BENEFITS OF GRID COMPUTING FOR K-ORGANIZATIONS

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Abstract: For knowledge management to be successful, the corporate culture needs to be adapted to encourage the creation, sharing, and distribution of knowledge within the organization. There exist different historical and theoretical approaches to and theories about organizing knowledge, which are related to different views of knowledge, cognition, language, and social organization. Each of these approaches tends to answer the question: "What is knowledge organization?" differently. Grid computing enables organizations (real and virtual) to take advantage of various computing resources in ways not previously possible. They can take advantage of under utilized resources to meet business requirements while minimizing additional costs. The nature of a computing grid allows organizations to take advantage of parallel processing, making many applications financially feasible as well as allowing them to complete sooner. Grid computing makes more resources available to more people and organizations while allowing those responsible for the IT infrastructure to enhance resource balancing, reliability, and manageability. When you deploy a grid, it will be to meet a set of business requirements. To better match grid computing capabilities to those requirements, it is useful to keep in mind some common motivations for using grid computing.

Keywords: Knowledge organizations, grid, cognition

Bibliography:

1. Czajkowsk, K., Ferguson, D., Foster, I., Frey, J., Graham, S., Maguire, T., Snelling, D. and Tuecke, S., From Open Grid Services Infrastructure to WS-Resource Framework: Refactoring and Evolution, http://www.ibm.com/developerworks/library/ws-resource/ogsi_to_wsrf_1.0.pdf, March 2004.

 Czajkowski, K., Ferguson, D., Foster, I., Frey J., Graham S., Sedukhin I., Snelling, D., Tuecke, S. and Vambenepe, W. The WS-Resource Framework, http://www.ibm.com/developerworks/library /ws-resource/ws-wsrf.pdf, March 2004
Foster, Z., Kesselman, C. The Grid: Blueprint for a new Computing Infrastructure, Morgan Kaufmann Publishers, San Francisco, CA, 1998 4. Gasser, L. Braganza, C. and Herman, N. - MACE: A Flexible Test bed for Distributed AI Research. M.N. Huhns (ed.), Distributed Artificial Intelligence, Pitman Publishers, 1987.

5. Honkela, T. (1993). Neural nets that discuss: a general model of communication based on self-organizing maps. S. Gielen and B. Kappen (eds.), Proceedings of ICANN'93, International Conference on Artificial Neural Networks, Springer-Verlag, London

6. Nagaratnam, N., Janson, P., Dayka, J., Nadalin, A., Siebenlist, F., Welch, V., Foster, I., and Tuecke S. Security Architecture for Open Grid Services, http://www.cs.virginia.edu/~humphrey/ogsa-sec-wg/OGSA-SecArch-v1-07192002.pdf.

7. Oliver, D., Roos, J. Studying Organization Identity Empirically: A review, Working paper, Available at http://www.imagilab.org/pdf/wp03/WP31.pdf, 2003

8. Open Grid Service Infrastructure Primer, Global Grid Forum, http://www.ggf.org, August, 2004