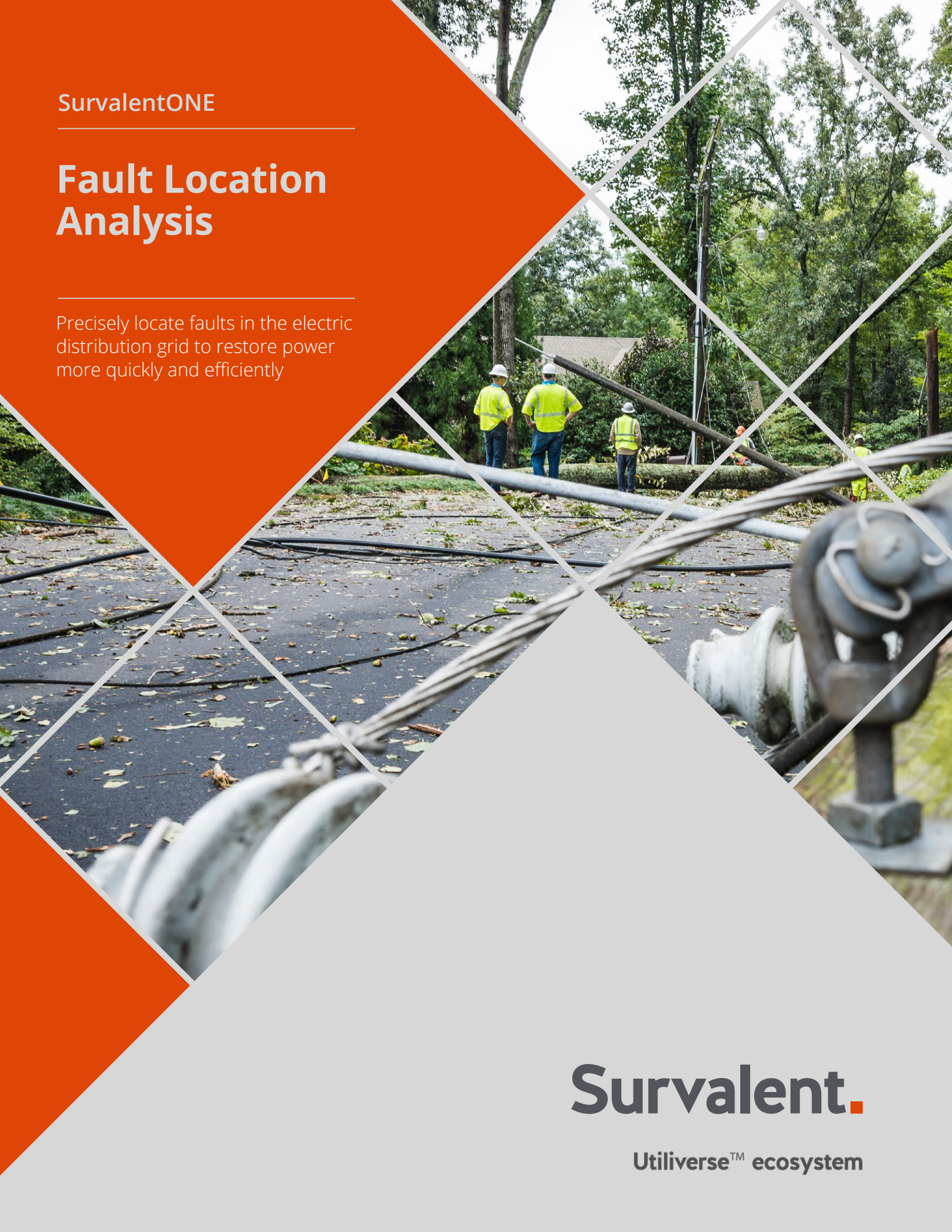SurvalentONE

Fault Location Analysis

Precisely locate faults in the electric
distribution grid to restore power
more quickly and efficiently

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With SurvalentONE Fault Location Analysis, utilities can quickly locate faults in the electric distribution grid to increase the speed and efficiency of outage responses and power restoration

Electric utilities that can trace a fault in their network to the smallest possible geographic area have the greatest ability to restore power quickly and efficiently.

Fault Location Analysis helps control room operators increase the precision with which they can locate faults in the electrical grid, enabling them to pass along more exact position coordinates to the repair crews. SurvalentONE's analysis software uses fault data collected from the field to calculate the most probable fault location(s).

Based on the results of Fault Location Analysis, utilities can deploy efficient, targeted repair operations in the field and reduce the duration of power outages.

Restore Power Faster

Every second of network downtime means inconvenience for customers and lost revenue for the utility. When operators are notified of a fault (e.g. recloser lock-out detected), they must pinpoint the corresponding fault as best they can and quickly relay an approximate location to repair crews tasked with fixing the problem.

Leveraging recorded data such as the type of fault, the short-circuit fault current measured at a switch, and which switches saw the fault, operators can use SurvalentONE's Fault Location Analysis application to generate a study of possible fault location(s) on the feeder. Fault Location Analysis then displays the results in the map in SmartVU, making it easy for operators to direct repair crews to the recommended location(s) to investigate first.
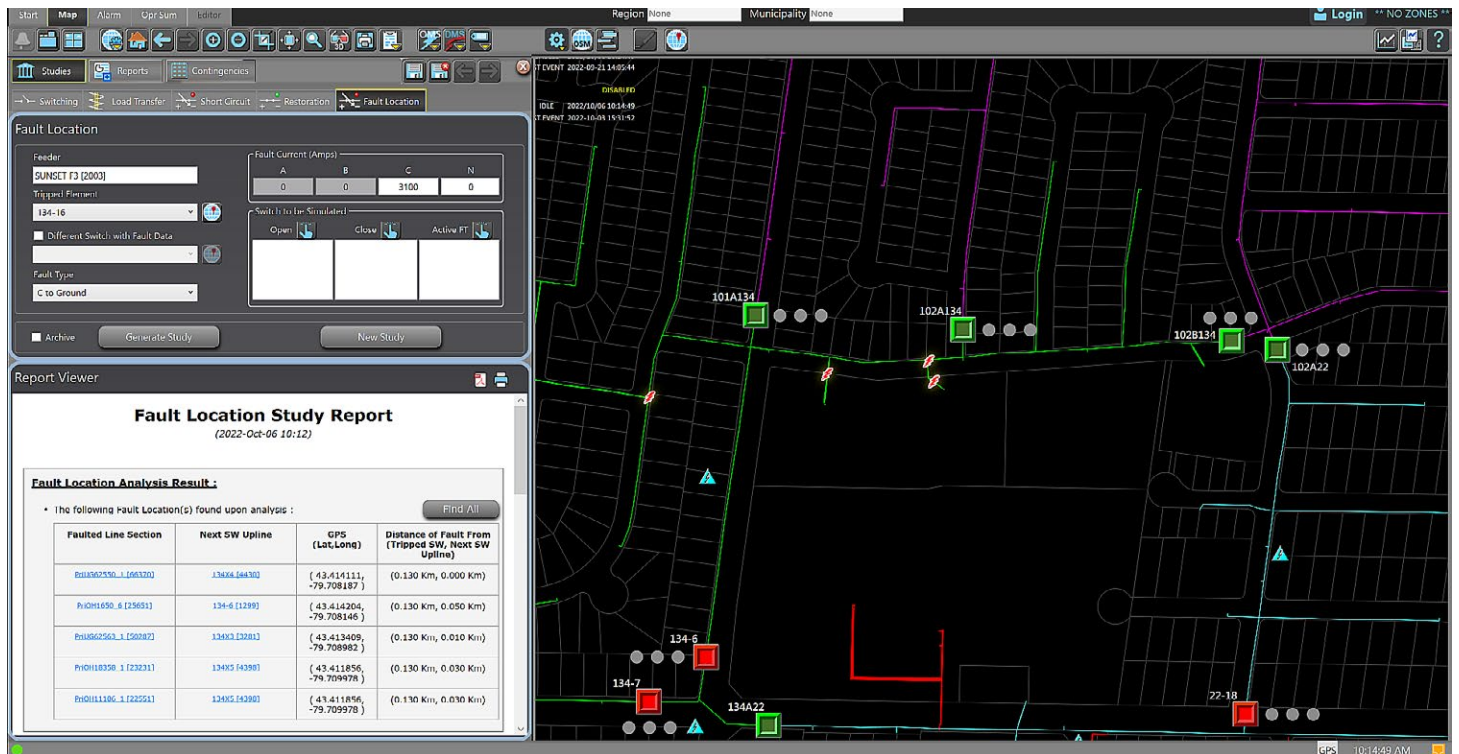
Work More Efficiently and Save Money

Operating expenses and opportunity costs increase when repair crews must spend extra time driving around during a power outage to find the root cause. With Fault Location Analysis narrowing down the search area for these crews, utilities can reduce fuel consumption, minimize wear and tear on trucks, and reduce the labor cost of each repair, while maximizing revenue and improving the quality of their service.

In addition, Fault Location Analysis makes operators more productive by letting them work entirely within the familiar SmartVU interface where they do the majority of their day-to-day operations instead of switching over to third-party software to perform each fault location analysis. Fault Location Analysis also provides greater analytic capabilities because operators can run their analysis based on the as-operated network or any network configuration.

Learn from Historical Record of Fault Events

Fault Location Analysis also provides the option of retaining studies for future analysis, offering valuable insight into a network's behavior. Engineers can also use historical data to detect failure patterns, identify potential deficiencies in the network (e.g. areas that require tree trimming), and design improvements that will prevent similar faults from occurring in the future.

Benefits

- Locate faults with greater precision

- Speed up restoration of power to customers

- Deploy repair crews more efficiently to save on fuel and overtime expenses

- Reduce the use of third-party software to increase operator productivity

- Use historical results for network planning and improvements

Key Features

- Fault location analysis based on short-circuit fault current

- Detailed insight into each fault event

- Ability to retain fault location studies for future analysis and reporting

- Integrated as part of the SurvalentONE ADMS platform; results displayed in SmartVU

- Narrow down the possible fault locations by specifying which switches saw the fault

- Ability to perform the analysis on the as-operated network or any network configuration

- Ability to run at the sub-transmission and distribution level

Better Software.
Better Decisions.

With Survalent, you can control your critical network operations with confidence. We're the most trusted provider of SCADA and advanced distribution management systems (ADMS) for electric, water/wastewater, oil & gas, renewable energy, and transit utilities across the globe.

Over 800 utilities in 40 countries rely on the SurvalentONE platform to effectively operate, monitor, analyze, restore, and optimize operations. By supporting critical utility operations with a fully integrated solution, our customers have significantly improved operational efficiencies, customer satisfaction and network reliability. The company's comprehensive substation automation solution, Survalent StationCentral, delivers advanced control and monitoring for enhanced network performance and protection.

Our unwavering commitment to excellence and to our customers has been the key to our success for over 60 years.

100% Project Delivery. We Guarantee It. Ask Us How.

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