Introduction to Microsoft Azure

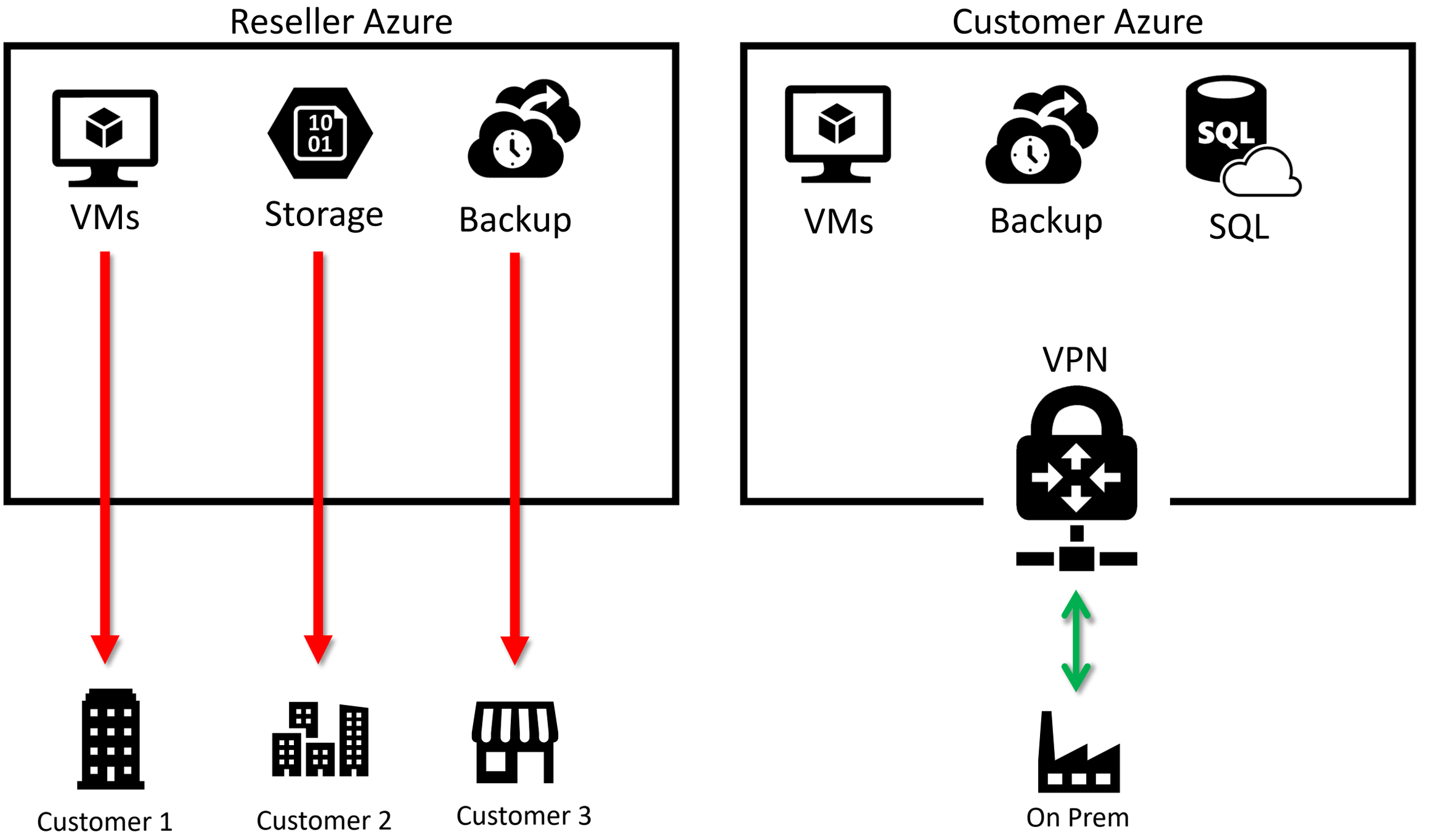
June 2022

@directorcia

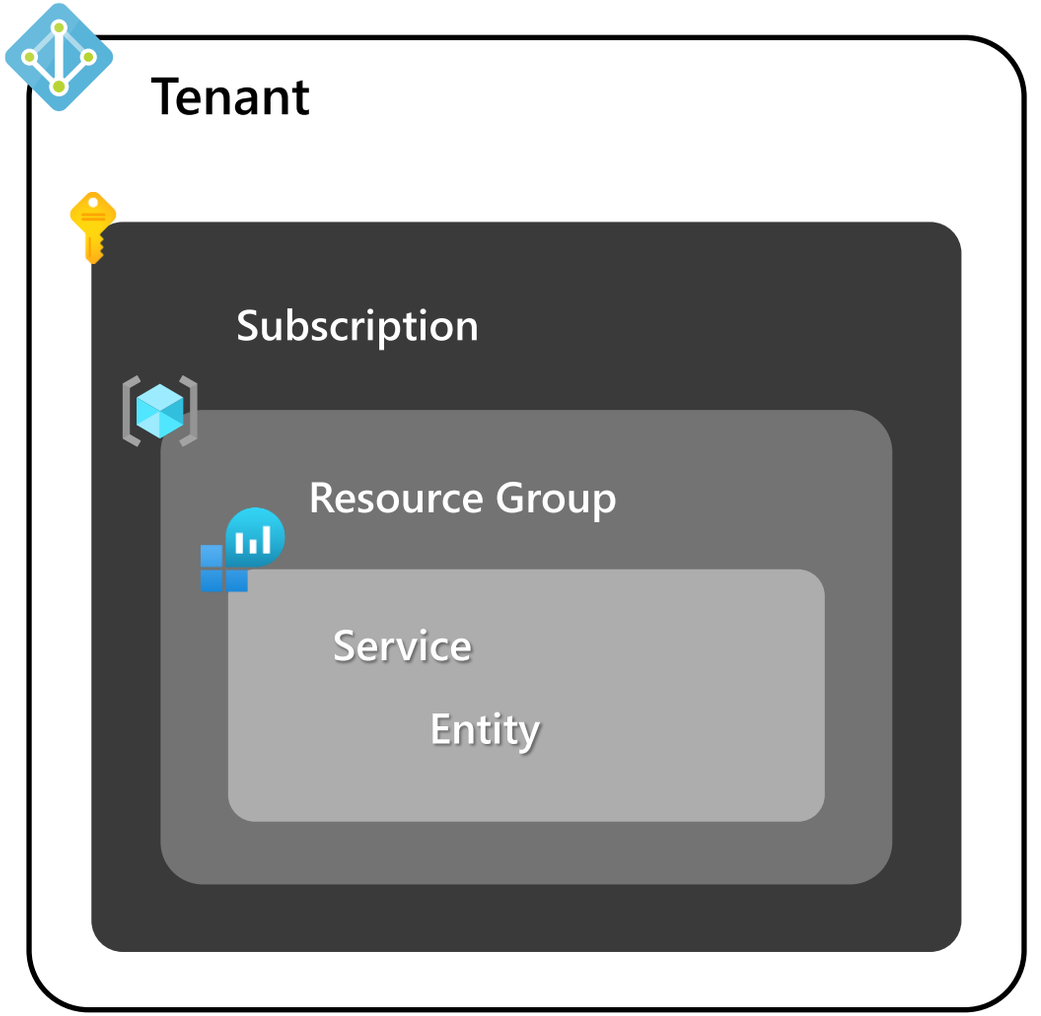
http://about.me/ciaops

What is Azure?

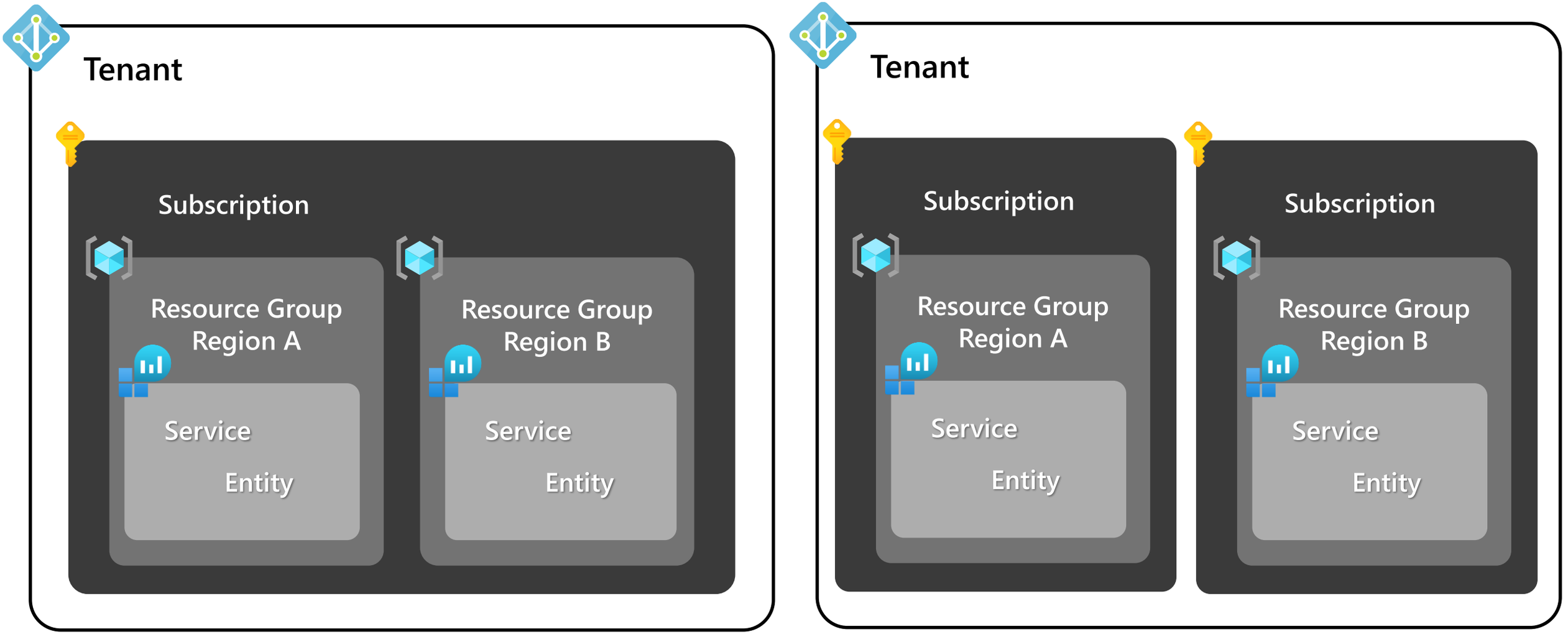
Your on demand data centre


Reseller Azure
VMs
Storage
Backup
Customer 1
Customer 2
Customer 3
Customer Azure
VMs
Backup
SQL
SQL
VPN
On Prem

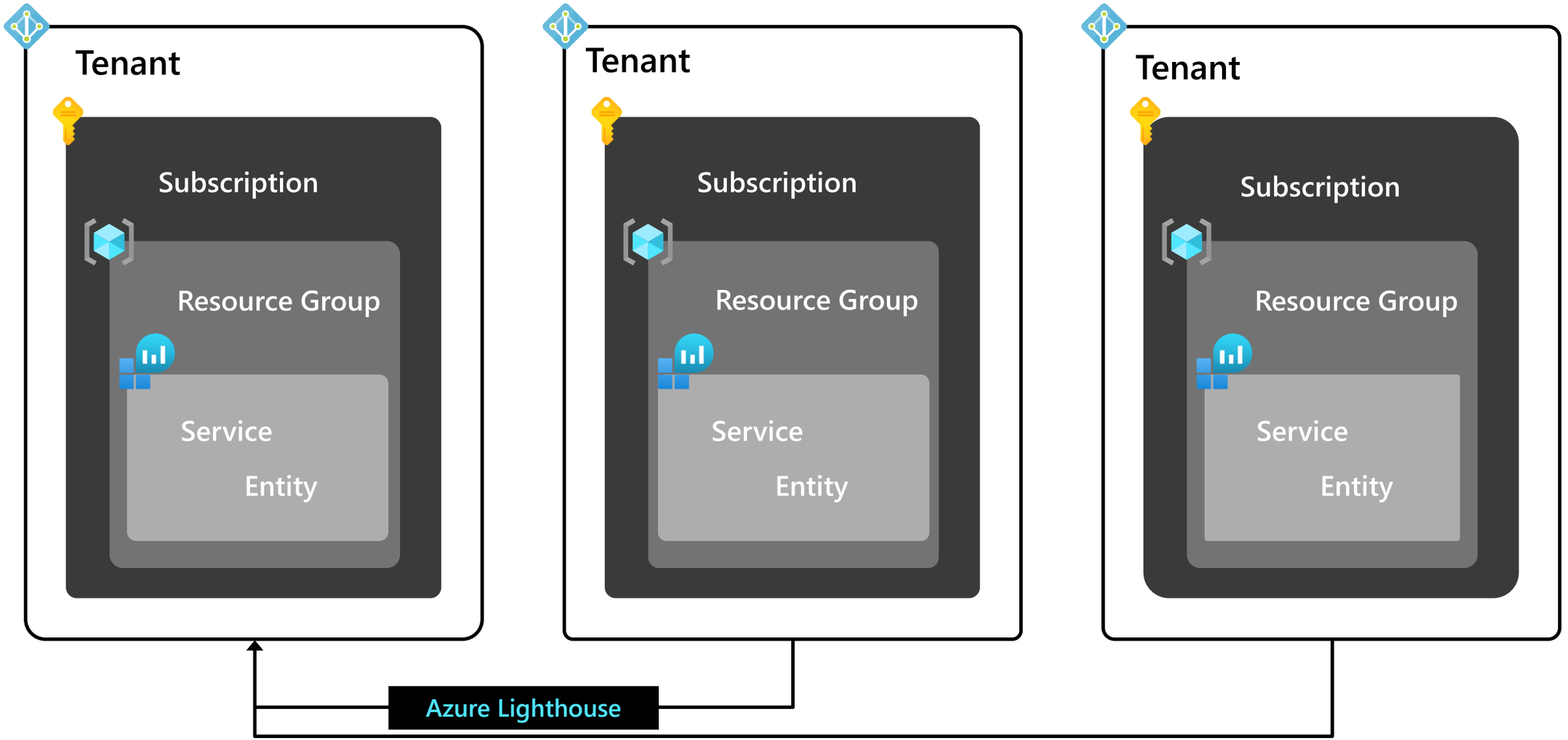
Typical Single Tenant Design



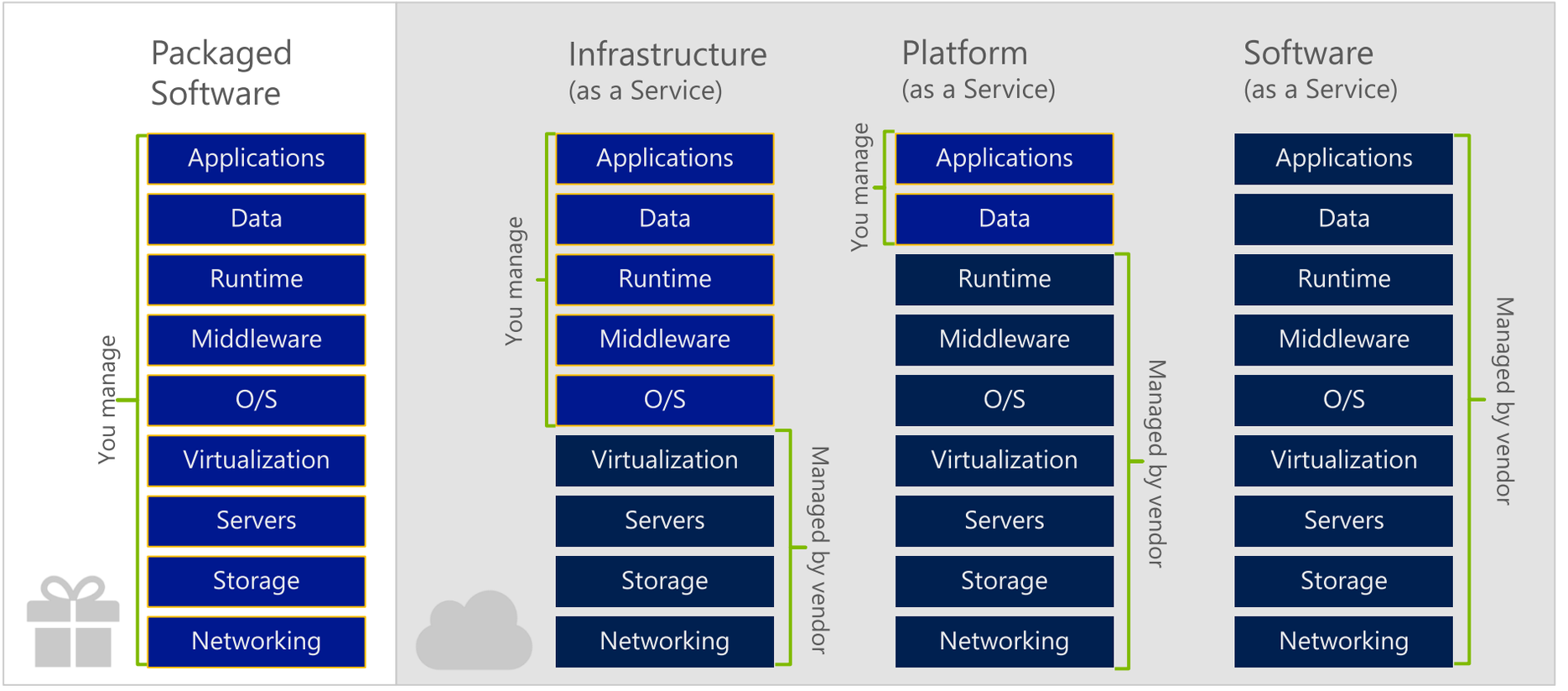
Single Tenant Design



Multi-Tenant Design



Cloud Computing



Platform Services

Security & Management

- Portal
- Active Directory
- Multi-Factor Authentication
- Automation
- Key Vault
- Store / Marketplace
- VM Image Gallery & VM Depot

Compute

- Cloud Services
- Service Fabric
- Batch
- Remote App

Web and Mobile

- Web Apps
- API Apps
- API Management
- Mobile Apps
- Logic Apps
- Notification Hubs

Developer Services

- Visual Studio
- Azure SDK
- Team Project
- Application Insights

Hybrid Operations

- Azure AD Connect Health
- AD Privileged Identity Management
- Backup
- Operational Insights
- Import/Export
- Site Recovery
- StorSimple

Integration

- Storage Queues
- Biztalk Services
- Hybrid Connections
- Service Bus

Media & CDN

- Media Services
- Content Delivery Network (CDN)

Analytics & IoT

- HDInsight
- Machine Learning
- Data Factory
- Event Hubs
- Stream Analytics
- Mobile Engagement

Data

- SQL Database
- SQL Data Warehouse
- Redis Cache
- Search
- DocumentDB
- Tables

Infrastructure Services

Compute

- Virtual Machines
- Containers

Storage

- BLOB Storage
- Azure Files
- Premium Storage

Networking

- Virtual Network
- Load Balancer
- DNS
- Express Route
- Traffic Manager
- VPN Gateway
- Application Gateway

Datacenter Infrastructure (42 Regions, 36 Online)

Licensing Azure

Azure purchasing options

Direct on azure.microsoft.com

Pay As You Go

Zero upfront cost, cancel anytime.

No long-term commitment.

Purchase with credit card.

Cloud Solution Provider Program

White Label

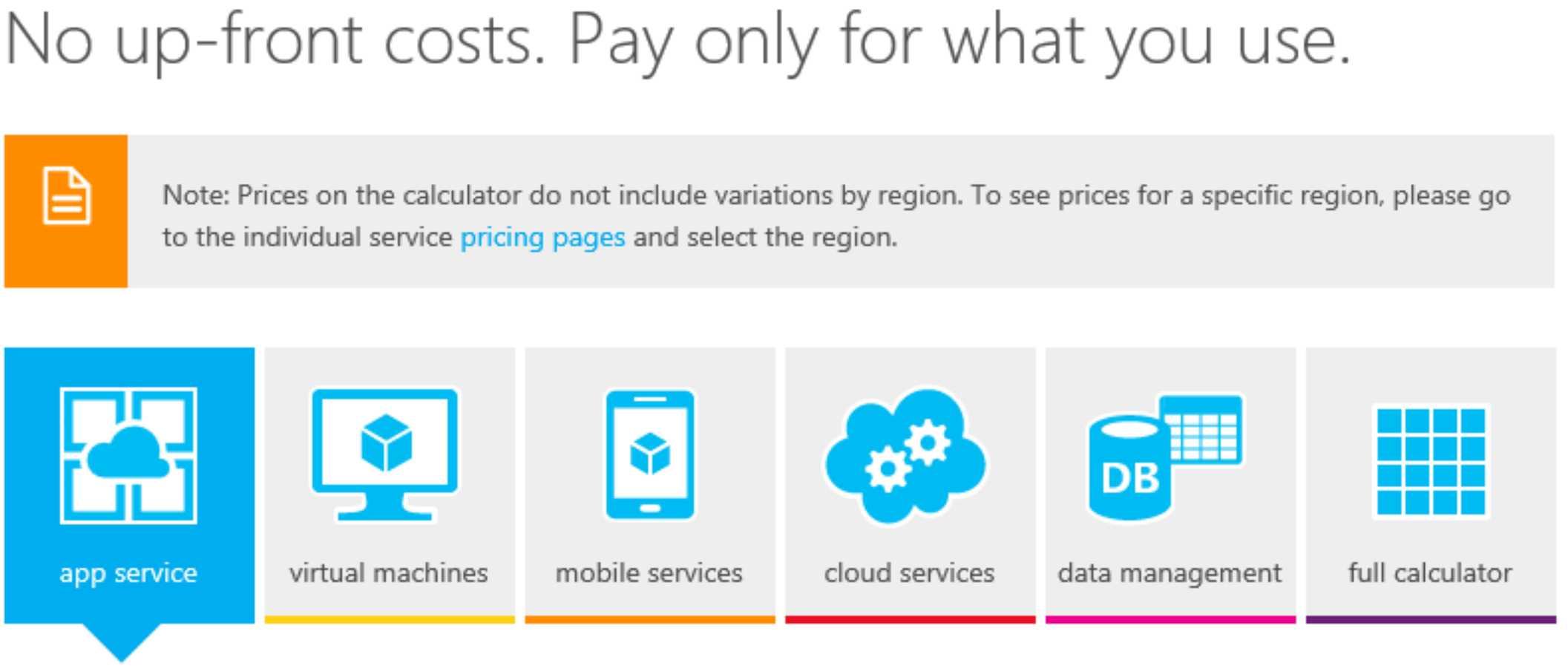
Set the price, the terms and directly bill customers.

Directly provision and manage subscriptions.

First point of contact for customers needs.

Purchase through Distributors.

Estimating Azure costs



http://azure.microsoft.com/en-us/pricing/calculator/

Different cloud pricing models?

Azure = Consumption

365 = PU/PM flat

Azure Partner IUR

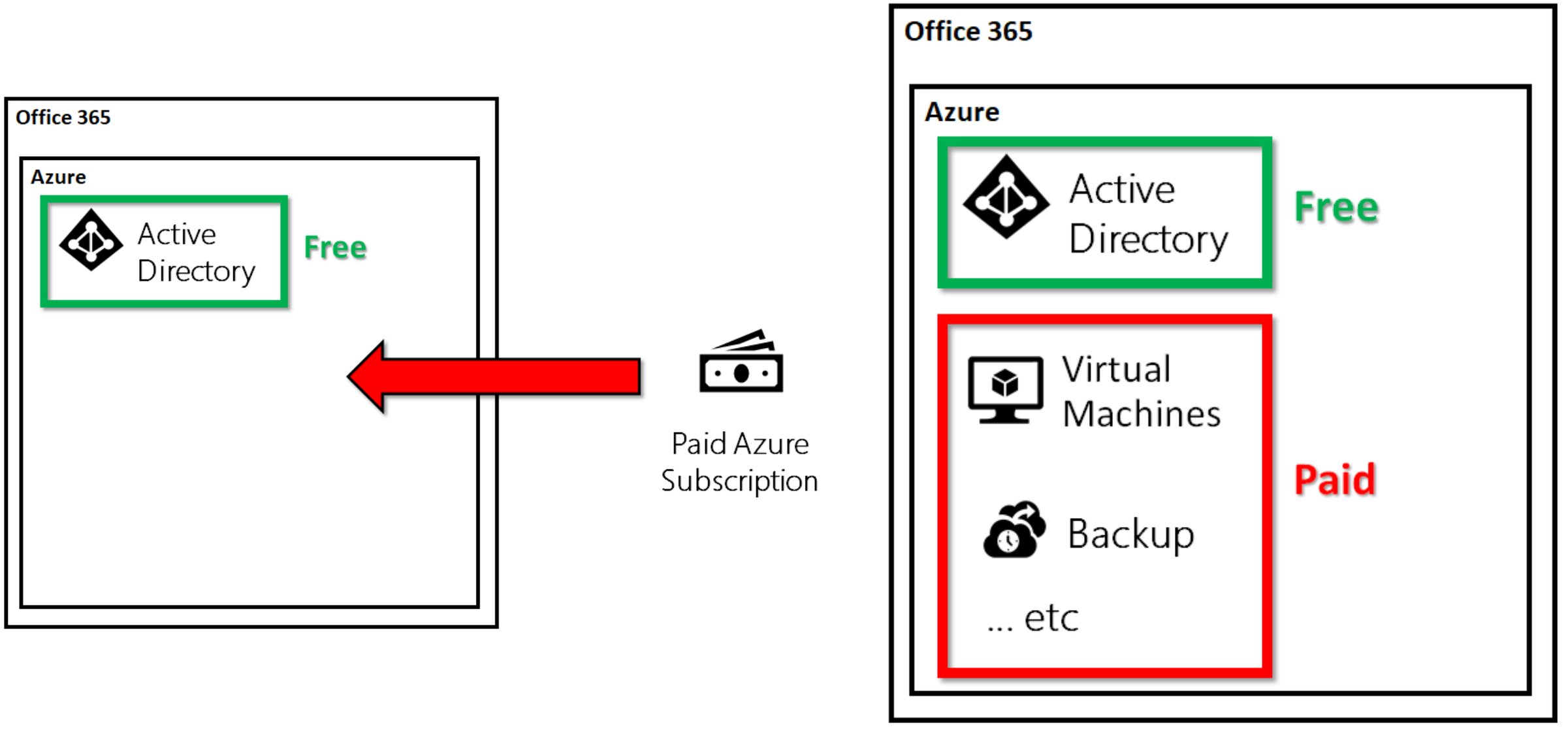
Details

- Partners received free monthly Azure credits as part of their benefits
- Credits automatically renew each month.
- What are my IUR benefits? - https://partner.microsoft.com/en-us/membership/internal-use-software

What can you use your credits for?

- Hosting your customers DNS records
- Creating a cloud administration workstation
- Backing up local files
- Storing tools, ISOs, installation files, data in cloud
- Archiving data
- Migration location
- And much, much more

Using Azure


Office 365
Azure
Active Directory
Free
Paid Azure Subscription
Office 365
Azure
Active Directory
Free
Virtual Machines
Backup
... etc
Paid

Azure DNS key features

All common DNS record types

A, AAAA, CNAME, MX, NS, SOA, SRV, TXT

Fast and available

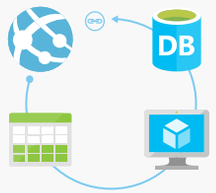
Ultra-low query latency from global Anycast network of name servers
Fast propagation of new records, globally distributed

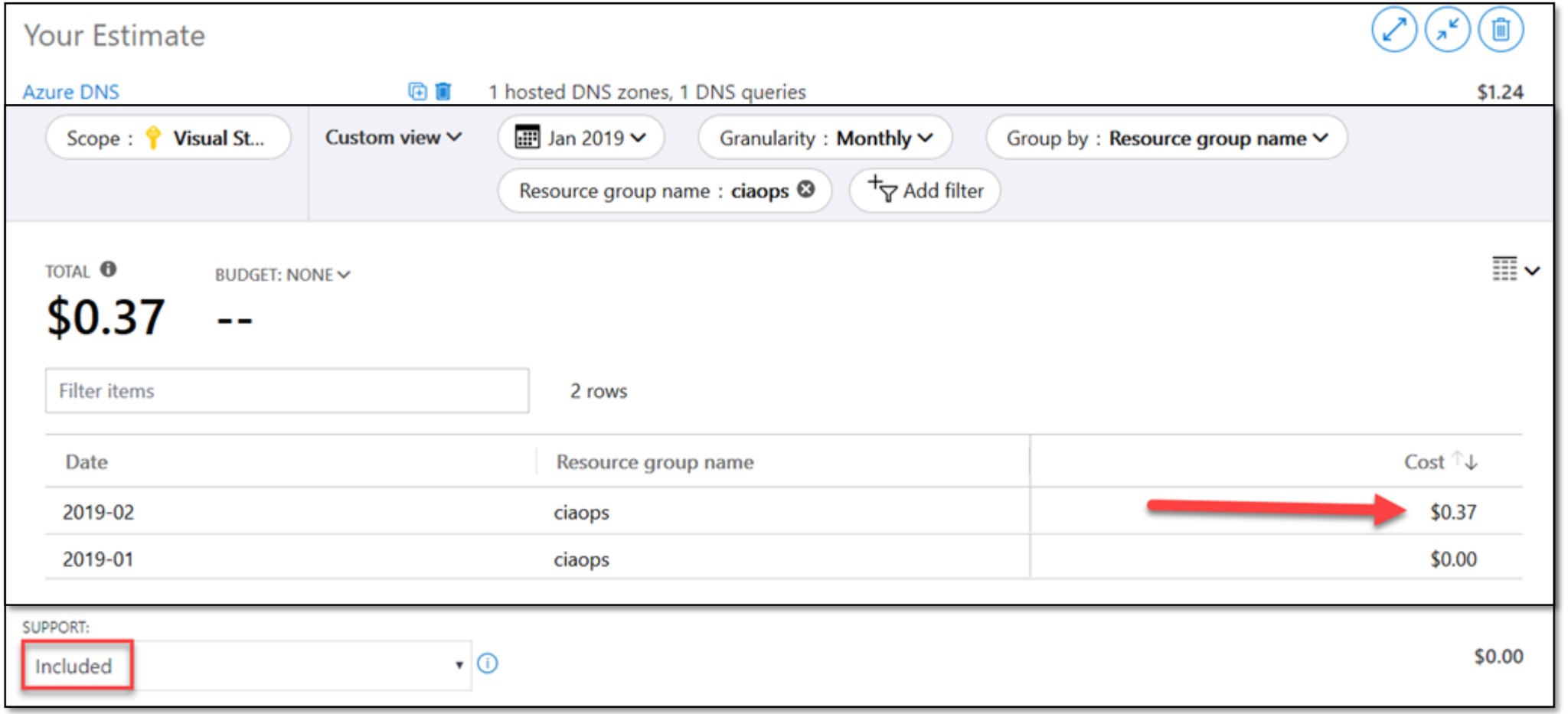
Azure Resource Manager benefits

Security, role-based access control, tagging and template-based deployment
For both zones and record sets

Automate via PowerShell

Ability to automate deployment using PowerShell




Your Estimate
Azure DNS
1 hosted DNS zones, 1 DNS queries
$1.24
Scope : Visual St...
Custom view
Jan 2019
Granularity : Monthly
Group by : Resource group name
Resource group name : ciaops
Add filter
TOTAL
$0.37
BUDGET: NONE
--
Filter items
2 rows
Date
Resource group name
Cost
2019-02
ciaops
$0.37
2019-01
ciaops
$0.00
SUPPORT:
Included
$0.00

Key Azure scenarios for small & midsize customers

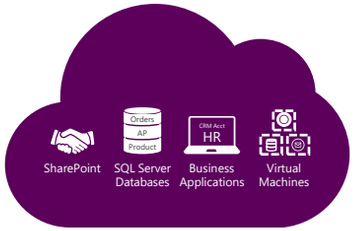
Data Backup

Provide easy, scalable data backup services in the cloud

Disaster Recovery

Offer peace of mind with ongoing cloud-based DR services

Deployment in VMs

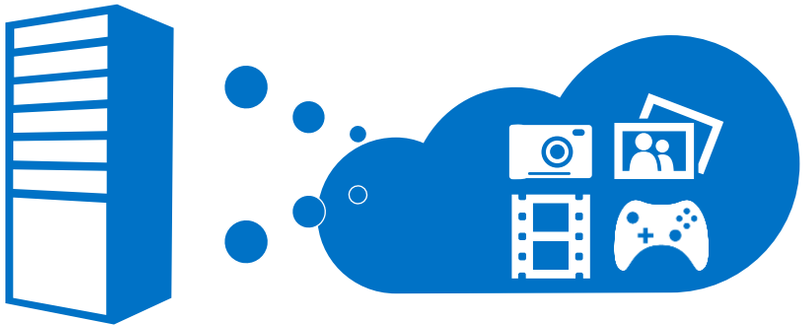


Quickly deploy and manage customer applications in the cloud

Host Websites

Grow your business helping customers move their websites to the cloud

Selling server backup in the cloud



Provide easy, affordable backup and archival in the cloud

- Sell Microsoft Azure Backup as an ongoing service with a recurring revenue stream
- Quickly and easily provision more storage for your customers as needed

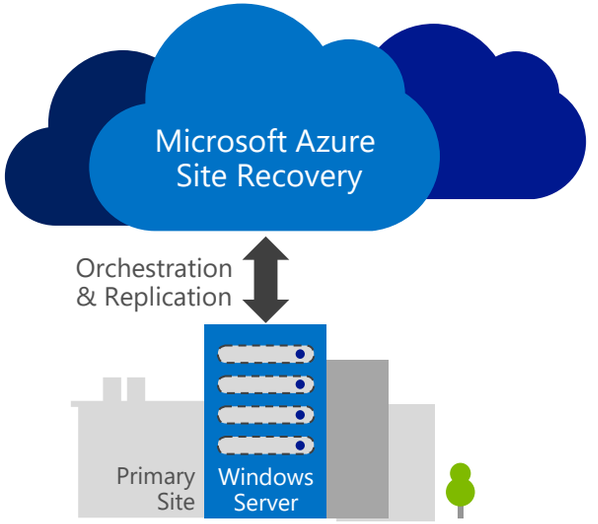
A range of applications: file servers, SQL Server, etc.

Long-term retention to address legal discovery needs

Encrypted backups and global, geo-redundant datacenters

No hardware and backup media costs—and no restoration costs

Selling disaster recovery in the cloud



Sell powerful, affordable, and simple disaster recovery (DR) in the cloud

- Offer your SMB customers peace of mind with cloud-based disaster recovery
- Use Azure as your DR site and leverage automated workload recovery

Earn recurring revenues by offering disaster recovery as a service (DRaaS)

Avoid the massive capital expense of building your own DR infrastructure

Provide site deployment in minutes, remote DR health monitoring, and customizable recovery plan

Deliver an initial DR plan and then offer ongoing testing and reporting services

Storage, backup, and disaster recovery: how they work together

Storage

Get easy, economical storage that can scale as needed

- Scale up or down easily to meet changing needs
- Access your data from anywhere
- Use with a choice of operating systems

Backup

Get fast, simple backup and an easy way to restore lost files

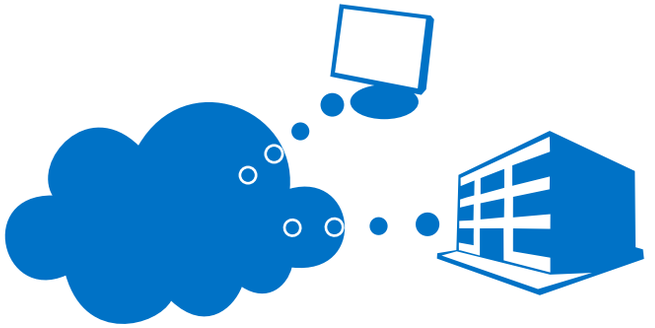
- Backup files to a secondary location
- Quickly restore files when accidentally deleted or lost
- Retain files and data for legal requirements

Disaster Recovery

Protect your servers and get your systems back online quickly

- Keep a replica of the entire server infrastructure—updated in near real-time
- Get applications and services back up and running in minutes

Hosting websites in the cloud



Grow your business helping customers move their websites to the cloud with Microsoft Azure

- Quickly build, deploy, and manage websites on an open and flexible cloud platform
- Offer the peace of mind from hosting on a global network of Microsoft-managed data centers

Leverage a fully-managed cloud infrastructure that can scale as needed to support the largest peak loads

Manage your customers' websites using the same familiar tools across on-premises and cloud environments

Where to start

- I finally 'get' Azure - http://blog.ciaops.com/2014/04/i-finally-get-microsoft-azure.html
- Azure Desktop Backup - http://blog.ciaops.com/2014/12/azure-desktop-backup.html
- Azure Backup for Applications – http://blog.ciaops.com/2016/01/azure-backup-server-for-applications.html
- Creating an Azure DC – http://blog.ciaops.com/2015/07/creating-domain-controller-in-azure.html
- Azure Resource Manager Basics - http://blog.ciaops.com/2016/02/azure-resource-manager-basics.html
- Creating an Azure SMB File Share - http://blog.ciaops.com/2016/01/creating-azure-smb-file-share.html
- Introducing Microsoft Azure - https://azure.microsoft.com/en-us/documentation/articles/fundamentals-introduction-to-azure/

CIAOPS Resources

- Blog – http://blog.ciaops.com
- Github – http://github.com/directorcia
- Free Office 365, Azure video tutorials – http://www.youtube.com/directorciaops
- Free documents, presentations, eBooks – http://slideshare.net/directorcia
- Office 365, Azure, Cloud podcast – http://ciaops.podbean.com
- Office 365, Azure online training courses – http://www.ciaopsacademy.com
- Office 365, Azure eBooks – http://www.ciaops.com/publications
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