Global Insurance Company

Case Study

The Challenge:

- Required ability to scale space and power to satisfy legacy and non-cloud workloads
- Need for seamless path to migrate enterprise to Cloud Services over time
- Required ability to backup, recover and archive critical data to multiple locations
- Internal staff able to focus on operations during the migration period
- Need for complete shielding from EMP/HEMP/IEMI

A **U.S. based Insurance Company** specializing in property and casualty operations engaged Cyber Innovation Labs (CIL) and EMP GRID Services to provide data center services complete with **Electromagnetic Pulse (EMP)** shielding.

THE CHALLENGE

As the Insurance Company's business grew both nationally and internationally, its IT infrastructure continued to take on a more critical role within the organization. The client wanted to improve their IT disaster recovery capabilities to support their customers and protect critical IT processes.

The Insurance Company required a dedicated enterprise data center with the ability to scale space and power to satisfy legacy and non-cloud workloads. Also, the project called for the ability to backup, recover and archive critical data to multiple locations as well as a seamless path to migrate the enterprise to Cloud Services over time. The directive also included protection and recovery capabilities in the event of a disaster event, including **EMP**. In doing so, the internal staff was to remain focused on operations during the migration.

THE SOLUTION

Enterprise Data Center Move Migration

Working in lock-step the client, the CIL and EMP GRID Services teams were tasked to deliver a comprehensive Facility Design, Build, Commission and Sign-Off Plan that encompassed all aspects of delivering a 100% turn-key, server-ready 2N, Tier 3 enhanced data center facility. The detailed move migration plan included:

- Development of data center layout, turn-key build & commissioning specifications
- Coordination of equipment delivery
- On-site technical "Managed Hands" support to complete installation
- Telecom installation assistance
- Trouble shooting support to complete installation

CIL and EMP GRID Services designed a **FLEXCenter** solution, comprised of 60 lockable cabinets, each furnished with mirrored and fully redundant rack PDUs. Our teams furnished the client with a 360° tested, certified and shielded chamber and fire-rated micro data center. In doing so, we added an extra layer of physical protection to vital systems and communications.

EMP GRID Services

Value Derived:

- Full EMP/HEMP/IEMI secured data center
- 6-sided solid steel HEMP/IEMI cage with wave guides; steel meshed air feeds and returns; copper tongue and groove perimeter
- Enhanced Tier 3 infrastructure (2N for all systems)
- 2 weeks continuous stand-alone power generation
- Fully meshed network; fully load balanced applications across geo-diverse sites; satellite backup systems for communication recovery
- Value engineered with delivery cost at market for standard data center facilities; no cost excess from conventional build

In conjunction with a server and storage on demand offering, the CIL and EMP GRID Services teams provided a comprehensive, catastrophic recovery plan for national and global critical IT operations. Complete with instantaneous Recovery Time Objection (RTO), the solution encompassed active/active resource for corporate IT cost efficiency.

VALUE DERIVED

Teaming with CIL and EMP GRID Services, the Insurance Company received the right mix of technical expertise, implementation experience and project management skills to execute a successful data center migration. The **EMP/High Altitude Electromagnetic Pulse (HEMP) / Intentional Electromagnetic Interference (IEMI)** secured data center was designed with a 6-sided solid steel cage, inclusive of:

- Wave guides
- Steel meshed air feeds and returns
- Copper tongue and groove perimeter

Designed with a Tier 3 infrastructure protocol, the data center came complete with 2 weeks continuous, stand-alone power generation to ensure full operational recovery in the threat of disasters or emergencies. The solution was value engineered, within budget and with no cost excess in comparison to a conventional data center build. Standardization of infrastructure and network architecture was greatly improved, as was security, redundancy, and scalability of systems.

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