Overnet : A Simple Protocol for Interconnecting Heterogeneous Overlay Networks

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***Abstract*—The interconnection of overlay networks has been recently identified as a promising model for building the future Internet. Recent research has focused on design of mechanisms for building bridges between heterogeneous local overlay networks for cooperation.**

However, in this way, some simple *meta*-protocols defining these bridges, and comprehensive quantitative studies of metrics such as *satisfaction rate* or *routing length* in such networks in the context of scalable information retrieval are still missing.

The purpose of this paper is to presents Overnet, a *meta*-protocol capturing the very essence of information retrieval over the interconnection of overlay networks. Overnet is based on co-located nodes filling the role of *neural synapses* between networks. Second, we precisely capture the behavior of key metrics measuring this protocol, result of intensive simulations.

Finally, we describe a new software prototype implementing such a concept based on the interconnection of Chord overlay networks, and exhibit some preliminary results of its actual deployment over the nationwide Grid'5000 platform.

I. Introduction

This demo file is intended to serve as a "starter file" for IEEE conference papers produced under LaTeX using IEEEtran.cls version 1.7 and later. I wish you the best of success.

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January 11, 2007

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II. Conclusion

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Acknowledgment

The authors would like to thank...

References

[1] H. Kopka and P. W. Daly, *A Guide to LaTeX*, 3rd ed. Harlow, England: Addison-Wesley, 1999.