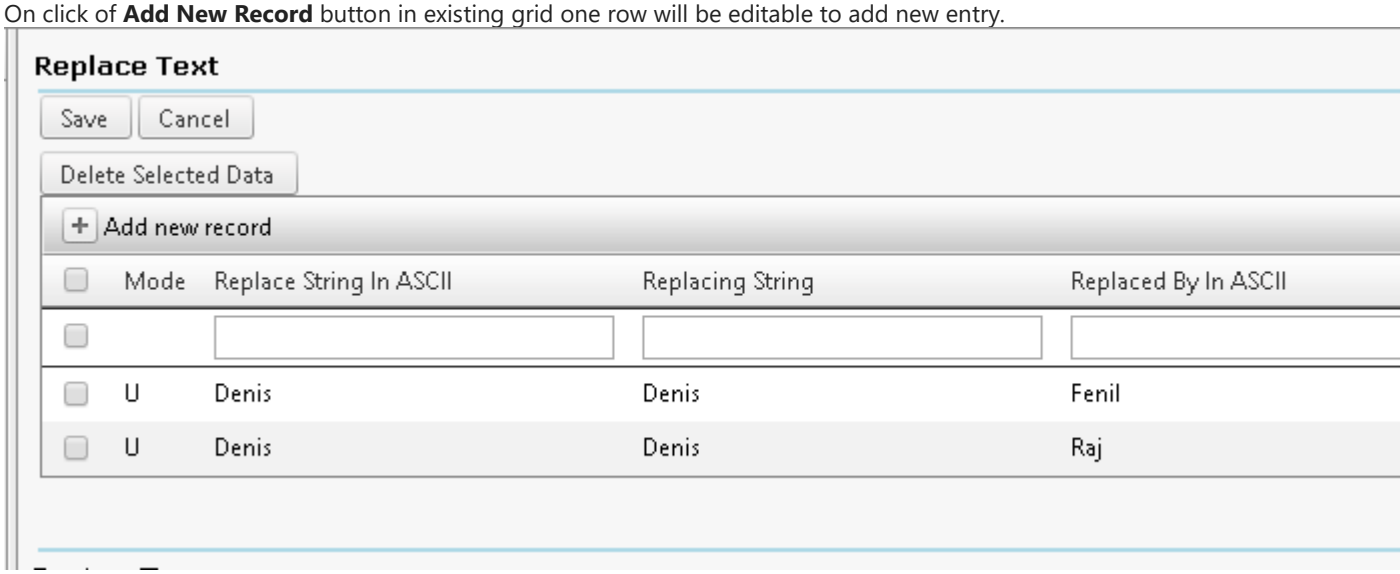
SR NO	FIELD NAME	DESCRIPTION
1	Removing String in Ascii	The string which you want to remove
2	Remove Method	Removal method like Position Based or Containing
3	Start Position	Start Position of removal string if remove method is Position Based.
4	End Position	End Position of removal string if remove method is Position Based.
5	Removing String	The string which is going to be removed.

Replace Text

Here you can specify the text to be replaced with new text. This is useful to replace text which is printed by control system to something meaningful. gainst each channel on click of **REPLACE text button** user can see the list of configurations done for that channel for replace



On click of **Add New Record** button in existing grid one row will be editable to add new entry.



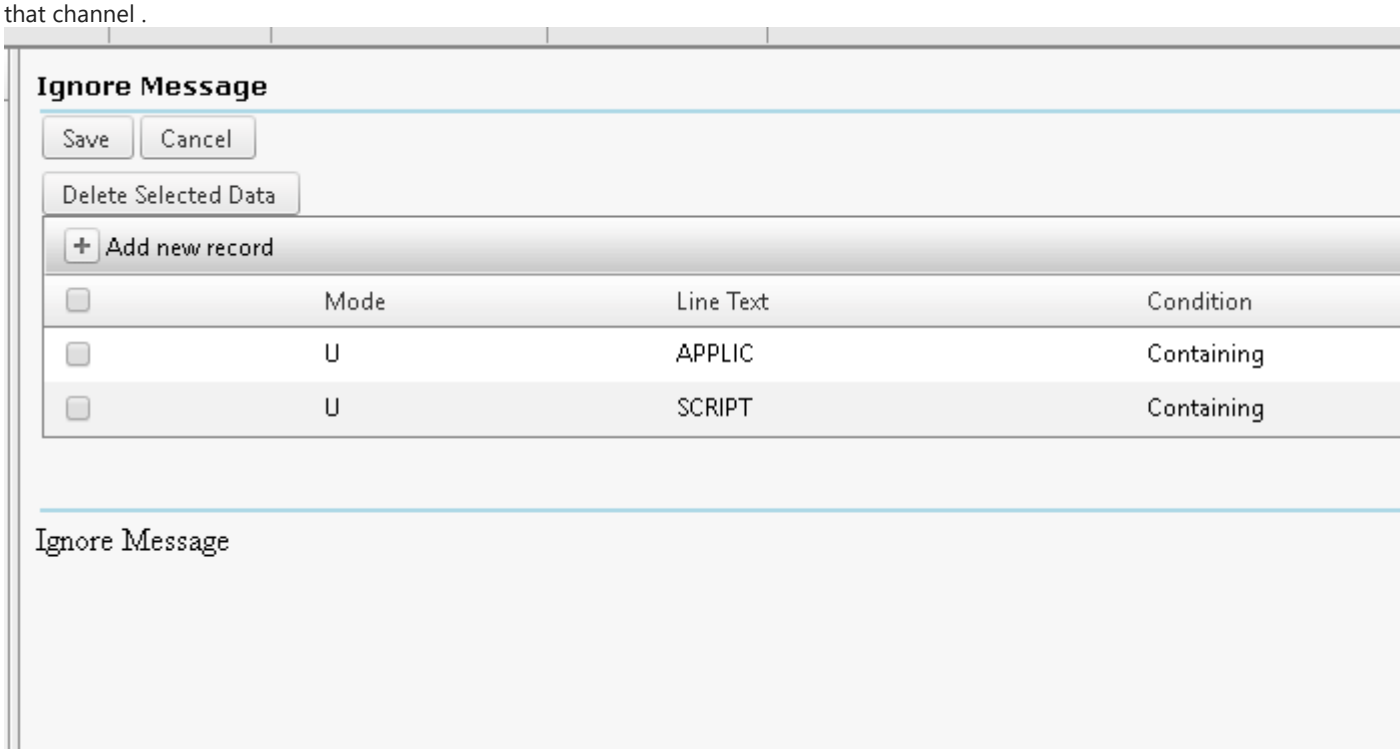
SR NO	FIELD NAME	DESCRIPTION
1	Replace String in ASCII	The string which you want to replace
2	Replacing string	The string which going to be replaced
3	Replace By in ASCII	The string which you want to replace with

4	Replaced By	The string which going to be replaced with
5	Replace Method	Replacing method like Position Based or Containing
6	Start Position	Start Position of replacing string if replace method is Position Based.
7	End Position	End Position of replacing string if replace method is Position Based.

Ignore Message

Here you can specify the messages to be ignored. This feature is useful to ignore unnecessary message which is printed by control system.

Against each channel on click of **Ignore text button** user can see the list of ignore string that are configured for that channel .



User need to insert value for all required field

SR NO	FIELD NAME	DESCRIPTION
1	Line Text	Ignore alarm line if specified Line Text exist
2	Condition	Ignore condition like Position Based, Containing, Start With, End With

3	Start Position	Start Position of ignore string if condition is Position Based or Start with
4	End Position	End Position of ignore string if condition is Position Based or End with

Mail Configuration

If data is not coming upto configure time Interval(Alarm Timeout) then if mail configuration has been done then mail will be triggered to configured person with configured message.

Mailer Enable : If this flag is having true value then only mail will trigger.
Save copy to send folder - Want to save mail in send item
Notification Time:
Mail Notification Reminder
MailType: Type of mail (Outlook,lotus notes,SMTP)
SMTP Server name:SMTP Server address if the Mail Type is SMTP
MailFrom : Mail id from which mail need to trigger
MailTO: Mail id on which mail need to send
MailCC: Mail ids which required in CC of mail
MailBCC: Mail ids which required in BCC of mail
Mail Subject: Subject line of mail
Body: Main body content of mail

Direct Print Configuration

If User want to see all logs on paper then user can configure direct print feature by that user will get all data logs on printer .

User need to configure all below fields

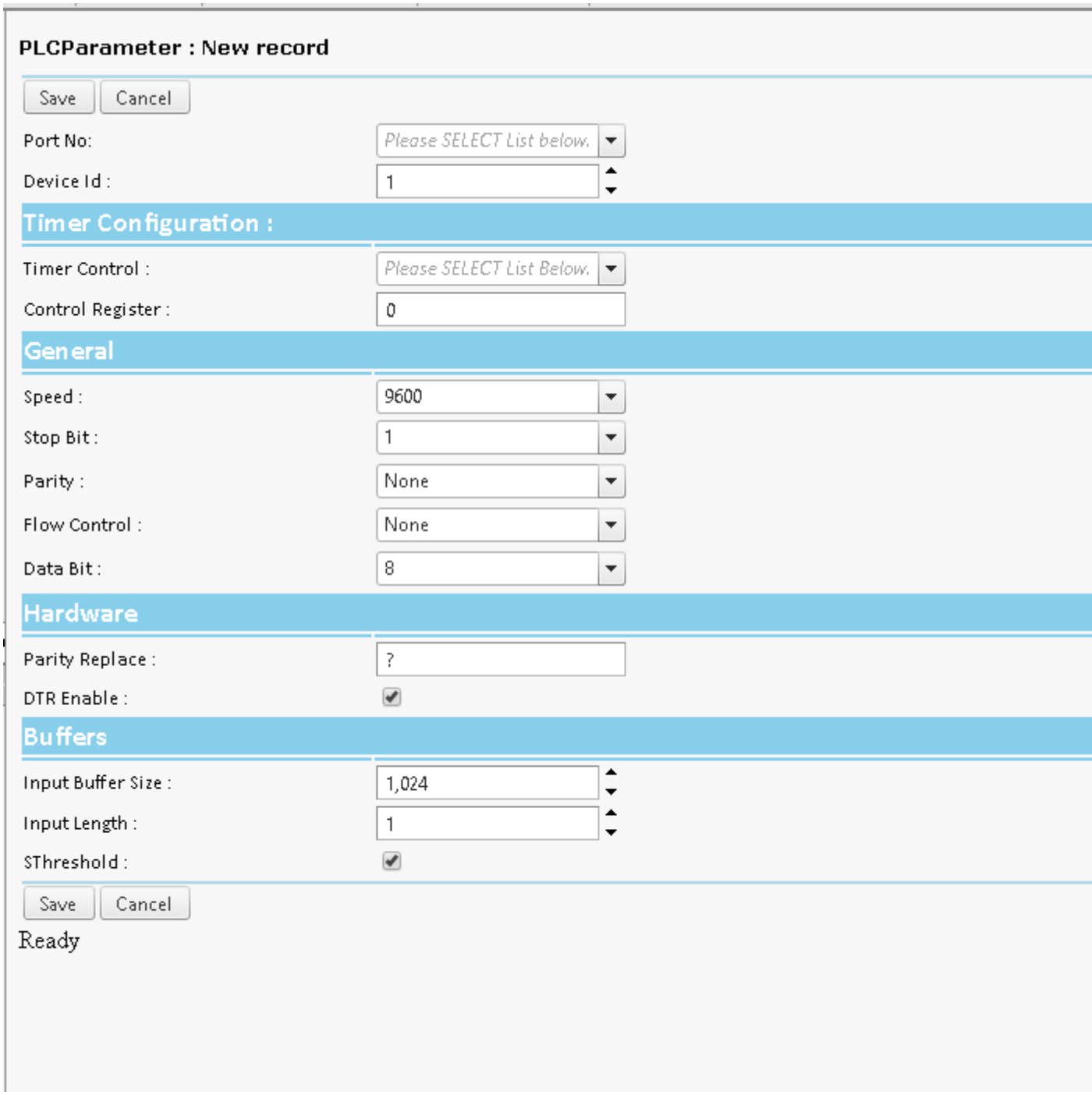
Printer Type : Select printer type Laser jet/Desk Jet Printer or DotMatrix Printer
Printer Name : Select print on through which you need to print data
No of Lines:
Port No: Printer port no
Speed: The rate at which information is transferred in a communication
Data Bit: Two bytes are sent, each consisting of a start bit, followed by data bits
Flow Control: The extra input and outputs used on the serial device to perform this type of handshaking.
Stop Bit: Stop bits separate each unit of data on an asynchronous serial
Parity: Parity bit in the communication

Parity Replace: To replace the parity bit during Communication
RTS Enable:DATA Terminal READY
Discard Null: Gets or sets a value indicating whether null bytes are ignored when transmitted between the Port and the receive buffer
DTR Enable: To Enable the ''Request To Send"
Buffer
Input buffer Size : Size of the input buffer For sending data
Input Length: The Length of the data while Receiving
Output Buffer Size: Size of the input buffer For Receiving data
SThreshold : Threshold Value for "Request To Send"
RThreshold: Threshold Value for "Request To Receive"

Adam Configuration

Adam Configuration is used to generate notification for various purpose i.e. network connectivity failure, application crashing and disk failure.

To add new ADAM Configuration click on Add New button



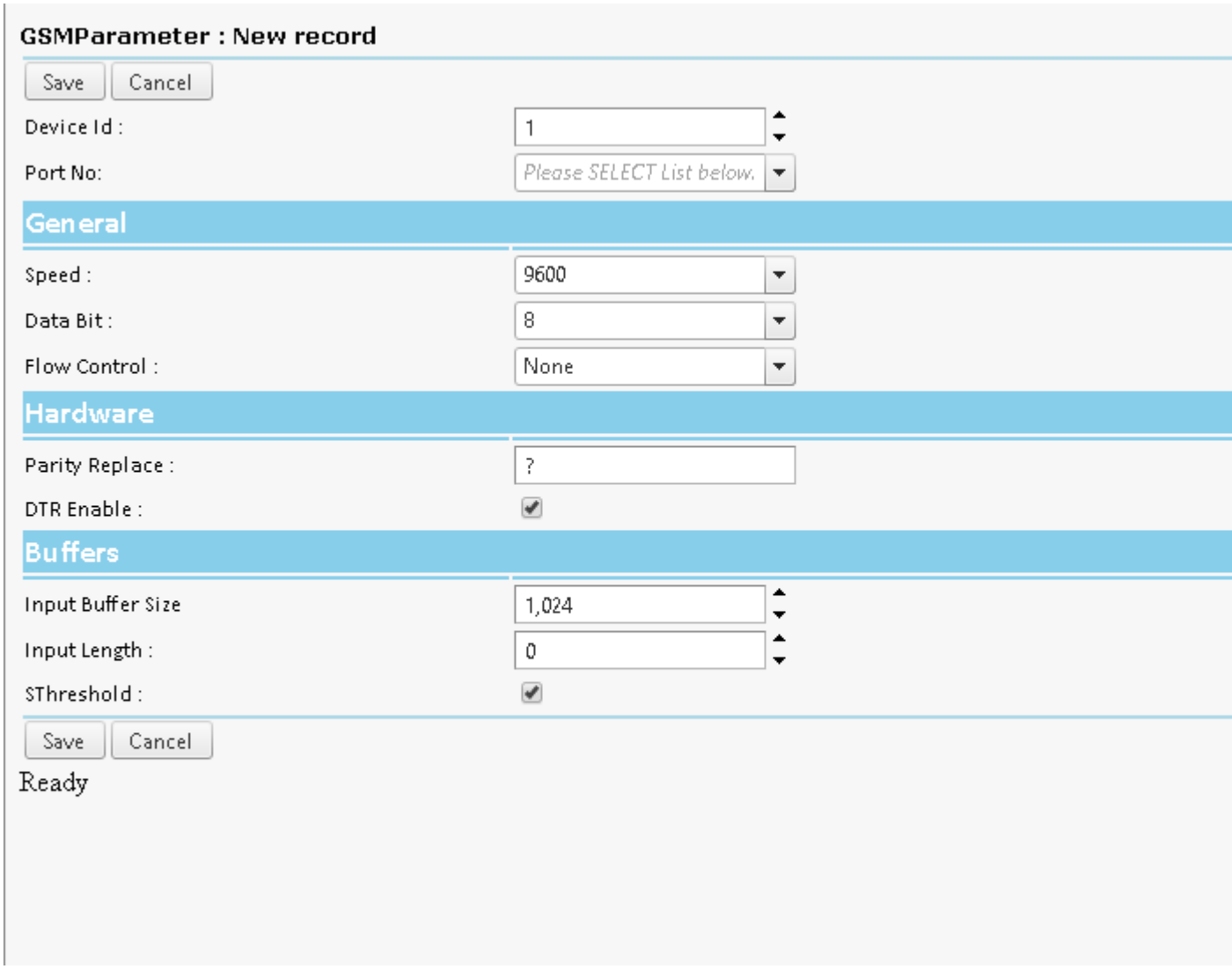
As Show in Image below ADM configurattion need to be configure

SR NO	FIELD NAME	DESCRIPTION
1	PortNo	The Comport through which the Communication is going to take place.
2	Device ID	Device Id for the Adam module.

3	Timer Control	
4	Control Register	On which DO channel Output needs to be configure
5	Refresh Time	
6	Timer Preset	Timer preset value. After time preset the bit will off on device.
7	Speed	The rate at which information is transferred in a communication
8	Stopbit	Stop bits separate each unit of data on an asynchronous serial
9	Parity	Parity bit in the communication
10	Flow Control	The extra input and outputs used on the serial device to perform this type of handshaking.
11	Data Bit	Two bytes are sent, each consisting of a start bit, followed by data bits
12	Parity Replace	To replace the parity bit during Communication
13	Discard Null	Gets or sets a value indicating whether null bytes are ignored when transmitted between the port and the receive buffer
14	DTR Enable	To Enable the ''Request To Send"
15	RTS Enable	DATA Terminal READY
16	Input Buffer Size	Size of the input buffer For sending data
17	Output Buffer Size	Size of the input buffer For Receiving data
18	Input Length	The Length of the data while Receiving
19	EOF Enable	To enable disable "END OF FILE"
20	SThreshold	Threshold Value for "Request To Send"
21	RThreshold	Threshold Value for "Request To Receive"

SMS(GSM)

GSM parameter is use for communication through MODEM.



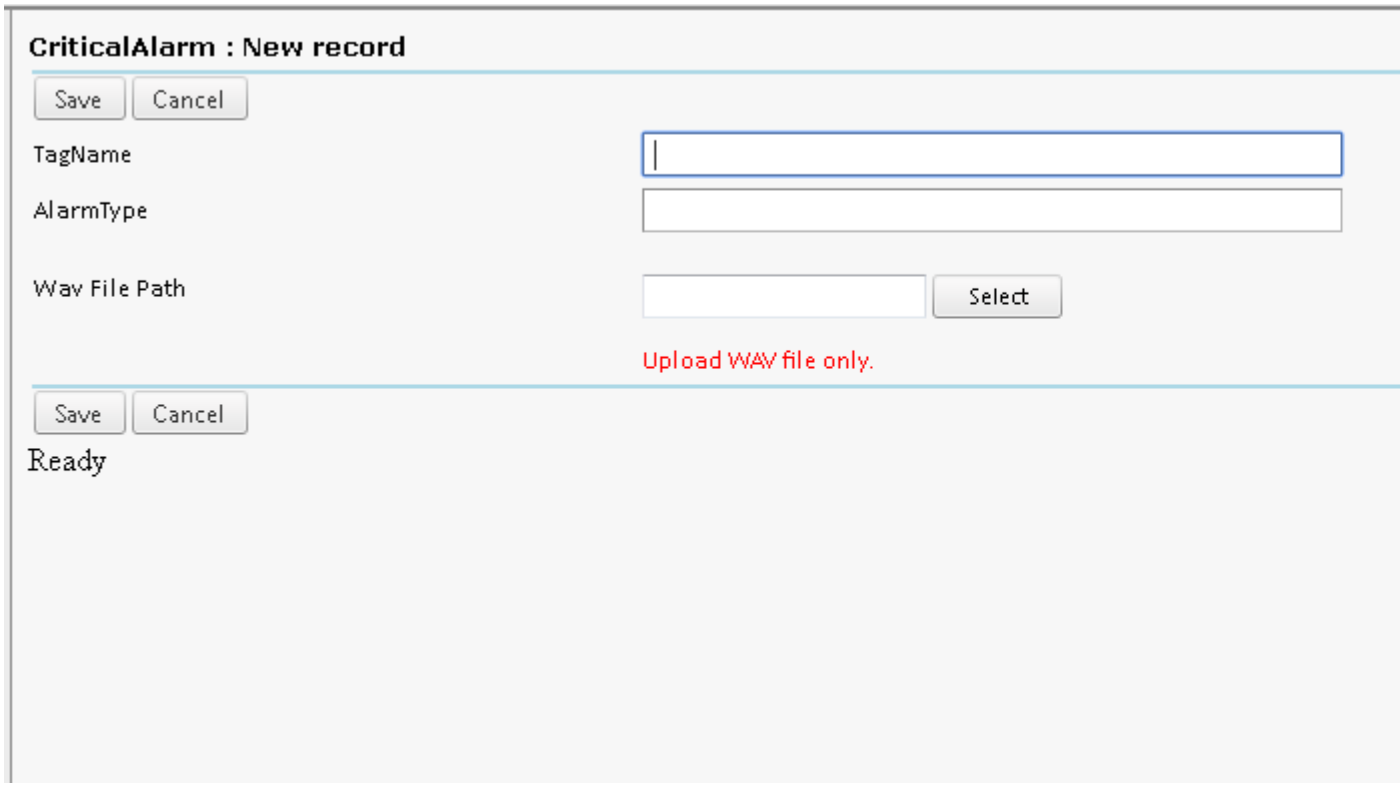
As Show in Image below parameters need to be configure

SR NO	FIELD NAME	DESCRIPTION
1	Device ID	Unique identification of devices which is defined by OS.
2	PortNo	Port no on which GSM modem is connected to send SMS.
3	Speed	The rate at which information is transferred in a communication
4	Parity	Parity bit in the communication
5	Data Bit	Two bytes are sent, each consisting of a start bit, followed by data bits
6	Stop Bit	Stop bits separate each unit of data on an asynchronous serial

7	Flow Control	The extra input and outputs used on the serial device to perform this type of handshaking.
8	Parity Replace	To replace the parity bit during Communication
9	Discard Null	Gets or sets a value indicating whether null bytes are ignored when transmitted between the port and the receive buffer
10	DTR Enable	To Enable the ''Request To Send"
11	RTS Enable	DATA Terminal READY
12	Input Buffer Size	Size of the input buffer For sending data
13	Output Buffer Size	Size of the input buffer For Receiving data
14	Input Length	The Length of the data while Receiving
15	EOF Enable	To enable disable "END OF FILE"
16	SThreshold	Threshold Value for "Request To Send"
17	RThreshold	Threshold Value for "Request To Receive"

Critical Alarm

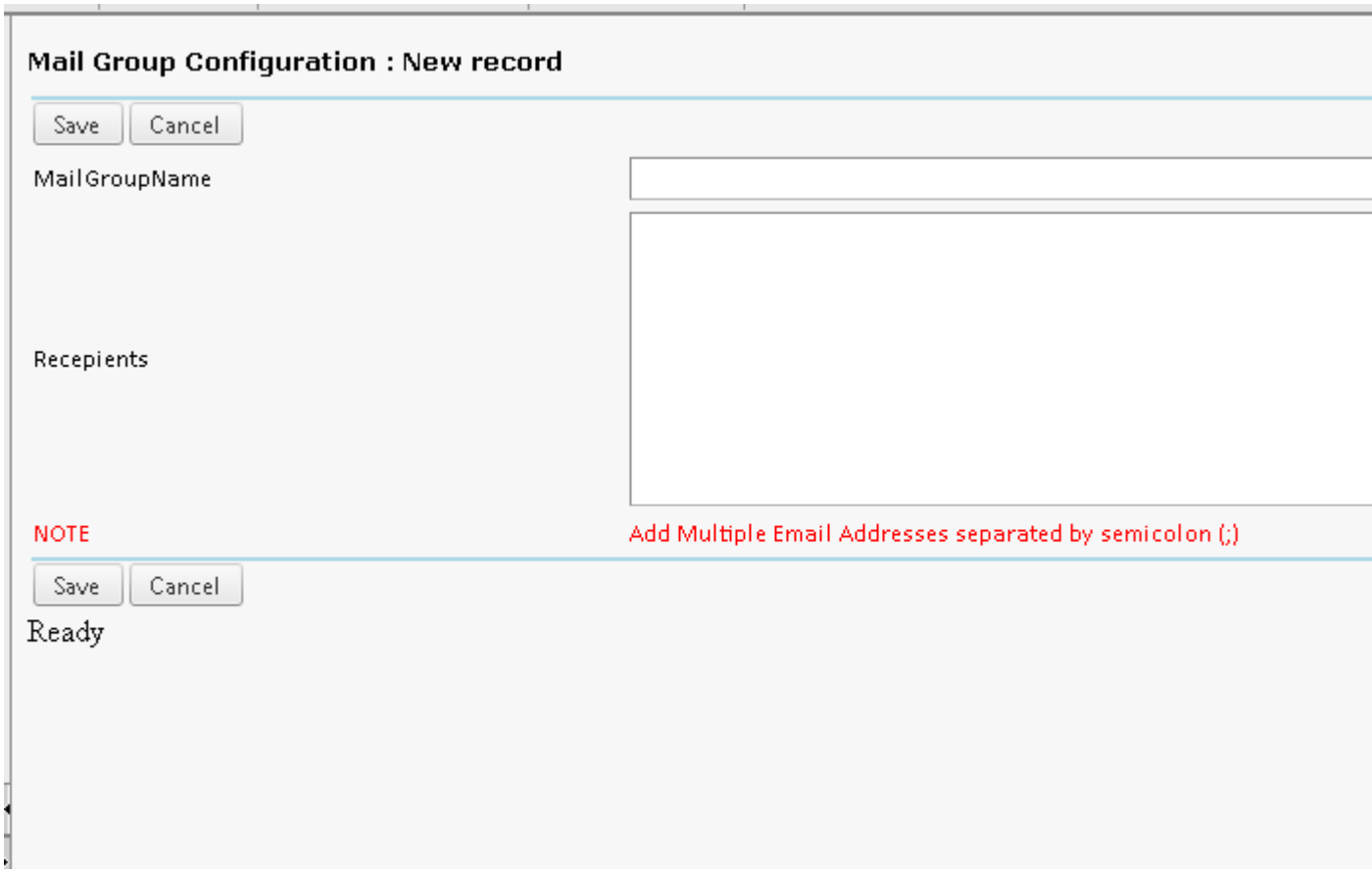
Critical Alarm Configuration is used to configure critical tags and plays wav file whenever it comes.



SR NO	FIELD NAME	DESCRIPTION
1	TagName	Tag Name
2	AlarmType	Alarm Type
3	Wav File Path	Wav file to be played

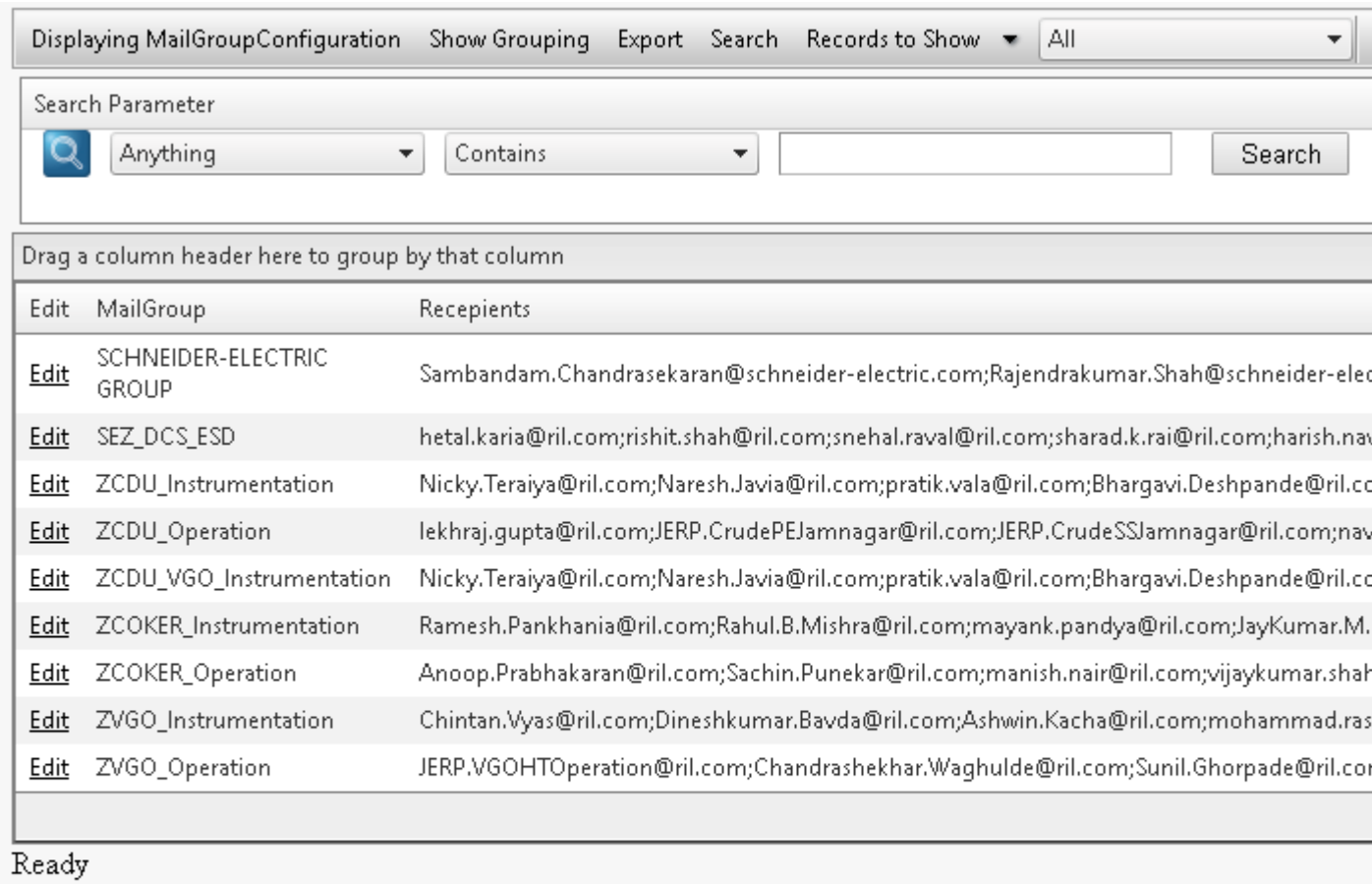
Mail Group

Here we can create mail group to send notification on mail.
On click of Add New user will get below popup to create new Mail group



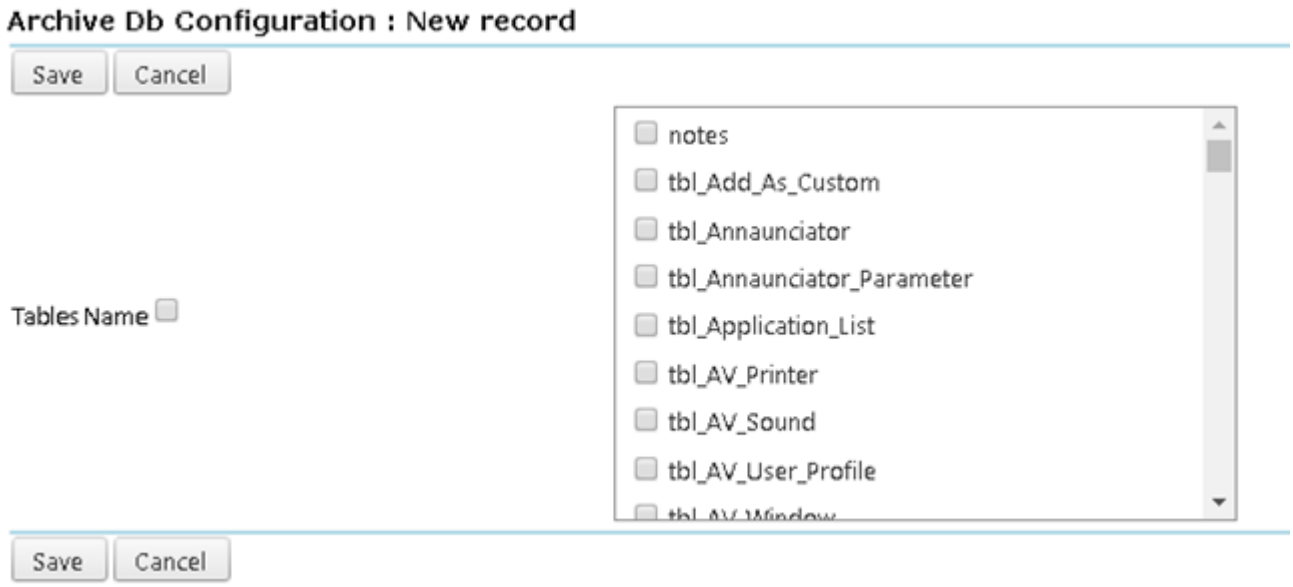
SR NO	FIELD NAME	DESCRIPTION
1	MailGroupName	Group name
2	Recepients	Mail IDS

On click of Save button page will redirect to Mail group list page



Dynamic Database schema configuration

Archive DB Configuration

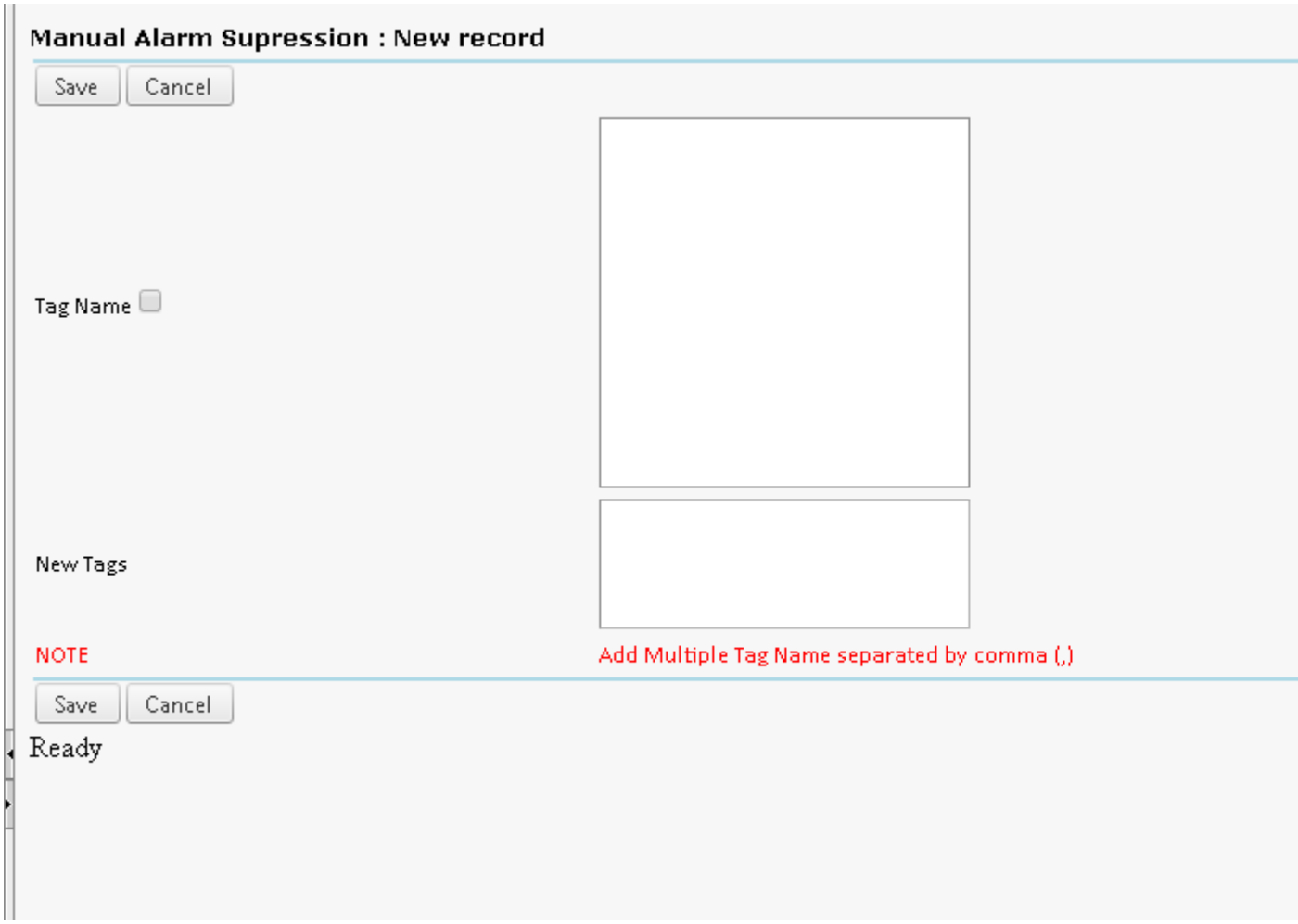


SR NO	FIELD NAME	DESCRIPTION
1	Tables Name	List of Table Name and View Name

Manual Alarm Supression

`To disable alarm for sometime user can use supression configuration

Following is the screenshot where we can do configuration of Manual Alarm Suppression



SR NO	FIELD NAME	DESCRIPTION
1	TagName	Tagname which should be suppressed
2	New Tags	Tags other than TagName list