AutoSave

Support for Mitsubishi CNC Remote Monitor

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 Mitsubishi CNC programs using Remote Monitor software.

AutoSave's Microsoft Windows-based client application is fully integrated with the Mitsubishi Remote Monitor 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 of Off-line; access is then available to on-line and download
- Historical Tracking and Audit Trails
- Automatic Change Notification
- Quick Disaster Recovery

CLIENT / SERVER / AGENT

MDT's Remote Monitor support module is comprised of the AutoSave client installed on a Windows 2000 or XP workstation, an AutoSave server acting as the master control center to coordinate all change-related programming activities and store program files, and an agent providing distributed processing efficiencies for the server.

ARCHIVED CONTENTS

All necessary Mitsubishi Remote Monitor program files from the project path are saved as a complete unit and restored to the client or agent whenever needed for subsequent use. The specific details of this can be provided.

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

Device communications via Ethernet for the client and agent have been tested.

UPLOAD

A client-based upload (using the local client copy of Mitsubishi Remote Monitor) from the processor first retrieves the current copy files for the local PC, uploads the logic, data, and Standard RAM 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 Remote Monitor installed.



Features

DOWNLOAD

Download is accessed from within the launched Remote Monitor off-line session, available with either the current copy or a named version. All or part of the program can be downloaded.

COMPARISON FEATURES

Comparisons utilize a text-based compare of the .prg and .prm files of the data set. Since the SRAM.BIN always compares as different, there is an option to not report its differences.

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 Remote Monitor module allows for scheduled, unattended comparisons of configured groups of programs. Using the agent to perform the 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 to enable 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.

REMOTE MONITOR EDITOR REQUIREMENTS

MDT certifies this module as operating properly with Mitsubishi Remote Monitor version BND-384W202 with the Q4A type CNC.

Comparison report samples follow.

| | | Program Summary | 7 | |
|----------------------------------|----------|---|---------------------|--|
| Program Name | | /ahn_area/mits/Q4A_CNC | | |
| Program Description | | | | |
| Personality Type Compare Date | | mits-cnc 2005-09-28 12:43:15 | | |
| | | | | |
| | Anc_00 | 002 | Anc_00001 | |
| File Date | 2005-09 | -28 12:42:48 | 2005-09-28 11:27:50 | |
| User ID | ahn | | ahn | |
| Client ID | alabama | alabama | | |
| Method | Local to | Local to Current | | |
| Revision Comment | save nev | save new - with ALL PRM edited. N1P N9P deleted | | |

Sample above when SRAM.BIN option selected to ignore differences.

| | | Program S | Summary | |
|----------------------------------|---------------------|----------------------------------|---------------------|--|
| Program Name | | /ahn_area/mits/Q4A_CNC | | |
| Program Description | | | | |
| Personality Type Compare Date | | mits-enc | | |
| | | 2005-09-28 12:55:22 | | |
| | | | | |
| | Anc_000 | 106 | Processor Copy | |
| File Date | 2005-09-28 12:54:11 | | 2005-09-28 12:55:22 | |
| User ID | ahn | | | |
| Client ID | alabama | | | |
| Method | Local to Version | | | |
| Revision Comment | restore | | | |
| | | | | |
| LL.PRM | | The file <u>ALL PRM</u> has chan | ged | |
| RAM BIN | | The file SRAM BIN has changed. | | |

| ALL.PRM Compare Report | | | | |
|------------------------|----------------|--|--|--|
| Ancestor 00002 | Ancestor 00001 | | | |
| | N1P40 | | | |
| | N2P00 | | | |
| | N3P00 | | | |
| | N4P00 | | | |
| | N5P00 | | | |
| | N6P00 | | | |
| | N7P00 | | | |
| | N8P00 | | | |
| | N9P04 | | | |
| | | | | |

Capabilities

| 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 | ☑ |
| Editor Launch Off-line | ☑ |
| Server / Agent Highlights | |
| Time-Base Scheduling | ☑ |
| AutoCompare | ☑ |
| AutoNotify | ☑ |
| AutoUpdate | |

