



10 Things IT Needs to Know about Cloud

Your Quick Guide to Developing an IT Cloud Strategy

Today, the question is not *if* your organization will adopt cloud computing, but *when*. Here are 10 frequently asked questions to prepare you to “sell-in” the right cloud strategy for your organization.



1 What is Cloud computing?

Cloud computing is the virtual delivery of shared resources, utilized by end users as a service. Cloud is typically discussed in two contexts: (1) what infrastructure it's built on and (2) how it will be used. IT professionals often think in terms of cloud infrastructure (e.g., public, private, and hybrid cloud). Business decision makers may be more focused on the type of service to be delivered: Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), or Software-as-a-Service (SaaS). Aligning the two perspectives will help articulate an ideal cloud strategy.

2 Why should my organization implement Cloud?

Cloud can help address pressures that IT organizations are facing to reduce costs, deliver quickly, and ensure data security and compliance. These pressures are mitigated by cloud through better resource utilization, on-demand service delivery, and better security policy management.

3 What should be my first step in planning a cloud strategy?

Start by developing a strategy document, which includes the following:

- High-level business case
- Defined implementation phases
- Workload identification
- Cloud architecture definition
- Client device plan
- Monitoring and management plan
- IT and business partnership plan

Intel's [Private Cloud Infrastructure-as-a-Service Planning Guide](#) offers details on executing your strategy.

4 How do I ensure my cloud strategy is comprehensive?

Document how moving from Virtual Machine (VM)-aware to cloud-aware application delivery will impact existing business processes. Consider categorizing workloads based on diverse infrastructure needs:

- Standard: Productivity applications and non-core workloads or applications used daily.
- Strategic: Core applications and workloads that create value for and differentiate the business.
- Pilot: Applications and workloads that drive innovation and create new opportunities for the business.

5 What's the right cloud delivery model for my organization?

The best cloud delivery model for your business matches workloads to environments to deliver the services your end users need. To determine the right model, consider the factors specific to your datacenter and organization (e.g., workload type, demand, and scale, security requirements, and service level expectations).

Learn more in Intel's [Hybrid Cloud 101 Brief](#).

Frequently Asked Questions

6 Is virtualization the same as cloud?

Here's the difference: virtualization abstracts compute resources—typically as VMs—with associated storage and networking connectivity. Cloud determines how those virtualized resources are allocated, delivered, and presented. While virtualization is not required in bare metal clouds, clouds based on virtualization enable more rapid scaling of resources in a way that non-virtualized environments find hard to achieve.

7 How do I deploy a secure cloud infrastructure?

Look for architecture that enables a root of trust, and keep these principles in mind:

Secure the residence: Understand where data is being stored and accessed.

Secure the movement: Understand the networks through which data is being disseminated.

Secure the method: Understand *how* data is being transmitted through networks to the storage points.

Learn more about Intel's [cloud security solutions](#).

8 How do I assess the current status and roadmap for my cloud strategy?

Are you running one application on one server, or have you virtualized your servers to improve efficiency? Both solutions work, but they can hamper innovation and limit scalability. To take the next step, outline your service delivery vision against three constraints: service level agreements (SLA), budget, and optimal server utilization. See how [Intel IT redefined its datacenter strategy](#).

9 How might cloud affect current business practices?

- Move from manually provisioned to automated infrastructure.
- Adopt DevOps principles.
- Evolve from supporting static services to deploying dynamic services.
- Enable IT to act as a service broker—driving the business, instead of simply supporting the business.

Intel's [PaaS Drives Cloud Demand](#) white paper offers details on strategic execution.

10 Are there new cloud-related terms and concepts I should be aware of?

Cloud Bursting: An application runs in a private cloud or datacenter and “bursts” to a public cloud when the demand for computing capacity increases.

Network Function Virtualization (NFV): Virtualizes entire classes of network node functions into standardized building blocks that may be connected, or chained, together to create communication services. Read the white paper on [Network Functions Virtualization](#).

Software-Defined Networking (SDN): Allows network administrators to manage and provision network services through software-based networking and automation. Read the white paper on [Open IT Networks](#).

Software-Defined Storage (SDS): A software-defined, massively scalable storage environment that provides automated tiers and data and media management on high volume servers. [Read the blog](#).

Software-Defined Infrastructure (SDI): Enables a fully orchestrated, abstracted environment where applications define the systems through pooled resources, provisioning management, and service assurance.

Resources

[Intel IT Center >](#)

[New Cloud Guides and Resources >](#)

[New Cloud Video >](#)

[Open Data Center Alliance >](#)

