

## Change log

From Version 2.0.3468 (8/4/2017) to 2.0.3481 (8/14/2017)

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Added a check when loading a license file with the help about button. This will make sure the PCID matches what is in the license file with the machine's ID

Dwell had an issue that was caused by the blocking functions that were added for the trajectory buffer

Shadow #Vars added to emulate old school Fanuc controllers

DRO's forced to update on load even if the default value is zero.

From Version 2.0.3390 (5/9/2017) to 2.0.3468 (8/4/2017)

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New Fonts added to the screen controls to allow people to have all windows fonts in the screens and allow other fonts in Linux as well.

Allow Fonts to be changed in the Tab controls

New angled meter added as a screen control in Hobby and Industrial

Fixed Bitmap buttons shrinking issue with some scripts

Tangential planner optimized for CV

Serial plugin can now poll to see if any serial data is in the receive buffer (Used for barcode reader testing)

Floating point numbers can now be used in the PMC

Added mcAxisRemoveOverrideAxis() to turn off Overrides (Used for THC mostly)

Override Axis API calls added to the Help Doc

MPG movement prevented in FeedHold state

Added mcAxisRemoveOverrideAxisSync() API call added to zero out an override axis when removed

Saving of the # vars rage is now settable in config dialog

Optimization of control updates and script editing

mcIpcGetLastErrorMessage() and mcIpcGetLastErrorCode() added for helping with debugging with a remote Lua instance

Shuttle Pro plugin will now allow the center dial to be mapped to all the encoders.

Bitmap button enhanced for better graphics support

Keyboard plugin Inc move bug fixed that would not allow it to change the axis to be jogged

Bitmap controls can now take new bitmaps at run time

New blocking functions added to protect the core from the plugin taking data while Mach4 is placing the data in the buffer. This is to fix a rare condition where the machine would just stop mid run and rewind the file.

Gcode now checks for axis that are disabled

Gcode Error strings are now available for translation

G28 would move the Z axis every time fixed

From Version 2.0.3247 (4/1/2017) to 2.0.3390 (5/9/2017)

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New industrial installer

Border is now a property that can be set in the Industrial GUI toggle buttons

Corner radius can be set on buttons in industrial version

Outputs with # vars added for Parameters #1100 - #1131

Reduce Screen flickering when screen is refreshed

P Parameter added to G28.1 to allow Homing of an out of band axis

Docs have tool table functions added

New font handling added for screen to allow for more fonts in screens

More updates for Comp with G68 active and error checking added for bad comp moves.

On screen Keypad for DRO's fixed to not go off the right edge of the screen

API functions added to set the function of a left mouse click for touch screen monitors

```
mc.mcToolPathSetMouseLeftClick(mInst, click_func);  
rt = mc.mcToolPathGetMouseLeftClick(mInst);
```

The click function are as follows:

```
MC_TP_MOUSEFUNC_ROTATE 0  
MC_TP_MOUSEFUNC_PAN    1  
MC_TP_MOUSEFUNC_ZOOM   2
```

Border property added to buttons and toggle buttons in screen design

No border option added for group controls

Tool Life management added to the tangential Gcode interpreter.

Lua scr.GetHistory() function added. This can be used to log the history in the history dialog.

Hide disabled motion devices in the config dialog.

Help menu added to the docs folder and the support page

Added color property for the background of the group controls

Out of band axis made to have the same functions as a normal axis (Homing, axis output signals , etc)

Correct incremental jogging for machines that start in G21 (mm)

Industrial screens have borders removed to make them look better

Example maros added to turn ouptuts on and off with Mcodes

From Version 2.0.3233 (11/3/2016) to 2.0.3346 (4/1/2017)

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Alert for Custom screens!

The Single block state must be added to the cycle start button to restart in single block

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Added Wizards:

Shuttle Pro Gcode register wizard

Feed and Speed calculator wizard

Soft Limit configuration wizard

Steps per unit calculation wizard

End wizards

Demo mode time out dialog added, This will tell you that you are in Demo mode when Cycle Start is pressed and is timed out.

G53 allowed when G68 is active. This was done to allow better functionality for shape cutting machines doing plate rotation. You no longer have to get out of G68 to do toolchanges if the moves are done with G53.

Single block fixed for can cycles

Keyboard plugin has a register to tell what application has focus. This can be used to "auto set focus" in the PLC script with Lua code.

Global register added to show the name of the Mach4 application. Should be used in conjunction with the Keyboard current focus register.

G28.1 added for Mill operations. New State was added to make this work

API called added mcSpindleWaitForeSpeed() and mcSpindleWaitForStop() Can be looked at with Lua code to check for spindle speeds.

MDI code added to allow better probe support

Retract Updated because of sync code added for the G68 rotations

Find and replace added to the industrial Gcode editor

OSIG\_RETRACT signal added to allow outputs to flag when we are in the Retract state

Support added for screens without toolpaths

Support for negative numbers added to the PMC

Var #3103 added to show the state of the controller in Gcode

Shuttle Pro will allow the Inc Jog center wheel to change with axis selection.

Shuttle Pro wizard added so users don't need to look at the registers. (More as an example)

Line number added to error message in Gcodeerror.mcs (lua code)

Comp error fixed for arcs to small to fit tool

Inch and MM jogging added mcJogSetUnits and mcJogGetUnits

mcJogSetFeedRate and mcJog GetFeedRate added to allow jogging as a feed rather than a % of max rate

More errors added to mcLua to show why scripts failed to compile

Keyboard Enable register added

Add mcCntlGetHdId() API function. System Information will now include the hard drive IDs.

UVW axis in mill now will follow unit changes

Added UVW DRO Types for the screen designer

Inc jog planner optimized for low speed moves

A macro can now be called when M30 is hit . "macrostop.mcs" is the name of the macro

New educational (no movement other than with Sim) and HMI only license added for GUI only applications

mcCntrlGetInstanceHandle added

Core: Added mc.mcGetInstanceNumber() LUA function.Core: mc.mcGetInstance() can now take an optional string parameter to name the instance user for API tracing.

Core: Add API tracing via a variant of MINSTANCE called HMINSTANCE. mcCntlGetInstanceHandle(inst, "owner desc", &hinst); You can then use hinst as the instance parameter to all API functions.

Core: mcCntlProbeGetStrikeStatus() API function added to look for probe strike

Softlimit wizard added for helping configure softlimits.

Industrial installer changed to add Lathe to the installer

Industrial installer changed to match the color and theme of the screens

<END> From Version 2.0.3233 to 2.0.3346