## Forts' Solution – Nonstop Operation

### Security for sensitive and critical data

### **ENTERPRISE SECURITY**

Complete access and security of data across the complete corporate landscape including legacy systems.

### NON-STOP OPERATION

The Knox units start with a minimum 24PB of usable storage. Each Knox can scale up to 32EB of storage.

### AGILE STORAGE

Reconfiguration and Expansion of storage completed on the fly without interrupting operations.

# FIRMWARE UPDATES ON THE FLY

Any required firmware updates and enhancements for interfaces, adapters and controllers are completed on the fly and automatically controlled to do rolling updates transparently.



- Ability to change critical parts without the need to stop operations.
- Multiple power supplies to protect against single supplier failures.
  - Five 9s operation based on a single site without replication
  - Uninterruptable Power Supplies to protect against site wide power losses.

Knox systems are designed with all major components to be replaced without the need to power down the server.

With multiple redundant power supplies any power supply can be replaced in a simple controlled operation whilst still maintaining redundancy in case of another power supply failure.

All Storage devices are hot swappable and the redundancy of devices ensures that any replaced storage device is rapidly rebuilt. All storage devices are covered by a N +3 redundancy on each storage array to cover all eventualities.

Any network interface can be replaced whilst maintaining full operational status due to the automatic routing failover built into the operation system.

Should there be a need to replace or upgrade any of the system memory, this can be done without the need to interrupt the server operation beyond a very short period of slower operation whilst the memory is automatically reconfigured to reflect the change.



### Connectivity

### Keeping the lights on

All Knox systems have built in Uninterruptable Power Supplies in every rack and these are kept charged from multiple power line supplies. During the design stage our team will work with you to ensure that you have redundant supplies to the Knox units to help minimize the chance of external problems preventing access to critical data.

When there is a concern for the reliability of mains power, the team will work with you on the design and implementation of your own backup generators to keep the lights on.



### On the Fly Updates

All major components in the Knox systems are hot swappable. This includes the Solid State and Magnetic Disk drives, Network interface modules, Storage control modules and system RAM. All operations can continue to run transparently to the user when these parts are being upgraded or replaced. Non-Disruptive Upgrade (NDU) of firmware and patches is available across Knox systems, Delaware and Ticonderoga switches and CamConnect devices to insure there are no operational interruptions.

#### **IMPLEMANTATION**

Our Implementation teams located across North and South America, Europe and Australasia have all the knowledge to ensure the intiial implementation of your solution goes without problems.

### **ONGOING SUPPORT**

Each customer has their own dedicated support team who will work on site to the Enterprise remains secure. All changes and reconfiguration needs are covered by the support package.

For more information on any of our products or services please visit us on the Web at:

www.sysencrypt.com

