# How to update the image location in Container instance

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# 1 Introduction

# 1.1 Container Instance and image

BI4Dynamics BC gets data from Dynamics BC using Microsoft service called Container Instance. Container instance acts like specialized Virtual Machine used for specific purposes. The purpose of Container instance is defined by the **image** that contains instructions of what Container instance must do. The image location has been changed. The image is the same.

# 1.2 Microsoft changed the image location: effected 30-06-2024

Images are stored in the Azure. The location of the image has changed. Old image locations are no longer available. BI4Dymamics has published the image to a new Azure location.

Here is what happened:

- 1. Microsoft deprecated the old location of the images on 30-06-2024.
- 2. The images have been moved to new Azure location
- 3. <u>Azure Container Instance used for BI4Dynamics BC application must be updated to look for</u> <u>Docker image in new location</u>

## 1.3 Microsoft note

Last year we notified users in email that the agreement between Microsoft and Docker to allow Azure IP addresses to make unlimited anonymous image pulls from Docker Hub will end. However, we extended this deadline until June 30, 2024, in order to provide more time for customers to mitigate this issue. Guidance on the mitigation can be found <u>Manage public content in private container registry - Azure Container Registry | Microsoft Learn</u>.

The best way to mitigate the risk of Docker rate limiting is to use the feature inside Azure Container Registry called Artifact Cache to cache images from Docker Hub to your Azure Container Registry. You can then modify your build and deployment scripts to pull those same images directly from Azure Container Registry. Alternatively, you can purchase a Subscription from Docker. Purchasing a subscription from Docker will increase the amount of pulls a user can have without hitting the anonymous pull limit.

This extended deadline passed recently, which now causes rate limiting on anonymous pulls done to Docker Hub. I've escalated the situation to the Product Group who may provide some additional possibilities for getting around this. To allow ACI authenticating to Docker Hub you would need to recreate the container group, passing the credentials at creation time with the appropriate --registry flags: <u>az container | Microsoft Learn</u>

In this document we explain how to change the image location to continue using BI4Dynamics BC.

### Note:

- There is no need to change Container Instance installation
- There is no change in BI4Dynamics application
- There is no need to change permissions
- We need to <u>change the image location in the BI4Dynamics</u> **Container Instance setup** in Azure portal, so that Container Instance is pulling image from new location (one line of code).

# 2 Update the image in Azure Resources Explorer (manual to-do)

This is explanation of how Azure resources are storing infromation and where to do the change.

Open Azure Resource Explorer and log in under Entra ID account: https://resources.azure.com

Important: the account must have the role of Contributor or Owner for the container instance

### Once you are logged in, extend the option subscriptions:

Azure Resource Explorer (Prev	riew) Search Q V Read Only Read Write Q Power BI (powerbl@bl4dynamics.com)
	Data (GET, PUT)
	<pre>1* {     "message": "Select a node to start" 3 }</pre>

The full list of available **subscriptions** will be shown:



Select Subscription and Resource group where your container instance is located:



Note: If you are not surewhat is the name of the Subscription or the Resource group where your container instance is located, it can be found in Azure portal under Overview section. 🛖 bi4docker 🛷 🛪 Container instances ○ « 🖒 Start 🤇 Restart 🗌 Stop 📋 Delete 🖒 Refresh 🖗 Give feedback 🔎 Search Overview Resource group (move) : dev Activity log Status : Stopped Access control (IAM) Location : North Europe 🧳 Tags > Settings : c68037f2-bb7a-4586-9afd-e5b6225c8b0c Subscription ID > Monitoring Tags (<u>edit</u>) User : mg Automation

Under the selected Resource group extend **providers** and search for **Microsoft.ContainerInstance**. Extend the **containerGroups** and click on the name of the container instance we need to update. **Scripted properties** of the container instance should become visible:



### Make sure that the Read/Write option selected and click on Edit:

Azure Resource Explorer (Preview)	Search	Q Read Onl	y Read/Write	Power BI (powerbi@bi4dynamics.com)
Porviders     Subscriptions     Customers POC     MCPP Subscription	bi4doo	cker		
Microsoft Azure Sponsorship 1     locations     providers	Edit (GET, PUT)	<pre>\$ Actions (POST, DELETE) https://management.azure.com/</pre>	Create Docur	nentation Ansible f2-bb7a-4586-9afd-e5b6225c8b0c/resourceGroup

### Search for the image in the properties of the container instance:



Change the value from **bi4dynamicsdevelopment/bc2lake**to **bi4dynamicsregistry.azurecr.io/bc2lake** and click on **PUT**:



Wait until the changes are saved (green tick icon should appear for couple of seconds):



# 3 Start the Container Instance in Azure Portal

In Azure Portal, navigate to the **Settings** and make sure that the image is updated.

### Container Instance pointing to old image location:

Diddocker   Containers * ···						×	
	🕐 Refresh 🛛 Refreed	back					
Activity log	1 container and 0 init conta Name	lmage	State	Previous state	Start time	Restart count	
<ul> <li>Access control (IAM)</li> <li></li></ul>	bi4docker	bi4dynamicsdevelopment/bc2lake	Waiting			0	
✓ Settings ○ Containers							
Properties	Events <b>Properties</b> L	ogs Connect					<b>^</b>
> Monitoring > Automation > Help	Name bi4docker lmage bi4dynamicsdevelopment/b	c2lake					

### Container Instance pointing to new image location:

Bi4docker   Containers ★ … Container instances						×	
	💍 Refresh 🛛 🛱 Give feed	back					
Overview     1 container and 0 init containers							
Activity log	Name	Image	State	Previous state	Start time	Restart count	
Access control (IAM)	bi4docker	bi4dynamicsregistry.azurecr.io/bc2l	. Terminated	Waiting		4	
🗳 Tags							
✓ Settings							
🗾 Containers							
Properties							
🔒 Locks	Events Properties L	ogs Connect					
> Monitoring	Name						
> Automation	DI4docker						
> Help	Image bi4dynamicsregistry.azurecr.	io/bc2lake					

### To tests, start the container instance under **Overview**:

bi4docker					×
	🕨 Start 🦿 Restar	t 🗌 Stop 📋 Delete 💍 Refresh 🔗 Give feedback			
Overview	∧ Essentials				JSON View
Activity log	Resource group (move	:) : <u>dev</u>	SKU	: Standard	
Access control (IAM)	Status	: Stopped	OS type	: Windows	
🧉 Taos	Location	: North Europe	IP address (Public	):	
	Subscription (move)	: Microsoft Azure Sponsorship 1	FQDN	:	
✓ Settings	Subscription ID	: c68037f2-bb7a-4586-9afd-e5b6225c8b0c	Container count	: 1	
Containers Properties	Tags ( <u>edit</u> )	: User : mg			

Running container instance has been already setup during BI4Dynamics installations. The update process for

- Container instance update and
- BI4Dynamics Data Warehouse update already exists and there is no need to change it.

We suggest monitoring the automatic update process for the first time.

# 4 Troubleshooting

In case of error the following yellow icon will be shown, and the value will not be updated:

bi4docker							
E Data (GET	T, PUT) \$Actions (POST, DELETE) Create Documentation Ansible						
PATCH	Cancel         2           Cancel         4						
1 - {							
2 - "p	roperties": {						
3	"isCreatedFromStandbyPool": false,						
4	"provisioningState": "Succeeded",						
5	"provisioningTimeoutInSeconds": 1800,						
6	"isCustomProvisioningTimeout": false,						
7 -	"containers": [						
8 -	{						
9	"name": "bi4docker",						
10 -	"properties": {						
11	<pre>"image": "bi4dynamicdevelopment/bc2lake",</pre>						
12 -	"ports": [						
13 -	{						
14	"protocol": "TCP",						
15	"port": 80						
16	}						
17	], 🚹						
18 -	"environmentVariables						
19 -							
20	"name": "StorageAccountName",						
21	"value": "bi4docker"						

### Scroll down the page to see the details:

- providers	191* { 192 "mentocol": "TCP"
* Show all	193 "port": 80
<ul> <li>Microsoft Compute</li> </ul>	194 }
<ul> <li>Microsoft.compute</li> </ul>	195 ],
<ul> <li>Microsoft.ContainerInstance</li> </ul>	196 <sup>-</sup> 1p <sup>-</sup> ; <sup>-</sup> 20.105.103.1/9 <sup>-</sup> ,
<ul> <li>containerGroups</li> </ul>	198 }
+ axdev2019-docker-4c4gb	199 "osType": "Windows",
<ul> <li>bi4docker</li> </ul>	200- "instanceView": {
- containers	201 "events": [],
- comunicia	202 state: Running
<ul> <li>bi4dynamics-bc-datawarenouse</li> </ul>	204 }.
<ul> <li>bi4dynamics-powerbi</li> </ul>	205 "id": "/subscriptions/c68037f2-bb7a-4586-9afd-e5b6225c8b0c/resourceGroups/dev/provid
<ul> <li>docker-selected-tables</li> </ul>	/bi4docker",
+ docker-speed-4c4gb	206 "name": "bi4docker", 207 ""
+ docker-speed-uk	208 "location": "northeurope",
<ul> <li>docker-test</li> </ul>	209- "tags": {
- containers	210 "User": "mg" 211 3
+ mn-test-beta	212 }
+ Microsoft.ContainerRegistry	E
+ Microsoft.DevTestLab	Error:
+ Microsoft.Network	
+ Microsoft.OperationalInsights	"erron": (
+ Microsoft.Resources	"code": "InaccessibleImage", "message": "The image 'hiddwnamicdevelopment/hc2lake' in container group 'hiddorker' is not accessible
+ Microsoft.Sql	}
+ Microsoft Otorgan	

The possible reasons for failing are:

• Insufficient permissions of the account we signed in with



• Container is still in transitioning state after the last processing

E	Error:
	{     "error": {         "code": "ContainerGrounTransitioning".
	<pre>"message": "The container group 'bi4docker' is still transitioning, please retry later." }</pre>

• The new image name is misspelled

Error:	
{ "error": {	
"code": "InaccessibleImage",	
<pre>"message": "The image 'bi4dynamicdevelopment/bc2lake' in container group 'bi4d</pre>	docker' is not accessible.
}	