

# AutoSave

## Support for Omron CX-Programmer

*Enterprise tools for automation source management*

### OVERVIEW

The AutoSave suite of products provides you with the software tools needed to manage all your automation programs. AutoSave controls and tracks the changes to your industrial programmable devices and program sources including Omron CX-Programmer programs.

AutoSave's Microsoft Windows-based client application is fully integrated with the Omron CX-Programmer editor to offer you both an interactive environment and background monitoring, resulting in a comprehensive change management solution. You have complete control over your device programs including:

- Secure Editor Launch for On-line and Off-line Edit
- Historical Tracking and Audit Trails
- Automatic Change Notification
- Quick Disaster Recovery

### CLIENT / SERVER / AGENT

The AutoSave Omron CX-Programmer module is comprised of the AutoSave client installed on a Windows 2000 or XP workstation, an AutoSave server acting as the master control center that coordinates all change-related programming activities and stores program files, and an agent providing distributed processing efficiencies for the server.

### ARCHIVED CONTENTS

All necessary Omron CX-Programmer program files (including the .cxp and .opt) are saved as a complete unit and restored to the client or agent whenever needed for subsequent use.

### SECURED PROGRAM ACCESS

The Graphical User Interface (GUI)-based client interface allows a user to access the AutoSave functions with a login and password. At login, the AutoSave server determines the level of access to the different areas and programs that are permitted to the user *and* the client PC.

### VERSION CONTROL

When the user opens a program via AutoSave, the file becomes locked and indicates to others the user who has the file checked out. The system can deny further access while the program is in use. When the user completes editing and saves the changes, AutoSave prompts for a revision note, creates a new current copy, relegates the previous current to a numbered ancestor, and unlocks the program. Simply downloading an ancestor or master copy to the device and restoring that copy to the current copy can undo unwanted programming changes.

### COMMUNICATIONS

Communications are accomplished via Ethernet for the client, agent and server. Device communications are established within the Omron project itself. AutoSave simply launches the application and the user handles the communication navigations.

### UPLOAD

A client-based upload (using the local client copy of Omron CX-Programmer) from the processor first retrieves the current copy files for the local PC, uploads the logic and data files from the processor to the client and then all the program's files are saved to the server, creating a complete new current copy.

A server-based upload employs the AutoSave agent technology and affords the capability of performing the upload from a client that cannot communicate with the processor or that does not have CX-Programmer installed.

## Features

### DOWNLOAD

A client-based download to the processor enables the user to select the current copy or any available ancestor or version with which to update the processor's logic and data files. Accessing the download function only via a context menu provides additional security, as does AutoSave's prompting for confirmation before initiating the download.

### COMPARISON FEATURES

AutoSave performs an ASCII comparison of the contents of the .cxp file. The contents of the .opt file are not compared.

### COMPARISON ON DEMAND

Any two copies of a program, such as current, local, ancestor, version, or processor, can be compared to each other. This comparison is done on an as-needed basis and may be performed from any client with access to the device program.

### AUTOMATED COMPARE

The CX-Programmer module allows for scheduled, unattended comparisons of configured groups of programs. Using CX-Programmer software installed on the agent to perform the actual upload, AutoSave can compare the processor copy to the current copy or compare the current copy to a selected version (master copy). See comparison sample in the next column.

This module supports the AutoUpdate feature that enables AutoSave to replace the existing current copy if it is different than the processor.

### NOTIFICATION

Notification e-mail can be automatically sent to selected users when scheduled comparisons are completed. Comparison reports are displayed and e-mailed in HTML format.

### EDITOR REQUIREMENTS

MDT has certified its Omron module release as operating properly with Omron CX-Programmer v6.0x and 6.1x.

| AutoSave omron-cx Difference Report                 |                      |                        |
|-----------------------------------------------------|----------------------|------------------------|
| Program Name                                        | _SimpleX             |                        |
| Program Description                                 | simple test program  |                        |
| Personality Type                                    | omron-cx             |                        |
| Compare Date                                        | 6/2/2005 11:50:40 AM |                        |
|                                                     | ver00                | ver02                  |
| File Date                                           | 6/1/2005 9:02:21 AM  | 6/1/2005 9:02:46 AM    |
| User ID                                             | sja                  | sja                    |
| Client ID                                           | pepper               | pepper                 |
| Revision Method                                     | Ancestor to Version  | Current to Version     |
| Revision Comment                                    | original             | copied con to r2       |
| Differences Detected (via CompareClient)            |                      |                        |
| Differences Summary                                 |                      |                        |
| Item#                                               | Name                 | Result                 |
| 1                                                   | _SimpleX.cxp         | Binary Files Different |
| FileList Settings                                   |                      |                        |
| File                                                | Type                 | Compare?               |
| ~.opt                                               | Text                 | NO                     |
| ~.cxp                                               | Binary               | YES                    |
| ~.bak                                               | Excluded             | NO                     |
| Generated on PEPPER by omron-cx version# 1.00.03.00 |                      |                        |

## Capabilities

| System Highlights                      |                                     |
|----------------------------------------|-------------------------------------|
| Client: Real-time Ancestry             | <input checked="" type="checkbox"/> |
| Server: Auto Unattended Operation      | <input checked="" type="checkbox"/> |
| Agent: Parallel/Distributed Processing | <input checked="" type="checkbox"/> |
| Secured Program Access                 | <input checked="" type="checkbox"/> |
| Version Control w/file compression     | <input checked="" type="checkbox"/> |
| Device Upload                          | <input checked="" type="checkbox"/> |
| Device Download                        | <input checked="" type="checkbox"/> |
| Client Highlights                      |                                     |
| Compare                                | <input checked="" type="checkbox"/> |
| Editor Launch                          | <input checked="" type="checkbox"/> |
| Editor Menu Access                     | <input checked="" type="checkbox"/> |
| Server / Agent Highlights              |                                     |
| Time-Base Scheduling                   | <input checked="" type="checkbox"/> |
| AutoCompare                            | <input checked="" type="checkbox"/> |
| AutoNotify                             | <input checked="" type="checkbox"/> |
| AutoUpdate                             | <input checked="" type="checkbox"/> |
| Server Platform Support                |                                     |
| Windows                                | <input checked="" type="checkbox"/> |