

## Abstract

Information is removed from data transmitted over networks and stored in data storage facilities by generating non-informational data as an output from a series of nodes (routers, computing devices or logical routing applications) by using a function that applies random data to the data received at each node. The function may be an XOR and the random data may be a pseudorandom string of the same length as the informational data. The non-informational data may be managed normally without concern for security. When the informational data is needed it can be re-generated using the non-informational data and a cascade of the random data from the series of nodes as inputs to an inverse function (XOR is its own inverse). The random data may be generated from a smaller random seed.