



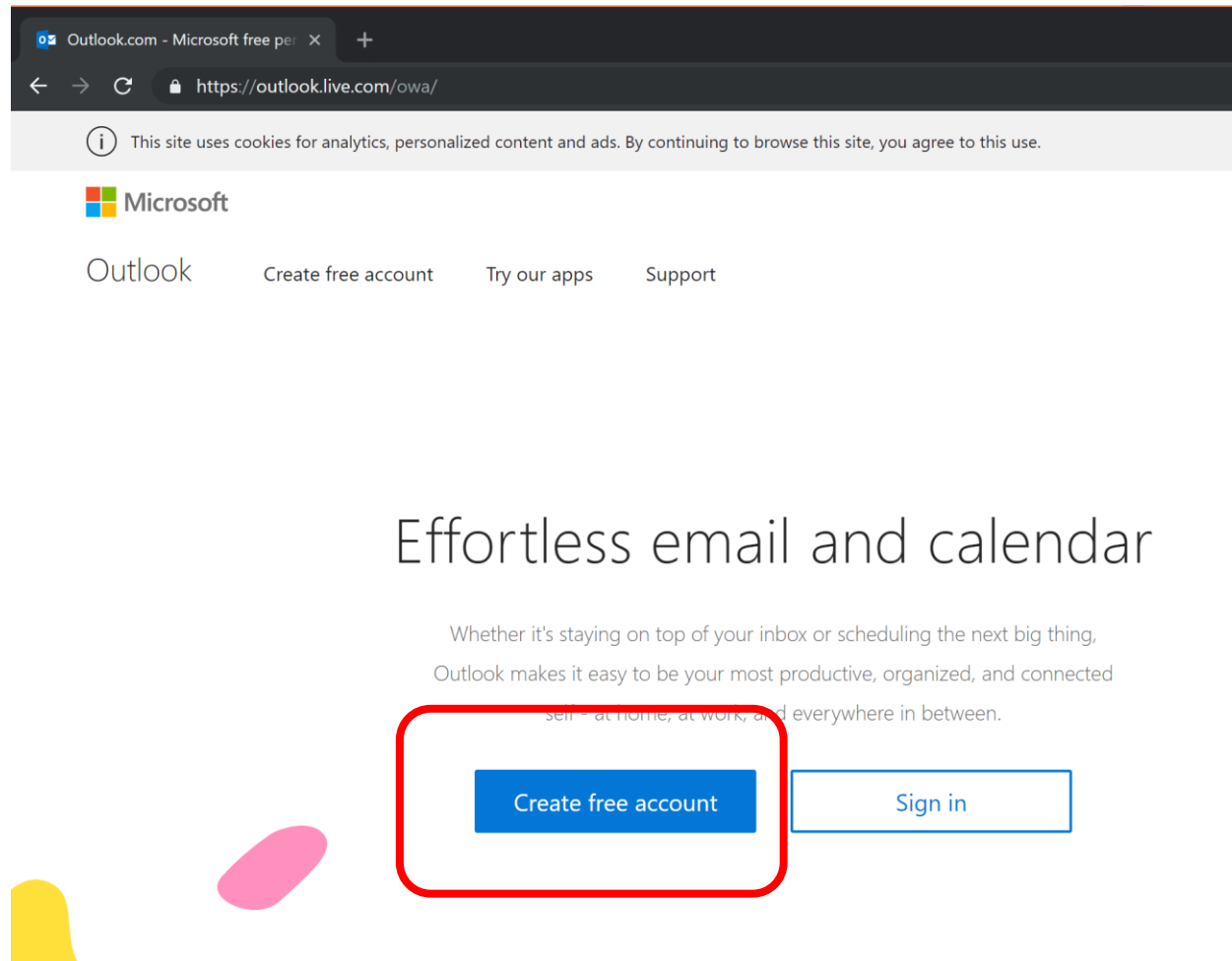
# **Workshop Cloud Paramétrage**





# **1) Création d'un compte Azure avec un passe Azure**

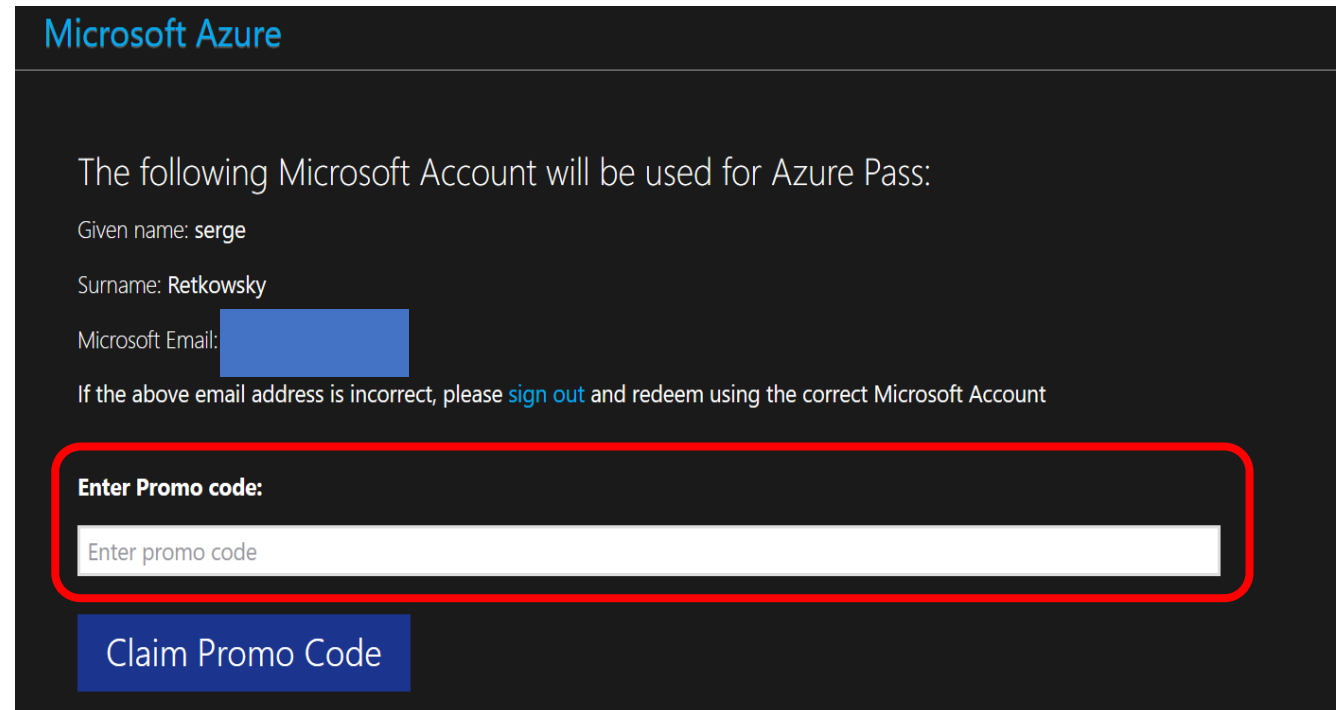
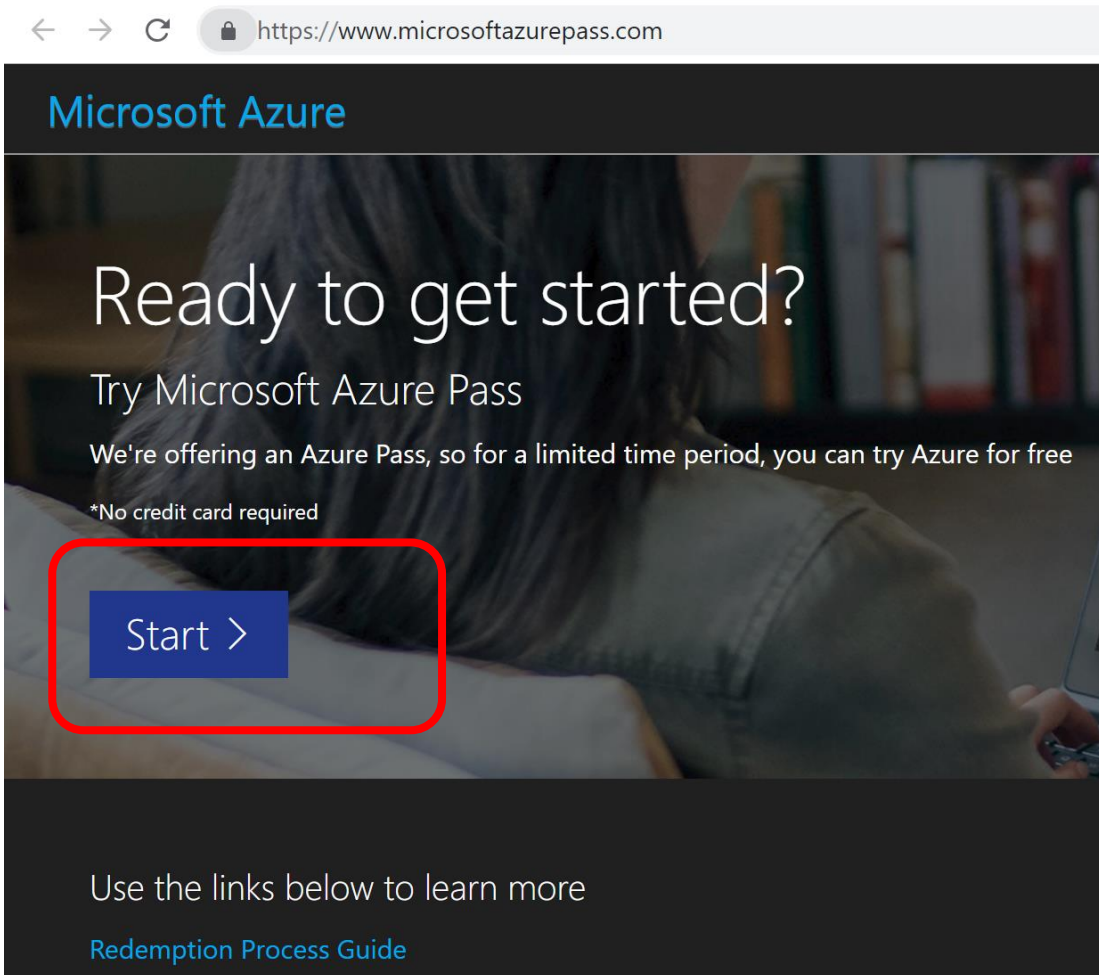
# 1.1 Création adresse email outlook

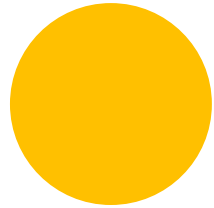


<https://outlook.live.com/owa/>

# 1.2 Activer votre passe Azure

<https://www.microsoftazurepass.com>

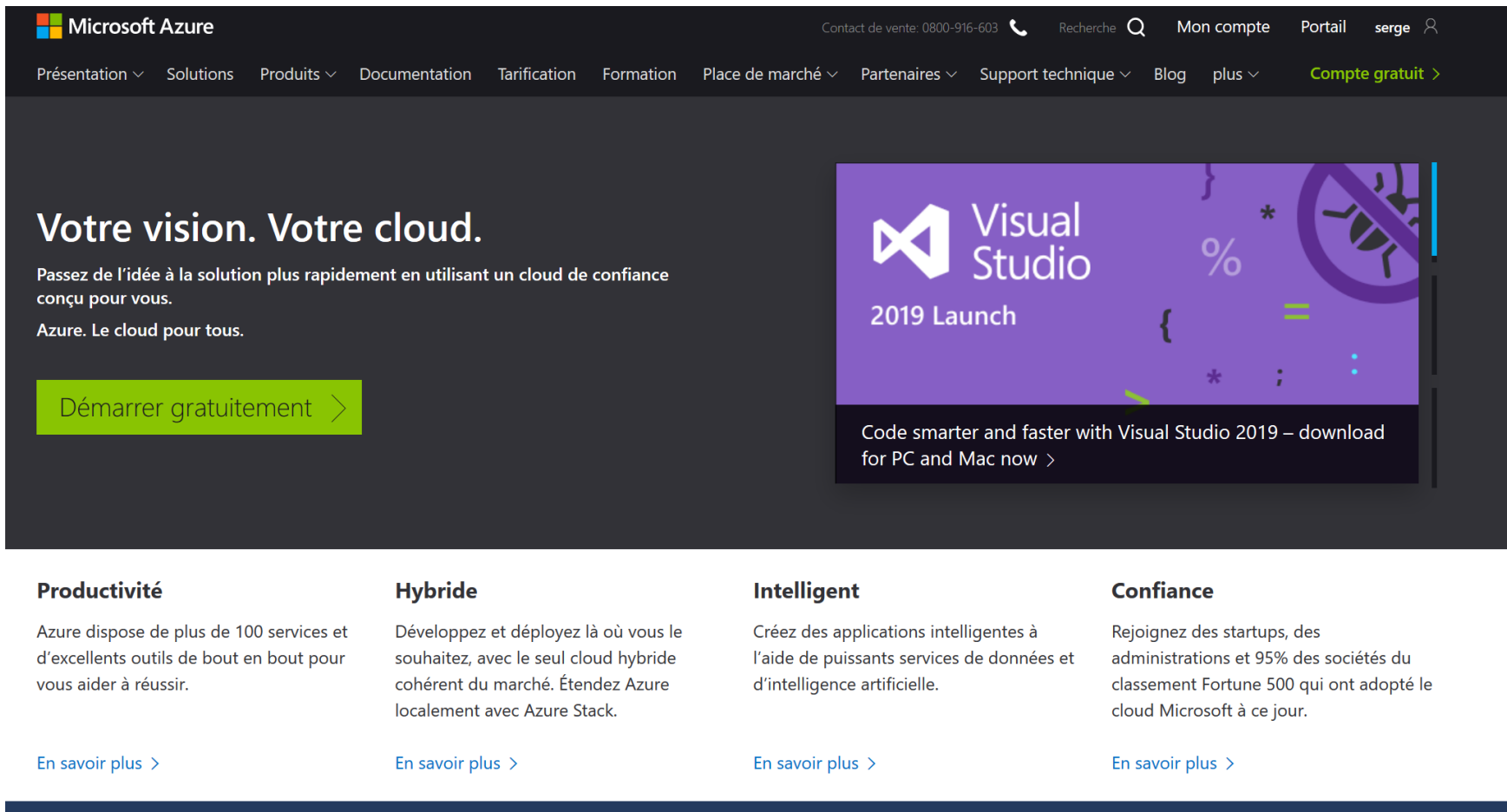




## **2) Provisionnement service Azure Databricks**

## 2.1 Connexion Portail Azure

<https://azure.microsoft.com>



The screenshot shows the Microsoft Azure website. At the top, the Microsoft Azure logo is on the left, and navigation links for 'Contact de vente', 'Recherche', 'Mon compte', 'Portail', and 'serge' are on the right. Below this is a horizontal menu with links: 'Présentation', 'Solutions', 'Produits', 'Documentation', 'Tarification', 'Formation', 'Place de marché', 'Partenaires', 'Support technique', 'Blog', 'plus', and 'Compte gratuit'. The main content area features a large banner with the text 'Votre vision. Votre cloud.' and a sub-headline 'Passez de l'idée à la solution plus rapidement en utilisant un cloud de confiance conçu pour vous. Azure. Le cloud pour tous.' A green button labeled 'Démarrer gratuitement' is positioned below the text. To the right of the banner is a purple box for 'Visual Studio 2019 Launch' with the text 'Code smarter and faster with Visual Studio 2019 – download for PC and Mac now'. Below the banner, there are four columns of text, each with a title and a link to 'En savoir plus'.

**Microsoft Azure**

Contact de vente: 0800-916-603 Recherche Mon compte Portail serge

Présentation Solutions Produits Documentation Tarification Formation Place de marché Partenaires Support technique Blog plus **Compte gratuit**

### Votre vision. Votre cloud.

Passez de l'idée à la solution plus rapidement en utilisant un cloud de confiance conçu pour vous.

Azure. Le cloud pour tous.

**Démarrer gratuitement**

#### Visual Studio 2019 Launch

Code smarter and faster with Visual Studio 2019 – download for PC and Mac now

Productivité	Hybride	Intelligent	Confiance
Azure dispose de plus de 100 services et d'excellents outils de bout en bout pour vous aider à réussir.	Développez et déployez là où vous le souhaitez, avec le seul cloud hybride cohérent du marché. Étendez Azure localement avec Azure Stack.	Créez des applications intelligentes à l'aide de puissants services de données et d'intelligence artificielle.	Rejoignez des startups, des administrations et 95% des sociétés du classement Fortune 500 qui ont adopté le cloud Microsoft à ce jour.
<a href="#">En savoir plus</a>	<a href="#">En savoir plus</a>	<a href="#">En savoir plus</a>	<a href="#">En savoir plus</a>

## 2.2 Création du service Azure Databricks

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes 'Preview', 'Microsoft Azure', 'Report a bug', and a search bar. The left sidebar contains navigation links for 'Create a resource', 'Home', 'Dashboard', 'All services', and 'FAVORITES'. The main content area displays the 'Marketplace' view with a search for 'databricks'. The search results are filtered by 'Pricing' (All), 'Operating System' (All), and 'Publisher' (All). The results table shows one entry: 'Azure Databricks' by 'Microsoft' in the 'Analytics' category. The table is highlighted with a red border.

Home > New > Marketplace > Everything

Marketplace

My Saved List 0

Everything

Compute

Networking

Storage

Web

Mobile

Containers

Databases

Analytics


Search: databricks

Pricing: All

Operating System: All

Publisher: All

Results

NAME	PUBLISHER	CATEGORY
 Azure Databricks	Microsoft	Analytics

## 2.2 Création du service Azure Databricks

The screenshot displays the Azure Databricks service overview page. The left-hand navigation pane includes the 'Azure Databricks' header, a search bar, and a list of settings such as 'Overview', 'Activity log', 'Access control (IAM)', and 'Tags'. The main content area features a 'Delete' button, a 'Managed Resource Group' section with fields for 'Resource group (change)', 'Subscription (change)', and 'Subscription ID', and a large 'Launch Workspace' button. Below these are several quick-start links: 'Documentation', 'Getting Started', 'Import Data from File', 'Import Data from Azure Storage', 'Notebook', and 'Admin Guide'.

Dashboard > Azure Databricks > Databricks

**Azure Databricks** Microsoft

+ Add Edit columns More

Filter by name...

NAME ↑↓

**Databricks**

**Databricks**  
Azure Databricks Service

Search (Ctrl+/)

Overview

Activity log

Access control (IAM)

Tags

Settings

Virtual Network Peerings

Locks

Automation script

Support + troubleshooting

New support request

Delete

Resource group (change)  
AzureDB

Subscription (change)  
Microsoft Azure Internal Consumption

Subscription ID

Managed Resource Group

URL  
<https://westeurope.azuredatabricks.net>

Pricing Tier  
premium

Launch Workspace

Documentation

Getting Started

Import Data from File

Import Data from Azure Storage

Notebook

Admin Guide



## 2.3 Création du Cluster Spark Databricks

Clusters / Cluster HC 5.2

Cluster HC 5.2



Edit

Clone

Restart

Terminate

Delete

Configuration

Notebooks (2)

Libraries (3)

Event Log

Spark UI

Driver Logs

Spark Cluster UI - Master

Cluster Mode

Standard

Databricks Runtime Version

5.2 (includes Apache Spark 2.4.0, Scala 2.11)

Python Version

3

Autopilot Options

☒ Enable autoscaling

☒ Terminate after 120 minutes of inactivity

Worker Type

Standard\_DS3\_v2

14.0 GB Memory, 4 Cores, 0.75 DBU

Min Workers

2

Max Workers

8

Driver Type

Standard\_DS3\_v2

14.0 GB Memory, 4 Cores, 0.75 DBU

Advanced Options

Bien vérifier que les options *Enable autoscaling* et *Terminate after X minutes of activity* soient activées.

Cela permet de mettre en place *l'autoscaling* entre les *workers* du cluster Spark et de désactiver automatiquement le cluster en cas d'inactivité spécifiée par un timeout.

## 2.3 Création du Cluster Spark Databricks

Azure Databricks

Home

Workspace


Clusters

+ Create Cluster

▼ Interactive Clusters

AllCreated by meAccessible by me

Filter

Name	State	Nodes	Driver	Worker	Runtime	Creator		
 Cluster HC 5.2	Running	3	Standard_DS3_v2	Standard_DS3_v2	5.2 (includes Apach...	seretkow@micros...	2	3

Azure Databricks

Home

Workspace


Clusters

+ Create Cluster

▼ Interactive Clusters

AllCreated by meAccessible by me

Filter

Name	State	Nodes	Driver	Worker	Runtime	Creator		
 Cluster HC 5.2	Running	3	Standard_DS3_v2	Standard_DS3_v2	5.2 (includes Apach...	seretkow@micros...	2	3

## 2.4 Importation des librairies Azure ML service dans Databricks

Microsoft Azure

Azure Databricks

Home

Workspace

Recents

Data

Clusters

Jobs

Search

### Create Library

Library Source

Upload DBFS **PyPI** Maven CRAN

Repository ?

Optional

Package


azureml-sdk[databricks]

Create Cancel

## 2.5 Association des librairies Azure ML service au cluster Databricks




Microsoft Azure

Clusters / Cluster HC 5.2

**Cluster HC 5.2**  [Edit](#) [Clone](#) [Restart](#) [Terminate](#) [Delete](#)

[Configuration](#) [Notebooks \(2\)](#) [Libraries \(3\)](#) [Event Log](#) [Spark UI](#) [Driver Logs](#) [Spark Cluster UI - Master ▼](#)

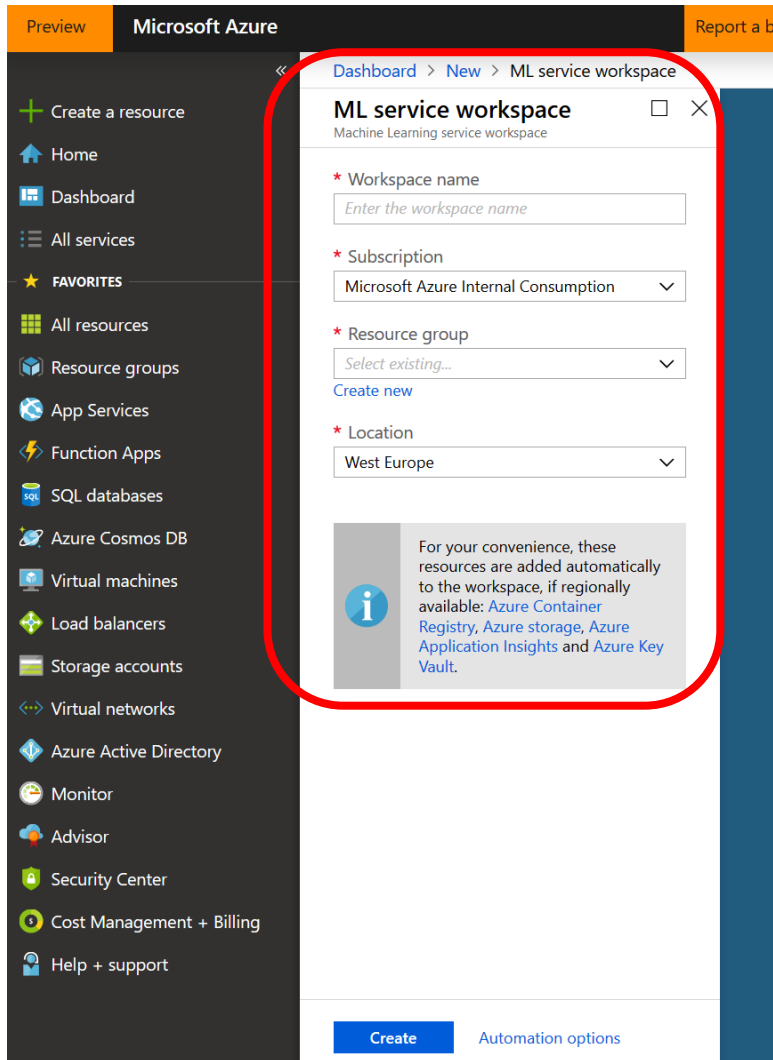
[Uninstall](#) [Install New](#)

<input type="checkbox"/>	Name	Type	Status	Source
<input type="checkbox"/>	azureml-sdk[automl_databricks]	PyPI	 Installed	
<input type="checkbox"/>	azureml-sdk[databricks]	PyPI	 Installed	
<input type="checkbox"/>	tqdm	PyPI	 Installed	



### **3) Provisionnement Azure ML service**

# 3. Provisionnement du service Azure ML service



Une fois le service provisionné il sera nécessaire de retenir le **nom du workspace, la localisation, le ressource groupe ainsi que l'ID du service.**

Ces valeurs seront nécessaires pour assurer une connexion au workspace Azure ML service depuis un notebook Azure Databricks ou Jupyter.

