Virtual machines are gaining a growing importance in modern business IT infrastructure. They facilitate multiple operating system instances on one physical host, which provides more efficient use of the computing power of the physical host but increases the amount of network traffic as well. To avoid potential network congestion and prioritize link resource usage in a virtual machine system, we propose a bandwidth regulation scheme. Extensive evaluation demonstrates that this bandwidth regulation scheme is accurate and effective. In addition, we resolved a drastic performance degradation of the Open-iSCSI initiator. We thoroughly tested the performance of the Open-iSCSI initiator and three modified versions under two methods of setting the TCP send buffer size - statically and dynamically. Based on these results, we propose a performance tuning scheme, which can enable users of Open-iSCSI, especially those using Open-iSCSI over a long fat network, to achieve significant throughput gains.