

MOST EBIM Workbench

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8459-EB-MT

- ◆ Project management tool
- ◆ Network configuration & administration
- ◆ Tagname-based configuration - simplifying system configuration
- ◆ Auto-tagname generation
- ◆ I/O configuration
- ◆ Peer to peer communications
- ◆ Remote data table for mapping Modbus® devices
- ◆ Import/export utilities and reports
- ◆ Configuration back-up and restore

Overview

The MOST EBIM Workbench is an integrated project development environment that centralizes and coordinates I/O database configuration.

The Workbench also provides significant tools for your control system, including I/O Configurator, Downloader, Remote Data Table Builder for Modbus, Tag Builder, Network Configurator and a Peer to Peer table builder. With this extensive range of tools, the Workbench is much more than an I/O Configurator, it also provides overall system management.

Designed using a Microsoft® Windows® Explorer paradigm, the Workbench provides a powerful and flexible framework that significantly reduces project implementation and maintenance costs. In addition to working with an easy-to-use hierarchy of objects and folders, capabilities such as drag-and-drop, right mouse click support and context sensitive help inherent within the Workbench make developing, testing and maintaining automation projects easy and straightforward. The Workbench also provides system-wide security allowing for multiple levels of access to the control system.

MOST Workbench comprehensive tools

The MOST EBIM Workbench generates an export data base to create the operator (HMI) database.

The system eliminates expensive, laborious and sometimes error-prone manual engineering work typically required during control projects. Manual generation of bills of materials and operator interface requirements are abolished. Similarly, eliminating the repetitive input of system information significantly reduces errors and configuration time.

Network configuration tool

The Workbench's Network Configuration Tool can be used to configure your entire plant network, setting up and maintaining TCP/IP addresses for all devices on the network. After the network is setup, the Workbench is used to monitor and maintain the devices on the network. Each EBIM, including redundant EBIMs, needs IP addresses, MAC addresses and node numbers. If the MAC addresses are unknown, they can be found through the Network Configuration tool. Then the Network Configurator can be used to manage the assignment of IP addresses to the EBIMs. It also provides additional information about each EBIM that has been configured, such as whether it is a single or redundant EBIM and the status of both Ethernet LANs.

Tagname based system

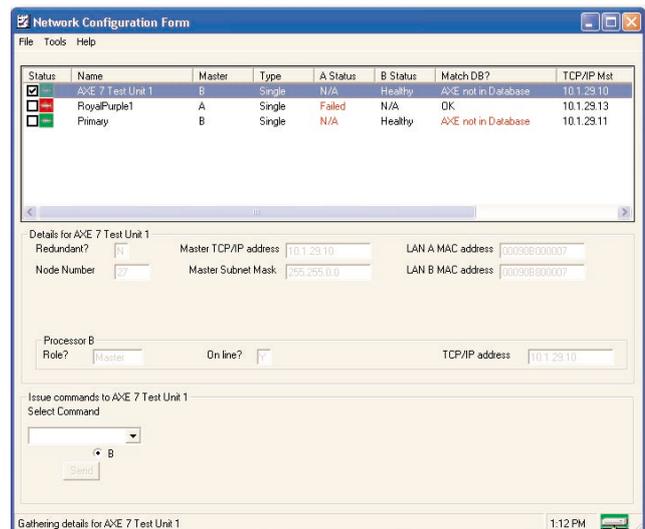
All variables are referred to by tagname, providing a descriptive reference to all variables throughout the system, replacing the need



to reference register addresses. The Workbench models a process system input/output with the assignment of module and point destinations. Using a predetermined template, this task is accomplished as a simple "fill in the blanks" procedure and builds the project I/O configuration database.

Tag import utility

The Tag Import Utility can be used to import a tag list that is already defined in a spreadsheet format. The utility imports a .csv, tab or space separated file directly into the Workbench, saving the need to manually recreate this information if it already exists.



Peer to peer capability

The peer to peer capability allows data from an EBIM to be used on the network. This takes advantage of the high-speed peer to peer communications of the Ethernet network, resulting in more efficient control processing. Peer to peer data is setup with tag name assignment, with the tag names being available to all controllers on

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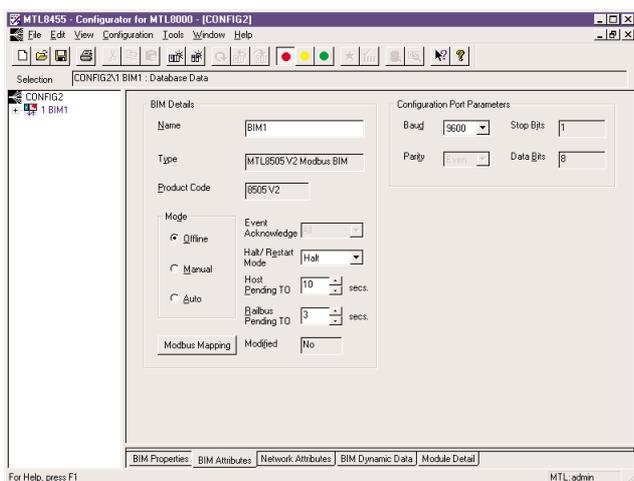
the network. Assigning peer to peer data is easy, all you need to do is simply drag and drop Tagnames from another project or EBIM to the current EBIM.

Standardized reports

All databases are MSDE (Microsoft Data Engine) databases, which are fully SQL compliant and can be readily shared throughout the system. This design enables many standardized reports to be readily generated, including a list of Assigned I/O, Available I/O, Unassigned Points, Factory Acceptance Test status, Point Overview report that lists transducer information for all the tags in the system, Tagname for HMI (which returns the information located on the HMI tab of the Project Tags window) and Tagname Index (which returns the information located on the I/O Definition tab of the Project Tags). These reports simplify the overall management of the project.

I/O Configurator

I/O modules connected to an EBIM must be configured to permit operation. The EBIM needs to be told the identity of each I/O module fitted and values of relevant parameters. Modules are added by a simple drag and drop process. 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 values and then tagnames are assigned to each I/O point. Failsafe values can be defined to assure that the modules operate safely if there is a system interruption.



Dynamic data

Real-time data is available on-screen. The viewable data includes primary variables as well as status parameters. This can be refreshed continually or when the operator requires a screen refresh.

Configuration upload

Configuration data already contained in an EBIM can be uploaded to the Workbench. This can be saved as a PC file and copied to other EBIMs. PC files that were created for earlier versions of the EBIM firmware can also be opened and edited for use with the latest versions of the EBIM.

Simple tabbed pages

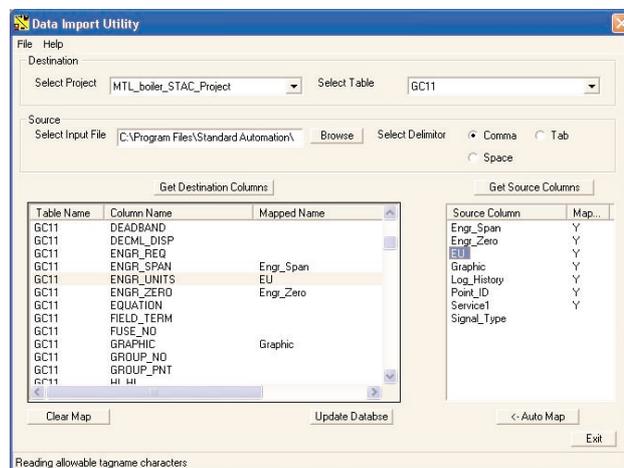
The right hand side of the screen contains information on any item that is highlighted in the navigation tree to the left. For example, with the network icon selected, three tabbed pages of information are available. These pages define and describe the network protocol, the EBIMs that are attached to the network and the details of the project contained in the overall configuration file.

Downloader

The Workbench Downloader is used to download the firmware to the EBIM. With Redundant EBIMs, strategy changes can be downloaded to a backup EBIM without disrupting control in the primary EBIM. When the download is complete, the backup EBIM will take over control and update the primary EBIM with the changes. Control can revert back to the primary EBIM after these changes are incorporated. Downloading to a simplex EBIM can be done on-line.

Remote data table builder for Modbus import

The remote data table is used for connecting to remote Modbus master or Modbus slave devices. Tagnames are assigned to these devices, which are then included in the control strategy. An example of a remote Modbus device is a Modbus TCP compliant H1 Linking device that could be used to bring Foundation Fieldbus H1 data into the control system.



MOST

The mission of MTL Open System Technologies (MOST) is to design, manufacture and distribute modular, open hardware and software technology-based components for use in the most demanding real-time system applications. These field-proven components can be "snapped" together to create sophisticated control systems.

System requirements

Processor

MinimumIntel® Pentium® III - 700Mhz
Recommended.....Intel® Pentium® 4 - 1.7Ghz

Operating System.....Microsoft® Windows® 2000 (SP2) or XP

RAM (to open all aspects of the Workbench)
Minimum128 MB
Recommended512 MB

Hard Disk space (Including MSDE components - See notes below)
Minimum500 MB
Recommended1 GB

CD-ROM drive

Notes

- 1) Installation software checks for presence of Microsoft Data Engine (MSDE) and installs the necessary components if they are missing.
- 2) Additional space will be required to store any configurations the user creates.

On-line help files are available for the individual components of the Workbench.

