In Mobile appliance, users have a limited amount of storage availability to them due to their limited size and weight. To relieve problem we developed iSCSI remote storage system, which is an excellent solution for smart home automation too. User can store or access their valuable data to the home server from anywhere, anytime and also get facility to use mass storage space. The iSCSI protocol has emerged as a transport for carrying SCSI block-level access protocol over the ubiquitous TCP protocol. It enables a client’s block-level access to the data on remote storage over an existing IP infrastructure. However, the performance of the iSCSI based remote storage system for mobile appli-ances were sharply dropped in wireless networks; especially when we adapt default parameters value suggested in standard for our remote storage system in wireless networks. This paper focuses our experiments, which are performed to investigate the best performance values of iSCSI parameters for iSCSI-based remote storage system, are taken out in CDMA networks in order to realize the access to a remote storage system anytime and anywhere. And after the experiment, we suggest the optimal value of parameters. The experiment results from several test cases show us the best values are not the default values specified in the iSCSI standard.