CISCO IT CHECKLIST FOR THE SERVICE-ORIENTED DATA CENTER MODEL

In implementing the service-oriented data center model, Cisco IT has effectively developed a service-oriented architecture that is supported and enhanced by critical infrastructure services and resources. Very importantly, the Cisco IT service-oriented architecture and service-oriented infrastructure are driven by complementary business goals. Here are some basic steps to help ensure that your service-oriented architecture requirements are reflected in infrastructure planning and implementation.

Governance

- ❒ In your service-oriented infrastructure business case, ensure that both hard and soft benefits associated with a robust service-oriented architecture deployment are reflected.
- ❒ Build a cross-functional architecture team that includes stakeholders from application development and support, system administration, storage, network engineering, physical facilities, business continuance, and security.
- ❒ Create a three- to five-year vision for the data center architecture and a phased roadmap for getting there. Align the architecture roadmap to the service-oriented infrastructure roadmap if and when it is available.

Planning and Design

- ❒ Identify relevant near-term challenges and wins, such as server standardization, storage consolidation, server I/O consolidation, and application delivery optimization. Implement these solutions within the context of a broader service-oriented architecture strategy.
- ❒ Investigate virtualization technologies (e.g., server, storage, and network virtualization) and cluster computing within the context of supporting the service-oriented architecture.
- ❒ Determine which applications can be evolved or implemented in the service-oriented architecture and which can be ported to a shared, standardized service-oriented infrastructure.

Operations and Management

- ❒ Change processes to focus on supporting cross-technology infrastructure services, not just individual devices.
- ❒ Try to ensure that infrastructure services can be defined centrally and enforced consistently end to end.

To help assess how well your service-oriented data center model is performing, following are questions from Ken Bulkin, IT senior manager for strategic programs, and Mike Matthews, IT program manager, both in the Service-Oriented Data Center group at Cisco. Addressing each one of these will go a long way toward building an effective, dynamic IT implementation and then keeping it humming for a long time.

- ❒ What is your level of server virtualization? Are you closer to 5,000 servers and 1,000 virtual machines or 500 servers and 2,000 virtual machines?
- ❒ Can you track delivery of an application or service end to end through all the servers, storage, and communications links?
- ❒ How much have application provisioning times come down? When the Cisco service-oriented data center is fully automated, it should be able to set up new applications within minutes.
- ❒ What costs are you saving, e.g., new servers, new storage systems, new SysAdmins?
- ❒ Can you fulfill the guarantees of your various SLAs?
- ❒ Have you estimated the capacity you'll need over the next five years and planned how you'll supply it? What are the growth patterns of the applications and services your service-oriented data center supports?
- ❒ Is the service-oriented data center well aligned with your business practices and goals? Do you understand the impact of its policies on specific activities such as technical support and customer service?
- ❒ How will the service-oriented data center operations affect your customers?
- ❒ If there is a failure, do you understand what its effects will be on your company, in terms of both business operations and IT?