

The image features decorative geometric patterns in the corners, composed of various colored triangles and squares in shades of blue, teal, and black, some with halftone or striped textures.

ONE IDENTITY

by **Quest**[®]

How do you manage access to your Azure infrastructure?

Cloud Infrastructure Entitlement Management as part of a unified identity security platform

Dr. Stephan Hausmann

Visit us at
#7-510

Dash to the cloud
Dash to the hybrid cloud
Dash to the hybrid multi cloud
Dash to the *secure* hybrid multi cloud



\$494B market



75%
of security
failures

size of the Cloud
Infrastructure and Platform
service market in 2025

[Source: Gartner \(Apr 2021\)](#)

will result from **inadequate
management of identities,
access, and privileges** in 2023

[Source: Gartner \(June 2020\)](#)

Why Cloud Infrastructure Entitlement Management (CIEM)?

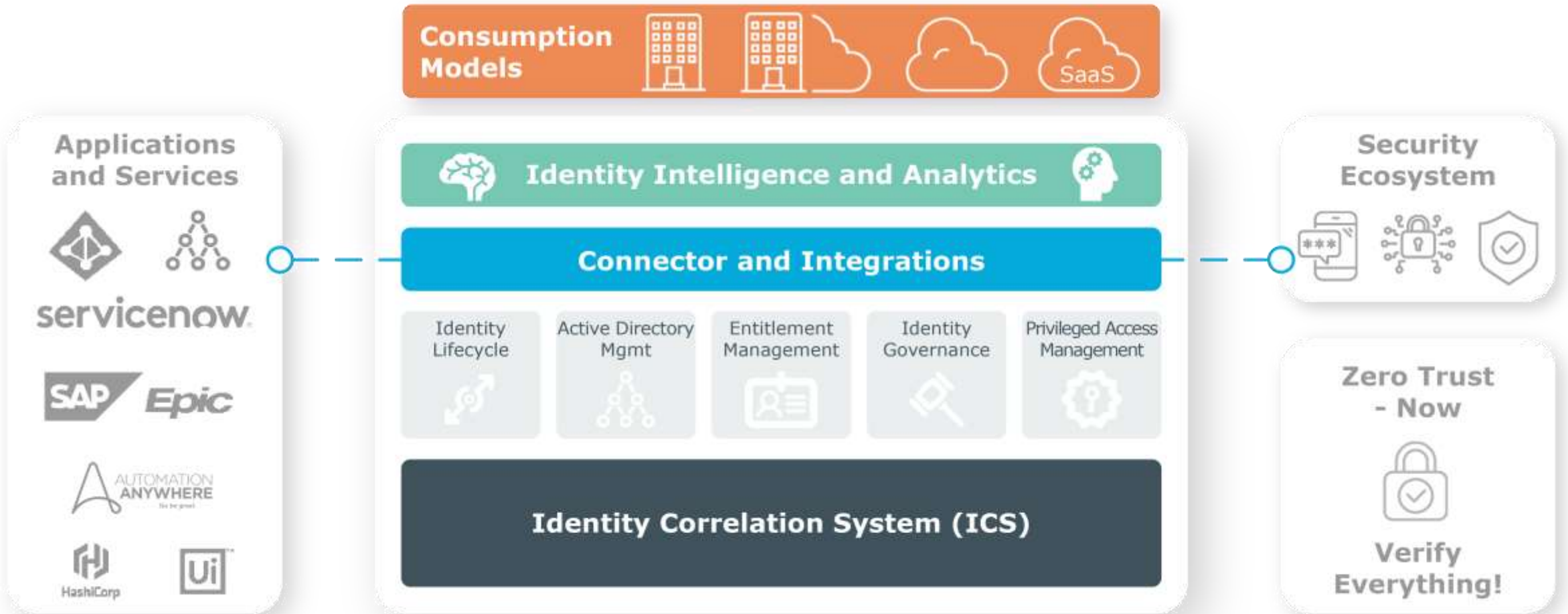
- Using the cloud is beneficial for organizations
- Everything accessible, everywhere, anytime
- Inconsistent security policies in the multi-cloud
- Excessive and long-standing privileged permissions
- cloud (usage) is dynamic
- Beyond traditional On-Premises IGA and PAM
- ...

Cloud Infrastructure Entitlement Management (CIEM)

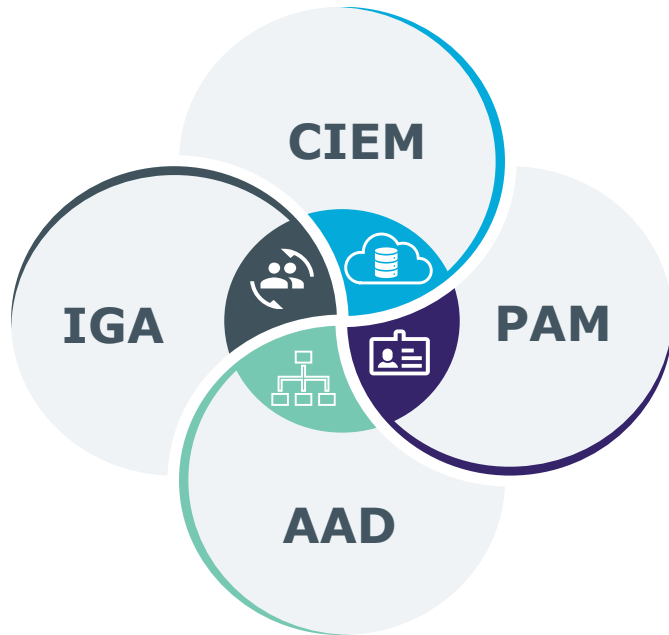
- Catalog - which entitlements exist in the cloud
 - Resources in the cloud (VMs, Containers, Serverless infrastructure, ...)
 - Services in the cloud (Database, Storage, Network, Applications, ...)
 - Administrative accounts in the cloud
- Managing identities and access in cloud and multi-cloud environments
 - Humans and machines
- Ensure permissions are granted appropriately, with separation of roles
- Intersection of IGA and PAM
- ...

Unified identity security platform

People | Applications | Data



Our approach to CIEM....



- Use existing IGA capabilities
 - Correlation
 - Analytics and Reporting
 - Unused accounts, Peer Group Outliers, Orphan entitlements and accounts
 - Request & Attestation
- Enhance IGA
 - Visibility on infrastructure permissions
 - Integrate Cloud events and usage
 - Multi-Cloud support
 - Misc PAG workflows
- Use existing PAM capabilities
 - SSH/RDP sessions
 - Push PAM secrets to DevOps

Results

Centralize Visibility

Detect and Respond

Right Size permissions

Reduce attack surface

Breach resilience

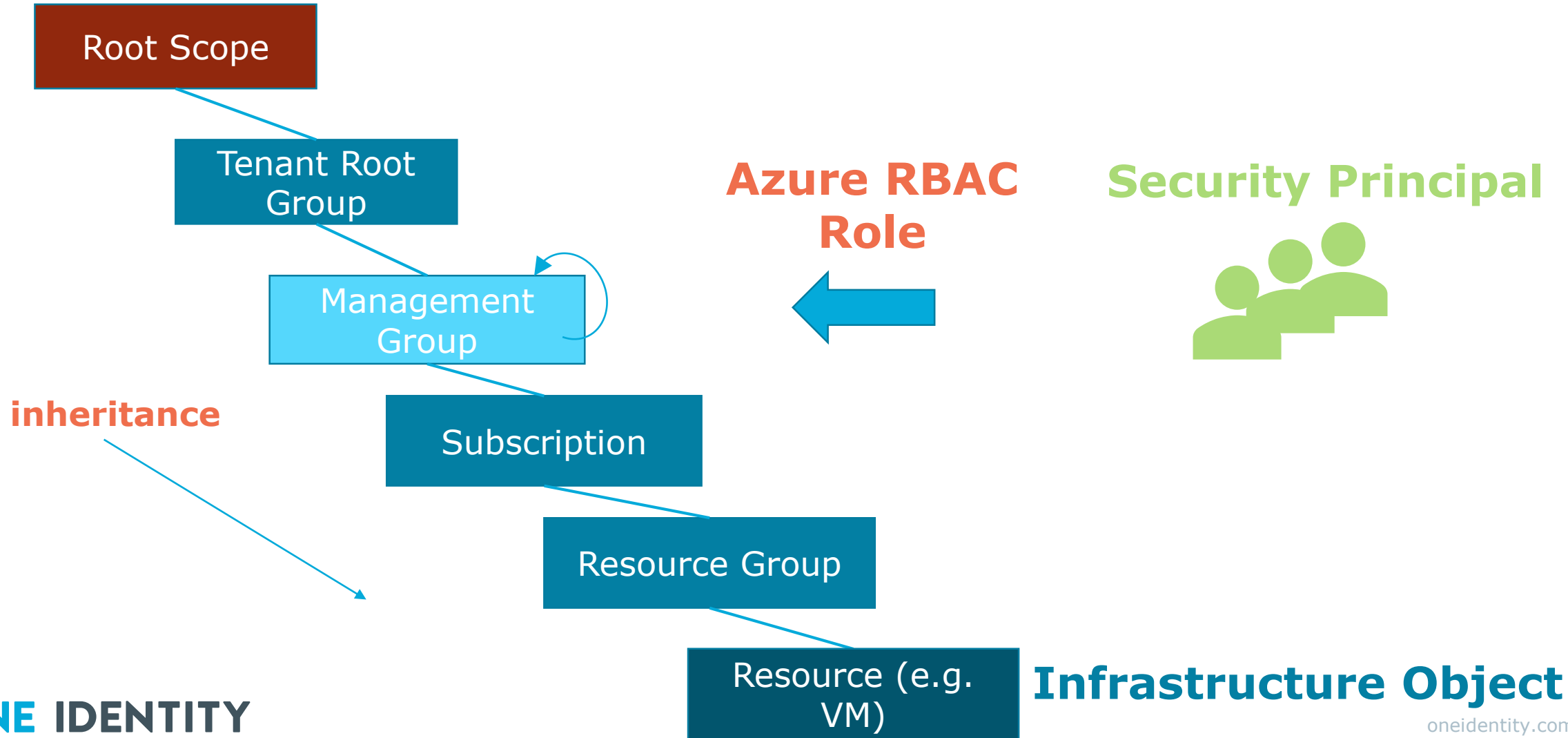
Prove Compliance

Business Confidence

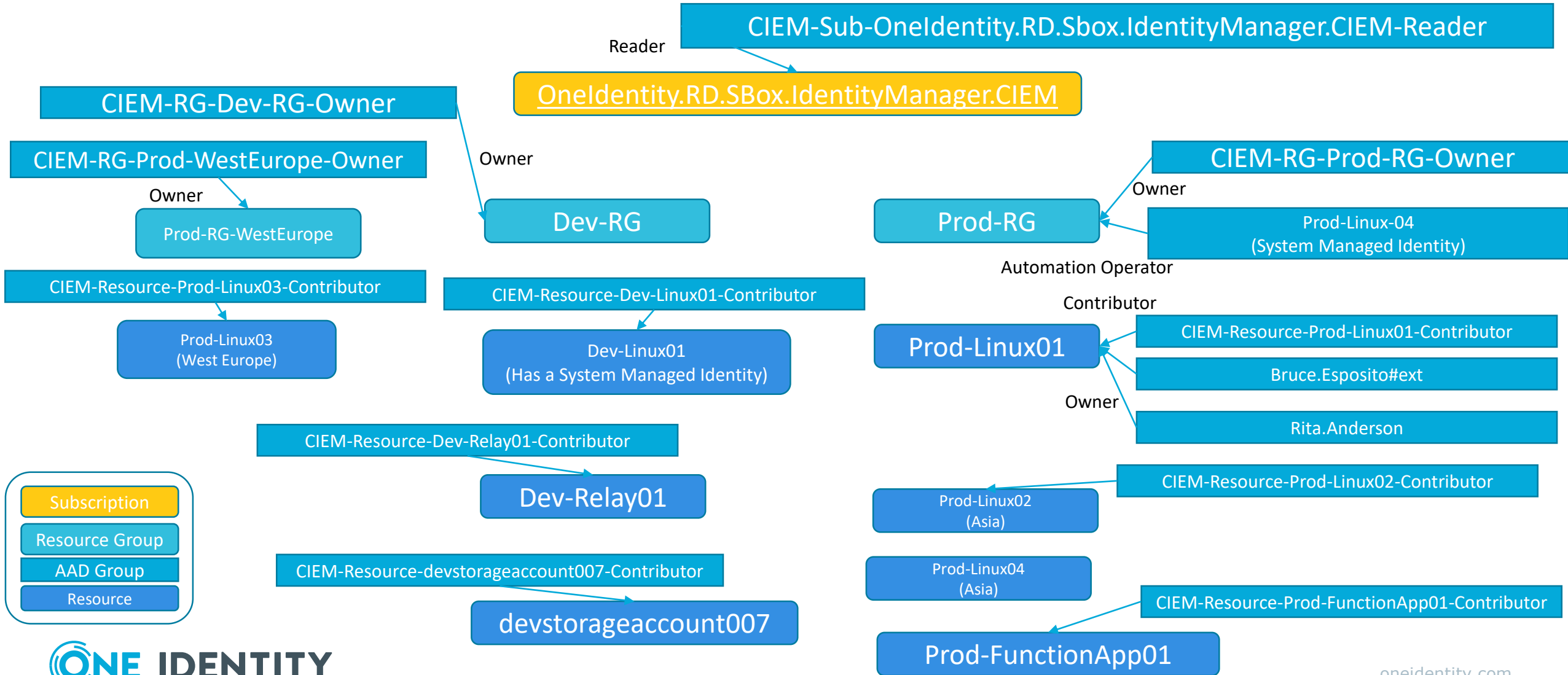
IGA Use Cases ... for Cloud Infrastructure

- Discover Cloud Infrastructure access
- Detect and Respond to anomalies in Cloud Infrastructure access
- Request for Access to Cloud Infrastructure
- Attestation of Cloud Infrastructure access
- Privilege Account Governance for Cloud Infrastructure access

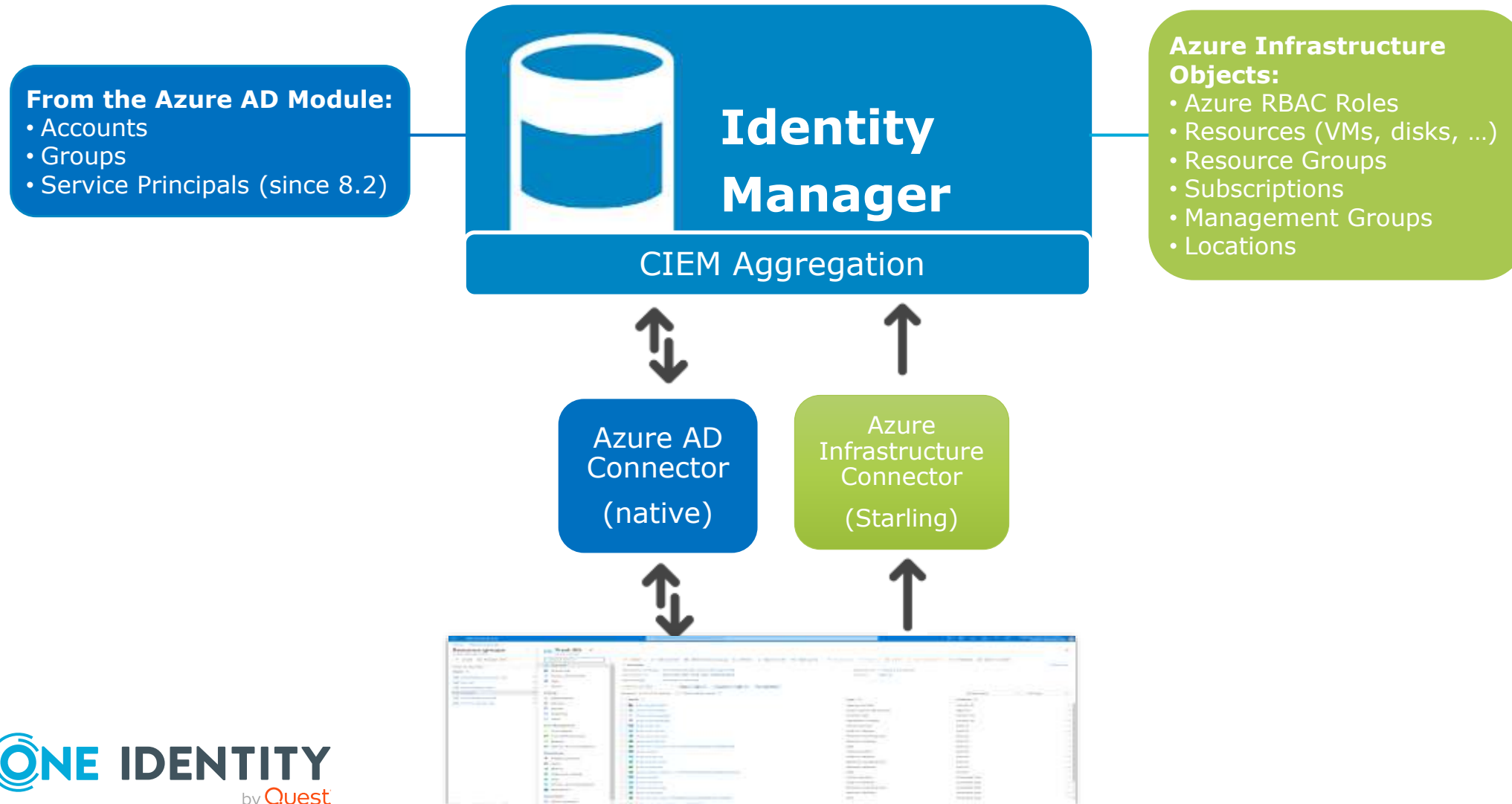
Azure Infrastructure Permission Model



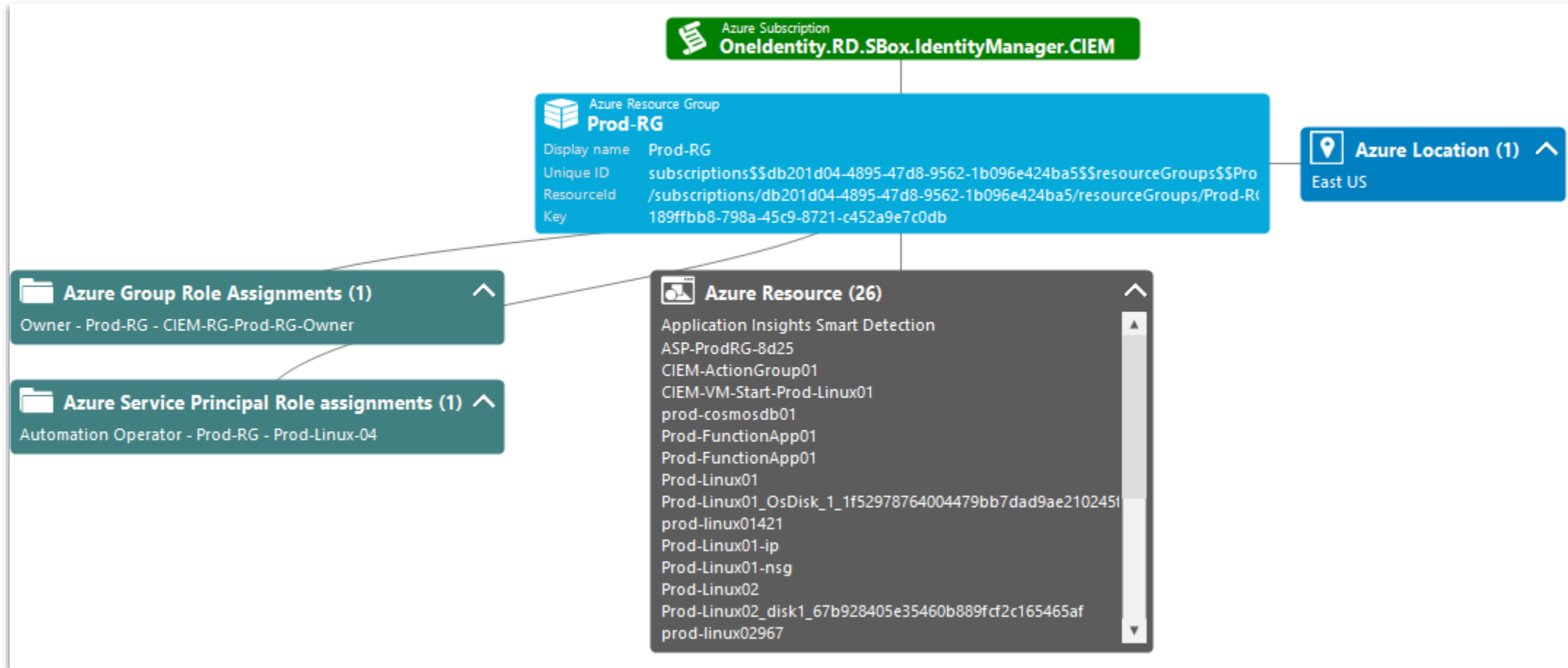
The reality is more complex ...



Identity Manager CIEM Integration



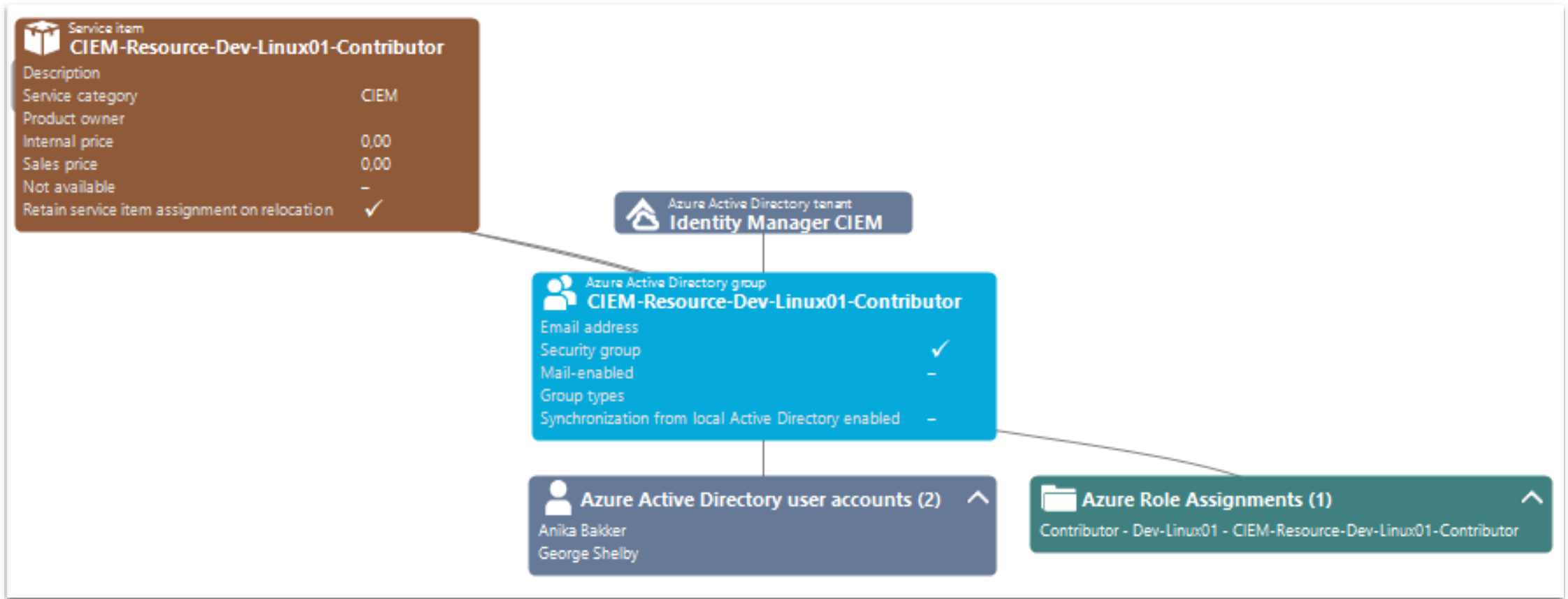
Visibility - Resource Group



Visibility - Resource Group Report

ONE IDENTITY™ One Identity Manager				
Azure Cloud System Role Assignment Overview By Resource Group				
Resource Group	Prod-RG			
Subscription	OneIdentity.RD.SBox.IdentityManager.CIEM			
Management Group	Tenant Root Group			
AAD Organization	Identity Manager CIEM			
Role	Group	User	Service Principal	Scope
Automation Operator			Prod-Linux-04	Resource Group
Contributor			OneMInfra	Management Group (Inherited)
Contributor			OneMInfraLimited	Subscription (Inherited)
Owner	CIEM-RG-Prod-RG-Owner			Resource Group
Owner	Godlike			Subscription (Inherited)
Reader	CIEM-Sub-OneIdentity.RD.SBox.IdentityManager.CIEM-Reader			Subscription (Inherited)
Root Scope Role Assignments inherited by all Azure Resource Groups				
AAD Organization	Identity Manager CIEM			
Role	Group	User	Service Principal	
User Access Administrator		Robert Byrne (rbyrne)		

Visibility - Azure AD Group granting access to a Resource



CIEM IGA Scenarios

Scenario 1 – Discovery and Visibility

- Visibility onto Infrastructure structure and objects
- Visibility onto Access – by user, by resource
- Dashboards & Reporting

Scenario 2 – Policies and Anomaly Detection

- Orphan/Dormant/Inactive accounts
- Accounts with direct access to infrastructure
- Infrastructure without owners
- Identities with inappropriate business access – geographical or role

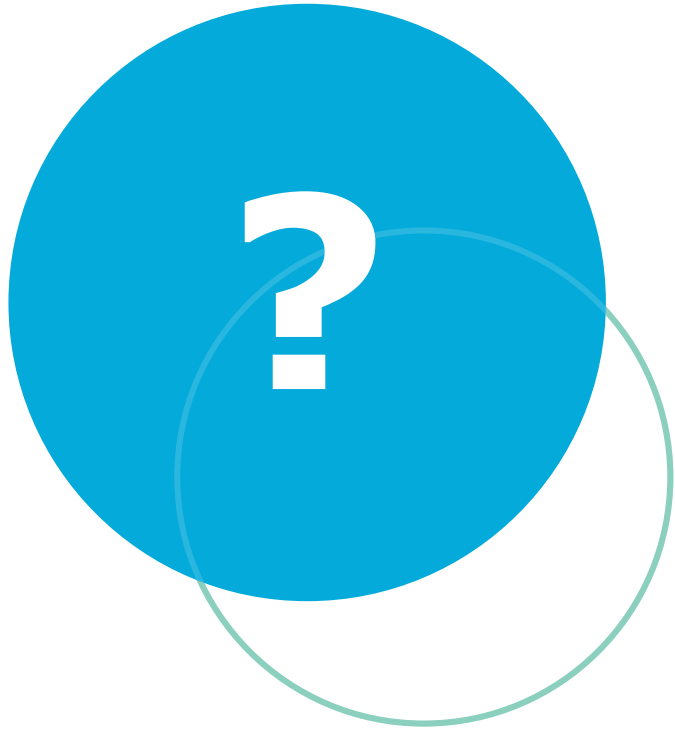
Scenario 3 – Governance

- Access Request
- Attestation/Recertification

Benefits of CIEM with Identity Manager

Extend governance

from On-Premises Applications and Cloud Applications
to Cloud infrastructure.



Questions?

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