

Intel Compiler not compatible with glibc 2.24-9 and newer

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Translate 

Reference Number : DPD200419088

Version : Intel[®] C++ and Fortran Compiler

Operating System : Linux*

Problem Description : An unexpected NaN or other incorrect output may be seen when an application built with these Intel compilers is run on a system containing glibc version 2.24-9 and newer.

Cause : This appears to be due to the new dynamic loader in glibc doesn't preserve the values of additional registers used by a function call through `__regcall` calling convention or some Intel compiler library like SVMML function call through a non-standard calling convention, as described at https://sourceware.org/bugzilla/show_bug.cgi?id=21236 (https://sourceware.org/bugzilla/show_bug.cgi?id=21236) and https://sourceware.org/bugzilla/show_bug.cgi?id=21265 (https://sourceware.org/bugzilla/show_bug.cgi?id=21265). It will not impact a statically linked library function call or a function call through `__regcall` calling convention within a single executable.

Resolution Status : This incompatibility has been fixed in Intel[®] compiler version 17.0 update 5 and 18.0.

Workaround : It can be worked around by setting environment variable `LD_BIND_NOW=1` to disable the lazy binding of dynamical linked libraries before running an application: "export `LD_BIND_NOW=1`"

For more complete information about compiler optimizations, see our [Optimization Notice \(/en-us/articles/optimization-notice#opt-en\)](#).

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