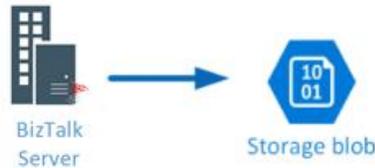


Sending files to Azure Blob Storage from BizTalk Server 2020

Manjunath Hireholi, Technical Manager, EnkayTech



Until BizTalk 2016, there was no direct way to communicate with Azure Blob storage to send files. Hence, we had to use WCF-WebHttp adapter to send files to the blob storage. It also required us to write a custom pipeline component to strip the filename from the file path (example – “file.txt” from “c:\files\file.txt”) before sending it to Azure Blob storage else the file name in Azure blob storage would end up being “c:\files\file.txt” instead of just “file.txt”.

However, BizTalk Server 2020 comes in with a built in Azure Blob Storage adapter using which you can directly communicate with the blob storage. This also eliminates the need for a custom pipeline.

Let’s take a look at how simple it is to push files to Azure blob storage from BizTalk Server 2020.

First, create an Azure Storage account → Create a container

The screenshot is divided into three main sections. The top section shows the 'biztalk2020rgdiag' storage account page. A red box highlights the account name and icon. Below it is a search bar and a navigation menu with options like 'Overview', 'Activity log', and 'Access control (IAM)'. On the right, there are action buttons like 'Open in Explorer', 'Move', and 'Refresh', along with subscription and tag information. A red box highlights a 'Containers' card with the text 'Containers Scalable, cost-effective storage for unstructured data' and a 'Learn more' link.

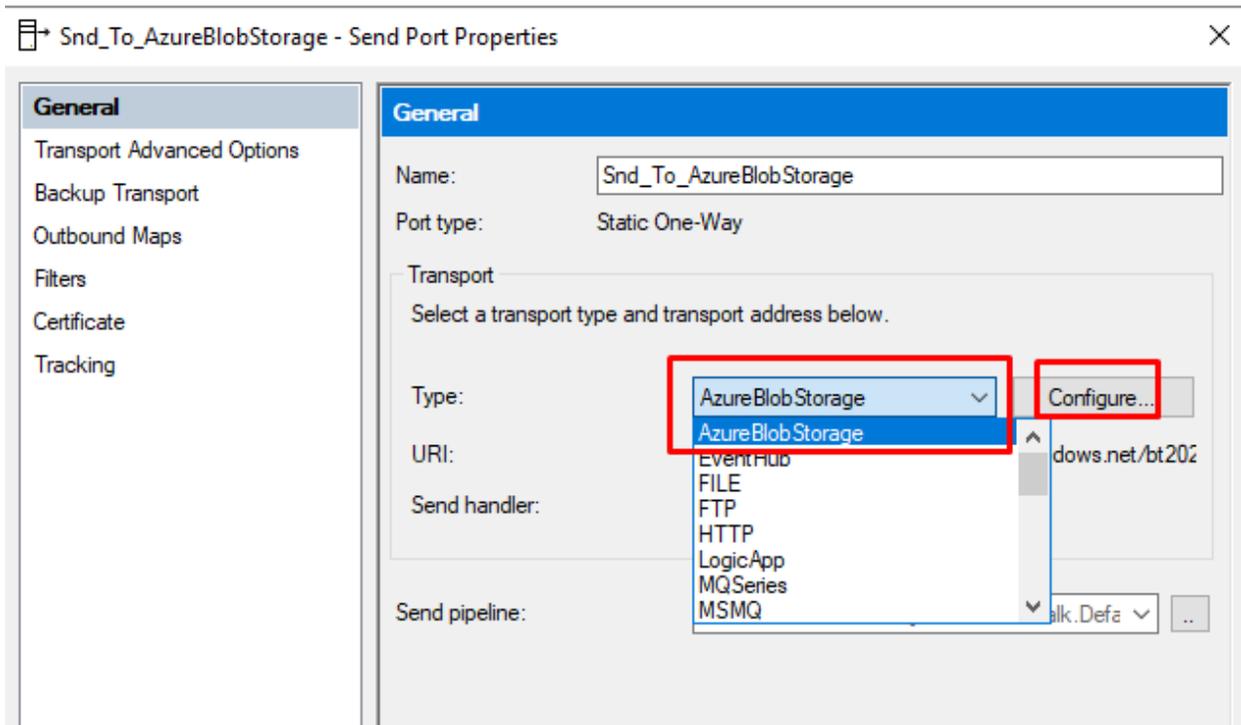
The middle section shows the 'New container' dialog box. A red box highlights the '+ Container' button in the top toolbar. The dialog has a 'Name' field containing 'biztalkazureblobstoragecontainer' and a 'Public access level' dropdown menu set to 'Private (no anonymous access)'. 'OK' and 'Cancel' buttons are at the bottom.

The bottom section shows the 'biztalkazureblobstoragecontainer' page. A red box highlights the 'Container' title and icon. The top toolbar includes 'Upload', 'Change access level', 'Refresh', 'Delete', 'Change tier', 'Acquire lease', and 'Break lease'. Below the toolbar, there is a search bar for blobs and a table with columns 'Name' and 'Modified'. The table currently shows 'No blobs found.'

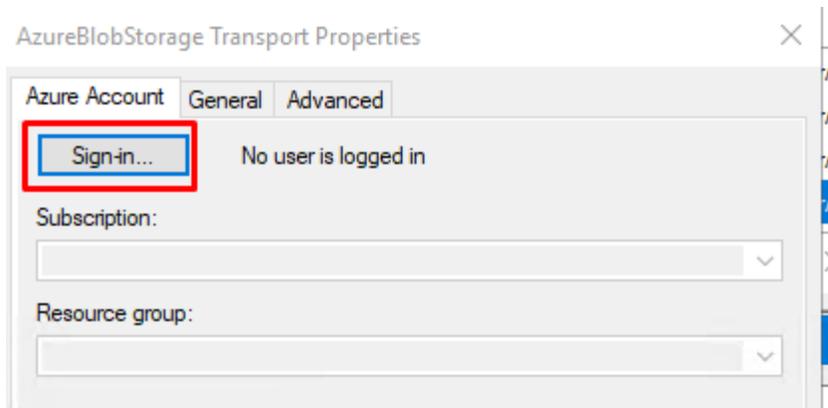
We now have a container created in our Azure blob storage account.

Now, lets create a send port in BizTalk server 2020 and use Azure Blob Storage adapter to send files to this container.

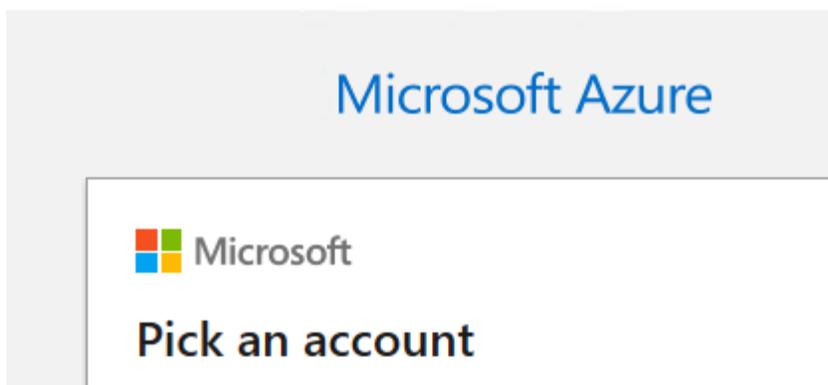
Select the Transport Type : AzureBlobStorage from the drop down and hit Configure



Sign in with your Azure account (same account that you used to create your Azure storage account) –



n in to your account



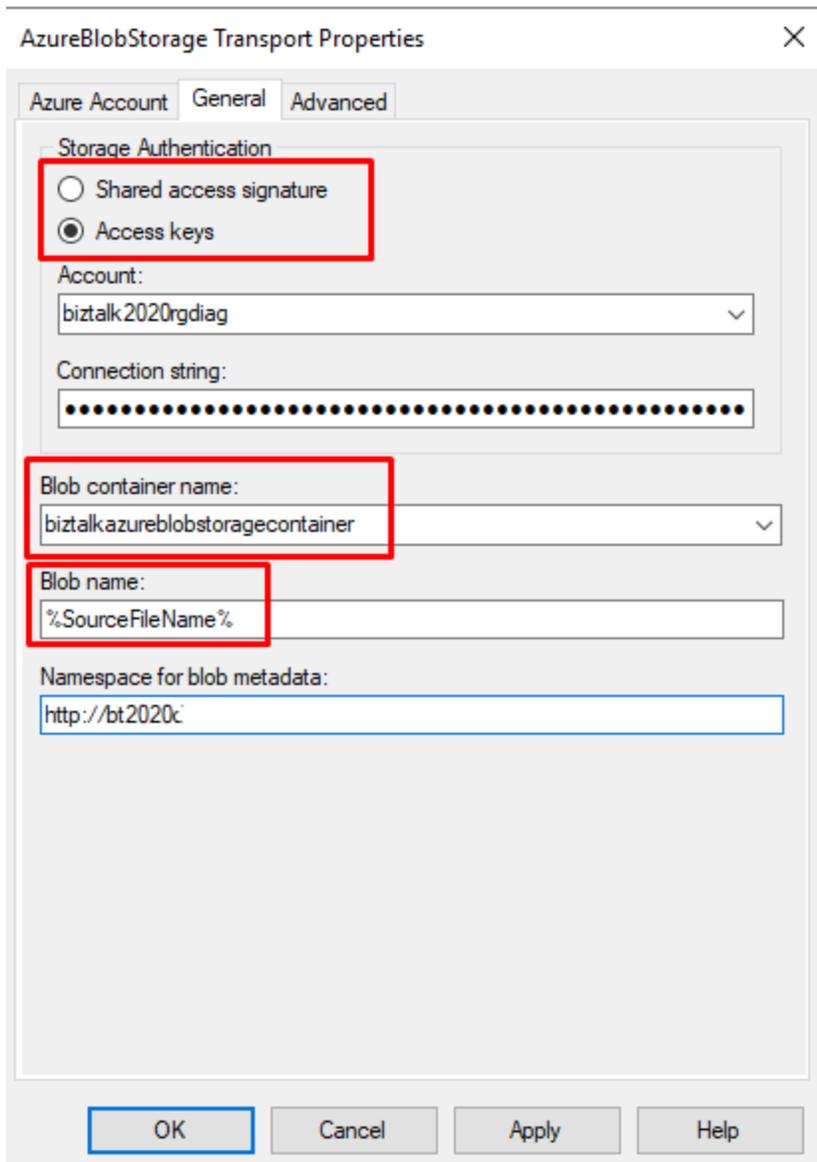
Once signed in, select the appropriate subscription and resource group where your Azure Storage account exists and click on “General” tab:

In the “General” tab you can either use SAS option – which requires you to get the connection string from your azure account and paste it under the Connection String text box

OR

You can select Access keys option which lets you select the storage account and once you select the account the connection string is automatically pulled from that account.

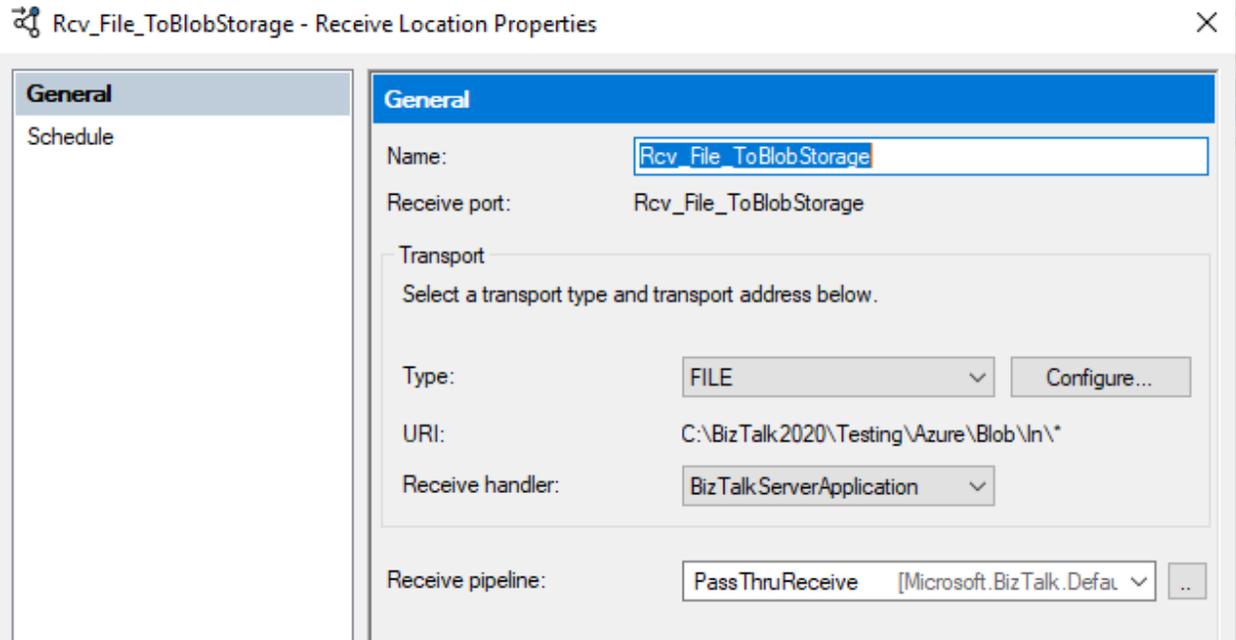
Select the blob storage container where the files should be sent.



Please note that the “**Blob name**” value is set to **%SourceFileName%**

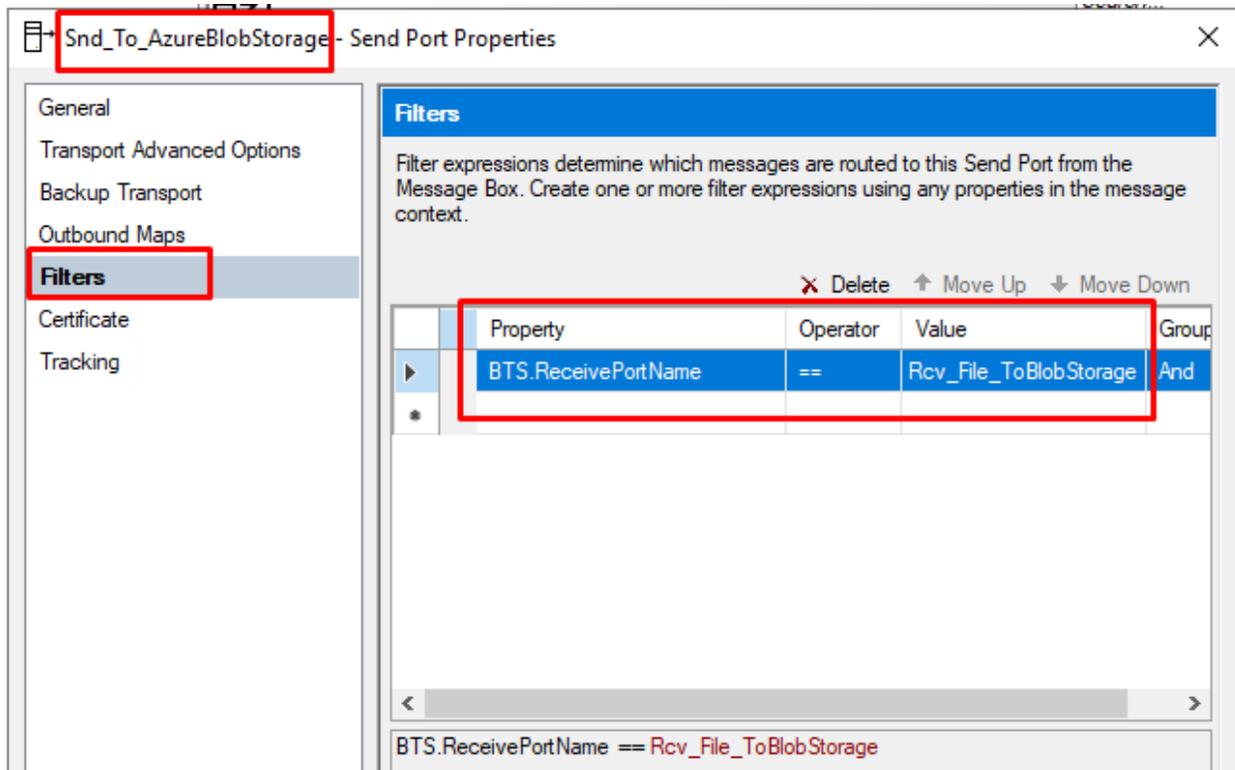
Now, this is what eliminates the need for that custom pipeline which was required while using WCF-WebHTTP to extract only the filename from the file path. With this the file written to the blob storage container will have the same file name as that of the source/original file.

Create a simple receive port and a receive location to pick a sample file and send it to Azure blob storage using via the above send port. Use pass through pipelines in both Receive location and Send port.



Add this receive port name in the send port's filter.

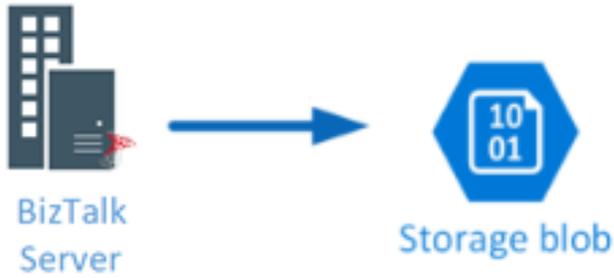
Now, the messages published by the above receive port to the message box will be routed to the below send port as it's subscribing to them.



The below test file should now get picked and sent to Azure blob storage container –

This PC > Windows (C:) > BizTalk2020 > Testing > Azure > Blob > In

Name	Date modified	Type	Size
 blobStorage_TestFile	1/16/2020 7:16 PM	Text Document	1 KB



biztalkazureblobstoragecontainer
Container

Search (Ctrl+/) << | Upload | Change access level | Refresh | Delete | Change tier | Acquire lease

Authentication method: Access key (Switch to Azure AD User Account)
Location: biztalkazureblobstoragecontainer

Search blobs by prefix (case-sensitive)

Name	Modified	Access tier	Blob type	Size	Lease state
<input type="checkbox"/>  blobStorage_TestFile.txt	1/16/2020, 7:33:21 PM		Block blob	79 B	Available

There you go, we have successfully pushed a file from BizTalk Server 2020 to Azure Blob.