



# Navigating Data Governance in Microsoft Fabric & Purview

Wolfgang Strasser



# Servus! Hi! Welcome!



Wolfgang Strasser

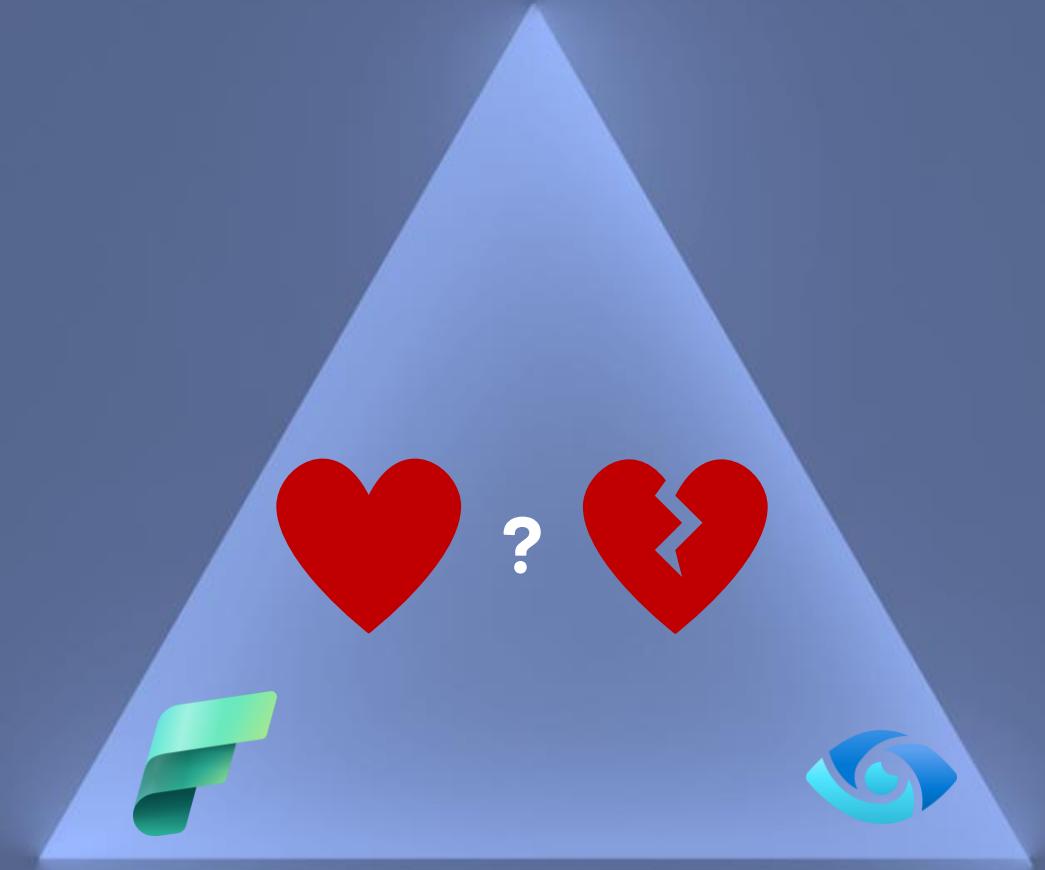
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[workingondata.wordpress.com](http://workingondata.wordpress.com)

<https://www.youtube.com/@WolfgangStrasser>



# Data Governance

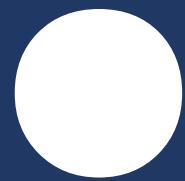


**Microsoft  
Fabric**

**Microsoft  
Purview**

# The book of Data Governance, Microsoft Purview & Microsoft Fabric



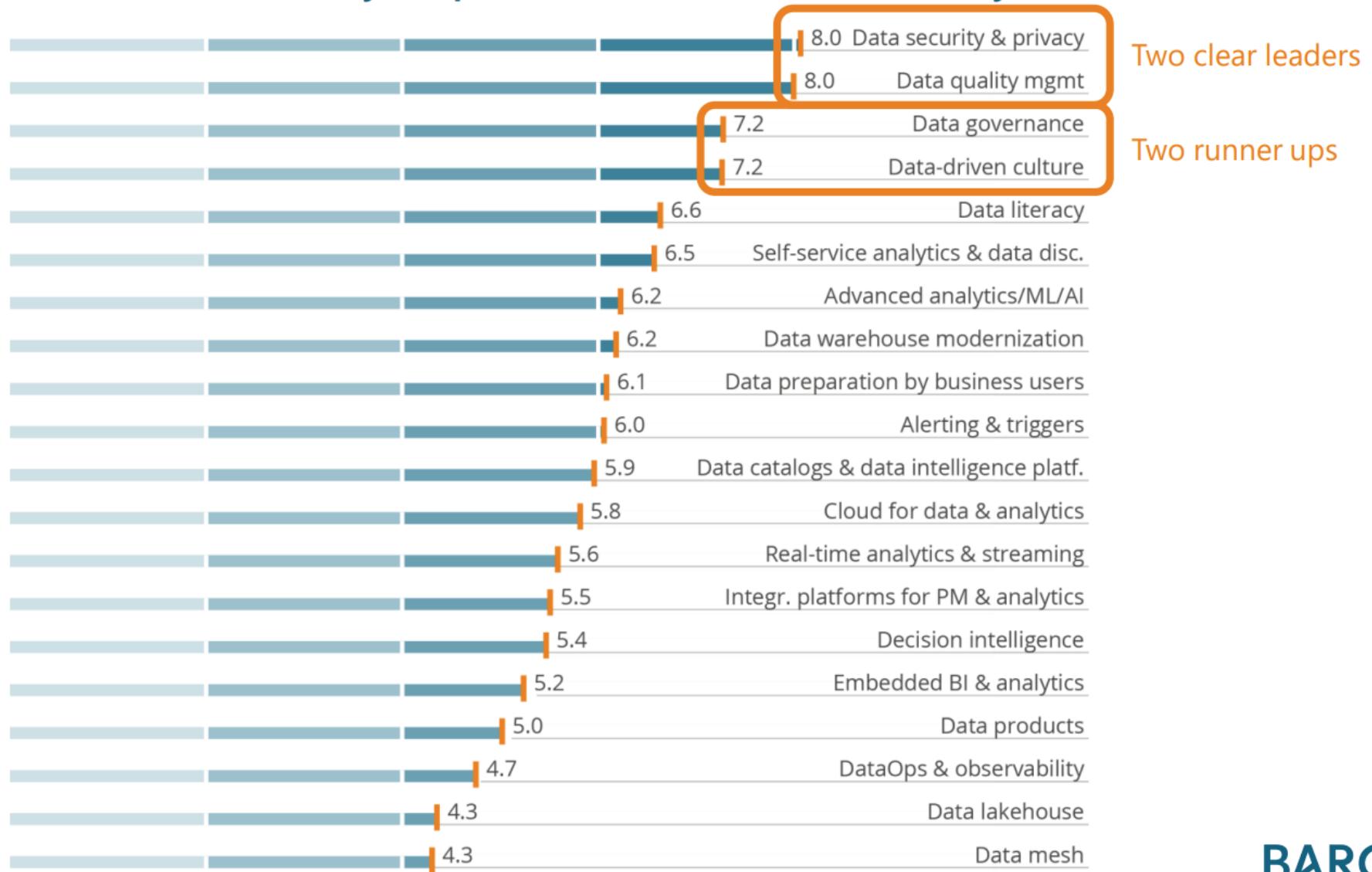


#DataGovernance

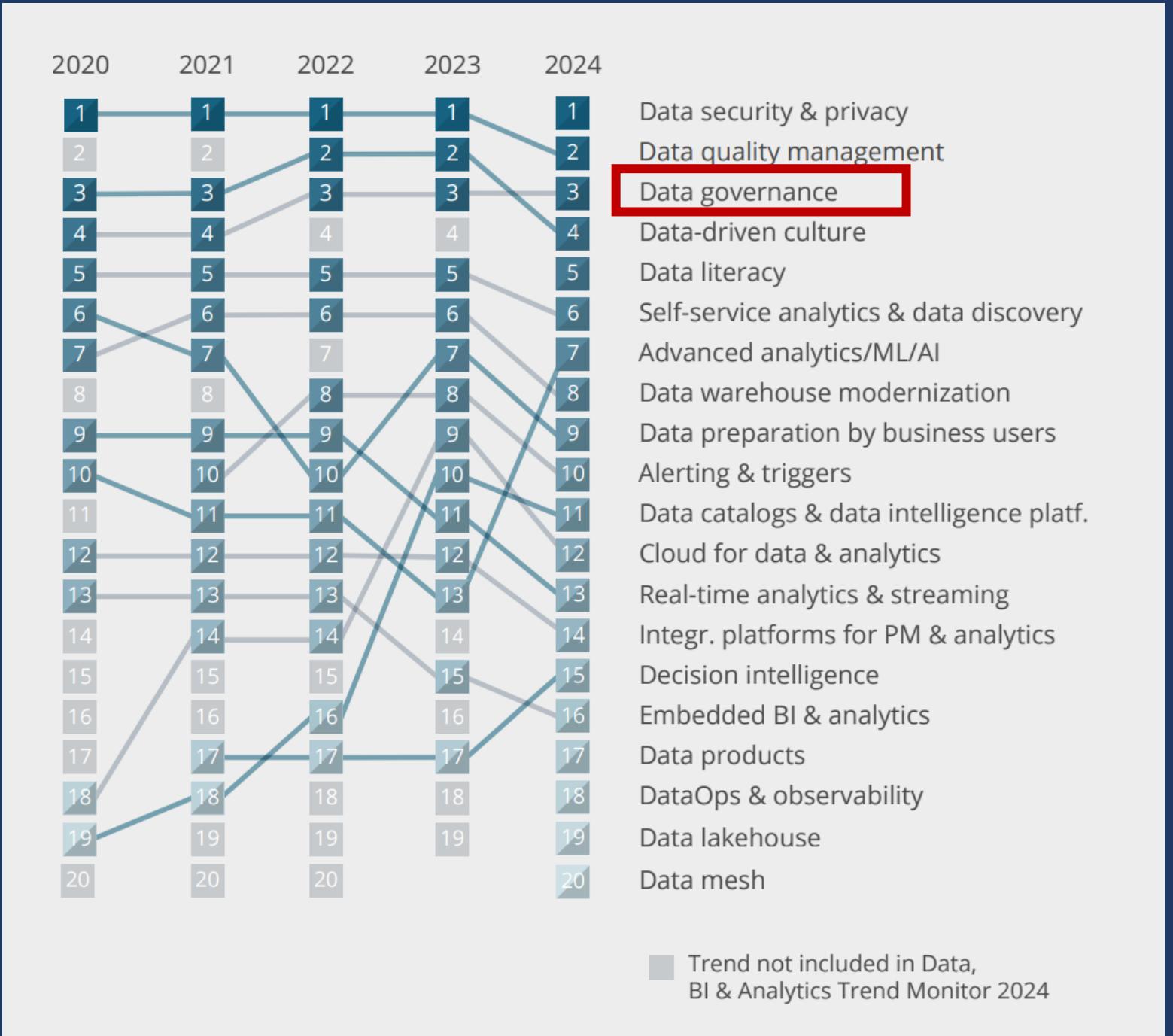
# Why Data Governance?



## 2,398 BI practitioners have their say: Importance of Data, BI and Analytics Trends



Source: BARC Data, BI & Analytics  
Trend Monitor 2024, n=2,398



# What is Data Governance?

what is data governance

All

Images

Videos

News

Books

More

About 273.000.000 results (0,66 seconds)

what is data governance

ALL

WORK

IMAGES

VIDEOS

MAPS

NEWS

15 100 000 Results

Date ▾

Open links in new tab



# Governance / To Govern

 **govern**

/'gʌv(ə)n/

See definitions in:

All Law Grammar

*verb*

verb: **govern**; 3rd person present: **governs**; past tense: **governed**; past participle: **governed**; gerund or present participle: **governing**

1. conduct the policy, actions, and affairs of (a state, organization, or people) with authority.  
"he was incapable of governing the country"  
Similar: rule preside over be in power over reign over control
- control, influence, or regulate (a person, action, or course of events).  
"the future of Jamaica will be governed by geography not history"  
Similar: determine decide control regulate direct rule dictate
- conduct oneself, especially with regard to controlling one's emotions.  
"he does not have the ability to govern himself or others successfully"  
Similar: control restrain keep in check check curb hold back
- serve to decide (a legal case).

2. **GRAMMAR**  
(of a word) require that (another word or group of words) be in a particular case.  
"the Latin preposition 'cum' governs nouns in the ablative"

*guide, steer, manage*



# What is Data Governance?



# Definition Attempt #1

Data governance (DG) is the **process of managing the availability, usability, integrity and security of the data in enterprise systems, based on internal data standards and policies** that also control data usage.

Effective data governance ensures that **data is consistent and trustworthy and doesn't get misused**. It's increasingly critical as organizations face new data privacy regulations and rely more and more on data analytics to help optimize operations and drive business decision-making.

# Definition Attempt #2

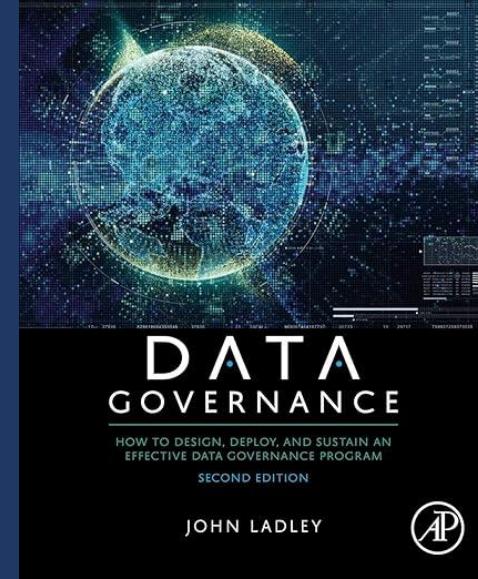
Data governance is a **collection of processes, roles, policies, standards, and metrics** that ensure the effective and efficient use of information in enabling an organization to achieve its goals.

It establishes the processes and responsibilities that ensure the quality and security of the data used across a business or organization. Data governance defines who can take what action, upon what data, in what situations, using what methods.

# Definition (Ladley 2019)

Data governance is a required business capability if you

**want to get value from your data**



# Definition Attempt #xx

# #TreatYourDataBetter

Wolfgang Strasser



**How can I help you today?**

# Data Governance

## Vision and Strategy



Roles



Processes



Policies



Tools



Data Lifecycle



#MicrosoftFabric



# Microsoft Fabric



Data  
Factory



Synapse Data  
Engineering



Synapse Data  
Science



Synapse Data  
Warehousing



Synapse Real  
Time Analytics



Power BI



Data  
Activator



AI



OneLake



Purview

Unified  
architecture

Unified  
experience

Unified  
governance

Unified  
business model

# Sounds nice! Right?

One Place

One Tool

One Security



Data Governance



# Governance in Fabric

# Governance in Fabric can mean many things..

Workspace creation

Publish to web

Exporting data

Gateway creation / configuration

Integration settings like ArcGIS

Access and collaboration with externals

... basically all tenant settings

# Administrative Governance (Tenant Settings)

Learn / Fabric REST APIs / Tenants /

## Tenants - Get Tenant Settings

Reference

Service: Fabric REST APIs  
API Version: v1  
Returns a list of the tenant settings.

### Permissions

The user must have administrator rights (such as Office 365 Global Administrator or Fabric Service Administrator).

### Required Scope

Tenant.Read.All or Tenant.ReadWrite.All

### Limitations

Maximum 200 requests per hour.

HTTP

```
GET https://api.fabric.microsoft.com/v1/admin/tenantsettings
```

## Extract and query the tenant settings

2023-06-20 / Azure, Fabric, Power BI

A long wish have come true. It's now possible to query the Admin APIs and get a list of all the tenant settings. This is very valuable to be able to document the settings and also follow the changes of them.

The GetTenantSettings Read API [was released](#) the same day as Microsoft Fabric was announced, which therefore perhaps drowned in all the other amazing news? However, it is not accidental as the API is part of Fabric, now that the Admin portal is part of Fabric. This is just a technical change – the API can still be used to get all the tenant settings for Power BI – whether or not your using Fabric.

This is the first Fabric Admin API and you can get more information here:  
<https://learn.microsoft.com/en-us/rest/api/fabric/admin/tenants/get-tenant-settings>

As always, I have created a [Data Factory template](#) and also a [Synapse Serverless SQL view](#) to unfold the JSON output. It's a base view with an outer apply on both properties, enabledSecurityGroups and excludedSecurityGroups. This way you will get multiple rows for each settings, but can then get all the information in one query.

Name \*  
PowerBI\_API

Description

Connect via integration runtime \*  
AutoResolveIntegrationRuntime

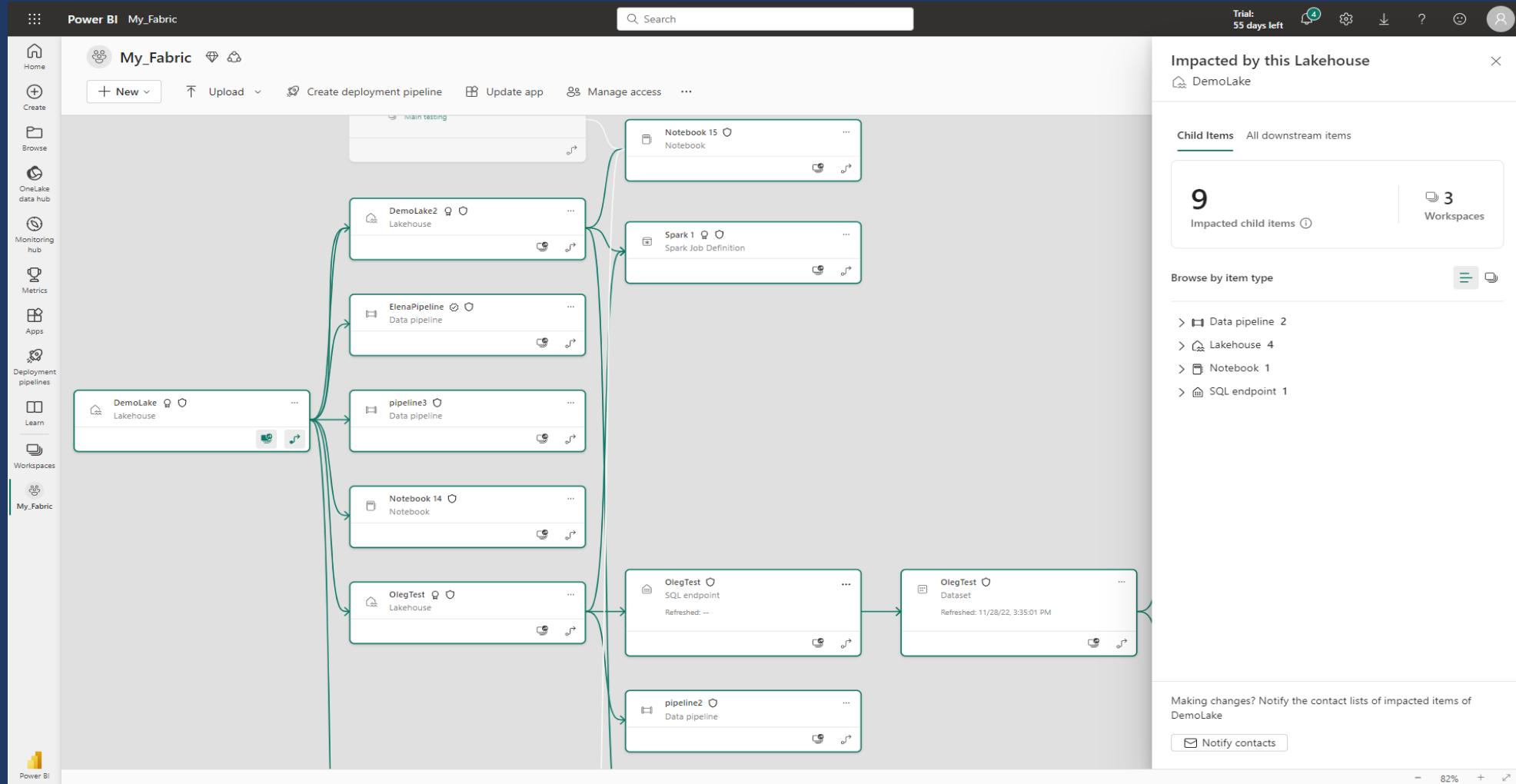
Base URL \*  
@{linkedService().BaseUrl}

Information will be sent to the URL specified. Please ensure you trust the URL entered.

<https://justb.dk/blog/2023/06/extract-and-query-the-tenant-settings/>

<https://github.com/justBlindbaek/PowerBIMonitor>

# Data Lineage



# Endorsement

Promoted

Certified

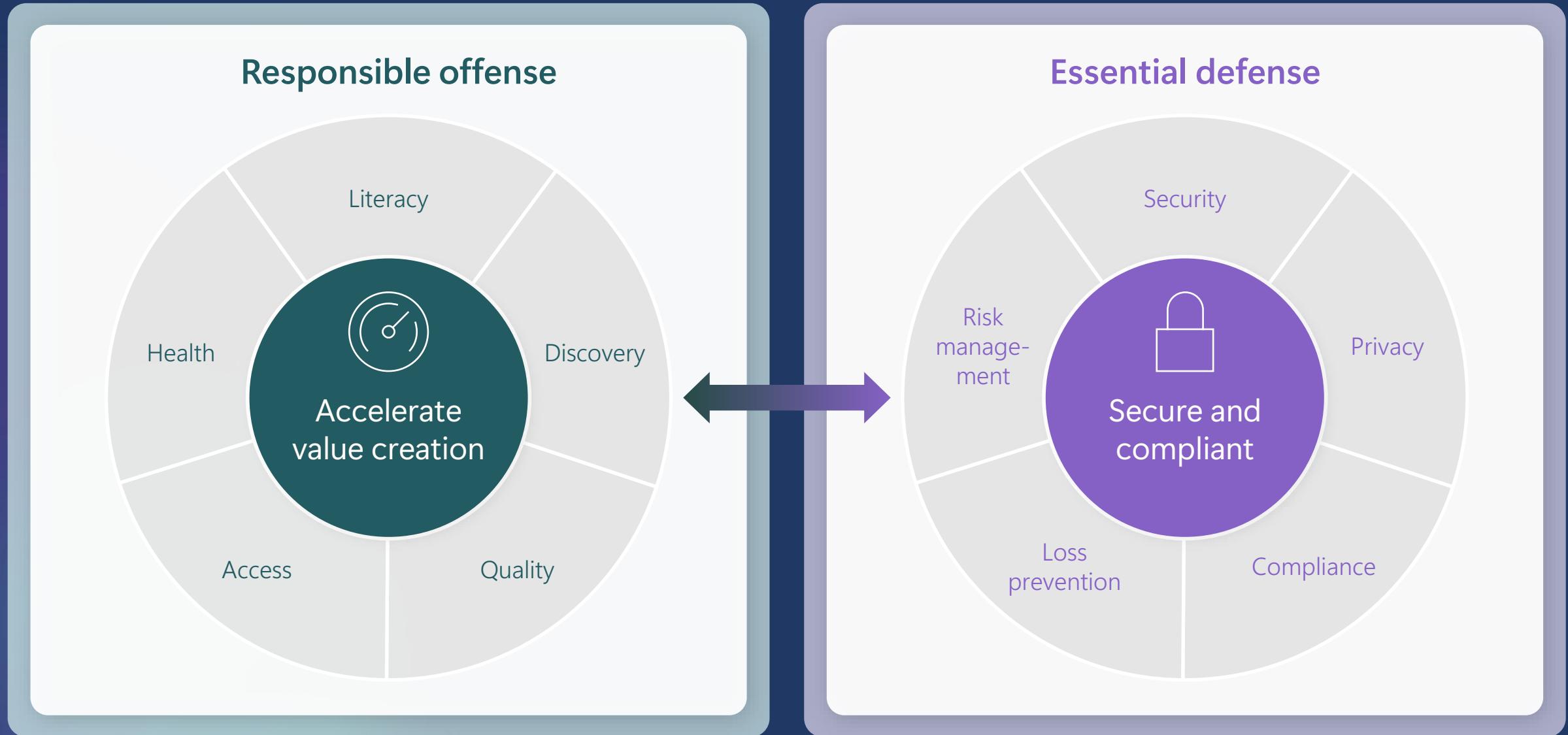
All My data Endorsed in your org Favorites Filter by keyword Filter

Name	Type	Owner	Location	Endorsement
DIAD Final Report	Semantic model	Wolfgang Strasser	DIAD	Certified
DIAD Final Report	Semantic model	Wolfgang Strasser	Neuer Workspace	Certified
LH4Analytics	Lakehouse	Wolfgang Strasser	FabricWS 02	Certified
My Power BI Customer and Products Data	Semantic model	Wolfgang Strasser	Blog Demos	Certified
Purview Customer Data	Semantic model	Wolfgang Strasser	Blog Demos	Certified
Another_Lakehouse	Lakehouse	Wolfgang Strasser	FabricWS 02	Promoted
Social	Semantic model	Wolfgang Strasser	DIAD	Promoted
Unser erster Bericht	Semantic model	Wolfgang Strasser	Neuer Workspace	Promoted



#MicrosoftPurview

# Data governance and security is evolving



# Data security, governance, and compliance ... ...together



**Microsoft  
Purview**

## ◀ Data Security



For information and  
cybersecurity teams

Data Loss Prevention  
Insider Risk Management  
Information Protection

## ◀ Data Governance



For data consumers,  
data engineers, data  
officers

Data Map  
Data Catalog  
Data Estate Insights

## ◀ Risk & Compliance



For risk, compliance,  
and legal teams

Data Lifecycle Management  
eDiscovery & Audit  
Communication Compliance



On-prem and multi-cloud



Unstructured & structured data



Across IaaS, and SaaS

# Microsoft Purview

Microsoft Purview is a comprehensive portfolio of products spanning data governance, information protection, risk management, and compliance solutions.

## Microsoft Purview solutions

Guidance to help you get started with Microsoft Purview solutions in the governance and compliance portals.



### What is Microsoft Purview?

Learn how Microsoft Purview data governance, risk, and compliance solutions can help your organization govern, protect, and manage your data estate.



### Microsoft Purview governance documentation

Learn how to use Microsoft Purview so your organization can find, understand, govern, and consume data sources.



### Microsoft Purview risk and compliance documentation

If your organization needs to comply with legal or regulatory standards, start here to learn about compliance in Microsoft Purview.

# Explore the Microsoft Purview family

Help keep your organization's data safe with a range of solutions for unified data security, data governance, and risk and compliance management.

## Audit

Support forensic investigations and meet regulatory requirements with critical audit log events, and customized retention policies.

[Learn more >](#)

## Adaptive Protection

Discover how Adaptive Protection Preview can dynamically adjust the strength of your data security controls.

[Learn more >](#)

## Communication Compliance

Foster a safe and compliant workplace by detecting sensitive or inappropriate content shared across your organization's communication channels.

[Learn more >](#)

## eDiscovery

Discover and manage your data in place with end-to-end workflows for internal or legal investigations.

[Learn more >](#)

## Compliance Manager

Reduce risk by translating complex regulatory requirements into specific improvement actions that help you raise your score and track progress.

[Learn more >](#)

## Information Protection

Discover, identify, classify, and protect sensitive data that's business critical, and then manage and protect it across your environment.

[Learn more >](#)

## Data Lifecycle Management

Classify and govern data at scale to meet your legal, business, privacy, and regulatory content obligations.

[Learn more >](#)

## Insider Risk Management

Detect, investigate, and act on critical risks in your organization, including data theft, data leaks, and security policy violations.

[Learn more >](#)

## Data Loss Prevention

Automatically protect sensitive information from risky and unauthorized access across apps, services, endpoints, and on-premises files.

[Learn more >](#)

## Unified Data Governance

Gain visibility into all data across your multicloud and hybrid data estate with Unified Data Map. Maximize business value through easy discoverability and access to data with Data Catalog. Gain a comprehensive understanding of your entire data estate with Data Estate Insights.

[Learn more >](#)

<https://www.microsoft.com/en-us/security/business/microsoft-purview#areaheading-oca579>

[← Home](#)[All solutions](#)[Platform](#)[Risk & Compliance](#)[Data Governance](#)[Data Security](#)[Privacy](#)[Resources](#) Filter by keyword

## Core

Core capabilities to setting up and configuring solution experiences across Microsoft Purview.



### Audit

Search the audit log for user and admin activities across all locations and services.



### Data Map

Manage the data source connections that populate the metadata repository.



### Settings

Configure portal and solution settings. These can also be accessed any time from the Settings icon at the top of the portal.



### Workflows

Workflows are repeatable business processes that can be used to automate and orchestrate operations on data entities.

## Risk & Compliance

Manage critical risks and regulatory requirements.



### Communication Compliance

Capture inappropriate messages to help reduce communication risks and take steps to minimize harm.



### Compliance Manager

Get insight into your compliance posture and reduce risks with built-in assessments and recommended improvement actions.



### eDiscovery

Identify, preserve, and export data in response to legal discovery requests and eDiscovery cases.



### Information Barriers

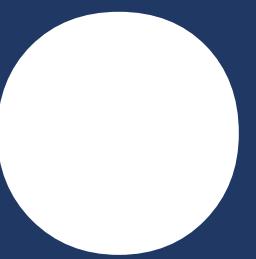
Restrict two-way communication and collaboration to avoid conflicts of interest and safeguard internal info.



### Records Management

Automate and simplify the retention schedule for regulatory, legal, and business-critical records.

**purview.microsoft.com**



DataGovernance / Data Catalog

# #MicrosoftPurview



On-prem



Cloud



SaaS  
Applications



OneLake



...

## Microsoft Purview

### Security

Secure data across its lifecycle wherever it lives

### Data Governance

Govern data seamlessly to empower organization

### Compliance

Manage risks and regulatory requirements

### Data Map

Automate and manage metadata at scale



SQL Server



Azure SQL



Fabric



Databricks



Synapse  
Analytics



Microsoft 365

# Multicloud governance across your entire data estate

Welcome to the new Microsoft Purview portal. It has a new look and capabilities that make it easier than ever to govern and protect your data.

 Microsoft Azure  Microsoft Fabric



New  Data Map

New  Data Catalog

New  Data Estate Insights

New  Workflows

New  Data policy

Knowledge Center 

 View all apps →

# Demo

# Purview Data Governance – Data Catalog

Map your data across (**hybrid**) sources

Data **Classification**

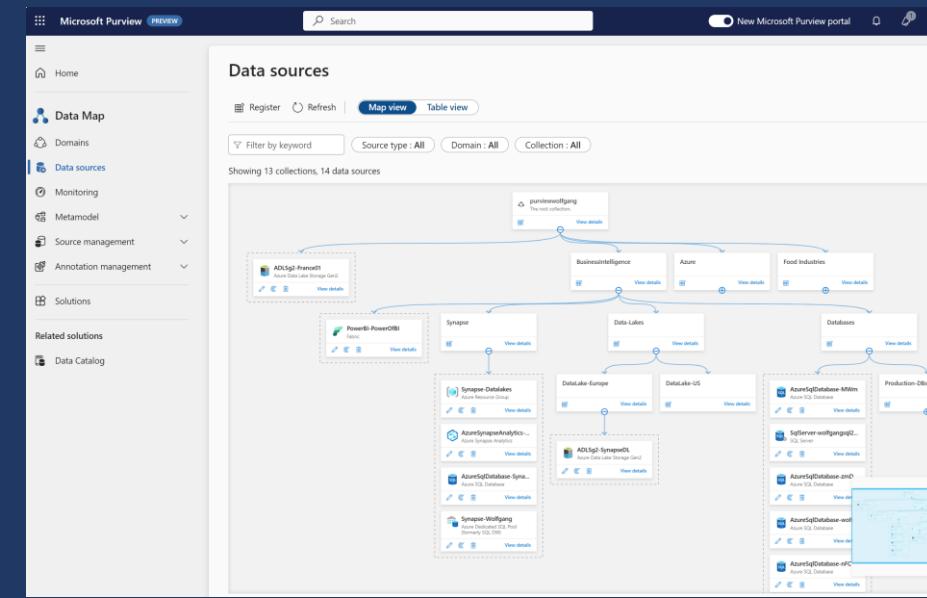
Discovery of **trusted data**

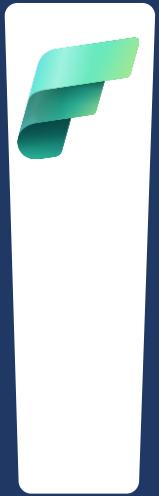
Add **Business Context**

**Data Supply Chain / Data Lineage**

Define **Policies**

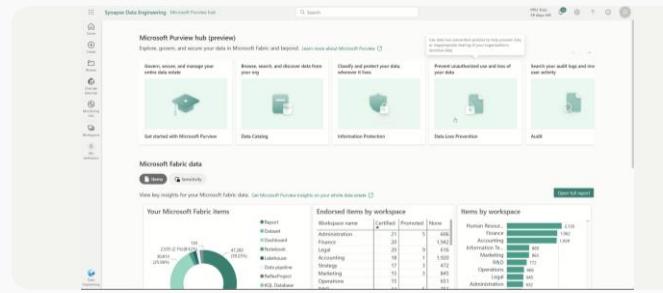
Share Data





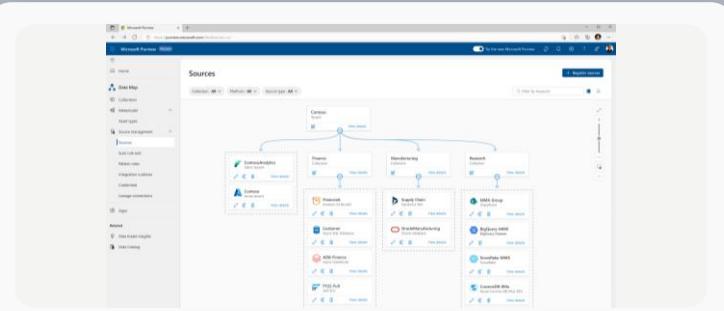
**#MicrosoftFabric &**  
**#MicrosoftPurview**

# Fabric & Purview – Auto Attach



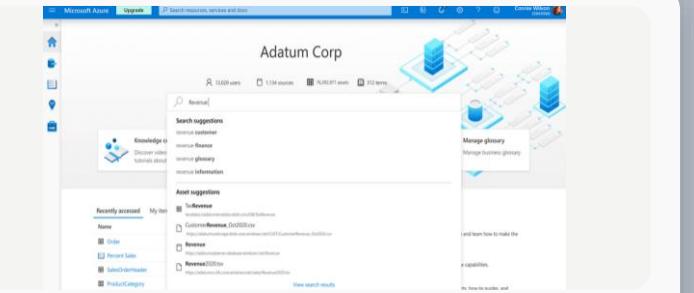
## Purview hub

See relevant insights about sensitive data and item endorsement across the Fabric data estate and get easy links to more advanced Purview capabilities



## Data Map (limited version)

Get a free, trial version of the Microsoft Purview Data Map to look across your Fabric assets and their relationships across your data estate



## Data Catalog (limited version)

Get a free, trial version of the Microsoft Purview Data Catalog to browse and search across your Fabric data assets



# Fabric integration “Live Mode”

The screenshot shows the Microsoft Purview Data Catalog interface. At the top, there's a navigation bar with the Microsoft Purview logo, a PREVIEW badge, a search bar, and a toggle for the New Microsoft Purview portal.

The main area is titled "FabricWS 02". On the left, there's a sidebar with "Data Catalog" selected, followed by "Overview", "Browse" (with "Source types" expanded to show "Collections", "Business glossary", "Data sharing", and "Data Estate Insights"), "Solutions" (with "Data Map" listed), and "Related solutions".

The right side displays a list of items under "FabricWS 02". The "Lakehouse" item is highlighted. The list includes:

- Data Engineering
- SQL analytics endpoint
- Lakehouse
- Spark Job Definition
- Notebook
- Data Factory
- Dataflows
- Data pipeline
- Data Science
- Experiment
- Model
- Data warehouse
- Warehouses
- Power BI
- Dashboards
- Dataflows
- Datamarts
- Datasets
- Reports
- Real-Time Analytics

A table on the right lists items with their names and types:

Item name	Type
Another_Lakehouse	Lakehouse
DataflowsStagingLakehouse_1afb3501ac3a42c8bc8;	Lakehouse
LH4Analytics	Lakehouse

# Fabric Live View – What's missing?

## Metadata available in live view

Resources in live view in the Microsoft Purview Data Catalog automatically have this metadata available:

- Name
- Properties
- Schema
- Lineage

 Note

Live view resources won't automatically have classifications applied. To automatically apply classifications to these resources, you need to upgrade to the enterprise version of Microsoft Purview, register and scan the resource.

Data owners can also update the metadata on live view resources to add more information. Including manually adding description, contacts, etc.

# Fabric & Purview – Sharing is caring..

## Governance and security features built into Fabric

- |  |   |
|--|---|
|  Admin portal and monitoring    |  Data lineage and impact analysis            |
|  Capacity metrics               |  Metadata scanning                           |
|  Domains and workspaces         |  Purview Hub (purp)                          |
|  Universal security model       |   |
|  OneLake data hub               |  Purview Information Protection <sup>1</sup> |
|  Endorsements                   |  Purview Data Loss Prevention <sup>1</sup>   |
|  External data sharing (prpr) |  Purview Audit <sup>1</sup>                |

### Purview experiences in Fabric



Fabric  
metadata

←  
Govern and  
secure  
Fabric data

## Microsoft Purview

- |  |
|--|
|  Comprehensive data security <sup>1</sup> |
|  Risk & compliance posture <sup>1</sup>   |
|  Federated data governance <sup>1</sup>   |



Fabric auto-attaches to Microsoft Purview



On-prem



Cloud



SaaS  
Applications



OneLake



...

## Microsoft Purview

### Security

Secure data across its lifecycle wherever it lives

### Data Governance

Govern data seamlessly to empower organization

### Compliance

Manage risks and regulatory requirements

### Data Map

Automate and manage metadata at scale



SQL Server



Azure SQL



Fabric



Databricks



Synapse  
Analytics



Microsoft 365

# Sensitivity Labels

The screenshot shows the 'Sensitivity' section of the 'WolgangsLakehouse' page. The 'Sensitivity label' dropdown is set to 'Secret'. A modal window titled 'Sensitivity applied downstream' is open, stating 'Items created from WolfgangLakehouse are now...' and includes a 'View impact' button.

WolgangsLakehouse  
Lakehouse

About

Sensitivity label

Endorsement

SQL endpoint

Sensitivity

Secret

Sensitivity applied downstream  
Items created from WolfgangLakehouse are now...  
View impact

The 'New warehouse' dialog shows the 'Name' field containing 'NewDatawarehouse' and the 'Sensitivity' dropdown set to 'Sensitive data'. Other options visible in the dropdown include 'Personal' and 'Secret'.

New warehouse

Name \*

NewDatawarehouse

Sensitivity \*

Sensitive data

Sensitive data

Personal

Secret

Learn more

The screenshot shows a report titled 'Impacted by this Lakehouse' for 'WolgangsLakehouse'. It displays 1 impacted child item and 1 workspace. A 'Browse by item type' section shows 1 SQL endpoint under 'WolgangsLakehouse'. A note at the bottom says 'Making changes? Notify the contact lists of impacted items of WolfgangLakehouse' with a 'Notify contacts' button.

Impacted by this Lakehouse

WolgangsLakehouse

Child Items All downstream items

1 Impacted child items 1 Workspaces

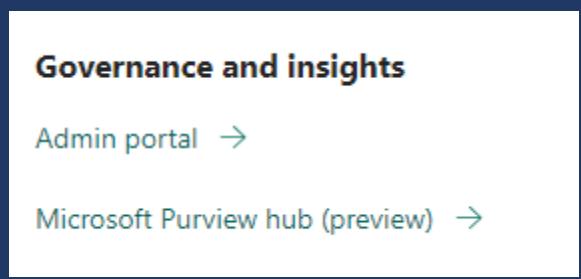
Browse by item type

1 SQL endpoint 1 WolfgangLakehouse

Making changes? Notify the contact lists of impacted items of WolfgangLakehouse

Notify contacts

# Purview Hub



Microsoft Purview hub (preview)  
Explore, govern, and secure your data in Microsoft Fabric and beyond. [Learn more about Microsoft Purview](#)

Govern, secure, and manage your entire data estate

Browse, search, and discover data from your org

Classify and protect your data, wherever it lives

Prevent unauthorized use and loss of your data

Search your audit logs and investigate user activity

Get started with Microsoft Purview

Data Catalog

Information Protection

Data Loss Prevention

Audit

Microsoft Fabric data

Items Sensitivity

View key insights for your Microsoft Fabric data. [Learn more about Microsoft Fabric insights](#)

Your Microsoft Fabric items

Report  
Dataset  
Dashboard  
NA  
Report  
Dataset  
Dashboard  
Lakehouse  
SQL endpoint  
Notebook  
Datamart  
NA  
Warehouse

Endorsed items by workspace

Workspace name	Certified	Promoted	None
Blog Demos	2	1	23
DIAD	1	1	32
Neuer Workspace	1	1	12
Admin monitoring	0	0	2
Automation WS	0	0	6
Automation WS [Production]	0	0	4
Automation WS [Test]	0	0	6
Automation WS DEVOPS	0	0	6
Bauer BI 2019	0	0	7
Dataflows CDS	0	0	
dataflows CPH	0	0	
Dataflows demo (Premium)	0	0	
<b>Total</b>	<b>4</b>	<b>3</b>	<b>295</b>

Items by workspace

DIAD  
PowerPlatform  
Blog Demos  
Dataflows De...  
Power BI Demos  
Neuer Worksp...  
HybridPowerBI  
FabricWS 01  
Bauer BI 2019  
ReportingOver...  
Synapse Integr...  
Automation WS  
Automation W...  
Automation W...  
PASS Summit ...  
ScottishSummi...  
0 2

46 Workspaces

303 Items

Endorsed items by type

Type	Certified	Promoted
Dataset	4	2
Report	1	1

Endorsement ● Certified ● NA ● None ● Promoted

Certified vs Promoted items

Endorsement	Certified	Promoted
Certified	4	3

Endorsement ● Certified ● Promoted

Purview Hub

Pages Overview Report Endorse Report Sensitivity Report Inventory Report Help Items page Sensitivity page

File Export Share Chat in Teams Get insights Subscribe to report ...

Fabric Trial: 58 days left

Purview Hub insights

Overview Sensitivity Endorsement Inventory

Total items 303

Endorsed: 7 %Endorsed: 2.31%

Labeled: 22 %Labeled: 7.26%

Category	No. of items	No. of labeled items
Report	141	9
Dataset	112	7
Dashboard	42	2
Lakehouse	3	0
SQL endpoint	3	0
Notebook	2	0
Datamart	1	0
NA	1	0
Warehouse	1	0

Most active creators

User	No. of items
wolfgang@powerofbi.at	204
(Blank)	86
bauerbi@powerofbi.at	9
kerstin@powerofbi.at	3
NA	1
b.engleider@cubido.at	0
frank@powerofbi.at	0
powerbitester@powerofbi.at...	0

Most used labels

Label name	Percentage
No Label	284 (93.73%)
Sensitive data	17 (5.61%)
NA	1 (0.36%)
Personal	0 (0%)

Endorsement assignments

Category	Percentage
Certified	4 (50%)
Promoted	3 (37.5%)
NA	1 (12.5%)

Workspaces

Workspace	No. of items	Labeled items (%)	Endorsed items (%)	Latest modified
My workspace	38	0.00%	0.00%	11/22/2020
DIAD	34	0.00%	5.88%	5/22/2023
PowerPlatform	27	0.00%	0.00%	10/29/2019
Blog Demos	26	42.31%	11.54%	6/22/2023
Dataflows Demos	18	0.00%	0.00%	6/27/2022
Power BI Demos	18	0.00%	0.00%	6/16/2023
Neuer Workspace	14	0.00%	14.29%	12/2/2022
HybridPowerBI	10	0.00%	0.00%	2/16/2023
FabricWS 01	8	50.00%	0.00%	6/22/2023
Total	303	7.26%	2.31%	6/22/2023

Power BI

# Microsoft Purview Audit

## Audit

New Search    Classic Search    Audit retention policies (Preview)

Searches completed: 2    Active searches: 0    Active unfiltered searches: 0

Date and time range (UTC) \*

Start: Jun 22 00:00

End: Jun 23 00:00

Keyword Search: Enter the keyword to search for

Search name: Give the search a name

Activities

Created a warehouse, Created a lakehouse tab... ▾

create

Created a warehouse

Created a lakehouse file

Created a lakehouse folder

Created a lakehouse table

Created report from lakehouse

Created a lakehouse shortcut link

Search    Clear all

# Data Quality - DataWrangler

NB DataWrangler | ? No label · Saved ·

← df (Data Wrangler)

+ Add code to notebook    Copy code to clipboard    Save as CSV

**Operations**

- > Find and replace (4)
- > Format (7)
- > Formulas (3)
- > Schema (4)
- > Sort and filter (2)
- Group by and aggregate
- New column by example
- Scale min/max values

**Cleaning steps**

- 1 Loaded variable 'df' from kernel state
- 2 **New operation**

2 New operation

1 Choose an operation to get started

Choose an operation to generate preview

Preview code for all steps    Apply    Discard

Data frame loaded    Kernel ready    pandas 1.5.3

**Summary**    Survived

Data type	int64
Rows	156
Unique values	2
Missing values	0
Statistics	
Mean	0.346
Standard deviation	0.477
Minimum	0
25th percentile	0
Median	0
75th percentile	1
Maximum	1

156 Unique values

The screenshot shows the DataWrangler interface with a data preview of the 'df' DataFrame. The preview includes columns for index, PassengerId, Survived, Pclass, Name, Sex, and Age. Summary statistics for each column are displayed as histograms. A sidebar on the left lists operations like 'Find and replace', 'Format', and 'Formulas'. A 'Cleaning steps' section shows two steps: 'Loaded variable 'df' from kernel state' and 'New operation'. The 'New operation' step is currently selected, with a sub-section titled 'Choose an operation to get started'.



luchu @lucianopecile · 2h

Dear Chief Data Officers, friendly reminder.

bad data in = bad data out

Invest in robust data quality practices .

#data #CDO



**WHAT ARE YOU  
MISSING?**

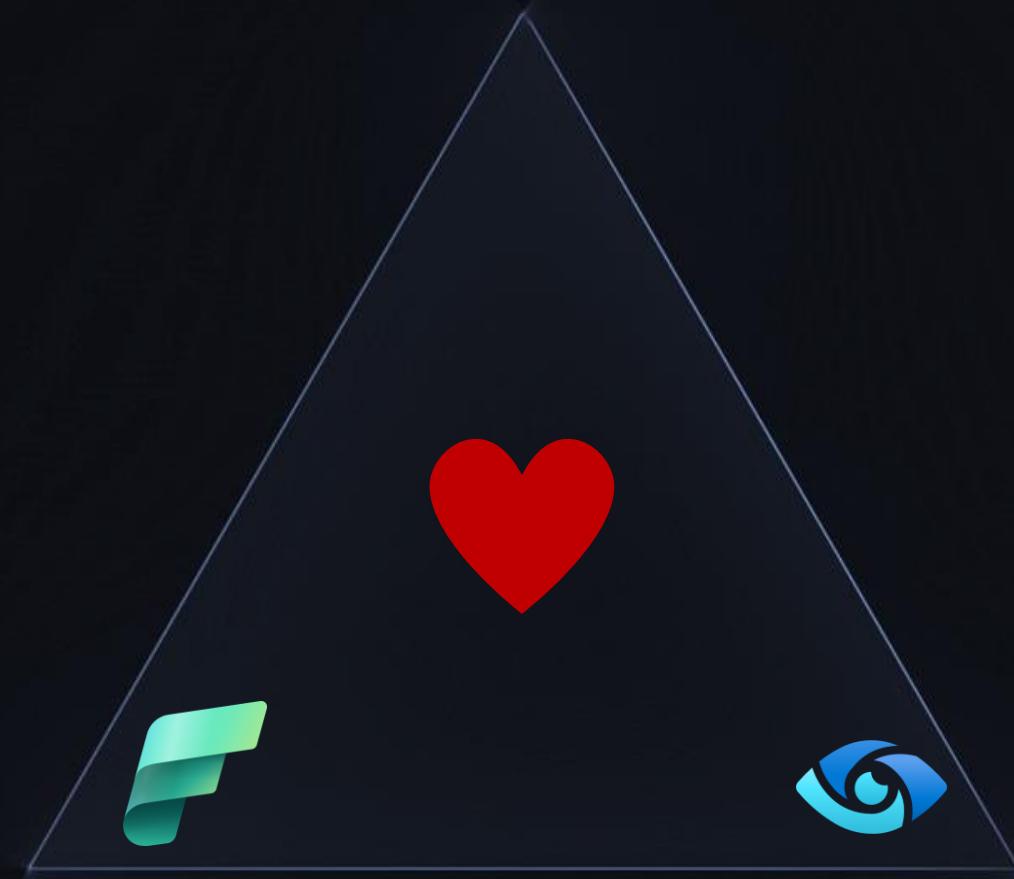
# Data Governance

OneLake  
OneSecurity  
  
Data Wrangler

Domains

Data Lineage

Sensitivity Labels  
  
Purview Hub  
  
Audit Log



**Microsoft  
Fabric**

**Microsoft  
Purview**

# Navigating Data Governance in Microsoft Fabric & Purview



**Wolfgang Strasser**

Data Consultant @  **CUBIDO**

Digital Solutions

[workingondata.wordpress.com](http://workingondata.wordpress.com)

<https://www.youtube.com/@WolfgangStrasser>

