What's New in MachineShop™ Release 1.06?

Windows XP Support

The development environment for the MachineShop™ toolbar, Interact and MachineLogic™ now includes support for Windows XP Professional. MachineShop is now supported on Windows 95 OSR2, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, and Windows XP.

MachineShop Toolbar/Shell Direct Serial Transfers

The MachineShop Toolbar and MachineShop Shell have been updated to support a new, simplified Direct Serial transfer type. The new transfer uses a simple 3-wire null modem cable and auto-detects the MachineShop Shell or older PowerStation Shell. For this transfer type, no special support is needed for Dialup Networking on the development system. New PowerStations will now be shipped with the MachineShop Shell configured for this new transfer type by default.

MachineLogic™ Slot Card Runtime Support

The new MachineLogic Slot Card contains the complete MachineLogic Runtime system on a PCI card. It includes the runtime kernel, simultaneous I/O support, power-failure detection, retentive memory, online debugging ports, 10/100Base-T Ethernet port, Master Control Relay, and more… MachineLogic is now available in the original PC "soft" Runtime and new the Slot Card runtime. To learn more about this new product visit http://www.ctcusa.com/MachineLogic.

MachineLogic Development Update (v2.11)

The development environment for MachineLogic has been updated to include EN/ENO ladder logic support (Slot Card only), automatic source code management, graphical I/O definition, global search and replace, enhanced graphical worksheet editing features, a logic analyzer (Slot Card only), and more ease of use features.

MachineLogic I/O Interfaces

- New MachineLogic Slot Card (MLSC) supports for Profibus DP, DeviceNet and Modbus Ethernet (ENOMB) I/O Interfaces.
- New MachineLogic PC I/O Interface for Modbus Ethernet (ENOMB). Includes runtime and configuration utility.

Interact Application Manager (v6.10) Updates

- 320x240 Keyboard updated to hide characters as passwords are entered.
- Modifications for support of the TCP/IP Stack (v1.20) and the loading of RTC Interact drivers (v6.10) into Extended memory.

Interact Drivers, New and Updated

- MachineLogic Driver (MLD v6.01) - Update to MachineLogic Slot Card runtime.
- Siemens TI Ethernet Driver (TIEN v6.00) – New Driver for Simatic 505 family
- Allen-Bradley DF1 Serial Driver (ABDH v6.01) – Update for higher BAUD rates
- Allen-Bradley Ethernet Driver (ABEN r6.03) – Update for SLC and PLC string types
- Modicon Modbus Serial Driver (MBUS v6.10) – Update for Quantum PLC address ranges
- RTC Driver Updates (listed drivers are v6.10) – the following RTC drivers have been updated to support the use of Extended memory:

BSAP	GSNX	MIPA	SMAC	TELM	UDI
GALI	ICLC	PMAC	SPPI	TICM	YASK
GECM	ASCII	SLC5	MBUS	TIWAY	

MachineShop Shell Updates (v1.07, FlashBack v1.05)

- New Driver Serial Transfer Support
- MachineLogic Control Panel updates for PC Soft Runtime and Slot Card Runtime systems
- TCP/IP Stack 1.20 update for Interact RTC 6.10 Drivers, Interact AM 6.10, and MachineLogic Modbus Ethernet I/O Interface support.
- INTEL Ethernet Port driver update for PS and new P1-10" products
- Support for TCP/IP Pack Drivers – allows for integration of 3rd party Ethernet interfaces that have a DOS packet driver available.
- BIOSTSR Update for P1-10" product.
- Added EDIT to standard PowerStation image

MachineShop Suite Component Version Numbers

- MachineShop Toolbar 1.03
- Interact 6.10
- MachineLogic 2.11
- MachineShop Shell 1.07
- TCP/IP Stack 1.20
- FlashBack 1.05

Please be sure to check the README.TXT included with the CD for a listing of the latest changes, version history, and release notes.

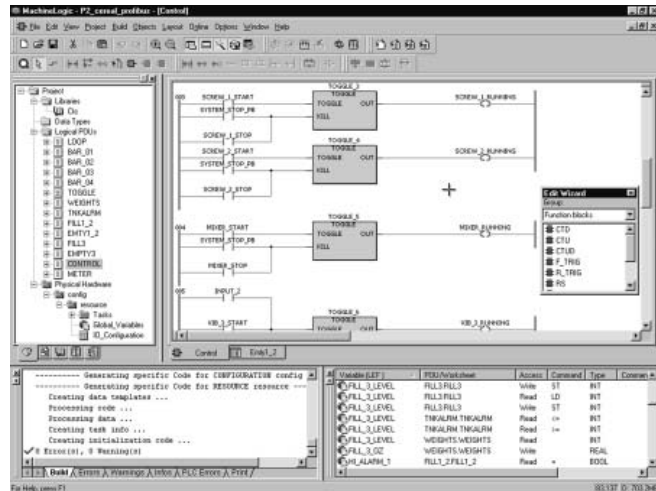# MachineLogic 2.11: Additions and Updates

The following list details new product features and
updates that will be included with the
MachineLogic 2.11 update.

General Features

Projects in any Language
Project comments may be translated into
another language. To do so:
1. Export project comments to
    a standard ASCII file
2. Translate the comments into the
    desired language
3. Re-import the translated comments
    into the project

New HTML Help
The online help has been updated to an HTML help system. The new help allows you to enter a question to get
faster, more exact and simpler information retrieval.

HTML Help for User POUs
In addition to the description textual worksheets, a user defined HTML help page may be added to a POU. This
allows for the integration of videos, machine or company specific information, or links to WEB pages in the
development environment.

Global Search and Replace
Search and replace can be used throughout an entire project. The worksheets in the project are automatically
opened and closed when using the Global Search or Global Replace features.

Templates
Allows the user to create templates with a "save as template" menu option.

Automatic Project Backup and Autosave Function for Worksheets
A time interval can be defined for an automatic saving of projects and worksheets.

Cross References for Global Variables
Cross references include global variables and their direct addresses.

Storing of Cross References
Cross references can be stored in an ASCII file for use in another program.

Opening the Variables Worksheet While in Another Worksheet – by Mouse Click
The variable worksheet can be opened by a toolbar-button.

Automatic Compilation of Variable Worksheets
As soon as a variable worksheet or code worksheet is closed, it is compiled.

Graphical I/O Configuration Dialogs

The I/O Configuration text worksheet has been replaced with a dialog driver interface for the configuration of input/output blocks.

Editor Updates

Graphical Editor

LD EN/ENO Support (Supported by MachineLogic Slot Card only, not supported by MachineLogic PC)

Optional support for input and output enabled bits for function blocks in ladder editor. This gives LD a look similar to products like A-B PLCs.

Optimized Collision Handling

The risk of collisions has been reduced by automatically positioning elements that are being inserted in free places.

Snap to Grid

Optional Snap to Grid allows the insertion point of new elements to snap to a predefined grid nearest to the cursor.

Drag & Drop

All elements may be inserted into a graphical worksheet by means of Drag & Drop. This applies to individual elements (such as FUs/FBs, contacts or variables) as well as entire networks.

Clipboard for SFC

Clipboard functions are now supported for SFC elements.

Individual Setting of Colors

Colors can be defined for any object type.

Multi-Line Comments

Comments extending over several lines can be included.

Powerflow

When the Powerflow is active, accumulator values are now displayed.

Tooltips

If the mouse pointer is positioned on an online-value, the current value is shown in a tooltip.

Worksheet Properties

Settings like the zoom factor or the layout type are automatically saved when closing a worksheet and restored when opening it again.

Page Borders

The page borders of the page layout may be displayed in any editor.

Text Editor

Opening User FBs
In online mode, user FUs/FBs can be opened via the context menu.

Project Manager

Multiple Selections
Multiple selections for functionalities like the clipboard, printing or global search and replace may be used in the MachineLogic Project Tree.

Directories for Firmware Libraries
Firmware libraries may now be placed in any directory.

Online Functionality

Logic Analyzer (Supported by MachineLogic Slot Card only, not supported by MachineLogic PC)
The optional integrated Logic Analyzer provides the following functionalities:
- Realtime data recording from runtime
- Insertion of variables directly from the program-editors
- Automatic scaling
- Recording of definable number of cycles before and after the trigger condition
- Two trigger variables
- Captured data my be exported to CSV file

Representation of Online Values
Online values can be displayed in decimal, hexadecimal or binary representation. The representation modes can be easily switched at any time.

Debug in Libraries
Double-clicking on the corresponding FUs or FBs allows for debugging of user libraries.

Online Representation of VAR_IN_OUT
The online values of VAR_IN_OUT parameters can be displayed within an FB.