

# AutoSave

## Support for Indramat WinMTC v19

**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 programs including BRC Indramat WinMTC v19 programs.

This module supports the WinMTC v19 application running on the Indramat MTC-200 hardware and requires the installation of the provided AutoSave Remote Module Service (ARMS) executable on the HMI.

AutoSave's Microsoft Windows-based client application is fully integrated with the HMI 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:

- On demand Upload or Scheduled Comparison with AutoUpdate Capture and Archive Changes Made at the Operator's Console or Handheld HMI
- Historical Tracking and Audit Trails
- Automatic Change Notification
- Quick Disaster Recovery

### CLIENT / SERVER / AGENT

This AutoSave Indramat WinMTC v19 module is comprised of an AutoSave server acting as the master control center that coordinates all change-related programming activities and stores program files. The AutoSave client and agent software provide upload and download capabilities to capture and restore changes for the unit.

### ARCHIVED CONTENTS

AutoSave creates revision copies comprised of all the files and information within the program's file list for the device. All are saved as a unit. The complete unit is restored to the client/agent whenever needed for subsequent use. It archives live data from the CNC along with the saved hard drive data.

### SECURED PROGRAM ACCESS

The 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 to upload/download via AutoSave, the file becomes locked and indicates the user who has the file checked out. Other users see this lock condition when attempting to access the program. The system denies access to locked programs. When the user completes the use of the files, AutoSave prompts for a revision note, creates a new current copy, relegates the previous current to a numbered ancestor, and unlocks the program. Undo unwanted programming changes by simply downloading an ancestor or master copy to the device and restoring that copy to current.

### UPLOAD

The CNC programs are comprised of multiple data files, NC program files, tool information files, and other files; these are stored within the NC itself and the HMI's hard-drive. This module executes a backup operation from within the WinMTC software to archive live data from the CNC onto the hard drive and includes this data along with the saved hard drive data in the created AutoSave revision.

### DOWNLOAD

Download to the device enables the user to select the current copy or any available ancestor or version with which to update the device's files and results in the creation of a new current copy. 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

The module provides its own server compare functionality both for textual and graphical differences. It utilizes the basic MDT ASCII compare methods; binary files indicate binary differences (no details), text files and PDFs for graphical compares have a link to the details, and missing files are reported.

### 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 COMPARISON

The Indramat WinMTC v19 module allows for scheduled, unattended comparisons of configured groups of programs. Using the agent to perform the actual upload and comparison, AutoSave software can compare the device's copy to the current copy or compare the current copy to a selected version (permanent or master copy). It supports the **AutoUpdate** feature option to create a new current copy when differences between the device and current copy are detected.

### NOTIFICATION

Notification e-mail is automatically sent to designated personnel when scheduled comparisons are completed and provides links to complete HTML detail reports as this sample of the machine data and parameters reporting:

**Machine Data:**

- File `anlge\machdata\0xy001.typ` has changed. *Details:*
  - Text Comparison:**

line 10 of anc00004	:NrYName YByteY Unit YLDYTDY'SiYNY Min. Value Y Max. Value Y Ini. Value YMTYTyZuY
line 10 of anc00000	:Nr'Bereichnr'Byte' Einheit'VK'NK'VZ'VN' Min. Wert' Max. Wert' Ini. Wert'MT'TyZu'
lines 37 to 38 of anc00004	028 PERC 2 % 3 1 0 0 0.0 999.9 0.0280001
	029 AMPL 2 1/8 3 2 0 0 0.0 100.00 0.00290001
Missing from anc00000	
- File `anlge\machdata\0xy001.ava` is in anc00004 but not anc00000.
- File `anlge\machdata\9231_111.exp` is in anc00004 but not anc00000.
- File `anlge\machdata\0xy001.typ` has changed. *Details:*
  - Text Comparison:**

line 10 of anc00004	:NrYName YByteY Unit YLDYTDY'SiYNY Min. Value Y Max. Value Y Ini. Value YMTYTyZuY
line 10 of anc00000	:Nr'Identif.'Byte' Unidad'VK'NK'VZ'VN' Valor m.jn.' Max. valor' Valor ini.' MT'TyZu'
lines 37 to 38 of anc00004	028 PERC 2 % 3 1 0 0 0.0 999.9 0.0280001
	029 AMPL 2 1/8 3 2 0 0 0.0 100.00 0.00290001
Missing from anc00000	

**NC Variables:**

- File `anlge\nc_var\0xy003.dat` is in anc00000 but not anc00004.
- File `anlge\nc_var\0xyzzzz.vtp` is in anc00000 but not anc00004.

### Parameter Sets:

- File `anlge\param\antr050.idx` has changed.
- File `anlge\param\antr04.ver` has changed.
- File `anlge\param\par02b00.old` has changed. *Details:*

line 15 of anc00004	B00.005 100000.0 MM/MIN
line 15 of anc00000	B00.005 200.0 MM/MIN
lines 17 to 18 of anc00004	B00.006 10000.0 MM/MIN
lines 17 to 18 of anc00000	B00.007 10000 MM/SEC^2
	B00.006 200.0 MM/MIN
	B00.007 100 MM/SEC^2
lines 64 to 65 of anc00004	B00.046
lines 64 to 65 of anc00000	B00.047
	B00.046
	B00.047
lines 74 to 77 of anc00004	B00.058 0
Missing from anc00000	B00.059 0
	B00.060 0
	B00.061 0

- File `anlge\param\blockfil` has changed.

## 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"/>
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"/>
Agent Device Download	<input checked="" type="checkbox"/>
Server Platform Support	
Windows	<input checked="" type="checkbox"/>

## INDRAMAT WINMTC V19 EDITOR REQUIREMENTS

MDT certified this module as operating properly with BRC Indramat WinMTC v19 running on the Indramat MTC-200 or MTA-200 CNC hardware and requires the installation of the provided ARMS executable on the HMI.