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Grid Diagnostic Suite – SICAM Localizer

Fast and efficient fault localization
for overhead lines

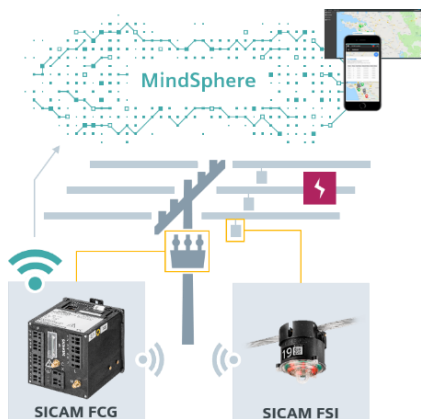
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Modernization of distribution grids

A safe and reliable supply of power for utility, industrial and private customers is now more in demand than ever before. Existing distribution grids, however, have historically been very limited in their ability to use automated and intelligent methods and are thus hard to troubleshoot. When a fault occurs, the physical extent of these networks makes it difficult to identify its exact location and usually involves considerable time-consuming manual labor. Maintenance teams must check the status of fault passage indicators (FPIs) along overhead lines or check individual substations sequentially in order to locate and correct the fault.

This leads to unnecessarily high maintenance efforts and costs, especially for grid distribution operators.

The SICAM Localizer automates the tasks of reporting and localizing faults on overhead lines by using IoT-enabled devices reporting to MindSphere, our cloud platform of choice for quick and universal access to all essential information.



Our solution for automated fault localization

In our solution, the SICAM FSI (Fault Sensor Indicator) – a mature and established product for detecting fault currents – was enhanced with a short-range wireless radio interface to communicate warning messages to a nearby SICAM FCG (Fault Collector Gateway), which in turn establishes communication over cellular networks into the cloud and can connect with up to 9 FSIs. The following Data Sources can be used to supply data to SICAM Localizer:

SICAM FSI 6MD2314x via
SICAM FCG 6MD2340-3JM7x 7AA1

SICAM Localizer

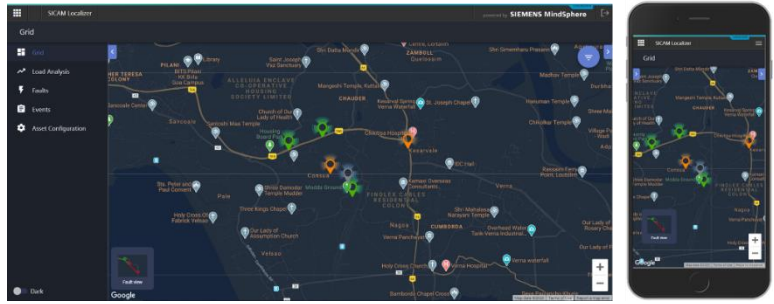
A MindSphere application for automated fault reporting and fault localization on overhead lines that helps power grid operators to optimize maintenance activities and reduce outage time.

Customer benefits

- Reduced costs through fast and efficient automated fault localization for distribution grids
- Deployable in any area with mobile network coverage
- Easy integration and secure IoT communication with MindSphere

Grid View

- SICAM FSI locations
- Fault location
- Device status updates
- Network status updates



Fault/Event View

- Visualize and generate customized reports for selected overhead lines feeder network based on performance
- Monitors load on connected transformer



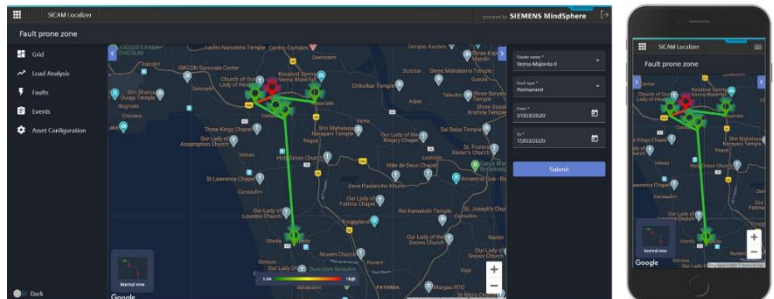
Load Analysis View

- Analyze the performance of a selected feeder or a phase of the feeder over a selectable period



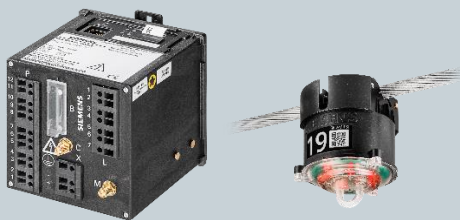
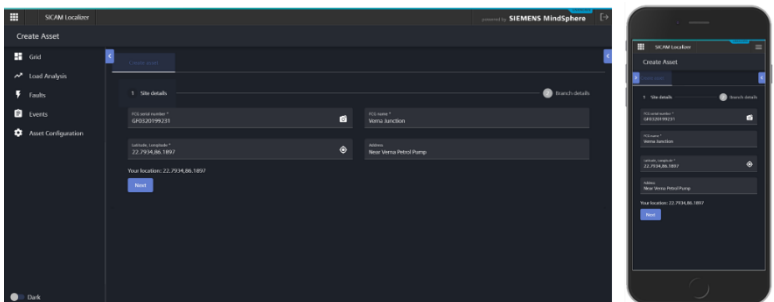
Fault Prone Zone View

- Identify the section in the feeder line which is more prone to faults



Asset Configuration View

- In this view one can create assets in SICAM Localizer that will receive and report data associated with the SICAM FSI and SICAM FCG.



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