DATA CENTER SOLUTIONS

and

CDW

and NOW OPTIMIZATION IS WITHIN REACH.

CONVERGED INFRASTRUCTURE • VIRTUALIZATION • STORAGE
• NETWORKING • BACKUP & RECOVERY • POWER & COOLING
Chances are, at least part of your data center isn't making the grade, and that could be holding you back more than you realize. In today's fast-paced world, some of your most critical operations revolve around technology. And for those systems to work, you need an infrastructure that's ready to support your changing workloads and organizational needs.

At CDW, we'll help you bring your underperforming infrastructure up to speed. We can assess your environment, design the best approach, deploy your solution and manage it throughout its lifecycle. Because with a flexible, resilient and efficient data center, you can support flexibility, resiliency and efficiency throughout your organization.
OUR DATA CENTER STRATEGY

The support you need for continued success.

When it comes to selecting, implementing and integrating new technologies, we’re here to help. In addition to helping you choose the right solutions for your budget and technical needs, we have an extensive portfolio of data center services and managed services to bring those solutions to life.

EXPERTS
You’ll get access to a team of experts who can help you modernize your data center and better support your organization.

ACCOUNT MANAGERS
Your account manager has insight into the latest data center technologies and can help you learn about the solutions that best fit your organization’s needs.

SOLUTION ARCHITECTS
Our team of more than 200 solution architects and data center specialists can help you evaluate your environment and tailor a custom solution to meet your specific goals.

DATA CENTER ENGINEERS
With decades of experience, our data center engineers are able to provide technical expertise, build your actual solution and offer ongoing support to keep your equipment up and running.

PARTNERSHIPS
We work with a variety of leading vendors to bring you a wide selection of products and solutions. Our close relationships with these trusted providers give us additional knowledge to help determine which technologies are right for your requirements.

SERVICES & SUPPORT
Modernizing your data center is a big undertaking, so we offer a variety of services to help with the process. Our data center assessments evaluate your current environment and recommend the best approach, while our end-to-end services can help you implement your solution, from configuring new equipment and migrating workloads to managing and maintaining the components of your updated data center.

CDW SOLUTIONS BLOG
Read what our solution architects think about the latest data center technologies and trends at blog.CDW.com
OUR PORTFOLIO OF SOLUTIONS

A comprehensive approach, customized for you.

From high-performing servers and next-generation storage equipment to networking infrastructure and software, we have all the components you need for a future-ready data center. More important, we have the expertise to help you determine your needs and build a customized solution to meet them.

Our data center products, solutions and services offering encompasses:

- Converged Infrastructure
- Virtualization
- Storage
- Data Center Networking
- Backup & Recovery
- Power & Cooling

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GATHERING INSIGHT INTO YOUR ENVIRONMENT

To help you determine which solution areas your organization should address, we offer workshops to review your current infrastructure.

**DATA CENTER WORKSHOP**
With this half-day session, a CDW data center solution architect will discuss the latest data center optimization technologies and best practices and conduct an overview of your data center. We’ll identify current challenges, looking at application delivery methods and requirements, disaster recovery and continuity requirements, standards compliance, and IT governance. Then, we’ll translate your goals into a forward-thinking strategy.

**DISCOVERY WORKSHOPS**
Utilizing the information gathered in the Data Center Workshop, we’ll recommend a series of Discovery Workshops in order to gain a complete and accurate picture of your current environment. These workshops cover topics including network, server, storage and physical environment and are led by solution architects who specialize in each specific topic.

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DATA CENTER VIDEO CHANNEL

Explore videos that cover a variety of topics within the data center at CDW.com/datacentervideo
CONVERGED INFRASTRUCTURE and CDW

Bringing things together for optimal performance.

Simply updating or adding equipment as computing workloads, storage needs and network demands increase can leave you with a disjointed ecosystem. To help you truly optimize, we bring you all the hardware and software you need to build a converged data center environment, plus the strategy needed for a well-integrated solution.

We can help you streamline your data center with:

- Preconfigured integrated systems that pool servers, storage, networking and software together
- Prevalidated reference architectures to support flexible workload requirements
- Hyperconverged appliances that tightly integrate compute, storage, networking and virtualization into a single, flexible modular appliance

End-to-end support for your converged infrastructure.

**ASSESS**
Let us evaluate your overall infrastructure with a data center assessment or review technologies such as FlexPod™ and VSPEX® with our health check offerings. We also offer assessments to help with data migration.

**DESIGN**
Our experts can help you plan and design architectures that utilize converged appliances such as FlexPod, FlexPod Express and VSPEX.

**DEPLOY**
When it comes time to implement technologies like FlexPod, FlexPod Express, VSPEX and Vblock™, our engineers can help you get them up and running and assist with data migration.

**MANAGE**
We offer hosted private clouds that run on a managed FlexPod and are hosted in our own data centers. And to best meet your needs, you can choose from three different tiers of support.

The benefits of a converged infrastructure plan.

- Tightly integrate your servers, storage, networking and software components
- Improve application performance and availability by improving allocation of resources
- Reduce administration costs by minimizing capital expenses and improving operational efficiencies
- Streamline support models and offer scalability to meet changing demands
- Simplify management with a single platform

**THE CONVERGED INFRASTRUCTURE PAYOFF FOR I.T.**
This white paper explains how prevalidated systems can help you simplify infrastructure management and focus on innovation. Read it at CDW.com/payoff
VIRTUALIZATION
and CDW

Enabling efficiencies throughout your data center.

When it comes to virtualization, maximizing your server resources is only the beginning. As software-defined IT ecosystems gain momentum, we can help you design a plan that extends efficiency, flexibility and security to your storage, network and more.

Our virtualization offerings include:

- Software-defined Data Center (SDDC) architectures
  - Server virtualization
  - Storage virtualization
  - Network virtualization
- Client virtualization

End-to-end support for your virtualization solution.

**ASSESS**
In addition to our full server virtualization assessments, we can conduct health checks on your VMware ESXi™ and vSphere™ and Microsoft® Hyper-V® technologies.

**DESIGN**
Our experts can assist with planning and design for your virtualization solution and can engineer pilot deployments for Microsoft Hyper-V.

**DEPLOY**
To help get your solution off the ground, we offer jump start and implementation for VMware ESXi and vSphere and implementation for Microsoft Hyper-V.

**MANAGE**
With multiple service levels to fit your support needs, we can host and manage your virtual machines using VMware, Citrix® and Microsoft.

The benefits of a virtualization plan.

- Increase efficiency, lower costs, simplify app provisioning and provide exceptional uptime with simple administration and management with SDDC
- Set the foundation for more simple and supported cloud deployments with virtualization
- Allow for automated provisioning of resources and better performance by eliminating siloed storage and network device interfaces and hardware with SDDC
- Improve control over applications and centrally house data for increased security with client virtualization

GIVE YOUR DATA CENTER A BOOST
This guide details how a software-defined data center can better support your organization. Read it at CDW.com/boost

We partner with top vendors like these to bring you the best in virtualization solutions.
STORAGE and CDW

Keeping data organized and accessible.

Data is growing at an unprecedented rate, and it can be tempting to tack on additional storage devices and archiving solutions just for a place to put it all. But what you really need is a cohesive and efficient solution that’s prepared for the data yet to come and prevents the problems that come with a congested storage landscape.

We can help you build a smart storage strategy that could include:

- Storage area networks (SANs), network-attached storage (NAS) and direct-attached storage (DAS)
- Flash storage
- Hierarchical storage management
- Cloud storage

End-to-end support for your storage solution.

ASSESS
We offer assessments of your storage environment as well as data migration assessments and health checks.

DESIGN
Before creating a blueprint for your storage plan, we’ll conduct planning and design sessions to determine your organization’s needs and goals.

DEPLOY
To help you roll out your new storage solution, we offer hardware implementation, software installation and data migration assistance.

MANAGE
We can take on the tasks associated with monitoring, upgrades, maintenance, reporting, and hardware and software incident management for our EMC®, NetApp®, IBM®, Cisco® and Brocade® partner storage and storage networking offerings.

The benefits of a strategic storage plan.

- Improve IT control and visibility with updated storage management tools
- Better meet enterprise storage needs with fast, reliable and efficient flash storage
- Adjust to changing storage needs with highly scalable, cost-effective cloud storage
- Improve manageability and portability of storage resources with SAN, NAS and DAS – potentially lowering storage costs
- Determine an accurate cost-per-performance balance for your storage tiers using hierarchical storage management

FLASH: THE NEXT STEP IN STORAGE
This white paper covers the benefits of solid-state storage and how it can best be utilized. Read it at CDW.com/flashstorage
DATA CENTER NETWORKING and CDW

Keeping increased traffic under control.

High-bandwidth deployments like virtualization and cloud computing support your organization but can put massive strains on your network. To properly manage the changing traffic patterns of your data and applications, you need a highly optimized network. Our experts can help you improve the performance of your network so it can help keep your entire data center humming along.

Our WAN and application optimization solutions include:

- Upgraded routing and switching equipment
- Application delivery controllers (ADCs)
- Caching, compression, deduplication and QoS capabilities

End-to-end support for your data center networking solution.

ASSESS
To help identify specific problem areas in your environment, we offer an extensive range of network assessments including WAN acceleration assessments, network health checks and data network roadmaps.

DESIGN
We can help you plan and design an upgraded network infrastructure and provide proof of concept to help ensure it is a good fit with your environment.

DEPLOY
Once you’ve decided on the right approach, our experts can assist with the implementation and installation of new network technologies.

MANAGE
Our team can assist with monitoring, upgrades, maintenance, reporting and hardware incident management for Layer 2 and 3 switches, routers, load balancers, and WAN optimizers.

The benefits of a data center networking plan.

- Support increased application demands with an optimized network design
- Give employees consistent, reliable access to the tools they need to do their jobs by delivering applications faster and more securely
- Avoid costly downtime and lost productivity by improving network performance, availability and continuity of operations
- Prepare for future needs by increasing network flexibility and scalability

PERFORMANCE BOOST: GETTING THE MOST OUT OF THE WAN

This white paper explains how to ease traffic and increase efficiencies as your network demands evolve. Read it at CDW.com/performanceboost

We partner with top vendors like these to bring you the best in data center networking solutions.
Not surprisingly, your data is a critical component of your data center. In the case of a disaster, you need to be able to recover data quickly to keep operations running smoothly. We can help you build a customized plan that better supports your organization by streamlining backups and data management.

Your backup and recovery solution could include:

- Cloud backup
- Centralized data management
- Data deduplication
- Multi-data-center replication

End-to-end support for your backup and recovery solution.

**ASSESS**
We can conduct a health check on the backup and recovery systems you have in place such as IBM Tivoli® Storage Manager (TSM).

**DESIGN**
For solutions such as Microsoft System Center Data Protection Manager (SCDPM), we can lead planning, design and pilot deployment.

**DEPLOY**
Our team can also take care of implementation for TSM; SCDPM; and EMC Avamar®, RecoverPoint and Data Domain.

**MANAGE**
You can offload tasks like monitoring, upgrades, maintenance, reporting, and hardware and software incident management for systems from partners like IBM, NetApp and CommVault® onto our expert teams.

The benefits of a comprehensive backup and recovery plan.

- Prepare for unanticipated data loss with offsite backups
- Automate and streamline time-consuming backup processes with centralized data management that enables remote management of your data landscape
- Accelerate data recovery by minimizing redundant data
- Strengthen disaster recovery by hosting backups on multiple servers across data centers

We partner with top vendors like these to bring you the best in backup and recovery solutions.
POWER & COOLING
and CDW

Maximizing energy efficiency and increasing uptime.

Overheating. Power surges. Energy inefficiency. They may sound like minor problems, but they take time and funds away from your IT infrastructure. Instead, we can help you find power and cooling solutions that protect your equipment, maximize efficiency and save you money. And as one of the largest providers of power protection products, we offer competitive pricing and dedicated resources and rebate programs.

A comprehensive power and cooling solution will include:

- Cooling and housing equipment
- Uninterrupted power supplies (UPSs) and power distribution units (PDUs)
- Energy management resources and software

End-to-end support for your power and cooling solution.

**ASSESS**
EnergySTEP Data Center Assessments from APC® and CDW can provide insight into your power and cooling landscape and identify areas for improvement.

**DESIGN**
Utilizing our partnerships with top vendors, we can help you choose the right power and cooling equipment for your budget and technical needs.

**DEPLOY**
To help ensure seamless integration with your existing power and cooling infrastructure, we can assist with the installation of new appliances.

**MANAGE**
By hosting your environment in one of our data centers, you can offload the burden of managing data center infrastructure and operations, including power and cooling.

The benefits of a power and cooling plan.

- Increase uptime by controlling airflow and keeping your infrastructure cool and running smoothly
- Safeguard against potential disasters by protecting your data center in the case of a power failure
- Maximize energy efficiencies and cost savings thanks to management resources that monitor energy use and identify potential problems

We partner with top vendors like these to bring you the best in power and cooling solutions.

STATE-OF-THE-ARTS PROTECTION
See how we helped a community college implement a power and cooling solution in their new Center for Arts and Media at CDW.com/slcc
FACILITIES

State-of-the-art sites to build, demonstrate and host your solution.

CONFIGURATION CENTERS

Between our configuration centers in Las Vegas and Vernon Hills, IL, we have a staff of more than 130 trained and certified technicians. They're on hand to build a host of solutions to your exact specifications quickly and accurately. Their expertise can help you minimize downtime, eliminate the need to hire outside consultants and speed your deployment with solutions that are ready for implementation as soon as they arrive onsite.

Services conducted at our configuration centers include:

- Complex hardware and software configurations
- Network and connectivity testing
- Configuration of clustered servers
- RAID configurations
- Routers
- Enclosures
- Customer configured racks
- Network devices
- Custom cabling

TECHNOLOGY EXPERIENCE CENTERS (TEC)

Optimizing your data center is a complex process that integrates seemingly disparate components into a comprehensive solution. To help you better understand how it all comes together, we bring these solutions to life at our Technology Experience Centers. There, you can experience the latest in data center technologies, see how integrated solutions work together in a real environment, compare solutions side by side and explore the benefits of modernizing your data center.

Visit our TECs in person or virtually to see:

- Static demonstrations of user interface and overall software capabilities
- Clarification and verification of specific software functionality
- Verification of software functions
- Insight into the building of a solution–enriched strategy
- Evaluation of software functional solution configurations

CDW DATA CENTERS

Located in Chicago, Dallas, Milwaukee, Minneapolis, Madison and Fitchburg, WI, our world-class data centers offer customers full racks and high power densities. We provide Tier 3 and Tier 4 data centers with SLAs of 99.982% and 99.995%, respectively. Let us help you decide which workloads to have hosted and managed by our teams, knowing that our state-of-the-art data centers can provide the capacity, security and efficiencies your organization needs.
Wherever you are on the path to optimization, we’re here to help you along the way. With years of experience working with organizations like yours, we have the expertise to help you determine the right solution and bring it to life.

To research the latest data center innovations or learn more about our comprehensive approach, visit CDW.com/datacenter. You’ll find a variety of resources, from webinars and videos to infographics and white papers.

If you have any questions or are ready to start optimizing your data center, contact your account manager or call 800.800.4239.