

OPENSHMEM BOF SC2011 TCC-303

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RECENT ACTIVITY

- Tony Will discuss UofH work/web activity
- Mellanox Presentation
- HP/Qlogic Presentation
- TAU with OpenSHMEM
- Recent news from SGI (I show, SGI confirms)
 - Q&A



PAINFUL HISTORY

- 1st year, refining management involvement
- 2nd year, working through first pass of agreement
- 3rd year
 - Early in 2011 many potential adopters had business issues with the adopter/developer agreement.
 - It was suggested to Intel/IBM to prepare a counter proposal. Not accepted.
 - OSSS offered to approach OFA for a new basis.
 - Legal team on SGI side was swapped.
 - New legal team engaged. Management engaged. Engineering engaged. (Karl, Greg, Mark, Bruce, Eng-Lim...)
 - We have movement.



NEAR REAL-TIME UPDATE FROM SGI (1)

• SGI has (under separate agreement) donated its SHMEM API and licensed its SHMEM Copyright and associated Trademarks, as well as any "necessary" Patents (means any patent claim that is necessarily used by a party who makes, uses or sells software implementing the SHMEM API in software) to OSSS - for no cost, royalty or fee - to be called OpenSHMEM.



NEAR REAL-TIME UPDATE FROM SGI (2)

• This Adopter's Agreement flows down the terms of that prior SGI-OSSS license, so that any other entity, company or individual that wishes to create and distribute software and associated documentation that implements the OpenSHMEM API may do so under the terms of the copyright, trademark and patent license from SGI - in short, SGI extends its license to others and will not sue them (and yes, still for no fee or cost). To be clear, an "Adopter" who signs this agreement is a party who creates and/or distributes software that includes/implements the API, not a party that merely creates some independent software that happens to call the OpenSHMEM API (no agreement is required to do that).

NEAR REAL-TIME UPDATE FROM SGI (3)

- This Adopter's agreement attempts to achieve a reciprocal and equitable exchange:
 - SGI/OSSS licenses SHMEM technology for free to Adopters, thus effectively giving Adopters the freedom to make and distribute products that implement the IP without fear of being sued;



NEAR REAL-TIME UPDATE FROM SGI (4)

• In exchange for the right to call their implementations "OpenSHMEM" complaint and not be sued (effectively creating a compatible standard), Adopters grant back reciprocal rights (also for free) to OSSS and other Adopters (including SGI) to their "necessary" patents and derivative copyrighted works, so OSSS/other Adopters are not sued. In all cases, the exchange of IP is limited in scope, and relates only to that IP and portions of products/implementations "necessary" to implement the OpenSHMEM API (see the definitions in the attached agreement). *

• Thus, key take-away points are:

- 1. SGI, via OSSS, licenses its API, Copyright, Trademark, and Necessary Patents for no cost;
- 2. In return, Adopters who wish to create and distribute software that implements this SGI donated/licensed IP, and who want to call their implementations "OpenSHMEM compatible" agree to:
 - a. Grant reciprocal license back for no royalty of any of their necessary patents to OSSS/other Adopters (again, this is limited to only those patent claims necessary to implement the portions of a product implementing OpenSHMEM API);



- b. License back any derivatives of the copyrighted work licensed from SGI/OSSS (e.g., API specification), back to OSSS/other Adopters for no cost (but the Adopter retains ownership of such derivatives); and
- c. The key limitation imposed on Adopters is that their implementations and future derivatives must remain backward compatible with SGI SHMEM which thus forms the basis of a mutually compatible standard. *



This Adopter Agreement requires no onerous • compatibility tests, or compliance certification by Adopters - the idea is to keep it simple and not burdensome -- although an "Adopter" would violate the terms of this Adopter Agreement and the associated IP licenses if they choose to create and/or distribute non-compatible implementations that they regardless decide to call "OpenSHMEM" compatible. Of course, OSSS may always decide to make available compatibility test suites or other compliance documentation in the future, as part of its on-going operations..



• The next steps are for OSSS to circulate this draft (and whatever exec summary -- such as this email -they wish) to interested Adopters and potential OSSS Members. We can then collectively discuss and revise as needed (SGI welcomes a meeting or teleconference to discuss and get this done as soon as practicable), and hopefully close this portion of the project without further delay. In parallel, SGI is contributing some additional in-kind support to OSSS, by paying outside counsel to help propose ByLaws and a Membership agreement drafts for OSSS to use in the future (based on the OFA model put forth by OSSS). Drafts of these documents will be sent to OSSS for their consideration and revisions in the coming weeks.