Electrification X

Network Fault Management

Feature: Overhead Line Fault Management

For fast and efficient fault localization for overhead lines

SIEMENS

Contents

Overview

Efficient fault management & maintenance of overhead line distribution network requires precise information, often a time-consuming and cumbersome task. Electrification X – Network Fault Management (Overhead Line Fault Management - OHL-FM) streamlines overhead line distribution maintenance by simplifying data collection and fault analysis.

This innovative system automates fault reporting and localization through a comprehensive insight, simplifying the process for service engineers to pinpoint vulnerable sections, drill down on sections at risk – for a smarter way of working. Our IoT enable solution is curated to support you:

- Reduced costs and grid downtime through fast and efficient automated fault localization for distribution grids
- Deployable in any area with mobile network coverage with notifications on fault via voice call
- Secure IoT communication to the cloud and "Zero-Config" engineering in the cloud
- A wide range of visualization methods combined with data analytics
- Ease of scaling

Functions

## Fast and automatic fault localization

The feature Overhead Fault Management of Electrification X - Network Fault Management feature set automates the tasks of reporting and locating faults on overhead lines with the use of IoT-enabled devices integrated into our Electrification X cloud platform. The solution ensures universal access to vital overhead line network data, enabling automatic fault detection and localization. By significantly reducing downtime and enhancing maintenance efficiency, it optimizes overall operations seamlessly.
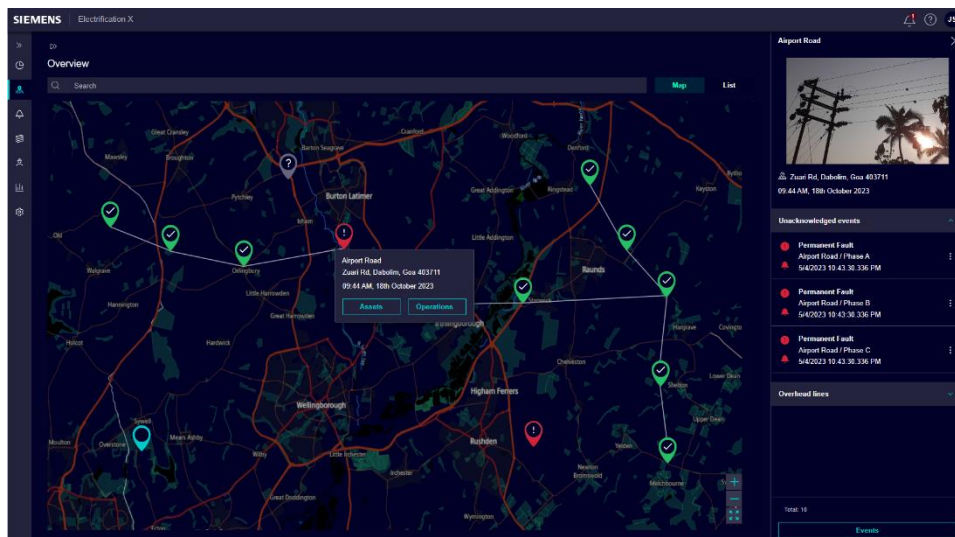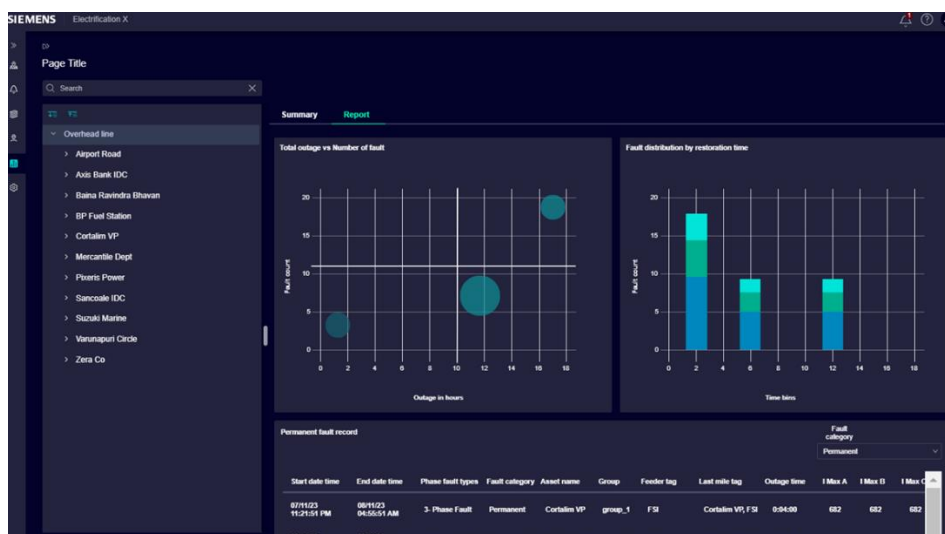

Electrification X - Network Fault Management: Map view

Enhanced Grid Insight

Analyze load currents through diverse visualization and advanced data analytics, enabling detailed analysis of grid feeder utilization. This versatile tool empowers users to access and scrutinize grid data at any location, facilitating insightful analysis and optimization for enhanced grid performance.
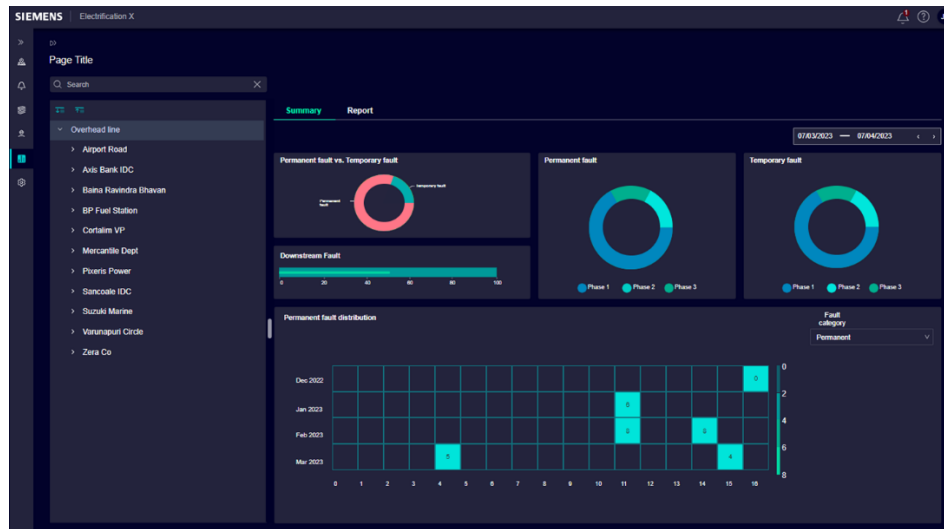
Electrification X – Network Fault Management (Overhead Line Fault Management): Fault Analysis Summary view

Electrification X – Network Fault Management (Overhead Line Fault Management): Fault Analysis Report view

Efficient Integration

Efficient Integration leverages 'Zero-Config' engineering in the cloud, eliminating complex setups and configurations for seamless deployment. With this approach, systems automatically adapt and connect, simplifying the process and enhancing efficiency in cloud-based operations.

Subscription

Standard Subscription Plan	Electrification X Network Fault Management
Functions	All
Subscription metric	• Starter package for first 5 locations • FSI Location Extension package to connect 1 additional location • FSI Group extension package to connect 1 additional FSI group to a location • Voice Call Notifications
Subscription term	Annually, auto-renewal
Billing term	Annually, payment in advance
Upscale	Effective immediately, pro-rated billing
Downscale/Cancellation	Effective with end of subscription term
Connected Devices	To be purchased separately
Permitted Users	Unlimited, Extended Use

The Overhead Line Fault Management feature under Electrification X Network Fault Management feature set subscription plan is the regular, scalable Offering for this Cloud Service. The subscription term is twelve (12) months with automatic renewal; the Cloud Service fee is paid in advance. The subscription plan can be upscaled at any time and Cloud Service fees for upscales are calculated on a pro-rated basis. The Customer can also scale down the Cloud Service effective with the end of the current subscription term. The subscription fee will be adjusted for the upcoming billing term. The Cloud Service can be cancelled any time, effective with the end of the current subscription term.

The subscription plan can be purchased in packages per location or group of location as defined in the packages. The subscription plan assumes a location is referring to one unique postal address or geo coordinates.

Extended Use entitles Customer to authorize its Affiliates and third parties to access and use the Cloud Services in accordance with the rights set out in the Terms and Conditions.

Prerequisites

Electrification X Tenant	The Electrification feature set is operated on an Electrification X Tenant. Therefore, a tenant with an Electrification X Base Package is required. The Electrification X Base Package has a subscription term of 12 month and must be purchased together with the first Station Monitoring feature, if not otherwise already available and in operation.
Supported Connected Devices	The Cloud Service is currently compatible with commercially available Connected Device from Siemens. A description of the available Connected Device is provided below.
	A Connected Device must be purchased and installed on premise at a site specified by the Customer as agreed between the Customer and Siemens to use the Cloud Service. Customer is responsible for installing the Connected Device at the site and any associated costs to perform said Cloud Service in accordance with related Documentation for the Connected Device
	List of supported Connected Devices: **SICAM FCG (Fault Collector Gateway), SICAM FSI V1 (Fault Sensor Indicator) or SICAM FSI V2 (Master and sensors)**
Web browser and viewing devices	Chrome is recommended to use the Cloud Service, but other standard browsers might also serve this function. Screen resolution of 1920x1080 pixels or higher is recommended for best user experience
Internet Connection	The bandwidth of Customer's internet connection determines the performance of the Cloud Service

Ordering

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Ordering Process for the Subscription	To order the Cloud Service for the first time, Customer must request a quote from its Siemens sales representative. Depending on the offering either with Services, then customer will receive a link to his tenant, or without services, then the Customer will receive a link to the shopping cart. In this case Customer needs to (i) choose the payment options and (ii) accept the Terms and Conditions to start using the Cloud Service. The "Terms and Conditions" consist of the "Supplemental Terms Electrification & Automation", the Base Terms and the General Software and Cloud Supplemental Terms, the Acceptable Use Policy, the Siemens Data Processing Terms, this Product and Service Data Sheet and any other Supplemental Terms which may be referenced in either of the mentioned documents. Customer may upgrade, downgrade, and cancel the Cloud Services directly in the Subscription Manager store https://subscribe.siemens.com
Ordering Connected Devices	To order Connected Devices the Customer may request a quote from its Siemens sales representative
Connected Device	SIEMENS: **SICAM FCG (Fault Collector Gateway) , SICAM FSI V1 (Fault Sensor Indicator) or SICAM FSI V2 (Master and sensors)**
Ordering	For order information, Customer may contact its local sales representative

Product Documentation

Technical Documents	Document ID	Document ID German	Document ID English
Building X – Accounts User Guide	A6V12050070		
Electrification X – General Package User Manual		E50417-H7500-C200-A1	E50417-H7540-C200-A1
Electrification X – Network Fault Management User Manual		E50417-H7500-C202-A1	E50417-H7540-C202-A1
Electrification X – Engineering Guide		E50417-H7500-C203-A1	E50417-H7540-C203-A1
Electrification X – Security Manual		E50417-H7500-C204-A1	E50417-H7540-C204-A1
Electrification X – Protocols Manual		E50417-L7500-C200-A1	E50417-L7540-C200-A1

Technical Documents can be downloaded here:
https://support.industry.siemens.com/

Topology

Feature: Overhead Line Fault Management
Technical Setup
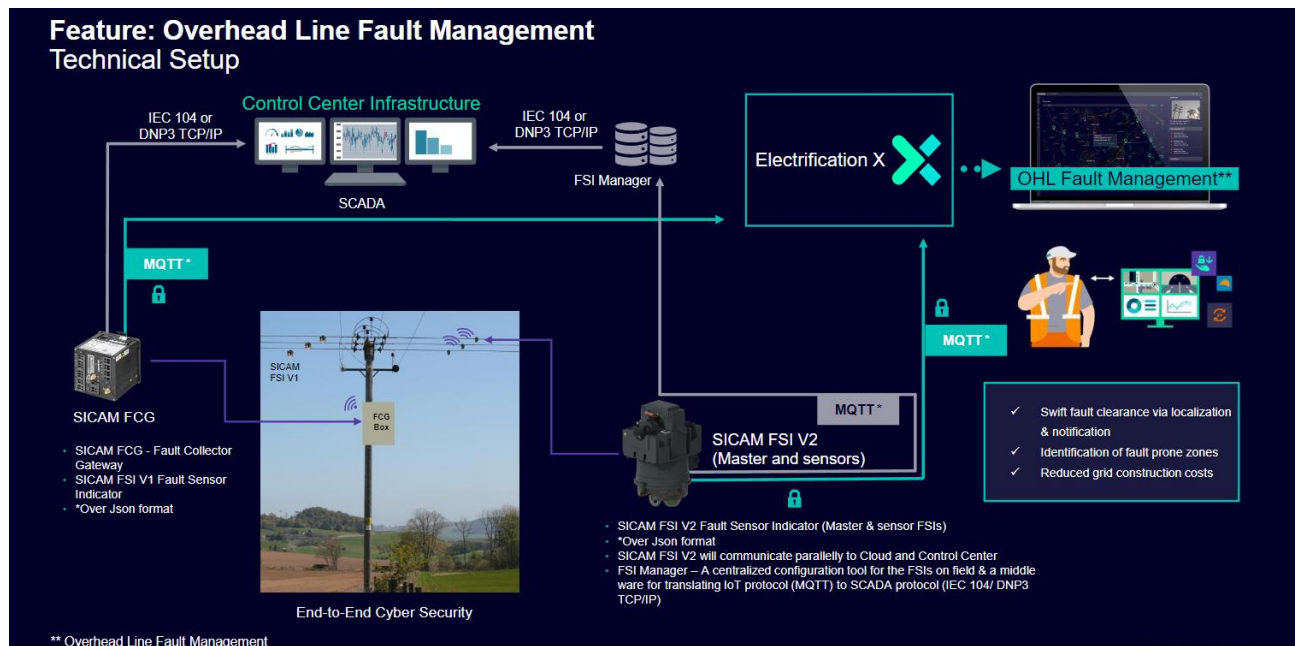
Data communication between the Connected Devices on premise and the Cloud Service requires internet connectivity (to be provided by the Customer).

Customer Support

Siemens may offer helpdesk support. Customer may contact its local Siemens representative for support requests