LINKVIEW

The Tool for Link Reliability Monitoring & Diagnostic Analysis

The Challenge

The reliability and performance of a physical communication link in RS485 and Fiber networks are often viewed as an unknown with limited internal detail available for analysis.

With the relatively new EN54 requirement for redundancy in radial communication spurs, a means to monitor, identify and record an intermittent communication fault is essential to improving the QoS of these communication systems.

The introduction of any tools supporting the change from re-active to pro-active maintenance programs in the life safety industry is long overdue with many of the certification steering committees actively involved in steering this change.

The Solution

The INSTANCE LINKVIEW application was developed to support the DIM100 modules designed to locate and isolate communication faults in radial links within the physical layer. The LINKVIEW application tool was specifically developed to provide its users with the ability to rapidly recognise and diagnose these radial link faults. The tool is used in conjunction with the Instance life safety DIM100 modules to provide a 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, with the diagnostic detail presented to the user in either a "Node Analysis" view or an "Event Record" view with support for maintenance 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 link by including detailed information captured over the period preceding the fault recovery event.

The Graphical View

The LINKVIEW application provides for easy interpretation through basic views.

Features

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

- Top level network view. (LINKVIEW Lite Version) – Free with the purchase of a pair of DIM100 modules

  The Instance Nodes are presented with fault limited detail

  Module Firmware Versions are reflected

  The fault recovery originator/s are presented

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

  Support for all MONTAP Lite features

  The detailed content of nodes X and Y is decoded and presented to the user

  A graphical "Quick View" format of all the link data is presented

  The link data traffic preceding each Recovery Event is presented

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

  Support for all LINKVIEW Pro features

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

  A comprehensive report including graphical detail for each recovery event

  A "Live Monitoring" feature supports the option to view link status from a remote station

Benefits

Use of the LINKVIEW Software Application along with the Instance life-safety DIM100 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
- Link stability monitoring
- Support in commissioning (Firmware Version management, Configuration mode confirmation, Wiring polarity verification, Link configuration monitoring e.g. Signal attenuation monitoring – booster requirements, System stability confirmation)
- Support in maintenance monitoring (Log of all physical link alterations)
- CIE watchdog/power recycle monitoring
- Early identification of intermittent fault on CIE
- Preventative maintenance opportunity through monitoring the link performance trends over multiple maintenance exercises

Instance LINKVIEW application and life-safety modules for network monitoring

The software supports the option of real time monitoring of the link physical layer. This feature requires Instance DIM100 modules to be installed at either end of the radial for signal redundancy. Communication between the device hosting the LINKVIEW application can be connected to any of the Instance DIM100 modules via few options, i.e. USB(v2.0), Bluetooth, WIFI or RS232. The interface is allocated to a dedicated communication port on a monitoring station (the device hosting the LINKVIEW application).

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

Instance
Managing Data Xchange