

IVIEW

The Tool for Network Reliability Monitoring & Diagnostic Analysis

The Challenge

The reliability and performance of the physical network layer in RS485 and Fiber networks are often viewed as an unknown with little internal detail available for analysis.

With the common topology of a class A redundant network, an intermittent network fault could be introduced into the system with its occurrence unrecorded due to insufficient monitoring. This unrecorded event could result in network anomalies that could be misinterpreted, resulting in incorrect fault diagnosis.

The Solution

The INSTANCE IVIEW application and life safety modules were derived from the need to isolate network faults relating to the physical layer.

The IVIEW application tool was specifically developed to provide its users with the ability to rapidly recognise and diagnose physical errors on the network. The IVIEW Software tool is used in conjunction with the Instance life safety modules to provide a single consolidated solution.

The software application can be used independently when interrogating data files recovered from the INSTANCE modules. The data files are loaded into the application and decoded. The diagnostic detail is then presented to the user in one of the three formats, namely:



Top Level network view, Node Analysis view and Event Record view with Report generation.

The Tool and its diagnostic capability provide the user with the ability to record events, before, during and after each system maintenance exercise. These events can be presented in a report to provide an indication of the stability of the network by including detailed information captured in a time period preceding the fault recovery event.

The Graphical View

The IVIEW application provides for easy interpretation through basic topographical network views.

Features

The IVIEW application is available to the user in three versions.

- Top level network view. (IVIEW Lite Version) – Free with the purchase of any INSTANCE module excluding the MON100



The INSTANCE Network Nodes are presented with fault mapping

Module Firmware Versions are reflected

The fault recovery originator/s are presented

- **Node Analysis View. (IVIEW Professional Version) – License per workstation**

Support for all IVIEW Lite features

The detailed content of each node is decoded and presented to the user

A graphical “Quick View” format of all the network data is presented

The network data traffic preceding each Recovery Event is presented

- **Event Record View with a Comprehensive Report Generation Option. (IVIEW Ultimate Version) - License per workstation**

Support for all IVIEW Pro features

All Event records are presented with network stability indicators in tabulated format

A comprehensive report including graphical and

A “Live Monitoring” feature supports the option to view network status from a central station

monitoring – booster requirements, System stability confirmation)

- Support in maintenance monitoring (Log of all physical network alterations)
- CIE watchdog/power recycle monitoring
- Early identification of intermittent fault on network cards
- Preventative maintenance opportunity through monitoring the system stability over multiple maintenance exercises.

Instance IVIEW application and life-safety modules for network monitoring

The software supports the option of real time monitoring of the network physical layer. This feature requires INSTANCE modules to be installed at each network node for signal redundancy. Communication between the device hosting the IVIEW application and any of the INSTANCE modules can be via USB(v2.0), Bluetooth, WIFI, Rs232 or RS485. The interface is allocated to a dedicated communication port on a monitoring station (the device hosting the IVIEW application). The IVIEW Software Application can support multiple instances and hence multiple rings for monitoring.

Benefits

Use of the IVIEW Software Application, along with the INSTANCE life safety Modules, offers the user many benefits beyond that of a pure diagnostic nature.

Immediate benefits available to the user:

- Efficient cable fault detection and diagnosis
- System stability monitoring
- Support in commissioning (Firmware Version management, Configuration mode confirmation, Wiring polarity verification, Network configuration monitoring e.g. double address indication, Signal attenuation

About IVIEW Software

Minimum requirements

Operating System:

Windows XP(32 bit) or

Windows 7(32 bit compatibility mode)

Hardware:

Processor: Intel Core2 3 Ghz

Memory: 2048Mbytes (2Gb)

Hard disk: 160 Gb

