F4T™

application note -
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Setting Up Email and Text Alerts for Watlow's F4T Controller

Summary:

F4T Alert Capabilities

The new email and text alert feature for the Watlow F4T controller provides a method to send email and SMS (text) messages to defined contacts when specified events occur. Up to 10 unique alerts can be configured. Ten contacts can be predefined to receive alerts (with two addresses available per contact).

When the specified conditions occur for an enabled alert, the F4T will automatically send an alert message to each recipient that has been selected with the respective alert.

Notes

The F4T controller is only capable of sending alerts when the following conditions are met:

- The F4T is properly connected to a network via Ethernet.
- The email server settings are configured to allow the outgoing connection to an email server.
- Email and text enable is set to YES (in email server settings).
- Contacts have been entered.
- Trigger conditions are established for sending notifications.
- The timing and delivery of notifications is dependent on a variety of components for delivery. The failure of the internet connection, email server, power supply or other components can prevent the delivery of the alert. As a safety precaution, **DO NOT** rely on the delivery of an alert for an event.

The purpose of this technical document is to provide general instructions on the setup of the F4T to enable the features and general guidelines on configuration of your email / cell phone to receive the sent messages. The F4T relies on routing emails to an email service and text messages to email-SMS addresses. Valid addresses must be specified for each. Your provider may require validation of the user of the service.

The Basic Steps Are

There are basic steps that need to occur for the email and text alert feature. First, identify the required server settings for service receiving email (you may need to involve your IT department to set the correct settings and allow the alerts to be sent).

1) Email service domain
2) Use of SSL/TLS (most people use this for security)
3) Outgoing mail port used by service
4) User name on account of service
5) User password on account of service
6) Configure email server setting in F4T using settings identified in previous step
7) Send test message from F4T
8) Check receipt in email or cell phone
9) If message is not received, review previous steps
10) Configure which events will send notification to which individuals

Notes

When a user has an email account, it is provided by a service that hosts the sending and receiving of emails. There are many free email providers such as gmail.com, hotmail.com or yahoo.com. Many businesses use a paid service such as Office 365. Enter the providers domain address such as smtp.gmail.com or imap.gmail.com. Some services such as Google require a user to visit a website and enable use of "less secure apps" before they function. The following is a list of some common email connections.

Notes

The following list is for informational purposes only. Refer to your email service provider for advanced troubleshooting. If your email provider is not listed here or if the provided server information is not being accepted, contact your email provider.

POP3

Provides reliable access to your emails on a specific computer (once they are downloaded). However, it does not back up your messages or sync between devices by default.
This is useful for accessing emails offline, however, if they are deleted there are no backups.

IMAP

Stores your emails safely on the server, and allows you to access and interact with it from any device.
This is useful to access email from multiple devices, or if you want a secure backup for all emails.

Service Provider	Incoming Server	Port	Security	Outgoing Server	Port	Security	User Name	Notes
1and1.com	imap.1and1.com	993	SSL/Authentication	smtp.1and1.com	587		Full email address	Known as IONOS
Airmail.net	imap.airmail.net	143		smtp.airmail.net	587	SSL/Authentication	Full email address	Internet America
Ameritech	imap.mail.att.net	993	SSL	smtp.mail.att.net	465	SSL	Full email address	Email provided by AT&T
AOL	pop.aol.com	110	995 for SSL	smtp.aol.com	465	SSL	Full email address	Verizon.net email moving to AOL Mail
	imap.aol.com	143	993 for SSL					
AIM Mail	pop.aol.com	110	995 for SSL	smtp.aol.com	587	STARTTLS Authentication	Full email address	Email provided by AOL
	imap.aol.com	993	SSL/TLS					
AT&T	inbound.att.net	995	SSL	outbound.att.net	465 or 587	SSL	Full email address	
	imap.mail.att.net	993		smtp.mail.att.net				
Bell Atlantic	pop.verizon.net	995	SSL	smtp.verizon.net	465	SSL	Username only	Verizon.net email moving to AOL Mail
Bell South	inbound.att.net	995	SSL	outbound.att.net	465	SSL	Full email address	Email provided by AT&T
	imap.mail.att.net	993		smtp.mail.att.net	465 or 587	SSL		
Cable One	mail.cableone.net	993	SSL	mail.cableone.net	465	SSL	Full email address	
Cablevision	mail.optonline.net	110	SSL/Authentication	mail.optonline.net	587	SSL/Authentication	Username only	Email provided by Optimum.net
CenturyLink	pop.centurylink.net	995	SSL	smtp.centurylink.net	587	TLS, if available	Full email address	Email provided by Qwest
	mail.centurylink.net	993	SSL					
Charter	mobile.charter.net	993 (IMAP)	SSL	mobile.charter.net	587	SSL	Full email address	Must use IMAP protocol with mobile
CincinnatiBell	imap.fioptics.com	993 143	SSL	smtp.fioptics.com	25 587	TLS	Full email address	
Clearwire	pop.gmail.com	995	SSL	smtp.gmail.com	465	TLS	Full email address	Email provided by Gmail. IMAP must be enabled in the web client
	imap.gmail.com	993	SSL		587	SSL		
Comcast (Xfinity)	mail.comcast.net	995	SSL	smtp.comcast.net	465 587	SSL		For mobile devices, use the Comcast mobile app
	imap.comcast.net	993	SSL					
ComNetcom.net	pop.comnetcom.net	110		smtpauth.earthlink.net	587	SSL/Authentication	Full email address	Email provided by Earthlink
Cox	pop.cox.net	110	993 for SSL/Authentication	smtp.cox.net	587 for TLS	TLS	Username only	
	imap.cox.net	995			465 for SSL	SSL		
Cox Business	pop.coxmail.com	995	SSL	smtp.coxmail.com	465	SSL	Full email address	
	imap.coxmail.com							

Service Provider	Incoming Server	Port	Security	Outgoing Server	Port	Security	User Name	Notes
Earthlink	pop.earthlink.net	110		smtpauth.earthlink.net	587	Authentication	Full email address	
Flash (AT&T Yahoo!)	inbound.att.net	995	SSL	outbound.att.net	465	SSL	Full email address	Email provided by AT&T
Frontier	pop3.frontier.com	995	SSL	smtp.frontier.com	465	SSL/Authentication	Full email address	
Gmail	pop.gmail.com	995	SSL	smtp.gmail.com	465 for SSL	SSL/Authentication	Full email address	IMAP must be enabled in Gmail settings
	imap.gmail.com	993	SSL		587 for TLS	TLS/Authentication		
GoDaddy	Server settings vary by customer basis	110 995 143 993	SSL	Server settings vary by customer basis	25 80 465 587 3535	SSL	Full email address	Refer to GoDaddy support (480-505-8877)
GTE.net	pop.verizon.net	995	SSL	smtp.verizon.net	465	SSL	User name only	Verizon.net email moving to AOL Mail
Hawaiian Telecom	mail.hawaiiantel.net			smtp.hawaiiantel.net				SMTP requires authentication: username/pass
Hotmail/Windows Live	pop3.live.com	995	SSL	smtp.live.com	25 587	SSL/TLS	Full email address	Rebranded as Outlook.com. Use native Email app on device for Hotmail, Live, or Outlook.com
iCloud	imap.mail.me.com	993	SSL	smtp.mail.me.com	587	SSL Use TLS if SSL fails	Full email address	
Lycos	pop.lycos.com	110		smtp.mail.lycos.com	587		User name only	POP and IMAP access require subscription to Plus.
	imap.lycos.com	143						
Mindspring	pop.mindspring.com	110		smtpauth.earthlink.net	587	SSL/Authentication	Full email address	Email provided by Earthlink
MSN.com	pop3.live.com	995	SSL	smtp.live.com	25 or 587	TLS/Authentication	Full email address	Legacy customers only
Network Solutions	mail.[yourdomain].com	110		smtp.[yourdomain].com	587 or 2525	Authentication	Full email address	For Verizon use port 587 for SMTP
NetZero	pop.netzero.com	995	SSL	smtp.netzero.com	465	SSL/Authentication	Username only	
Outlook.com	pop3.live.com	995	SSL	smtp.live.com	25	Authentication	Full email address	Use device app for Hotmail, Live or Outlook.com email
					587	SSL/TLS		
PacBell	inbound.att.net	995	SSL	outbound.att.net	465	SSL	Full email address	Email provided by AT&T
Rackspace	pop.emailsrver.com	110		smtp.emailsrvr.com	25 587 2525 8025 465	SSL	Full email address	Use secure SMTP if using secure POP or IMAP
	secure.emailsrvr.com	995	SSL					
	imap.emailsrvr.com	143	SSL					
	secure.emailsrvr.com	993	SSL					

Service Provider	Incoming Server	Port	Security	Outgoing Server	Port	Security	User Name	Notes
Road Runner	mail.twc.com	995		mail.twc.com	587		Full email address	Email provided by TWC
		993 (IMAP)						
RCN	pop.rcn.com	110		smtp.rcn.com	25 or 587		Full email address	
	imap.rcn.com	143						
SBC Global	POP server: inbound.att.net	995	SSL	outbound.att.net	465	SSL	Full email address	Email provided by AT&T
	IMAP server: imap.mail.att.net	993		smtp.mail.att.net	587			
snet.net	inbound.att.net	995	SSL	outbound.att.net	465	SSL	Full email address	Email provided by AT&T
Spectrum	mobile.charter.net	993 (IMAP)	SSL	mobile.charter.net	587	SSL/Authentication	Full email address	
Surewest	pop.cci.net	110		smtpauth.mycci.net	587	Authentication	Full email address	Email provided by Consolidated Communications
	imap.mycci.net	143						
swbell.net	inbound.att.net	995	SSL	outbound.att.net	465	SSL	Full email address	Email provided by AT&T
	imap.mail.att.net	993		smtp.mail.att.net	587			
Time Warner Cable	mail.twc.com	110		mail.twc.com	587		Full email address	
		143 IMAP						
US Army	us.army.mil	993	SSL	mailrouter.us.army.mil	465	SSL	Username only	
Verizon LTE Installed	incoming.verizon.net	995	SSL	outgoing.verizon.net	465	SSL/Authentication	Username only	
Windstream	pop.windstream.net	993	SSL	smtp.windstream.net	465	SSL	Full email address	
	imap.windstream.net							
Yahoo! (Ymail)	imap.mail.yahoo.com	993	SSL	smtp.mail.yahoo.com	465 or 587	SSL/Authentication	Full email address	Yahoo prefers IMAP on mobile devices
Yahoo! Mail Plus	pop.mail.yahoo.com	995	SSL	smtp.mail.yahoo.com	465 or 587	SSL/Authentication	Full email address	
Yahoo Small Business	imap.mail.yahoo.com	993	SSL	smtp.bizmail.yahoo.com	465	SSL/Authentication	Full email address	Yahoo prefers IMAP on mobile devices

Notes

- The provider of the email services may make use of Secure Socket Layer (SSL) or Transport Layer Security (TTL), which provide a level of encryption. SSL is the earlier version replaced by TTL today. Most services today use that method.

- The port used by the service is a number used to establish a connection. Some common port numbers are shown in the list.

Enter the SMS address to send text messages. Common providers of email to SMS include:

Carrier SMS gateway domain

AT&T 10-digit number@txt.att.net

Sprint 10-digit number@messaging.sprintpcs.com

U.S. Cellular 10-digit number@email.uscc.net

Verizon 10-digit number@vtext.com

- A maximum of 10 contacts may be specified to receive alerts.
- Each contact may have two addresses such as email and SMS addresses.
- Each contact may have different events to trigger the alert to that individual.
- The three events that may be configured are alarms, profile actions or analog input errors (sensors).
- Each event may be specific to one or all of the same types such as one specific sensor or all sensors for an alert to be sent.