

# AutoSave Change Management

## Support for Siemens STEP 7

PRODUCT PROFILE



### PRODUCT OVERVIEW

The AutoSave suite of products provides the software tools needed to manage all your automation programs. It controls and tracks the changes to your industrial programmable devices and program sources including Siemens STEP 7 projects.

AutoSave works directly with the STEP 7 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:

- Standard or Shared On-line and Off-line Editing; Monitoring
- Version-specific modules supporting v5.1/ 5.2, v5.3, v5.4, and v5.5
- Historical Tracking
- Automatic Change Notification
- Quick Disaster Recovery
- Support for Simatic Distributed Safety Programs

### CLIENT / SERVER / AGENT

The AutoSave STEP 7 module plugs into the AutoSave client which is installed on each user workstation. An AutoSave server acts as the master control center that coordinates all change-related programming activities and stores PLC project files, and an agent provides distributed processing efficiencies for the server.

### ARCHIVED CONTENTS

The entire STEP 7 project folder is archived. A typical project object can be comprised of many files and contain multiple stations of multiple CPUs, communications, and floating programs not assigned to a CPU. (Projects with embedded projects cannot be supported.) The entire project is saved and restored to the client whenever needed for subsequent use. Because of the significant size of the STEP 7 project files, operations that mandate obtaining the files from the server over-write whatever is on the client's local drive and do not afford the user the option of maintaining the existing local files.

### SECURED PROGRAM ACCESS

The AutoSave 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. Additionally, AutoSave limits access to STEP 7 functions not directly related to the launched on-line or off-line edit session in order to contain changes and provide audit trails and historical tracking.

### VERSION CONTROL

When the user requests a program via AutoSave, the file becomes locked and indicates who has the file checked out. The system denies access to others while the program is in use (unless *shared* editing is being performed). 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.

### UPLOAD

A client-based upload (using the local copy of STEP 7) from the processor to the server affords the user the options to select a single program or the entire project. Further upload refinements are specified by the user to upload *all* or *selected* blocks. The specified data is uploaded from the processor to the client and then the project's files are saved to the server, creating a new current copy.

### DOWNLOAD

Using the local copy of STEP 7, 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 blocks. In all cases, Auto-Save also creates a new current copy. From the project, the user selects both the specific program and whether to load all or selected blocks to download and also specifies the handling of downloaded blocks that already exist in the CPU.

# STEP 7 Product Profile

## COMPARISON FEATURES

Comparisons are performed by STEP 7's software. When the server performs the comparison, the comparison is performed on the entire project and each of its programs with the report presented in HTML format. Client comparison is based on the user-selected program and components. Summary and detail information is available. Archived communication data is not considered during the comparison. Recently added functionality provides an optional comparison of the hardware configuration.

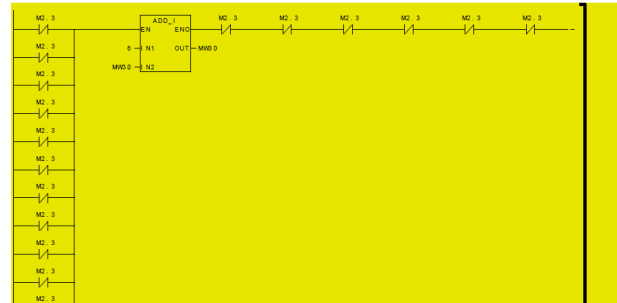
### MDT AutoSave Compare Result

Program Name	/Step7_55/PHK1_SW_GOOD
Program Description	[null]
Personality Type	step7_55
Compare Date	2011-05-03 16:09:17

	Current Copy	version2
File Date	2011-05-03 13:49:37	2011-04-25 14:41:42
User	Irmm	Irmm
Client	WIN7OS	WIN7OS
Method	Version to Current	Current to Version
Revision Comment	restore version1	same as anc 2 - S730UOB1 - added contact to net2, deleted net19, F8209 - STL, D510, D826, D869, D8690, S7400UOB1 - shortened net2, deleted contact from net7

Compare Report for program 'PHX1\_SW\_GOOD'

Rung2 - Page1 :MDT\_LAB\_S7400\_1\_OB1 of current Rung has been changed



## COMPARISON ON DEMAND

Using STEP 7'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 7 module allows for scheduled, unattended comparisons of flexibly configured groups of programs. Using STEP 7 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 (permanent, 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

STEP 7 programming software supports the Siemens STEP 7 family of controllers, categorized into the families of S7 300 and S7 400. The software editor is LAD /STL /FBD, a multipurpose utility. Support for engineering tools STL and SCL is also provided.

## COMMUNICATIONS

All communications information for a STEP 7 project is stored within the project itself. AutoSave configuration provides agent services to specific zones.

## VERSION SPECIFIC MODULES

Separate, version-specific modules are provided for STEP 7 v5.1/5.2, v5.3, v5.4, and v5.5, enabling sites to convert to newer releases when appropriate. An AutoSave license purchased for STEP 7 support entitles the customer to use any module. Please note that AutoSave cannot be used for projects with embedded/multiple projects.

System Highlights	
Client: Real-time Ancestry	✓
Server: Auto Unattended Operation	✓
Agent: Parallel/Distributed Processing	✓
Secured Program Access	✓
Version Control w/file compression	✓
Device Upload	✓
Device Download	✓
Client Highlights	
Compare	✓
Compare Selected Logic or Data Blocks	✓
Editor Controlled Actions/ User Rights	✓
Editor Launch	✓
Standard and Shared On-line & Off-line Edit	✓
Server / Agent Highlights	
Time-Base Scheduling	✓
AutoCompare	✓
AutoNotify	✓
AutoUpdate	✓