Namespace AzureServiceBusFlow.Abstractions Interfaces

ICommandProducer<TCommand>

IEventProducer<TEvent>

IMessageHandler<T>

<u>IServiceBusMessage</u>

<u>IServiceBusProducer<TMessage></u>

Interface ICommandProducer<TCommand>

Namespace: <u>AzureServiceBusFlow</u>.<u>Abstractions</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public interface ICommandProducer<in TCommand> where TCommand : class, IServiceBusMessage

Type Parameters

TCommand

Methods

ProduceCommandAsync(TCommand, MessageOptions, CancellationToken)

Task ProduceCommandAsync(TCommand command, MessageOptions messageOptions, CancellationToken)

Parameters

command TCommand

messageOptions <u>MessageOptions</u>

cancellationToken CancellationToken♂

Returns

Task ☑

ProduceCommandAsync(TCommand, CancellationToken)

Task ProduceCommandAsync(TCommand command, CancellationToken cancellationToken)

Parameters

command TCommand

Returns

<u>Task</u> ♂

Interface | EventProducer < TEvent >

Namespace: <u>AzureServiceBusFlow.Abstractions</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public interface IEventProducer<in TEvent> where TEvent : class, IServiceBusMessage

Type Parameters

TEvent

Methods

ProduceEventAsync(TEvent, CancellationToken)

Task ProduceEventAsync(TEvent @event, CancellationToken cancellationToken)

Parameters

event TEvent

cancellationToken CancellationToken☑

Returns

Task♂

Interface IMessageHandler<T>

Namespace: <u>AzureServiceBusFlow.Abstractions</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public interface IMessageHandler<in T>

Type Parameters

Т

Methods

HandleAsync(T, ServiceBusReceivedMessage, CancellationToken)

Task HandleAsync(T message, ServiceBusReceivedMessage rawMessage, CancellationToken cancellationToken)

Parameters

message T

rawMessage <u>ServiceBusReceivedMessage</u>

☑

cancellationToken CancellationToken☑

Returns

<u>Task</u> ☑

Interface IServiceBusMessage

Namespace: <u>AzureServiceBusFlow.Abstractions</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public interface IServiceBusMessage

Properties

CreatedDate

```
DateTime CreatedDate { get; }
```

Property Value

RoutingKey

```
string RoutingKey { get; }
```

Property Value

Interface IServiceBusProducer < TMessage >

Namespace: <u>AzureServiceBusFlow.Abstractions</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public interface IServiceBusProducer<in TMessage> where TMessage : class, IServiceBusMessage

Type Parameters

TMessage

Methods

ProduceAsync(TMessage, MessageOptions, CancellationToken)

Task ProduceAsync(TMessage message, MessageOptions producerOptions, CancellationToken cancellationToken)

Parameters

message TMessage

producerOptions MessageOptions

cancellationToken CancellationToken☑

Returns

<u>Task</u> ☑

ProduceAsync(TMessage, CancellationToken)

Task ProduceAsync(TMessage message, CancellationToken cancellationToken)

Parameters

message TMessage

 $\verb| cancellationToken| \underline{CancellationToken}| \underline{ \square}$

Returns

<u>Task</u> ♂

Namespace AzureServiceBusFlow.Builders

Classes

<u>ServiceBusConfigurationBuilder</u>

Builder for configuring Azure Service Bus, allowing connection, producers, and consumers setup.

<u>ServiceBusConsumerConfigurationBuilder</u>

<u>ServiceBusProducerConfigurationBuilder<TMessage></u>

Class ServiceBusConfigurationBuilder

Namespace: <u>AzureServiceBusFlow.Builders</u>

Assembly: AzureServiceBusFlow.Configurations.dll

Builder for configuring Azure Service Bus, allowing connection, producers, and consumers setup.

public class ServiceBusConfigurationBuilder

Inheritance

<u>object</u>

✓ ← ServiceBusConfigurationBuilder

Inherited Members

<u>object.Equals(object)</u> ♂, <u>object.Equals(object, object)</u> ♂, <u>object.GetHashCode()</u> ♂, <u>object.GetType()</u> ♂, <u>object.MemberwiseClone()</u> ♂, <u>object.ReferenceEquals(object, object)</u> ♂, <u>object.ToString()</u> ♂

Constructors

ServiceBusConfigurationBuilder(IServiceCollection)

Builder for configuring Azure Service Bus, allowing connection, producers, and consumers setup.

public ServiceBusConfigurationBuilder(IServiceCollection services)

Parameters

services <u>IServiceCollection</u> ☑

Properties

AzureServiceBusConfiguration

The connection string used to connect to Azure Service Bus.

public AzureServiceBusConfiguration AzureServiceBusConfiguration { get; }

Property Value

<u>AzureServiceBusConfiguration</u>

Methods

AddConsumer(Action < ServiceBusConsumerConfigurationBuilder>)

Adds a consumer configuration via a callback.

```
public ServiceBusConfigurationBuilder
AddConsumer(Action<ServiceBusConsumerConfigurationBuilder> configure)
```

Parameters

configure <u>Action</u> < <u>ServiceBusConsumerConfigurationBuilder</u> >

Action to configure the consumer, receives a specific builder.

Returns

<u>ServiceBusConfigurationBuilder</u>

Returns the builder itself for method chaining.

```
AddProducer<TMessage>
(Action<ServiceBusProducerConfigurationBuilder<TMessage>>
)
```

Adds a producer for messages of type TMessage configured via a callback.

```
public ServiceBusConfigurationBuilder AddProducer<TMessage>
(Action<ServiceBusProducerConfigurationBuilder<TMessage>> configure) where TMessage :
class, IServiceBusMessage
```

Parameters

configure Action Action@cerconfigurationBuilder TMessage >>

Action to configure the producer, receives a specific builder.

Returns

<u>ServiceBusConfigurationBuilder</u>

Returns the builder itself for method chaining.

Type Parameters

TMessage

The type of message to produce, must implement ISErviceBusMessage.

Build()

Validates the configuration and ensures required properties are set.

public void Build()

Exceptions

$\underline{InvalidOperationException} \, \square$

Thrown when the connection string is not set.

ConfigureAzureServiceBus(AzureServiceBusConfiguration)

Sets the connection string that will be used for all Service Bus operations.

public ServiceBusConfigurationBuilder ConfigureAzureServiceBus(AzureServiceBusConfiguration)

Parameters

azureServiceBusConfiguration <u>AzureServiceBusConfiguration</u>

Returns

<u>ServiceBusConfigurationBuilder</u>

Returns the builder itself for method chaining.

Class ServiceBusConsumerConfigurationBuilder

Namespace: <u>AzureServiceBusFlow.Builders</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public class ServiceBusConsumerConfigurationBuilder

Inheritance

<u>object</u> ✓ ← ServiceBusConsumerConfigurationBuilder

Inherited Members

<u>object.Equals(object)</u> dobject.Equals(object, object) dobject.GetHashCode() dobject.GetType() dobject.MemberwiseClone() dobject.ReferenceEquals(object, object) dobject.ToString() dob

Constructors

ServiceBusConsumerConfigurationBuilder(AzureServiceBusConfiguration, IServiceCollection)

Parameters

_azureServiceBusConfiguration <u>AzureServiceBusConfiguration</u>

services <u>IServiceCollection</u> ☑

Methods

AddHandler<TMessage, THandler>()

public ServiceBusConsumerConfigurationBuilder AddHandler<TMessage, THandler>() where
TMessage : class, IServiceBusMessage where THandler : class, IMessageHandler<TMessage>

Returns

<u>ServiceBusConsumerConfigurationBuilder</u>

Type Parameters

TMessage

THandler

Build()

```
public void Build()
```

EnsureSubscriptionExists(string, string)

Parameters

subscriptionName <u>string</u> ☐

Returns

 $\underline{Service Bus Consumer Configuration Builder}$

FromQueue(string)

public ServiceBusConsumerConfigurationBuilder FromQueue(string queueName)

Parameters

queueName string ☐

Returns

<u>ServiceBusConsumerConfigurationBuilder</u>

FromTopic(string, string)

Parameters

topicName <u>string</u> ☑

subscriptionName <u>string</u>♂

Returns

<u>ServiceBusConsumerConfigurationBuilder</u>

Class ServiceBusProducerConfigurationBuilder<TMe ssage>

Namespace: <u>AzureServiceBusFlow.Builders</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public class ServiceBusProducerConfigurationBuilder<TMessage> where TMessage :
class, IServiceBusMessage

Type Parameters

TMessage

Inheritance

<u>object</u> ✓ ← ServiceBusProducerConfigurationBuilder<TMessage>

Inherited Members

<u>object.Equals(object)</u> , <u>object.Equals(object, object)</u> , <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

ServiceBusProducerConfigurationBuilder(AzureServiceBusConfiguration, IServiceCollection)

public ServiceBusProducerConfigurationBuilder(AzureServiceBusConfiguration azureServiceBusConfiguration, IServiceCollection services)

Parameters

azureServiceBusConfiguration <u>AzureServiceBusConfiguration</u>

services IServiceCollection♂

Methods

EnsureQueueExists(string)

public ServiceBusProducerConfigurationBuilder<TMessage> EnsureQueueExists(string queueName)

Parameters

Returns

<u>ServiceBusProducerConfigurationBuilder</u><TMessage>

EnsureTopicExists(string)

public ServiceBusProducerConfigurationBuilder<TMessage> EnsureTopicExists(string topicName)

Parameters

Returns

<u>ServiceBusProducerConfigurationBuilder</u><TMessage>

ToQueue(string)

public ServiceBusProducerConfigurationBuilder<TMessage> ToQueue(string queueName)

Parameters

queueName <u>string</u> ♂

Returns

ToTopic(string)

public ServiceBusProducerConfigurationBuilder<TMessage> ToTopic(string topicName)

Parameters

topicName <u>string</u> <a>™

Returns

<u>ServiceBusProducerConfigurationBuilder</u><TMessage>

WithCommandProducer()

public ServiceBusProducerConfigurationBuilder<TMessage> WithCommandProducer()

Returns

<u>ServiceBusProducerConfigurationBuilder</u><TMessage>

WithEventProducer()

public ServiceBusProducerConfigurationBuilder<TMessage> WithEventProducer()

Returns

 $\underline{ServiceBusProducerConfigurationBuilder} < TMessage >$

WithQueue(string)

public ServiceBusProducerConfigurationBuilder<TMessage> WithQueue(string queue)

Parameters

queue <u>string</u>♂

Returns

 $\underline{Service Bus Producer Configuration Builder} < TMessage >$

WithTopic(string)

public ServiceBusProducerConfigurationBuilder<TMessage> WithTopic(string topic)

Parameters

topic <u>string</u>♂

Returns

<u>ServiceBusProducerConfigurationBuilder</u><TMessage>

Namespace AzureServiceBusFlow.Extensions Classes

<u>AzureServiceBusExtensions</u>

Class AzureServiceBusExtensions

Namespace: <u>AzureServiceBusFlow.Extensions</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public static class AzureServiceBusExtensions

Inheritance

Inherited Members

Methods

AddAzureServiceBus(IServiceCollection, Action < ServiceBusConfigurationBuilder >)

public static IServiceCollection AddAzureServiceBus(this IServiceCollection services, Action<ServiceBusConfigurationBuilder> configure)

Parameters

services IServiceCollection♂

configure <u>Action</u> < <u>ServiceBusConfigurationBuilder</u> >

Returns

Namespace AzureServiceBusFlow.Hosts

Classes

<u>ServiceBusConsumerHostedService</u>

Class ServiceBusConsumerHostedService

Namespace: <u>AzureServiceBusFlow.Hosts</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public class ServiceBusConsumerHostedService : IHostedService, IAsyncDisposable

Inheritance

<u>object</u> ✓ ← ServiceBusConsumerHostedService

Implements

IHostedService ☑, IAsyncDisposable ☑

Inherited Members

<u>object.Equals(object)</u> ♂, <u>object.Equals(object, object)</u> ♂, <u>object.GetHashCode()</u> ♂, <u>object.GetType()</u> ♂, <u>object.MemberwiseClone()</u> ♂, <u>object.ReferenceEquals(object, object)</u> ♂, <u>object.ToString()</u> ♂

Constructors

ServiceBusConsumerHostedService(Func < ServiceBusReceivedMessage, IServiceProvider, CancellationToken, Task > , IServiceProvider, ILogger, AzureServiceBusConfiguration, string, string)

public ServiceBusConsumerHostedService(Func<ServiceBusReceivedMessage, IServiceProvider,
CancellationToken, Task> messageHandler, IServiceProvider serviceProvider, ILogger logger,
AzureServiceBusConfiguration azureServiceBusConfiguration, string queueOrTopicName, string
subscriptionName = null)

Parameters

messageHandler <u>Func</u>♂<<u>ServiceBusReceivedMessage</u>♂, <u>IServiceProvider</u>♂, <u>CancellationToken</u>♂, <u>Task</u>♂ >

azureServiceBusConfiguration <u>AzureServiceBusConfiguration</u>

```
queue0rTopicName <u>string</u>♂
```

subscriptionName <u>string</u> ☐

Methods

DisposeAsync()

Performs application-defined tasks associated with freeing, releasing, or resetting unmanaged resources asynchronously.

```
public ValueTask DisposeAsync()
```

Returns

A task that represents the asynchronous dispose operation.

StartAsync(CancellationToken)

Triggered when the application host is ready to start the service.

```
public Task StartAsync(CancellationToken cancellationToken)
```

Parameters

cancellationToken CancellationToken☑

Indicates that the start process has been aborted.

Returns

Task ☑

A <u>Task</u>☑ that represents the asynchronous Start operation.

StopAsync(CancellationToken)

Triggered when the application host is performing a graceful shutdown.

public Task StopAsync(CancellationToken cancellationToken)

Parameters

Indicates that the shutdown process should no longer be graceful.

Returns

<u>Task</u> ☑

A <u>Task</u> that represents the asynchronous Stop operation.

Namespace AzureServiceBusFlow.Models

Classes

<u>AzureServiceBusConfiguration</u>

<u>MessageOptions</u>

Class AzureServiceBusConfiguration

Namespace: <u>AzureServiceBusFlow.Models</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public class AzureServiceBusConfiguration

Inheritance

<u>object</u> ∠ ← AzureServiceBusConfiguration

Inherited Members

Properties

ConnectionString

```
public required string ConnectionString { get; set; }
```

Property Value

<u>string</u> ☑

MaxAutoLockRenewalDurationInSeconds

```
public int MaxAutoLockRenewalDurationInSeconds { get; set; }
```

Property Value

<u>int</u>♂

MaxConcurrentCalls

```
public int MaxConcurrentCalls { get; set; }
Property Value
int
```

MaxRetryAttempts

```
public int MaxRetryAttempts { get; set; }
```

Property Value

<u>int</u>♂

ServiceBusReceiveMode

```
public required ServiceBusReceiveMode ServiceBusReceiveMode { get; set; }
```

Property Value

<u>ServiceBusReceiveMode</u> □

Class MessageOptions

Namespace: <u>AzureServiceBusFlow.Models</u>

Assembly: AzureServiceBusFlow.Configurations.dll

```
public record MessageOptions : IEquatable<MessageOptions>
```

Inheritance

<u>object</u> < MessageOptions

Implements

<u>IEquatable</u> < <u>MessageOptions</u> >

Inherited Members

<u>object.Equals(object)</u> , <u>object.Equals(object, object)</u> , <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

MessageOptions(TimeSpan?, IDictionary < string, object > ?)

```
public MessageOptions(TimeSpan? Delay, IDictionary<string, object>? ApplicationProperties)
```

Parameters

Delay <u>TimeSpan</u>♂?

ApplicationProperties <u>IDictionary</u> ♂ < <u>string</u> ♂, <u>object</u> ♂ >

Properties

ApplicationProperties

```
public IDictionary<string, object>? ApplicationProperties { get; init; }
```

```
<u>IDictionary</u> ♂ < <u>string</u> ♂, <u>object</u> ♂ >
```

Delay

```
public TimeSpan? Delay { get; init; }
```

Property Value

<u>TimeSpan</u> **□**?

Namespace AzureServiceBusFlow.Producers Classes

<u>CommandProducer<TCommand></u>

EventProducer<TEvent>

<u>ServiceBusProducer<TMessage></u>

Class CommandProducer < TCommand >

Namespace: <u>AzureServiceBusFlow.Producers</u>

Assembly: AzureServiceBusFlow.Configurations.dll

```
public class CommandProducer<TCommand> : ICommandProducer<TCommand> where TCommand :
class, IServiceBusMessage
```

Type Parameters

TCommand

Inheritance

<u>object</u> < CommandProducer < TCommand >

Implements

<u>ICommandProducer</u><TCommand>

Inherited Members

<u>object.Equals(object)</u> , <u>object.Equals(object, object)</u> , <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

CommandProducer(IServiceBusProducer < TCommand >)

```
public CommandProducer(IServiceBusProducer<TCommand> producer)
```

Parameters

producer IServiceBusProducerTCommand>

Methods

ProduceCommandAsync(TCommand, MessageOptions, CancellationToken)

public Task ProduceCommandAsync(TCommand command, MessageOptions messageOptions, CancellationToken cancellationToken)

Parameters

command TCommand

messageOptions
MessageOptions

Returns

Task ☑

ProduceCommandAsync(TCommand, CancellationToken)

public Task ProduceCommandAsync(TCommand command, CancellationToken cancellationToken)

Parameters

command TCommand

cancellationToken CancellationToken☑

Returns

<u>Task</u> ☑

Class EventProducer < TEvent >

Namespace: <u>AzureServiceBusFlow.Producers</u>

Assembly: AzureServiceBusFlow.Configurations.dll

```
public class EventProducer<TEvent> : IEventProducer<TEvent> where TEvent :
class, IServiceBusMessage
```

Type Parameters

TEvent

Inheritance

<u>object</u> ← EventProducer<TEvent>

Implements

IEventProducer < TEvent>

Inherited Members

<u>object.Equals(object)</u> , <u>object.Equals(object, object)</u> , <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

EventProducer(IServiceBusProducer<TEvent>)

```
public EventProducer(IServiceBusProducer<TEvent> producer)
```

Parameters

producer IServiceBusProducer TEvent

Methods

ProduceEventAsync(TEvent, CancellationToken)

public Task ProduceEventAsync(TEvent @event, CancellationToken cancellationToken)

Parameters

event TEvent

Returns

<u>Task</u> ♂

Class ServiceBusProducer < TMessage >

Namespace: <u>AzureServiceBusFlow.Producers</u>

Assembly: AzureServiceBusFlow.Configurations.dll

public class ServiceBusProducer<TMessage> : IServiceBusProducer<TMessage> where TMessage :
class, IServiceBusMessage

Type Parameters

TMessage

Inheritance

<u>object</u>

✓ ← ServiceBusProducer<TMessage>

Implements

<u>IServiceBusProducer</u><TMessage>

Inherited Members

<u>object.Equals(object)</u> , <u>object.Equals(object, object)</u> , <u>object.GetHashCode()</u> , <u>object.GetType()</u> , <u>object.MemberwiseClone()</u> , <u>object.ReferenceEquals(object, object)</u> , <u>object.ToString()</u>

Constructors

ServiceBusProducer(AzureServiceBusConfiguration, string, ILogger)

public ServiceBusProducer(AzureServiceBusConfiguration azureServiceBusConfiguration, string queueOrTopicName, ILogger logger)

Parameters

 $azure Service Bus Configuration \ \underline{Azure Service Bus Configuration}$

queueOrTopicName <u>string</u> ✓

logger <u>Logger</u>

☐

Methods

ProduceAsync(TMessage, MessageOptions, CancellationToken)

public Task ProduceAsync(TMessage message, MessageOptions producerOptions, CancellationToken cancellationToken)

Parameters

message TMessage

producerOptions <u>MessageOptions</u>

cancellationToken <u>CancellationToken</u> ☑

Returns

Task <a>™

ProduceAsync(TMessage, CancellationToken)

public Task ProduceAsync(TMessage message, CancellationToken cancellationToken)

Parameters

message TMessage

cancellationToken CancellationToken♂

Returns