Bus Interface Modules

Configuration Software

◆ *Windows™ Explorer - style interface*

◆ *used to configure Bus Interface Modules*

◆ *local or remote configuration via LAN*

◆ *dynamic viewing of real-time data*

◆ *single project file for mulitple nodes*

The 8455 software is one of the methods for configuring Bus Interface Modules (BIMs) in an MTL Process I/O™ node. It runs on a PC, under the familiar Windows™ operating system. The PC can be linked to the BIM using either a local cable link or via a secondary LAN connection, where available.

The BIM is the interface between the I/O modules and the host controller, and must be configured to permit correct operation. The BIM needs to be told the identity of each I/O module fitted and values of relevent parameters. Parameters must also be defined for LAN communication with the host controller.

PROJECT FILE

The configuration information is contained in a project file. A project file can be created for a single BIM or for multiple BIMs, e.g. on a network, each of which can accommodate up to 32 I/O modules. The configuration information may then be downloaded to the individual BIMs on the network.

USER INTERFACE

The main screen of the Configurator has a conventional Windows Menu and Toolbar display at the top. The main body of the screen is then split to show a "navigation tree" for the network on the left-hand side and the BIM/module parameters on the right.

MODULE ATTRIBUTES & PARAMETERS

The software can display the hardware and software revision levels of the both the BIM and the I/O modules. Each module has its own set of parameters and these appear with default values when the module is first added to the system. These can then be edited individually to specify the required system.

DYNAMIC DATA

Real-time data is available on-screen if the configuration link (serial or LAN) is in place. The viewable data includes primary variables as well as status parameters. This can be refreshed continually or when the operator requires a screen refresh. When in continuous refresh mode, the time between module data reads can also be viewed. Alternatively, the Configurator can be operated "offline" for simple project file creation.

UPLOAD BIM DATA

Configuration data already contained in a BIM can be uploaded to the Configurator. This can be saved as a PC file and copied to other BIMs. PC files that were created for earlier reversions of the BIM firmware can also be opened and edited for use with the latest versions of the BIM.
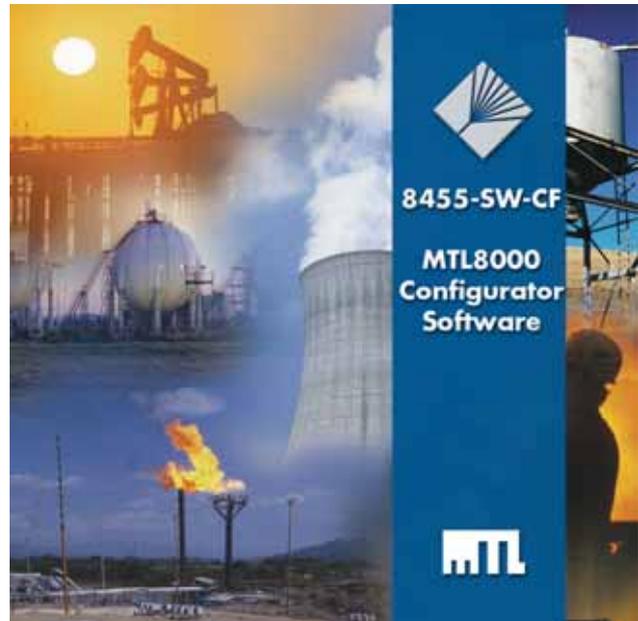
OPEN DATABASE STRUCTURE

The Configurator contains a Microsoft® Access open structure database in which the configuration data is held.

SIMPLE TABBED PAGES

The right hand side of the screen contains information on any item that is highlighted in the navigation tree to the left. With the network icon selected, three tabbed pages of information are available (see Fig 1).
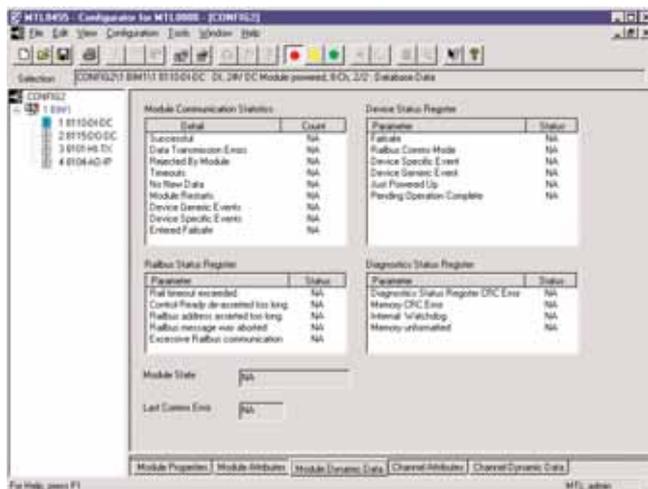

Fig 1 - Configuration file details

These pages define and describe the network protocol, the BIMs that are attached to the network and the details of the project contained in the overall configuration file.

Configuration Software

Selection of the BIM icon in the navigation area reveals five pages of information and settings (see Fig 2) for the BIM. These pages provide information that relate to the selected BIM and its specific network settings and the I/O modules attached to it.
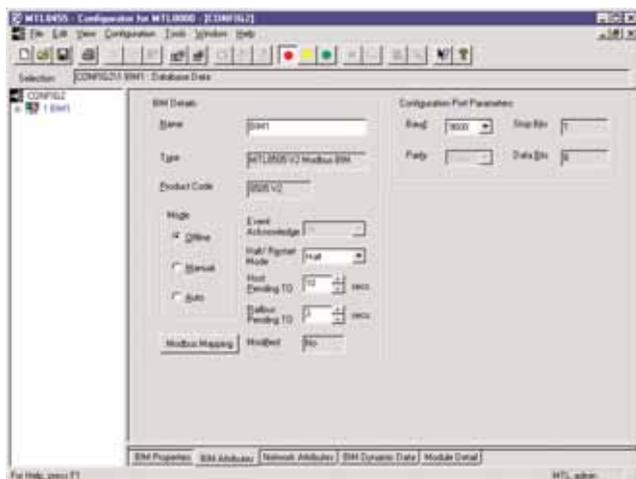

Fig 2 - BIM attributes

Finally, clicking on an I/O module provides a further set of five pages of module information and settings (Fig 3). These pages contain details of the software and hardware revision levels of the chosen module, the condition of its various status flags, the user definable variables and, if connected "live", the current value of each variable.
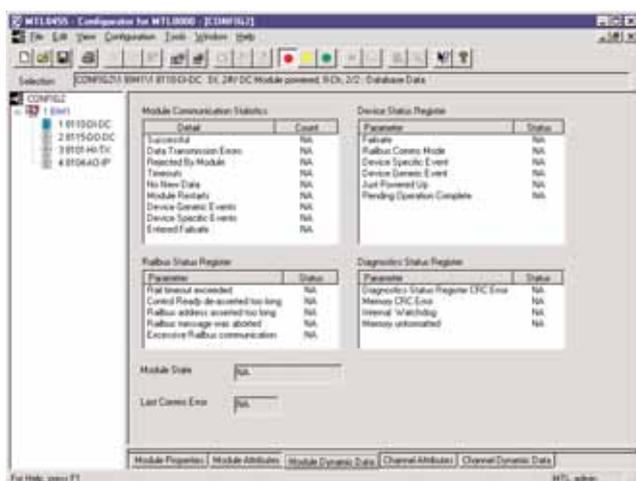

Fig 3 - I/O module dynamic data

All of these pages are provided automatically when a module is added.

PC SYSTEM REQUIREMENTS

Intel "Pentium®" processor (recommended)

Microsoft® Windows™ 95, 98, 2000 or NT4 operating system

RAM capacity – as appropriate for operating system

At least one available serial port (COM1,2,3 or 4)

1 Mb hard disk space + *space for user created configuration files*

BIM COMMUNICATION PORT SETTINGS

Speeds ....1,200 – 38,400 baud
Parity...Odd, Even or None
Data bits 8
Stop bits 1
Protocol ....SLIP

ASSOCIATED LITERATURE

INM8455 ....Instruction manual, BIM Configuration Software

TO ORDER

Configurator with RS232 cable 8455-SW-CF
Configurator without RS232 cable 8456-SW-CF
RS232 cable 8460-CA-CF

(The software and any release notes are supplied on a CD ROM.)

IMPORTANT NOTE:

This software is designed for use with the latest 8505-BI-MB BIM that has version 2.x firmware. It is NOT compatible with version 1 BIMs. However, .csv or .ssf files created for use in version 1 BIMs can be imported to create configuration files for version 2 BIMs.

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