

Fifteen Years of OpenMP: What Now?

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OpenMP: Past, Present, Future

- Gov't agency tells a bunch of vendors to standardize on a parallel-do-loop directive
- What was going on with OpenMP from 1997 to 2005?
- Tasking was a major (r)evolution for OpenMP – do user's understand it?
- Progress (depends who you ask) has accelerated

OpenMP: What is missing?

- A user focused book on OpenMP tasking
- Support for heterogeneous systems
- Streaming and pipelining style parallelism
- Support for memory hierarchies

OpenMP: Challenges

- Directives applied to more complicated base languages: C++11, Fortran 2008
- OpenMP constructs are now incorporated into base languages
- OpenMP is for shared memory programming
- OpenMP is a directive based approach for parallel programming