

MiAFASTM

Automated Fault
Analysis System

Disruptive innovations in protection and communication technologies and intelligent protection systems are generating voluminous data. Most of the progressive utilities around the globe have invested heavily on building this kind of infrastructure as part of their substation automation.

Following a disturbance, protection engineer are entrusted with the responsibility of analysis of such unstructured data, to better understand the behavior of protection system.

Timely analysis/assessment and taking corrective actions of such a data helps in great way in operating the power system in a reliable manner. Traditionally, this would take few days to few weeks for the utility personnel to derive insights and come up with remedial measures if any. MiAFASTM completely automates this and provides concise information in minutes, enabling faster decision making and reduce operational cost.

What's in for Whom

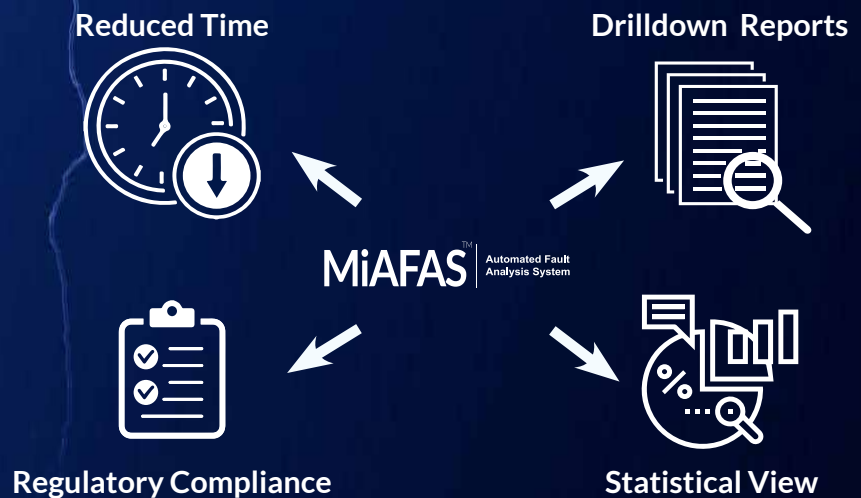
Operation & Maintenance

- Quick response due to more accurate fault location
- Proactive Breaker Maintenance
- Fault statistics for optimizing maintenance schedule
- Reduce repair and maintenance efforts
- Improved reliability

Protection

- Determine adequacy of relay operation
- Reduction in time taken for fault analysis
- Meeting regulatory requirements
- Panoramic view of the faults

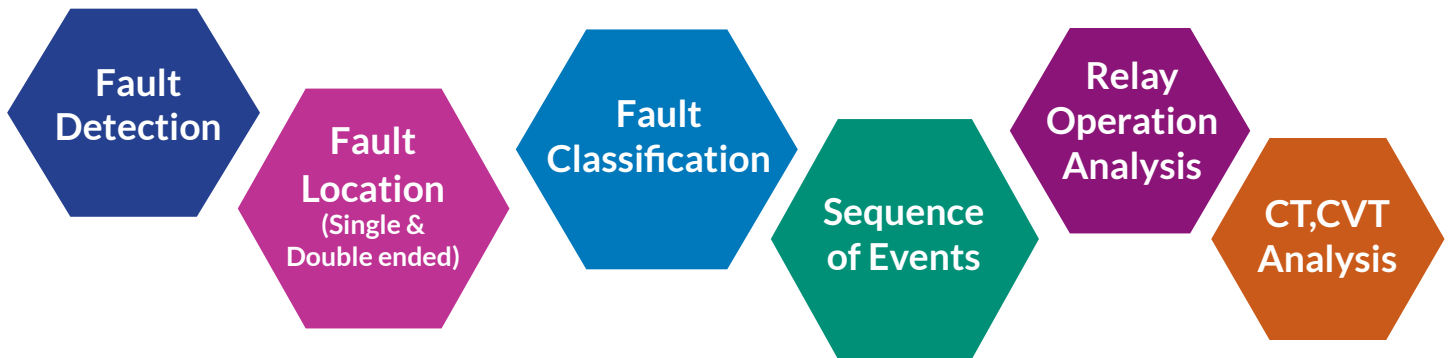
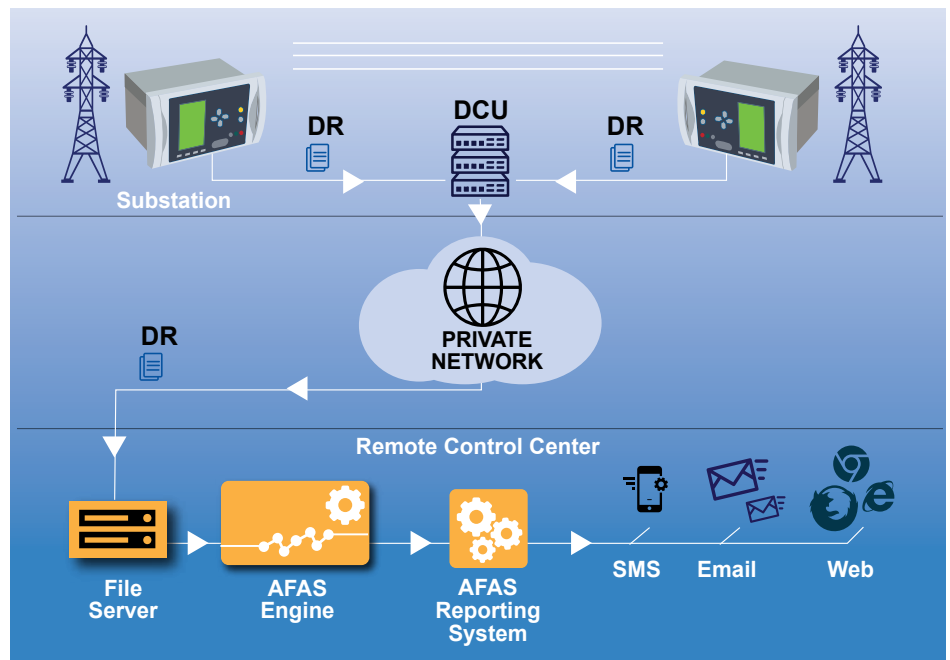
Why?



“MiAFASTM streamlines the process of timely analysis of the disturbances and generates comprehensive reports that are in compliance with utility standards providing deep insights into fault behavior”

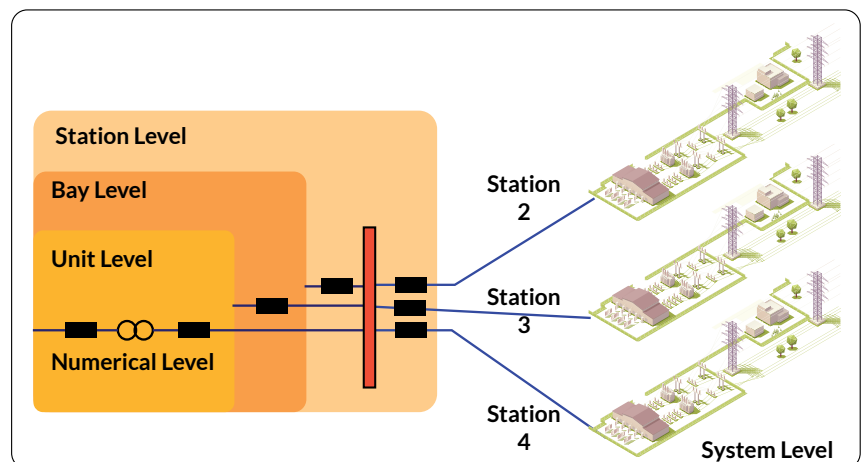
How it Works

The disturbance data collected (in COMTRADE file) from protection equipments get transferred to central processing system. MiAFAS's preprocessing engine checks for validity of the file(s) and performs merging of part files on a need basis. All valid files are then passed through the analysis engine which analyzes the data using various intelligent algorithms, pre-defined fault signatures and generates a detailed report on:







After the analysis, the generated reports are sent to various personnel in the form of SMS, E-Mail and published Online. All the processed information is archived in a historical database for the purpose of MIS report generation and statistical analysis at a later stage.






Level wise reporting



Features

 <ul style="list-style-type: none">• Distance• Differential• Over current• Voltage	<ul style="list-style-type: none">• SOTF• STUB• Auto closure• Fuse failure	<ul style="list-style-type: none">• Carrier aided protection• Direct trip
Line protection	 <ul style="list-style-type: none">• Differential• Over current• REF	 <ul style="list-style-type: none">• Differential• Backup impedance• Over current• REF
Transformer protection	Reactor protection	
 <ul style="list-style-type: none">• Pole discrepancy• Breaker operation analysis		
Breaker protection		

Additional features

 Role Based Access	 Fault Dashboard	 Statistical View	 COMTRADE Viewer	 Notification
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