

AWS Summit

AWS 技术峰会 · 北京 2014

AWS基础服务和常见使用场景

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December 11, 2014



2003

amazon.com

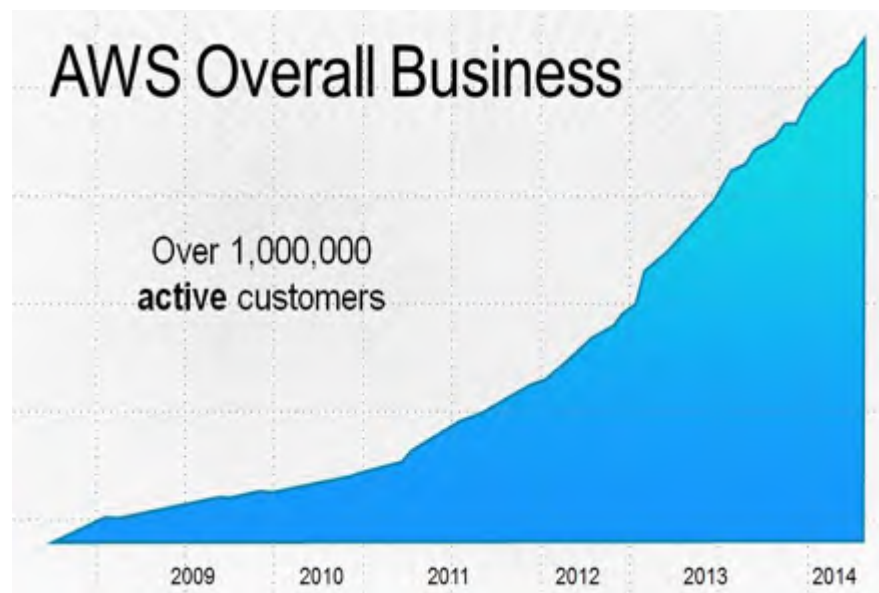
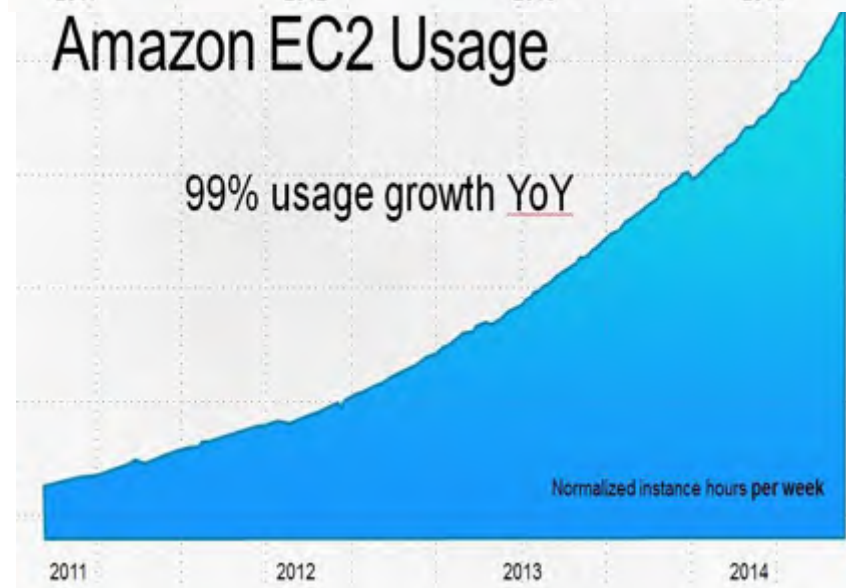
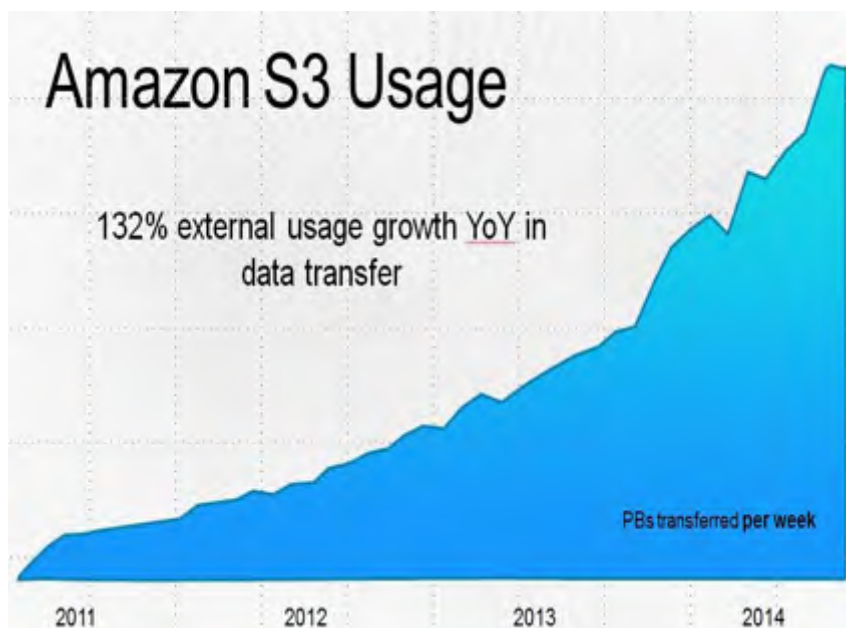
- \$7B 电商零售业务
- 7,800 employees
- 构建在物理服务器上

2014



每一天, AWS 新增加的服务能力都足以
支撑Amazon 在作为\$7B 企业时所需的
全球IT设施

AWS 加速增长



“服务能力是另外14家供应商总和的5倍”



Gartner 的魔力象限

Gartner®

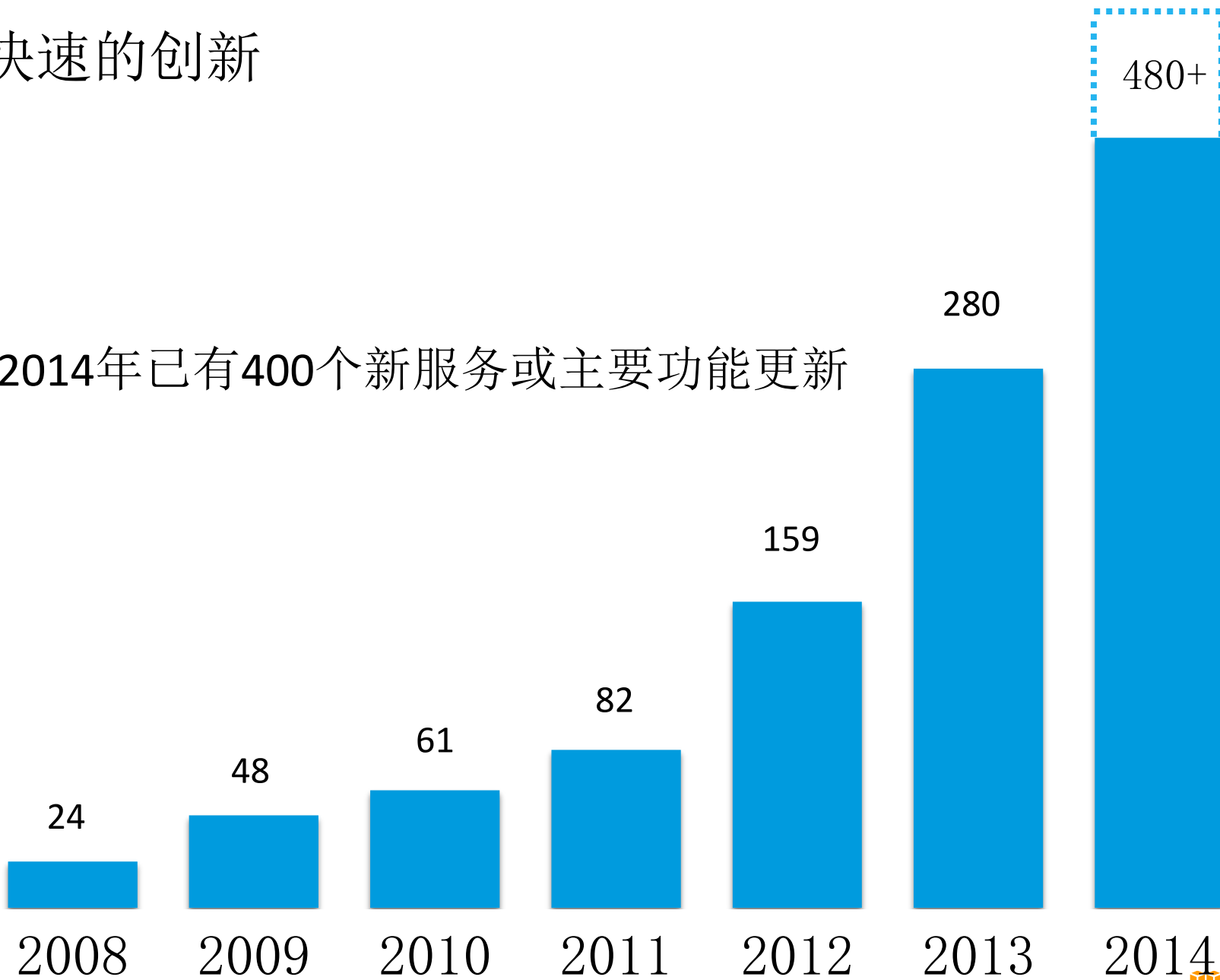


Gartner "Magic Quadrant for Cloud Infrastructure as a Service," Lydia Leong, Douglas Toombs, Bob Gill, Gartner report is available upon request from [Steven Armstrong \(steven.armstrong@amazon.com\)](mailto:steven.armstrong@amazon.com). Gartner does not publish opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

Source: Gartner (May 2014)

快速的创新

2014年已有400个新服务或主要功能更新



全球最知名的一些互联网创新应用在AWS上

Instagram

Dropbox

Pinterest

airbnb

tumblr

Spotify

yelp

MAILBOX

Expedia

reddit

Light in the box.com

ticketmaster

Flipboard

foursquare



CAMERA360

360
WWW.360.CN

網易 NETEASE
WWW.163.COM

FUN+GAME

CMT
cheetahmobile



豌豆荚

meitu 美图



畅游
changyou

:DeNA

papaya

dolphin

全球知名企业在AWS上

NASDAQ

SAMSUNG



The New York Times

TCL

S&P
CAPITAL IQ

ERICSSON



LIONSGATE

Hisense



News International



THOMSON REUTERS



COLDWELL
BANKER

The Washington Post

oppo

bankinter.

HITACHI



Newsweek

htc



SHARP

SEGA

NOVARTIS

SMIT



TOSHIBA
Leading Innovation >>>

OUTBACK
STEAKHOUSE

NETFLIX

TP-LINK
The Reliable Choice



Schneider
Electric



amazon
web services

政府机构在AWS上

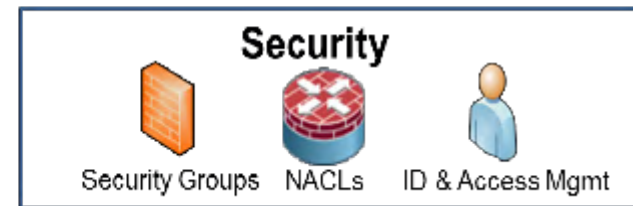


AWS提供的服务

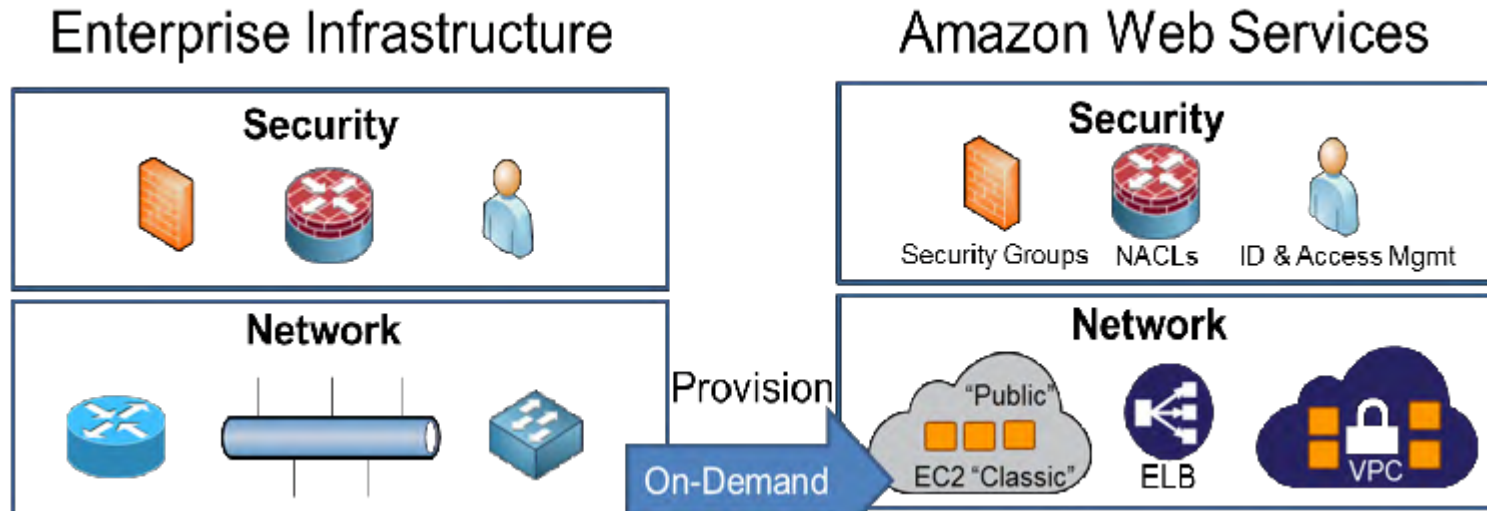
Enterprise Infrastructure



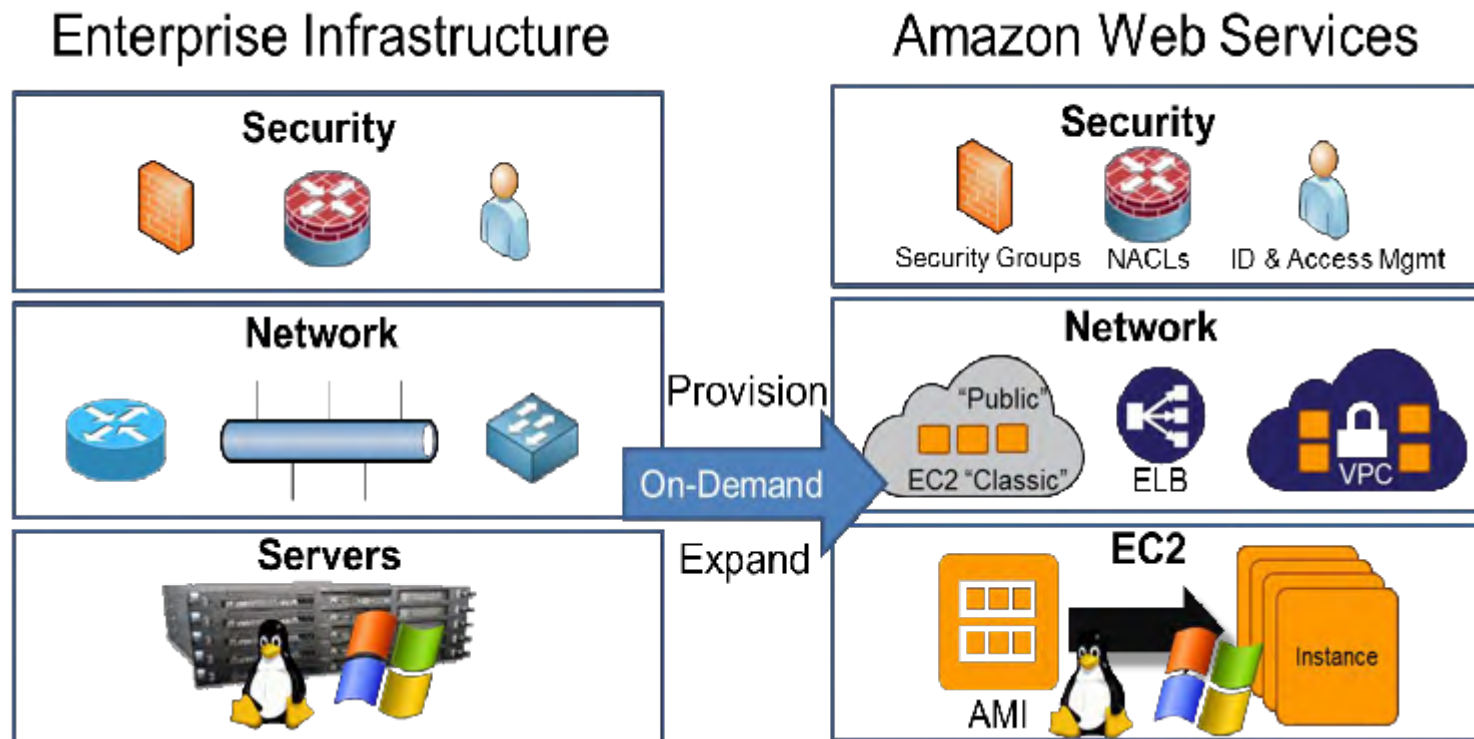
Amazon Web Services



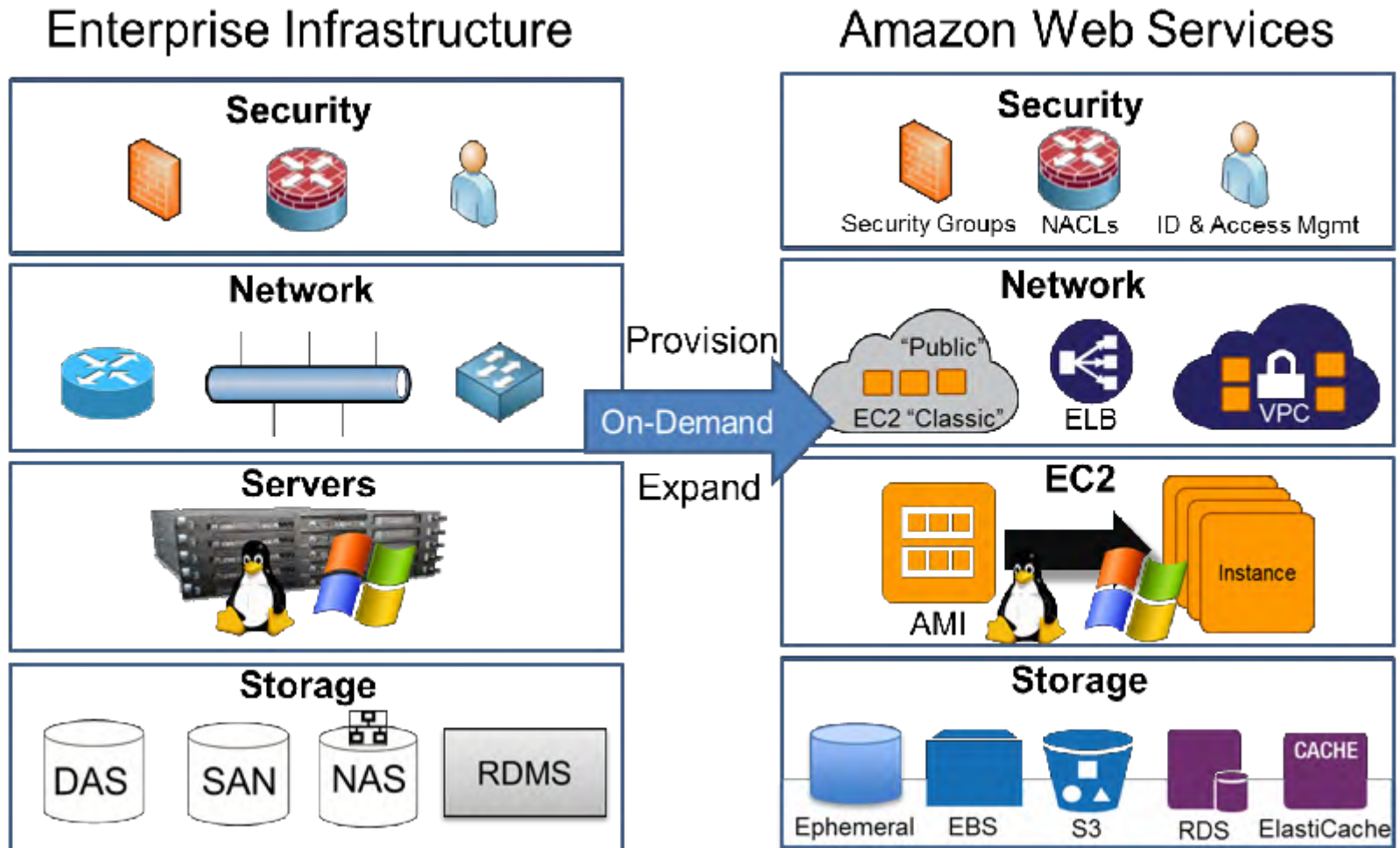
AWS提供的服务



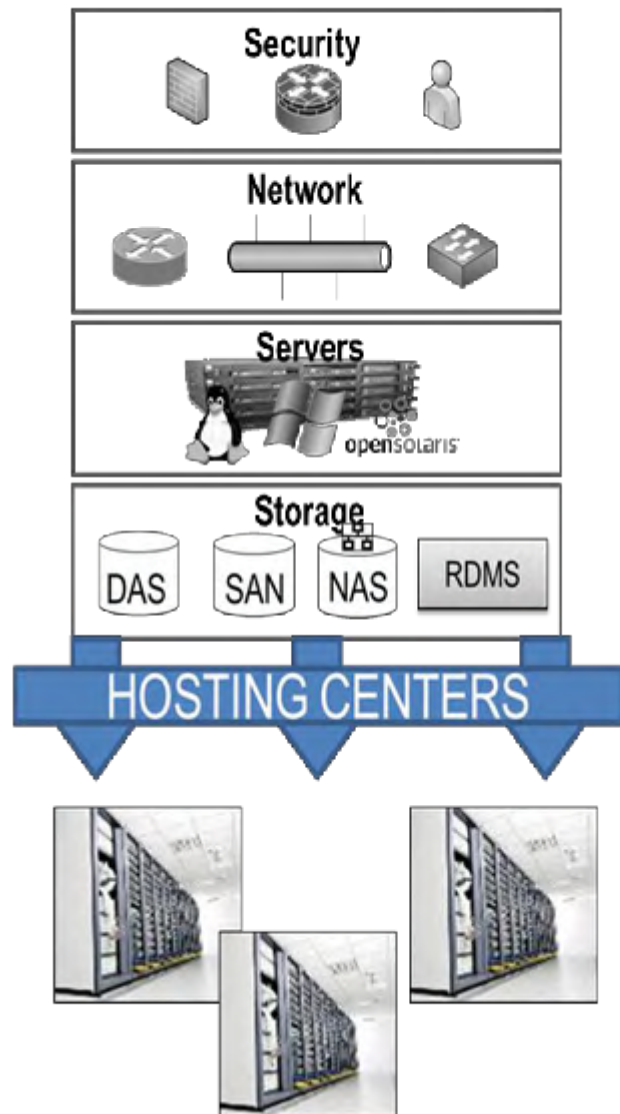
AWS提供的服务



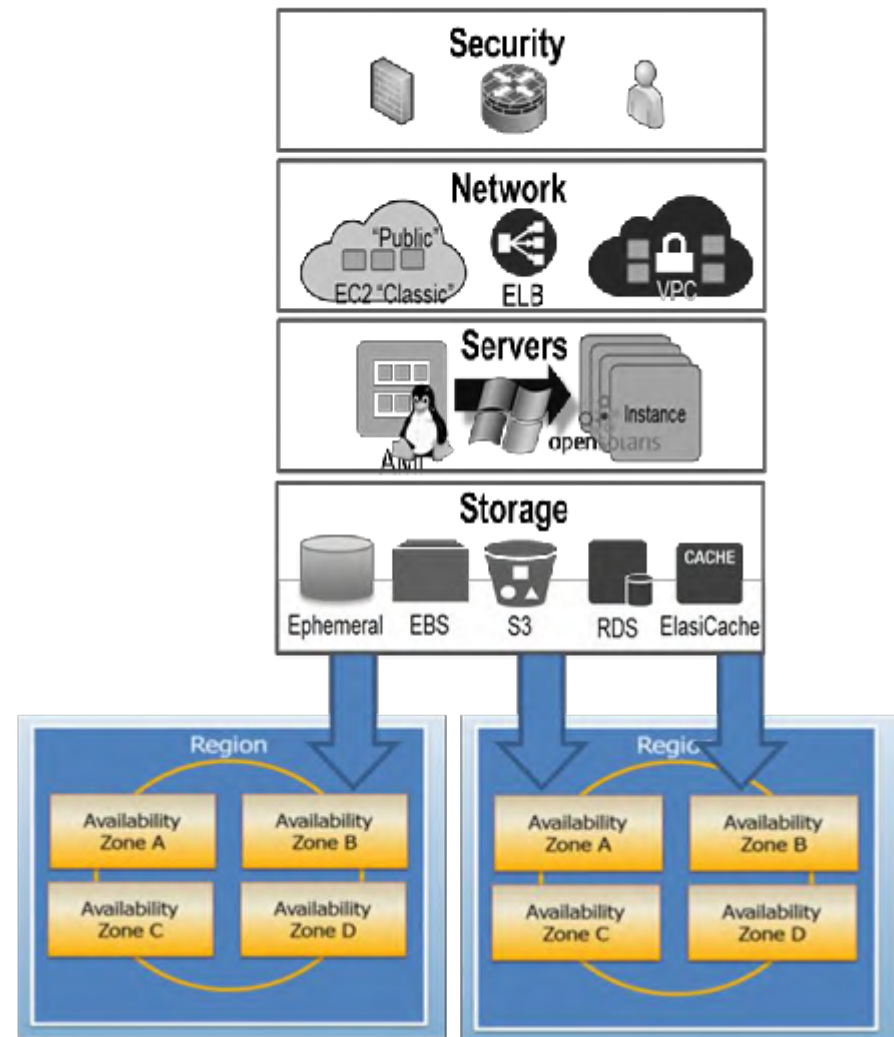
AWS提供的服务



Enterprise Infrastructure



Amazon Web Services



AWS 全球基础设施

AWS 全球基础设施



目前:

11 Regions

28 Availability Zones

中国:

北京是第一个region

第一个Availability Zone已经Public preview
第二个Availability Zone 将在2015年上半年推出

AWS 的全线服务

Enterprise
Applications



Virtual Desktops



Collaboration and Sharing

Platform
Services

Databases

Relational

No SQL

Caching

Analytics

Hadoop

Real-time

Data
Warehouse

Data
Workflows

App Services

Queuing

Orchestration

App Streaming

Transcoding

Email

Search

Deployment & Management

Containers

Dev/ops Tools

Resource Templates

Usage Tracking

Monitoring and Logs

Mobile Services

Identity

Sync

Mobile Analytics

Notifications

Foundation
Services



Compute
(VMs, Auto-scaling and
Load Balancing)



Storage
(Object, Block
and Archive)



Security &
Access Control



Networking

Infrastructure



Regions



Availability Zones



CDN and Points of Presence

A broad and deep platform helps customers build sophisticated, scalable applications

AWS计算服务

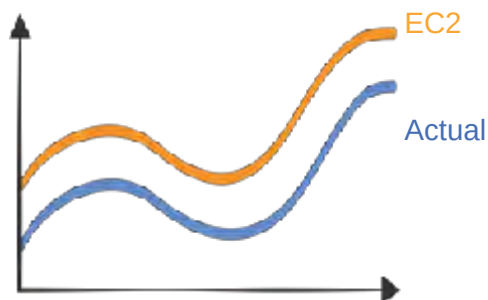
EC2

虚拟服务器
支持主流OS的装机模版AMI
支持自制AMI
和EIP松耦合
和EBS 块存储松耦合



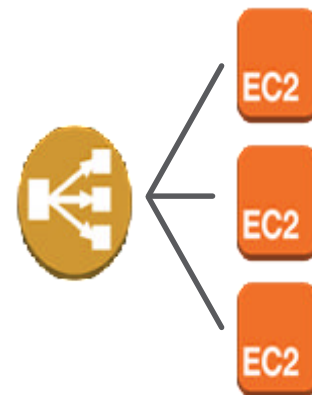
Auto Scaling

根据负载自动增加和减少服务器数量



Elastic Load Balancing

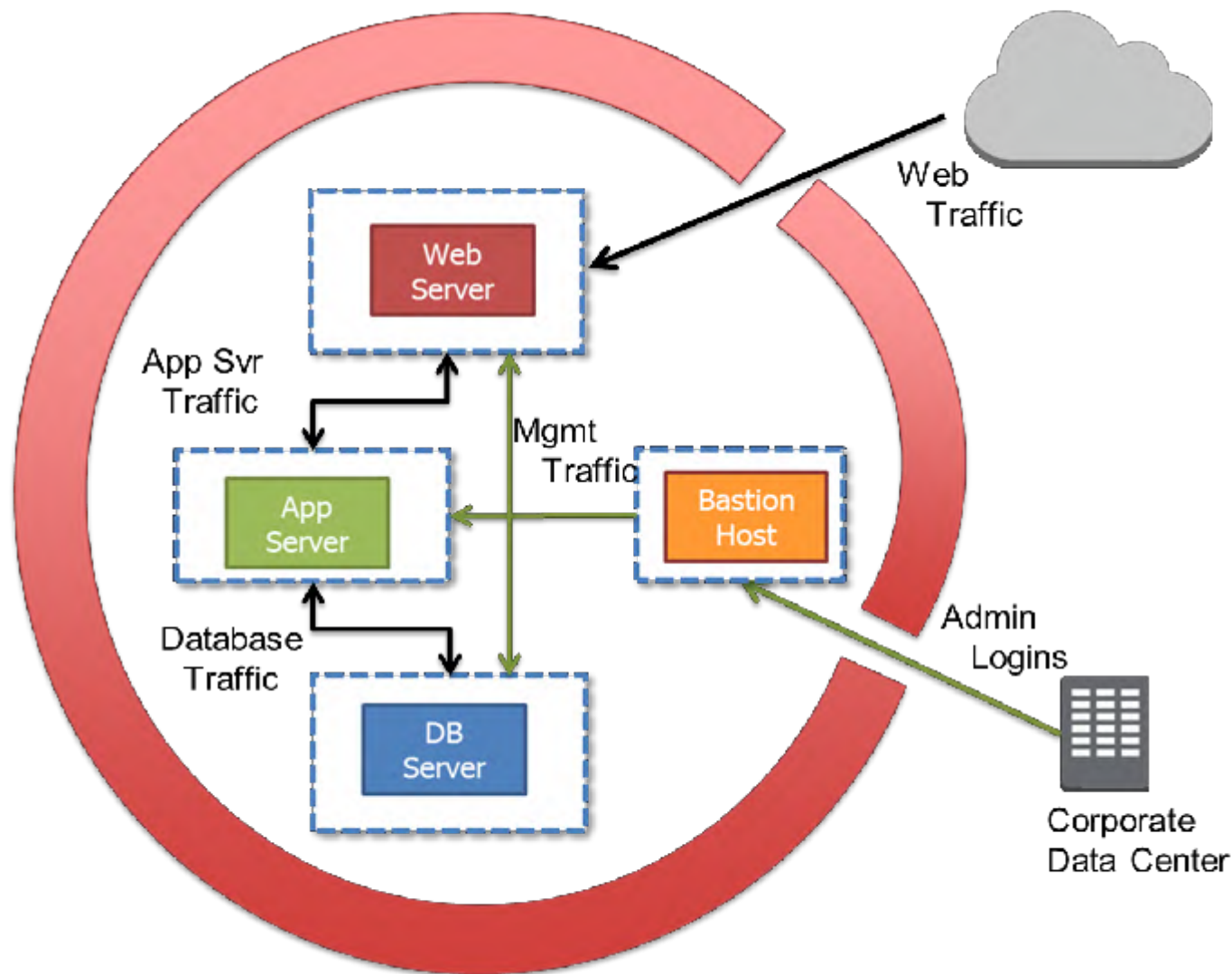
自动扩展，提供高可用性的负载均衡



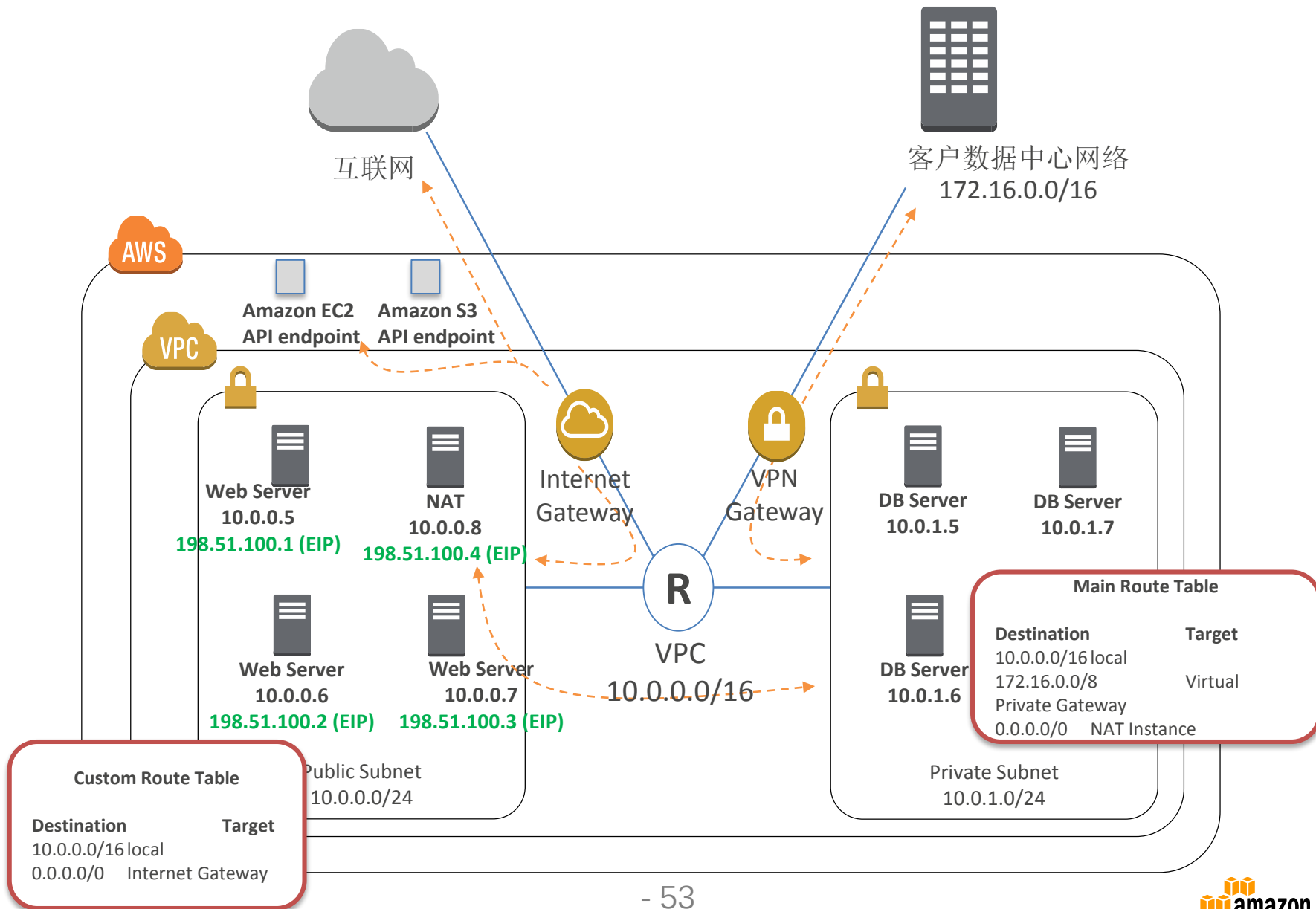
EC2 安全组

- 安全组规则

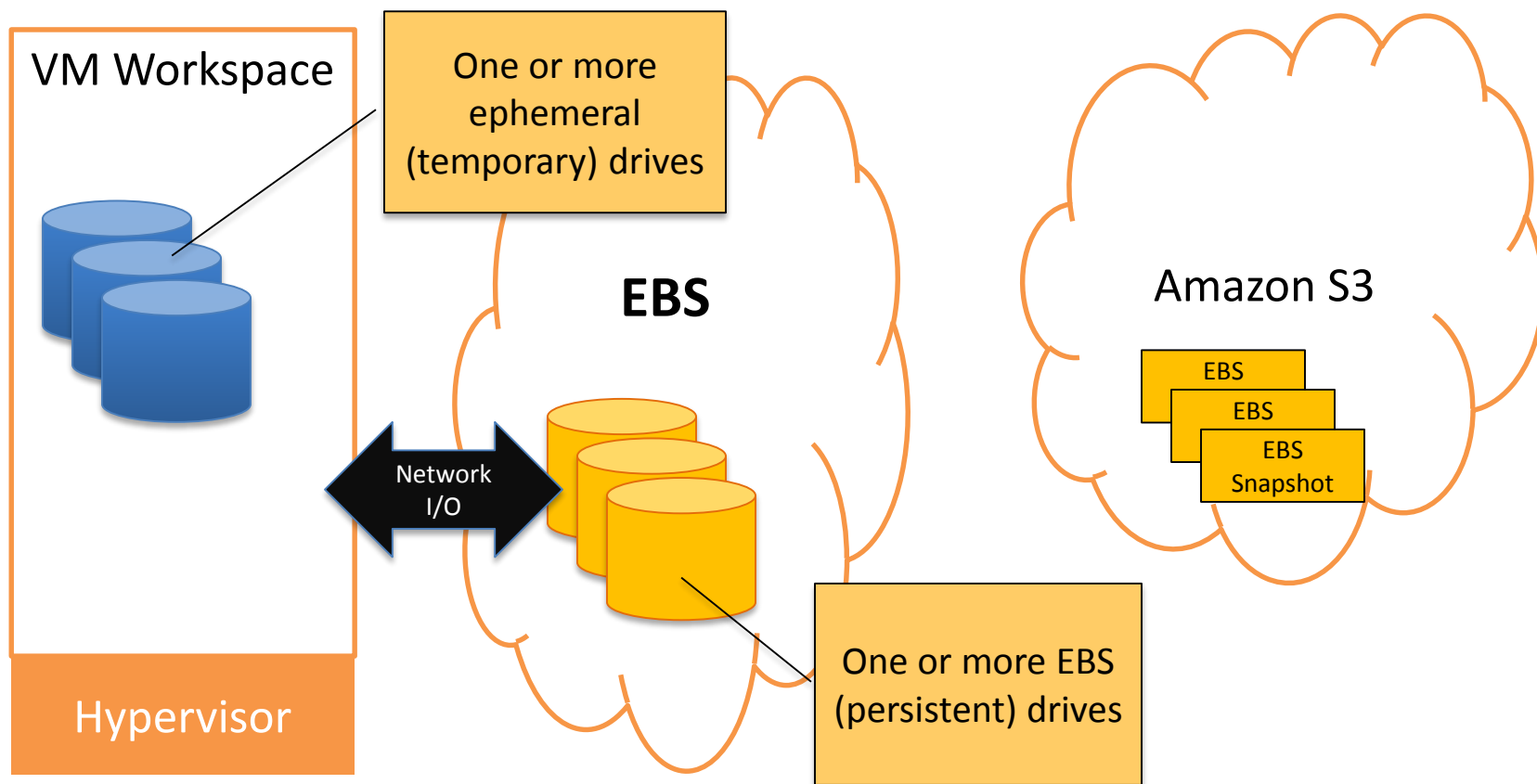
- Name
- Description
- Protocol
- Port range
- IP address, IP range, Security Group name



EC2网络环境



EC2和EBS及S3配合使用

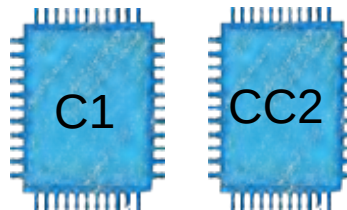


China region 目前可用的EC2类型

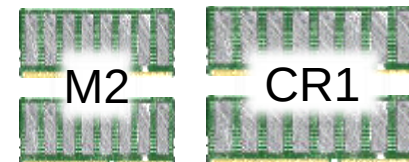
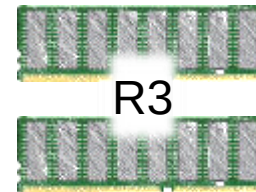
General Purpose



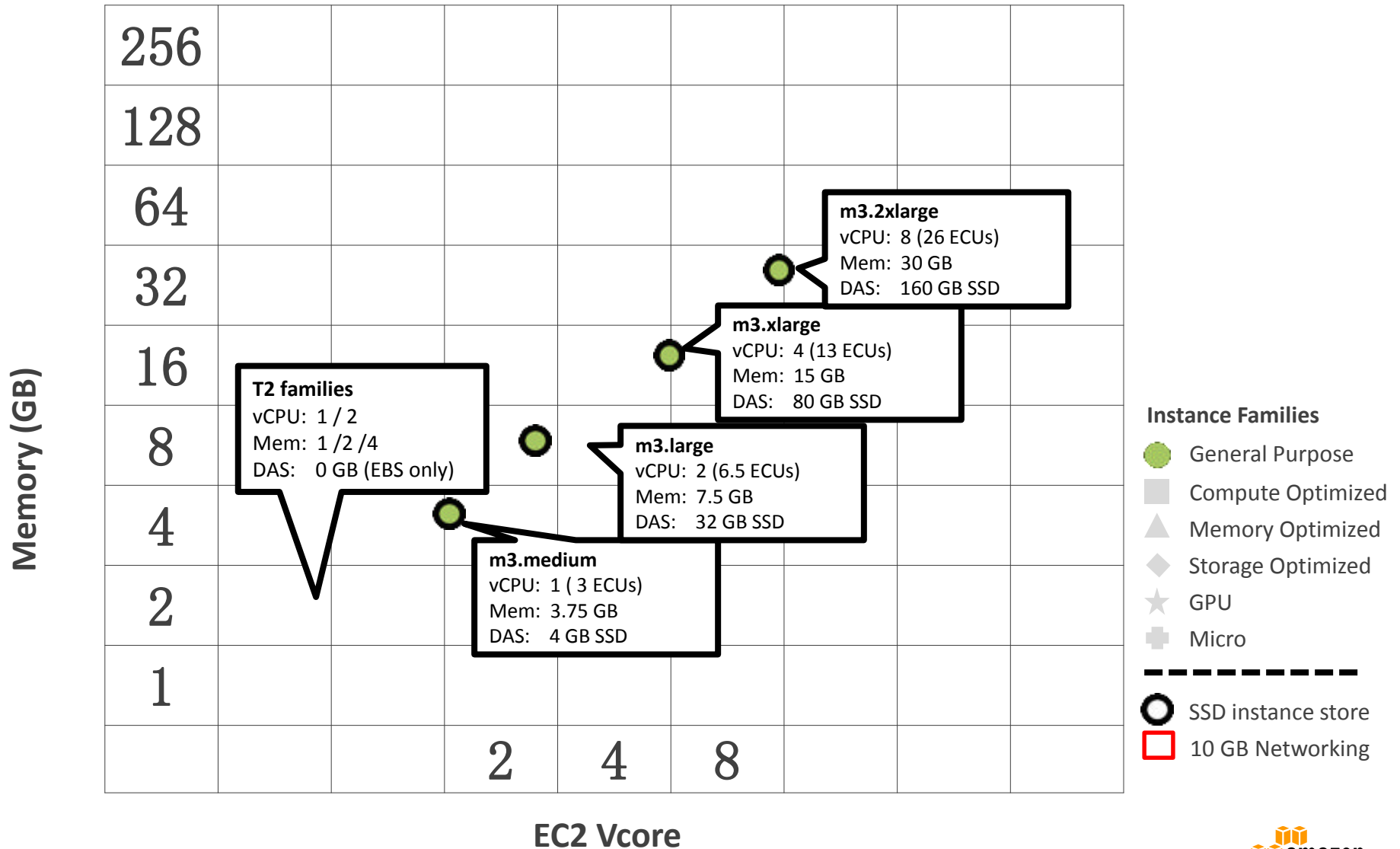
Compute Optimized



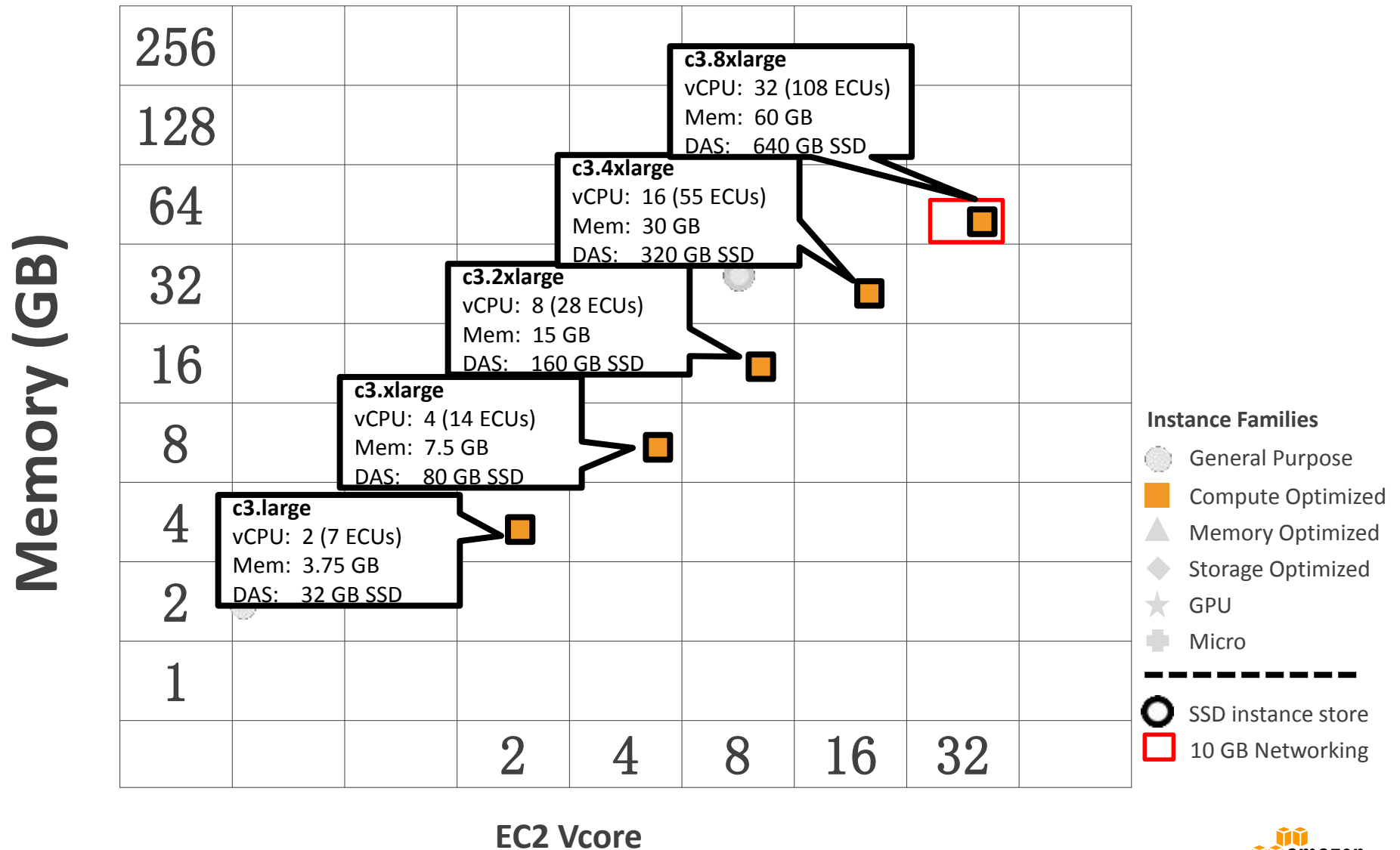
Memory Optimized



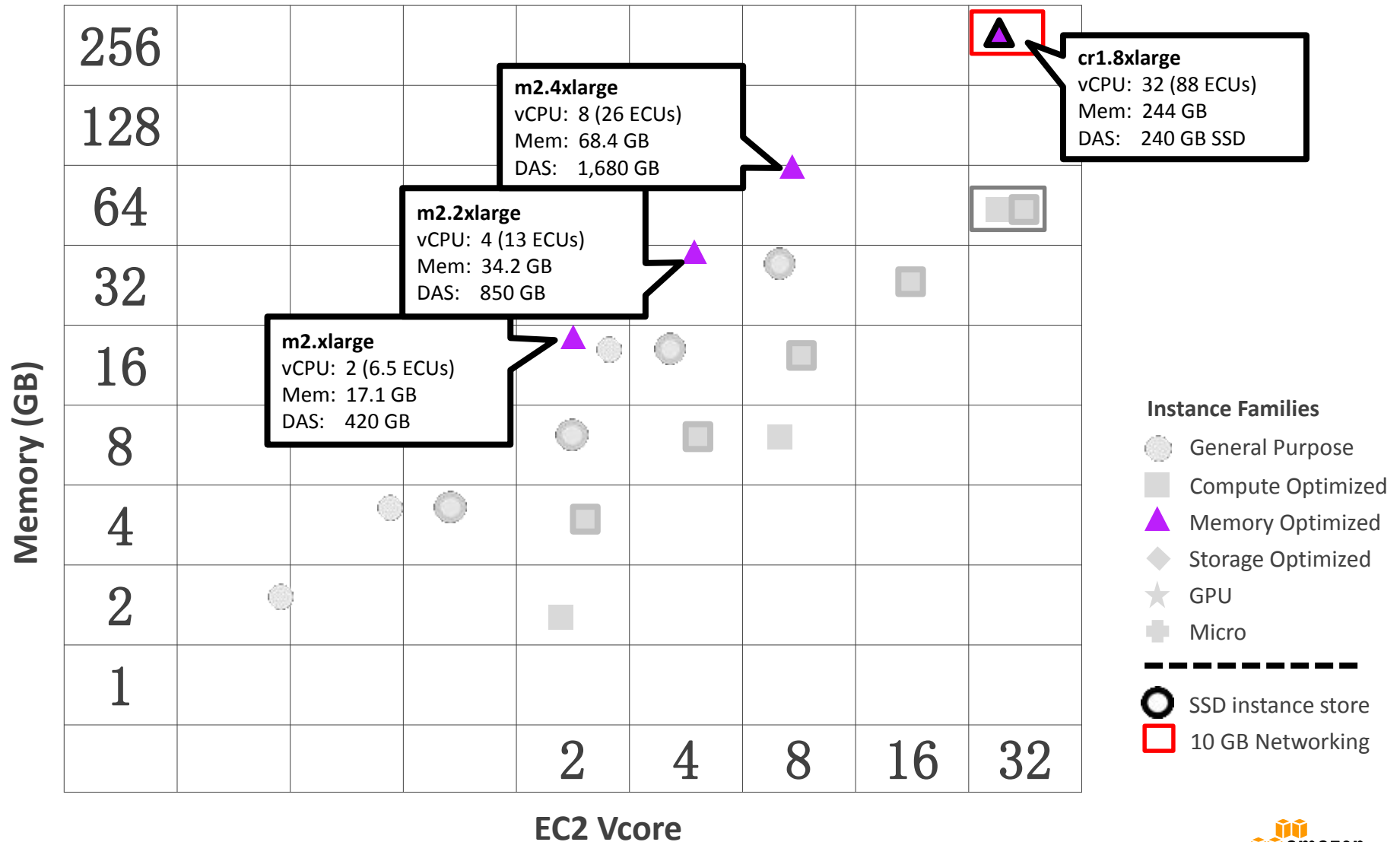
General Purpose Instances



Compute Optimized Instances



Memory Optimized Instances

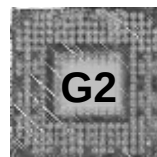


其他海外Region提供的EC2类型中国将陆续推出

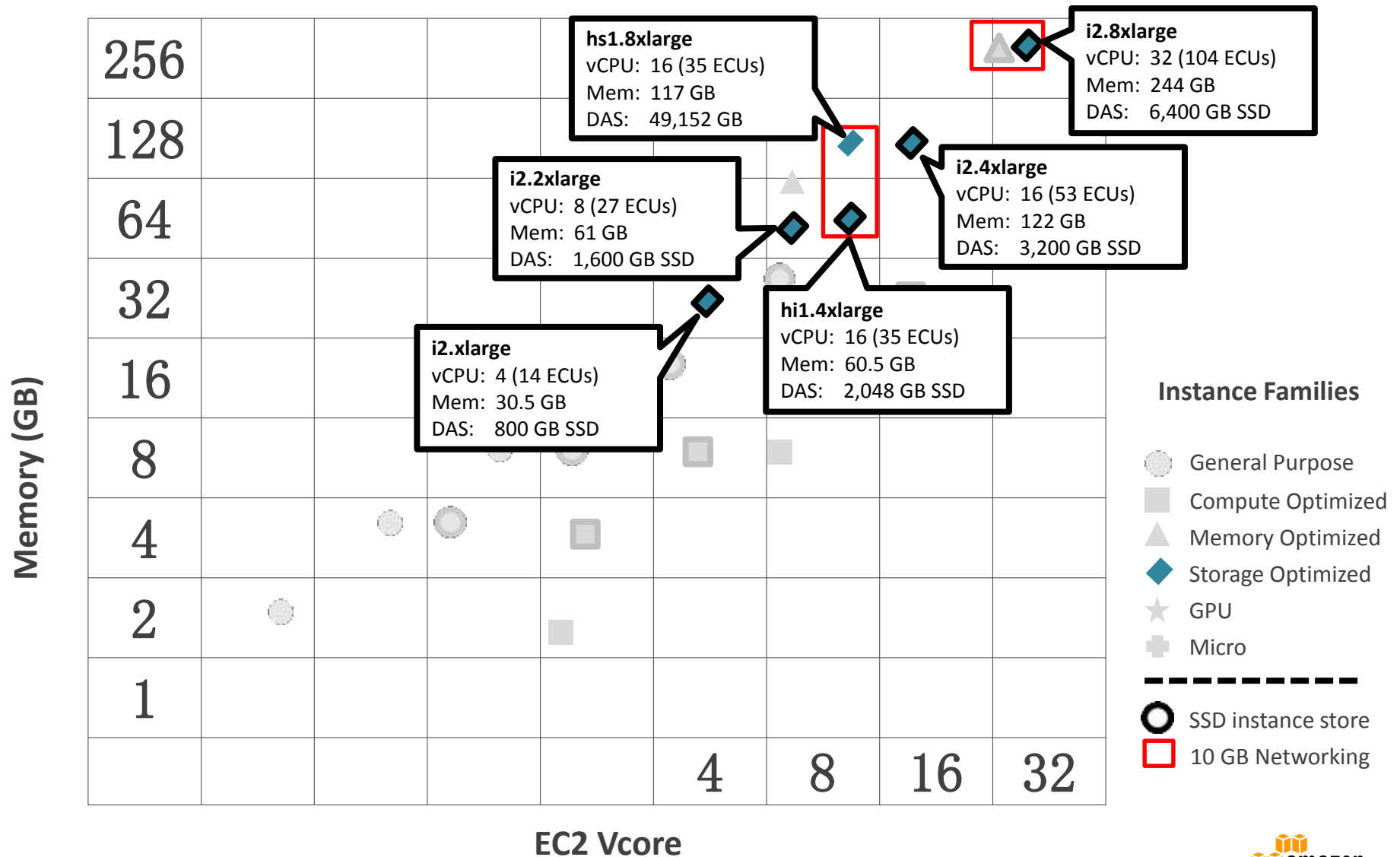
**Storage and IO
optimized**



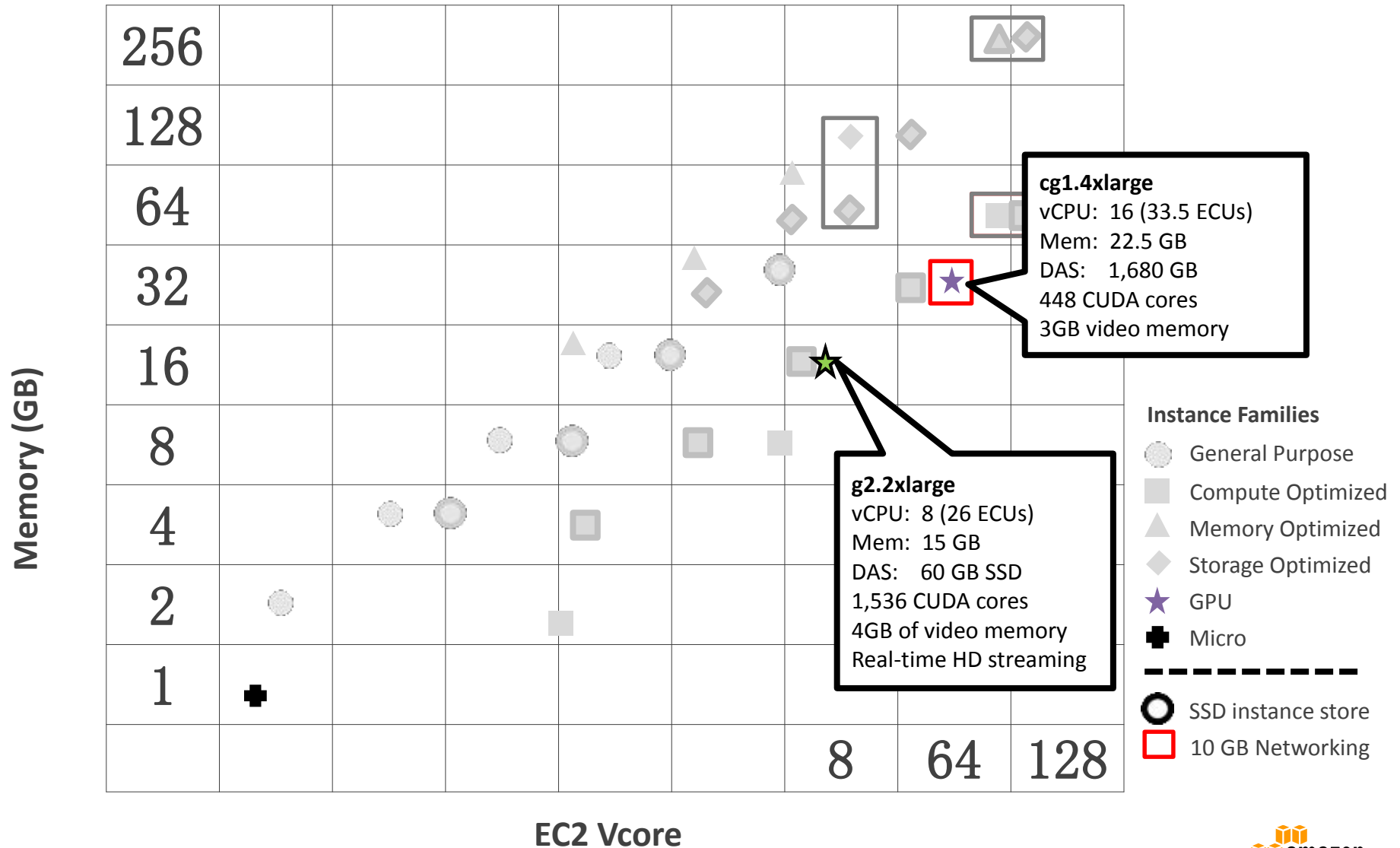
**GPU
enabled**



Storage Optimized Instances



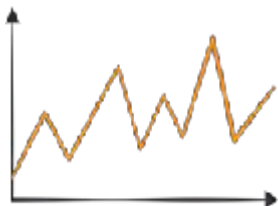
GPU Instances



多种价格模型选择

按使用小时付费

For spiky workloads,
or to define needs



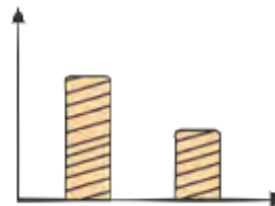
包年

For committed
utilization



竞拍

For time-insensitive or
transient workloads



AWS网络服务

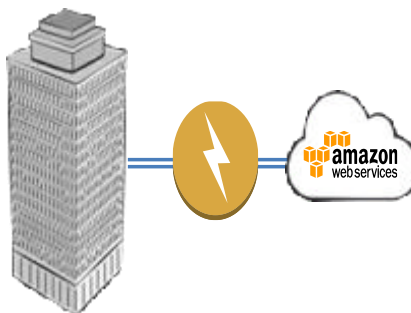
Amazon VPC:

私有网络环境: IP段
和公网/私网subnet
支持VPN tunnel和专
线连接



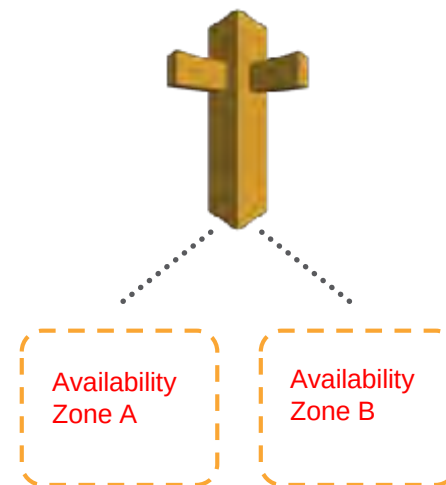
AWS DirectConnect

提供搭建专线到
AWS上的网络接口

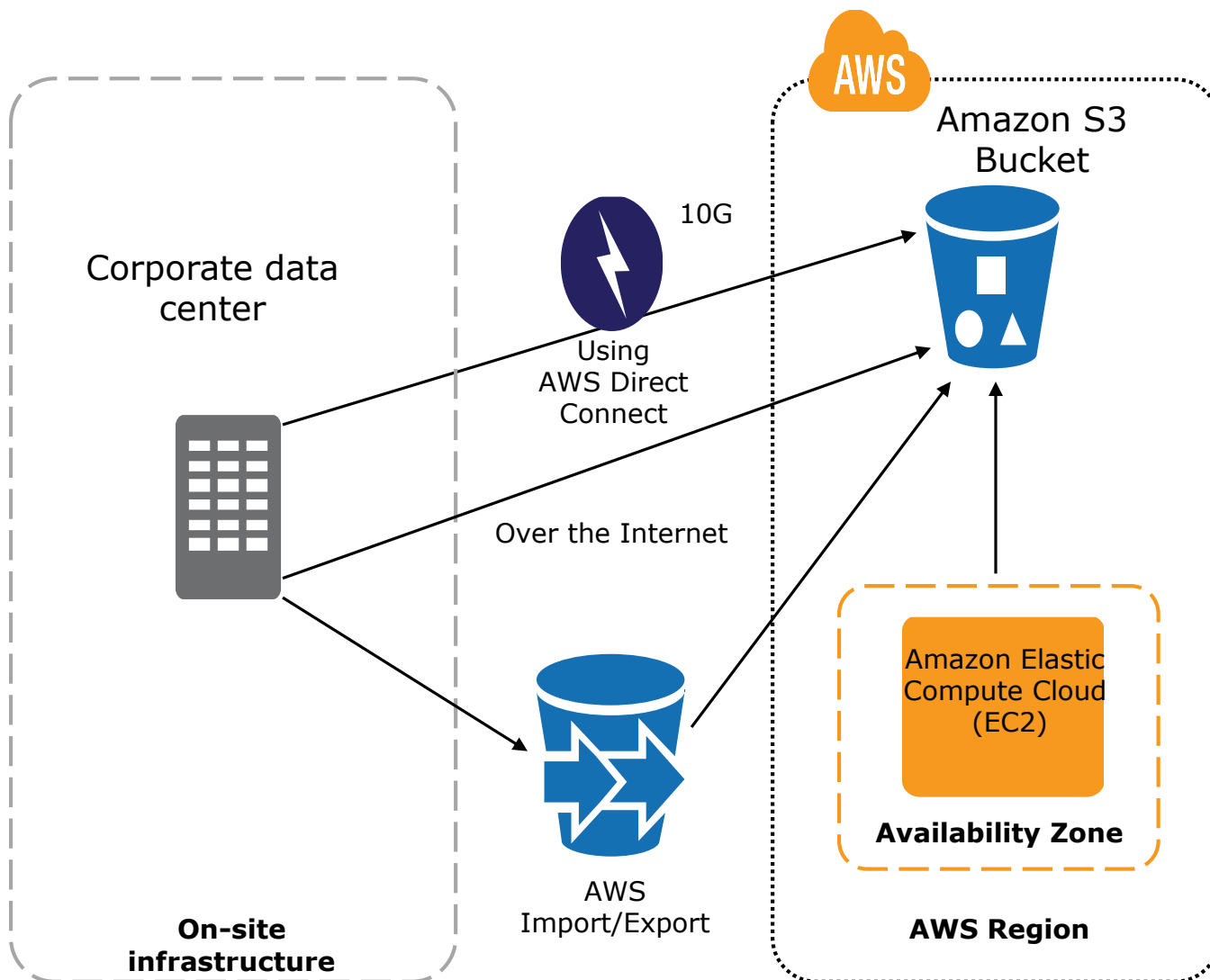


Amazon Route 53

DNS服务



与AWS连接的几种网络选择



AWS存储

Amazon EBS

EC2的块存储
支持指定PIOPS性能



Amazon S3

基于对象的存储
可以作为原站发布



Images
Videos
Files
Binaries
Snapshots

Amazon Glacier

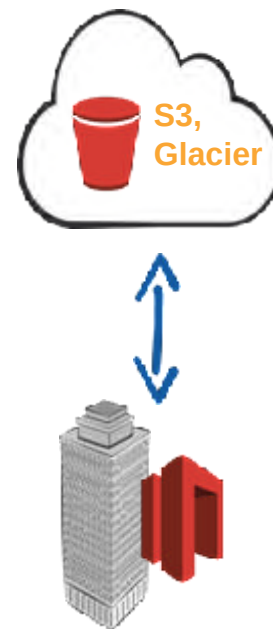
成本极低的冷存储



Images
Videos
Files
Binaries
Snapshots

AWS Storage Gateway

自动同步客户数据到
AWS上



AWS应用服务

Amazon RDS

管理型的关系性数据库服务：支持MySQL, Oracle和SQL



Amazon DynamoDB

管理型的非关系型数据库服务



Amazon ElastiCache

内存缓存服务，支持Memcached, Redis



Amazon CloudFront

全球CDN服务（暂时无中国大陆的服务节点）



AWS大数据服务

Amazon EMR (Elastic Map Reduce)

Hadoop平台



Amazon Redshift

PB级别的数据仓库
服务



Amazon Kinesis

处理实时数据流的可扩展服务



AWS部署和管理服务

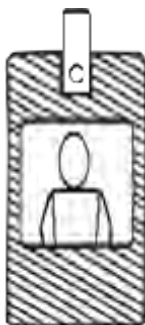
Amazon CloudWatch

服务监控



AWS IAM (Identity & Access Mgmt)

管理子用户和权限



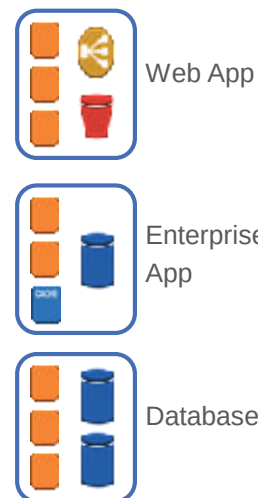
AWS OpsWorks

基于应用的生命周期提供自动的管理和配置工具



AWS CloudFormation

多个AWS服务的组合模版



AWS Elastic Beanstalk

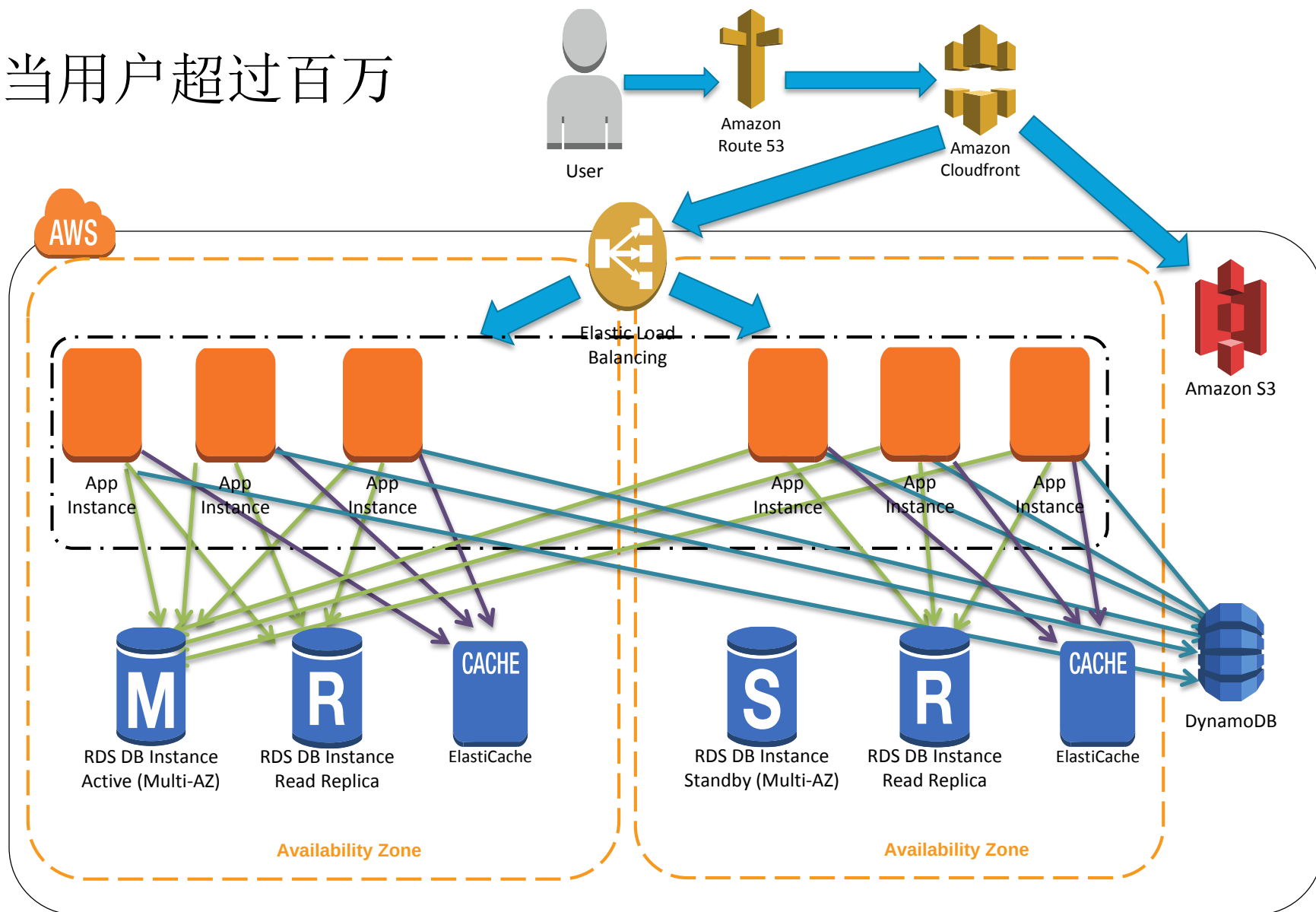
针对开发语言的自动的资源部署



举例：一个支持几百万用户的网络应用：

AWS多个服务的配合使用

当用户超过百万



除了Web Applications，AWS还能用来做什么？



- DRS里提供对Oracle数据库的支持
- Oracle的企业应用都可以在AWS的环境里部署
- AWS环境里兼容客户已经购买的Oracle license



- AWS是经SAP认证的云平台，SAP也是AWS的全球技术合作伙伴
- 大多数的SAP应用都已经经过认证，可以把产品化部署在AWS上



- Windows操作系统在AWS的EC2上是可选的操作系统之一
- 易于配置和维护Active directory, sever System Center Operations Manager , SQL, Exchange, Sharepoint等
- 使用BYOL使用已经购买的License

LIONSGATE 用AWS托管SharePoint & SAP

THE DECIDING FACTORS
WERE THE RELIABILITY,
EXTENSIVE ECOSYSTEM
OF PARTNERS AND SERVICES,
AND COMPETITIVE PRICING
THAT AWS OFFERED

- Jeremy Fuchs
VP, Financial and BI Systems

LIONSGATE™



Amazon VPC

用Cloud部署企业
内部应用

比传统的机房和服务
器节省50%成本

在未来3年节省
\$1M 的成本

**1 instance for 100 hours
=
100 instances for 1 hour**

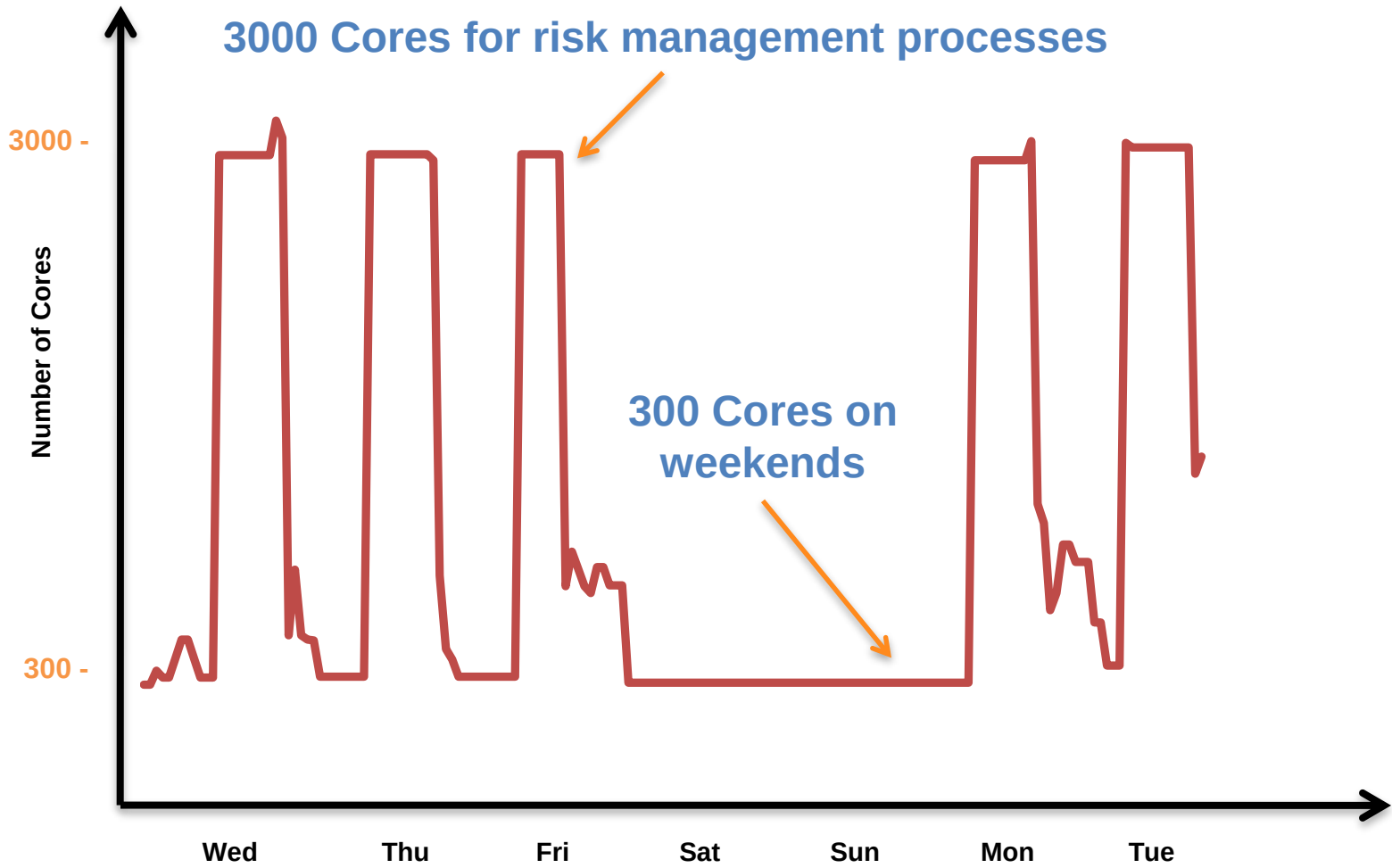
Bankinter用AWS做信用分析

**BANKINTER USES AWS AS AN
INTEGRAL PART OF OUR CREDIT-RISK
SIMULATION APPLICATION. WE NEED
TO PERFORM AT LEAST
5,000,000 SIMULATIONS
TO GET REALISTIC RESULTS**

— Javier Roldán
Director of Technical Innovation



Average simulation
time went from 23 hours
to 20 minutes



AWS非常适合用于灾难恢复

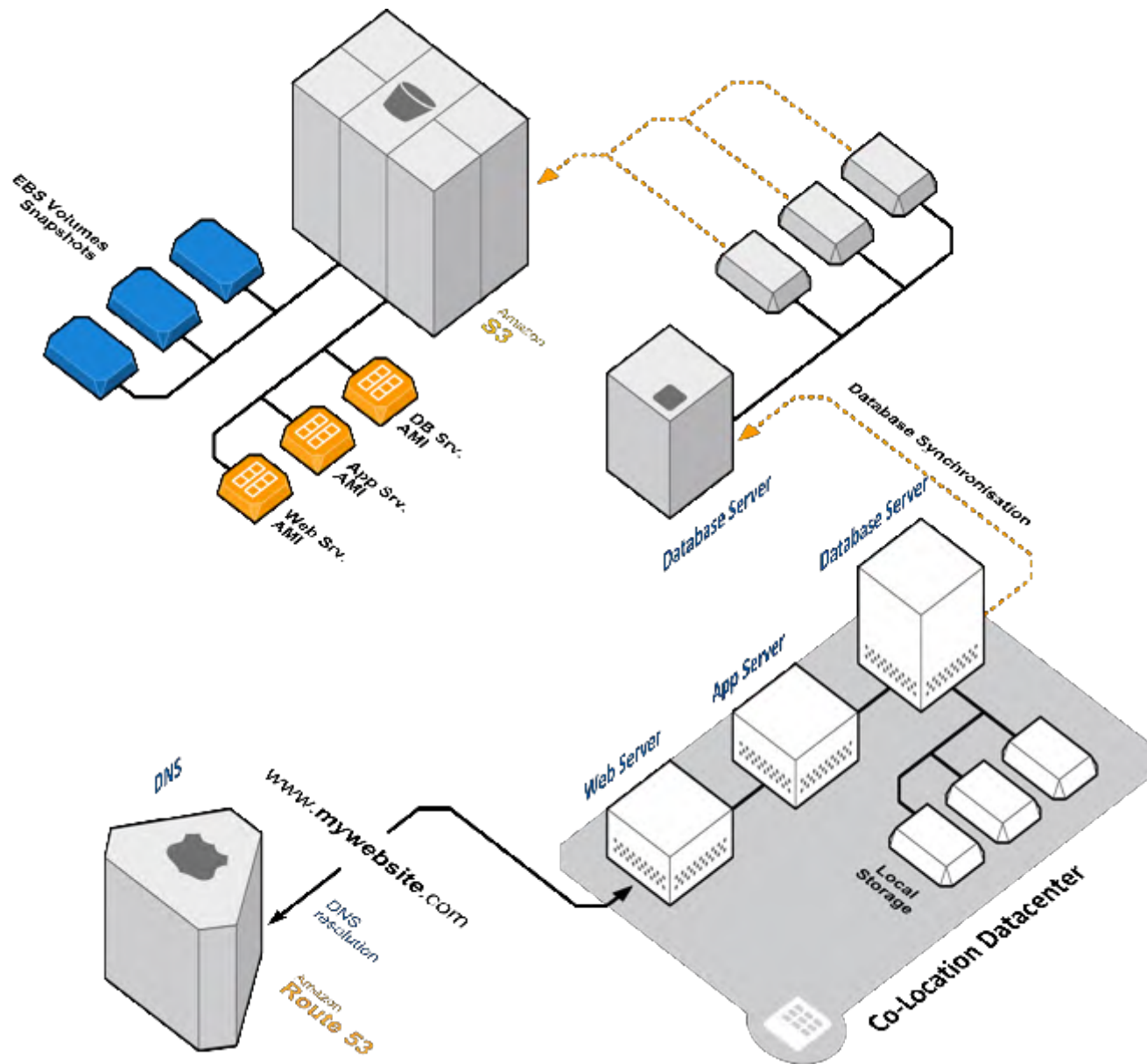
Primary Site

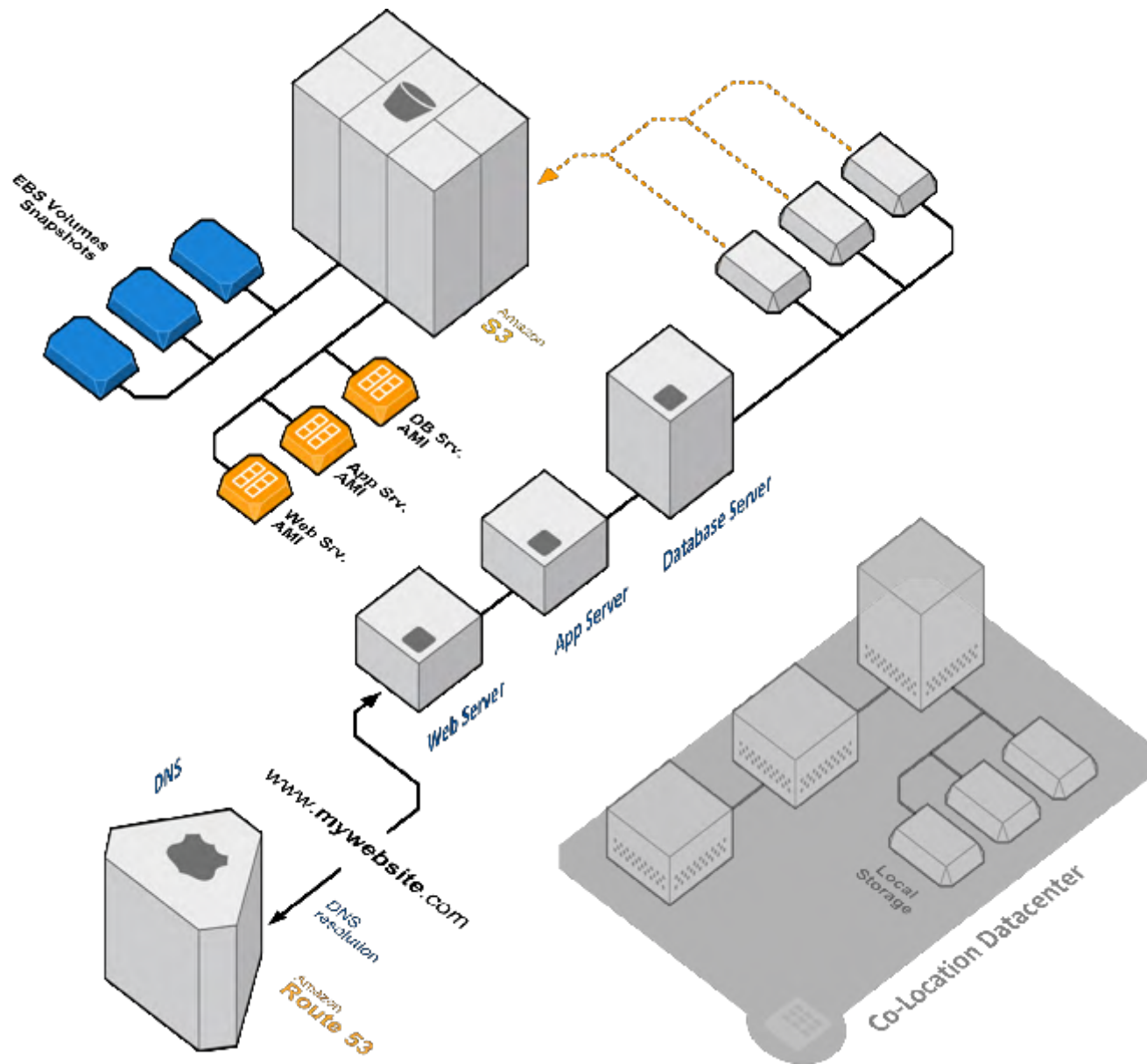
Routers
Firewalls
Network
Application Licenses
Operating Systems
Hypervisor
Servers
SAN
Primary Storage
Backup
Archive



AWS

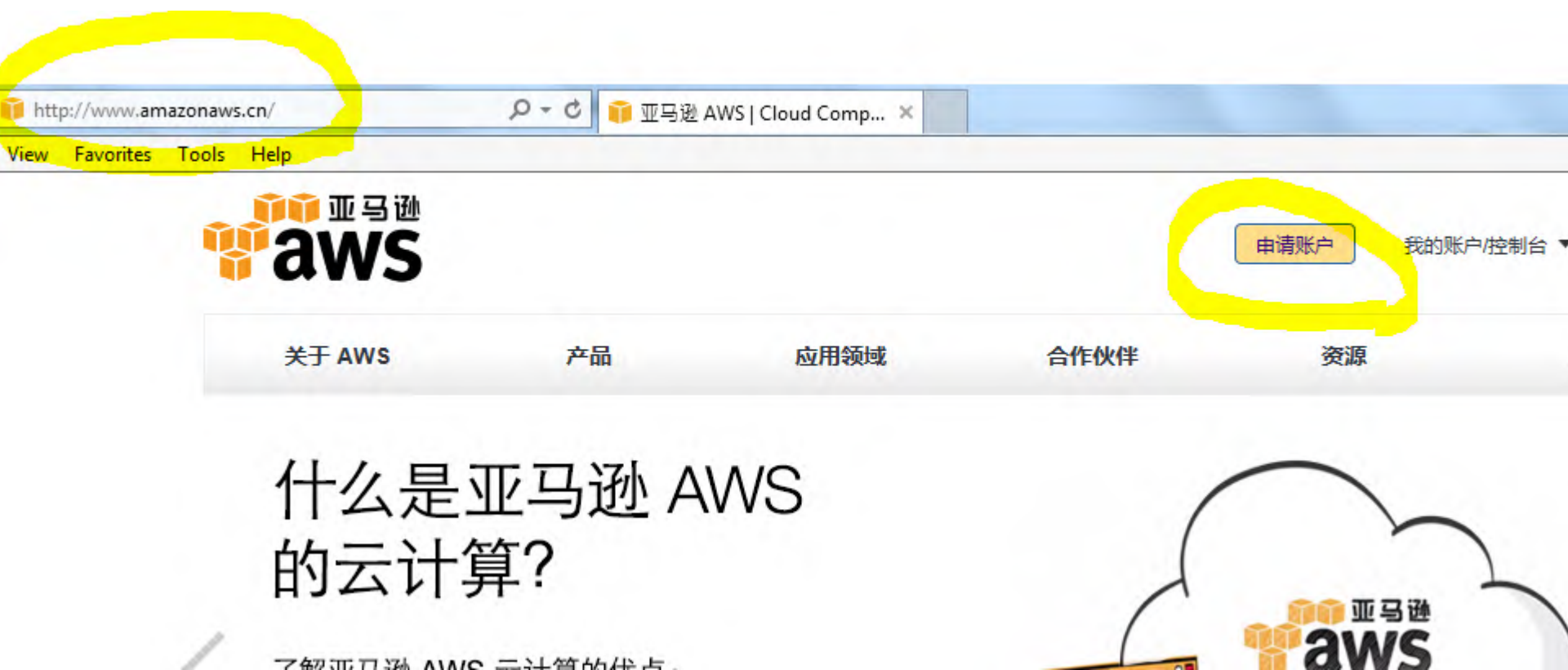
Routers
Firewalls
Network
Application Licenses
Operating Systems
Hypervisor
Servers
SAN
Snapshot Storage
Backup
Archive





谢谢

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