

# Storage optimization for Finance and Operations

Dynamics 365 FastTrack  
Architecture Insights Series

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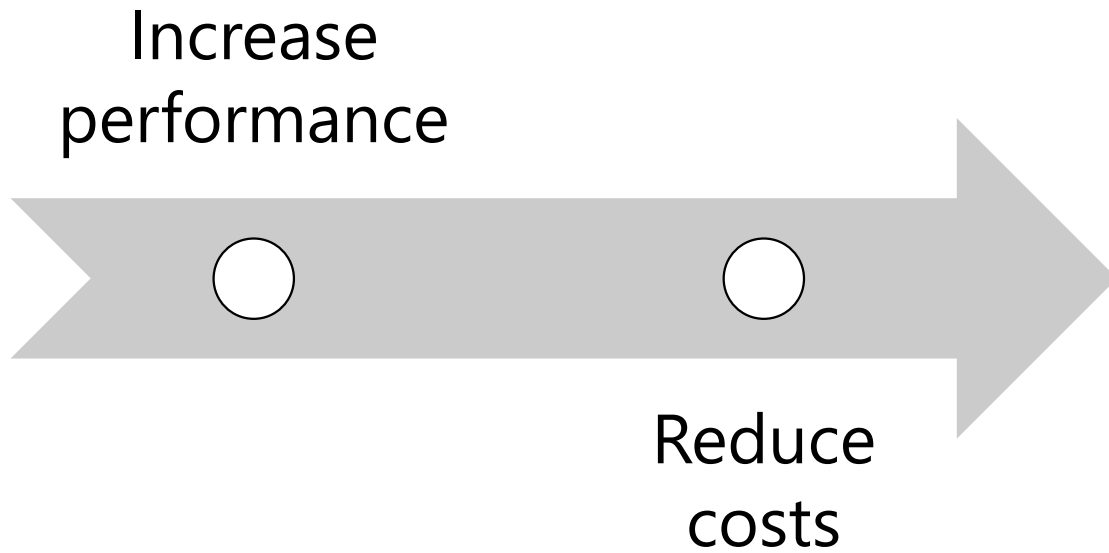
# Agenda

- Why is storage management important?
- How can I check my consumption?
- How can I reduce storage consumption?
- How can Microsoft help?



Why?

# What can we accomplish?



# Checking Storage



# Power Platform Admin Center

←

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🔒

https://admin.powerplatform.microsoft.com/resources/capacity

Power Platform admin center

☰

Home

Environments

Analytics

Billing (Preview)

Licenses (Preview)

Settings

Resources

Capacity

Dynamics 365 apps

Power Apps assets

Power Pages sites

Help + support

Data integration

Data (preview)

Policies

Admin centers

Azure Active

Capacity

Summary

Dataverse

Microsoft Teams

Add-ons

Trial

Finance and operations

See where your org (tenant) is using storage, add-ons, and Microsoft Power Platform requests that could impact your capacity. [Learn more](#)

Storage capacity usage

Capacity

Summary

Dataverse

Microsoft Teams

Add-ons

Trial

Finance and operations

Environment	Type	Finance and operations database usage	Finance and operations file usage
goldendemo22	Sandbox	38.41 GB	0 MB



# Directly in Sandbox Database

goldendemo22

Delete Maintain History Notification list Software License Terms

## Manage environment

### ENVIRONMENT DETAILS:

Environment Id

Deployed on 2/14/2020 3:44 AM

Deployed by

Environment administrator

Latest activity ID

Environment Type Self-service

Primary region North Europe

### DATABASE ACCOUNTS

Reason for access

AX troubleshooting (read-only to AX)

### ENVIRONMENT VERSION INFORMATION ENVIRONMENT FEATURES

Application release 10.0.35

Commerce Manage

Object Explorer

Connect

- spartan-srv-emea-d365opsprod-0
- Database Diagrams
- Tables
- Views
- External Resources
- Synonyms
- Programmability
- Query Store
- Extended Events
- Storage
- Security
- Integration Services Catalogs

SQLQuery2.sql - spa...sa-c63trtz7 (1942)\*

SQLQuery1.sql - spa...sa-c63trtz7 (1542)\*

Regressed Queries...04\_11173841\_72d5]

```
SELECT so.NAME AS 'Table Name'
, SUM(i1.dpages * 8.0 / 1024) as Total_Size_Mb
, SUM(case
WHEN i.type < 2 THEN (i1.dpages * 8.0 / 1024)
END) as Data_size_MB
, SUM(case
WHEN i.type = 2 THEN (i1.dpages * 8.0 / 1024)
END) as Index_size_MB
FROM sysindexes AS i
INNER JOIN sys.indexes AS i ON i.object_id = i1.id AND i.index_id = i1.indi
INNER JOIN sys.objects AS so ON so.object_id = i1.id AND is_ms_shipped = 0
INNER JOIN sys.schemas AS s ON s.schema_id = so.schema_id
WHERE s.name = 'dbo'
and rowcnt > 0
GROUP BY so.name
ORDER BY Total_Size_Mb desc
```

100 %

Results Messages

	Table Name	Total_Size_Mb	Data_size_MB	Index_size_MB
1	BATCHHISTORY	9228.804686	7251.179687	1977.624999
2	EVENTCUD	5015.874998	4686.273437	329.601561
3	BATCHJOBHISTORY	4684.343749	1418.250000	3266.093749
4	BATCH	3583.078121	2265.242187	1317.835934
5	BATCHJOB	1228.499998	619.945312	608.554686
6	EVENTCUDLINES	552.781249	384.203125	168.578124
7	SECURITYOBJECTHISTORY	470.539062	470.539062	NULL
8	GENERALJOURNALACCOUNTENTRY	236.210934	41.796875	194.414059
9	SOURCEDOCUMENTLINE	200.609374	125.289062	75.320312
10	BATCHJOBALERTS	182.218750	69.625000	112.593750
11	INVENTTRANS	170.523431	22.562500	147.960931
12	FORMRUNCONFIGURATIONPAGECAPTION	169.843748	44.132812	125.710936
13	BATCHJOBRECURRENCESCOUNT	169.117187	114.039062	55.078125
14	INVENTSUMLOGTTS	168.999997	64.273437	104.726560
15	ACCOUNTINGDISTRIBUTION	165.460933	24.703125	140.757808
16	SUBLEDGERJOURNALACCOUNTENTRYDISTRIBUTION	157.937498	79.421875	78.515623
17	EVENTINBOX	156.929687	80.125000	76.804687
18	DIMENSIONFOCUSBALANCE	131.624998	36.656250	94.968748
19	SALESLINE	127.132807	37.859375	89.273432
20	RETAILTRANSACTIONSALSTRANS	113.578119	27.507812	86.070307

## Ask us

- Contact your account team
- Contact Fast Track (if applicable)
- Contact Cloud Solution Architect (if applicable)



# Additional resources

Finance and operations storage capacity

[Finance and operations storage capacity - Power Platform | Microsoft Learn](#)

Enable just-in-time database access

[https://learn.microsoft.com/en-us/dynamics365/fin-ops-core/dev-itpro/database/database-just-in-time-jit-access](#)

How to get Dynamics 365 Finance and Operations table sizes

[https://community.dynamics.com/blogs/post/?postid=adeedfe3-6d41-ee11-bdf3-000d3a55bb34](#)



# Reduction tactics

## Optimization targets



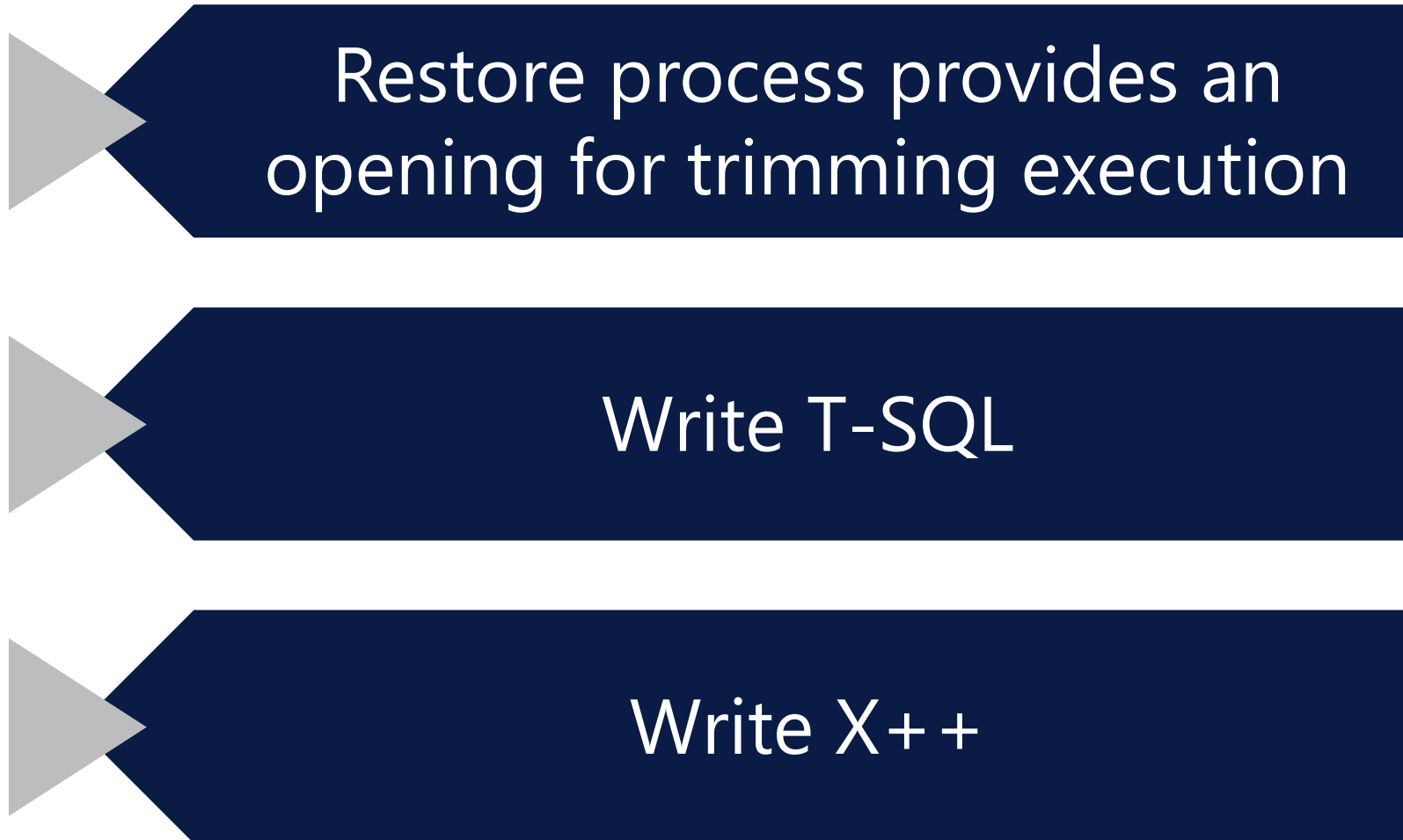


Reduction tactics

Sandboxes



## Trim data in sandbox environments



# Additional resources

## Environment strategy

<https://learn.microsoft.com/en-us/dynamics365/guidance/implementation-guide/environment-strategy-overview>

## Point-in-time restore of the production database to a sandbox environment

<https://learn.microsoft.com/en-us/dynamics365/fin-ops-core/dev-itpro/database/database-pitr-prod-sandbox>

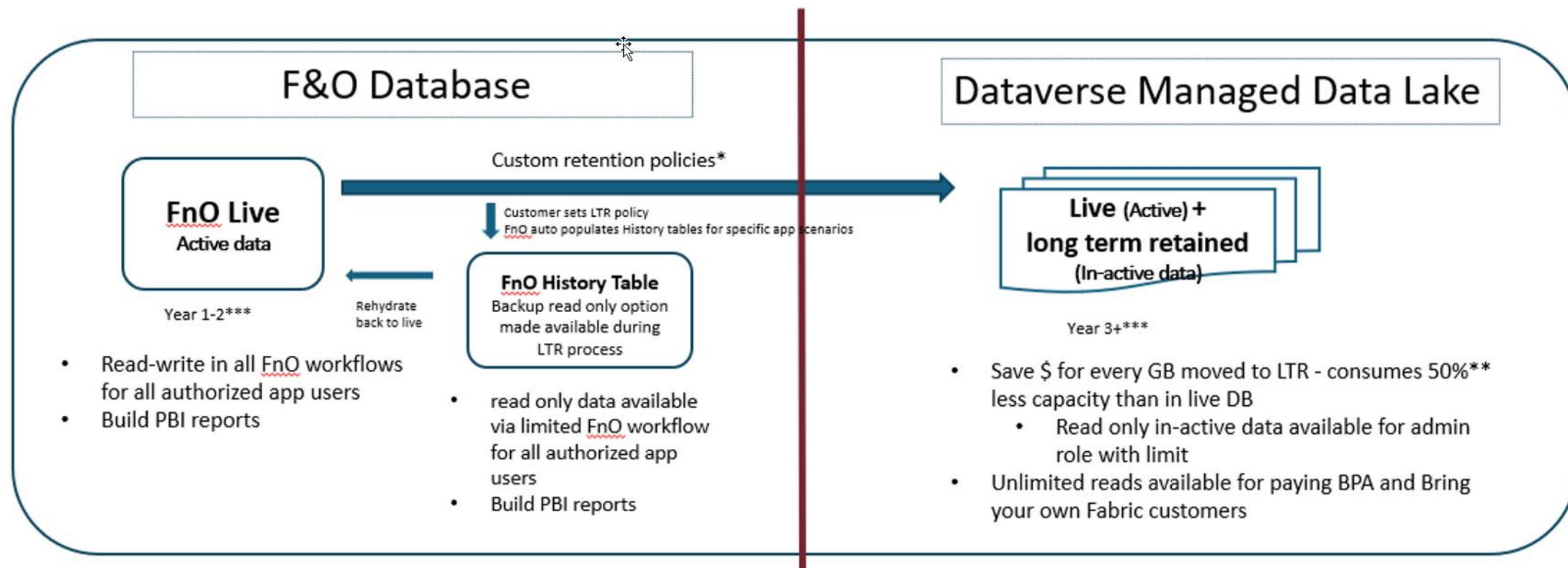




Reduction tactics

Production - archiving

# Archiving overview



\*\*\* For illustration purpose only.  
Customer decides time period.

\* LTR policies can  
1. ONLY be defined for FnO entities enabled for retention.  
2. be set from FnO app UI or Power Apps maker portal.  
3. be viewed from FnO and maker portal retention policies dashboard

Single FnO entity used for data lake movement

\*\* Dependency on data type in source table .  
DB capacity savings from 25 Athena production customers,  
PIMCO in LTR public preview  
JADE – FnO SCM Sales order private preview

# Archiving strategy

## Live data

- Data that requires frequent access, ability to modify or remove and the needs to support a wide variety of search criteria.
- Live data will exist in SQL Azure at this stage.

## History data

- Over time, data is used for reference and/or analytics only and data cannot be modified. The access frequency and the variety of search criteria are greatly reduced.
- Data will be copied over to History table in parallel with move to LTR.
- History data will remain in the SQL Azure database but cannot be modified.
- You will have an option to reverse the archived data to Live table as long as the data resides here.

## Long term data retention(LTR)

- Over more time, the need to reference this data or use it in analytics decreases.
- Customer can remove the data from historical tables freeing up space in SQL Azure database, while retaining data in LTR
- Data available

Transaction Data

Transaction data in our ERP system has different characteristics over time.

Create/Verify/process  
(Live)

Reporting/Analytics  
(History)

Reference/Compliance  
(LTDR)

Timeline\*:

< 2 years

2 years to 5 Years

5 to N years

Beyond N years

Timeline for illustration only. This can be different based on entities and business scenarios

# Archiving roadmap

Entity	Private Preview	Public preview	General Availability
General Ledger Voucher	10.0.38	10.0.39*	TBD
Sales Orders	10.0.38	10.0.39*	TBD
InventTrans	10.0.38	10.0.39*	TBD
Tax Transactions	10.0.38	10.0.39*	TBD
Ledger Journal	10.0.38	10.0.39*	TBD

## How to begin?

Please join the previews and Yammer group:

[https://www.yammer.com/dynamicsaxfeedbackprograms/#/threads/inGroup?type=in\\_group&feedId=69826658304](https://www.yammer.com/dynamicsaxfeedbackprograms/#/threads/inGroup?type=in_group&feedId=69826658304)



Reduction tactics

Production – clean-up

# What's out-of-the box (highlights)

## System administration

- Batch Job History
- Alert history

## General Ledger

- Posted Journals

## Data management

- Staging tables

## Sales and marketing

- Sales orders
- Sales update history
- Order event history

## Procurement and sourcing

- Purchase update history
- Requests for quotation (RFQs) and RFQ replies

...

## Warehouse management

- Work creation history
- Wave batch cleanup
- Work user session log cleanup

...



# What's out-of-the box (highlights)

## Inventory management

- Posted inventory journals
- Closed or deleted inventory settlements
- Inventory dimensions cleanup

...

## Production control

- Unused journals
- Ended production orders

...

## Cost management

- Costing sheet cache

...

## **Full list**

<https://learn.microsoft.com/en-us/dynamics365/fin-ops-core/dev-itpro/sysadmin/cleanuproutines>

# **“Extras”**

## **Archive credit card transaction data**

<https://learn.microsoft.com/en-us/dynamics365/commerce/dev-itpro/archive-cc-data>

## **Document attachment retention**

<https://learn.microsoft.com/en-us/dynamics365/fin-ops-core/fin-ops/organization-administration/configure-document-management#configuration-of-document-attachment-history>

**Write custom cleanups as necessary**



# Avoid storing logs

Move SysDatabaseLog to somewhere less transactional



Keep data migration lean and mean





Reduction tactics

Production - customizations

# Customizations

Does this have to be in the ERP transactional database?

Is this a log?

Is this IoT data?

Use Fabric (or it's components – storage, Power BI, etc)

Use embedded Power Apps

Archive framework roadmap will support custom tables!





Unified support

and the Dynamics 365 Storage Capacity  
Assessment

# Dynamics 365 Finance and Operations Storage Capacity Assessment

Identify possibilities to optimize the storage of the application



## OVERVIEW

A proactive engagement designed to provide **insight into the health of your Dynamics 365 Finance and Operations database**.

Optimization strategies to improve **storage efficiency and performance** based on your specific usage patterns.



## PREREQUISITIES

- Unified Support
- Access to the target Dynamics Lifecycle Services project
- Access to collect configuration and telemetry data from the targeted Dynamics 365 production and sandbox instances



## OUTCOME

- Expert analysis and guidance on your Finance and Operations database capacity and performance with prioritized remediation activities. ▪
- In-depth review of assessment details with a subject matter expert.



## LOGISTICS

- Duration: 3 days
- Delivery: Remote

<sup>1</sup> Reach out to your CSAM for full details of the engagement.

<sup>2</sup> Scoping call is required to make sure the engagement is suitable and to explain the engagement in detail.

<sup>3</sup> A similar assessment exists for Dynamics 365 Customer Engagement

# Summary



# Final thoughts



Don't get bogged down – use Pareto principle, prioritize, avoid “boiling the ocean”



Analyze carefully



Look for low hanging fruit



Be aware that there might not always be a silver bullet



The earlier you start – the easier it is



Plan for time – sometimes, it can take a while

Thank you

