

COV Cloud Framework

Essential Characteristics

Broad Network Access

Rapid Elasticity

Measured Service

On-Demand Self-Service

Resource Pooling

Service Models

IaaS

Infrastructure
Servers * Storage * Network

PaaS

Platform
OS * Software Stack
Infrastructure
Servers * Storage * Network

SaaS

Applications
OEM / Packaged Software
Platform
OS * Software Stack
Infrastructure
Servers * Storage * Network

Deployment Models



Private Cloud



Public Cloud



Hybrid Cloud



Community Cloud

COV Cloud Framework

Essential Attributes

Broad Network Access

Capabilities available over the network accessed through standard mechanisms promoting heterogeneous thin or thick client platforms (e.g., mobile phones, tablets, laptops, and workstations) use.

Rapid Elasticity

Elastically provisioned and released capabilities, sometimes automatically, scaling rapidly outward and inward commensurate with demand. Consumer provisioning capabilities often appear unlimited and can be appropriated in any quantity at any time.

Measured Service

Automatically control and optimize resources by leveraging a service metering capability (e.g., storage, processing, bandwidth, and active user accounts). Resource usage monitored, controlled, and reported, providing transparency.

On-Demand Self-Service

Consumer can unilaterally provision computing capabilities, such as server time and network storage, as needed, automatically, without requiring human interaction with each service provider.

Resource Pooling

Provider's computing resources pooled to serve multiple consumers using a multi-tenant model, with different physical and virtual resources dynamically assigned and reassigned according to demand. There is a sense of location independence in that the customer generally has no control or knowledge over the exact location of the provided resources, but may be able to specify location at a higher level of abstraction (e.g., country, state, or datacenter). Examples of resources include storage, processing, memory, and network bandwidth.

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COV Cloud-Based Services

Private
On-Premise



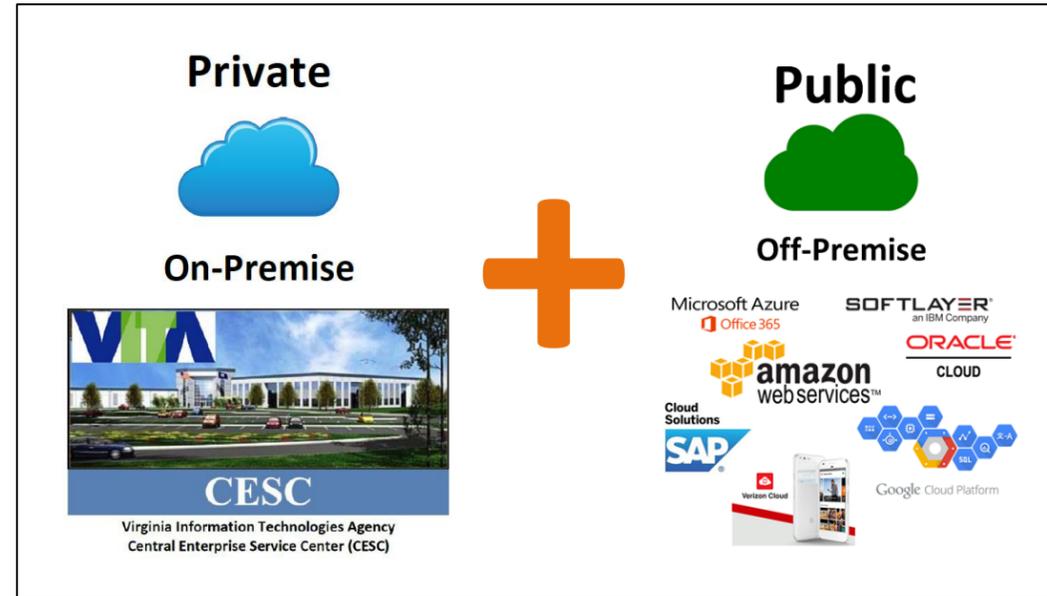
Hybrid
Blended



Public
Off-Premise



CESC
Virginia Information Technologies Agency
Central Enterprise Service Center (CESC)



Community



COV Cloud-Based Services

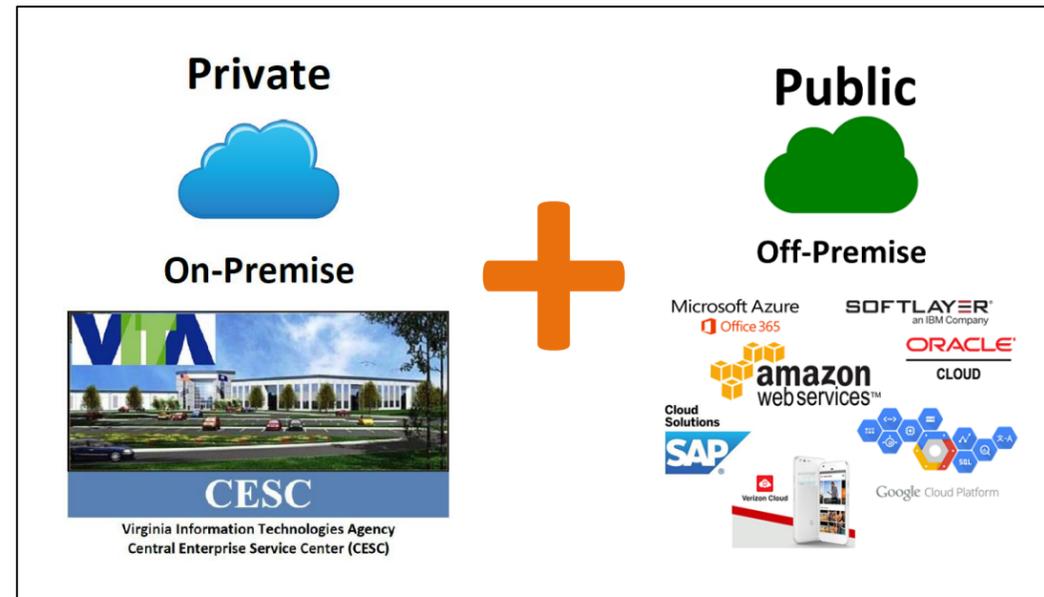
Private
On-Premise



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Central Enterprise Service Center (CESC)

Cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units). May be owned, managed, and operated by the organization, a third party, or some combination of them, and it may exist on **or** off premises.

Hybrid
Blended



Cloud infrastructure is a composition of two or more distinct cloud infrastructures (private, community, or public) that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability (e.g., cloud bursting for load balancing between clouds).

Public
Off-Premise



Cloud infrastructure is provisioned for open use by the general public. It may be owned, managed, and operated by a business, academic, or government organization, or some combination of them. It exists on the premises of the cloud provider.



Community

Cloud infrastructure is provisioned for exclusive use by a specific community of consumers having shared concerns (e.g., mission, security requirements, policy, and compliance considerations). May be owned, managed, and operated by one or more of the organizations in the community, a third party, or some combination of them. And it may exist on **or** off premise.



COV IT Solutions Hosting Framework



On-Premise



Off-Premise



VITA

Agencies

VITA

Agencies

3rd Party Hosting

Servers
Physical | Virtual

Appliances

Appliances

Servers
Physical | Virtual

3rd Party Hosting

Floor Space



Hybrid Cloud



Community Cloud



COV IT Solutions Hosting Framework



On-Premise



Off-Premise



VITA

Agencies

Servers

Physical | Virtual



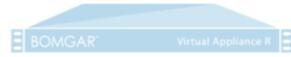
VMware ESX



Appliances



Dell EMC Avamar
G4 Node Rack
Appliance



Teradata Cloud Data
Warehouse
Appliance 2800

3rd Party Hosting

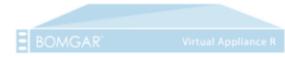
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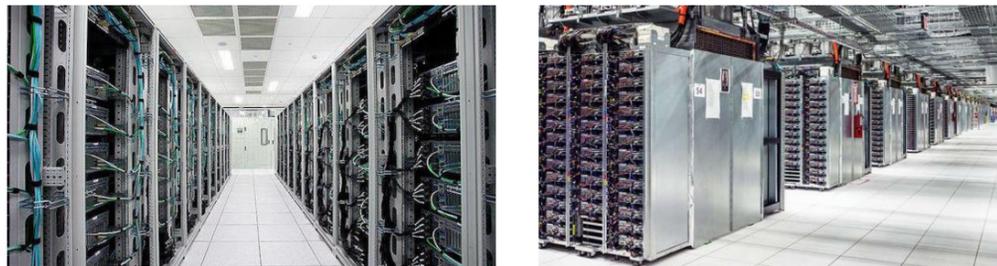


VMware ESX



3rd Party Hosting

Floor Space



Hybrid Cloud

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