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# **Cloud Standards for Cloudcenters**

## GoGrid's take on Cloud Standards

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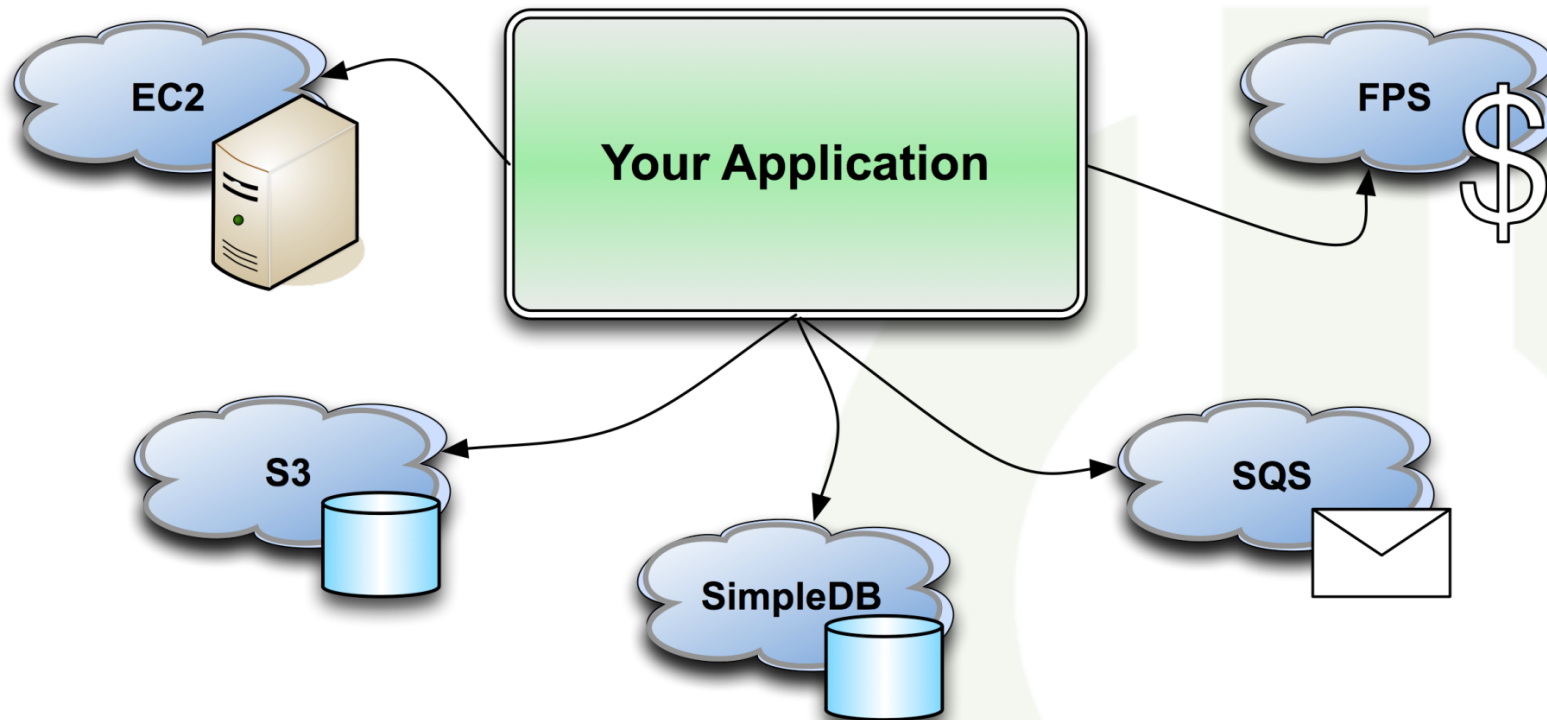
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## Two Faces of IaaS

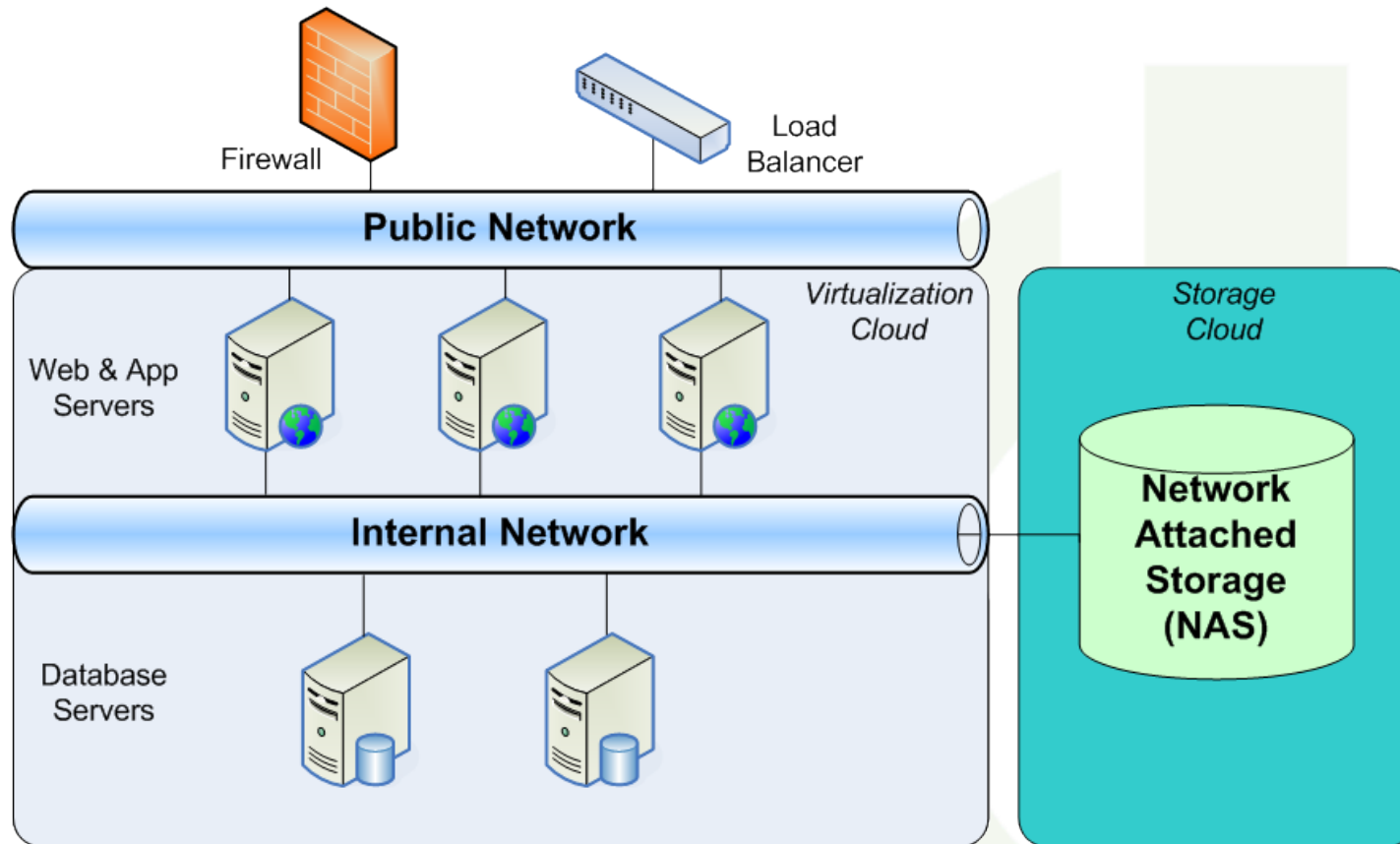
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- 🔌 Service Infrastructures (aka “Web Services”)
  - AWS is canonical example
  - Web service model
  - Pick and choose ‘a la carte’ web services
  - Proprietary interfaces
- 🔌 Cloudcenters
  - GoGrid is canonical example
  - Very common: FlexiScale, RackSpace/Mosso, & AppNexus
  - Datacenter model ‘in-the-sky’
  - Standards-based datacenter-like infrastructure

## Service Infrastructures



## Cloudcenters



## Cloudcenter Standards

- Similar to Service Infrastructures
- Similar to Grid requirements
- But different:
  - Web application focused
  - Standard datacenter paradigms
    - Dedicated private & public network blocks
    - VLANs
    - Loadbalancers
    - Firewalls
    - Heterogenous environment

## Beware of Standards

- ⌚ There is not a one-size-fits-all solution
- ⌚ Large number of constituencies in 'cloud':
  - SaaS, PaaS, IaaS, cloudcenters, grids, and others
- ⌚ Each constituency needs to form around common needs
- ⌚ Solve the smallest most urgent standards needs first

## Use Cases

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- Case #1: Cloudcenter OEM/VAR
  - RightScale is canonical example
  - Allow single OEM/VAR/vendor to build same solution on multiple clouds with same API interface
- Case #2: Provider Diversity
  - Multiple clouds for DR or geographic diversity
  - Same hypervisor?
- Case #3: Cloudburst / Cloudbridge
  - Self-service VPNs, hypervisor conversion (VMware <-> Xen)
  - Advanced “enterprise” features:
    - Billing, security, compliance, and user/group control