Optimized Data Centers Simulation

Service Brief

The data center challenge

Organizations worldwide are increasing their strategic use of technology. By automating more of their business processes and investing in more IT resources they are straining their underlying data center energy, cooling and space resources. This exposes their whole business to potential IT risks. The Data Center Institute predicts that by the year 2010 more than half of all data centers will have to relocate to new facilities or outsource some applications, and also that over the next five years power failures and limits on power availability will halt data center operations at more than 90 percent of all companies.[1] The EPA reports that in the next five years more than 50 percent of large enterprises will face a shortage of data center floor space.[2] This data center crisis has serious implications, as it could jeopardize critical business functions and undermine innovation and growth.

This situation results from a lack of collaboration and alignment between business application development, IT management and facilities management. Nearly every business process depends on data center resources that span a diverse mix of old and new technology assets, software applications and staff skill sets. A complex mix of business, IT, and facility requirements must be integrated during the pre-design phase, in order to design an optimized data center solution that will support current operations and future growth. Collaboration among key stakeholders is required to implement innovative strategies that will drive ongoing improvements in programming, design, operational efficiency and increasing business responsiveness.

HP Optimized Data Centers Simulation

Data Centers require a huge investment to design, build and then operate. It is critical to your business success that your Data Center operates at peak efficiency to achieve its business goals. HP's Optimized Data Centers Simulation will help you do exactly that.

Set in the adrenalin-fuelled world of motor sport, the HP Optimized Data Centers Simulation highlights business demands and data center constraints with hands on techniques for improving responsiveness, efficiency and risk management throughout the data center lifecycle. Set in the context of the "high octane" world of motor racing, the simulation demonstrates how increased collaboration and synergy lead to optimized data center solutions: facilities and IT infrastructure that offer our customers greater reliability, cost efficiency and improved business results.

[1] AFCOM's Data Center Institute, AFCOM 2006

[2] EPA report to address Public Law 109–431

In the simulation real time race car performance and business system displays are supported by simulation building blocks including data center facilities, power and cooling systems, servers, storage, virtualization technology, and applications combined with the key operational processes and roles.

The simulation sessions

The simulation session includes up to three rounds of highly interactive cycles of planning, operating and improving data center capabilities.

- The first round tests the abilities of the team to deliver real time race results while operating a typical data center. This round highlights the knowledge and operational gaps between business departments, IT, and facilities.
- The second round introduces proven techniques for coordinating Data Center teams while measuring and managing complex power and cooling systems, servers, software applications, storage systems, network resources, and management tools.
- The final round develops a strategic approach to data center investment and resource allocation to drive better utilization of assets and increased return on investment while aligning with business requirements.

The HP Optimized Data Centers Simulation uses a lifecycle model to help companies identify critical data center design requirements for current operations and future growth. These include energy and space efficiency solutions that can help to reduce costs while removing capacity-related obstacles to growth. This enables your enterprise to meet current and future business demand while effectively supporting critical corporate environmental and compliance initiatives.

Why HP?

HP is a worldwide leader in Data Center programming, design, operations, and management. Proof-points for our experience and expertise include:

- **Data center design:** Have designed and commissioned over 50 million square feet of raised floor environment
- **Energy:** Have designed LEED certified data centers for the private and public sectors
- **International experience:** Hold active projects in North America, South America, Europe, Asia, the Middle East, and Australia
- **Thought leadership:** Recognized as industry leaders through continuous publication and worldwide presentations on design trends and emerging technologies
  - Leadership in the delivering Mission Critical Support
  - Leaders in the development of standards for Service Management such ITIL v3

The HP Optimized Data Centers Simulation proves that learning from the experts about optimized data centers can be fun and valuable at the same time. Don't believe it? Find out for yourself by experiencing the simulation, and learn more about our approach to designing and operating cost effective Hybrid-Tiered data centers. Take a test drive!

HP offers a host of proven Data Center technologies, services, and training programs to help both private and public sector clients optimize organizational collaboration, synergy, and cost control throughout the lifecycle of their Data Center, including pre-design of the Center itself. Just as we have helped some of the world's leading corporations, institutions and agencies, HP can guide you through every aspect of your Data Center design and operation.

Technology for better business outcomes

To learn more, visit www.hp.com/learn/datacenter

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