Entry Functions

The intermediate NC data is transferred to the configuration script one record at a time using the special entry functions listed below.

Entry Functions

onMachine()

onMachine() is invoked when the machine configuration changes during post processing.

onOpen()

onOpen() is invoked once at post processing initialization. This is the place to output the program header.

The configuration script is not allowed to modify the entry functions after onOpen() has been invoked.

onParameter(String name, String value)

onParameter() is invoked for each parameter in the CLD data where a parameter is a simple name-value pair.

onPassThrough(String value)

onPassThrough() is invoked for pass-through information. Pass-through allows the user to transfer text unmodified through to the post processor to the output file. This feature should be used with caution as the post processor will ignore any pass-through data.

onComment(String comment)

onComment() is invoked for each comment.

onSection()

onSection() is invoked at the start of a section. A section commonly corresponds to an individual operation within the CAM system. However, note that it is perfectly legal from the post processors perspective if an operation generated multiple sections.

onSectionSpecialCycle()

onSectionSpecialCycle() is invoked at the start of a section if the section contains a cycle that has been marked as special. A section commonly corresponds to an individual operation within the CAM system. However, note that it is perfectly legal from the post processors perspective if an operation generated multiple sections. onSectionSpecialCycle() doesn't do anything by default. Use **PostProcessor.setSectionSpecialCycle()** to mark a cycle as special.

onDwell(Number seconds)

onDwell() is invoked per dwell command.

onSpindleSpeed(Number spindleSpeed)

Invoked when the spindle speed changes. The property 'spindleSpeed' specifies the current spindleSpeed.

onRapid(Number x, Number y, Number z)

onRapid() is invoked per linear rapid (high-feed) motion. Make sure to prevent dog-leg movement in the generated program.

onLinear(Number x, Number y, Number z, Number feedrate)

onLinear() is invoked per linear motion.

onCircular(Boolean clockwise, Number cx, Number cy, Number cz, Number x, Number y, Number z, Number feedrate)

onCircular() is invoked per circular motion.

onRapid5D(Number x, Number y, Number z, Number dx, Number dy, Number dz)

onRapid5D() is invoked per linear 5-axis rapid motion.

onLinear5D(Number x, Number y, Number z, Number dx, Number dy, Number dz, Number feedrate)

onLinear5D() is invoked per linear 5-axis motion.

onRewindMachine(Number a, Number b, Number c)

onRewindMachine() is invoked per for simultaneous 5-axis motion when machine axis rewind is required. Note that rewinds are commonly undesired but cannot be avoided for certain machine types.

onMovement(Integer movement)

onMovement() is invoked when the movement type changes. The property 'movement' specifies the current movement type.

onPower(bool power)

onPower() is invoked when the power mode changes. The property 'power' specifies the current power mode. Used for water jet, laser cutter, and plasma cutter.

onRadiusCompensation()

onRadiusCompensation() is invoked when the radius compensation mode changes. The property 'radiusCompensation' specifies the current radius compensation mode.

onToolCompensation(Integer compensation)

onToolCompensation() is invoked when the tool compensation mode changes. Only used for tool types for which dual compensation is defined.

onCycle()

onCycle() is invoked at the beginning of each cycle.

The variable 'cycleType' holds the unique name identifying the type of the current cycle. The parameters of the cycles are available through the 'cycle' variable.

onCyclePoint(Number x, Number y, Number z)

onCyclePoint() is invoked for each point associated with the active cycle. `onCyclePoint()` is only invoked between `onCycle()` and `onCycleEnd()`.

onCycleEnd()

onCycleEnd() is invoked on cycle termination. A corresponding `onCycleEnd()` is guaranteed to follow an invocation of `onCycle()`.

onCommand(Integer command)

onComment() is invoked for well-known commands (e.g. stop spindle).

onMachineCommand(Integer command)

onMachineComment() is invoked for machine commans (e.g. 28 could be mapped to M28).

onOrientateSpindle(Number angle)

onOrientateSpindle() is invoked when a specific spindle orientation is required. The function may be invoked when expanding cycles.

onSectionEnd()

onSectionEnd() is invoked at the termination of a section.

onSectionEndSpecialCycle()

onSectionEndSpecialCycle() is invoked at the termination of a section if the section contains a cycle that has been marked as special. onSectionEndSpecialCycle() doesn't do anything by default. Use **PostProcessor.setSectionSpecialCycle()** to mark a cycle as special.

onClose()

onClose() is invoked at post processing completion. This is the place to output your program footer.

onTerminate()

onTerminate() is invoked once after post processing has completed. The output file is unlocked at this point and can be moved and copied as desired.
