



# Cisco Data Center Optimization Services

OPTIMIZE YOUR DATA CENTER ARCHITECTURE FOR DESKTOP VIRTUALIZATION AND CLOUD SERVICES BY UNIFYING YOUR APPLICATION, STORAGE, AND SERVER TRAFFIC INTO A COMPREHENSIVE FRAMEWORK.

## Increase Efficiency Through Integration and Virtualization

Businesses today are facing increasing business pressures and operational limitations. As enterprise needs grow and budgets shrink, managing desktop applications, networking, security, storage, and new computing models such as virtualized desktops and cloud services as separate entities has become a cumbersome and costly data center model. The enterprise demand for application services, business continuity, secure and reliable cloud services, and increased agility and scale coupled with lower costs has increased the need for optimized asset utilization and a unified approach toward resource and service management.

## Cisco Data Center Optimization Services

While consolidation and virtualization help integrate technology silos, incorporating these technologies across the data center requires effective communication between functional areas. In addition, optimizing your data center to be cloud ready and virtualizing thousands of desktops increase infrastructure complexity and require a unified approach to managing increasing complexity.

Cisco® Data Center Optimization Services are an architecture-based approach that blends traffic for applications, servers, and storage over a unified fabric. You gain a holistic view of all your data center functional areas that helps you incorporate transformational technologies, such as cloud models

and virtualized desktops. The resulting consolidated and optimized solution offers dynamic efficiencies that are easier to manage and scale and help promote cost reduction and savings.

Our holistic view of the data center extends top to bottom and end to end, since Cisco and partners can provide the required solutions to enable any type of customer initiative. This broader view allows for greater consolidation and application performance effects from our unified hardware systems. Furthermore, our services portfolio provides nonhardware assistance—people, process, and technology—to address virtualized desktops and cloud services and the demand for secure virtual data and operations.

## A Blueprint for Success

Cisco experts assess your current data center, recommend needed changes, and review design requirements and plans. They collaborate with you to develop detailed design standards for your data center and to evaluate the ability of your applications to meet future requirements. They also help you incorporate new technologies and features, so you can update your production environment more quickly while incurring less risk. The methodologies that Cisco experts share with you are blueprints for success, since they are used within Cisco and by our largest successful customers. These practices help Cisco adhere to tight deployment timelines while mitigating risk through proactive recommendations and escalation support. The service includes recurring

analyses of the performance data and configurations from your network devices to give you a continuous, strategic view of your data center.

## Ongoing Support

To help ensure the long-term security and relevance of your investment, Cisco also provides your team with continuous learning through hands-on and remote training sessions; ongoing design, improvement planning, and service and project management support; best practice audits; and postdeployment health checks. Ongoing communication with Cisco experts helps keep you informed about new products and software features for your environment.

## A Flexible Offering for Your Unique Needs

Cisco Data Center Optimization Services give you the opportunity to select individual supporting service packages, organized by hardware technology and solution specific to areas of your network and data center, and offers a broad selection of standard and optional activities and deliverables.

The following supporting service packages are available as part of Cisco Data Center Optimization Services:

### Strategy and Architecture

Strategy and architecture provide an evaluation of your current data center landscape and a plan to transform, virtualize, consolidate or grow, and automate your data center platform.

**Cloud Optimization**

Cloud optimization evaluates and helps you understand the current state of your technology (network/compute/storage/virtualization infrastructure) and operations management architectures (systems management tools). It also provides recommendations on changes required to help you transition to a cloud operational model that will enable an infrastructure as a service (IaaS).

**Desktop Virtualization Optimization**

Desktop virtualization optimization provides the key performance and utilization metrics of a customer's desktop and application environments. Our review of best practices for the evolving desktop virtualization environment is designed to support growth, improve productivity and IT operational processes, accelerate change, and develop a future deployment roadmap, including recommendations for the architecture for your desktop virtualization deployments.

**Unified Network Services Optimization**

Unified network services optimization helps you better manage the availability and the performance of distributed applications (such as Application Control Engine [ACE]) and provides an ongoing methodology for enabling operational excellence, including an annual cycle of assessments, support, and learning across your data center's Layer 4–7 devices. These activities support incremental innovation by synthesizing information from application topologies, performance reports and trends, transaction reports, alerts, and notifications. Unified

network services optimization provides a consolidated view of transactions, applications, servers, and the network. Support also extends to the wide area network (WAN) by providing design options and configurations that help maintain or improve application responsiveness utilizing wide area application services (WAAS) and Cisco Enterprise Content Delivery System (ECDS), as well as support for the solutions deployed to consolidate your remote office infrastructure into a centrally managed data center and optimize WAN performance.

**Unified Computing Optimization**

Unified computing optimization helps you evaluate how unified computing can improve the performance and efficiency of your data center's server capacity. Application requirements, trends, procedures, capacity patterns, and security needs are evaluated as a basis for recommendations on optimal architectures that are secure and resilient. To facilitate virtualization of your server environment, unified computing optimization also provides support for Cisco Nexus® 1000V and VMware products.

**Unified Fabric Optimization**

Unified fabric optimization helps you assess and evaluate how the unified fabric can improve the performance and efficiency of your data center. It provides an ongoing methodology for assuring operational excellence, including an annual cycle of assessments, support, and learning. The analysis and recommendations focus on advanced features such as Fibre Channel over Ethernet

(FCoE), Data Center Interconnect, Cisco Secure Trust, Data Center Ethernet, and Virtual Device Contexts.

**SAN Optimization**

Storage area network (SAN) optimization provides analyses and recommendations using an annual cycle of assessments, support, and learning for planned data center initiatives and newly released features to make the best use of data center assets. It also helps reduce the number of disparate islands of SANs.

**Complementary and Prerequisite Services**

Cisco Data Center Optimization Services are complementary to the Cisco Borderless Network Optimization Service (NOS) and can be ordered in tandem or standalone. To obtain the best results from the Cisco Data Center Optimization Services, Cisco recommends that you first deploy these services:

**Table 1.** Prerequisite Services by Technology

Technology/Component	Prerequisite Services
Strategy and architecture	<ul style="list-style-type: none"> <li>• Data Center Architecture Workshop</li> <li>• Data Center Facilities Assessment</li> <li>• Data Center Virtualization Architecture Blueprint</li> <li>• Architecture Value Analysis</li> <li>• Data Center Consolidation Service</li> <li>• Virtualization Operations Management Assessment</li> <li>• Virtualization Strategy and Roadmap Service</li> </ul>
Cloud	<ul style="list-style-type: none"> <li>• Cloud Strategy</li> <li>• Cloud Planning and Design</li> <li>• Cloud Implementation</li> </ul>

Technology/Component	Prerequisite Services
Desktop	<ul style="list-style-type: none"> <li>• Desktop Virtualization Strategy</li> <li>• Desktop Virtualization Planning and Design</li> </ul>
Unified networking services	<ul style="list-style-type: none"> <li>• Application Dependency Mapping</li> <li>• ACE Planning and Design Service</li> <li>• WAAS Planning and Design Service</li> <li>• Cisco Nexus Planning and Design Service</li> <li>• Virtual Desktop Infrastructure Planning and Design Service</li> </ul>
Storage	<ul style="list-style-type: none"> <li>• SAN Planning and Design Service</li> <li>• SAN Health Check Service</li> </ul>
Unified computing	<ul style="list-style-type: none"> <li>• Unified Computing Architecture Assessment Service</li> <li>• Unified Computing Planning and Design Service</li> <li>• Unified Computing Virtualization Services</li> <li>• Unified Computing Preproduction Pilot</li> <li>• Data Center Virtualization Service</li> </ul>
Unified fabric	<ul style="list-style-type: none"> <li>• Cisco Nexus Planning and Design Service</li> </ul>

## Benefits

A virtualized, consolidated data center based on a unified fabric for applications, servers, and storage is inherently more efficient than an operational model that requires separate management for each functional area. By turning your data center into an integrated system that offers a holistic operational view, Cisco Data Center Optimization Services can help you:

- Align people, processes, and tools to speed deployment and reduce costs

- Create a more reliable application environment that reduces downtime and increases productivity
- Improve the performance of business-critical applications and services
- Reduce operational costs and expenses
- Increase scalability so you can meet growing functional requirements with fewer hardware additions and software changes
- Quickly absorb and take advantage of technology innovations such as virtualized desktop services and cloud services

## 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. Cisco and our industry-leading partners deliver intelligent, personalized services that accelerate the transformation of your data center. Using a unique, network-based perspective and a unified view of data center assets, Cisco takes an architectural approach to help you efficiently consolidate, virtualize, and manage data center resources. Cisco Data Center Services help transform, optimize, and protect your data center to reduce costs, deliver high availability, and improve application performance.

## Availability

Cisco Data Center Optimization Services, offered as an annual subscription service, are widely available. Contact your local Cisco account manager about availability in your area.

## For More Information

For more information about Cisco Data Center Optimization Services, as well as the broad array of Cisco Services for the data center, contact your local Cisco account manager or visit [www.cisco.com/go/dcservices](http://www.cisco.com/go/dcservices).

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