

OpenMP 3.0 – A Preview of the Upcoming Standard

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Abstract. The OpenMP 3.0 standard should be released for public comment by the time of this conference. OpenMP 3.0 is the first major upgrade of the OpenMP standard since the merger of the C and Fortran standards in OpenMP 2.5. This talk will give an overview of the new features in the OpenMP standard and show how they help to extend the range of problems for which OpenMP is suitable.

Even with multi-core, the number of hardware cores in an SMP node is likely to be relatively small for the next few years. Further, a number of users want to use OpenMP, but need to scale to more cores than fit in a node, and do not want to mix OpenMP and MPI. Intel supports a production quality OpenMP implementation for clusters that provides a way out. This talk will briefly introduce Intel Cluster OpenMP, provide an overview of the tools available for writing programs, and show some performance data.