# Cisco Director Class SAN Planning and Design Service

## Improve data center infrastructure for accessing, managing, and protecting growing information resources.

**Mitigate risk and accelerate the deployment of your Cisco SAN Solution with Cisco Director Class SAN Planning and Design Service.**

Businesses face the challenge to improve data center infrastructure for accessing, managing, and protecting their growing information resources. A solution to accelerate your migration from discrete storage area networking (SAN) islands to an efficient, interconnected, intelligent SAN based platform is critical to business continuance and disaster recovery for intelligent storage fabric applications.

Designed for large-scale initiatives, the Cisco Director Class SAN Planning and Design Service can help you accelerate your migration from discrete storage area networking (SAN) islands to an efficient, interconnected, intelligent SAN based on the Cisco MDS platform. Director-class Cisco MDS 9000 Multilayer Directors and Fabric Switches use multiple layers of intelligence to consolidate SAN islands into a secure, manageable solution that supports business continuance and disaster recovery for intelligent storage fabric applications.

### Plan and Deploy an Efficient Large-Scale SAN Solution

The Cisco Director Class SAN Planning and Design Service is a project-based service that helps you speed the identification and resolution of planning, design, and implementation issues by addressing your requirements for storage, server, and data center consolidation, as well as for business continuance and disaster recovery, during the initial SAN deployment. The activities and deliverables available with the Cisco Director Class SAN Planning and Design Service are separated into three areas:

- Plan
  - SAN assessment
  - Implementation and migration plan
- Design
  - High-level design
  - Low-level design
- Learn
  - Knowledge transfer and mentoring

## Plan

Cisco and Cisco Certified Partners can help you plan effectively, helping to mitigate the risk involved with designing a SAN infrastructure. Our data center experts can evaluate your network's strengths and limitations, services, and solution requirements and validate that planned changes are in alignment with your business goals. We can examine critical readiness factors such as infrastructure design, environmental issues, and security and make recommendations to help you proactively resolve gaps. The activities and deliverables scoped for the plan phase are outlined in Table 1.

**Table 1.** Cisco Director Class SAN Planning and Design Service Plan Activities, Deliverables, and Benefits

| Activities and Deliverables | Benefits |
|---|---|
| **SAN assessment**<br>· Collect project-specific data that will be used to organize a detailed project plan covering both the implementation and migration of your SAN<br>· Executive summary containing an overview, definitions, and assessment scope as well as collected data and general findings<br>· Overview of the current SAN infrastructure, including the general data center environment and a SAN design<br>· An analysis of the current environment, including change management and issue handling, security, challenges, and issues<br>· SAN infrastructure findings and suggestions that include SAN scalability, SAN availability, zoning, domain configuration, interface configuration, backup and restore, data replication, and disaster recovery<br>· Operating environment findings and suggestions applicable to management and monitoring, security, and change management | · Provides a detailed project plan that can be used for future SAN deployments<br>· Collaborative approach provides best-in-class solution<br>· Provides a prioritized list of recommendations based on identified and documented Cisco leading practices |
| **Implementation and migration plan**<br>· Cisco data center experts provide guidance to help you successfully deploy a robust and highly stable SAN using Cisco MDS 9000 Multilayer Directors and Fabric Switches<br>· Provides step-by-step procedures to implement the configuration specified in the low-level design<br>· Development of a detailed rollback plan for each phase of the implementation is available to use if an issue is found during the implementation<br>· Basic site setup such as switch names, virtual SANs, cables and labels, zoning and aliasing, and cable locations<br>· Management, security, port configuration, and VSAN configuration<br>· Migration and cutover tasks | · Faster deployment<br>· Repeatable process to implement low-level design<br>· Avoid network downtime |

## Design

Developing a detailed design is essential to reducing risk, delays, and the total cost of network deployments. Cisco and Cisco Certified Partners can provide an implementation-ready design that you can use to engineer your network. We consider your technical requirements and network design goals to create an architecture optimized for your organization that can reduce the need for costly redesign, improve performance, and scale to support future changes. The activities and deliverables scoped for the design phase are outlined in Table 2.

Table 2.  Cisco Director Class SAN Planning and Design Service Design Activities, Deliverables, and Benefits

| Activities and Deliverables | Benefits |
| --- | --- |
| High-level design<br>· Existing storage topology diagrams<br>· Functional requirements<br>· Feature recommendations<br>· Scalability design considerations | · Architecture that validates your specific goals for deploying MDS platform<br>· Efficient platform migration<br>· SAN strategy and roadmap aligned with assessment recommendations |
| Low-level design<br>· Detailed reference, or blueprint, for the proposed SAN architecture<br>· SAN topology and individual component configuration<br>· SAN infrastructure to help you manage ongoing documentation of changes<br>· Workbook that covers naming conventions, zoning, specific switch configurations, IP addressing, device and port mapping, and other information specific to your environment | · Provides a detailed reference, or blueprint, for the proposed SAN architecture<br>· Design details support a successful deployment<br>· Documentation of SAN infrastructure helps you manage ongoing documentation of changes<br>· Delivers a collaboratively developed workbook with information specific to your environment |

## Learn

Help increase your team's self-sufficiency by sharing knowledge and leading practices. The activities and deliverables scoped for the learn phase are outlined in Table 3.

Table 3.  Cisco Director Class SAN Planning and Design Service Learn Activities, Deliverables, and Benefits

| Activities and Deliverables | Benefits |
| --- | --- |
| Remote knowledge transfer sessions<br>· Deliver remote knowledge transfer sessions about Cisco products and technologies you use. This activity typically includes the following:<br>– Provide informal educational sessions<br>– Conduct chalk talks<br>– Regular communication by conference calls and email | · Provides anytime access to our industry-leading expertise and intellectual property<br>· Helps train your operations staff on leading practices for deploying and integrating WAAS solutions<br>· Increases the self-sufficiency of your network support team<br>· Improves staff proficiency through knowledge exchange with Cisco experts |

## Benefits

The Cisco Director Class Planning and Design Service helps you accelerate the process of designing and deploying a SAN based on the Cisco MDS platform. Whether you need to create a new SAN or connect SAN islands into an integrated, manageable solution, we apply a proven methodology and best practices to help you support intelligent storage fabric applications.

The Cisco Director Class SAN Planning and Design Service helps you to:

· Deliver more efficient storage networking with a Cisco SAN solution
· Quickly identify and resolve planning and design issues so you can reduce the inherent risks in changing your IT infrastructure
· Deploy a SAN solution that delivers the features and functions you expect on time and on budget
· Effectively integrate multiple-vendor solutions by working closely with Cisco original storage manufacturer (OSM) partners
· Realize the lower cost-of-ownership potential of your Cisco SAN solution
· More efficiently use existing resources by enhancing staff skills through training and knowledge exchange with Cisco experts

## Prerequisite Services

Before you implement the Cisco SAN solution, Cisco recommends the Cisco Architecture Value Analysis Service. This service identifies the operational and financial commitments required to build a new infrastructure. For larger businesses, Cisco recommends the Cisco Data Center Assessment Service for Virtualization Operations Management, formerly known as Cisco Virtualization Operations Management Assessment Service. This service identifies the barriers and risks limiting the ability to efficiently operate a virtualized data center  and transforms operating models and management silos.

## Follow-on Services

To realize the value of the architecture, network devices, and applications need to be secure available, and operating reliably. Cisco recommends the Cisco Data Center Optimization Service as a next step after the Cisco Director Class SAN Planning and Design Service. The Cisco Data Center Optimization Service provides optimization services specific to SAN in addition to ACE, unified fabric (Cisco Nexus™), unified computing, WAAS, end-to-end architecture, and virtualization.

## Why Cisco Data Center Services

Today, the data center is a strategic asset in a world that demands better integration among people, information, and ideas. Your business and your data center work better when technology products and services are aligned with your business needs and opportunities. Using a unique, unified view of data center assets, Cisco and our industry-leading partners deliver services that accelerate the transformation of your data center. Cisco takes an architectural approach to help you efficiently integrate and manage data center resources. Cisco Data Center Services help you reduce costs and deliver high availability and application performance.

## Cisco and Partner Expertise

Cisco and our partners use leading practices and proven methodologies to help you quickly and efficiently plan and deploy a high-performance, resilient, and scalable architecture. The Cisco Director Class SAN Planning and Design Service is delivered by Cisco Advanced Services and partners who hold a wide array of industry certifications and are subject matter experts in business and technology architectures and data center technologies. They have direct experience in planning, designing, and supporting SAN infrastructures. Our product and technology expertise is continuously enhanced by hands-on experience with real-life networks and broad exposure to the latest technology and implementations.

## Availability

The Cisco Director Class SAN Planning and Design Service is a statement-of-work (SOW)-based service and is widely available. Contact your local service account manager about availability in your area.

## For More Information

For more information about services for Cisco Director Class SAN Services or Cisco Data Center Services, contact your Cisco service account manager or visit the Cisco Data Center Services at www.cisco.com/go/dcservices.

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