CenturyLink®
Infrastructure as a Service (IaaS)

Infrastructure as a Service (IaaS) via the Cloud

CenturyLink will provide the agencies with the capability to provision processing, storage, networks, and other fundamental computing resources. IaaS is a means of accessing data center type resources on demand, controlling what you do with those assets without directly owning them. Agencies will have control over operating systems, storage, and deployed applications, although they do not manage or control the underlying cloud infrastructure.

Product Description

The CenturyLink IaaS offering is currently based on the VMware virtualization platform that supports more than 80 percent of federal workloads today. CenturyLink’s IaaS is built on high performance and high availability enterprise-grade components that sustain large, complex application workloads. CenturyLink’s FedRAMP certified IaaS is an on demand self-service which allows agencies to select and provision computing (e.g., memory and processing) and networking resources (e.g., VLANs, load balancers, firewall rules, and Internet bandwidth) as needed in a web portal, through an API, or through an automation platform. CenturyLink uses a hybrid IT building block approach to deliver cloud services, recognizing that cloud solutions are not one size fits all. IaaS includes features like high availability hardware; networking services such as LAN, load balancers, firewalls, and VPNs; and no additional charge for utilization of disk input/output (IO) or data transfer, resulting in a consistent predictable cost model. CenturyLink’s IaaS complies with all service specific security requirements. CenturyLink’s IaaS has built-in features like high availability hardware, security services such as firewalls, and dedicated site to site IPSec VPNs. Individual agency service deployments are isolated through service identifications. The agency specific service identification is accessed with an RSA SecurID token to maintain individual customer data and any virtual machine isolation.

KEY FEATURES

CenturyLink’s hybrid IT approach allows unique options for agencies that include:

- Enterprise-grade cloud to run mission-critical workloads without modification
- Extension of common people, processes, and tools on-premises and in the cloud to increase efficiency and agility
- Industry standard formats for virtualization, networking, and security to ensure bi-directional workload portability and avoid vendor lock-in which simplifies migration to the cloud
How IaaS is Provided

Our IaaS is located in two geographically redundant locations. Both locations are designed to high availability standards for resiliency, utilizing redundant N+1 power systems, load balancers, dynamic resource schedulers, and other VM protections to move workloads within the cluster and ensure compliant availability for users. CenturyLink IaaS is reachable worldwide from CenturyLink’s network as well as through the public Internet where applicable. IaaS capabilities are scalable to expand to multiple other data center locations as EIS and other service requirements evolve.

Highlights

■ Multiple geographically dispersed data centers
■ Migrate mission-critical applications in/out of cloud
■ Dedicated cloud instance isolates compute and storage resources for specific agency
   Necessary physical infrastructure for an agency to provide their own public or private facing web hosting instance
■ Management/monitoring portal
■ Data management and analytics in compliance with agency TO requirements

KEY FEATURES CONTINUED...

■ Leverages a resource pool model to allocate the exact amount of virtual CPU (vCPU), memory, and storage to right-size virtual machines (VMs) and reduce wasted resources
■ Rapid scale up and down of the number and size of VMs within the resource pool, at any time, to accommodate increases in demand while delivering the true benefit of cloud services