

An aerial photograph of a vast, snow-covered mountain range. The peaks are rugged and partially covered in snow, with some rocky outcrops visible. The sky is a deep blue with wispy white clouds. A large, semi-transparent white circle is overlaid on the right side of the image, containing the text 'Microsoft Azure Landing Zone' in a bold, black, sans-serif font.

Microsoft Azure Landing Zone

MISSION

We are keenly committed to the business success of our customers.

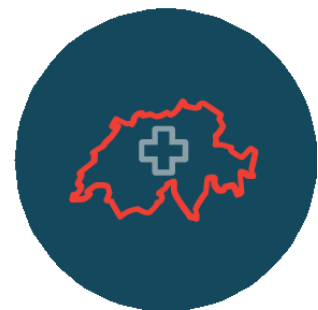
We rely on

- **innovative Microsoft Cloud solutions**
- **flexible, tailor-made managed services**
- **the first-class know-how of our staff**

TECHNOLOGY

AZURE

Cloud Platform



SWISS DATACENTER

Data centers in Zurich and Geneva



HYBRID OPERATION

Step-by-step in to the cloud with hybrid solutions



COMPLIANCE

More than 90 compliance certifications



SECURITY

Microsoft invests over 1\$ billion annually in security



OFFICE 365

Productivity & Workplace

ALL FROM ONE SOURCE

Dozens of Office applications working seamlessly together



WORK OFFLINE AND ONLINE

Office is also there when you don't have a network



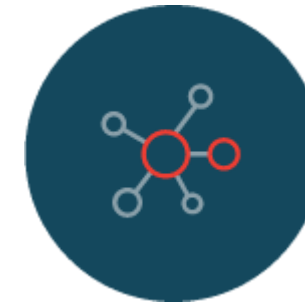
WORKPLACE SECURITY

Always the latest and best security features



CLIENTS THAT SIMPLY WORK

Best practices and Baggenstos know-how



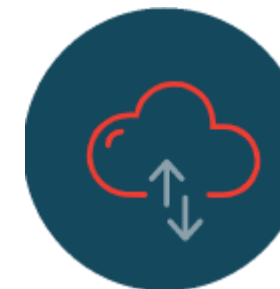
AZURE Landing Zone

Document, which describes desired outcome



AZURE Assessment

Assessment (virtual) Machines (CPU, RAM, Disk, etc.) and creates an estimation



Define Processes

Modernize processes to adapt to cloud

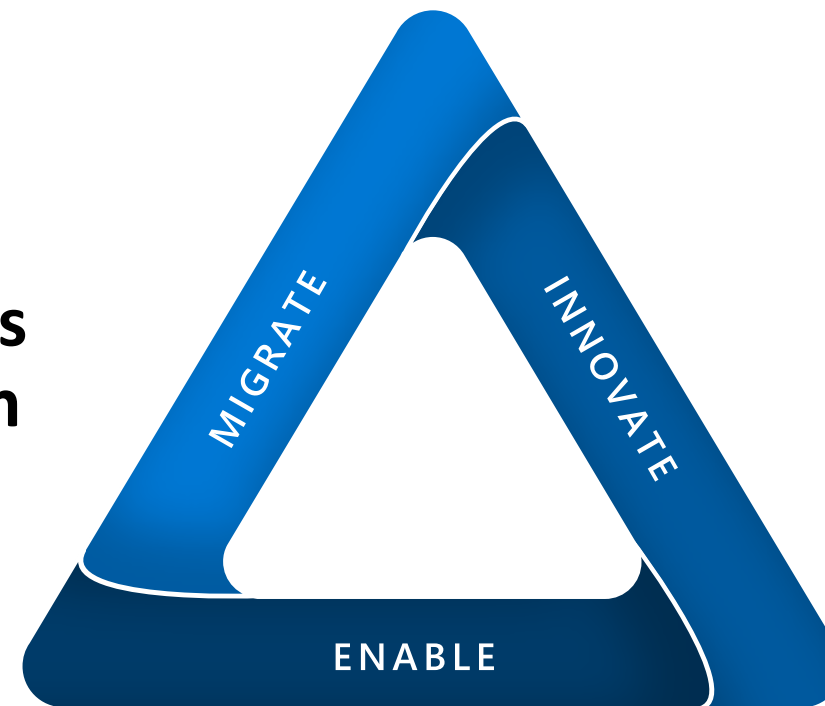


Migration Bundles

Create small migration packages. Start small, end big!

The path to digital transformation

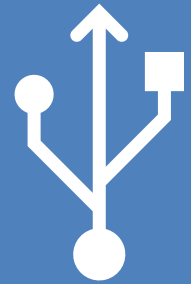
**Migrate your existing apps
to Azure and optimize them**



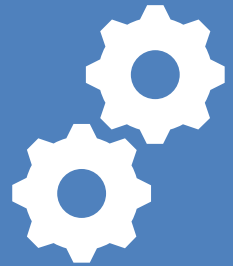
**Innovate with new apps
and modernize existing apps**

**Enable your team for
successful cloud use**

Key Challenges



Architecture Complexity: Customers lack the required level of understanding and experience on Azure. The mismatch between on-premises infrastructure and cloud-design considerations creates dissonance and friction with respect to defining architectures and standards for their migration to the cloud. They are struggling with the translation of their requirements to Azure concepts, capabilities, constructs and security model.



Operating Compatibility: Existing approaches and functions for the traditional delivery and management of IT services are not compatible with the Azure platform and cloud operating models. When combined with a lack of skills and experience, customers are struggling to define and therefore transform their operating model to manage and support large-scale cloud infrastructure.



Lack of Trust and Desire for Control: The absence of a precise and detailed cloud architecture that is compliant with their requirements, and the lack of a well-defined operating model to support such a platform, leads IT not to trust Azure and instead strive to maintain full control. This often involves building 'walls' and complicated processes which ultimately get in the way of business lines adopting Azure.



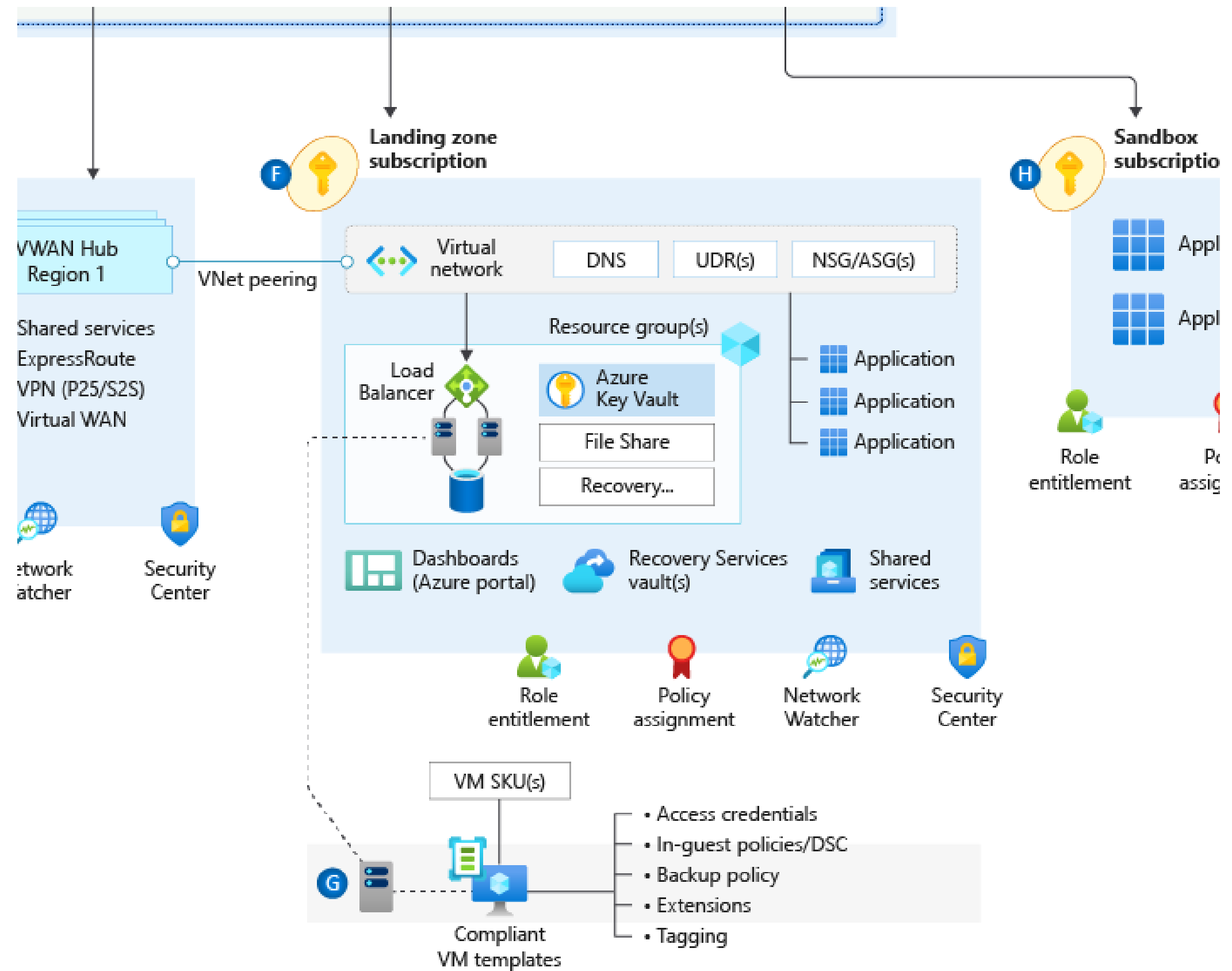
Metropolis

*Using an analogy, this is similar to how city utilities such as **water**, **gas**, and **electricity** are accessible before new houses are constructed. In this context, the network, IAM, policies, management, and monitoring are shared '**utility**' services that **must be readily available** to help streamline the application migration process.*



Enterprise-scale Landing Zone(s)

The principle purpose of the “Landing Zone” is therefore to ensure that when an application or workload lands on Azure, the required “plumbing” is already in place, providing greater agility and compliance with enterprise security and governance requirements.



AZURE LANDING ZONE

Topics

- Naming Convention
- RBAC
- Network concept
- Policies
- Automation
- High Availability
- Backup Disaster Recovery
- SQL
- Azure AD Design
- Security
- etc.

Enterprise-scale Design Principles

Enable Autonomy for Innovation and Transformation

Security and Compliance By-Default

Governance At-Scale with Sustainable Cloud Engineering



Subscription Democratisation



Policy Driven Governance



Single Control and Management Plane



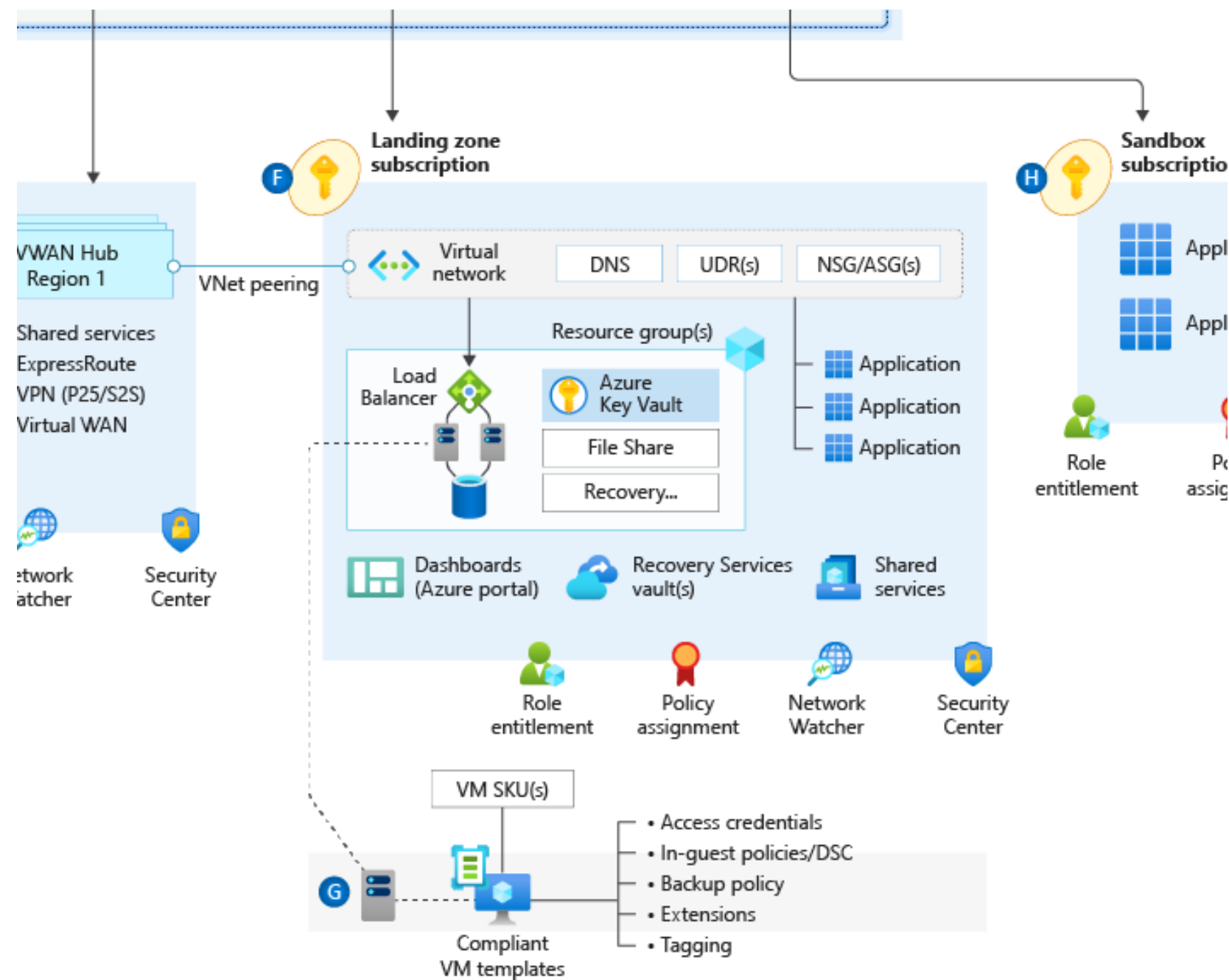
Application Centric and Archetype-Neutral




Azure Native Design and Platform Roadmap Alignment




Enterprise-scale Design Principles





Subscriptions should be used as a unit of management and scale aligned with business needs and priorities, to support business areas and portfolio owners to accelerate application migrations and new application development.

 Subscription Democratization

 Policy Driven Governance

 Single Control and Management Plane

 Application Centric and Archetype-Neutral

 Azure Native Design and Platform Roadmap Alignment



Enterprise-scale Design Principles

Azure Policy should be used to provide the **guard-rails** and ensure the continued compliance of the customer platform and applications deployed onto it, whilst also providing application owners sufficient freedom and a secure unhindered path to cloud.



Subscription Democratisation



Policy Driven Governance



Single Control and Management Plane



Application Centric and Archetype-Neutral



Azure Native Design and Platform Roadmap Alignment



Enterprise-scale Design Principles

The Enterprise-scale architecture should not consider any abstraction layers such as customer developed portals or tooling and should provide a consistent experience for both **AppOps** (centrally managed operation teams) and **DevOps** (dedicated application operation teams).



Subscription Democratisation



Policy Driven Governance



Single Control and Management Plane



Application Centric and Archetype-Neutral



Azure Native Design and Platform Roadmap Alignment



Enterprise-scale Design Principles

We should focus on application centric migrations and development rather than a pure infrastructure "lift and shift" migration (i.e. movement of virtual machines) and should not differentiate between old/new applications or IaaS/PaaS applications.



Subscription Democratisation



Policy Driven Governance



Single Control and Management Plane



Application Centric and Archetype-Neutral



Azure Native Design and Platform Roadmap Alignment



Enterprise-scale Design Principles

The **Enterprise-scale architecture** approach advocates the use of native platform services and capabilities whenever possible, which should be aligned with Azure platform roadmaps to ensure new capabilities are made available within customer environments.



Subscription Democratisation



Policy Driven Governance



Single Control and Management Plane



Application Centric and Archetype-Neutral



Azure Native Design and Platform Roadmap Alignment



Enterprise-scale Design Guidelines



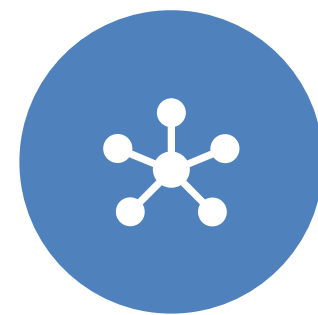
Enterprise Enrolment &
Azure AD Tenants



Identity & Access
Management



Management Group &
Subscription Organization



Network Topology &
Connectivity



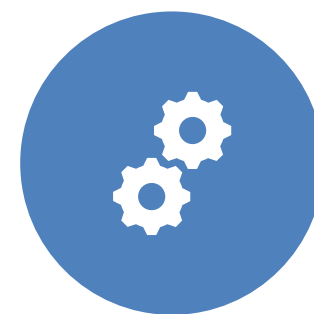
Management & Monitoring



Business Continuity &
Disaster Recovery



Security, Governance &
Compliance

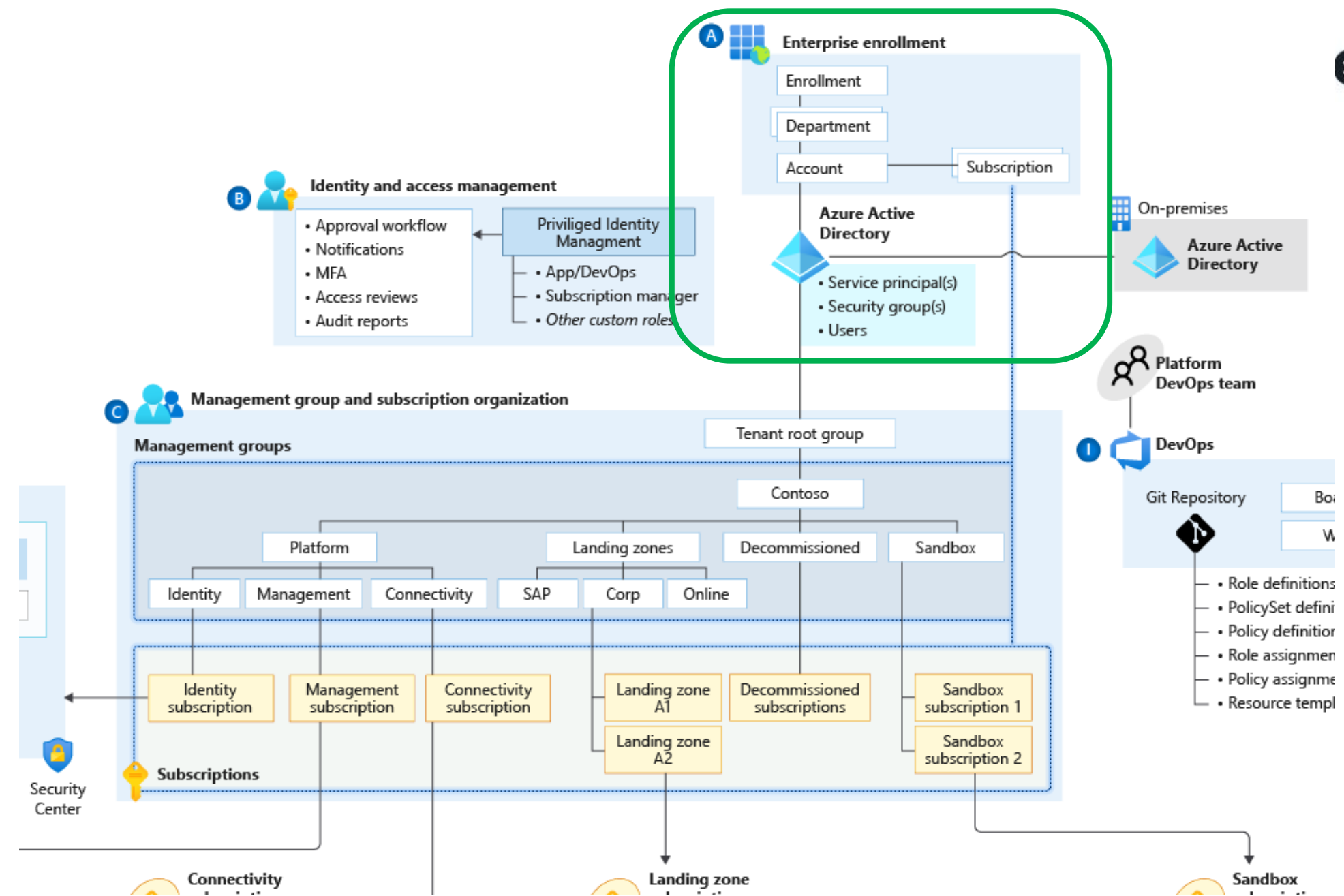


Platform Automation &
DevOps





Enterprise Enrolment & Azure AD Tenants



Define Azure AD Tenants

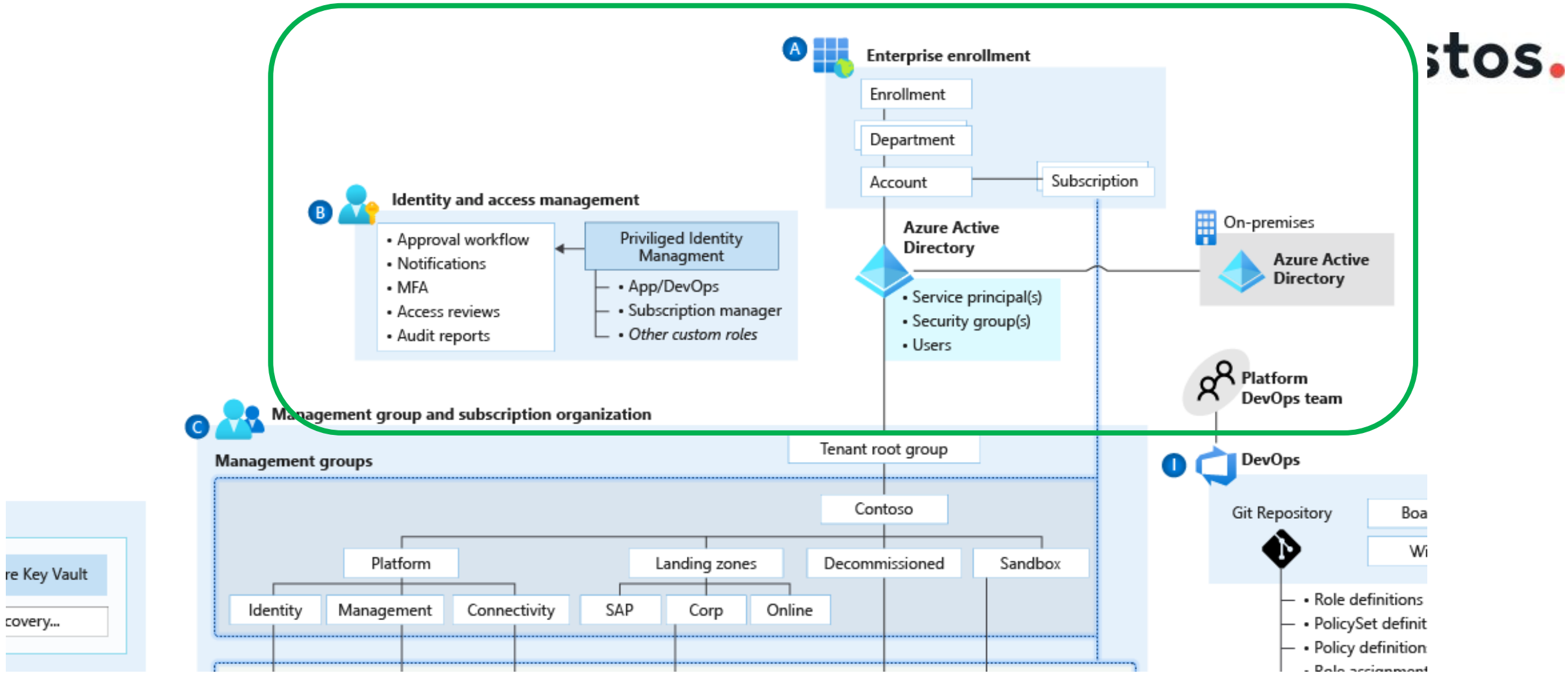
Enterprise enrolment roles links users with their **functional role** and consists of

- Enterprise Administrator
- Department Administrator
- Account Owner
- Service Administrator
- Notification Contact





Identity & Access Management



Planning for Authentication Inside the Landing Zone

A critical design decision enterprise organization must make when adopting Azure is whether to:

extend an existing on-premises identity domain into Azure

or

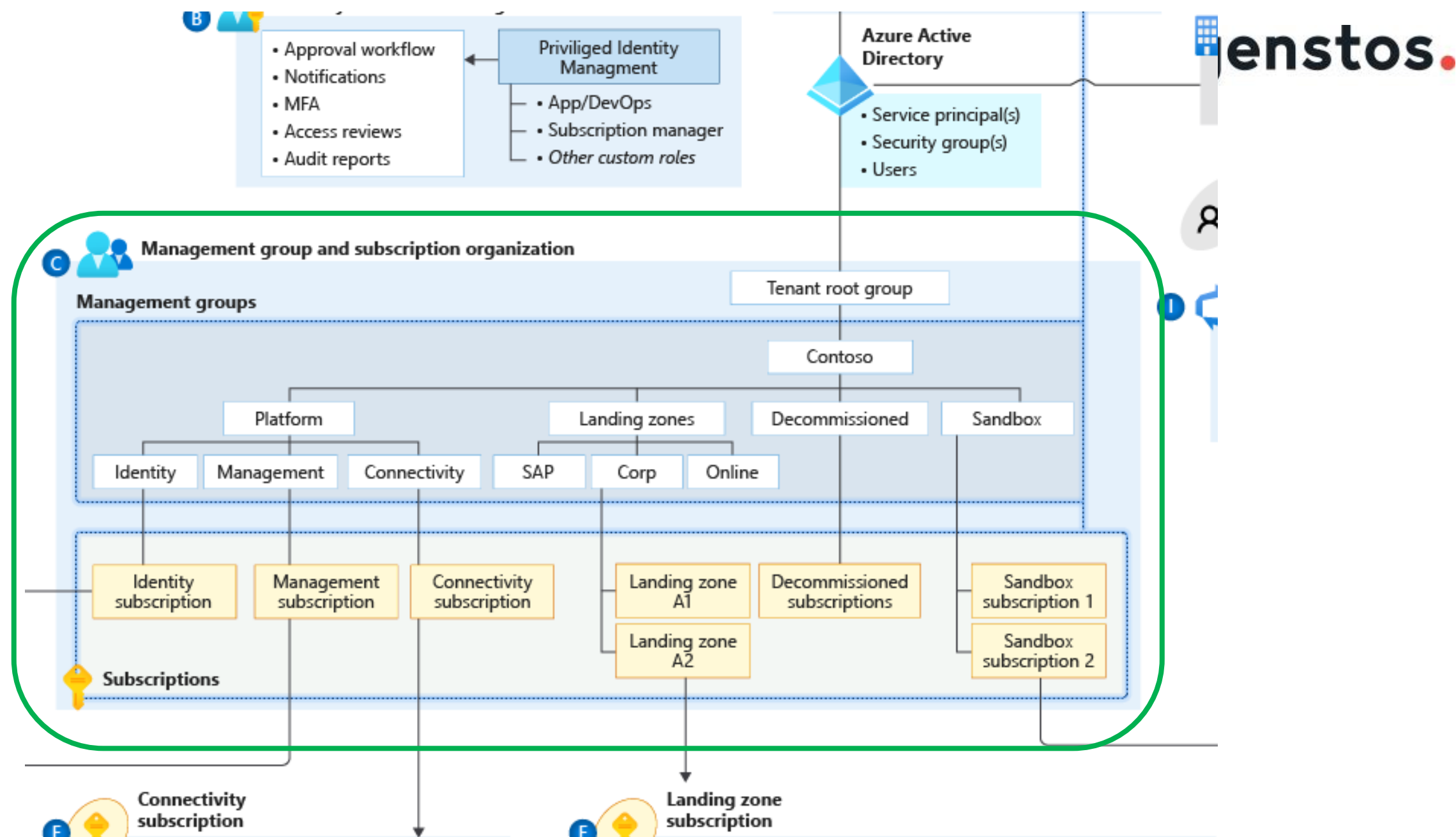
create a brand new one





Management Group & Subscription Organization

Define Hierarchy, Quota & Capacity, and Manage Cost



Subscription Organization and Governance

- Use Management Group structure, within an AAD tenant, to support org mapping
- Must be appropriately considered when planning Azure adoption at-scale

Configure Subscription Quota and Capacity

- Platform limits and quotas within the Azure platform for services
- Availability of required SKUs in chosen Azure regions
- Subscription quotas are not capacity guarantees and are per region

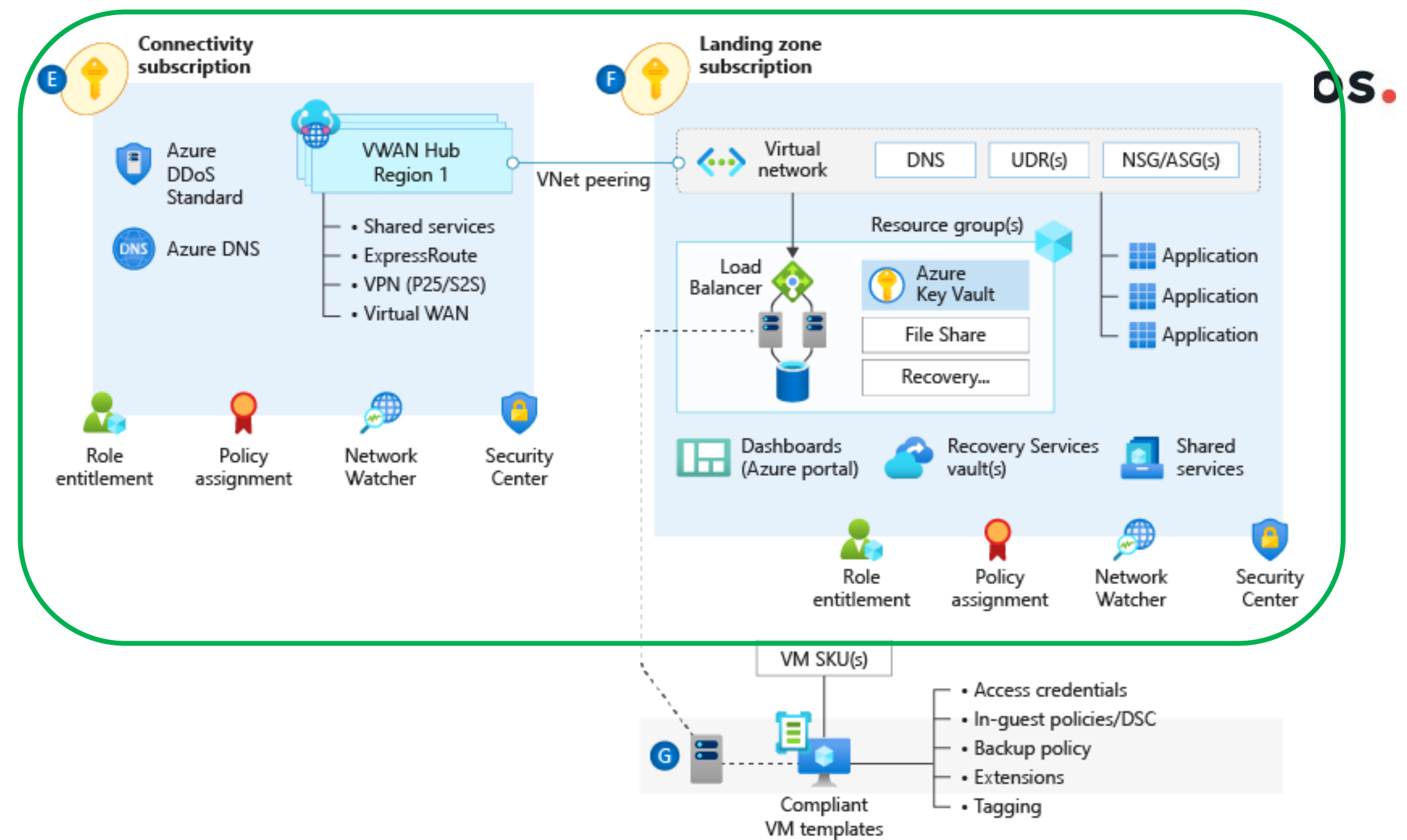
Establish Cost Management

- Potential need for chargeback models where shared PaaS services are concerned, such as ASE which may need to be shared to achieve higher density
- Shutdown schedule for non-prod workloads to optimise costs





Network Topology & Connectivity



Consider the following design elements:

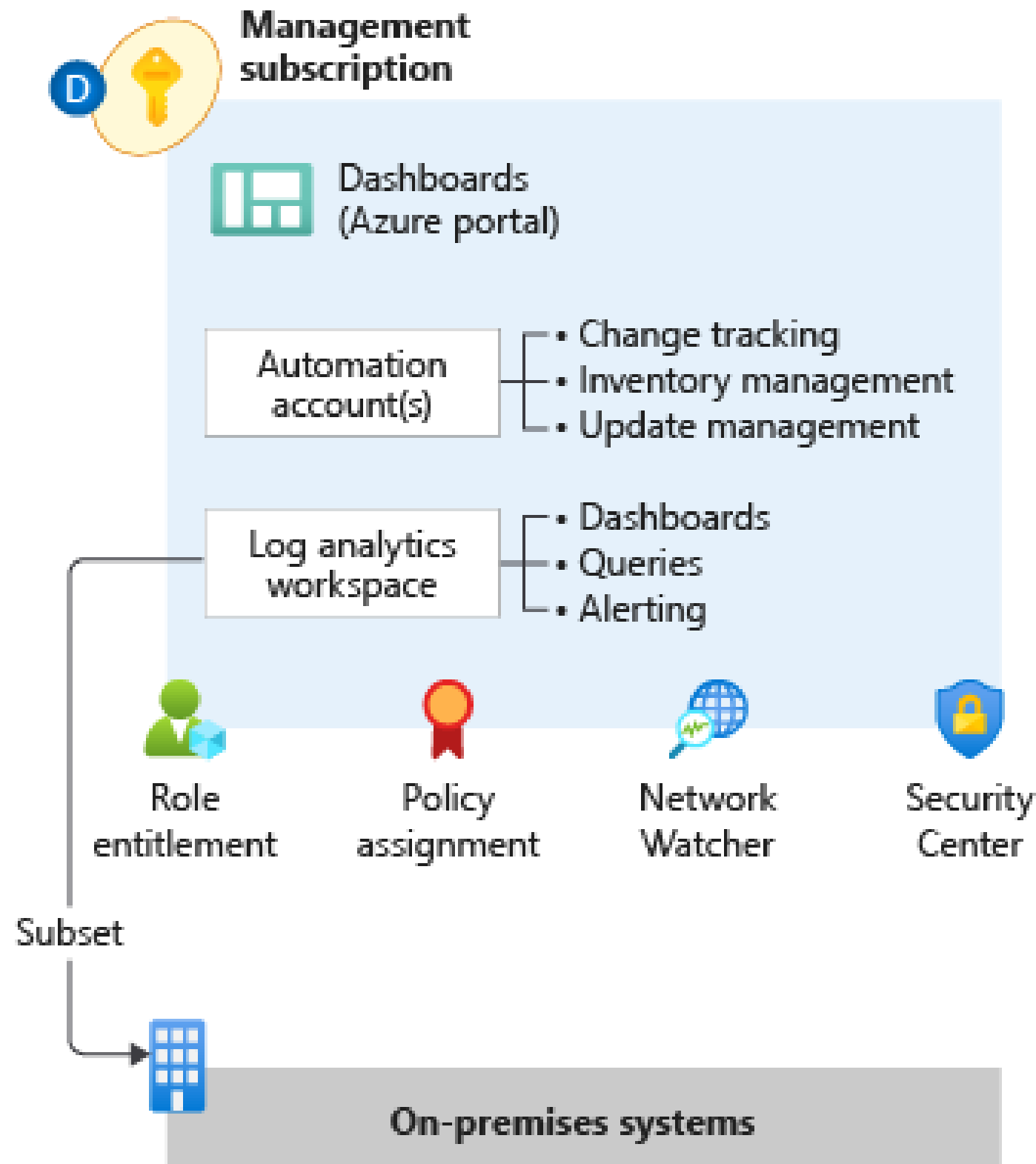
- Planning for IP Addressing
- Configure DNS
- Define an Azure Networking Topology
- Azure VWAN (Microsoft Managed)
- Traditional Azure networking (Customer Managed)
- Walkthrough – Enterprise-scale network topology (VWAN-based)
- Connectivity to Azure





Management & Monitoring

Planning for Platform & Application Management and Monitoring



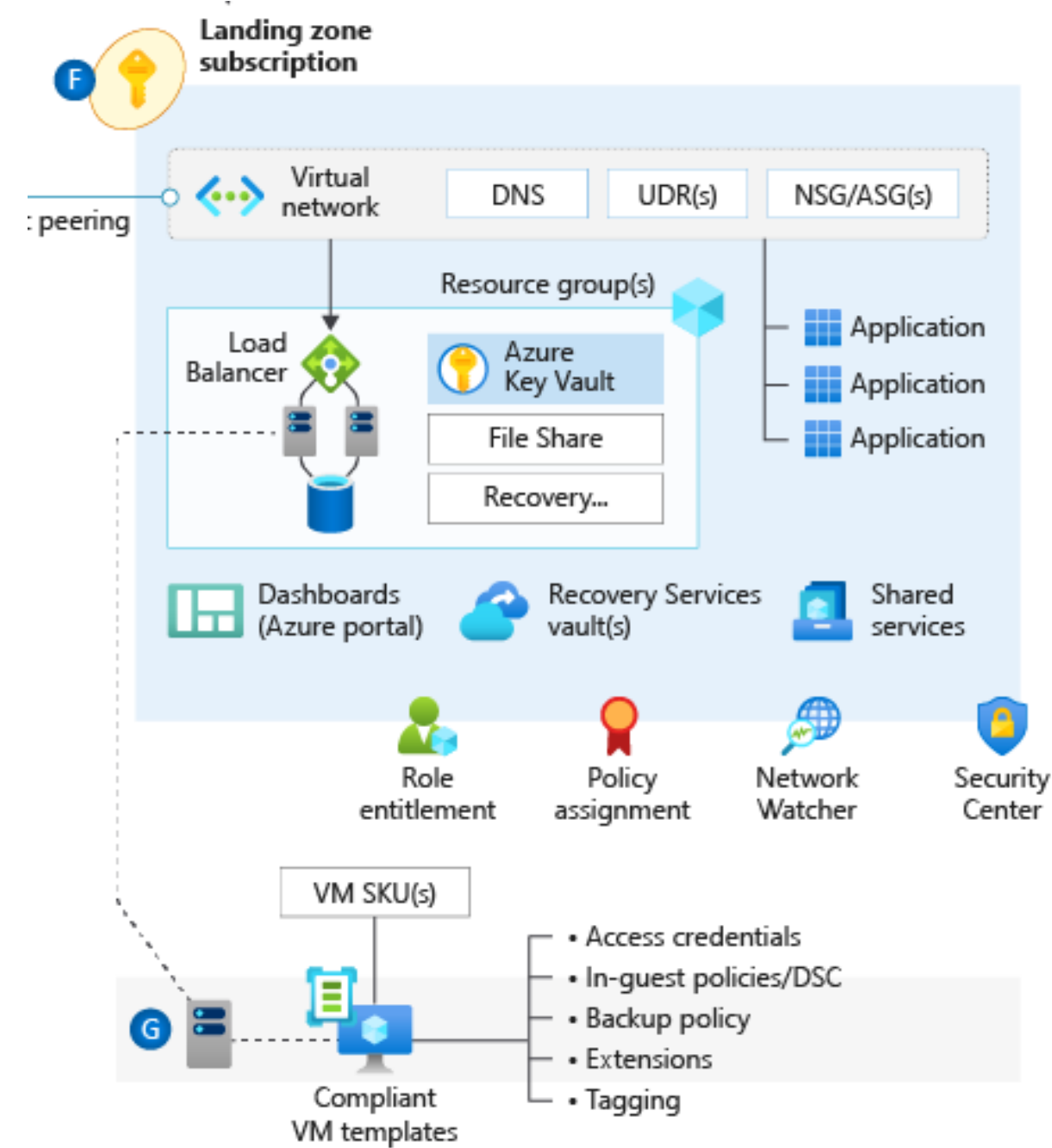
- ❑ **Log Analytics workspace** is an administrative boundary Security audit logging and achieving a horizontal security lens across the entire customer Azure estate
- ❑ **Azure data retention thresholds** and requirements for archiving





Business Continuity & Disaster Recovery

Planning for BCDR



Application and data availability requirements:

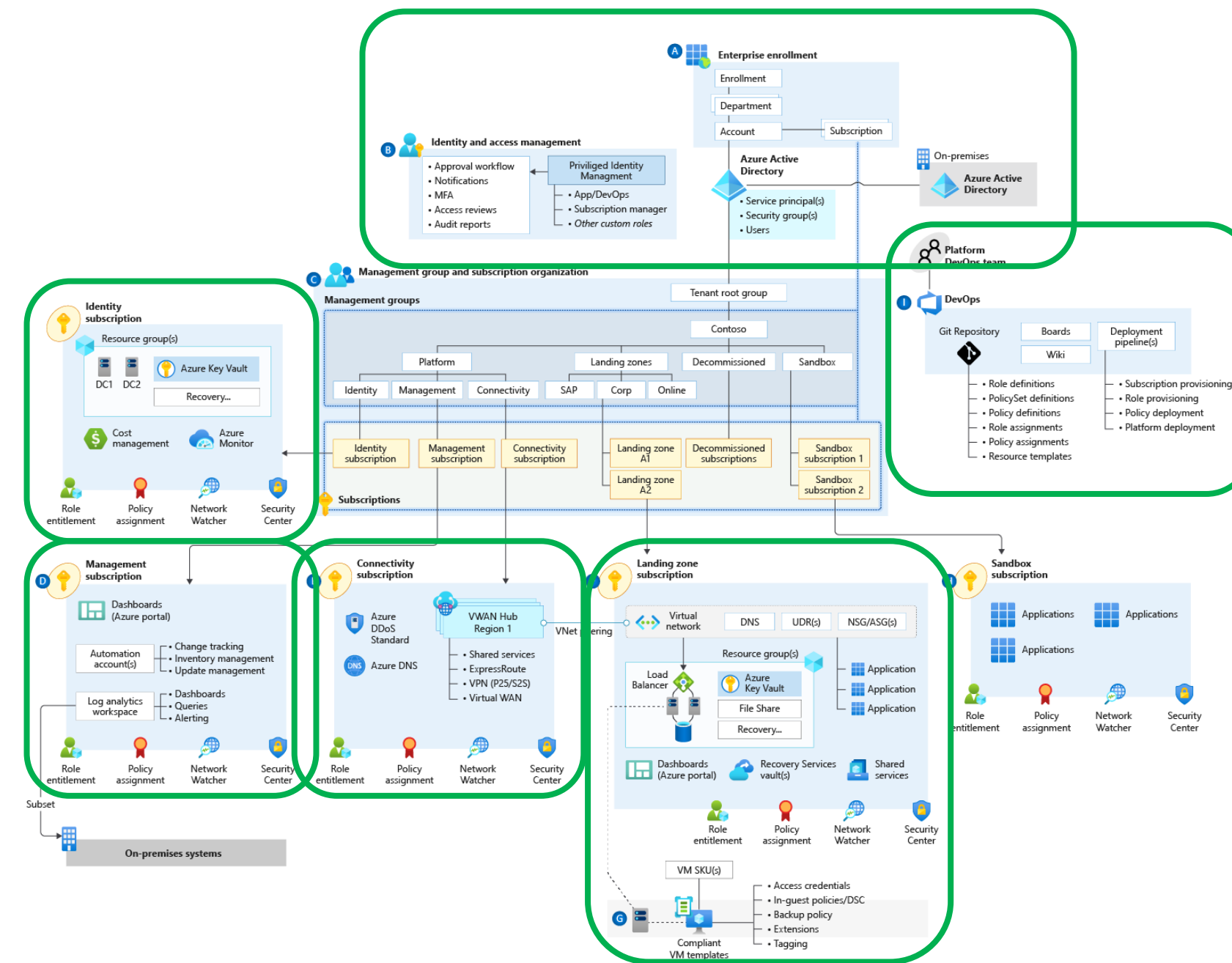
- BCDR for PaaS** services and the availability of native DR and HA features
- Support for **multi-region deployments** for failover purposes
- Application operations with **reduced functionality or degraded performance** in the presence of an outage





Security, Governance & Compliance

Define Encryption & Key Management



Subscription and scale limits as they apply to Key Vault

- Key Vault serves a security boundary since access permissions for keys, secrets and certificates are at the vault level
- Premium SKU can be leveraged where HSM protected keys are required

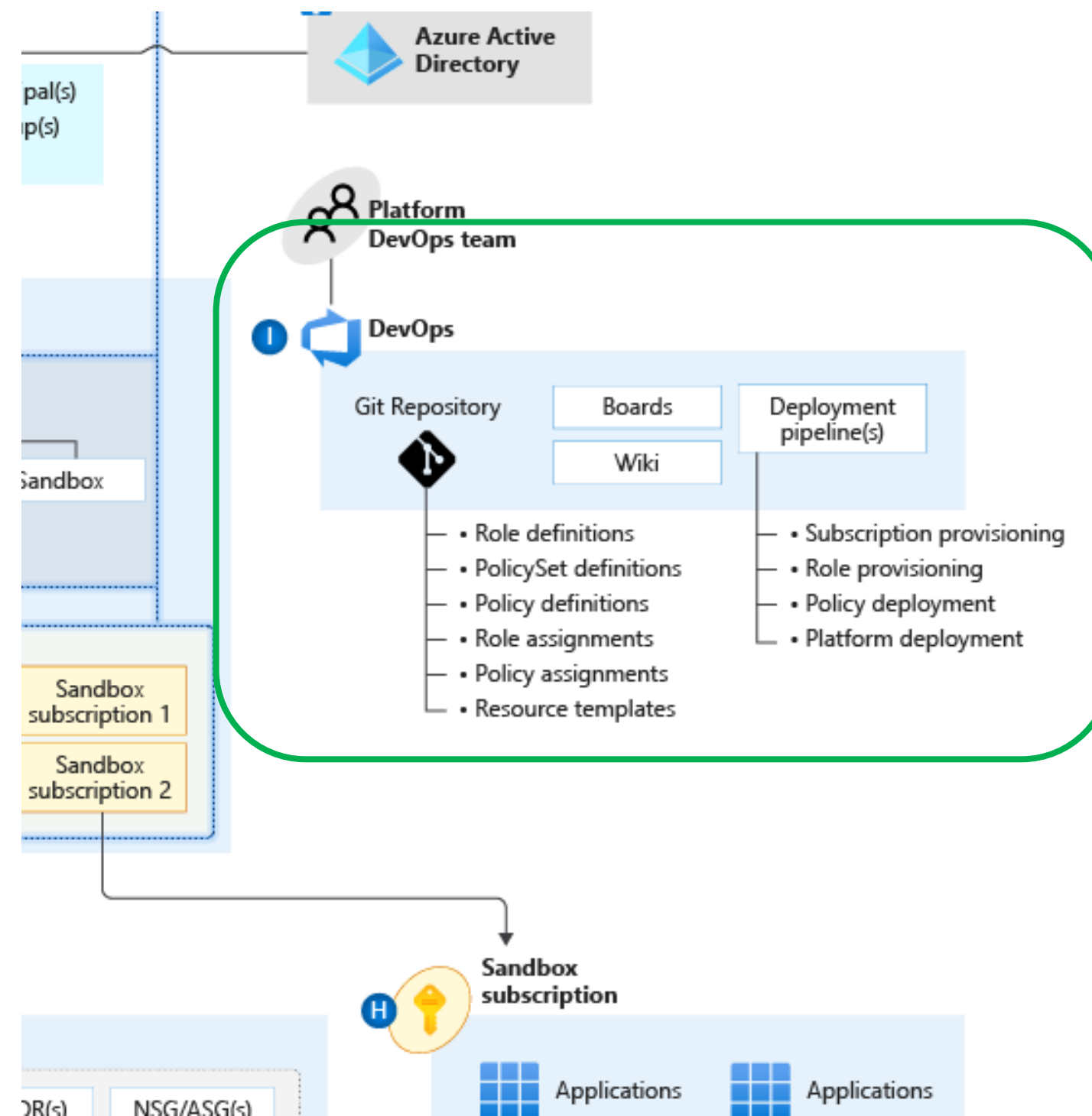
Key rotation and secret expiration

- Use a federated Key Vault model to avoid transaction scale limits
- Establish an automated process for key and certificate rotation





Platform Automation & DevOps



Planning for a DevOps Approach

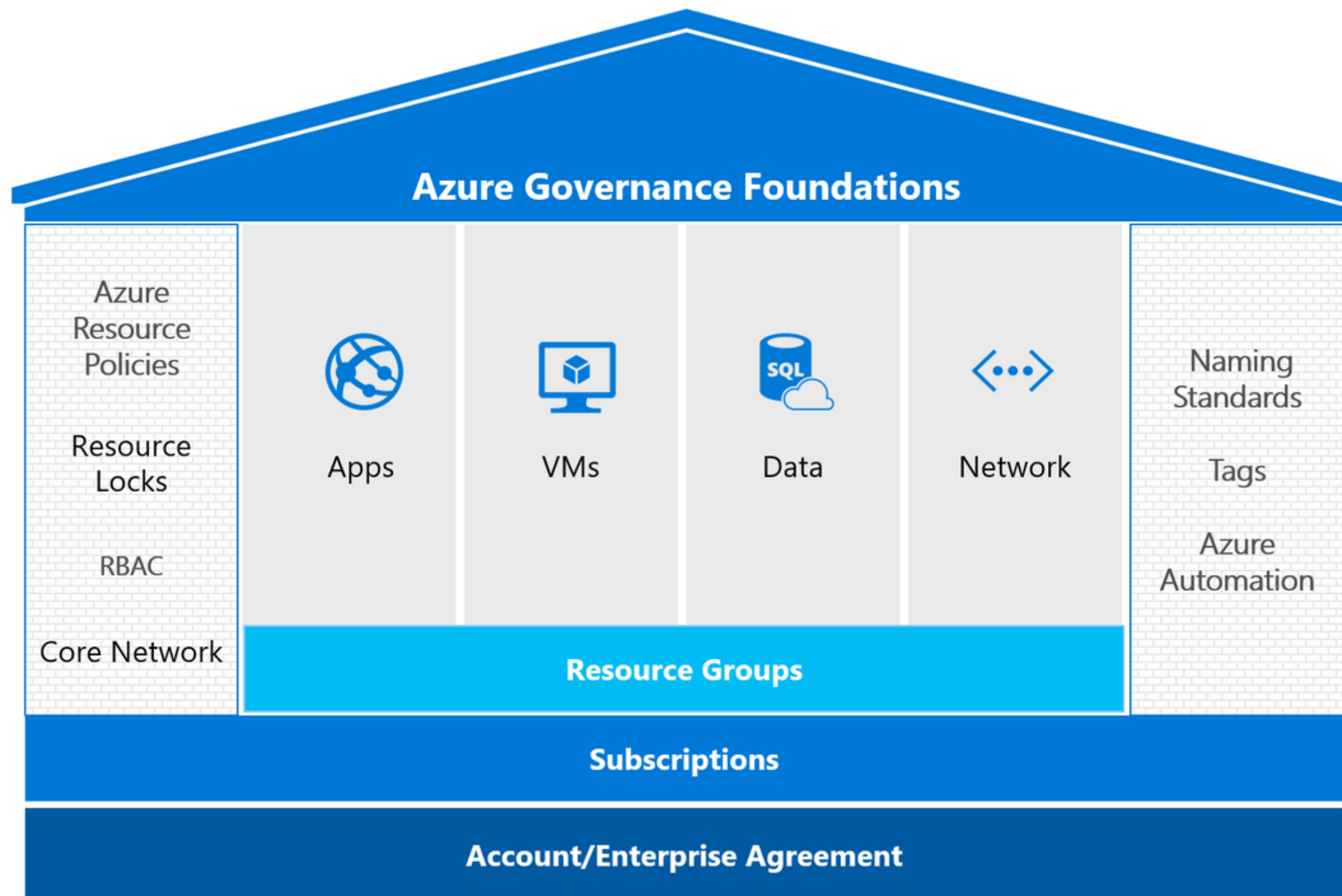
- ❑ Where central teams are concerned, CI/CD pipelines should be used to manage policy definitions, role-definitions, policy assignments, and template galleries

The blanket application of a DevOps model will not miraculously establish capable DevOps teams.

- ❑ Establish a cross functional **DevOps Platform Team** to build, manage and maintain your Enterprise Scale architecture.



Preboarding

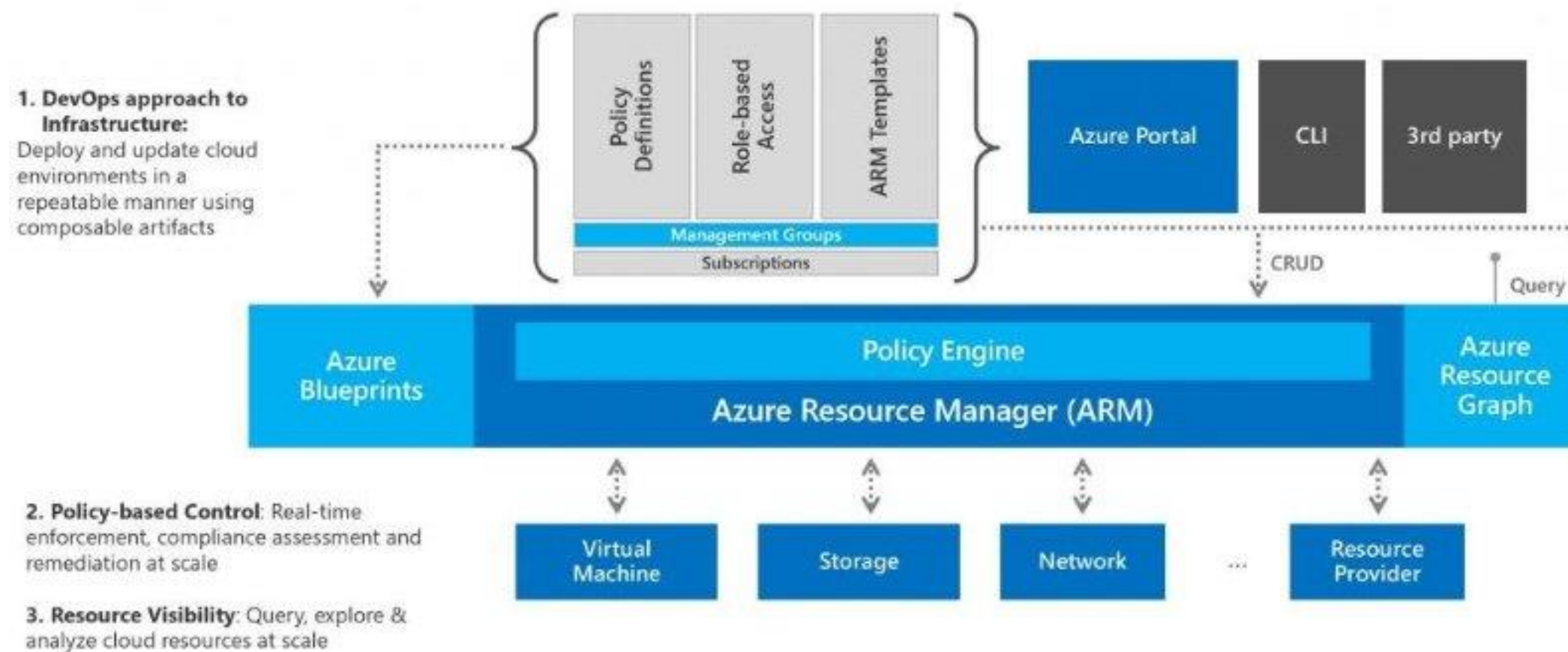


Scope

- Define the must have Basis for Azure
 - Naming Convention
 - RBAC
 - Network konzept
- Creation of documents draft together with client
- Assessment of the existing on premises infrastructure
- Define the “way we work”
- Kickoff

Onboarding

Azure Governance Architecture



Scope

- Go into detail
 - Azure Blueprints
 - Azure Management Groups & Subscriptions
 - Azure AD Design
- Creation of documents draft together with client
- Final Delivery of all Azure Governance Document to Microsoft for Review
- PoC Project Plan

THANK YOU

We are looking forward
to your challenge!

