

Cisco Data Center Facilities Assessment Service

Increase the availability, capacity, and life of your data center facility.



Service Overview

Data centers must respond to changing business needs, environmental conditions, security threats, and compliance requirements. Many enterprises update rapidly evolving network components more often than their network critical physical infrastructure (NCPI). This situation can lead to lower availability, utilization, and efficiency. A comprehensive facilities assessment can help you determine how well your physical infrastructure meets your current and planned networking needs, so you can better update your resources or design a new facility.

The Cisco® Data Center Facilities Assessment Service evaluates your physical data center infrastructure, including the overall site, power, cooling, physical security, and operational practices. The service is delivered jointly by Cisco Advanced Services and qualified Cisco partners with extensive expertise in data

center facility requirements. These experts use best-practice methodologies and advanced tools to identify problem areas between your facilities and networked systems. You receive recommendations that can help you improve critical infrastructure and extend the life of your data center.

Accelerate Your Success

The Cisco Data Center Facilities Assessment Service is part of a broad range of services offered by Cisco and our partners that use the Cisco Lifecycle Services approach to help companies accelerate their success with advanced technologies while increasing the return on data center and network investments. The Cisco Data Center Facilities Assessment Service offers activities in the prepare and plan phases of the network lifecycle.

With this service, you receive reports that can help you evaluate the physical infrastructure of an existing networking facility such as a data center, network operations center, server room, or communications closet. This information can help you create a physical infrastructure that supports updates and expansions or the design of a new facility.

The Cisco Data Center Facilities Assessment Service can be customized to your unique requirements. You can take advantage of some or all of the following activities:

- Site assessment
- Power and cooling assessment
- Site security assessment

- Fire detection and suppression assessment
- Operational assessment
- Project management

Create a More Efficient Physical Design

The site assessment can help you create a more efficient physical design for an existing or proposed networking facility. This assessment analyzes your floor plan and cabling system and identifies potentially harmful environmental conditions such as excessive humidity or heat. After these factors are analyzed, the site assessment provides a floor plan that can improve the layout of your facility and offer greater accessibility to your high-density infrastructure, and recommendations to help you simplify your power and network cabling. These tactics and procedures can produce a simplified, highly accessible facility that is environmentally and operationally more efficient.

The site assessment provides the following deliverables:

- Site assessment report
- Floor plan drawing
- Floor plan optimization recommendation report
- Cabling assessment and recommendations

Understand the Power and Cooling You Need for a Highly Reliable Network

The power and cooling assessment can help you make sure that your facility provides the power and cooling that your network requires for high reliability. This assessment analyzes the installed power capacity along with cooling systems and constraints, using thermal imaging to identify hot spots. The analysis can indicate areas where temperature and humidity levels exceed tolerances and might compromise network reliability and recommends methods to improve the use of power and cooling resources.

The standard assessment typically includes the following activities to help you reduce power consumption:

- Inspect and report on load levels of your universal power supplies (UPSs)
- Inspect perforated tiles to help ensure proper placement
- Advise on hot aisle/cool aisle placement and a more efficient rack layout
- Measure room temperature and AC return temperature
- Inspect and measure chiller plants and other AC parameters
- Inspect raised floor and ceiling tiles for air leaks that cause AC inefficiency

During this assessment Cisco and our partners work together to help ensure the correct size of the UPSs and power equipment, based on real-world, practical load values and not nameplate readings. The Cisco and partner engineering teams work closely to "right-size" the equipment and not oversize the system to increase reliability and capacity. To accomplish this, we consider the unique heat flow and dissipation characteristics and requirements of your network and IT infrastructure environment.

After the analysis is complete, the power and cooling assessment recommends improvements to your infrastructure based on your future goals and business requirements. The improvements can involve environmental conditions, utilization and capacity of the power and cooling infrastructure, and general efficiency to help you meet your reliability objectives.

Implementing the power and cooling assessment recommendations can help you extend the service life of your facility by using best-practice methodologies and tools to correct problems and help ensure regulatory compliance.

The power and cooling assessment provides the following deliverables:

- Electrical distribution system capacity, redundancy and points of failure
- Air conditioning system capacity, redundancy, and points of failure
- UPS capacity and redundancy
- Generator capacity and redundancy
- Maintenance and monitoring
- Operational procedures for the physical infrastructure, including emergency response and escalation procedures
- Site documentation

Improve Your Physical Site Security

Defending your data center facility and business data against intruders is a critical capability. The site security assessment reviews your operations procedures to isolate security weaknesses and evaluate your facility's ability to overcome any likely threats. The site security assessment can help you determine how to improve your physical site security. It includes the following deliverables:

- Security system coverage and reliability
- Facility security discovery workshop
- Facility security assessment report
- Mitigation and best-practice report

Reduce Your Risk of Catastrophic Failure Caused by Fire

The fire detection and suppression assessment covers aspects of business continuance related to the physical plant. Fire detection and suppression analog systems are reviewed to determine the policies and procedures in place for dealing with catastrophic failures. Both focus areas can be added to an IP-based network management platform, providing redundancy in monitoring and alerting, thereby reducing risks to business continuance. The primary deliverable for this assessment is a fire detection and suppression assessment report.

Increase the Operational Efficiency of Your Data Center

The operational assessment evaluates your infrastructure and operational practices to verify that your facility can support current and planned systems, network technologies, and services. The evaluation includes people, processes, and tools. You can use the reports generated by this activity to plan and budget for facility expenditures, identify areas for automation opportunities, and implement clear change management procedures. These actions can help your facility deliver the high level of operational efficiency that you require.

The operational assessment provides the following deliverables:

- Operational assessment report
- Monitor/control overview report

Experience a Well-Coordinated, On-Time Project

Your Cisco Data Center Facilities Assessment Service project might include a project manager to coordinate the various activities during the engagement and help ensure that you receive deliverables in a timely manner. This fee-based service is included in the scope of the project.

Benefits

The Cisco Data Center Facilities Assessment Service helps ensure that your updated or new infrastructure meets your reliability and capacity goals and can scale to meet your future requirements. This comprehensive assessment combines analyses of your operating practices and business strategies with physical infrastructure elements such as site location, power, cooling, fire protection, and security.

The Cisco Data Center Facilities Assessment Service helps you to:

- Increase the effectiveness of your facility by identifying ways to make it more simplified, accessible, and environmentally and operationally efficient
- Identify the power and cooling infrastructure you need to support a highly reliable network
- Align your security systems and processes with your business and IT strategies
- Improve operational efficiency to lower costs and increase network availability

Why Cisco Services

Cisco Services make networks, applications, and the people who use them work better together.

Today, the network is a strategic platform in a world that demands better integration between people, information, and ideas. The network works better when services, together with products, create solutions aligned with business needs and opportunities.

The unique Cisco Lifecycle approach to services defines the requisite activities at each phase of the network lifecycle to help ensure service excellence. With a collaborative delivery methodology that joins the forces of Cisco, our skilled network of partners, and our customers, we achieve the best results.

Availability and Ordering Information

The Cisco Data Center Facilities Assessment Service is available for purchase throughout the world. The service is available as a transactional statement of work (SOW)-based service. The part number for this service is AS-DCN-CNSLT.

For More Information

For more information about the Cisco Data Center Facilities Assessment Service or other Cisco data center services that can help you protect and get the most out of your data center investment, visit www.cisco.com/go/dcservices or contact your Cisco service account manager.

Cisco Services.
Making Networks Work
Better Together.

**Americas Headquarters**

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters

Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

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.

©2007 Cisco Systems, Inc. All rights reserved. CCVP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, BPX, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, LightStream, Linksys, MeetingPlace, MGX, Networking Academy, Network Registrar, Packet, PIX, ProConnect, ScriptShare, SMARTnet, StackWise, The Fastest Way to Increase Your Internet Quotient, and TransPath 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. (0705R)