High performance. Delivered.

Accenture cloud application migration services

A smarter way to get to the cloud

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Strategy | Digital | Technology | Operations

Cloud computing can help make your apps extraordinarily agile and scalable. You know this. Your competitors know this. And now, it seems, it is a race to the finish.

Until, that is, application migration appears on the agenda.

Even though cloud computing has become more commonplace in infrastructures, when it comes to applications, many of you lie awake at night mulling big questions:
• Should I even move these applications to the cloud?
• If so, which type of cloud? Public? Private? Hybrid?
• Which provider can offer me the most flexibility and support?

You know you need to map a path with the endgame in mind. A secure architecture reigns when plotting app migration. And if it does not, you may end up with more complexity than before. Accenture can lead you through a process that reduces pain and costs while maximizing time and resources. It comprises five important stages: discovery, assessment, planning, migration and deployment.

Cloud app migration: How we do it

Across the world, organizations of all sizes from every sector are moving to cloud computing. And they need help with migration: Yet fewer than half of the organizations moving to cloud are confident in identifying which of their applications could best benefit from the technology.

According to global analyst IDC, spending on public IT cloud services is expected to reach more than US$107 billion by 2017.[1]

And, according to Aragon Research, moving legacy applications to a hybrid cloud environment may be the most challenging task.

The results of Accenture's High Performance IT research show high performers are combining private and public clouds with existing systems to enhance what each has to offer as they transition to a hybrid environment.

In short, high performers aren't waiting for new technologies to develop or mature before they act.

Mapping your path to the cloud

To make a smooth, strategic cloud migration, you should start with careful analysis to discern which cloud services are the best fit for your applications, whether they are custom or off-the-shelf. Next, you'll need to select the most efficient migration approach, with a detailed understanding of the efforts involved—the many steps to get you there.

Accenture can help. We offer a deep understanding of the possibilities that emerge when legacy systems and cloud solutions mesh. And we have a clear vision of the digital future this hybrid world is leading us to. We combine those insights with our industry knowledge to drive innovation and transform complex environments into high-performance engines. We can help ease large-scale migrations by executing with industrialized tools and methods.

Accenture's enterprise application migration services provide detailed, long-ranging, robust methodologies for migrating large application portfolios to cloud platforms— and is scalable—for single apps to multiple. Our tested, reliable tools can help you with

application inventory, assessment, code analysis, migration planning and execution.

We start with an in-depth inventory of your current applications, collecting data that feeds into our cloud assessment tools. The data is key for calculating the appropriate fit among public, hybrid and private clouds. This process also helps predict the most appropriate model for your migration— Infrastructure as a Service (IaaS), Platform as a Service (PaaS) or Software as a Service (SaaS) clouds.

When working with custom apps, after you select a suitable deployment and service model, we assess the most appropriate fit among applications for leading cloud platforms. Post assessment, our code analysis tools identify any application areas that require remediation for the target platform. To help reduce risk, migration time, and budget for planning and execution, we prioritize applications that can be grouped in waves.

Application Migration Journey

Discovery

Gather your data—what applications you have, who uses them, how often, when they were written and in what language.

Discover/inventory applications

Capture metadata

Assessment

Using our migration framework, make key decisions on the path and destination for each application.

Establish assessment framework

Determine application disposition
Lift and shift, remediate, re-platform, decommission

Determine cloud deployment and service
IaaS, PaaS, SaaS, private, public, hybrid

Determine target cloud vendor platform

Migration Planning

Create a practical roadmap based on application assessment. Focus on early value and momentum.

Plan, estimate and prioritize migration

Update business case

Conduct pilots

Design future architecture

Define migration roadmap

Migration and Testing

Skilled professionals migrate applications at scale with automated tools and standard processes.

Remediate and/or migrate applications

Document code changes and configurations

Migrate databases, interfaces and dependent applications

Validate and accept

Deployment

Go live in a more powerful and efficient place.

Transition to support

Post-migration review

Update service catalog

Tools

ITx **ITxRay:** highly configurable, non-intrusive discovery application that provides an in-depth look into environment configurations

Application Portfolio Optimization (APO): provides functional and technical health assessment

Accenture Cloud Computing Assessment Tool (ACCAT): provides quick, high-level assessments to identify opportunities and readiness for cloud, quantifiable outcomes, and strategy for further exploration

Cloud Migration Toolkit (CMT): automates code analysis and generates an impact analysis chart

eMPIR: Migration Management: provides a single point of access to data access; migration execution command and control; real time planning/tracking and auditing/reporting

Language Migration: Migration from legacy languages to modern languages via the BlueAge toolset

Migration Automation: Racemi, Cloud Velocity, App Zero, Rivermeadow, etc.

1 Discovery

While companies are flocking in ever-increasing numbers to cloud computing's "everything as a service" promise, many also still rely on traditional, in-house IT systems and applications.

What has emerged is a more complex hybrid technology landscape—one in which businesses must assimilate multiple developing technologies with legacy systems. How many applications are you running? How outdated are they?

The challenges run wide and deep. To start, you may have thousands of applications to migrate to the cloud. Your existing apps may not be designed to take advantage of cloud infrastructure, may be written in languages, or rely upon operating systems that are not supported by cloud platforms and may have limited technical support.

A move to cloud computing would be easy if there were only one cloud environment. Incompatible application programming interfaces complicate migrations.

Accenture's discovery phase is designed to grasp the number of applications you are running, how often you use them, who uses them, when they were written and in what language. We establish an assessment framework, discover and audit applications in the portfolio, and determine application disposition.

To complete a thorough application inventory, we employ high-grade tools, including:

- ITxRay—a highly configurable, non-intrusive network discovery and inventory application that provides an in-depth look into environment configurations.

- Application Portfolio Optimization Tool— provides application inventory, functional and technical health assessment.

2 Assessment

After we establish a tailored assessment framework, we can help you determine the appropriate migration path for each application. We weigh critical factors such as security, scalability, your growth plan, high-priority business initiatives and risks, and regulations. Our assessment tool generates an impact analysis chart to determine migration-readiness.

From there, we can discern the most appropriate target cloud deployment option (public, private or hybrid), a suitable type of service (IaaS, PaaS or SaaS), cloud vendor platform (such as Amazon Web Services, Azure, Cloud Foundry, Open Shift or Salesforce1 Platform) and the appropriate level of remediation.

Blu Age®

Why Accenture? We explore, test and use innovative tools, such as Blu Age®, designed specifically for moving apps from legacy systems to the cloud.

Accenture's enterprise Migration Planning Information Repository (eMPIR) migration management tool offers single point of data access, migration execution command and control, real-time planning and tracking, and a clear migration work plan.

An agile solution for application modernization, Blu Age® extracts models of the business rules from your legacy applications and automates their transformation into code. With its software code generation engine, Blu Age® can help accelerate the modernization of your applications, reduce migration and maintenance budgets, and enhance the agility of your information system.

The Blu Age® tool allows Accenture to migrate otherwise stranded apps to cloud platforms.

While some companies may help you move 200 lines of code per day, our teams use Blu Age® to help you move 1,000 lines per day.

Modernizing your applications with Blu Age® also offers substantial savings— you could lower your migration and maintenance budgets between 40 and 50 percent.

3 Migration planning

During the next phase of Accenture's Cloud Migration process, we align the assessment results to a practical roadmap. We update the business case, conduct pilot migrations—plan to reduce risk, etc., and then create a work plan for the overall migration, finalizing the cloud architecture.

During the planning phase, we take into account key factors, such as:
• Assessment recommendations and target architecture
• Target environment availability for private clouds
• Application dependencies
• Budget and cost expectations
• Business calendars

Specific steps during the planning phase may include:
• Estimating the application migration effort
• Defining requirements
• Creating a migration roadmap
• Planning migration
• Conducting migration pilots
• Updating the business case
• Designing a future architecture

4 Migration and testing

During the migration and testing phase, we mobilize Accenture's Application Migration Factory processes, tools and teams to meet your specific requirements and objectives. The process includes a detailed migration plan, factory governance and operations model, all backed with Accenture's industry-leading practices.

Using tools such as eMPIR migration management and Blu Age®, steps may include:
• Remediating and/or migrating applications
• Documenting code changes and configurations
• Migrating databases
• Testing applications to help confirm migration has not changed functionality

5 Deployment

Finally, it's time to go live. Once we've worked with you to perform all the discovery, assessment, planning, and migration and testing, we can launch your cloud applications, providing support, performing post-migration review and executing technical decommissioning, as required.

Your applications would now operate in a new architecture as public or private IaaS, PaaS or SaaS deployments.

Cloud in action
How Accenture helped.

A breakthrough database framework through cloud migration

A leading global software company wanted to boost the performance and functionality of its licensing applications, which capture millions of dollars in daily revenues. Accenture helped turn the company's innovative ideas into reality and addressed ongoing performance issues that led to savings of more than US$5 million and reduced delivery time by two weeks.

A few pioneering innovations we employed included:
- A first-ever migration of a pricing application to the company's own cloud product
- A lean, end-to-end database ecosystem called a "right-sizing framework"

The cloud migration increased application availability to 99.9 percent, which in turn helped close sales faster during peak periods, increasing user satisfaction by 10 percent. The cloud migration project also resulted in a customer showcase and reusable assets, and components for cloud Web services, which will help the company drive further market adoption of its services.

The project reduced the number of records to be migrated from 42 million to just 50,000, trimming the need for a large hardware inventory of 15 servers to just one, and addressing non-availability issues during release cycles. The company saved more than US$5 million annually through greater development and test efficiency, and realized a one-time saving of US$1 million on hardware costs. It also slashed development and testing time to two to three days (from four to six weeks), delivering new functionality to customers and partners faster, which laid the foundation for using agile development and migrating additional applications to the cloud.

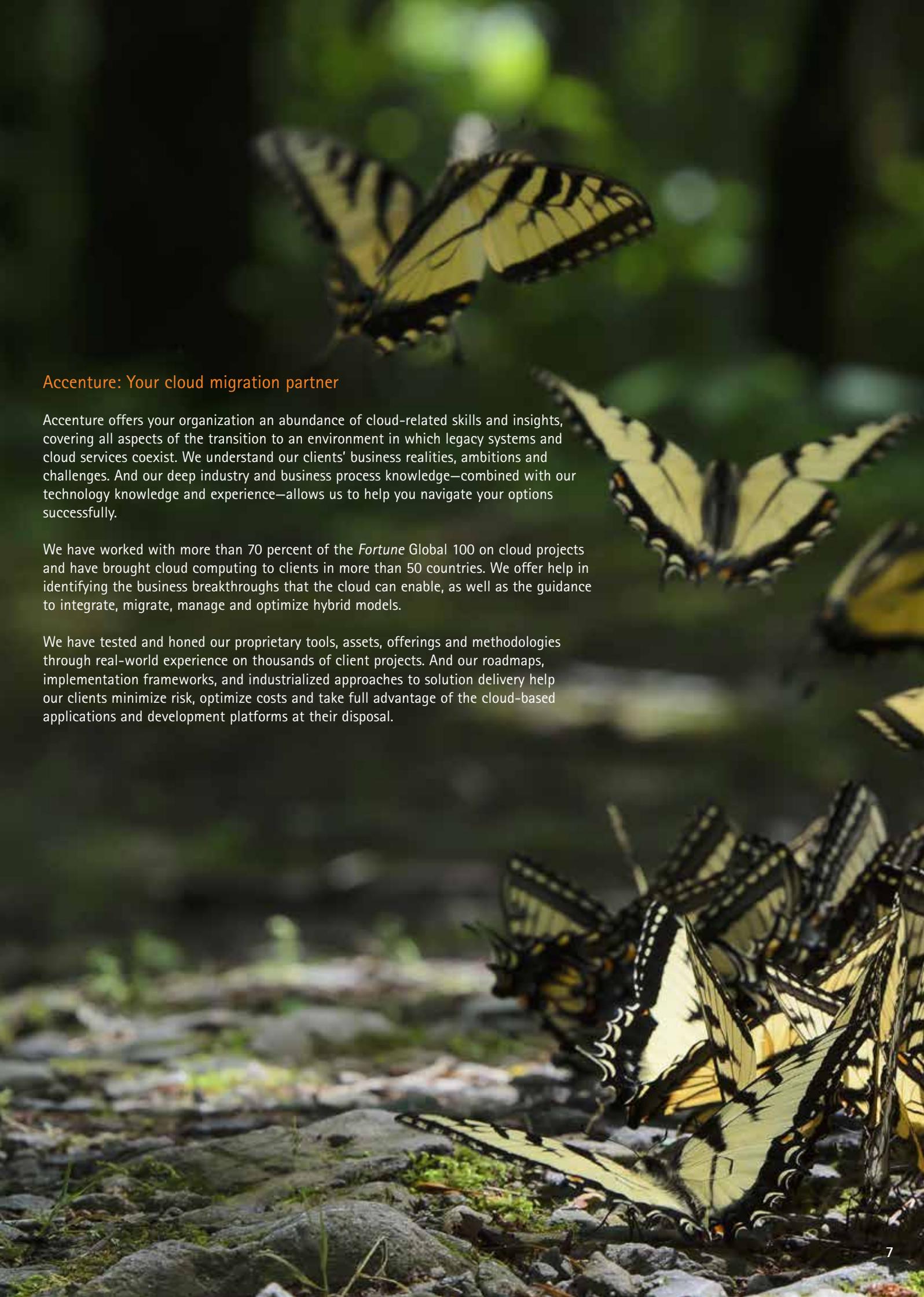### Discovery Networks International Cloud Migration

Reaching more than 1.6 billion cumulative subscribers in more than 220 countries and territories, Discovery Networks International (DNI) distributes 46 international brands and customized schedules and programming in 45 languages via 245 feeds.

Because of its scale, DNI had been experiencing a number of difficulties with its infrastructure hosting and storage need setup. Continually launching new sites, DNI was fast approaching capacity in its existing data center. Additionally, the company operated out of a single data center with no disaster recovery capability.

Accenture conducted an analysis of DNI's online architecture and assessed the suitability of migrating its entire portfolio to the Amazon Web Services (AWS) platform. The analysis highlighted a number of key benefits resulting in Accenture managing the application migration, AWS environment configuration and production deployments—all based upon proposed cloud architecture blueprint.

Today, DNI is on track to reduce its monthly operational hosting bill by 73 percent. Other benefits include:
- Agility—A cloud-based architecture enables DNI to launch new, value-added services without latency issues from infrastructure management and provisioning
- Granular Scaling Capability—Accenture implemented a fully elastic cloud architecture, which allowed DNI's infrastructure to grow as demand increases throughout any 24-hour period
- Reduction in Future Capital Outlay—Given the increased popularity and complexity of its online offerings, DNI had planned to increase its data center capacity but, following the migration, the need for this large capital expenditure disappeared

Accenture: Your cloud migration partner

Accenture offers your organization an abundance of cloud-related skills and insights, covering all aspects of the transition to an environment in which legacy systems and cloud services coexist. We understand our clients' business realities, ambitions and challenges. And our deep industry and business process knowledge—combined with our technology knowledge and experience—allows us to help you navigate your options successfully.

We have worked with more than 70 percent of the *Fortune* Global 100 on cloud projects and have brought cloud computing to clients in more than 50 countries. We offer help in identifying the business breakthroughs that the cloud can enable, as well as the guidance to integrate, migrate, manage and optimize hybrid models.

We have tested and honed our proprietary tools, assets, offerings and methodologies through real-world experience on thousands of client projects. And our roadmaps, implementation frameworks, and industrialized approaches to solution delivery help our clients minimize risk, optimize costs and take full advantage of the cloud-based applications and development platforms at their disposal.

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 289,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is www.accenture.com.

About Accenture Cloud

Accenture is uniquely positioned to help organizations use the cloud for competitive advantage within a complex digital marketplace. With a full range of cloud services, from strategy and implementation to migration and a cloud brokerage, we help clients plan for, integrate and manage in a hybrid world where cloud and legacy systems co-exist. We combine those insights with our industry knowledge, delivery experience and diverse ecosystem to drive innovation and transform complex environments into high-performing digital businesses. Accenture has worked on more than 8,000 cloud computing projects for clients, including nearly 70 percent of the *Fortune* Global 100, and has more than 10,000 professionals trained in cloud computing.

For More Information

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