Improving Data Center Efficiency to Drive Down Operating Costs

# Data Center Assessment Services

#### HIGHLIGHTS

Expert consulting from a company with extensive knowledge of HPC and data center environments

Improve Power Usage Effectiveness (PUE) by turning your data center and lowering utility bills

Identify hot spots, assess power and cooling problems before they cause you downtime

## Overview

The SGI Data Center Assessment Services is a collection of targeted services that examine your existing data center infrastructure, analyze your specific circumstances and recommend improvements. Depending on your specific needs and direction, these services can be used individually or as part of a package to address common data center business concerns:

- Calculating current Power Usage Effectiveness
- Identifying unbalanced, inefficient, or "dirty" power distribution
- Verifying a site's ability to use the latest high efficiency dense systems
- Solving specific data center concerns
- Review of the infrastructure including electrical and mechanical elements to maximize the efficiency and energy savings

When you engage Professional Services, we will put together a custom package to address your specific concerns; your tailored Data Center Assessment. Each customized offering includes complete project organization and communication during the assessment and helps mitigate the risks associated with any project where facilities changes are made to an existing environment. Due to SGI's certified project management methodologies, project completion is on time and within budget, affording customers effortless transitions to new, more efficient environments.

#### 1 to 5 Day Engagement

This service is perfect for customers requiring standard on site/remote Project Management, Data Collection and Assessment Skills and recommendations for a more efficient, greener tomorrow.

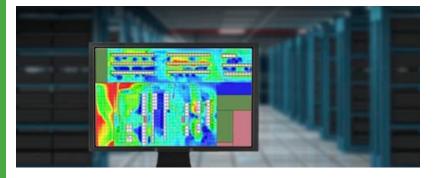
#### **Scope Statement**

Experienced SGI personnel can perform the following Assessment tasks depending on services selected:

- Calculate the PUE of the facility based on the power measurements taken during the onsite visit
- Measure current power consumption at the facility level and at the IT level (this is usually done at the output of the Power Distribution Unit)
- Create temperature, humidity and air flow maps based on the measurements taken during the onsite visit
- Review technical information (mechanical and electrical one-line and as-built drawings, server efficiency information, data center floor plans, rack layouts)
- Review maintenance practices
- Analyze data and information gathered during the onsite visit.
- Write assessment report including recommendations.

#### **Project Deliverables:**

- Statement of Work
- Summary Report



# **Data Center Assessment Services**

### Methodology

SGI employs the following phases to manage this project:

#### Phase I – Planning and Design

During the Planning and Design phase,

- Conducts meetings to gather all information needed to ensure a successful assessment.
- Organizes and develops a detailed Project Plan.
- Schedules the installation and configuration to minimize Customer business disruptions.
- Involves Subject Matter Experts, Solutions Architects and Technical Consultants as appropriate.

#### Phase II – Information gathering and Assessment

During the Implementation and Testing phase,

- Works with site to collect data and information necessary during the on-site visit
- Provides on-site/remote resource to execute the plan.
- Visual inspection of environment.
- Validates infrastructure drawings.
- Investigates all agreed upon criteria.

### Phase III – Documentation and Acceptance

During the Documentation, Functional Overview, and Acceptance phase,

- Reviews and completes the SGI Data Center Assessment Report.
- Creates all summary reports in the Statement of Work.
- Presents report and discusses findings with involved parties.
- Conducts a Summary Overview review with customer to discuss all recommendations.
- Clarifies findings to customer's satisfaction and discusses next steps

### **Customer Responsibilities**

- Provide at least one technical resource with the appropriate access privileges to assist SGI resource.
- Work with Project Manager to collect requested information and documents
- Provide outage window if needed.
- Hold to plan after agreement.
- Provide access to all power, HVAC, computing systems, storage systems, and networks as necessary to perform the collection during normal business hours, or at mutually agreed timeframes.
- Provide support from technical support teams for all vendors and third parties as necessary.
- Assume all responsibility for network connectivity, performance, and configuration issues.

### **SGI Professional Services Resource Staff**

- Project Manager
- Solution Architect(s)
- Technical Consultant(s)
- Subject Matter Expert(s)

Any additions or changes to Project Scope must be stated in a separate SGI change order detailing the changes, and the impact on pricing, and timeframes. Such changes include, but are not limited to: • Any work or requirement not listed in the Statement of Work.

- Delays due to site being unready for work to be performed
- Onsite Project Management

www.sgi.com/products/professionalservices

#### Corporate Office

46600 Landing Parkway Fremont, CA 94538 tel 510.933.8300 fax 408.321.0293 www.sgi.com North America +1 800.800.7441 Latin America +55 11.5185.2860 Europe +44 118.912.7500 Japan +81 3.5488.1811 Asia Pacific +61 2.9448.1463

© 2009 Silicon Graphics International Corp. All rights reserved. All other trademarks, registered trademarks, tradenames, company names and service marks are the respective properties of their holders. 20091016 P/N 4176