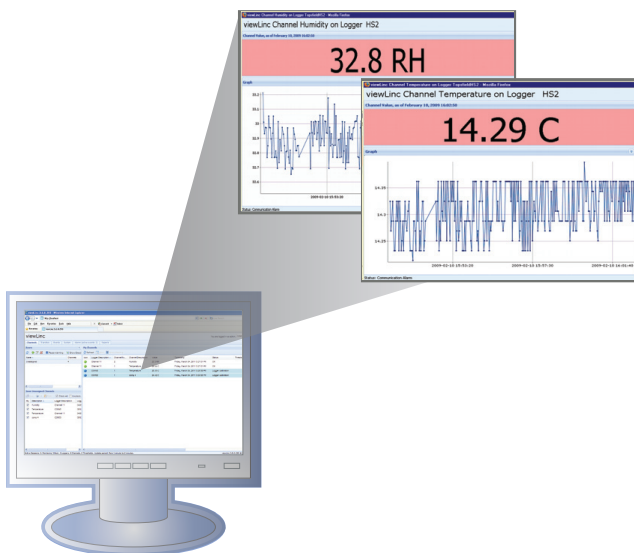


ADMINISTRATOR GUIDE

viewLinc 3.6

Vaisala Veriteq viewLinc Software



Copyright

Copyright © 2011 Vaisala Canada Inc. All rights reserved.

No copying, distribution, publication, modification, or incorporation of this document, in whole or part, is permitted for commercial purposes without the express written permission of Vaisala Canada Inc.

Vaisala Canada Inc
13775 Commerce Parkway
Richmond, BC V6V 2V4
Canada

Trademarks

Vaisala Canada Inc, Vaisala Veriteq, Vaisala Veriteq vLog, Vaisala Veriteq viewLinc, and Vaisala Veriteq Spectrum are trademarks of Vaisala Canada Inc.

Windows is a registered trademark of Microsoft Corporation.

All other trademarks referred to are the property of their respective owners.

Disclaimer and Limitation of Liability

Vaisala Canada Inc and its subsidiaries assume no responsibility for any damage or loss resulting from the use of this manual.

Vaisala Canada Inc and its subsidiaries assume no responsibility for any loss or claims by third parties which may arise through the use of this software. Vaisala Canada Inc. and its subsidiaries assume no responsibility for any damage or loss caused by deletion of data as a result of hardware malfunction. Be sure to make backup copies of all important data to protect against data loss.

Vaisala Canada Inc makes no warranties, either expressed or implied, regarding Vaisala Veriteq data loggers, Vaisala 300 Series Transmitters, or software, its merchantability, or its fitness for any particular purpose. The exclusion of implied warranties is not permitted by some states. As such, the exclusion may not apply to you.

Vaisala Veriteq viewLinc has been tested using a variety of network systems. However, the large number of possible hardware and network configurations makes testing under every circumstance impossible. If you have trouble using Vaisala Veriteq viewLinc software, contact Vaisala Canada Inc.

Technical Support

For technical support in North America, please call 1-866-861-3388, or for customers outside North America, see "Getting Help" on page 16.

Email: veriteqsupport@vaisala.com

Document part number: M211342EN-A

Release date: March 2011

Contents

| | |
|--|-----------|
| About this Manual | v |
| Who this Manual is for | v |
| How this Manual is Organized | v |
| Conventions Used in this Document | vi |
| Related Documentation and Software Products | vi |
| Support Information | vi |
| Chapter 1: Getting Started | 1 |
| Overview | 2 |
| System Requirements | 4 |
| Installing viewLinc | 6 |
| Connecting Loggers | 7 |
| Installing Spectrum or vLog Software | 11 |
| Installing viewLinc Software | 12 |
| Logging In to viewLinc | 13 |
| Administrator's Road Map | 15 |
| Getting Help | 16 |
| Chapter 2: Channels | 19 |
| About Channels | 20 |
| What is a Channel? | 20 |
| Where are my Channels? | 20 |
| Understanding the Channels Screen | 21 |
| Opening Large Channel Views | 22 |
| Real-Time Graphs | 23 |
| Reading Graphs in Large Channel View | 24 |
| Viewing Graph Detail in Large Channel View | 25 |
| Acknowledging Alarms from Large Channel View | 26 |
| Organizing Channels into Zones | 27 |
| Creating Zones | 27 |
| Editing Zones | 28 |
| Assigning Channels to Zones | 28 |
| Deactivating Zones | 30 |

| | |
|--|-----------|
| Ordering Channel Columns | 30 |
| Hiding and Showing Channel Columns | 31 |
| Chapter 3: Alarms | 33 |
| About Alarms | 34 |
| What Happens When an Alarm is Triggered? | 35 |
| Creating Alarm Templates | 36 |
| Threshold Alarms | 42 |
| Setting Threshold Alarms | 42 |
| Editing Threshold Alarms | 44 |
| Disabling Threshold Alarms | 44 |
| Deactivating and Reactivating Threshold Alarms | 44 |
| Communication Alarms | 45 |
| Setting Communication Alarms | 45 |
| Editing Communication Alarms | 46 |
| Disabling Communication Alarms | 47 |
| Logger Alarms | 48 |
| Setting Logger Alarms | 48 |
| Editing Logger Alarms | 48 |
| Disabling Logger Alarms | 49 |
| Acknowledging Alarms | 49 |
| Pausing Alarms | 50 |
| Chapter 4: System Settings | 53 |
| Discovering Loggers | 54 |
| Adding Loggers | 54 |
| Swapping Loggers | 56 |
| Removing Loggers | 58 |
| Editing Logger Properties and Aliases | 59 |
| Editing Channel Properties and Aliases | 60 |
| Configuring Email Settings | 61 |
| Editing Alarm Email Templates | 63 |
| Working with Users | 64 |

| | |
|---|------------|
| Creating Contact Schedules | 65 |
| Creating User Accounts | 67 |
| Editing Users and Passwords | 68 |
| Deactivating Users | 69 |
| Reactivating Users | 69 |
| Choosing Logger and Channel Description Lengths | 69 |
| Choosing Temperature Measurement Unit Preferences .. | 70 |
| Setting Session Expiry Time | 71 |
| Creating Preconfigured Comments for Email Messages .. | 71 |
| Chapter 5: Events | 75 |
| Viewing Events | 76 |
| Adding Comments to Events | 77 |
| Printing Event Logs | 77 |
| Exporting Event Logs | 78 |
| Chapter 6: Reports | 79 |
| About Historical Data | 80 |
| Generating Historical Data Reports | 80 |
| Generating Alarm History Reports | 81 |
| Generating Channel History Reports | 82 |
| Creating New Reports | 85 |
| Deleting Reports | 85 |
| Chapter 7: Transfers | 87 |
| Transfers and Transfer Schedules | 88 |
| Creating Transfer Schedules | 88 |
| Performing an Immediate Data Transfer | 90 |
| Editing Transfer Schedules | 90 |
| Deactivating a Transfer Schedule | 91 |
| Temporarily Disabling Transfer Schedules | 91 |
| Appendix: FAQs & Troubleshooting | 93 |
| Index | 105 |

Contents

About this Manual

The viewLinc 3.6 Administrator Guide includes the information you need to install, configure and operate the viewLinc system.

You can also view the Quick Start Guide for a graphical overview of installing viewLinc. If you are not an Administrator, refer to the User Guide for information on the standard tasks performed using viewLinc.

Who this Manual is for

This manual is for administrators who will install and configure viewLinc Server software and its associated components to allow end users to view and monitor data logger readings across a network. This manual covers several topics, including how administrators set threshold alarms, configure email alarm notification, organize channels, define reports, and set logger data transfer schedules.

How this Manual is Organized

The viewLinc 3.6 **Administrator Guide** is organized into chapters as follows:

Chapter 1: Getting Started. Contains viewLinc overview, hardware and software requirements, essential installation instructions, how to log in.

Chapter 2: Channels. Covers what a channel is, using “My Channels”, opening large channel views, and organizing channels into zones. This chapter covers topics of interest to both a general viewLinc user and the administrator.

Chapter 3: Alarms. Contains information on creating, editing, deactivating, and pausing alarms informing those monitoring the system of threshold-exceeding conditions or if data communication between the logger and the system is down. Includes how to acknowledge alarms.

Chapter 4: System Settings. Includes information specifically for administrators, including creating user accounts, configuring email server settings for alarms,

choosing temperature units to display, and changing how and which loggers are shown in My Channels.

Chapter 5: Events. Includes filtering and printing event logs, including details on transfers, alarms, and acknowledgements.

Chapter 6: Reports. Includes a definition of historical data, what you can do with it, how to generate reports.

Chapter 7: Transfers. Includes information about how to transfer Vaisala Veriteq logger data to a PC for analysis using vLog or Spectrum.

Appendix: FAQs & Troubleshooting. Answers common troubleshooting questions, including how to stop and start the viewLinc service, what is installed with viewLinc, and how to troubleshoot common issues.

Conventions Used in this Document

This document uses the following conventions:

- A sequence of actions is indicated by a list separated by a vertical line. For example:
“In viewLinc, choose System | Loggers”
- Menu selections, items you select, and the names of buttons are shown in **bold**.

Related Documentation and Software Products

For help with viewLinc, consult the viewLinc Quick Start Guide.

Use Vaisala Veriteq Spectrum or vLog software and their associated Quick Start Guides for setting up Vaisala Veriteq data loggers and viewing and printing logger historical data as graphs or text files.

Use your specific Vaisala product User Guide for information about installing 300 Series Transmitters.

Support Information

In North America, technical support is available between 8am-4pm PST Monday - Friday, 1-866-861-3388 (or 604-

273-6850). You can also email veriteqsupport@vaisala.com, or visit www.vaisala.com/veriteq.

For sales, pricing, quotations, or general information, please call 1-800-683-8374 (in North America), or 604-273-6850.

For assistance outside North America, see “Getting Help” on page 16.

Chapter 1: Getting Started

This section includes:

- overview of the Vaisala Veriteq Continuous Monitoring System (CMS)
- hardware and software requirements
- installing viewLinc
- logging in to viewLinc from an Internet browser to monitor conditions
- Administrator's Road Map

Overview

Welcome to viewLinc 3.6, a key element in the Vaisala Veriteq Continuous Monitoring System (CMS). Using viewLinc you can easily monitor data logger readings locally on a PC or across a network using a supported version of Microsoft® Internet Explorer® or Mozilla® Firefox® Internet browser.

With viewLinc 3.6, you can:

- monitor remote conditions from multiple data loggers from a local or remote PC desktop
- view real-time data in a graphical format
- generate historical data and alarm reports
- receive visual or email alarms when conditions you are monitoring are out of compliance or if there is a network communication problem
- analyze automatically documented logger events, such as when alarms are triggered, acknowledged or there are logger communication problems
- schedule transfers of Vaisala Veriteq logger data (also referred to as 'historical data') to be viewed and graphed with Vaisala Veriteq Spectrum or vLog software
- easily identify loggers and the zones in which they operate
- swap a logger for calibration or replacement purposes without breaking the data audit trail
- create preconfigured comments for alarm notifications
- create reusable alarm templates

When installed, the Vaisala Veriteq CMS is comprised of software components (including viewLinc), and hardware components (including data loggers, a PC with a supported Internet browser, and, depending on how you connect the loggers to your PC, various cables, Vaisala Veriteq vNet or Digi networking devices).

How you connect your loggers to your PC is a very important administrative decision. There are four methods and each requires certain hardware connections. The most convenient

methods of attaching loggers to PCs are using vNet or Digi devices. These options are described in Table 1.

| Method | How Connected | Detail |
|--------------|---------------------------|---|
| vNet devices | Ethernet | <ul style="list-style-type: none"> Allows data loggers to be connected to the PC across an Ethernet network, allowing the PC and loggers to be separated by large distances within a facility Requires installation of vNet drivers (provided) Requires use of vNet device |
| Digi device | Ethernet | <ul style="list-style-type: none"> Allows data loggers to be connected to the PC across an Ethernet network, allowing the PC and loggers to be separated by large distances within a facility Requires installation of Digi drivers (provided) Requires use of Digi device |
| USB port | Vaisala Veriteq USB cable | <ul style="list-style-type: none"> Allows data loggers to connect directly or over an Ethernet network (when logger host is installed) to the viewLinc server Requires installation of USB drivers (provided) and uses a USB connection on a PC Requires a USB to Logger cable |

Table 1: Methods of attaching loggers to PCs

| Method | How Connected | Detail |
|-------------|-----------------------------------|---|
| Serial port | Vaisala Veriteq serial port cable | <ul style="list-style-type: none"> • Allows data loggers to connect directly or over an Ethernet network (when logger host is installed) to the viewLinc server • Requires a Serial port on a PC • Requires a Serial to Logger cable |

Table 1: Methods of attaching loggers to PCs

It is also possible to use a mix of these methods if your system requires it.

The outlined **System Requirements** apply to all installation options.

System Requirements

To install viewLinc, you need:

- Vaisala Veriteq data loggers or Vaisala 300 Series Transmitters (both are referred to as 'loggers' in this guide and in viewLinc)
- PC (will be referred to in the rest of this document as the viewLinc Server)
- Vaisala Veriteq cables (there are specific cables for attaching loggers to Digi devices and attaching loggers to USB or Serial ports on a viewLinc Server)
- (optional) vNet devices, for connecting loggers to a viewLinc Server using an Ethernet connection
- (optional) Digi devices, for connecting loggers to viewLinc Server using an Ethernet connection

viewLinc Server Requirements

The viewLinc Server machine must meet the following requirements:

- Be available 24 hours a day, 7 days a week.
- Have 350 MB free application disc space.
- Use one of the following operating systems:
 - Microsoft® Windows XP
 - Microsoft® Windows 7 or Windows Server 2008 (32 or 64 bit versions)
 - Other operating systems can be used depending on the size of the installation
- If you plan to use viewLinc from the viewLinc Server machine, you must have a supported Internet browser installed (Microsoft® Internet Explorer® 6.0 or later; Mozilla® Firefox® 3.5 or later are recommended).
- The Historical database requires 200KB/channel/day. The default location of the database is the application folder, and the location of the application folder can be specified during installation.

Depending on the number of channels you are using, the viewLinc Server machine should also meet the following requirements:

Large size installation (300-1000 channels)

- a dedicated machine
- 3.2 GHz, Quad Core
- 4 GB RAM
- sufficient HD space to support 200KB/channel/day

For example, if you have 400 channels, you will need approximately 30GB (400x200x365) per year.

Medium size installation (20-299 channels)

- machine may be shared with other applications
- 1.6 GHz Dual Core
- 4 GB RAM
- sufficient HD space to support 200KB/channel/day

For example, if you have 40 channels, you will need approximately 3GB (40x200x365) per year.

Small installation (<20 channels)

- 1.6 GHz
- 2 GB RAM
- sufficient HD space to support 200KB/channel/day

For example, if you have 4 channels, you will need approximately 300MB (4x200x365) per year.

End User PC Requirements

A machine on the network used to administer viewLinc must have:

- 2.4 GHz
- 2 GB RAM
- a supported Internet browser installed (Microsoft Internet Explorer 6.0 or later; Mozilla Firefox 3.5 or later recommended).

Installing viewLinc

This section outlines how to install viewLinc on a server or a remote host, including a description of the four methods by which loggers can be connected to the system. The four methods are:

- using a vNet device to connect loggers to the network
- using a Digi device to connect loggers to the network
- using USB port to connect loggers to viewLinc Server or Remote Host
- using Serial port to connect loggers to viewLinc Server or Remote Host

If you are connecting 300 Series Transmitter loggers, they are connected either wirelessly or using a Digi device. Refer to your Vaisala product User Guide for more information.

For further graphical representation of installing viewLinc, see the relevant Vaisala Quick Start Guides. There are versions for those using vNet or Digi devices and those using

USB/Serial ports. For copies of Quick Start Guides, see www.vaisala.com/veriteq or speak to your sales representative.

Connecting Loggers

Choose from the following methods to connect your loggers to the network or appropriate PCs.

Method 1: Using vNet Devices

The following procedure shows how to use vNet devices to connect your data loggers to the network.

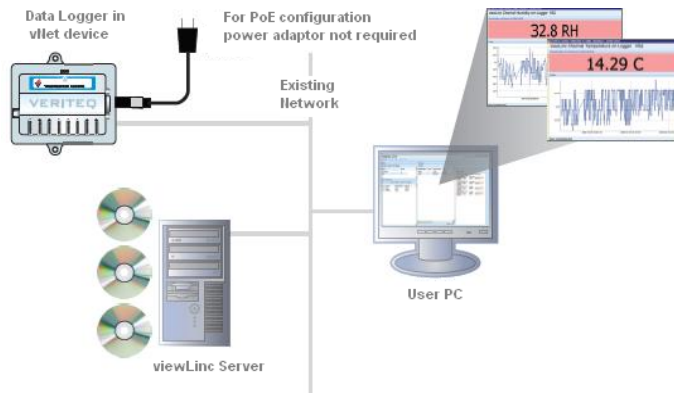


Figure 1: Overview of viewLinc system using vNet devices

Attaching Main Hardware

- 1 Remove protective label on the bottom of the data logger.
- 2 Connect the data logger to the vNet device.
- 3 Connect the vNet device to the Ethernet outlet and (if not using PoE) power supply. When power is supplied to the vNet device, the red power LED light will blink for 7-8 seconds, then stay solid. When a network connection is made, the red LNK LED should light up and stay solid, and the green ACT LED should blink occasionally.

Note: To ensure a secure connection, insert the power supply barrel-end connector into the device and turn 1/4 to the right. If your network supports

Power Over Ethernet, you do not need to connect to a power supply.

For more information about installing vNet devices, refer to the vNet User Guide.

Installing Vaisala Veriteq Drivers

This section covers installing the drivers for vNet devices to connect Vaisala Veriteq loggers to the network using an Ethernet connection. Repeat all of these steps for each vNet device you want to use.

Discovering the vNet Device

- 1 Obtain a reserved (recommended) or static IP address for your vNet device from your IT department. If your networking policy requires you to reserve IP addresses using DHCP, see www.vaisala.com/veriteq for instructions.
- 2 Insert the vNet Device driver CD into the viewLinc Server.
- 3 The Device Setup Wizard launches automatically. Click **Next**.
- 4 Select the device that matches the MAC address from the side of your vNet device, then click **Next**.

Note: If your device is on a different subnet from the server, you will need to know the IP address of the vNet device and launch the RealPort-Setup.exe installer from the RealPort folder on the vNet Device Drivers CD.

Configuring RealPort and Installing Drivers

- 1 In the Configure Network Settings screen, enter an IP address (provided by your IT department). Click **Next** two times.
- 2 In the Configure RealPort Settings screen, select **Install RealPort on this computer**, then click **Next**.
- 3 Click **Next** again. The settings are saved.
- 4 Click **Finish**.

Repeat ***Installing Vaisala Veriteq Drivers*** for each vNet device.

Method 2: Using Digi Devices

The following procedure shows how to use Digi devices to connect your data loggers to the network.

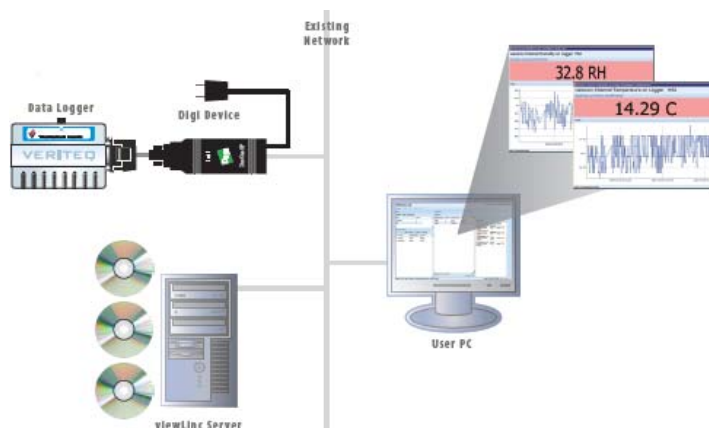


Figure 2: Overview of viewLinc system using Digi devices

Attaching Main Hardware

- 1 Connect your data logger to a Digi device using a Vaisala Veriteq cable.
- 2 Connect your Digi device to power supply and Ethernet outlet.

Note: These instructions focus on the Digi One SP. For other Digi models, see www.vaisala.com/veriteq.

Installing Digi Drivers

This section covers installing the drivers for Digi devices to connect Vaisala Veriteq loggers or Vaisala 300 Series Transmitters to the network using an Ethernet connection. Repeat all of these steps for each Digi device you'll use.

Discovering the Digi Device

- 1 Obtain a reserved (recommended) or static IP address for your Digi device from your IT department. If your networking policy requires you to reserve IP addresses using DHCP, see www.vaisala.com/veriteq for instructions.

- 2 Insert the Digi driver CD into viewLinc Server.
 - 3 The Digi Device Setup Wizard launches automatically. Click **Next**.
 - 4 Select the device that matches the MAC address from the bottom of your Digi device. Click **Next**.
- Note:** If your device is on a different subnet from the server, you will need to know the IP address of the Digi device and launch the RealPort installer on the Digi Driver CD.

Configuring RealPort and Installing Drivers

- 1 In the Configure Network Settings screen, enter an IP address (provided by your IT department). Click **Next** two times.
- 2 In the Configure RealPort Settings screen, select “Install Digi RealPort on this computer”. Click **Next**.
- 3 Click **Next** again. The settings are saved.
- 4 Click **Finish**.

Repeat **Installing Digi Drivers** for each Digi device.

Method 3: Using USB Port

You can also connect data loggers directly to PCs using a USB Port, as shown in Figure 3.

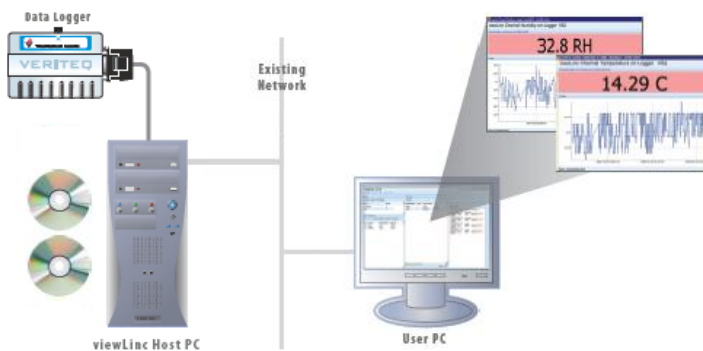


Figure 3: Overview of viewLinc system using USB port to connect loggers

Installing USB Drivers

- ▶ Using the supplied Vaisala Veriteq USB cable driver CD and Quick Start guide, install USB drivers on every PC you plan to attach loggers to.

Connecting Hardware

- 1 Connect the data logger to a Vaisala Veriteq USB cable.
- 2 Connect the USB cable to your viewLinc Server or Logger Host (ensure the viewLinc Server computer is attached to your network).
- 3 Install a USB cable driver. You only need to install a driver once on each machine to which loggers are connected.

Method 4: Using Serial Port

You can also connect data loggers to PCs using a Serial Port. The configuration using a Serial port is very similar to using USB; refer to Figure 3.

Connecting Hardware

- 1 Connect your data logger to a Vaisala Veriteq Serial port cable.
- 2 Connect the Serial port cable to your viewLinc Server or Logger Host (ensure this computer is attached to your network).

Repeat these steps for all data loggers.

Installing Spectrum or vLog Software

Once your data loggers are installed, you are ready to install either Spectrum or vLog software.

Note: If you use 300 Series Transmitters, you are not required to install Spectrum or vLog Software.

Installing Spectrum (for non-validatable environments), or vLog (for validatable environments) allows you to:

- set sample intervals
- enable or disable channels
- specify logger and channel descriptions
- store historical data for backup purposes

It is recommended you install Spectrum or vLog on all PCs with Vaisala Veriteq loggers connected to them.

Refer to the Spectrum or vLog User Guides for installation instructions.

Installing viewLinc Software

Now you are ready to install viewLinc which will be used to make data logger monitoring, alarming and reporting available across your network. There are two options available to you:

- Install viewLinc software on a network server (must be installed once).
- Install viewLinc software on a PC as an offsite host to make Loggers connected to it available to the viewLinc server.

To install viewLinc on the viewLinc Server:

- 1 On your viewLinc Server, insert the viewLinc CD and run setup.exe.
- 2 Select the installation language.
- 3 Start the Setup Wizard by clicking **Next**.
- 4 Review and accept the License Agreement, and click **Next**.
- 5 Choose a destination location for the viewLinc program files and database, then click **Next**.
- 6 Select **Enterprise Server**, and click **Next**.
- 7 If you are upgrading from an earlier version of viewLinc and you want to retain the settings used in your older version of viewLinc, select **Import Settings**.
- 8 viewLinc Server requires an open TCP port for communication. The installer defaults to port 80; if port 80 is taken, the installer offers a new port number. Make a note of this port number - you'll need it when logging in to viewLinc. Click **Next**.
- 9 Click **Install**.
- 10 Click **Finish**.

You can set up additional computers as remote hosts using a USB or Serial cable.

To install viewLinc on an offsite host PC:

- 1 Insert viewLinc CD and run setup.exe.
- 2 Select the installation language.
- 3 Start the Setup Wizard by clicking **Next**.
- 4 Review and accept the License Agreement, then click **Next**.
- 5 Choose a destination location for the viewLinc program files, then click **Next**.
- 6 Select **Logger Host**, then click **Next**.
- 7 Click **Install**.
- 8 Click **Finish**.

You have installed all necessary viewLinc components. You can now move to any machine on the network - or stay where you are - and log in to viewLinc to monitor channels using any supported Internet browser on the network.

Logging In to viewLinc

viewLinc allows you to:

- watch conditions (such as temperature and relative humidity) being recorded by loggers and in the viewLinc historical database
- receive alarms if conditions are outside limits you set or if there is a communications problem
- receive other system-related alarms

When you are ready to start using viewLinc, such as setting alarms, configuring email settings, and scheduling logger data transfers, log in to viewLinc from a supported Internet browser. Supported Internet browsers include Microsoft Internet Explorer 6.0 or later, or Mozilla Firefox 3.5 or later.

By default, one administrator account is created when viewLinc is installed. The username and password are both “admin”. It is important you change the admin password as soon as possible to prevent unauthorized access (see “Editing Users and Passwords” on page 68).

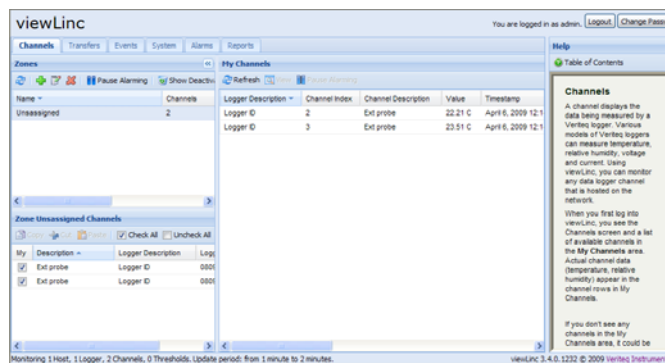
To log in to viewLinc:

- 1 Double-click the desktop icon .

- 2 Or, in the address box of a supported Internet browser, enter the name or address of the machine where viewLinc is installed, and the port number. For example, `http://computername:portnumber` (if no port number is specified, 80 is used by default).
- 3 In the login screen, enter your username and password. Click **Login**.

Note: The default administrator username and password are both “admin”.

- 4 The main viewLinc screen appears, showing available channels or (the first time you log in) an empty “My Channels” screen.



If you don't see any channel data, go to the Channels tab. In the Zones area, select a channel from the list, and click **Refresh**. The selected channel's data will appear.

If no channels display, your data logger may not be connected properly, you may not have Channels assigned to you, or there could be a problem with viewLinc itself. If you use Vaisala Veriteq data loggers, try discovering loggers - see “Discovering Loggers” on page 54.

Note: The administrator may have set up the system to prompt you for your password periodically to

ensure system security. When prompted, reenter your password. To change or set the session expiry, see “Setting Session Expiry Time” on page 71.

For more on channels, see **Chapter 2: Channels**.

Administrator's Road Map

Once your viewLinc system is installed, you may find the following roadmap a useful overview of the set up and configuration activities required to implement viewLinc.

- 1 Edit Vaisala Veriteq logger properties using vLog or Spectrum (such as sample timing and data logger channels).
- 2 If you plan to set day and time schedules during which specific users will be notified of alarms, set Contact Schedules (see “Creating Contact Schedules” on page 65).
- 3 Create User Accounts (see “Creating User Accounts” on page 67.)
- 4 Choose temperature measurement unit preferences (see “Choosing Temperature Measurement Unit Preferences” on page 70.)
- 5 Configure email settings (see “Configuring Email Settings” on page 61).
- 6 Edit alarm email templates (see “Editing Alarm Email Templates” on page 63).
- 7 Create alarm and threshold templates (see “Creating Alarm Templates” on page 36).
- 8 Add loggers (see “Adding Loggers” on page 54).
- 9 Set and configure alarm thresholds (see “Threshold Alarms” on page 42).
- 10 Configure alarms (see the sections on setting threshold, communication and logger alarms in **Chapter 3: Alarms**).
- 11 Create zones, assign channels to zones and edit channel properties (see “Organizing Channels into Zones” on page 27).

Once these set up activities are complete, you are ready to start monitoring logger readings, viewing events and printing reports. You can also set up transfer schedules to view and analyze Vaisala Veriteq logger data in vLog or Spectrum software (see “Transfers and Transfer Schedules” on page 88).

Getting Help

If you need help, technical support is available:

North America

Contact Vaisala Canada Inc, 8am-4pm PST Monday - Friday, at 1-866-861-3388 (or 604-273-6850) or email veriteqsupport@vaisala.com. See also www.vaisala.com/veriteq.

For sales, pricing, quotations, or general information, please call 1-800-683-8374 (or 604-273-6850).

Outside of North America:

helpdesk@vaisala.com

Vaisala Headquarters (Finland)

Vanha Nurmijärventie 21

01670 Vantaa

FINLAND

Industrial Instruments

Phone: +358 9 8949 2658

Fax: +358 9 8949 2295

Japan Service Center

42 Kagurazaka 6-Chome

Shinjuku-ku

Tokyo 162-0825

JAPAN

Phone: +81 3 3266 9611

Fax: +81 3 3266 9610

China Service Center

Floor 2, EAS Building

No. 21, Xiao Yun Road, Dongsanhuan Beilu

Chaoyang District

Beijing 100027

CHINA

Phone: +86 10 5827 4100

Fax: +86 10 8526 1155

Chapter 2: Channels

This section is for administrators and general users.

In this section, you'll learn about:

- channels and zones
- selecting channels and zones to display in My Channels
- opening large channel views
- viewing and working with real-time graphs in a large channel view
- creating zones
- organizing channels into zones
- editing zones
- deactivating zones
- displaying or hiding channel information

Let's get started learning what a channel is in viewLinc.

About Channels

What is a Channel?

Depending on the type of Vaisala data loggers you have installed, a logger may have up to five channels available to measure temperature, relative humidity, voltage and/or current (one channel is used for each type of measurement).

Note: 300 Series Transmitters Output Quantities are displayed as Channels.


Each channel displays the type of data being measured. Using viewLinc, you can monitor any data logger channel that is connected to the network.

When you first log in to viewLinc, the Channels window displays. This window includes:

- zones available for monitoring
- data logger channels available for the selected zone
- active monitoring channels and actual channel data
- threshold indicators
- context-sensitive Help

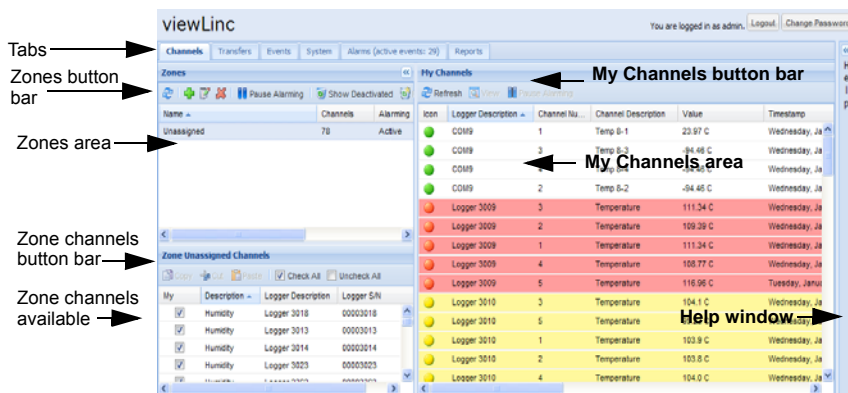
Where are my Channels?

If you don't see any channels in the My Channels area, it could be that:

- There are no zones or channels selected. In the Zones area, ensure at least one channel or zone has the check box next to it selected, then click  **Refresh** in the My Channels area.
- Your logger may not be connected properly.
- If you use Vaisala Veriteq loggers, try discovering loggers - see "Discovering Loggers" on page 54.

Understanding the Channels Screen

The Channels screen in viewLinc contains many important features:



| Item | Details |
|--------------------------|--|
| Tabs | Contains main viewLinc tabs: Channels, Transfers, Events, System, Alarms, Reports. |
| Zones button bar | Contains buttons like Refresh, Pause Alarming, etc. |
| Zones area | Where configuration of zones takes place. Use zones to organize the many channels that may be connected to viewLinc. |
| Zones channels available | List of data logger channels available for a selected zone. |
| My Channels area | Includes details on channel configurations, current data readings, latest timestamp and threshold alarm setting information. |

Table 2: Important parts of the Channels screen

My Channels displays general information about your logger and channels. Most columns are easy to understand; however, here are a few definitions to help you get familiar

with viewLinc. To see all options, see “Hiding and Showing Channel Columns” on page 31:

| Column | Displays |
|---------------------|--|
| Zone | Zone the channel is in. |
| Logger Description | Logger description (editable from the System tab). |
| Channel Number | Number representing the channel for that logger (each logger has 1 or more channels, and labels them 1, 2, and so on). |
| Channel Description | Description of channel (editable from the System tab). |
| Value | Value of that channel, for example, temperature in Celsius. |
| Timestamp | Time that the last channel reading was taken. |
| Status | “OK” appears if there are no currently active alarms. Changes to indicate if a threshold alarm condition or any other alarm has been detected. |
| Threshold Summary | Summary of threshold status, if active. |
| Alarming | Indicates whether the channel or logger is currently alarming (having reached an alarm threshold). |

Table 3: Columns of information in My Channels


Opening Large Channel Views

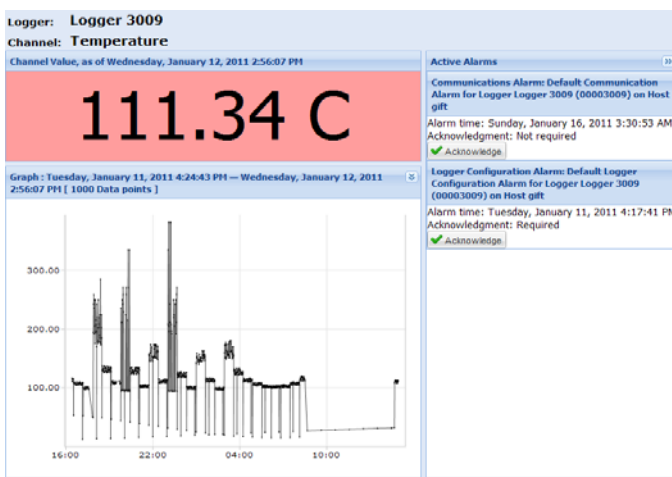
This window contains the most current data reading for the channel, any related threshold settings, a graphical representation of recent historical data readings, and an area to indicate an active alarm.

Note: You can view a particular channel reading in a single window, or you can open multiple channel

windows. If you use Internet Explorer, ensure your browser is set up to open new links in a new window or tab. Go to Tools | Internet Options, then, on the General tab in the Tabs section, click **Settings** and choose to open links from other programs in **A new tab in the current window**.

To open a large channel view:

- 1 From the Channels tab in the My Channels area, select a channel you want to view.
- 2 Click  **View** or double-click the selected channel line. A new resizable window containing information about the selected channel appears.



- 3 Repeat steps 1 and 2 to view multiple large channel views.

To close a large channel view, click the close box in the top right corner of the window.


To acknowledge an alarm, see “Acknowledging Alarms” on page 49.

Real-Time Graphs

With viewLinc, you can view live data in graphical form at any time. Each graph displays the last 300 or 1000 data points (based on the sample interval set for the logger and the

Internet browser you use), and threshold values for the corresponding time period.

To view live data as a graph:

- 1 From the Channels tab, in the My Channels area, select a channel you to want to view.
- 2 Click  **View** (or double-click the selected channel line)
This opens the large channel view.

In this screen you can view the most recent historical trends, and hover over specific data points for more detailed readings.

Reading Graphs in Large Channel View

When you open a channel, you can read both a numerical and graphical representation of the logger reading. Here is a description of the key elements in the graphing area:

| Item | Description |
|------------------------|--|
| Title bar | Displays the name of the active logger and type of data reading (humidity, temperature, voltage or current). |
| Header bar | Indicates the date and time of latest reading; the time zone is based on the time zone setting of the PC running the browser. |
| Numerical display area | Displays most current data value in units being measured, as defined by the user(see page “Choosing Temperature Measurement Unit Preferences” on page 70 to change). |
| Graph area | A graphical representation of data history is displayed here. |
| Left-side Y-axis | Shows the scale for the data displayed in the graph. |

Table 4: Large channel view elements

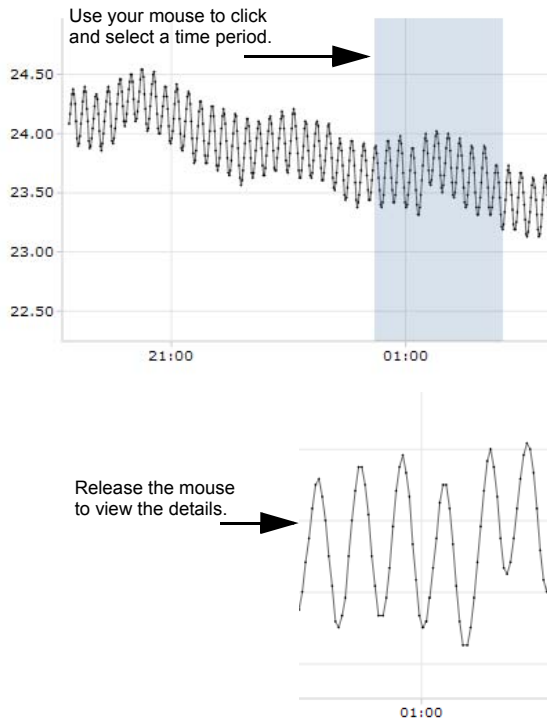
| Item | Description |
|--------------------|--|
| X-Axis time scale | Shows the reporting time frame (if you use Internet Explorer 6.0, you can only view the last 300 data points; all other browsers will show the last 1000 points). |
| Channel Line | Indicated by a line to show historical measurement readings based on a specific date or time frame. Move your mouse and hover over a specific point to show the specific X- and Y-axis values. |
| Threshold Line | Indicated by a color-coded line (based on threshold setting) to show historical threshold values. Move your mouse and hover over a specific point to show the specific X- and Y-axis values. |
| Active Alarms area | Displays active alarm details: Threshold value and amount exceeded; alarm date and time; whether the alarm was acknowledged, and by whom. Permits user to acknowledge an alarm. |
| Status bar | Indicates channel monitoring status (OK or Alarm condition type). |

Table 4: Large channel view elements

Viewing Graph Detail in Large Channel View

With a large channel view open, you can also zoom in on a specific time period.


Simply click anywhere on the graph and drag your cursor to the right to highlight the time period you want to magnify, then release. The magnified area displays until the next live update. To return to full view immediately, double-click anywhere on the graph (or to zoom out, select an area, drag cursor to the left, then release).



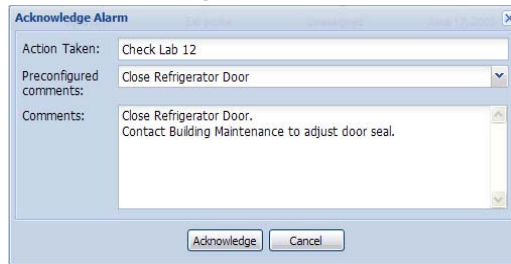
Acknowledging Alarms from Large Channel View

From a large channel view window, you can acknowledge alarms.

To acknowledge an alarm from a large channel view:

- 1 From the large channel view Active Alarm panel, click  **Acknowledge**.
- 2 In the Acknowledge Alarm dialog box that appears, enter information to describe what was done to correct the alarm situation, or a general comment.

3 Click **Acknowledge**.



The **Acknowledge Alarm** dialog box contains the following fields and buttons:

- Action Taken:** Check Lab 12
- Preconfigured comments:** Close Refrigerator Door
- Comments:** Close Refrigerator Door, Contact Building Maintenance to adjust door seal.
- Buttons:** Acknowledge, Cancel

Organizing Channels into Zones

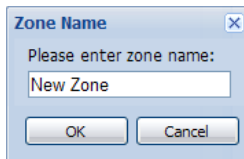
To organize your viewLinc screen and keep a closer eye on the channels that matter to you, you can organize your channels into relevant zones.

By default, there is one zone created, Unassigned. All available channels and recently disconnected channels are contained in this zone until otherwise configured.

Creating Zones

To create a new zone:

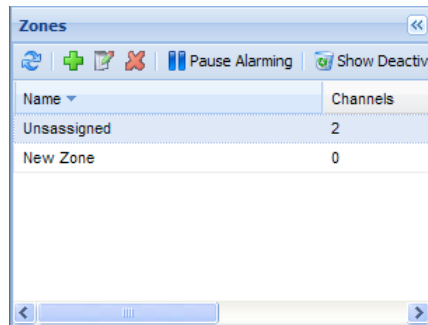
- 1 From the Channels tab in the Zones area, click **+ New**.
- 2 In the Zone Name dialog box, enter a name for the zone.



The **Zone Name** dialog box contains the following fields and buttons:

- Please enter zone name:** New Zone
- Buttons:** OK, Cancel

- 3 Click **OK**. The new zone appears in the Zones area under Unassigned.



Editing Zones

To edit a zone (the zone name only):

- 1 From the Channels tab in the Zones area, highlight the zone you want to edit.
- 2 Click **Edit**.
- 3 In the Zone name dialog box, make your changes.
- 4 Click **OK**.

Editing zones edits the zone name only; it does not change the channels assigned within it. To move channels in and out of zones, see **Assigning Channels to Zones**.

Assigning Channels to Zones

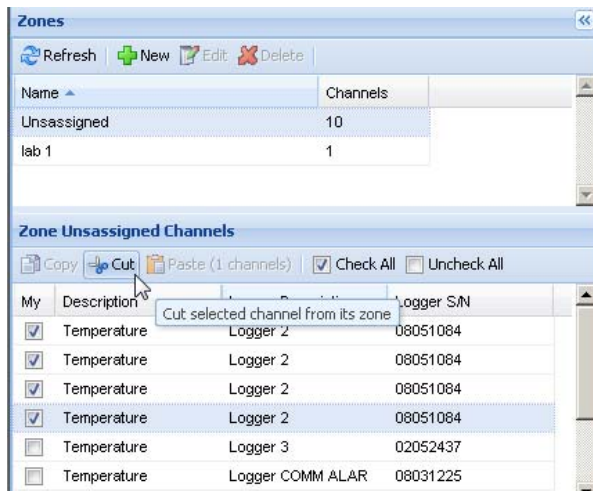
To assign a channel to a zone:


- 1 Before you can move channels into a zone, channels must be set up by your viewLinc administrator. Refer to the specific User Guide to learn more about enabling and disabling logger channels on your Vaisala Veriteq logger or 300 Series Transmitter.
- 2 From the Channels tab in the Zones area, ensure you have created the zone you want to assign a channel to. You must have at least one zone created (in addition to Unassigned which is created by default) in order to assign channels.

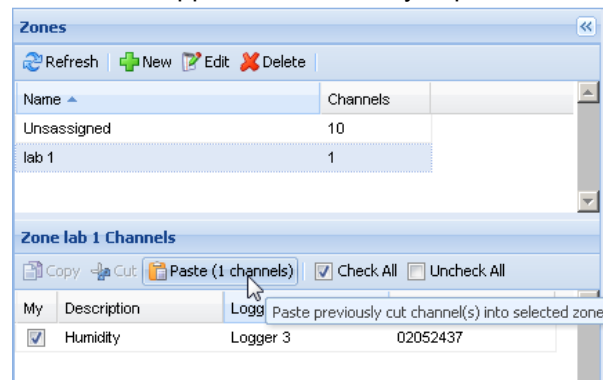
- 3 In the Zones area, highlight the zone (in this case, the Unassigned zone) that contains the channel you want to reassign.
- 4 In the Zone Unassigned Channels area (below Zones), highlight the channel you want to reassign.


Note: To select multiple channels at one time, press the **Ctrl** key while you select channels. To select a group of channels in a list, press the **Shift** key and select the first and last channels.

- 5 Click  **Cut**.



- 6 In the Zones area, highlight the name of the zone you want to reassign the channel to (in this case, Lab 1).
- 7 In the Zone Unassigned Channels area, click  **Paste**. The channel appears in the zone you pasted it into. You




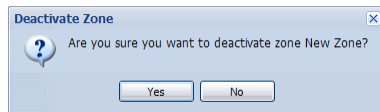
may need to select your channel destination zone or click  **Refresh** to view the result.

Deactivating Zones

When you deactivate a zone, the channels revert to the default Zone, Unassigned, if they are not included in other zones.

To deactivate a zone:

- 1 From the Channels tab in the Zones area, select the zone you want to deactivate. Note that you cannot deactivate the Unassigned zone.
- 2 Click  **Deactivate Selected Zone**. The Deactivate Zone dialog box appears.



- 3 Click **Yes**. The zone is deactivated and its channel(s) reappear in the Unassigned zone.

To move channels between zones, see “Assigning Channels to Zones” on page 28.

Ordering Channel Columns

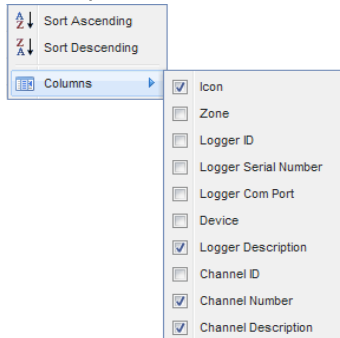
To re-sort the display order in My Channels:

- 1 From the Channels tab in the My Channels area, let your mouse hover over any column heading until the black option button appears.
- 2 Click the button and select **Sort Ascending** or **Sort Descending**, or, click on any column header to sort all the rows using that column. Click again to resort the list in the opposite order.

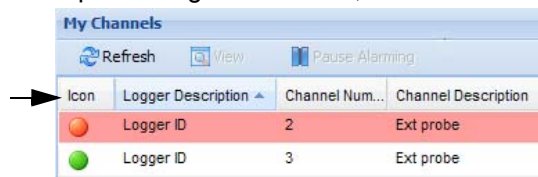
Hiding and Showing Channel Columns

To hide columns in My Channels:

- 1 From the Channels tab in the My Channels area, let your mouse hover over any column heading, then click the black option button.



- 2 Select **Columns**, then select the columns you want to display or deselect columns you want to hide. For example, to show a column with colored icons representing alarm status, select **Icon**.



- 3 Click outside the list, or press **[Esc]** to hide the options list.

You've now looked at how channels work - let's move on to learn how to configure, trigger and acknowledge alarms.

Chapter 3: Alarms

Alarms and alarm acknowledgement are one of the keys to success with the Vaisala Veriteq Continuous Monitoring system.

In this chapter, you'll learn to:

- understand types of alarms in viewLinc
- create alarm templates
- set threshold and communication alarms
- deactivate and reactivate alarms
- acknowledge alarms
- pause alarms

To learn about how to generate Alarm reports, see ***Chapter 6: Reports.***

Let's get started looking at alarms.

About Alarms

Users with Full Control, Configure Alarms, and Configure Custom Threshold permissions can set alarm limits, and, when conditions exceed these limits, alarms are triggered which notify key staff of the condition. Staff with Acknowledge Alarms permissions or higher then acknowledge alarms in viewLinc.

All transactions are recorded in the Event Log and the Historical database.

There are several types of alarms in viewLinc: threshold alarms, communication alarms, event log validation alarms, and logger sampling alarms. If you are using validatable loggers, you may also receive logger validation alarms and calibration alarms.

Using viewLinc, you can customize the alarm information that is issued for threshold, communication and logger alarms by configuring them from the System | Loggers tab.

Threshold Alarms

Threshold alarms notify users when conditions (such as temperature and relative humidity) are outside acceptable limits.

Threshold alarms are not enabled by default. To trigger threshold alarms when certain thresholds are exceeded, users with assigned permissions must configure them.

Communication Alarms

Communication alarms notify users when communication between a host (Logger Host or viewLinc Server) and its data loggers is down. This may be because viewLinc Server can not communicate with the logger, or the data logger connection to a host has been severed. Communication alarms serve as a system health test, alerting you if there is a problem that might disrupt viewLinc monitoring and alarming.

Event Log Validation Alarms

An Event Log Validation alarm indicates that the viewLinc event log historical data has been modified or tampered with and is therefore no longer validatable.

Logger Configuration Alarms

If you receive a Configuration Alarm, this indicates that your data logger has stopped recording data history or was configured incorrectly. This could be the result of being set to stop when full, a delayed start, or the logger could have an internal error. This alarm can also be triggered if a channel has been disabled in the logger using Spectrum or vLog. To correct this issue, you can verify or modify the Vaisala Veriteq data logger settings using vLog. If the problem persists, contact your Vaisala technical support representative.

Logger Validation Alarms

If you use a VL-type data logger, you'll receive a Validation alarm if the validation memory in the logger is corrupted or has been modified. Contact your Vaisala technical support representative.

Logger Calibration Alarms

If you use a VL-type data logger, Calibration Alarms send you intermittent notification when your data logger is due for calibration. You receive notifications at the following intervals: 3 months and 1 month before the calibration date, then again on the data logger's scheduled calibration date. This alarm will remain active until the logger has been recalibrated.

What Happens When an Alarm is Triggered?

When an alarm is triggered, several things can happen:

- A pop-up can appear showing a description of the condition, and an alarm message. If pop-ups are blocked in your browser, an error message appears, prompting you to enable pop-ups for viewLinc.
- An email can be sent. If configured, emails are automatically sent to the address (or addresses) specified when threshold limits are exceeded, communications are interrupted, or an event log or logger alarm condition is

present. Alarm emails can be sent repeatedly based on how alarm properties have been set.

- An application can be launched or an external device turned on. If configured, an external device (such as a light or buzzer) or a computer application (such as batch file which can page or phone a particular number) can be triggered when an alarm condition occurs.
- All of the above. You can also set up a tree alarm hierarchy, a method of notifying different individuals of an alarm if the first notification is not acknowledged within a specified time frame.

Alarms should be acknowledged in viewLinc and the situation dealt with as soon as possible. All transactions are recorded in the Event Log and Historical database and can be viewed in an Event Log or Alarm report.

Creating Alarm Templates

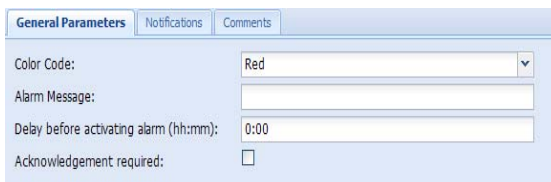
viewLinc provides you with five default alarm templates, one each for threshold alarms, communication alarms, and three types of logger alarms (calibration, validation, and configuration). You can modify the parameters of these templates as you need, or create your own.

Templates are a great way to save time when you want to define similar alarm settings for multiple logger channels (applies to the general parameters - color code, alarm message, delay, acknowledgement, as well as notifications and comments).

You can also create a reusable threshold condition and assign it to a specific alarm template (see “To create a threshold condition template:” on page 41).

To create an alarm template:

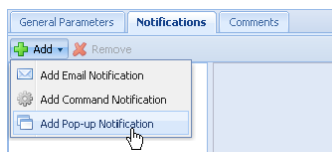
- 1 From Alarms | Alarm Templates, click **+ Add Alarm Template**.



The screenshot shows a web-based form for configuring an alarm template. It has three tabs: 'General Parameters' (selected), 'Notifications', and 'Comments'. The 'General Parameters' tab contains the following fields:


- Color Code:** A dropdown menu with 'Red' selected.
- Alarm Message:** A text input field.
- Delay before activating alarm (hh:mm):** A text input field with '0:00' entered.
- Acknowledgement required:** A checkbox that is currently unchecked.

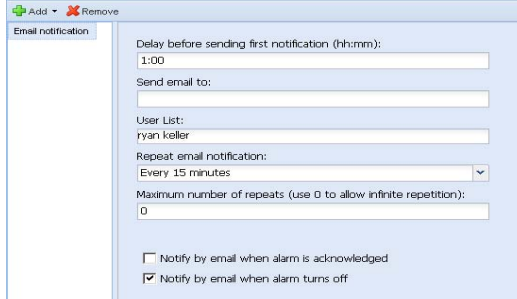
- 2 By default, the alarm template name is New Alarm Template. Click in the title to enter a more specific title.
- 3 On the General Parameters tab, define the following:
 - a **Color Code.** Choose the alarm color code - either blue, yellow, orange, or red. This color is used as the color indicator for alarms on the Alarms tab, and as the background color for a row in My Channels, if activated. It is also used as the color for a threshold line in a real-time graph. Use the color codes to indicate severity, starting with blue for less serious alarm conditions, escalating to red for the most serious alarm conditions.
 - b **Alarm Message.** If you want to set up an alarm email notification (set up on the Notifications tab), enter the message you want to appear in the alarm notification.
 - c **Delay Before Activating Alarm (HH:MM).** If desired, specify a delay period, in hours and/or minutes, from when a condition exists and you want the alarm triggered.
 - d **Acknowledgement Required.** Select this option if you require an individual to acknowledge an alarm. If you select this option, the alarm will remain on the Alarms tab until it has been acknowledged.
- 4 If you want the alarm to open in a pop-up window:
 - a Select the Notifications tab.
 - b Click **Add**, and then select **Add Pop-up Notification**.



- c In the **Delay before pop up** field, indicate a delay, in hours and/or minutes (HH:MM), before you want the pop-up to display. This delay starts after the delay on the General tab finishes.

Note: We recommend that you use this feature sparingly. If many pop-ups are triggered at the same time, it can disrupt your browser operation and may require that you restart your browser to correct.

- 5 To send an email notification when the alarm triggers:
 - a Select the Notifications tab.
 - b Click  **Add**, and then select **Add Email Notification**.



- c In the **Delay before sending first notification** field, indicate a delay, in hours and/or minutes (HH:MM), before you want the first email sent.

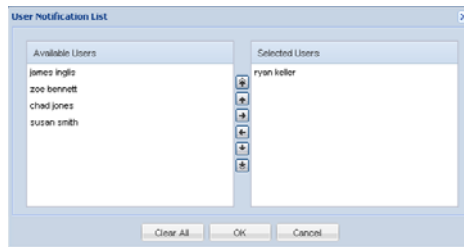
Note: If you have set the Delay Before Activating Alarm option, ensure the combined time delay does not interrupt your alarm notification requirements.

- d To enter a specific email or multiple email addresses to receive notification (ones that are not pre-configured in System | Users), enter the email addresses in the **Send email to** text box. Separate multiple email addresses with commas.

Note: Email addresses specified in **Send email to** are not checked against email addresses for specific users. If you put an email address in **Send email to**, and that same email address is specified in System | Users with a specific contact schedule, viewLinc will ignore the schedule and send the notification.

- e Click the **User List** text box to view a list of users authorized to receive notifications. Only users for whom you have specified an email address in System | Users are visible (see “Creating User Accounts” on page 67). Drag users to notify to the Selected Users column. Re-

organize the list order if necessary using the arrow buttons. Click **OK**.



- f** In the **Repeat email notification** drop-down, choose an appropriate interval for the frequency emails are re-sent while the condition still exists. You may also want to use the **Maximum Number of Repeats** field to specify a maximum number of repeat emails that should be sent (enter zero, 0, if you do not want to specify a limit).
- g** To also have an email sent when an alarm is acknowledged, or when the condition no longer exists, select the appropriate check box.

- h** If you want to issue alarm notifications to different recipients for different alarm conditions, create multiple email notifications with different delay periods. For example, you could create a notification for the first recipient with a short delay period, perhaps 1 minute. Create another email notification for someone else with a different delay period, for example 20 minutes. If the first notification is not acknowledged within 20 minutes, the second notification is automatically sent.

Note: There is additional information that can be sent in the alarm email. For more, see “Editing Alarm Email Templates” on page 63.

- 6** You can also run commands on the viewLinc Server machine (which in turn can trigger external devices) when a condition exists. To configure commands:
 - a** Select the Notifications tab.
 - b** Click **+ Add**, then select **Add Command Notification**.
 - c** To specify a delay before the command runs, enter a delay period in hours and/or minutes (HH:MM).

Note: If you have set the Delay Before Activating Alarm option, ensure the combined time delay does not interrupt your alarm notification requirements.

- d** In the **Run command** text fields, enter DOS commands in the appropriate boxes. You can run different commands when an alarm is triggered, a notification is repeated, an alarm is acknowledged, or an alarm condition is no longer true.

The screenshot shows a configuration window with the following fields and values:

- Delay before running first notification command (hh:mm): 0:10
- Run command when alarm is activated: "C:\Program Files\Veriteq Instruments\viewLinc\python\python" -m viewLinc.scripts.SwitchBbRelay 2 2
- Run command on repeated notifications: "C:\Program Files\Veriteq Instruments\viewLinc\python\python" -m viewLinc.scripts.SwitchBbRelay 2 3
- Repeat command: Every 60 minutes (selected from a dropdown menu)
- Maximum number of repeats (use 0 to allow infinite repetition): 12
- Run command when alarm is acknowledged: (empty field)
- Run command when alarm is turned off: "C:\Program Files\Veriteq Instruments\viewLinc\python\python" -m viewLinc.scripts.SwitchBbRelay 2 1

For example:

```
C:\Program Files\Veriteq Instruments\viewLinc\python\python" -m viewLinc.scripts.SwitchBbRelay <number of com port where relay device is attached>
```

Option as specified in script documentation in **Appendix: FAQs & Troubleshooting**.

The example above shows a python script specific to a Digital Relay I/O device. Different parameters apply to different commands or scripts.

- 7** To insert comments in an alarm email, you can select from a list of preconfigured comments (see “Editing Alarm Email Templates” on page 63), or enter a new

comment. How comments appear in an email is defined in the email template.

- a Select the Comments tab.
- b Select a preconfigured comment that is appropriate for the purpose of the notification, or enter a new comment you want displayed in the notification.

The screenshot shows the 'Comments' tab of the alarm template configuration window. It features a 'Preconfigured comments' dropdown menu and a 'Comments' text area for entering a custom comment.

- 8 When alarm settings are complete, click **Save**.

You can now apply this alarm template to one or more loggers or channels (see “Setting Threshold Alarms” on page 42 or “Setting Communication Alarms” on page 45). If you want to make minor changes to the template while applying to loggers, see “Editing Threshold Alarms” on page 44, “Editing Communication Alarms” on page 46, or “Editing Logger Alarms” on page 48.

To create a threshold condition template:


- 1 From Alarms | Threshold Templates, click **Add Threshold Template**.

The screenshot shows the 'Add Threshold Template' dialog box. It includes fields for 'Threshold Condition' (greater than 0.00 C), 'Use Alarm Template' (selected), 'Use Custom Alarm Settings', and the 'General Parameters' tab. Other fields include 'Color Code' (Red), 'Alarm Message', 'Delay before activating alarm' (0.00), and 'Acknowledgement required' (checkbox).

- 2 By default, the template is named New Threshold Template. Double-click anywhere in the title to change it.

New Threshold Template

- 3 Set the threshold condition.
- 4 If you want to apply an existing alarm template (which defines how the alarm displays and who is notified when a threshold is reached), select **Use Alarm Template** (see “Creating Alarm Templates” on page 36).

- 5 If you want to define custom settings for this template, complete the fields in the General Parameters, Notifications, and Comments tabs.
- 6 When you are finished creating your threshold template, click  **Save**.

Threshold Alarms

Users with the correct permissions set logger channel thresholds that trigger alarms. For example:

- Greater than 23.00 C for more than 1 minute
- Less than 37.76 RH for more than 15 minutes

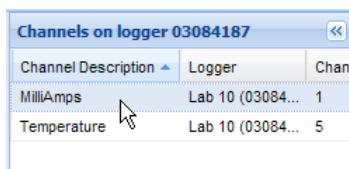
You can set a threshold alarm using a template (if previously configured), or set a custom alarm.

Setting Threshold Alarms

You can configure several threshold alarms, for example, one for yellow alarms (mild concern), another for red alarms (extreme concern). For example, you could set a yellow alarm to trigger first (at one minute out of threshold), and send an email to someone who needs to know. For a red alarm, you could set the alarm condition to a longer time (15 minutes out of threshold) and send the email to a lab manager, or a distribution list of people who need to be notified to take action.

To set a threshold alarm:

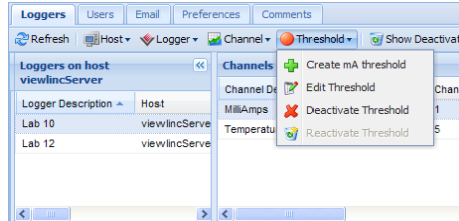
- 1 From System | Loggers, in the Channels on Logger column, select the channel or channels you want to set the threshold alarm for.



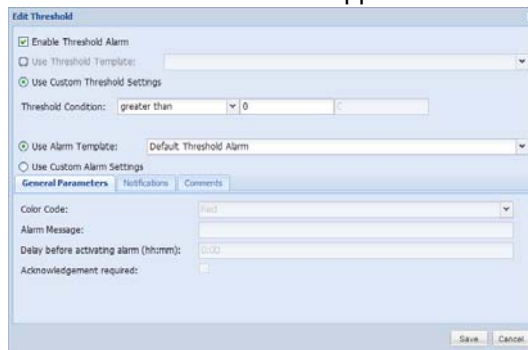
| Channel Description | Logger | Chan |
|---------------------|------------------|------|
| MilliAmps | Lab 10 (03084... | 1 |
| Temperature | Lab 10 (03084... | 5 |

Note: To select multiple channels at one time, press the Ctrl key while you select channels. To select a group of channels in a list, press the Shift key and select the first and last channels.

- 2 Select **Threshold**, and click **+ Create X Threshold** (where X represents the unit reading measured by the channel, such as C or RH or mA).




The Edit Threshold screen appears.



- 3 To set a threshold alarm using an existing threshold template (recommended), select **Use Threshold Template**, then select the template from the drop-down list.
- 4 To set a custom threshold, select **Use Custom Threshold Settings** and define the threshold condition. For example, a temperature alarm that is triggered when the temperature goes above 21C.
- 5 To use an existing alarm template, select **Use Alarm Template**, then select the template from the drop-down list.
- 6 To set up custom alarm settings, select **Use Custom Alarm Settings**.
- 7 Set your alarm settings on the General Parameters, Notifications, and Comments tabs following steps 3 to 8 in “Creating Alarm Templates” on page 36.

Editing Threshold Alarms


To edit a threshold alarm:

- 1 In System | Loggers, select the channel you want to edit thresholds for, and then select the threshold to edit.
- 2 On the Threshold menu, click  **Edit Threshold**. The Edit Threshold screen displays.
- 3 Edit threshold settings as desired.
- 4 Click **Save**.

Disabling Threshold Alarms

You can temporarily disable alarms without deleting all the setting information (for example, when you want to move a logger from one location to another).

To temporarily disable a threshold alarm:


- 1 In System | Loggers, highlight the row of the channel you want to disable thresholds for.
- 2 On the Threshold menu, select  **Edit Threshold**.
- 3 In the Edit Threshold screen, deselect **Enable Threshold Alarm**.
- 4 Click **Save**.

Note: You can also pause alarms - for more information, see "Pausing Alarms" on page 50.



Deactivating and Reactivating Threshold Alarms

You may want to deactivate a logger's channel threshold alarm because it is no longer required. A deactivated threshold "disappears", but can be reactivated.

To deactivate a threshold alarm:

- 1 In System | Loggers, highlight the row of the channel you want to disable thresholds for.
- 2 On the Threshold menu, select  **Deactivate Threshold**.

To reactivate a deactivated alarm:

- 1 Click  **Show Deactivated Items**.
- 2 From the list of thresholds that appear, highlight one and select  **Reactivate Threshold**.

Note: You can also pause alarms - for more information, see “Pausing Alarms” on page 50.

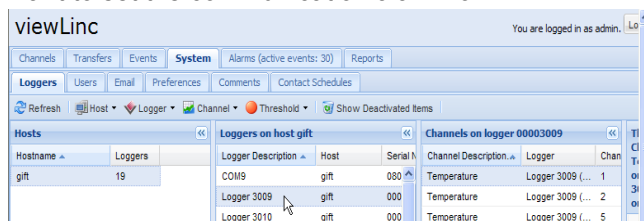
Communication Alarms

Communication between loggers and the viewLinc Server is essential for real-time monitoring of conditions. Because of this, viewLinc includes communication alarms to notify users if communications are down at any point. By default there is one communication alarm preconfigured for each host and each logger. You can either edit the default alarms, or set up additional communication alarms.

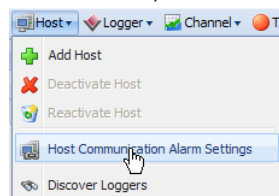
Setting Communication Alarms

To set a communication alarm:

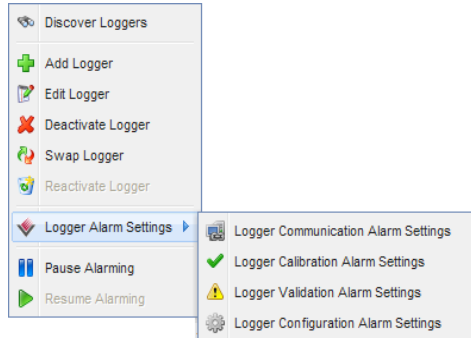
- 1 From System | Loggers, select the host or logger you want to set the communication alarm for.



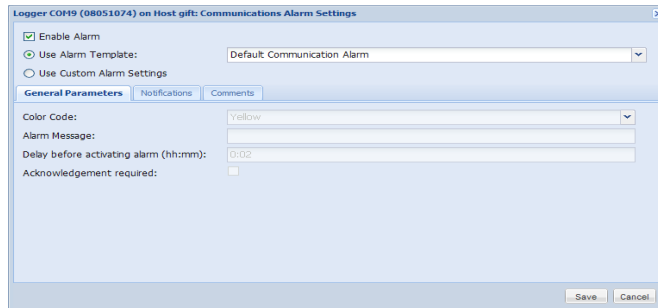
- 2 To set a Logger Host communication alarm, on the Host menu select, **Host Communication Alarm Settings**.



- 3 To set a Logger communication alarm, on the Logger menu select **Logger Alarm Settings**, then **Logger Communication Alarm Settings**.



The Communications Alarm Settings screen appears.



- 4 Select **Enable Alarm** (an alarm is not 'live' until it is enabled).
- 5 To set a communication alarm using an existing alarm template, select **Use Alarm Template**, then select the template from the drop-down list.
- 6 To set custom alarm settings, select **Use Custom Alarm Settings**.
- 7 Set your alarm settings on the General Parameters, Notifications, and Comments tabs following steps 3 to 8 in "Creating Alarm Templates" on page 36.

Editing Communication Alarms

By default, there is one communication alarm preconfigured for each host and logger. These alarms cannot be deleted; however, they can be edited.


To edit communication alarms:

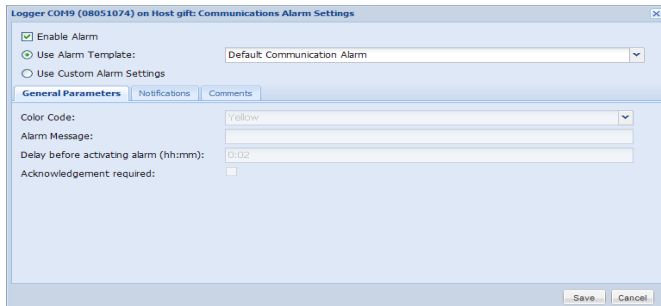
- 1 From System | Loggers, highlight the name of the host or logger whose communication alarm you want to edit.
- 2 To edit a Logger Host communication alarm, on the Host menu select, **Host Communication Alarm Settings**.
- 3 To edit a Logger communication alarm, on the Logger menu select **Logger Alarm Settings**, then **Logger Communication Alarm Settings**. The Communication Alarm Settings screen appears.
- 4 Edit alarm settings as desired.
- 5 Click **Save**.

Disabling Communication Alarms

You can temporarily disable communication alarms without deleting all the setting information.

To temporarily disable alarms:

- 1 From System | Loggers, highlight the name of the host or logger whose communication alarm you want to disable.
- 2 On the Host or Logger menu, select  **Communication Alarm Settings**. The Communications Alarm Settings screen appears.



- 3 Deselect the **Enable Alarm** check box.
- 4 Click **Save**.

Note: You can also pause alarms - for more information, see "Pausing Alarms" on page 50.

Logger Alarms

Ensuring the continuous functionality of your logger is required for accurate real-time monitoring. Because of this, viewLinc includes logger calibration, validation and configuration alarms to notify users if logger functionality is compromised at any point. By default, there are three logger alarms (in addition to the Logger Communication alarm) preconfigured for each logger. These alarms cannot be deleted; however, they can be edited.

Setting Logger Alarms

To set a logger alarm:

- 1 From System | Loggers, select the logger you want to set the logger alarm for.
- 2 On the Logger menu select **Logger Alarm Settings**, then select the logger alarm type you want to set. The Alarm Settings screen appears.
- 3 Select **Enable Alarm** (an alarm is not 'live' until it is enabled).
- 4 To set a logger alarm using an existing alarm template, select **Use Alarm Template**, then select the template from the drop-down list.
- 5 To set custom alarm settings, select Use Custom Alarm Settings and use the General Parameters, Notifications, and Comments tabs to define custom settings (see steps 3 through 8 in "Creating Alarm Templates" on page 36).

Editing Logger Alarms

To edit a logger alarm:

- 1 From System | Loggers, select the logger you want to edit the logger alarm for.
- 2 On the Logger menu select **Logger Alarm Settings**, then select the logger alarm type you want to edit.
- 3 Edit alarm settings as desired.
- 4 Click **Save**.

Disabling Logger Alarms

To disable a logger alarm:

- 1 From System | Loggers, select the logger whose alarm you want to disable.
- 2 On the Logger menu select **Logger Alarm Settings**, then select the logger alarm type you want to disable.
- 3 Deselect the **Enable Alarm** check box.
- 4 Click **Save**.

Note: You can also pause alarms - for more information, see “Pausing Alarms” on page 50.

Acknowledging Alarms

All users can receive alarms, but only users with the correct permission can acknowledge alarms.

If an alarm is set to require alarm acknowledgement, alarms must be acknowledged. You must be logged in to viewLinc to acknowledge alarms.


Acknowledgement information, such as the action taken and any comments, is tracked in the Event Log and Historical database. For more information, see **Chapter 5: Events** and **Chapter 6: Reports**.

Alarms can also be configured so they do not require acknowledgement. See “Setting Threshold Alarms” on page 42, “Setting Communication Alarms” on page 45, and “Setting Logger Alarms” on page 48 for more.

When an alarm is triggered, a new row appears in the Alarms tab.

This section covers acknowledging alarms using the Active Alarms tab. You can also acknowledge alarms from a large channel view (see “Acknowledging Alarms from Large Channel View” on page 26).

To acknowledge alarms from the alarms tab:

- 1 From Alarms | Active Alarms, select the active alarm, then click  **Acknowledge**.

- 2 The Acknowledge Alarm dialog box appears, prompting you to enter actions taken and comments.

The screenshot shows a dialog box titled "Acknowledge Alarm". It has three main input areas: "Action Taken:" with the text "Check Lab 12", "Preconfigured comments:" with a dropdown menu showing "Close Refrigerator Door", and "Comments:" with a text area containing "Close Refrigerator Door. Contact Building Maintenance to adjust door seal.". At the bottom, there are two buttons: "Acknowledge" and "Cancel".

- 3 Click **Acknowledge**. Your comments and actions are added to the Event log and the Acknowledge Alarm box closes. My Channels is updated with this change in status.

Pausing Alarms

You may want to pause alarms if you need to move loggers, or if a certain known situation may result in conditions exceeding set thresholds. Pausing alarms is faster than disabling alarms for a temporary period. You can pause an alarm for up to 24 hours.

To pause all alarms in a zone:

- ▶ From Channels | My Channels, select the zone to pause and click **Pause Alarming**. You can also select specific loggers or channels to pause.

To pause an alarm:

- 1 From System | Loggers, select the logger or channel to pause alarms for.
- 2 To pause all logger alarms or an individual channel alarm, select **Logger** or **Channel**, then **Pause Alarming**.
- 3 In the Pause Alarming dialog box, enter a reason for the pause and select the amount of time to pause alarms for. Click **OK**.

The screenshot shows a dialog box titled "Pause Alarming". It has three main input areas: "Preconfigured comments:" with a dropdown menu showing "refrigerator maintenance", "Comments:" with a text area containing "refrigerator maintenance", and "Duration:" with a dropdown menu showing "1 hour". At the bottom, there are two buttons: "OK" and "Cancel".

In the My Channels area, the alarming status column changes to show how long alarms are paused for.

To resume alarming for one or more channels in a zone:

- ▶ From Channels | My Channels, select one or more zones to restore, loggers or channels and click ► **Resume Alarming**.

To resume an alarm:

- 1 From System | Loggers, select the logger or channel to resume alarms for.
- 2 To resume all logger alarms or an individual channel alarm, select **Logger** or **Channel**, then ► **Resume Alarming**.

Chapter 4: System Settings

There are several important administration screens in viewLinc, all hosted under the System tab. This section covers the administration tasks you need to know about, including:

- discovering loggers
- adding loggers
- swapping loggers
- removing loggers
- editing logger and channel properties
- configuring email settings
- editing alarm email templates
- creating, editing, or deactivating user accounts and passwords
- granting user permissions for alarm editing capabilities
- granting user permissions to see certain channels
- choosing logger and channel description display length (aliases)
- choosing temperature measurement unit preferences
- setting session expiry time
- creating preconfigured comments

For information on the event log and generating reports, see **Chapter 5: Events**, and **Chapter 6: Reports**. For information on setting threshold alarms, see **Chapter 3: Alarms**.

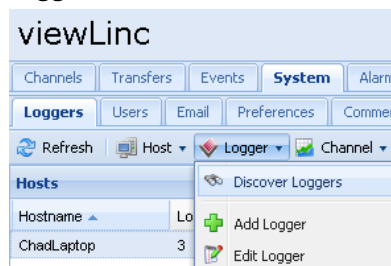
Let's begin working with Loggers and Channels within System.

Discovering Loggers

To discover recently-attached Vaisala Veriteq loggers which may not show up in My Channels automatically:

Note: 300 Series Transmitters are not recognized by viewLinc using the Discover Loggers procedure; viewLinc recognizes them automatically (or you can use your Digi Discovery software if required).

- From System | Loggers click **Logger**, then select **Discover Loggers**.



Note: This process may take several minutes, depending on the number of Vaisala Veriteq loggers and/or components in your network.

Adding Loggers

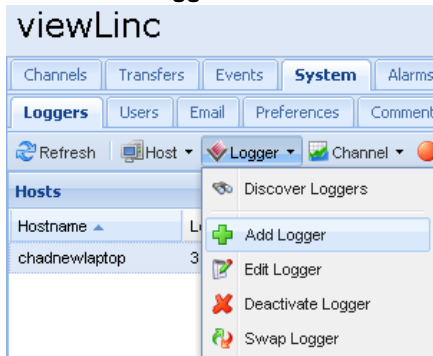
You may want to add a logger to your system if:

- discovering loggers will take too long
- you are adding a 300 Series Transmitter logger
- you want to add a variety of logger types at one time.

Note: To add multiple Vaisala Veriteq loggers at one time, see “Discovering Loggers” on page 54.

To add a Vaisala Veriteq logger:

- 1 From System | Loggers click the **Logger** menu, then select **Add Logger**.

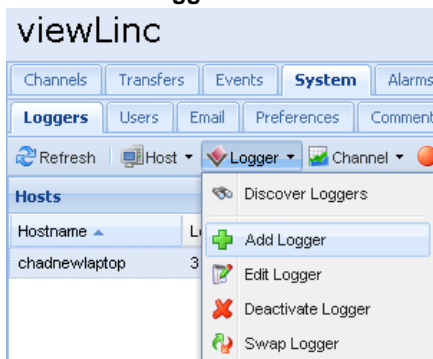


- 2 In the Add Logger screen, select Veriteq logger from the Device Class dropdown list.
- 3 Enter the COM port number.
- 4 To add a combination of Vaisala Veriteq loggers and 300 Series Transmitter loggers, select Upload Definitions File then enter or browse to the correct file. To add several Vaisala Veriteq Loggers, see “Discovering Loggers” on page 54. To create a Definitions File, see page 95.

To add a 300 Series Transmitter Logger:

Note: Ensure no other users are logged on to the transmitter you want to add.

- 1 From System | Loggers click the **Logger** menu, then select **Add Logger**.



- 2 In the Add Logger screen, select 300 Series Transmitter from the Device Class dropdown list.
- 3 Enter the following:
 - a Disconnect After Scan: To maintain a persistent connection to the device, choose False.
 - b Connection Type: If the transmitter has a LAN or WLAN module, select Network. If you use an external Digi device, choose COM Port.
 - c TCP Port: Default is 23 (can't be changed)
 - d IP Address: See your administrator or check the logger box.
 - e Sample Rate: Choose 90 (recommended, but you can modify the rate if you need more or less recorded data).
 - f Connection Timeout: To ensure continuous monitoring, do not change. Contact your network administrator if required.
- 4 To add several 300 Series Transmitters or a combination of Vaisala Veriteq loggers and 300 Series Transmitter loggers, select Upload Definitions File then enter or browse to the correct file. To create a Definitions File, see see page 95.


Swapping Loggers

If you need to send a logger for maintenance (such as recalibration), you will need to swap it for another logger to ensure continuous monitoring and alarming.


Note: If a logger is removed without being swapped, this will trigger a communication alarm.

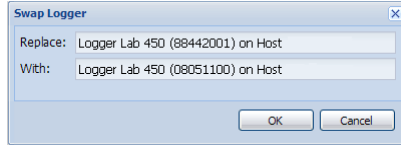
When a logger is swapped, the change is noted on the channel history report (the report shows logger serial number for a reporting period). If, during the reporting period, the logger was swapped, this event is listed in the report summary). The new logger inherits the logger ID, logger and channel descriptions (Vaisala Veriteq loggers only), alarm settings and transfer schedule.


To swap a logger:

- 1 Ensure the new logger has the same settings as the logger to be swapped (see System | Loggers, or refer to the vLog, Spectrum or your Vaisala product User Guide):
 - Note:** Each Vaisala Veriteq logger must be reviewed separately using vLog or Spectrum, and the COM port to which they are connected must be selected from Tools | Options.
 - **COM port/IP address.** Logger is on the same COM port (attached to the same cable). If you are swapping a 300 Series Transmitter connected as a network device, ensure the new transmitter has the same IP address.
 - **Name.** Logger is not retired or deactivated.
 - **Status.** Logger is not in active alarm mode.
 - **Sample Interval.** Loggers have the same sample interval.
 - **Channels.** Loggers have the same channels enabled and be using the same units of measure for each matching channel.
 - **Audit Trail.** Vaisala Veriteq loggers are not linked to a vLog Audit Trail.
- 2 From System | Loggers, select the Host and then the logger you want to swap (remove).
- 3 On the Logger menu, select  **Pause Alarming**.
- 4 In the Pause Alarming screen, you can add a comment about why you are swapping loggers, and specify the expected duration for the pause. This will ensure no communication or threshold alarms are triggered when disconnecting the logger.
- 5 Click **OK**.
- 6 Disconnect the logger you want to swap, and connect the new logger. If you are swapping a 300 Series Transmitter, unplug the power source and plug it in again.
- 7 Click Refresh to update the logger list (you may have to wait a few minutes for the logger to appear). If the new logger has been previously swapped it will be found in the list of deactivated loggers (to view, click Show Deactivated Items on the System | Loggers page).

- 8 From System | Loggers, select the logger you have removed.

- 9 On the Logger menu, select  **Swap Logger**.




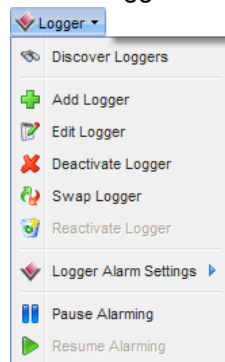
- 10 Verify the correct logger is identified in the **With** field, then click **OK**. viewLinc will reassign the logger.
- 11 If you want the new logger to resume alarming, on the Loggers menu, select  **Resume Alarming**.

Removing Loggers

Because viewLinc's communication alarms are set up to notice if any logger is not communicating with the system, you need to use the Deactivate Logger feature to remove a logger from the system.

To deactivate a logger:

- 1 From System | Loggers, select the Host and then the logger you want to deactivate.
- 2 On the Logger menu click  **Deactivate Logger**.



- 3 A message appears, asking that you confirm you want to remove this logger. Click **Yes**.

You can now remove the logger from the network.

Editing Logger Properties and Aliases


viewLinc allows you to edit a Vaisala Veriteq logger description (maximum 16 alpha-numeric characters stored within the logger), as well as its alias (maximum 64 alpha-numeric characters, not stored within the logger). You can edit a 300 Series Transmitter alias in viewLinc.

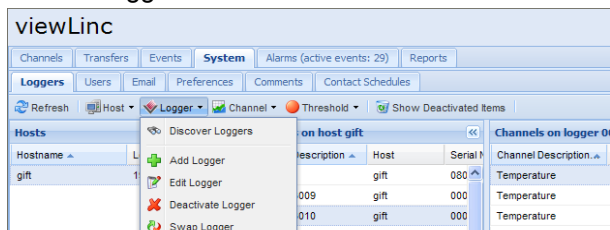
Editing logger properties allows you to specify a description or alias that viewLinc will use for that logger. You can set which identification (logger description and/or alias) viewLinc uses in System | Preferences | Logger Description (see “Choosing Logger and Channel Description Lengths (Aliases)” on page 69).

To modify additional logger properties, refer to your Vaisala product User Guide.

Note: If your logger is linked to the vLog audit trail, you first need to either disable the link to the audit trail or edit the logger properties in vLog.

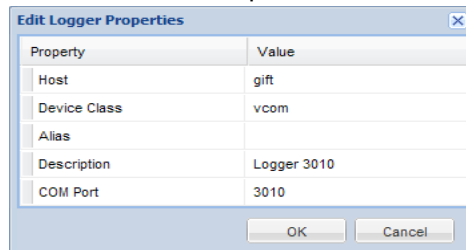
To edit logger properties:

- 1 From System | Loggers, select the Host and then the logger whose properties you want to edit.
- 2 On the Logger menu select  **Edit Logger**. Or, double-click the logger row.



- 3 In the Edit Logger Properties screen, in the Description text box, enter the new information (maximum 16 characters for Vaisala Veriteq loggers only). In the Alias text box, enter a more descriptive Alias (maximum 64 characters), if you want. This Alias is used if you specify

in System | Preferences that viewLinc displays aliases instead of the descriptions stored in the loggers.




- 4 Click **OK** to save.

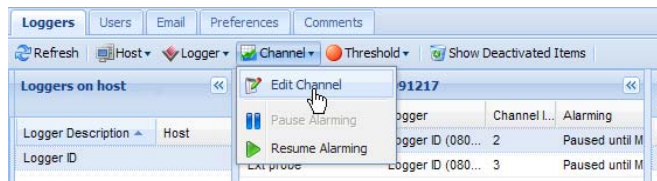
Editing Channel Properties and Aliases

viewLinc allows you to edit a channel's description, alias, and preferred temperature units, if applicable. This is useful when you want to easily identify a specific channel onscreen.

Note: Depending on the logger you use, not all logger channels can have their descriptions modified.

To edit channel properties:

- 1 From System | Loggers, select the Host and then the logger whose channel's properties you want to edit.
- 2 Select the channel you want to edit.
- 3 On the Channel menu select  **Edit Channel**. Or, double-click the channel row.



- 4 In the Edit Channel Properties dialog box, in the Alias text box, enter a more descriptive Alias (maximum 64 characters), if you want. This Alias will be used if you specify in System | Preferences that viewLinc displays aliases instead of the descriptions stored in the loggers.

- 5 In the Description text box, enter a description (maximum 16 alpha-numeric characters).

| Property | Value |
|-----------------|--------------------|
| Logger | 00003010 |
| Device Class | vcom |
| Alias | |
| Description | Temperature |
| Units Type | Temperature |
| Preferred Units | Use System Default |


- 6 If you do not want to use the system default temperature units (set on the System | Preferences tab), you can modify the temperature units used for a specific channel. To clear existing unit preferences and accept the system default, click in the Preferred Units field to select the option, **Use System Default**.
- 7 Click **OK** to save.

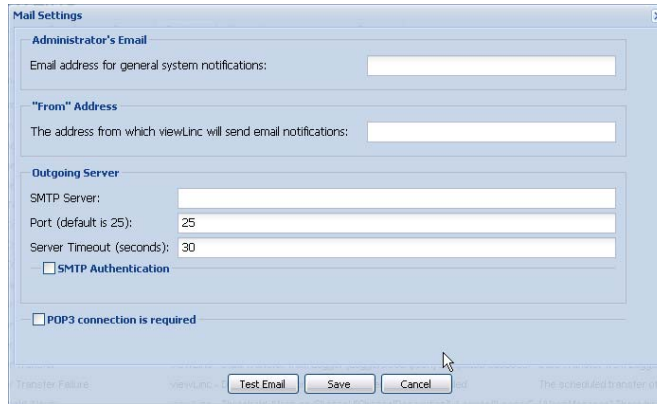
Configuring Email Settings

Alarm notifications are sent via email, therefore administrators must set Email Settings to properly send email messages from your mail server. If you aren't sure which usernames and passwords to use or which check boxes to enable, contact your IT Administrator.

To configure Email Settings:

- 1 In viewLinc, choose System | Email. The Email screen appears, showing the email templates in use for various viewLinc messages.

- 2 Click  **Email Settings**. The Mail Settings screen appears.

The image shows a 'Mail Settings' dialog box with a light blue background. It contains several sections: 'Administrator's Email' with a text field for the email address; 'From' Address with a text field for the address; 'Outgoing Server' with fields for SMTP Server, Port (default 25), and Server Timeout (seconds) (30), and checkboxes for 'SMTP Authentication' and 'POP3 connection is required'. At the bottom, there are 'Test Email', 'Save', and 'Cancel' buttons. A mouse cursor is pointing at the 'Cancel' button. The dialog box has a title bar with 'Mail Settings' and a close button (X).

- 3 Enter the Administrator's Email address. This address is used to receive all system notifications.
- 4 Enter a valid "From" address. Email notifications from viewLinc will be "from" this address, so the email address must exist. Contact your IT administrator to create a "From" address if needed. For example:
viewlinc_system@yourcompany.com or controlroom47@yourcompany.com
- 5 In the Outgoing Server area, enter:
 - an outgoing SMTP mail server name (e.g., mail.yourserver.com)
 - an outgoing mail server port (your IT Administrator will have this information)
 - an appropriate server timeout interval
- 6 If your outgoing mail server requires authentication, select the SMTP Authentication check box and enter the username and password to send mail on that server.

- 7 If your outgoing mail server requires confirmation through a POP3 connection before sending mail, configure the following settings:
 - a Select **POP3 connection is required**.
 - b Enter the incoming POP3 mail server name.
 - c Enter the incoming mail server port.
 - d Select **POP3 Authentication**, then enter a username and password for a valid POP3 account for the view-Linc system to use.
- 8 Click **Test Email** to test your settings. If they are OK, continue. If not, adjust settings as indicated in these steps until the test email is sent successfully.
- 9 Click **Save**.


Editing Alarm Email Templates

You can edit the information that is sent about alarms in the various alarm notification emails - for example, the email notifying you about a Communication or Threshold Alarm, a repeated Alarm, an Acknowledged Alarm, or a Logger Transfer. You may want to edit emails to modify contents if sending emails to a pager or cellular phone, or for a specific purpose within your company.

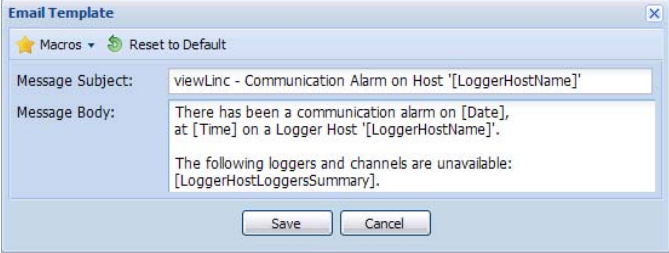
You can edit email templates to include or not include many different items, for example:

- Logger description
- Event Type
- Details of Alarm
- Date
- Time
- Channel
- Comments (custom or preconfigured comments)

To edit email templates:

- 1 From System | Email, select the row containing the email template you want to edit and click  **Edit Email Template**. Or, double-click the row to edit. The **Email Template** screen appears.

- 2 In the Email Template screen, edit the email template message. Items in [brackets] are macro variables that viewLinc will insert in the email. To choose different variables, click the location where you want to add a macro, then click **Macros** and select the variable you want to use from the drop-down list.



The screenshot shows a dialog box titled "Email Template". At the top, there is a "Macros" dropdown menu and a "Reset to Default" button. The "Message Subject:" field contains the text "viewLinc - Communication Alarm on Host '[LoggerHostName]'". The "Message Body:" field contains two paragraphs: "There has been a communication alarm on [Date], at [Time] on a Logger Host '[LoggerHostName]'." and "The following loggers and channels are unavailable: [LoggerHostLoggersSummary].". At the bottom of the dialog, there are "Save" and "Cancel" buttons.

- 3 When you are finished, click **Save**.

Working with Users

When you install viewLinc, a default “admin” account (user account with Full Control) is created. The username and password are both “admin”.

It is important to change the admin password as soon as possible (see “Editing Users and Passwords” on page 68).

You also need to create accounts for other users, specifying their login name, their email address and schedule (times they should receive alarm notification), their security level, the channels they can see, and their authentication method (if they will use a viewLinc login or use the same login as their Windows login).

viewLinc offers several user security levels, as outlined in the following table:

| Security Level | Privileges |
|-----------------------------|---|
| Full Control | <ul style="list-style-type: none"> • full privileges • in viewLinc 3.4 and previous, this was an “Administrator” account • sees all channels (cannot assign or limit channels) |
| Configure Alarms | <ul style="list-style-type: none"> • same as Configure Custom Thresholds and can configure alarms • sees all channels (cannot assign or limit channels) |
| Configure Custom Thresholds | <ul style="list-style-type: none"> • same as Acknowledge Alarms and can configure alarm thresholds |
| Acknowledge Alarms | <ul style="list-style-type: none"> • same as View and can acknowledge alarms |
| View | <ul style="list-style-type: none"> • show and hide zones • view, edit, print and sort event logs • generate alarm and historical data reports • can be assigned a limited set of channels to view |


Table 5: Privileges associated with each viewLinc User Security Level

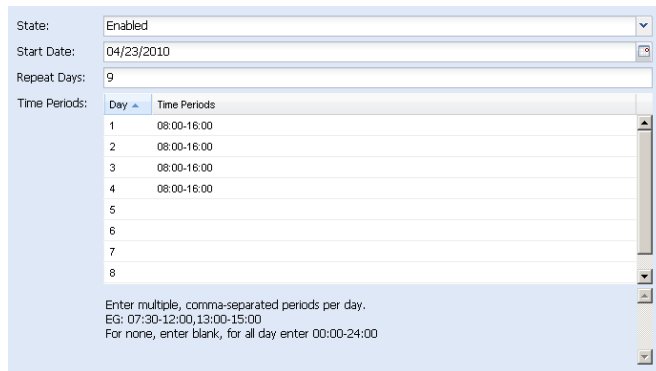
Creating Contact Schedules

viewLinc allows you to set times when a particular user receives alarm notifications. Users can be set to receive notifications “always”, “never”, or on a schedule of times and rotating dates (for example 07:00-19:00 on a 4 day on, 5 day off rotation, or 08:30-17:30 on a 5 day on, 2 day off rotation).

Contact schedules are applied to user accounts, so schedule patterns (days, hours) must be set before any can be applied to a particular user.

To create contact schedules:

- 1 From System | Contact Schedules, click  **Add Contact Schedule**. The Contact Schedule area becomes active.



State: Enabled

Start Date: 04/23/2010

Repeat Days: 9

| Day | Time Periods |
|-----|--------------|
| 1 | 08:00-16:00 |
| 2 | 08:00-16:00 |
| 3 | 08:00-16:00 |
| 4 | 08:00-16:00 |
| 5 | |
| 6 | |
| 7 | |
| 8 | |


Enter multiple, comma-separated periods per day.
Eg: 07:30-12:00,13:00-15:00
For none, enter blank, for all day enter 00:00-24:00

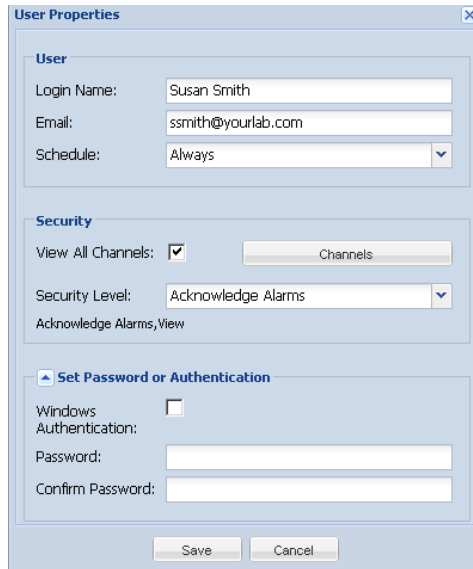
- 2 From the State drop-down, choose **Enabled**. This allows you to set start date, repeat days pattern, and the time periods.
- 3 Choose a start date by typing in the text box or choosing from the calendar.
- 4 Specify Repeat Days. To repeat the contact schedule every 7 days, enter 7. For 9 days, enter 9. The maximum value is 99 days.
- 5 In the Time Period rows, enter the time period in 24-hour time in the following format: xx:xx-yy:yy where xx:xx is the start time and yy:yy is the end time. For intermittent schedules, separate time periods by a comma. For example, 08:00-12:00, 13:00-16:00). For contact all day, enter 00:00-00:00. For no contact in a day, leave the day blank.
- 6 Click **Save**. Your schedule will be named “New Schedule”. To rename it, double-click the row.

Note: To temporarily disable the scheduling capability (for example, to have notifications sent “always” or “never”, choose “Always” or “Never” from the State drop down box). You can then choose or edit the schedules you’ve set at later time and re-select “Enabled”.

Creating User Accounts

To create user accounts:

- 1 From System | Users, click  **Add User**.
- 2 In the User Properties screen, enter a login name for the user.



The **User Properties** dialog box is shown with the following fields and options:

- User Section:**
 - Login Name:
 - Email:
 - Schedule: (dropdown menu)
- Security Section:**
 - View All Channels: ☒ (with a **Channels** button)
 - Security Level: (dropdown menu)
 - Acknowledge Alarms, View
- Set Password or Authentication Section:**
 - Windows Authentication: ☐
 - Password:
 - Confirm Password:

At the bottom are **Save** and **Cancel** buttons.

- 3 Enter an email for the user.
- 4 viewLinc allows you to specify when a user is working so they can be notified of alarms at their email address only when they are working. From the Schedule drop-down, choose a Schedule for the user: Always (they are always notified of alarms), Never (they are never notified), or another schedule listed.

Note: To specify Schedules, see “Creating Contact Schedules” on page 65.


- 5 From the Security area, select the channels the user can see. Either select “View All Channels”, or click the Channels button to specify certain ones.

- 6 Select the user's security level:
 - **View** = User can view data only (channels and alarm status, generate reports).
 - **Acknowledge Alarms** = User has View rights, and can acknowledge alarms.
 - **Configure Custom Thresholds** = User has View and Acknowledge rights, and can configure alarm thresholds.
 - **Configure Alarms** = User has View and Acknowledge rights, can configure alarm thresholds, communication alarms and logger alarms.
 - **Full Control** = User has all permissions: add/deactivate loggers, edit logger and channel descriptions, manage users, set system preferences, create, view and assign reports.
- 7 If using Windows authentication, select the Windows authentication check box. viewLinc will rely on Windows to verify the user's password at login time. Use this option to let users log on to viewLinc with their regular Windows user name and password.
- 8 Enter and confirm a password (this field is available only if using viewLinc authentication).
- 9 Click **Save**.

Note: viewLinc offers the ability to have users re-confirm their identity by re-entering their user name and password either whenever a change is made, or after a set number of minutes. To set this preference, see "Setting Session Expiry Time" on page 71.

Editing Users and Passwords


To edit user accounts and passwords:

- 1 In viewLinc, go to System | Users.
- 2 Select the user to edit and choose  **Edit User**. Or, double-click the row containing the user you want to edit. The User Properties screen appears.
- 3 From the User Properties screen, edit settings as needed.
- 4 Click **Save**.

Note: You can only edit passwords in viewLinc if you are not using Windows authentication.



Deactivating Users

To deactivate a user:

- 1 From System | Users, select the User you want to deactivate.
- 2 Click  **Deactivate User**.
- 3 Click **Yes** to confirm the change.

Reactivating Users

To reactivate a user:

- 1 From System | Users, click  **Show Deactivated Users**. All deactivated users appear in grey text.
- 2 Select the user you want to reactivate and click  **Reactivate User**.

Choosing Logger and Channel Description Lengths (Aliases)

Vaisala Veriteq loggers have descriptions stored inside them that have a maximum length of 16 characters (300 Series Transmitters do not store descriptions). Channel descriptions have a maximum length of 12 characters. Some administrators may prefer to display a longer, more informative description. To accommodate this, viewLinc allows you to set an alias for a logger or channel, up to maximum of 64 characters.

To choose whether viewLinc should display the description stored in the logger or its alias, set the Channel Description and/or Logger Description preference in System | Preferences.

To set the Channel or Logger Description preference:

- 1 In viewLinc, go to System | Preferences.

| Name | Value |
|-----------------------------------|--|
| Channel Description | Use Channel Alias |
| Logger Description | Use Channel Description from Logger... |
| Preferred Temperature Units | Use Channel Alias |
| Users must confirm their identity | Never |

- 2 In the Channel Description row, choose “Use Channel Description from Logger” or “Use Channel Alias” from the Value drop-down.
- 3 Repeat your preference choice for Logger Description.

Choosing Temperature Measurement Unit Preferences

When viewLinc is installed, temperature is set to display in degrees Celsius. You can configure viewLinc to show temperatures in either Celsius or Fahrenheit.

To choose temperature measurement units:

- 1 In viewLinc, go to System | Preferences.
- 2 In the Name column, select **Preferred Temperature Units** and in the Value column, choose either **Celsius (C)** or **Fahrenheit (F)**.

| Name | Value |
|-----------------------------------|-------------------------------------|
| Channel Description | Use Channel Description from Logger |
| Logger Description | Use Logger Alias |
| Preferred Temperature Units | C |
| Users must confirm their identity | C |

Note: This procedure does not alter how the logger measures temperature - it alters the units in which temperature is displayed (except for channels which already have preferred unit settings assigned).

Setting Session Expiry Time

viewLinc allows you to set a session expiry time after which a user or administrator must reconfirm their identity by reentering their password. This prevents non-authorized users from making changes to viewLinc.

You can choose to set this expiry time as “never”, “always” (that is, requiring password confirmation before making any change to the system), or intervals of 1, 5, 10, 15, 30 and 60 minutes after logging in or reconfirming their password.

This setting is applied identically to all viewLinc users and administrators.

To set the session expiry:

- 1 From viewLinc, choose System | Preferences.
- 2 In the Name column, select **Users must confirm their identity**, then choose an expiry time in the Value column.

| Name | Value |
|-----------------------------------|-------------------------------------|
| Channel Description | Use Channel Description from Logger |
| Logger Description | Use Logger Alias |
| Preferred Temperature Units | C |
| Users must confirm their identity | Never |
| | Always |
| | 1 minute from last authentication |
| | 5 minutes from last authentication |
| | 10 minutes from last authentication |
| | 15 minutes from last authentication |
| | 30 minutes from last authentication |
| | 1 hour from last authentication |

Creating Preconfigured Comments for Email Messages

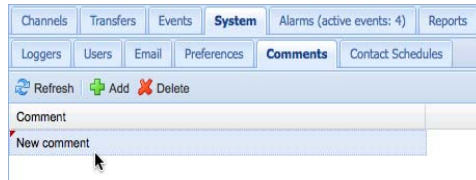
Administrators can preconfigure standard comments to be sent as part of email notifications for alarms and transfers, as well as have them included in the Event Log.

To use these comments in email notifications, the [Comments] parameter must be present in the specific Email Template. For example, if you set a Communication Alarm to email someone when it is triggered, the preconfigured comment you select for that alarm will be included in the email if the [Comments] parameter is included in the email template for Communication Alarms.

You can use preconfigured comments in alarm templates, or when setting up a custom alarm.

To create preconfigured comments:

- 1 From System | Comments click **+ Add**.

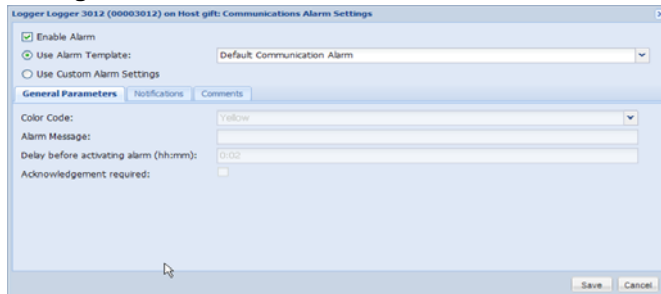


- 2 In the box that contains the text, **New comment**, enter the comment and press **[Enter]**.

To use preconfigured comments (in a custom Communication Alarm, for example):

- 1 From System | Loggers, highlight a logger to set a comment for, then click **Logger**, then **Logger Alarm**

Settings and then select  **Logger Communication Alarm Settings**.



- 2 Select **Use Custom Alarm Settings**.
- 3 On the Comments tab, select a comment from the **Preconfigured Comments** drop-down list. Your preconfigured comments will appear in the Comments box, allowing you to make additional changes to the text, if required.
- 4 Click **Save**.
- 5 From System | Email, choose the email template to edit. For this example, Logger Communication Alarm.
- 6 From the Email Template dialog, ensure the [Comments] variable is present, or select it (insert cursor where you want it to appear, then choose **Macros | Comments**). The

preconfigured comment you selected in Communication Alarm settings will be inserted in the email message.

7 Click **Save**.

To delete preconfigured comments:

1 From System | Comments, highlight the comment to delete.

2 Click  **Delete**.

Chapter 5: Events

All events - such as alarms, transfers of data from the data logger, alarm acknowledgements, system configuration changes and general system notifications - are tracked in viewLinc's Event Log, under the Events tab.

The data tracked in Events is different from the data tracked in a data logger. Where the viewLinc Event Log tracks events occurring within the viewLinc system (such as notification of successful transfer of data from a logger to a stored local directory), the data logger itself tracks the changes in temperature, relative humidity or voltage.

To ensure viewLinc continuously monitors and stores event history, event log validation alarms notify you when the viewLinc event log has been modified. For more about event log validation alarms, see **Chapter 3: Alarms**.

Use the Events tab to analyze events to determine when and where particular problems occurred, or to diagnose a situation that needs troubleshooting.

In this section, you'll learn to:

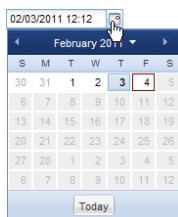
- view events
- add comments to events
- print event logs
- export and save event log data into .xls format


Viewing Events

Events are viewed on an Event Log, a text-based listing of all system events occurring with the data loggers on your system.

To view Events:

- 1 From viewLinc, click Events. The Event Log appears, displaying a list of events, and, if available, comments on the event in the Event Details area to the right of the event listing.
- 2 Using the date and time selectors, choose the period for which you want to see events. Enter a date (using format MM/DD/YYYY HH:MM) or use the calendar button to specify a date range.




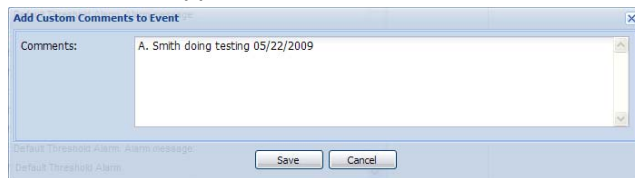
- 3 Using the buttons to the right of the date and time selectors, select or deselect buttons to see specific types of event details. After selecting an event type button to filter your results, click  **Refresh** to refresh the list. The more buttons you deselect, the shorter the list will be. You can choose to view:
 - **Alarm Events.** A list of alarms that were triggered during the specified time period.
 - **Admin Events.** A list of administrator actions taken, such as logging in to viewLinc and new alarm threshold settings.
 - **Transfer Events.** List of logger data transfers performed during the specified time period.
 - **System Events.** List of changes to configuration options or any failed attempts to communicate between viewLinc Servers and data loggers.

Adding Comments to Events

You may want to add comments to the Event Log, perhaps to outline why an event occurred or what was done in response to an event or problem.

To add a comment to the Event Log:



- 1 From viewLinc, click Events.
- 2 Highlight the row (event) to add the comment to, and click  **Add Comment**. The Add Custom Comments to Event screen appears.



- 3 Enter your comment, then click **Save**.
- 4 To view a comment for a particular event, highlight the row containing that event and look for the comment in the Event Details area.

Printing Event Logs

To print the event log:

- 1 From viewLinc, click Events.
- 2 Choose the date and time range you are interested in printing. In the date/time box, enter a date and/or time in 24-hour notation, or click the calendar icons to make your selection.
- 3 Using the buttons to the right of the date and time selector, choose to either include or not include Alarm Events, Admin Events, Transfer Events and/or System Events.
- 4 Click  **Refresh**.
- 5 Click  **Print**.

- 6 In a new browser window, a printer-friendly Event Log report opens.

viewLinc Event Log Report

Events from Tuesday, January 18, 2011 2:12:00 PM to Wednesday, January 19, 2011 2:12:00 PM

Filter: System Events, Admin Events, Alarm Events, Transfer Events

Event log status: Valid



| Event ID | Date/Time | Message | Category | Record Status | Event Details | Comments |
|----------|---|--|----------|---------------|--|----------|
| 6495 | Wednesday, January 19, 2011 2:00:30 PM | Authentication successful: user admin | system | Valid | | |
| 6494 | Wednesday, January 19, 2011 2:00:25 PM | Authentication failure: user admin | system | Valid | | |
| 6493 | Wednesday, January 19, 2011 1:57:27 PM | User admin has logged out | system | Valid | | |
| 6492 | Wednesday, January 19, 2011 11:51:29 AM | Authentication successful: user admin | system | Valid | | |
| 6491 | Wednesday, January 19, 2011 11:41:00 AM | User admin has logged out | system | Valid | | |
| 6490 | Wednesday, January 19, 2011 11:36:56 AM | User admin has logged out | system | Valid | | |
| 6489 | Wednesday, January 19, 2011 11:35:31 AM | Authentication successful: user admin | system | Valid | | |
| 6488 | Wednesday, January 19, 2011 10:29:09 AM | Authentication successful: user admin | system | Valid | | |
| 6487 | Wednesday, January 19, 2011 9:40:37 AM | Scheduled transfer of logger Logger 3012 (S/N 00003012) on host gift failed. Error: Unable to allocate COM port because it is unavailable. | transfer | Valid | Destination: C:\3.5.3\viewLinc\transfers\Logger 3012-00003012-2011-01-19 09-40-37.spl Error: Unable to allocate COM port because it is unavailable Logger: Logger 3012 (S/N 00003012) on host gift | |

- 7 The Print dialog box displays automatically allowing you to set your print parameters and print the Event Log.

Exporting Event Logs

With viewLinc you can export event log data into a saved .xls file for analysis at a later date.

To export event logs:

- 1 In viewLinc, click Events and choose the date range you are interested in exporting. In the date/time box, enter a date and/or time in 24-hour notation, or click the calendar icons to make your selection.
- 2 Using the buttons to the right of the date and time selector, choose to either include or not include **Alarm Events, Admin Events, Transfer Events** and/or **System Events**.
- 3 Click  **Refresh**.
- 4 Click  **Export**. A file download dialog opens, prompting you to open or save the events .xls file.

Chapter 6: Reports

Using viewLinc, you can create graphs and reports to analyze changes in data over time based on the historical data collected by Vaisala loggers.

In this section, you'll learn what historical data is and how to:

- analyze historical data
- generate historical data reports in graphical and tabular formats
- create new reports and report templates
- delete reports

About Historical Data



Vaisala data loggers have the ability to store large amounts of data inside them. Data is logged in frequencies from once every 10 seconds to once every 24 hours. To set this frequency -- known as the *sample interval* -- for Vaisala Veriteq loggers, refer to the Spectrum or vLog User Guide. To set the sample interval for 300 Series Transmitters “Editing Logger Properties and Aliases” on page 59.

With viewLinc you can monitor real-time conditions for loggers over the network, analyze or graph changes in conditions over time, or compare conditions recorded by different loggers. This analysis is performed using the Reports tab.

Historical data from a Vaisala Veriteq logger can also be transferred to a local directory on a set schedule - be it daily or weekly - using viewLinc’s Transfers tab. Once transferred, data can be retrieved for exporting (into .xls) and printing, depending on your reporting needs. See **Chapter 7: Transfers** for more.

Generating Historical Data Reports

viewLinc provides you with a set of graphical reports which can help you easily view trends in data readings or alarm monitoring statistics (such as alarm trigger frequency).

-  **Alarm reports** provide an overview of alarm events over a period of time (events related to every alarm are grouped together and presented in a readable form).
-  **Channel History reports** provide a detailed history of channel values (presented in both graphical and tabular form).

Generating Alarm History Reports

To generate an Alarm history report:

- 1 On the Reports tab in the Alarm Reports list, select the report you want to generate.



The report parameters appear on the right side of your screen (users can only view report parameters for the reports they generate, or reports to which they have been granted owner access).

- 2 On the General tab you can specify the period you want the report to include using the default option, **Most Recent Events**, or a specific date range. If you choose a fixed date range, use the calendars to indicate from/to dates.

Note: If you have Admin access, you can select a Report Owner, the user you want to have access to modify or generate this report (to set up a list of users see, “Creating User Accounts” on page 67).

 A screenshot of a web application form titled 'General' with tabs for 'Report Content', 'Statistics Settings', 'Report Source Data', and 'Page Layout'. The form contains the following fields:


- Report Owner: A dropdown menu with 'A_Smith' selected.
- Range Type: A dropdown menu with 'Most Recent Events (for automatic or manual report generation)' selected.
- Duration: A text box with '1' and a dropdown menu with 'months' selected.
- Scheduled Generation** section:
 - ☒ Automatically generate and save to: A text box with 'E:\dev34\viewLinc-trunk\src\viewLinc\Reports'.
 - ☐ Automatically generate and email to: An empty text box.
 - Start generating: A date picker showing '05/15/2009' and a time dropdown showing '11:29 AM'.
 - Frequency: A text box with '1' and a dropdown menu with 'months' selected.
 - Report format: A dropdown menu with 'PDF (to view with Adobe Acrobat Reader)' selected.

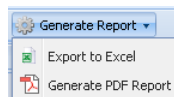
- 3 In the Scheduled Generation area of the General tab, you can choose the format for your report (PDF or tab-separate, for Excel), to automatically generate and save the report to a specific file location, or send the report to an email address or a list of addresses (use a comma to separate email addresses). You can also schedule when you want the report to generate, and how frequently you want it generated.

Note: For large report data sets, we recommend that you schedule report generation at a time when few users are using the system, such as after business hours.

- 4 On the Report Content tab determine whether you want a brief report (with one line for each alarm) or a detailed

report (showing details about all alarm activities: activation, notifications, acknowledgement, etc.).

- 5 On the Report Source Data tab define the report scope. To include alarm report details from all channels, select **All Channels**. You can also select specific channels and zones:
 - a Select the option, **Selected Channels and Zones**.
 - b To select one or more channels in a zone, select the zone name (checkbox).
 - c To select a specific channel in a zone, select the channel description (checkbox).
 - d Repeat these steps for each channel you want to include on the report. All selected channels appear in the Selected region.
- 6 On the Page Layout tab define your report display options:
 - a Page Header and/or Page Footer options: choose the pages you on which you want a header or footer displayed. To define the header or footer, enter text in the Left, Center or Right fields.
 - b You can also choose the type of paper you want to print on, and the orientation.
- 7 Click  **Save**.
- 8 To manually generate the report, from Generate Report choose either **Export to Excel** or **Generate PDF Report**,



Generating Channel History Reports

To generate a Channel History report:

Note: viewLinc does not provide a default Channel History report. Instead, the first time you generate a Channel History report, the report is automatically saved.

- 1 On the Reports tab, in the Channel History Reports list, select the report you want to generate. The report details appear on the right side of the screen.

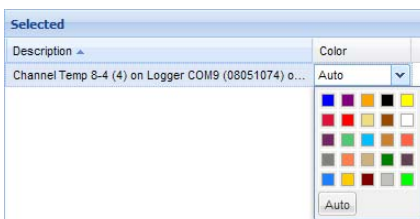
- 2 On the General tab specify the user you want to have access to this report (if not already granted Full Control), and the range type data based on a specific date range, or the most recent data.
- 3 In the Scheduled Generation area, you can choose the format for your report (PDF or tab-separate, for Excel), to automatically generate and save the report to a specific file location, or send the report to an email address or a list of addresses (use a comma to separate email addresses). You can also schedule when you want the report to generate, and how frequently you want it generated.



Note: For large report data sets, we recommend that you schedule report generation at a time when few users are using the system, such as after business hours.

- 4 On the Report Content tab identify the types of data you want included in the report, including Logger Samples (data points retrieved from the data logger's internal memory), Logger Sample Statistics (this allows you to change Statistic Settings in the Statistic Settings tab), Real-time Samples, and/or Thresholds.
- 5 If you include Logger Sample Statistics, use the Statistics Settings tab to define how information will display on your report, and any statistical information you want to include:
 - a From Statistics Settings, select a statistics interval if you want to intermittently generate statistics within the time frame of a report. For example, if your report generates data based on a seven day (weekly) interval, you may want to view statistics daily.
 - b In the Include area, select the types of statistical data you want to add to the report, including maximum value, average value, minimum value, standard deviation and mean kinetic temperature (MKT):
 - If you want to specify the activation energy, check Mean kinetic temperature and specify the activation energy as KJ/mol.
- 6 On the Report Source Data tab, define the report scope and color spectrum. To report on all channels, select **All**

Channels. You can also select specific channels and zones:

- a Select the option, **Selected Channels and Zones**.
- b To select one or more channels in a zone, select the zone name.
- c To select a specific channel in a zone, select the channel description checkbox.
- d To add an index to the graph, select **Show Markers**.
- e To specify a color to highlight a specific channel's data, select the channel, then select an option from the color dropdown. If you select Auto, viewLinc chooses a color according to the default color spectrum:







- f When the channel line colors are set to 'Auto' viewLinc assigns the next free color from a built-in palette of colors (see page 102 for the color spectrum sequence). Repeat for each channel you want to include on the report. All selected channels appear in the Selected region.
- 7 Use the Page Layout tab to define the headers, footers, paper size and orientation:
 - a For Header or Footer options, choose to display on all pages, on the first page only, on the last page only, or on the first and last page.
 - b To define the content of your header or footer, enter text in the Left, Center or Right fields.
 - c You can also choose the paper size you want to print on, and the orientation.
 - 8 Click  **Save**.
 - 9 To manually generate the report, click  **Generate Report**.

Creating New Reports

viewLinc provides you with a set of default report templates which you can modify according to default criteria. You can also save your modifications as a new report template for others to use.

If you want to make extensive modifications to the standard report template, use the New Channel History report or New Alarm report functions. If you want to define a new report which is similar to an existing report template, use the Clone Report feature.


To create a new Alarm History or Channel History report:

- 1 In the Reports toolbar, select the button for the type of report you want to create:  **New Alarm Report**,  **New Channel History Report**, or  **Clone Report**.
- 2 Complete the report parameters as you want them to appear.
- 3 To assign a new name for the report (by default it generates a name based on selected parameters), click on the title to make the text editable, and enter a name.
- 4 Click  **Save**.

Your new report is saved and appears alphabetically in the report list.

Deleting Reports

To delete a report that you no longer use:

- 1 On the **Reports** tab, select the report you want to delete.
- 2 Click  **Delete**.
- 3 At the confirmation message, click **OK**.

Chapter 7: Transfers

This section describes how to:

- transfer historical data from Vaisala Veriteq loggers
- create, edit, deactivate and temporarily disable scheduled data transfers

Transfers and Transfer Schedules

In addition to being able to view your data logger history in viewLinc, you can transfer your Vaisala Veriteq logger data for viewing and analyzing in a spreadsheet or other data analysis tool.


You can transfer Vaisala Veriteq logger data according to a set schedule. Since transfers can be scheduled in advance, you don't need to be there when the transfer takes place. Regardless of how frequently you schedule data transfers, data in the logger remains intact and is recorded indefinitely (or until the logger reaches its memory capacity).

It is recommended that you transfer your Vaisala Veriteq logger data on a regular basis for backup purposes, and to ensure no data is overwritten (refer to the vLog User guide for more information on logger data storage capacity). Each transfer from each logger creates one data file per logger.

Note: All Vaisala Veriteq loggers are assigned a default transfer schedule when the logger is discovered. The transfer is enabled and scheduled for a seven-day period. If your logger will reach its storage capacity before this period is over, you can adjust the period to ensure no data is lost.

Creating Transfer Schedules

To create a transfer schedule for a Vaisala Veriteq logger:

- 1 From viewLinc, click Transfers.
- 2 Click  **New Transfer**.
- 3 From the Logger Transfer Properties window, in the General area, click **Enable this transfer**. New transfers are disabled by default.

- 4 From the Logger drop-down, choose the logger for which you want to set the transfer.

Logger Transfer Properties

General

Enable this transfer: ☒

Logger: **Logger 3009 (00003009)**

Email notifications to: **Logger 3014 (00003014)**
Logger 3022 (00003022)
COM9 (08051074)
Logger 3128 (00003128)
Logger 3018 (00003018)
Logger 3015 (00003015)
Logger 3016 (00003016)
Logger 3363 (00003363)
Logger 3013 (00003013)
Logger 3020 (00003020)
Logger 3017 (00003017)
Logger 3021 (00003021)
Logger 3019 (00003019)
Logger 3300 (00003300)
Logger 3009 (00003009)

Schedule

Period, days: **7**

Start date: **2011-11-14**

Start time: **11:15 PM**

Destination

Destination: **c:\logger_files**

Field 1:

Field 2:

- 5 Enter the email address to receive notification should the transfer fail. You can choose an email address, a list of email addresses separated by commas, or a distribution list created on your mail server by the IT administrator.
- 6 Ensure correct mail server settings have been set in “Configuring Email Settings” on page 61.
- 7 In the Schedule area, choose a transfer schedule interval and start date and time. The Start time is a drop-down list of 15-minute intervals. For example, you could set up a data transfer every 7 days, beginning 2011-11-14 at 11:15 PM.
- 8 In the Destination area, choose the destination directory for the saved .spl file (do not use a mapped drive path). Sample directory paths could include: c:\logger_files or \\<machinename>\<desination_dir>. We recommend you use a directory on the viewLinc Host Server (for example, c:\<destination_dir>).

Note: During a data transfer, you may be prompted to enter a valid username and password for saving to the target directory or shared directory. You also need to ensure that the account which installed viewLinc (that is, which runs the viewLinc Enterprise Server service) has sufficient permissions to write to the directory where you want the transferred data to go. For more on Services with viewLinc, see “Appendix: FAQs & Troubleshooting” on page 93.

- 9 Choose the filename for your transferred file by specifying the order for the identifying fields which will make up the filename. Filenames for .spl files are created from combinations of the logger's description, its serial number, and the date and time the file was saved. For example, Logger ID-08094523-2011-04-22 16-30-01.spl.
- 10 At the bottom of the screen, enter either a preconfigured comment, or any specific comments you want to associate with this transfer, such as its purpose, to whom email notifications should go, and so on.
- 11 To test that the transfer will complete as defined, click **Transfer Now**. The data should be transferred to the location specified.
- 12 Click **Save** to save these settings for a scheduled transfer. A row containing information on the scheduled transfer for each logger you've set up appears in Transfers.


Performing an Immediate Data Transfer

To transfer data now:

- 1 Follow steps 1 through 10 in "Creating Transfer Schedules" on page 88 (or edit an existing transfer) and then click **Transfer Now**. The data should be transferred to the location specified.
- 2 Click **Save** to save the scheduled transfer or **Cancel** to close.

Editing Transfer Schedules


To edit scheduled transfers:

- 1 From viewLinc, click Transfers.
- 2 Select the row containing the scheduled transfer(s) to edit.
- 3 Click  **Edit Transfer**.
- 4 The Logger Transfer Properties screen appears. Edit the transfer details as required.
- 5 Click **Save**.

Deactivating a Transfer Schedule

You will need to deactivate any scheduled transfers when deactivating loggers.

To deactivate a scheduled transfer:


- 1 From viewLinc, click Transfers.
- 2 Select the row containing the scheduled transfer you want to deactivate.
- 3 Click  **Deactivate Transfer**.
- 4 A dialog appears, prompting you to confirm the deactivation. Click **Yes**.

To show all deactivated transfers, click **Show Deactivated Transfers**; the deactivated transfers appear in your list in grey text.

Temporarily Disabling Transfer Schedules

Disable a transfer schedule when you want to swap a Vaisala Veriteq logger or no longer want to view a transfer schedule in your list of transfers.

To temporarily disable scheduled transfers:

- 1 From viewLinc, click Transfers.
- 2 Select the row containing the scheduled transfer to edit.
- 3 Click  **Edit Transfer**.
- 4 From the Logger Transfer Properties screen, deselect **Enable this transfer**.
- 5 Click **Save**.

Appendix: FAQs & Troubleshooting

This section contains answers to frequently asked questions and information for troubleshooting common problems with viewLinc and vNet or Digi devices.

As an administrator, you may want to be aware of the viewLinc services running on your Windows PC. This section also contains information on which files are installed as part of viewLinc.

Q: How does viewLinc work?

A: viewLinc runs as a Windows service which is launched automatically. If and when you reboot the viewLinc Server, this service will automatically start.

The viewLinc Enterprise Server is a service which gathers data from loggers, performs scheduled transfers, watches for alarms, executes any associated actions, manages users, and controls system-wide and user-specific settings.

Q: Which HMT Transmitters can I use with viewLinc 3.6?

A: Here is the list of supported 300 Series Transmitters:

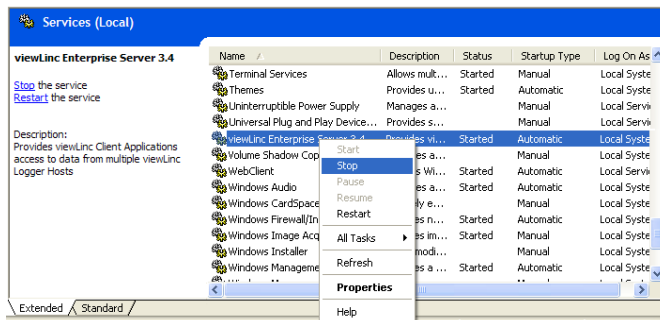
HMT331, HMT332, HMT334, HMT335, HMT337, HMT338
DMT342, DMT 334, DMT335, DMT336, DMT337, DMT338
MMT332, MMT337, MMT338
PTU301, PTU303, PTU307, PTU30T

Q: How do I stop or turn off viewLinc?

A: Complete the following steps:

- 1 On your Windows PC, choose Start | Settings | Control Panel | Administrative Tools | Services.
- 2 Stop all viewLinc Services: From the list of services, right click on the service (viewLinc Enterprise Server or

viewLinc Logger Host, viewLinc Watchdog, and viewLinc POS Display), then from the pop-up menu, choose Stop.



Q: What files are installed with viewLinc?

A: Most of the files installed as part of viewLinc are installed into one directory - by default, "viewLinc". During installation, administrators can change default file location and name.

The default path to the files installed as part of viewLinc is C:\Program Files\Veriteq Instruments\viewLinc. You can also move database files to another location on your network.

Note: If you are upgrading from viewLinc 3.4 or 3.5 to viewLinc 3.6, the default path is C:\Program Files\Veriteq Instruments\viewLinc 3.4.

The viewLinc installer also creates a program group, Veriteq Instruments, in the Start menu: C:\Documents and Settings\All Users\Start Menu\Programs\Veriteq Instruments. During installation, the viewLinc installer puts shortcuts to both the viewLinc login page and default viewLinc Help home page in the Veriteq Instruments program group.

During installation, the viewLinc installer also puts shortcuts to both the viewLinc login page and default viewLinc Help home page for the administrator who installed viewLinc: C:\Documents and Settings\<administrator_profile>\Start Menu\Programs\Veriteq Instruments.

While running viewLinc, you can transfer logger data (in an .spl file) from the logger to a user-specified location. These .spl files are saved to a location specified by the user. A typical .spl file for a two-channel logger is about 85KB.

viewLinc creates Event Logs which can be viewed from within the application. This data is stored in the installation directory.

Q: My network uses a combination of Vaisala Veriteq loggers and 300 Series Transmitters. How can I add them quickly?

A: To add multiple transmitters or a combination of loggers and transmitters at one time, create a .txt definitions file with one logger or transmitter defined per line. Add fields to identify the logger class and logger properties (separating each field with a tab).

To set vcom type devices (Vaisala Veriteq loggers), define the com port number to which your logger is connected. For example:

```
vcom com_port=101
```

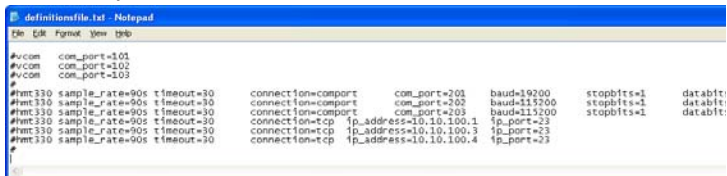
```
vcom com_port=102
```

```
vcom com_port=103
```

To set hmt330 type devices (300 Series Transmitters), define the following:

- sample_rate = the internal sample rate of the logger
- timeout = the timeout for communication events
- connection = the type of connection, comport or tcp
- com_port = a com port number to which your logger is connected (values for comport connections are user-defined)
- ip_address = the IP device address of your loggers (tcp connection)
- ip_port = the tcp port (values for tcp connections, ip_address and ip_port, are user-defined)
- Common values for both tcp and comport connections:
 - sample_rate = 10s, **90s (default)**, 12m, 2h, 12h, 2d, or 12d
- Optional values for comport connection:
 - baud = 300, 2400, 4800, 9600, **19200 (default)**, 57600, or 115200
 - stopbits = **1(default)** or 2
 - databits = 7 or **8(default)**
 - parity = odd, even or **none(default)**

For example:



```

definitionsfile.txt - Notepad
File Edit Format View Help
#vcom com_port=301
#vcom com_port=302
#vcom com_port=303
#vmt330 sample_rate=90s timeout=30 connection=comport com_port=201 baud=19200 stopbits=1 databit:
#vmt330 sample_rate=90s timeout=30 connection=comport com_port=202 baud=115200 stopbits=1 databit:
#vmt330 sample_rate=90s timeout=30 connection=comport com_port=203 baud=115200 stopbits=1 databit:
#vmt330 sample_rate=90s timeout=30 connection=tcp ip_address=10.10.100.1 ip_port=23
#vmt330 sample_rate=90s timeout=30 connection=tcp ip_address=10.10.100.3 ip_port=23
#vmt330 sample_rate=90s timeout=30 connection=tcp ip_address=10.10.100.4 ip_port=23

```

Q: How do you add IP addresses for data loggers?

A: You don't. But, you do assign IP addresses to your communication devices. Because viewLinc communicates using COM ports, attaching data loggers to the network using Ethernet/IP addresses requires the use of a networking device. vNet or Digi devices create virtual COM ports that allow data loggers to communicate with viewLinc using Ethernet. We recommend that you do not use dynamic IP address for your device; instead, use a reserved or static IP address (obtained from your IT department). IP addresses are assigned to vNet or Digi devices during driver configuration. Refer to the Vaisala Veriteq Quick Start Guide for vNet or Digi devices for installation instructions. For more about vNet, see www.vaisala.com/veriteq. For more about Digs, see www.digi.com.

Q: How does viewLinc know which devices (with attached loggers) are assigned to it?

A: It doesn't. Your network devices aren't 'assigned' to viewLinc; rather, viewLinc monitors the network for loggers attached to COM ports. As mentioned, viewLinc software communicates via COM ports. Installing a network device using the Quick Start Guide creates virtual COM ports which are monitored by viewLinc.

To see which COM ports (virtual or other) are assigned to a vNet or Digi device, use Device Manager:

- 1 Open Device Manager (From Start, choose Settings | Control Panel | Administrative Tools| Computer Management. Device Manager is on the left hand side).
- 2 Once Device Manager is open, expand Ports (COM & LPT) to see which COM ports are connected to which devices. By default, vNet devices are named CDL-VNET-

P - model name; Digi devices are named Digi xxxxx (where x is the serial number of the device).

- 3 For more detail, in Device Manager, under Multiport serial adapters, right-click the device in question. Choose Properties, select the Advanced tab, and click on the properties button. On the left will be a list of the COM ports used for this device.

To see which loggers are being controlled by viewLinc, see the System tab.

Q: I want to run a B+B Electronics or Web Relay External Digital Relay I/O device as part of my alarm system. How do I do this?

A: In addition to email alarms and pop-up windows, you can also run commands on the viewLinc Server (which in turn can trigger external devices) when an alarm threshold is exceeded.

To configure these:

In the Create Threshold screen on the Notifications tab, click Add, then select Add Command Notification. Enter a DOS command in the appropriate box. There are different boxes to accept different commands for when an alarm is triggered, notification is repeated, alarm acknowledged, or alarm condition is no longer true.

If you are using a B+B Electronics External Digital Relay I/O Device, you must also attach the Digital Relay I/O Device to a COM port on the viewLinc Server.

If you are using a Web Relay device, no com port is required – this device can be connected directly to the local area network. Both devices can be configured using the instructions within the B+B Relay and Web Relay Quick Start manuals.

You must also attach the Digital Relay I/O Device to a COM port on the viewLinc Server.

When using the B+B External Digital Relay I/O device and the python SwitchBbRelay script (installed automatically as part of viewLinc 3.6), the specific DOS command to enter in the viewLinc Edit Threshold screen is:

```
"C:\Program Files\Veriteq  
Instruments\viewLinc\python\python" -m
```

`viewLinc.scripts.SwitchBbRelay` <number of com port where relay device is attached> <Option>
where Option is one of:

- 1 - turn on Device 1
- 2 - turn on Device 2
- 3 - turn on both Device 1 and 2
- 0 - turn off both Devices.

Q: I'm using vNet/Digi devices to connect my loggers to the network. I want to move my device from one location to another within the same subnet. What do I need to do?

A: If you've used a reserved or static IP address for your device (as recommended) and are moving your device from one location to another within the same subnet, here are the steps to follow:

- 1 Pause alarming on the logger. (You may experience communication alarms while performing these steps if you do not pause alarming).
- 2 Unplug the vNet or Digi device from the network (with loggers still attached).
Note: You do NOT need to uninstall the Digi RealPort software from the viewLinc Server machine. In fact, doing so will potentially cause problems when you reattach the Digi to the network.
- 3 Move the device to another location.
- 4 Plug the device into the network again.
- 5 Resume alarming. viewLinc should be able to reconnect with the device and allow you to see the loggers.

Q: I'm using vNet/Digi device to connect my loggers to the network. I want to move my device from one subnet to another. What do I need to do?

A: If you've used a reserved or static IP address for your vNet or Digi device (as recommended) and you're moving your device from one location to another in a different subnet, there are several configuration steps:

- 1 Pause alarming. (You may experience communication alarms while performing these steps if you don't pause alarming).

- 2 You do NOT need to uninstall the device software from the viewLinc Server machine; but, you do need to make some configuration changes:
 - **Reserved IPs:** Remove the reservation from the DHCP scope for the original subnet and create a new reservation in the DHCP scope for the new subnet. Proceed to step 6.
 - **Static IPs:** With the vNet or Digi device still connected at its original location, log into the vNet or Digi web interface. In the address bar of a web browser, type the IP address of the device. (The IP of your device can be found using Device Discovery, if you are on the subnet as the device.)
 - At the login screen, login as 'root' user and supply the password. The default password is 'dbps'. If you have not changed the password, use the default.
 - From the navigation bar, choose Network. In the Network Configuration screen, enter the new IP address, subnet mask and gateway for the new subnet. Click **Apply**.
 - Reboot the device.
- 3 Move the device to its new location.
- 4 Configure viewLinc to look for the device in this new subnet. On the viewLinc machine, from Device Manager | Multiport Serial Adaptors, right click on the row for your device.
- 5 From the Properties screen, choose Advanced | Properties | Network.
- 6 From the Network screen, enter the network settings to reflect the device's new IP address. Click **OK**.
- 7 Resume alarming. viewLinc should be able to connect to the device and allow you to see the loggers.


If viewLinc can't connect to these loggers or this device after performing the above steps, there may be a port blocked on the router connecting the subnets. Try the following:

- 1 Determine if the device in the new subnet is accessible from the viewLinc computer. From a command prompt on the viewLinc computer, type ping <IP address>. If there are successful responses to the ping, this test will prove

that routing exists between the subnets. Go to the next test.

2 For Digi devices:

- a** In the command prompt, type telnet <IP address>. If you get a login prompt, this test will prove that the device is able to respond to requests. Hit "Ctrl+C" to abort the login. Go to the next test.
- b** In the command prompt, type telnet <IP address> 771. If you get an error message (and the previous tests were successful) then Port 771 is being blocked between the local computer and the device. This port must be opened before the device can be used with Vaisala software. This port may be blocked by network devices (such as routers, firewalls or layer 3 switches) or PC software (such as the Microsoft Windows Firewall, 3rd party firewalls, or security software suites). Unblock this port.

A successful connection is indicated by sets of three (3) horizontal lines (...) appearing on your screen. Note that one set of lines will appear every 10 seconds.

Q: I can't log in to viewLinc despite using the correct username and password.

Ensure the service "viewLinc Enterprise Server" is running. In Windows Control Panel, choose Administrative Tools | Services, then find "viewLinc Enterprise Server" on the list and right-click to **Start**. (If Enterprise Server isn't running you cannot view the Login screen).

Q: I'm getting communication alarms in viewLinc. I think my network device or logger has stopped responding. What do I do?

- 1** Ensure your loggers are plugged in.
- 2** Ensure your network device is connected to a power supply and the power supply is plugged in. On a Digi or vNet device, the power light on the front of the device should be solid red.
- 3** Ensure the device is connected to and communicating with the network. Try to ping the device by typing the

following at a command prompt: `ping <IP address of the device>`.

- 4 If there is communication between the device and the network, check that the Vaisala-supplied cable connecting the device to the logger is connected properly. If the light on the cable is solid red, there is a problem with the network device or logger cable. Ensure your device has been configured to use RealPort (see www.vaisala.com/veriteq for more). If this still doesn't fix the problem, go to step 6.
- 5 If the light on the cable is working correctly but you are still getting communication alarms, go into Device Manager on the viewLinc computer and ensure the device is still installed. Under the Multiport serial adaptor category in Device Manager, you should see an entry for the device with the address you configured. If you don't see this, try connecting another working logger, or reinstall the device by following steps 2 B and C from the ***Quick Start Guide for viewLinc with vNet or Digi Devices***.
- 6 If the light on the cable is not working properly, open a graphing application (vLog or Spectrum) and determine if the cable can communicate with the logger. If there is a problem with the logger communicating with the graphing application, it is likely the device or logger cable is not functioning properly. Try connecting the logger to a new device, or to a computer using USB, and see if you can connect to it in vLog or Spectrum.

Q: I'm in viewLinc and trying to transfer logger files to a network location but it isn't working. What do I do?

A: First, ensure you are using the full network path to the network directory (for example, `\\ComputerName\etc.`), not a mapped drive letter. Also, ensure that the account that's running viewLinc has write permissions to the folder where you're attempting to transfer the logger files. The account that's running viewLinc was set during installation. See information on installing viewLinc in Chapter 1 of this guide, or online help.

Q: I've made some changes in viewLinc, such as new thresholds and logger descriptions, but they're not showing up. What's wrong?

A: Channel information is updated and refreshed depending on the refresh rate set in viewLinc. Click the Refresh button in viewLinc, or determine the refresh rate viewLinc is using and wait the allotted time.

Q: How does viewLinc select colors for reports?

A: When channel line colors are set to 'Auto' viewLinc assigns the next free color from a built in palette of colors. Colors are selected in the following order/sequence:

- a** Black (0, 0, 0)
- b** Red (255, 0, 0)
- c** Green (0, 128, 0)
- d** Orange (255, 165, 0)
- e** Blue (0, 0, 255)
- f** Yellow (255, 255, 0)
- g** Purple (128, 0, 128)
- h** Brown (150, 75, 0)
- i** Gray (128, 128, 128)
- j** Maroon (128, 0, 0)
- k** Lime (0, 255, 0)
- l** Tomato (255, 99, 71)
- m** Azure (30, 127, 255)
- n** Amber (255, 204, 0)
- o** Byzantium (112, 41, 99)
- p** Bronze (205, 127, 50)
- q** Silver (192, 192, 192)
- r** Crimson (220, 20, 60)
- s** Emerald (80, 200, 120)
- t** Coral (255, 127, 80)
- u** DeepSkyblue (0, 191, 255)
- v** Ecru (205, 178, 128)

w Eggplant (97, 64, 81)

x Buff (240, 220, 130)

For more help with any of these issues, contact Vaisala Canada at 1-866-861-3388 or vaisalasupport@veriteq.com.

Index

Numerics

300 Series Transmitters 93

- adding 55
- installing 6
- IP address 56
- output quantities 20
- swapping 57
- See also loggers

A

accounts

- creating for users 67
- user options 68

acknowledge an alarm 26, 49

active alarms

- viewing 25

adding

- comments to alarm notifications 40
- comments to event logs 77
- multiple loggers 95

Administrator's Road Map 15

alarm trigger

- launch an application or action 36

alarming status, defined 22

alarms 33–51

- acknowledging 26, 49
- active
 - viewing 25
- changing email contents for 63
- color codes 37
- commands 39
- communication 34, 45
 - commands 39
 - comments in 40
 - disabling 47
 - editing 47
 - email notifications 38
 - notification 65
 - pausing 50

pop-up notification 37

troubleshooting 100

email notifications 35

email settings 61

logger 35, 48

comments in 40

Configuration 35

disabling 49

email notifications 38

Logger Calibration alarms

defined 35

multiple notifications 36, 39

pausing 50

templates 36

threshold 34

comments in 40

deactivating 44

disabling 44

editing 44

email notifications 38, 65

external relay devices 97

multiple notifications 39

pausing 50

pop-up notification 37

running commands 97

setting 42

threshold condition template 41

tree hierarchy 36

user notification 65

Validation 35

aliases, setting 69

applications

running when alarm triggered 39

average value 83

B

B+B Electronics Digital Relay device 97

background color 37

browsers, supported 5

C

- Calibration alarms 35
- Celsius, showing temperatures in 70
- Channel Description
 - defined 22
 - editing 60
- Channel Number 22
- Channel Value
 - defined 22
 - reading 25
- channels 19–31
 - aliases 69
 - changing unit preference 61
 - displaying in My Channels 14, 20
 - editing properties 60
 - opening 22
 - output quantities 20
 - properties 60
 - reading graphs 24
- Clear Unit Preferences 61
- cloning a report 85
- closing large channel view 23
- color
 - selecting for alarms 37
 - selecting for reports 84
- color palette 102
- COM Ports
 - viewing 96
- commands
 - alarms 39
 - running from viewLinc 97
- comments
 - adding to alarms 40
 - adding to event logs 77
 - preconfigured 40
 - viewing 77
- communication alarms
 - adding comments to 40

- adding email notifications 38
 - adding pop-up notification 37
 - color codes 37
 - defined 34
 - disabling 47
 - editing 47
 - pausing 50
 - setting 45
 - templates 36
 - troubleshooting 100
- Configuration alarms
 - defined 35
- contact schedules 65
- creating
 - alarm templates 36
 - preconfigured comments 40
 - reports 85
 - user accounts 67
 - zones 27
- customer support vi

D

- data transfers
 - immediate transfer 90
 - scheduled transfer 88
- deactivating
 - loggers 58
 - threshold alarms 44
 - transfer schedules 91
 - zones 30
- definition file for loggers 95
- deleting
 - reports 85
- devices, external relay 97
- Digi devices
 - installation of viewLinc with 9–13
 - moving location of 98
 - RealPort driver installation 10
 - troubleshooting 96, 98

- disabling
 - communication alarms 47
 - logger alarms 49
 - threshold alarms 44
- discovering
 - Vaisala Veriteq Loggers 54
 - vNet devices 8
- drivers
 - RealPort 8, 10
 - USB cable 11
- E**
- editing
 - communication alarms 47
 - email templates 63
 - logger alarms 48
 - logger aliases 59
 - logger and channel properties 59
 - threshold alarms 44
 - zones 28
- email
 - settings 61
 - templates 63
 - macros 64
- email notifications 35, 65
 - in alarms 38
- event logs 75–78
 - adding comments to 77
 - exporting 78
 - printing 77
 - saving 78
 - viewing 76
 - viewing comments 77
- Excel reports 81, 82, 83
- exporting
 - event logs 78
- external relay devices 97
- F**
- Fahrenheit, showing temperatures in 70

- files
 - installed with viewLinc 94
- Firefox
 - versions supported 5

G

- getting help vi
- graphs
 - reading 23
 - viewing 22

H

- hardware requirements 4
- help 16
 - technical support vi
- historical data 2, 79, 87
 - purpose of 80
 - viewing 22
- host, installing 13
- HTTP Server port 12

I

- indicators, color 37
- installation
 - 300 Series Transmitters 6
 - Administrator's Road Map 15
 - Digi RealPort driver 10
 - host 13
 - options for 2
 - Spectrum 11
 - viewLinc 6–13
 - vLog 11
 - vNet RealPort driver installation 8
- Internet Explorer
 - settings 22
 - versions supported 5
- IP addresses
 - 300 Series Transmitters 56

L

- large channel view, closing 23

- large channel view,
 - reading graphs 23
- launching applications or devices 36
- logger alarms
 - adding comments to 40
 - adding email notifications 38
 - adding pop-up notification 37
 - color codes 37
- Logger Configuration alarms
 - defined 35
- Logger Validation alarms
 - defined 35
- loggers
 - adding 54
 - 300 Series Transmitters 55
 - Vaisala Veriteq loggers 55
 - adding multiple 95
 - alarms 48
 - editing 48
 - setting 48
 - templates 36
 - aliases 59, 69
 - Calibration alarms 35
 - channel descriptions 60
 - Configuration alarms 35
 - deactivating 58
 - definitions file 95
 - descriptions 59, 69
 - discovering 54
 - editing aliases 59
 - editing properties 59
 - swapping 56
 - transfer schedules 88
 - transfers 90
 - troubleshooting 101
 - Validation alarms 35
- login screen 13
- logs, event. See event logs.

M

- macros
 - using in email templates 64
- mail server settings 61
- maximum value 83
- mean kinetic temperature (MKT) 83
- measurement units 70
- Microsoft Excel
 - exporting logs to 78
 - viewLinc event logs and 78
- minimum value 83
- Mozilla Firefox
 - versions supported 5
- multiple alarm notifications 39
- My Channels 21

N

- notifications
 - calibration 35
 - multiple 36

O

- opening large channel view 22
- output quantities 20

P

- passwords
 - reconfirmation after session expiry 14, 71
- pausing alarms 50
- PDF reports 81, 82, 83
- permissions, user 64, 68
- pop-ups
 - for alarms 35
- ports
 - HTTP Server 12
- preconfigured comments 40
- printing
 - event logs 77
 - reports 85
- privileges, user 64

R

- reactivating
 - users 69
- reading
 - channel values 25
 - graphs
 - in large channel view 24
 - threshold values 25
- relay devices 97
- replacing loggers 56
- reports 79–85
 - cloning 85
 - color 84
 - creating 85
 - deleting 85
 - Excel 81, 82, 83
 - generating 81, 82
 - PDF 81, 82, 83
 - printing 85
 - types 80
- road map 15
- run commands
 - for alarms 39

S

- sample count 83
- scheduled data transfer
 - deactivating 91
 - disabling 91
 - editing 90
 - scheduling 88
- schedules
 - contact 65
 - creating for users 65
- scripts, running from viewLinc 97
- security
 - levels 64
 - users 68
- See also loggers
- serial ports 4

- installation of viewLinc with 11–13
- services 93
- session expiry 14, 71
- setting
 - alarm templates
 - color code 37
 - alarms
 - communication 45
 - logger 48
 - threshold 42
 - browser settings 22
 - threshold alarms 42
 - user security and permissions 68
- setting up
 - road map 15
- settings. See system settings
- showing deactivated transfers 91
- Spectrum
 - installation 11
- spreadsheets, event log data in 78
- standard deviation 83
- statistics intervals 83
- statistics settings 83
- Status bar, defined 22
- subnets
 - troubleshooting 99
- support, technical vi
- supported browsers 5
- swapping loggers 56
- system requirements 4
- system settings 53–70

T

- Tab bar 21
- technical support vi, 16
- templates
 - creating 36
 - editing 63
 - using macros 64
- threshold alarms
 - adding comments to 40

- adding email notifications 38
- adding pop-up notifications 37
- color codes 37
- deactivating 44
- defined 34
- disabling 44
- editing 44
- multiple notifications 39
- pausing 50
- resume alarming 51
- setting 42
- templates 36, 41
- Threshold Summary, defined 22
- threshold values, reading 25
- timestamp 22
- transfer schedules 88
 - deactivating 91
 - disabling 91
 - editing 90
- transferring data
 - immediately 88, 90
 - showing deactivated transfers 91
- transmitters
 - adding 55
 - installing 6
 - output quantities 20
 - See also loggers
 - supported 93
- treed alarm notifications 39
- troubleshooting 93–103
 - subnets 99
- turning off
 - viewLinc 93

U

- unit preferences
 - channels 61
- units, temperature 70
- upgrading from earlier version 12

- USB ports 3
 - installation of viewLinc with 10
- user accounts
 - creating 67
 - editing 68
 - logging in 13
 - permissions 68
 - security 68
- user security 68
- users
 - access options 68
 - contact schedules 65
 - reactivating 69
 - security levels 64
- using color
 - for alarms 37
 - for reports 84

V

- Vaisala Veriteq loggers
 - adding 55
 - discovering 54
 - See also loggers
- Validation alarms
 - defined 35
- viewing
 - active alarms 25
 - channels 22
 - COM ports 96
 - event comments 77
- viewLinc
 - browsers supported by 5
 - channels
 - displaying in My Channels 14, 20
 - files installed with 94
 - installation 2, 6–13
 - with Digi devices 9–13
 - with serial ports 4, 11–13

- with USB 3, 10
 - with vNet devices 7
- logging in 13
- security options 14, 71
- server requirements 4
- services 93
- supported transmitters 93
- turning off 93
- upgrading from earlier version 12
- vLog
 - installation 11
- vNet devices
 - discovering 8
 - moving location of 98
 - RealPort driver installation 8
 - troubleshooting 96, 98
- W**
- web relay devices 97
- Windows services 93
- X**
- xls files 78
- Z**
- zones 27–30
 - creating 27
 - deactivating 30
 - editing 28
 - viewing 21

