

How To: SAMOS in SCS

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Background:

SAMOS is a **S**hipboard **A**utomated **M**eteorological and **O**ceanographic **S**ystem that can pair with NOAA's SCS software to log continuous recordings of navigational (ship's position, course, speed, and heading), meteorological (winds, air temperature, pressure, moisture, rainfall, and radiation), and near-surface oceanographic (sea temperature, and salinity) parameters while the vessel is at sea.

Measurements are recorded at high-temporal sampling rates, typically 1 minute or less, which allows for more accurate estimates of the turbulent air-sea fluxes to be determined and make SAMOS data ideal for validating flux fields from numerical weather prediction models, oceanic models, and remotely observed satellite data.

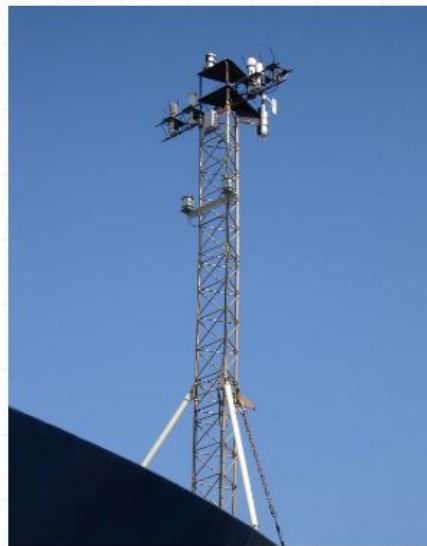
Research vessels operating in remote areas, in comparison to normal shipping lanes, increases the value of these data for validation studies.

SAMOS
Shipboard Automated Meteorological and Oceanographic System



Overview:

- Setting up SCS Configuration File
- Setting up Sensor Configuration File
- Setting up SAMOS Event Logger Template File
- Setting up SAMOS Mailer Configuration Values
- Running the SAMOS Event Logger
- Running the SAMOS Mailer
- Maintaining SAMOS Metadata
- Transforming ELG Files into \$SAMOS Format



Credit: WHOI



Credit: Rik Wanninkhof/AOML



Setting up SCS Configuration File:

The SAMOS Mailer uses the mail server configuration variables in the SCS Configuration File (*SCS Menu* → → *Acquisition* → *Data Acquisition* → *SCS Configuration File Editor*) to contact the mail server and do all mailer applications included in the SCS system.

SMTP_SERVER
SMTP_PORT
SMTP_USE_SSL
SMTP_IGNORE_CERT_ERRORS
SMTP_AUTH_CREDENTIALS

SHIP_NAME	SCS	The ship's name (used when sending Ship Tracker messages).
SMTP_AUTH_CREDENTIALS		User credentials for authenticating to the ship's SMTP ser.
SMTP_IGNORE_CERT_ERRORS	1	0: Check server certificate when sending mail (standard be.
SMTP_PORT	25	The port used to access the SMTP server for sending message
SMTP_SERVER		The SMTP server onboard which will send email messages (i..
SMTP_USE_SSL	0	1: Use SSL when sending email. 0: Do not use SSL.
VESSELCODE	SD	Two-letter vessel code to identify source of data in databa

See: Page 20, Section 1.4, SCS User's Guide (v4.9) for more info



Setting up Sensor Configuration File (Overview):

Using the CFE-DB (Configuration File Editor - Database) you must define a set of derived average sensors to compute the average for the previous 60 seconds.

The Log Rate for the SAMOS average sensors must be set to 60 seconds, and the Timeout Sensor Parameter must be set to not less than 60 seconds (this is enforced by CFE-DB).

The name of the SAMOS average sensors should start with the word SAMOS to distinguish them easily from other sensors.

Message Definition

Message Type:

Name:

Comment:

Logging Rate:

Log Sub Folder:

Termination Char:

Timeout (sec):

Name	ASCII	Multiple Occurrence
Comma	44	False

Add
Remove

Sentence Label:

Base Data Field Def:

Average Type: Average Interval: Number of Samples:

See: Page 330, Section 12.3, SCS User's Guide (v4.9) for more info



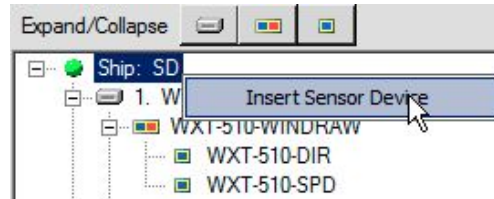
Setting up Sensor Configuration File (Steps):

- From the main SCS Menu, select:
Acquisition → *Data Acquisition* → *Sensor Config Edit (Database)*



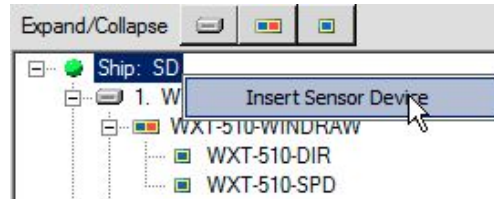
Setting up Sensor Configuration File (Steps):

- From the main SCS Menu, select:
Acquisition → *Data Acquisition* → *Sensor Config Edit (Database)*
- Right-click the ship name and click *Insert Sensor Device*

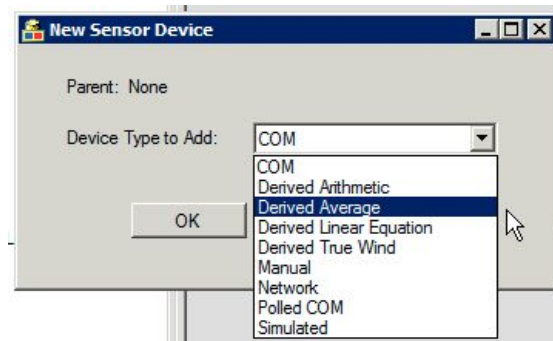


Setting up Sensor Configuration File (Steps):

- From the main SCS Menu, select:
Acquisition → *Data Acquisition* → *Sensor Config Edit (Database)*
- Right-click the ship name and click *Insert Sensor Device*



- Pick the appropriate *Derived* device type
(*Derived Average* in this case)



Setting up Sensor Configuration File (Steps):

- Give the sensor device a name, remembering to start with SAMOS- (right)

Sensor Device

Device Type: Device Order: Enabled

Name:

Comment:

Installation

Install Date:

Install To:

Average Type: By Interval By No. of Samples

Average Interval (s): Number of Samples:



Setting up Sensor Configuration File (Steps):

- Give the sensor device a name, remembering to start with SAMOS- (right)
- Select the Average Type (right)
 - Polar - Used for sensors whose output is in the range of 0 to 360, such as gyros and COG, and Wind Direction
 - Arithmetic - Used for all other sensors

Sensor Device

Device Type: Device Order: Enabled

Name:

Comment:

Installation

Install Date:

Install To:

Average Type: By Interval By No. of Samples

Average Interval (s): Number of Samples:



Setting up Sensor Configuration File (Steps):

- Give the sensor device a name, remembering to start with SAMOS- (*right*)
- Select the Average Type (*right*)
 - Polar - Used for sensors whose output is in the range of 0 to 360, such as gyros and COG, and Wind Direction
 - Arithmetic - Used for all other sensors
- Fill in the Average Interval(s) (in minutes) (*right*)

Sensor Device

Device Type: Device Order: Enabled

Name:

Comment:

Installation

Install Date:

Install To:

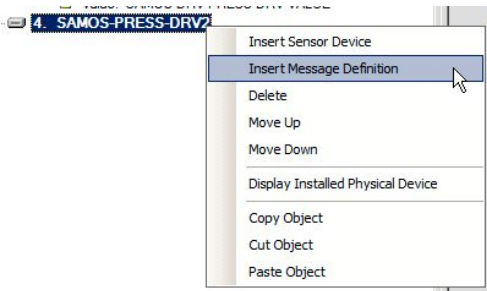
Average Type: By Interval By No. of Samples

Average Interval (s): Number of Samples:



Setting up Sensor Configuration File (Steps):

- Give the sensor device a name, remembering to start with SAMOS- (*right*)
- Select the Average Type (*right*)
 - Polar - Used for sensors whose output is in the range of 0 to 360, such as gyros and COG, and Wind Direction
 - Arithmetic - Used for all other sensors
- Fill in the Average Interval(s) (in minutes) (*right*)
- Right-click the new Sensor Device and select *Insert Message Definition* (*below*)



A screenshot of the 'Sensor Device' configuration window. The 'Name' field is set to 'SAMOS-PRESS-DRV', the 'Average Type' is set to 'Arithmetic', and the 'Average Interval (s)' is set to '1'. The 'Device Type' is 'Derived Average', 'Device Order' is '4', and the device is 'Enabled'. The 'Installation' section shows 'Install Date' and 'Install To' fields, with a 'History' button. The 'Average Type' dropdown is set to 'Arithmetic', and the 'By Interval' radio button is selected. The 'Number of Samples' field is empty.



Setting up Sensor Configuration File (Steps):

- Give the *Message Definition* a name, remembering to start with SAMOS-

Message Definition

Message Type:

Name:

Comment:

Logging Rate:

Log Sub Folder:

Termination Char:

Timeout (sec):

Delimiters:

Name	ASCII	Multiple Occurrence
Comma	44	False

Sentence Label:

Base Data Field Def:

Average Type: Average Interval: Number of Samples:



Setting up Sensor Configuration File (Steps):

- Give the *Message Definition* a name, remembering to start with SAMOS-
- Set the *Logging Rate* and *Timeout* to 60 (sec)

The screenshot shows the 'Message Definition' configuration window. The following fields are highlighted with red boxes:

- Name:** SAMOS-PRESS
- Logging Rate:** 60
- Log Sub Folder:** SAMOS
- Timeout (sec):** 60
- Sentence Label:** \$WIXDR
- Base Data Field Def:** WXT-510-PRESS

Other visible fields include:

- Message Type:** Derived Average
- Termination Char:** ASCII 10 (LF)
- Average Type:** Arithmetic
- Average Interval:** 1
- Number of Samples:** (empty)

Delimiters:			
Name	ASCII	Multiple Occurrence	
Comma	44	False	

Buttons: Add, Remove



Setting up Sensor Configuration File (Steps):

- Give the *Message Definition* a name, remembering to start with SAMOS-
- Set the *Logging Rate* and *Timeout* to 60 (sec)
- Set the *Log Sub Folder* to SAMOS

The screenshot shows the 'Message Definition' configuration window. The following fields are highlighted with red boxes:

- Name:** SAMOS-PRESS
- Logging Rate:** 60
- Log Sub Folder:** SAMOS
- Timeout (sec):** 60
- Sentence Label:** \$WIXDR
- Base Data Field Def:** WXT-510-PRESS

Other visible settings include:

- Message Type:** Derived Average
- Termination Char:** ASCII 10 (LF)
- Average Type:** Arithmetic
- Average Interval:** 1
- Number of Samples:** (empty field)

Name	ASCII	Multiple Occurrence
Comma	44	False



Setting up Sensor Configuration File (Steps):

- Give the *Message Definition* a name, remembering to start with SAMOS-
- Set the *Logging Rate* and *Timeout* to 60 (sec)
- Set the *Log Sub Folder* to SAMOS
- Select the *Base Data Field Def* that you are pulling your derived value from

The screenshot shows the 'Message Definition' configuration window. The following fields are highlighted with red boxes:

- Name:** SAMOS-PRESS
- Logging Rate:** 60
- Log Sub Folder:** SAMOS
- Timeout (sec):** 60
- Sentence Label:** \$WIXDR
- Base Data Field Def:** WXT-510-PRESS

Other visible fields include:

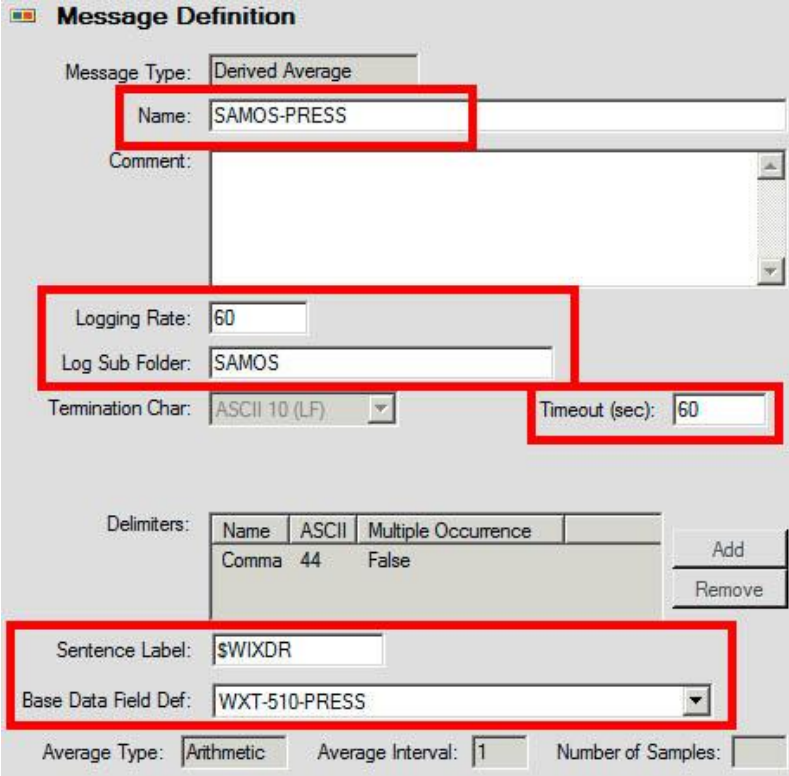
- Message Type:** Derived Average
- Termination Char:** ASCII 10 (LF)
- Average Type:** Arithmetic
- Average Interval:** 1
- Number of Samples:** (empty)

Name	ASCII	Multiple Occurrence
Comma	44	False



Setting up Sensor Configuration File (Steps):

- Give the *Message Definition* a name, remembering to start with SAMOS-
- Set the *Logging Rate* and *Timeout* to 60 (sec)
- Set the *Log Sub Folder* to SAMOS
- Select the *Base Data Field Def* that you are pulling your derived value from
- Use the same *Sentence Label* as the base field



The screenshot shows the 'Message Definition' configuration window. The following fields are highlighted with red boxes:

- Name:** SAMOS-PRESS
- Logging Rate:** 60
- Log Sub Folder:** SAMOS
- Timeout (sec):** 60
- Sentence Label:** \$WIXDR
- Base Data Field Def:** WXT-510-PRESS

Other visible fields include:

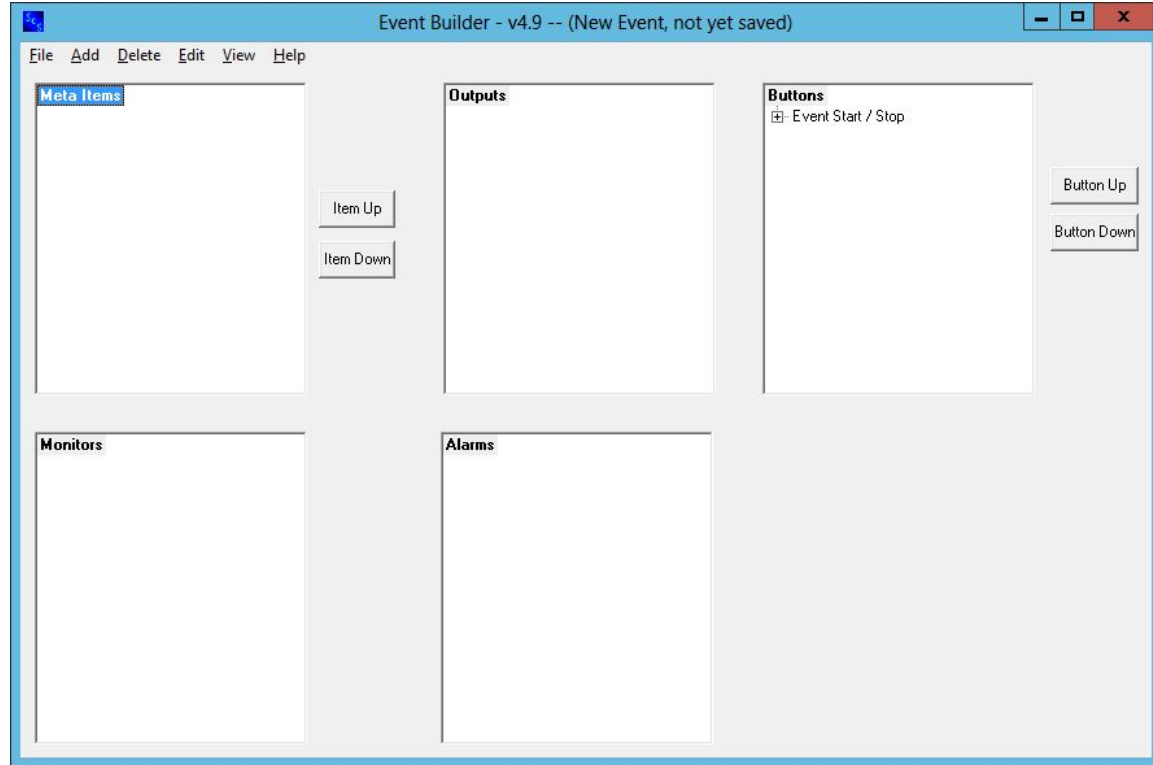
- Message Type:** Derived Average
- Termination Char:** ASCII 10 (LF)
- Average Type:** Arithmetic
- Average Interval:** 1
- Number of Samples:** (empty)

Name	ASCII	Multiple Occurrence
Comma	44	False



Setting up SAMOS Event Logger Template File:

- From the main SCS Menu, select:
Acquisition → *Events* →
Event Builder Classic

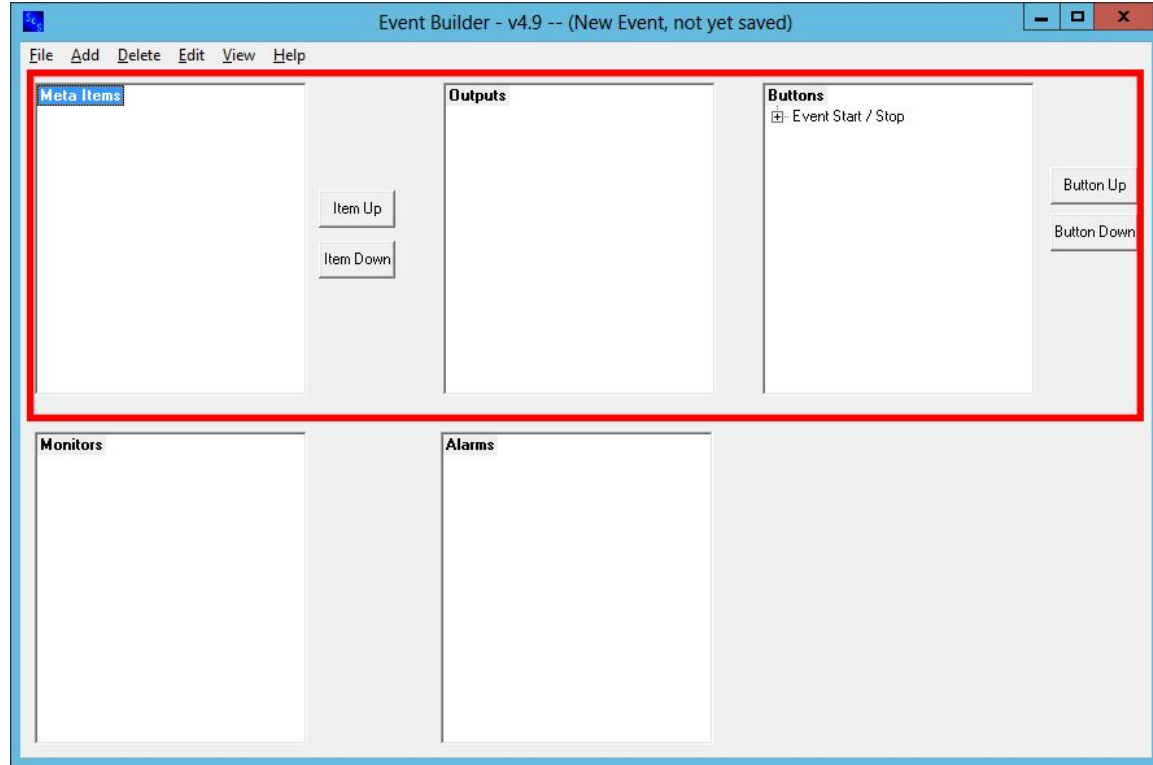


See: Page 121-132, Section 4.3, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File:

- From the main SCS Menu, select:
Acquisition → *Events* →
Event Builder Classic
- For the SAMOS Event, we are mainly concerned with the three boxes on the top of the window, *Meta Items*, *Outputs*, & *Buttons*

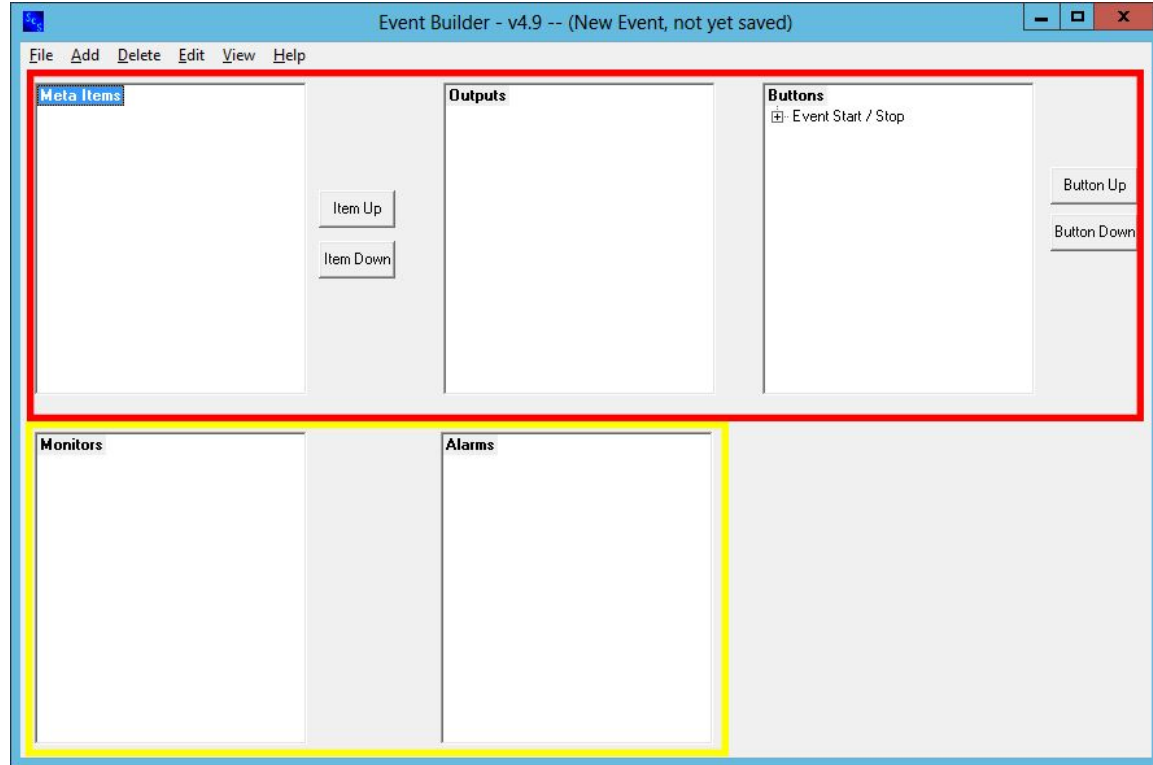


See: Page 121-132, Section 4.3, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File:

- From the main SCS Menu, select:
Acquisition → *Events* →
Event Builder Classic
- For the SAMOS Event, we are mainly concerned with the three boxes on the top of the window, *Meta Items*, *Outputs*, & *Buttons*
- You can set *Monitors* and *Alarms* to warn you of things going on if you want, but they are not needed

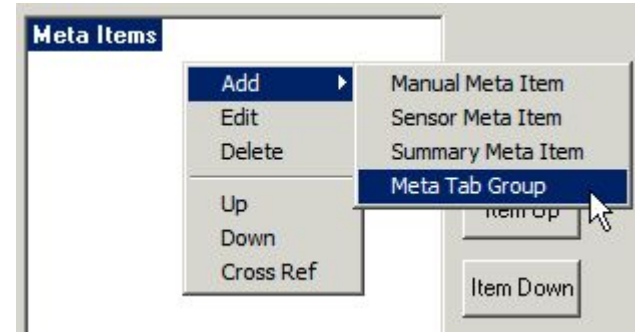


See: Page 121-132, Section 4.3, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File:

- From the main SCS Menu, select:
Acquisition → *Events* → *Event Builder Classic*
- *Meta Items*
 - Right-click *Meta Items*, then *Add* → *Meta Tab Group* (right, top)

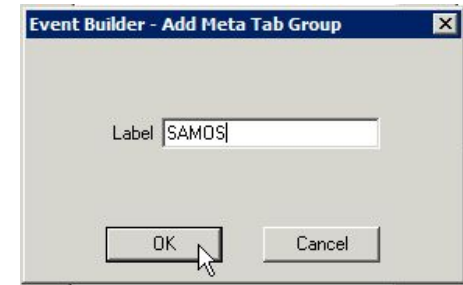
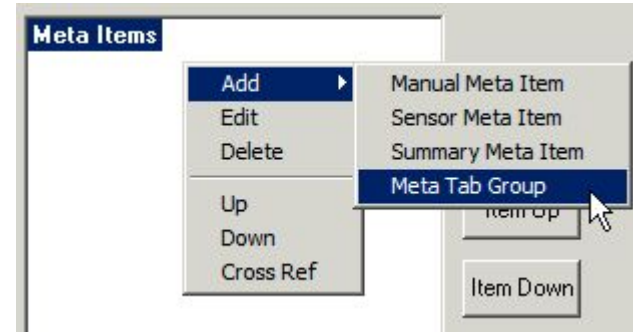


See: Page 121-132, Section 4.3, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File:

- From the main SCS Menu, select:
Acquisition → *Events* → *Event Builder Classic*
- *Meta Items*
 - Right-click *Meta Items*, then *Add* → *Meta Tab Group* (*right, top*)
 - Label the *Meta Tab Group* (*right, bottom*)

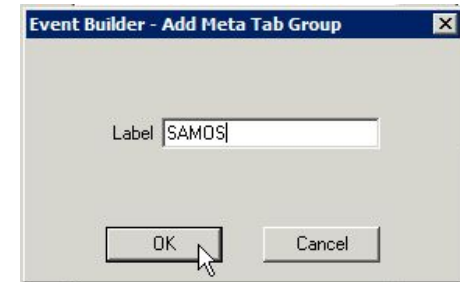
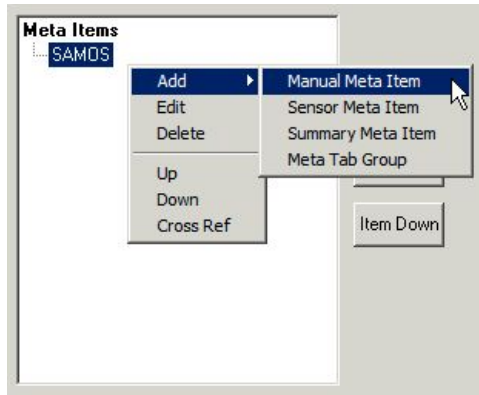
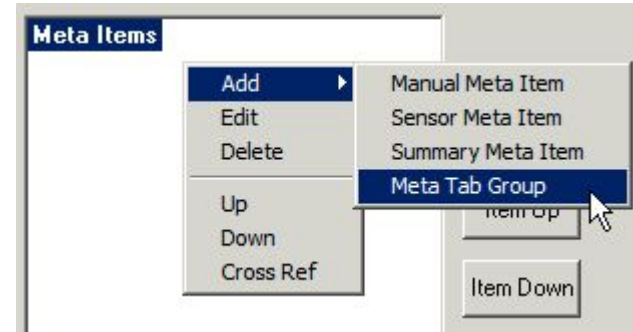


See: Page 121-132, Section 4.3, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File:

- From the main SCS Menu, select:
Acquisition → *Events* → *Event Builder Classic*
- *Meta Items*
 - Right-click *Meta Items*, then *Add* → *Meta Tab Group* (right, top)
 - Label the *Meta Tab Group* (right, bottom)
 - To add your ship's call sign, right-click the *Meta Tab Group* and choose *Add* → *Manual Meta Item* (below)

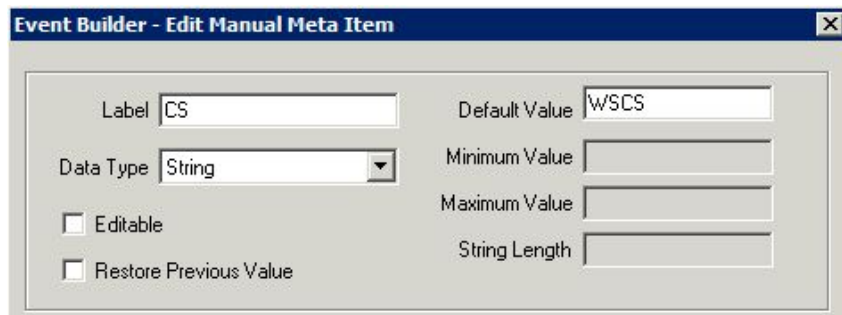


See: Page 121-132, Section 4.3, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File: (cont'd)

- On the *Manual Meta Item* pop-up, enter: (below)
 - “CS” (call sign) for the *Label*
 - *String* for the *Data Type*
 - Your ship’s call sign for the *Default Value*



The screenshot shows a dialog box titled "Event Builder - Edit Manual Meta Item". It contains the following fields and options:

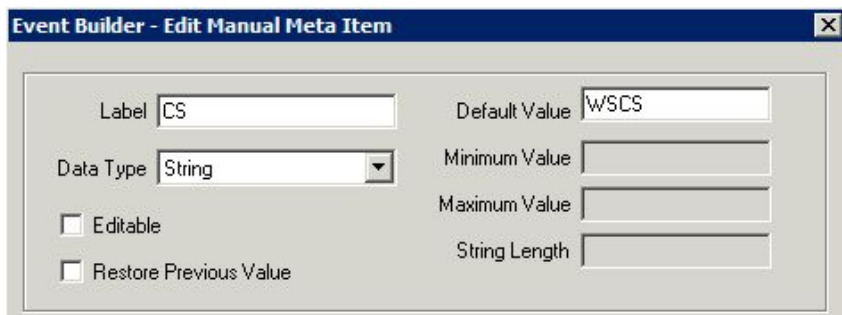
- Label:** Text input field containing "CS".
- Data Type:** Dropdown menu set to "String".
- Default Value:** Text input field containing "WSCS".
- Minimum Value:** Empty text input field.
- Maximum Value:** Empty text input field.
- String Length:** Empty text input field.
- Editable:** Unchecked checkbox.
- Restore Previous Value:** Unchecked checkbox.

See: Page 121-132, Section 4.3, *SCS User's Guide (v4.9)* for more info



Setting up SAMOS Event Logger Template File: (cont'd)

- On the *Manual Meta Item* pop-up, enter: (below)
 - “CS” (call sign) for the *Label*
 - *String* for the *Data Type*
 - Your ship’s call sign for the *Default Value*



Event Builder - Edit Manual Meta Item

Label: CS Default Value: WSCS

Data Type: String

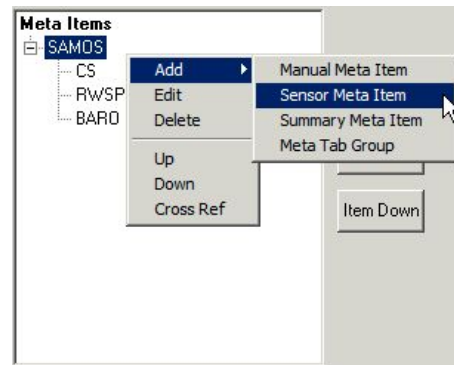
Editable

Restore Previous Value

Minimum Value: _____

Maximum Value: _____

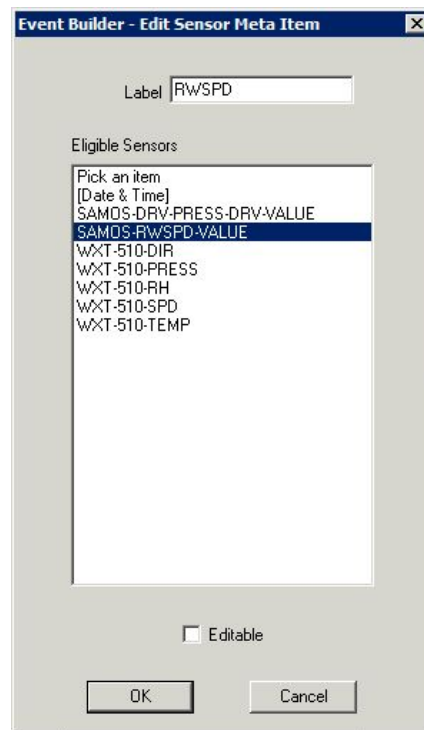
String Length: _____



- Next, you will add your SAMOS derived sensors
 - Right-click the Meta Tab Group and select *Add* → *Sensor Meta Item* (right)

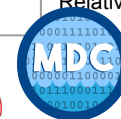
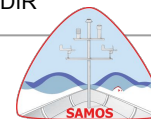
Setting up SAMOS Event Logger Template File: (cont'd)

- Select one of the SAMOS derived sensors from the list (*near right*)
- For the *Label*, refer to page 330 of the v4.9 SCS User's Guide for the full suggested designator list (*far right*)
- Repeat the process until all SAMOS derived sensors have been added to the *Meta Items* section



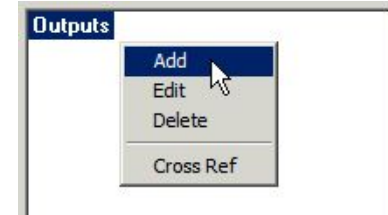
Designators	Data Type
CS	Ship's Call Sign
LAT	Latitude
LON	Longitude
GYRO	Ship Heading
SOG	Speed Over Ground
COG	Course Over Ground
ATEMP	Air Temperature
BARO	Barometric Pressure
RELH	Relative Humidity
RWSPD	Relative Wind Speed
RWDIR	Relative Wind Direction

See: Page 330, Section 12.2, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File: (*cont'd*)

- Right-click on the *Outputs* heading and click *Add* (*right, top*)

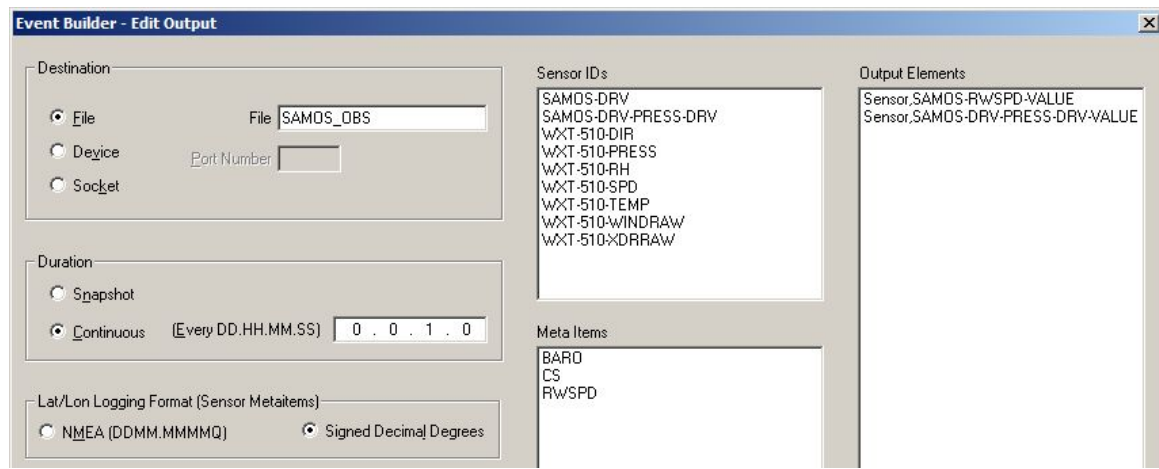
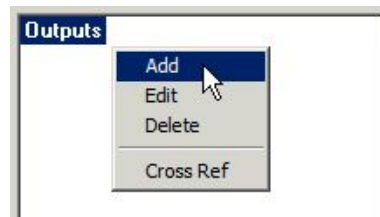


See: Page 331, Section 12.4, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File: (cont'd)

- Right-click on the *Outputs* heading and click *Add* (right, top)
- You must define a continuous output as follows: (right, bottom)
 - *Destination/File* is SAMOS_OBS
 - *Duration* type is continuous
 - Log rate is 1 minute
 - For *Lat/Lon Logging Format* select the *Signed Decimal Degrees* radio button
 - The list of selected *Output Elements* should consist of all SAMOS derived average sensors from the *Sensor ID* window



See: Page 331, Section 12.4, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File: (cont'd)

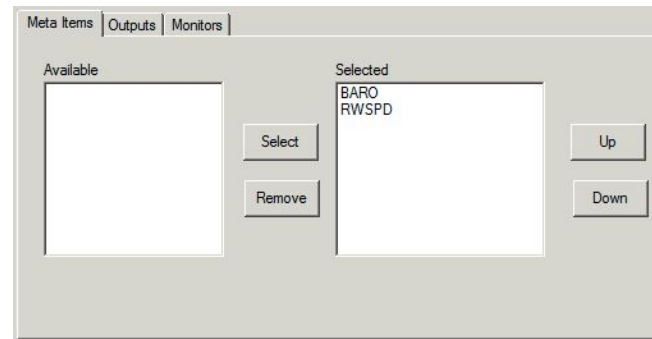
- Under the *Buttons* section, there should already be a *Button Group* labeled *Event Start / Stop* and a button for *Start Event* and *Stop Event*

See: Page 331, Section 12.4, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File: (*cont'd*)

- Under the *Buttons* section, there should already be a *Button Group* labeled *Event Start / Stop* and a button for *Start Event* and *Stop Event*
- Double-click the *Start Event* button
 - Under the *Meta Items* tab, add the SAMOS Derived Meta Items created earlier (*right, top*)

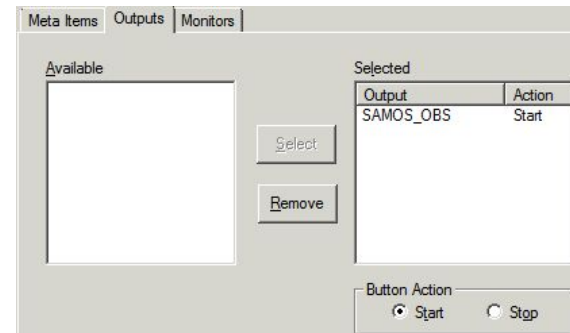
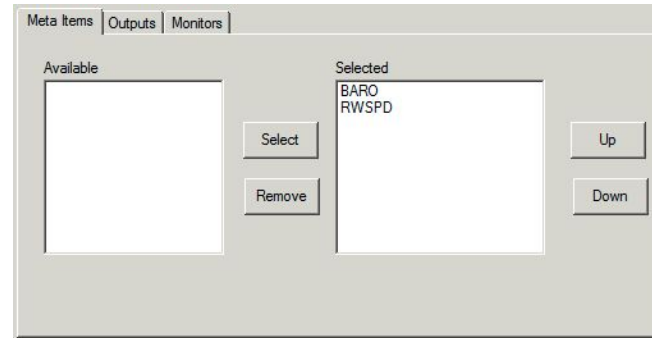


See: Page 331, Section 12.4, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File: (cont'd)

- Under the *Buttons* section, there should already be a *Button Group* labeled *Event Start / Stop* and a button for *Start Event* and *Stop Event*
- Double-click the *Start Event* button
 - Under the *Meta Items* tab, add the SAMOS Derived Meta Items created earlier (*right, top*)
 - Under the *Outputs* tab, add the *SAMOS_OBS* output created earlier (*right, bottom*)
 - For the *Button Action*, select the *Start* radio button (*right, bottom*)

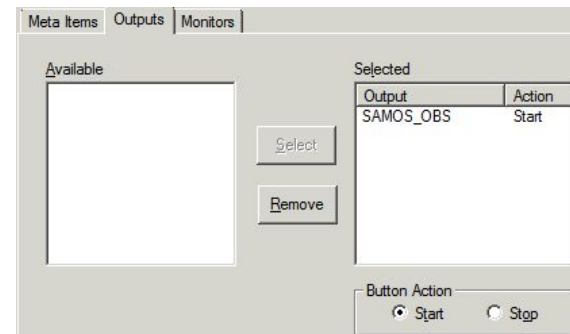
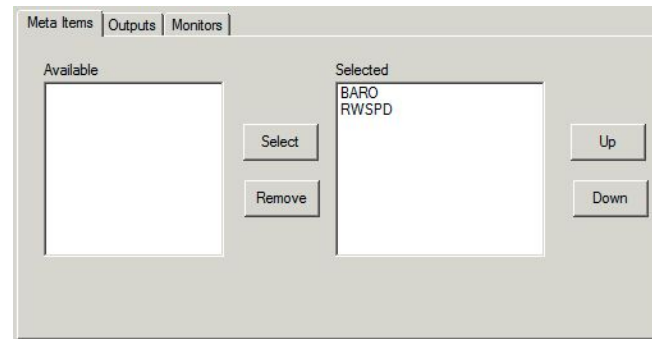


See: Page 331, Section 12.4, SCS User's Guide (v4.9) for more info



Setting up SAMOS Event Logger Template File: (cont'd)

- Under the *Buttons* section, there should already be a *Button Group* labeled *Event Start / Stop* and a button for *Start Event* and *Stop Event*
- Double-click the *Start Event* button
 - Under the *Meta Items* tab, add the SAMOS Derived Meta Items created earlier (*right, top*)
 - Under the *Outputs* tab, add the *SAMOS_OBS* output created earlier (*right, bottom*)
 - For the *Button Action*, select the *Start* radio button (*right, bottom*)
- Double-click the *Stop Event* button
 - Follow the same steps above, adding the previously created SAMOS Derived Meta Items under the *Meta Items* tab
 - Under the *Outputs* tab, add the *SAMOS_OBS* output and select *Stop* for *Button Action*
- Make sure to save the *Event Template* as *SAMOS.tpl*



See: Page 331, Section 12.4, SCS User's Guide (v4.9) for more info



Setting up SAMOS Mailer Configuration Values:

The following values required to send email are entered on the Email Account tab

From the main SCS Menu, select:

Utilities → *SAMOS Mailer* → *Email Account* tab (right)

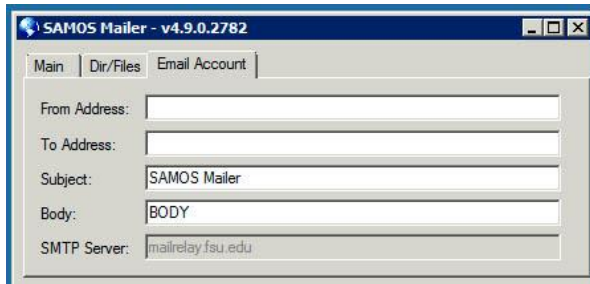
From Address

To Address (samoss_data@coaps.fsu.edu)

Subject (preferably include call sign and date)

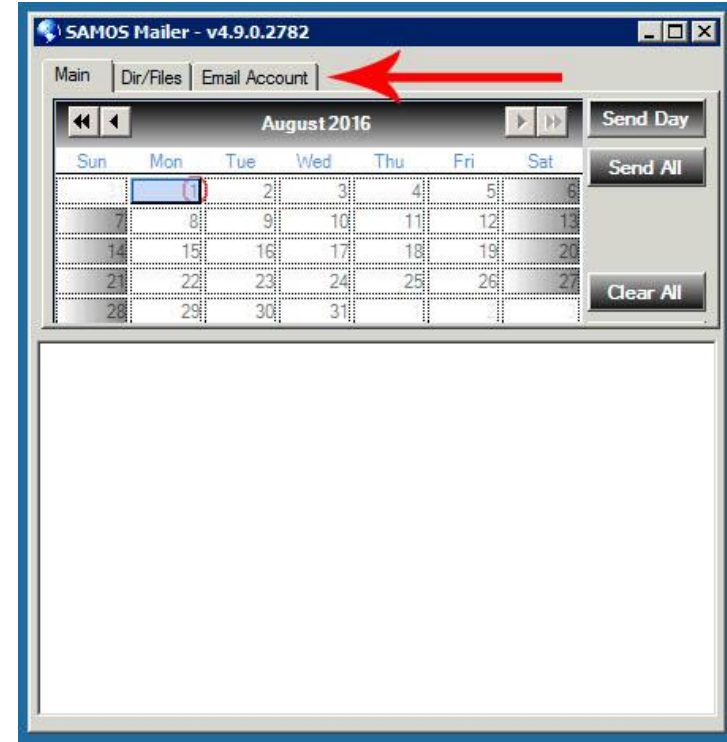
Body (preferably blank)

SMTP Server (filled from SCS Configuration File)



The screenshot shows the 'Email Account' tab in the SAMOS Mailer application. The fields are filled with the following information:

From Address:	
To Address:	
Subject:	SAMOS Mailer
Body:	BODY
SMTP Server:	mailrelay.fsu.edu



See: Page 278, Section 9.4.7.4, SCS User's Guide (v4.9) for more info



Running the SAMOS Event Logger:

- From the main SCS Menu, select:
Acquisition → *Events* → *Event Logger Classic*

See: Page 276, Section 9.4.5, SCS User's Guide (v4.9) for more info



Running the SAMOS Event Logger:

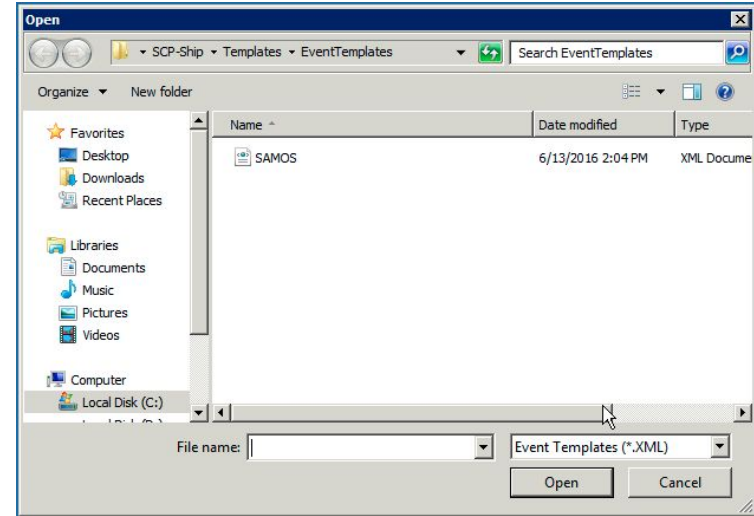
- From the main SCS Menu, select:
Acquisition → *Events* → *Event Logger Classic*
- The Open dialog box should open in the right location. If not, navigate to:
{Drive}:\SCSServer{version}\SHIP40\SCP-Ship\Templates\EventTemplates

See: Page 276, Section 9.4.5, SCS User's Guide (v4.9) for more info



Running the SAMOS Event Logger:

- From the main SCS Menu, select:
Acquisition → *Events* → *Event Logger Classic*
- The Open dialog box should open in the right location. If not, navigate to:
{Drive}:\SCSServer{version}\SHIP40\SCP-Ship\Templates\EventTemplates
- Select the SAMOS.tpl *Event Template* and click *Open* (right)

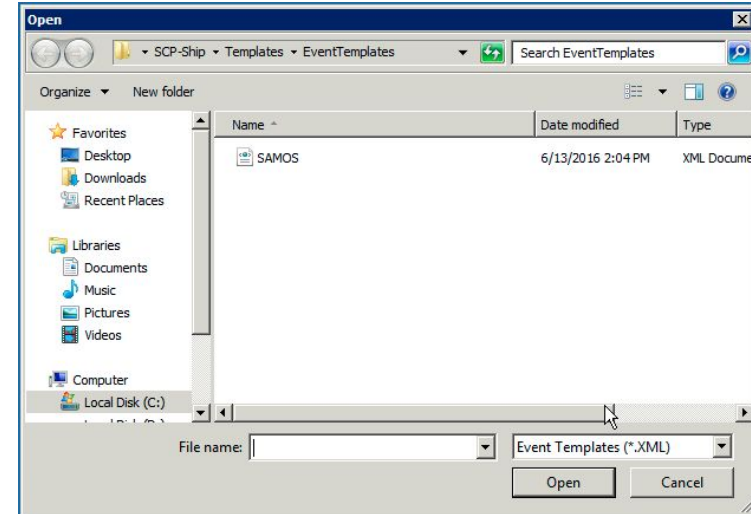


See: Page 276, Section 9.4.5, SCS User's Guide (v4.9) for more info



Running the SAMOS Event Logger:

- From the main SCS Menu, select:
Acquisition → *Events* → *Event Logger Classic*
- The Open dialog box should open in the right location. If not, navigate to:
{Drive}:\SCSServer{version}\SHIP40\SCP-Ship\Templates\EventTemplates
- Select the SAMOS.tpl *Event Template* and click *Open* (right)
- On the left side of the *Event Logger*, click *Start Event* button to start the SAMOS Event.

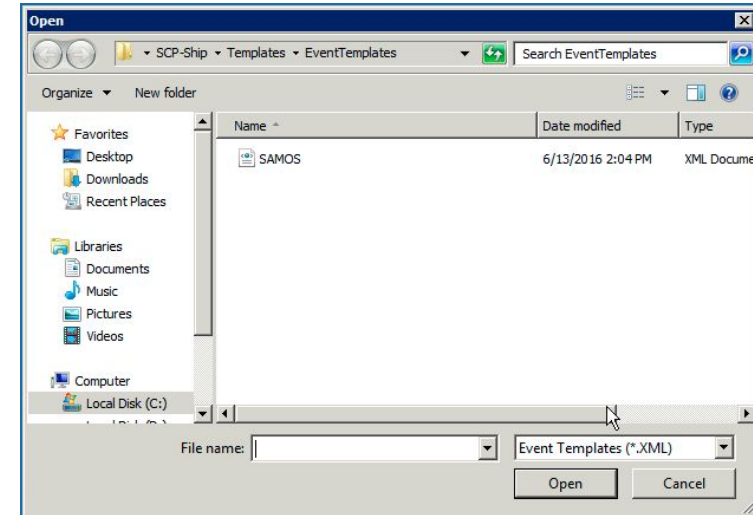


See: Page 276, Section 9.4.5, SCS User's Guide (v4.9) for more info



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{Drive}:\SCSServer{version}\SHIP40\SCP-Ship\Templates\EventTemplates
- Select the SAMOS.tpl *Event Template* and click *Open* (right)
- On the left side of the *Event Logger*, click *Start Event* button to start the SAMOS Event.



****NOTE: This SAMOS Event should stay running the entire time Data Acquisition is running, except in the case that the ship is doing classified research, or as otherwise instructed by Chief Officer.****

See: Page 276, Section 9.4.5, SCS User's Guide (v4.9) for more info



Running the SAMOS Mailer:

- Once the SAMOS Event is running, from the main SCS Menu, select:
Utilities → *SAMOS Mailer*



Running the SAMOS Mailer:

- Once the SAMOS Event is running, from the main SCS Menu, select: *Utilities* → *SAMOS Mailer*
- The calendar displays the current month with a red circle around the current day
 - All prior dates in which data was sent are set to green (*right*)
 - If a date was missed, it is marked red (*right*)



Running the SAMOS Mailer:

- Once the SAMOS Event is running, from the main SCS Menu, select:
Utilities → *SAMOS Mailer*

- The calendar displays the current month with a red circle around the current day
 - All prior dates in which data was sent are set to green (*right*)
 - If a date was missed, it is marked red (*right*)

- **Buttons**

- Send Day - sends data for the currently selected date on the calendar
- Send All - sends ALL available data in [Event Data/SAMOS] to the designated email address. Do not use this option if some of the data has already been sent. Only send the days that SAMOS has not received.
- Clear All - deletes/clears all data for the SAMOS event



Running the SAMOS Mailer:

- Once the SAMOS Event is running, from the main SCS Menu, select:
Utilities → *SAMOS Mailer*
- The calendar displays the current month with a red circle around the current day
 - All prior dates in which data was sent are set to green (*right*)
 - If a date was missed, it is marked red (*right*)
- Buttons
 - Send Day - sends data for the currently selected date on the calendar
 - Send All - sends ALL available data in [Event Data/SAMOS] to the designated email address. Do not use this option if some of the data has already been sent. Only send the days that SAMOS has not received.
 - Clear All - deletes/clears all data for the SAMOS event
- Status Icon/System Tray
 - Since the software should run continuously, the SAMOS Mailer resides mainly in the System Tray. If the globe is blue (*below*), then all is well, however, if the globe is red (*below*), then a problem was encountered within the last 24 hours.



Transforming Raw ELG Data to SAMOS Format

<https://docs.google.com/presentation/d/1P4P3RIEGkUYt5TcY8Ba-tWaLGRC8MqQ8T3X2R1h6hsU>

The screenshot displays a software application window with a file explorer on the left, a central data table, and a command window on the right. The data table contains the following columns: Date, Time, SAMOS-PROB-VALUE, SAMOS-PROB-VAL, SAMOS-PROB-VAL, and SAMOS-PROB-VAL. The command window shows the following output:

```
1 Date, Time SAMOS-PROB-VALUE SAMOS-PROB-VAL SAMOS-PROB-VAL SAMOS-PROB-VAL
2 00/00/2000,18:24:50,1807.4,50,3,6,1
3 00/00/2000,18:25:50,1807.4,50,3,6,1
4 00/00/2000,18:26:50,1807.4,50,3,6,1
5 00/00/2000,18:27:50,1807.4,50,3,6,1
6 00/00/2000,18:28:50,1807.4,50,3,6,1
7 00/00/2000,18:29:50,1807.4,50,4,6,1
8 00/00/2000,18:30:50,1807.4,50,4,6,1
9 00/00/2000,18:31:50,1807.4,50,4,6,1
10 00/00/2000,18:32:50,1807.4,50,5,6,2
11 00/00/2000,18:33:50,1807.4,50,4,6,1
12 00/00/2000,18:34:50,1807.4,50,4,6,1
13 00/00/2000,18:35:50,1807.4,50,4,6,1
14 00/00/2000,18:36:50,1807.4,50,4,6,1
15 00/00/2000,18:37:50,1807.4,50,4,6,1
16 00/00/2000,18:38:50,1807.4,50,4,6,1
17 00/00/2000,18:39:50,1807.4,50,4,6,1
18 00/00/2000,18:40:50,1807.4,50,6,6,1
19 00/00/2000,18:41:50,1807.4,50,6,6,1
20 00/00/2000,18:42:50,1807.4,50,7,6,1
21 00/00/2000,18:43:50,1807.4,50,7,6,1
22 00/00/2000,18:44:50,1807.4,50,7,6,1
23 00/00/2000,18:45:50,1807.4,50,7,6,1
24 00/00/2000,18:46:50,1807.4,50,6,6,1
25 00/00/2000,18:47:50,1807.4,50,6,6,1
26 00/00/2000,18:48:50,1807.4,50,5,6,1
27 00/00/2000,18:49:50,1807.4,50,5,6,1
28 00/00/2000,18:50:50,1807.4,50,5,6,1
29 00/00/2000,18:51:50,1807.4,50,4,6,1
30 00/00/2000,18:52:50,1807.4,50,4,6,99
```



Maintaining SAMOS Metadata:

Initial Vessel Setup requires name, call sign, date of recruitment, and the time format (one string w/YYYYMMDDhhmmss or 2 strings, YYYYMMDD and HMS). The designator(s) for time must be input upon initial vessel setup in DB.

Also file format (SAMOS001, JGOFS, etc...)

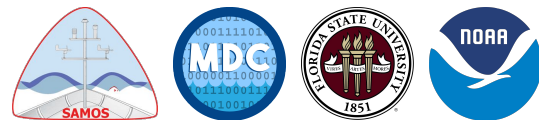
Finally, we need to know the email address the data will be sent from.

Vessel: Name Call Sign Date of Recruitment Primary Contact Email *Operating Institution* *IMO#* **Institution Address** **Contact Phone Number**	Instrument: Variable Name Designator Original Units Date Metadata Valid - begin **Winds need direction convention met/oceanographic** **TS needs TS sensor type** **RAD needs RAD direction upwelling or downwelling** **RWDIR needs 0 line reference**
---	--



METADATA

* = Can get away without, but quite important
** = Can get away without, though leaves us to make assumptions. Best to have during setup.



Have Problems or Need Tech Questions Answered?

SAMOS Technical Staff

samos@coaps.fsu.edu

SAMOS technical staff can be reached directly at the email address above.

