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Dear Developer,

The MIPSpro 7.2.1 compiler release introduces several changes in the development environment for IRIX®.

OpenMP support in Fortran 77, Fortran 90, and ProMPF

OpenMP is a multi-company consortium to develop and support common shared-memory parallel programming APIs for various languages on UNIX[®] and Windows NT[™] systems. The OpenMP consortium's initial API for parallel shared-memory Fortran programming was finalized and announced in the fall of 1997 and is supported in this release, specifically in MIPSpro 7.2.1 Fortran 77, Fortran 90, and ProMPF 2.8. For more information on OpenMP, see the Web site at http://www.openmp.org.

C++ Enhancements

MIPSpro 7.2.1 C++ provides support for the string class in conformance with the ANSI standard, while continuing to support the rope class for increased performance.

Names in the standard library are now in the standard C++ namespace, so standard header files can now be included without the trailing *.h*.

Inline Memory Intrinsics

There are a number of new options (-OPT:mem_intrinsics[=(OFF | ON)], memcpy_cannot_overlap[(OFF | ON)], etc.) that control the inlining of memory intrinsics. See the compiler_dev relnotes for more information.

Query Extension Mechanisms

The Query Extension Mechanism allows SGI engineers to add new features to libraries that application developers can detect and (optionally) use while maintaining binary compatibility. Note that one set of binaries that leverage new features on a new system can run on older systems that don't support the particular feature.

Speedshop With Thread Support

Speedshop 1.3 supports the native implementation of POSIX threads (pthreads) added with IRIX 6.5.

Licensing

MIPSpro 7.2.1 runs with MIPSpro 7.2 licenses. Licensing mechanisms and options are unchanged from MIPSpro 7.2 to 7.2.1.

ProDev Workshop Evaluations

ProDev Workshop evaluation software is included on the IRIX Development Foundation CD. Evaluation licenses can be obtained by visiting http://www.sgi.com/Products/license.html, by sending an email to demolicense@sgi.com, or contacting your local Silicon Graphics office.

Packaging:

IRIX Development Foundation and Libraries

The IRIX Developer Foundation (IDF) and IRIX Developer Libraries (IDL) CDs for IRIX 6.5 ships with the IRIX 6.5 operating system CDs.

IDF 1.1 and IDL 1.0 for IRIX 6.2, 6.3, and 6.4 ship with each MIPSpro 7.2.1 compiler.

Look in the IDF release notes for installation information.

Patches

You will find a MIPSpro 7.2.1 patch CD in this package.

Note: Be sure to install it after you install the compilers.

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