



5 tips to secure your #PowerPlatform #ecosystem











5 tips to secure your Power Platform ecosystem

Trust built in at every level

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Aroh Shukla

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- Microsoft MVP Alumni (Biz Apps & Data Platform)
- Love learning and Sharing











Agenda

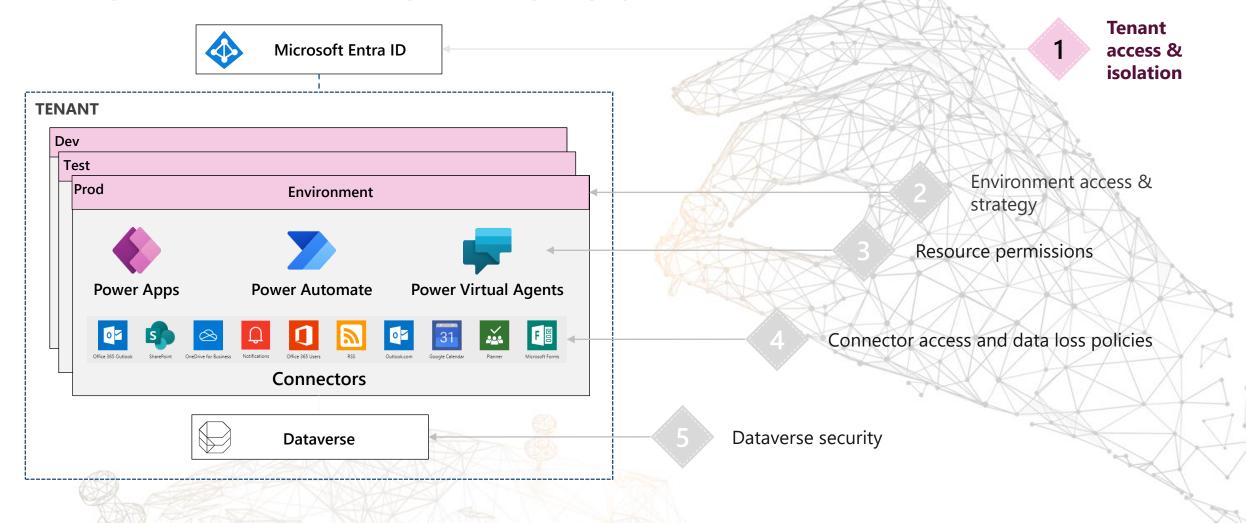
- 1. Tenant access & isolation
- 2. Environment access & strategy
- 3. Resource permissions
- 4. Data polices (DLP Polices)
- 5. Dataverse Security
- 6. DEMOS







POWER PLATFORM SECURITY LAYERS

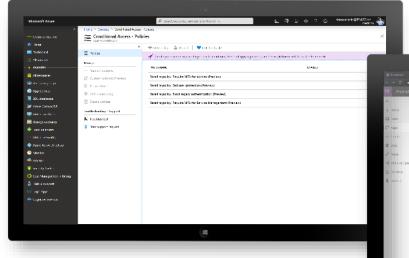








IDENTITY MANAGEMENT WITH MICROSOFT ENTRA ID



Using Microsoft Entra ID and conditional access policies to manage timeout and access requirements.

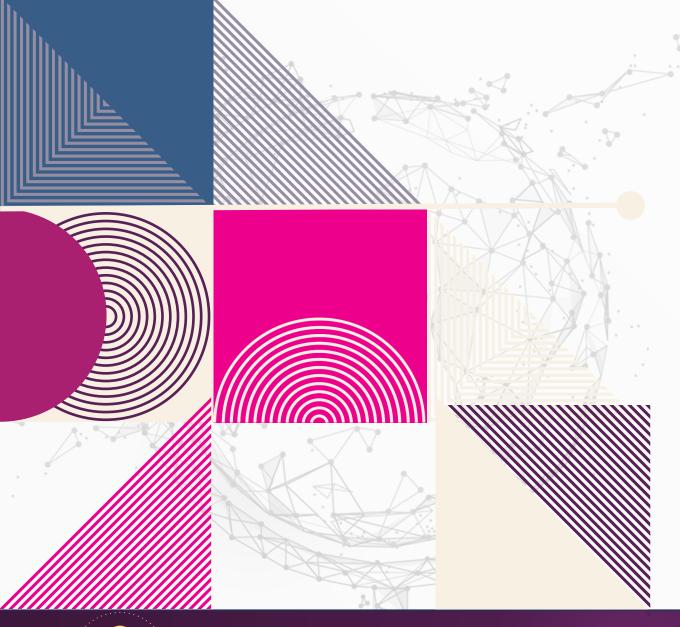
Use Azure Active Directory groups to manage/share apps and data access.

Share apps with **external users** with **Azure Active Directory** B2B collaboration.









DEMO 1 TENANT LEVEL ACCESS







ENVIRONMENT SECURITY Tenant Access & Microsoft Entra ID Isolation **TENANT** Dev Test **Environment access &** Prod **Environment** strategy Resource permissions **Power Virtual Agents Power Apps Power Automate** Connector access and data loss policies **Connectors**





Dataverse



Dataverse security

KEY FACTS ABOUT ENVIRONMENTS

POWER PLATFORM'S UNIT OF ORGANIZATION



It is a container to separate resources that have different roles, security



Every tenant has a default environment where all licensed users can create apps, flows



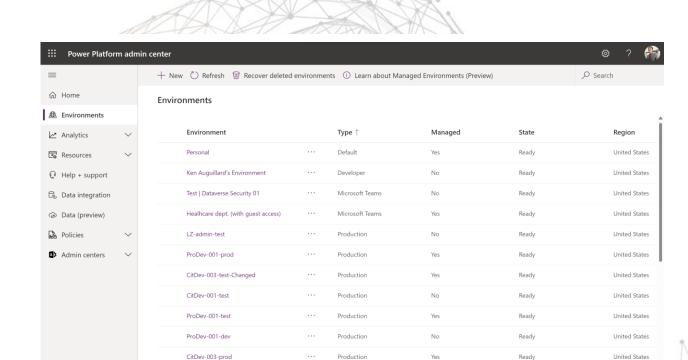
It is bound to a geography so that apps, flows, etc. are routed only to datacenters in



Dataverse is available to securely store and manage data that's used by business applications



Control who can create environments in the Power Platform admin center. (**Governance**)



Production







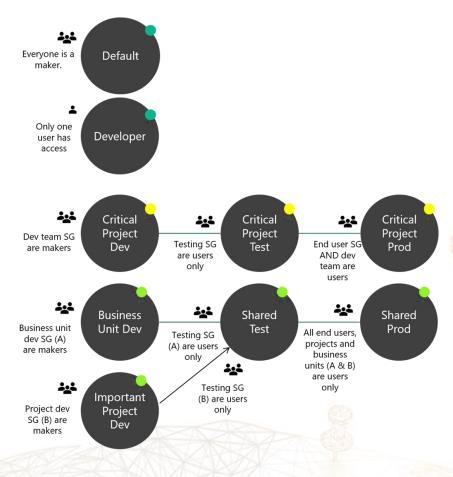
Ask virtual agent

CitDev-002-prod

Ready

Feedback

ENVIRONMENT STRATEGY



Communicate with everyone that **Default** is not for development of critical apps.

Developer environments are completely locked for any other user except the user who subscribed to the community plan. Applications can be moved out of the environment if needed.

Dedicated dev/test/prod environments for each critical application. Developers have Environment Maker access in the dev environment, but only user access in test and prod. End users only have end user access to the production solution so no one can modify the applications.

Shared test/prod environments for important but medium complex apps can be shared between multiple projects or business units. Individual projects and business units should always have their own development environment to protect

development environment to protect data. End users only have basic user access to solutions and data in production environments.

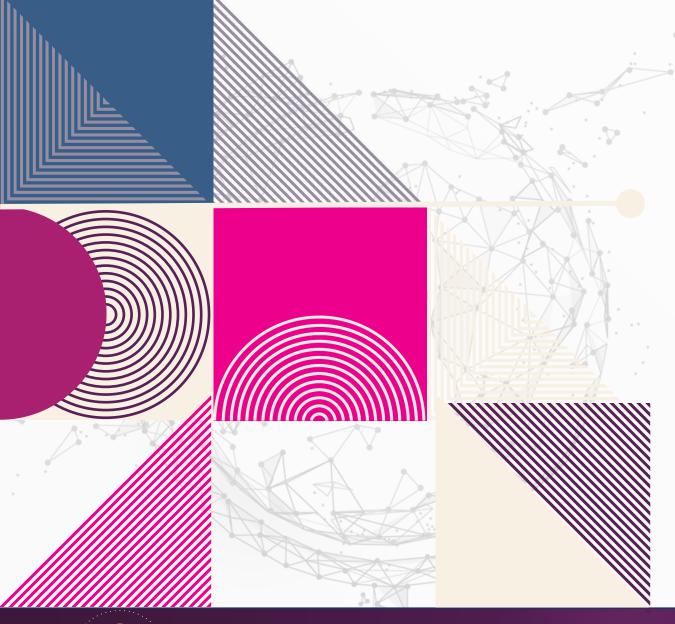
Critical projectIndividual projectPersonal productivity apps

SG = Security Group







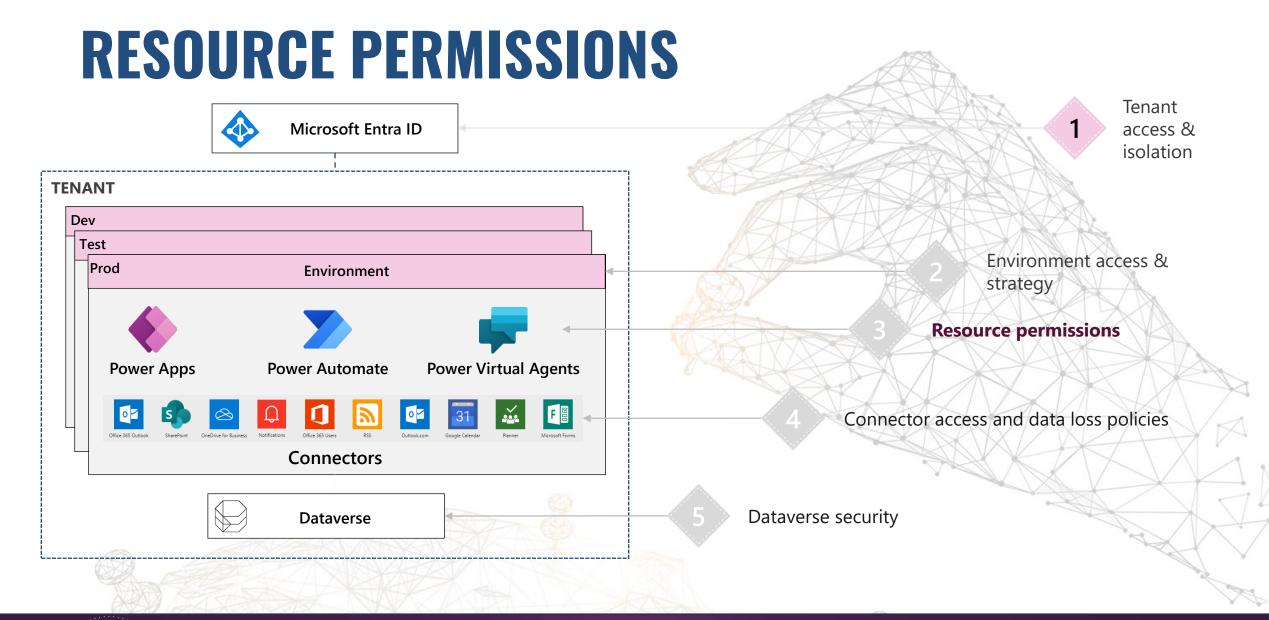


DEMO 2 ENVIRONMENT ACCESS







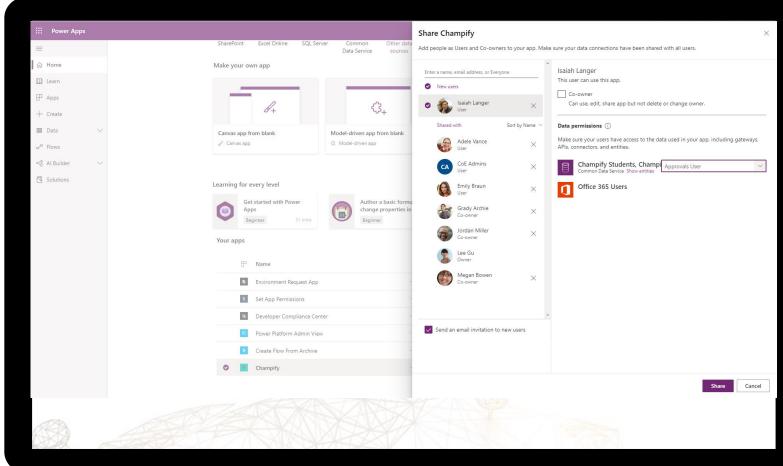








SHARING COMPONENT AND GRANTING DATA ACCESS





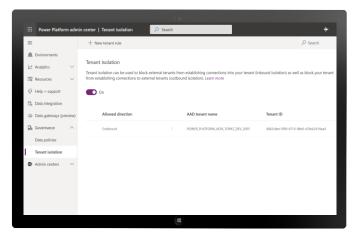


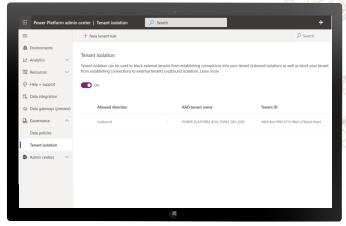


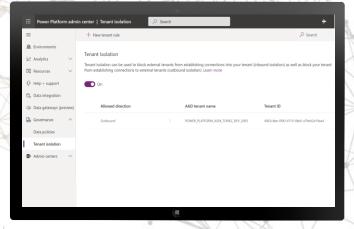


RESOURCE LEVEL ACCESS

- Access to co-own components edit, share, use
- Flow co-ownership sharing also shares connections in the flow implicitly with owners
- Access to run components use only







Power Automate

Power Apps

Copilot Studio

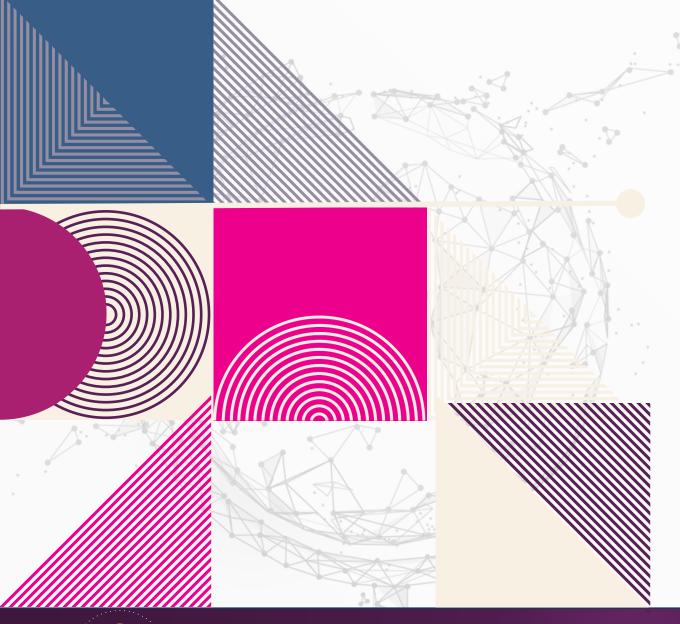
Important:

Power Apps, Power Automate, and Copilot *do not provide* users access to any data assets that they don't already have access to.









DEMO 3 SHARING ACCESS







DATA POLICIES (DLP)



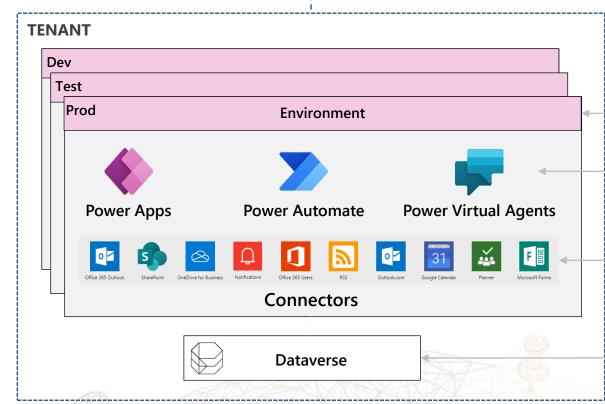




Resource permissions

Connector access and data loss policies

Dataverse security









DATA POLICIES (DLP) CATEGORIES



Business

- Connectors for **sensitive** data
- Connectors in this group can't share data with connectors in other groups.



Non-Business

- Connectors for **non-sensitive** data
- Connectors in this group can't share data with connectors in other groups.
- Unassigned connectors will show up here by default.



Blocked

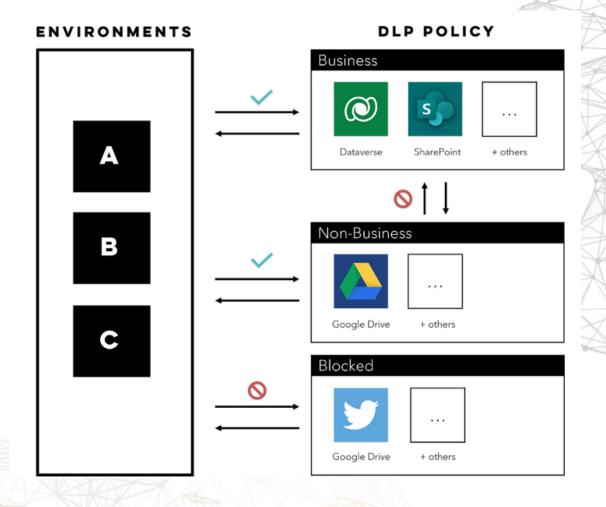
- Blocked connectors can't be used where this policy is applied.
- Sysmex users cannot use in their flows and apps.







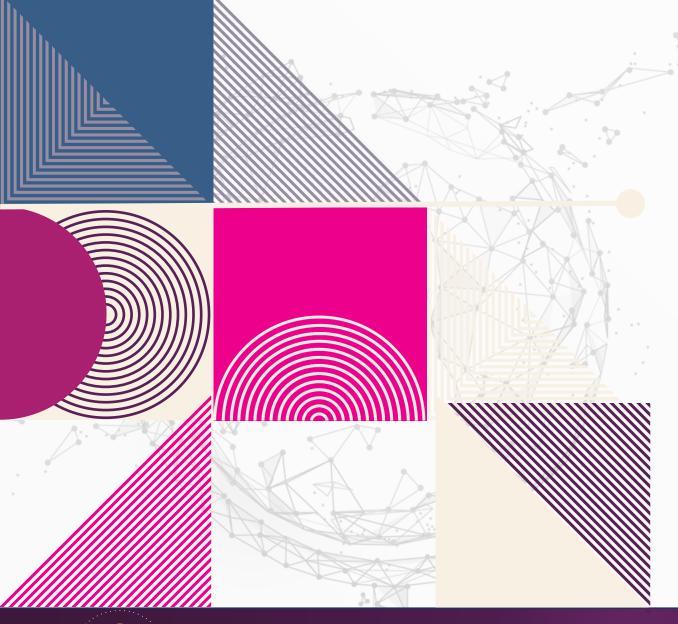
EXAMPLE OF CONNECTOR GROUPS FOR











DEMO 4 DLP POLICES



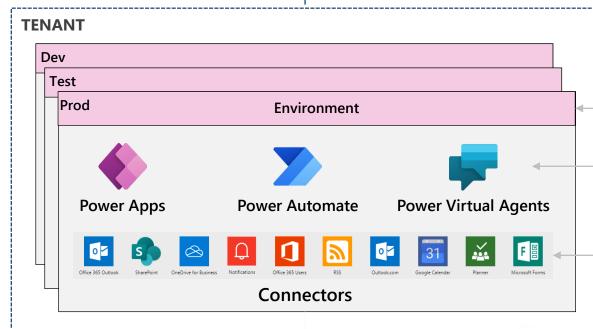




DATA POLICIES (DLP)







Dataverse

Environment access & strategy

Resource permissions

Connector access and data loss policies

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MICROSOFT DATAVERSE - WHAT'S IN THE BOX?











Integration

Security





Authorization



Role-based security



Auditing

Logic



Calculated & Rollup fields



Plugins

Business



Duplicate Detection



Jobs



Rules



Workflows

Data



Modelling



Catalog and discovery



Reporting







Common Data Model

Multi-language Multi-currency

Storage





databases

Files and blobs

data



Semi-structured Log files

Relevance Search

& Find data







Azure Synapse Analytics

AI M



Webhooks





Data export

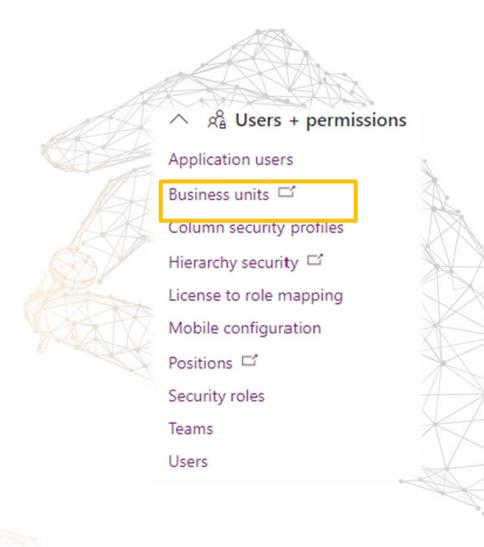






BUSINESS UNITS

- **Business units** work with **security roles** to determine the effective security that a user has.
- You can <u>create child business units</u> to help further segment your users and data.
- Every user assigned to an environment will belong to a business unit.



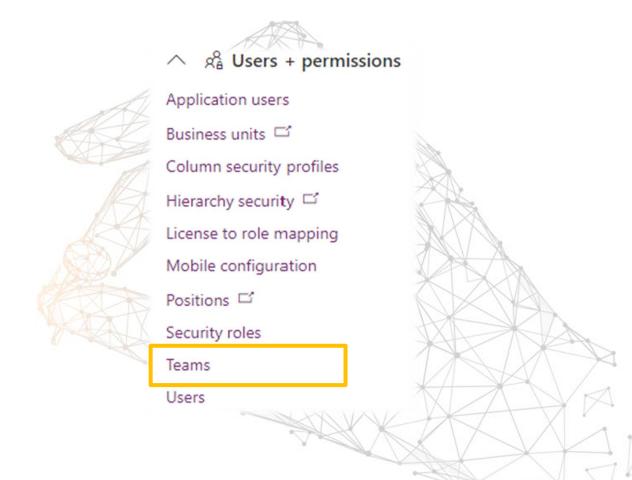






TEAMS

- Associate a business unit with an Azure AD security group
- Use an Azure AD security group to map your business unit for streamlining your user administration and role assignment.



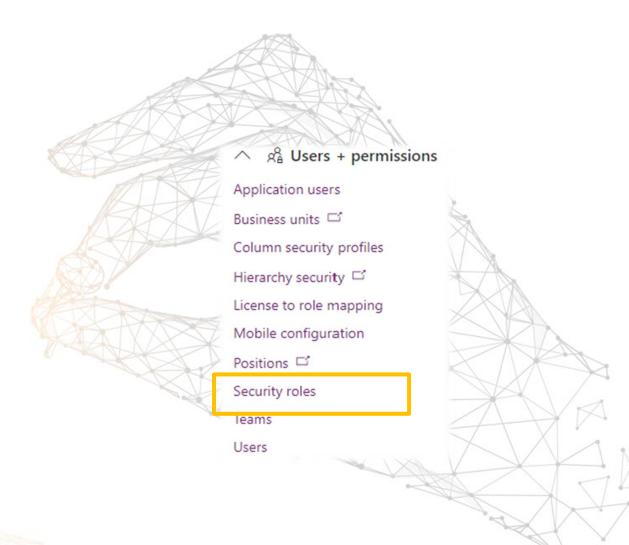






SECURITY ROLES

- <u>Security roles</u> can be associated directly to users, or they can be associated with <u>Dataverse teams</u> and <u>business units</u>.
- All users associated with the team will benefit from the role.



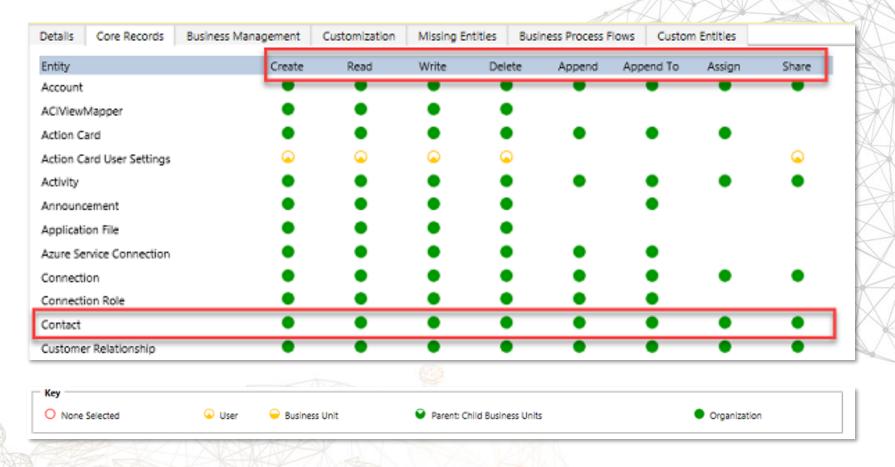






SECURITY ROLES – PRIVILEGES

You can either add more privileges in an existing security role or create a custom security role.

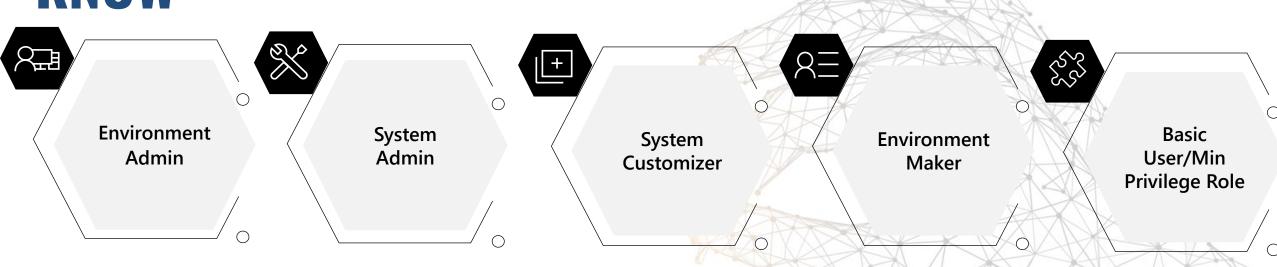








KEY OUT-OF-BOX SECURITY ROLES YOU NEED TO KNOW



Perform all environment level **administrator tasks** – User mgmt., Dataverse provisioning, Resource mgmt., DLP mgmt etc Customize or administer the **environment**, including creating, modifying, and assigning security roles. View all data in the environment (if licensed).

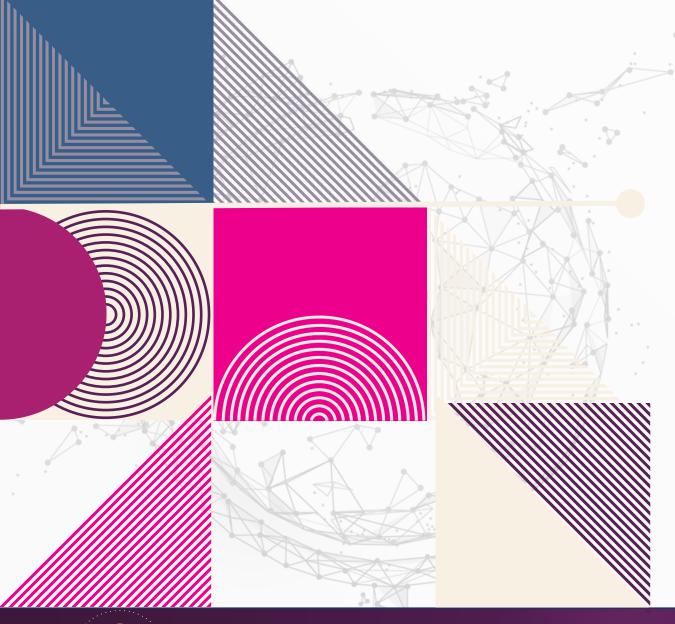
Customize the environment. View records for environment entities that they create.

Resource creation – apps, connections, custom APIs, gateways, and flows Resource consumption by end users for standard entities









DEMO 5 DATAVERSE SECURITY







Any Questions?







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Resources:





