



AI Resource Installation Guide

Sales and Operations Planning

Last Update: January 15, 2026

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I. ABOUT



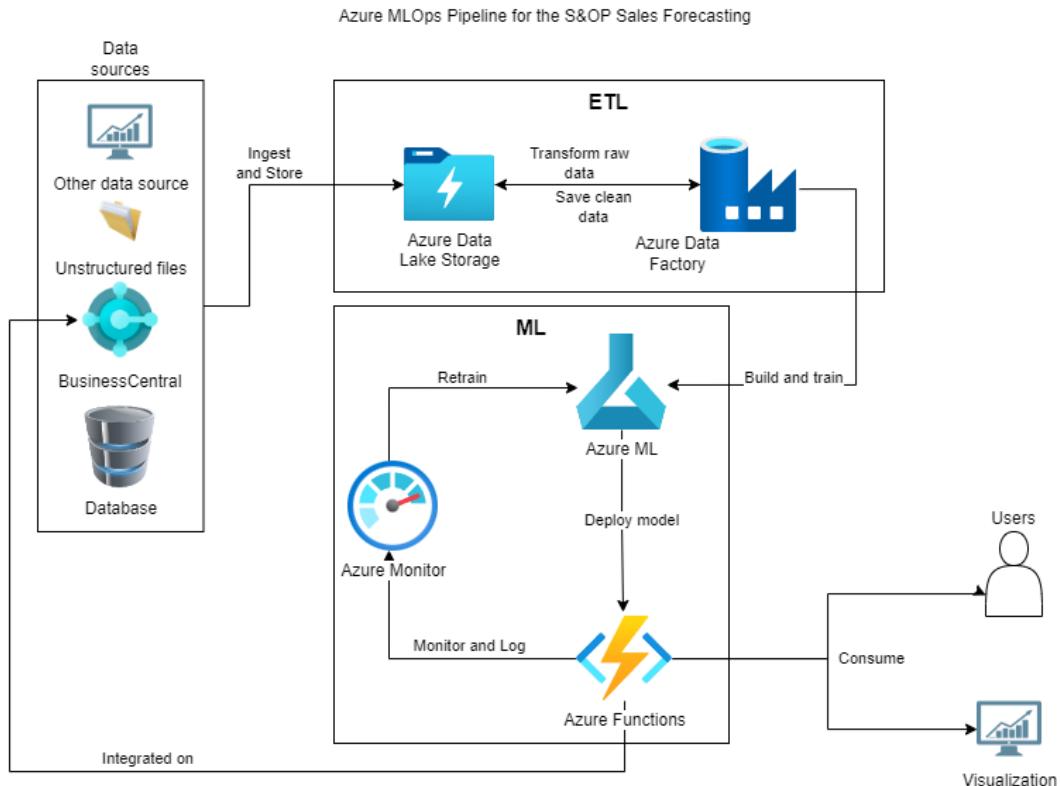
The Sales & Operations Planning for Dynamics 365 Business Central application generates AI-powered sales forecasts. Historical sales data is synced from Business Central to Microsoft Azure and then utilized for model training. The following guide covers the S&OP AI pipeline and its installation instructions.

For more information, please go to <https://www.websan.com/sales-and-operations-planning-for-dynamics-365-business-central> .

II. ARCHITECTURE DESIGN & PRE-REQUISITES

This section presents the Sales & Operations Planning application AI pipeline and the pre-requisites for the installation of its resources.

AI Pipeline and Data Privacy



IMPORTANT: Except for the resources marked with a double asterisk (**), the standard installation (**recommended**) requires setting resources names **exactly** to the values indicated in the present documentation. Using a different naming convention requires source code updates not supported by WebSan. If different names are required by your organization, please contact the AI Support team as soon as possible.

WebSan's AI Commitment: Your data will *never leave your Azure tenant* and will solely be used for producing forecasts for your Business Central environment. WebSan Solutions Inc. will not use your data to train the models used by other companies.

Installation Pre-Requisites

Listed below are the AI resource installation requirements:

1. An active Azure subscription that will allow the creation and usage of the following resources:
 - a. Azure Data Lake Storage Gen2
 - b. Azure Machine Learning Services
 - c. Azure Data Factory v2
 - d. Azure Function
2. As the installation process involves making Role-Based Access Control (RBAC) updates to the resources listed above, you must have an owner role or other elevated permissions, at least at the Resource Group level, for the resource group where the solution will be installed.
3. You will need to provide login credentials for an Azure account to the WebSan AI Support Team (no admin privileges are mandatory). These credentials will be used for the deployment of the Azure Function to your tenant.

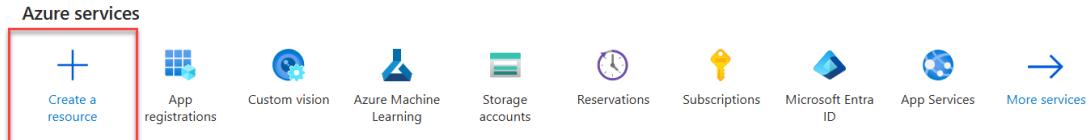
Note that you must contact the WebSan AI Support Team to gain access to the installation scripts required to complete the installation of the AI resources.

1. RESOURCE DEPLOYMENT

The following section covers the steps required for the deployment of the AI pipeline resources.

Resource Group

1. Log in to your Azure Portal. In the main page, click on + Create a resource.



Azure services

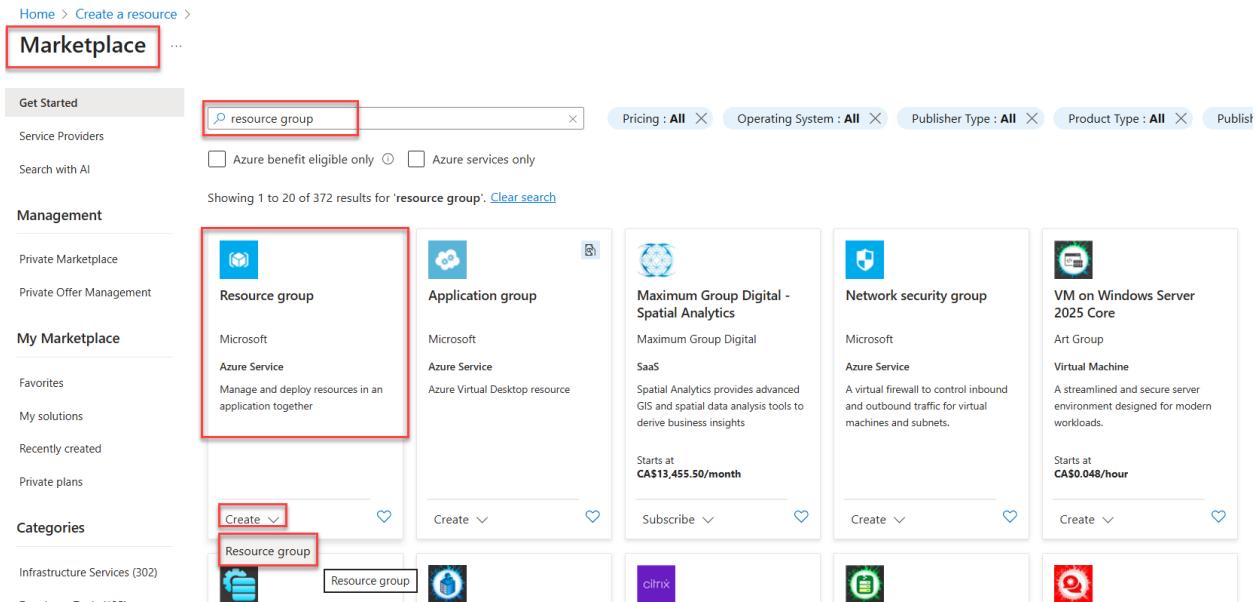
- Create a resource** (highlighted with a red box)
- App registrations
- Custom vision
- Azure Machine Learning
- Storage accounts
- Reservations
- Subscriptions
- Microsoft Entra ID
- App Services
- More services

Resources

Recent Favorite

Name	Type	Last Viewed
⚡ sales-prediction-function	Function App	3 hours ago
💡 sales-prediction-function	Application Insights	4 hours ago
🌐 websanaistorage	Storage account	3 days ago
🌐 websan-ai	Resource group	3 days ago

2. In the window that appears, search for “resource group”. In the Resource group tile, click Create > Resource group.



Home > Create a resource >

Marketplace ...

Get Started

Service Providers

Search with AI

Management

Private Marketplace

Private Offer Management

My Marketplace

Favorites

My solutions

Recently created

Private plans

Categories

Infrastructure Services (302)

resource group

Pricing : All × Operating System : All × Publisher Type : All × Product Type : All × Publish!

Azure benefit eligible only Azure services only

Showing 1 to 20 of 372 results for 'resource group'. [Clear search](#)

Resource group (highlighted with a red box)	Application group	Maximum Group Digital - Spatial Analytics	Network security group	VM on Windows Server 2025 Core
Microsoft	Microsoft	Maximum Group Digital	Microsoft	Art Group
Azure Service	Azure Service	SaaS	Azure Service	Virtual Machine
Manage and deploy resources in an application together	Azure Virtual Desktop resource	Spatial Analytics provides advanced GIS and spatial data analysis tools to derive business insights	A virtual firewall to control inbound and outbound traffic for virtual machines and subnets.	A streamlined and secure server environment designed for modern workloads.
Create (highlighted with a red box)	Create	Starts at C\$13,455.00/month	Create	Starts at C\$0.048/hour
Resource group (highlighted with a red box)	Resource group	Subscribe	Create	Create

3. In the “Create a resource group” page that appears, select your subscription and enter the name **websan-ai** in the Resource group field. Set the Region field to your desired region.

Microsoft Azure

Home > Resource groups > Create a resource group

Basics Tags Review + create

Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

Project details

Subscription * (dropdown placeholder)

Resource group * websan-ai

Resource details

Region * (dropdown set to (Canada) Canada Central)

4. Click **Review + create**.

Note: You must ensure all subsequent resources created as part of this solution are located in the Resource Group you just created. Also, as you will need to make Role-Based Access Control updates to the resources that will be created next, you must have an Owner role or other elevated permissions, at least at the Resource Group level, for the resource group you just created.

Azure Data Lake Storage (ADLS)

(**) – the name of this *resource* must be globally unique across all Azure Tenants; you may set it to your preferred value. However, note that the name of the *containers* within the ADLS must follow the exact names indicated in this documentation.

1. To create the Azure Data Lake Storage Gen2, you will need to:

a. Search for 'Storage Accounts', click the **Storage accounts** service.

Azure services

Storage accounts

Services

Storage accounts

Static Web Apps

Storage accounts (classic)

Storage Sync Services

Stream Analytics jobs

b. Create a storage account by clicking the Create button; you will be directed to the wizard to create the storage. Set the Storage Account Name and Region to your

preferred values. **Redundancy** must be set to **Locally-redundant storage (LRS)**. Make sure to choose the resource group you created before.

Home > Storage accounts >

Create a storage account

Basics Advanced Networking Data protection Encryption Tags Review

Cost of your storage account depends on the usage and the options you choose below. [Learn more about Azure storage accounts](#)

Project details

Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources.

Subscription *

Resource group * [Create new](#)

Instance details

Storage account name *

Region * [Deploy to an edge zone](#)

Performance Standard: Recommended for most scenarios (general-purpose v2 account)
 Premium: Recommended for scenarios that require low latency.

Redundancy

c. On the Advanced tab, look for Hierarchical Namespace, then enable it.

Hierarchical Namespace

Hierarchical namespace, complemented by Data Lake Storage Gen2 endpoint, enables file and directory semantics, accelerates big data analytics workloads, and enables access control lists (ACLs) [Learn more](#)

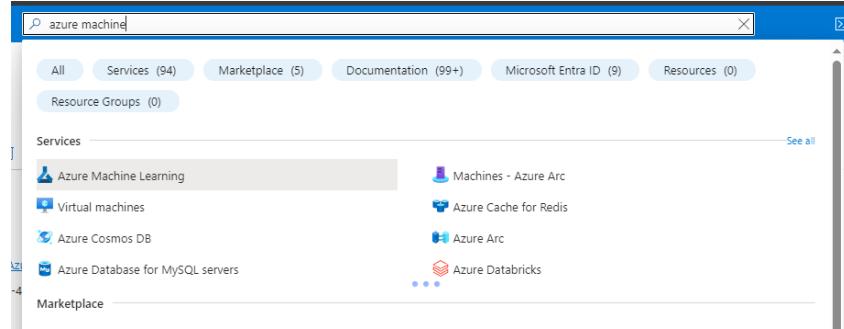
Enable hierarchical namespace

d. Click the **Review + Create > Create** buttons and wait for it to be deployed.

Azure Machine Learning

- To create the next resource – **Azure Machine Learning Services**:

- On your Azure Portal, search for ‘Machine Learning’, then click the **Azure Machine Learning services**.



b. Create a machine learning workspace by clicking the Create button. It shall direct you to the wizard for creating the workspace. Name the workspace **websanaiml**, then set the Region based on your preference. Values for the storage account, key vault, and application insights will be automatically created.

c. Click the **Review + create > Create** buttons. Wait for it to be deployed.

Azure Data Factory

1. To create the next resource – **Azure Data Factory v2**:

a. On your Azure portal, search for “data factories”, then click the **Data factories** services.

The screenshot shows the Azure portal search results for 'data factories'. The 'Data factories' service is selected, highlighted in grey. Other services listed include Data Shares, Data Types, Azure Databricks, and Managed databases. The 'All' tab is selected at the top.

b. Create the data factory by clicking the Create button. It shall direct you to the wizard for creating the data factory. Name the data factory **websan-ai-dfv2**, then set the Region based on your preference. Also, set the Version to **V2**.

The screenshot shows the 'Create Data Factory' wizard on the 'Basics' tab. The 'Subscription' dropdown is set to 'WebSan MPN Azure Sponsorship 2022'. The 'Resource group' dropdown is set to 'websan-ai'. The 'Name' field is set to 'websan-ai-dfv2'. The 'Region' dropdown is set to 'East US'. The 'Version' dropdown is set to 'V2'.

c. On the Networking tab, look for Managed virtual network, then enable the option.

The screenshot shows the 'Networking' tab of the 'Create Data Factory' wizard. The 'Managed virtual network' section contains a note about provisioning AutoResolveIntegrationRuntime. Below it is a checkbox labeled 'Enable Managed Virtual Network on the default AutoResolveIntegrationRuntime', which is checked.

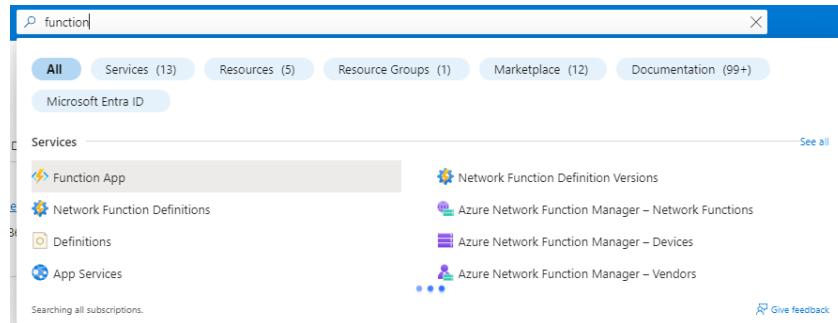
d. Click the **Review + create** > **Create** buttons. Wait for it to be deployed.

Azure Function App

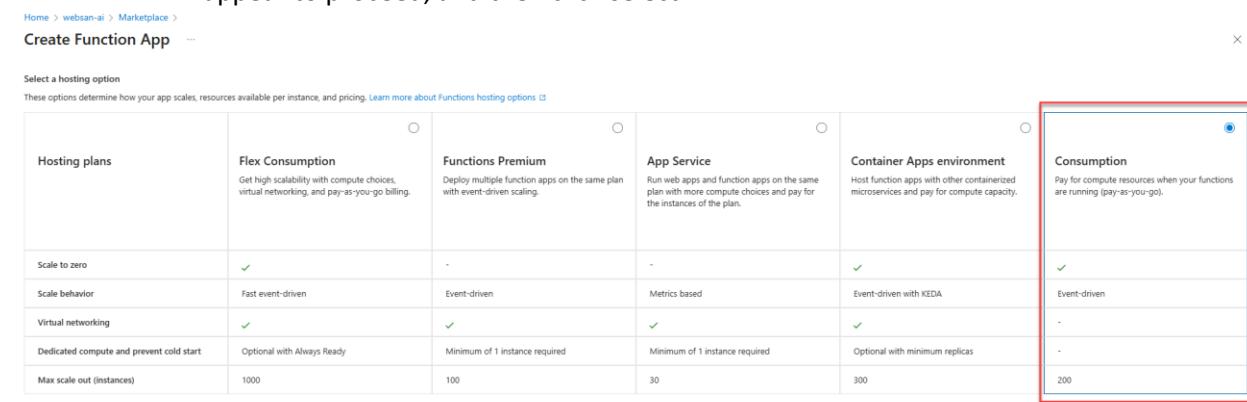
(**) – the name of this resource must be globally unique across all Azure Tenants; you may set it to your preferred value.

Install the last resource, **Azure Functions**:

- On your Azure portal, search for “function apps”, then click the Function App



- In the window that appears, select the Consumption tile, accept the notifications that appear to proceed, and then click select.



- Enter a globally unique name in the Function App Name field, then set the following values:

Subscription *

Resource Group * [Create new](#)

Function App name * [.azurewebsites.net](#)

Do you want to deploy code or container image? * Code Container Image

Runtime stack *

Version *

Region *

Operating system
Linux is the only supported Operating System for your selection of runtime stack.

Operating System * Linux Windows

Hosting
The plan you choose dictates how your app scales, what features are enabled, and how it is priced. [Learn more](#)

Hosting options and plans * Consumption (Serverless)
Optimization for serverless and event-driven workloads.

Functions Premium
Event based scaling and network isolation, ideal for workloads

[Review + create](#) [< Previous](#) [Next : Storage >](#)

d. Click the **Review + create** > **Create** buttons. Wait for it to be deployed.

After installing all the necessary resources for the solution, ensure your Azure account is set as **Owner** for all the resources installed. You can verify this by going to the **Access Controls (IAM)** tab for each of the resources. Remember that all the resources must have been installed in the Resource Group you created at the beginning of this section.

Access control (IAM)

Role assignments

Number of role assignments for this subscription: 118

Search by name or email: Type: All Role: All Scope: All scopes Group by: Role

All (22) Job function roles (3) Privileged administrator roles (19)

Name	Type	Role	Scope	Condition
Owner (8)	User	Owner	Subscription (Inherited)	None
	User	Owner	Subscription (Inherited)	None
	User	Owner	Subscription (Inherited)	None
	User	Owner	Subscription (Inherited)	None
	User	Owner	Subscription (Inherited)	None
	User	Owner	Subscription (Inherited)	None
	User	Owner	Subscription (Inherited)	None
	User	Owner	Subscription (Inherited)	None

2. RESOURCE CONFIGURATION

Azure Data Lake Storage

1. Go to your websan-ai resource group and select your Storage Account resource.
2. On the right pane, go to Security + networking > Access Keys. For either key, click the Show button that appears next to it, copy the key and **temporarily** store it in a safe location. You will use this key shortly.

Home > websan-ai > websanaistorage

websanaistorage Access keys ...

Storage account

Search

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

Partner solutions

Resource visualizer

> Data storage

Security + networking

Networking

Access keys

Set rotation reminder Refresh Give feedback

Access keys authenticate your applications' requests to this storage account. Keep your keys in a secure location like Azure Key Vault, and replace them often with new keys. The two keys allow you to replace one while still using the other.

Remember to update the keys with any Azure resources and apps that use this storage account. [Learn more about managing storage account access keys](#)

Storage account name: websanaistorage

key1 Rotate key

Last rotated: 8/24/2023 (833 days ago)

Key:

Connection string:

key2 Rotate key

Last rotated: 8/24/2023 (833 days ago)

Key:

3. Next, on the right pane, go to Data storage > Containers. Here, click on the +Add container button that appears on the top-left corner of the screen. This will allow you to create the following containers in the storage account (see image below). These containers will serve as our central storage for the raw data, cleaned data (from Azure Data Factory v2), and the trained model (for Azure Function).



websanaistorage | Containers

Storage account

Search

+ Container Change access level Restore containers Refresh Delete Give feedback

Overview

Activity log

Tags

Diagnose and solve problems

Access Control (IAM)

Data migration

Events

Storage browser

Data storage

Containers

Search containers by prefix

Show deleted containers

Name	Last modified	Anonymous access level	Lease state
<input type="checkbox"/> Slogs	8/24/2023, 11:09:06 PM	Private	Available
<input checked="" type="checkbox"/> cleaned	10/20/2023, 12:26:24 AM	Container	Available
<input type="checkbox"/> data	10/19/2023, 7:39:31 PM	Private	Available
<input type="checkbox"/> model	11/21/2023, 12:16:38 AM	Container	Available
<input type="checkbox"/> raw	10/19/2023, 7:16:48 PM	Private	Available

4. Confirm that the Anonymous access level is set to “Private”. If necessary, change the access level by clicking the 3 horizontal dots at the end of each folder, then click the **Change access level** menu.

The screenshot shows the Azure Storage Explorer interface. On the left, a sidebar lists various storage-related options like Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, Storage browser, Data storage (Containers, File shares, Queues, Tables), and Security + networking. The main area displays a list of blobs in a container named 'cleaned'. The blobs are: Slogs (Last modified 8/24/2023, 11:09:06 PM, Private, Available), cleaned (Last modified 10/20/2023, 12:26:24 AM, Container, Available, Container properties, Generate SAS, Manage ACL, Access policy, Acquire lease, Break lease, Change access level, Edit metadata, Delete), data (Last modified 10/19/2023, 7:39:31 PM, Private, Available, Generate SAS, Manage ACL, Access policy, Acquire lease, Break lease, Change access level, Edit metadata, Delete), model (Last modified 11/21/2023, 12:16:38 AM, Container, Available, Container properties, Generate SAS, Manage ACL, Access policy, Acquire lease, Break lease, Change access level, Edit metadata, Delete), and raw (Last modified 10/19/2023, 7:16:48 PM, Private, Available, Container properties, Generate SAS, Manage ACL, Access policy, Acquire lease, Break lease, Change access level, Edit metadata, Delete). A context menu is open on the 'cleaned' blob, with the 'Change access level' option highlighted.

Blob anonymous access should be set to **Disabled.**

The screenshot shows the Azure Storage account overview page for 'websanaistorage'. The left sidebar includes options like Overview, Activity log, Tags, Diagnose and solve problems, Access Control (IAM), Data migration, Events, Storage browser, Partner solutions, Resource visualizer, Data storage (Containers, File shares), and Cloud services. The main content area shows the storage account details: Resource group (websan-ai), Location, Subscription (move), Subscription ID, Disk state, and Tags (edit). Under the Properties tab, the 'Data Lake Storage' section is shown, with 'Hierarchical namespace' set to 'Enabled', 'Default access tier' set to 'Hot', and 'Blob anonymous access' set to 'Disabled' (which is highlighted with a red box). The 'Security' section includes options for require secure transfer for REST API operations, storage account key access, and minimum TLS version.

5. Click the **Access Control (IAM)** menu in the sidebar, click the **+ Add** button -> Add role assignment.

The screenshot shows the 'Access Control (IAM)' page for 'websanaistorage'. The left sidebar includes Overview and Activity log. The main content area shows the 'Add role assignment' section with tabs for 'Check access', 'Role assignments' (which is highlighted with a red box), 'Roles', 'Deny assignments', and 'Classic administrators'. A red arrow points to the '+ Add' button, which is highlighted with a red box.

6. In the window that appears, search for “Storage blob data contributor” and select it from the list; then, go to the Members tab.

The screenshot shows the 'Add role assignment' window. The 'Role' tab is highlighted with a red box. A red arrow points to the search bar where 'storage blob data contr' is typed. The search results show 'Storage Blob Data Contributor' selected. The 'Members' tab is also highlighted with a red box. The 'Conditions' and 'Review + assign' tabs are visible. The results table shows two entries: 'Storage Blob Data Contributor' (Description: Allows for read, write and delete access to Azure Storage blob containers and data, Type: BuiltInRole, Category: Storage, Details: View) and 'Storage Blob Data Owner' (Description: Allows for full access to Azure Storage blob containers and data, including assigning POSIX access control, Type: BuiltInRole, Category: Storage, Details: View).

7. In the members tab, click the “+ Select members button. In the pane that appears, select your service account; then, click Review + assign.

The screenshot shows the 'Add role assignment' interface in the Azure portal. The 'Members' tab is selected. A red box highlights the '+ Select members' button. A red arrow points down to the 'Review + assign' button. To the right, a 'Select members' pane is open, showing a list of users and service principals. A red box highlights the search bar and the 'Select' button at the bottom.

Azure Function (i)

1. Go to your websan-ai resource group and select your Function App resource.
2. In the left pane, go to Settings > Identity. Under System assigned, locate the field Status and make sure it is set to “On”.

The screenshot shows the Azure Function settings page. The 'Identity' tab is selected. A red box highlights the 'System assigned' section. A red arrow points to the 'Status' button, which is set to 'On'. A red box highlights the 'On' button. A red arrow points to the 'Azure role assignments' button.

3. Go to Settings > Environment variables. Under App Settings, create the environment variables shown below and click Apply.

sales-prediction-function | Environment variables

App settings Connection strings

Name	Value	Deployment slot setting	Source	Delete
APPLICATIONINSIGHTS_CONNECTION_STRING	Show value		App Service	
AzureWebJobsStorage	Show value		App Service	
FUNCTIONS_EXTENSION_VERSION	~4		App Service	
FUNCTIONS_WORKER_RUNTIME	python		App Service	
MODEL_BLOB_PATH	azureml/sales_prediction_model.pkl		App Service	
MODEL_CONTAINER_NAME	model		App Service	
STORAGE_ACCOUNT_NAME	websanaistorage		App Service	

4. Go back to your Azure Data Lake Storage (ADLS) resource, on the left pane go to Access Control (IAM) > + Add > Add role assignment.

websanaistorage | Access Control (IAM)

+ Add

Role assignments	Role	Members	Conditions	Review + assign
Check access				
Role assignments				
Roles				
Deny assignments				
Classic administrators				

5. Select the Storage Blob Data Contributor role.

Add role assignment

Role Members Conditions Review + assign

storage blob data read

Name	Description	Type	Category	Details
Defender for Storage Data Scanner	Grants access to read blobs and update index tags. This role is used by the data scanner of Defender for Storage.	BuiltinRole	None	View
Storage Blob Data Contributor	Allows for read, write and delete access to Azure Storage blob containers and data	BuiltinRole	Storage	View
Storage Blob Data Reader	Allows for read access to Azure Storage blob containers and data	BuiltinRole	Storage	View

6. Under Members, select Managed identity, click +Select members, and select the Managed Identity for the Function App you created. Click Select, and Review + assign.

The screenshot shows the Azure portal interface for managing role assignments. On the left, the 'Add role assignment' dialog is open with the 'Members' tab selected. It shows a 'Selected role' of 'Storage Blob Data Reader' and an 'Assign access to' section with 'Managed identity' selected. Below is a 'Members' table with a 'Select members' button. On the right, a 'Select managed identities' modal is displayed, showing a list of identities under 'Managed identity'. The 'sales-prediction-function' identity is highlighted with a red box. At the bottom of the modal are 'Select' and 'Close' buttons.

7. Go to the Business Central company where you will be using the AI Functionality of the Sales & Operations Planning application. Please note that the service is limited to a single company per installation.

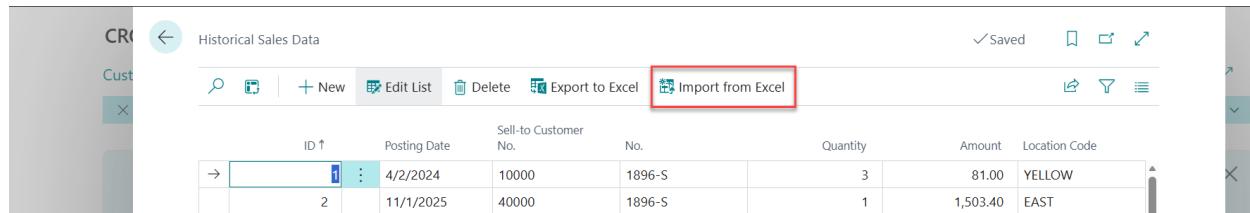
Business Central (i)

1. In Business Central, go to the Sales & Operations Planning Setup page. Activate the Copy Sales to History toggle and then use the Schedule Historical Sales Sync button at the top of the screen to schedule the job queue to run – you may also run it once on demand. This action will copy the data in the Posted Sales Invoice Lines to the Historical Sales Data page.

The data loaded to the Historical Sales Data table will be used to train the AI forecasting model used by the application. Your data will never leave your Azure tenant or be used to train other clients' models.

The screenshot shows the 'Sales & Operation Planning Setup' page in Microsoft Dynamics 365 Business Central. At the top, the 'Schedule Historical Sales Sync' button is highlighted with a red box. Below, the 'Copy Actual Sales Scheduler' section shows the 'Copy Sales to History' toggle is turned on, with a 'Last Run Completed' of 12/6/2025 12:00 AM and a 'Processing Time' of 443 milliseconds. The 'Sync Actual Sales to Azure – Scheduler' section shows the 'Enable Azure Sync' toggle is turned on, with a 'Look-Back Period' of 5Y, 'Machine Learning Setup' with an API URL of https://sales-prediction-function-hee..., and 'Azure Storage Account Setup' with 'Azure Storage Acc Name' as websanaisstorage, 'Container Name' as raw, and 'Shared Key' as a masked value.

2. Additionally, you may load historical data to your system by using the Import from Excel action found in the Historical Sales Data page. Download the Excel template (Export to Excel button), populate the file with your data, and reupload it using the Import from Excel action.

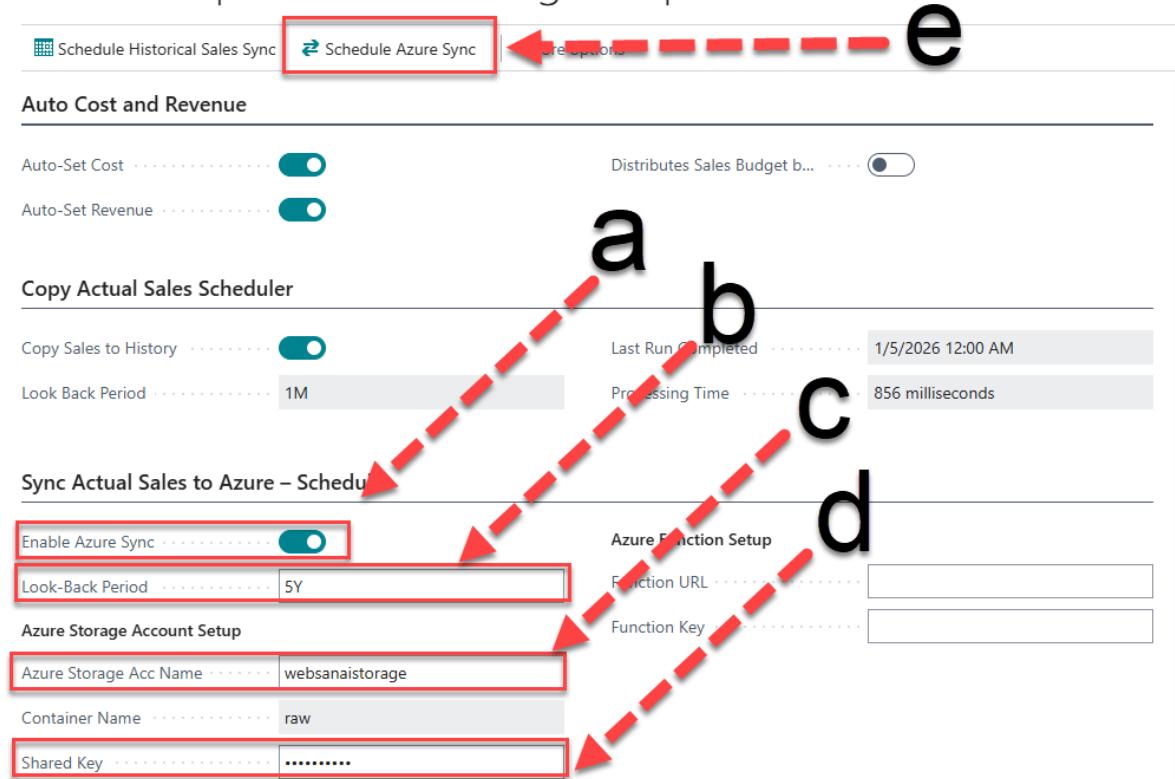


The screenshot shows a table titled 'Historical Sales Data' with columns: ID, Posting Date, Sell-to Customer No., No., Quantity, Amount, and Location Code. Two rows of data are visible. At the top of the table, there are buttons for 'New', 'Edit List', 'Delete', 'Export to Excel', and 'Import from Excel' (which is highlighted with a red box). To the right of the table, there are standard table navigation icons.

3. Go back to the Sales & Operations Setup page. Here you will need to:

- turn on the Enable Azure Sync toggle
- assign a value to the Look-Back Period in years (#Y)
- in the Azure Storage Acc Name field, enter the globally unique name you assigned to your Storage Account (ADLS)
- in the Shared Key field, enter the Storage Account key you temporarily saved to your computer
- click the Schedule Azure Sync button. This action will send the data in the Historical Sales Data table to the “raw” container in your Azure Data Lake Storage in Azure.

Sales & Operation Planning Setup



The screenshot shows the 'Sales & Operation Planning Setup' page with several configuration sections:

- Schedule Historical Sales Sync** (disabled)
- Schedule Azure Sync** (disabled, highlighted with a red box and arrow 'a')
- Auto Cost and Revenue** section with 'Auto-Set Cost' (disabled) and 'Distributes Sales Budget b...' (disabled)
- Copy Actual Sales Scheduler** section with 'Copy Sales to History' (disabled) and 'Look Back Period' (set to '1M')
- Sync Actual Sales to Azure – Schedu** (disabled)
- Enable Azure Sync** (disabled, highlighted with a red box and arrow 'a')
- Look-Back Period** (set to '5Y', highlighted with a red box and arrow 'b')
- Azure Storage Account Setup** section with 'Azure Storage Acc Name' (set to 'websanaistorage', highlighted with a red box and arrow 'c'), 'Container Name' (set to 'raw'), and 'Shared Key' (disabled, highlighted with a red box and arrow 'd')
- Azure Function Setup** section with 'Function URL' and 'Function Key' fields (both empty)
- Last Run Completed** (set to '1/5/2026 12:00 AM')
- Processing Time** (set to '856 milliseconds')

Azure Machine Learning Service (i)

1. In your Azure Portal, go to your websan-ai resource group and select your Azure Machine Learning Service resource.
2. Click the **Access Control (IAM)** menu in the sidebar, then add the Data Factory that you have created as a **Contributor**.

Home > websan-ai > websanaiml

websanaiml | Access control (IAM) Azure Machine Learning workspace

Search | + Add | Download role assignments | Edit columns | Refresh | Remove | Feedback

Check access | Role assignments | Roles | Deny assignments | Classic administrators

Number of role assignments for this subscription: 27 / 4000

Search by name or email: Assignment type: All | Type: All | Role: All | Scope: All scopes | Group by: Role

13 items (11 Users, 2 Managed Identities)

Name	Type	Role	Scope	Condition
Contributor				
websan-ai-dfv2	/subscriptions/9c9b6e33-8a5c-4186-a88a-...	Data Factory	Contributor	This resource
				None

Azure Data Factory (i)

1. Go to your websan-ai resource group and select your Data Factory resource.
2. Click on Launch Studio. You will be redirected to the ADF studio.

Home > websan-ai > websan-ai-dfv2 Data factory (V2)

Search | Delete

Overview

Activity log | Access control (IAM) | Tags | Diagnose and solve problems | Resource visualizer

Essentials

Resource group (move): websan-ai	Type: Data factory (V2)
Status: Succeeded	Getting started: Quick start
Location: East US	
Subscription (move): WebSan MPN Azure Sponsorship 2022	
Subscription ID: 9c9b6e33-8a5c-4186-a88a-3f0167f066b9	

Azure Data Factory Studio

Launch studio

Quick Starts | Tutorials | Template Gallery | Training Modules

3. On the left-hand pane, click the Manage > Linked Services > + New. You will create two Linked services which will be used for setting the extract-load-transform (ETL) pipeline.

Microsoft Azure | Data Factory > websan-ai-dfv2

Home | Author | Monitor | Manage | Learning Center

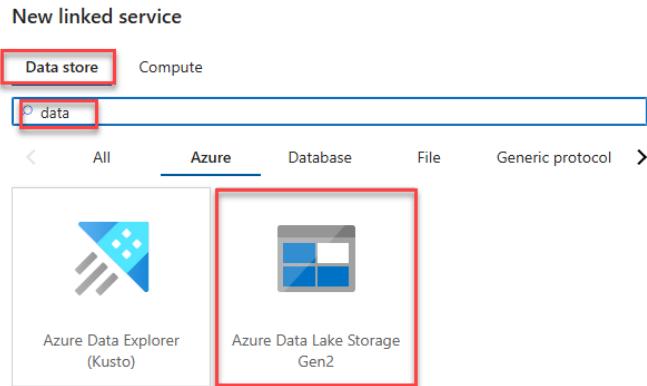
General | Factory settings | Connections

Linked services

+ New

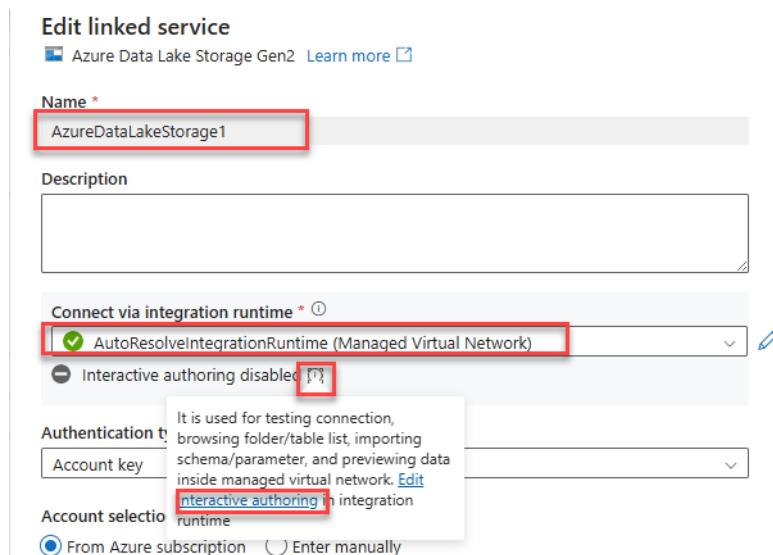
Annotations: Any

4. Search for the Azure Data Lake Storage Gen2 service in the Data Store tab, then click **Continue**.



a. Configure the Linked Service.

- a. You may input your preferred name for the linked service
- b. Connect via integration runtime: AutoResolveIntegrationRuntime(Managed Virtual Network).
 - i. Click the (i) button next to *Interactive authoring disabled*. Click the *Edit Interactive Authoring* link. In the window that appears, check the *Enable* box under Interactive authoring and hit Apply.



- c. Authentication type: Account key
- d. Account selection method: From Azure subscription
 - i. Select your Azure subscription and Storage Account (ADLS) name.
- e. Click Test connection and then Apply.

Edit linked service

Azure Data Lake Storage Gen2 [Learn more](#)

Name *
AzureDataLakeStorage1

Description

Connect via integration runtime * ⓘ
AutoResolveIntegrationRuntime (Managed Virtual Network) [Edit](#)

Interactive authoring enabled ⓘ

Authentication type
Account key

Account selection method ⓘ
 From Azure subscription Enter manually

Azure subscription ⓘ

Storage account name *
websanaistorage

Managed private endpoint
Not available ⓘ [Create new](#)

Test connection ⓘ
 To linked service To file path

Annotations
+ New

> Parameters

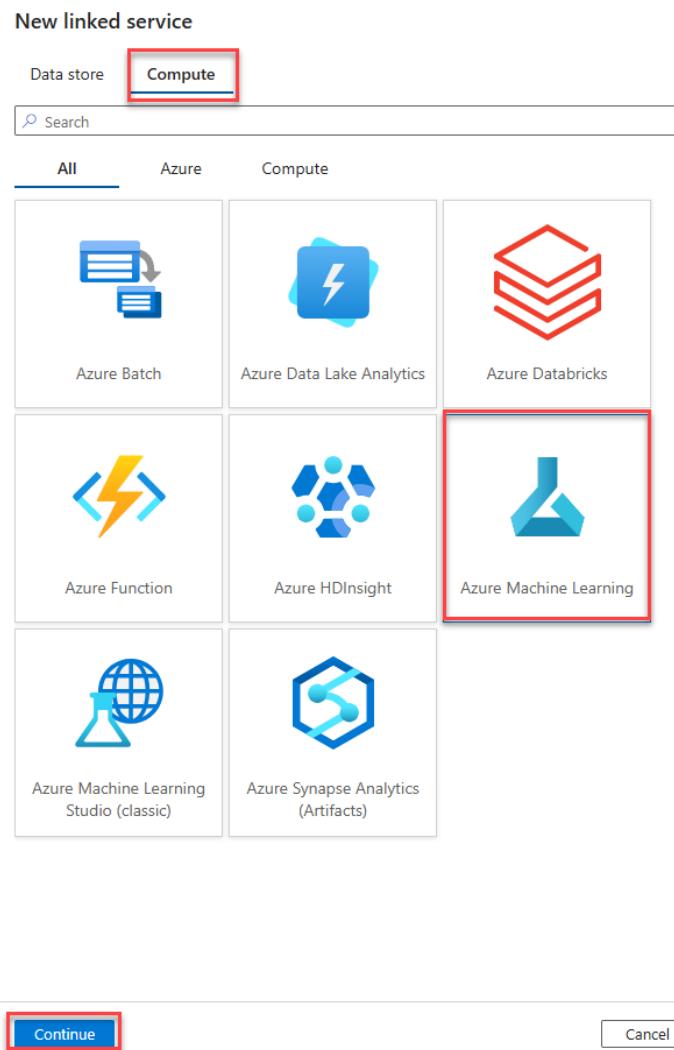
> Advanced ⓘ

[Apply](#) [Cancel](#) [Test connection](#)

5. Click + New again.

Name	Type	Related
AzureDataLakeStorage1	Azure Data Lake Storage Gen2	8

6. Search for the Azure Machine Learning in the Compute tab, then click Continue.



- a. Configure the Linked Service.
 - a. You may input your preferred name for the linked service
 - b. Connect via integration runtime: AutoResolveIntegrationRuntime(Managed Virtual Network).
 - c. Authentication type: System-assigned managed identity
 - d. Account selection method: From Azure subscription
 - i. Select your Azure subscription and Azure Machine Learning Workspace name (websanaiml).
 - e. Click Test connection and then Save.

Edit linked service

 Azure Machine Learning [Learn more](#)

Name *
AzureMLService1

Description

Connect via integration runtime *
 AutoResolveIntegrationRuntime (Managed Virtual Network) [Edit](#)
 Interactive authoring enabled [Edit](#)

Authentication method
 System-assigned managed identity

Azure Machine Learning workspace selection method
 From Azure subscription Enter manually

Azure subscription

Azure Machine Learning workspace name *
 websanaiml

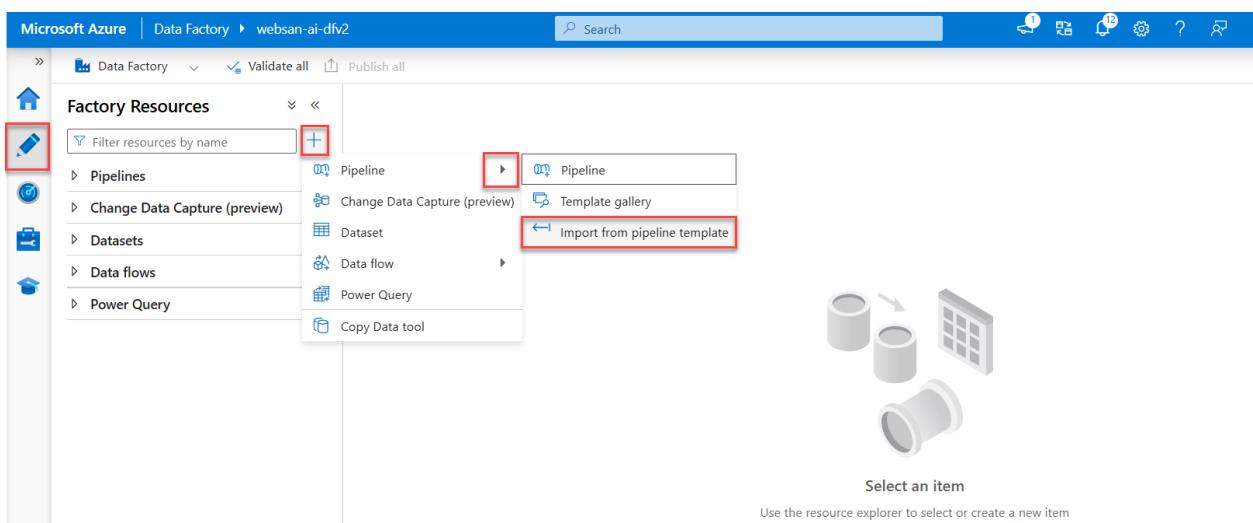
Managed private endpoint
Not available [Edit](#)
[Create new](#)

Managed identity name: **websan-ai-dfv2**
 Managed identity object ID: **[REDACTED]**
 Grant Data Factory service managed identity access to your Azure Machine Learning.
[Learn more](#)

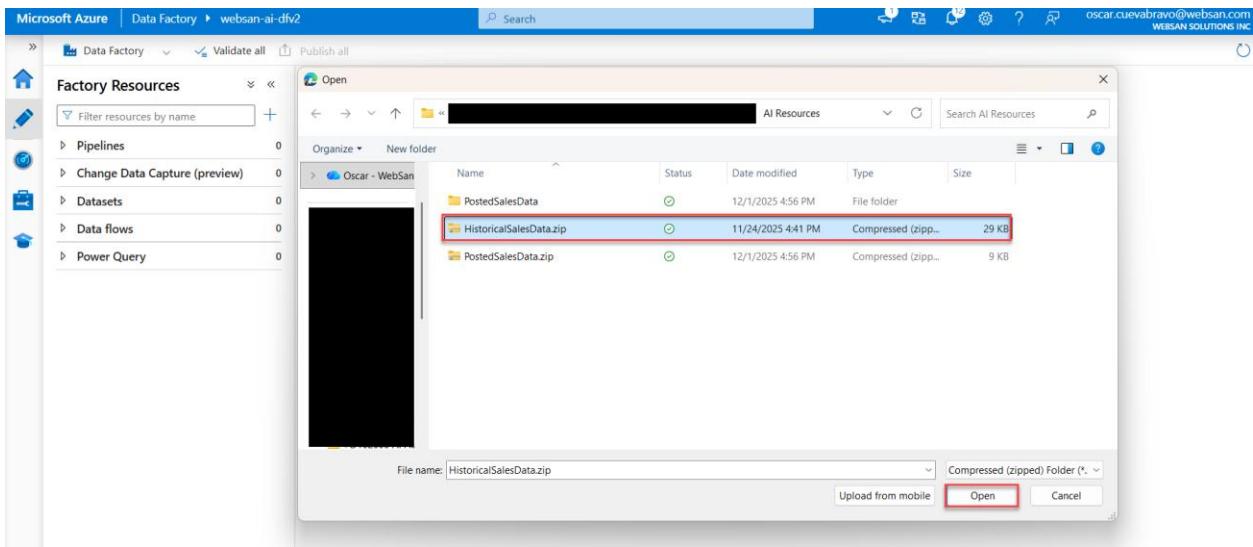
Annotations
[New](#)
[Advanced](#)

Buttons
[Save](#) (Red box) [Cancel](#) [Test connection](#)

7. After setting up the Linked services, go to the Author menu, then click the plus button to add a pipeline. Hover to the Pipeline menu, then click the Import from pipeline template.

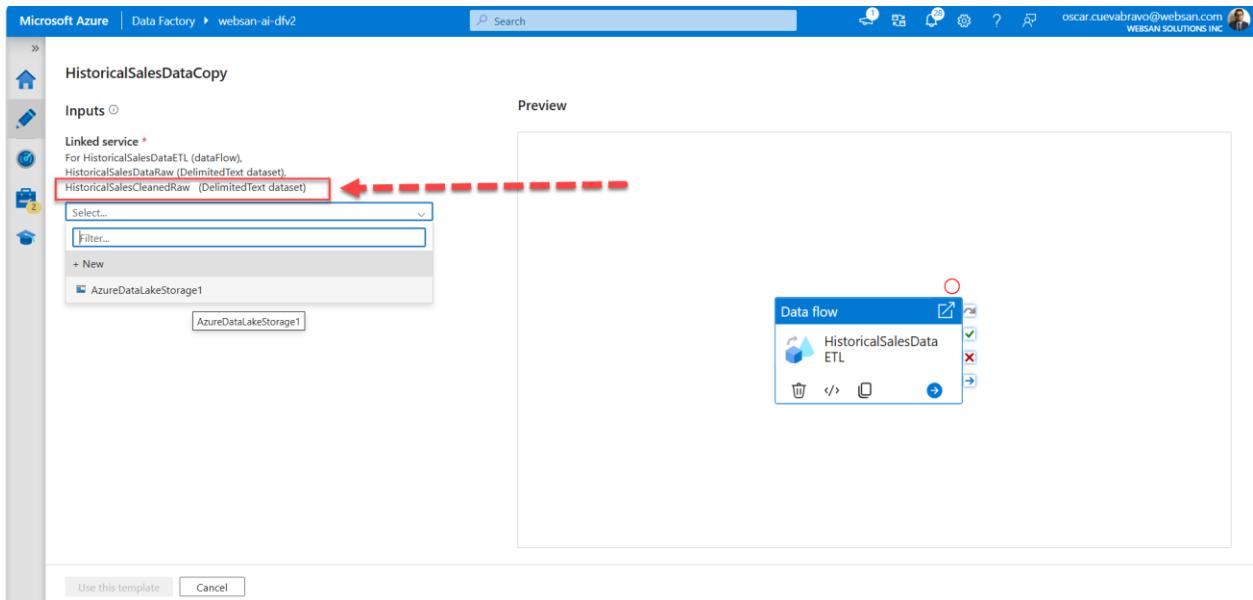


8. Use the *HistoricalSalesDataCopy.zip* folder as the template for the pipeline. This will create a pipeline, data flow, and datasets to be used in the pipeline. Select the linked services created in the inputs.

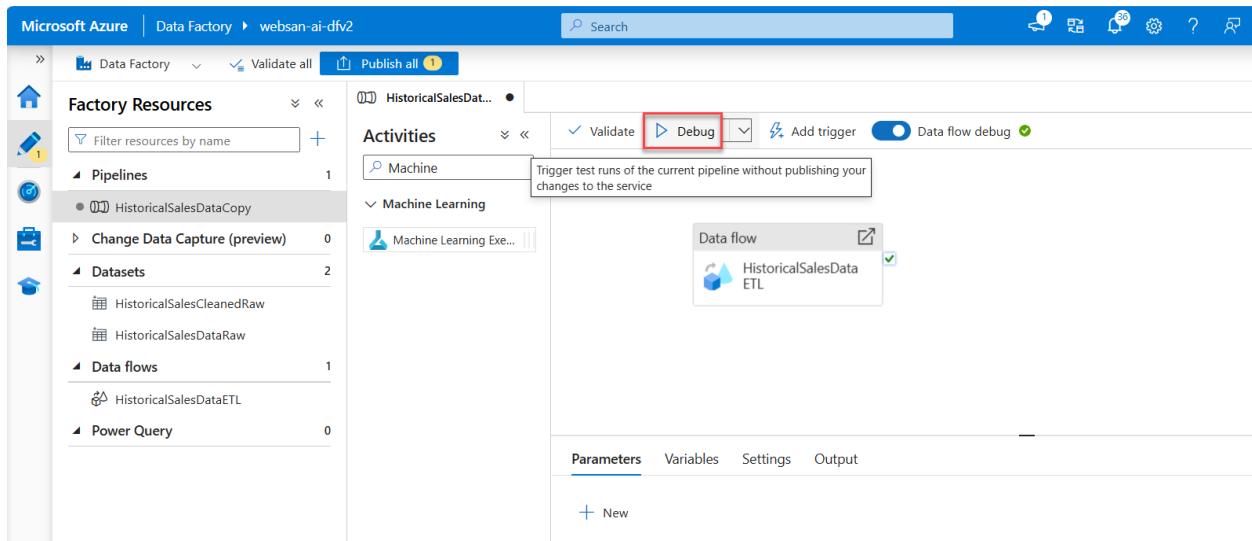


Remember: You must contact WebSan Support to obtain all installation files and scripts.

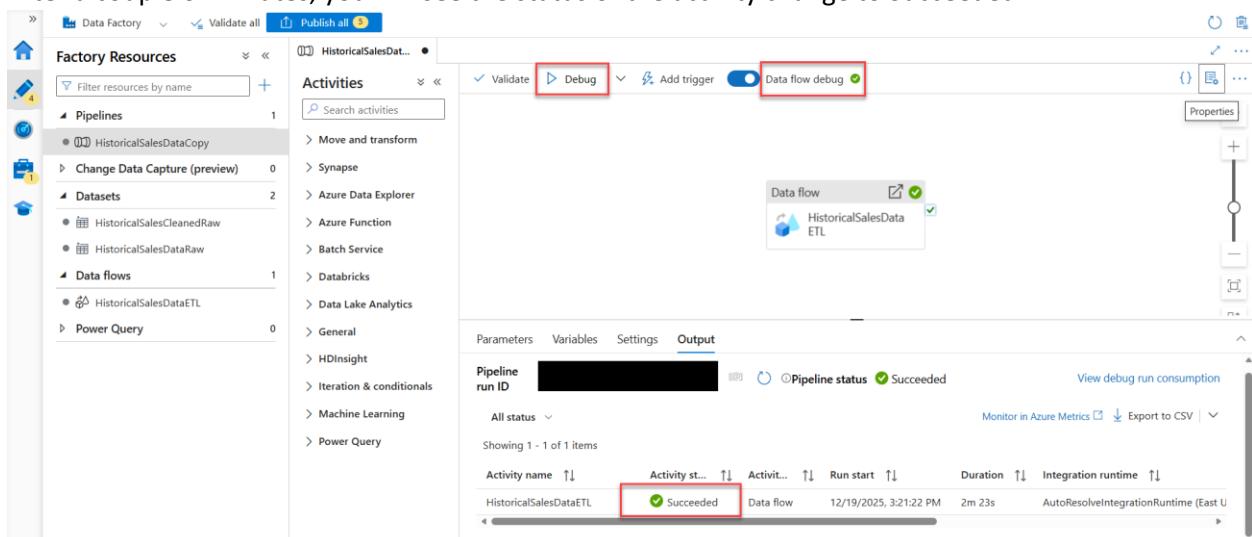
9. Select the Linked service and click Use this template.



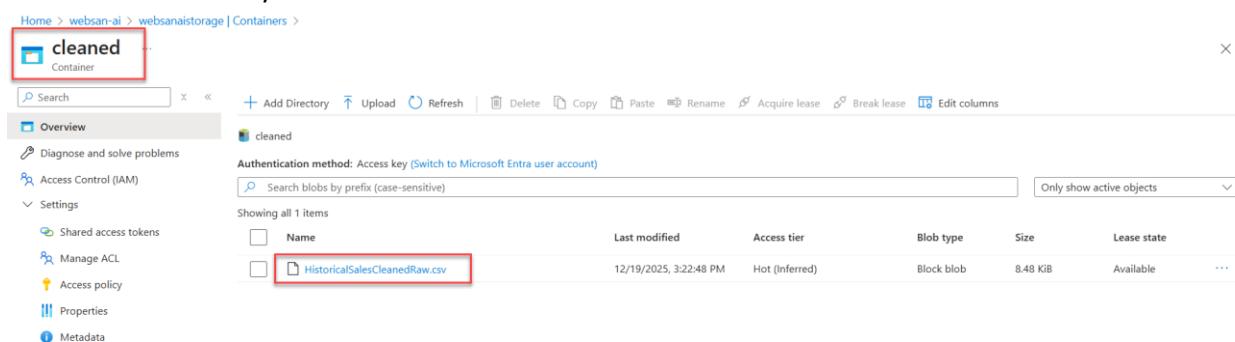
10. After creating the pipeline using the template, click the > Debug button to trigger the pipeline once without publishing. This will create the *HistoricalSalesCleanedRaw.csv* file in the *Cleaned* container in your Storage Account (ADLS), which the *sales-data-forecast-model.py* will use for training.



11. Wait until you see a green check mark next to Data flow debug and click the Debug button again. After a couple of minutes, you will see the status of the activity change to Succeeded.

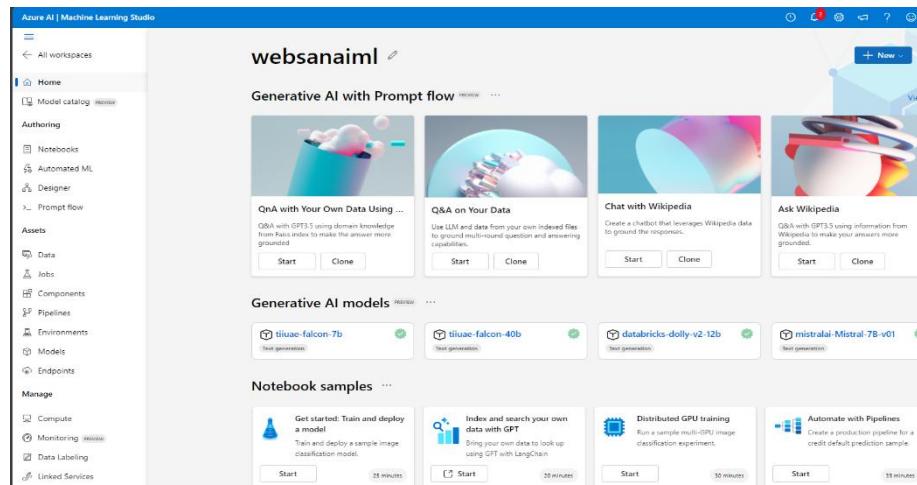


12. Optionally, can confirm that the HistoricalSalesCleanedRaw.csv file has been created by going to the Cleaned container in your ADLS resource.



Azure Machine Learning Service(ii)

- Locate your AzureML resource and click the Launch Studio button. It will redirect you to a new window leading to the Azure Machine Learning workspace.



- Under the Manage menu group, click the **Compute** menu. From here, we need to create a Compute instance.

For user reference, this documentation was updated in December 2025. At the time of writing:

- a *Standard_DS3_v2* compute *instance* was used for development and internal testing purposes.
- a *STANDARD_D2as_V4* compute *cluster* named “WebsanMLCompute” is programmatically created when running the *pipeline-creator.ipynb* file. If the number of nodes in the cluster is not sufficient due to Microsoft updates; either:
 - comment out the cell block that creates the compute target (4th block) and create the compute manually in the Azure Machine Learning studio using the exact name indicated in the point above (*WebsanMLCompute*)
 - update the *vm_size* parameter in the block to allow for adequate number of nodes.

```
#Create or find the compute cluster used to run training jobs
compute_name = "WebsanMLCompute"
vm_size = "STANDARD_D2AS_V4"
```

```
(vm_size=vm_size,
 min_nodes=0, # Cluster can scale down to zero when idle
 max_nodes=4) # Maximum number of nodes allowed
```

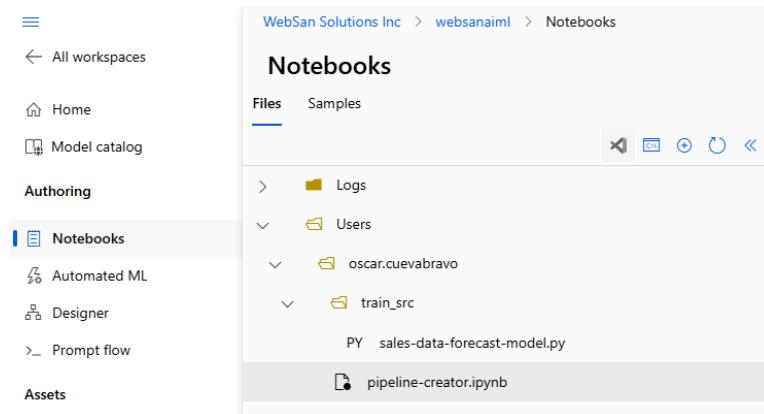
The compute instance and compute cluster listed above were used for development and testing purposes only. For large, production datasets, you may use more powerful compute resources. Note, however, that these will accrue more cost.

- Click on the Notebooks menu under the Authoring menu group. From there, create a *train_src* folder inside the service account’s folder. Afterwards, upload the *sales-data-forecast-model.py* file in the created folder.

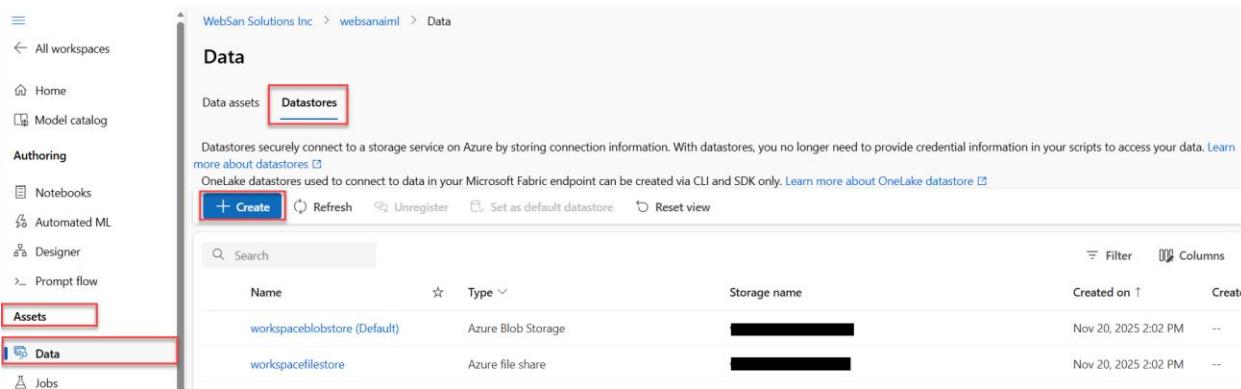
4. Upload the *pipeline-creator.ipynb* file to the root folder of the service account.

You must contact WebSan Support to obtain the installation files and scripts.

5. Confirm your folder output matches the below.



6. On the right-side pane, go to Assets > Data > Data Stores and click the + Create button.



a. In the pane that appears, enter the following details:

- i. Datastore name: "websan_ai_model_datastore"
- ii. Datastore type: Azure Blob Storage
- iii. Account selection method: From Azure subscription
- iv. Select your Subscription ID
- v. Storage account: select your Storage Account
- vi. Blob container: select *model*
- vii. Authentication type: Account key
- viii. Account key: enter the key retrieved in the Azure Data Lake Gen2 step 1.

b. Click Create

c. Confirm the Datastore is listed

The screenshot shows the Microsoft Fabric interface. On the left, a sidebar lists various workspace categories like Home, Model catalog, and Data. The 'Data' section is selected. The main area shows a list of data stores under the 'Datastores' tab. One store, 'websan_ai_model_datastore', is highlighted with a red box. A modal dialog titled 'Create datastore' is open on the right, also with a red box around it. The dialog fields are as follows:

- Datastore name ***: websan_ai_model_datastore
- Datastore type ***: Azure Blob Storage
- Account selection method**: From Azure subscription (radio button selected)
- Subscription ID**: (dropdown menu, redacted)
- Storage account ***: websanaistorage (websan-ai)
- Blob container ***: model
- Save credentials with the datastore for data access**: (checkbox)

At the bottom of the dialog are 'Create' and 'Cancel' buttons, with 'Create' also having a red box around it.

7. Click the + Create button again.

The screenshot shows the Microsoft Fabric interface with the 'Data' sidebar selected. The 'Datastores' tab is selected and highlighted with a red box. The 'Create' button is also highlighted with a red box. The main area shows a list of data stores. A new data store, 'websan_ai_cleaned_datastore', has been added to the list:

Name	Type	Storage name	Created on	Actions
workspaceblobstore (Default)	Azure Blob Storage	[redacted]	Nov 20, 2025 2:02 PM	...
workspacefilestore	Azure file share	[redacted]	Nov 20, 2025 2:02 PM	...
websan_ai_cleaned_datastore	Azure Blob Storage	[redacted]	Nov 20, 2025 2:02 PM	...

- In the pane that appears, enter the following details:
 - Datastore name: "websan_ai_cleaned_datastore"
 - Datastore type: Azure Blob Storage
 - Account selection method: From Azure subscription
 - Select your Subscription ID
 - Storage account: select your Storage Account
 - Blob container: select *cleaned*
 - Authentication type: Account key
 - Account key: enter the key retrieved in the Azure Data Lake Gen2 step 1.
- Click Create
- Confirm the Datastore is listed

8. To run the pipeline-creator.ipynb file you will need to:

- In the left-side pane, go to Authoring > Notebooks. Then, from your file tree, select the pipeline-creator.ipynb file.
- Ensure you have selected the correct compute instance and click the Play button. Wait for the compute to start.
- Set the kernel to *Python 3.10 – Azure ML*.

d. Click the >> button to execute the notebook and wait for the **entire** notebook run to complete.

This notebook will create and/or access the following:

1. Compute cluster for the training
2. ML Pipeline for training
3. Trained model that is saved in the model folder in ADLS2 -> websan_ai_model_datastore in Azure Machine Learning studio allows the saving of the trained model artifact in the model folder in websanaistorage.

Expect slower training times on bigger datasets. Inform your AI engineer if you need faster training.

9. In Azure, go to your Data Storage (ADLS) resource. On the left-hand pane, go to Data Storage>Containers>model>azureml and select sales_prediction_model.pkl – confirm that the value in the Last Modified Date column corresponds to the date and time when training occurred.

Name	Last modified	Access tier	Blob type	Size	Lease state
4b15000b-16b2-4338-bdf6-2465cf588d08	12/19/2025, 9:56:08 PM		Block blob	119.99 KiB	Available
sales_prediction_model.pkl	12/19/2025, 9:56:38 PM	Hot (Inferred)	Block blob	119.99 KiB	Available

Azure Data Factory (ii)

1. To finalize the setup of your ADF, once your trained model (.pkl file) has been created, go back to your Azure Data Factory, open your pipeline and:
 - a. Search for “machine learning execute” in the tab Activities, then drag the component into the work area.
 - b. Double click the new component in the work area and go to the Settings tab
 - i. For the Azure Machine Learning linked service, select the linked service you created at the beginning of this section. Test your connection.
 - ii. For the ML Pipeline ID type, select the Pipeline ID

- iii. Select the ML pipeline name that we created via Azure ML services.
- iv. Select the ML pipeline ID that we created via Azure ML services.
- v. (optional) Set the experiment name.

2. After setting the properties of the ML pipeline, connect the previous component to the ML component. Connection should be based on completion; use the green arrow as shown below, connect Data Flow to Machine Learning Execute.



3. Final output should look like this:

- After adding the pipeline through the template and updating it with the new components, click the **Publish All** button at the topmost part of the workspace. For any validation errors, refer to the logs generated by the publisher.

Azure Function (ii)

- You will need to contact the WebSan AI support team and provide them with the Azure login credentials to your tenant that you generated before. A Function will be published to your sales-prediction-function Function App resource.
- You can confirm that the Function has been deployed by going to your Function app resource and locating the “main” function. Click on “main”.

The screenshot shows the Azure Functions Overview page for the 'sales-prediction-function' app. The 'main' function is selected in the list, showing it is running and enabled. The page displays various details about the function app, including its resource group, status, location, and app service plan.

- Click on Get function URL. In the Get Function URL, click on the copy button for the **default (Function Key)**. Paste that key in a secure place only temporarily; you will use this key shortly.

The screenshot shows the Azure Functions 'Code + Test' blade for the 'main' function. The 'Get function URL' button is highlighted. A 'Get Function URL' modal is open, showing three URL options: master (Host key), default (Function key), and default (Host key). The 'default (Function key)' URL is selected.

- The Function Key will have the following format:

`https://<name you assigned to your function>.azurewebsites.net/api/main?code=<key>`

Business Central (ii)

To finalize the setup of the application, complete the following tasks:

- In Business Central, go to the Sales & Operations Planning Setup page.
- Take all the characters in the Function Key up to “main”, paste them in the Function URL field.
`https://<name you assigned to your function>.azurewebsites.net/api/main?code=<key>`
- Take all the characters in the Function Key after “code=”, paste them in the Function Key field.
`https://<name you assigned to your function>.azurewebsites.net/api/main?code=<key>`

Sales & Operation Planning Setup

The screenshot shows the configuration interface for Sales & Operation Planning. It includes sections for Auto Cost and Revenue, Copy Actual Sales Scheduler, and Sync Actual Sales to Azure – Scheduler. The Sync section has two fields highlighted with red boxes: 'Function URL' and 'Function Key'.

Auto Cost and Revenue

- Auto-Set Cost: On
- Distributes Sales Budget b...: On
- Auto-Set Revenue: On

Copy Actual Sales Scheduler

- Copy Sales to History: On
- Last Run Completed: 1/5/2026 12:00 AM
- Look Back Period: 1M
- Processing Time: 856 milliseconds

Sync Actual Sales to Azure – Scheduler

Azure Function Setup	
Enable Azure Sync: On	Function URL: https://test2025...sales-predictic...
Look-Back Period: 5Y	Function Key:*

Azure Storage Account Setup

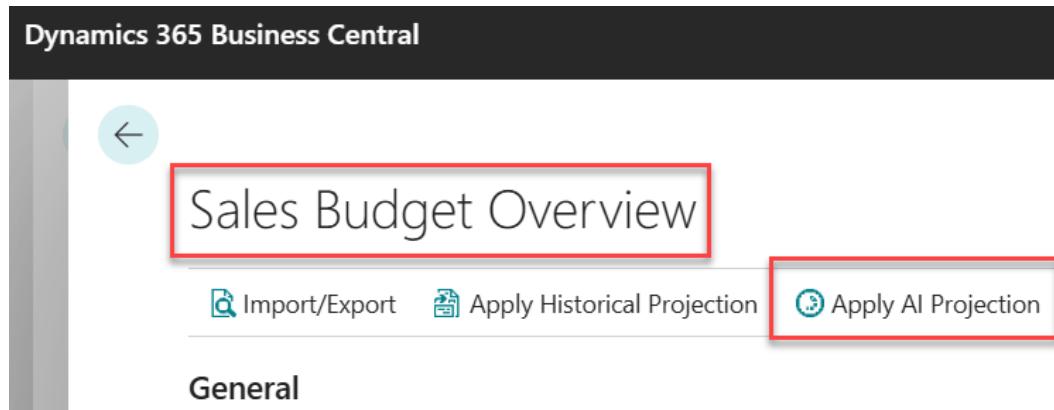
- Azure Storage Acc Name: 2025r
- Container Name: raw
- Shared Key:

This concludes the setup of the AI resources for the Sales and Operations Planning application.

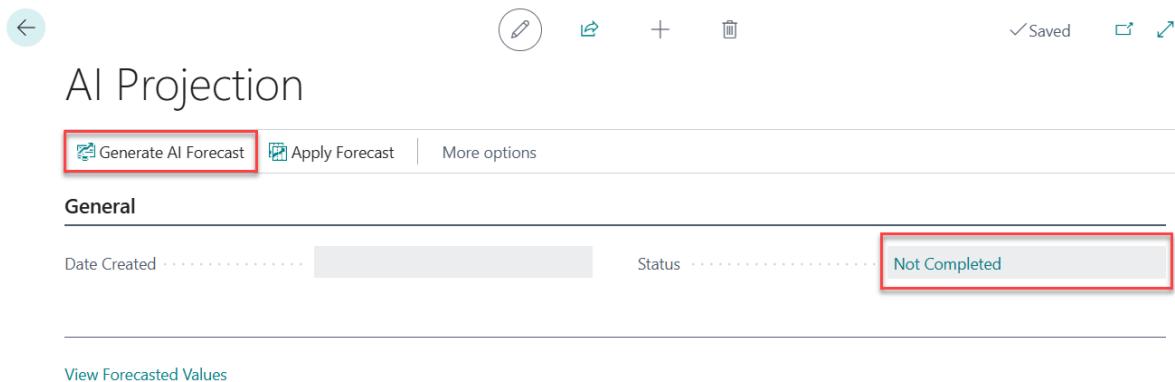
3. TESTING

Generation of First AI Forecast

In Business Central, go to Sales Budgets. Create a new budget or select one from the list. In the window that appears, select Apply AI Projection.



Click Generate AI Forecast. The Status field will be updated once the forecasting task is complete. You may close this page and come back to it later to check the status of the forecasting task.



4. MODEL RETRAINING

Retraining Fundamentals

Before you retrain your model, you must know the definition of two fundamental modelling concepts: forecast generation and model retraining.

- **Forecast Generation.** To generate forecasts (or *predictions*), a model that clearly “understands” and accurately “represents” the underlying trends of the dataset used for training is required. While the market conditions (and as such, dataset underlying trends) remain the same as those that were present in the training data, it is best practice to continue using the same model.
- **Model retraining.** When current market conditions are “significantly” different to those present when the model was trained, it is important to start considering model retraining. Careful consideration to determine whether market conditions are different enough to merit the retraining of a model must always be made. While examples of these conditions are different for each business and vary greatly by industry, the following are common variables to track:
 - Interest rates
 - Taxes and/or tariffs
 - Competition
 - Technology changes
 - Labor market
 - Total/Fixed assets volume
 - Sustained decline in model output accuracy (actuals vs predicted)

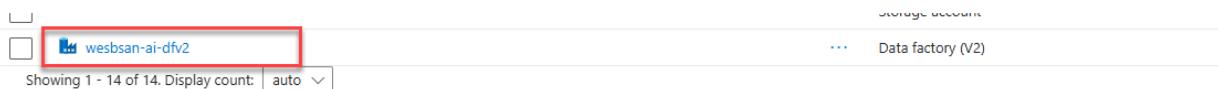
You may refer to the following article published by IBM to learn more about model drift:

<https://www.ibm.com/think/topics/model-drift>

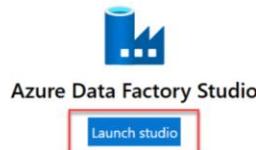
Retraining Execution

To retrain your production model, you will need to:

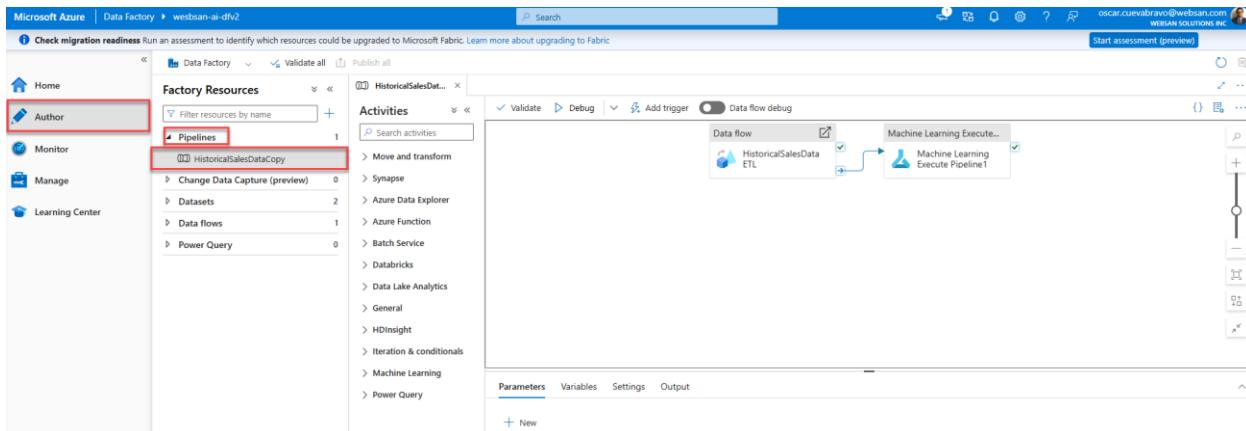
1. Make sure you have the latest version of your Business Central data available in your Azure tenant. You may refer to the following information to learn the steps required to sync Business Central data: [Business Central \(i\)](#)
2. Log in to your Azure tenant.
3. Go to your websan-ai resource group and locate your Azure Data Factory resource.



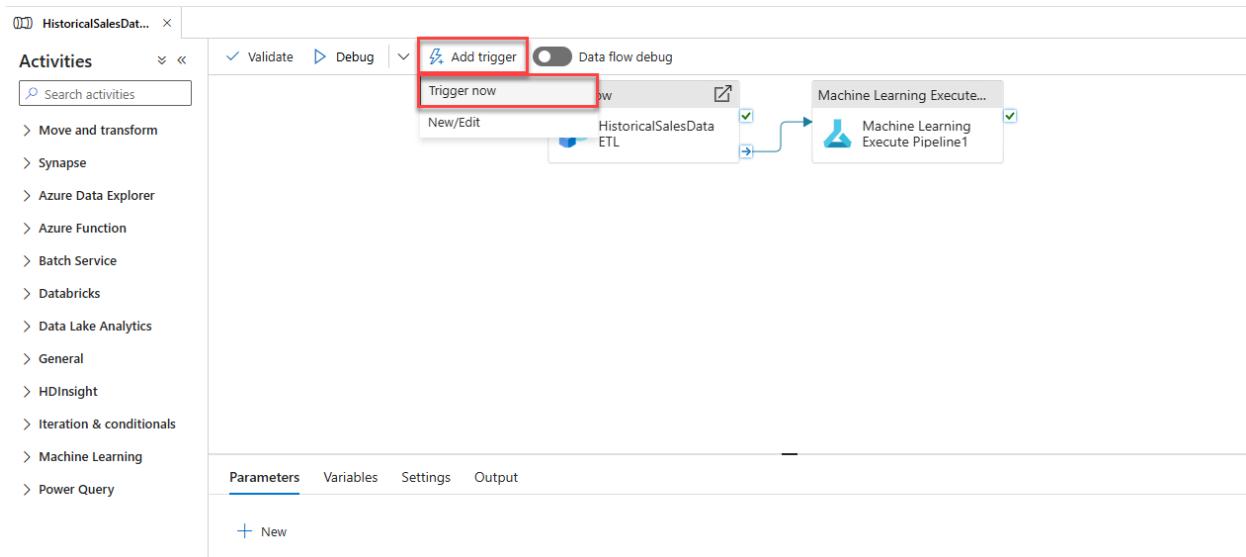
4. In the window that appears, click Launch Studio.



5. To open your pipeline, go to Author > Pipelines > HistoricalSalesDataCopy.



6. To trigger the pipeline, click on Add trigger > Trigger now.



7. This will pull the latest dataset found in the raw container, prepare it for model training, start a model training job in Machine Learning studio. A new sales_prediction_model.pkl file will be available.

A new model version will be available to generate AI sales forecasts generated from Business Central.