C and Cpp Analyzer 2.3 - Release Notes

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2.3.1-funcrel

Resolved Issues

Customer Ticket Id	Details
26411	CPP analysis failed with error: "exited with error code -1073741819".
26612	PB: CPP analysis failed with error: "exited with error code -1073741819".

2.3.0-funcrel

Resolved Issues

Customer Ticket Id	Details	
24883	For C/C++ rules, parameter 'Number of violation occurrences' is showing the function name in dashboard.	

Other Updates

Details
Macro objects missing when header file that contains macro definition is included in PCH

2.3.0-beta1

New Support

Summary	Details
Transaction Entry\Exit point	C++ Analyzer would now have default TCCSetup file which would be automatically loaded in TCC.

Rules

Rule Id	New Rule	Details
1065110	FALSE	The rule "Ensure arrays and containers are accessed using unsigned values" has been disabled and is no longer available. This change could impact your existing grades when generating a new snapshot on existing unchanged source code.
1065132	TRUE	Avoid using typeid in polymorphic class from the body of its constructor or destructor.
1065130	TRUE	Avoid defining, redefining or undefining standard macros from standard library

1065128	TRUE	Avoid having unused labels in your program (C/C++)
1065126	TRUE	Avoid using goto to jump backwards into a statement in the same function(C/C++)
1065124	TRUE	Avoid using 'goto' statement to jump into or out of blocks
1065122	TRUE	Avoid #define or #undef macros anywhere other than global namespace
1065120	TRUE	Avoid using # OR ## operators more than once while defining macros
1065118	TRUE	Arguments to a function-like macro shall not contain tokens that look like preprocessing directives.
1065116	TRUE	Undefined macro identifiers shall not be used in #if or #elif preprocessor directives, except as operands to the defined operator
1065114	TRUE	Avoid lines starting with "#" with invalid pre-processing directive
1065018	TRUE	Avoid using offsetof from <cstddef></cstddef>

Other Updates

Details

A performance issue while processing virtual links have been fixed.

Recent code change may have resulted in warnings about \CAST -System in log. This is now fixed.

An intermittent crash while parsing file with complex lables and goto statements have been fixed.

2.3.0-alpha1

Rules

Rule Id	New Rule	Details
1065110	TRUE	Ensure arrays and containers are accessed using unsigned values
1065108	TRUE	Bit-fields shall be either unsigned integral, or enumeration (with underlying type of unsigned integral type)
1065106	TRUE	Avoid comparing types of different widths in a loop
1065104	TRUE	Converting a multiplication to a larger type should be done before the multiplication takes place
1065102	TRUE	Avoid checking Integer overflow without explicit cast