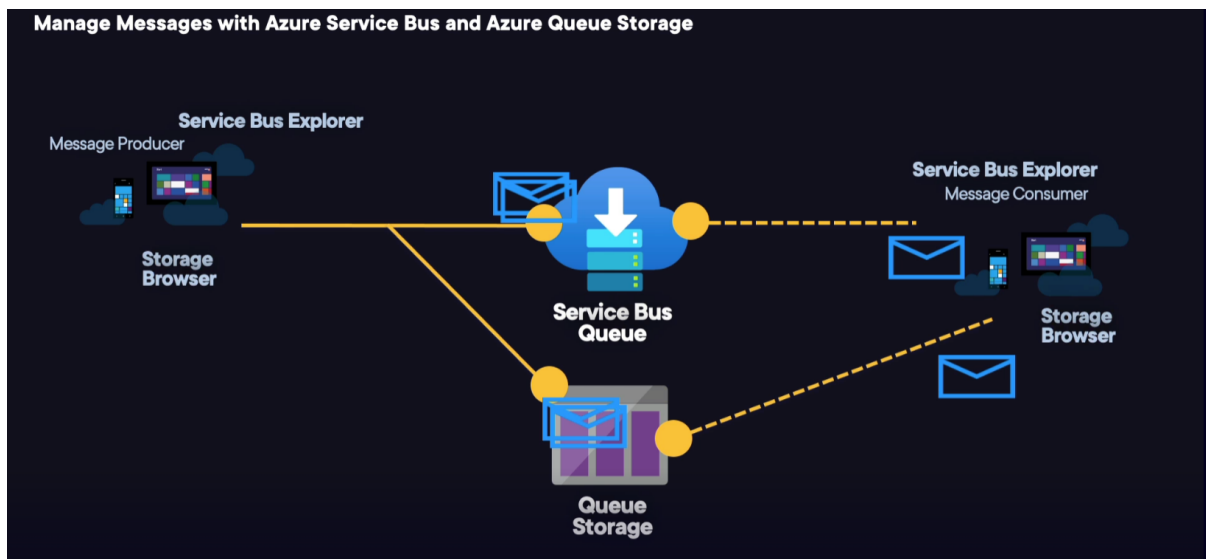


Project - Manage Messages with Azure Service Bus and Azure Queue Storage



Summary

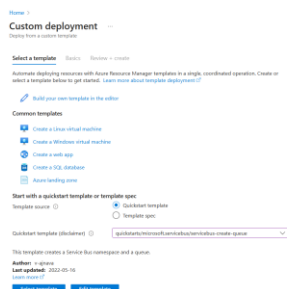
Imagine you are leading a small group of summer interns on the product team, who are rotating through various engineering teams to better understand the kinds of cloud technologies your organization uses. You want to help them understand the concepts of modern message handling and concept of queues in that domain. Ideally, you would also like them to be able to get hands-on themselves, so you have prepared a demo to show them how queues operate in Azure Service Bus and Azure Storage, with an opportunity for them to follow along with you.

Deploying two Azure messaging services — Azure Service Bus and Azure Storage Queues — using the custom template feature in the Azure portal. After deploying each service, you will use the portal-resident tool to act as both the producer of messages and the consumer of messages to get a taste of how these two services work.

Deploy and Work with Messages in Azure Service Bus Queue

Deploy the Service Bus Namespace and Queue

1. From the resource group **Overview** page, use the top search bar to search for and navigate to **Deploy a custom template**.
2. On the **Custom deployment** page, search for servicebus-create-queue in the **Quickstart template** field. Select the option that appears.



- To preview the code, click **Edit template**. Once you've reviewed the template, click **Custom deployment** in the top breadcrumb navigation.
- Click **Select template**.
- For **Resource group**, use the pre-provisioned resource group.
- For **Service Bus Namespace Name**, enter a universally unique name.

Tip: If you need help creating a unique name, try using your initials and the date. Use letters and numbers.

- For **Service Bus Queue Name**, enter *myqueue*. Leave the **Location** as-is.
- Click **Review + create > Create**. The deployment will take a few minutes to complete.

Home > Custom deployment --
Azure subscription template

Next Deployment Starts let you manage the lifecycle of your deployments. Try it now →

Select a template **Basics** Review + create

Template
servicebus-queue-2 resources [Edit template](#) [Edit parameters](#) [Visualize](#)

Project details
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription *
Resource group * [Create new](#)

Instance details
Region * ✓
Service Bus Namespace Name * ✓
Service Bus Queue Name * ✓
Location

[Previous](#) [Next](#) [Review + create](#)

- Once ready, click **Go to resource group**.
- In the **Resources** list, click the link for the newly created Service Bus Namespace.

Test in the Service Bus Explorer

- From the left navigation menu, under **Entities**, select **Queues**.
- Click the link for **myqueue**.

Home > Microsoft.Template-202112022047 | Overview > 778-83a5172e-manage-messages-with-azure-service-bus > az04servicebusqueueproject

az04servicebusqueueproject | Queues

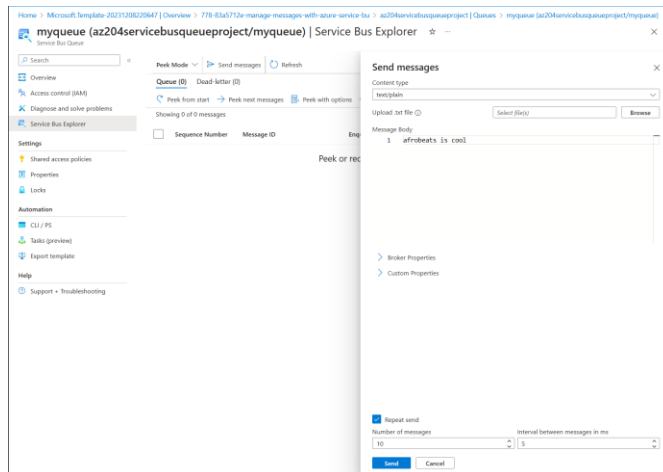
Search to filter items by name...

Name	Status	Message count	Active messages	Dead letter messages	Scheduled messages	Max size
myqueue	Active	0	0	0	0	1024 MB

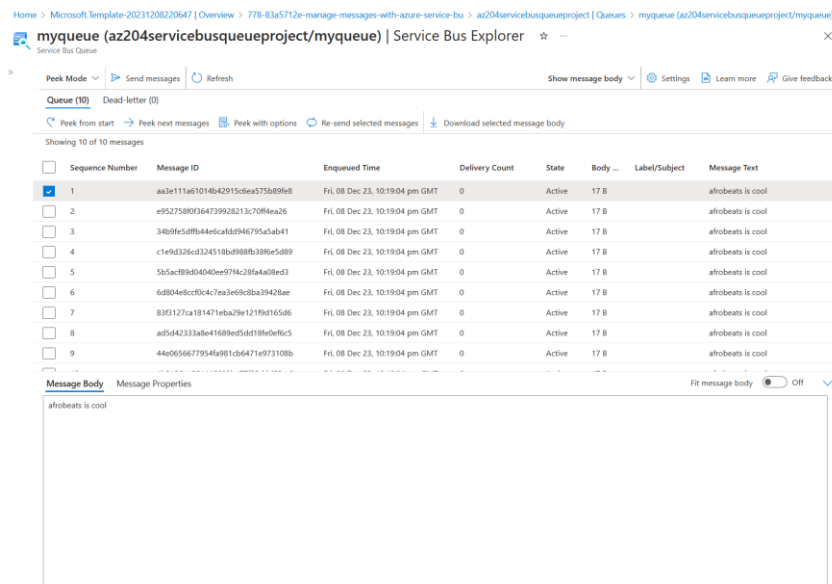
Left navigation menu: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings (Shared access policies, Geo Recovery, Migrate to premium, Encryption, Configuration, Properties, Locks), Entities (Queues, Topics).

- From the left menu, select **Service Bus Explorer**.
- At the top, click **Send messages**.

5. Add any text to the **Message Body**.
6. Select the option for **Repeat send**, and configure the following settings:
 - **Number of messages:** Enter *10*.
 - **Interval between messages in ms:** Enter *5*.
7. Click **Send**.



8. To act as the message consumer, you can *peek* or review the messages without removing them from the queue or changing their position in the queue. Ensure the first option at the top of the queue is set to **Peek Mode**.
9. Click **Peek from start**.



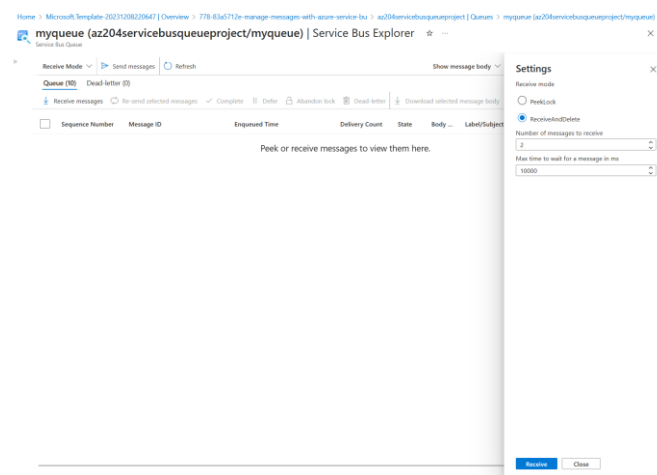
10. Click the option box next to a message, and scroll down to view the message body.

11. Now, change from Peek Mode to **Receive Mode**.

12. Click **Receive messages**.

13. On the **Settings** flyout pane that appears, configure the following options:

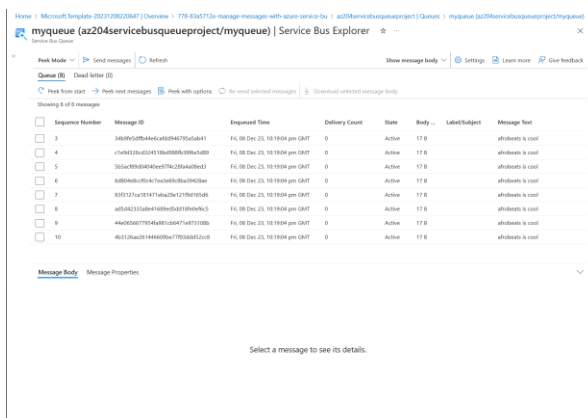
- **Receive mode:** Select the **ReceiveAndDelete** option.
- **Number of messages to receive:** Enter 2.
- Click **Receive**.



14. Observe that you've received two messages, and the queue now has only eight messages.

15. Switch back to **Peek Mode**. (Click **Refresh** if it is erroneously showing 10 out of 8 messages.)

16. Click **Peek from start**, and observe that eight messages now appear, starting with sequence 3.



Deploy and Work with Messages in Azure Storage Queue

Deploy the Storage Account and Add the Queue

1. Use the top search bar to search for and navigate to **Deploy a custom template**.
2. On the **Custom deployment** page, search for storage-account-create in the **Quickstart template** field. Select the option that appears.
3. Click **Select template**.
4. For **Resource group**, use the pre-provisioned resource group.
5. This time, all other settings should be automatically populated.
6. Click **Review + create > Create**. The deployment will take a few minutes to complete.

The screenshot shows the 'Custom deployment' page in the Azure portal. The 'Basics' tab is selected, and the 'storage-account-create' template is chosen. The 'Project details' section shows the subscription as 'PS Real Hands-On Labs', the resource group as '776-83a6773e-manage-messages-with-azure-service-bus', and the region as 'South Central US'. The 'Storage Account Type' is set to 'Standard_LRS'. The 'Location' is '[resourceGroup.location]' and the 'Storage Account Name' is '[format(''{resourceIdPrefix}}{uniqueString(resourceGroup)}')]'.

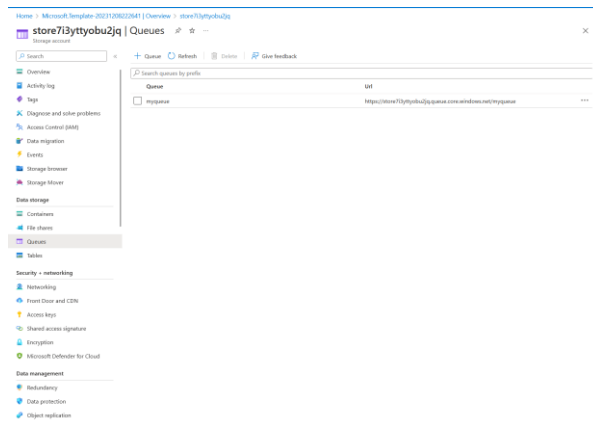
7. Once ready, click **Go to resource**.

The screenshot shows the 'Overview' page for the deployment 'Microsoft.Template-20231208222641'. The deployment status is 'Your deployment is complete'. The 'Deployment details' section shows the subscription as 'PS Real Hands-On Labs', the resource group as '776-83a6773e-manage-messages-with...', and the deployment name as 'Microsoft.Template-20231208222641'. The 'Next steps' section includes a link to 'Go to resource'.

8. From the storage account main page, in the left navigation menu under **Data storage**, select **Queues**.
9. Click **+ Queue**.

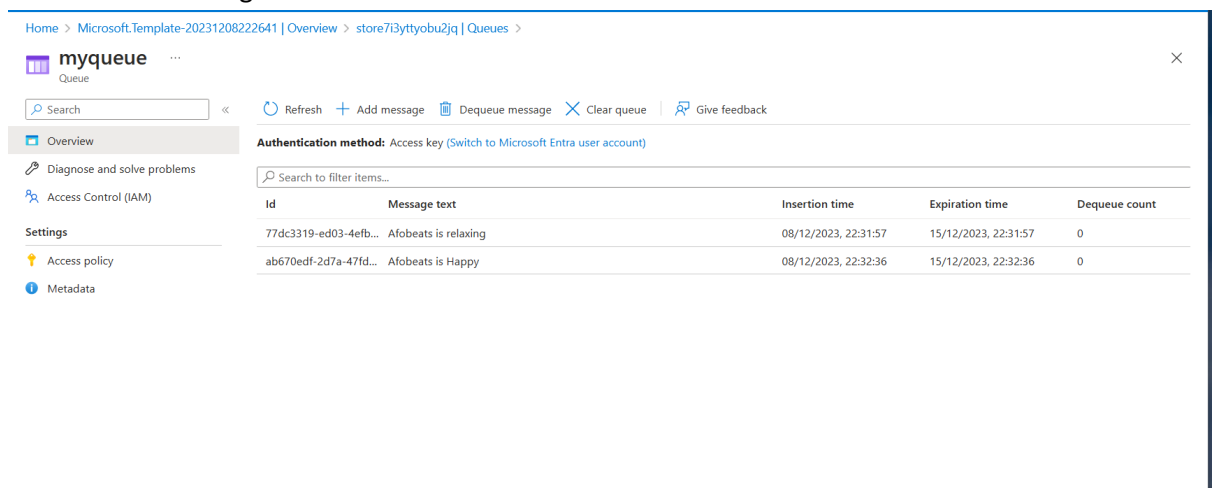
10. Name the queue *myqueue*.

11. Click **OK**



Test in the Service Bus Explorer

1. From the left navigation, select **Storage browser**.
2. From the menu in the middle, select **Queues**.
3. Select the link for **myqueue**.
4. Click **Add message**.
5. On the **Add message to queue** flyout window, enter some text in the **Message text** field.
6. Click **OK**.
7. Add another message and save.



8. Act as a message consumer to look at one of the messages, without removing it from the queue or changing its position in the queue. (Remember, this is called a *peek*.) In this UI, all you need to do is click on the message and view. Note that it does not dequeue.

9. To dequeue a message, click **Dequeue message**. (Observe it will remove the first element in the queue.)

10. Click **Yes** and note that the message has been dequeued.

Home > Microsoft.Template-20231208222641 | Overview > store7i3yttiyobu2jq | Queues >

myqueue

Queue

«

Refresh

+ Add message

Dequeue message

✕ Clear queue

Give feedback

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Access policy

Metadata

Authentication method: Access key ([Switch to Microsoft Entra user account](#))

Id	Message text	Insertion time	Expiration time	Dequeue count
ab670edf-2d7a-47fd...	Afobeats is Happy	08/12/2023, 22:32:36	15/12/2023, 22:32:36	0