#TeamsNation

Learn how to use Microsoft Search and integrate your business data



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In work life...

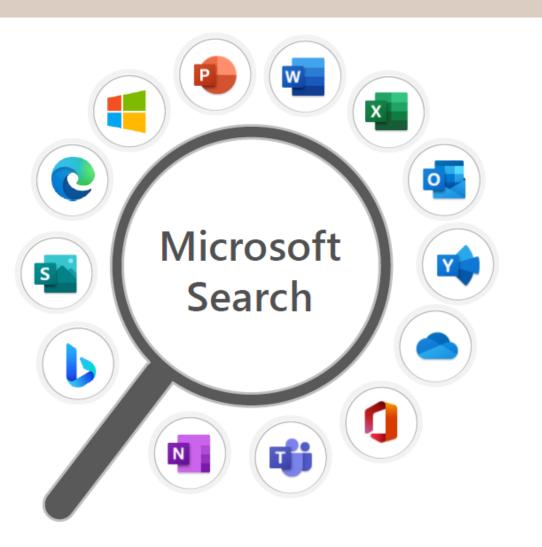
20%

of work time spent searching for info (and often in the wrong location)

Source: McKinsey Global Institute



What is is?



Simple, intelligent search across Microsoft 365 and your company

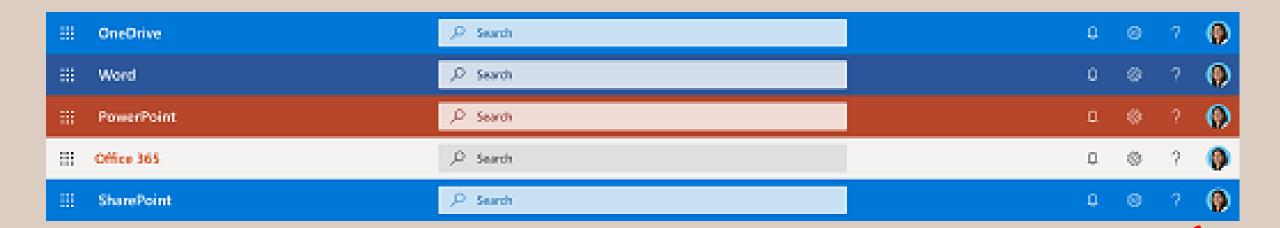
Data is secure, private, and never shared

An experience that's consistent and familiar, everywhere you search

Results are personalized for you and your work

Search from any device, anywhere

Where is it?



- Office.com or the starting pages for Word, Excel, and PowerPoint permissions!

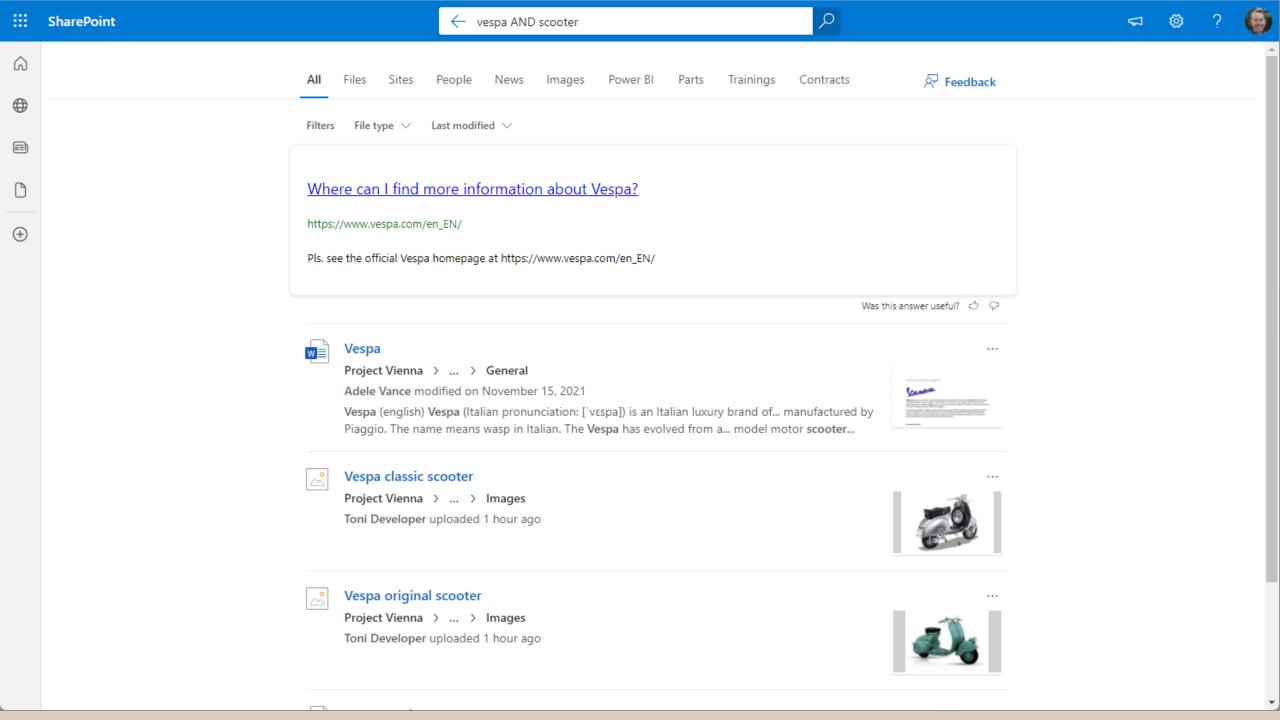
 Note: The permissions!

 Office.com or the starting pages for Word, Excel, and PowerPoint permissions!

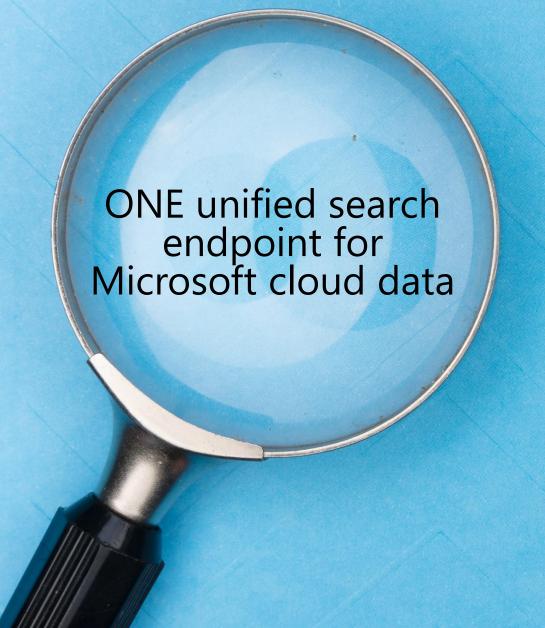
 Over time the Microsoft Search box will come to me



Demo Microsoft Search



Why use the Microsoft Search?



- No setup
- Easy to use
- Personal search
- Personal history
- Spell correction
- Configuration
- Automatic crawling
- Integrate other data sources
- Integrate custom data

Differences btw. Microsoft Search and SharePoint Search

Microsoft Search

- Modern search experience
- Microsoft Search is personal
- Using the same existing SPO Index
- At: SharePoint start page, hub sites, communication sites, and modern team sites
- Microsoft Search experience cannot be customized *
- Can be extended with custom data easily

SharePoint Search

- Classic Search
- Same result for everyone
- Using the existing SPO Index
- At: publishing sites, classic team sites, and in the Search Center
- Search admin can customize the classic search experience

Microsoft Search technologies

Microsoft Search

- Ready-to-use for content in M365
- Built-in features like AI, history, spell checker, etc
- Configure bookmarks, QnA, locations, acronyms
- Ingest your custom data easily

SharePoint Syntex

- Content extraction from unstructured documents
- Automatic forms extraction
- Power Platform Al Builder
- No-Code Al Models
- Trainable with document types

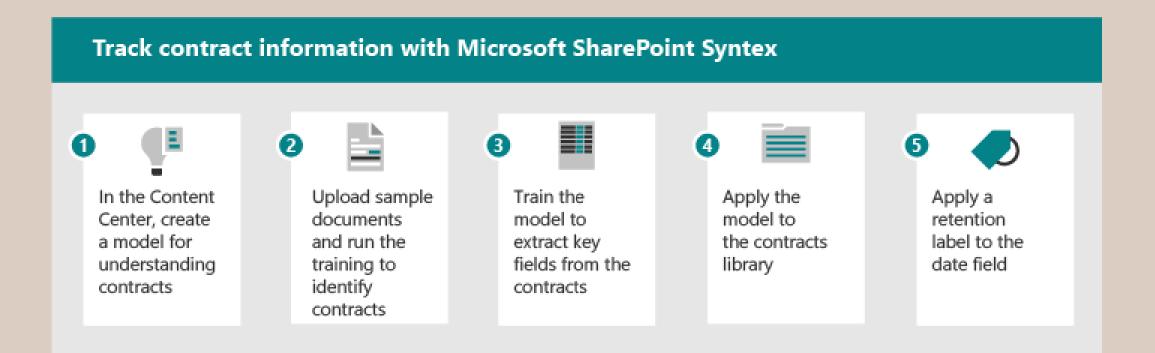
Viva Topics

- Discover important topics highlighted in content
- Automatically identify, process, and organize content
- Automatically build topic pages

Azure Cognitive Search

- No out-of-the-box solution – for developers
- Full control of the Indexing pipeline
- Powered by AI for OCR, translations, pictures, custom data recognition
- Data from Azure and SPO

SharePoint Syntex examples (form processing)



Viva Topics examples



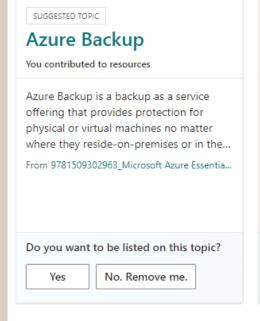
Introducing topic pages

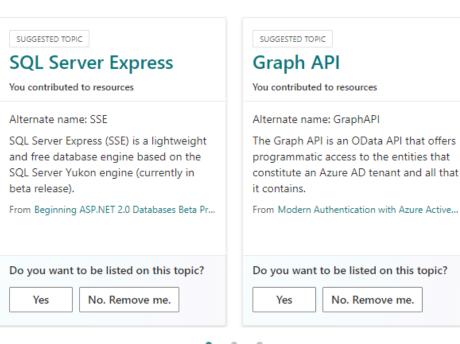
Microsoft Viva helps you discover knowledge through topics. Some topics are discovered automatically. Some are added or edited by members of the topic center.

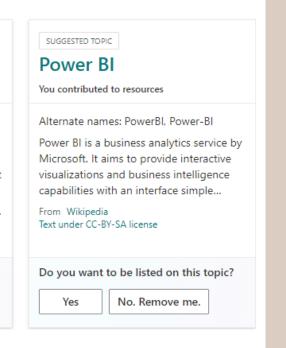
Learn more about Viva Topics

We've listed you on these topics. Did we get it right?

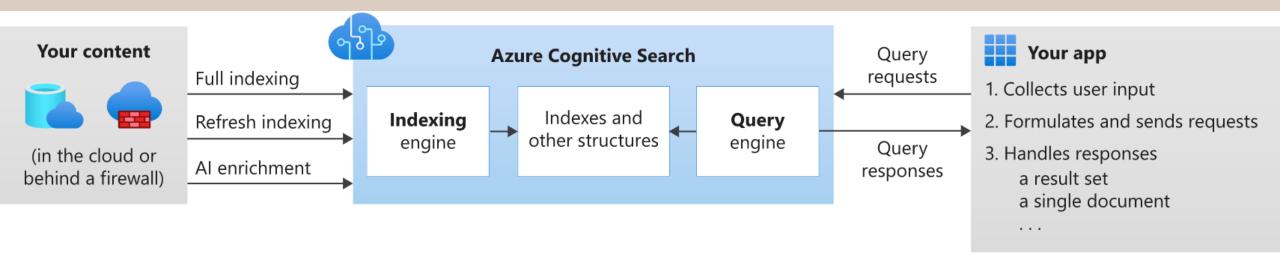
Find the reasons you're listed in the topic summaries. Stay listed so you can share your knowledge on the topic. Learn more about topics.







Azure Cognitive Search concept





Graph Connectors + API

Graph connectors support virtually any data source







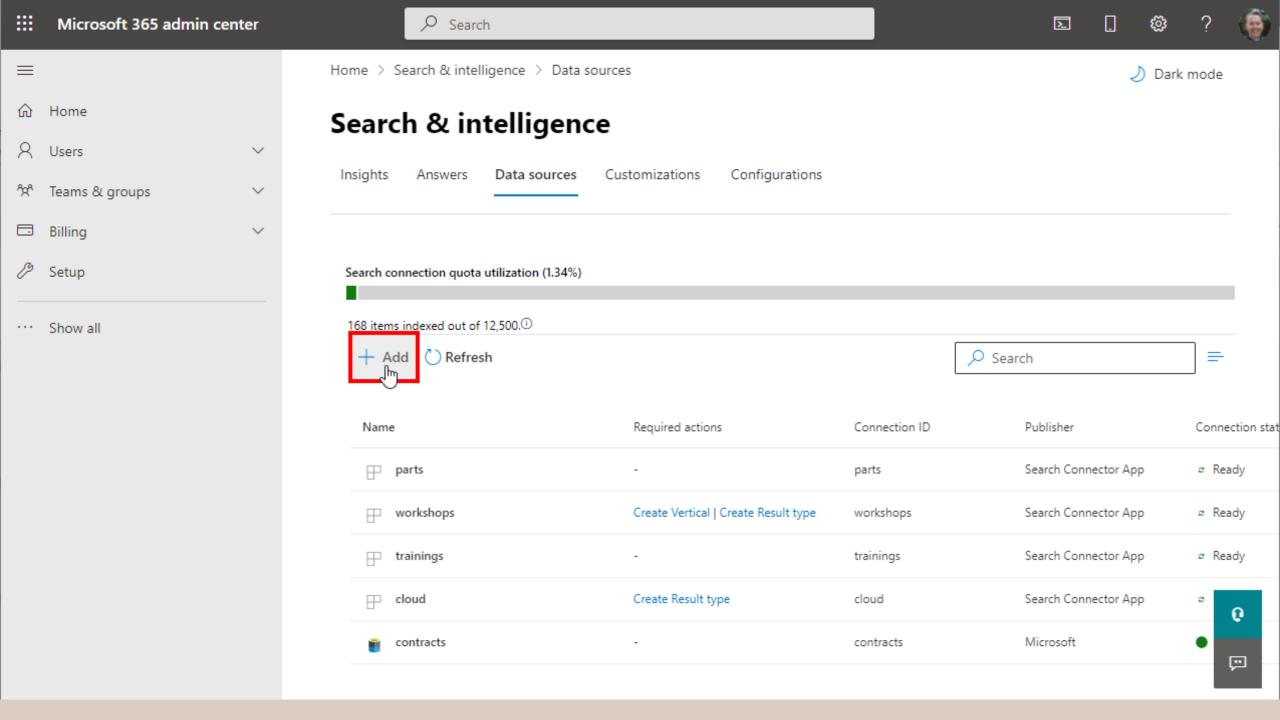
Partner connectors
> 100
connectors

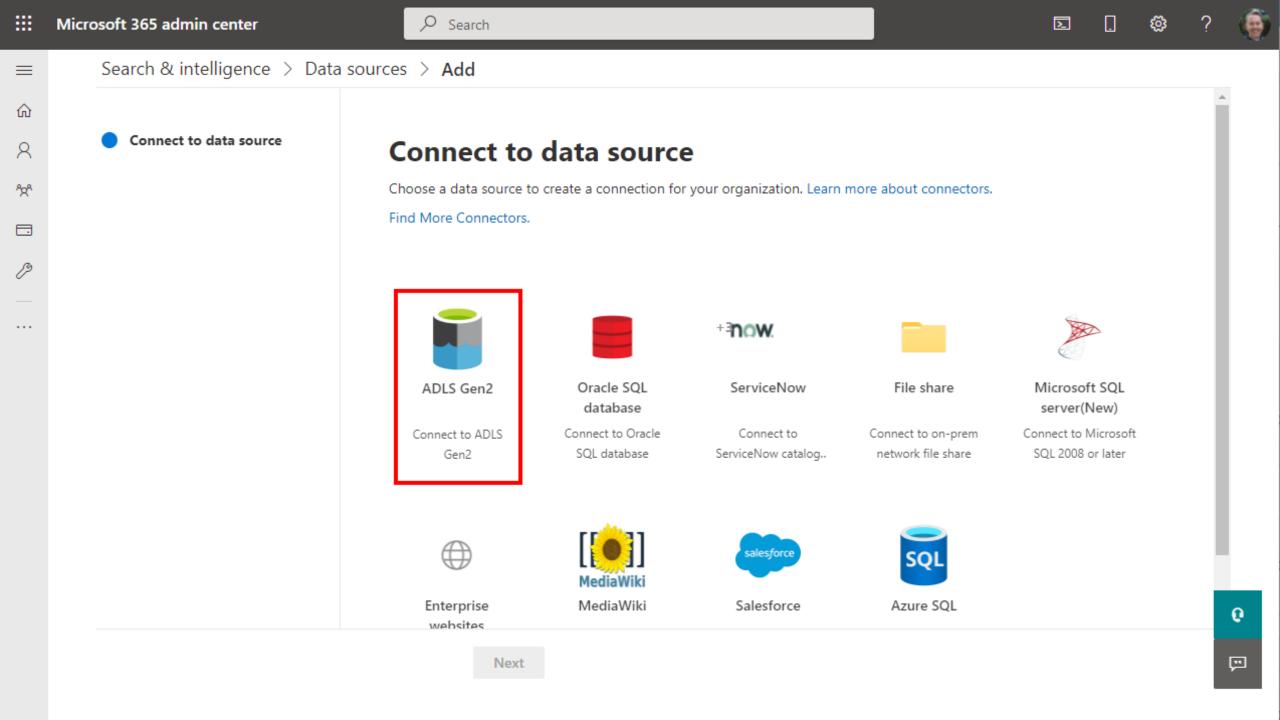


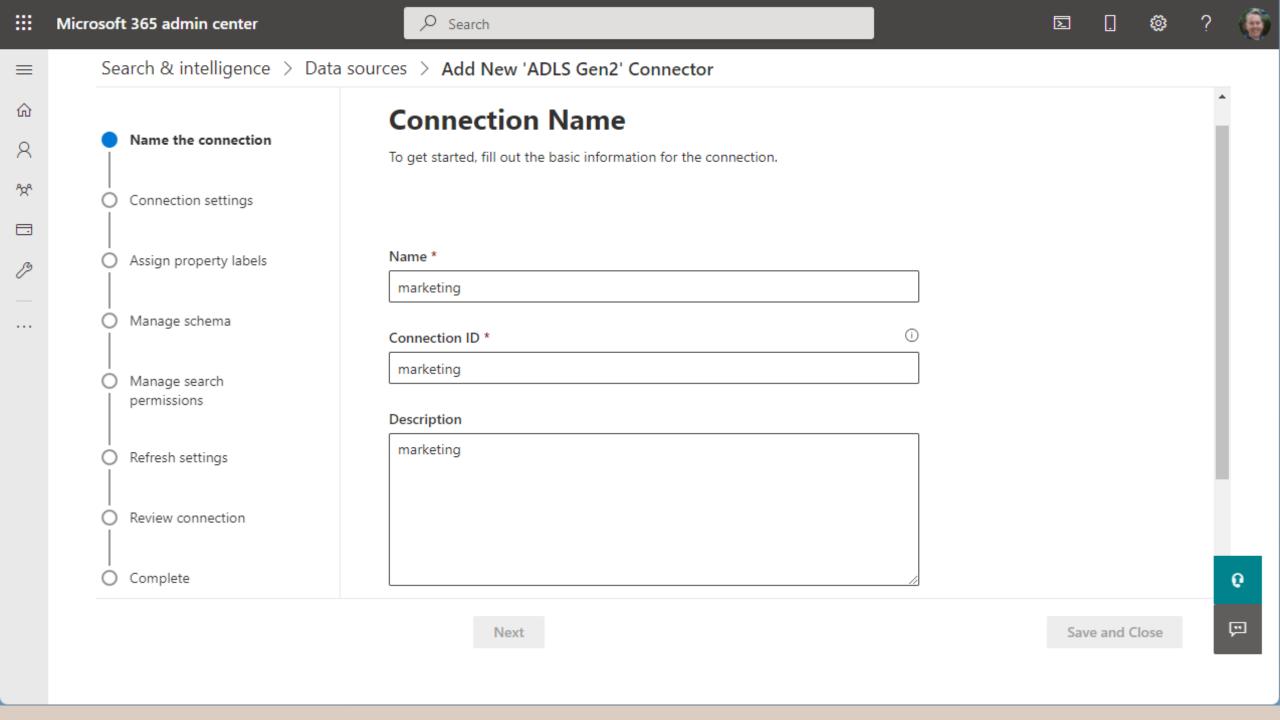
Microsoft Graph API

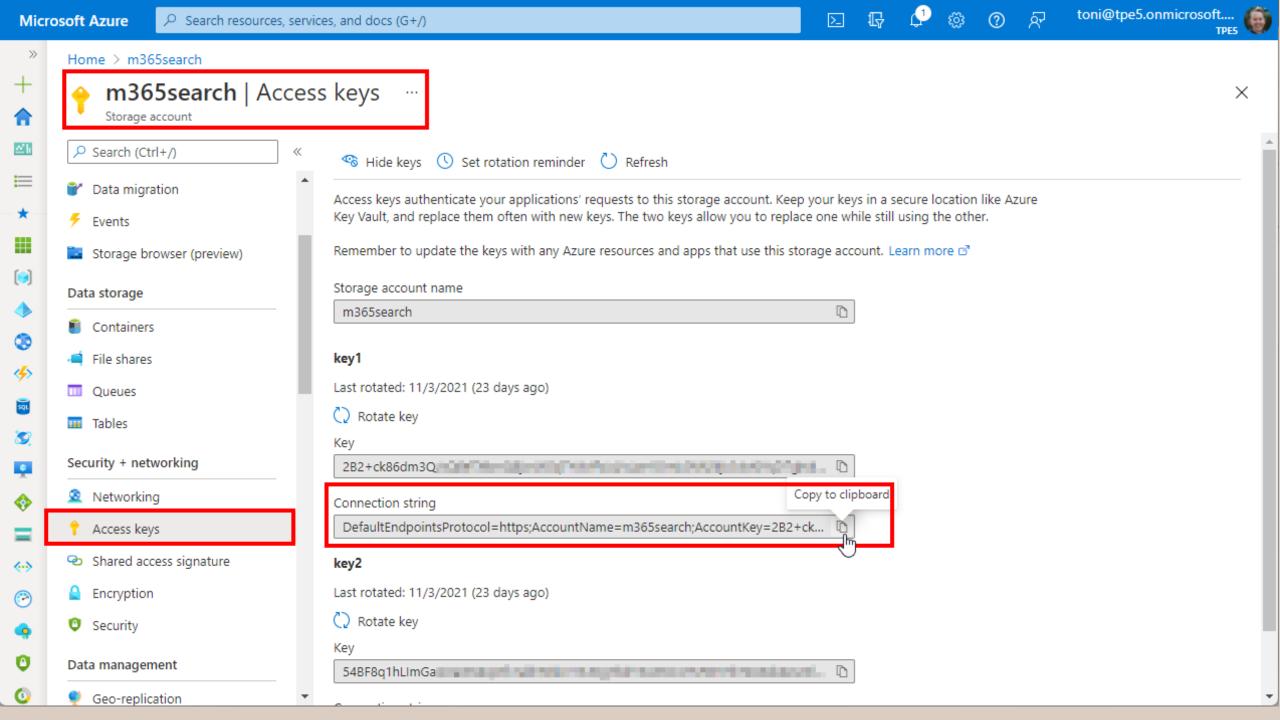


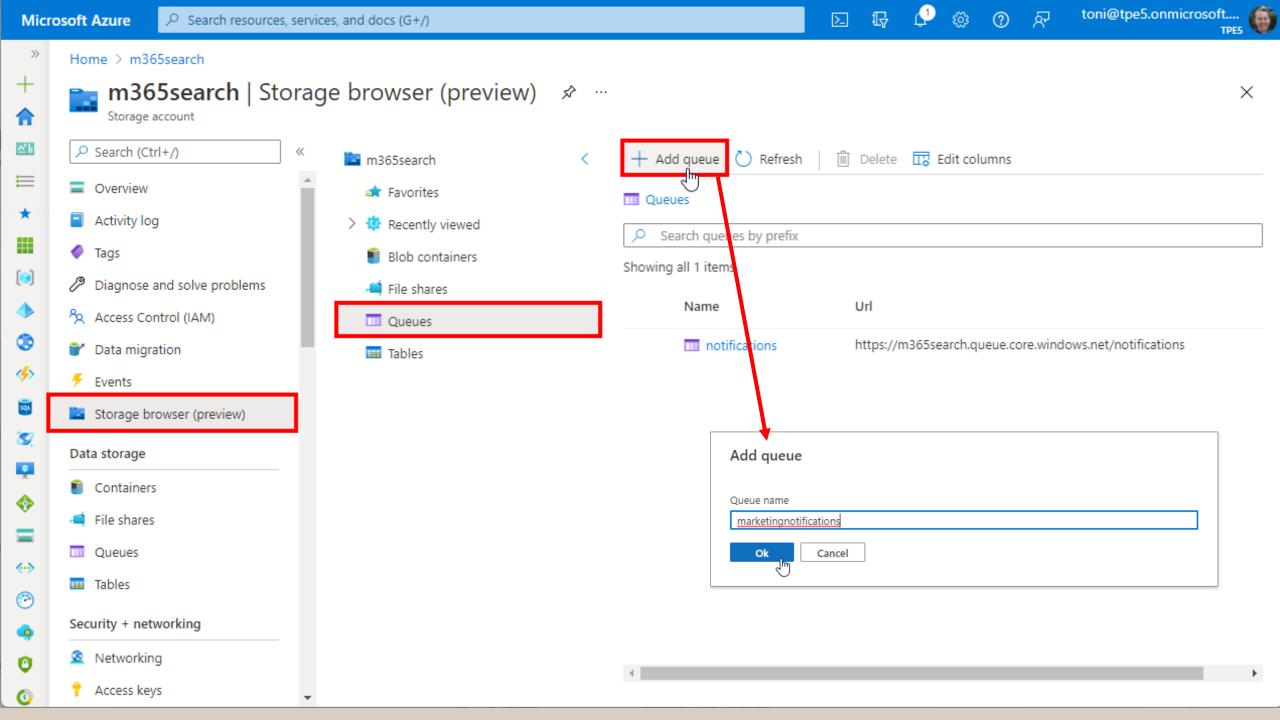
Use Azure Data Lake Storage Gen2 Graph Connector https://docs.microsoft.com/en-us/microsoftsearch/azure-data-lake-connector

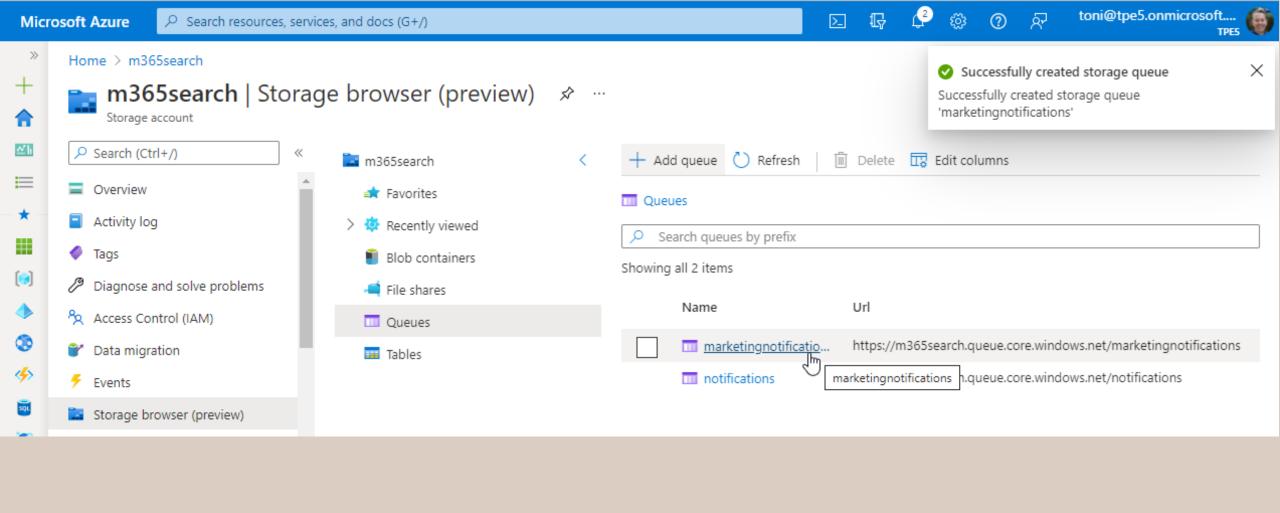


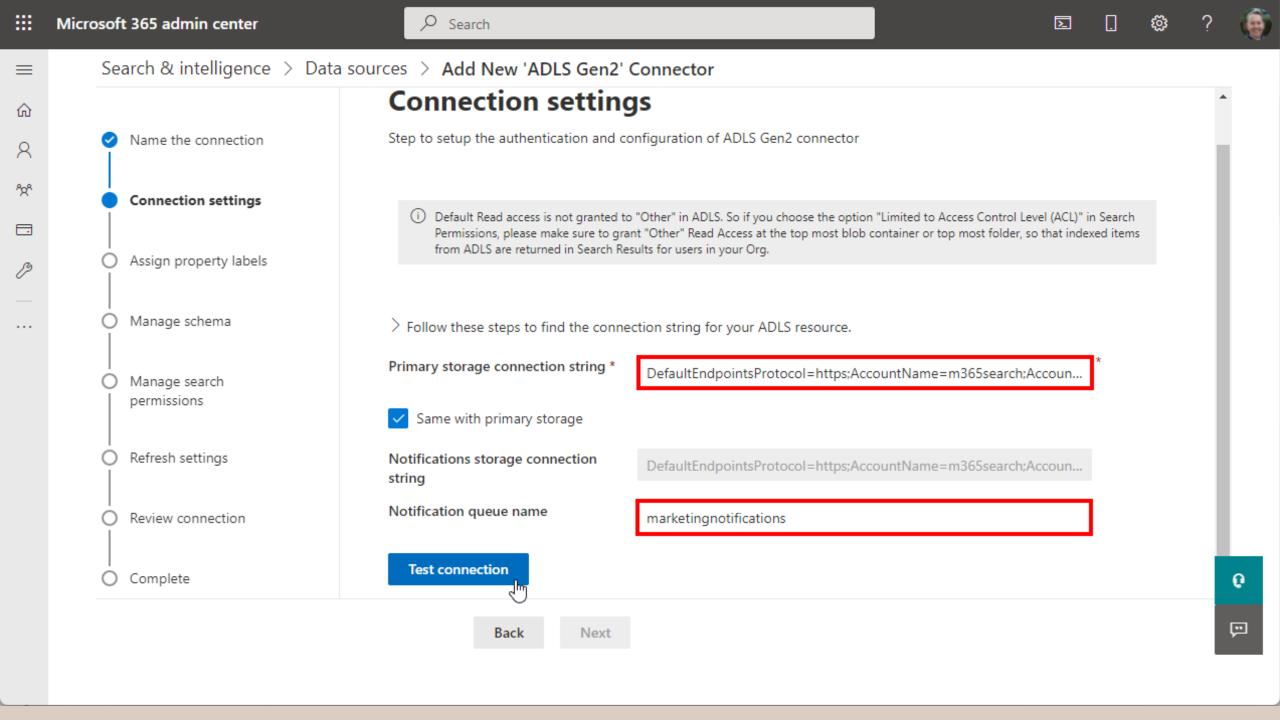


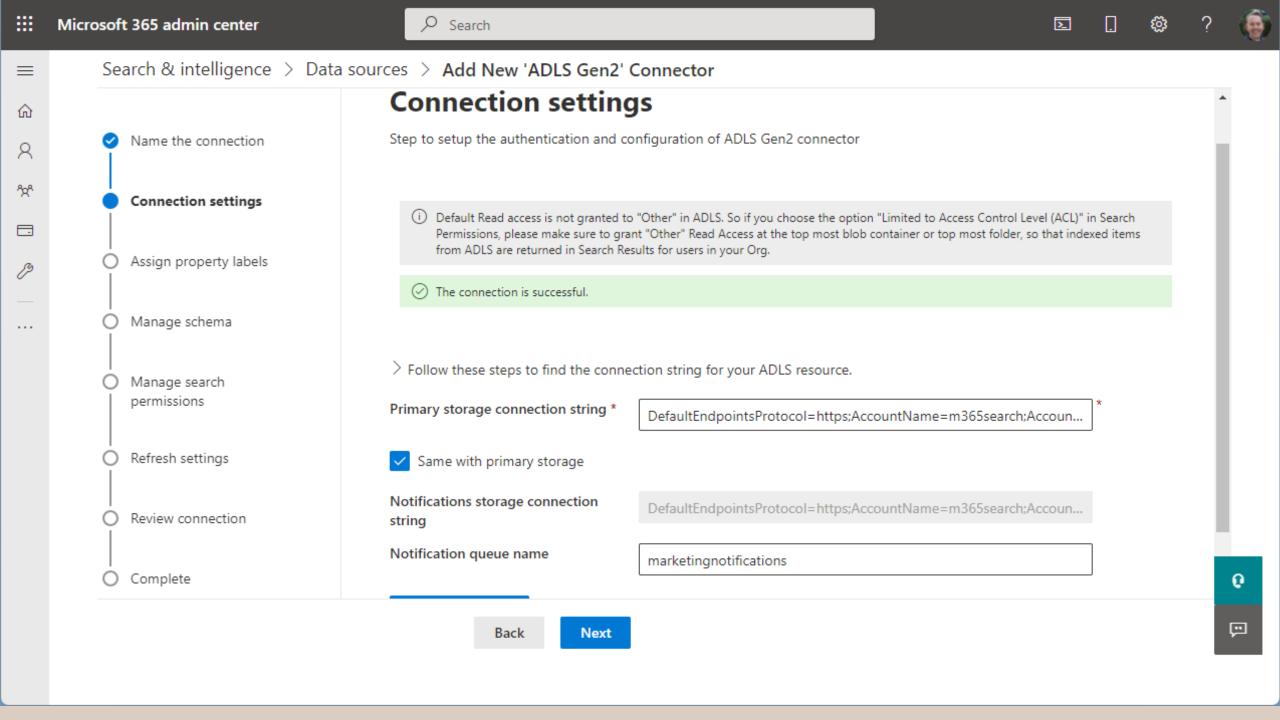


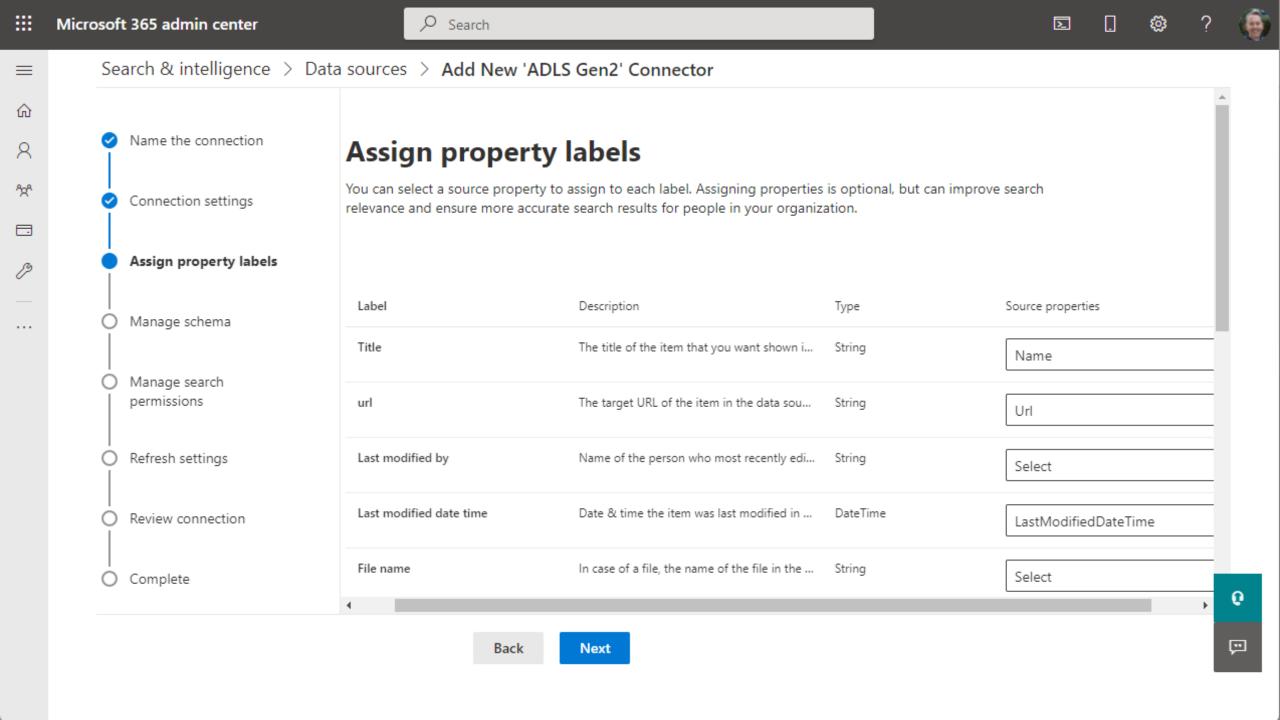


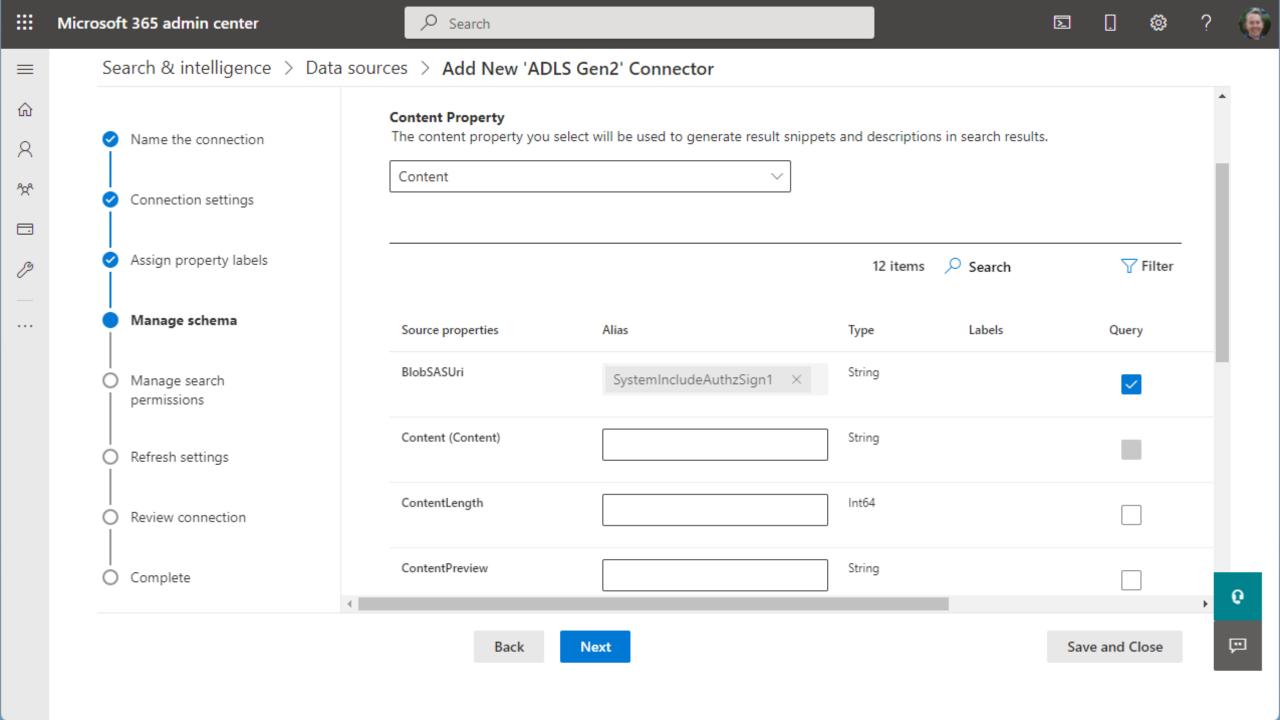


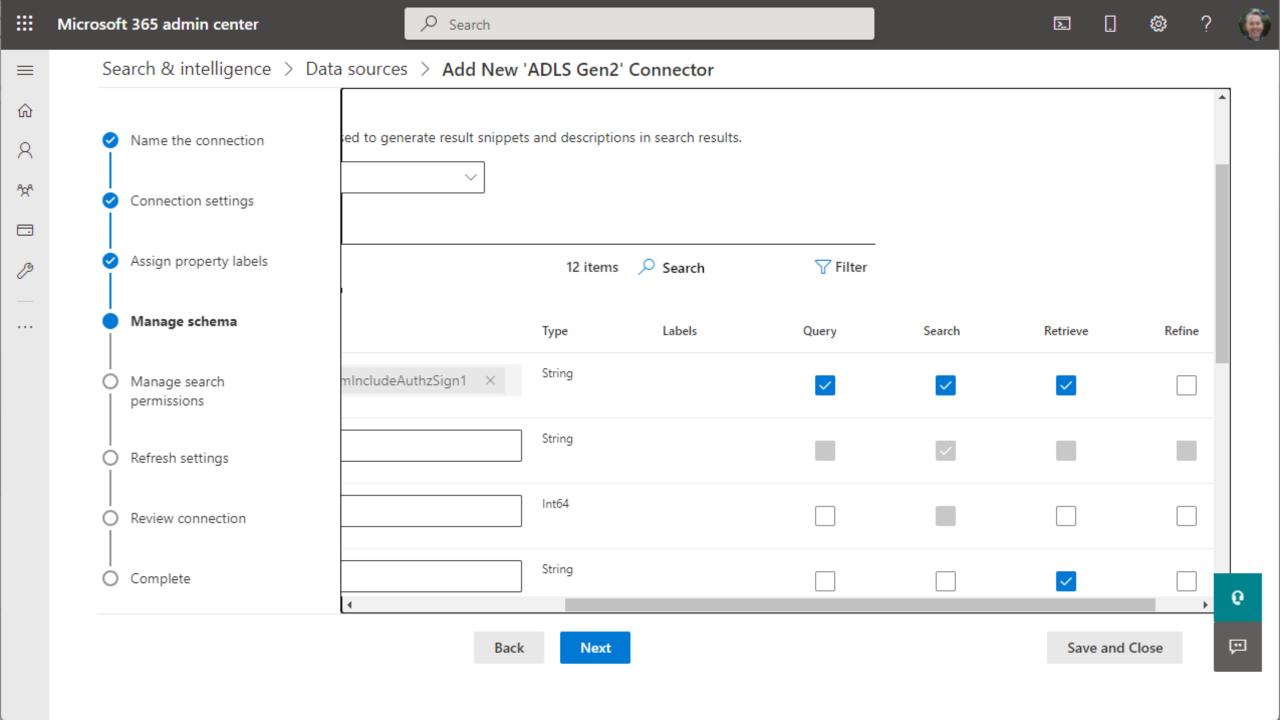


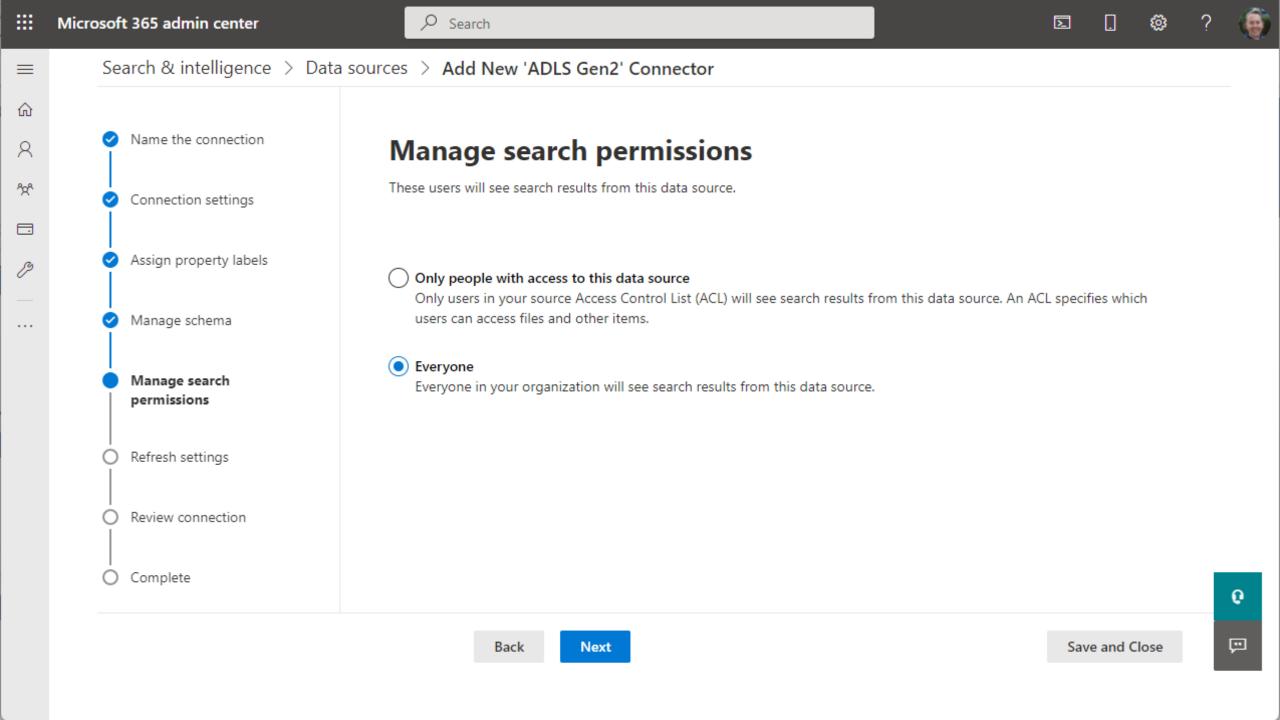


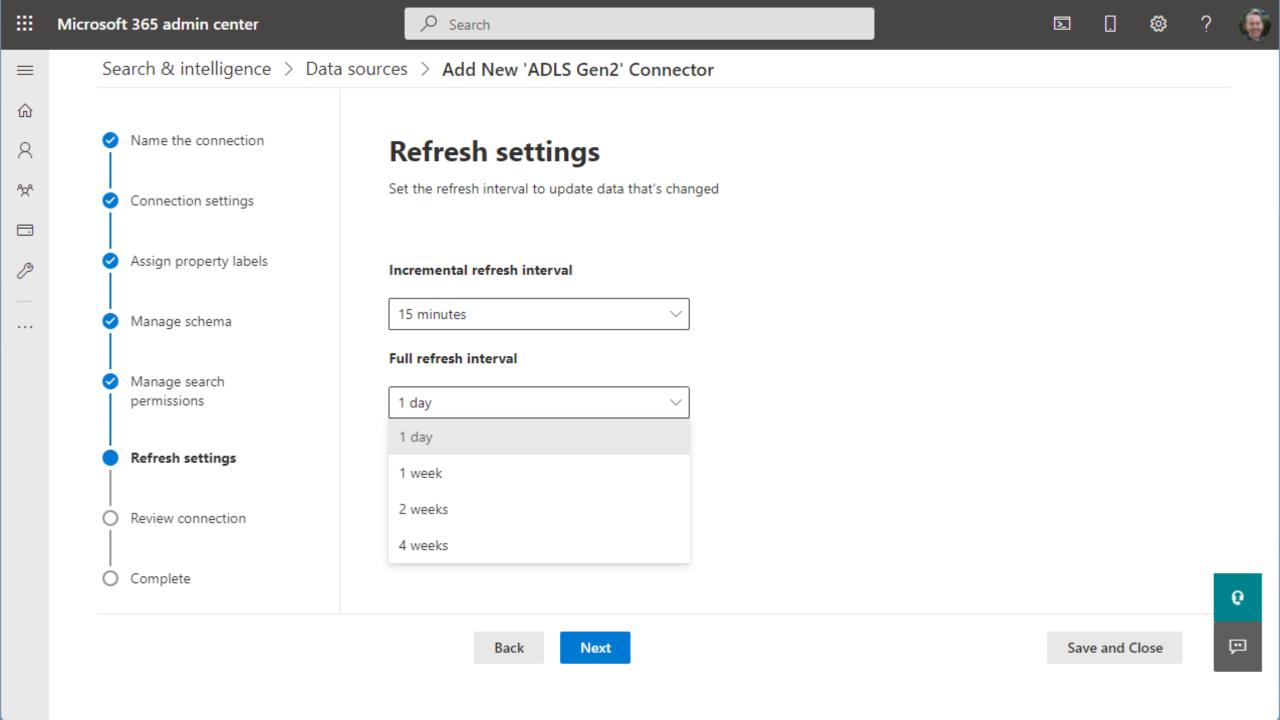


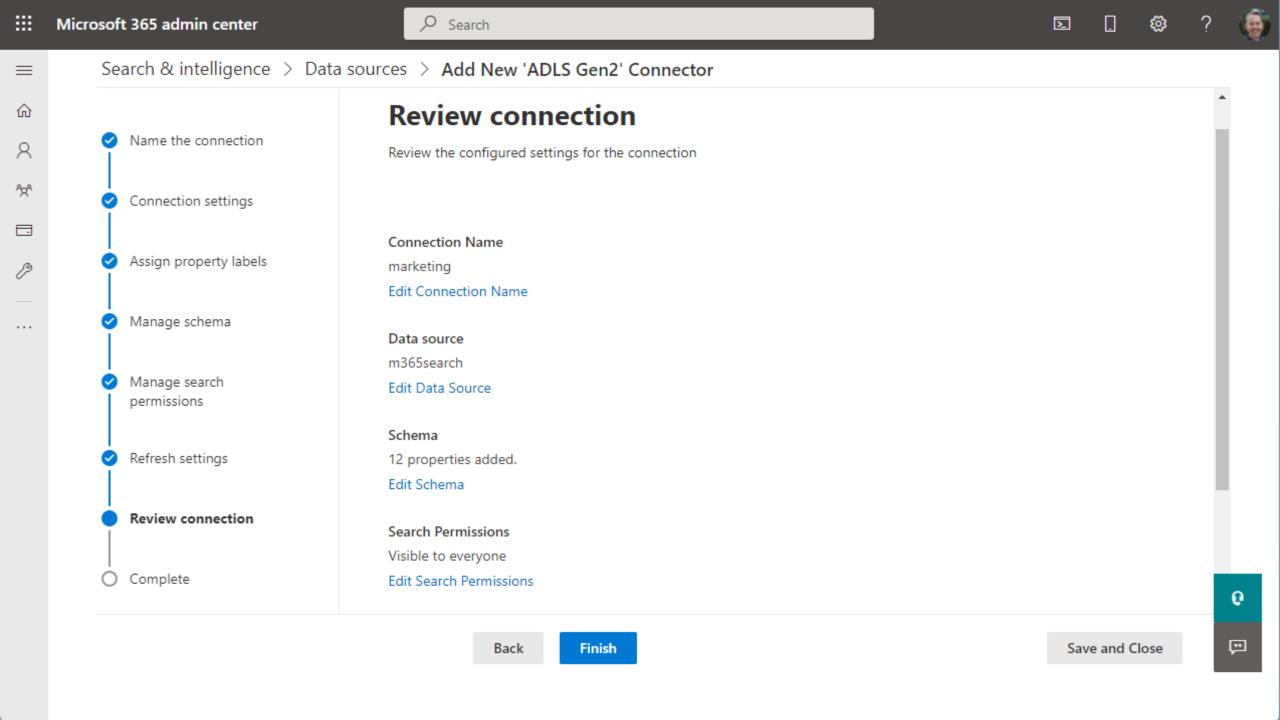


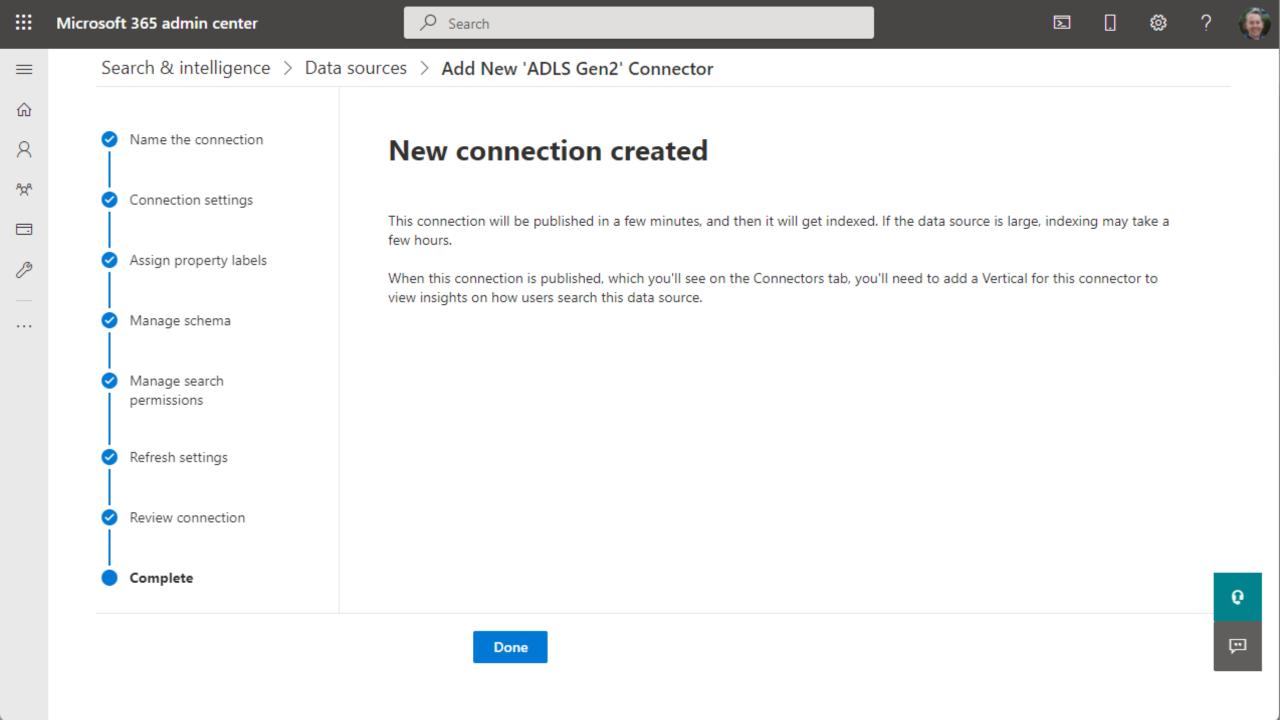


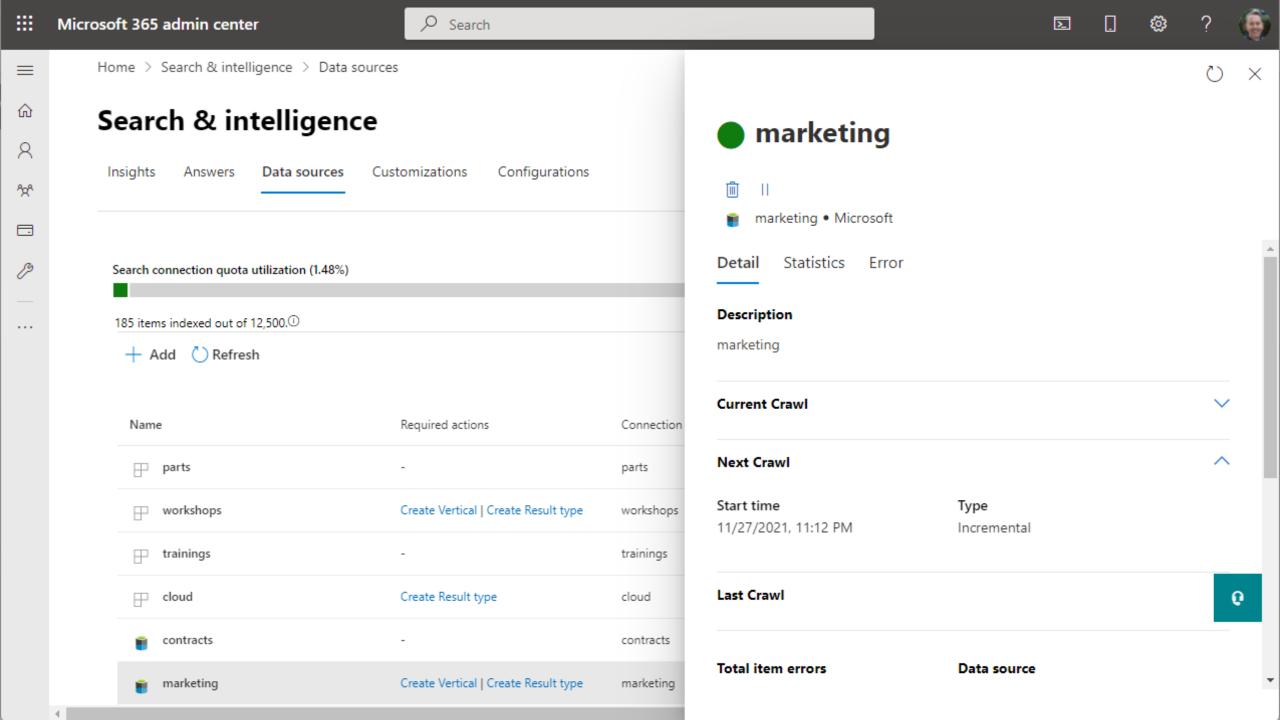


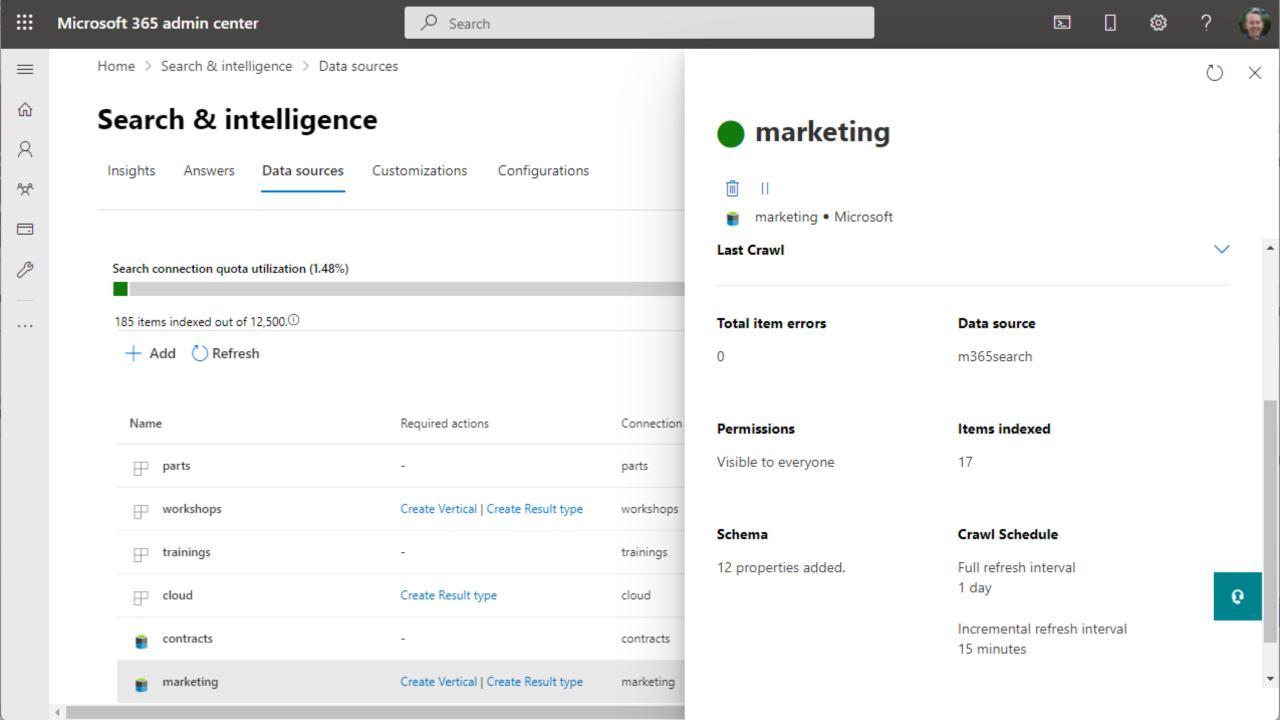












Note: Azure Data Lake Storage Gen2 Graph connector

- Files size needs to be 4 MB or less for it to be crawled.
- Word (docx, .docm, .dotx, .dotm)
- PowerPoint (.pptm, .pptx, .potm, .potx, .ppam, .ppsm, .ppsx)
- Excel (.xlsx, .xlsm)
- Legacy Office formats (.doc, .dot, etc.)
- Text (.txt)
- HTML
- PDF
- Binary files like images (.jpg, .bmp, etc. , also when embedded) are not supported

https://docs.microsoft.com/en-us/microsoftsearch/azure-data-lake-connector

Microsoft Graph connector API limits

Keep these limits in mind when designing connectors:

- Max. 10 connections per Microsoft 365 tenant
- Max. 700,000 items per connection
- Max. 70 GB byte size of a connection
- Max .128 properties per schema
- Max. 100,000 external groups per Microsoft 365 tenant
- Max. 1000 requests/sec (HTTP 429)
- Item ingestion: 4 items/sec (250 MB/hour)
- Item ingestion: 4 MB is the maximum size of an item (request body size)
- HTTP status code 429 if too many requests occured

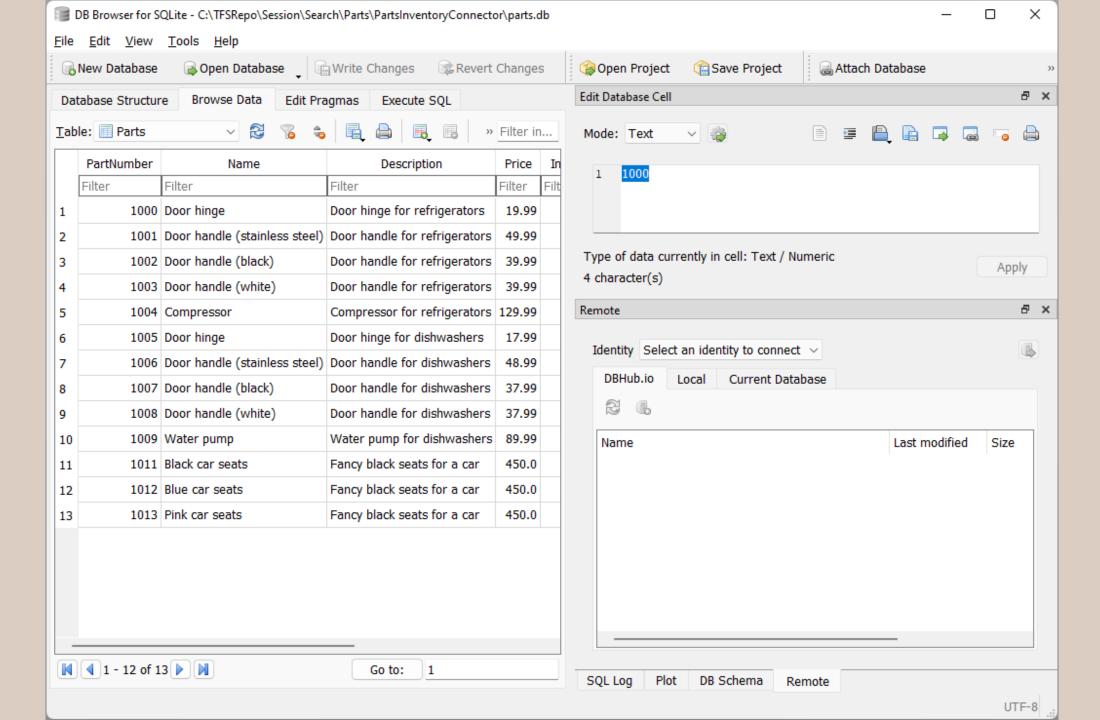
https://docs.microsoft.com/en-us/graph/connecting-external-content-api-limits



Use the API with Powershell https://github.com/tonipohl/MicrosoftSearch



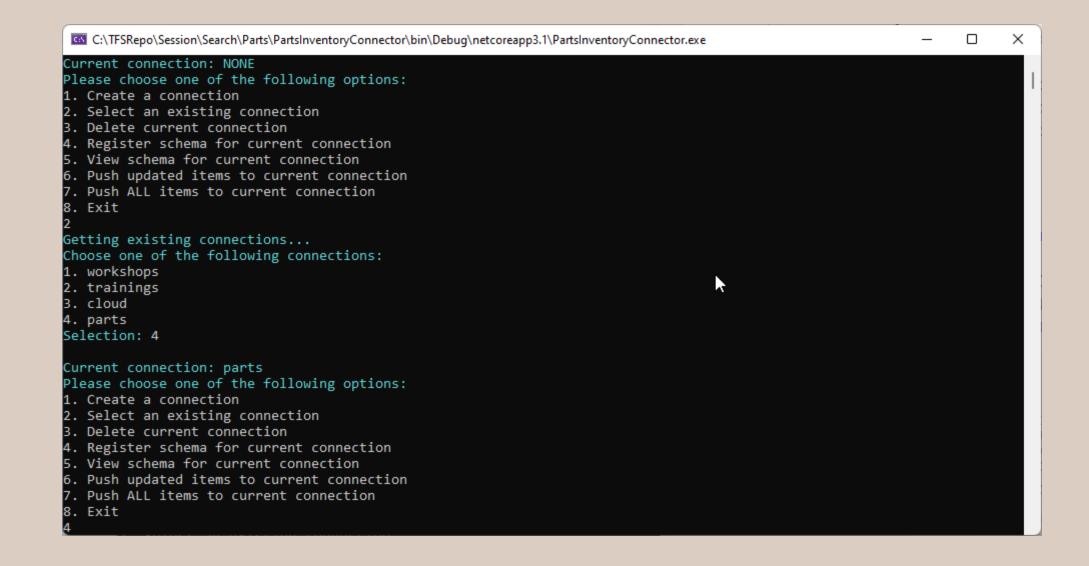
Use the API with C# Code https://github.com/microsoftgraph/msgraph-search-connector-sample

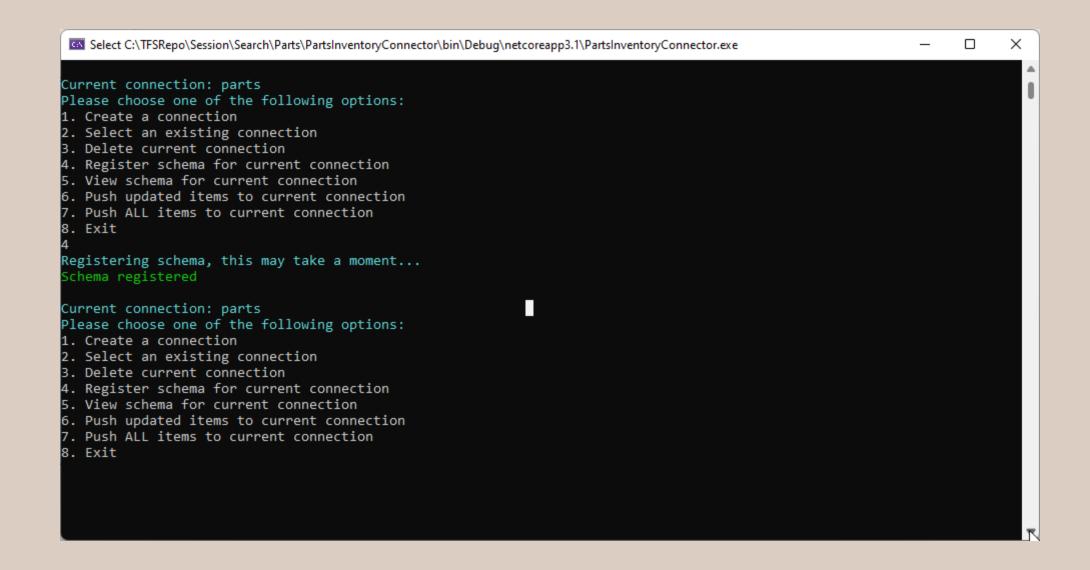


```
C:\TFSRepo\Session\Search\Parts\PartsInventoryConnector\bin\Debug\netcoreapp3.1\PartsInventoryConnector.exe
Parts Inventory Search Connector
Current connection: NONE
Please choose one of the following options:

    Create a connection

Select an existing connection
Delete current connection
4. Register schema for current connection
5. View schema for current connection
Push updated items to current connection
Push ALL items to current connection
8. Exit
Enter a unique ID for the new connection:
parts
Enter a name for the new connection:
parts
Enter a description for the new connection:
parts description
New connection created
  "Configuration": {
    "AuthorizedAppIds": [
      "e8ca4bc7-7570-42ad-b9e2-263ceff12832"
    "AdditionalData": {
      "authorizedApps": {
        "ValueKind": 2
```

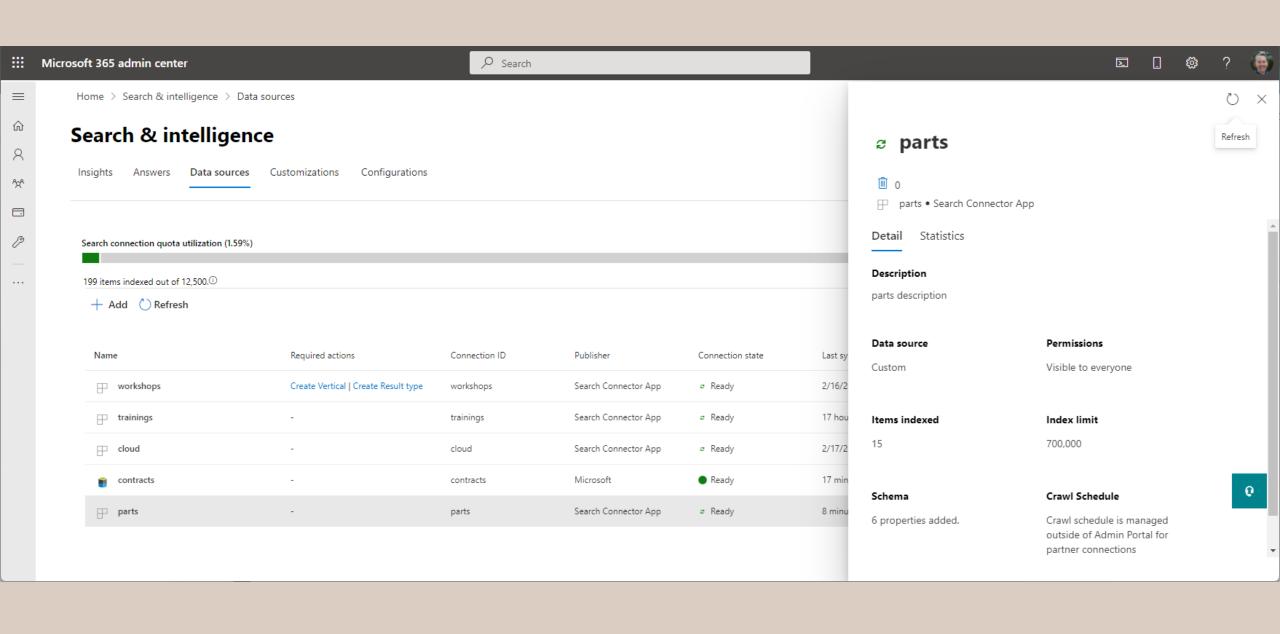


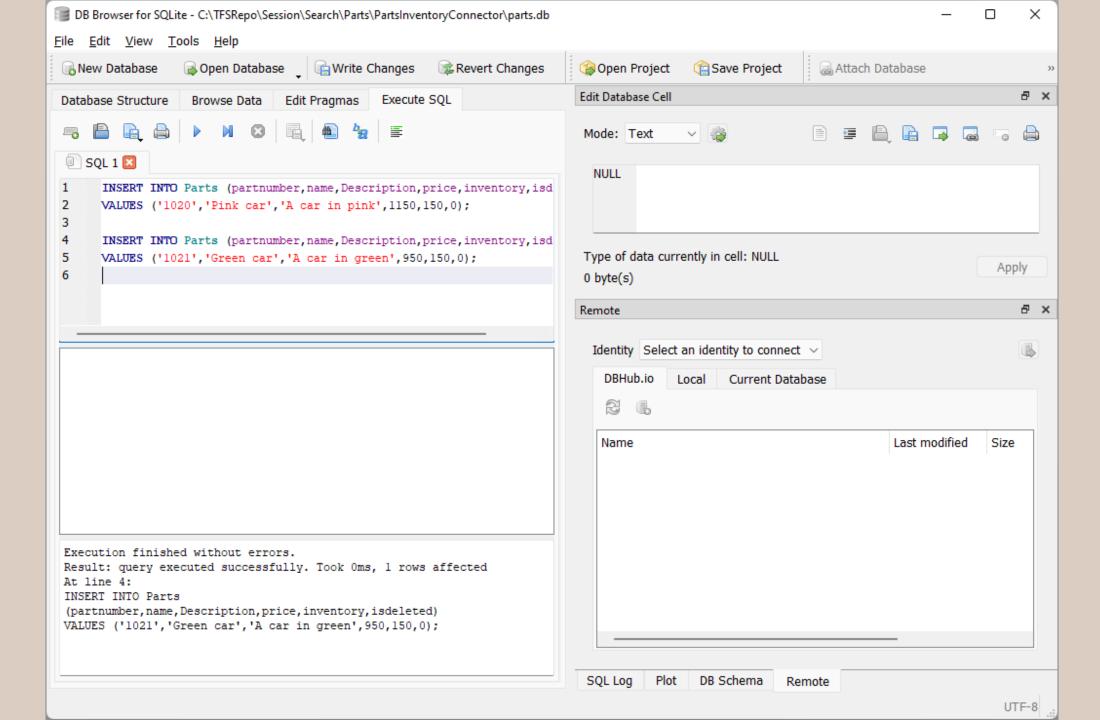


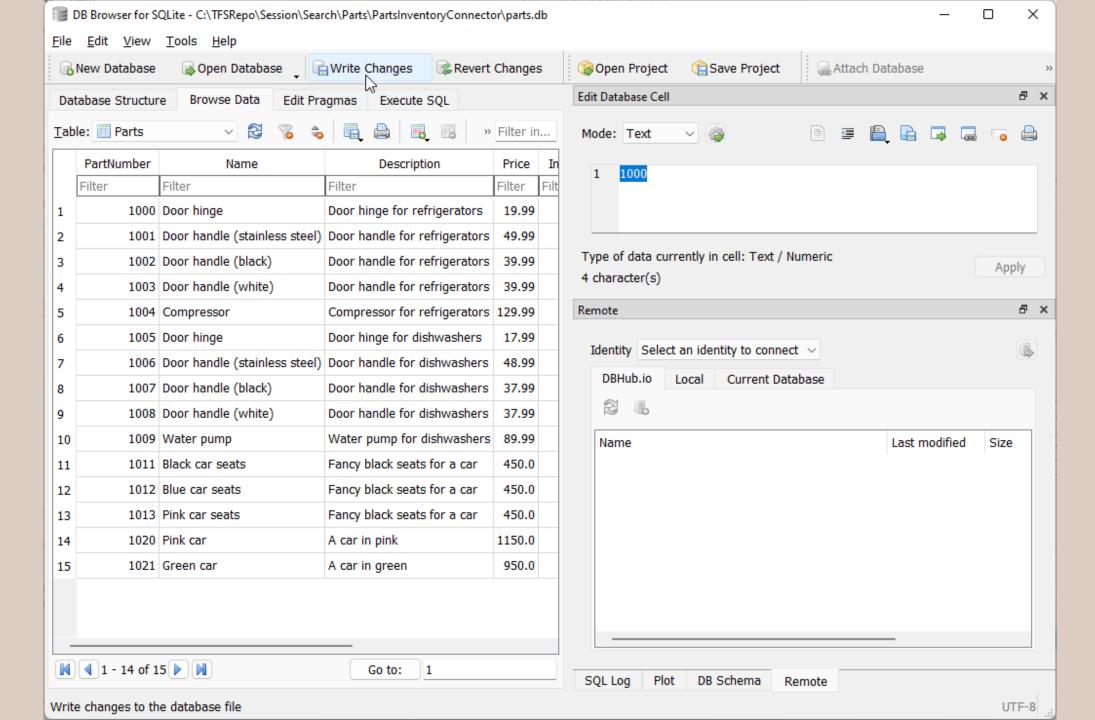
```
C:\TFSRepo\Session\Search\Parts\PartsInventoryConnector\bin\Debug\netcoreapp3.1\PartsInventoryConnector.exe
                                                                                                                    "AdditionalData": null,
      "ODataType": null
  "Id": null,
  "ODataType": null,
  "AdditionalData": {
    "@odata.context": {
      "ValueKind": 3
Current connection: parts
Please choose one of the following options:

    Create a connection

Select an existing connection
Delete current connection
4. Register schema for current connection
5. View schema for current connection
Push updated items to current connection
 7. Push ALL items to current connection
8. Exit
Processing 15 add/updates, 0 deletes
Uploading part number 1000...DONE
Uploading part number 1001...DONE
Uploading part number 1002...DONE
Uploading part number 1003...DONE
Uploading part number 1004..._
```







```
C:\TFSRepo\Session\Search\Parts\PartsInventoryConnector\bin\Debug\netcoreapp3.1\PartsInventoryConnector.exe
                                                                                                                  cloud
parts
Selection: 4
Current connection: parts
Please choose one of the following options:

    Create a connection

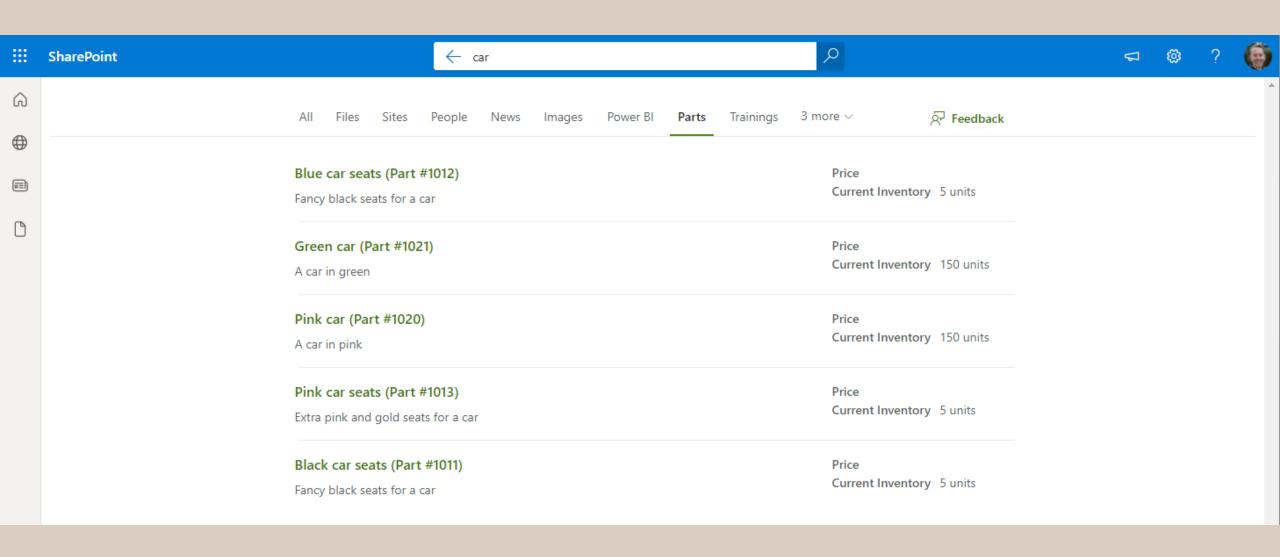
Select an existing connection

    Delete current connection

4. Register schema for current connection
View schema for current connection
Push updated items to current connection
 7. Push ALL items to current connection
8. Exit
Uploading changes since last upload at 28.02.2022 18:22:23
Processing 1 add/updates, 0 deletes
Uploading part number 1013...DONE
Current connection: parts
Please choose one of the following options:

    Create a connection

Select an existing connection
3. Delete current connection
4. Register schema for current connection
5. View schema for current connection
Push updated items to current connection
7. Push ALL items to current connection
8. Exit
```





Use the API with the ready to use PnP Search solution (PnP Modern Search v4, February 2022)

http://aka.ms/pnp-search

https://github.com/microsoft-search/pnp-modern-

search/releases

Microsoft Search Summary

- How to configure Microsoft Search?
 - Do nothing. It comes with M365 automatically
- Does it cost extra?
 - No (included in the M365 licenses)
- What happens if a user has no Search license?
 - The "Microsoft Search" plan is assigned automatically. It can't be unassigned.
- Does it support various languages?
 - Yes
- Does it search Team chats?
 - Currently, no
- Does it search pictures (OCR, ...)?
 - No. Use Azure Cognitive Search
- What does Microsoft Search search?
 - See graphics

- How many connectors can I configure?
 - You can add a maximum of ten Graph connections to each tenant.
- Can you customize the refiners?
 - Currently, no
- Can you customize the search results?
 - Currently only for your own connectors (but December is a good month...)
- What quota/what if I reach the quota?
 - e.g. E5: 500 items * 100 users = 50,000 items index quota
 - Add Extra Graph Connector Capacity licenses
- What other data and features will be included in future?
 - Coming...

Knowledge & Content Services roadmap 2021-2022

	Experiences	Foundation	Language support	Clouds
Viva Topics	 Topics in Teams – Preview Topics in Outlook and Yammer Question concierge Topic management updates Support for topic types 	 Graph connected content available for knowledge indexing Shared components for topics API in Microsoft Graph Syntex taxonomy integration 	Extended language support French, German, Spanish	Government Community Cloud (GCC) availability
SharePoint Syntex	 Content assembly Advanced metadata search Contract management Image tagging 	APIs in Microsoft Graph	Extended language support French, German, Italian, Spanish	GCC High availability
Microsoft Search	 Azure Cognitive Search results in Microsoft Search Recommended Bookmarks Recommended Q&A Connector results on All vertical Personal query history in SharePoint and Office.com Semantic search People-centric search in SharePoint and Office.com 	 New connectors Jira Confluence SharePoint Server Schoology CSV eDiscovery support for Microsoft Graph connectors Stemming support with Microsoft Graph connectors 		GCC availability
Compliance	 Retention policies for Yammer Retention for cloud attachments Retention labels auto-applied based on sensitivity label Outlook clients support for records management 	Graph API to manage labels & events		

What to expect in Microsoft Search in near future?

https://www.microsoft.com/en-us/microsoft-365/roadmap?filters=Microsoft%20Search



Microsoft Search Resources

- Session content <u>https://github.com/tonipohl/MicrosoftSearch</u>
- Configure Search Connector with the admin portal https://www.youtube.com/watch?v=TVSkJpk1RiE
- Configure the Azure Data Lake Storage Gen2 Graph connector https://docs.microsoft.com/en-us/microsoftsearch/azure-data-lake-connector
- File share Graph connector to search on-premise Windows file shares https://docs.microsoft.com/en-us/microsoftsearch/fileshare-connector
- On-prem connectors: Install the Microsoft Graph connector Agent https://docs.microsoft.com/en-us/microsoftsearch/graph-connector-agent https://aka.ms/gcadownload
- C# sample
 https://github.com/microsoftgraph/msgraph-search-connector-sample
- PnP Modern Search v4 webparts
 https://microsoft-search.github.io/pnp-modern-search/

- Microsoft Graph Resources (code)
 https://developer.microsoft.com/en-us/graph/gallery/?filterBy=Samples,SDKs
- SPFx sample

 https://github.com/microsoft-search/spfx-samples/tree/master/Sample1.0

 Microsoft Search in SharePoint and Office 365

 https://www.youtube.com/watch?v=6upqwbhHoJM
- Bringing external data into Microsoft 365 custom search result types and verticals Chris O'Brien https://www.sharepointnutsandbolts.com/2021/09/M icrosoft-365-custom-search-vertical-result-type.html?m=0
- Licensing and pricing <u>https://docs.microsoft.com/en-us/microsoftsearch/licensing</u>
- Microsoft Graph Postman Collections
 https://www.postman.com/microsoftgraph/workspace/microsoft-graph/collection/455214-085f7047-1bec-4570-9ed0-3a7253be148c?ctx=documentation
- Roadmap <u>https://www.microsoft.com/en-us/microsoft-365/roadmap?filters=Microsoft%20Search</u>

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