



WorkshopPLUS

Power Platform for Administrators

Power Platform Environments

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Objectives

After completing this Learning, you will be able to:

1	Understand.... <ul style="list-style-type: none">✓ What Power Platform environments are✓ Environments storage capacity requirements and limits
2	Understand.... <ul style="list-style-type: none">✓ What security roles are available for Power Platform administration✓ Basics about Dataverse security model and most important security roles
3	Understand.... <ul style="list-style-type: none">✓ Managing Environments✓ How environment backup/restore/recovery works
4	Understand.... <ul style="list-style-type: none">✓ Lifecycle of Dataverse for Teams environment



Understanding Environments

Power Platform Environment

Definition:

Container to store, manage, and share your organization's business data, apps, flows, chatbots, and other Power Platform resources

Serves as a container to separate apps that might have different roles, security requirements, or target audiences

Key facts:


- Every tenant has a Default environment where all licensed Power Apps and Power Automate users can create apps & flows.
- Tied to a geographic location
- Different types of environment exist
- Can have either **zero** or **one** Dataverse database

Security tips:

- Non-default environments offer more permission controls.
- Non-default environment creation can be restricted to specific admins.
- Non-default and non-developer environments with Dataverse can restrict access to a specific AAD security group.

Tenant settings

These settings are applicable across your organization. [Learn more](#)

Name	Description
Copilot (preview)	Allow canvas editors and admins to get AI-powered answers to how-to questions
Weekly digest 	Manage additional recipients for the weekly digest email for Managed Environment
Developer environment assignments	Control who can create and manage developer environments.
Production environment assignments	Control who can create and manage production and sandbox environments.
Trial environment assignments	Control who can create and manage trial environments.

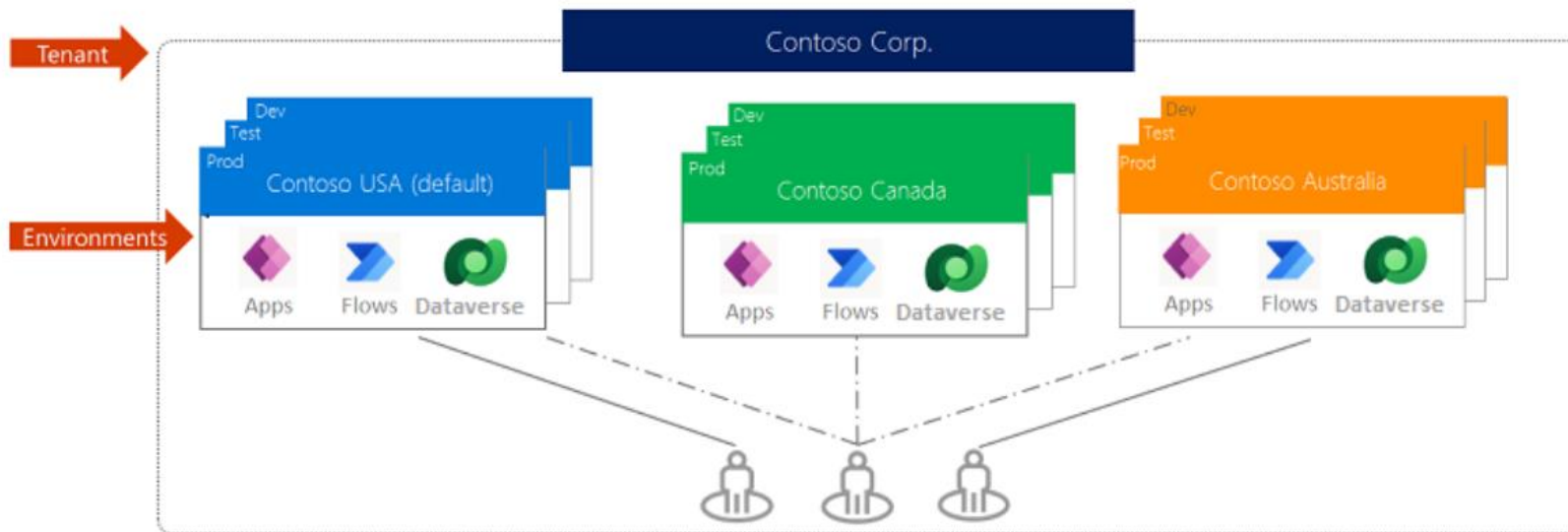
Controlling environment creation in the admin center.

Power Platform		Admin center	
		+ New Refresh	
Environments		Environments	
Analytics			
Capacity			
Common Data Service			
		Environment	Type
		CRM (Online)	Production
		CRM (Online)	Sandbox

List of environments in the admin center.

Environment Scope

- Environments are created **under an Azure Active Directory tenant**, and its resources **can only be accessed by users within that tenant**.
- Any resources created in an environment like apps, flows, connections, Dataverse database etc. are **bound to datacenters in the geographic location** selected for an environment
- An app, for example, created in the environment is only permitted to connect to the data sources that are also deployed in that same environment, including connections, gateways, flows, and Dataverse databases.



Microsoft Confidential

New environment



This operation is subject to [capacity constraints](#)

Name *

Demo

Type ⓘ *

Sandbox

Region *

Local environments can provide quicker data access.

Europe - Default

United States

Europe - Default

Asia

Japan

Canada

United Kingdom

Preview (United States)

South America

France

Switzerland

Germany

United Arab Emirates (UAE)

Environment Types

More details in upcoming slides

Type	Creator	Description
Default	Auto-created	A single default environment is automatically created for each tenant and shared by all users (who are Environment Makers).
Production	Licensed user, subject to tenant level setting	Intended to be used for permanent work in an organization. Production environments are what you should use for any environments on which you depend.
Sandbox	Licensed user, subject to tenant level setting	Sandbox environments are used for development and testing, separate from production.
Trial	Licensed user, subject to tenant level setting	Trial environments are intended to support short-term testing needs and are automatically cleaned up after a short period of time.
Developer	Licensed user	Developer environments are created by users who have a free Power Platform Developer Plan license. These are special environments intended only for use by the owner but other makers can be added for app/flow development. Premium connectors can be used.
Dataverse for Teams	Auto-created	Dataverse for Teams environments are automatically created for a Team in Teams when you create an app in Teams using the Power Apps app for the first time or install a Power Apps app from the app catalog.
Support	Microsoft support engineer	It is an environment created in your tenant by Microsoft under your direct instructions, for purposes of preventing, detecting, or repairing problems affecting the operation of your online service.

Default environment

Definition:

A single default environment is automatically created for each tenant and is shared by all users in the tenant (who are Environment Makers). Learn more [here](#).

Key facts:

- Whenever a new user creates their first Power App or Power Automate flow, they're **automatically added** to the **Environment Maker role**.
- Default **is not for development of critical apps**.
- Can't be disabled or deleted
- You can't back up manually. System backups are done continuously.
- Limited to 1TB of storage capacity

Security tips:

- Rename the environment to make the purpose of that environment self-explanatory like "**Personal Productivity**"
- Configure a **strict Data Loss Prevention (DLP)** policy to control the connectors that can be used by apps and flows in the default environment.
- More info - [Manage the default environment - Power Platform | Microsoft Learn](#)

Environments > Personal Productivity

Details

Environment URL	State
...crm4.dynamics.com	Ready
Region	Refresh cadence
Europe	Frequent
Type	Security group
Default	Not assigned

Sandbox environment

Definition:

- Non-production environments.
- Isolated from production, a sandbox environment is the place to safely develop and test application changes with low risk. Learn more [here](#).

Key facts:

- Can be converted to Production environment
- Possible to create own backups along system backups and restore backups 7 days back in time (28 days if any Dynamics 365 app is deployed to environment)
- **Copy** Dynamics 365 customer engagement apps (Sales, Customer Service, Field Service, Marketing, and Project Service Automation), and all data between environments
- **Reset** to delete and reprovision it
 - If environment has AAD Security Group defined, then you need to set a new group during the reset.
 - Consider a reset when you want to: Create a new project, free up storage or remove personal data.

The screenshot displays the Microsoft Dynamics 365 environment management interface. At the top, a navigation bar includes links for 'Open environment', 'Settings', 'Resources', 'Convert to production', 'Backups', 'Copy', 'Reset', 'Delete', and 'History'. Below this, the breadcrumb 'Environments > Testing' is visible.

The main content area shows the 'Details' for the 'Testing' environment:

Details	
Environment URL	crm4.dynamics.com
State	Ready
Region	Europe
Refresh cadence	Frequent
Type	Sandbox
Security group	Not assigned

Two modal windows are open:

- Reset environment** (Testing): This modal contains a warning message: 'Deletes everything, including backups, and creates a new environment.' It includes fields for 'Name' (Testing), 'Type' (Sandbox), 'Purpose' (Describe the environment purpose), 'Region' (Europe), 'URL' (crm4.dynamics.com), 'Security group' (No group is selected), and 'Version' (9.2.21092.00145). Buttons for 'Reset' and 'Cancel' are at the bottom.
- Copy environment** (Development): This modal contains a warning message: 'Overwrite another environment with a copy of this one. Its existing resources including backups will be deleted. Learn more'. It includes a note: 'This operation is subject to capacity constraints'. It has radio buttons for 'Copy over' (Everything, Customizations and schemas only) and 'Customizations and schemas only'. It includes a dropdown for 'Select environment to overwrite' (Testing) and a button for 'Don't see your environment?'.

Production environment

Definition:

Environment for resources like apps, flows, chatbots etc. which are meant to be released to a target audience e.g., end users of a Power App

Key facts:

- Can be converted to Sandbox environment
- Possible to create own backups along system backups and restore backups 7 days back in time (28 days if any Dynamics 365 app is deployed to environment)
- **Copy** Dynamics 365 customer engagement apps (Sales, Customer Service, Field Service, Marketing, and Project Service Automation), and all data between environments

The screenshot displays the 'Copy environment' dialog in the Microsoft Dynamics 365 interface. At the top, a navigation bar includes links for 'Open environment', 'Settings', 'Resources', 'Convert to sandbox', 'Backups', 'Copy', 'Delete', and 'History'. Below this, the 'Environments > Production' section is visible. A 'Details' panel on the left lists the following information:

Details	
Environment URL	.crm4.dynamics.com
State	Ready
Region	Europe
Refresh cadence	Frequent
Type	Production
Security group	Not assigned

The 'Type' field is highlighted with a red box. To the right, the 'Copy environment' dialog is open, showing a 'Development' environment being copied. A warning message states: 'Overwrite another environment with a copy of this one. Its existing resources including backups will be deleted. [Learn more](#)'. Below this, it notes 'This operation is subject to [capacity constraints](#)'. The 'Copy over *' section has two radio button options: 'Everything' (selected) and 'Customizations and schemas only'. The 'Select environment to overwrite *' dropdown menu is set to 'Testing'. At the bottom, there is a link that says 'Don't see your environment?'.

Trial environment

Definition:

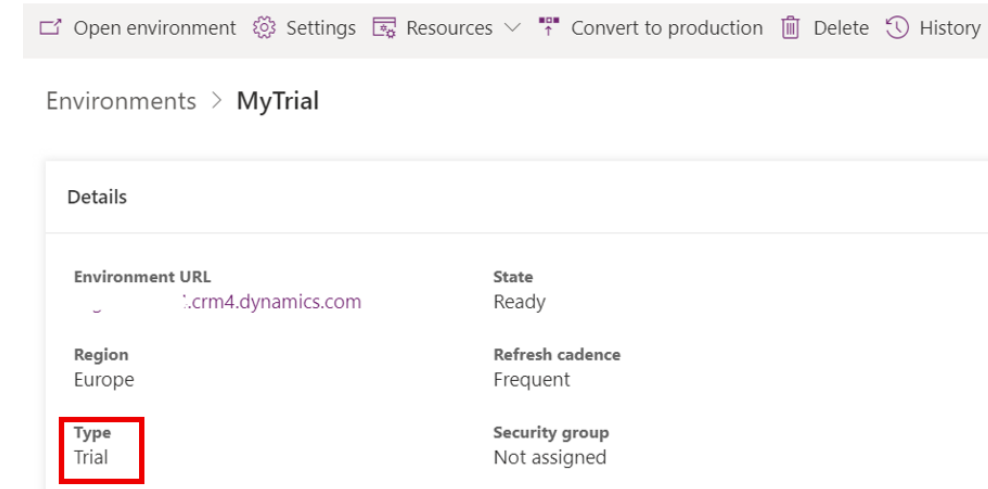
Using trial environments, companies can try out new features and solutions. Learn more [here](#).

Two types of trial environments:

- **Trial (standard)** - Allow users to try new features and quickly build low-code and no-code POC applications and processes.
- **Trial (subscription-based)** - Companies can use to develop larger, multiuser, and multiple-department solutions and perform proof-of-concept reviews. Tenant admins can add a trial (subscription-based) environment to their tenant.

Key facts:

- Users with eligible license like Power Apps per User can create **one** trial environment at a time
- Does not consume paid capacity of the tenant
- Can be converted to Production environment
- Will be automatically deleted after 30 days but can be extended for additional 30 days and 7 days before environment is set to expire
- Only one extension is allowed per trial environment.








Developer environment (Developer Plan)

Definition:

You get a free developer environment to develop and test apps, including **support for premium and custom connectors and Dataverse**. Learn more [here](#).

Key facts:

- Create apps and flow and share and collaborate on these solutions with others.
- Connect to any data source by using OOB connectors or by creating custom connectors.
- Use a fully managed, scalable data platform with Dataverse
- Export the solutions you create in your developer environment and publish them on Microsoft AppSource, so your customers can test-drive them.
- **Not meant for production use**
- Environment capacity limits are:
 - Flow runs/month – 750
 - Database size – 2GB
- A free **Microsoft Power Apps for Developer Plan** license is assigned to the user

 Open environment  Settings  Resources  Delete  History

Environments > 's Environment

Details

Environment URL	State
orgff694029.crm4.dynamics.com	Ready
Region	Refresh cadence
Europe	Frequent
Type	Security group
Developer	Not assigned

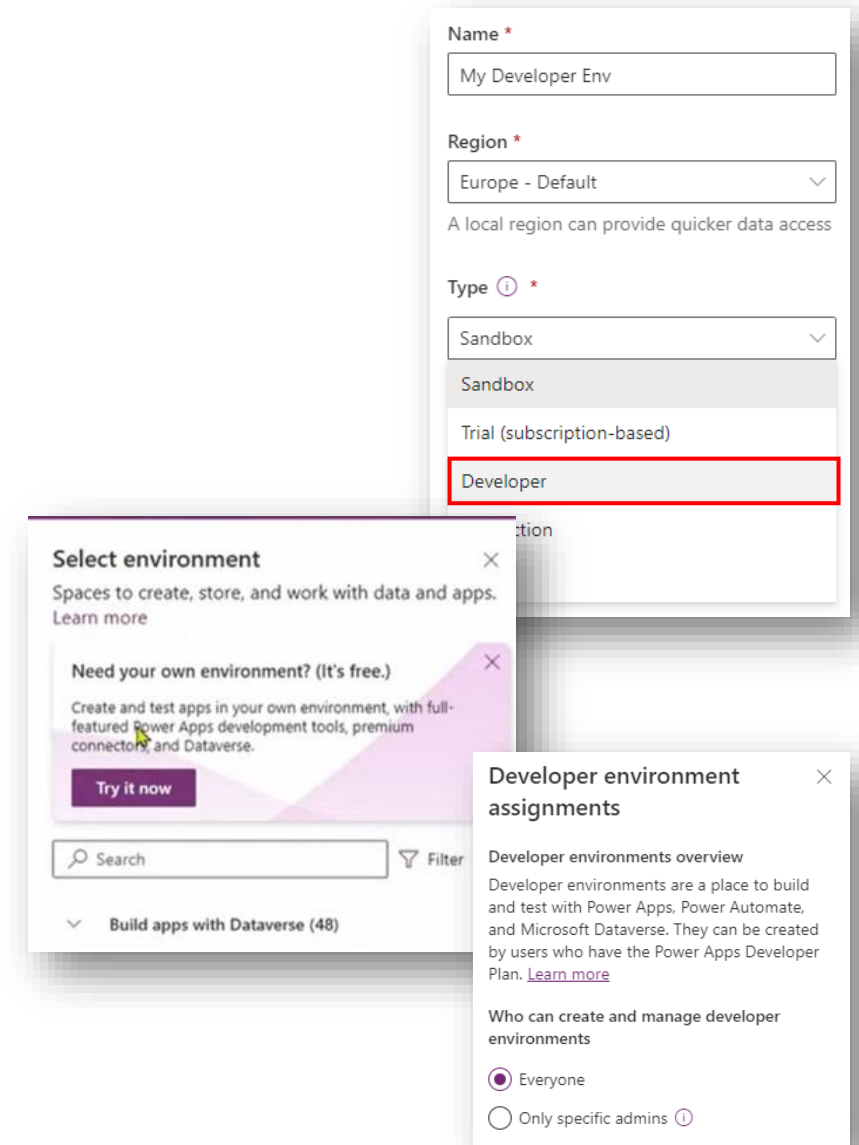
Developer environment (Personal)

Definition:

Developer environments (Personal) can be created without having Power Platform Developer plan

Key facts:

- Same features and limits as Developer environments created by the system when user has Power Platform Developer plan
- All users having seeded or standalone Power Platform license can create up to **three** Developer environments if not blocked in tenant level
- Can be created in Power Platform Admin Center or Power Apps Studio (make.powerapps.com) in environment picker
- **Not meant for production use**



Dataverse for Teams environment

Definition:

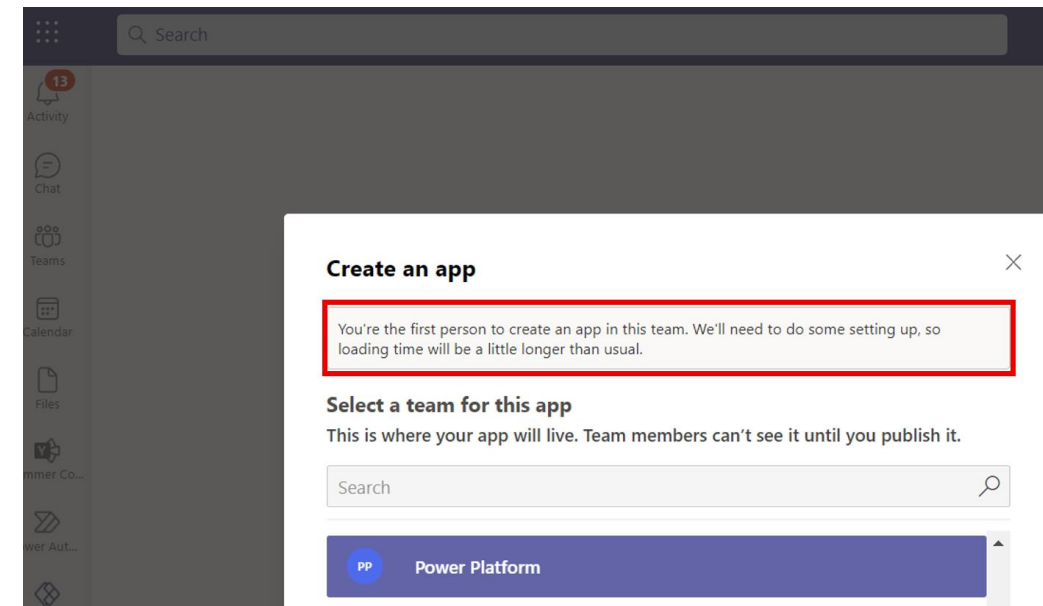
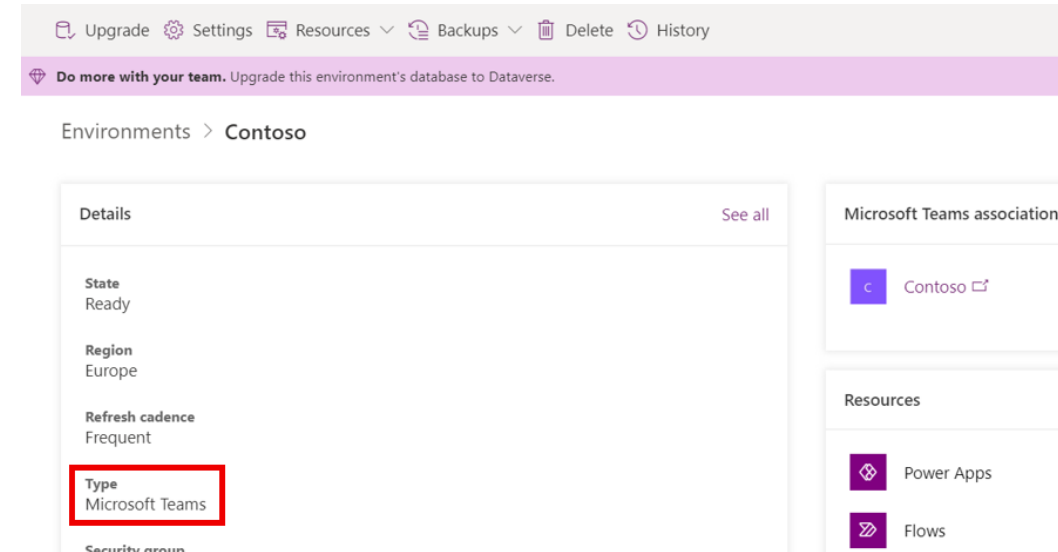
Is automatically created for the selected team when you **create an app or bot in Microsoft Teams** or **install a Power Apps app from the app catalog** for the first time.

Each team can have **one** environment, and all data, apps, bots, and flows created with the Power Apps app inside a team are available from that team's Dataverse for Teams database.

Learn more [here](#).

Key facts:

- Available as part of select Microsoft 365 subscription like E3/E5
- Possible to create own backups along system backups and restore backups 7 days back in time
- Team guests can access apps, bots, flows, and data but not able to make or edit apps - only discover and run
- Dataverse for Teams database ("light version" of Dataverse) can be upgraded to full version of Dataverse



Dataverse for Teams restrictions

- Teams can invite guests who can discover & run apps, bots, flows, and access data in the Dataverse for Teams DB within their Team. However, they **won't be allowed to install, make, or edit apps.**
- Dataverse for Teams Apps **will only be accessible in Teams and Teams Mobile.**
- For any standalone Power Apps or Power Automate usage, which includes API access as well, the Dataverse for Teams schema will need to be promoted to Dataverse.
- No direct API access or pro developer experience will be provided, and only Power Apps embedded within the Teams client will be able to access the runtime.
- Apps created in Microsoft Teams that use Dataverse for Teams will be accessible outside of Microsoft Teams in a web browser if you have a trial or standalone Power Apps license. However, note the following:
 - Apps not displayed in make.powerapps.com or Power Apps mobile app
 - The only way to run these apps is to launch them in a web browser from Teams using Go to website or Open in browser in the Power Apps mobile app.
 - When run outside of Teams, the Teams integration object's values won't be available.

Create an environment

You can create environments in the Power Platform Admin Center (PPAC), PowerShell, or using Power Platform Management Connectors in Power Apps and Flows.

Environment can be created either with or without Dataverse database.

NOTE! These do not apply for Dataverse for Teams environments

To create an environment, all the following must be **true**:

- The user has a license that allows environment creation.
- Environment creation is allowed in tenant level for users (if not then allowed only for Global, Power Platform or Dynamics Admin).
- For **production** and **sandbox** environments, the tenant must have **at least 1GB** of database storage capacity available.
- For trial (standard) environments, the user needs a license providing per-user entitlement for trial environments (refer to the table above). This applies to tenant-level admins, as well.
- For trial (subscription-based) environments, each offer-based trial (also known as "admin trial") subscription entitles the tenant to three subscription-based trial environments. Only tenant-level admins are able to provision trial (subscription-based) environments.

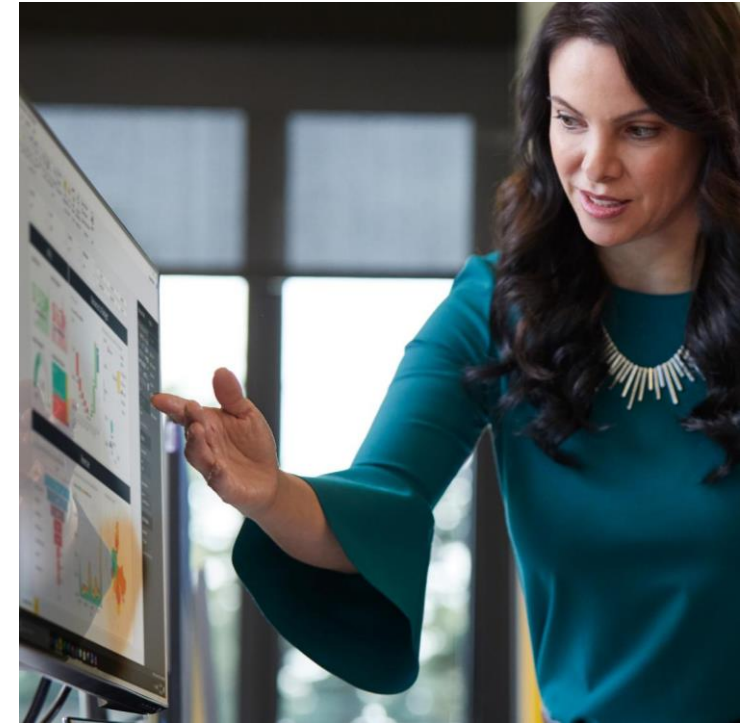
License	Trial	Production
Microsoft 365 Plans	No	No
Dynamics 365 Teams Plans	No	No
Power Platform Developer Plan	No	No
Dynamics 365 trial	Yes (one)	No
Dynamics 365 Plans	Yes (one)	Yes
Power Apps plan	Yes (one)	Yes
Power Apps trial	Yes (one)	Yes
Power Virtual Agents trial plan	Yes	No
Power Virtual Agents plan	No	Yes

NOTE! Global and Power Platform Administrators can create environments without any license

Demonstration

Create a trial environment with Dataverse database

1. Open PPAC
2. Verify that you have Power Apps per user license assigned for the user you are using (MOD Admin)
3. Also verify that you haven't already created trial environment with that user as only 1 trial environment is allowed per user
4. In Environments page, click NEW
5. Set the following environment settings:
 1. Name
 2. Type = Trial
 3. Show different regions and choose default region
 4. Select "Create a database for this environment"
6. Click NEXT
7. You do not need to change anything in "Add database" screen just go through different settings and options
8. Click SAVE to start environment creation



Environment Storage Capacity

Understand Environment & Dataverse capacity

- All environments with or without Dataverse will **consume at least 1GB capacity**.
- Power Platform Admin Center contains a page for viewing and managing Power Platform capacity.
- Available storage capacity is a condition for creating additional environments or increasing Dataverse data storage capacity.
- Possibility to also buy additional Dataverse storage capacity in 1GB increments

Power Apps Default Capacity per tenant	Default per user	Default per app	Accrued per user	Accrued per app
Dataverse Database capacity	10GB	5GB	250MB	50MB
Dataverse File capacity	20GB	20GB	2GB	400MB
Dataverse Log capacity	2GB	2GB	-	-

Power Automate Default Capacity per tenant	Default per user	Default per flow	Accrued per user	Accrued per flow
Dataverse Database capacity	10GB	5GB	250MB	50MB
Dataverse File capacity	20GB	2GB	2GB	200MB
Dataverse Log capacity	2GB	200MB	-	-

Power Virtual Agents Default Capacity per tenant	Default per tenant
Dataverse Database capacity	10GB
Dataverse File capacity	20GB
Dataverse Log capacity	2GB



Database Capacity

Store and manage entity definitions and data



File Capacity

Manage attachments, files, photos and videos



Log capacity

Record data changes over time for analysis & reporting purposes

Example of tenant capacity

- The **first subscription** of Power Apps (10GB) OR Power Automate (10GB) OR Power Virtual Agents (10GB) OR Dynamics 365 Customer Engagement **provides the one-time default capacity** entitlement for the tenant.
- Additional subscriptions do not add to the tenant's default capacity.
- When additional subscriptions are added to the tenant, **additional Dataverse capacity may accrue** to the tenant.

Example:

Let's assumed that a new customer starts by purchasing 10 Power Apps per user licenses and 20 Power Apps per app licenses. In this case, the total tenant wide pooled capacity will be as follows:

Default and Accrued Capacity Allocation	Default/ tenant	Accrued/10 Enterprise USL	Total Tenant wide capacity
Dataverse Database Capacity	10GB	$10 \times 250\text{MB} + 20 \times 50\text{MB} = 3.5\text{GB}$	$10\text{GB} + 3.5\text{GB} = 13.5\text{GB}$
Dataverse File Capacity	20GB	$10 \times 2\text{GB} + 20 \times 400\text{MB} = 28\text{GB}$	$20\text{GB} + 28\text{GB} = 48\text{GB}$
Dataverse Log Capacity	2GB	NA	2GB

Capacity enforcement

Example 1 - Overage

Database storage is over capacity, overage enforcement

Type	Entitled	Consumed
Database	100 GB	110 GB
Log	10 GB	5 GB
File	400 GB	200 GB

This tenant is 10 GB over in database usage. Despite having 200 GB excess file storage, the tenant is considered to be in **deficit**.

This tenant should free up storage or purchase more capacity.

Capacity enforcement

Example 2 - Overage

Log storage is over capacity, overage enforcement

Type	Entitled	Consumed
Database	100 GB	95 GB
Log	10 GB	20 GB
File	400 GB	200 GB

This tenant is 10 GB over in log usage and has only 5 GB available in database capacity; the tenant is considered to be in **deficit**.

This tenant should free up storage or purchase more capacity.

Capacity enforcement

Example 3 - Overage

File storage is over capacity, overage enforcement

Type	Entitled	Consumed
Database	100 GB	20 GB
Log	10 GB	5 GB
File	200 GB	290 GB

This tenant is 90 GB over in file usage. Despite having 85 GB available (80 GB database + 5 GB log) in storage capacity; the tenant is considered to be in **deficit**.

This tenant should free up storage or purchase more capacity.

Capacity enforcement

Example 4 - **No** Overage

Log storage is over capacity

Type	Entitled	Consumed
Database	100 GB	80 GB
Log	10 GB	20 GB
File	400 GB	200 GB

This tenant is 10 GB over in log usage but has 20 GB available in database capacity. Therefore, the tenant **isn't in deficit**.

Note that file storage excess entitlement can't be used to compensate deficits in log or database storage.

Storage Consumption Warning Threshold setting

Sets a threshold value for the tenant storage capacity consumption beyond which results in a warning.

Power Platform admin center

Environments

Analytics

Dataverse

Power Automate

Power Apps

Data export

Billing (Preview)

Licenses (Preview)

Settings

Resources

Capacity

Dynamics 365 apps

Power Apps assets

Power Pages sites

Help + support

Tenant settings

These settings are applicable across your organization. [Learn more](#)

Name	Description
Copilot (preview)	Allow canvas editors and admins to get AI-powered answers
Weekly digest	Manage additional recipients for the weekly digest email for
Developer environment assignments	Control who can create and manage developer environments
Production environment assignments	Control who can create and manage production and sandbo
Trial environment assignments	Control who can create and manage trial environments.
Add-on capacity assignments	Control who can allocate add-on capacity to an environment
Analytics	Enable tenant level analytics.
Customer Lockbox	Control Microsoft operator access to customer content.
Storage Consumption Warning Threshold	Control tenant level storage consumption warning threshold.
Publish bots with boosted conversations	Allow Power Virtual Agents to publish bots linked to a knowl

This setting applies to Managed Environments only.

Storage Consumption Warning Threshold

Sets a threshold value for the tenant storage capacity consumption beyond which results in a warning

Tenant-level Storage Consumption Warning Threshold

85

Save

Cancel

Dataverse for Teams Capacity Limits

- The consumption **won't** count towards the tenant's capacity limits.
- We'll provide a pool of capacity for Dataverse for Teams environments, which will be separate from the tenant's Dataverse capacity pool.
- Each Dataverse for Teams environment provides **2 GB of combined database and file storage**, with a portion of this amount reserved for system use (about 512MB).

Unit	Service limit
Dataverse for Teams environments	5 environments, + 1 additional environment for every 20 eligible Microsoft 365 user licenses. Should more instances be needed, consider deleting unused environments or upgrading environments to Dataverse. Customers with more than 200,000 eligible Microsoft 365 seats should contact their Microsoft representative.
Max Dataverse for Teams environment storage per tenant	10 GB + Dataverse for Teams environments × 2 GB (up to a maximum of 19.5 TB). The 2 GB storage limit can't be extended further. Should more storage be needed, consider upgrading environments to Dataverse.
Max Dataverse for Teams environments API calls	API requests in Microsoft Power Platform consist of various actions that a user makes across various products. For more information about API calls and the per-user limits available, go to Microsoft Power Platform request entitlements .

Dataverse for Teams capacity

Environment Enforcement

- At 80% of the limit, the **Microsoft Teams users** will see in the Microsoft Teams maker experience a message informing them the capacity limit is about to be reached. At this point, customers are encouraged to either reduce storage usage or contact their admin for other options.
- At 100% of the limit, any existing apps, chatbots, and flows will continue to work, and existing apps can be updated. However, new apps, bots, flows, and tables can't be created or installed as a result of having reached the capacity limit.

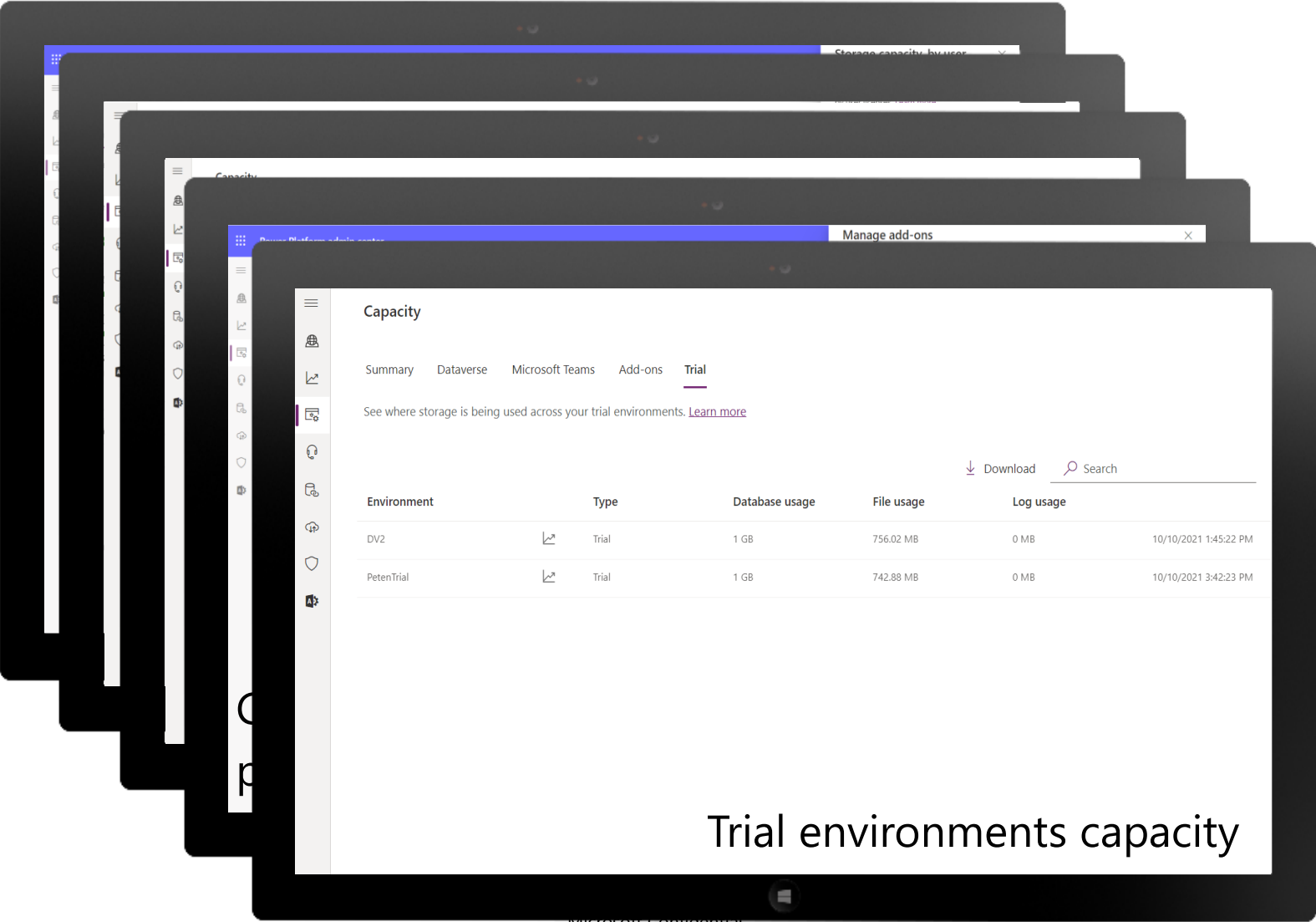
Dataverse for Teams capacity

Tenant Enforcement

- At 80% of the limit, a notification that capacity is reaching its limit will be sent to the **tenant admins** (Global, Dynamics & Power Platform). The admin will be encouraged to consider reducing storage usage or upgrading some of the Dataverse for Teams environments.
- At 100% of the limit, the creation of new Dataverse for Teams environments will be blocked. Any users attempting to create a new Dataverse for Teams environment will be prompted to contact the tenant admin as the result of the capacity limit being reached. Additionally, new apps, chatbots, flows, and tables won't be allowed to be created or installed in any existing Dataverse for Teams environment.

Tenant and environment level capacity reports

More about capacity analytics in Monitoring & Analytics module



Add-on Capacity Management

- If your organization has purchased capacity Add-ons, you **must allocate** that capacity to any environment where you want to use it.
- Organization Add-on capacity summary information is visible in PPAC > Capacity > Summary page.
- You can assign Add-Ons to environments in PPAC > Capacity > Add-ons where you also see environment level assignments.
- You can also control who can allocate add-on capacity to an environment in PPAC > Settings > Add-On capacity Assignments.

Add-on capacity assignments

Who can allocate add-on capacity to environments

- ☐ Any environment admin
- ☒ Only specific admins ⓘ

Add-ons ⓘ

Manage

Download reports

☐ App passes

3 of 3 assigned

☐ Portal page views

0 of 0 assigned

☐ AI Builder credits

1000 of 1125000 assigned

☐ Power Automate Unattended RPA

0 of 0 assigned

☐ Flow per business process

0 of 0 assigned

☐ Portal logins

0 of 0 assigned

☐ App Passes for Microsoft Teams

0 of 0 assigned

Capacity			
Summary	Dataverse	Microsoft Teams	Add-ons
See where your org is using add-ons and assign them to environments. Learn more			
Environment	App passes	Flow per business pro...	Portal
Personal Productivity	3	0	0

Manage add-ons

Assign add-ons to environments so that people can do more with virtual agents, and AI models. [Learn more](#)

Environment

Personal Productivity ✕

App passes

Give unlicensed users access to Power Apps apps and flows.

1 2 passes remaining

ⓘ Extra steps are required for App passes to work on model-driven apps.

Flow per business process

Assign capacity so your people can use business process flows.

0 0 flows remaining

Portal page views

Allow anonymous visitors to use your portals. A minimum of 50000

0 0 views remaining

Portal logins

Manage the number of logins allowed on your portals. A minimum of 1000

0 0 logins remaining

AI Builder credits

Assign AI processing credits to your Power Apps apps and flows.

1000 1124000 credits remaining

App Passes for Microsoft Teams

Give unlicensed users access to Power Apps inside of Microsoft Teams.

0 0 passes remaining

Power Automate Unattended RPA

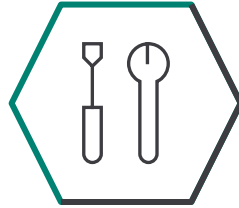
Environment Security

Tenant level service admin roles



Global Admin

Full administration to all services in tenant



Power Platform Admin
Dynamics 365 Admin
Power Platform Admin role



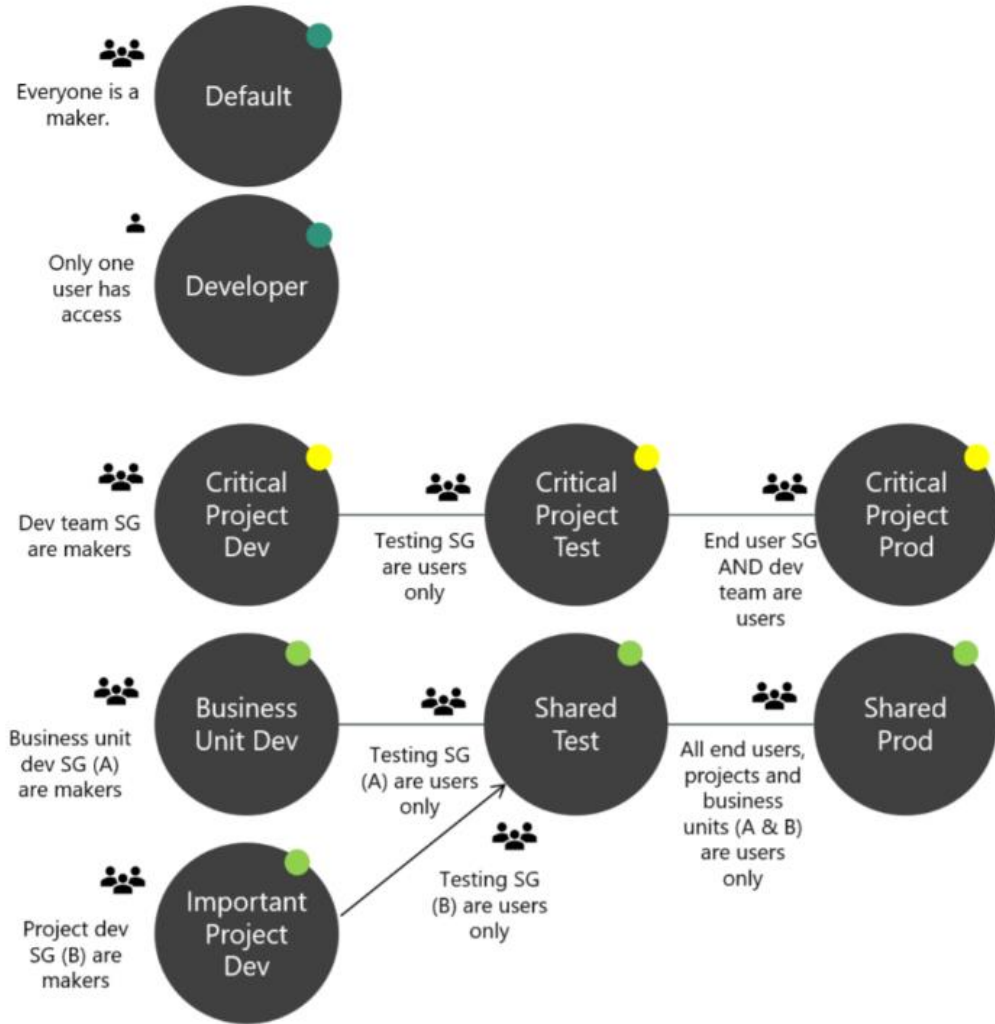
Delegated Admin

Full administration to all services in tenant

Used for partners to provide support to customers

Full support for Power Platform

Strategy for establishing secure environments

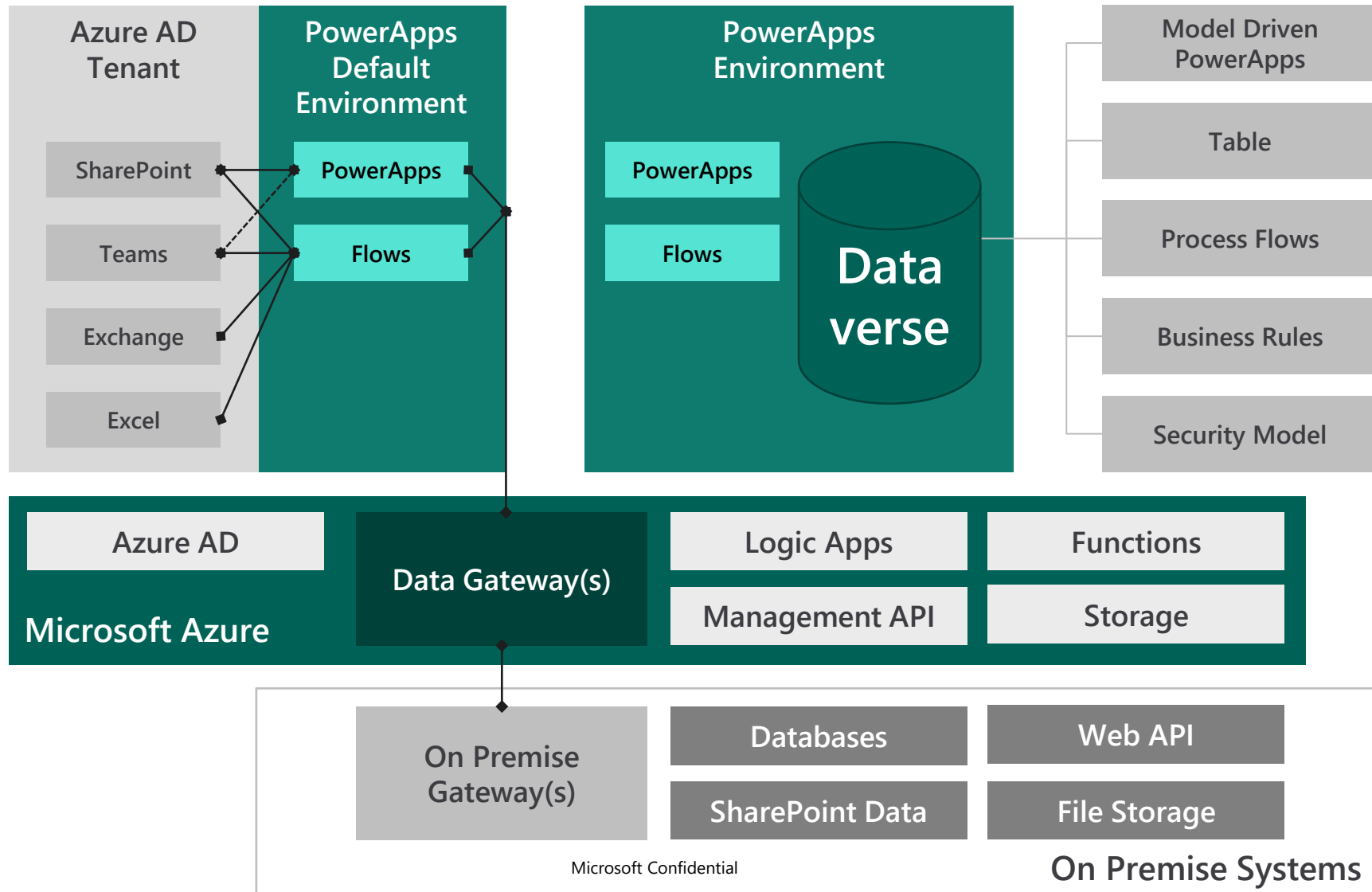


Visual representation of an environment strategy at work.

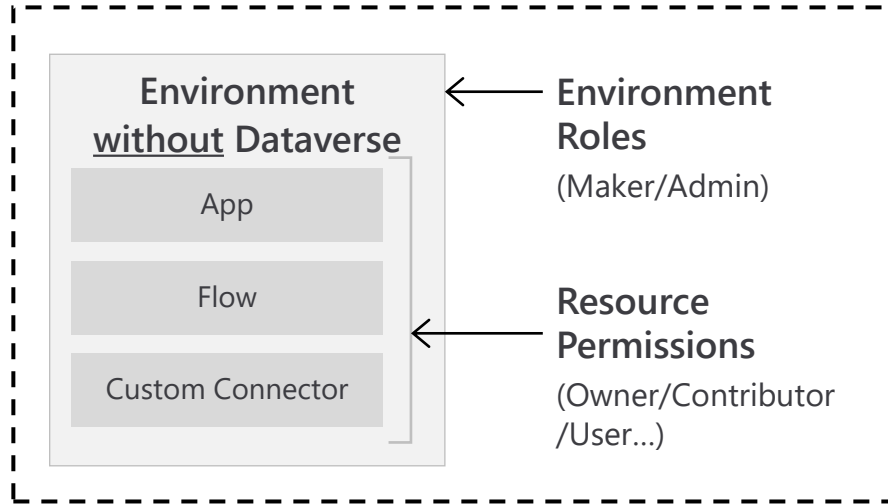
Security checklist (learn more [here](#)):

- ✓ Assign your admins the Power Platform service admin role.
- ✓ Restrict the creation of net-new trial and production environments to admins.
- ✓ Treat the default environment as a 'Personal productivity' environment.
- ✓ Establish a process for requesting access to or creation of environments.
 - Dev/Test/Production environments for specific business groups/applications.
 - Individual-use environments for POCs and trainings.
- ✓ Establish Tenant and Environment level Data Loss Prevention (DLP) policies (discussed in more detail in DLP module)

Looking inside environments



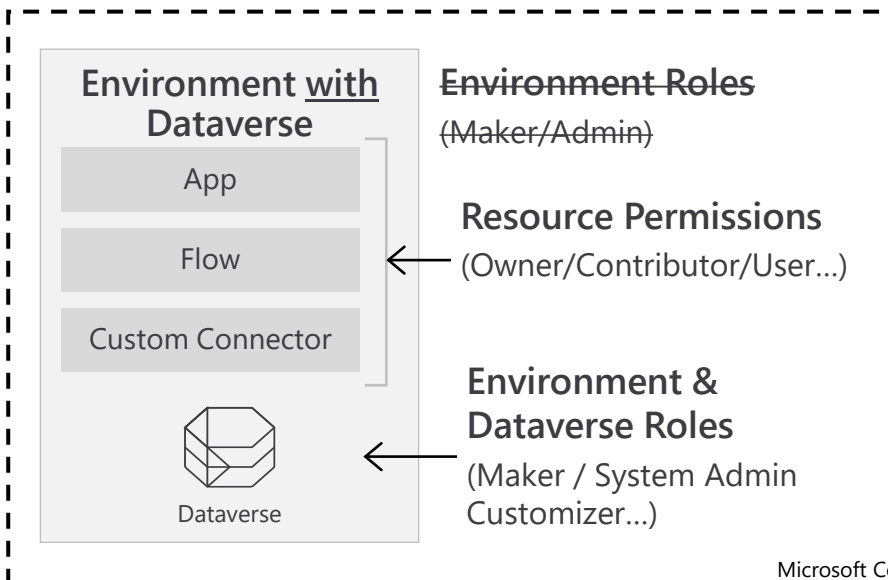
Environment security and access control



Environment Admin can perform all administrative actions like

- View/manage resources
- Add/remove a user or group from roles
- Create DLP policies
- Provision Dataverse database to envs

Environment Maker can create resources within an environment and distribute apps and flows they build using share functionality.



Once a Dataverse database has been created, the Dataverse security roles take over for controlling security.

Access to resources are controlled using

- Dataverse security roles
- Resource permissions for apps/flows/custom connectors/etc.

Learn more about Dataverse security roles from [here](#)

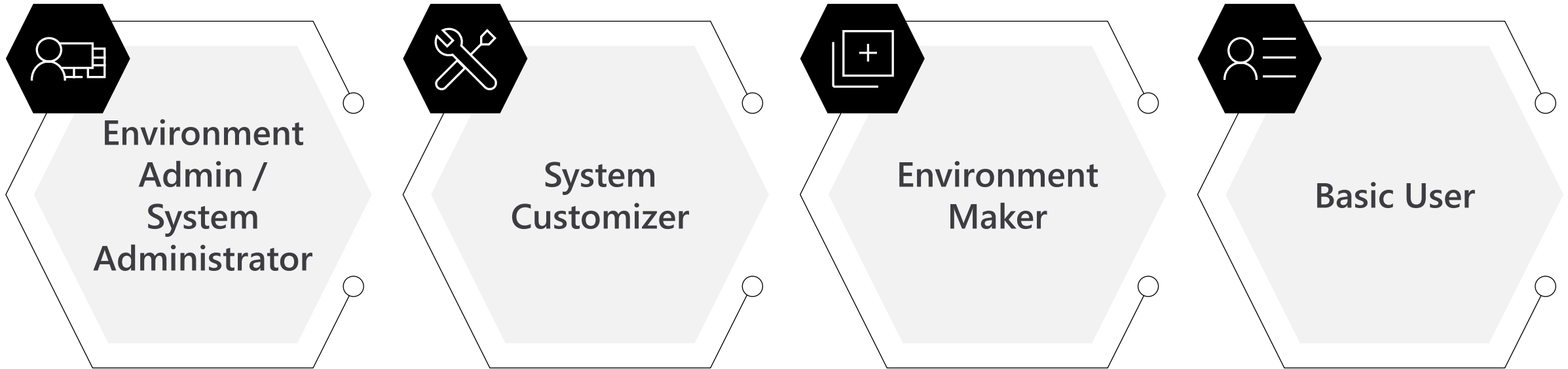
Security roles
[See all](#)

Teams
[See all](#)

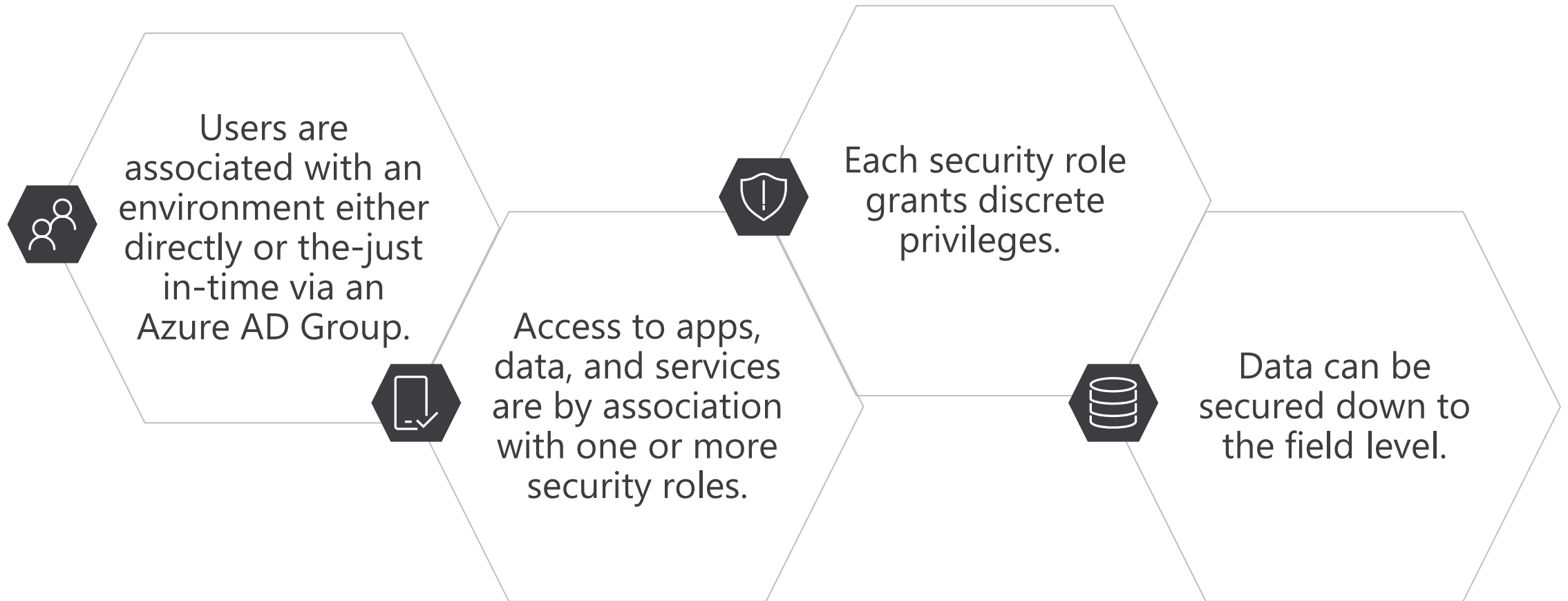
Users
[See all](#)

S2S Apps
[See all](#)

Key out-of-the-box security roles you need to know

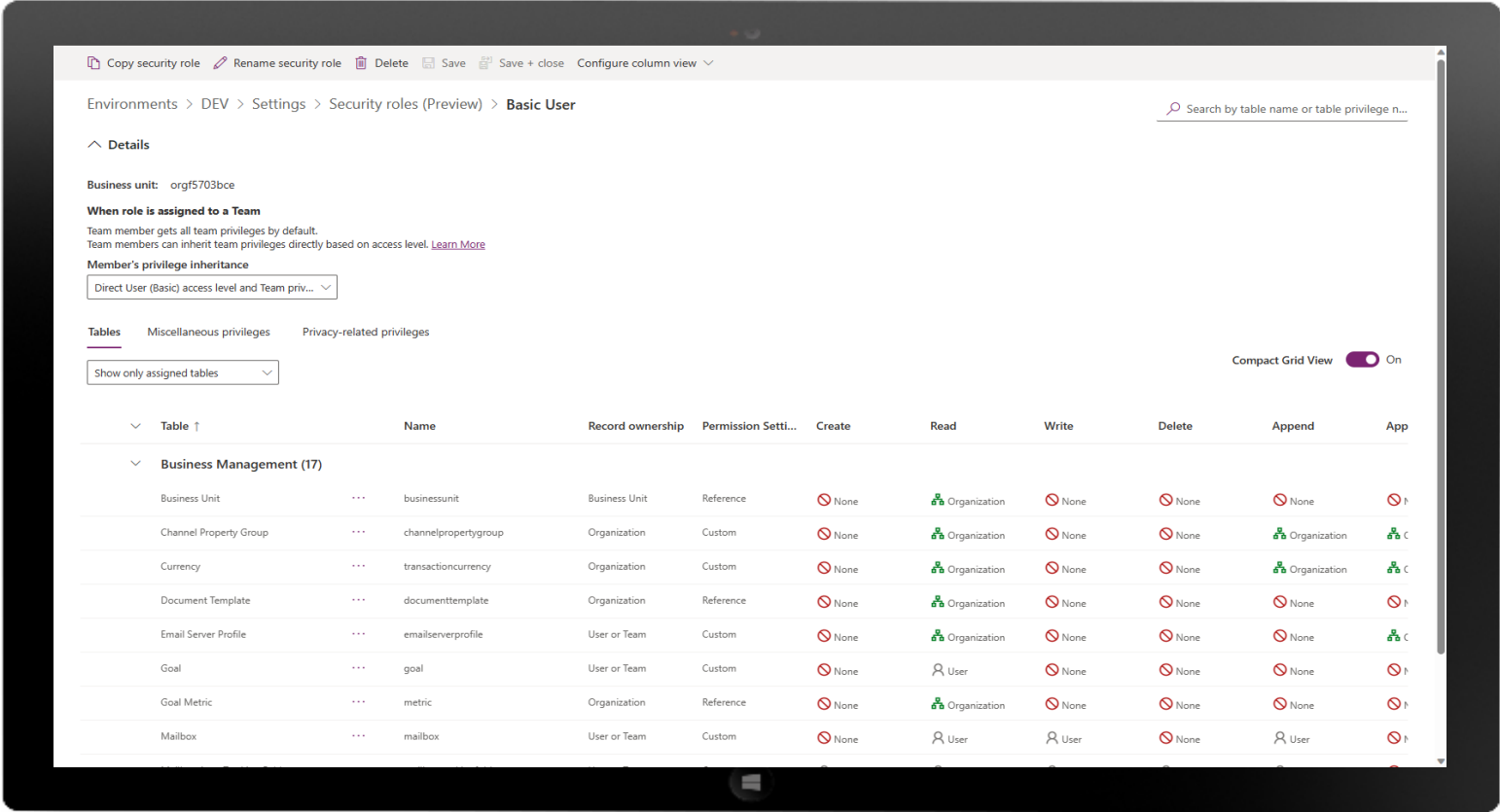


Security with Dataverse in an environment



Customizing Security Roles

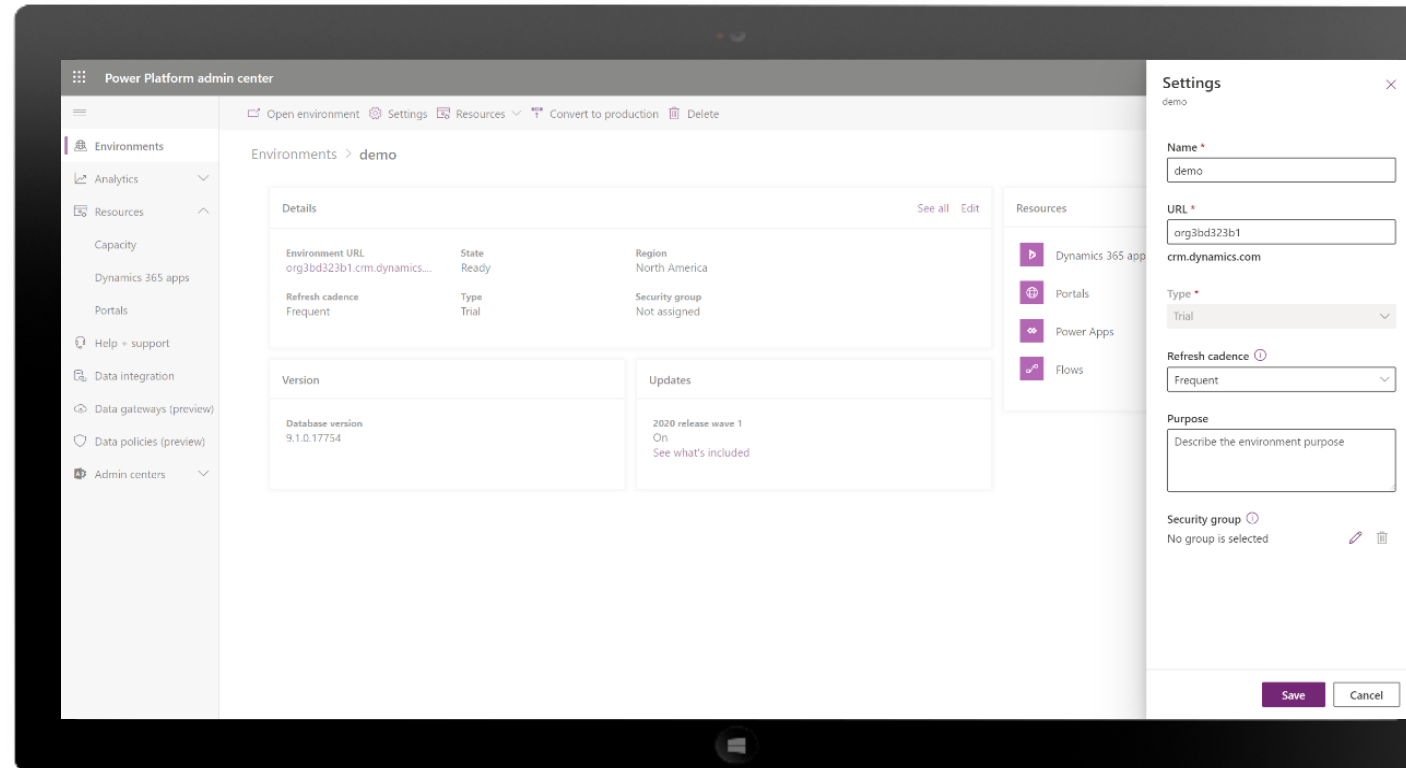
If your app uses a custom table, its privileges must be explicitly granted in a security role before your app can be used. You can either add these privileges in an existing security role or create a custom security role.



Controlling User Access to Dataverse environments

If your company has multiple Dataverse environments, you can use Azure AD security and Microsoft 365 groups to control which licensed users can be a member of an environment.

- If you do not specify a security group, all users who have a Dataverse license, will be added to the environment (but no security roles will be added).
- When a security group is associated with an existing environment with users, all users in the environment that are not members of the group will be disabled.



Dataverse for Teams environment user access

- Every team in Teams is linked 1:1 to a Microsoft 365 group.
- Two user membership types: **owners** and **members**.
- Members can be users from the customer's own tenant or from a guest tenant.
- Any user management (addition, removal, user type change) made in a team will be reflected in the Microsoft 365 group and vice versa.
- Access to a Dataverse for Teams environment and its resources (apps, data) will be restricted to users in the Team. However, it is now possible to share an app in Dataverse for Teams with users outside of the team – Click [here](#) for more info.
- The Microsoft 365 Group linked to a team will be automatically associated with the Dataverse for Teams environment, restricting access to users of that Microsoft 365 group.
- This Microsoft 365 Groups association with the Dataverse for Teams environment won't be editable until the environment is promoted to Dataverse.

Dataverse for Teams role assignments

Persona	Security role auto-assigned	Description
Teams owner	System Administrator	<ul style="list-style-type: none">• Manage Team's membership and settings• Full access to the environment's apps, resources, and data.• Perform environment maintenance tasks in PPAC
Teams member	Teams Member	<ul style="list-style-type: none">• View env's resources, run all apps and resources, and create or update their own resources. <u>Full data access</u>
Teams guest	Teams Guest	<ul style="list-style-type: none">• Can view and run all resources in the team• By default, guests have full access to records <u>they create</u> and don't have access to other users' records.
GA / PP Admins	System Administrator	<ul style="list-style-type: none">• Can perform environment maintenance tasks such as backup and restore in all DVfT environments• They need not be owners or members of the team, but through their tenant-level admin privileges they System Administrator privileges with R/W access mode to Dataverse for Teams environments.
Dynamics 365 admin	System Administrator*	<ul style="list-style-type: none">• These admins need to be owners or members of the team to have System Administrator-level privileges to manage the health and maintenance of the environment.
Colleagues with access	Basic User	<ul style="list-style-type: none">• Users of the same tenant who aren't in the team but have been invited to run apps in the team• By default, no access to data but can be granted based on the app or resources that they need to run (will automatically remove M365 Group association from Dataverse for Teams environment)

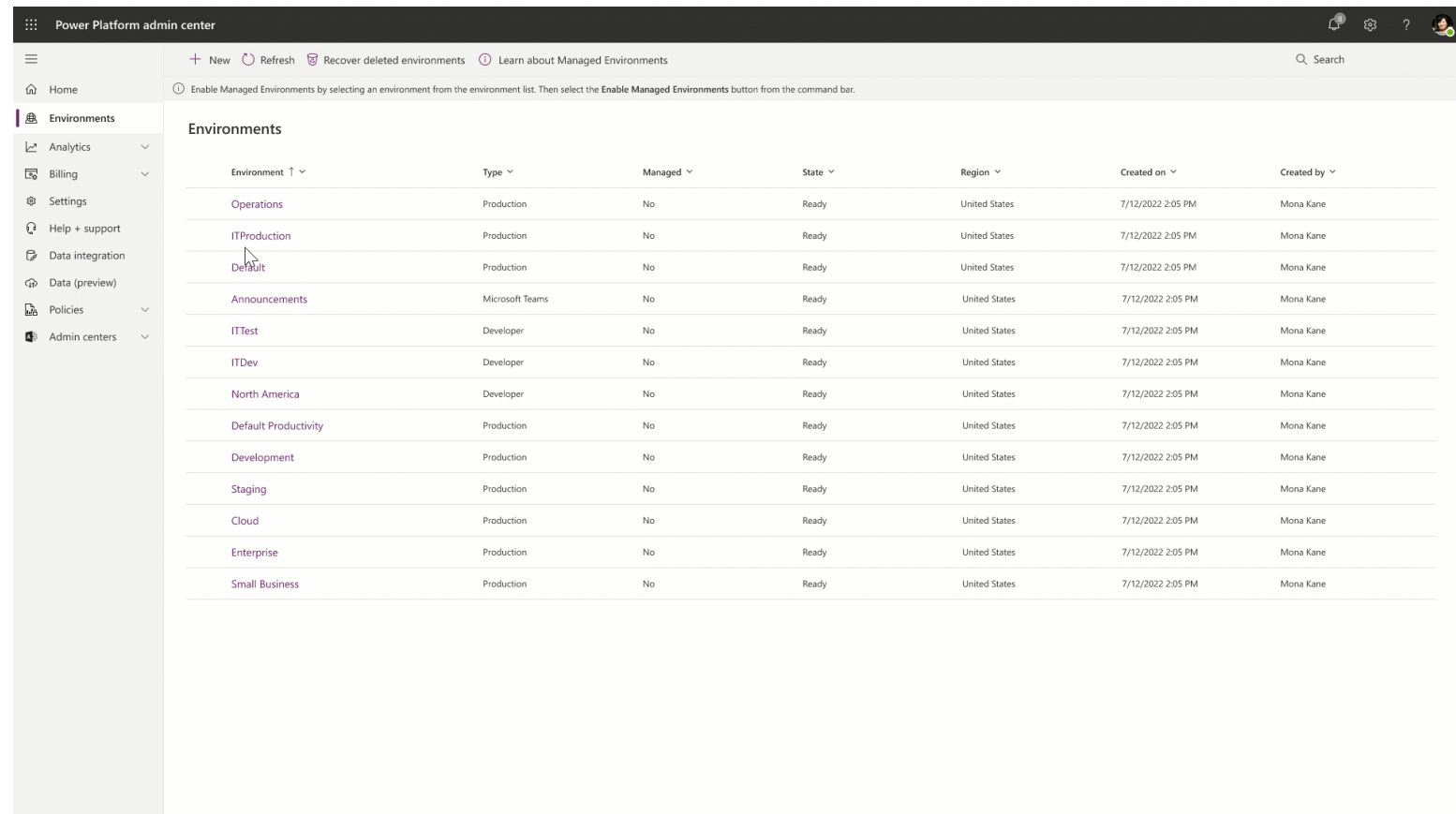
* System Administrator if owner in the team; System Administrator and Teams Member if they are a member in the team.
No access if they aren't an owner or member in the team.

Managing Environments

Managed Environments

[Managed Environments](#) offer a set of enhanced out-of-the-box governance capabilities that simplify, automate, and streamline IT administration of Microsoft Power Platform at scale.

- Primary elements of Managed Environments:
 - [Limit sharing](#)
 - [Weekly digests](#)
 - [Data policies](#)
 - [Set up Power Platform pipelines](#)
- Requires apps/flows/users to have a standalone premium license.



The screenshot displays the 'Power Platform admin center' interface. On the left is a navigation pane with options: Home, Environments, Analytics, Billing, Settings, Help + support, Data integration, Data (preview), Policies, and Admin centers. The main area is titled 'Environments' and contains a table with columns: Environment, Type, Managed, State, Region, Created on, and Created by. A message at the top of the main area reads: 'Enable Managed Environments by selecting an environment from the environment list. Then select the Enable Managed Environments button from the command bar.' The table lists various environments, including Operations, ITProduction, Default, Announcements, ITTest, ITDev, North America, Default Productivity, Development, Staging, Cloud, Enterprise, and Small Business.

Environment	Type	Managed	State	Region	Created on	Created by
Operations	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
ITProduction	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Default	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Announcements	Microsoft Teams	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
ITTest	Developer	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
ITDev	Developer	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
North America	Developer	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Default Productivity	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Development	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Staging	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Cloud	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Enterprise	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane
Small Business	Production	No	Ready	United States	7/12/2022 2:05 PM	Mona Kane



Tenant Settings


Control who can create environments and manage other settings

In Power Platform Admin Center, Click **Settings** in the left menu. You can also click the gear icon on the top right corner and click **Power Platform Settings**.

Tenant settings


These settings are applicable across your organization. [Learn more](#)

Name	Description
Copilot (preview)	Allow canvas editors and admins to get AI-powered answers to how-to questions. Currently in preview.
Weekly digest 	Manage additional recipients for the weekly digest email for Managed Environments.
Developer environment assignments	Control who can create and manage developer environments.
Production environment assignments	Control who can create and manage production and sandbox environments.
Trial environment assignments	Control who can create and manage trial environments.
Add-on capacity assignments	Control who can allocate add-on capacity to an environment.
Analytics	Enable tenant level analytics.
Customer Lockbox 	Control Microsoft operator access to customer content.
Storage Consumption Warning Threshold	Control tenant level storage consumption warning threshold.
Publish bots with boosted conversations	Allow Power Virtual Agents to publish bots linked to a knowledge source chosen by canvas editors. This feature is in...

 = This setting applies to Managed Environments only.


Production environment assignments

Who can create and manage production environments

- ☐ Everyone
- ☒ Only specific admins 

Trial environment assignments

Who can create and manage trial environments

- ☐ Everyone
- ☒ Only specific admins 


Developer environment assignments



Developer environments overview

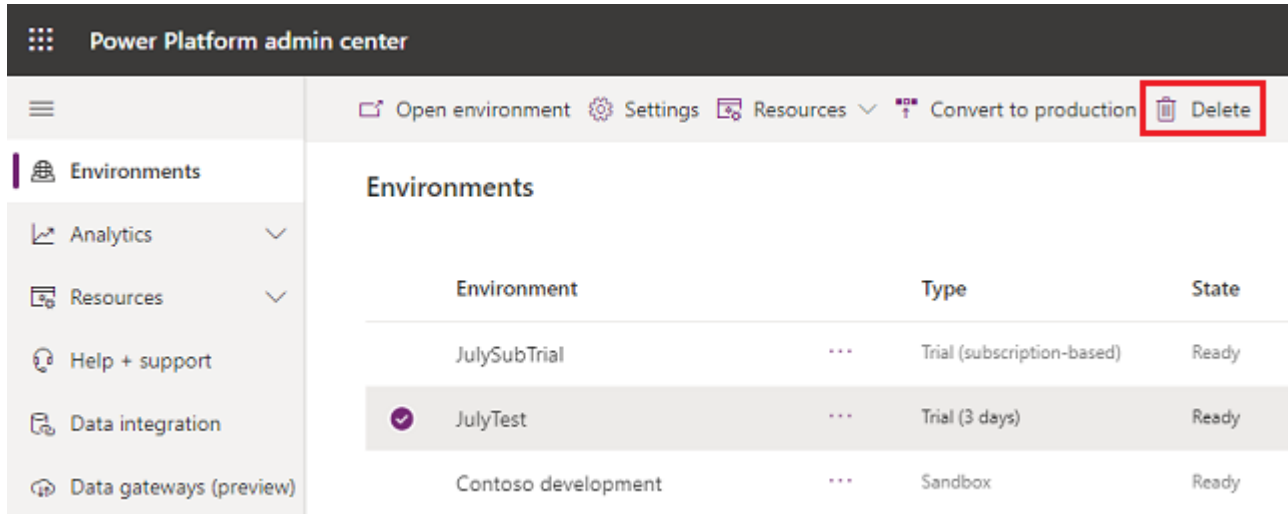
Developer environments are a place to build and test with Power Apps, Power Automate, and Microsoft Dataverse. They can be created by users who have the Power Apps Developer Plan. [Learn more](#)

Who can create and manage developer environments

- ☐ Everyone
- ☒ Only specific admins 

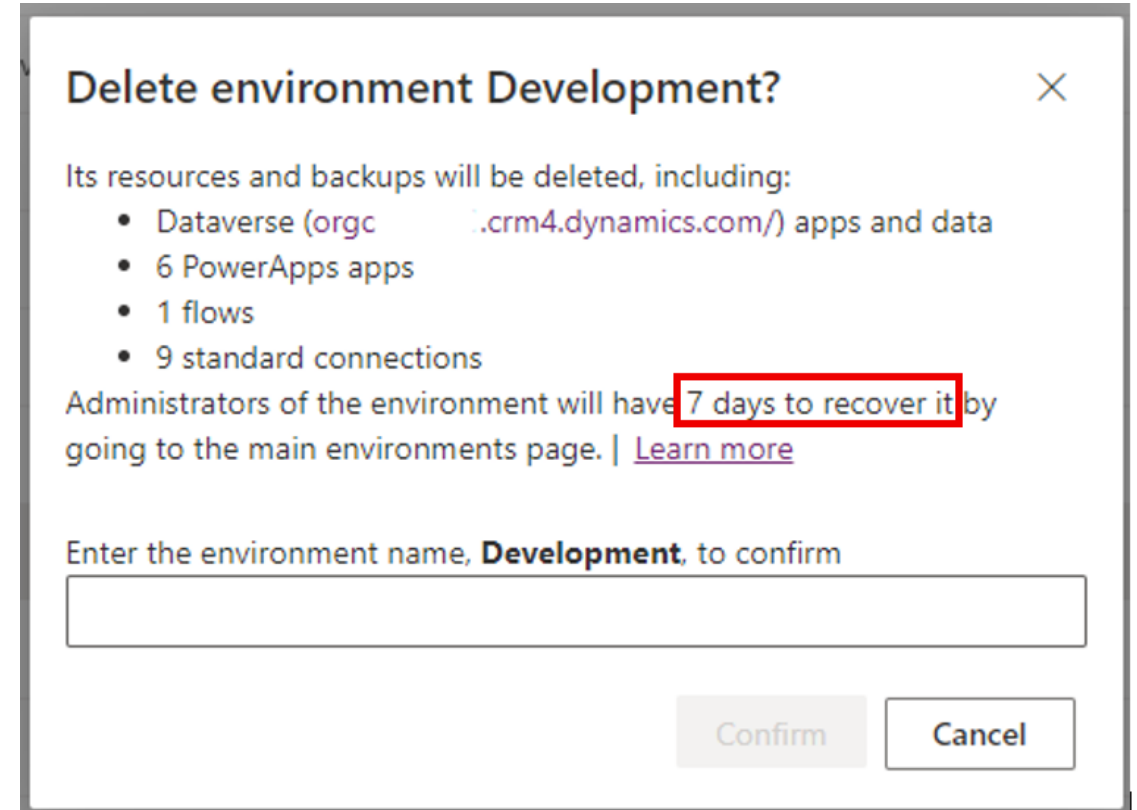
Delete Environment

- You can [delete](#) an environment to recover storage space and to remove Personally Identifiable Information (PII)
- In Power Platform Admin Center open environments list, select an environment and click Delete.
- NOTE: You **can't** delete the default environment.



The screenshot shows the Power Platform Admin Center interface. The top navigation bar includes links for 'Open environment', 'Settings', 'Resources', 'Convert to production', and 'Delete'. The 'Delete' button is highlighted with a red box. The left sidebar shows the 'Environments' section selected. The main content area displays a table of environments.

Environment	Type	State
JulySubTrial	Trial (subscription-based)	Ready
JulyTest	Trial (3 days)	Ready
Contoso development	Sandbox	Ready



The screenshot shows a confirmation dialog box titled 'Delete environment Development?'. It lists the resources and backups that will be deleted, including Dataverse apps and data, PowerApps apps, flows, and standard connections. It also states that administrators will have 7 days to recover the environment by going to the main environments page. The dialog includes a text input field for the environment name, a 'Confirm' button, and a 'Cancel' button.

Delete environment Development?

Its resources and backups will be deleted, including:

- Dataverse (orgc .crm4.dynamics.com/) apps and data
- 6 PowerApps apps
- 1 flows
- 9 standard connections

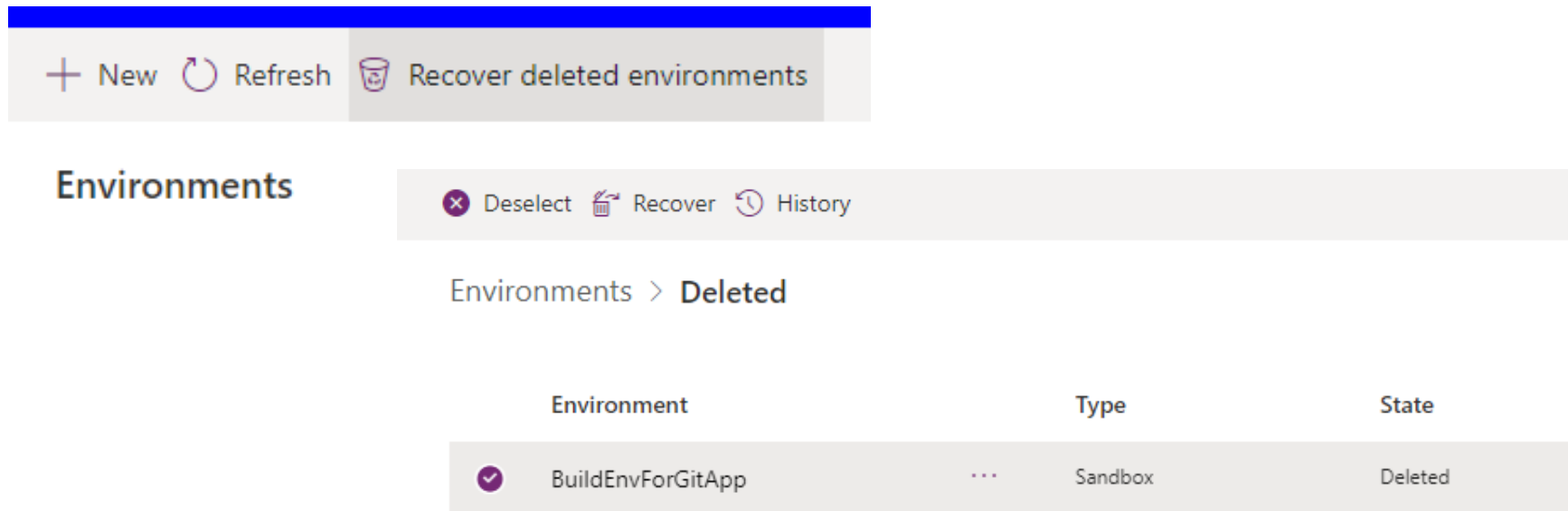
Administrators of the environment will have **7 days to recover it** by going to the main environments page. | [Learn more](#)

Enter the environment name, **Development**, to confirm

Confirm Cancel

Recover Environment

- You can recover a deleted environment within 7 days of deletion in PPAC or using PowerShell [Recover-AdminPowerAppEnvironment](#).
- Available storage capacity might be required in order to successfully recover an environment depending on the type of environment being recovered.



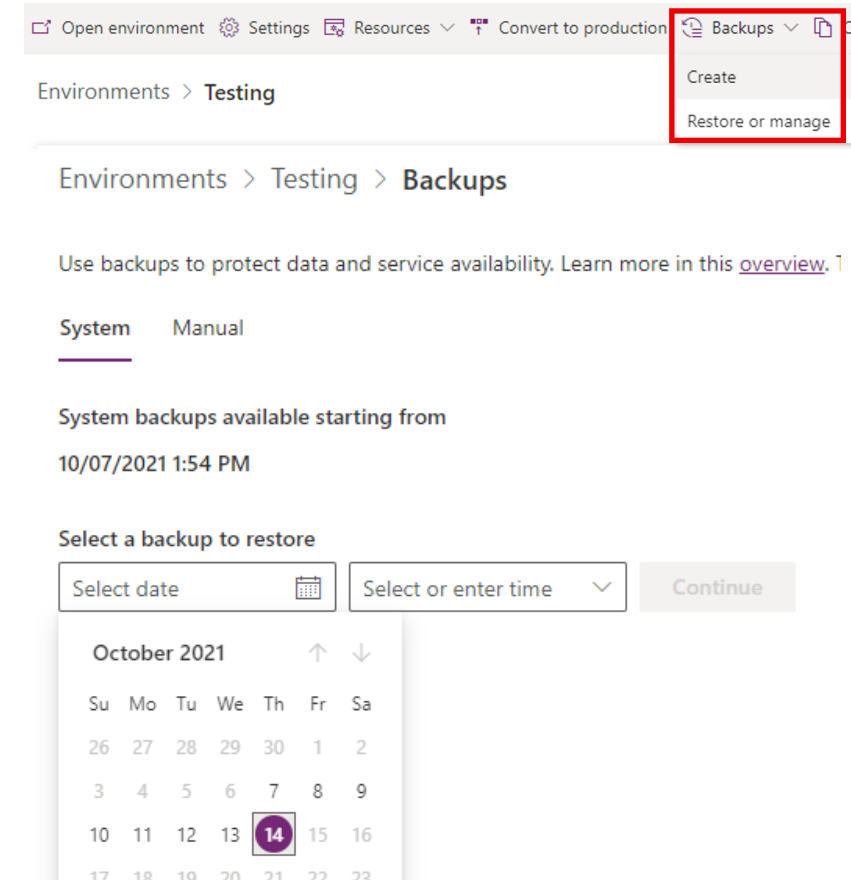
Backup and Restore Environments

System backups:

- All your environments except Trial environments are backed up
- System backups occur continuously
- The underlying technology used is Azure SQL Database
- Production backups with database are retained 7 days or if at least one D365 application installed then 28 days
- Sandbox backups are retained for 7 days
- You must restore an environment to the same region in which it was backed up.
- When an environment is restored onto itself, audit logs are **not** deleted.

Manual backups:

- You can manually backup Production and Sandbox environments.
- You can't back up the default environment.
- Production backups are retained 7 days or if at least one D365 application installed then 28 days.
- Sandbox backups are retained for 7 days.



Dataverse for Teams environment lifecycle

- Environment name is the same as the Team name.
- Lifetime of the environment will be tied to the Team it was created in.
- If you promote an environment to Dataverse (full version), the 1:1 mapping isn't guaranteed because the environment can now be used by applications outside of Teams.
 - The promoted environment is bound by the lifecycle rules associated with the Power Apps license and the configuration of the environment.
- Power Platform provides a cleanup mechanism that automatically removes [Dataverse for Teams environments](#) from your tenant that are left inactive. An environment will first be disabled after 90 days of inactivity. If no action is taken by administrators and the environment is left disabled for 30 days, it will then be deleted. Administrators have 7 days to recover deleted environments – [More info](#).

Operations	Feature description
Backup	Automated backups and labeled backups can be taken. Admins can view them in the Power Platform admin center. Backups will be available for up to 7 days.
Restore	Only point-in-time restores to the same environment will be possible. Note: if the environment has been upgraded, the point-in-time restore will only be available starting from the moment it was upgraded.
Copy	Not available by default for Dataverse for Teams environments.
Create	Only through Microsoft Teams. Note: these Dataverse for Teams environments will be limited to a 1:1 mapping to the Microsoft Teams team it was created in and bound to the Microsoft 365 group associated with the team.
Delete	The environment can be deleted by the team owner. Note: the environment will be deleted automatically if the team it was created in is also deleted.
Reset	Not available by default for Dataverse for Teams environments.
Upgrade	Unlocks all the functionality of Dataverse services for the environment.

Environment Administration Mode

- Environment can be set to **Administration mode** which allows only users in System Administrators and System Customizers roles to login to environment.
- Supported in Sandbox, Production, and Trial (subscription-based) environments
- This is useful when you want to make operational changes and not have regular users affect your work and have your work affect end users (non-admins).
- Possible to also disable all asynchronous **Background operations**, such as workflows and Exchange sync

Edit details

Production

URL *

crm4.dynamics.com

Type ⓘ

Production ▼

Refresh cadence ⓘ

Frequent ▼

Purpose

Describe the environment purpose

Security group ⓘ

No group is selected



Administration mode

☒ Enabled

Background operations

☒ Enabled

Custom message

Write a custom message displayed to end users

Move Environment

You can use the Tenant-to-Tenant Migration feature to request to have an environment in one tenant moved to another tenant. To do so [submit a support request](#).

- Possibility to move one or multiple environments
- You will need to create a temporary environment or environments in the destination tenant, depending on how many source environments you are migrating.
- Source environment type and destination environment type must match.

After moving environments to another tenant:

- The environment ID in the target tenant cannot be set to the same environment ID as in the source tenant. This is not supported.
- The org URL, org ID, and the name do not change.
- Security group mapping is handled as part of the manual tenant to tenant migration process. At the very least, a replacement (or removal) will be needed because the security group won't exist with the same ID in the new Azure AD tenant.

Questions?

Lab Setup

Lab Description

NOTE! Labs are included only in 3-day version of the workshop

Follow the steps below to setup workshop lab environment:

1. Every workshop attendee will be having a dedicated demo tenant along with virtual machines environment to perform upcoming labs.
2. Use Edge Chromium or Chrome web browser to navigate to <http://aka.ms/lod>
3. Click on Sign in then select **Microsoft Account**
4. Sign-in using Microsoft personal account (other email service account can also work) – don't use business email.
5. Select **WorkshopPlus** menu item then click on My Training
6. Click on **Redeem training key** (course instructor will share the key)
7. In loaded page, scroll to **Lab** section then select **Workshop labs title link** to launch it.
8. In virtual labs environment select **Resources** tab and the open **ContosoGateway** server.
9. In **Resources** tab, you can find also the **Office 365 Credentials** you need to sign into your own lab tenant.

LABS – Provision environments

Lab Description
Lab 1 - Provisioning Power Platform environment
Lab 2 - Provisioning Dataverse for Teams environment

