



AZURE LANDING ZONE FOR FINANCIAL SERVICES ORGANIZATIONS

A flexible solution based on modular architecture artefacts, accelerators and resources, which enables Capgemini experts to create customized and adjustable Landing Zones, that meet the specific needs and design decisions of our customers.

Microsoft
Partner



2021 Partner of the Year Winner
Financial Services Award
Global SI Digital Transformation Award
Analytics Award





INDUSTRY: FINANCIAL SERVICES ORGANIZATIONS

Our solution provides capability to FS customers to quickly build highly secure, compliant and automated Landing Zone. We enable our clients to start on boarding applications to Azure within 12 to 16 weeks of the start of the engagement.

CHALLENGES

Our FS Customers experience the following challenges when building Landing Zones (LZ):

- Lack of cloud skills among IT teams
- Security and Regulatory compliance
- Time to build is high
- Lack of integration with third party tools and offerings
- Inability to track and manage cost efficiently
- Not fully automated

IDEAL SOLUTION

Our solution help address all these challenges by:

- Provide best practices guidance
- Use our set of accelerators (architecture designs, Terraform modules, etc.) to quickly build an enterprise scale LZ
- Ensure hardened and regulatory compliant environments
- Build an internal capability or manage the environments
- Infrastructure testing setup

DESIRED OUTCOMES

Our solution enables customers to take use of best practices and lessons learnt we have accumulated over years of helping customers build and operate Cloud platforms in Financial Services Sector.

Our layered approach that covers all crucial aspects in LZ build and deployment.

We decrease Landing Zone deployment time up to 50% and increase Developer productivity up to 40%.





AZURE LANDING ZONE FOR FINANCIAL SERVICES ORGANIZATIONS

Accelerated Azure adoption for Banking and Insurance Customers

1

Terraform based and modular

Our hardened Terraform modules allow FS Customers to use stateful, cloud-agnostic tool to build their Landing Zone and Cloud environments. Our modules enabled flexible and customized deployments.

2

Fully automated and interoperable

We follow DevOps practices by utilizing CI/CD pipelines for automated deployments, testing and security gates.

Our infrastructure testing library compliments the terraform modules and may be utilised separately for auditing purposes.

Additionally, we support out of the box integration with third party tools.

3

Secure and Compliant

We follow best architecture and security practices.

We support industry standards of compliance via policy as code approach: **PCI-DSS, HIPAA, SWIFT**, etc.

Security testing with Checkov and infrastructure/audit testing with Chef Inspec.





CAPGEMINI LANDING ZONE FRAMEWORK FOR AZURE CLOUD

Microsoft Azure is the preferred Cloud platform for Fortune 100 and UK FTSE customers and Financial Services Organizations. Capgemini enables Customers to quickly build out their Azure Foundations and start rapidly migrating their workloads without worrying about compliance, security and automation.

INFRASTRUCTURE AS CODE APPROACH

Our solution enables customers to start utilizing Azure services rapidly and in a repeatable fashion. We have a library of more than 100 terraform modules, that grows daily.

Advanced infrastructure and security testing capabilities.

POLICY AS CODE APPROACH

Utilizing Azure Policies, Initiatives and Blueprints allows us to implement preventive controls in Azure Cloud to ensure compliant environments.

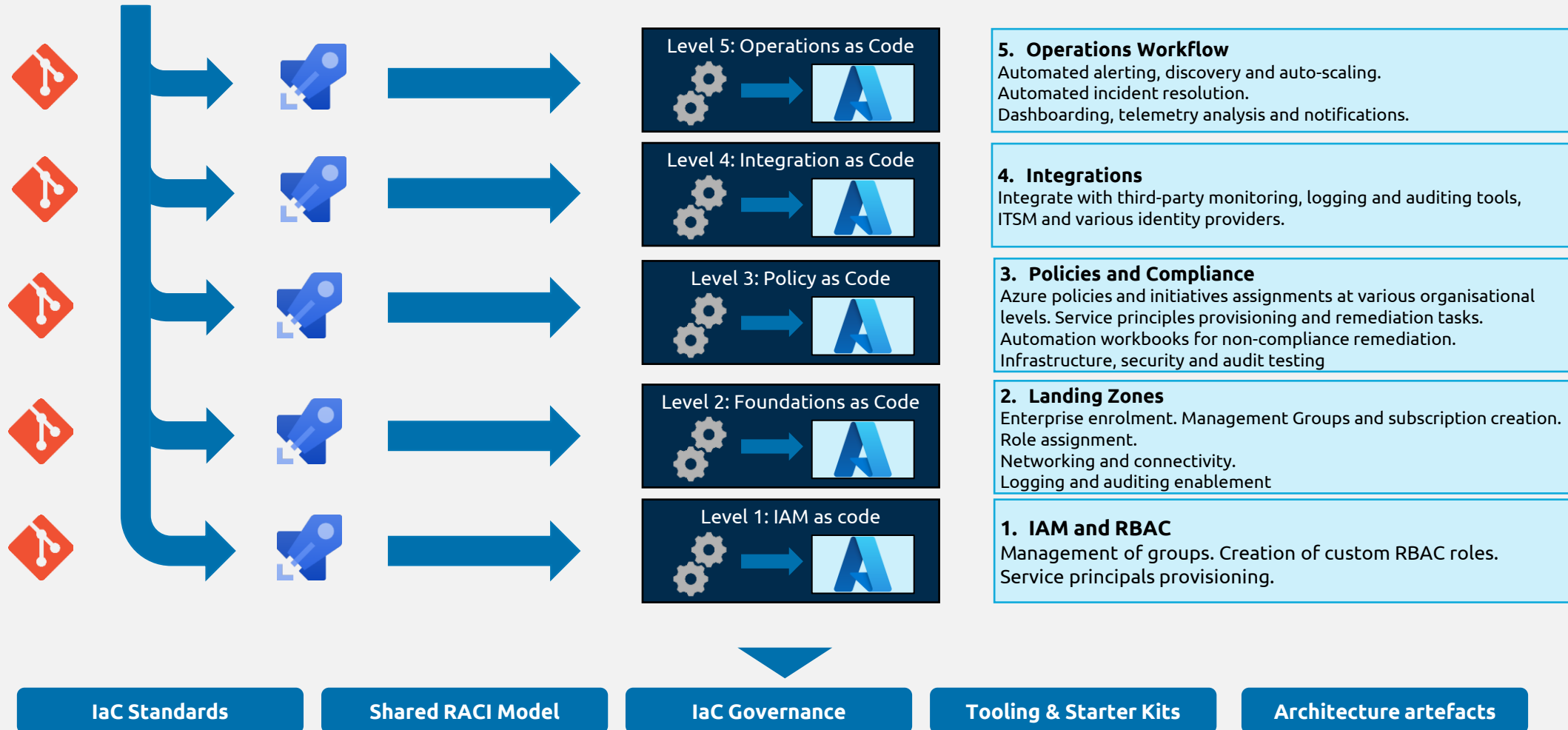
LAYERED FRAMEWORK APPROACH

Our layered framework approach allows us to address all components in building Landing Zones and Azure Cloud Platform and iterate on each layer independently.



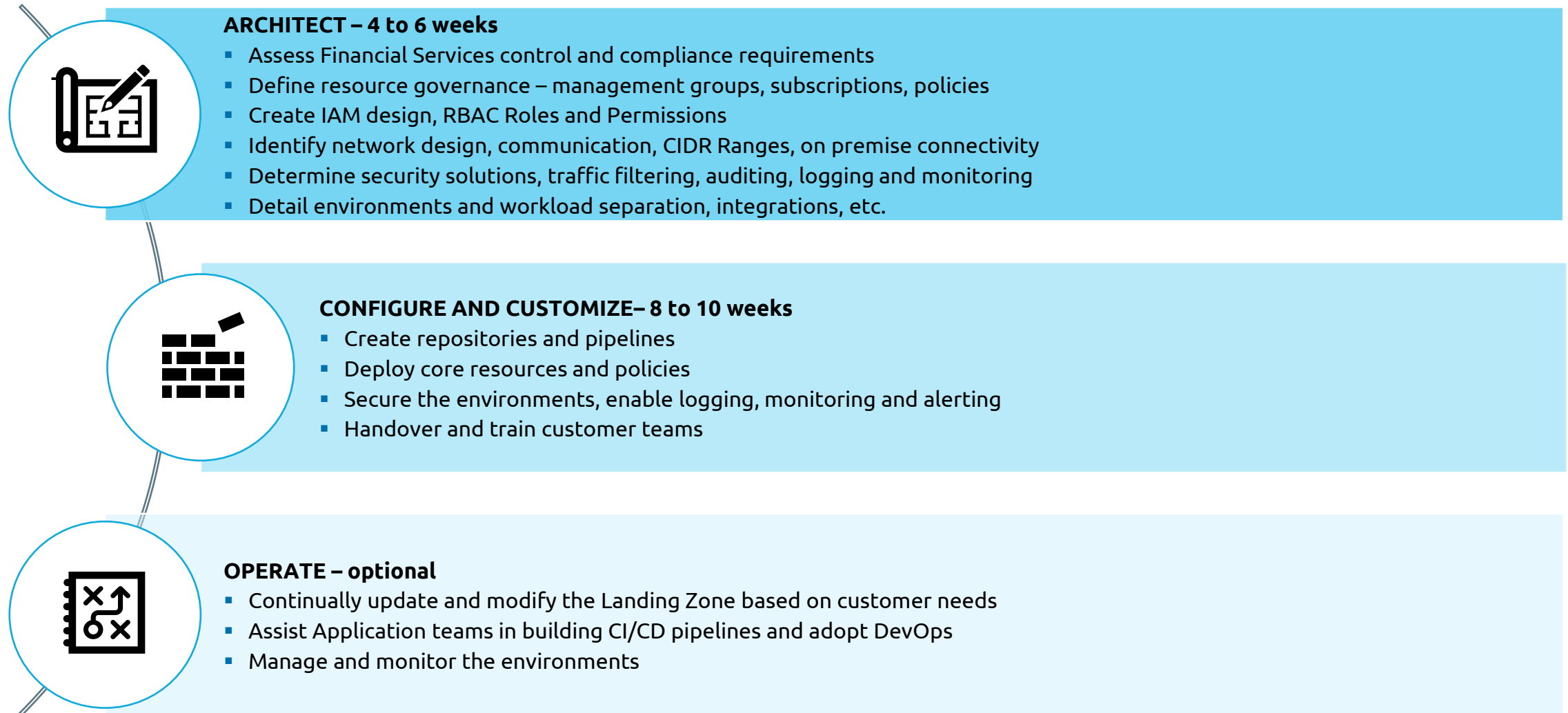
OUR LAYERED APPROACH

Our X-as-Code Automation Framework



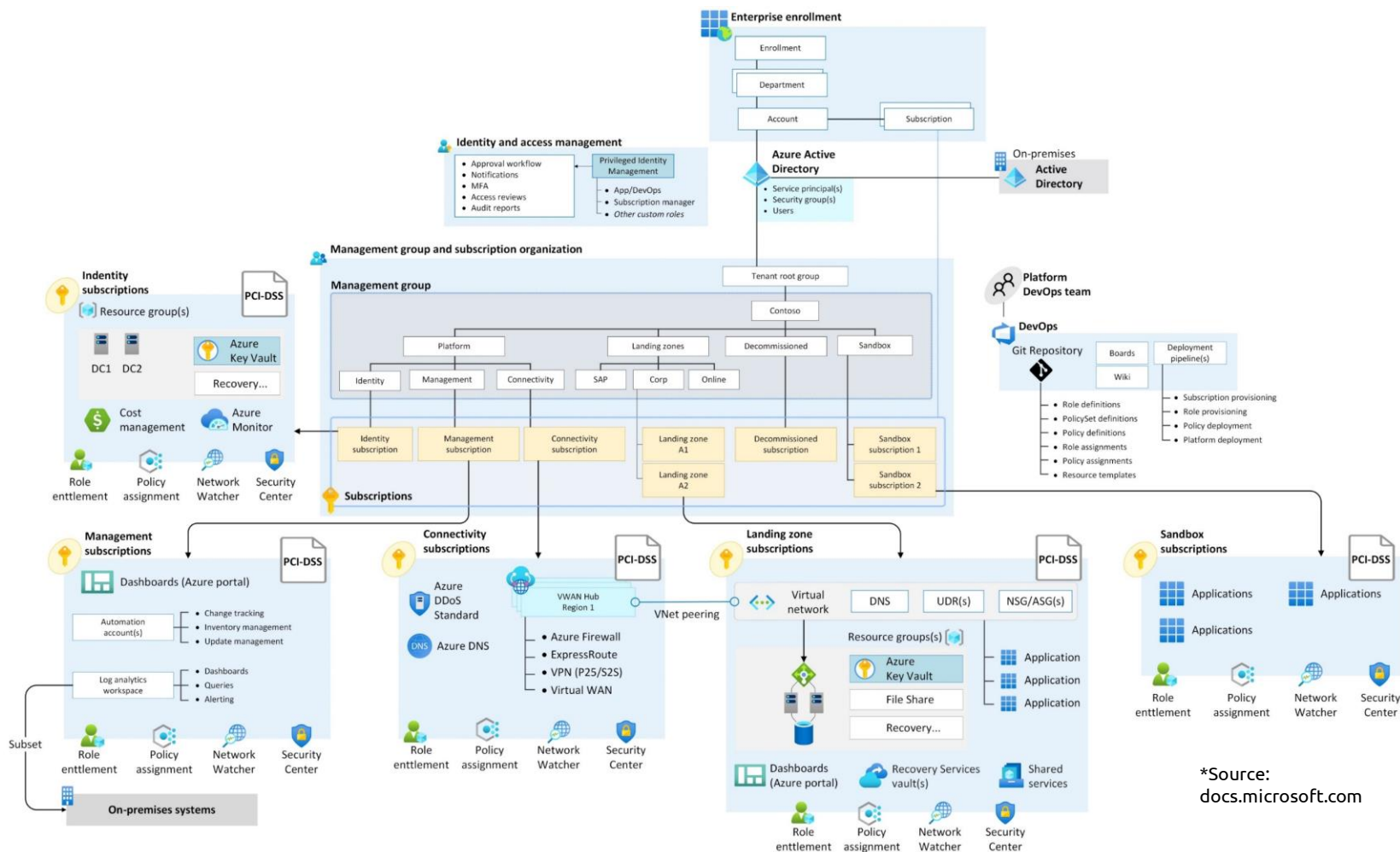


ENGAGEMENT PROCESS





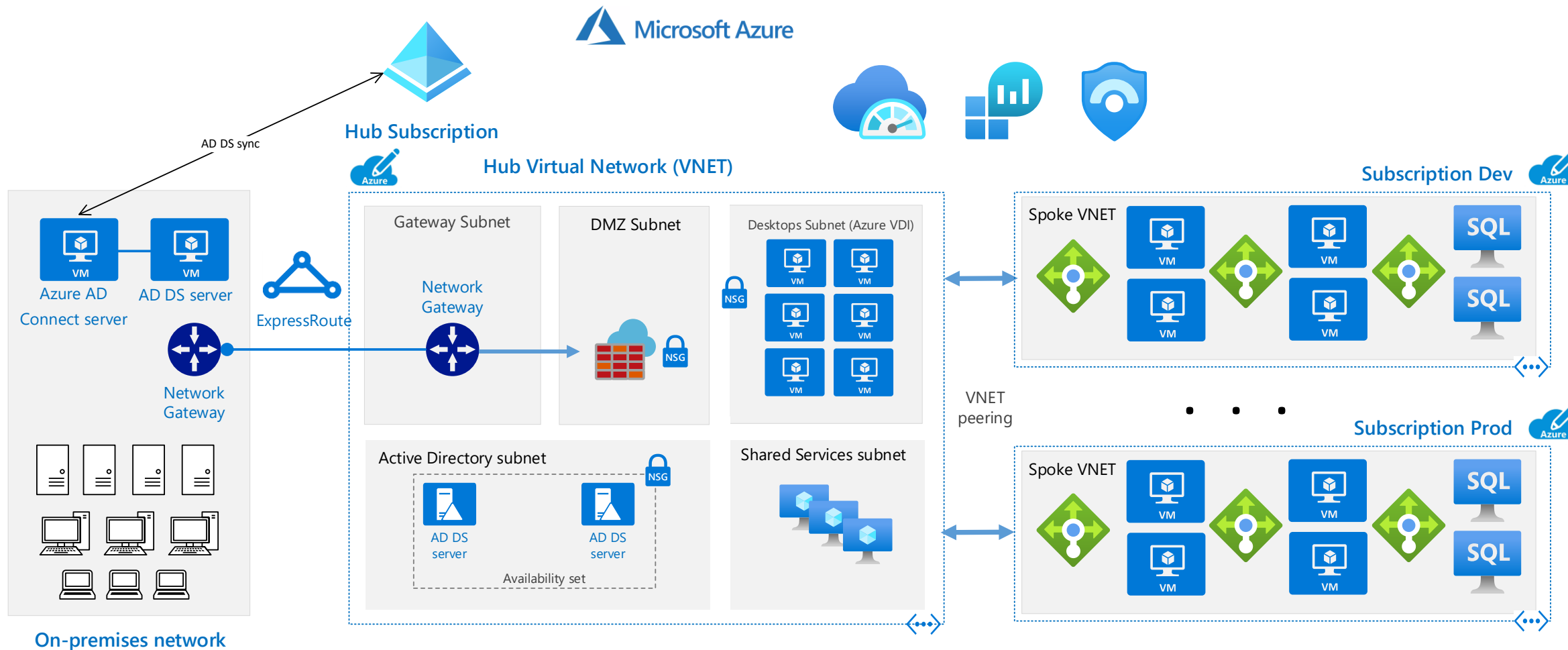
SAMPLE LANDING ZONES – ENTERPRISE SCALE LANDING



Enterprise Scale Landing Zone, suitable for full estate migration



SAMPLE LANDING ZONES – SMALL DEPLOYMENTS



Small Landing Zone, suitable for deploying a single application across multiple environments



ENTERPRISE SCALE LANDING ZONE IMPLEMENTATION SCREENSHOTS

Root Management Group

Management group

Search (Ctrl+/)

- Overview
- Subscriptions
- Resource Groups
- Resources
- Activity Log
- Access control (IAM)
- Governance
- Security
- Policy
- Deployments
- Cost Management
- Cost analysis
- Budgets

Click on a management group to view more details. Right-click on a subscription or group to

Assign policy Assign initiative Refresh

Scope: Corporate Definition type: All definition typ

Access Level: Owner Path: / Root Management Group

Showing 2 subscriptions in 8 groups

Name	ID
Root Management Group	corp
Corporate	corp
Connectivity	conn
Development	dev
Finance	finance
HR	hr
Production	prod

Now create custom non-compliance messages for policy assignments. Lea

Total Assignments: 7 Initiative Assignments: 1

Assignment name ↑↓

- Allowed locations
- Allowed locations for resource groups
- Configure Azure Defender to be enabled on SQL servers
- Configure SQL servers to have auditing enabled
- Deploy SQL DB transparent data encryption
- PCI v3.2.1:2018

Policy | Remediation

Search (Ctrl+/) Refresh

Scope: Corporate

Policies to remediate Remediation tasks

This is a list of assigned policies with deployIfNotExists or modify effect.

Filter by name or ID...

Policy Definition

- Configure Azure Defender to be enabled on SQL servers
- Configure SQL servers to have auditing enabled
- Deploy SQL DB transparent data encryption
- Add system-assigned managed identity to enable Guest Configuration assignments on virtual machines with no identities
- PCI v3.2.1:2018

Jobs in run #20211129_20

Storage account

Job	Status	Progress
InfraTest	Succeeded	2m 18s
Initialize job	Succeeded	4s
Checkout Inspec-prof...	Succeeded	1s
Checkout terraform...	Succeeded	1s
Terraforminstaller	Succeeded	1s
Terraform init	Succeeded	3s
Terraform validate	Succeeded	3s
Terraform plan	Succeeded	17s
Terraform apply	Succeeded	55s
Generate Inspec imp...	Succeeded	10s
Run Inspec	Succeeded	13s
Check Inspec Result	Succeeded	<1s
Post-job: Checkout L...	Succeeded	<1s
Finalize Job	Succeeded	<1s
Report build status	Succeeded	<1s

Run Inspec

```

Starting: Run Inspec
Task: Run a Bash script on macOS, Linux, or Windows
Description: Run a Bash script on macOS, Linux, or Windows
Version: 3.189.0
Author: Microsoft Corporation
Help: https://docs.microsoft.com/azure/devops/pipelines/tasks/utility/bash
1 Generating script...
2 Starting script...
3 Starting Command Output
4 /usr/bin/bash --profile --noc /home/vsts/work/_temp/132ed6df-3553-4dec-835e-c36ec63291a.sh
5 % Total % Received % Xferd Average Speed Time Time Current
6 Dload Upload Total Spent Left Speed
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Data Lake Store accounts

+ Add connection Refresh

Hub	Hub region	Virtual network	Virtual network connecti...	Virtual net
vhub-eastus	East US	Virtual networks (3)		
		dev-vnet-eastus	dev-vnet	Succeeded
		prod-vnet-eastus	prod-vnet	Succeeded
		shared-vnet-eastus	shared-vnet	Succeeded



CUSTOMER SUCCESS: FINANCIAL SERVICES CUSTOMER

- Privately owned Financial Services Customer
- Focused on Insurance and Reinsurance
- Tech-forward focus to achieve diverse perspective
- Combining insurance products with Data science and robust analytics
- 90% of apps are third party products and SaaS Services, 10% custom applications

Safe and robust landing zone

Terraform landing zone, designed and delivered within 8 weeks. Focus on compliance and automation

Secure and Compliant

Proposed regulatory compliant Security standards, data privacy and classification, PII's treatments, etc. Applied multiple Azure Policy and remediations.

Developer experience and enablement

Adopted Service Catalogue approach to deliver seamless and straightforward on boarding





CAPGEMINI LANDING ZONE FOR FS ORGANIZATIONS

Microsoft Partnership:

<https://www.capgemini.com/partner/microsoft/>

Contact us: microsoft.fs@capgemini.com

Learn more:

Link to your Microsoft Commercial Marketplace offer

Microsoft
Partner



Gold Cloud Platform
Gold Security
Gold DevOps
Gold Application Development
Gold Data Platform





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Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 270,000 team members in nearly 50 countries. With its strong 50 year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fuelled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.

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