

Configuring Alarm Emails From The Field Logger DL1080/DL1081 Using SMTP2GO As The Outgoing Server

This document describes how to setup a mail service in the cloud that can be easily accessed by the Field Loggers DL1080/DL1081. Due to the ever changing email requirements and protocols of different IT departments, SMTP is not always supported internally within these IT departments. The email interface in the DL1080/DL1081 needs an SMTP server for sending emails. This document will show you how to setup a free SMTP account with SMTP2GO and configure the Field Logger to communicate through that account.

■ Creating A Free SMTP2GO Account.

- 1) Go to SMTP2GO's website: <http://www.smtp2go.com> and sign up for a FREE account. This free account will allow up to 20 emails per day. If you require more than 20 emails per day, then sign up for one of their paid plans which will allow a higher email count per day.
- 2) During the registration process, you will be asked to create an email address and password. For this demonstration, I've chosen gb@aemc.com with a password of gbaemc2014.
- 3) Once signed up, SMTP2GO will assign a server name for your email account. There were 2 possibilities as of this writing, smtpcorp.com or smtp2go.com. The equivalent IP addresses assigned for these servers are **207.58.147.66** for **smtpcorp.com** or **207.58.142.213** for **smtp2go.com** .

- 4) **THIS IS A CRITICAL PORT CHECK!!** SMTP2GO works on ports 2525, 8025, 587 and 25. In almost all cases, using port 2525 will work, however some ISPs may block port 2525. To determine if a particular port is blocked from your location, please do the following Telnet steps in Windows.
 - 1) Windows 7/Vista users may need to install Telnet to perform the test below, as these operating systems do not come with Telnet pre-installed. To add Telnet in Windows 7/Vista, go to Control Panel -> Programs -> Turn Windows Features On or Off and check Telnet Client.
 - 2) Click "Start" button/orb, Enter "cmd" into the search box then press Enter to open a CMD window.
 - 3) In the new CMD window, enter "telnet smtpcorp.com 2525" (if your assigned server is smtpcorp.com)
 - 4) If port 2525 is available you should see "220 smtpcorp.com ESMTP Exim.....etc" appear at the top of the window after a few seconds. If this does not appear, then close the window and repeat the steps 2 and 3 above, using ports 8025, 587 and 25. For example, to test port 8025 enter "telnet smtpcorp.com 8025".
 - 5) Now make note of the SMTP port number that you have just determined is open and available.
 - 6) You should now know the server's IP and the available port for communication. In the following setup menus, we will use the server settings of server smtpcorp.com which is **IP: 207.58.147.66, Port: 2525**.

■ Field Logger DL1080/DL1081 - Software/Firmware - Check/Update

Ensure you are running the latest software and firmware for your logger. As of the writing of this, the latest is: Field Logger – Firmware version 1.5 – Logger Software version 1.5.2

Updated versions can be found here: <http://www.aemc.com/aemc-software/updates/dl-loggers.html> Instructions are included in the ZIP file for firmware upgrading.

Please validate that the logger is updated to the above versions at a minimum before proceeding with instructions below.

Once firmware and software are at the versions above, continue with the below configuration.

■ Field Logger DL1080/DL1081 – Configuration For SMTP Email Setup and Emailed Alarms

- 1) Connect to Logger through the Logger Software using a USB cable.
- 2) Connect an Ethernet cable into the Logger and to an active Ethernet jack to allow TCP/IP communications.
- 3) Click the green right arrow twice to get to the **Ethernet Interface** page.
- 4) On the **Ethernet Interface** page (screenshot below), ensure "Disable All" is unchecked. Once unchecked, the configuration options will appear.
- 5) Click the "TCP/IP" button
- 6) Set "IP Configuration" to the proper IP configuration settings for your local network. Please consult your IT dept for more information. In this case, we selected "Get IP automatically" (shown below). For static IPs, select "Use the following IP configuration" and fill out the IP Address, Sub-Network Mask and Standard Gateway information.

- 7) Set “**DNS Configuration**” to the proper configuration settings for your local network. Please consult your IT dept for more information. In this case, we selected “**Get DNS configuration automatically (DHCP)**”. To manually enter a DNS Server, select “**Use the following DNS configuration**” to enter the correct server.

The screenshot shows the 'Ethernet Interface' configuration page. On the left, under 'Services', there are buttons for 'TCP/IP', 'FTP', 'SMTP', 'SNMP', 'HTTP', and 'Modbus TCP'. The 'SMTP' button has a green checkmark, while others have red X marks. A note says 'Click on the buttons to set up each service.' On the right, under 'TCP/IP', there are two sections: 'IP Configuration' and 'DNS Configuration'. In 'IP Configuration', 'Get IP configuration automatically (DHCP)' is selected. In 'DNS Configuration', 'Get DNS configuration automatically (DHCP)' is selected. At the bottom, there are navigation buttons: 'Back', a save icon, a warning icon, a refresh icon, a cancel icon, and 'Next'.

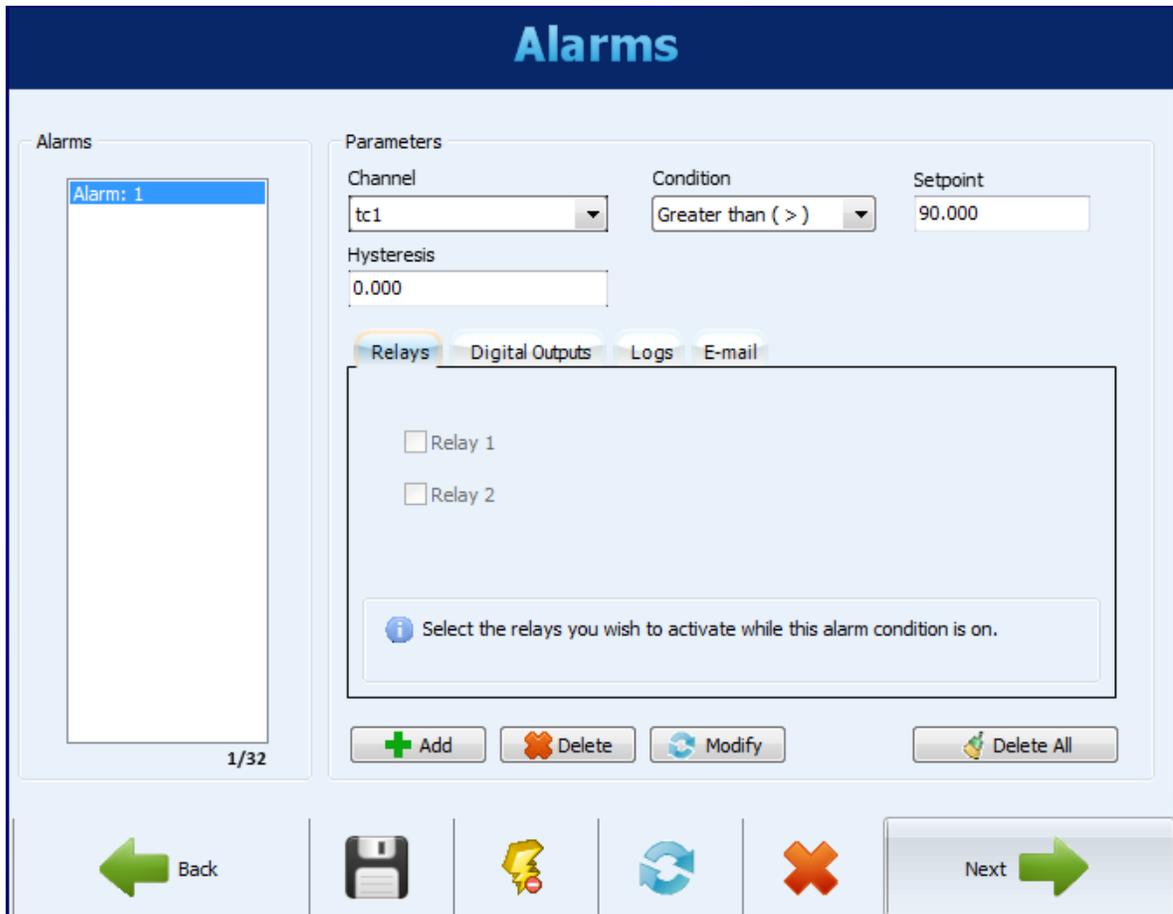
- 8) Click the “**SMTP**” button (screenshot below). When on the **SMTP** tab, enter the SMTP2GO IP Address and Port. In this case, we use **IP: 207.58.147.66** and **Port: 2525** (which we determined to be open in a prior setup step).
- 9) The “User” and “Password” fields need the email credentials you used to setup your SMTP2GO account. In this case, we will use **User: gb@aemc.com** and **Password: gbaemc2014**
- 10) The “E-mail Sender” field will need to be the same email address as above: gb@aemc.com
- 11) The “Subject” field will contain the email Subject of the email message. This is a free form text field.
- 12) The “Constant Part of Message” box allows you to enter pertinent information concerning the nature of the email alert. Maximum character limit is 64.

- 13) Click on “+ Edit List” to add any **potential** recipients of the Logger’s email alert. There can be multiple email alerts configured and each alert can go to any combination of email recipients. Enter all possible recipients of any email alert into this “list”. In this example, techsupport@aemc.com was entered as a potential recipient (screenshot below). Maximum number of emails entered is 10.

The screenshot shows the "Ethernet Interface" configuration page. On the left, under "Services", there are buttons for TCP/IP, FTP, SMTP (highlighted with a green checkmark), SNMP, HTTP, and Modbus TCP. The SMTP section is expanded, showing it is "Enabled". Under "Authentication", the IP Address is 207.58.147.66, Port is 2525, User is gb@aemc.com, and Password is masked. Under "E-mail", the Sender is gb@aemc.com and the Subject is "ALARM email from DL 1080/1081 !". The "Constant Part of Message" dropdown is set to "Customized Message Appears In All Emails". At the bottom, there is a "Receivers List" section with a "+ Edit List" button and "Receivers Configured: 1/10". Navigation buttons for Back, Save, Help, Refresh, Cancel, and Next are at the bottom.

This screenshot shows the same "Ethernet Interface" configuration page as above, but with a "Receivers List" dialog box open. The dialog box has a title bar with a close button (X). Inside, the email address "techsupport@aemc.com" is entered in a text field. Below the text field is an "E-mail" label and another empty text field. At the bottom of the dialog box are three buttons: "+ Add", "Delete", and "Close". The background configuration page is partially visible, showing the SMTP settings and the "+ Edit List" button.

- 14) Click the Next arrow 5 more times to get to the “Alarms” page. (screenshot below)
- 15) Choose a Channel to monitor for Alarm conditions under the “Channel” pulldown menu.
- 16) Choose the Condition, Setpoint and Hysteresis that will trigger an Alarm condition. In the example, we are monitoring a thermocouple and the Alarm will get set when the temperature reading is above 90°F (see screenshot below). Click “+ Add” to create an alarm. Max number of Alarms is 32.



Alarms

Alarms

Alarm: 1

1/32

Parameters

Channel: tc1

Condition: Greater than (>)

Setpoint: 90.000

Hysteresis: 0.000

Relays | Digital Outputs | Logs | E-mail

Relay 1

Relay 2

Select the relays you wish to activate while this alarm condition is on.

+ Add | Delete | Modify | Delete All

Back | Next

- 17) You also have to click the “E-mail” tab to specify who will get the Alarm email (screenshot below). In this example, we’ve chosen techsupport@aemc.com to receive “Alarm: 1” email.

The screenshot shows the "Alarms" configuration page. On the left, a list of alarms includes "Alarm: 1". The main area is titled "Parameters" and contains the following fields:

- Channel: tc1
- Condition: Greater than (>)
- Setpoint: 90.000
- Hysteresis: 0.000

Below these fields are four tabs: "Relays", "Digital Outputs", "Logs", and "E-mail". The "E-mail" tab is selected and highlighted with a dashed border. It contains a list of email addresses with checkboxes, where "techsupport@aemc.com" is checked. Below the list is an information icon and the text: "Inform which e-mail receivers must be notified when entering this alarm condition." At the bottom of the "E-mail" section are four buttons: "Add", "Delete", "Modify", and "Delete All".

At the very bottom of the page are navigation icons: a green arrow pointing left labeled "Back", a floppy disk icon, a lightning bolt icon, a circular refresh icon, a red "X" icon, and a green arrow pointing right labeled "Next".

- 18) You ***MUST*** click on “**Modify**” to save these changes. If you navigate off this page without clicking **Modify**, then any changes will ***NOT*** be saved.
- 19) Now click through to the end of the configuration screens and hit “**SEND**” to write the configuration to the logger. Once written, generating an Alarm condition will send an email immediately. The email is only sent when the Alarm condition is triggered. If you have a constant Alarm condition that never leaves the Alarm state, you will not get an email. Only when the Alarm condition is entered/triggered does the email get sent.

If you have any further questions, feel free to contact our Technical Hotline at 1-800-343-1391.

Thank you.