

WinMulti Master Directory Files

Mul File Main Page

Contents

Overview

Files - .Mul and .Saw Files

.Mul Files

.Saw Files

Files - .ZFT

Files - .DAT

File - [BuildNo].db3

Directory - _machine

Subdirectory - _machine\diagnostic

Subdirectory - _machine\optimise

Subdirectory - _machine\running

File - _Machine\diagnostic\diagnostic.db3

File - _machine\useage.db3

Directory - Archive

Directory - Backup

Directory - Batches

Directory - DXF

Directory - Flowline Ops

Directory - OPBIN

Directory - Opdesign

Directory - samout

Directory - Saw

Comments

Overview

The master directory contains all the information required to run the winMulti software. This folder is referenced in the Masterdir File and could be located anywhere, but is generally found in the following locations


Common Locations

	Configuration	Location	Notes
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Latest	Machines with centralised control (All TwinCAT3 Machines - ZX5s , Beckhoff upgraded machines, software upgrades to v6)	c:\ddrive\	
	Machines with front end winMulti on a beckhoff PC	d:\ (Memory Stick or network drive)	A USB stick was originally used to minimise the use of hard drive space, and to provide a simple method of PC replacement. However a memory stick will corrupt after a couple of years of use, and the general change to use a shared directory on another PC was adopted.
	Machines with a seperate machine and saw hardware configuration (original flowlines and ZX3/4)	c:\multi\	
Oldest	DOS Machines	c:\	

Files - .Mul and .Saw Files

.mul and .saw files are text files, normally csv that hold the setup data for the winMulti software

 ...These files are standard ASCII text files because they were originally conceived pre-1995 for DOS based systems and have maintained compatibility

.Mul Files

No	File Name	Description	Location
1	Adjust	Software generated log of operator adjustments to parameters	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Adjust
2	Alarms	Configuration file for Input and output triggered alarms	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Alarms
4	Axes	Configuration file for Motion Controlled axes on machine	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Axes
5	AxesLR		https://stuga.dokit.app/wiki/Mul_File_Specification_-_AxesLR
6	Backup	Configuration file for backed up locations	https://stuga.dokit.app/wiki/Mul_File_Specification_Backup
7	Clamppos	Configuration file for clamp positioners	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Clamppos
8	Clamps	Configuration file for clamps directly controlled by location of profile and gripper	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Clamps
9	Colours	Configuration file for profile colour descriptions	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Colours
10	Draw	Configuration file for "Flowline Ops" editor	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Draw
12	Ejpos	Configuration file for ejector	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Ejpos
13	etherCatDevices	Configuration file for etherCAT diagnostics System	https://stuga.dokit.app/wiki/Mul_File_Specification_-_EtherCatDevices
14	Hardware	Configuration file for Window Hardware setup in "flowops" software	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Hardware
15	Inverters	Configuration file for complex multiple Inverter setup	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Inverters
16	IODef	Configuration file for Input and Output channel specification	https://stuga.dokit.app/wiki/Mul_File_Specification_-_ioDef
18	IP	Log file for network setup notes, IP addresses, etc	https://stuga.dokit.app/wiki/Mul_File_Specification_-_IP

19	Opttol	Configuration file for optimiser tolerances	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Opttol
20	Optypes	Configuration file for operation types in "flowops" software	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Optypes
21	Osensor.mul	Configuration file for offcut position sensors	https://stuga.dokit.app/wiki/Mul_File_Specification_Osensor
22	Peps	Configuration file for Profile Extra Parameters (in addition to profile/mul)	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Peps
23	Preps	Configuration file for Hardware Preps in "flowops" software	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Preps
24	Profile	Configuration file for main profile parameters	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Profile
25	Queueno	Log file of next number to use in the transfer table queue system	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Queueno
26	Reminders	Configuration file for reminder table - sets user reminders to appear	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Reminders
27	Settings	Configuration file for Settings in "flowops" software	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Settings
28	Shifts	Configuration file for Customer shift pattern	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Shifts
30	StdOps	Configuration file for tooling operations	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Stdops
31	Systems	Database file of profile systems	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Systems
32	Tools	Configuration file for toolong setup on ring	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Tools
33	Trim	Configuration file for profile trimming	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Trim
34	userVariables	Parameters file for user-defined parameters used in macro mnd-files	https://stuga.dokit.app/wiki/Mul_File_Specification_-_userVariables
35	Xposhold	Configuration file for "holding" outputs off if an axis is in a certain position range	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Xposhold
36	Zstdopdef	Database of mnd file types and variables used	https://stuga.dokit.app/wiki/Mul_File_Specification_-_Zstdopdef

.Saw Files

No	File Name	Description	Location
1	Colours		https://stuga.dokit.app/wiki/Saw_File_Specification_Colours
2	Loadpos		https://stuga.dokit.app/wiki/Saw_File_Specification_Loadpos
3	Messages		https://stuga.dokit.app/wiki/Saw_File_Specification_-_Messages
4	NextSamRead		https://stuga.dokit.app/wiki/Saw_File_Specification_-_NextSamRead
5	Params & Sparams		https://stuga.dokit.app/wiki/Saw_File_Specification_-_Params_and_Sparams
6	Offcuts		https://stuga.dokit.app/wiki/Saw_File_Specification_-_Offcuts

Files - .ZFT

Zebra Format Files (.zft) are the configuration files for the label generation when

- The labels are created by the winMulti software (ie not generated in a ZEB file by the office software - See Stuga Zebra Label Batch File Specification)
- Remake Labels
- Offcut and Waste Labels

See ZFT File Format and Second Barcode Label For Saws for more information

Files - .DAT

These files are produced by the optimiser system to help diagnose the optimisation process. A set of .dat files is created for each optimisation

group (all pieces of the same profile and colour combination). The optimiser is a separate file which crunches this data and outputs its own .dat file with the results of the optimisation

Optimiser Dat Files

File	Function	Created By
gaps.dat	Gap amount between all prep combinations	winMulti
pieces.dat	List of offcuts of the current profile / colour being optimised	winMulti
offcuts.dat	List of useable offcuts of the current profile / colour being optimised	winMulti
results.dat	Results of the optimisation	optimiser.exe / optim32.exe
oplog.dat	Output log of the optimisation process	optimiser.exe / optim32.exe

File - [BuildNo].db3

This is a SQLite database file to hold the offcuts created by the machine

i ...Using the db3 database for offcuts was implemented in version 5.2. Prior to this, the offcuts were stored in offcuts.saw, however this was slow and buggy when the offcuts data grew too large.

Directory - _machine

The _machine directory stores log files of the diagnostic information on the machine. The software continually outputs data to help diagnostics "after the event"

Subdirectory - _machine\diagnostic

Contains a folder generated for each month and year the machine is running. Within this folder are sets of daily log files

Daily Log Files [dd] = day of month

Name	Function	Notes
dd.csv	Main Log file for diagnostics	On systems with more than one "machine side", ie machine side and saw side, this log is for the machining centre side The saw side has its own diagnostic log (see ddsaw.csv) i ...There are two separate diagnostic logs for a 2-side machine because the processes happen in parallel
dd.frm	Number of complete frames cut on this day.	The software increments this number what all the pieces of a frame are complete. The software uses the "Slot" field from the 449 file to determine a frame
dd.pcs	Number of pieces cut on this day	
ddsaw.csv	Log file for saw side diagnostics	

Subdirectory - _machine\optimise

Logs a copy of the information sent to the optimiser process. Used to diagnose and track down historical optimisation issues

Subdirectory - _machine\running

Log of the efficiency and performance values of the machine. A csv file is created for each day the machine runs. The file contains a line for each minute of running detailing how many seconds in that minute the machine was running, idle or waiting for an operator.

From this data, and the number of pieces cut, the performance of the machine can be calculated

i ...In v6 software, this data was placed in a SQLite database diagnostic.db3 to allow greater compatibility and performance with SQL data standards

File - _Machine\diagnostic\diagnostic.db3

See Advanced Database Information

File - _machine\useage.db3

See Advanced Database Information

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