

RUN WITH IT.



An Overview of Cloud Deployment Options

THE SITUATION | THE CHALLENGES | THE SOLUTION | THE BENEFITS

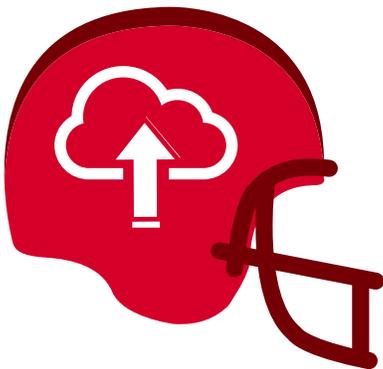


THE SITUATION

TACKLING THE CLOUD.

To move the ball down the field, more and more organizations are tackling cloud computing. So it's more important that everyone become familiar with the cloud playbook and understand the many options available, the numerous benefits to harness and the potential challenges to avoid.

You need to be able to tell the difference between:



PUBLIC CLOUD – a solution in which the cloud resources are shared among many different organizations, or even the public



HYBRID CLOUD – a solution in which an organization's public and private clouds remain distinct entities but are bundled together



PRIVATE CLOUD – a solution in which cloud resources are dedicated to a single organization and run either in its own data center or that of a service provider



70%

of CIOs will embrace a "cloud first" strategy by 2016.¹

$\frac{1}{3}$ of IT/security executives say the majority of their IT operations will be performed in the cloud in the near future.²

60% of decision-makers say cloud computing has reduced the need for infrastructure maintenance, giving them more time to focus on strategy and innovation.³

THE CHALLENGES

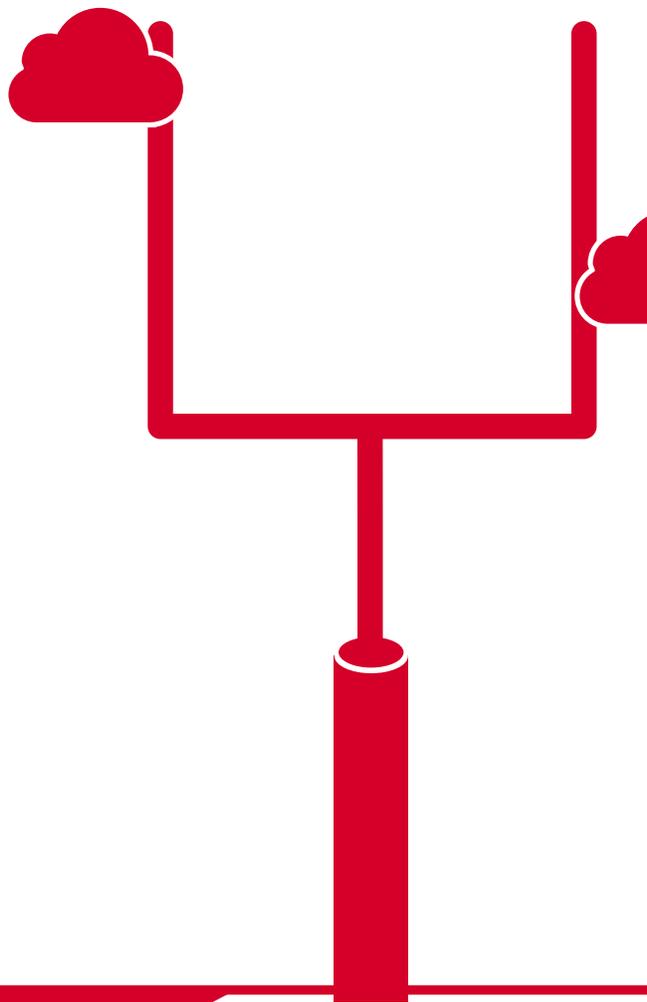
GETTING SIDELINED.

More than a few challenges may be running interference with your adoption of cloud computing, whether you are first starting to consider it or already using it, such as:

UNFAMILIARITY — Many IT decision-makers know how the cloud can help drive objectives and goals, but don't know how to move forward. They don't have enough information about which vendor would be best. They are overwhelmed by the thought of migrating to a new framework. Or they simply lack the necessary IT resources.

SECURITY CONCERNS — Twenty-two percent of IT managers are afraid they will lose control of data stored in the cloud. Concerns of keeping infrastructure and data safe to, in and from the cloud are very real. So much so that some organizations opt for a cloud environment, which might not be the best fit for them. Also, some line-of-business directors are bypassing security and implementing their own cloud services.

COSTS AND RESOURCES — Many organizations don't understand that IT budgets may see as much as 25% savings over four years with a cloud implementation. They are concerned their IT resources are too limited, or they don't fully understand how to implement cloud solutions. Plus, they worry that other IT investments they recently made will go to waste.



56% of large enterprises say that cloud services have helped them achieve an increase in profits.³

49% of cloud users cited increased employee mobility and productivity after having moved to the cloud.⁶

44% of IT budgets are spent on the cloud and will grow to 51% by 2015.²

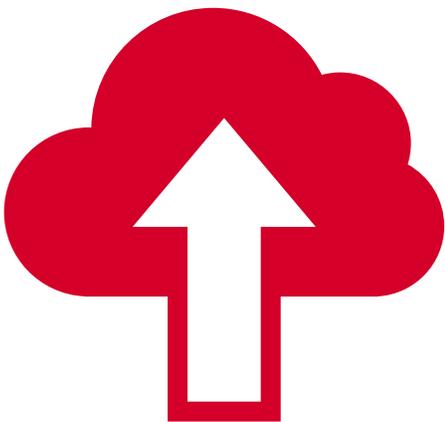
THE SOLUTION

CALLING THE PLAY.

In order to overcome these challenges and take full advantage of all the cloud can offer, you need a coach – a technology partner who can offer insight and innovative solutions. Why is everything so complex? Because you need to choose the best cloud environment to fit your needs, your strategic goals and your budget.



PUBLIC CLOUD



A solution in which the cloud resources are shared among many different organizations or even the public. You purchase services, sets of services, computing power or storage space from a cloud provider who hosts the environment for you. This is a cost-effective solution for organizations that do not have extensive IT infrastructure, enabling massive flexibility and scalability. You only use as much cloud space as you need and can grow into more as your organizations grows.

A solution in which cloud resources are dedicated to a single organization and run either in its own data center or that of a service provider. Having a private cloud helps ensure an extra layer of security and privacy which might be required if your organization has to comply with industry or governmental regulations.

PRIVATE CLOUD



HYBRID CLOUD



A solution that combines an organization's public and private cloud environments, providing greater levels of flexibility as well as increased security and control. You can retain the scalability benefits of a public cloud but also maintain a private platform in which you can design, develop and test your own applications.

RISE OF THE HYBRID

34% of IT decision-makers say a hybrid cloud approach would help their IT become more strategic overall and advance higher-level goals.

IN THE HUDDLE

1. How quickly will cloud services be up and running?
2. How quickly can service levels be adjusted as usage demands rise and fall?
3. Does the contract apply to the infrastructure as a whole, or does it cover each individual machine?
4. How often will downtime occur for scheduled maintenance, and how will disruptions be scheduled?
5. Will the provider accept an exit clause allowing termination of the contract without penalty in the case of recurring incidents?
6. What types of service problems result in refunds? What types receive service credits? What are the redemption procedures in each case?
7. Will the organization receive monthly reports that analyze performance against agreed-upon metrics?
8. How will the cloud be monitored for regulatory compliance?

PRIVATE CLOUD IS A GOOD SOLUTION FOR:

- Government agencies that need to maintain strict regulatory and compliance standards
- Organizations that need to protect mission-critical or sensitive data
- Companies that want an additional layer of security
- Companies that are required to meet specific infrastructure standards
- Organizations that have already invested heavily in an on-prem data center
- Companies with an extensive and knowledgeable IT staff

PUBLIC CLOUD IS A GOOD SOLUTION FOR:

- Startups and small businesses that don't have a dedicated IT staff or legacy infrastructure
- Companies that require agility for bursts of activity or traffic
- Organizations that need to run apps used by many people
- Companies that want to consolidate infrastructure and pay only for the resources they need
- Companies that need an easily scalable environment
- Companies that need to supplement a private cloud solution to handle incremental bursts of activity or traffic

HYBRID CLOUD IS A GOOD SOLUTION FOR:

- Organizations that want to integrate all of their existing applications, processes and infrastructure, whether in a public or private cloud
- Companies that want to ensure scalability while still meeting and maintaining security and compliance standards
- Organizations that require more strict control of systems and mission-critical applications



THE BENEFITS

SCORING THE EXTRA POINT.

Finding the right coach to guide you through the process of adopting the best cloud solution will bring many benefits to your organization, such as:

MAXIMIZING I.T. AND ORGANIZATIONAL RESOURCES

- A cloud solution can shift your infrastructure spending from Capital Expenditures (CapEx) to Operational Expenditures (OpEx) so you can better regulate monthly costs.
- Your previous investment in on-premises infrastructures will not go to waste. Many cloud models work with existing infrastructure, enabling you to strategically and cost-effectively migrate to the cloud.
- As a matter of fact, you can even integrate and consolidate different back-end systems and technology, such as disaster recovery, backup and archiving, into one cloud environment to eliminate redundancies and maximize efficiencies.
- IT management becomes centralized and simplified so you can focus on more strategic initiatives. Also, maintenance, personnel, updates and infrastructure upgrades are all handled on the vendor side, freeing you from those costs.
- Resources can be more closely matched to consistent needs, as opposed to having to account for peaks and valleys in demand.

DRIVING COMPETITIVE ADVANTAGE

- The cloud allows you to become more agile and responsive to needs by facilitating rapid prototyping and improving workflows, speeding up speed-to-market.
- You can connect disparate offices and mobile workers to company applications and processes run in the cloud in real time, boosting productivity.
- Easily enable custom application development and deployment by giving developers a flexible and reliable platform to design, test and launch company applications.
- You can store massive amounts of data that can be analyzed to gain actionable insights, leading to better service and enhanced efficiencies.

INCREASING FLEXIBILITY

- Your cloud solution can easily scale up or down to meet the needs of your organization, ensuring availability of resources for employees and customers.
- Cloud infrastructures quickly scale and handle fluctuations in traffic and activity.
- The cloud helps you future-proof your organization with the latest proven technology.
- Since cloud infrastructures enable you to pay only for what you use, you won't be locked into an agreement with one provider.



WHY CDW?

Whether you're new to the cloud or looking to find new ways to maximize its benefits, CDW has the expertise to help you win the game.



THE PEOPLE

With the experience that comes from operating a public cloud platform for CDW customers for more than five years, our account managers are uniquely qualified to guide you through the planning and implementation of the best solution for your organization. Also, our experienced and industry-certified solution architects can recommend a customized path for your organization to follow.



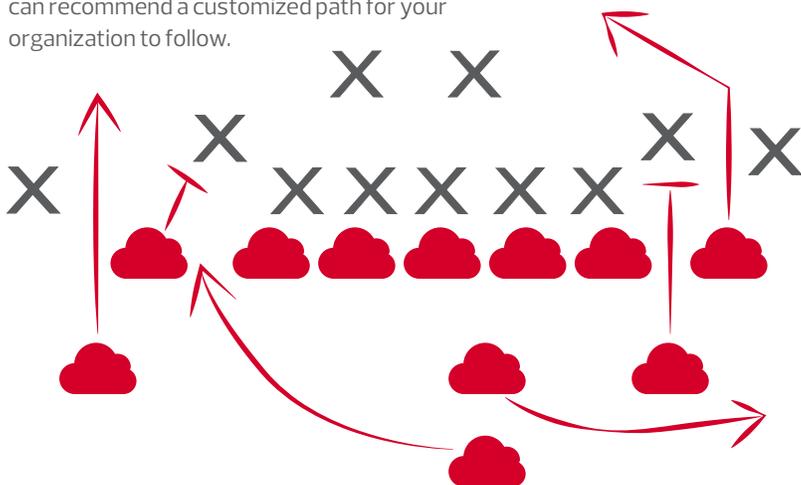
THE PARTNERS

We work with more than 45 cloud providers, have more than 200 cloud solutions and offer service-level agreements that will meet or exceed your requirements. Our cloud offerings and services are comprehensive, holistic and based squarely on your strategic plans.



THE PLAN

CDW's consultative solution process ensures your cloud needs are covered at every stage of the process. An initial discovery session helps you understand your technology and goals, requirements and budget. Next, we provide an assessment and review of your existing IT environments and project requirements. Then, we make detailed vendor evaluations and recommendations, as well as a future environment design and proof of concept. Finally, we'll assist with procurement, configuration, deployment and migration of your chosen cloud environment. And after all that, we can host and manage your cloud environment, if desired.



THE CLOUD GAME PLAN.

CDW can huddle up with you and implement our four-stage cloud infrastructure protocol without a fumble:

- 1. PLAN** – We help you take a look at the entire playing field, including your application inventory, lifecycle management and the state of your data center.
- 2. PRIORITIZE** – We make sure you have the right lineup of security, performance, dedicated resources, levels of integration, degrees of customization, service-level agreements and objectives.
- 3. IDENTIFY** – We determine your bandwidth needs, relevant network considerations and which type of cloud configuration would work best for you.
- 4. JUMPSTART** – We tailor the cloud solution to your organization, focusing on areas such as virtualization, converged infrastructure, disaster recovery, testing and development.

HELP FROM YOUR CLOUD COACH

CDW can help you build an integrated IT infrastructure. With extensive expertise and a wide range of offerings in solution areas that complement the cloud (such as security, networking, data center optimization and mobility), CDW can help you find the right solutions, ensure that all aspects of your infrastructure work well together and provide you the most benefit.

OUR PARTNERS

vmware®

VMware vCloud Hybrid Service is a secure, dedicated hybrid cloud service built on the trusted foundation of VMware vSphere. It supports existing workloads and third-party applications as well as new application development, giving IT a common platform for seamlessly extending its data center to the cloud. It's available in two service types – Dedicated Cloud and Virtual Private Cloud. CDW is the 2013 Global vCloud Hybrid Cloud Service Provider of the Year.



The FlexPod solution portfolio combines NetApp storage systems, Cisco Unified Computing System servers and Cisco Nexus fabric into a single, flexible architecture. FlexPod solutions are validated and tested to reduce risk and increase IT efficiency. Organizations of all types and sizes have transformed the promise of private cloud computing into breakthrough results using technologies from NetApp and our partners.



Get open source-based public cloud infrastructure with HP Cloud Services. HP's enterprise-class cloud gives developers the tools and flexibility they need to build next-generation apps. Organizations of all sizes benefit from greater workload availability, manageability and portability without the constraints of a closed operating environment and vendor lock-in.

WE'VE GOT THE PROOF



INDUSTRY AND PARTNER AWARDS AND CERTIFICATIONS

- NetApp FlexPod Premier Partner
- Certified Ethical Hacker
- Certified Information Systems Security Professional
- Certified Telecom Professionals
- Global Information Assurance Certification (GIAC)
- GIAC Certified Incident Handler
- GIAC Security Essentials
- Health Insurance Portability and Accountability Act Academy Certified
- Homeland Security Certified
- Mature IT Infrastructure Library (ITIL) Governance Framework
- National Institute of Standards and Technology (NIST) Self-Assessed
- Payment Card Industry Data Security Standards v2 Level 1 Compliant
- Project Management Professional Certification
- Statement on Auditing Standards (SAS) 70 Type-II Certified Operations
- Statement on Standards for Attestation Engagements (SSAE) 16 Audit and Published Report
- HP Cloud Center of Excellence
- Cisco Master Cloud Builder
- VMware Global vCHS Partner of the Year
- Level 3 Top Agent and Platinum Partner 2012 & 2013
- Masergy No. 1 Agent 2011 – 2013
- McAfee Small and Midsize Business (SMB) North America Partner of the Year 2012
- Microsoft Corporate Accounts Global Partner of the Year 2012
- NaviSite Agent Partner of the Year 2012
- NaviSite Top Revenue Producer Award 2012
- Terremark Top Channel Partner 2008 – 2013

SEE FOR YOURSELF



CHECK OUT OUR CLOUD COMPUTING VIDEO CHANNEL TO SEE WHY COMPANIES ARE MIGRATING TO THE CLOUD.



SEE HOW >> CDW.com/cloud-video

Visit CDW.com/cloud or call 800.800.4239 to learn more about how having the right cloud coach can make all the difference for your organization.



144982

¹IDC Directions 2014, *How the Third Platform is Disrupting Partner Ecosystems*, March 2014

²IDG, *Enterprise Cloud Computing Study*, 2013

³Manchester Business School, *Cloud Computing Research*, 2013

⁴GreenSQL, *Database Security Survey*, October 2012

⁵CDW Report, *Silver Linings and Surprises: CDW's 2013 State of the Cloud Report*, 2013

⁶CDW, *2013 State of the Cloud Report*

⁷Forrester Report, *Enterprises Seek the Benefits of Hybrid Cloud, and Work to Overcome the Challenges*, January 2013

The terms and conditions of product sales are limited to those contained on CDW's website at CDW.com; notice of objection to and rejection of any additional or different terms in any form delivered by customer is hereby given; CDW®, CDW-G® and PEOPLE WHO GET IT™ are trademarks of CDW LLC; all other trademarks and registered trademarks are the sole property of their respective owners