

AutoSave

Support for STEP 5

Enterprise tools for automation source management

OVERVIEW

The AutoSave™ suite of products provides 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 STEP 5 programs.

AutoSave's Microsoft Windows-based client application is fully integrated with the STEP 5 software 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:

- Historical Tracking and Audit Trails
- Automatic Change Notification
- Quick Disaster Recovery
- On-line and Off-line Edit, Monitor
- STEP 5 Reports

CLIENT / SERVER / AGENT

The AutoSave STEP 5 module is comprised of the AutoSave client installed on the Windows-based workstation, an AutoSave server acting as the master control center that coordinates all change-related programming activities and stores PLC project files, and an agent providing distributed processing efficiencies for the server.

ARCHIVED CONTENTS

The STEP 5 program file set is collectively referred to as a Project and contains numerous files. STEP 5 mandates that a specific directory structure be established and that each project have its own subdirectory within this structure. The contents of this subdirectory is saved and restored to the client whenever needed for subsequent use.

SECURED PROGRAM ACCESS

The graphical user interface (GUI)-based client interface allows users to access the AutoSave functions using a login and password. At login, the AutoSave server

determines the level of access to the different areas and programs permitted to the user and the client PC.

VERSION CONTROL

When the user requests a program via AutoSave, the file becomes locked and indicates who has the file checked out. The system can deny access to others 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 copy 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.

UPLOAD

A client-based upload (using client's local copy of STEP 5) from the S5 processor first retrieves the current copy files for the local PC, uploads the logic and data blocks from the processor to the client and then compresses all the program's files and saves them to the server, creating a 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 STEP 5 installed.

DOWNLOAD

A client-based download (using the client's local copy of STEP 5) 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. A new current copy is created.

Accessing the download function only via a context menu provides necessary security, as does AutoSave's prompting for confirmation before initiating the download.

COMPARISON FEATURES

Comparisons are performed by STEP 5's software and detect changes to all or specific blocks (as configured by the user) for the program. Notification e-mail can be automatically sent to selected users when comparisons or changes are made. When the server performs the comparison, the AutoSave agent performs the upload. The comparison reports are presented in HTML format. Graphical depictions of the comparison differences are presented.

Comparison of Current to Processor		
Compared Blocks	FB, FB, FX, OB, SB, DB, VB, DX	
Block Type	Differing Blocks	Total
FB	0	16
OB	4	13
DB	1	2
Total	5	31



COMPARISON ON DEMAND

Using STEP 5's software, compare any two revisions of the program, such as current, local, ancestor, or version, to each other or to the processor. As implied by its name, this comparison is done on a demand basis and may be performed from any client with access to the device program.

AUTOMATED COMPARISON

The STEP 5 module allows for scheduled, unattended comparisons of flexibly configured groups of programs. Using STEP 5 software installed on the agent to perform the actual upload, AutoSave software can compare the processor copy to the current copy or compare the current copy to a selected version (permanent or master copy). This module supports the **AutoUpdate** feature that enables AutoSave to update the server with a new current copy if the existing current copy is determined to be different than the processor.

NOTIFICATION

Notification e-mail can be automatically sent to selected users when comparisons or changes are made.

SUPPORTED DEVICES AND EDITORS

STEP 5 programming software supports the Siemens S5 PLC family of controllers including 90U, 95U, 100U, 115U, 135U, and 155U.

COMMUNICATION CONNECTIVITY

- Serial (AS511)
- Profibus
- Ethernet (ISO/TCP)
- Ethernet-to-Profibus
- Serial with PG-MUX
- Profibus with PG-MUX
- Ethernet (ISO/TCP) with PG-MUX
- Ethernet-to-Profibus with PG-MUX

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"/>
Compare Selected Logic or Data Blocks	<input checked="" type="checkbox"/>
Editor Controlled Actions/ User Rights	<input checked="" type="checkbox"/>
Editor Launch	<input checked="" type="checkbox"/>
Editor Menu Access	<input checked="" type="checkbox"/>
Editor Multiple Instances	<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"/>

EDITOR REQUIREMENTS

MDT has certified its release as operating properly with Siemens STEP 5 (English and German) v7.17 and v7.02.

PCs serving as combined Agent & Client require Windows Admin rights; if only Agent, Power User suffice.

