

Data Management Framework Optimization

Dynamics 365 FastTrack
Architecture Insights Series

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Agenda

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- Overview
 - Optimization options
 - Scenarios



Overview



Overview

- Data management framework (DMF) is used for importing data
 - Large volumes
 - Time constraints
 - Cutover

Don't compare DMF performance on a tier 1 machine with a tier 2+ environment.

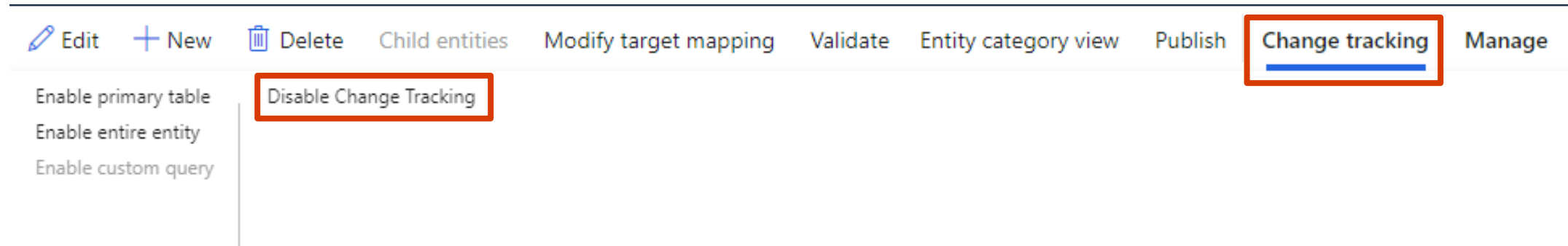


Optimization options




Optimization options

- Change tracking



Optimization options

- Set-based processing

<input type="radio"/>		Entity	↑	Staging table	Target entity	Entity type	Change tracking	Type	Set-based processing
<input checked="" type="radio"/>		Standard general ledger account		StandardMainAccountStaging	StandardMainAccountEntity	Entity	None	StandardMainAccountEntity	<input checked="" type="checkbox"/>




Optimization options


- Batch group

Default Batch Group
Normal

DatalImport
DMF Data Imports
High

Standard view 

Batch Groups

Group	Description	Scheduling Priority
DatalImport	DMF Data Imports	High 

Batch Group

ADMINISTRATION



Optimization options

- Clean-up jobs

Job history cleanup

Parameters

[Cleanup job history](#)

The parameters must be configured to specify the criteria for preserving the job history in data management. Job history that does not meet the criteria will be deleted. The deletion of the job history can also be scheduled as a recurring batch job. The clean up job will execute for the specified amount of time. If more history remains to be cleaned up after the specified amount of time has elapsed, the remaining history will be cleaned up in the next recurrence of the batch job or it can be manually scheduled again. The history of clean up can be viewed from the view cleanup job history form.

The cleanup process will delete job history for job runs in all status, including the ones that are in progress. This must be understood and accepted by checking the user agreement below. Accepting this user agreement is required to proceed further.

Number of days to retain history

Number of hours to execute the job

User Agreement

☐ No

Run in the background



Optimization options

- Validations and business logic

INVENTORY MOVEMENT JOURNAL HEADERS AND LINES V4 : INVENTINV | Standard view

Map staging to target

Mapping details Mapping visualization

+ New Delete Save Generate mapping

	Staging field	Mapping type	Function	Target field	Sequence	Return param...	Call validate Field method
	CATCHWEIGHTQUANTITY	=		CATCHWEIGHTQUANTITY	0	0	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	COSTAMOUNT	=		COSTAMOUNT	0	0	<input type="checkbox"/>
	DEFAULTLEDGERDIMENSIONDIS...	=		DEFAULTLEDGERDIMENSIONDIS...	0	0	<input checked="" type="checkbox"/>
	FIXEDCOSTCHARGES	=		FIXEDCOSTCHARGES	0	0	<input checked="" type="checkbox"/>

Entity structure | INVENTORY MOVEMENT JOURNAL HEADERS AND LINES V4 : INVENTINV

Standard view

Filter

	Sequence	Data source	Parent data source	Level	Run business validations	Run business logic in insert or update method
<input checked="" type="checkbox"/>	1	InventInventoryMovementJourn...		1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



Optimization options

- Import threshold record count
- Import task count

Entity import execution parameters

Standard view ▾

<input type="radio"/>	<input type="checkbox"/>	Entity	↑	Import threshold record count	Import task count
		Customer definitions		100	8
		Customer details V2		250	8
		Customer groups		10	4
<input checked="" type="radio"/>		Customers		100	8



Scenarios



Optimization scenarios

- Changing import threshold record count and import task count

Definition Group	Entity	Sequence	No of Records	No of Threads	Duration	Staging	New	Updated	Deleted	Source Format
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	1	00:51:45	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	1	00:55:24	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	1	00:56:20	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	5	00:17:42	5466	0	10	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	10	00:07:31	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	10	00:07:53	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	10	00:09:37	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	10	00:19:31	5466	5466	0	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	10	00:09:57	5466	0	5466	0	EXCEL
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	100	00:02:56	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	100	00:03:16	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	100	00:03:16	5466	0	0	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	710	00:06:28	5466	0	5466	0	CSV
InventoryMovementV4PerfTest	Inventory movement journal headers and lines V4	1	5466	710	00:07:12	5466	0	0	0	CSV



Optimization scenarios

- Data is important

04799700 : GENJRN | Standard view ▾

Journal voucher

Display journal lines

All ▾

List General Invoice Payment Payment fee Fixed assets Remittance History

+ New Delete Voucher Financial dimensions ▾ Sales tax Functions ▾

○	↺	Date	Voucher	Company	Account type	Account	Description	Debit	Credit	Offset company	Offset account type	Offset account
		5/20/2022	GNJL000130	USRT	Customer	004003		150.00		USRT	Ledger	110110--
		5/20/2022	GNJL000129	USRT	Customer	004003		100.00		USRT	Ledger	110110--
		5/20/2022	GNJL000131	USRT	Customer	004003		125.00		USRT	Ledger	110110--
✓		5/20/2022	GNJL000132	USRT ▾	Customer ▾	004005 ▾	▾	135.00		USRT ▾	Ledger ▾	110110-- ▾



Resources

- [Optimize data migration for Finance and Operations apps - Finance & Operations | Dynamics 365 | Microsoft Docs](#)
- [Data import and export jobs overview - Finance & Operations | Dynamics 365 | Microsoft Docs](#)
- [Priority-based batch scheduling - Finance & Operations | Dynamics 365 | Microsoft Docs](#)



Thank you



