Post Processor Configuration

The format of the processed NC output is determined by a post processing configuration script. This script is responsible for transforming the intermediate NC data one NC record at a time. The basic format of the configuration script is the JavaScript language. The JavaScript language is quite simple and easy to learn. Tutorials for JavaScript are widely available on the Internet.

The following standard JavaScript API classes are supported from the configuration script: `Array`, `Boolean`, `Date`, `Math`, `Number`, and `String`.

Attention

Note that JavaScript is a case sensitive language meaning that 'qwerty' and 'Qwerty' do not refer to the same data. All angles are represented in radians unless otherwise specified. You can use `toDeg()` and `toRad()` functions to convert between radians and degrees. This allows seemless integration with the standard JavaScript API.

For a quick overview of the primary requirements you can start by examining the minimal post configuration script 'minimal.cps' located in the posts folder.

This section describes the common tasks required for the specific entry functions.

onMachine

`onMachine()` is invoked when the machine configuration changes during post processing. This entry function can normally be disregarded.

onOpen

Setup program beginning using programName.

onSection

Setup plane and origin `currentSection.workPlane` and `currentSection.workOrigin`.

Setup work coordinate system using `currentSection.workOffset` property.

onMovement

Possibly handle feeds by movement type. This can also be done in `onRapid()`, `onLinear()`, and `onCircular()`.

onPower

Handle power mode changes. This can also be done during the cutting motion using the 'power' property.

onRadiusCompensation

Possibly setup radius compensation mode. This can also be done in `onRapid()`, `onLinear()`, and `onCircular()`.

onToolCompensation

Allows tool compensation to change during a section. Only used for tool types for which dual compensation is defined.

onRapid

Output rapid traverse motion.

onLinear

Output linear feed motion.

onCircular

Output circular motion if supported.

onRapid5D

Output rapid 5-axis traverse motion.

onLinear5D

Output linear 5-axis feed motion.

onRewindMachine

Handle machine axis rewind for simultaneous 5-axis motion.

onDwell

Output dwelling period.

onSpindleSpeed

Output spindle speed.

onCycle

Initialize cycle state.

onCyclePoint

Map supported cycles or invoke `expandCyclePoint()` to expand the cycle. Alternatively, invoke `cycleNotSupported()` for unsupported cycles.

onCycleEnd

Finalize cycle state.

onSectionEnd

Retract to machine coordinate system.

onClose

Restore and end program.

onTerminate

Access output file in external applications. The primary output file will be locked and not fully flushed until onTerminate() is invoked. The log file is still locked at this point.
