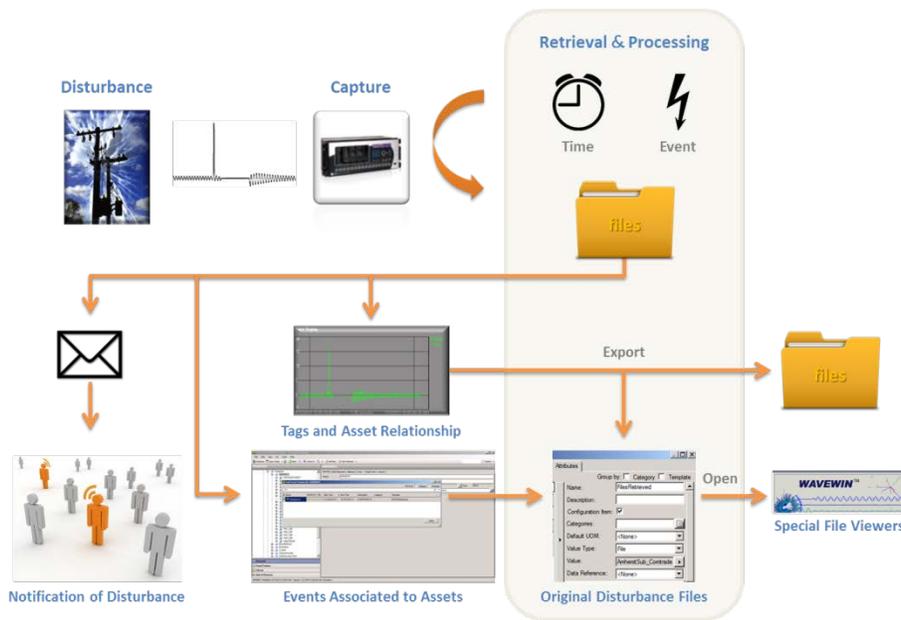
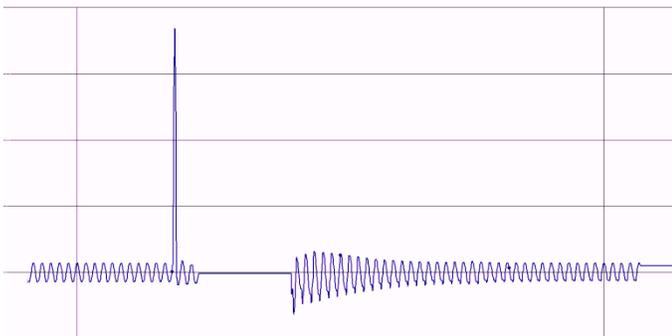


The utility industry has the need to capture and analyze several different types of events that require higher sampling rates than can be supported by SCADA or other means. The two important categories of events are: **transient disturbances** (e.g. power system security related) and **power quality**. There are two IEEE/ISO standards that facilitate the creation of high fidelity/high sample files:

- **Transient disturbances** are typically captured through devices that support IEEE C37.111: Common Format for Transient Data Exchange (COMTRADE)
- **Power quality** events are typically captured through devices that support IEEE 1159.3: Power Data Interchange Format (PQDIF)



The typical process, for such event files, is that a field event occurs and is detected in the device. The device creates the appropriate files as it has been configured. At some point in time, an engineer is notified that they need to investigate an event. The engineer then retrieves the file(s) from the device and analyzes the information, determines the remediation, and initiates corrective action. Once the corrective action is taken, the event information may be lost.



With the **SISCO COMTRADE Utility**, the detection and retrieval of the files are automated. Upon detection of new files, the utility has the ability to integrate with **PI Notifications** to generate automatic notification of an event in minutes instead of hours. The retrieved files are stored in **PI Event Frames**, associated with the proper **PI AF Asset**, for retrieval and automatic execution of the appropriate event file viewer. Additionally, the utility allows the extraction of the event information and re-integration of the high fidelity information with SCADA level information to allow PI users to see the actual system state during the event.

Besides the enhanced operational view of the system information, the SISCO COMTRADE Utility supports the export of **OSISOFT PI** information into the COMTRADE file format and the viewing in an off-the-shelf COMTRADE viewer. This capability also facilitates exchanging of synchrophasor information as well as potentially allowing different simulation tools to utilize the data.