

Sync Inventory Adjustments to Dynamics 365 SCM using Inventory Visibility Service

Presenters:

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Agenda

- Overview
- Architecture & data Flow
- Setup and Configurations
- Use case and Demo
- Resources
- Q&A

Overview

Weijie Sa



Manufacturing challenges

- > Cascading inventory pressures
- > Tier-n supplier visibility
- > Rising energy costs
- > Inventory shortages
- > Volatility in consumer demand



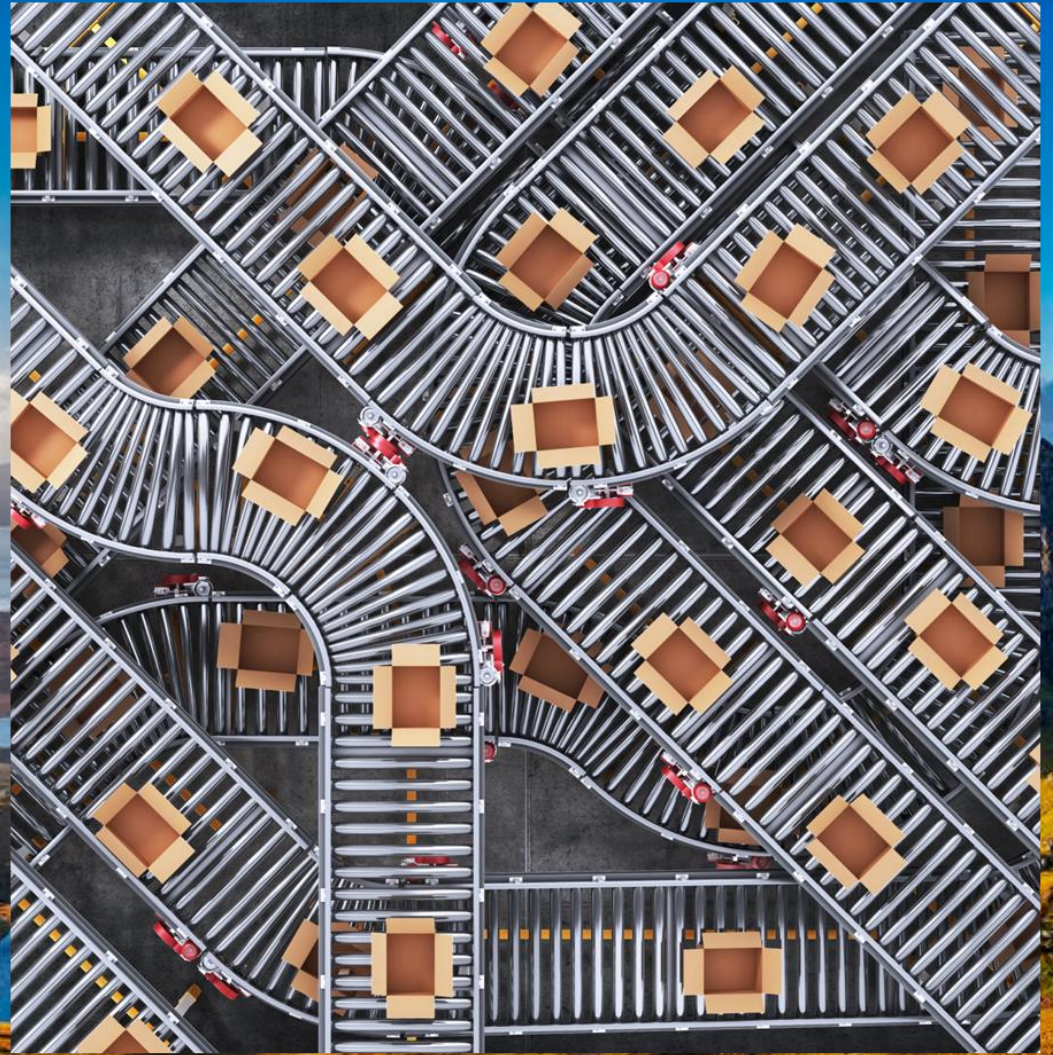
Retail challenges

- > Omni channel Inventory visibility
- > Supply shortages
- > High volume inventory transaction needs handle
- > Volatility in consumer demand

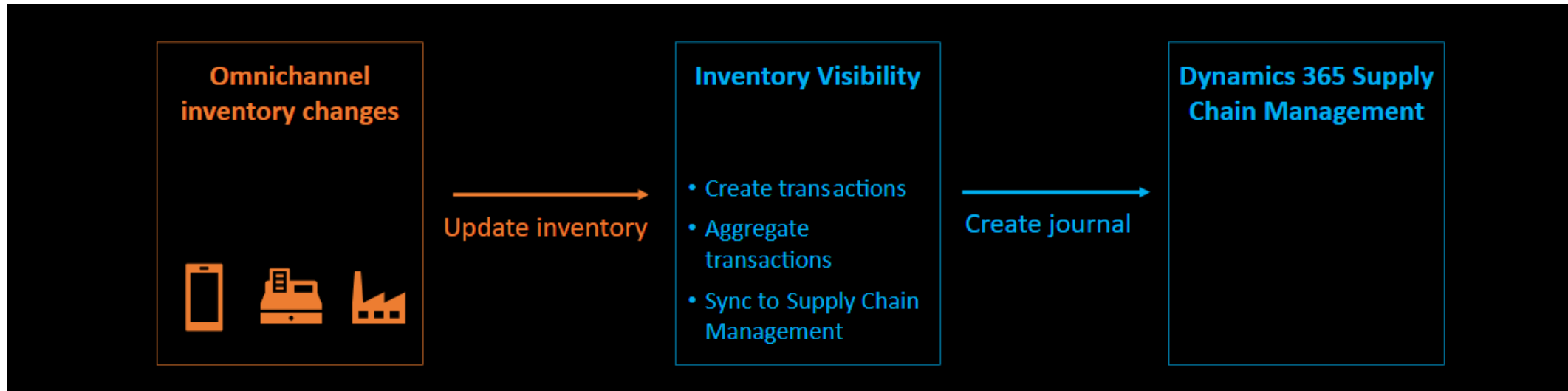


Goal

Composable inventory management solution that work with multiple existing systems



A composable solution : Business layer in the Inventory Visibility



Benefit to a composable flow:

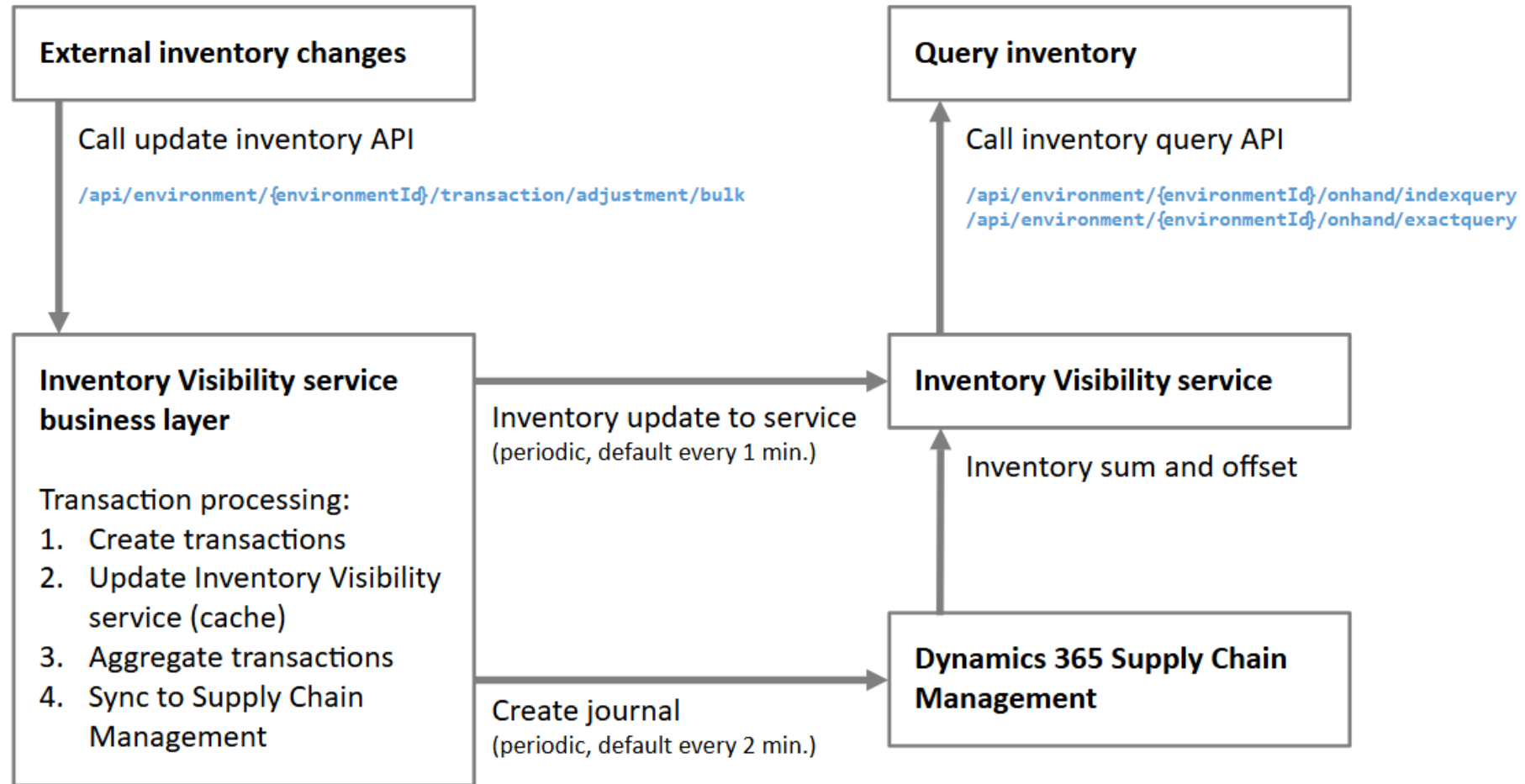
- ✓ Gain agility cross multiple systems
- ✓ Act faster and scale best practices
- ✓ Increase resilience with autonomy

Architecture and data flow

Hiren Naik



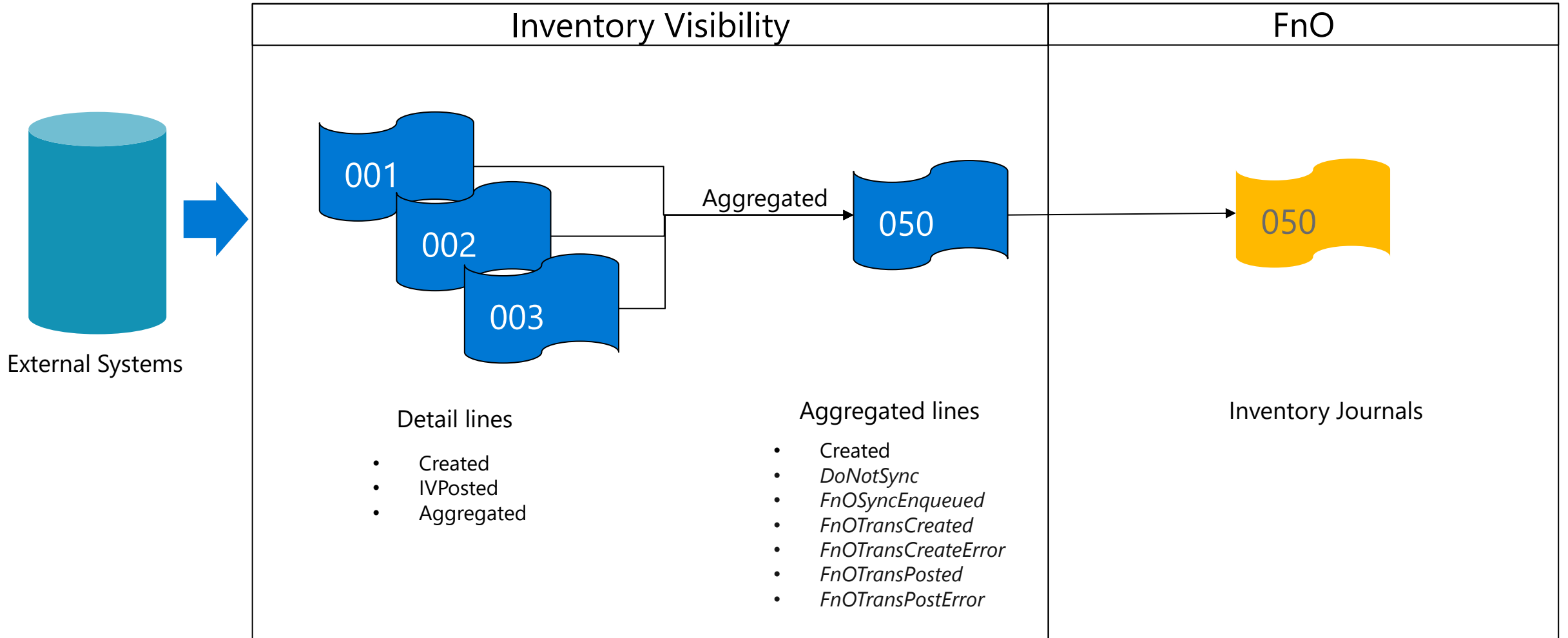
Architecture



/api/environment/{environmentId}/transaction/adjustment/bulk

```
Path:
  /api/environment/{environmentId}/transaction/adjustment/bulk
Method:
  Post
Headers:
  Api-Version="1.0"
  Authorization="Bearer $access_token"
ContentType:
  application/json
Query(URL Parameters):
  createWithIVSync # bool, optional
Body:
[
  {
    "id": string
    "organizationId": string,
    "productId": string,
    "quantityDataSource": string,
    "physicalMeasure": string,
    "dimensions": {
      "siteId": string,
      "locationId": string,
      [key:string]: string, # optional
    },
    "quantity": number,
    "externalReferenceCategory": string, # optional
    "externalReferenceId": string, # optional
    "fnoJournalNameId": string, # optional
    "costPrice": number, # optional
    "transDate": date, # optional
  },
]
```

Data Flow



Setup and Configurations

Hiren Naik



Features in Dynamics 365 SCM

- Dynamics 365 SCM must be on 10.0.41

Feature management
Do not enable new features automatically ▾

New 26 | Not enabled 106 | Scheduled 2 | [Enable all](#) | [Check for updates](#)

New Not enabled Scheduled All

Filter

Feature name	Status	Enable date	Feature added	Feature state	Module
Inventory Visibility transaction integration	✔	11/12/2024	9/25/2024	Preview	Inventory and warehouse management
Inventory Visibility integration with ATP	✔	3/4/2024	2/12/2024	Preview	Inventory and warehouse management
Inventory Visibility integration with inventory adjustment offset	✔	8/8/2023	7/10/2023		Inventory and warehouse management
Inventory Visibility integration with inventory adjustment posting	✔	8/8/2023	7/10/2023		Inventory and warehouse management
Inventory Visibility integration with soft reservation on sales order lines	✔	5/31/2023	5/29/2023		Inventory and warehouse management
Enable warehouse items in Inventory Visibility	✔	11/22/2022	3/31/2022		Inventory and warehouse management
Inventory Visibility integration with reservation offset	✔	3/4/2024	9/1/2021		Inventory and warehouse management
Inventory Visibility integration	✔	10/26/2022	2/20/2021		Inventory and warehouse management

Inventory Visibility transaction integr... ✔

Feature added 9/25/2024
Inventory and warehouse management

This feature was enabled on 11/12/2024

Description

Provides the functionality to allow Inventory Visibility service to directly update inventory changes into Dynamics 365 SCM as journals or other type of transactions. To enable this feature, "Inventory Visibility integration" and "Inventory Visibility integration with inventory adjustment offset" features need to be enabled as a prerequisite.

Comments

DMF Import Project setup in Dynamics 365 SCM

← Edit + New Delete Import Create recurring data job Apply Template Job history Download Entity sequence Applicable roles Applicable legal entities Standard view **Import options** ...

Manage recurring data jobs
Generate mapping

Import | IVTransactionImport_Adjustment | Standard view

IVTransactionImport_Adjustment

Import

Group name	Description	Data project operation type	Project category	Truncate entity data	Group ID
IVTransactionImport_Adjustment		Import	Project	<input type="checkbox"/> No	{7319CB6B-514E-4640-B87C-0C...}

Selected entities

+ Add file + Add template Remove entity Open in Excel Resequence Sort by Disable Entity attribute

Entity	View map	Execution ... ↑	Level in execut...	Sequence	Obsolete	Source data format	Skip staging	Sheet lookup	Disable	Application module
<input type="radio"/> Inventory adjustment headers for Inventory Visibility Add-in			1	1	1	CSV	<input checked="" type="checkbox"/>			Inventory and warehouse mana...
<input type="radio"/> Inventory adjustment lines for Inventory Visibility Add-in			1	1	2	CSV	<input checked="" type="checkbox"/>			Inventory and warehouse mana...

Batch jobs in Dynamics 365 SCM

← Edit + New Delete Batch job history Recurrence Alerts BusinessEvents Generated files Change status Remove recurrence Copy batch job Options 🔍

Personalize
Always open for editing
Personalize this page
Add to workspace ▾

Page options
Security diagnostics
Advanced filter or sort
Record info
Go to ▾

Share
Get a link ▾
Create a custom alert ▾
Manage my alerts

Power Automate
See your flows
Create a flow

Batch job

Standard view * ▾

🔍 Filter

○	Job ID	Status	Job description	📅	Scheduled start date/time	Active period	Created by	Run by	Company acco...	Batch group	Effective Scheduling Priority
	68720222792	Ended	Inventory Visibility ATP initial push		6/12/2024 7:55:40 PM		HirenNaik	HirenNaik	USMF		Normal
	68720160542	Ended	Inventory Visibility initial push		4/19/2024 5:05:29 PM		HirenNaik	HirenNaik	USMF		Normal
	68720160141	Waiting	Inventory Visibility integration		11/12/2024 9:56:32 PM		HirenNaik	HirenNaik	USMF		Normal
	68720221304	Waiting	Inventory Visibility integration with ATP		11/12/2024 9:56:43 PM		HirenNaik	HirenNaik	USMF		Normal
✓	68720484548	Waiting	Inventory Visibility posting job		11/12/2024 9:57:21 PM		HirenNaik	HirenNaik	USMF		Normal
✓	68720484544	Executing	Update status of posted inventory adjustment journals to Inventory Visibility,		11/12/2024 9:55:57 PM		HirenNaik	HirenNaik	USMF		Normal

Datasource and Measure configuration in IVS

Dynamics 365 Inventory Visibility SANDBOX

iv - Saved
Inventory System Configuration

General Related

Data Source Name: iv

Dimension Mappings

Data Source N...	Customer Dimension	Base Dimens
<input type="checkbox"/> iv	Expiry Time	Extender
<input type="checkbox"/> iv	Site	Siteld
<input type="checkbox"/> iv	Expiry Date	Extender
<input type="checkbox"/> iv	Warehouse	Location
<input type="checkbox"/> iv	Status	Extender

Rows: 5

Physical Measures

Display name	Physical Measure Name
<input type="checkbox"/> iv.ordered	ordered
<input type="checkbox"/> iv.Inbound	Inbound
<input type="checkbox"/> iv.Consumed	Consumed
<input type="checkbox"/> Adjust	Adjust

Rows: 14

Calculated Measures

Calculated Measure Display...	Calculated Measure Name
<input type="checkbox"/> iv.atp	ivatp

Dynamics 365 Inventory Visibility SANDBOX

IV_NetAvailable - Saved
Calculated Measure Metadata V2 · IV UI V2 form

General Related

Calculated Measure Display Name: IV_NetAvailable

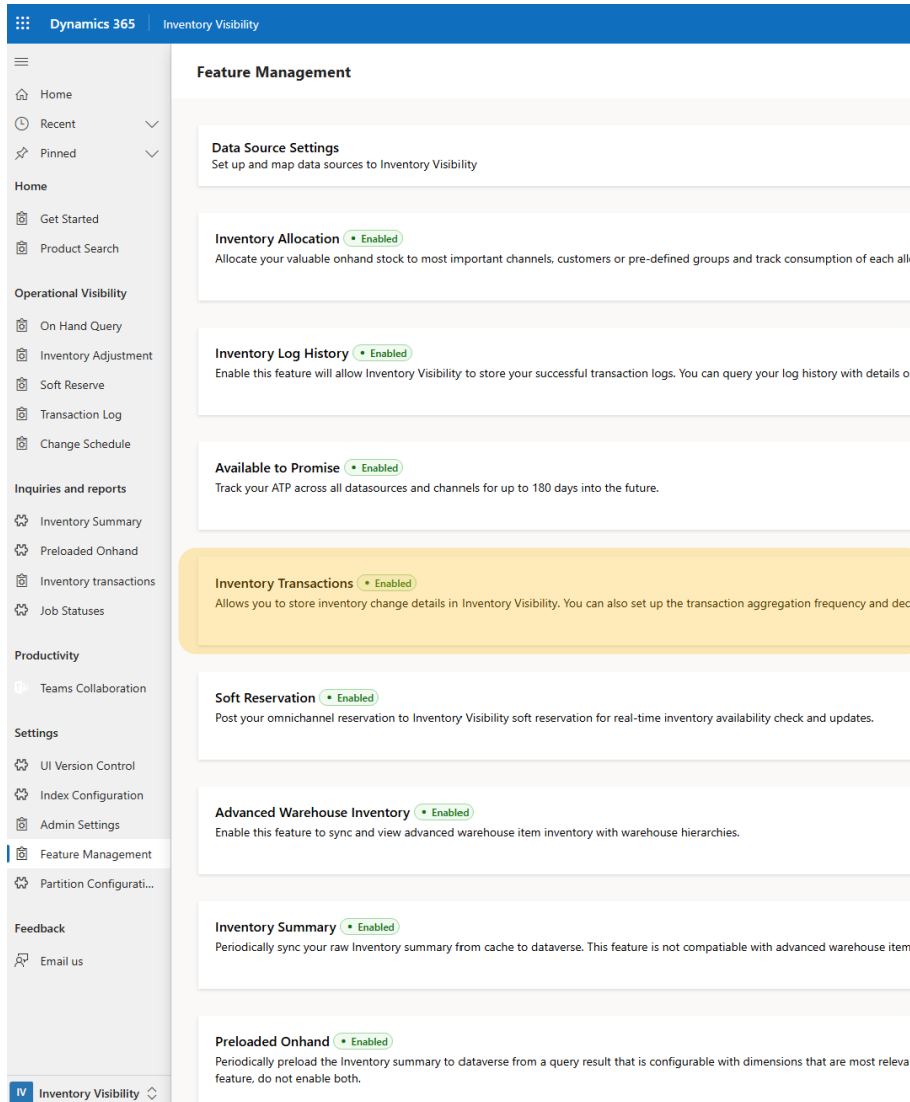
Calculated Measure Data Source: iv

Calculated Measure Name: IV_NetAvailable

Calculated Measure Details

Calculated Measure Formula Description	+/- to result	Physical Measure Name Reference
<input type="checkbox"/> fno_AvailPhysical	Addition	fno.AvailPhysical
<input type="checkbox"/> IV_Adjust	Addition	Adjust

Feature in Inventory Visibility Service



The screenshot displays the Dynamics 365 Inventory Visibility interface. The top navigation bar shows 'Dynamics 365' and 'Inventory Visibility'. A left-hand navigation pane lists various sections: Home, Recent, Pinned, Home (with sub-items 'Get Started' and 'Product Search'), Operational Visibility (with sub-items 'On Hand Query', 'Inventory Adjustment', 'Soft Reserve', 'Transaction Log', and 'Change Schedule'), Inquiries and reports (with sub-items 'Inventory Summary', 'Preloaded Onhand', 'Inventory transactions', and 'Job Statuses'), Productivity (with 'Teams Collaboration'), Settings (with 'UI Version Control', 'Index Configuration', and 'Admin Settings'), Feature Management (highlighted in blue), Partition Configurati..., Feedback (with 'Email us'), and Inventory Visibility (at the bottom).

The main content area is titled 'Feature Management' and lists several features, each with an 'Enabled' status indicator in a green pill. The features are:

- Data Source Settings**: Set up and map data sources to Inventory Visibility.
- Inventory Allocation**: Allocate your valuable onhand stock to most important channels, customers or pre-defined groups and track consumption of each all.
- Inventory Log History**: Enable this feature will allow Inventory Visibility to store your successful transaction logs. You can query your log history with details or
- Available to Promise**: Track your ATP across all datasources and channels for up to 180 days into the future.
- Inventory Transactions**: Allows you to store inventory change details in Inventory Visibility. You can also set up the transaction aggregation frequency and deci
- Soft Reservation**: Post your omnichannel reservation to Inventory Visibility soft reservation for real-time inventory availability check and updates.
- Advanced Warehouse Inventory**: Enable this feature to sync and view advanced warehouse item inventory with warehouse hierarchies.
- Inventory Summary**: Periodically sync your raw Inventory summary from cache to dataverse. This feature is not compatible with advanced warehouse item
- Preloaded Onhand**: Periodically preload the Inventory summary to dataverse from a query result that is configurable with dimensions that are most releva feature, do not enable both.

Inventory Transactions Feature Setup in IVS

Dynamics 365 | Inventory Visibility SANDBOX

Transaction - Saved
Transaction Feature Entity

General Related

Enable feature True

Periodically synchronize transaction to IV True

Inventory Visibility synchronization frequency * 1

Fno Synchronization Settings

Enable Sync Job True

Job Settings [SystemDefault-ScheduledTransactionFnoSyncJob](#)

Max line count in adjustment journal * 100

Fno synchronization frequency(Unused) * 2

Fno sync max journal count in package * 1

Fno integration mappings

Physical Measure Name	Target Fno Transaction Type	Target Fno Transaction Status	Created On	Modified On
<input type="checkbox"/> Adjust	AdjustmentJournal	Posted	9/17/2024 1:01 PM	11/12/2024 11:07 AM

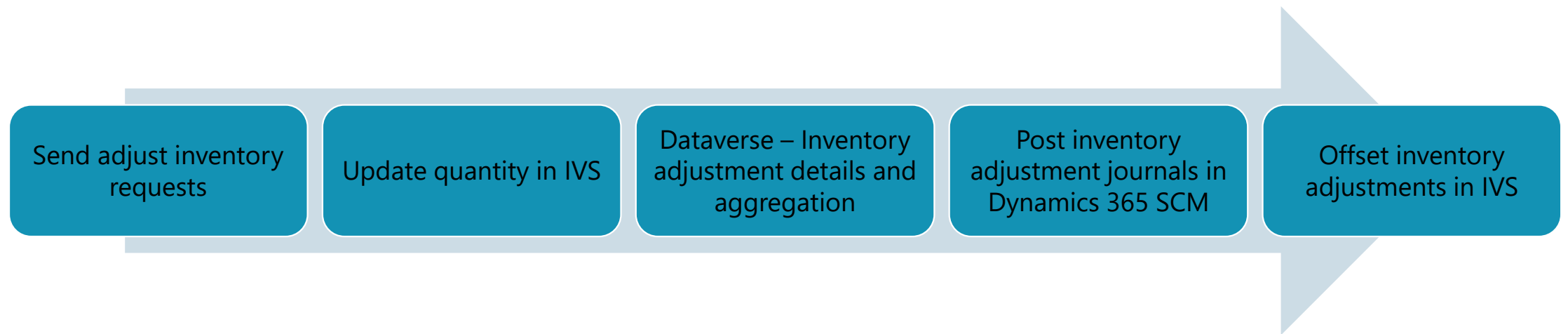
Rows: 1

Use case

Hiren Naik



- Contoso coffee has retail stores across country. Store manager adjust inventory for items such as coffee beans, milk, muffins throughout day.
- Store manager will interact with copilot to make inventory adjustments. Inventory will be directly adjusted in Inventory Visibility Service.
- Inventory Visibility Service is configured to aggregate inventory adjustments at regular interval and post inventory adjustment journals in Dynamics 365 SCM. Upon successful inventory posting in Dynamics 365 SCM inventory will be offset in Inventory Visibility Service.



Demo



View	Order settings	Warehouse	Quality	Packaging	Batch attributes	Compliance
On-hand inventory Transactions Warehouse transactions	Lots Batches Default order settings	Warehouse items Bar codes GTIN codes Physical dimensions Physical product dimensions	Non conformances Item quality groups	Bulk item conversion Consolidated on-hand	Batch attributes selection Product specific Customer specific Search inventory	Regulated products Safety data sheet Reporting details Item hazardous material Restricted products

Released product details

Standard view

Filter

Item number	Product name	Search name	Product type	Product subtype	Product service type	Product dimension groups	Product lifecycle state	Engineering product category details	Product owner
000076	ProductBundle	ProductBundle	Item	Product	Not specified				
0001	Youth Accessory Combo Set	YouthAccessoryComboS	Item	Product	Not specified				
000101	Catalyst2	Catalyst2	Item	Product	Not specified				
000126	SB_Test01	SB_Test01	Item	Product	Not specified				
000151	Milk	Milk	Item	Product	Not specified				
000176	HrtMonitor	HrtMonitor	Item	Product	Not specified				
000202	Fabrikam Car Radio	FabrikamCarRadio	Item	Product	Not specified				
000227	Light roast coffee beans	Lightroastcoffeebean	Item	Product	Not specified				
000228	Light roast cold brew	Lightroastcoldbrew	Item	Product	Not specified				
000251	Planned order 001	Plannedorder001	Item	Product	Not specified				
000276	AK47	AK47	Item	Product	Not specified				
000301	Milk	Milk	Item	Product	Not specified				
000302	CoffeeBeans	CoffeeBeans	Item	Product	Not specified				
000303	Muffins	Muffins	Item	Product	Not specified				
1000	Surface Pro 128 GB	1001	Item	Product	Not specified				
4401	Proseware 50W Car Radio	Proseware 50W Car Ra	Item	Product master	Not specified	Color		Operational	
4402	Northwind Traders 50W Car Radio	Northwind Traders 50	Item	Product master	Not specified	Color			
4403	A. Datum 50W Car Radio	A. Datum 50W Car Rad	Item	Product master	Not specified	Color			
A0001	HDMI 6' Cables	HDMI 6' Cables	Item	Product	Not specified			Operational	
A0002	HDMI 12' Cables	HDMI 12' Cables	Item	Product	Not specified				
C0001	Microsoft Natural Keyboard Elite	Microsoft Natural Ke	Item	Product master	Not specified	Color			
C0002	Microsoft Arc™ Keyboard	Microsoft Arc™ Keybo	Item	Product	Not specified				
C0003	Microsoft Arc™ Mouse	Microsoft Arc™ Mouse	Item	Product master	Not specified	Color			
C0004	Lifecam HD 5000	Lifecam HD 5000	Item	Product	Not specified				
ConBased_0001	ConsBased 0001	ConsBased0001	Item	Product master	Not specified	Config			
D0001	MidRangeSpeaker	MidRangeSpeaker	Item	Product	Not specified				
D0002	Cabinet	Cabinet	Item	Product	Not specified				

- Home
- Recent
- Pinned
- Home
- Get Started**
- Product Search
- Operational Visibility
 - On Hand Query
 - Inventory Adjust...
 - Soft Reserve
 - Transaction Log
 - Change Schedule
- Inquiries and reports
 - Inventory Summary
 - Preloaded Onhand
 - Inventory transact...
 - Job Statuses
- Productivity
 - Teams Collaborati...
 - IV Inventory Visibility**

Get Started

Setup your Inventory Visibility and find more resources

Feature Management
Manage feature statuses, setup data sources and configurations Manage

Index Hierarchy
Configure frequently-used query dimensions for best performances Manage

Partition Configuration
Configure rules to store inventory data under different partitions. Only applicable to environments with no inventory data. Manage

Entity Version
Switch between legacy UI (version 1) and new UI (version 2) experience; To migrate existing configuration to new UI, Go to 'Admin Settings' -> Migrate UI Versions -> Manage Manage

Other Settings
Set tokens; View and update your configuration to Inventory Visibility instances Manage

More resources
[Documentations](#)
[Tech Talks](#)

Resources



- Learn: [Sync external inventory adjustments through Inventory Visibility - Supply Chain Management | Dynamics 365 | Microsoft Learn](#)
- Viva Engage: [Dynamics 365 and Power Platform Preview Programs : D365 SCM Inventory Management & Inventory Visibility : New Conversations](#)
- TechTalks: [Inventory Visibility Service for Dynamics 365 Supply Chain Management Series](#)
- Business Process: [Introduction to inventory to deliver business process - Dynamics 365 | Microsoft Learn](#)



QUESTIONS

Dankie Faleminderit **Shukran** Chnorakaloutioun Hvala Blagodaria
Děkuji **Tak** Dank u **Tānan** Kiitos **Merci** Danke Ευχαριστώ A dank
Mahalo הודות. **Dhanyavād** Köszönöm Takk **Terima kasih** **Grazie** Grazzi

Thank you!

감사합니다 Paldies Choukrane Aċiū **Благодарам** ありがとうございます
谢谢 Баярлалаа **Dziękuję** Obrigado Mulțumesc **Спасибо** Ngiyabonga
Ďakujem **Tack** Nandri **Kop khun** Teşekkür ederim Дякую **Хвала** Diolch



Microsoft Dynamics 365