Define a Connection to an External Storage System

Last Modified on 05/29/2024 4:03 am EDT

Starting with V10.0, Cora SeQuence has been renamed to Cora Orchestration.

V9.7.1 and later

Overview

For most File Activities, you need to define a connection to an external storage system. Depending on the activity, you will save a file, retrieve a file, delete a file, or create a folder in the external storage system.

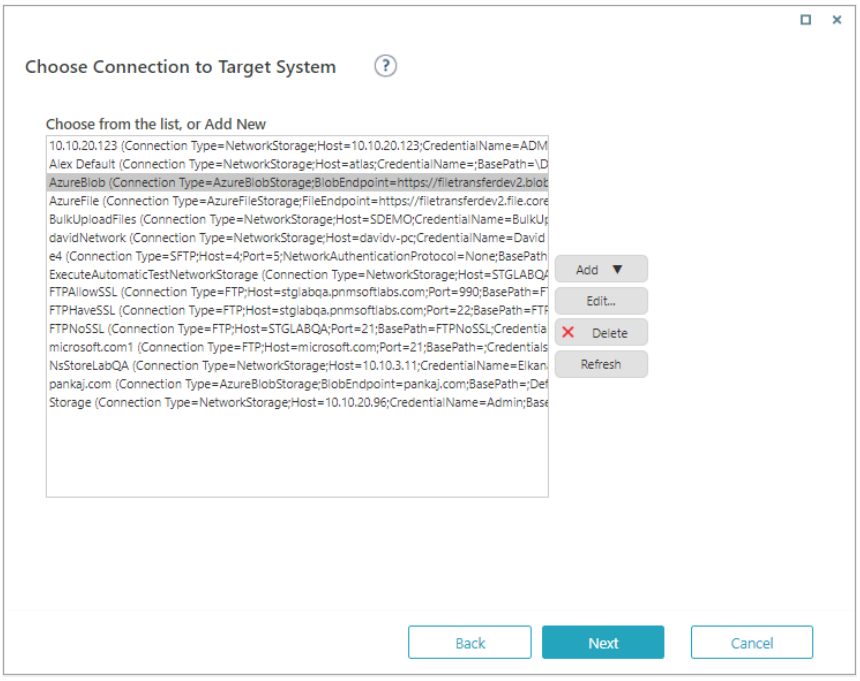
NOTES
- Connection names and descriptions should be meaningful. You might want to use a connection in other activities, so it's important for you to be able to identify and understand what a connection is from the name and description.
- The path separator requirements for each storage system must also be used for base paths, source paths, file paths, and so on, in activities that require a connection to an external storage system. For example, if the file storage system you select supports forward slash (/) path separators, then all subsequent paths must also use forward slashes:
`https://{externalstoragesystem}/{basepath}/{relativepath}/{file}`

File activities that use an external storage system

- Put File Activity
- Get File Activity
- Get File Info Activity (V10.6 onwards)
- Create Folder Activity
- Delete File Activity

Supported external storage systems

- Amazon Simple Storage Service (AWS S3)
- Azure Blob Storage
- Azure File Storage
- FTP
- Network Storage
- SFTP



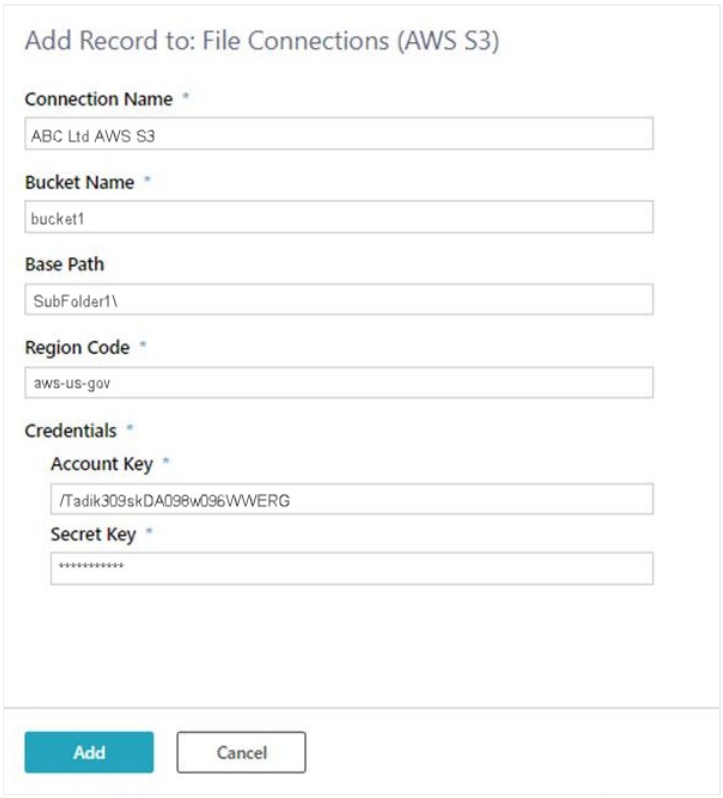
Amazon Simple Storage Service (Amazon S3)

Specifications and limitations

Parameter	Description
Pattern	S3DirectoryInfo.GetFiles (string, SearchOption)
Path and File Name Restrictions	https://docs.aws.amazon.com/AmazonS3/latest/userguide/bucketnamingrules.html
Path Separator	/
Supports Folder Hierarchy	No

Parameters

Parameter	Description
Connection Name	The name you select for the connection.
Bucket Name	The S3 bucket name, where files are stored.
Base Path	The sub folder name.
Region Code	The region to which bucket is assigned.
Credentials	• **Account Key**: The username for authentication. • **Secret Key**: The account password of authentication.



Azure Blob Storage

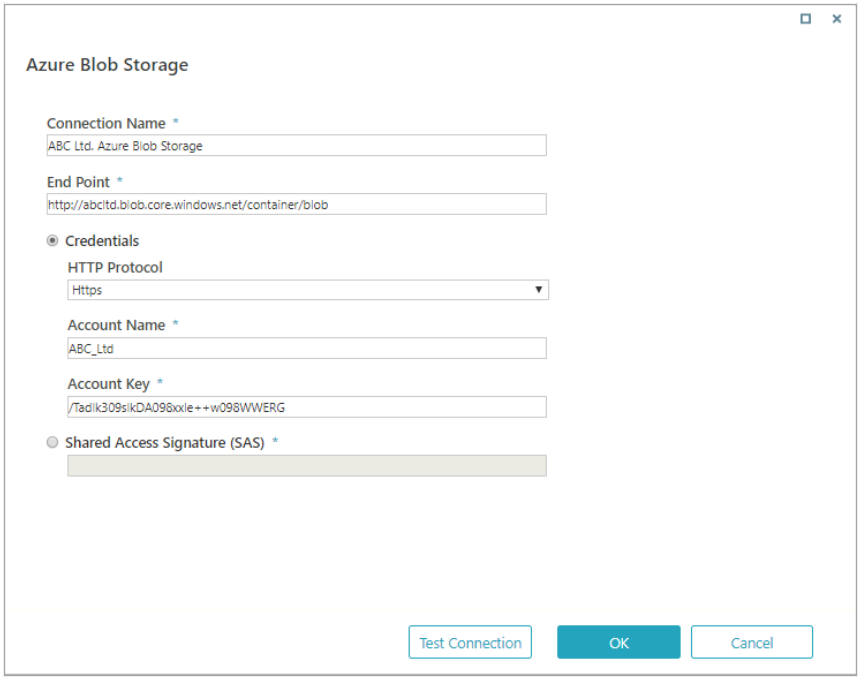
Specifications and limitations

Parameter	Description
Pattern	CloudBlobContainer.ListBlobs Method: a string containing the blob name prefix.
Path and File Name Restrictions	Naming and Referencing Shares, Directories, Files, and Metadata
Path Separator	/
Supports Folder Hierarchy	No, each container can only contain blobs.

Parameters

Parameter	Description
Connection Name	The name you select for the connection.
End Point	URL to the Azure Blob storage.
Credentials	The protocol, account name, and account key for your Azure Blob Storage account. If you select this, SAS is not relevant.

Parameter	Description
Shared Access Signature (SAS)	Signature that grants limited access to objects in the storage account (system) to other clients, without exposing your account key. If you select this, Credentials is not relevant.



NOTE
To make sure that you defined connection settings correctly, test the connection after you enter the required parameters.

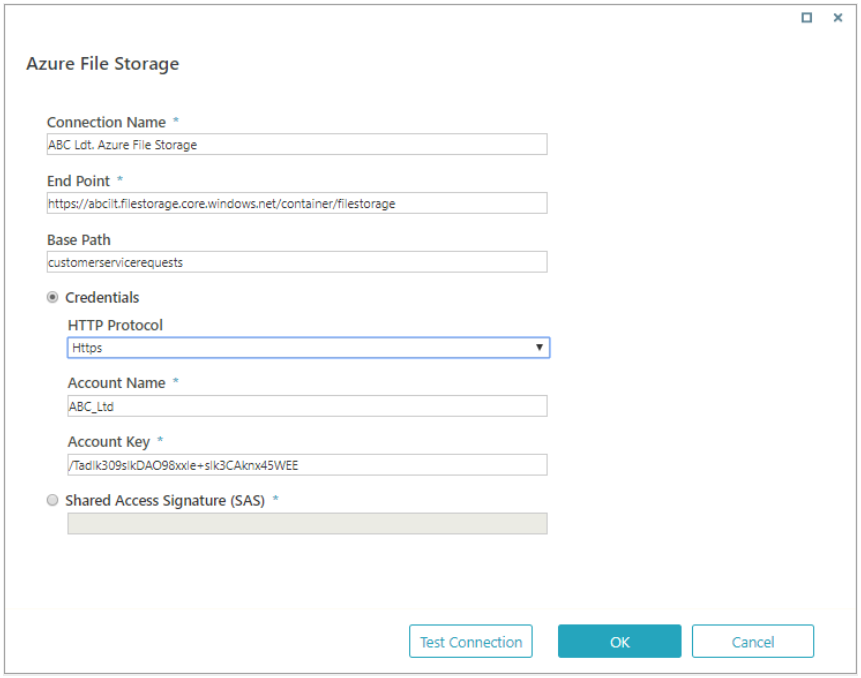
Azure File Storage

Specifications and limitations

Parameter	Description
Pattern	CloudFileDirectory.ListFilesAndDirectories Method: a string containing the file or directory name prefix.
Path and File Name Restrictions	Naming and Referencing Shares, Directories, Files, and Metadata.
Path Separator	/
Supports Folder Hierarchy	Yes

Parameters

Parameter	Description
Connection Name	The name you select for the connection.
End Point	URL to the Azure Blob storage.
Base Path	Sub-folder in the end point. Should be a shared folder on the server.
Credentials	The protocol, account name, and account key for your Azure File Storage account. If you select this, SAS is not relevant.
Shared Access Signature (SAS)	Signature that grants limited access to objects in the storage account (system) to other clients, without exposing your account key. If you select this, Credentials is not relevant.



FTP

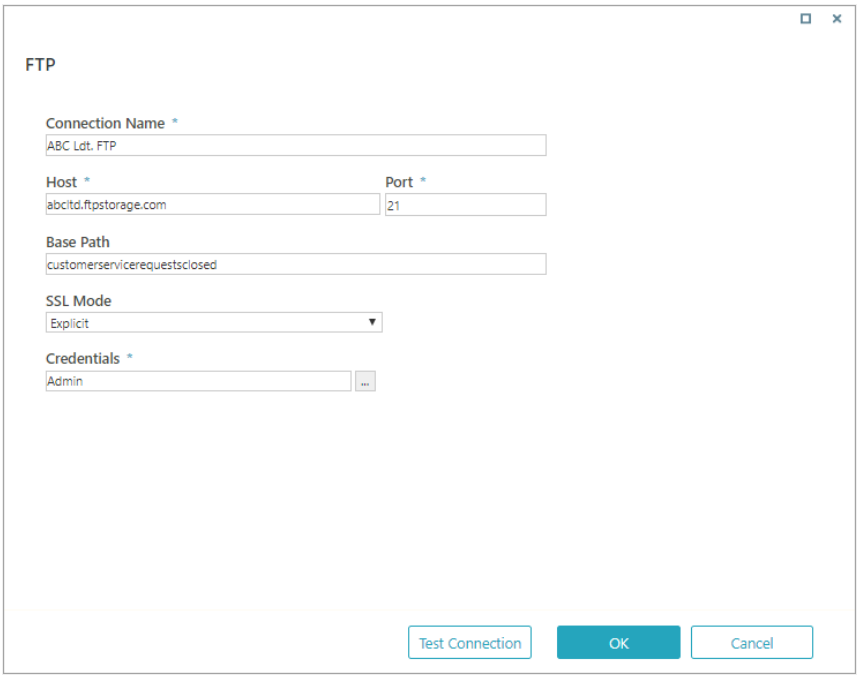
Specifications and limitations

Parameter	Description
Pattern	• **Wildcards**: used to specify multiple files or directories whose names match a pattern. • **FileSet**: used to combine multiple matching criteria (such as all ".txt" and ".csv" files) and also specify *exclude* criteria.
Path and File Name Restrictions	FTP does not specify a standard pathname convention. You need to follow the file-naming conventions of the file systems involved in the file transfer.
Path Separator	/

Parameter	Description
Supports Folder Hierarchy	Yes

Parameters

Parameter	Description
Connection Name	The name you select for the connection.
Host	URL to the FTP server.
Port	Port for the FTP server.
Base Path	Sub-folder in the FTP server. Should be a shared folder on the server. Make sure the user defined in the credentials has permission on the shared folder.
SSL Mode	• **Implicit**: Assumes that the server is expecting everything encrypted using SSL. This means that when the client first connects to the server it will immediately negotiate the SSL connection on the command connection. Normally, implicit connections are also on a different port, such as port 990. • **Explicit**: A normal FTP connection is established, usually on the standard port 21. However, after connecting, the client will send a command to switch to SSL mode. This command is "AUTH SSL". When this command is sent, the server will respond normally, and then establish an SSL connection.
Credentials	Name, user name, and password for the FTP server. See screenshot below for details.



Network Storage

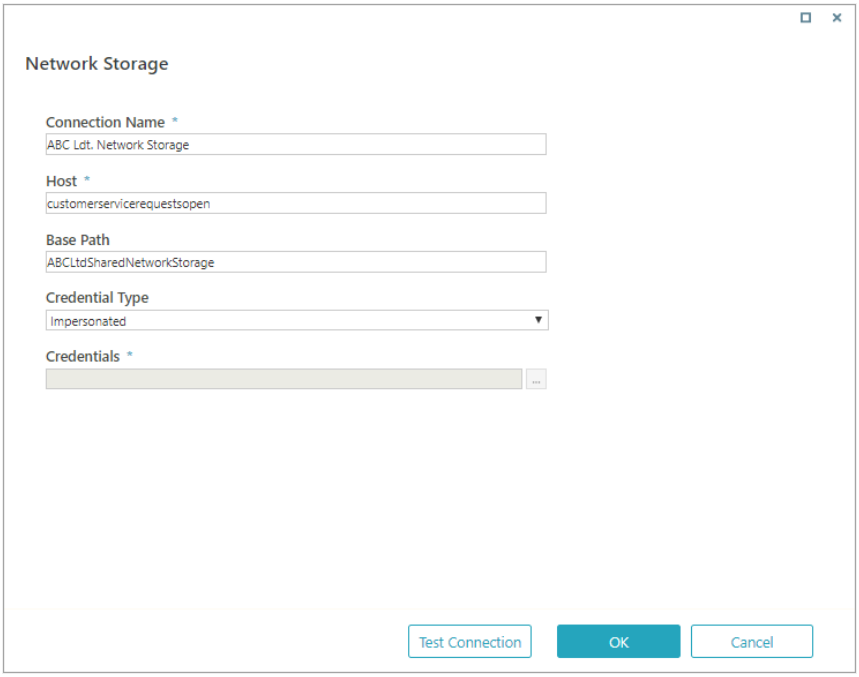
Specifications and limitations

Parameter	Description
Pattern	Directory.GetFiles Method
Path and File Name Restrictions	• Invalid Path Chars • Invalid File Name Chars
Path Separator	\
Supports Folder Hierarchy	Yes

Parameters

Parameter	Description
Connection Name	The name you select for the connection.
Host	Name or URL of the network.
Base Path	Sub-folder in the network storage. Should be a shared folder on the server. Make sure the user defined in the credentials has permission on the shared folder. You cannot store files in the base path (folder). You need to a folder below this one to store files.
Credential Type	• Application • Impersonated • Stored

Parameter	Description
Credentials	Name, user name, and password for the FTP server. See screenshot below for details.



SFTP

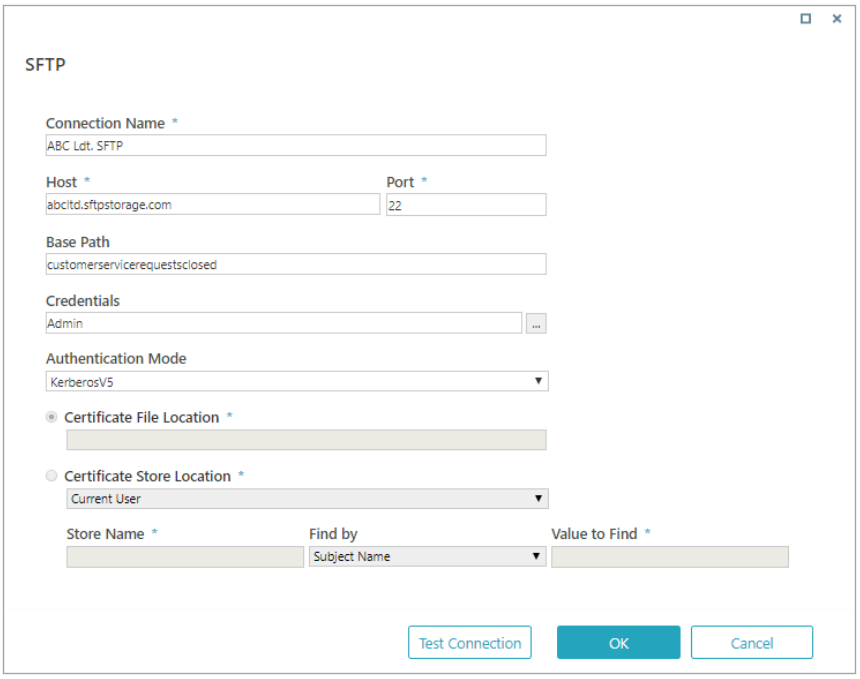
Specifications and limitations

Parameter	Description
Pattern	• **Wildcards**: used to specify multiple files or directories whose names match a pattern. • **FileSet**: used to combine multiple matching criteria (such as all ".txt" and ".csv" files) and also specify *exclude* criteria.
Path and File Name Restrictions	FTP does not specify a standard pathname convention. You need to follow the file-naming conventions of the file systems involved in the file transfer.
Path Separator	/
Supports Folder Hierarchy	Yes

Parameters

Parameter	Description
Connection Name	The name you select for the connection.
Host	URL to the SFTP server.

Parameter	Description
Port	Port for the SFTP server.
Base Path	Sub-folder in the SFTP server. Should be a shared folder on the server. Make sure the user defined in the credentials has permission on the shared folder.
SSL Mode	• **Implicit**: Assumes that the server is expecting everything encrypted using SSL. This means that when the client first connects to the server it will immediately negotiate the SSL connection on the command connection. Normally, implicit connections are also on a different port, such as port 990. • **Explicit**: A normal FTP connection is established, usually on the standard port 21. However, after connecting, the client will send a command to switch to SSL mode. This command is "AUTH SSL". When this command is sent, the server will respond normally, and then establish an SSL connection.
Credentials	Name, user name, and password for the FTP server. See screenshot below for details.
Authentication Mode	• **NTLM**: alksjdf • **Kerberos v5**: a;lkjsdf • **Certificate**:
Certificate File Location	Path for the certificate.
Certificate Store Location	Path for the certificate store.
Store Name	Name of the certificate store.
Find by	Parameter to search by.
Value to Find	Value you want to find.



Credentials

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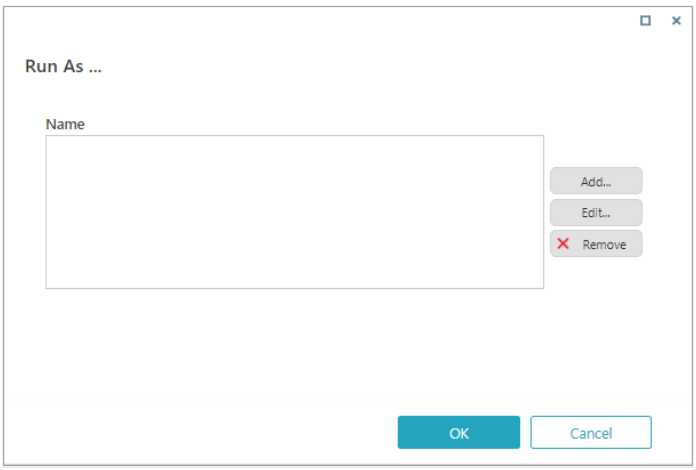
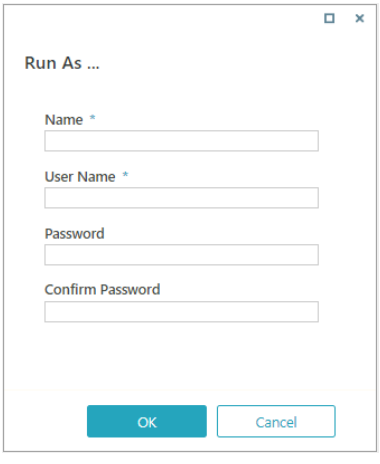




V8.7 and earlier

For most File Activities, you need to define a connection to an external storage system. Depending on the activity, you will save a file, retrieve a file, delete a file, or create a folder in the external storage system.

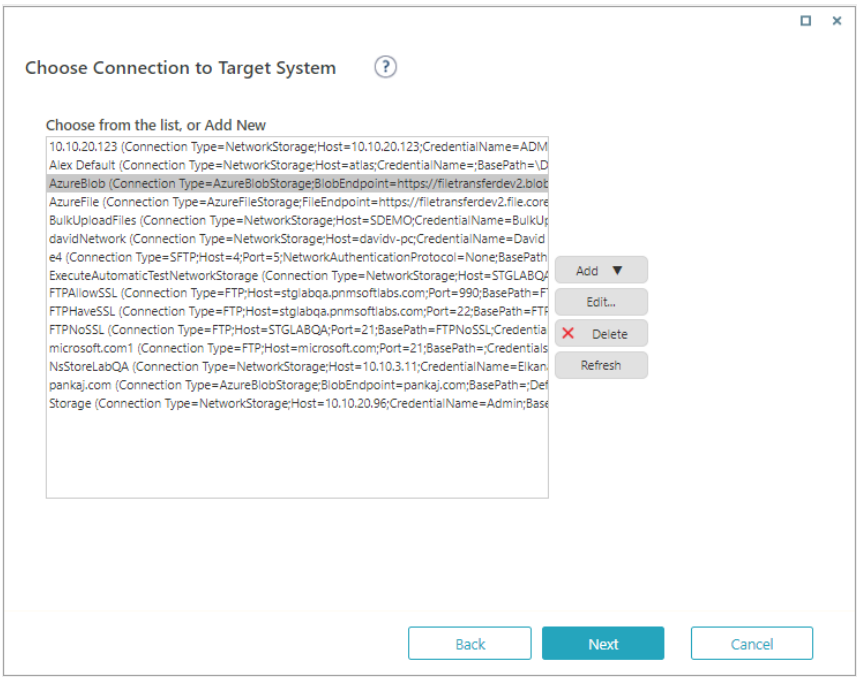
NOTES:
- Connection names and descriptions should be meaningful. You might want to use a connection in other activities, so it's important for you to be able to identify and understand what a connection is from the name and description.
- The path separator requirements for each storage system must also be used for base paths, source paths, file paths, and so on, in activities that require a connection to an external storage system. For example, if the file storage system you select supports forward slash (/) path separators, then all subsequent paths must also use forward slashes:
https://{*externalstoragesystem*}/{*basepath*}/{*relativepath*}/{*file*}

File activities that use an external storage system

- Put File Activity
- Get File Activity
- Create Folder Activity
- Delete File Activity

Supported external storage systems

- Azure Blob Storage
- Azure File Storage
- FTP
- Network Storage
- SFTP



Azure Blob Storage

Specifications and limitations

Parameter	Description
Pattern	CloudBlobContainer.ListBlobs Method: a string containing the blob name prefix.
Path and File Name Restrictions	Naming and Referencing Shares, Directories, Files, and Metadata
Path Separator	/
Supports Folder Hierarchy	No, each container can only contain blobs.

Parameters

Parameter	Description
Connection Name	The name you select for the connection.
End Point	URL to the Azure Blob storage.
Credentials	The protocol, account name, and account key for your Azure Blob Storage account. If you select this, SAS is not relevant.
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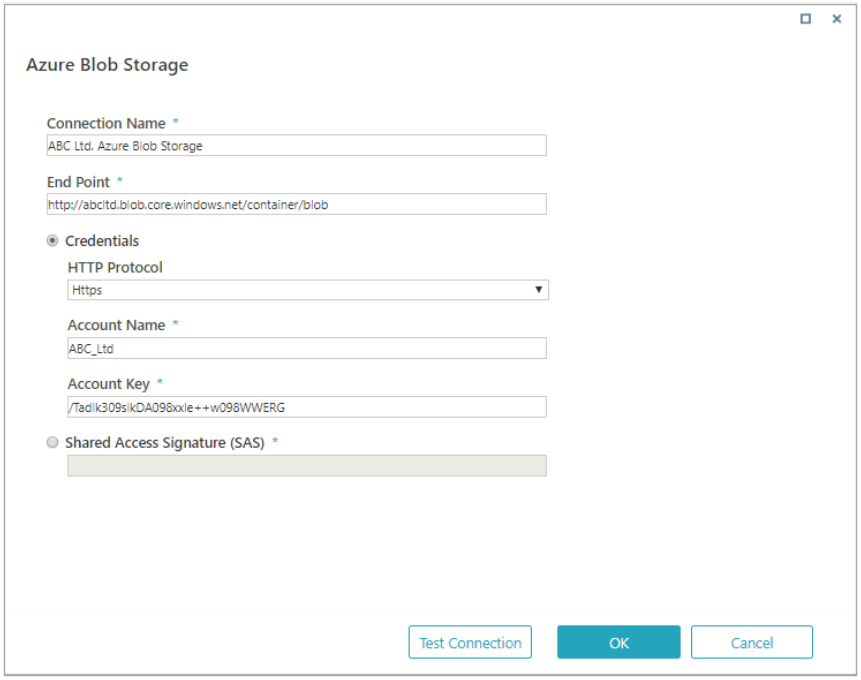

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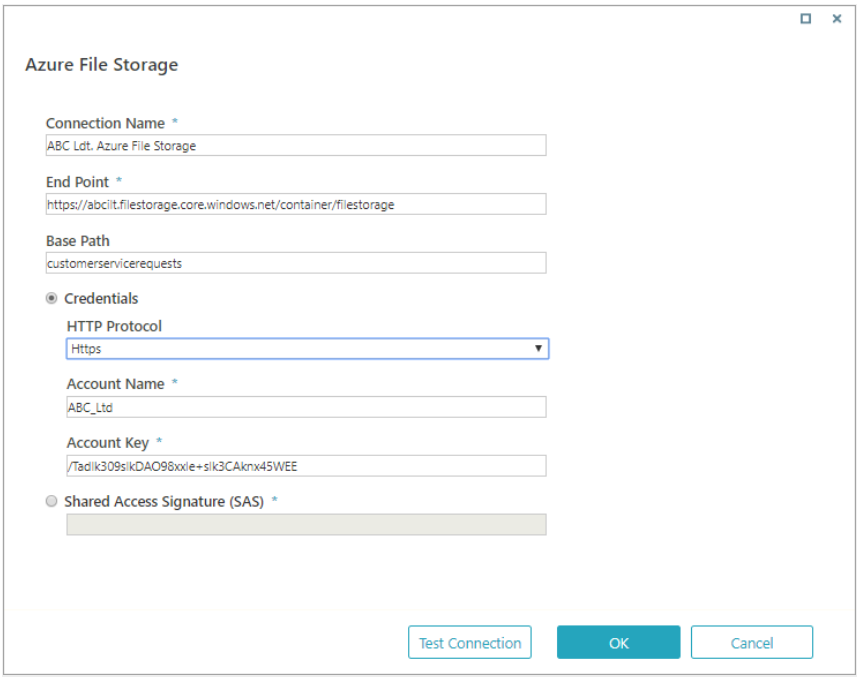

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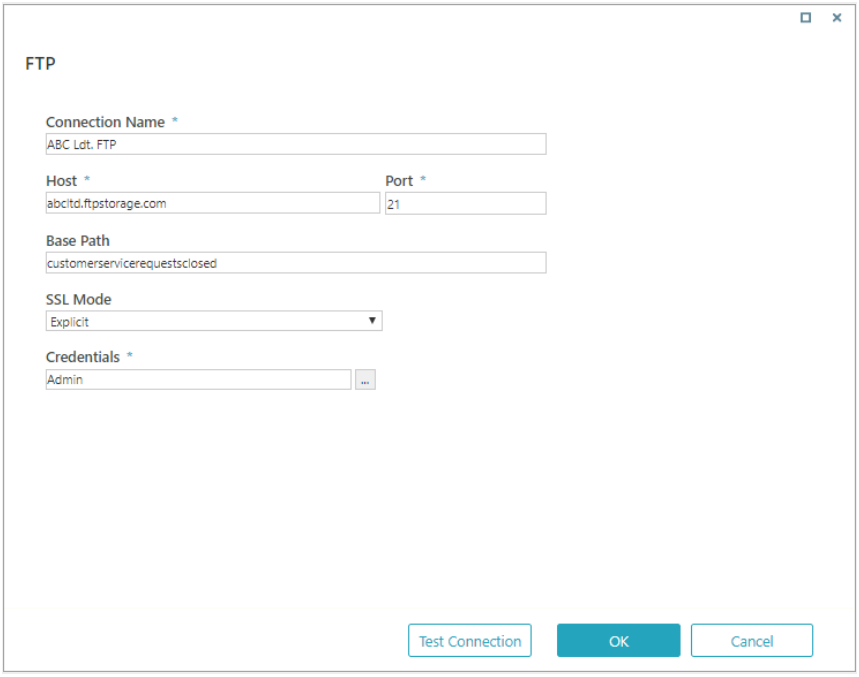

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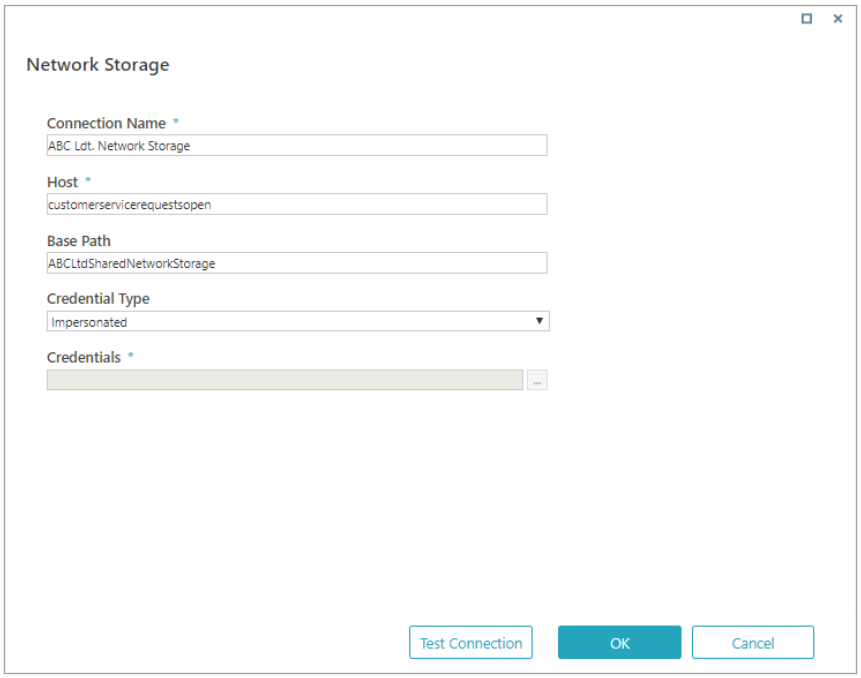

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Supports Folder Hierarchy	Yes

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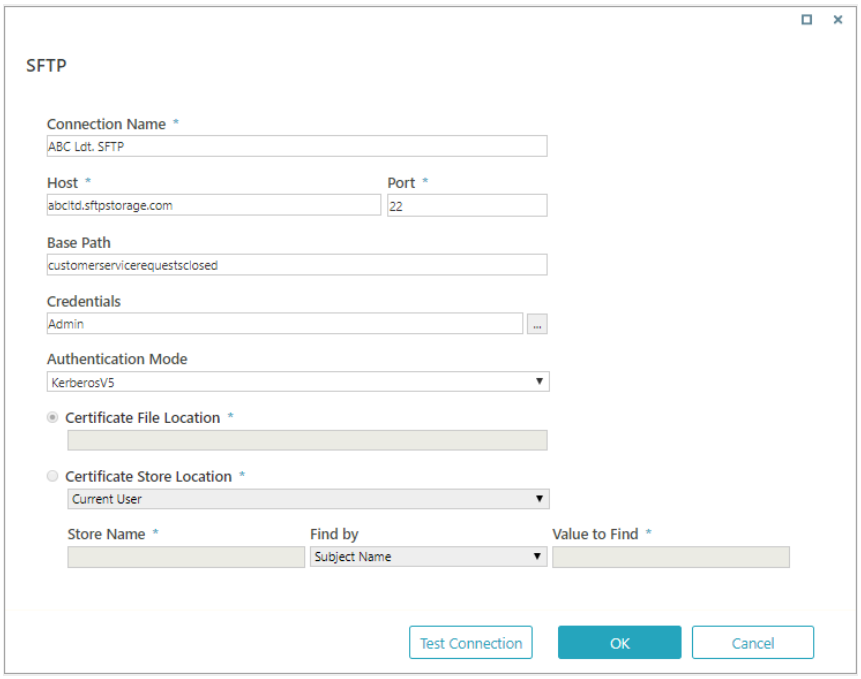

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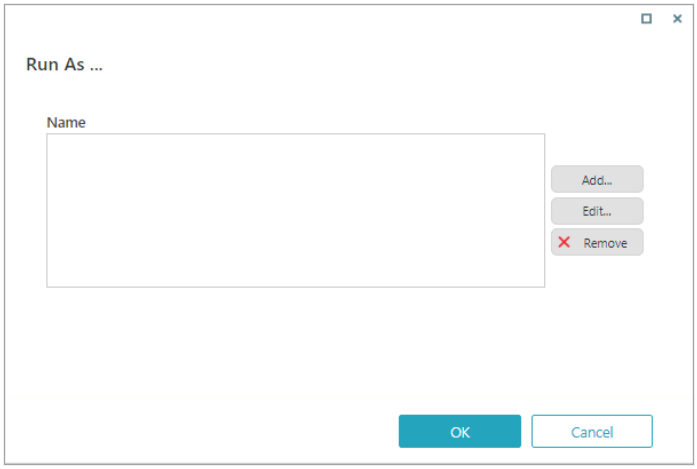

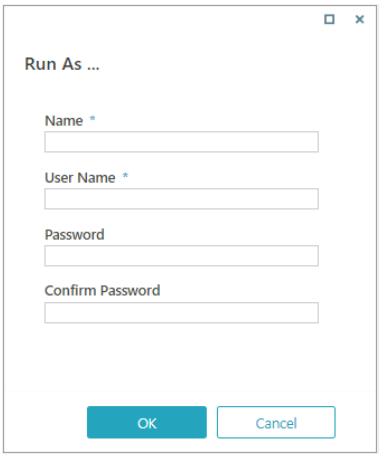
Run As ...
Name *
User Name *
Password
Confirm Password
OK
Cancel