

Definition of Terms

Address Book – This stores the name and contact details of persons who can be alerted by RWME when conditions warrant. It is also a repository of command lines and alert groups for automated alerting.

Alerts – These are generated by breach conditions or device errors when previously setup by the user. If an alert is not setup, users will still see the monitor list item change color and its status text change from Normal to Breach of Limit or a Device Error. Alerting methods include email, SMS and command line execution.

Boolean – This describes a type of variable in a node/item which has only two opposing states (i.e. ON/OFF, OPEN/CLOSED, WET/DRY).

Breach conditions vs. Device errors – Breach conditions relate to troubled variables of the monitored item/node. Device errors apply to Sensorsoft devices that are in trouble.

BREACH OF BOOLEAN LIMIT – This is a breach condition where the node/item variable is reading a specific Boolean state (i.e. DOWN, PWR_FAIL) that has been designated as undesired or actionable. This condition can be setup by a user to generate alerts.

BREACH OF CRITICAL LIMIT – This is a breach condition where the Sensorsoft device variable is reading a scalar value that is above a set CRITICAL limit and has been designated as undesired or actionable. This condition can be setup by a user to generate alerts.

BREACH OF WARNING LIMIT – This is a breach condition where the Sensorsoft device variable is reading a scalar value that is above a set WARNING limit and has been designated as undesired or actionable. This condition can be setup by a user to generate alerts.

COMM Corrupted – This is a device error where the RWME software detected corrupted packet communications from the Sensorsoft device. This can include missing bytes in response packet, bad response byte returned or CRC checksum errors. This error can be setup by a user to generate alerts.

Device Model Changed – This is a device error where the RWME software detected that the Sensorsoft device Model changed. The device was swapped with different model that may be incompatible with the original model or its alerting profile. This error can be setup by a user to generate alerts.

Dollar (\$) Variables – These are placeholders used in alerting messages that will be replaced with data at the time of sending the alert. Typical dollar variables are \$R for Last Successful Reading and \$T for current date and time. Dollar variables are used in Settings->Alert Message Definitions and Command Line alerts.

DTMF – Dual Tone Multi-Frequency. This is the technical terminology for Touch Tone™. This is used by RWME to send alert messages to numeric only pagers using a dial-up modem.

EEPROM Failure – This is a device error where the Sensorsoft device is reporting a problem reading its non-volatile memory. This error can be setup by a user to generate alerts.

Groups – RWME uses two types of groups; monitor and alert groups. A **monitor group** allows monitored nodes/items to be organized together by their physical location or class type. A monitor group can be selected using the Viewing Monitor Group link on the monitor list (upper right corner). An **alert group** allows a number of alerting methods to be tied together for the purpose of joint alerting. Alert Groups are located in the Address Book.

GSM – Global System for Mobile communications. This is a world wide standard for many cellular phones. RWME supports GSM compatible modems for sending SMS text messages to mobile devices.

OFFLINE – This is a device error where the RWME software cannot open a TCP network connection to the Sensorsoft device, or the connection was interrupted. This error can be setup by a user to generate alerts.

Polled vs. Real-time – These terms describe types of Sensorsoft devices. Polled devices are those that are read at specific or regular intervals and use a momentary network connection. Real-time devices emit messages when something in the device changes and they use a continuous network connection.

POWER UP – A Sensorsoft device reports this event each time it powers up. A high count likely indicates that the SSD is being un-powered between measurement intervals. This event is counted but cannot generate alerts.

RWME – Remote WatchMan Enterprise software.

Scalar – A type of variable with readings that cover a range of numbers or values (i.e. 0-100, -40 to +125). Most scalar variables will have a unit of measure (i.e. C, F, %RH).

SCM – Service Control Manager, as provided by Microsoft in its various operating systems. It can be used to start and stop the RWME service.

SGT – Sensorsoft Graphing Tool, the software used by RWME to graph log data. SGT is a signed Java Web Start app.

SMS – Short Message Service, a method used by RWME to send short text messages to mobile or cellular devices.

SMTP – Simple Mail Transport Protocol, the protocol is used by RWME to send alert emails to a mail server.

SSD – SensorSoft Device, a sensor or actuator based on the Sensorsoft Device Protocol (SSDP). We may also refer to it as a device or sensor.

SSDP – SensorSoft Device Protocol, the protocol used by RWME to communicate with Sensorsoft devices.

TAMPER – This is a device error where the Sensorsoft device is reporting that its sensor element has been damaged or tampered with or its enclosure has been opened. This error can be setup by a user to generate alerts.

TAP – Telocator Alpha-Paging Protocol, the protocol used by RWME to send alphanumeric messages to mobile or cellular devices using a dial-up modem.

TCP/IP – Transmission Control Protocol with Internet Protocol. This is the protocol used in virtually all local area networks and the Internet. RWME uses TCP to communicate with devices, servers and cameras. We do not currently use UDP or SNMP.

TCP Port – This is a number that is predefined by the node or item being connected to. It is required information to connect to any node.

TIMEOUT – This is a device error where the RWME software cannot get a response from the Sensorsoft device (SSD) after sending a command or request. There are several possible causes of this error. The most common is that the SSD cable has become disconnected from the serial port of the device server. This error can be setup by a user to generate alerts.

Update Interval – Time in minutes between readings. When a dash is shown instead of a number in the Monitor List, this indicates a device that is updated in real-time instead of being polled.

HTTP – HyperText Transfer Protocol. This is used by the RWME web server and the web browsers that connect to it.

Item or Node – This generic term describes something being monitored by the RWME software on the network. It could be a Sensorsoft device, TCP server or network camera.

LOW SUPPLY VOLTAGE – This is a device error condition where the Sensorsoft device is reporting that it has a low power supply voltage. This error can be setup by a user to generate alerts.

Variable – An item/node is organized into variables. Each variable has a reading (i.e. 20.0), a name (i.e. TEMP_C), index number (i.e. 1) and in some cases a unit of measure (i.e. C, Celsius). Some device variables can have a user defined description (i.e. SS6420).

XML – Extensible Markup Language, used by RWME to exchange monitor list data with other IT applications. Click the View XML link on the monitor list or refer to the RWME User's Manual.

Monitoring Basics

RWME software can monitor the following types of items or nodes:

- Sensorsoft device (sensor, relay)
- Network Camera (Axis, Canon)
- TCP Server Port (http, smtp, pop, etc.)
- Sensorsoft Alert Network Appliance

To monitor an item or node you need, in most cases, two things;

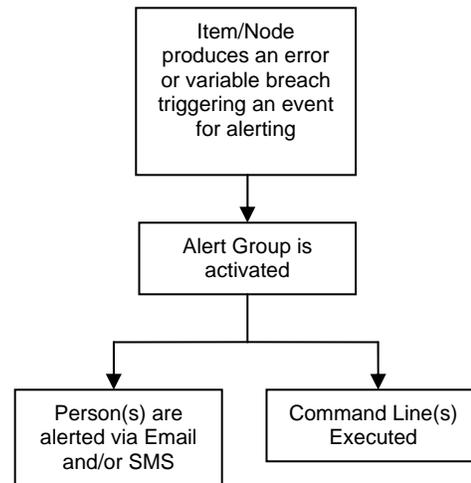
- IP address or host name
- TCP port number

Setting up a monitored item or node;

1. Click Settings->Add a new Item/Node to monitor list.
2. Select the type of Item/Node and click [Next].
3. Type in the IP address or host name, TCP port number and your personal description.
4. Click [Save].
5. Click the Monitor List to see the new Item/Node being monitored.

Alerting Basics

Alerts are issued through alert groups and not directly to a person or command line. This is the RWME flow of alerting action:



Using Dollar Variables in Alert Messages

When setting up alert messages, you can use dollar (\$) variables to enhance your messages. RWME supports the following dollar variables:

\$A	Type of alert (i.e. WARNING, CRITICAL, OFFLINE, etc...).
\$C	Comments.
\$D	Item/Node Description.
\$L	Location.
\$N	Inserts a new line <CR><LF> in the text.
\$P	Host:Port (i.e. 172.12.0.6:3001).
\$R	The value of the variable that is generating the alert.
\$T	Current date and time.
\$V	Name of the variable that is generating the alert.
\$X	Lists all variable names and values in the item/node.
\$Z	Custom description or variable suffix that is generating the alert (only supported by SS6420).

Dollar variables cannot be used in numeric (DTMF) alert messages because DTMF can only send numeric characters, '*' and '#'.

The dollar variables are used in Settings->Alert Message Definitions and in command lines.

Setup an Email Alert

These are the steps we recommend for setting up email alerts:

1. Setup the Email Alert (SMTP) Settings in Settings->Server Settings. Click the [Test SMTP Settings] button to verify settings work and administrator receives the test email.
2. Create at least one person in the Address Book to receive email alerts and do a test to verify that they can receive a test email from RWME.
3. In the Monitor List click the Description for the Item/Node which requires setup of an alert and click Modify this Item.
4. Click a checkbox for a variable or error that will trigger an alert and click the Alert Group drop-down box and select CREATE NEW GROUP.
5. When the Add New Alert Group form loads, complete the fields of this form and click [Save].
6. In the case of a variable set the Breach Limit to your desired state or level.
7. Finally click [Save] at bottom of modify page. Test this alert, by causing an error or variable breach selected in step 4. Verify you receive an alert email in the time requested.