CLOUD IDENTITY SUMMIT ‘22

Identity Management Track

Azure Attack Paths

Fabian Bader (glueckkanja-gab AG)

Community Event by

Azure Meetup
BONN

About me

- Cloud Security Architect @ glueckkanja-gab AG
- cloudbrothers.info
- @fabian_bader on Twitter
- Organizer of @HHPSUG
- fabian@bader.cloud

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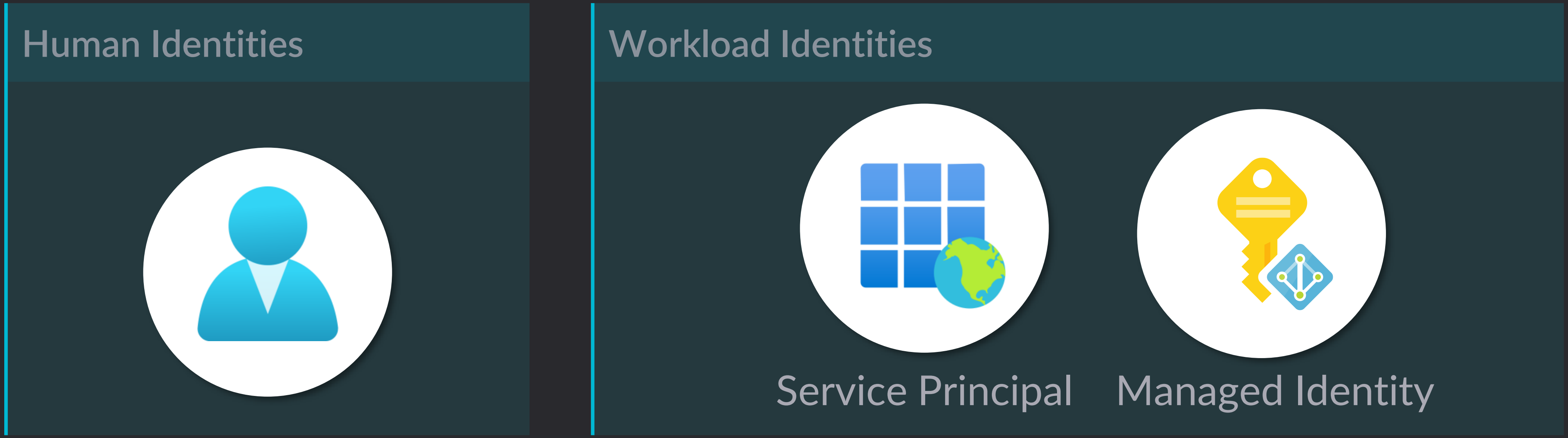
HAMBURG POWERSHELL

Identities in Azure

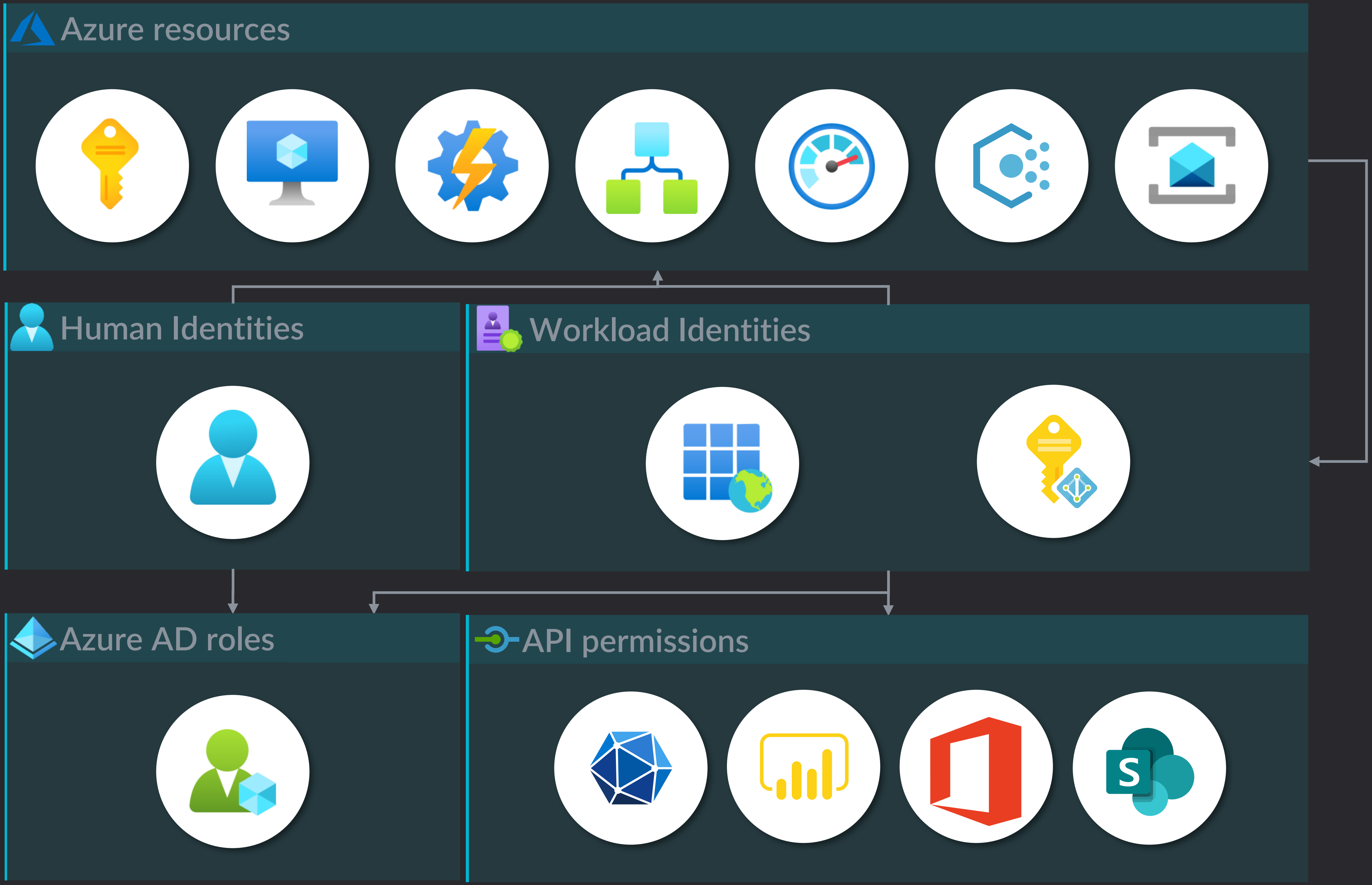


Human Identities

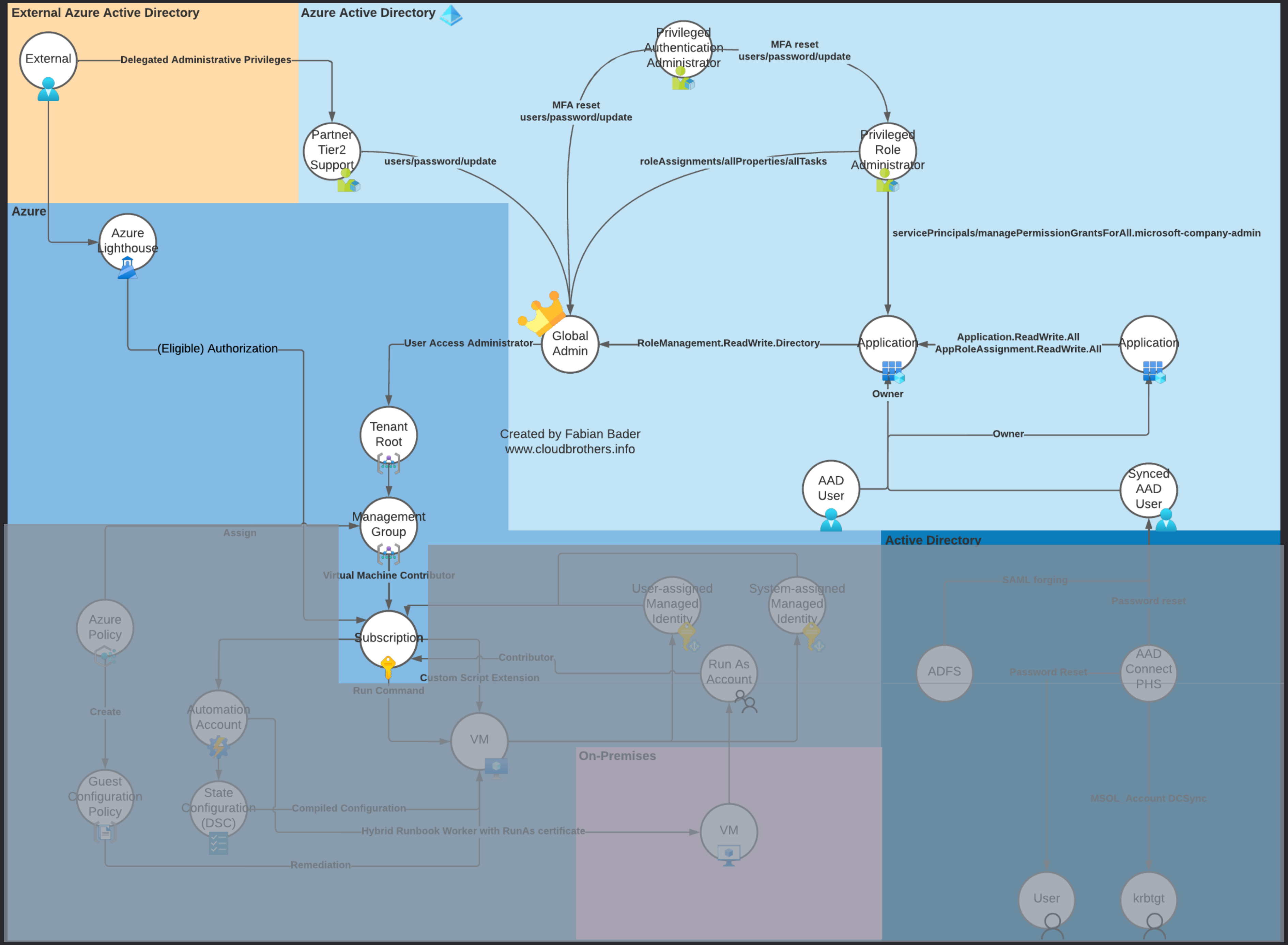
Workload Identities

Service Principal

Managed Identity


Azure resources
Human Identities
Workload Identities
Azure AD roles
API permissions

Too much permissions, a common mistake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AppRoleAssignment.ReadWrite.All
Application
Owner
Owner
Tenant Root
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AAD User
Synced AAD User
Management Group
Assign
Virtual Machine Contributor
Active Directory
SAML forging
Password reset
Azure Policy
User-assigned Managed Identity
System-assigned Managed Identity
Subscription
Contributor
Custom Script Extension
Run Command
Run As Account
ADFS
Password Reset
AAD Connect PHS
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Guest Configuration Policy
State Configuration (DSC)
Compiled Configuration
Hybrid Runbook Worker with RunAs certificate
VM
MSOL_Account DCSync
Remediation
User
krbtgt

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Attribution

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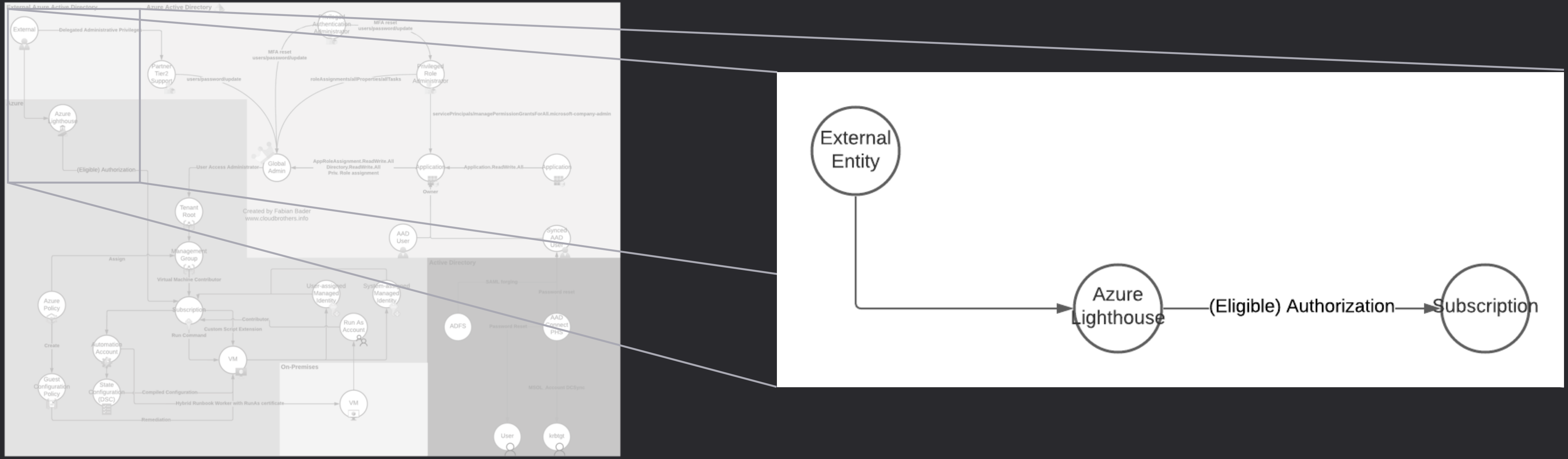
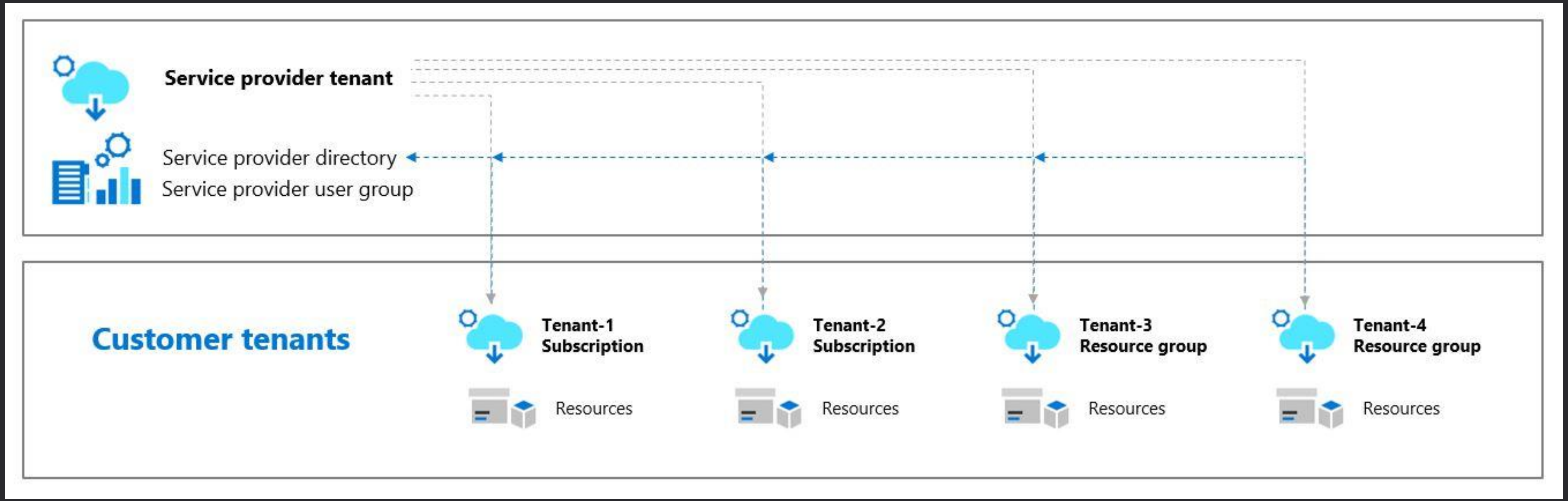
- Sami Lamppu - @samilamppu
- Dirk-jan Mollema - @_dirkjan
- Thomas Naunheim - @Thomas_Live
- Andy Robbins - @_wald0
- Dr. Nestori Syynimaa - @DrAzureAD
- And many more…

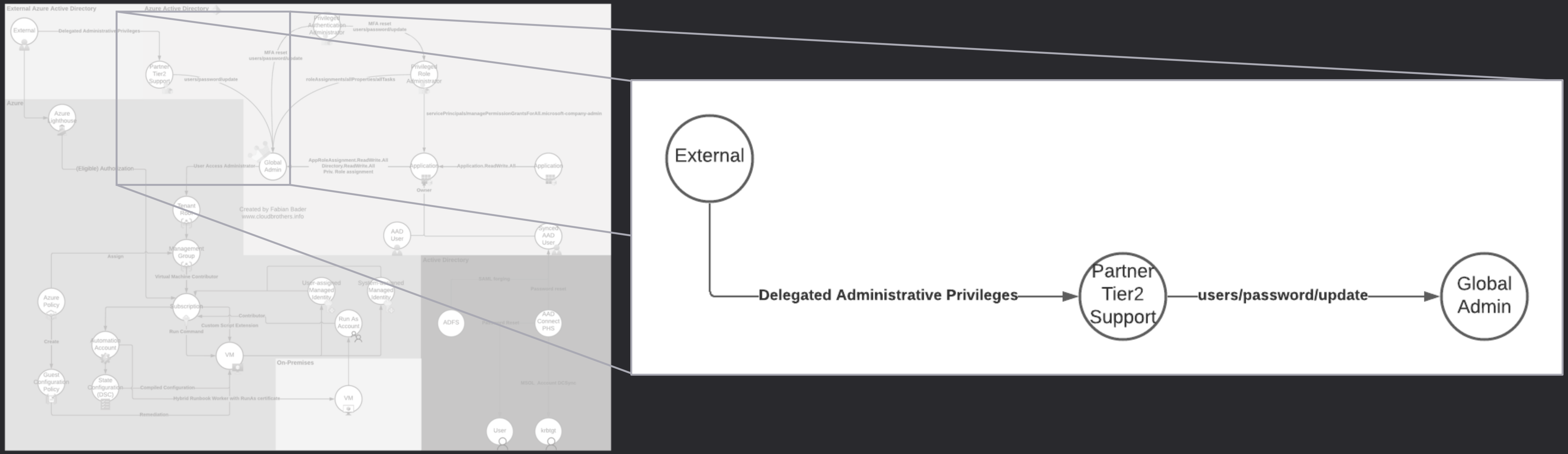
Azure Lighthouse



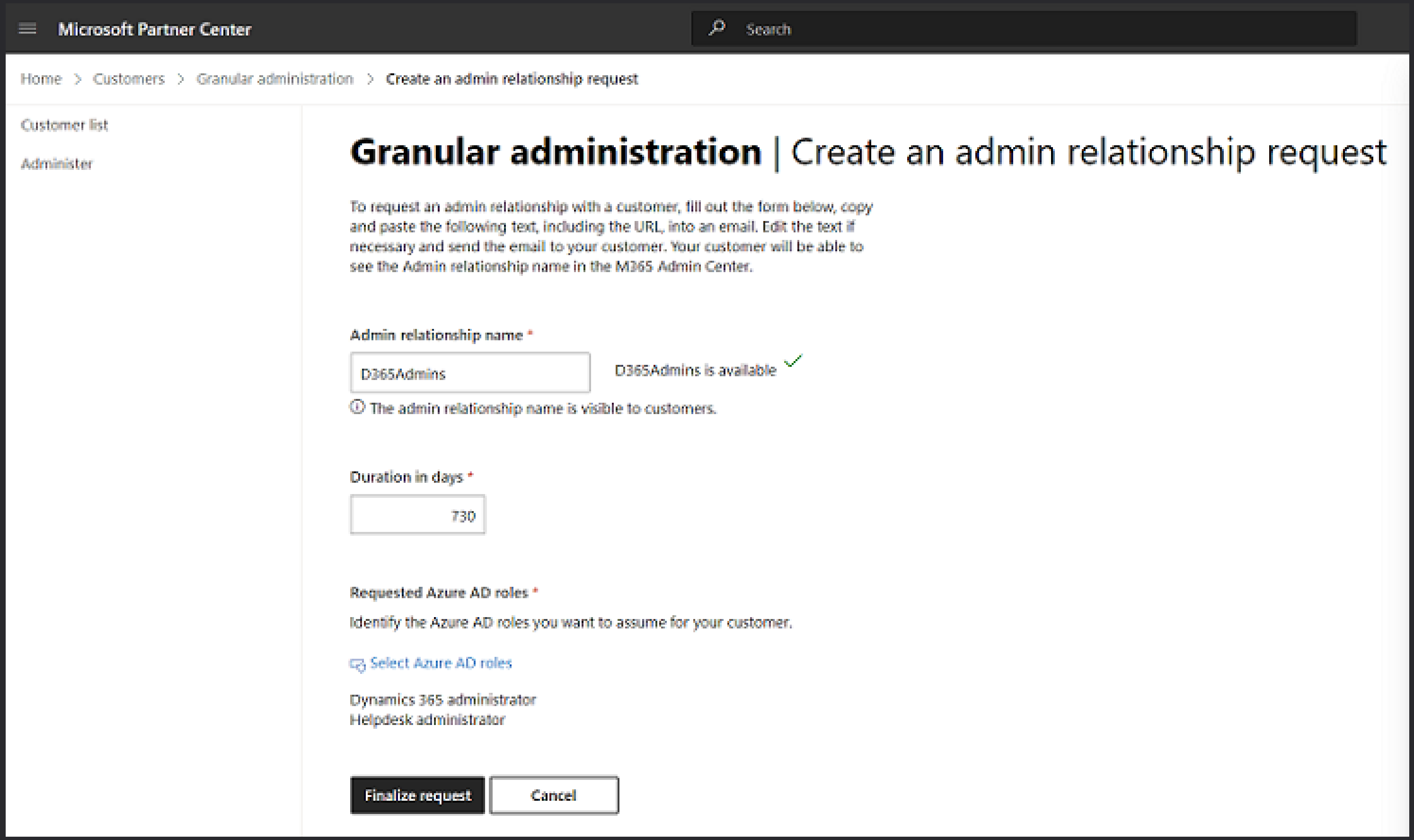
Azure Lighthouse



Delegated Administrative Privileges



Granular DAP



Microsoft Partner Center
Search
Home > Customers > Granular administration > Create an admin relationship request
Customer list
Administer

Granular administration | Create an admin relationship request

To request an admin relationship with a customer, fill out the form below, copy and paste the following text, including the URL, into an email. Edit the text if necessary and send the email to your customer. Your customer will be able to see the Admin relationship name in the M365 Admin Center.

Admin relationship name *

D365Admins

D365Admins is available ✓

ⓘ The admin relationship name is visible to customers.

Duration in days *

730

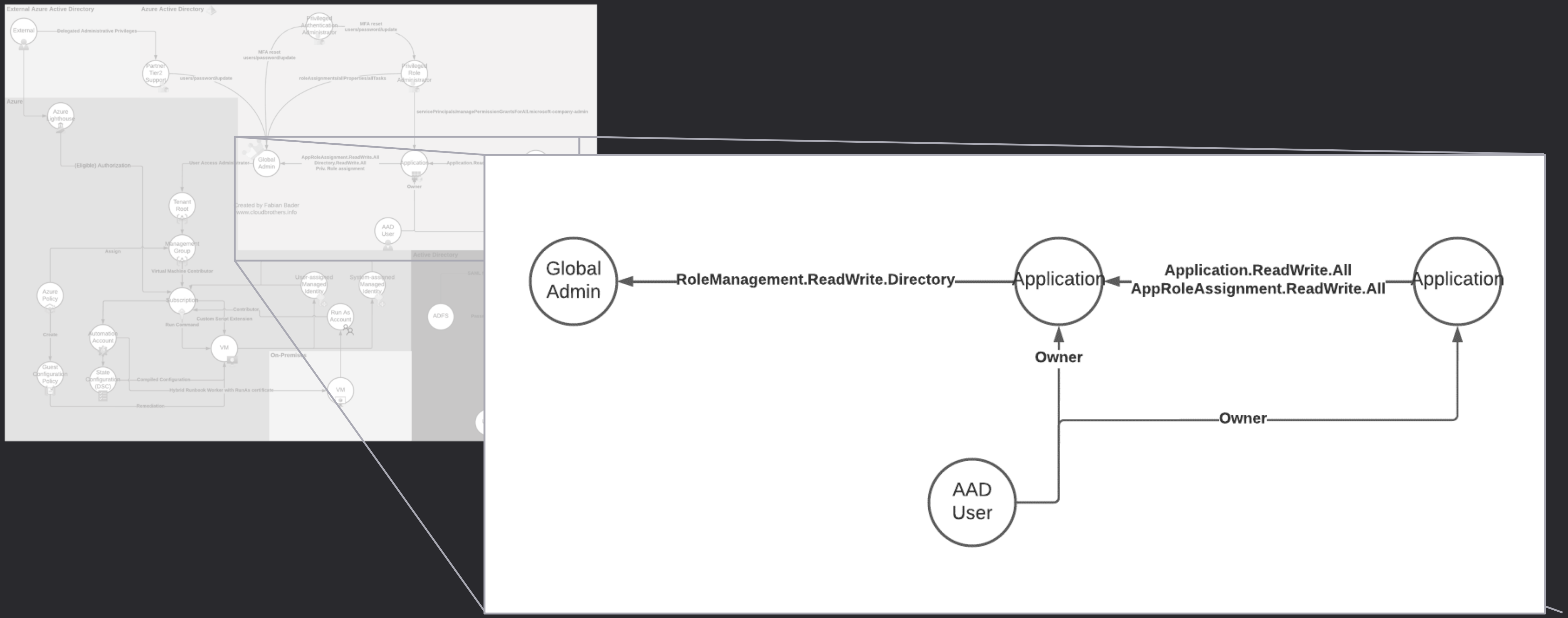
Requested Azure AD roles *

Identify the Azure AD roles you want to assume for your customer.

Select Azure AD roles

Dynamics 365 administrator
Helpdesk administrator

Abuse extensive API Permissions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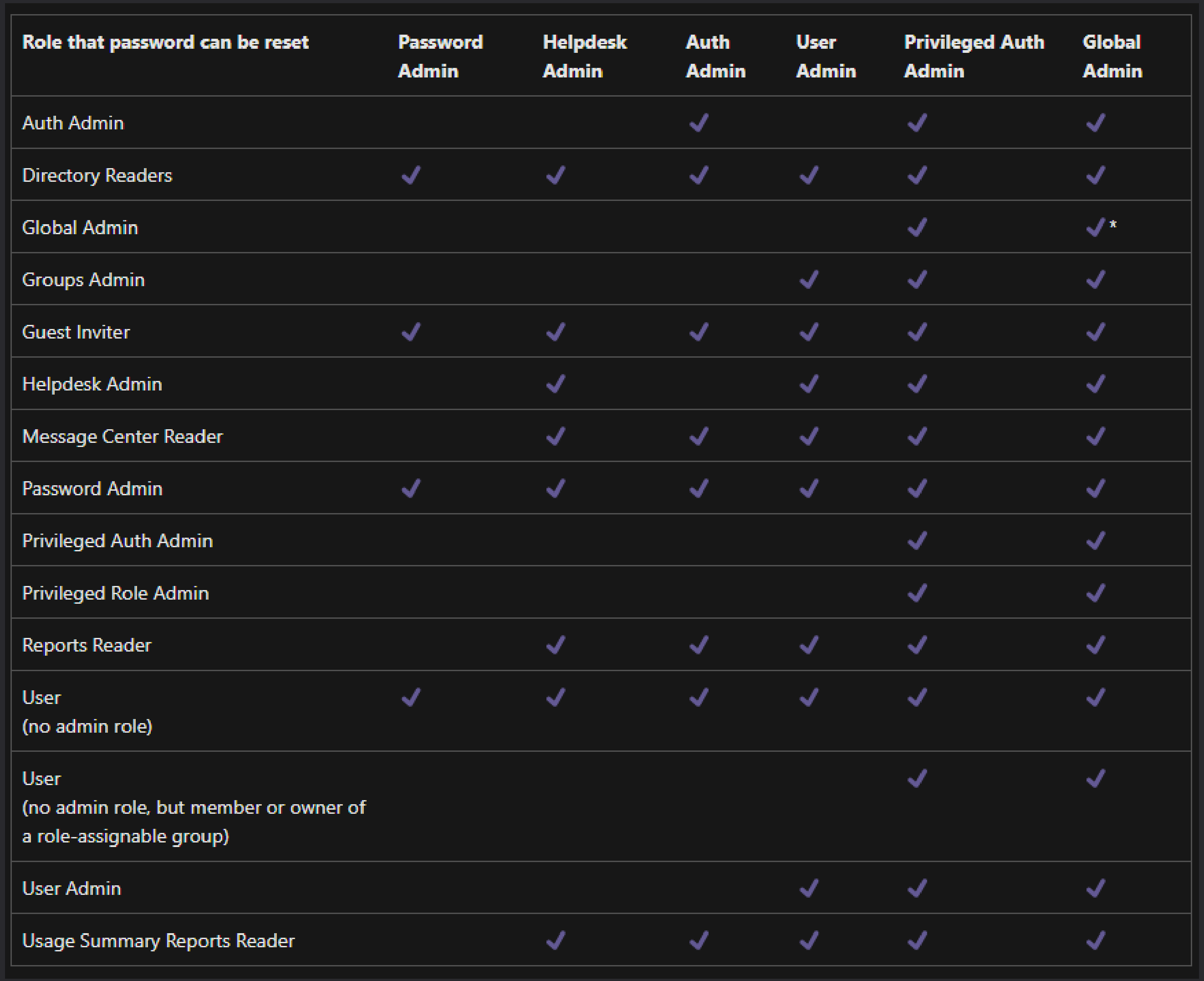
AAD User

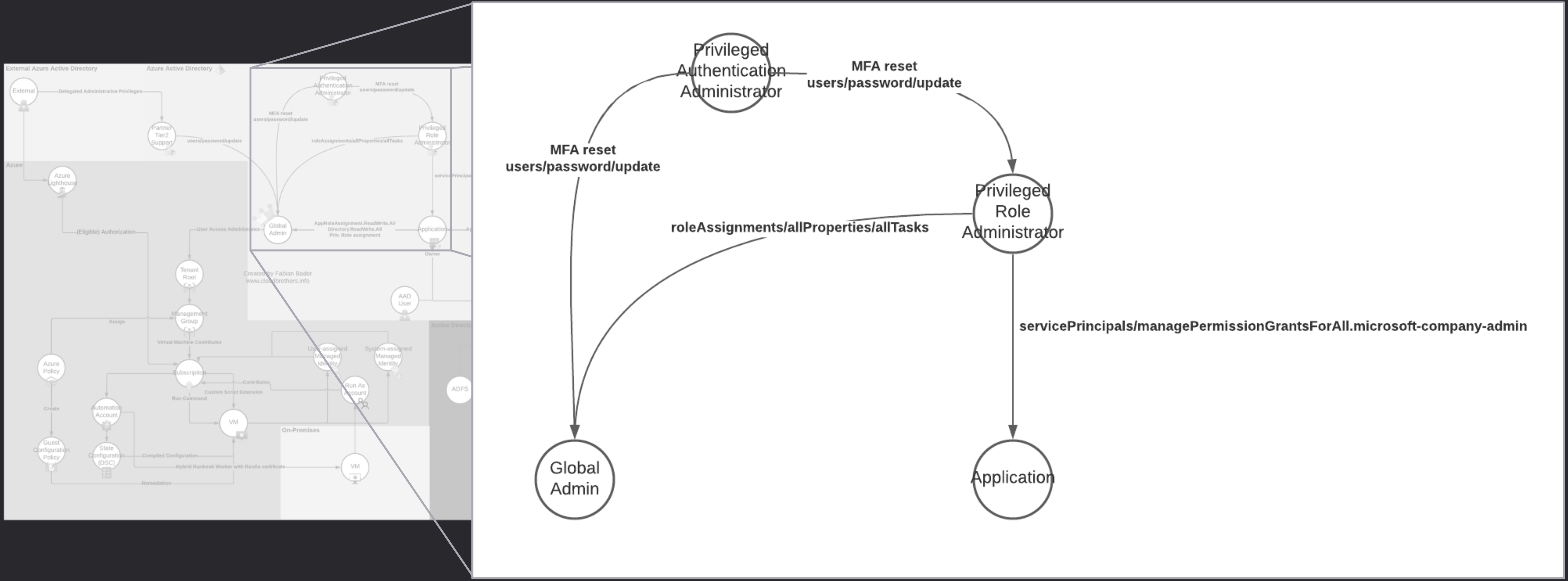
Azure AD Roles



Role that password can be reset	Password Admin	Helpdesk Admin	Auth Admin	User Admin	Privileged Auth Admin	Global Admin
Auth Admin			✓		✓	✓
Directory Readers	✓	✓	✓	✓	✓	✓
Global Admin					✓	✓*
Groups Admin				✓	✓	✓
Guest Inviter	✓	✓	✓	✓	✓	✓
Helpdesk Admin		✓		✓	✓	✓
Message Center Reader		✓	✓	✓	✓	✓
Password Admin	✓	✓	✓	✓	✓	✓
Privileged Auth Admin					✓	✓
Privileged Role Admin					✓	✓
Reports Reader		✓	✓	✓	✓	✓
User (no admin role)	✓	✓	✓	✓	✓	✓
User (no admin role, but member or owner of a role-assignable group)					✓	✓
User Admin				✓	✓	✓
Usage Summary Reports Reader		✓	✓	✓	✓	✓

https://learn.microsoft.com/en-us/azure/active-directory/roles/permissions-reference#who-can-reset-passwords

Azure AD Roles



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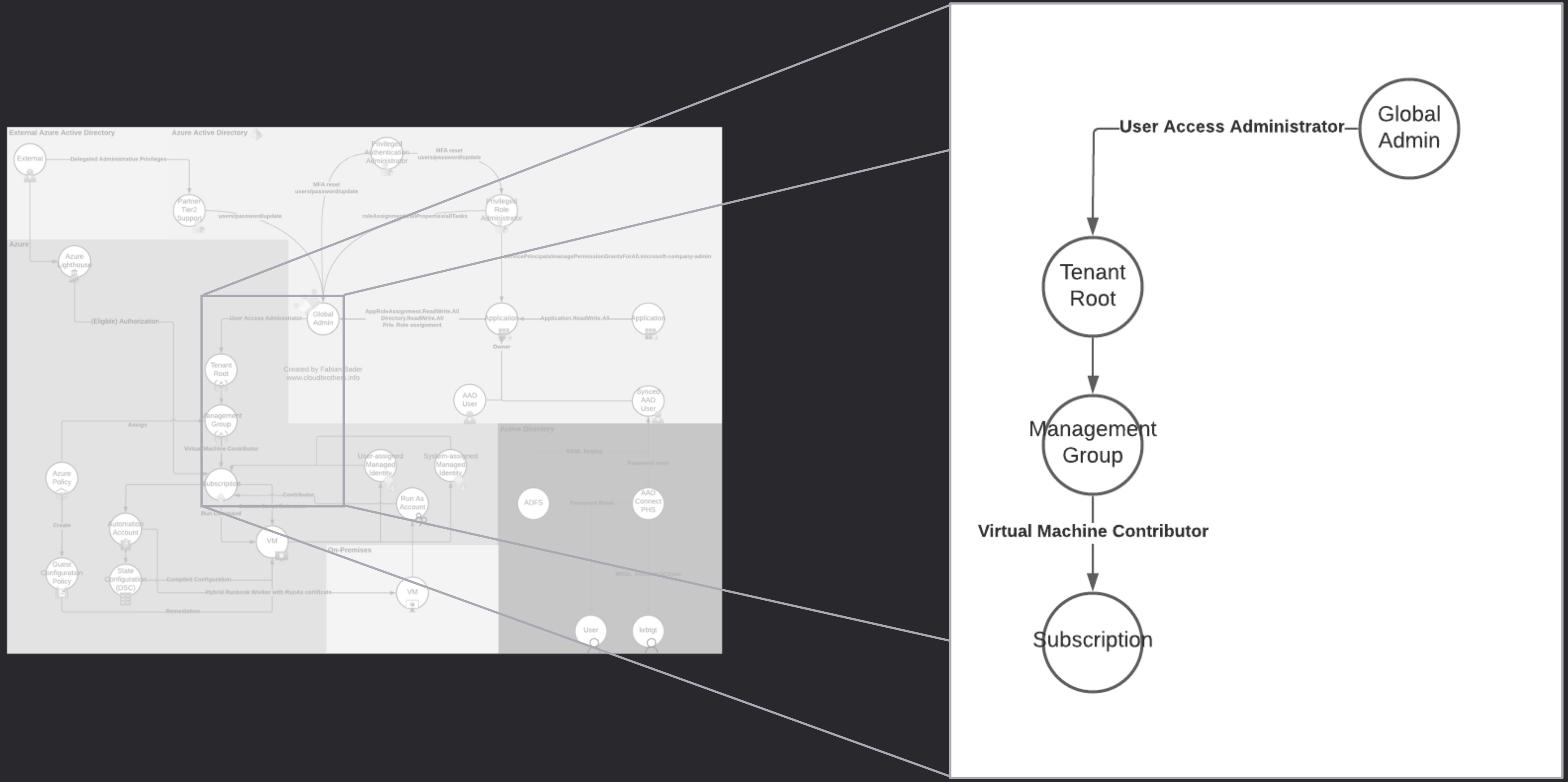
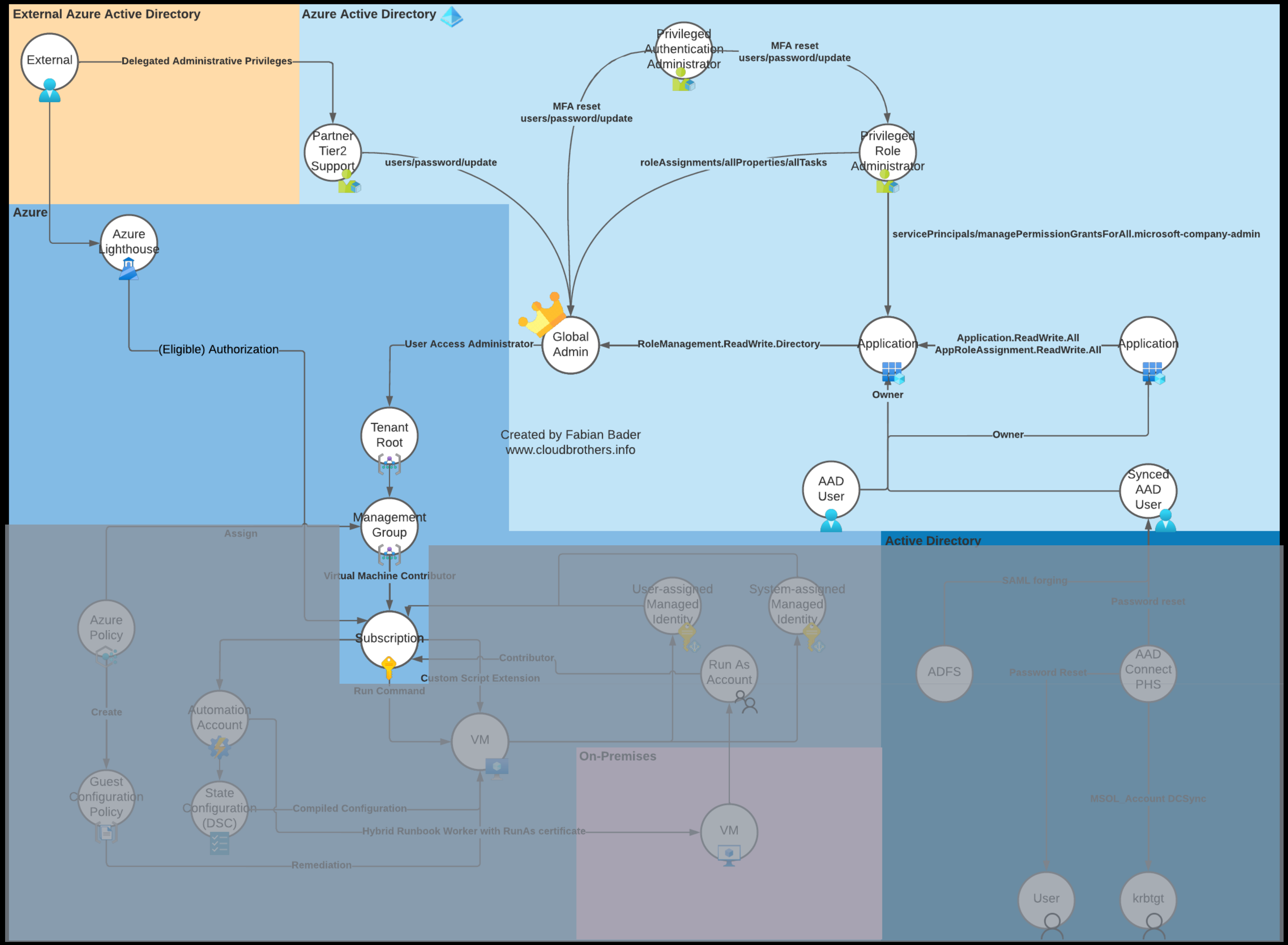
Elevate Azure Subscription Access

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SCAN ME

https://cloudbrothers.info/en/azure-attack-paths

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Thu, September 22nd, 2022

Ask Me Anything (AMA)

Roundtable discussion and Q&A
on experiences from the field and current trends!

Meet the speakers and exchange with members of the community!

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