## 



# Cisco Application Control Engine Planning and Design Service

## Securely enable applications without compromising performance.

Many enterprises and service providers need a faster way to enable applications while achieving performance and security metrics. The Cisco ACE module for Cisco Catalyst® 6500 Series Switches and Cisco 7600 Series Routers helps you better control the processes of deploying, securing, and accelerating applications across your extended organization. By defining fast and secure application services in unique virtual devices, the ACE module can help you increase the availability, performance, and security of your data center applications.

## Plan and Deploy a Cisco ACE Solution

Data centers are complex environments. The Cisco® ACE Planning and Design Service helps mitigate the risk of making changes to your data center and accelerates deployment. We can help you successfully implement ACE in your existing application environment, design a new deployment, and migrate from a Cisco Content Service Switch (CSS) or Content Switching Module (CSM) to the ACE module.

The Cisco ACE Planning and Design Service is a project-based service that helps you speed the identification and resolution of planning, design, and implementation issues and helps you ensure that your data center infrastructure is scalable and able to meet your future applications requirements. You can count on Cisco for assistance in deploying the new features offered by ACE while developing internal skills to manage this environment after it is operational.

Mitigate the risk of making changes to your data center and accelerate deployment of the Cisco Application Control Engine (ACE) Solution with Cisco ACE Planning and Design Service. The activities and deliverables available with the Cisco ACE Planning and Design Service are separated into three areas:

- Plan
- -ACE network assessment
- -Implementation and migration plan
- Design
- -High-level design review
- -Low-level design review
- -Implementation support
- -Migration support
- Learn
- -Remote knowledge transfer sessions

## 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 ACE Planning and Design Service Plan Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits
ACE network assessment	
<ul> <li>Executive summary containing an overview, definitions, and assessment scope as well as collected data and general findings</li> </ul>	<ul> <li>Accelerates the adoption of Cisco ACE technology</li> <li>Collaborative approach provides best-in-class</li> </ul>
Overview of the current ACE infrastructure, including the	solution
branch office environment and ACE design An analysis of the current environment, including change management and issue handling, security, challenges,	Provides a prioritized list of recommendations based on identified and documented Cisco leading practices
and issues	Provides a detailed project plan that can be
Integrates technical requirements and design goals into your Cisco ACE infrastructure design with the leadership	used for future ACE deployments
of Cisco experts using proven designs	Minimized expensive, time-consuming, and intrusive redesign by facilitating proper design
Operating environment findings and suggestions applica- ble to management and monitoring, security, and change management	early in the lifecycle
ACE application analysis	
<ul> <li>Includes a customer-specific application and ACE optimiza- tion policy map (including most nonstandard TCP/IP ports)</li> </ul>	Provides a list of chatty applications (high pro- tocol overhead) that should be considered for
ACE capacity planning recommendations	QoS engineering
Top talker application and destination servers along with average response time (application server to edge of the data center)	Improves capacity planning with the knowledge of volume of data exchanged and projected growth
	<ul> <li>Helps determine the correct ACE device models and number to include in design</li> </ul>

## Activities and Deliverables

#### Implementation and migration plan

- Review Cisco ACE deployment plan and strategy to help minimize deployment time and service disruption
- Analyze and integrate Cisco ACE deployment plan into the existing infrastructure
- Review installation and commissioning test plans
- Analyze any changes affecting operations
- Provide an implementation plan review report
- Step-by-step procedures required for successful migration from Cisco Wide Area File Services (WAFS) software or Cisco Application and Content Networking System (ACNS) software to Cisco ACE
- Hardware resource assessments and recommendations

## Benefits

- Accelerates successful Cisco ACE implementation
- Improves your ability to meet an aggressive deployment schedule
- Proactively identifies potential risks to help minimize disruption to the existing infrastructure during deployment
- Potentially reduces the duration of maintenance windows
- Helps ensure that your Cisco ACE implementation plan is complete and that it contains the critical elements required for a predictable, successful deployment

## 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 ACE Planning and Design Service Design Activities, Deliverables, and Benefits

Activities and Deliverables	Benefits
<ul> <li>High-level design</li> <li>Existing storage topology diagrams</li> <li>Functional requirements</li> <li>Feature recommendations</li> <li>Scalability design considerations</li> </ul>	<ul> <li>Architecture that validates your specific goals for deploying the Cisco ACE solution</li> <li>Efficient platform migration</li> <li>ACE strategy and roadmap aligned with assessment recommendations</li> <li>Improves the performance, resiliency, and availability of your Cisco ACE infrastructure</li> </ul>
<ul> <li>Low-level design review</li> <li>Review existing Cisco ACE deployments or provide a detailed review of a customer-provided Cisco ACE design</li> <li>Verify that the chosen platform, features, and functions meet the design objectives</li> <li>Review the customer-provided design to verify that it integrates the technical requirements and design goals</li> <li>Review the configuration to verify conformance or compliance with Cisco best practices</li> <li>Assess and validate the scalability and design limitations of the design</li> <li>Identify opportunities to improve design perfor- mance, security, and availability</li> </ul>	<ul> <li>Provides a detailed reference, or blueprint, for the proposed ACE infrastructure</li> <li>Design details support a successful deployment</li> <li>Verifies that your technical requirements and design goals are integrated into your Cisco ACE design through the use of proven design principles</li> <li>Minimizes expensive, time-consuming, and intrusive redesign by facilitating proper design early in the lifecycle</li> <li>Improves the performance, resiliency, and availability of your Cisco ACE infrastructure</li> </ul>

Activities and Deliverables	Benefits
Implementation support	
Onsite or remote support for implementation of the recommended solutions	<ul> <li>Assistance to help you install, configure, and manage your network</li> </ul>
<ul> <li>Provide leading practices recommendations and assistance in loading configurations</li> </ul>	Mitigate risks and rapidly address any issues that may arise
Migration support	
<ul> <li>Provides help transitioning of existing environment to a Cisco family-based architecture</li> </ul>	Assistance to help ensure a smooth and successful transi- tion event with problems addressed quickly
<ul> <li>Support for incident management</li> </ul>	

## 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 ACE Planning and Design Service Learn Activities, Deliverables, and Benefits

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

## **Benefits**

The Cisco ACE Planning and Design Service helps you accelerate deployment of Cisco ACE solutions for fast, secure application access in a scalable environment The Cisco ACE Planning and Design Service helps you to:

- Integrate your technical and design goals to create a customized design that helps you better control the processes of deploying, securing, and accelerating applications using Cisco ACE
- Quickly identify and resolve planning and design issues so you can reduce the inherent risks in changing your IT infrastructure
- Deploy a Cisco ACE solution that delivers the features and functions you expect on time and on budget
- Expand your IT staff's knowledge of Cisco ACE solutions through access to Cisco experts and resources

## **Prerequisite Services**

Before you implement the Cisco ACE 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 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 ACE Planning and Design Service. The Cisco Data Center Optimization Service provides optimization services specific to ACE in addition to unified fabric (Cisco Nexus<sup>™</sup>), SAN, 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 ACE 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 ACE 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 ACE 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 ACE 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.

Cisco Services.

Making Networks Work. Better Together.



Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd. Singapore Europe Headquarters Cisco Systems International BV Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, CCSI, Cisco Eos, Cisco HealthPresence, Cisco IronPort, the Cisco logo, Cisco Lumin, Cisco Nexus, Cisco Nurse Connect, Cisco Pulse, Cisco StackPower, Cisco StackPower, Cisco StackPower, Cisco TelePresence, Cisco Unified Computing System, Cisco WebEx, DCE, Flip Channels, Flip for Good, Flip Mino, Flipshare (Design), Flip Ultra, Flip Video, Flip Video, Flip Video (Design), Instant Broadband, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn, Cisco Capital, Cisco Capital, Cisco Strinanced (Stylized), Cisco Store, and Flip Gift Card are service marks; and Access Registrar, Aironet, AllTouch, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, Continuum, EtherFast, EtherSwitch, Event Center, Explorer, Fast Step, Follow Me Browsing, FormShare, GianMaker, GigaDrive, HomeLink, LlYNX, Internet Quotient, IOS, iPhone, iQuick Study, IronPort, the IronPort logo, Laser Link, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace, Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerKZY, PowerPanels, PowerTV (Design), PowerVu, Prisma, ProConnect, ROSA, ScriptShare, SonARThet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0908R)

Printed in the USA

C78-565214-01 10/09