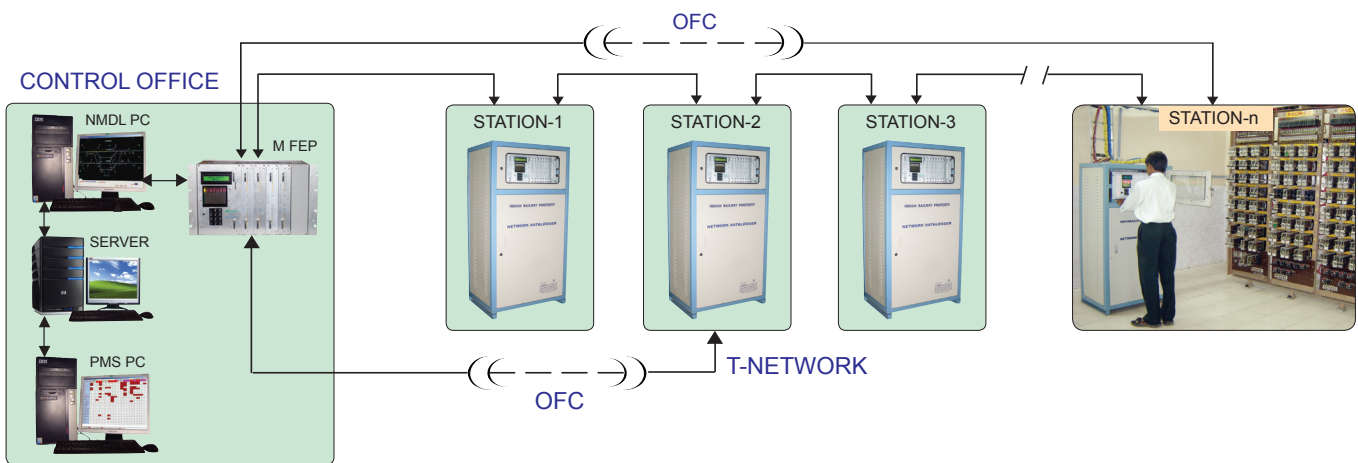# Data Logger System

> By monitoring the signaling system, Data logger system helps in finding-out the mistakes done by signal operators, loco pilots and the misbehaviour of signaling systems. Thus helping railways in preventing accidents and also reducing detentions to train services

DATA LOGGERS IN NETWORK

DATALOGGER SYSTEM FOR RAILWAY SIGNALLING

Reduces train journey time by identifying

⊘ **Mistakes of signal operator**   ⊘ **Mistakes of loco driver**   ⊘ **Failures of signalling system**

FEATURES

- Located in the Relay / Equipment rooms at stations
- Networked with OFC/E1/Voice channels or copper cable
- Enables Remote Condition Monitoring
- Logs status of Signalling by monitoring signalling relays & Analog voltages
- Software provided at central location brings out the abnormalities of the operations of the system
- Can monitor upto 4096 relays and 96 voltages
- Takes less power (at 24VDC – 2Amps)
- It is possible to send the faults of signal assets as SMS in the mobile network to reduce MTTR.

DATA LOGGER

- Micro processor based Embedded system,

- DIGITAL INPUTS : 512 to 4096 [optically isolated] - two data loggers can be connected in tandem to increase the capacity

- Analog inputs: 32 to 96 [individually isolated].

- Non-volatile Data Storage: in Flash RAMs up to Ten (10) lakhs of events

- Eight serial ports for data network.

- Dot matrix printer interfacing for online/ offline data printing.

- Data Speed : 57.6Kbps

- In-built dual leased line voice modem or inbuilt dual E1 converter for network

- User interface: LCD and 7-Segment LED display with Keyboard

- Control of potential free relay control from central place.

- Optional GPRS modem connectivity, where copper cable is not available, can directly transfer data to central place
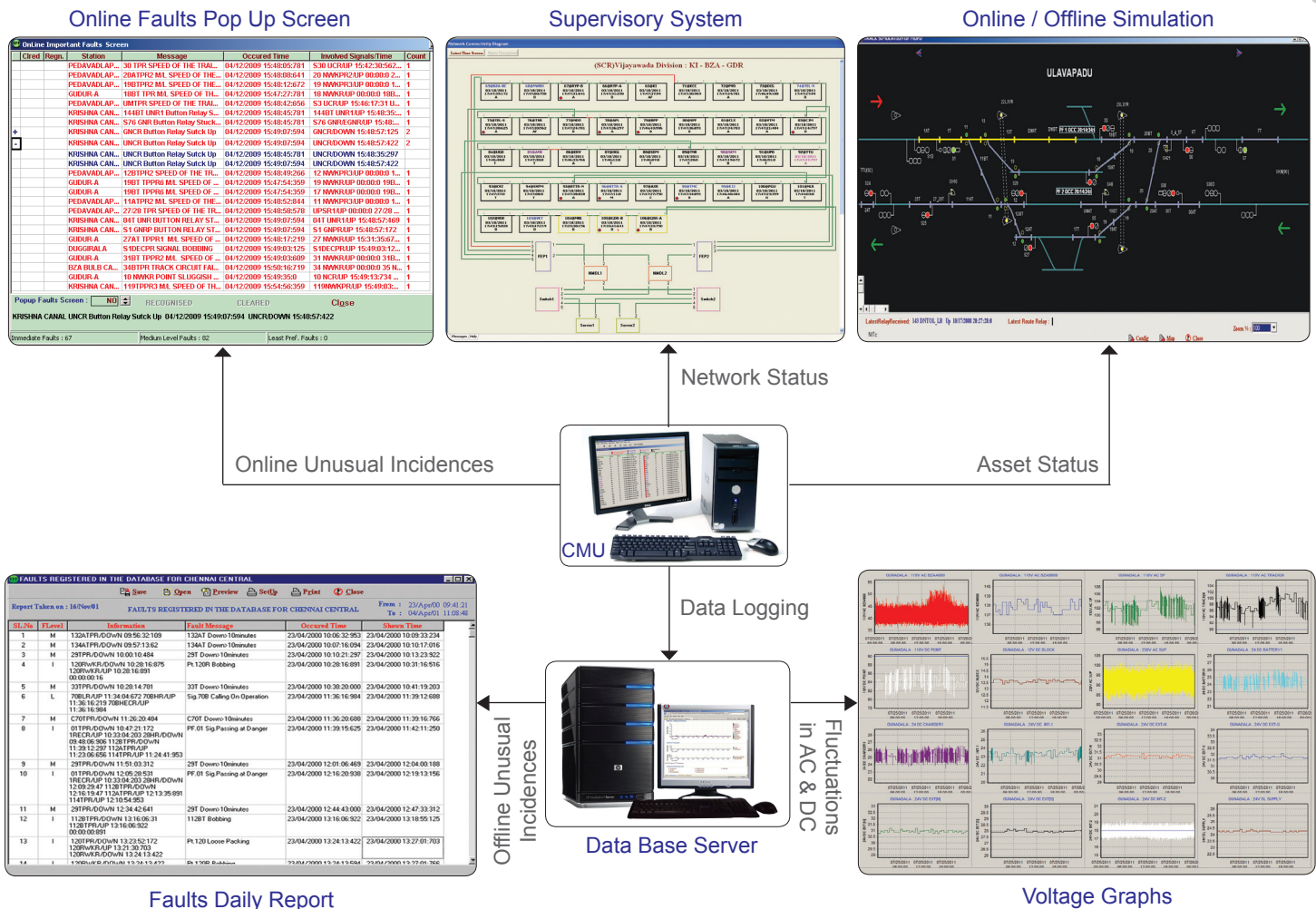
Data Logger - 4,096 Digital Inputs & 96 Analogue Inputs

NETWORK MANAGEMENT OF DATA LOGGER (NMDL)

Network Management of Data Loggers (NMDL) is a software

- To Receive data from Data logger network.
- To Record station wise status of Signaling Relays and Power Supplies in sequence

Online Faults Pop Up Screen

Supervisory System

Online / Offline Simulation

Online Unusual Incidences → Network Status → Asset Status

CMU

Data Logging

Offline Unusual Incidences

Data Base Server

Fluctuations in AC & DC

Faults Daily Report

Voltage Graphs

FEATURES

- ✓ On-line Asset-Failure Alarms.
- ✓ Online Yard Simulation.
- ✓ Asset Lifetime Alerting.
- ✓ Auto SMS of Asset Failure.
- ✓ Log of events Reports.
- ✓ Supervisory System for easy Maintenance of Data logger Network.
- ✓ Power Supply variations as Graphs.
- ✓ Offline Yard Simulation.
- ✓ Summary Report of Asset Failures.
- ✓ Auto Mailing Facility of Asset-Failure Reports.

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