



User Guide

S&OP – Azure Resource Installation Guide

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1. ABOUT

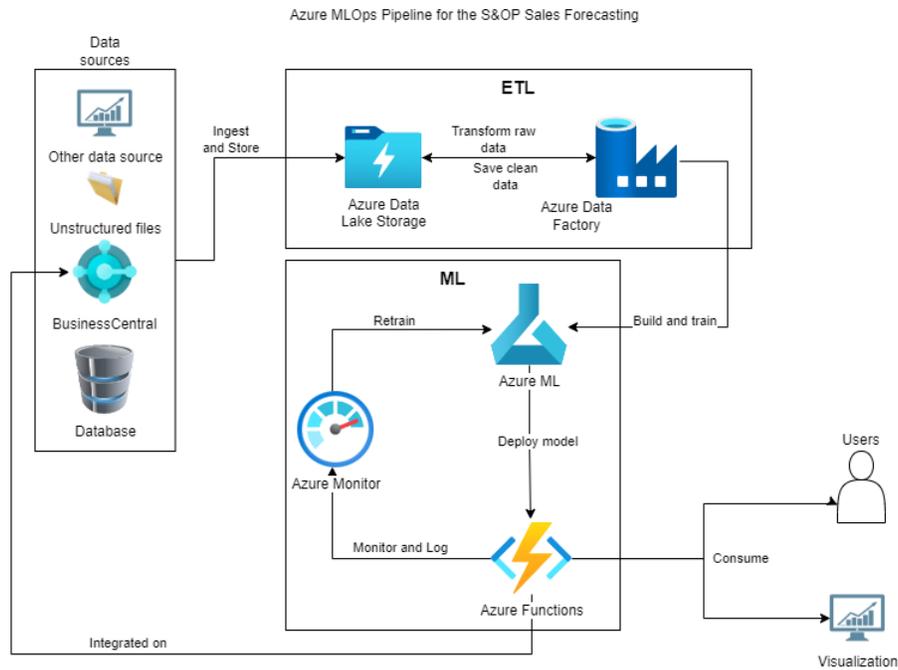


The Sales & Operations Planning for Dynamics 365 Business Central application generates AI-powered sales forecasts. Historical sales data is synced from Business Central to Microsoft Azure and then utilized for model training. The following user guide covers the S&OP Azure MLOps pipeline and its installation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

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

2. ARCHITECTURE DESIGN & PRE-REQUISITES

This section presents the Azure ML-Ops Pipeline for the Sales & Operations Planning application Sales Forecasting and the pre-requisites for the installation of the Azure Resources in the pipeline.



Installation Pre-Requisites

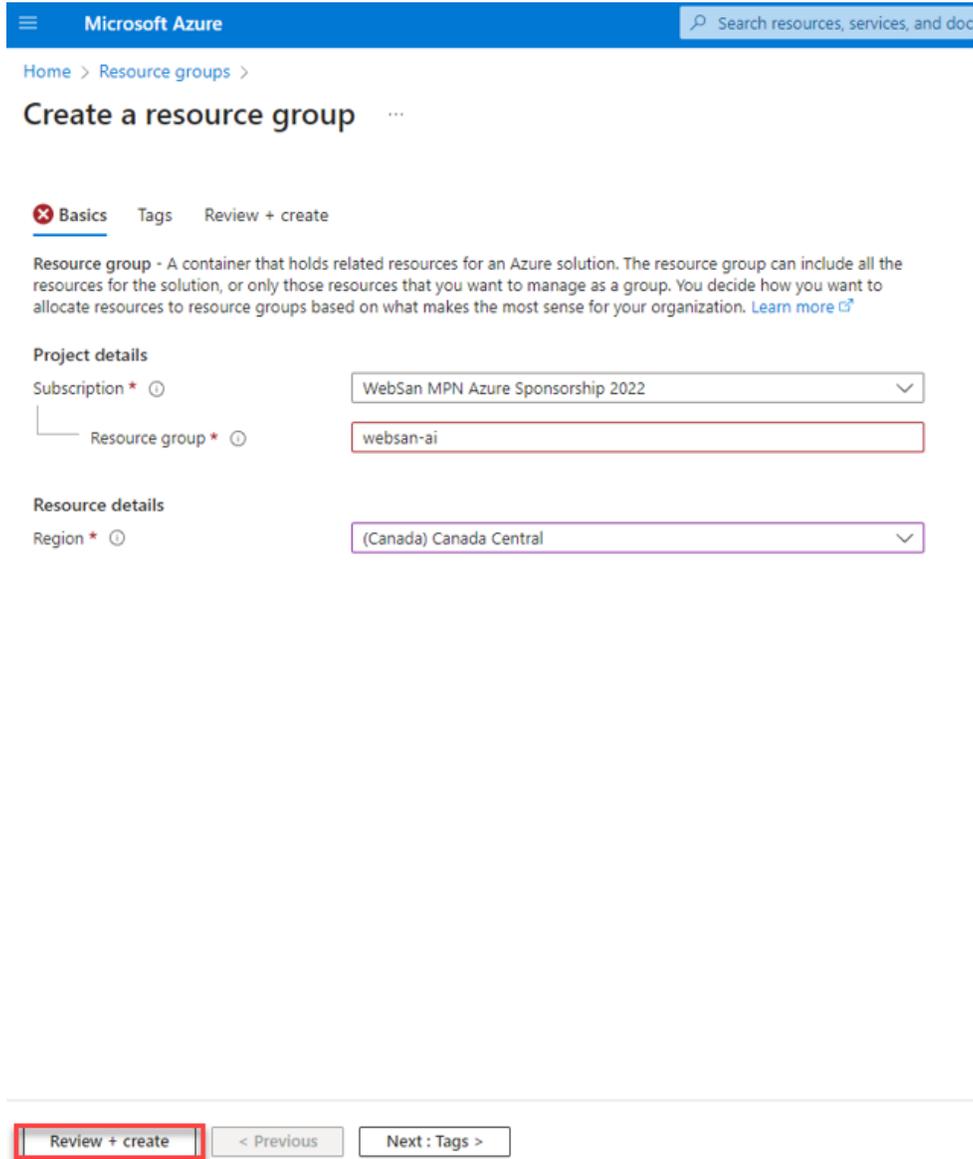
Listed below are the necessary conditions that are needed for you to install the entire solution resource.

1. You must have elevated or administrator access to the Azure environment where the solution is to be installed. The installation process involves setting some role-based access control (RBAC) changes.
2. A Subscription that will allow 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

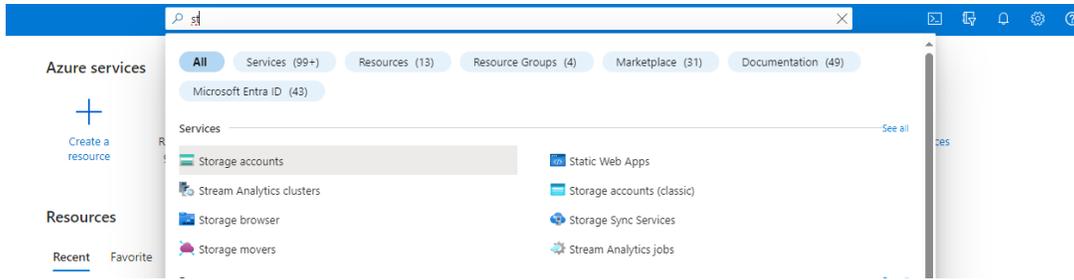
3. INSTALLATION STEPS

The following section covers the steps that required to deploy the S&OP Azure Resources.

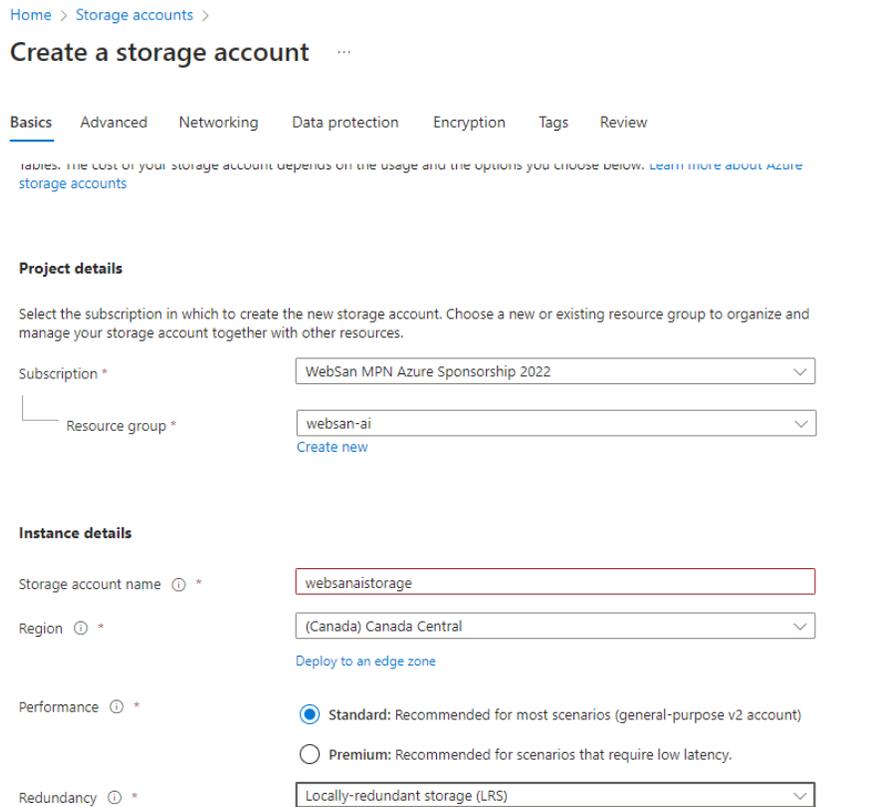
1. Open your Azure Portal, then create a Resource Group, name it as **websan-ai**. Also set your Region to your desired region. Then click **Review + create**.



2. Wait for the process to finish, then proceed in creating the first resource – **Azure Data Lake Storage Gen2**.
 - a. On your Azure Portal, search for ‘Storage Accounts’, then click the **Storage accounts** service.



- b. Create a storage account by clicking the Create button. It shall direct you to the wizard for creating the storage. Name the storage account **websanaistorage** then set the Region based on your preference. Also, set the **Redundancy** to **Locally-redundant storage (LRS)**. Make sure that resource group is the one that you created.



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

Hierarchical Namespace

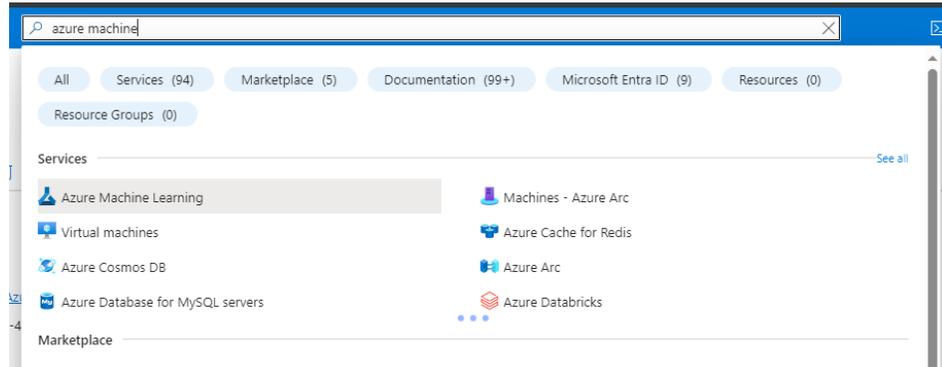
Hierarchical namespace, complemented by Data Lake Storage Gen2 endpoint, enables file and directory semantics, accelerates big data analytics workloads, and enables access control lists (ACLs) [Learn more](#)

Enable hierarchical namespace

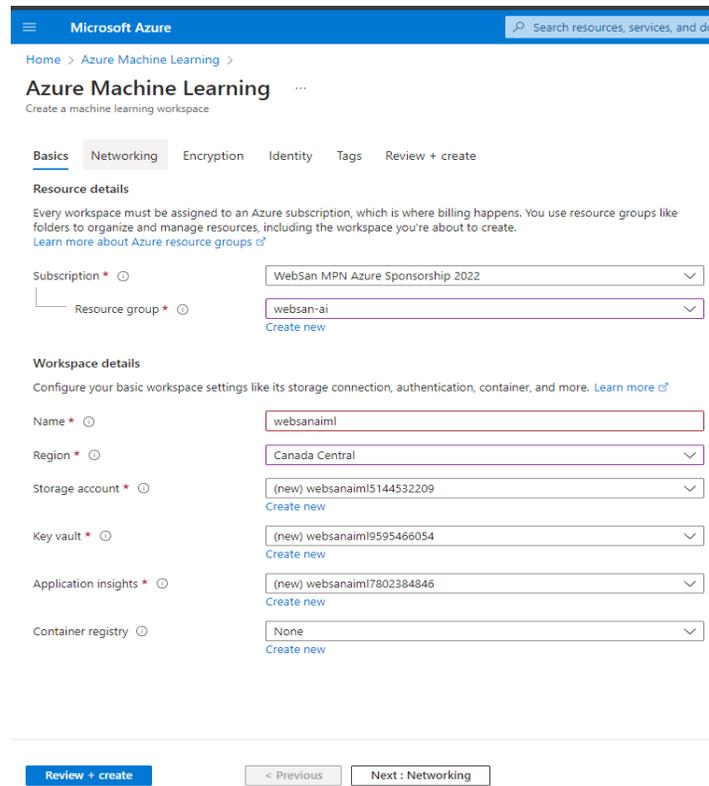
d. Click the **Review** button and wait for it to be deployed.

3. Create the next resource – **Azure Machine Learning Services:**

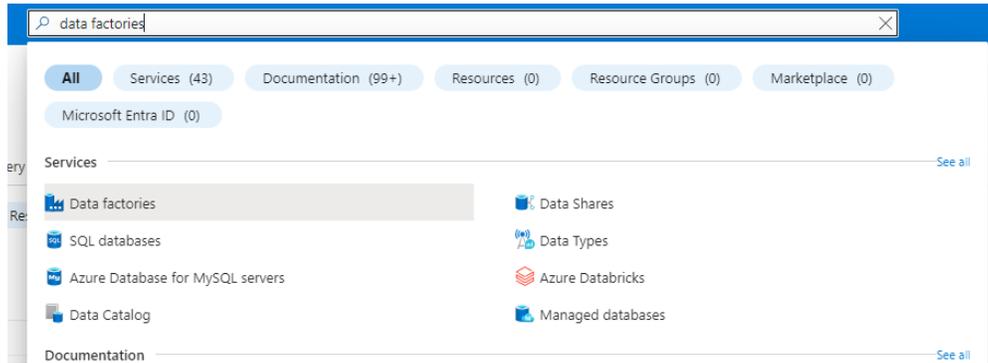
a. On your Azure Portal, search for ‘Machine Learning’, then click the **Azure Machine Learning** services.



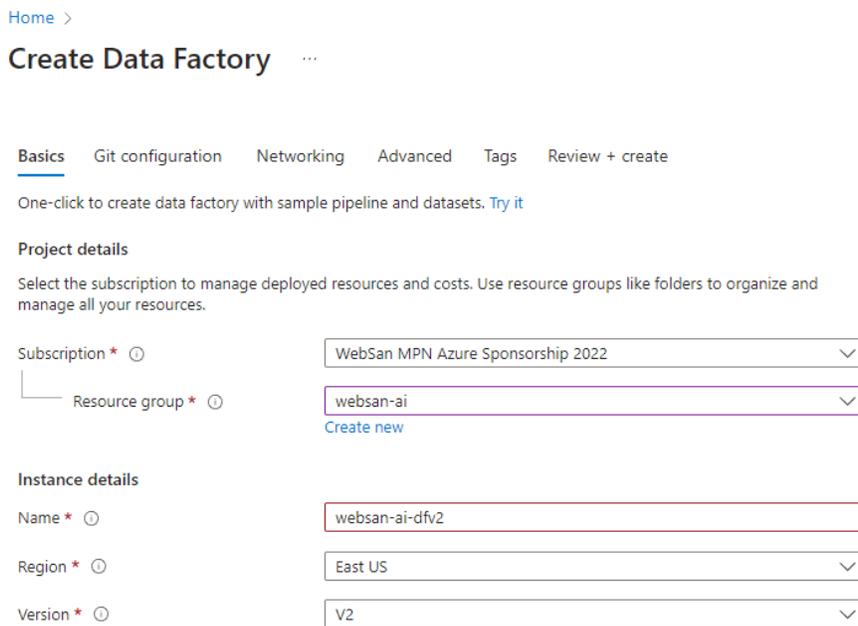
b. Create a machine learning workspace by clicking the Create button. It shall direct you to the wizard for creating the workspace. Name the workspace **websanaiml**, then set the Region based on your preference. Values for the storage account, key vault, and application insights will be automatically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



- c. Click the **Review + create** button. Wait for it to be deployed.
- 4. Create the next resource – **Azure Data Factory v2**:
 - a. On your Azure portal, search for “data factories”, then click the **Data factories** services.



- 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**.



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

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Create Data Factory ...

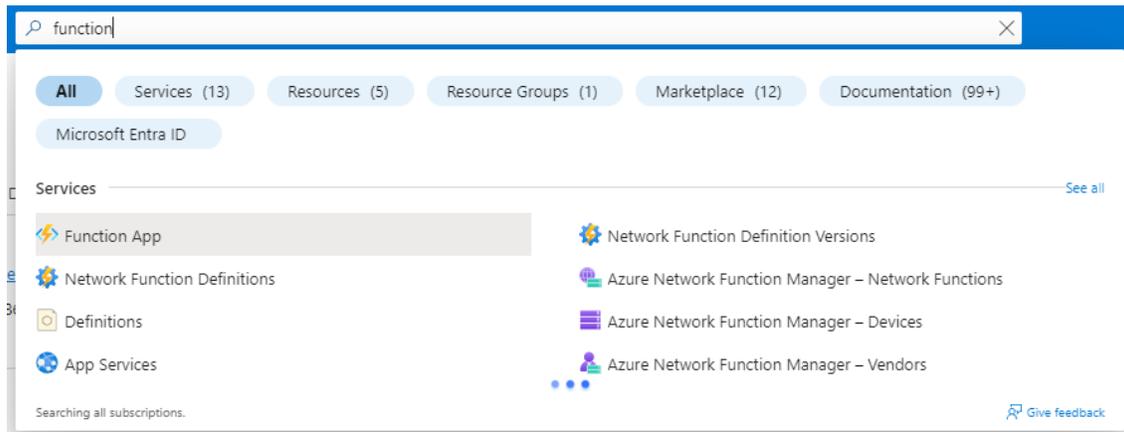
Basics Git configuration **Networking** Advanced Tags Review + create

Managed virtual network

Choose whether you want the default `AutoResolveIntegrationRuntime` to be provisioned on demand inside an ADF-managed virtual network. If this setting is disabled, after the data factory is created, you can still choose whether to provision explicitly created Azure integration runtime inside an ADF-managed virtual network.
[Learn more](#)

Enable Managed Virtual Network on the default `AutoResolveIntegrationRuntime`

- d. Click the Review + create button. Wait for it to be deployed.
5. Install the last resource, **Azure Functions**:
 - a. On your Azure portal, search for “function apps”, then click the Function App



- b. Create the function by clicking the Create button. It shall direct you to the wizard for creating the function app. Name the function app