

# SMS & EMAIL CONFIGURATION PROCEDURE

## Option 1:



## Option 2:



## Option 3:



- **Note:** Westermo Configuration and N-Port Configuration was given in separate document. In this document we only talk about configuration on 800xa.
  - **Important:** RS232 Com Port setting must be same on Modem, N-Port, N-Port Administrator and 800xA (OR) Modem, Windows Device Manager and 800xA. Please ignore if you are using Email.

# SMS & EMAIL CONFIGURATION PROCEDURE

- In this document we connected Modem via RS232 to TCP/IP gateway. Before configure in 800xa please confirm in which Com Port Modem Connected. Then Go to Aspect System Structure → Messenger → SMS Device → SMS Device → SMS Device aspect as shown blow. Select Com Port and Baud Rate.
- In case if you are using Email then go to Aspect System Structure → Messenger → Email Device → Email Device → Email Device.

The screenshot displays two windows from the 800xAService software. The left window, titled 'SGDF21ECMS // Engineering Workplace', shows the 'Aspects of SMS Device' configuration. The right window, titled 'NPort Administrator-COM Mapping', shows the 'COM Mapping' table.

**Aspects of 'SMS Device' Configuration:**

Aspects of 'SMS Device'	Modified	Modified by	Desc...	Inherited	Category name
Admin Structure	15-Feb-16 8:19:3...	ABB SMS and E...	[Adm...	False	Admin Structure
Aspect Category Definition	15-Feb-16 8:19:3...	ABB SMS and E...	The ...	False	Aspect Categor...
Aspect Category Type Reference	15-Feb-16 8:19:3...	ABB SMS and E...	The ...	False	Aspect Category
Aspect System Structure	15-Feb-16 8:19:3...	ABB SMS and E...	[Asp...	False	Aspect System ...
Name	15-Feb-16 8:19:3...	ABB SMS and E...	The ...	False	Name
SMS Device	30-Apr-18 9:29:4...	DF21ECMS\800...		False	SMS Device

**COM Mapping Table:**

No	Model	IP Address	Port	COM Port	Mode
1	NPort 5110	192.168.11.253	1	COM1	Hi-Performance, FIFO Enable, Fast Flush Disable, Offline Open Disable
2	NPort 5110	192.168.11.252	1	COM2	Hi-Performance, FIFO Enable, Fast Flush Disable, Offline Open Disable

**General Settings:**

Interval for Checking Incoming Messages: 120 Sec

Unicode Text:

**Modem Settings:**

Available Com Ports [Mandatory]: COM2

Baud Rate [Mandatory]: 38400 bps

PIN [Optional]:

Preferred SMSC Number [Optional]:

Check Modem State

Note: The Messenger Service must be disabled before configuring the SMS Device.

**Message Log - 0 | Monitor Log - 0**

No	Time	Description

Now: 18-Jul-19 10:41:43 AM

## SMS & EMAIL CONFIGURATION PROCEDURE

- Click Check Modem status button Modem Status should comes as Good.



**Note:** Signal Quality Excellent will not affect the SMS sending. If Signal Quality is Poor or Very Poor SMS may not send out properly. It may also miss SMS, from our system it goes to Modem but Modem May not send out. So, Mount Modem at Good Signal location.

# SMS & EMAIL CONFIGURATION PROCEDURE

- For Email Configuration Go to Aspect System Structure → Messenger → Email Device → Email Device → Email Device aspect as shown blow. In From row get the Email address from customer and enter here. On the SMTP Relay Server row enter the IP address of the customer SMTP Relay Server and ‘:’ Port Number defined by customer. Default will be ‘25’.

Aspects of 'Email Device'	Modified	Modified by	Desc...	Inherited	Category name	Version
Admin Structure	6/13/2019 11:52:...	ABB SMS and E...	[Adm...	False	Admin Structure	1
AC Aspect Category Definition	6/13/2019 11:52:...	ABB SMS and E...	The ...	False	Aspect Category Definition	1
Aspect Category Type Reference	6/13/2019 11:52:...	ABB SMS and E...	The ...	False	Aspect Category	1
Aspect System Structure	6/13/2019 11:52:...	ABB SMS and E...	[Asp...	False	Aspect System Structure	1
Email Device	8/7/2003 3:40:13...	ABB SMS and E...	This ...	False	Email Device	1
Name	6/13/2019 11:52:...	ABB SMS and E...	The ...	False	Name	1

Configuration Form: Email Device:Email Device

To:

From: BMS@sg.abb.com

SMTP Relay Server: 172.16.4.5:25

Note: If the SMTP Relay Server field is blank, local SMTP service pickup directory will be used.  
SMTP Relay Server format: <IPAddress>/<Hostname>[:<Port Number>]  
If the port number is not entered then default SMTP port number "25" shall be used.

**Note:** If you are using Alert Despatcher only change will be ABB will send all the alerts as Email to Alert Despatcher software. Sender address should be used Group name under address book tab as shown blow. Standard Alert Despatcher Manual is self-explanatory for Installation and Configuration of the software.

Groups:

SMECMS1 1 recipients

ABB(90277658)[sathishkumar.s@sg.abb.com]

Configuration Form: Email Device:Email Device

To:

From: ABBBMS@sg.abb.com

SMTP Relay Server: 127.0.0.1:25

Note: If the SMTP Relay Server field is blank, local SMTP service pickup directory will be used.  
SMTP Relay Server format: <IPAddress>/<Hostname>[:<Port Number>]  
If the port number is not entered then default SMTP port number "25" shall be used.

Device	Tel. no/address
SMTP/Email	SMECMS1@alertdispatcher.com

# SMS & EMAIL CONFIGURATION PROCEDURE

- As shown below Messenger Service should be in Service.

DF21ECMS1 // Engineering Workplace

(Enter search name) No Filter Replace

Service Structure

Services

- Alarm Analysis, Service
- Alarm Logger, Service
- Alarm Manager, Service
- Alarm Property Server, Service
- AspectDirectory, Service
- BackupService, Service
- Basic History, Service
- Calculation Server, Service
- Cross referencing server, Service
- Engineering XRef Service, Service
- Event Collector, Service
- Event Storage, Service
- External Alarm, Service
- File Set Distribution, Service
- IT SNMP Trap Service, Service
- Lock Server, Service
- Messenger Server, Service
  - Messenger SG\_1, Service Group
    - Messenger SP\_1, Service Provider
- OpcDA\_Connector, Service
- Property Expression Manager, Service
- Property Transfer, Service
- Scheduler, Service
- Server Aspect Controller, Service
- Soft Alarms, Service
- Softpoint Server, Service
- System Message Server, Service
- System Status, Service
- Time, Service
- Workplace Service, Service

Aspects of 'Messenger SP\_1'

Aspects of 'Messenger SP_1'	Modified	Modified by	Desc...	Inherited	Category name	Version
Node Administration Structure	7/24/2019 7:02:1...	800xaservice	[Nod...	False	Node Administr...	1
Alarm Expression	4/25/2008 1:10:1...	ABB 800xA Base	Used...	True	Alarm Expression	1
Name	9/30/2005 12:11:...	ABB SMS and E...	The ...	False	Name	1
Object Icon	5/6/2003 3:33:39...	ABB 800xA Base	Icon ...	True	Object Icon	1
Service Provider Definition	7/24/2019 7:02:1...	800xaservice		False	Service Provide...	1
Service Provider Type Reference	9/30/2005 12:11:...	ABB SMS and E...	The s...	False	Service Provider	1
Service Structure	9/30/2005 12:11:...	ABB SMS and E...	[Serv...	False	Service Structure	1

Messenger SP\_1:Service Provider Definit...

Configuration | Status

Service: Messenger Server View

Group: Messenger SG\_1 View

Enabled

Current Service

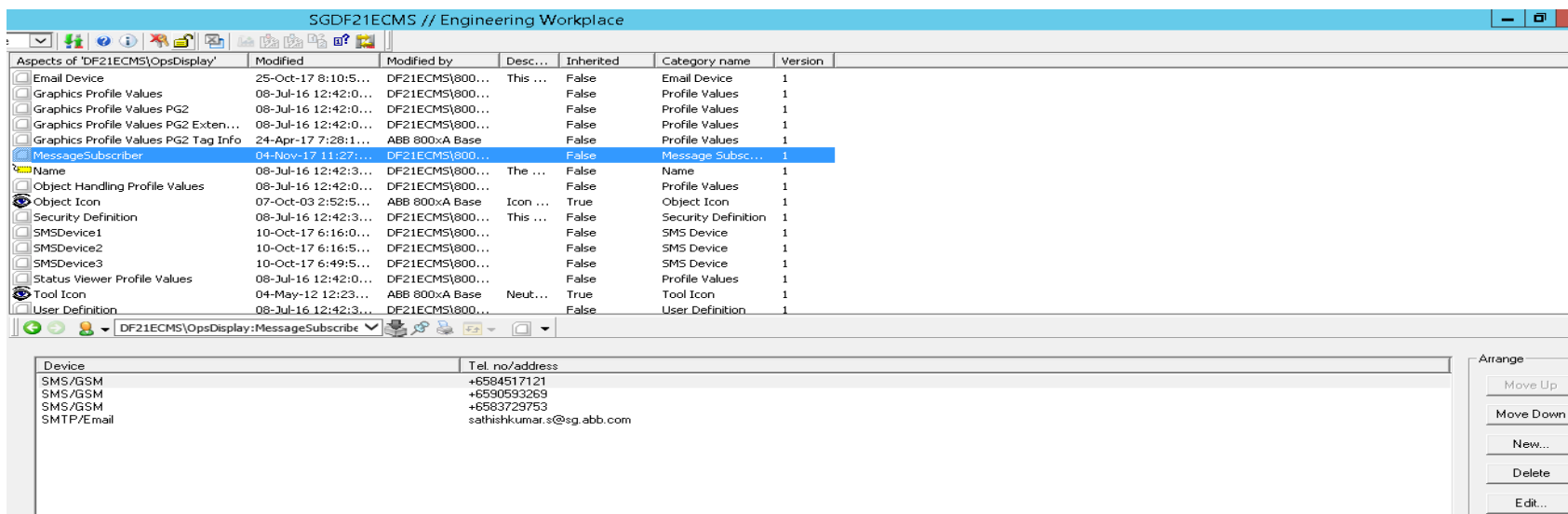
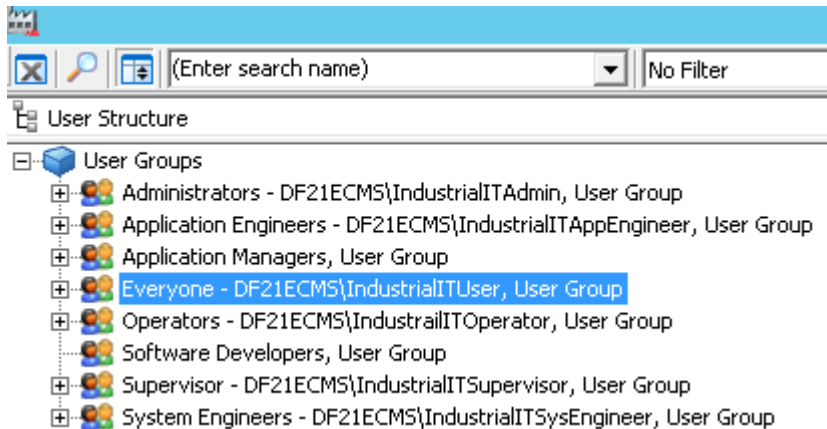
Node: S1AS-101 View

Target State: Service

Command: Run

# SMS & EMAIL CONFIGURATION PROCEDURE

- Come to User Structure select the User for which you want to add Phone number or Email Id. As shown below Create new aspect of Message Subscriber. In that add the Mobile or Email ID as shown below.



**Important:** After Adding You Must Check the Enable check box below on every Message Subscriber you create. Default will be unchecked.

## SMS & EMAIL CONFIGURATION PROCEDURE

- As a Standard we normally use Location Structure to create all SMS list. But User can configure SMS list in any structure. As shown below Create Generic Object → Create Alarm and Event Message Source. Under same Object Create Alarm List and Message Handler Aspect. Under the Alarm List select the Alarm List which you have created newly and based on customer requirement select the appropriate options as shown below.

The screenshot displays the 'Engineering Workplace' interface for 'DF21ECMS1'. The left pane shows a 'Location Structure' tree with 'DF21\_SMS, Section' expanded. The main pane shows a table of 'Aspects of ALL Process Alarms\_Eve...' with columns: Modified, Modified by, Desc..., Inherited, Category name, and Version. The 'All Process Message Source' aspect is selected.

Aspects of 'ALL Process Alarms_Eve...	Modified	Modified by	Desc...	Inherited	Category name	Version
All Process Alarm List	5/28/2016 2:30:5...	{8C251924-9D...	This ...	False	Alarm and Event List	1
All Process Alarm List Configuration	5/31/2019 7:47:5...	{8C251924-9D...	The ...	False	Alarm and Event List Configuration	1
All Process Alarm Message Handler	4/14/2019 8:10:3...	{8C251924-9D...		False	Message Handler	1
All Process Event List	5/28/2016 2:36:0...	{8C251924-9D...	This ...	False	Alarm and Event List	1
All Process Event List Configuration	3/11/2019 1:04:0...	{8C251924-9D...	The ...	False	Alarm and Event List Configuration	1
All Process Event List_State	8/13/2016 12:58:...	{8C251924-9D...	The ...	False	Alarm and Event List Configuration	1
All Process Event List_State	8/13/2016 12:21:...	{8C251924-9D...	This ...	False	Alarm and Event List	1
All Process Message Source	4/27/2017 11:22:...	{8C251924-9D...		False	Alarm and Event Message Source	1
Event List_Gen	9/11/2017 10:51:...	{8C251924-9D...	This ...	False	Alarm and Event List	1
Location Structure	5/28/2016 2:28:2...	{8C251924-9D...	[Loca...	False	Location Structure	1
Name	5/28/2016 2:28:2...	{8C251924-9D...	The ...	False	Name	1
Object Icon	1/30/2009 2:37:2...	ABB 800xA Base	Icon ...	True	Object Icon	1
Section Type Reference	5/28/2016 2:28:2...	{8C251924-9D...		False	Section	1

The configuration form below the table shows the 'Alarm List' tab selected. The 'Alarm list' dropdown is set to 'All Process Alarm List'. Under 'Message action for a new alarm condition', the 'Always send message' radio button is selected. Under 'Message action for alarm state change', the 'Send message on return to normal' checkbox is checked.

**Note:** RTN message supports from 800xa 6.0.3.1 onwards. In older version this will not support.

# SMS & EMAIL CONFIGURATION PROCEDURE

- In Alarm and Event Message Source → Message Configuration tab as shown below. Select the Column which you want to include in SMS and mention the number of Characters. In Field Delimiter give a Semicolon and a space to separate the columns while sending the SMS.

The screenshot displays the configuration interface for the Alarm List. The left pane shows a tree view of the domain structure. The main pane shows a list of configuration items, with 'ALL Process Message Source' selected. The bottom pane shows the 'Message Configuration' tab for this source, which includes a table of fields to be included in the SMS and their lengths.

Name	Length (characters)
<input type="checkbox"/> Event Time	20
<input checked="" type="checkbox"/> ActiveChangeTime	20
<input checked="" type="checkbox"/> AlarmState	3
<input checked="" type="checkbox"/> Object Name	30
<input checked="" type="checkbox"/> Object Description	30
<input checked="" type="checkbox"/> Condition	30
<input checked="" type="checkbox"/> Message Description	40
<input type="checkbox"/> System Name	20
<input type="checkbox"/> Sub Condition	25
<input type="checkbox"/> PriorityLevel	8
<input type="checkbox"/> Severity	8
<input type="checkbox"/> Category	8
<input type="checkbox"/> Actor	20
<input type="checkbox"/> Guid	38
<input type="checkbox"/> LNDesc	20
<input type="checkbox"/> NodeName	20
<input type="checkbox"/> CurrentValue	12
<input type="checkbox"/> Class	6
<input type="checkbox"/> ProcessSection	20
<input type="checkbox"/> AckState	5
<input type="checkbox"/> AckTime	20

Message Prefix:

Message Suffix:

Field delimiter: ;

Total message length 165 characters

**Important:** SMS Character should not cross 160 Character Including Ack ID. If SMS Character exceed 160 Character it will go as 2 messages and it will not receive in mobile continuously, it may jump between other messages.



# SMS & EMAIL CONFIGURATION PROCEDURE

- In Message handler add the Users to whom you want to send SMS and Email. Add Timeout (After What Time Message has to go), Attempts (How Many attempts it should consider to send SMS) and Enable (If it is checked it will send SMS). Under Message Source tab select the Alarm and Event Message source, check the Enabled box.

The screenshot displays the 'DF21ECMS1 // Engineering Workplace' interface. On the left, a tree view shows the 'Location Structure' with 'DF21\_SMS, Section' expanded. The main window shows a table of 'Aspects of ALL Process Alarms\_Eve...'. The 'All Process Alarm Message Handler' is selected and highlighted in blue.

Aspects of 'ALL Process Alarms_Eve...	Modified	Modified by	Desc...	Inherited	Category name	Version
All Process Alarm List	5/28/2016 2:30:5...	{8C251924-9D...	This ...	False	Alarm and Event List	1
All Process Alarm List Configuration	5/31/2019 7:47:5...	{8C251924-9D...	The ...	False	Alarm and Event List Configuration	1
<b>All Process Alarm Message Handler</b>	<b>4/14/2019 8:10:3...</b>	<b>{8C251924-9D...</b>	<b>The ...</b>	<b>False</b>	<b>Message Handler</b>	<b>1</b>
All Process Event List	5/28/2016 2:36:0...	{8C251924-9D...	This ...	False	Alarm and Event List	1
All Process Event List Configuration	3/11/2019 1:04:0...	{8C251924-9D...	The ...	False	Alarm and Event List Configuration	1
All Process Event List_Stz	12:58:...	{8C251924-9D...	The ...	False	Alarm and Event List Configuration	1
All Process Event List_State	8/13/2016 12:21:...	{8C251924-9D...	This ...	False	Alarm and Event List	1
All Process Message Source	4/27/2017 11:22:...	{8C251924-9D...	The ...	False	Alarm and Event Message Source	1
Event List_Gen	9/11/2017 10:51:...	{8C251924-9D...	This ...	False	Alarm and Event List	1
Location Structure	5/28/2016 2:28:2...	{8C251924-9D...	[Loca...	False	Location Structure	1
Name	5/28/2016 2:28:2...	{8C251924-9D...	The ...	False	Name	1
Object Icon	1/30/2009 2:37:2...	ABB 800xA Base	Icon ...	True	Object Icon	1
Section Type Reference	5/28/2016 2:28:2...	{8C251924-9D...		False	Section	1

Below the table, the 'Message Source' tab is active, showing a list of destinations and their configurations:

Destination	Device	Timeout	Attempts	Enabled
DF21ECMS\CIDuty	SMS Device missing			
DF21ECMS\Sam	SMS Device_A missing			
DF21ECMS\Allan	SMS Device_A missing			
DF21ECMS\Bharath	SMS Device_A missing			
DF21ECMS\Benz	SMS Device missing			
DF21ECMS\Harry	SMS Device missing			
DF21ECMS\Senthil	SMS Device_C missing			
DF21ECMS\Farhan	SMS Device missing			
DF21ECMS\Jerry	SMS Device missing			
DF21ECMS\John	SMS Device missing			
DF21ECMS\Lim Yong Khon	SMS Device_A missing			

The 'Message Source' configuration panel shows the 'ALL Process Message Source' selected in the dropdown menu, and the 'Enabled' checkbox is checked.

- In Control Structure you will SMS and e-mail Messaging under that select the Messenger Event Log aspect you can find the SMS sending out events.