Inside the Cloud Your Key Questions Answered

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Introduction

As we discussed in our previous white paper, your peers are turning to the cloud to help them meet challenges such as:

- Reduced budget and staff
- A constant demand for better services
- Multiple corporate systems running on dedicated servers
- Rising storage costs
- An imbalance in IT staffing
- An imbalance in server workloads
- Problems and delays in provisioning new equipment

Cloud computing can deliver a host of business benefits to companies of all sizes. These benefits include:

- Provisioning resources on demand
- Controlling costs
- Reducing waste
- Improving the productivity
- Enhancing decision making

The benefits seem clear. But CIOs and IT leaders evaluating cloud technology often express concerns about this new computing paradigm—and perhaps you're struggling with some of the same issues. Let's address some of the most commonly asked questions about cloud computing.

Cloud Computing FAQs

Q: How secure is the cloud?

A: This is often the first question a CIO will ask about cloud computing—and with good reason. When data is in your company's hands, you know exactly how secure it is—for better or for worse. But when you turn it over to a public cloud service provider, you're suddenly at the mercy of their security standards.

In other words, a cloud is only as safe as its security policies. Before you work with any cloud service provider, you'll need to find out:

- What measures they take to safeguard data.
- What compliance requirements they must follow, how recently they were audited, and what the results were.
- How they use encryption.
- What access controls they have in place.
- What identity management technology they use.
- How they use firewalls, secure connections, intrusion detection systems, and Virtual Private Networks.
- How well the provider's security policies and technology integrate with your own.

The bottom line? Just as in traditional networks, data in the cloud must be protected by several layers of security to prevent theft and sabotage.

Q: How reliable is the cloud?

A: If CIOs ask about cloud security first, they'll probably ask about cloud reliability second. After all, trusting a third party to provide fast, responsive computing resources is almost as scary a thought as trusting them to secure your data.

Amazon's recent cloud outage didn't do much to set minds at ease. Among the lessons we all learned: the cloud will indeed go out; it's best to partner with an expert in architecting your cloud solution; you must manage and maintain your cloud solution; and you should never put "blind trust" in the cloud.¹

On the other hand, you can rest assured that cloud services providers design their solutions to scale to the needs of a whole host of fast-growing customers. As a result, you'll probably find that the cloud not only keeps up with your needs, but also helps drive business agility.

You'll also find that most cloud providers stipulate service levels up front, and then give you tools for monitoring their performance.

Q: What savings can I achieve with the cloud?

A: Since no two companies are exactly alike, the cloud will have a different financial impact on each one. According to IBM, the level of savings can depend on the types of workloads being processed, the delivery method selected, the efficiency of the infrastructure to be replaced by cloud, and many other factors.²

But companies clearly see the potential. In a recent IBM survey, 77 percent of respondents chose cost savings as a key driver for public cloud adoption. They anticipated savings in software licenses, hardware, labor, IT support, and maintenance.³

Q: Will the cloud work for a small or mid-market company?

A: The benefits of the cloud aren't confined to huge companies with massive server farms. In fact, it's best to start small and gradually expand your cloud computing activities over time:

"There are many early examples of how companies have been able to reduce costs with various cloud service implementations. However, most of these cost-proven benefits have been based on small, well-defined projects. A complex evaluation of costs, benefits, risks, business cultural issues, and corporate and governmental standards must take place before developing a cloud strategy that will encompass a more comprehensive implementation.

"Cloud services will help organizations enter the age of utility computing in an incremental manner....One organization may decide that a Software as a Service approach will be beneficial whereas another organization will begin by using incremental compute capacity on demand....Most organizations will adopt a hybrid strategy combining internally delivered services with services accessed from traditional outsourced or hosted services providers or via the cloud."⁴

As you can see, smaller companies that have a clear focus on what they're trying to achieve may in fact have the easiest time implementing cloud solutions that meet their needs.

¹ CRN. "Amazon's Cloud Outage: 10 Lessons Learned." Online article. April 27, 2011. <u>http://www.crn.com/slide-shows/cloud/229402271/amazon-cloud-outage-10-lessons-learned.htm?pgno=1</u>

² IBM. "Dispelling the vapor around cloud computing: Drivers, barriers and considerations for public and private cloud adoption." IBM Smart Business Thought Leadership White Paper. January 2010.

³ IBM.

⁴ Hurwitz, Bloor, Kaufman.

Q: How are companies deploying their cloud solutions?

A: There's no right or wrong way to get started with cloud computing. But organizations seem to be having the most success migrating specific applications to the cloud.

A 2009 IBM study asked IT and line-of-business decision-makers about the corporate workloads they had already deployed or would consider deploying as part of a public or private cloud. Here are the most popular workloads for potential private cloud adopters:

- Data mining, text mining, and other analytics: 83%.
- Application streaming: 81%.
- Service/help desk: 80%.
- Industry-specific applications: 80%.
- Test and development environments: 80%.

For potential public cloud adopters:

- Audio/video/web conferencing: 71%.
- CRM or sales force automation: 61%.
- Business continuity/disaster recovery: 60%.
- Data archiving: 59%.
- Application streaming: 58%.⁵

If you're ready to start planning a cloud project in your organization, consider building your strategy around one of these areas.

Q: How do I select a cloud solution?

A: As we've alluded to already, there's no one-size-fits-all solution for cloud computing. Your company will need to make its own decisions about which cloud solutions will best meet your needs.

ConRes works closely with IBM, the leading provider of cloud computing solutions. IBM helps clients excel in cloud computing, providing secure and reliable Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS) solutions.

For example, suppose a retail store manager responsible for a geographic rollout of stores knows that the new store system needs processing cycles, bandwidth, storage, and applications. The manager can select this technology using IBM Tivoli Automation Software. By simply clicking an icon representing each store's footprint, the manager can automatically generate the relevant technical details for small, medium, large, or superstore scenarios.

Or suppose a company acquires another company and needs to incorporate applications and end users into its existing infrastructure. With IBM technology, the company can simply migrate the applications, and then display desktop or regional center access as an icon representing the processing, storage, bandwidth, and application portfolio of each new employee.

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⁵ IBM.

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With six regional offices located from the Mid-Atlantic region through New England and Chicago, ConRes has technology specialists in your area. Your cloud computing project will benefit from our 60,000 square foot Nashua ISO 9001 integration center, highly skilled professional services team, and best-of-breed discovery processes.

What kind of ROI can you expect when you work with ConRes? We'll discuss the payback of cloud initiatives in our next white paper. To contact ConRes right away, please call 1 800-937-4688.