Application Note 84

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Synergy Controller E-Mail Features

🖾 "NASA-109", ALARM UPDATE! - Message (Plain Text) 🔽 🗖 🔀 🗄 🙈 Reply | 🉈 Reply to All | 🙈 Forward | 🚑 🗈 | 😼 | 🔻 | 🍅 | 🗙 - I ▲ B Z U 医 書 律 律 Eile Edit View Insert Format Tools Actions Help Adobe PDF Click here to turn on links. To help protect your security, links are turned off in this message. 🔍 tcweb@tcweb.com 🔹 Sent: Mon 2/28/2011 9:46 PM Erom: To: Craig; info; Technican; Support Cc: Subject: "NASA 109", ALARM UPDATE! Sensor : TO5, M:0,S:5 Alarm Cond.: High Alarm Cleared! 27.4 C TCweb Name : "NASA 109" Version : 4.4.29 IP Address : http://172.16.10.109 Date, Time : 02/28/2011, 21:45:14 Log Used : 138 of 140 KB (c)2011 Tidal Engineering Corporation www.tidaleng.com



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.

Comm - CDI 500 monitor tur	10:50:38 AM	To begin, open the Comm Screen and browse to the Ethernet Network folder.
Ethernet Web Server	FTP Server	
TCP/IP Server E-Mail	Printer Setup	
Steady State	25.0 C	
Comm - CDI 500 monitor tur	10:51:55 AM 🛛 📓	Set the IP Address Selection and network
Back \Ethernet Network\Ethernet\		properties as required.
IP Address Selection	DHCP	
Ethernet Address	172.16.10.129	
Ethernet Subnet Mask	255.255.255.0	
Ethernet Gateway	172.16.10.254	
Description: The 'IP Address Selection' parameter specifies the protocol for assigning an IP address to the controller.		
Steady State	25.0 C	

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E-Mail Setup

Comm - CDI 500 monitor tur 10:48:06 AM 📓		Open the Ethernet Network Folder in the
Ethernet Network		Comm screen and b the
	~	Note that some screens have been
물울 물울	學者	reorganized in version 3.0.1 and may be a
Ethernet Web Server	FTP Server	bit different on older versions.
	5	
Stoody State	Printer Setup	
Comm - CDI 500 monitor tur	10:52:21 AM	Open the Setun Folder as shown at left
	. 10.33.21 AM E	open the setup rolder as shown at left.
Ethernet Network\E-Mail\		
	<u> </u>	
Setup Addresses	Alarm Recipients	
Log File Recipients E-Mail Debug	-	
Steady State	25.0 C	
Comm - CDI 500 monitor tur	. 10:53:53 AM 📓	Enable the E-Mail Feature as shown at left
Ethernet Network\E-Mail\Se	etup\	anu assign.
E-Mail Feature	Enabled	From E-Mail Name
From E-Mail Name	terumo	From E-Mail Address
From E-Mail Address	craig@tidaleng.c	Siville Server Address
E-Mail Alarme	200.07.170.111 Enabled	
		controller to a mail status undates
Description: The 'E-Mail Feature' must be Enabled for any E-Mail realted functionality to		regarding alarm conditions to your e-mail or
Change work.		cell phone (text messaging)
Steady State	25.0 C	

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Comm - CDI 500 monitor tur 11:04:15 AM 📲	Enter the SMTP Server Address
KEthernet Network\E-Mail\Setup\SMTP Server	See appendix A for help with this value.
206 . 67 . 176 . 111	
Accept Cancel	
Steady State 25.0 C	

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Comm - CDI 500 monitor tur 11:00:39 AM	Up to five E-Mail Addresses can be entered in the Addresses Folder.
Setup Addresses Alarm Recipients	
Log File Recipients E-Mail Debug	
Comm - CDI 500 monitor tur 10:54:53 AM	
LEthernet Network\E-Mail\Addresses\	
Address 1 craig@tidaleng.com	
Address 2 3809738017429@txt.att.net	
Address 3 6225162200960@vtext.com	
Address 4 9756197507045@vtext.com	
Address 5	
Description: Enter the E-Mail address of a recipient who will receive Alarms, Logs or both.	
Steady State 25.0 C	

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Comm - CDI 500 monitor tur 11:02:28 AM Image:	Open the Alarm Recipients folder and set each e-mail address accordingly.
Comm - CDI 500 monitor tur 10:56:51 AM Image: The second se	
Comm - CDI 500 monitor tur 11:03:18 AM Image:	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.

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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.

E-mail Accounts	s			×
Internet E-mail Settings (POP3) Each of these settings are required to get your e-mail account working.				
User Informati	ion	Server Information		
Your Name:	Craig Borax	Incoming mail server (POP3):	mail.tidaleng.com	
<u>E</u> -mail Address:	tidaleng@tidaleng.com	Outgoing mail server (SMTP):	mail.tidaleng.com	Ĩ
Logon Information		Test Settings After filling out the information) on this screen, we	
Password:	*****	recommend you test your acco button below. (Requires netwo	ount by clicking the ork connection)	
Log on using 5 Authentication	<u>R</u> emember password Secure Password n (SPA)	Test Account Settings	More Settings	T
			More Securitys	
		< <u>B</u> ack	Next > Ca	incel

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.

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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.

🖂 "NASA 109", HOUR	RLY LOG FILE - Mes	ssage (Plain T 🔳 🗖 🔀
🔆 🙈 <u>R</u> eply 🉈 Reply to A	။ 🛛 🙈 For <u>w</u> ard 🗍 🍓	🖻 😼 🔻 🏠 🗶 🍷
-	- <u>A</u> B	IU ≣≣掌撑 ;
Eile Edit View Inse	ert F <u>o</u> rmat <u>T</u> ools	Actions Help Adobe PDF
From: Otweb@tow To: Craig Cc: Subject: "NASA 109", H Attachments: 🗐 TCweb	veb.com Sent: Mo HOURLY LOG FILE _log.txt (136 KB)	on 2/28/2011 9:00 PM
TCweb Name : "N Version : 4. IP Address : <u>ht</u> Date, Time : 02, Log Used : 13 (c)2011 Tidal E <u>www.ti</u>	ASA 109" 4.29 t <u>p://172.16.10</u> /28/2011, 21:0 8 of 140 KB ngineering Cor daleng.com).109)0:00 :poration

Setup	- CDI 500 monitor tu	1:00:36 PM	To E-Mail a profile log, open the
e Back	Logging\Actions\		Setup\Logging\Actions folder, and pick E-Mail Log from the drop down selection list. Then
Action:	E-Mail Log	Execute	select the profile log and press the Execute
	Export Log to USB		button as shown at left.
*CDI 500	E-Mail Log		
*History	Copy Log to FTP		
CDI 500 m	Clear Log		
CDI 500 m	Plot Log to Printer		
CDI 500 m	ionitor turbo 2 03-14-2012 1	0.26.02	
test 851 0	3-12-2012 21.23.28		
test 851 0	3-12-2012 21.32.01		
test 851 0	3-13-2012 10.38.03		
test 851 0	3-13-2012 11.07.19	T	
RunningLin	ie4. Time: 0:12:51	30.0 C	

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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:

🖼 "NASA-109", ALARM UPDATE! - Message (Plain Text) 🔳 🗖	\mathbf{X}	
🤅 🙈 Reply 🙈 Reply to All 🙈 Forward 🅞 🐚 🔀 🔻 🔌 🗙		
· · · · · · · · · · · · · · · · · · ·		
Eile Edit View Insert Format Tools Actions Help Adobe		
The base to the second state of the second sta		
Click here to turn on links. To help protect your securicy, links are turned of this message.	atl. AT&T 3G 9:49 PM	*
Even to knuck @knuck even Seek. Mag 2/20/2011 0.46 PM	Messages 1 (410) 000-085	Edit
To: Craig; info; Technican; Support Cc: Subject: "NASA 109", ALARM UPDATE! βensor : T05, M:0,S:5 Alarm Cond.: High Alarm Cleared! 27.4 C TCweb Name : "NASA 109" Version : 4.4.29 IP Address : http://172.16.10.109 Date, Time : 02/28/2011, 21:45:14 Log Used : 138 of 140 KB (c)2011 Tidal Engineering Corporation <u>www.tidaleng.com</u>	1 of 3 FRM:tcweb@tcweb.com SUBJ:"NASA 109", ALARM UPDATE! MSG:Sensor : T05, M:0,S:5 Alarm Cond.: High Alarm Cleared! 27.4 C TCweb Name (Con't) 2 of 3 : "NASA 109" Version : 4.4.29 IP Address : http://172.16.10.109 Date, Time : 02/28/2011, 21:45:14 Log Used : 138 of 140 (Con't) 3 of 3	۲
		Send

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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.

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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 awardwinning 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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