

Case Study on Pneumatic Valve Test Jig Software

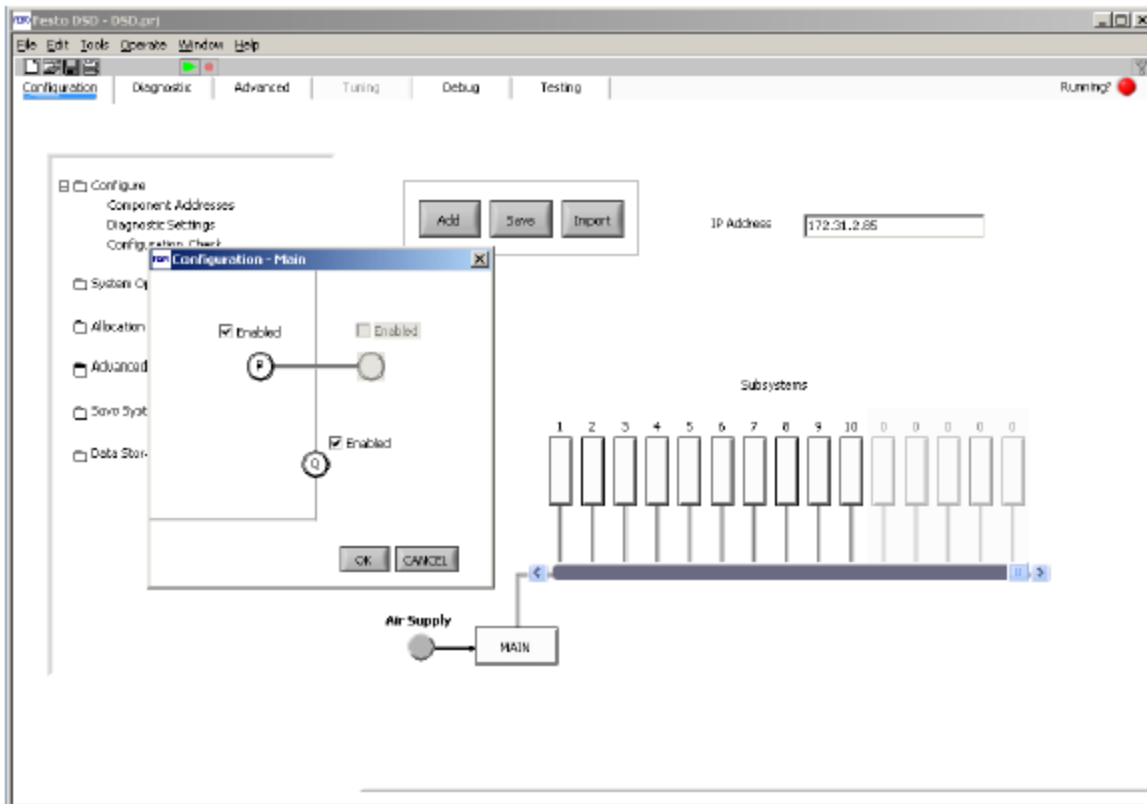
The scope of the project was to develop diagnostic software for process automation systems which use pneumatic components. The software consists of

- Capture of data from Pneumatic system on the TCP/IP port
- Benchmarking the data for standards as every system is different
- Analysis of the received data against the bench mark
- Various screens for configuring a process automation system
- Display the data and error results
- Display of Warning and Faults from the system

Description

- The diagnostic software was developed as two components - a Graphical User Interface (GUI) for configuration and visualization and a Dynamic Linked Library (DLL) for backend processing, which is developed in C.
- The GUI was developed with Lab View Professional 7 Express. The data acquisition, diagnostic algorithms and file I/O was developed as a Windows Dynamic Linked Library (DLL) using Microsoft Visual C++ 6.0. The Lab View GUI accesses the various functionalities in the DLL by using the Call Library Function Node feature in Lab View.
- The diagnostic software communicates with the automation system using a UDP protocol.
- The User Interface provides the following functionalities
 - Configuration of the Automated System
 - Data Visualization - as Graphs, Tables, Trend

Typical Screen Layout



For further details, email to: sales@Lntemsys.com