Ana Maria de Carvalho Carreiro

"Estudo Sobre o Uso de Medições em Redes de Computadores para Análise de Desempenho e Caracterização de Tráfego da Rede Rio "

The rapid growth and huge transformations that have occurred to the world-wide network - the Internet - have become a challenge to network managers, specially when we dealing with Quality of Service required by the latest applications, a major part of them multimedia applications. These factors require even more capacity planning, new network engineering, and the performance guarantees. In order to provide these, it is necessary to be aware about what happens in the network, understand how good is its performance, and thus plan and introduce changes, being able in a comprehensive way to measure the resulting changes in network performance. In this light, monitoring and analysis tasks have occupied even more space in network research. In this dissertation we present the concepts of metrics, measurement methodologies and measurement infra-structures. We also discuss some measurements tools developed by research groups and used in some projects for settings up measurement infra-structures. As practical result, we present the result of a study of the outbound traffic from the Rede-Rio in order to evaluate the use of peer-to-peer application use in this network.