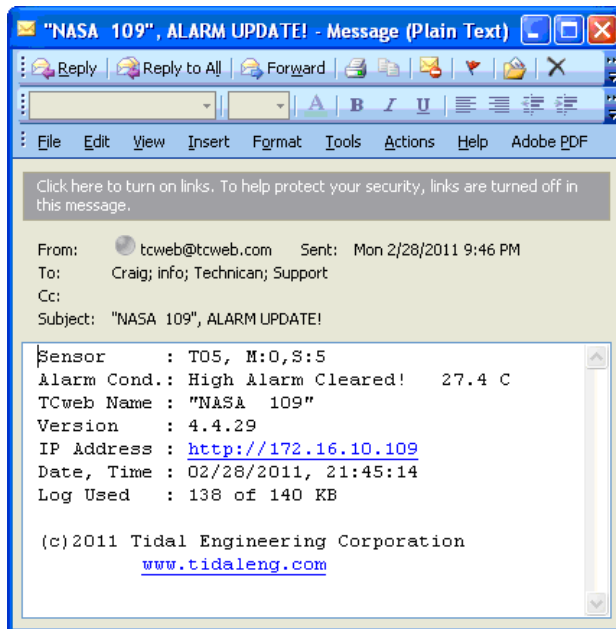


## Synergy Controller E-Mail Features



### Introduction

The Synergy Controller's e-mail feature generates alarm and log file e-mails. This Synergy Controller application note describes these e-mail features and provides instructions and examples for e-mail setup. These features are supported on both the Synergy Micro (AKA VersaTenn V) and the ¼ DIN Synergy Nano for software application Version 3.0.0 and newer. Contact the factory if you are interested in a software upgrade.

Tidal Engineering's Synergy Controllers, both the Synergy Micro and the ¼ DIN Synergy Nano provide state-of-the-art usability and connectivity for environmental test control and data acquisition and combine the functions of a chamber controller and a data logger and are designed to improve test efficiency by supporting both factory automation and test and measurement protocols and standards.

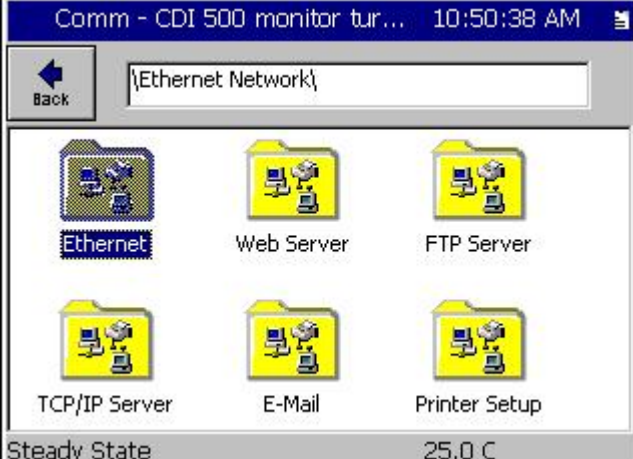
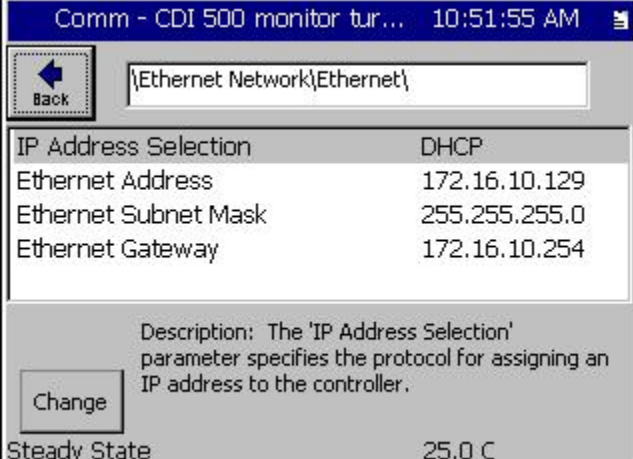
Synergy Controller feature highlights includes:

- ➔ Color touch screen
- ➔ Ethernet, RS-232 and GPIB communications
- ➔ Built in Data logger with USB drive support
- ➔ Data Acquisition, up to 64 T-type thermocouples (Optional)
- ➔ Built-in Web Server for remote control; WebTouch Remote™ (Optional)
- ➔ Compatible with Synergy Manager for PC based control, monitoring and programming.
- ➔ Built-in FTP Server for factory automation and test and measurement applications

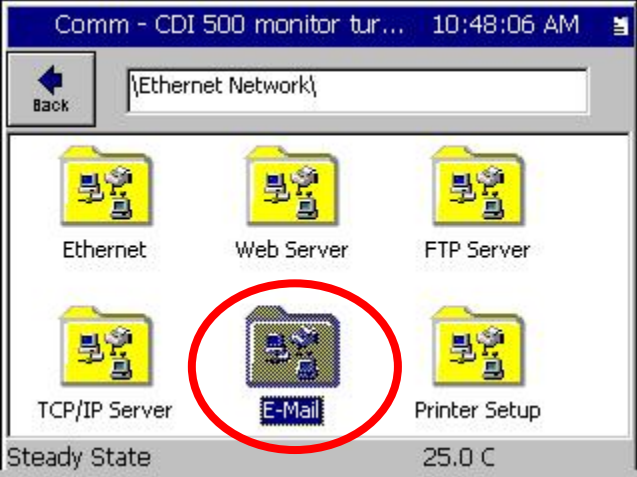
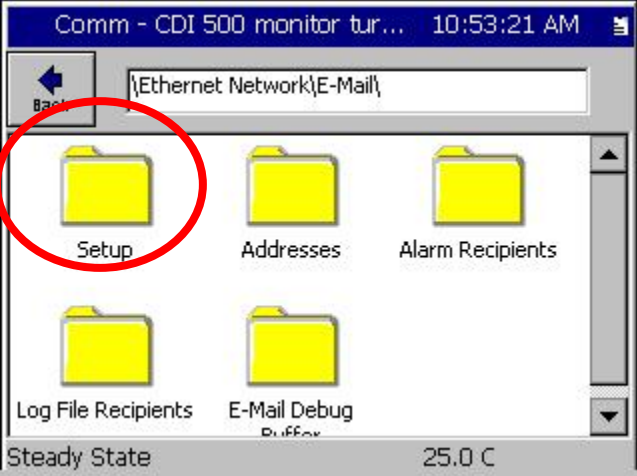
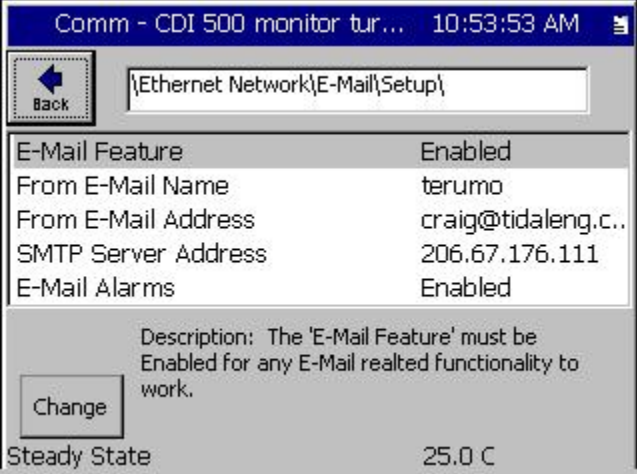
For more information regarding the controller please see the full Synergy Controller Technical Manual on our website at <http://www.tidaleng.comsynergy.htm>

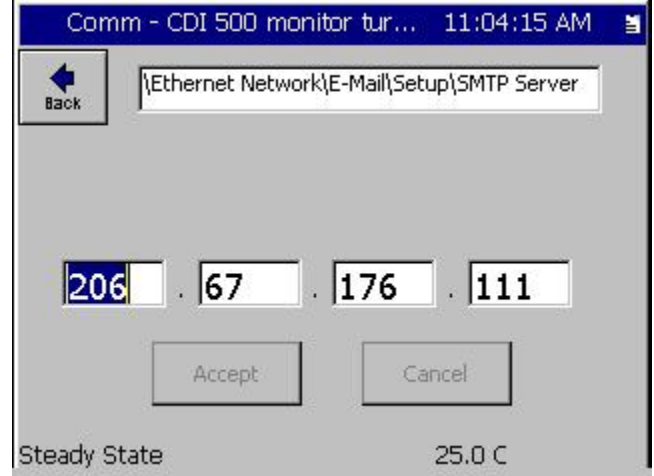
## Network Setup

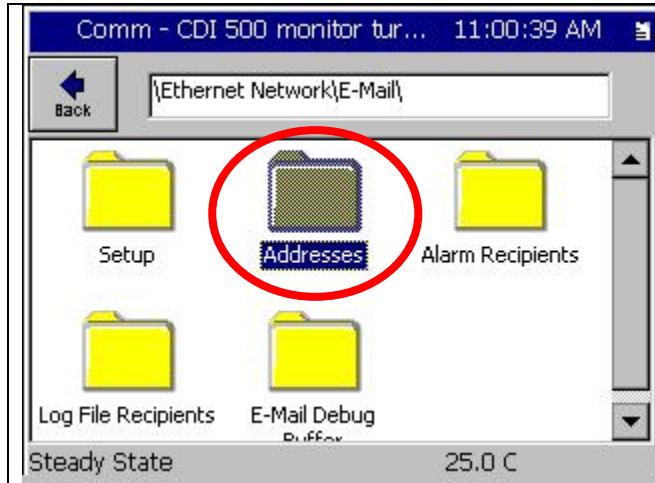
To send e-mail, your controller must be connected and setup on your network and an SMTP server must be available and routable. The IP address of the controller can be assigned by a DHCP server or statically entered on the controller local interface. See Application note 7 for information concerning network setup.

	<p>To begin, open the Comm Screen and browse to the <b>Ethernet Network</b> folder.</p>
	<p>Set the <b>IP Address Selection</b> and network properties as required.</p>

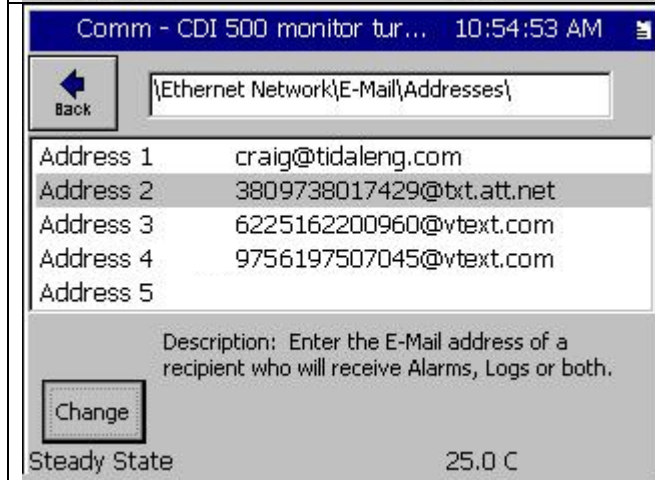
## E-Mail Setup

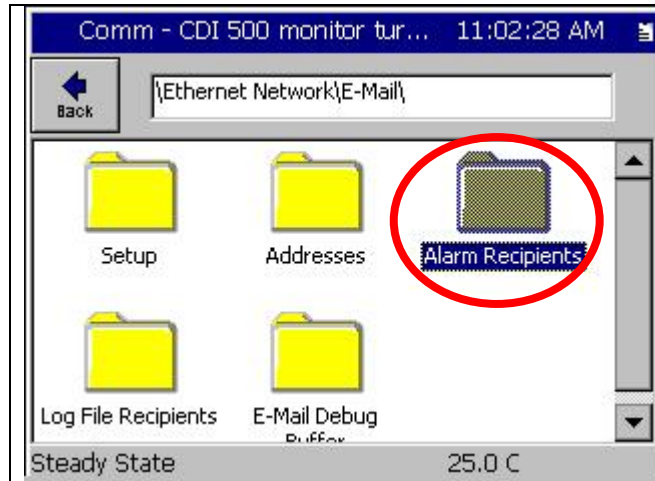
 <p>Comm - CDI 500 monitor tur... 10:48:06 AM</p> <p>{Ethernet Network}</p> <p>Back</p> <p>Ethernet Web Server FTP Server</p> <p>TCP/IP Server <b>E-Mail</b> Printer Setup</p> <p>Steady State 25.0 C</p>	<p>Open the <b>Ethernet Network</b> Folder in the <b>Comm</b> screen and b the</p> <p>Note that some screens have been reorganized in version 3.0.1 and may be a bit different on older versions.</p>										
 <p>Comm - CDI 500 monitor tur... 10:53:21 AM</p> <p>{Ethernet Network\E-Mail}</p> <p>Back</p> <p><b>Setup</b> Addresses Alarm Recipients</p> <p>Log File Recipients E-Mail Debug</p> <p>Steady State 25.0 C</p>	<p>Open the <b>Setup</b> Folder as shown at left.</p>										
 <p>Comm - CDI 500 monitor tur... 10:53:53 AM</p> <p>{Ethernet Network\E-Mail\Setup}</p> <p>Back</p> <table border="1"> <tr> <td>E-Mail Feature</td> <td>Enabled</td> </tr> <tr> <td>From E-Mail Name</td> <td>terumo</td> </tr> <tr> <td>From E-Mail Address</td> <td>craig@tidaleng.c..</td> </tr> <tr> <td>SMTP Server Address</td> <td>206.67.176.111</td> </tr> <tr> <td>E-Mail Alarms</td> <td>Enabled</td> </tr> </table> <p>Description: The 'E-Mail Feature' must be Enabled for any E-Mail related functionality to work.</p> <p>Change</p> <p>Steady State 25.0 C</p>	E-Mail Feature	Enabled	From E-Mail Name	terumo	From E-Mail Address	craig@tidaleng.c..	SMTP Server Address	206.67.176.111	E-Mail Alarms	Enabled	<p>Enable the E-Mail Feature as shown at left and assign:</p> <p>From E-Mail Name From E-Mail Address SMTP Server Address</p> <p>Enable E-Mail Alarms if you want the controller to e-mail status updates regarding alarm conditions to your e-mail or cell phone (text messaging)</p>
E-Mail Feature	Enabled										
From E-Mail Name	terumo										
From E-Mail Address	craig@tidaleng.c..										
SMTP Server Address	206.67.176.111										
E-Mail Alarms	Enabled										

	<p>Enter the SMTP Server Address</p> <p>See appendix A for help with this value.</p>
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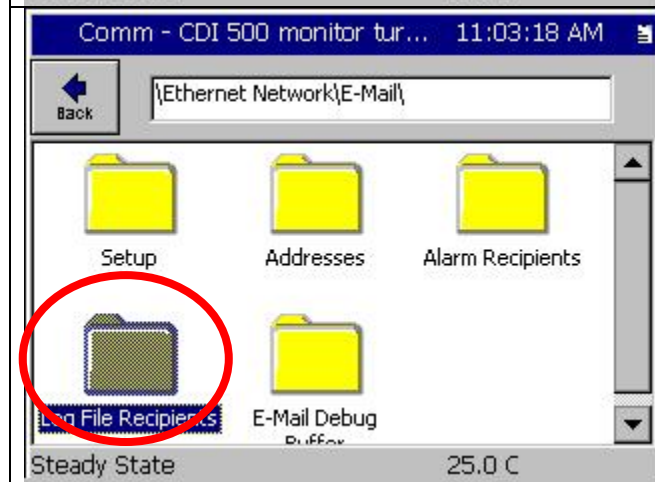
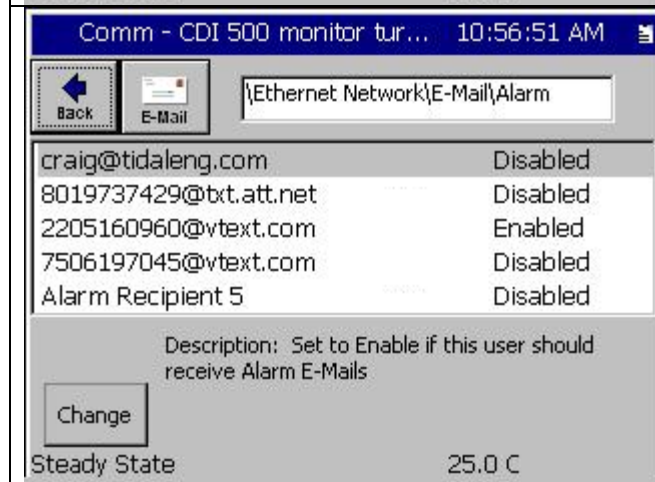


Up to five E-Mail Addresses can be entered in the **Addresses** Folder.

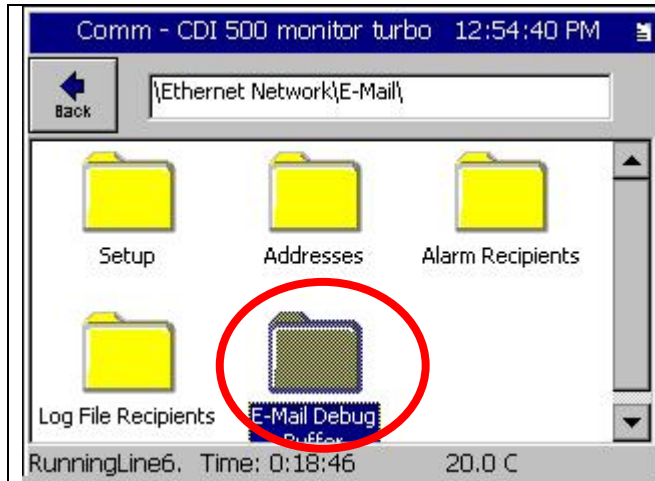




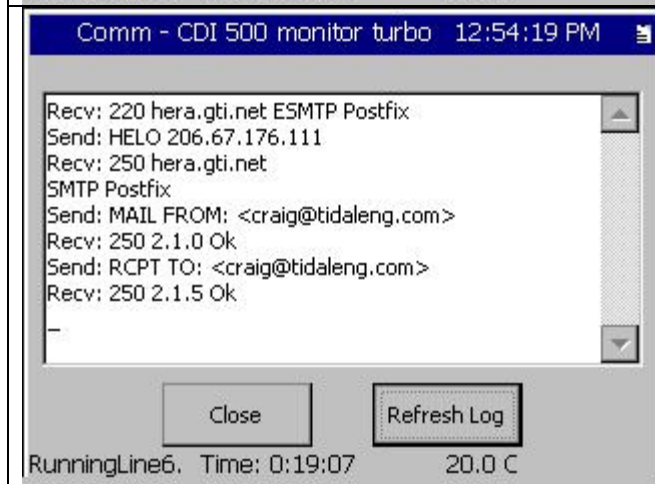
Open the **Alarm Recipients** folder and set each e-mail address accordingly.



Open the **E-Mail\Log File Recipients** Screen and set which addresses get the periodic log file e-mails. See the Logging systems for interval setup.



Open the **E-Mail/E-Mail Debug Buffer** screen to troubleshoot e-mail setup problems.



The **E-Mail/E-Mail Debug Buffer** screen records the transactions between the controller and the SMTP Server and can be helpful when troubleshooting e-mail setup problems.

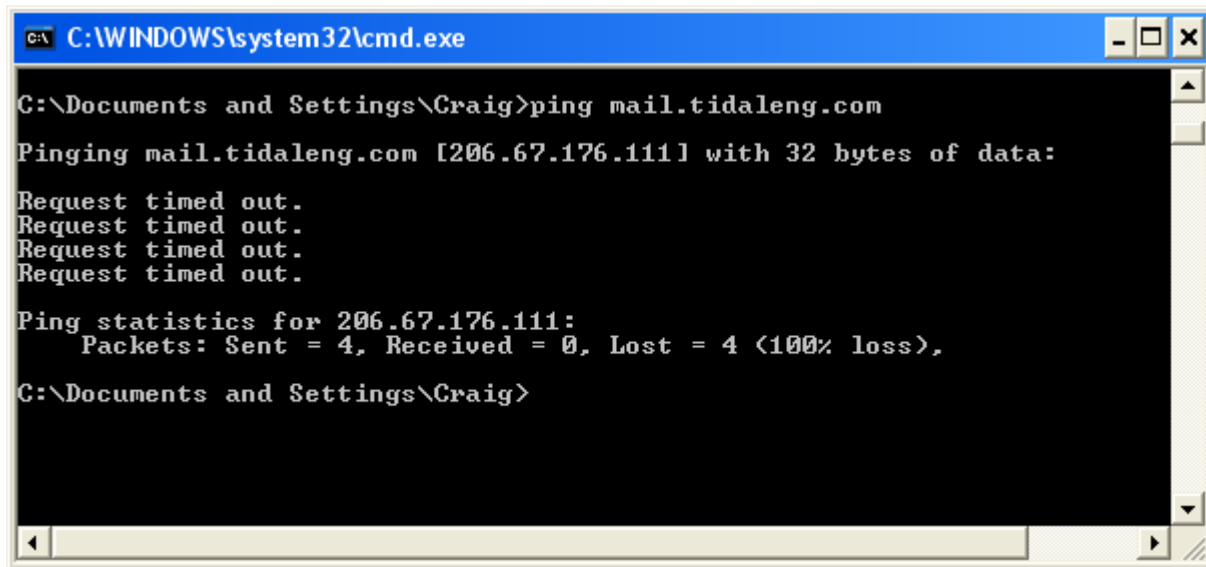
## Appendix A

To determine the Outgoing mail server (SMTP) for your account, you can look-up up the domain of your server in your e-mail program as shown below for Microsoft Outlook 2003.

The screenshot shows the 'E-mail Accounts' dialog box in Microsoft Outlook 2003. The title bar reads 'E-mail Accounts'. The main heading is 'Internet E-mail Settings (POP3)' with a sub-note: 'Each of these settings are required to get your e-mail account working.' The dialog is divided into four sections: 'User Information', 'Server Information', 'Logon Information', and 'Test Settings'.  
- **User Information:** 'Your Name:' is 'Craig Borax'; 'E-mail Address:' is 'tidaleng@tidaleng.com'.  
- **Server Information:** 'Incoming mail server (POP3):' is 'mail.tidaleng.com'; 'Outgoing mail server (SMTP):' is 'mail.tidaleng.com'. This field is highlighted with a red rectangular box.  
- **Logon Information:** 'User Name:' is 'tidaleng'; 'Password:' is '\*\*\*\*\*'. There is a checked checkbox for 'Remember password' and an unchecked checkbox for 'Log on using Secure Password Authentication (SPA)'.  
- **Test Settings:** Includes a 'Test Account Settings ...' button and a 'More Settings ...' button.  
At the bottom of the dialog are three buttons: '< Back', 'Next >', and 'Cancel'.

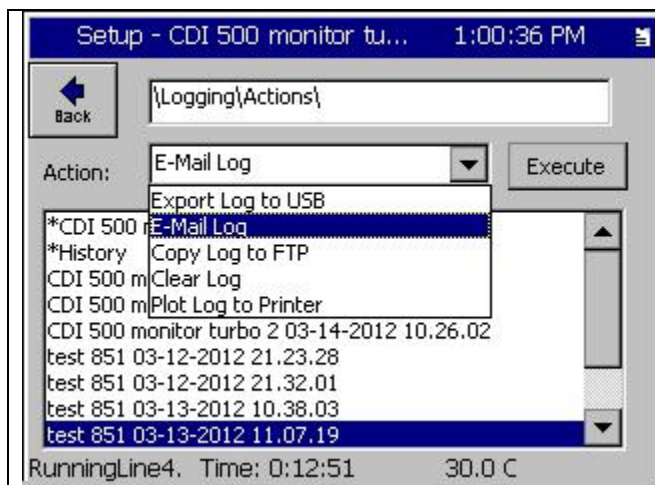
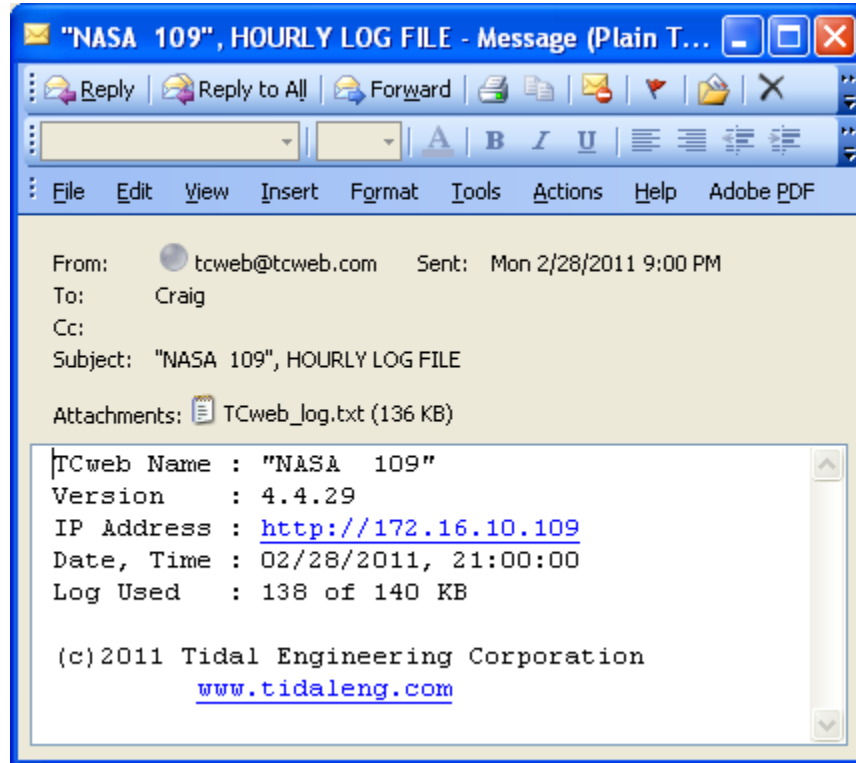
Then, you can look up the IP address for that domain using the ping command as shown below. In the example below my Email Server IP address is 206.67.176.111.





```
C:\WINDOWS\system32\cmd.exe
C:\Documents and Settings\Craig>ping mail.tidaleng.com
Pinging mail.tidaleng.com [206.67.176.111] with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 206.67.176.111:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\Documents and Settings\Craig>
```

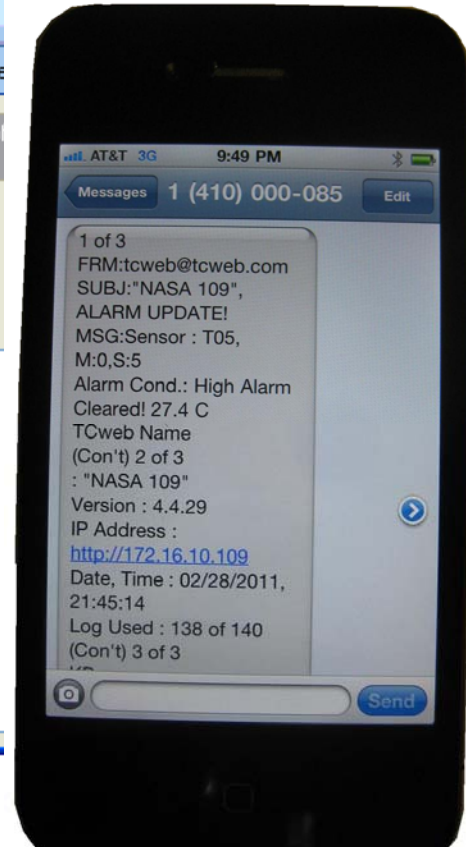
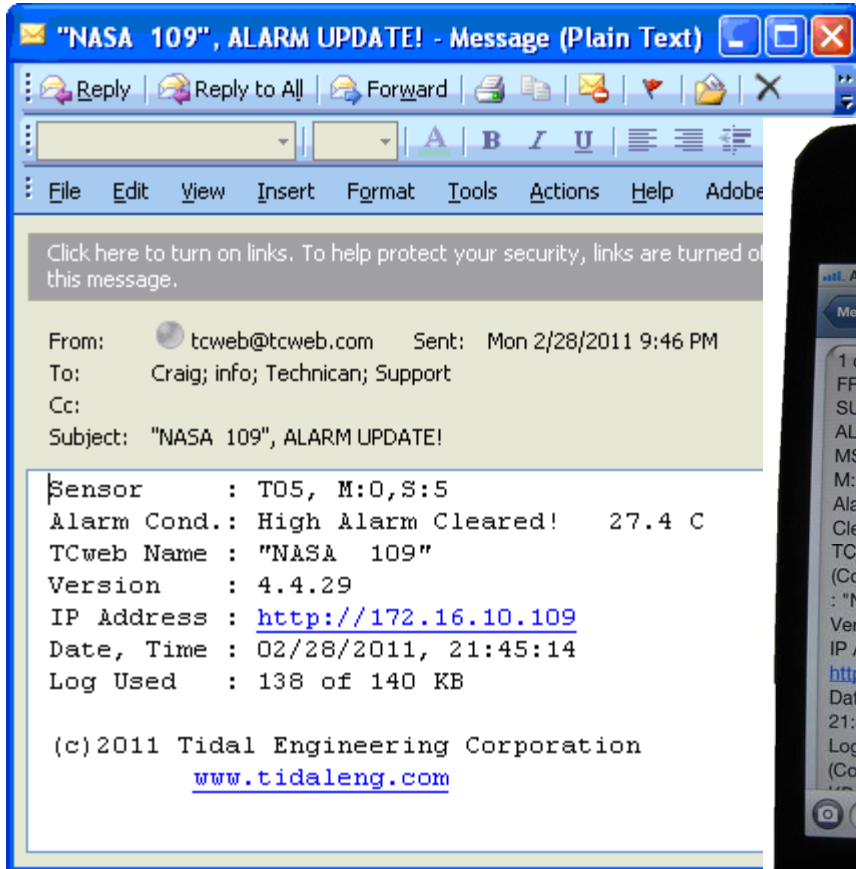
The Log File e-mail will look like the message below. Note that the Attachments include TCweb\_log.txt which is the log file in csv file format.



To E-Mail a profile log, open the **Setup\Logging\Actions** folder, and pick **E-Mail Log** from the drop down selection list. Then select the profile log and press the **Execute** button as shown at left.

The Alarm E-Mail message will include the Sensor and the Alarm Condition as well as information concerning the Synergy Controller generating the alarm.

The Alarm Message can be sent to your PC or to a Cell phone as a txt message as shown below:



## About the Synergy Controller Family

Tidal Engineering's Synergy Controllers, both the Synergy Micro 2 and the ¼ DIN Synergy Nano provide state-of-the-art usability and connectivity for environmental test control and data acquisition and combine the functions of a chamber controller and a data logger and are designed to improve test efficiency by supporting both factory automation and test and measurement protocols and standards.

Synergy Controller feature highlights includes:

- ➔ Color touch screen
- ➔ Ethernet, RS-232 and GPIB communications
- ➔ Built in 100 MB Data logger with USB drive support
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- ➔ Compatible with Synergy Manager for PC based control, monitoring and programming.
- ➔ Built-in FTP Server for factory automation and test and measurement applications

For more information regarding these controllers please see the full Synergy Controller Technical Manual on our website at <http://www.tidaleng.com/synergy.htm>

## About Tidal Engineering

Headquartered in Randolph, NJ, Tidal Engineering Corporation has been designing and building award-winning embedded hardware and software for test and measurement and data acquisition applications since 1992. The company is recognized for technical expertise in such areas as Embedded IEEE 488, and turnkey SCADA (Supervisory Control and Data Acquisition) systems.

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