



WHITE PAPER

## TRIMIT AZURE STORAGE SERVICES 22.2

This document contains information about the Azure Storage Services functionality in TRIMIT 22.2 for Microsoft Dynamics 365 Business Central 2022, Wave 2 (W1).

Version: 22.2  
Date: 28-02-2023

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# INTRODUCTION

If you are running TRIMIT in the Cloud, you also will have created your own account for Azure Storage Services for your documents and files.

See more details in <https://azure.microsoft.com/en-us/product-categories/storage/> and <https://docs.microsoft.com/en-us/azure/storage/files/storage-files-introduction>.

To make uploading/downloading files easier for users of TRIMIT, we have created the **TRIMIT Azure Storage Services** functionality by using and extending the **Connection Setups** that were already used in some way for the Replication of data needed for TRIMIT Intercompany or the TRIMIT Portals.

The functionality described is the functionality as of **TRIMIT 22.2 for Business Central W1 BC21.X**.

The pictures in this White Paper are based on the demo database for **TRIMIT 22.2**, which is based on Microsoft Dynamics 365 Business Central 2022 Release Wave 2, in the demo company **CRONUS TRIMIT W1 Ltd.** (based on CRONUS International Ltd. of Microsoft Dynamics 365 Business Central).

# COMPONENTS

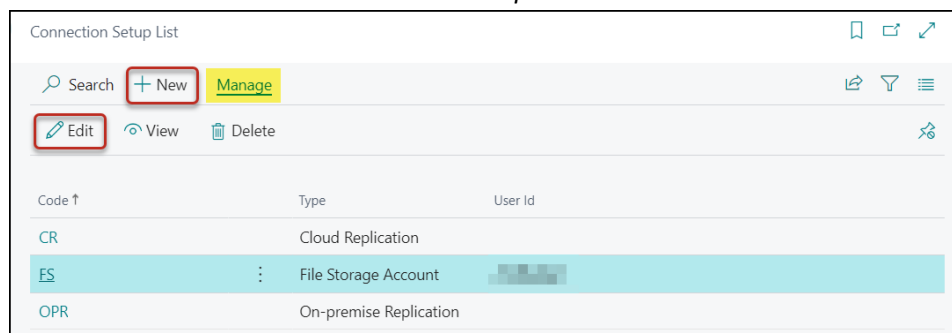
**TRIMIT Azure Storage Services** contains the following objects:

The tables     **6036517 trm Connection Setup**  
                  **6036560 trm File Storage Share**  
                  **6036562 trm Temp File Storage Explorer**

The pages      **6036544 trm Connection Setup Card**  
                  **6036545 trm Connection Setup List**  
                  **6036560 trm File Storage Share**  
                  **6036561 trm File Storage Shares**  
                  **6036563 trm File Storage Explorer**

# CONNECTION SETUP

You can find it via **Tell me** *Connection Setup List*.



## DESCRIPTION OF THE FIELDS:

### CODE

Unique **Code** for this Connection Setup.

### TYPE

You can choose between the following three options:

|                        |                                                               |
|------------------------|---------------------------------------------------------------|
| On-premise Replication | Connection for replicating Data in an on-premise installation |
| Cloud Replication      | Connection for replicating Data in a cloud installation       |
| File Storage Account   | Connection for Azure File Storage                             |

### USER ID

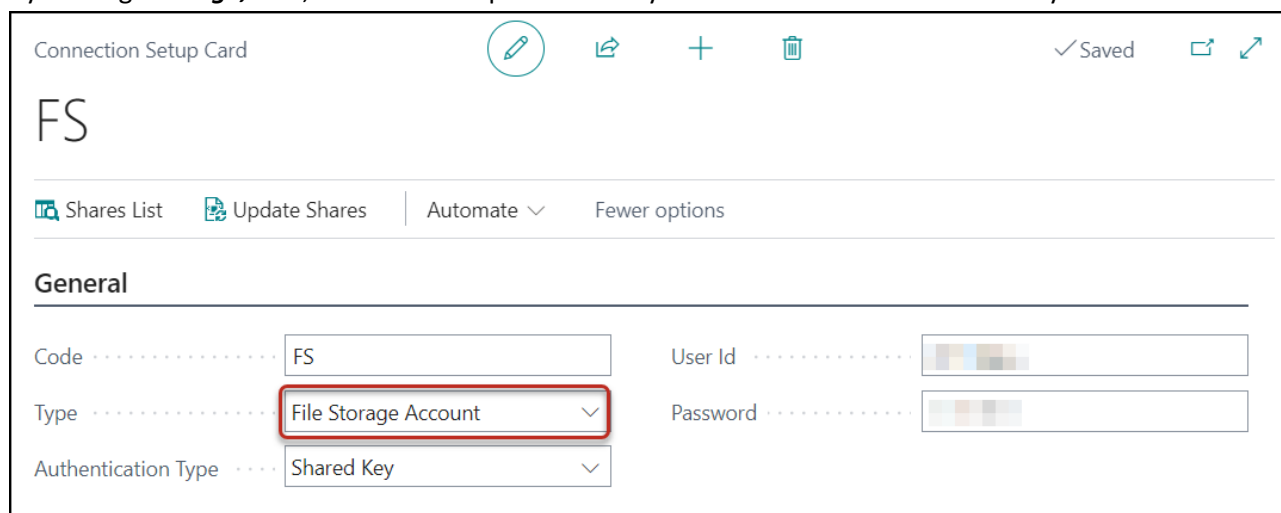
The **User Id** for your Connection.

In case of **Type** = *On-premise Replication* it is the **User Id** of your on-premise TRIMIT installation.

In case of **Type** = *Cloud Replication* it is the **Client Id** of your cloud TRIMIT installation.

In case of **Type** = *File Storage Account* it is the **Account** of your Azure Storage Services.

By clicking **Manage, Edit**, the Card will open in which you can also enter other necessary fields.



For **Type** *File Storage Account*

## AUTHENTICATION TYPE

With this field you can determine how the Authentication should take place based on your **User Id** and **Password**.

For **Type File Storage Account** – the only possible option is *Shared Key*, which is also filled as default.

Any other option will give you an error message.

There is also an option *Shared Access Signature* but that has not implemented yet for **Type File Storage Account**.

For **Type On-premise Replication** – the only possible option is *Basic*, which is also filled as default.

Any other option will give you an error message.

For **Type Cloud Replication** – the default is *OAuth 2.0 Service to Service*.

You can however choose between the following two options:

|                              |                                                                        |
|------------------------------|------------------------------------------------------------------------|
| Basic                        | Basic Authentication used for Replication to an on-premise environment |
| OAuth 2.0 Service to Service | OAuth Authentication used for Replication to a cloud environment       |

## PASSWORD

The Password belonging to your **User Id**.

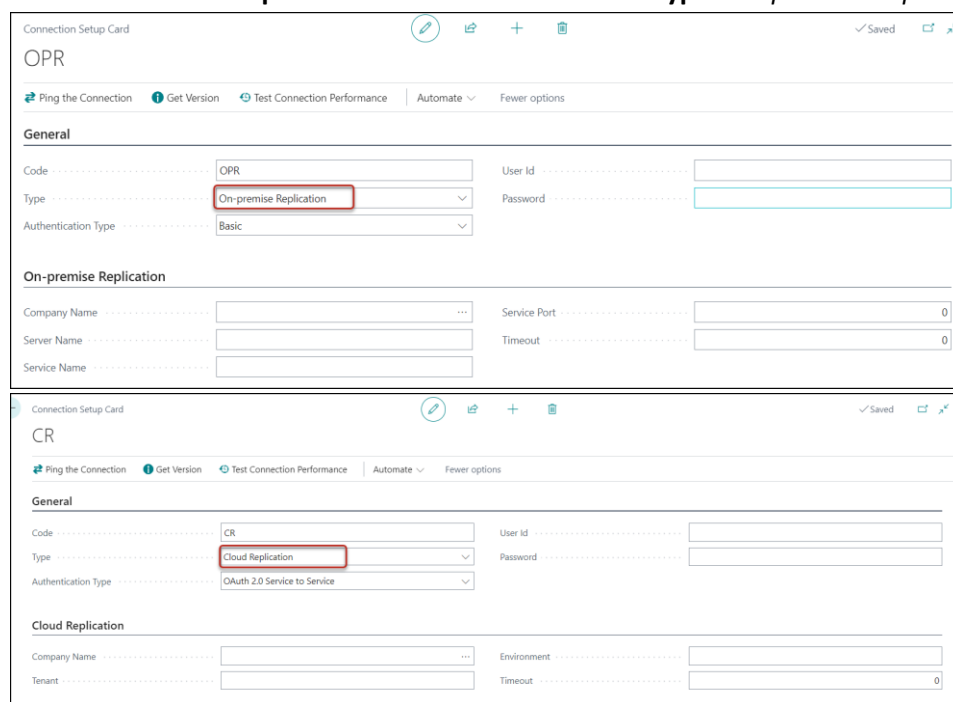
In case of **Type = On-premise Replication** it is the **Password** of your on-premise TRIMIT installation.

In case of **Type = Cloud Replication** it is the **Client Secret** of your cloud TRIMIT installation.

In case of **Type = File Storage Account** it is the **Password** of your Azure Storage Services.

For **Type File Storage Account**, click **Update Shares**, to update the Shares of your File Storage Account.

The **Connection Setup Card** will look different for the **Types On-premise Replication or Cloud Replication**.



The image shows two screenshots of the 'Connection Setup Card' interface. The top screenshot is for 'On-premise Replication' (OPR) and the bottom is for 'Cloud Replication' (CR). Both cards have a 'General' section with fields for 'Code', 'Type', 'Authentication Type', 'User Id', and 'Password'. The 'Type' field is highlighted with a red box in both. The OPR card also has an 'On-premise Replication' section with fields for 'Company Name', 'Server Name', 'Service Name', 'Service Port', and 'Timeout'. The CR card has a 'Cloud Replication' section with fields for 'Company Name', 'Tenant', 'Environment', and 'Timeout'. Both cards have a 'Ping the Connection' button and a 'Get Version' button. The OPR card also has a 'Test Connection Performance' button and an 'Automate' dropdown. The CR card has a 'Test Connection Performance' button and an 'Automate' dropdown. Both cards have a 'Saved' status indicator and a 'Fewer options' link.

For more details regarding **Replication**: see **White Paper – TRIMIT Replication of Data**

# FILE SHARES

The **File Shares** can be found via **Actions, Shares List** in Connection Setup Card of **Type File Storage Account** or via **Tell me File Shares**

| File Shares |              |                                     |                    |              |
|-------------|--------------|-------------------------------------|--------------------|--------------|
| Search      | + New        | Manage                              | Open File Explorer | Refresh      |
|             |              |                                     | Connection         | More options |
| Name ↑      | Storage Type | Default                             |                    |              |
| [redacted]  | Azure Blobs  | <input type="checkbox"/>            |                    |              |
| [redacted]  | Azure Blobs  | <input type="checkbox"/>            |                    |              |
| migrate     | Azure Blobs  | <input type="checkbox"/>            |                    |              |
| sqlbackup   | Azure Blobs  | <input type="checkbox"/>            |                    |              |
| test        | Azure Files  | <input checked="" type="checkbox"/> |                    |              |
| test        | Azure Blobs  | <input type="checkbox"/>            |                    |              |
| testtool    | Azure Blobs  | <input type="checkbox"/>            |                    |              |

In **File Shares** you will see the File Shares that have already been created in **Azure Storage Services** or via **TRIMITs Connect Setup** functionality.

Via **Manage, Edit** you can edit a **File Share** or via **+ New** you can create a new **File Share**. Depending on the **Storage Type** the page of the **File Share** will look different.

## STORAGE TYPE = AZURE FILES

File Share

File Explorer

More options

General

Name

test

Storage Type

Azure Files

Connection Code

FS

Default

☒

Azure Files Share

Last Modified

8/19/2019 8:11 PM

Deleted

☐

Deleted Time

Quota

10

Version

Enabled Protocols

Snapshot

Use Leases when Writing

☐

Use Newest API Version

☒

Etag

0X8D724D0A99EDE53

URI

## NAME

Name of the File Share.

## STORAGE TYPE

You can choose between the following two options:

|             |                                                                                                                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Azure Files | Offers fully managed cloud file shares that you can access from anywhere via the industry standard Server Message Block (SMB) protocol.<br>You can mount Azure file shares from cloud or on-premises deployments of Windows, Linux, and macOS. |
| Azure Blobs | Allows unstructured data to be stored and accessed at a massive scale in block blobs.<br>Also supports <a href="#">Azure Data Lake Storage Gen2</a> for enterprise big data analytics solutions.                                               |

## CONNECTION CODE

The **Connection Code** to which the File Share is connected to.

## DEFAULT

If a **File Share** has been set to **Default** = Yes, this will be the **File Share** that will be open if you go directly to the [File Explorer](#).

When no **File Share** has been set as **Default**, the **File Explorer** will simply show the first **File Share**.

## FASTTAB AZURE FILES SHARE

This FastTab is only showing the detailed information of your File Share of **Storage Type** *Azure Files*

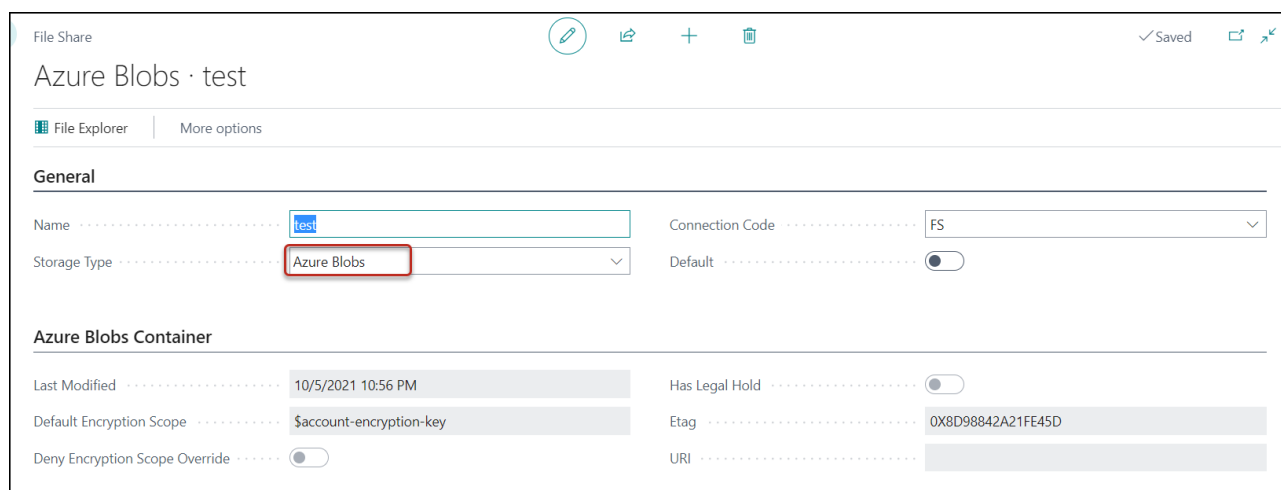
You can find more information regarding these properties in many Microsoft websites, like i.e.,

<https://docs.microsoft.com/en-us/rest/api/storageservices/get-blob-properties>.

If you want to see the **Last Changed** Date/Time of your files you need to have a checkmark in

**Use Newest API Version**. This will be set by default to Yes, when creating a File Share of **Storage Type** *Azure Files*.

## STORAGE TYPE = AZURE BLOBS



File Share

Azure Blobs · test

File Explorer | More options

**General**

Name: test

Storage Type: Azure Blobs

Connection Code: FS

Default: ☒

**Azure Blobs Container**

Last Modified: 10/5/2021 10:56 PM

Default Encryption Scope: \$account-encryption-key

Deny Encryption Scope Override: ☐

Has Legal Hold: ☐

Etag: 0X8D98842A21FE45D

URI:

## NAME

Name of the File Share,

## STORAGE TYPE

You can choose between the following two options:

|             |                                                                                                                                                                                                                                                |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Azure Files | Offers fully managed cloud file shares that you can access from anywhere via the industry standard Server Message Block (SMB) protocol.<br>You can mount Azure file shares from cloud or on-premises deployments of Windows, Linux, and macOS. |
| Azure Blobs | Allows unstructured data to be stored and accessed at a massive scale in block blobs.<br>Also supports <a href="#">Azure Data Lake Storage Gen2</a> for enterprise big data analytics solutions.                                               |

### CONNECTION CODE

The **Connection Code** to which the File Share is connected to.

### DEFAULT

If a **File Share** has been set to **Default** = Yes, this will be the **File Share** that will be open if you go directly to the [File Explorer](#).

When no **File Share** has been set as **Default**, the **File Explorer** will simply show the first **File Share**.

### FASTTAB AZURE BLOBS CONTAINER

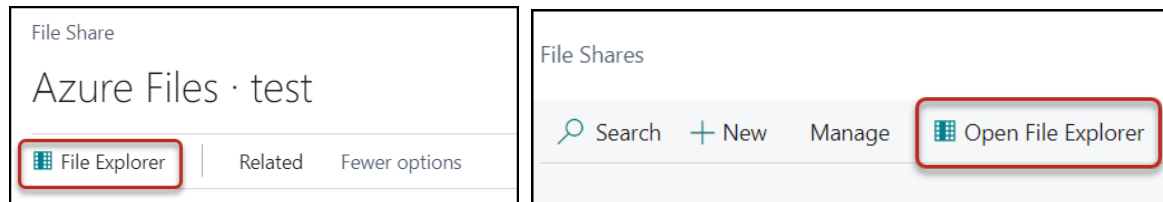
This FastTab is only showing the detailed information of your File Share of **Storage Type** *Azure Blobs*

You can find more information regarding these properties in many Microsoft websites, like i.e.,

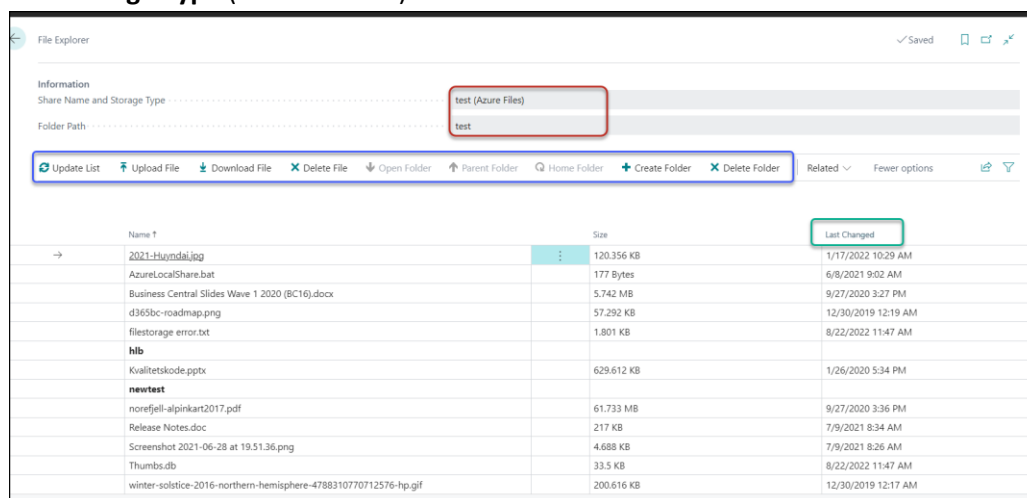
<https://docs.microsoft.com/en-us/rest/api/storageservices/get-blob-properties>

# FILE EXPLORER

The **File Explorer** can be found via **File Explorer** in File Share Card, via **Open File Explorer** In File Shares List or via **Tell me File Explorer**



When clicking **(Open) File Explorer**, you can see the files that have been uploaded already in a **Share Name and Storage Type** (the File Share).



## SHARE NAME AND STORAGE TYPE

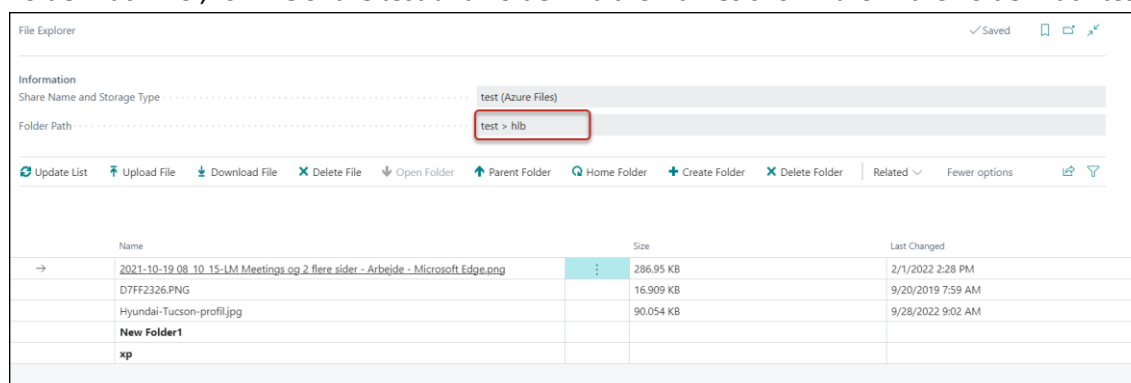
If you opened the **File Explorer** via a **File Share**, the **Share Name and Storage Type** is filled and cannot be changed. Based on this **Share Name and Storage Type**, the already uploaded Files/Folders (**Name**) will be shown.

If you opened the **File Explorer** via **Tell me**, you can choose an existing **File Share** and based on this, the already uploaded Files/Folders (**Name**) will be shown.

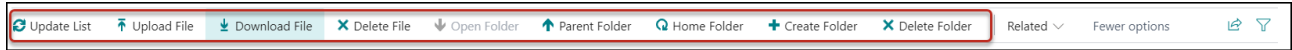
## FOLDER PATH

The **Folder Path** will show you the Path of the shown **Names**.

If I would choose a **File Share**, and then choose a Folder (Name is shown **Bold**), this would be shown in the **Folder Path**. I.e., for File Share **test** and Folder **h1b** the **Names** shown are in the **Folder Path** **test > h1b**



The active **Actions** for the **Names** list depend on the **Name** of the Files in the List.



The column **Last Changed** will only be shown for the **Azure Files** Storage Type, and only if the **Use Newest API Version** in the **File Share** has been set to **Yes**.

## UPDATE LIST

This will update the list of the Files/Folders into the tables of TRIMIT.

This Action is always 'active'.

## UPLOAD FILE

With this Action, you can upload any file into the File Share.

This Action is always 'active'.

## DOWNLOAD FILE

With this Action, you can download any file from the File Share to your local device.

This Action is always 'active'.

## DELETE FILE

With this Action, you can delete a file from the File Share – these are only the not-bold lines, because they represent the Folders.

This Action is always 'active'.

## OPEN FOLDER

With this Action, you can open a Folder to see which Files are in it.

Only the **bold** lines represent Folders.

This Action is only 'active' if you are standing on a line that represents a Folder.

## PARENT FOLDER

With this Action, you can go a level up, from a Folder content to the Folder.

This Action is only 'active' if you are standing on Files/Folders that have a Parent Folder

## HOME FOLDER

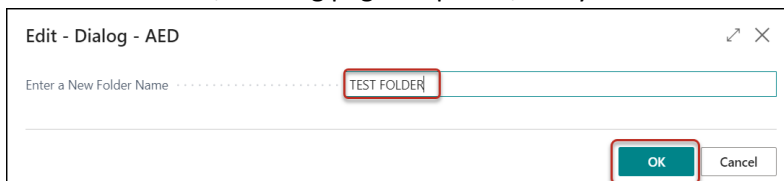
With this Action, you can go back to the highest level in the Folder structure.

This Action is only 'active' if you are standing on Files/Folders that have Parent Folder(s).

## CREATE FOLDER

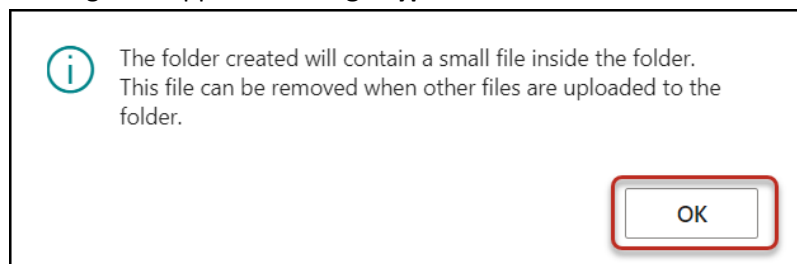
With this Action, you can create a new Folder.

For **Create Folder**, a Dialog page is opened, and you can enter the **Name** of the new Folder.



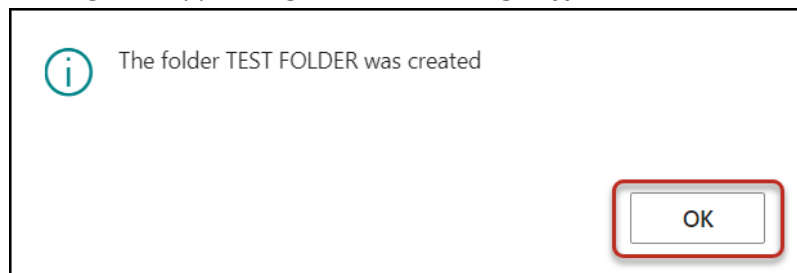
Click **OK**.

Message will appear if **Storage Type** of the File Share is *Azure Blob*:



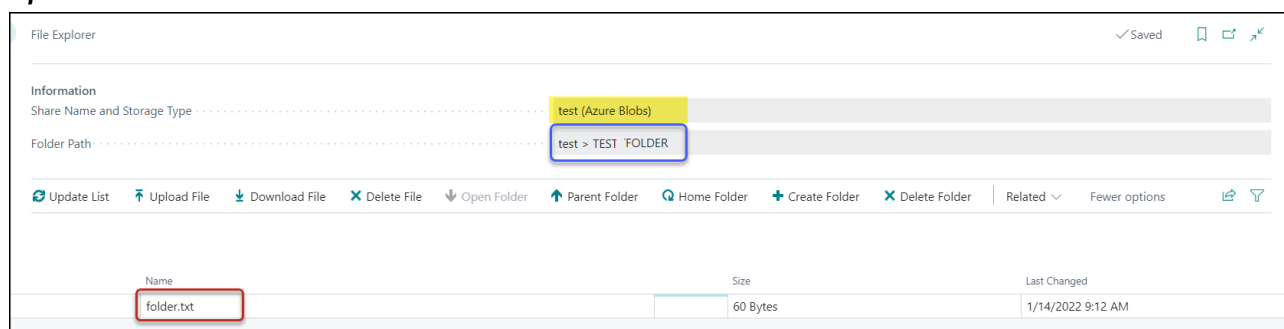
Click **OK**.

Message will appear regardless the **Storage Type** of the File Share:



Click **OK**.

Afterwards, in case of **Storage Type Azure Blob**, you can see the automatically created file via the Action **Open Folder**:



## DELETE FOLDER

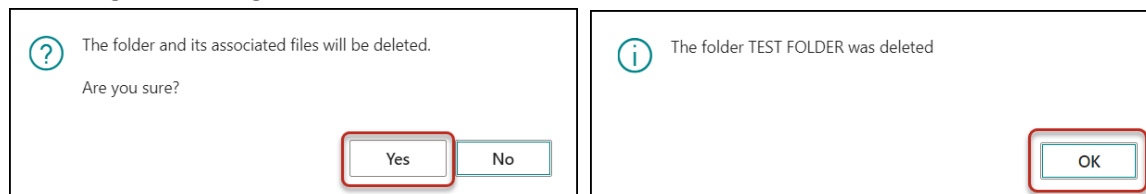
With this Action, you can delete a Folder.

Only the **bold** lines represent Folders.

This Action is only 'active' if you are standing on a line that represents a Folder.

What happens, is that the content of the Folder will be deleted, and if that has finished, the Folder itself will be deleted.

You will get a message before and after deletion:



# USE NETWORK DRIVE

You can create and run a .bat file to create a Network Drive for a direct connection to every File Share of your Azure Storage of **Storage Type Azure Files**:



1. Name for the Network Drive, i.e., Z:
2. **User Id** of your Connection Setup
3. **Name** of the File Share
4. **User Id** of your Connection Setup
5. **Password** of your Connection Setup

This would give you the possibility to see the content also directly in your regular File Explorer via a Network Drive:

