



iBaffle™

CLOUD in a BoxSM

RICHMAR's iBaffle Solution provides continuous access to critical information stored at multiple levels of security. It is a complete storage and server cloud solution that is comprised of an ultra-persistent, real time, data protection system with overlapping layers of security to eliminate single points of failure. Moreover, information is protected by military grade, person-to-person, data-level cryptography so strong it cannot be cracked by any means known to man.

Using proven Shamir Secret Sharing, data in motion and data at rest is cryptographically split and then disassembled at the bit level in such a manner as to create secure shares of data. This is similar to turning a dictionary upside down, shaking all of the letters and numbers into a big pile, disassembling each letter and number and, then, separating the pile into different shares.

The M of N fault tolerant mode of Security First's SPX BitFiler enables the implementation of physically or geographically dispersed and/or separate data repositories and data paths. Thus, no meaningful information is transmitted down a network path or stored on a single disk, tape or removable media. If one or more data streams are unavailable, the remaining data streams can be used to reconstruct the original information and recreate the lost data. In the event of extremely sensitive information distribution, secure shares can be sent at differing time intervals across various terrestrial and atmospheric medium.

The hardware device is a very powerful, rack mountable server that is four (4) standard server units in size and includes space for 45 hard drives split into nine (9) backplanes, which looks like nine hard drives to the server base operating system, and includes off the shelf parts. The motherboard is a standard off the shelf ATX server motherboard that will hold between 16 GB and 128 GB of memory, Dual Quad-Core processors, two (2) mirrored 1TB operating system hard drives, dual redundant power supplies, and four (4) Gigabit Network Interface Cards.

The iBaffle solution will help to consolidate multiple low use servers down to virtual servers, provide nearly unlimited storage, and grant the ability to move physical storage servers without having to bring down a large portion of the network. The iBaffle solution also offers complete security and high availability to remote users without having to use a VPN solution. User files remain protected and there is no longer a need to maintain full disk encryption or a VPN solution when traveling abroad. This solution provides total security, total storage and enhanced resiliency. The iBaffle storage and server cloud solution focuses on security risk elimination, not security risk mitigation.