

GFS Crane DC: Case Study

IDFC Limited, India's leading infrastructure company, recently launched an enterprise-wide energy and sustainability management program which included the adoption of Data Center Infrastructure Management (DCIM) software in their brand new state-of-the-art data center.

This new data center was built in line with the Tier III standards set by the Uptime Institute, which is regarded as "The Global Data Center Authority". Tier III facilities typically offer close to 100% availability. In addition to meeting the Uptime Institute's stringent Tier III requirements, IDFC became the first company in India to get certified as green energy efficient by TUV Rheinland, a German accreditation body for energy efficient IT systems.

As part of a continuous improvement process, IDFC implemented GFS Crane DC.

Keeping in mind his goal of improving energy efficiency in their data center, the CIO chose GFS Crane DC over other DCIM offerings, because of its rich features on both energy efficiency and asset management.

How GFS Crane DC Helped IDFC?

- 1. IDFC did not know the power consumed by individual devices in the data center.**
GFS Crane DC started measuring power consumption of servers and other IT equipment using soft metering and also interfaced with the existing Building Management System to capture Facility power consumption.
- 2. IDFC did not know the useful work done by the devices per watt of power.**
GFS Crane DC compared the resource utilization of servers (like CPU & memory) with power consumption to determine performance per Watt of power used by each server.
- 3. IDFC did not have real - time information on load for every rack and if more devices can be accommodated within the existing capacity.**
GFS Crane DC measured power consumption for each rack at real-time and determined current load and available capacity
- 4. The operating cost on power for the data center was not known to IDFC.**
GFS Crane DC helped to determine the monthly energy cost for the data center including expense on backup power (diesel)
- 5. Before DCIM implementation, IDFC was calculating PUE for the data center manually and it was not real-time.**
GFS Crane DC provided -
 - Real-time PUE & DCiE calculation
 - PUE trend over time
 - Comparison of measured PUE with industry benchmark, providing an efficiency scorecard for our data center.

6. IDFC did not have sustainability reporting for the data center before DCIM was implemented.

GFS Crane DC enabled –

- Calculation of carbon footprint of the data center
- Monthly trends on CO2 emission
- Device-wise CO2 emission data

7. Recommendations to improve efficiency

- GFS Crane DC identified under-utilized servers that can be candidates for retirement resulting in lower power consumption, lesser emission and lower power bills for the data center.
- GFS Crane DC identified old servers which have depreciated and can be replaced with more energy efficient devices.
- GFS Crane DC identified servers that can be virtualized and recommended the best possible virtualization scenario

*Speaking about the benefits,
KumananVetrivel, Senior
Director-IT, IDFC Limited said*



“We are very happy to collaborate with GreenField Software for GFS Crane DC. Being India’s leading financial services institution with sustainability management as one of our key performance goals, we wanted to be early adopters of DCIM software as it helps us use energy efficiently and reduce costs thereby setting a benchmark for Data Centers in the financial services industry to follow. We are confident that through this software we will be able to measure and optimize our resource usage.”

GreenField Software Private Limited is pioneering the Next Gen DCIM that reduces the Total Cost of Ownership (TCO) through Soft Metering and helps to allocate and optimize Data Center resources through Constraint-Based Planning.