Product Manual

LoggerNet ALERT2

Administration Utility

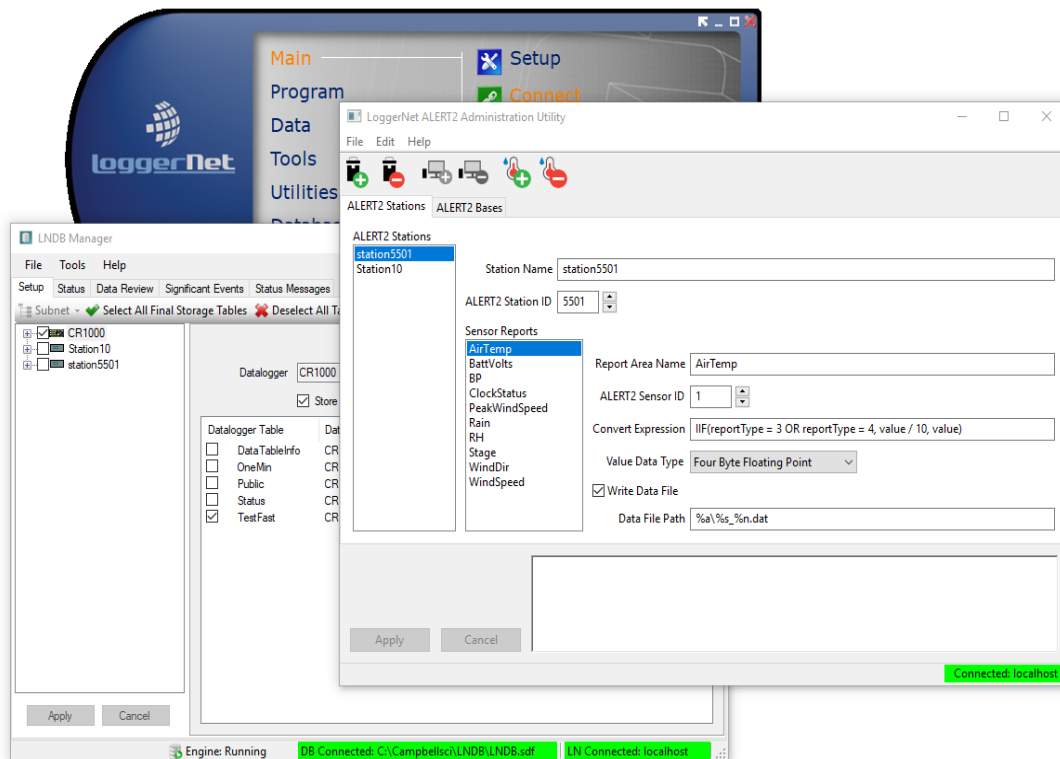CAMPBELL SCIENTIFIC®

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1. Introduction

LoggerNet ALERT2® Administration Utility (ALERT2 Administrator) allows for the easy ingestion of ALERT2 and ALERT concentration real-time data into the Campbell Scientific LoggerNet suite of software products. Users can easily store data for historical use. Once the stations are set up using ALERT2 Administrator, all that is required for data storage is that the LoggerNet server is running. The LoggerNet server can automatically start when the computer is turned on by running LoggerNet as a service. See "Installing and Running LoggerNet Admin as a Service" below.

Users can display data and send out alerts using RTMC projects and CSI Web Server. ALERT2 and ALERT data can also be stored in Microsoft SQL Server, Microsoft SQL Server Compact, or MySQL using LNDB.

All of this functionality allows for effective and timely decision making.

2. Requirements

ALERT2 Administrator requires that LoggerNet Admin is installed and running on the same machine or on a server that can be reached through a TCP/IP connection.

2.1 Installing and Running LoggerNet Admin as a Service

LoggerNet Admin can be run as a service. The advantage of running a software application as a service is that the software will run even when no user is logged in to the computer system. In addition, in the event of a loss of computer system power LoggerNet will resume data collection when power is restored to the computer and it "boots up".

LoggerNet Admin includes LoggerNet Service Manager, which is used to install and control LoggerNet when running as a service. The LoggerNet Service Manager is opened from the Windows Start menu (Campbell Scientific | LoggerNet Service Manager). The **LoggerNet Service Status** box at the top of the **LoggerNet Service Manager** window indicates whether or not LoggerNet is installed as a service and whether or not the service is running. When you first open

the LoggerNet Service Manager, if LoggerNet has not been installed as a service you will need to select the **Install** button. Note that LoggerNet must be closed to install it as a service. If it is opened, you will be prompted to close it before you can continue.

Once LoggerNet is installed as a service, you can use LoggerNet Service Manager to **Start** the service (or **Stop** it if it is enabled). The LoggerNet service can be uninstalled by selecting the **Uninstall** button.

The first time LoggerNet is installed as a service, a LoggerNet user account is created. The LoggerNet service is run under this LoggerNet user account. This allows the LoggerNet Service to always run in the same environment with known user rights. You will be asked to enter and confirm a password for the LoggerNet user account. The password you enter can later be used to log in to the computer as the LoggerNet user. The password can be changed by clicking the **Options** button and then clicking **Change Password**.

2.1.1 Issues with Running LoggerNet as a Service

By default, the LoggerNet service is run under the LoggerNet user account.This may cause some issues with write access and network drives. The issues, along with their solutions, are described in the following sections.

2.1.1.1 Write Access

The LoggerNet user has write access only to the CampbellSci directories. Therefore, if a task requires something to be written or done in a different directory or on the desktop, the LoggerNet user does not have sufficient access and the process will end in an error. This can be solved by giving the LoggerNet user write access to the necessary directories.

Giving the LoggerNet User Write Access

This is the process for giving the LoggerNet user write access to a designated directory in Windows 10. The process in other operating systems is similar.

1. Right-click on the directory in Windows Explorer and choose **Properties**.

2. Go to the **Security** tab of the **Properties** dialog box and select **Edit**. In the **Permissions for** *directoryname* dialog box, click **Add**. This will open the **Select Users, Computers, Service Accounts, or Groups** dialog box.

3. From the **Select Users, Computers, Service Accounts, or Groups** dialog box, click **Locations**. This will open the **Locations** dialog box.

4. In the **Locations** dialog box, select the computer name and click **OK**.

5. From the **Select Users or Groups** dialog box, click **Advanced**. Then click **Find Now**. Select **LoggerNet** in the list of names that appears at the bottom of the dialog box and click **OK**.

Note that *COMPUTER-NAME***LoggerNet** has been added to the object names on the **Select Users or Groups** dialog box. Click **OK** to close the **Select Users or Groups** dialog box.

6. The LoggerNet user should now be highlighted on the **Permissions for** *directoryname* dialog box. Select the **Full Control Allow** check box to give LoggerNet full permissions for the directory. Click **Apply** to apply the changes. Click **OK** to close the dialog box.

7. The LoggerNet user should now have full access to the designated directory.

2.1.1.2 Network Drives

Network drive mappings are associated with individual user accounts. Therefore, they cannot be used when running LoggerNet as a service. To use network drives when running LoggerNet as a service, you must use the full UNC path (e.g., *computer_name**directory**filename*). Note that the ability to write to the network drives will be governed by Windows security. It will be necessary to configure the LoggerNet service to run under an account that has network privileges. This requires changes to the properties of the LoggerNet service in Windows. Contact your network administrator for assistance.

3. QuickStart

3.1 Log into Server

The **Log into Server** dialog box comes up automatically the first time you run ALERT2 Administrator. It can be opened at any time from the **File | Select Server** menu item

This dialog box allows you to specify the computer running the LoggerNet server to which ALERT2 Administrator should connect. The dialog box has the following fields:

Server Address - This is the TCP/IP address of the computer running the LoggerNet server to which you are trying to connect. This must be the valid name of an existing computer or a TCP/IP address (in the form ###.###.###.### consisting of the IP network number, ###.###.###, and the host number, ###). If the software server resides on the same computer as the client, you can simply type in localhost for the server name.

Note that if you have used a command line argument to change LoggerNet's default port number, you must specify this alternate port number when entering the Server address (e.g., LocalHost:6700 or 192.168.7.123:6700).

Username - Your username on the software server.

**Password** - Your password for the software server.

The **User Name** and **Password** fields are required only if your server administrator has set up security on your system.

Each time you start the client, you will be prompted to enter this information. However, you can save the login information by selecting the **Remember username and password** check box, or you can select the **Automatically login to this server** check box to skip this window and use the information from the last session.

> **NOTE:** If you are connecting to a remote LoggerNet server, the LoggerNet server must have remote connections enabled (**Tools | Options | Allow Remote Connections**) in order for ALERT2 Administrator to be able to connect to the server.

3.2 Add Bases

To add bases to your network, ensure you are on the **ALERT2 Bases** tab and click the **Add Base** button:
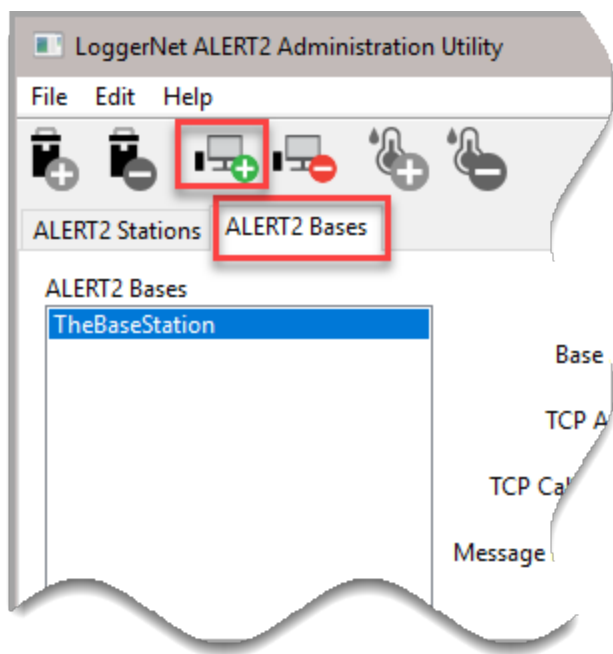
Enter a **Base Name** and select the communication **Link Type**: **Serial Port** or **TCP/IP**.
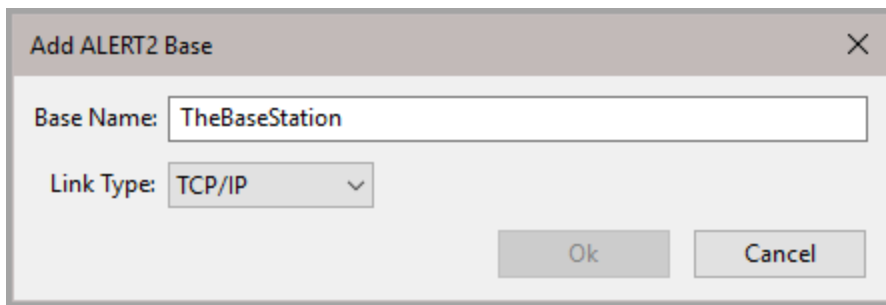
For a TCP/IP Base, specify:

- **TCP Address**: The domain name or IP address of the ALERT2 receiver along with the TCP port of the receiver's IND/TCP service separated from the address with a colon.

- **TCP Callback Port**: The TCP port on which LoggerNet will listen in order for the ALERT2 receiver to make in incoming TCP connection. If this value is non-zero, the link will only work for inbound connections.

- **Message Log File Size**: The maximum size, in bytes, to which LoggerNet will allow the message log file to grow before it renames and zips the file. If a value of zero is specified, received ALERT2 messages will not be written to the file.

For a Serial Port Base, specify:

- **Serial Port**: The name of the serial port to which the ALERT2 receiver is attached. Clicking on the ... button will display the list of serial ports on the LoggerNet server host.

- **Baud Rate**: The baud rate used on the serial port to communicate with the ALERT2 receiver.

- **Message Log File Size**: Specify the maximum size, in bytes, to which LoggerNet will allow the message log file to grow before it renames and zips the file. If a value of zero is specified, received ALERT2 messages will not be written to the file.

Repeat this process for all bases in the system.

3.3 Add Stations and Sensor Reports

To add stations to your network, ensure you are on the **ALERT2 Stations** tab and click the **Add Station** button:
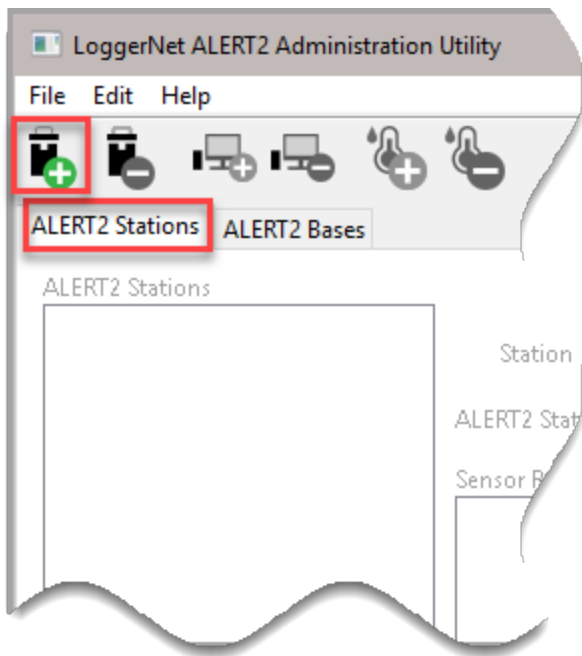
Enter a **Station Name** and select the **Station Type**: ALERT2 Self Reporting or **ALERT Concentration**.

Enter the **ALERT2 Station ID**.

When a station is added, it comes up with a default set of sensor reports. Additional sensor reports can be added by clicking the **Add Sensor Report** button

> **NOTE:** When adding sensor reports, make sure the correct station is highlighted in the ALERT2 Stations list.

When adding a sensor, enter the **Report Area Name** and **ALERT2 Sensor ID**. You may also wish to enter a **Convert Expression** to convert the raw value reported by the ALERT2 sensor. See the help within the application for more information.

4. Data Files and Log Files

By default, the data files containing sensor reports are stored in:

C:\CampbellSci\LoggerNet*stationname_ sensorreportname*.dat.

Log files containing the raw messages received from each base are stored in:

C:\CampbellSci\LoggerNet\Logs*basename_* messages$.log

5. Attributions

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