OpenStack Deep Dive

Alan Clark
OpenStack, Chairman of the Board
Director, SUSE
aclark@suse.com

Community Size Q2 2014

ECOSYSTEM SIZE
(Members + Sponsors + Supporters)

390

Companies

Members: 26
Sponsors: 77
Supporters: 287

INDIVIDUAL MEMBERS

17,575

TOP 10 Countries

1) United States
2) India
3) China
4) Great Britain
5) France
6) Russia
7) Canada
8) Australia
9) Japan
10) Germany

CUMULATIVE CONTRIBUTORS

2,295

AVERAGE MONTHLY CONTRIBUTORS

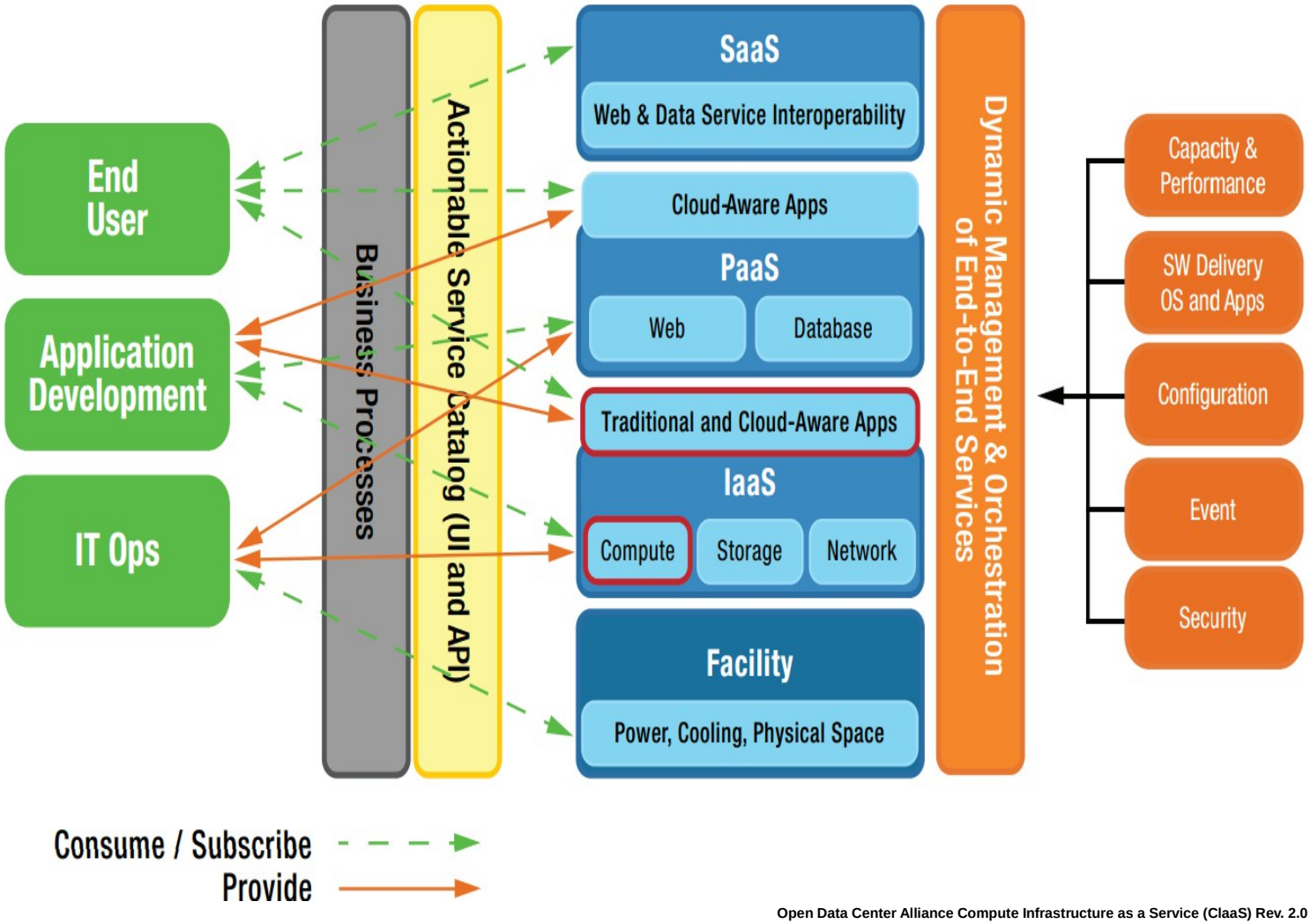
448

AVERAGE WEEKLY CONTRIBUTORS

255

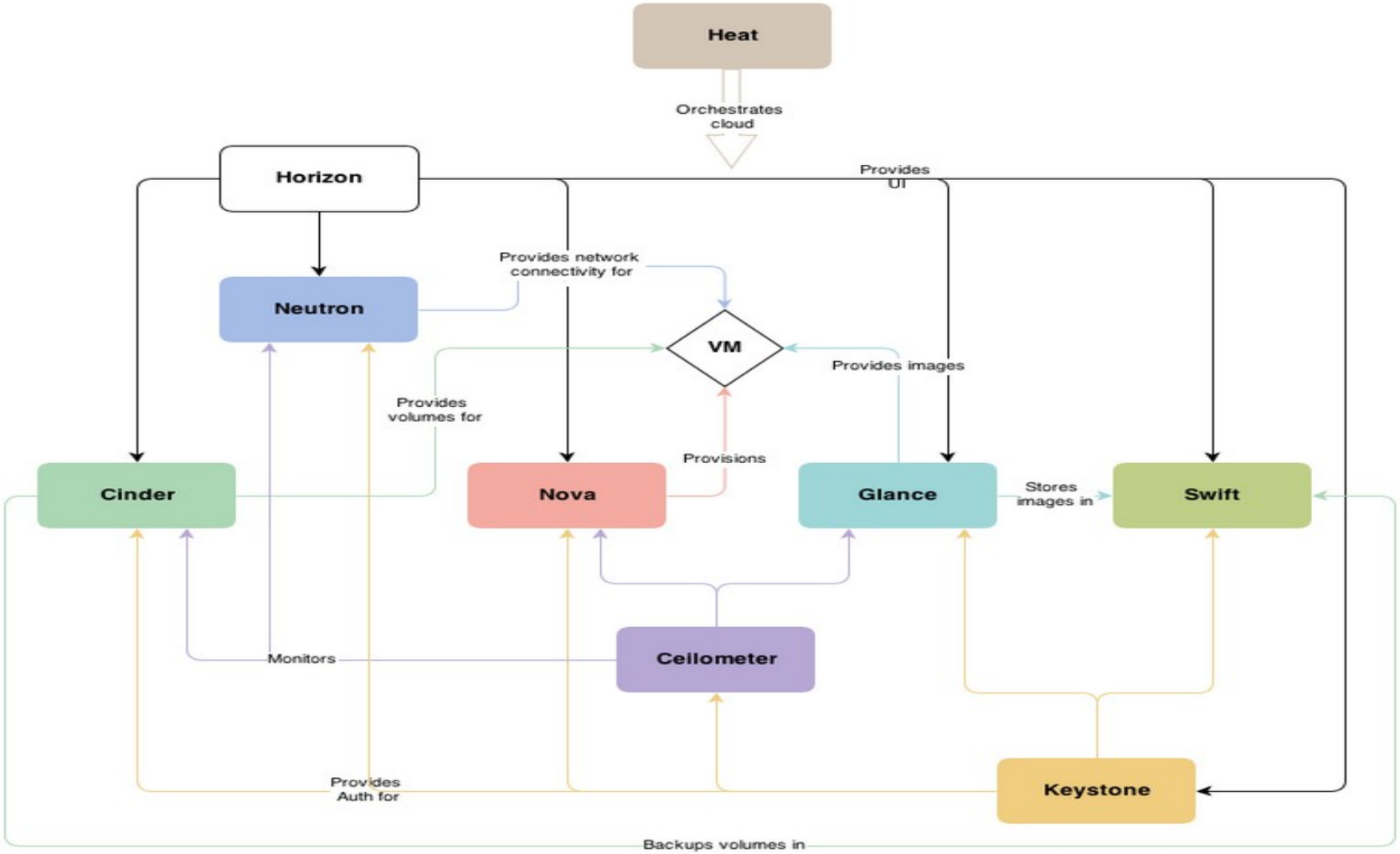
openstack
CLOUD SOFTWARE

Compute Infrastructure as a Service

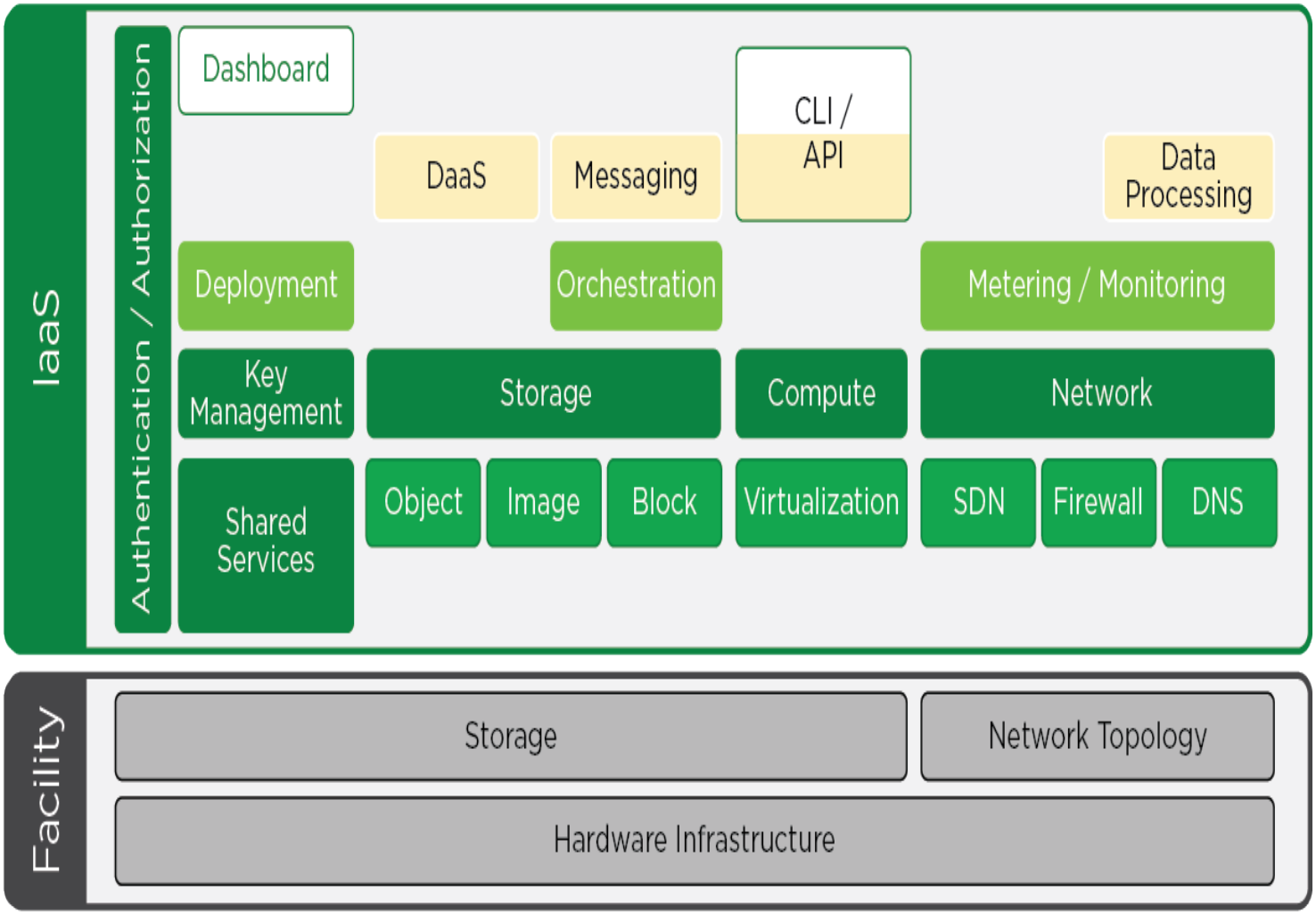


Open Data Center Alliance Compute Infrastructure as a Service (ClaaS) Rev. 2.0

OpenStack Component Interactions



OpenStack Layers



Service Management

Service Interface

Service Orchestration

Capacity Management

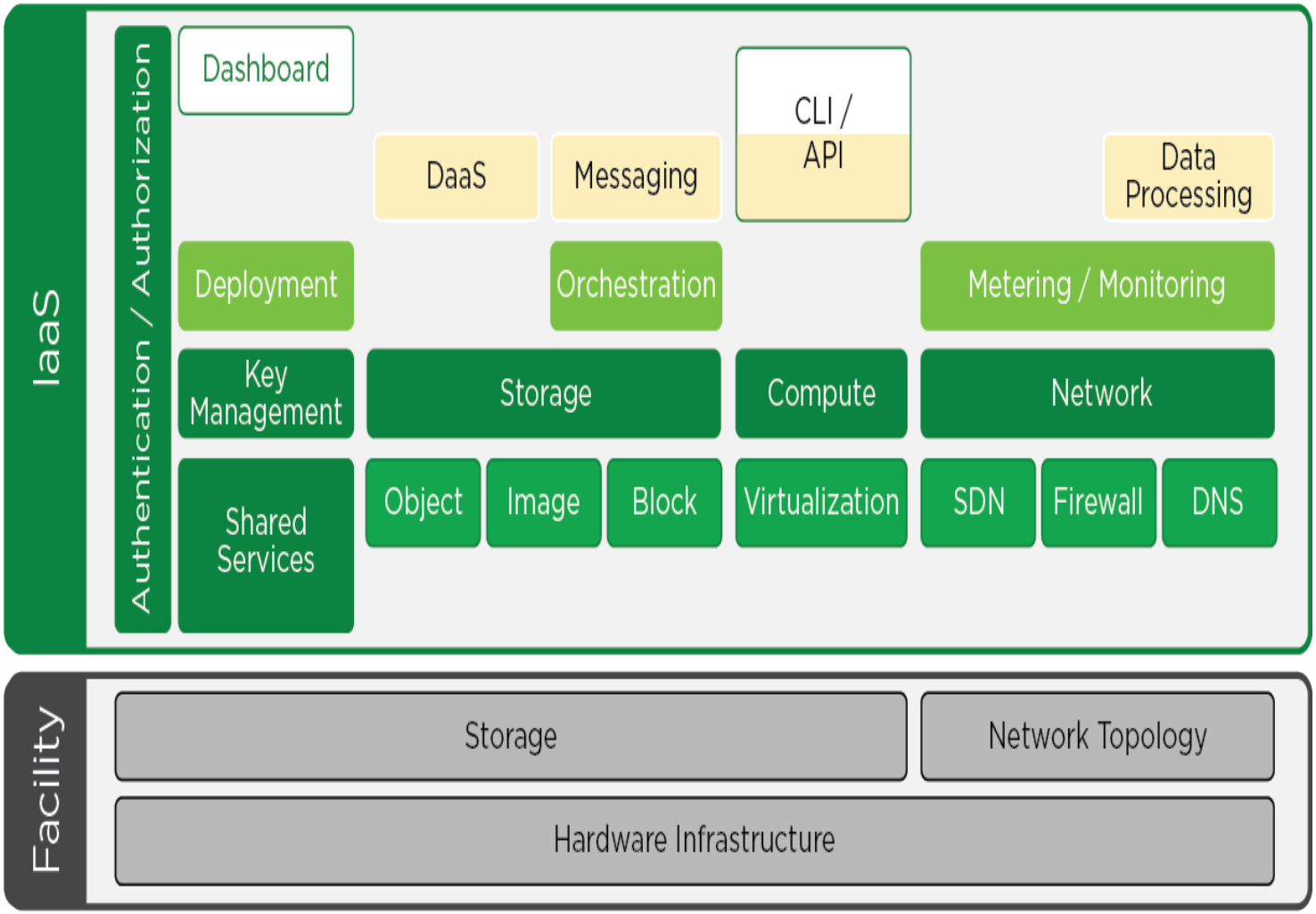
Virtual Infrastructure

Platform

Cloud Layers of Service

- Service Management
  - Primary Communication Point
    - User / Admin Provisioning
  - Capabilities
    - Life cycle management
    - Limit Enforcement
    - Extensible
- Orchestration
  - IT process automation
  - Align consumer demand
  - Work flow management, monitoring debugging
- Capacity Management
  - Efficient resource allocation / scheduling
  - Optimal workload placement
  - Extensible
- Virtual Infrastructure
  - Abstraction
  - Get BIG (Scale)
  - Separation of duties
  - Build advanced network services, distributed storage, server utilization

OpenStack Layers



Service Management

Service Interface

Service Orchestration

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Platform

SUSE® Strategy for Cloud Computing

Public Cloud

Broadly deploy SUSE Linux Enterprise Server through SUSE Cloud Public Program

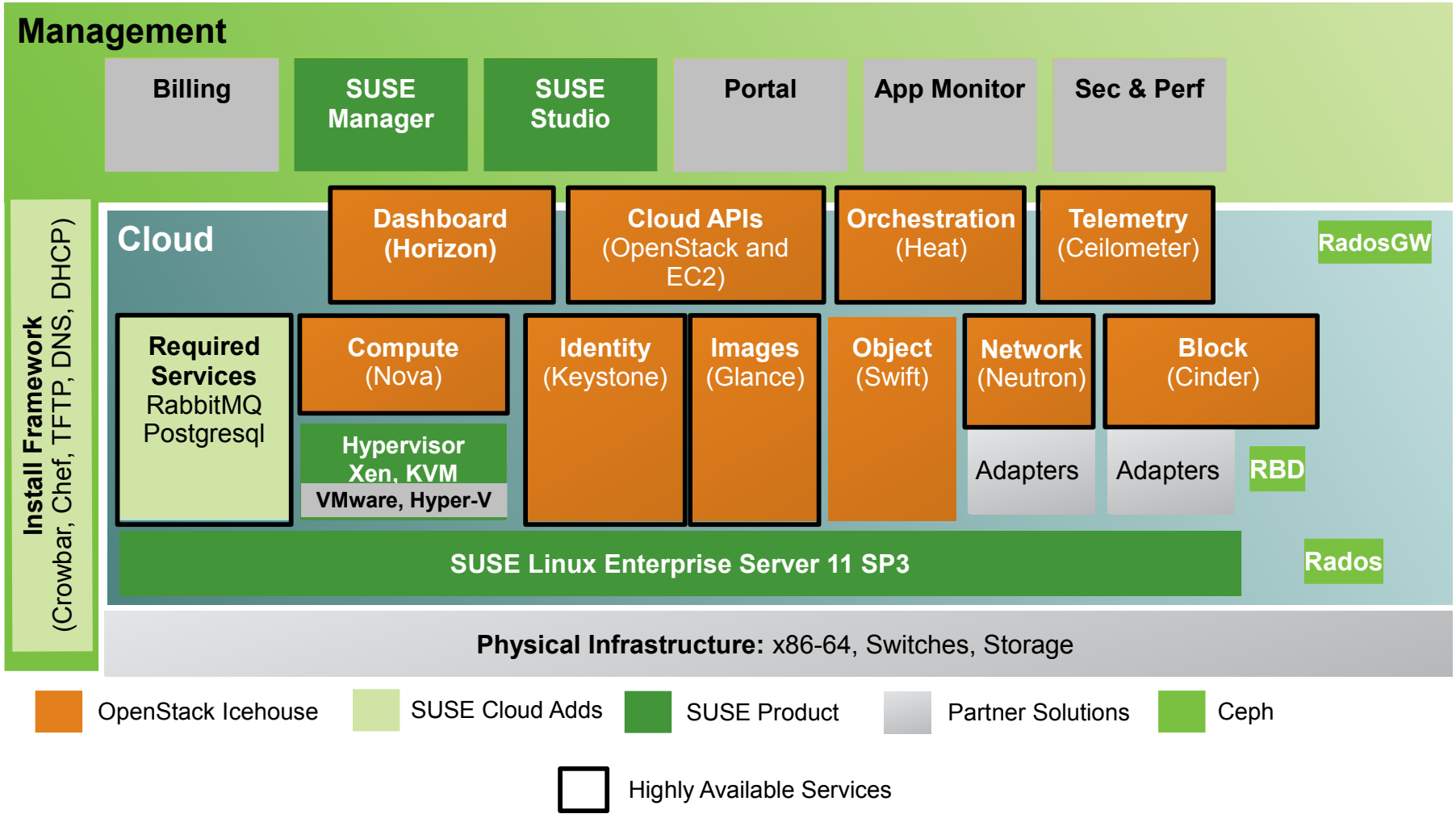
Private Cloud

Deliver cloud infrastructure solution powered by OpenStack

Hybrid Cloud

Tightly integrate SUSE Studio and SUSE Manager with SUSE Cloud to deliver a platform and tools that enable enterprise hybrid clouds

SUSE® Cloud 4


Management
Billing
SUSE Manager
SUSE Studio
Portal
App Monitor
Sec & Perf
Install Framework (Crowbar, Chef, TFTP, DNS, DHCP)
Cloud
Dashboard (Horizon)
Cloud APIs (OpenStack and EC2)
Orchestration (Heat)
Telemetry (Ceilometer)
RadosGW
Required Services RabbitMQ Postgresql
Compute (Nova)
Hypervisor Xen, KVM
VMware, Hyper-V
Identity (Keystone)
Images (Glance)
Object (Swift)
Network (Neutron)
Block (Cinder)
Adapters
Adapters
RBD
SUSE Linux Enterprise Server 11 SP3
Rados
Physical Infrastructure: x86-64, Switches, Storage
OpenStack Icehouse
SUSE Cloud Adds
SUSE Product
Partner Solutions
Ceph
Highly Available Services

Unique Power of Open Source Cloud

- Technical agility, efficiency and velocity
- Rapid and cost-effective service deployment
- Elasticity
- Flexibility to design a full software environment
- Foster collaboration
- Not just a cloud service provider
  - High-quality services
  - Business need alignment

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