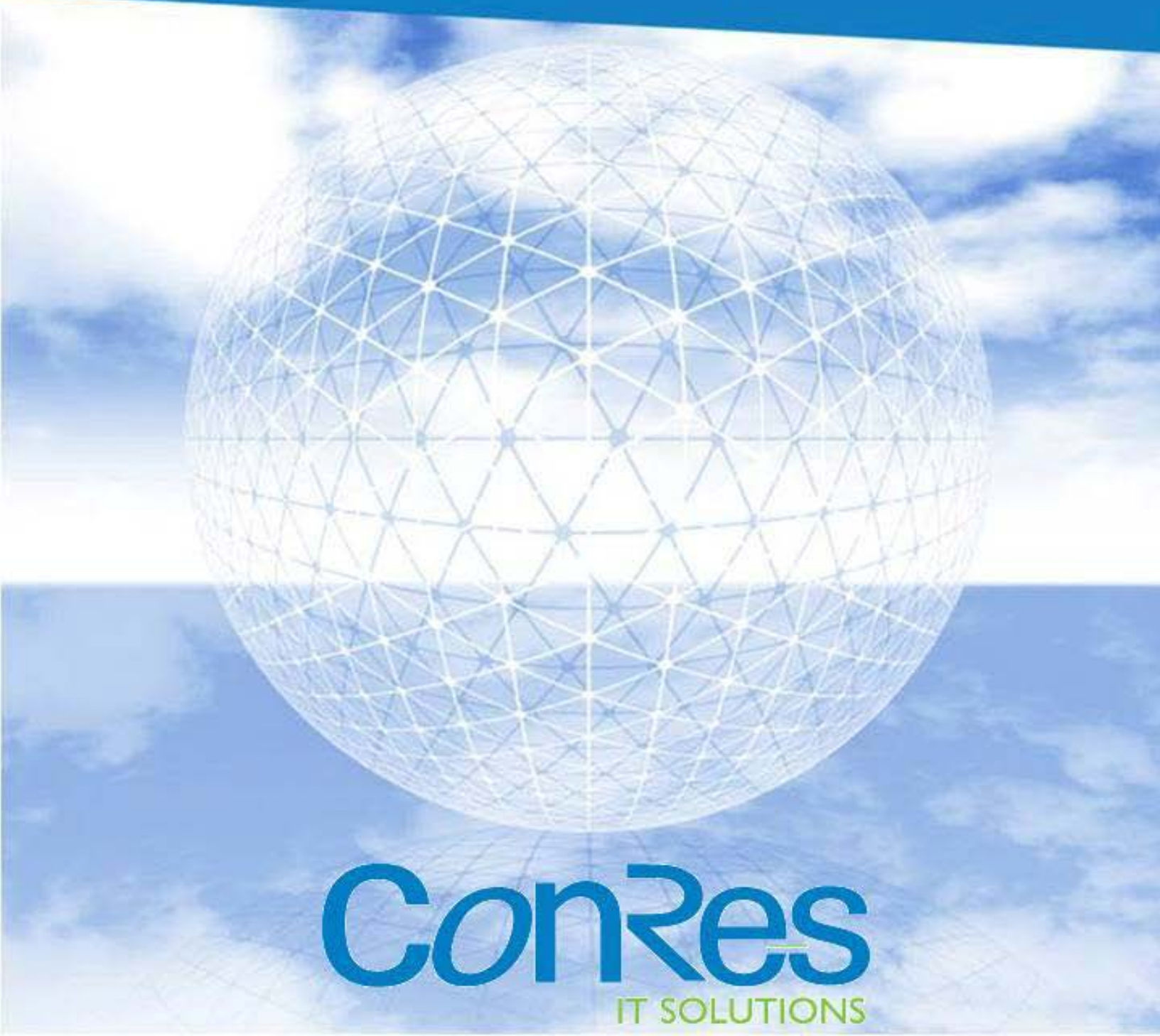
Getting to the Cloud
Your Practical Guide

By Ken Simon



ConRes
IT SOLUTIONS

Getting to the Cloud: Your Practical Guide

Introduction

After reading our previous white papers, you're probably already convinced that cloud computing holds the potential to help you meet today's toughest IT challenges. Companies everywhere are looking to the cloud to help them provision resources on demand, control costs, reduce waste, improve their productivity, and enhance their decision making.

You've gained reassurance that, despite common concerns, properly implemented cloud technology is both reliable and secure. You've seen the benefits the cloud can deliver to even small and mid-sized companies. And you've gained a better idea of how companies are deploying their cloud solutions.

Now, how do you get to the cloud? ConRes can recommend a clear path.

Six Key Steps to Cloud Computing

Although cloud technology is flexible and scalable by design, there's no single best way to launch a cloud computing initiative in your organization. You'll need to plan carefully. You'll want to assess your needs carefully. You'll probably spend a good deal of time researching the available technology—and then narrowing your choices to those that can deliver the fastest, most reliable ROI in your specific business environment.

Having said that, it's always easier to start a journey when you have an idea of where you're going. As a longtime IBM Premier Business Partner, ConRes recommends that you and your IT team use IBM's approach to get started:

1. **Create your IT strategy and roadmap.** Determine your goals around cloud service delivery, and identify the platform requirements and complexity involved.
2. **Assess and select workloads for your cloud.** Identify and prioritize workloads that are the best candidates for cloud delivery. Focus on the workloads that are easiest to standardize, are self-contained applications, or have a service-oriented architecture.
3. **Determine your cloud delivery model.** Establish which of your selected workloads are best suited for delivery via public cloud, private cloud, or a hybrid of both. Workloads such as web conferencing, help desk and training infrastructure, and storage are well-suited for public clouds. Data mining, text mining, and analytics are a better fit for private clouds. Test and developer environments could go either way.
4. **Determine the value.** Figure out your ROI by calculating the absolute savings you'll realize from all facets of IT operations related to each workload.
5. **Establish your architecture.** Determine which services you'll deliver or acquire, how you'll create and deliver them, and how users will access them.
6. **Implement your IT strategy, roadmap, and cloud services.** Condition your infrastructure for cloud delivery by virtualizing and automating existing systems as needed. Consider launching a pilot cloud project to give your IT organization much-needed experience. And then enable additional workloads and extend your cloud services to new users.[1]

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[1] 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.

Building Your Business Case for Cloud Computing

What should you include in your cloud computing business plan? Alinean, the leading developer of value-based online interactive tools, recommends focusing on several key components:

1. **Questionnaire.** Use this to collect census and opportunity information from your organization.
2. **Solution Selection.** Specify the solution options you plan to implement.
3. **Tangible Benefits.** Explain the quantifiable benefits you expect your company to achieve from implementing your cloud solution.
4. **Solution Costs.** Quantify the initial and ongoing investments for implementing the cloud solution. These may include capital expenses, implementation costs, ongoing management and support, operations and contracts, and business unit costs.
5. **Financial Summaries.** Include a traditional ROI analysis that compares the project's costs and benefits over a five-year period.
6. **Intangible Benefits.** Describe the benefits that are either not quantifiable or very difficult to quantify.
7. **Risk (What-if Analysis).** Assess the impact of various risks, especially if they may lessen the project's overall benefits.[2]

As you build your business case, you may find it helpful to incorporate the tangible savings and other benefits that IBM cloud computing customers have achieved in recent years. Here are several case studies that underscore the bottom-line value of a properly implemented cloud project.

Case Studies: Cloud Computing in Action

As we've discussed, organizations of all sizes are achieving measurable benefits with cloud computing. One such organization is North Carolina State University (NC State), a comprehensive university based in Raleigh, North Carolina and known for its leadership in education and research, science, technology, engineering, and mathematics.

The Challenge
Growing demand for academic computing resources at NC State made it increasingly difficult to deliver the service level that its key user populations—including students, instructors, researchers, and administrators—required.

The Solution
In collaboration with IBM, NC State looked to the domain of high-performance computing to create a new "cloud computing" model for provisioning technology that offers a quantum improvement in access, efficiency, and convenience over the traditional computer labs it had relied on.

The Results
Through its cloud computing project, NC State:

- Projected up to 75 percent savings in software licensing costs.
- Achieved a 150 percent increase in students served per application license.
- Increased its flexibility to shift computing capacity between instructional, research, and administrative needs.
- Gained the ability to support a significant growth in enrollment without building additional computer labs.

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[2] Alinean. "ROI Analyst™ Methodology." White paper. June 2006.

Many other organizations around the world have achieved major benefits by tapping into cloud computing based on IBM hardware. Here are several examples:

Customer	Business need	Solution	Benefits
Ecomanage Network Corporation A new affiliate of Toyota Tsusho, a general trading company for the Toyota group.	Confirm the final disposal of all industrial waste produced, a process that would require implementation of electronic manifests.	Implemented an IBM-developed and IBM-operated Wastes and Resources Circulation Management System. Using electronic networks, the system precisely locates and tracks industrial wastes and valuable recyclables in an end-to-end chain by linking the manufacturer with waste collectors, transporters, and recyclers.	• Helped reduce the occurrence of waste and recover valuable recyclables. • Streamlined its compliance reporting. • Made new intelligence available to address environmental health issues.
Wuxi A major center for industry and commerce, ranked in the top 15 cities in China.	Create flexible, shared computing resources for local government projects and start-ups; provide complete virtual infrastructure precisely sized for each requirement; and lower barriers to market entry for new companies.	Worked with IBM to deploy the Wuxi Cloud Center, based on IBM Blue Cloud technology and featuring both x86 and IBM Power Architecture servers. The cloud hosts the full IBM Rational Suite of software development and testing tools, and will later provide other IBM software on a pay-as-you-use model.	• Enabled high utilization of available resources, delivering excellent cost-efficiency. • Allowed each company's virtual resources to be flexed up and down as required, and priced according to usage. • Enabled almost instant setup and total flexibility, with zero requirements for customers to own or even understand the underlying infrastructure.
Kantana One of the leading entertainment companies in Thailand.	Store and retrieve extremely large files at high speed.	Implemented IBM Scale-out File Services (SoFS), an all-in-one data storage solution with IBM System x™ and IBM System Storage™ technologies and management services from IBM Global Technology Services.	• Increased productivity with centralized file storage for all animators. • Met growing business requirements with enhanced, cost-effective scalability. • Gained the ability to scale storage capacity precisely as business needs dictate. • Reduced administrative workload and costs with IBM Scale-out File Services.
Vietnam Technology and Telecommunication (VNTT) Which provides technology services to industrial parks in the Binh Duong province in the southeast of Vietnam.	Create a shared central infrastructure to deliver flexible infrastructure and software services to small- and mid-sized companies, on a pay-as-you-use pricing model.	Launched the VNTT Cloud Center, built on IBM Service Delivery Manager cloud solution and featuring IBM System x® and BladeCenter® servers, enabling the dynamic creation of secure virtual infrastructures for local businesses.	• Leveraged economies of scale to deliver high-quality IT services at a low cost. • Gained the ability to flex virtual resources up and down as business requirements change. • Eliminated the need to understand the underlying infrastructure, allowing businesses to focus on innovation.

Why ConRes?

If you're considering launching a cloud computing project by implementing IBM technology, you have a choice in which Value Added Reseller (VAR) you work with. Why choose ConRes?

Most VARs simply push the hardware they're most incented to sell, or they concentrate on selling professional services almost to the exclusion of products. ConRes is different.

We've coined the term "hybrid VAR™" because it truly represents the combination of products and services we offer our customers. As a hybrid VAR™, we take value added reselling to a higher level, with unbiased IT infrastructure and data center solutions built from a broad selection of IT products and professional services.

We also allow you to leverage our world-class, 45,000 square foot, ISO-registered integration center for staging, configuration, proofs of concept, scheduled rollouts, and even OEM and embedded computing solutions. We can fully configure, test, and complete any project, ranging from massive rollouts to custom systems.

In addition, ConRes offers you:

- **Financial stability.** We're a privately held, family owned and operated, $330 million company.
- **A true customer focus.** Being owner-operated lets us make faster decisions and respond quickly to customer needs.
- **Track record.** We have 48 years of high-tech knowhow supported by engineers with multi-vendor certifications.
- **Geographic reach.** ConRes has more than 300 employees who can provide coverage in most major metropolitan areas in the U.S.
- **Support for your diversity mandates.** ConRes is a certified woman-owned enterprise.

Request Your Free On-Site Assessment

You now have a much better idea of the many potential benefits of cloud computing. You also have a head start on building a business case and planning a project. Your next step? Call on ConRes' team of experienced IBM partners who can assess your current needs and goals and help you craft a cloud computing plan for success.

We've been helping companies design, procure, and implement the best possible technologies for their businesses for nearly half a century. ConRes will help you make the right decisions to support your users, your customers, and your business.

Let's get your cloud computing project started. Call us for your free on-site assessment at 1 800-937-4688.