## **Event Summary Viewer User's Guide**

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#### **Qualified Persons**

## **WARNING**

The equipment covered by this publication must be installed, operated, and maintained by qualified persons who are knowledgeable in the installation, operation, and maintenance of overhead electric power distribution equipment along with the associated hazards. A Qualified Person is someone who is trained and competent in:

- The skills and techniques necessary to distinguish exposed live parts from nonlive parts of electrical equipment
- The skills and techniques necessary to determine the proper approach distances corresponding to the voltages to which the Qualified Person will be exposed
- The proper use of special precautionary techniques, personal protective equipment, insulated and shielding materials, and insulated tools for working on or near exposed energized parts of electrical equipment

These instructions are intended ONLY for such Qualified Persons. They are not intended to be a substitute for adequate training and experience in safety procedures for this type of equipment.

## Read this Instruction Sheet

#### **NOTICE**

Read this instruction sheet thoroughly and carefully before installing or operating your S&C Event Summary Viewer software. Familiarize yourself with the Safety Information on page 3. The latest version of this publication is available online in PDF format at sandc.com/en/Support/Product-Literature.asp/.

## Retain this Instruction Sheet

This instruction sheet is a permanent part of your S&C Event Summary Viewer literature. Designate a location where you can easily retrieve and refer to it.

## **Proper Application**

### **WARNING**

The equipment in this publication must be selected for a specific application. The application must be within the ratings furnished for the equipment.

## Warranty

The warranty and/or obligations described in S&C's Price Sheet 181 "Standard Terms and Conditions for Services: Customers in the United States" plus any special warranty provisions, as set forth in the applicable product-line specification bulletin, are exclusive. The remedies provided in the former for breach of these warranties shall constitute the immediate purchaser's or end user's exclusive remedy and a fulfillment of the seller's entire liability. In no event shall the seller's liability to the immediate purchaser or end user exceed the price of the specific product that gives rise to the immediate purchaser's or end user's claim. All other warranties, whether express or implied or arising by operation of law, course of dealing, usage of trade or otherwise, are excluded. The only warranties are those stated in Price Sheet 181. and THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY EXPRESS WARRANTY OR OTHER OBLIGATION PROVIDED IN PRICE SHEET 181 IS GRANTED ONLY TO THE IMMEDIATE PURCHASER AND END USER, AS DEFINED THEREIN. OTHER THAN AN END USER, NO REMOTE PURCHASER MAY RELY ON ANY AFFIRMATION OF FACT OR PROMISE THAT RELATES TO THE GOODS DESCRIBED HEREIN, ANY DESCRIPTION THAT RELATES TO THE GOODS, OR ANY REMEDIAL PROMISE INCLUDED IN PRICE SHEET 181.

## End User License Agreement

The end user is granted a nontransferable, non-sublicensable, nonexclusive license to use the S&C IntelliTeam® Designer Software, IntelliLink® Remote Setup Software, IntelliTeam® SG Automatic Restoration System software, S&C Event Summary Viewer software, and/or other software furnished with the IntelliTeam SG Automatic Restoration System only upon acceptance of all the terms and conditions of the seller's end user license agreement set forth in Price Sheet 155.

## Understanding Safety-Alert Messages

Several types of safety-alert messages may appear throughout this instruction sheet. Familiarize yourself with these types of messages and the importance of these various signal words:

#### A DANGER

"DANGER" identifies the most serious and immediate hazards that will likely result in serious personal injury or death if instructions, including recommended precautions, are not followed.

## WARNING

"WARNING" identifies hazards or unsafe practices that can result in serious personal injury or death if instructions, including recommended precautions, are not followed.

## **A** CAUTION

"CAUTION" identifies hazards or unsafe practices that can result in minor personal injury if instructions, including recommended precautions, are not followed.

## **NOTICE**

"NOTICE" identifies important procedures or requirements that can result in product or property damage if instructions are not followed."

## Following Safety Instructions

If you do not understand any portion of this instruction sheet and need assistance, contact your nearest S&C Sales Office or S&C Authorized Distributor. Their telephone numbers are listed on S&C's website sandc.com. Or call the S&C Global Monitoring and Support Center at 1-888-762-1100.

#### NOTICE

Read this instruction sheet thoroughly and carefully before installing your S&C Event Summary Viewer software.



Replacement Instructions and Labels

If you need additional copies of this instruction sheet, contact your nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd.

It is important that any missing, damaged, or faded labels on the equipment be replaced immediately. Replacement labels are available by contacting your nearest S&C Sales Office, S&C Authorized Distributor, S&C Headquarters, or S&C Electric Canada Ltd.

#### Overview

Downloading the Installer

Installing the Software

The Event Summary Viewer is an offline software tool that simplifies fault analyses by enabling users to view the fault-related event records generated by an IntelliRupter fault interrupter. The tool can parse through the existing event logs and find all fault-related event records and all waveform-capture files correlated with these events. The Event Summary Viewer also improves fault analyses by using clear language and presenting the supporting data (pole number, terminal, fault current, etc.) in an organized way.

The Event Summary Viewer software installer (EventSummaryViewer-x.x) is available for download on the S&C Automation Customer Support Portal in the IntelliRupter Software workspace. A password is required to access the portal and can be requested on the **Log-in** page: **sandc.com/en/support/sc-customer-portal/** 

Follow these steps to install the Event Summary Viewer software:

- **STEP 1.** Double-click on the EventSummaryViewer-x.x.msi file to run the installer.
- $\textbf{STEP 2.} \quad \text{When the Setup Wizard dialog box appears, click on the } \textbf{Next} \text{ button. See Figure 1.}$



Figure 1. The Setup Wizard dialog box.

**STEP 3.** On the next screen, select a destination folder, and then click on the **Next** button. The user must have read and write privileges to use the selected folder. See Figure 2.

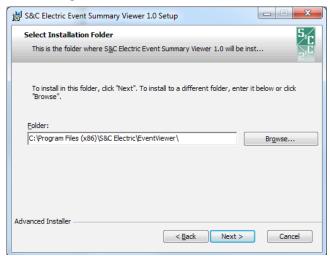


Figure 2. The Select Installation Folder dialog box.

**STEP 4.** Click on the **Install** button to begin the installation. If necessary, enter an Admin username and password to continue. See Figure 3.

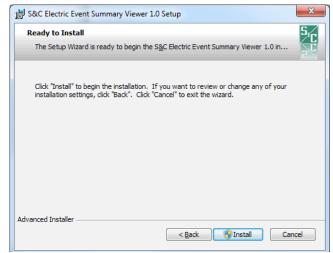


Figure 3. The Ready to Install dialog box.

**STEP 5.** The installation is complete. Click on the  $\mathbf{Finish}$  button to exit the setup wizard. See Figure 4.



Figure 4. The Installation Complete dialog box.

The software can be launched by double-clicking on the **S&C Electric Event Summary Viewer x.x** desktop icon or by selecting **S&C Electric>Event Summary Viewer** option from the **Start** menu.

#### File Menu

## **Help Menu**

#### **Miscellaneous Tools**

## **Event Summary Log Features**

**File>Load IntelliRupter® Events:** Loads multiple event log files with xevt, .evt, .vm, or .xdss extensions (These files can be obtained from the CompactFlash memory of the IntelliRupter fault interrupter using IntelliLink Setup Software. Users can also click on the **Load IntelliRupter® Events** icon.

**File>Open Event Summary:** Opens previously saved Event Summary Log files (Users can also click on the **Open Event Summary** icon.)

**File>Save Event Summary:** Saves Event Summary logs to file (Users can also click on the **Save Event Summary** icon.)

**Help>About S&C Event Summary Viewer:** Displays the application revision number **Help>Help on Event Summary Viewer:** Displays help text

 $\textbf{Zoom In:} \ \textbf{When clicked on, zooms into the} \ \textit{Event Summary Log} \ \textbf{screen view; see Figure 5}$ 



Figure 5. The Event Summary Log screen.

**Device Name:** Displays the name of selected device (Users assign the device a name using the IntelliLink Setup software.)

**Device Location:** Displays the location of device (Users assign the device a location using the IntelliLink Setup software.)

**Browse By Time:** Displays the start time of the first event record and the end time of the last event record in the log

Change Timestamp: Allows users to adjust the time range of the log

**Reset Timestamp:** Allows users to reset the time range of the log back to the default setting

**Switch State:** Displays the position of the switch for poles 1, 2, and 3 at the time of the event ("O" represents an open pole, "X" represents a closed pole, and "-" means the switch position was not recognized.)

**Local Time:** Displays the time zone of the personal computer (PC) used to download the event files from the device

**Description:** Displays a description of the event

**Pole:** Displays the pole (1,2, or 3) affected by the event

**Terminal:** Displays the direction (X or Y) of the fault

**Fault Current:** Displays the single-phase (faulted phase) or three-phase (Phase A, Phase B, Phase C, Ground Fault) current in amps at the time of the fault event

**Fault Voltage / Frequency:** Displays single-phase (faulted phase) or three-phase (Phase A to GND, Phase B to GND, Phase C to GND) voltage in volts for voltage-related events; displays frequency in hertz for frequency-related events

**Fault Duration:** Displays the time difference, in seconds, between the moment a protection element picks up and trips

**WFC:** Displays a hyperlink to a waveform capture file (.wfc) triggered by the event (Clicking on the link launches the waveform capture file in Softstuf's Wavewin application if installed on the user's PC.)

## Loading IntelliRupter Events

Follow these steps to load event files:

- STEP 1. Launch the application by double-clicking on the S&C Event Summary Viewer icon on the computer desktop or by selecting S&C Electric>Event Summary Viewer option from the Start menu.
- **STEP 2.** Once launched, click on the **File>Load IntelliRupter® Events** pull-down menu item or the corresponding left toolbar button to start the loading process. See Figure 6.

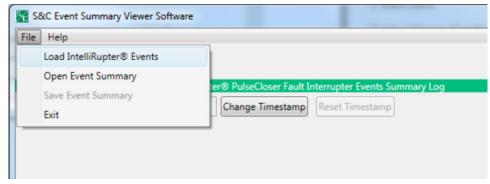


Figure 6. The File pull-down menu.

**STEP 3.** Select the event file extension to select the type of event files to load. See Figure 7.

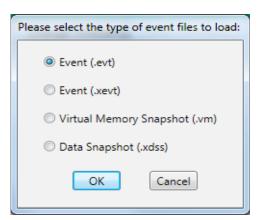
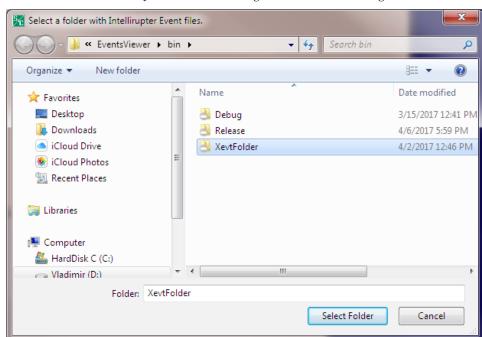


Figure 7. The Event file extension selection dialog box.

#### **NOTICE**

The tool cannot convert event files obtained from devices with firmware older than v3.5. If this is attempted, a screen will appear saying one or more event files could not be loaded.



**STEP 4.** Select a directory where the events log files are stored. See Figure 8.

Figure 8. The Select a Directory dialog box.

## **NOTICE**

The tool won't allow the selection of a single file. A directory must be selected.

The loading process starts when the selected folder contains any number of .xevt, .evt, .vm, or .xdss files. For .evt, .vm, or .xdss extensions, the application must first convert the files to .xevt files. See Figure 9.

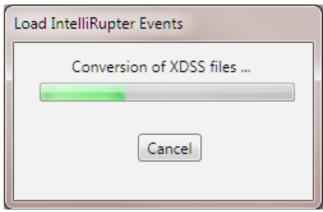


Figure 9. The Event Conversion Status dialog box.

After successfully converting the file, the loading process continues by obtaining the device information. See Figure 10 on page 9.

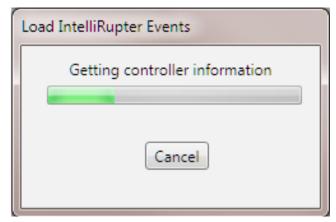


Figure 10. The Data Collection status dialog box.

This process can take some time. The duration depends on the number of files being loaded. Users can interrupt this process at any time by clicking on the **Cancel** button. After the process is successfully completed, the viewer tool generates a table with a list of all device names and the number of event log files corresponding to each device.

**STEP 5.** Select a device and click on the **Next** button. See Figure 11.

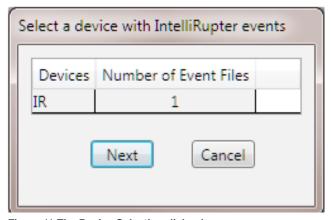


Figure 11. The Device Selection dialog box.

## **NOTICE**

The tool allows users to only select one device at a time. Also, event log files that weren't created by IntelliRupter fault interrupters will be omitted from this list.

**STEP 6.** A screen appears requesting whether the tool shall search for waveform capture files with the .wfc extension. See Figure 12. Click on the **Yes** button if the same folder also includes waveform capture files and you'd like to link them to the Event Summary Log. Otherwise, click on the **No** or **Cancel** buttons.

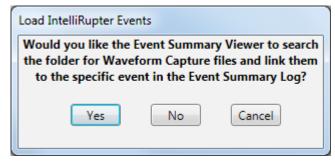


Figure 12. The Load Interrupter Events dialog box.

## **NOTICE**

The waveform capture files must be in the same folder as the event files. Otherwise, the tool will not detect and link the files to the Event Summary Log.

The tool cancels the loading process if the user presses the **Cancel** button. Otherwise, it will continue the loading process. See Figure 13.

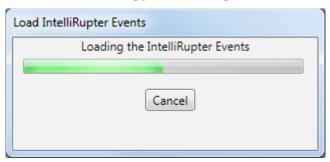


Figure 13. The Load Interrupter Events dialog box.

Once the loading is completed successfully, the tool creates an Event Summary Log. See Figure 14.

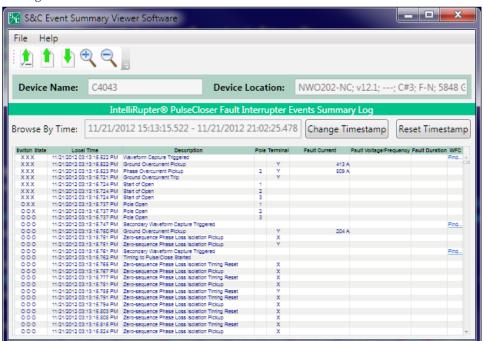


Figure 14. The Event Summary Log.

## **NOTICE**

Additional events cannot be added to the Event Summary Log after it is created. Users must start over and add the additional events during the initial loading process.

## Saving Event Summary Files

Follow these steps to save an Event Summary Log to a file:

- **STEP 1.** From the pull-down menu, click on the **File>Save Event Summary** menu item or the corresponding toolbar button. By default, both options are disabled until IntelliRupter fault interrupter event files are loaded into the Event Summary log.
- **STEP 2.** Select a directory where the Event Summary Log will be saved, and click on the **Save** button. See Figure 15.

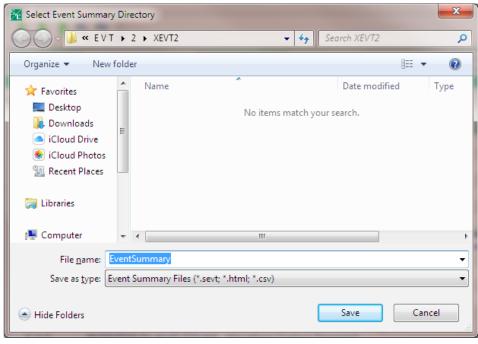


Figure 15. The Select Event Summary Directory dialog box.

The tool will save the Event Summary Log with .sevt, .html, and .csv extensions. The .sevt file can be reopened with the Event Summary Viewer, whereas the .html file can be opened in a Web browser and the .csv file can be opened using other tools, such as Microsoft Excel® software. In addition, the tool will copy all waveform-capture files with the .wfc extension to a subdirectory if the Events Summary Log was created with links to .wfc files. Follow these steps to open previously saved Event Summary Log files:

- **STEP 1.** From the pull-down menu, click on the **File>Open Event Summary** menu item or the corresponding toolbar button.
- **STEP 2.** Select the file with the desired extension. The tool will open files with .sevt extensions, whereas files with .html extensions will be opened with a default browser and files with .csv extensions will be opened with Microsoft Excel software. See Figure 16 on page 12.

## Opening Event Summary Files

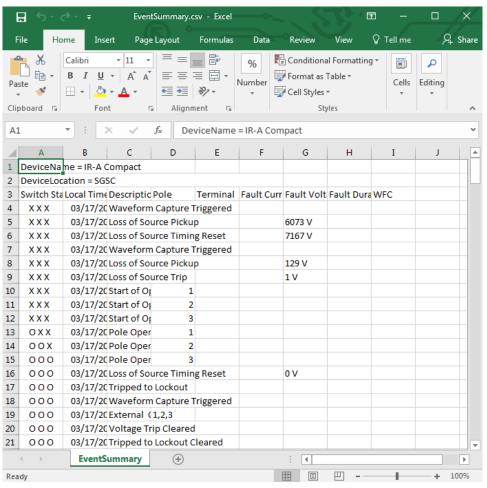


Figure 16. The Event Summary log displayed in Microsoft Excel.

# Browsing Events by Time

Users can modify the Event Summary Log by setting a specific time range using the **Change Timestamps** button on the main screen. Follow these steps to modify the Event Summary Log by setting a specific time range:

**STEP 1.** Click on the **Change Timestamp** button. See Figure 17.

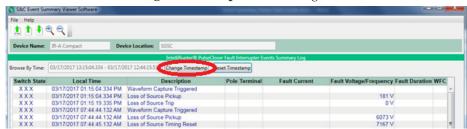


Figure 17. The Change Timestamp button.

The **Change Timestamp** screen enables users to set the hours, minutes, seconds, and milliseconds. The tool doesn't accept incorrect date ranges (start date>end date). In these cases, the tool issues an error message. See Figure 18 on page 13.

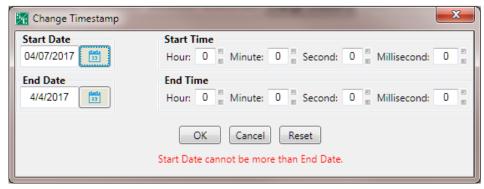


Figure 18. The Change Timestamp dialog box.

**STEP 2.** Enter a correct date range (start date < end date) and click on the  $\mathbf{OK}$  button. See Figure 19.

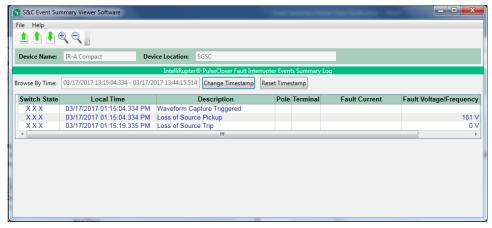


Figure 19. The Event Summary log with a custom time range.

Users can undo all changes by clicking on the **Reset Timestamp** button. See Figure 20.

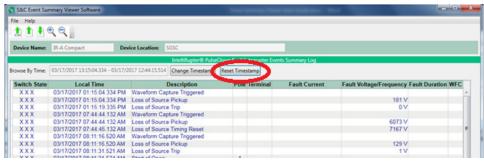


Figure 20. The Event Summary log with the full-time range.