For early customer engagement

Cisco Cloud Enablement Services

Comprehensive, enterprise cloud enablement services help you realize a secure, agile, and highly automated infrastructure-as-a-service (IaaS) environment for cost-effective, rapid IT service delivery.

Accelerate Your Enterprise Private Cloud Initiative

Enterprise leaders today are facing numerous challenges around increasing demand for rapid provisioning of services and how best to meet that demand as the business evolves.

Enterprises must continue to lower infrastructure costs and maximize limited capital and operational spending, while aligning and optimizing internal processes and better managing complex infrastructures. To control rising service delivery costs, enterprise IT will require user-based chargeback mechanisms and the ability to define and rapidly deliver application-level service level agreements (SLAs). Finally, enterprise IT must secure the user experience while meeting the demand for services and rapid service provisioning.

In confronting these challenges, enterprise leaders are asking some difficult, though highly relevant, questions about the value of cloud computing—IT resources and services that are abstracted from the underlying infrastructure and provided on demand and at scale in a multitenant and elastic environment—as well as the best way to proceed in transforming their enterprise IT infrastructures and service delivery.

Leaders are asking:

- Does cloud computing make sense for my business?
- How can we anticipate the challenges of migrating to a cloud architecture and make the transition easier?
- How can we plan and build a cloud architecture that comes in on time and on budget?
- How can we help ensure regulatory compliance and security? How does cloud affect our enterprise security program?
- How can we measure the benefits of cloud computing and make sure we will see a return on investment (ROI) and grow our business?
- Is there a way to customize the chosen cloud approach to deliver the most benefit, help ensure cloud evolution, and provide ongoing cost reductions?

Like any major business transition, these important questions must be answered before enterprises can initiate any change, including cloud computing, with confidence. To help you answer these questions, Cisco® Cloud Enablement Services provide a portfolio of professional services that can help facilitate a cloud strategy and transition to a cloud approach; accelerate the successful implementation and operation of a highly virtualized, secure, and automated infrastructure-as-a-service cloud environment; and rapidly transform IT service delivery, thus increasing business responsiveness and business agility.

Transitioning to Cloud Computing

Migrating to a new cloud model is much more complex than implementing a single technology. It requires a shift to a new operational business model. Today new data center technologies such as virtualization, orchestration, and automated provisioning and solutions such as the Cisco Unified Computing System™ (UCS), which unifies network, compute, storage access, and virtualization resources in a cohesive system, have combined to make infrastructure-as-a-service (IaaS) cloud utility architectures technically and operationally feasible.

In fact, many enterprises are considering or have started with the private cloud, in which the data center operates as an infrastructure as a service. There are several cloud deployment models available to enable infrastructure as a service.

- **Private clouds:** enterprise IT infrastructure services, managed by the business, with cloud computing qualities such as self-service, pay-as-you-go chargeback, on-demand provisioning, and the appearance of infinite scalability

- **Virtual private clouds:** Cloud services that simulate the private cloud experience in public cloud infrastructure

- **Public or external clouds:** Cloud infrastructure made available to the general public through web browsers or through APIs but offering limited customer control

- **Community clouds:** Cloud infrastructures shared by several organizations and supporting a specific community; for example, several financial service banks join to form a financial community in a cloud

- And, in the future, **hybrid clouds:** cloud infrastructures composed of two or more clouds able to interoperate or federate through networking technologies, across data center and organizational boundaries

By provisioning IT services as a cloud computing utility and eliminating siloed computing architectures, enterprises can turn IT into a strategic center of innovation with IaaS-enabled service offerings, such as computing, business continuity (disaster recovery), virtual desktop infrastructure, cloudburst, and development and testing/quality assurance as a service.

Cisco Cloud Enablement Services Approach

Cisco Cloud Enablement Services empower enterprises to identify, implement, and operationalize the most effective IaaS solution for their business. These services help you build your cloud business case, virtualize and dynamically provision network, compute, and storage resources, and enable new IaaS services with security built into every layer of the infrastructure for a secure, compliant cloud environment.

Cisco Cloud Enablement Services provide customized strategy, planning and design, and implementation based on the customer's targeted IaaS offering. Drawing on extensive experience delivering secure end-to-end virtualized data centers, Cisco provides a comprehensive, architectural approach for enabling IaaS that that considers the people, processes, and technologies involved across your network, compute, and storage resources. This approach encompasses the selection and customization of infrastructure management tools to orchestrate new services and service-oriented billing and chargeback mechanisms, as well as alignment of people and processes to manage IT services.

As part of its Cloud Enablement Services, Cisco also provides two overlying functions: a program management office (PMO) and architecture management office. The PMO is a common service element providing project governance, communications planning, risk mitigation, and ongoing management status updates for on-time, coordinated delivery of the IaaS architecture.

The architecture management office aligns your business, technologies, and operational architecture to your strategy and utilizes standardization and automation to lower costs for IT services, IT service management (ITSM) complexity, and risk. The office includes a solutions architect providing onsite and remote analysis and reviews of your end-to-end architecture to help ensure adherence to the cloud IaaS architectural design across all service phases.

Cisco Cloud Enablement Services offer:

- **Choice:** Cisco provides strategy, design, planning, implementation, and integration services, allowing you to choose the vendors, partners, and solutions that meet your business needs and create a best-in-class solution.

- **A comprehensive, architectural approach:** Cisco's approach to cloud enablement is designed to enable the cloud as a new operational model. Cisco utilizes a comprehensive, architectural approach to provide customized cloud infrastructure solutions and uses validated tools and methodologies to accelerate cloud implementation, while mitigating risks. Cisco delivers its enablement services across the enterprise business architecture, technology architecture, data center systems management, network management systems architecture, IT operational and people and process architecture, billing and service-level agreement (SLA) architecture, and facilities architecture.

- **Extensive virtualized data center and unified computing expertise:** Many virtualization efforts focus on server, rather than network, virtualization, thus limiting the potential of the cloud approach. By utilizing Cisco's network experience to address the entire cloud architecture and business challenge, you benefit from a comprehensive, rather than siloed, perspective. Cisco and its ecosystem of partners offer extensive real-world, technology and business expertise across network, storage, and compute resources.

- **Best-in-class solutions and partners:** A cloud architecture can encompass diverse technologies and business partners, both within and outside the enterprise. Cisco's collaborative partner approach applies the combined expertise of Cisco and our global partner ecosystem to reduce the risk and accelerate the benefits associated with a cloud transition. Cisco Cloud Enablement Services help integrate your technologies, tools, and partnerships into a cloud solution of your choice.

Cisco Cloud Enablement Services

The Cisco Cloud Enablement Services include:

- Cloud Strategy Service
- Cloud Planning and Design Service
- Cloud Implementation Service

Cisco Cloud Strategy Service

The most important question an enterprise should ask when contemplating a cloud computing initiative is: What can cloud computing do for my business in terms of controlling costs, delivering a return on investment (ROI), and affecting processes?

The Cisco Cloud Strategy Service employs ROI tools and in-depth analysis of your current architecture and technology choices—with a primary focus on security—to help you determine the most appropriate cloud strategy and architectural options. It also helps assess your architectural options for real cloud uses, such as disaster recovery and computing as a service. Additionally, this service helps you evaluate data center applications and dependencies, as well as management tools and operations management approaches involved in a cloud transition.

Unlike a device- or application-level only approach to security, Cisco takes a comprehensive architectural approach. Security is integrated into every layer of the Cisco-enabled IaaS architecture, and all service delivery elements have security. This core capability then is tailored to your environment and business mandates.

As part of the strategy service, Cisco provides several cloud security assessments which you can select according to your business needs. These security assessments focus on your needs around, for example, how to solve cloud multitenant security challenges when consolidating previously isolated lines of business into the cloud; manage and control the security of data as it moves through the cloud across dispersed network, computing, and storage resources; and assess whether an application, data, or service is suitable in terms of its security for the cloud and which providers have the security capabilities to meet enterprise security requirements. These assessments include the following:

- Assess the current data center security architecture and identify gaps between current state and future cloud security architecture state
- Assess your existing private cloud security architecture, identify areas to strengthen protection, and provide improvement recommendations
- Assess whether an application, content or network service is suitable for migration to a public cloud

In multitenant cloud environments, users will have both unique and overlapping regulatory, legal and audit requirements for their business operations. Our services help address these requirements as a cohesive business process for protecting systems and information by helping you to:

- Understand your existing security processes and how they are governed
- Evaluate the effectiveness of these security processes
- Improve security processes to better address requirements
- Analyze operational and technical controls
- Develop a common control framework based on the controls analysis

The end result is the cloud is now aligned with governance, risk, and compliance (GRC) priorities, in a consolidated and consistent program. As the business' GRC priorities adapt and expand, they can be incorporated smoothly into a cloud GRC program.

Cisco Cloud Strategy Service helps ensure that subsequent cloud architectural development, tools, and process integration and implementation are aligned with achieving business returns.

Cisco Cloud Planning and Design Service

Once an enterprise has identified a secure cloud strategy through the Cloud Enablement Strategy Service, the next step is creating a detailed architecture design to implement the IaaS solution. This design stage is crucial, both to help ensure that the ultimate architecture aligns with the unique business processes and goals of the enterprise and to reduce risk and accelerate time to value of the implementation. This service addresses a primary question: Which architecture can maximize virtualization, orchestration speed, and chargeback design?

The Cisco Cloud Planning and Design Service provides a comprehensive, detailed design service encompassing network, computing, storage, network services, network security, management tools, and processes to realize the target IaaS architecture.

The IaaS design service covers the technology and management tools architectures; security from an end-to-end security framework view (including identity and trust, security event monitoring and correlation, policy enforcement, isolation, and resiliency); cloud operations readiness; service-level agreement and chargeback development; migration planning; and facilities, mechanical, and electrical design.

Cisco has substantial expertise in the core underlying technologies of network, storage, and computing to deliver advanced, virtualized data centers, while detailing operational processes and recommending best practices. The Cisco team also will transfer to you unique intellectual property that benefits your business.

Cloud Planning and Design Service is crucial to linking strategic objectives with a secure overarching design, which prepares the foundations for the subsequent implementation and integration activities.

Cisco Cloud Implementation Service

Given the complexity of the transition from current-generation IT approaches to a cloud operational model, implementing and launching a cloud transition are a significant long-term investment, with potential risks. The major challenge is "How do we realize our cloud architecture—on time, on budget, and securely in our specific environment?"

The Cisco Cloud Implementation Service helps enable the migration from your environment to a Cisco cloud computing architecture. Cisco manages the implementation and integration of the end-to-end architecture by staging and delivering application migration, provisioning, and service orchestration of your desired cloud computing environment.

Cisco and its best-in-class partners bring extensive data center and virtualization expertise to the integration and staging of an enterprise cloud and provide you with a fully operational IaaS architecture, an automation tools architecture, and progressive implementation of new cloud-enabled IT services. The service reduces risk around cloud migration and helps ensure that the IaaS architecture aligns with the ROI metrics defined during the Cisco Cloud Strategy Service activities.

The Cisco Cloud Implementation Service uses internal Cisco intellectual property, proven methodologies, and Cisco partners to accelerate the implementation of cloud architectures, tools, and processes. Cisco helps to ensure that the architecture blueprint is accurately realized, in an on-time manner. Cisco Services also provide specialized expertise around the operation of Cisco networking equipment and the Cisco Unified Computing System so that you benefit from a leading practices implementation.

The Cloud Implementation Service covers the activities, including technology, security, tools, and facilities implementation; orchestration integration; workload migration; and staging and validation.

Benefits of Cisco Cloud Enablement Services

What is crucial to successfully exploiting cloud computing is to recognize this revolutionary operational model is much more than just a new technology architecture or operating system. Security, systems management tools, chargeback mechanisms, operational procedures, and SLAs are all important in addition to the network, computing, and storage technology.

The Cisco Services approach draws on our services experts with their expansive data center and virtualization expertise, proven best practice methodologies, and Cisco's unique intellectual property to support cloud-enabling technologies. Cisco Cloud Enablement Services help enterprises:

- Accelerate the development of a financially justified cloud strategy with a measurable ROI
- Help ensure that IaaS infrastructure, management, people, and processes maximize the success of the cloud transition and help ensure that its benefits are achieved
- Accelerate the development and implementation of an IaaS architecture, integrated tool design, and chargeback and security mechanisms validated by Cisco
- Create a phased migration plan to help ensure the successful adoption of the new cloud operational model
- Accelerate time to value of a IaaS architecture for cloud services creation and delivery

Why Cisco Data Center Services

Today, the data center is a strategic asset in a world that demands better integration among people, information, and ideas. Your business and your data center work better when technology products and services are aligned with your business needs and opportunities. Cisco and our industry-leading partners deliver intelligent, personalized services that accelerate the transformation of your data center. Using a unique combination of network and application based perspective and a unified view of data center assets, Cisco takes an architectural approach to help you efficiently consolidate, virtualize, and manage data center resources. Cisco Data Center Services help transform, optimize, and protect your data center to reduce costs, deliver high availability, and improve application performance.

Cisco and Partner Expertise

Cisco and our industry-leading partners use best practices and proven methodologies to help you quickly and efficiently plan and deploy a high-performance, resilient, and scalable cloud architecture for your business.

The Cisco Cloud Enablement Services are delivered by Cisco experts who hold a wide array of industry certifications and are subject matter experts in business and technology architecture and data center technologies. They have direct experience in planning, designing, and supporting virtualization solutions.

Cisco offers the following expertise:

- Data center solutions architect
- Layer 2 and Layer 3 infrastructure architect
- SAN architect
- Layer 4 to Layer 7 architect
- Virtualization architect with service orchestration expertise
- Cloud automation solutions architect
- Information security architect
- Network management architect
- Customer system architect and administrator
- Project management

Cisco product and technology expertise is continually enhanced by hands-on experience with real-life networks and broad exposure to the latest technology and implementations.

Availability

Cisco Cloud Enablement Services are widely available. Contact your Cisco account manager about availability in your area.

For More Information

For more information about Cisco Cloud Computing, visit:
www.cisco.com/go/cloud enablement