

ABSTRACT. We consider the mean and variance of the number of encryptions necessary over all subsets of privileged users to revoke a set of users in the complete subtree scheme (CST) and the subset-difference scheme (SD). These are well-known tree based broadcast encryption schemes. Park and Blake in: *Journal of Discrete Algorithms*, vol. 4, 2006, pp. 215–238 [4], give the mean number of encryptions for these schemes. We continue their analysis and show that the standard deviations are small compared to the means as the number of users gets large. Therefore, the mean number is a good estimate of the number of necessary encryptions used by these schemes.