

Office of the Chief Information Officer

What is Cloud Computing?



Cloud is Now

- Global Cloud services
- Big Data Management
- Microservices
- Ultra-secure services
- Sophisticated Business Intelligence
- More innovative and custom application availability
- Information available anywhere on any remote device

“as-a-service” subsets are being used everywhere in IT:

AaaS – Authentication as a service

BaaS – Backend as a service

BDaaS – Big Data as a service

BPaaS – Business Processes as a service

CaaS – Communications as a service

DBaaS – Database as a service

DaaS – Desktop as a service

Haas – Hardware as a service

IDaaS – ID as a service

MaaS – Monitoring as a service

MBaaS – Mobile backend as a service

NaaS – Network as a service

OaaS – Operations as a service

STaaS – Storage as a service

WaaS – Workspace as a service

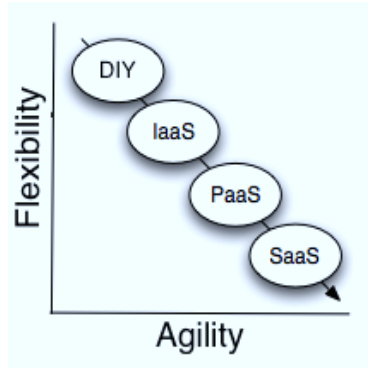
And, of course - XaaS – Anything as a service

For cloud security information, visit: <https://cloudsecurityalliance.org/>

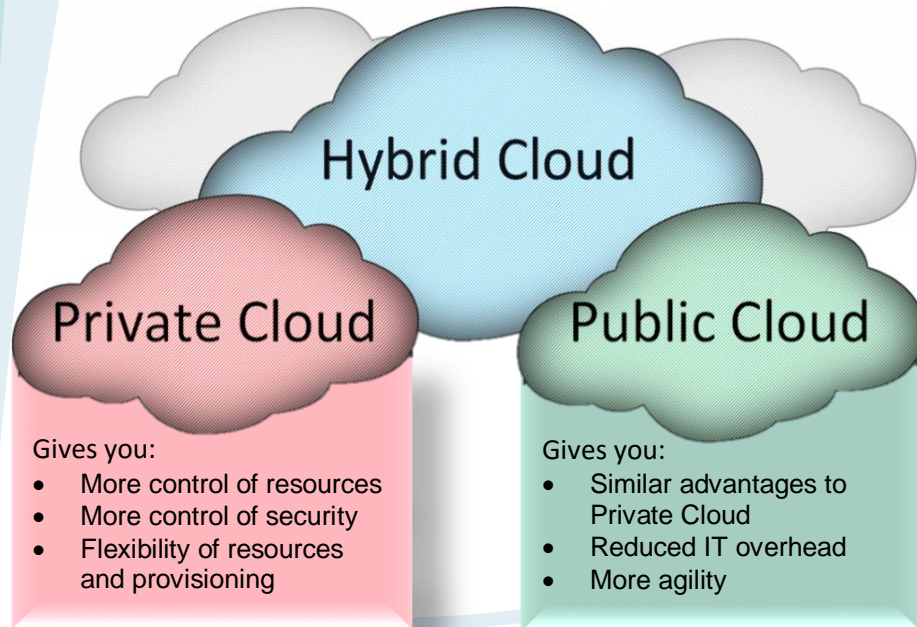
Three Basic Pillars

Public, Private, Hybrid

The more we outsource our services, the less flexibility we have over our data. All factors should be considered; availability, security and privacy, control, and compliance while we move toward agility to be able to customize our needs quickly, efficiently and cost effectively.



Many organizations find the answer in a Hybrid Cloud model - the combination of a Public Cloud by a third-party service provider and an on-site Private Cloud with orchestration and automation between the two.



In the simplest terms, cloud computing means storing and accessing data and programs over the Internet instead of your computer's hard drive or on-site servers. In the public cloud model, a third-party provider delivers cloud services that are sold on-demand, typically by the minute or the hour.

IaaS, PaaS, SaaS

There are three major categories of Cloud Computing:

- Infrastructure-as-a-Service (IaaS)
- Platform-as-a-Service (PaaS)
- Software-as-a-Service (SaaS)

Infrastructure-as-a-Service means the cloud provider supplies basic computing resources: servers, network, and storage.

Platform-as-a-Service means the provider supplies software, virtual machines and handles system administration for the user. PaaS also supplies middleware utilities and can do everything IaaS does with added management of resources, application frameworks, and tools.

Software-as-a-Service is basically a 'turn-key' operation. The cloud provider supplies everything from IaaS and PaaS services plus all applications and manages data – virtually all of your IT needs.

