GFS Crane for Financial Services

The Financial Services Industry (FSI) cannot afford any disruption in the running of its applications or IT infrastructure as it supports a globally interconnected round-the clock operation. The tenet is simple: no single failure should impact continuous availability of any mission critical application.

CIOs in Financial Services Industry (FSI) are challenged to provide applications and IT infrastructure to meet the industry's key requirements of:

- Risk management
- Data Security;
- Information Governance & Compliance; and
- Business Continuity

This paper concentrates on Business Continuity aspect in the Financial Services Industry, how Data Center Infrastructure Management (DCIM) software like GFS Crane can help and finally concludes with a Case Study of GFS Crane deployment in a leading Financial Services firm.

Role of DCIM

The Data Center has a myriad of assets – both IT and Facilities, besides the mission critical applications themselves – that requirenear 100% uptime. To provide such high availability, FSI Data Centers are built with minimum Tier 3 standards of Uptime Institute. Such standards require redundancies for all categories of equipment. This multiplication of assets, paradoxically, adds to the complexity of business continuity planning (BCP) as DC Managers now have to monitor the entire grid of computing and non-computing equipment, all provisioned with N+1 and sometimes N+2 levels. DCManagers in this industry now unequivocally state that mere redundancies are not good enough. What they need is the ability to predict failures and take proactive action. This can also reduce non-significant over-provisioning and avoidable capital expenditures. In turn, this can also improve asset utilization and reduce power consumption.

Strangely, while business continuity is fundamental to FSI, BCP today is constructed at equipment redundancy level only. There is no predictive analytics to support BCP. This is where Data Center Infrastructure Management (DCIM) software like GFS Crane can help.

GFS Crane for BCP

GFS Crane comes with three unique features for BCP:

- Visually defining the entire chain of all asset relationships: application to back-up power, helping to identify missing or weakest links and the redundancy paths;
- Providing alerts when critical thresholds are breached;
- Trending to predict failures based on past incidents and their periodicity.

Configuring Asset Relationships:

GFS Crane provides powerful drawing tools to configure entire Data Center across its multiple zones and floors with all asset relationships: computing as well as non-computing. This includes:

- Which applications are on which servers and storage: primary and secondary;
- On which racks are these servers and storage mounted;
- The associated network servers, PDUs and UPS
- The configuration of all other equipment: HVAC, chillers, transformers and back-up power.

Drag & drop features help to simulate different configurations that help in both optimizing the asset deployment in the DC as well as in capacity planning.

Once drawn and captured in the database, we know exactly what are the weakest or missing links that has potential to make business continuity vulnerable. Procurement decisions through GFS Crane Manufacturer Repository can assist to plug these gaps.

Redundancy paths are mapped to assist immediate identification of alternatives to overcome a failure or (even better) before it occurs as failure predictions are an important feature of BCP supported by GFS Crane.

Setting Alerts:

GFS Crane provides the user to set threshold levels for different parameters such as utilization, power and temperature. Automatic alerts are dispatched via email and text messages when such threshold levels are breached to help prevent failures.

Failure Predictions:

GFS Crane maintains a history of all move-add-change (MAC) decisions as well as a record of prior failures, the moment they happened and their cause. Analytic tools can then make probabilistic forecasts of potential failures based on past data of periodicity of equipment failure over time or prevent a MAC decision that has shown to have been problematic on previous occurrence(s).

GFS Crane in Financial Services

IDFC Limited, India's leading integrated infrastructure player successfully implemented GFS Cranesoftware. One of their goals was to improve BCP, besides better asset management and improved energy efficiency and sustainability reporting.

IDFC incorporated best practices in their design of a new Data Center which received Uptime Institute's Tier 3 Design Certification and Green Data Center certification from TUV Rheinland. IDFC's challenge was that in spite of having a Building Management System (BMS), Systems Management Tool and power monitoring devices, its IT Department did not have an automated visibility of their full infrastructure, utilization and power consumption patterns by different equipment in the Data Center. Neither did they get any alerts when certain critical thresholds were breached to enable proactive steps for preventing failures.

Besides improving higher availability and business continuity, GFS Crane is also enabling power savings by identifying candidates for virtualization, retirement and replacement.Asset auto-discovery, dynamic monitoring and analytics are helping to achieve other key goals: reducing over-provisioning and improving utilization of existing assets, doing proactive E-Waste management, and providing the CIO with accurate figures on power consumption, carbon emission and floor and rack space utilization for better capacity planning. A dashboard provides daily PUE, DCiE and health of the data Center against benchmarks it has set for itself.

Summary

Business Continuity Planning is fundamental to the success of a financial services business – banking, insurance or capital markets. Merely providing for equipment redundancy is neither operationally efficient nor economically sound. Today's demands of high availability, while at the same time ensuring better asset utilization and energy efficiency, necessitates a software to support business continuity. GFS Crane provides this through its Asset Management and Capacity Planning modules.

We are very happy to collaborate with GreenField Software for GFS Crane. Sustainability management is one of our key performance goals, as India's leading financial services institution. We have been an early adopter of DCIM software, which helped us use energy efficiently and reduce cost, thereby setting a benchmark for other Data Centers in the financial services industry to follow".

- KumananVetrivel, Senior Director-IT, IDFC Limited

GreenField Software's Mission is to help Data Centers control capital expenditures, reduce operating expenses and mitigate the risks of Data Center failures.

Besides DCIM Software, GFS offers Data Center Advisory Services in the areas of best practices, capacity planning, energy efficiency and business continuity of data centers.

http://www.greenfieldsoft.com

For a live demonstration of GFS Crane, write to us:

GreenField Software Private Limited
P-25 Transport Depot Road,
Kolkata – 700088, India.
Email: sales@greenfieldsoft.com
Tel: +91-33-2448-0307; Fax: +91-33-2440-6073