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March 21, 2003

RE: Consulting Reference for Dr. David E. Bakken

TO WHOM IT MAY CONCERN:

This letter is a strong letter of reference for Dr. David E. Bakken, who consulted to our company this month.

Dr. Bakken is a very active university researcher who has a very broad knowledge of the state of the art in research involving distributed computing systems and fault tolerant computing. Indeed, we first found him via his participation in the ICDCS conference, the premiere international research conference for distributed computing systems. Dr. Bakken also has a lot of practical experience and intuition into these areas, based on his varied industry experience, that complements his research knowledge nicely. Further, he communicates particularly well and is able to tailor the level of his message to any audience from senior engineers to high-level managers.

Amazon.com has perhaps the most extreme scalability requirements for any distributed computing application suite in the world. Additionally, replica and cache consistency issues are key for us, because customers must not see "glitches" in our system and the logical views it offers them of their customer information, catalog databases, etc. Dr. Bakken helped us to understand fault tolerant multicast and related technologies; assess our application's potential tradeoffs of consistency, fault tolerance, and scalability; and to begin to flesh out future architectural directions to achieve appropriate balances between these aspects.

Please contact us if we can be of further assistance.

Sincerely,

Mark Riggins
Principal Software Development Engineer
Customer Management Systems