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Class AggregateAttribute

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
[AttributeUsage(AttributeTargets.Class)]  
public class AggregateAttribute : Attribute
```

Inheritance

[object](#)  ← [Attribute](#)  ← AggregateAttribute

Inherited Members

[Attribute.Equals\(object\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Module\)](#)  ,
[Attribute.GetCustomAttributes\(Module, bool\)](#)  , [Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,
[Attribute.IsDefined\(Module, Type, bool\)](#)  , [Attribute.IsDefined\(ParameterInfo, Type\)](#)  ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#)  , [Attribute.Match\(object\)](#)  , [Attribute.TypeId](#)  ,
[object.Equals\(object, object\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Class AggregateBase<TState>

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public abstract class AggregateBase<TState> where TState : new()
```








Type Parameters

TState

Inheritance

[object](#)  ← AggregateBase<TState>

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) , [object.GetType\(\)](#) ,
[object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#) 

Constructors

AggregateBase(Guid)

```
protected AggregateBase(Guid id)
```

Parameters

id [Guid](#) 

Properties

Age

```
public long Age { get; }
```

Property Value

[long](#)

Id

```
public Guid Id { get; }
```

Property Value

[Guid](#)

PendingEvents

```
public IReadOnlyList<object> PendingEvents { get; }
```

Property Value

[IReadOnlyList](#) <[object](#)>

State

```
protected TState State { get; }
```

Property Value

TState

Methods

AckCommitted()

```
public void AckCommitted()
```

AppendPendingChange(object)

```
protected void AppendPendingChange(object ev)
```

Parameters

ev [object](#)

Given(TState, object)

```
protected abstract TState Given(TState state, object ev)
```

Parameters

state TState

ev [object](#)

Returns

TState

Rehydrate(IAsyncEnumerable<object>)

```
public Task Rehydrate(IAsyncEnumerable<object> events)
```

Parameters

events [IAsyncEnumerable](#) <[object](#)>

Returns

[Task](#)

Class EventHandlerAttribute

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
[AttributeUsage(AttributeTargets.Class)]  
public class EventHandlerAttribute : Attribute
```

Inheritance

[object](#)  ← [Attribute](#)  ← EventHandlerAttribute

Inherited Members

[Attribute.Equals\(object\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Module\)](#)  ,
[Attribute.GetCustomAttributes\(Module, bool\)](#)  , [Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,
[Attribute.IsDefined\(Module, Type, bool\)](#)  , [Attribute.IsDefined\(ParameterInfo, Type\)](#)  ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#)  , [Attribute.Match\(object\)](#)  , [Attribute.TypeId](#)  ,
[object.Equals\(object, object\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Delegate EventIdConvention

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public delegate Uuid EventIdConvention(IAggregate? aggregator, object evt)
```

Parameters

aggregator [IAggregate](#)

evt [object](#) 

Returns

Uuid

Delegate EventNameConvention

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public delegate string EventNameConvention(IAggregate? aggregate, object evt)
```

Parameters

aggregate [IAggregate](#)

evt [object](#) 

Returns

[string](#) 

Class


EventStoreProjectionManagementClientExtensions

Namespace: [MicroPlumberd](#)








Assembly: MicroPlumberd.dll

```
public static class EventStoreProjectionManagementClientExtensions
```

Inheritance

[object](#)  ← EventStoreProjectionManagementClientExtensions

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) , [object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#) 

Methods

EnsureJoinProjection(EventStoreProjectionManagementClient, string, IProjectionRegister, IEnumerable<string>)

```
public static Task EnsureJoinProjection(this EventStoreProjectionManagementClient client, string outputStream, IProjectionRegister register, IEnumerable<string> eventTypes)
```

Parameters

client EventStoreProjectionManagementClient

outputStream [string](#) 

register [IProjectionRegister](#)

eventTypes [IEnumerable](#)  <[string](#)  >

Returns

[Task](#) 

EnsureJoinProjection(EventStoreProjectionManagementClient, string, IEnumerable<string>)

```
public static Task EnsureJoinProjection(this EventStoreProjectionManagementClient client,
string outputStream, IEnumerable<string> eventTypes)
```

Parameters

client EventStoreProjectionManagementClient

outputStream [string](#)

eventTypes [IEnumerable](#) <[string](#)>

Returns

[Task](#)


Delegate GroupNameModelConvention

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public delegate string GroupNameModelConvention(Type model)
```

Parameters

model [Type](#)

Returns

[string](#)

Interface IAggregate

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface IAggregate
```

Properties

Age

```
long Age { get; }
```

Property Value

[long](#) 

Id

```
Guid Id { get; }
```

Property Value

[Guid](#) 

PendingEvents

```
IReadOnlyList<object> PendingEvents { get; }
```

Property Value

[IReadOnlyList](#)  < [object](#)  >

Methods

AckCommitted()

```
void AckCommitted()
```

Rehydrate(IAsyncEnumerable<object>)

```
Task Rehydrate(IAsyncEnumerable<object> events)
```

Parameters

events [IAsyncEnumerable](#) <[object](#)>

Returns

[Task](#)

Interface IAggregate<TSelf>

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface IAggregate<out TSelf> : IAggregate
```

Type Parameters

TSelf

Inherited Members

[IAggregate.Id](#) , [IAggregate.Age](#) , [IAggregate.PendingEvents](#) ,
[IAggregate.Rehydrate\(IAsyncEnumerable<object>\)](#) , [IAggregate.AckCommitted\(\)](#)

Methods

New(Guid)

```
public static abstract TSelf New(Guid id)
```

Parameters

id [Guid](#)

Returns

TSelf

Interface IConventions

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface IConventions
```

Properties

GetEventIdConvention

```
EventIdConvention GetEventIdConvention { get; set; }
```

Property Value

[EventIdConvention](#)

GetEventNameConvention

```
EventNameConvention GetEventNameConvention { get; set; }
```

Property Value

[EventNameConvention](#)

GetStreamIdConvention

```
SteamNameConvention GetStreamIdConvention { get; set; }
```

Property Value

[SteamNameConvention](#)

GroupNameModelConvention

```
GroupNameModelConvention GroupNameModelConvention { get; set; }
```

Property Value

[GroupNameModelConvention](#)

MetadataEnrichers

```
MetadataConvention? MetadataEnrichers { get; set; }
```

Property Value

[MetadataConvention](#)

OutputStreamModelConvention

```
OutputStreamModelConvention OutputStreamModelConvention { get; set; }
```

Property Value

[OutputStreamModelConvention](#)

Methods

GetMetadata(IAggregate?, object, object?)

```
object GetMetadata(IAggregate? aggregate, object evt, object? metadata)
```

Parameters

aggregate [IAggregate](#)

evt [object](#)[🔗]

metadata [object](#)

Returns

[object](#)

Interface IObjectSerializer

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface IObjectSerializer
```

Methods

Deserialize(ReadOnlySpan<byte>, Type)

```
object? Deserialize(ReadOnlySpan<byte> span, Type t)
```

Parameters

span [ReadOnlySpan](#) <[byte](#)>

t [Type](#)

Returns

[object](#)

Parse(ReadOnlySpan<byte>)

```
JsonElement Parse(ReadOnlySpan<byte> span)
```

Parameters

span [ReadOnlySpan](#) <[byte](#)>

Returns

[JsonElement](#)

SerializeToUtf8Bytes(object?)

```
byte[] SerializeToUtf8Bytes(object? t)
```

Parameters

t [object](#) 

Returns

[byte](#)  []

Interface IPlumber

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

Root interface for plumber

```
public interface IPlumber
```

Methods

AppendEvents(string, StreamRevision, IEnumerable<object>, object?)

Appends event to a stream, uses relevant convention, however aggregate-type or instance are passed as null to conventions.

```
Task AppendEvents(string streamId, StreamRevision rev, IEnumerable<object> events, object? metadata = null)
```

Parameters

streamId [string](#)

rev StreamRevision

events [IEnumerable](#) <[object](#)>

metadata [object](#)

Returns

[Task](#)

AppendEvents(string, StreamState, IEnumerable<object>, object?)

```
Task AppendEvents(string streamId, StreamState state, IEnumerable<object> events, object? metadata = null)
```

Parameters

streamId [string](#)

state StreamState

events [IEnumerable](#) <[object](#)>

metadata [object](#)

Returns

[Task](#)

Get<T>(Guid)

```
Task<T> Get<T>(Guid id) where T : IAggregate<T>, ITypeRegister
```

Parameters

id [Guid](#)

Returns

[Task](#) <T>

Type Parameters

T

SaveChanges<T>(T, object?)

```
Task SaveChanges<T>(T aggregate, object? metadata = null) where T : IAggregate<T>
```

Parameters

aggregate T

metadata [object](#)

Returns

[Task](#)

Type Parameters

T

SaveNew<T>(T, object?)

Task **SaveNew**<T>(T aggregate, [object](#)? metadata = **null**) **where** T : IAggregate<T>

Parameters

aggregate T

metadata [object](#)

Returns

[Task](#)

Type Parameters

T

Subscribe(string, FromStream, UserCredentials?, CancellationTokens)

ISubscriptionRunner **Subscribe**([string](#) streamName, FromStream start, UserCredentials? userCredentials = **null**, CancellationTokens cancellationTokens = **default**)

Parameters

`streamName` [string](#)

`start` `FromStream`

`userCredentials` `UserCredentials`

`cancellationToken` [CancellationToken](#)

Returns

[ISubscriptionRunner](#)

SubscribeModelPersistently<TModel>(TModel)

```
Task<IAsyncDisposable> SubscribeModelPersistently<TModel>(TModel model) where TModel :  
IReadModel, ITypeRegister
```

Parameters

`model` `TModel`

Returns

[Task](#) < [IAsyncDisposable](#) >

Type Parameters

`TModel`

SubscribeModel<TModel>(TModel, FromStream?)

```
Task<IAsyncDisposable> SubscribeModel<TModel>(TModel model, FromStream? start = null) where  
TModel : IReadModel, ITypeRegister
```

Parameters

`model` TModel

`start` FromStream?

Returns

[Task](#) <[IAsyncDisposable](#)>

Type Parameters

TModel

SubscribePersistently(string, string, int, UserCredentials?, CancellationTokens)

```
ISubscriptionRunner SubscribePersistently(string streamName, string groupName, int  
bufferSize = 10, UserCredentials? userCredentials = null, CancellationTokens  
cancellationTokens = default)
```

Parameters

`streamName` [string](#)

`groupName` [string](#)

`bufferSize` [int](#)

`userCredentials` UserCredentials

`cancellationTokens` [CancellationTokens](#)

Returns

[ISubscriptionRunner](#)

SubscribeSet()

```
ISubscriptionSet SubscribeSet()
```

Returns

[ISubscriptionSet](#)

Interface IProjectionRegister

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface IProjectionRegister
```

Methods

Get(string)

```
Task<ProjectionDetails?> Get(string name)
```

Parameters

name [string](#) 

Returns

[Task](#)  <ProjectionDetails>

Interface IReadModel

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface IReadModel
```

Methods

Given(Metadata, object)

```
Task Given(Metadata m, object ev)
```

Parameters

m [Metadata](#)

ev [object](#)

Returns

[Task](#)

Interface ISubscriptionRunner

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface ISubscriptionRunner : IAsyncDisposable
```

Inherited Members

[IAsyncDisposable.DisposeAsync\(\)](#)

Methods

WithModel<T>(T)

```
Task WithModel<T>(T model) where T : IReadModel, ITypeRegister
```

Parameters

model T

Returns

[Task](#)

Type Parameters

T

Interface ISubscriptionSet

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface ISubscriptionSet
```

Methods

SubscribeAsync(string, FromStream)

```
Task SubscribeAsync(string name, FromStream start)
```

Parameters

name [string](#)

start FromStream

Returns

[Task](#)

SubscribePersistentlyAsync(string, string?)

```
Task SubscribePersistentlyAsync(string outputStream, string? groupName = null)
```

Parameters

outputStream [string](#)

groupName [string](#)

Returns

[Task](#)

With<TModel>(TModel)

`ISubscriptionSet With<TModel>(TModel model) where TModel : IReadModel, ITypeRegister`

Parameters

`model` TModel

Returns

[ISubscriptionSet](#)

Type Parameters

`TModel`

Interface ITypeRegister

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public interface ITypeRegister
```

Properties

TypeRegister

```
public static abstract IDictionary<string, Type> TypeRegister { get; }
```

Property Value

[IDictionary](#) <[string](#), [Type](#)>

Class InvocationContext

Namespace: [MicroPlumberd](#)








Assembly: MicroPlumberd.dll

```
public class InvocationContext
```

Inheritance

[object](#)  ← InvocationContext

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Properties

Current

```
public static InvocationContext Current { get; }
```

Property Value

[InvocationContext](#)

Value

```
public dynamic Value { get; }
```

Property Value

dynamic

Methods

Clear()

```
public void Clear()
```

ClearCorrelation()

```
public void ClearCorrelation()
```

ContainsProperty(string)

```
public bool ContainsProperty(string propertyName)
```

Parameters

propertyName [string](#)

Returns

[bool](#)

Set(string, object)

```
public InvocationContext Set(string key, object value)
```

Parameters

key [string](#)

value [object](#)

Returns

[InvocationContext](#)

SetCausation(Guid)

```
public InvocationContext SetCausation(Guid causationId)
```

Parameters

causationId [Guid](#)

Returns

[InvocationContext](#)

SetCorrelation(Guid)

```
public InvocationContext SetCorrelation(Guid correlationId)
```

Parameters

correlationId [Guid](#)

Returns

[InvocationContext](#)

SetUserId(Guid)

```
public InvocationContext SetUserId(Guid userId)
```

Parameters

userId [Guid](#)

Returns

[InvocationContext](#)

Class InvocationScope

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public class InvocationScope : IDisposable
```








Inheritance

[object](#)  ← InvocationScope

Implements

[IDisposable](#) 

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  ,
[object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Properties

Context

```
public InvocationContext Context { get; }
```

Property Value

[InvocationContext](#)

Methods

ContainsProperty(string)

```
public bool ContainsProperty(string propertyName)
```

Parameters

propertyName [string](#) 

Returns

[bool](#)

Dispose()

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

```
public void Dispose()
```

Set(string, object)

```
public InvocationContext Set(string key, object value)
```

Parameters

key [string](#)

value [object](#)

Returns

[InvocationContext](#)

SetCausation(Guid)

```
public InvocationContext SetCausation(Guid causationId)
```

Parameters

causationId [Guid](#)

Returns

[InvocationContext](#)

SetCorrelation(Guid)

```
public InvocationContext SetCorrelation(Guid correlationId)
```

Parameters

correlationId [Guid](#)

Returns

[InvocationContext](#)

SetUserId(Guid)

```
public InvocationContext SetUserId(Guid userId)
```

Parameters

userId [Guid](#)

Returns

[InvocationContext](#)

Struct Metadata

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public readonly struct Metadata
```

Inherited Members

[ValueType.Equals\(object\)](#)[↗] , [ValueType.GetHashCode\(\)](#)[↗] , [ValueType.ToString\(\)](#)[↗] ,
[object.Equals\(object, object\)](#)[↗] , [object.GetType\(\)](#)[↗] , [object.ReferenceEquals\(object, object\)](#)[↗]

Extension Methods

[MetadataExtensions.CorrelationId\(Metadata\)](#)

Constructors

Metadata(Guid, JsonElement)

```
public Metadata(Guid id, JsonElement data)
```

Parameters

id [Guid](#)[↗]

data [JsonElement](#)[↗]

Properties

Data

```
public JsonElement Data { get; }
```

Property Value

[JsonElement](#)[↗]

Id

```
public Guid Id { get; }
```

Property Value

[Guid](#)

Delegate MetadataConvention

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public delegate void MetadataConvention(dynamic metadata, IAggregate? aggregate, object evt)
```

Parameters

metadata dynamic

aggregate [IAggregate](#)

evt [object](#) 


Class MetadataExtensions

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public static class MetadataExtensions
```

Inheritance

[object](#)  ← MetadataExtensions

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Methods

CorrelationId(Metadata)

```
public static Guid? CorrelationId(this Metadata m)
```

Parameters

m [Metadata](#)

Returns

[Guid](#) ?


Class OutputStreamAttribute

Namespace: [MicroPlumberd](#)


Assembly: MicroPlumberd.dll

```
[AttributeUsage(AttributeTargets.Class)]  
public class OutputStreamAttribute : Attribute
```

Inheritance

[object](#)  ← [Attribute](#)  ← OutputStreamAttribute

Inherited Members

[Attribute.Equals\(object\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
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[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,
[Attribute.IsDefined\(Module, Type, bool\)](#)  , [Attribute.IsDefined\(ParameterInfo, Type\)](#)  ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#)  , [Attribute.Match\(object\)](#)  , [Attribute.TypeId](#)  ,
[object.Equals\(object, object\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Constructors

OutputStreamAttribute(string)

```
public OutputStreamAttribute(string outputStreamName)
```

Parameters

outputStreamName [string](#)

Properties

OutputStreamName

```
public string OutputStreamName { get; }
```

Property Value

[string](#)


Delegate OutputStreamModelConvention

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public delegate string OutputStreamModelConvention(Type model)
```

Parameters

model [Type](#) 

Returns

[string](#) 

Class Plumber

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public class Plumber : IPlumber
```








Inheritance

[object](#)  ← Plumber

Implements

[IPlumber](#)

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Constructors

Plumber(EventStoreClientSettings)

```
public Plumber(EventStoreClientSettings settings)
```

Parameters

settings EventStoreClientSettings

Properties

Client

```
public EventStoreClient Client { get; }
```

Property Value

EventStoreClient

Conventions

```
public IConventions Conventions { get; }
```

Property Value

[IConventions](#)

PersistentSubscriptionClient

```
public EventStorePersistentSubscriptionsClient PersistentSubscriptionClient { get; }
```

Property Value

EventStorePersistentSubscriptionsClient

ProjectionManagementClient

```
public EventStoreProjectionManagementClient ProjectionManagementClient { get; }
```

Property Value

EventStoreProjectionManagementClient

ProjectionRegister

```
public IProjectionRegister ProjectionRegister { get; }
```

Property Value

[IProjectionRegister](#)

Serializer

```
public IObjectSerializer Serializer { get; set; }
```

Property Value

[IObjectSerializer](#)

Methods

AppendEvents(string, StreamRevision, IEnumerable<object>, object?)

Appends event to a stream, uses relevant convention, however aggregate-type or instance are passed as null to conventions.

```
public Task AppendEvents(string streamId, StreamRevision rev, IEnumerable<object> events, object? metadata = null)
```

Parameters

streamId [string](#)

rev StreamRevision

events [IEnumerable](#) <[object](#)>

metadata [object](#)

Returns

[Task](#)

AppendEvents(string, StreamState, IEnumerable<object>, object?)

```
public Task AppendEvents(string streamId, StreamState state, IEnumerable<object> events,
```



```
object? metadata = null)
```

Parameters

streamId [string](#)

state StreamState

events [IEnumerable](#) <[object](#)>

metadata [object](#)

Returns

[Task](#)

Get<T>(Guid)

```
public Task<T> Get<T>(Guid id) where T : IAggregate<T>, ITypeRegister
```

Parameters

id [Guid](#)

Returns

[Task](#) <T>

Type Parameters

T

SaveChanges<T>(T, object?)

```
public Task SaveChanges<T>(T aggregate, object? metadata = null) where T : IAggregate<T>
```

Parameters

aggregate T

metadata [object](#)

Returns

[Task](#)

Type Parameters

T

SaveNew<T>(T, object?)

```
public Task SaveNew<T>(T aggregate, object? metadata = null) where T : IAggregate<T>
```

Parameters

aggregate T

metadata [object](#)

Returns

[Task](#)

Type Parameters

T

Subscribe(string, FromStream, UserCredentials?, CancellationTokens)

```
public ISubscriptionRunner Subscribe(string streamName, FromStream start, UserCredentials? userCredentials = null, CancellationTokens cancellationTokens = default)
```

Parameters

`streamName` [string](#)

`start` `FromStream`

`userCredentials` `UserCredentials`

`cancellationToken` [CancellationToken](#)

Returns

[ISubscriptionRunner](#)

SubscribeModelPersistently<TModel>(TModel)

```
public Task<IAsyncDisposable> SubscribeModelPersistently<TModel>(TModel model) where TModel
    : IReadModel, ITypeRegister
```

Parameters

`model` `TModel`

Returns

[Task](#) <[IAsyncDisposable](#)>

Type Parameters

`TModel`

SubscribeModel<TModel>(TModel, FromStream?)

```
public Task<IAsyncDisposable> SubscribeModel<TModel>(TModel model, FromStream? start = null)
where TModel : IReadModel, ITypeRegister
```

Parameters

`model` `TModel`

`start` `FromStream?`

Returns

[Task](#) <[IAsyncDisposable](#)>

Type Parameters

TModel

SubscribePersistently(string, string, int, UserCredentials?, Cancellation_token)

```
public ISubscriptionRunner SubscribePersistently(string streamName, string groupName, int
bufferSize = 10, UserCredentials? userCredentials = null, Cancellation_token
cancellation_token = default)
```

Parameters

streamName [string](#)

groupName [string](#)

bufferSize [int](#)

userCredentials UserCredentials

cancellation_token [Cancellation_token](#)

Returns

[ISubscriptionRunner](#)

SubscribeSet()

```
public ISubscriptionSet SubscribeSet()
```

Returns

Enum StandardMetadataEnricherTypes

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

[Flags]

```
public enum StandardMetadataEnricherTypes
```

Fields

All = Created | InvocationContext

Created = 1

InvocationContext = 2

Delegate SteamNameConvention

Namespace: [MicroPlumberd](#)

Assembly: MicroPlumberd.dll

```
public delegate string SteamNameConvention(Type aggregateType, Guid aggregateId)
```

Parameters

aggregateType [Type](#) 

aggregateId [Guid](#) 

Returns

[string](#) 

Namespace MicroPlumberd.DirectConnect

Classes

[CommandEnvelope<TCommand>](#)

[CommandHandlerAttribute](#)

[ContainerExtensions](#)

[HandlerOperationStatus](#)

[RequestInvokerExtensions](#)

[ReturnsAttribute](#)

[ReturnsAttribute<TResult>](#)

[ThrowsFaultExceptionAttribute](#)

[ThrowsFaultExceptionAttribute<TMessage>](#)

Interfaces

[IApiTypeRegister](#)

[ICommand](#)

[ICommandHandler<TCommand>](#)

Class CommandEnvelope<TCommand>

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll


[ProtoContract]

```
public record CommandEnvelope<TCommand> : IEquatable<CommandEnvelope<TCommand>> where  
    TCommand : ICommand
```

Type Parameters

TCommand








Inheritance

[object](#)  ← CommandEnvelope<TCommand>

Implements

[IEquatable](#)  <[CommandEnvelope](#) <TCommand> >

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  ,
[object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Properties

Command

[ProtoMember(2)]

```
public required TCommand Command { get; init; }
```

Property Value

TCommand

StreamId

```
[ProtoMember(1)]  
public Guid StreamId { get; init; }
```

Property Value

[Guid](#)

Class CommandHandlerAttribute

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
[AttributeUsage(AttributeTargets.Class)]  
public class CommandHandlerAttribute : Attribute
```

Inheritance

[object](#)  ← [Attribute](#)  ← CommandHandlerAttribute

Inherited Members

[Attribute.Equals\(object\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Module\)](#)  ,
[Attribute.GetCustomAttributes\(Module, bool\)](#)  , [Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,
[Attribute.IsDefined\(Module, Type, bool\)](#)  , [Attribute.IsDefined\(ParameterInfo, Type\)](#)  ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#)  , [Attribute.Match\(object\)](#)  , [Attribute.TypeId](#)  ,
[object.Equals\(object, object\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Class ContainerExtensions

Namespace: [MicroPlumberd.DirectConnect](#)








Assembly: MicroPlumberd.DirectConnect.dll

```
public static class ContainerExtensions
```

Inheritance

[object](#)  ← ContainerExtensions

Inherited Members

[object.Equals\(object\)](#)  , [object.Equals\(object, object\)](#)  , [object.GetHashCode\(\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  , [object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Methods

AddCommandHandler<TCommandHandler>(IServiceCollection)

```
public static IServiceCollection AddCommandHandler<TCommandHandler>(this IServiceCollection services) where TCommandHandler : IApiTypeRegister
```

Parameters

services [IServiceCollection](#) 

Returns

[IServiceCollection](#) 

Type Parameters

TCommandHandler

AddCommandInvoker(IServiceCollection, Type)

```
public static IServiceCollection AddCommandInvoker(this IServiceCollection services,  
Type commandType)
```

Parameters

services [IServiceCollection](#)

commandType [Type](#)

Returns

[IServiceCollection](#)

AddCommandInvoker<TCommand>(IServiceCollection)

```
public static IServiceCollection AddCommandInvoker<TCommand>(this IServiceCollection  
services) where TCommand : ICommand
```

Parameters

services [IServiceCollection](#)

Returns

[IServiceCollection](#)

Type Parameters

TCommand

AddCommandInvokers(IServiceCollection)

```
public static IServiceCollection AddCommandInvokers(this IServiceCollection services)
```

Parameters

services [IServiceCollection](#)

Returns

[IServiceCollection](#)

AddCommandInvokers(IServiceCollection, IEnumerable<Type>)

```
public static IServiceCollection AddCommandInvokers(this IServiceCollection services,
    IEnumerable<Type> commandTypes)
```

Parameters

services [IServiceCollection](#)

commandTypes [IEnumerable](#) <[Type](#)>

Returns

[IServiceCollection](#)

AddCommandInvokers(IServiceCollection, params Type[])

```
public static IServiceCollection AddCommandInvokers(this IServiceCollection services, params
    Type[] commandTypes)
```

Parameters

services [IServiceCollection](#)

commandTypes [Type](#) []

Returns

[IServiceCollection](#)


Class HandlerOperationStatus

Namespace: [MicroPlumberd.DirectConnect](#)








Assembly: MicroPlumberd.DirectConnect.dll

```
[ProtoContract]  
public class HandlerOperationStatus
```

Inheritance

[object](#)  ← HandlerOperationStatus

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) , [object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#) 

Properties

Code

```
[ProtoMember(1)]  
public HttpStatusCode Code { get; init; }
```

Property Value

[HttpStatusCode](#) 

Methods

Ok()

```
public static HandlerOperationStatus Ok()
```

Returns

[HandlerOperationStatus](#)

Interface IApiTypeRegister

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
public interface IApiTypeRegister
```

Properties

CommandTypes

```
public static abstract IEnumerable<Type> CommandTypes { get; }
```

Property Value

[IEnumerable](#) <[Type](#)>

FaultTypes

```
public static abstract IEnumerable<Type> FaultTypes { get; }
```

Property Value

[IEnumerable](#) <[Type](#)>

ReturnTypes

```
public static abstract IEnumerable<Type> ReturnTypes { get; }
```

Property Value

[IEnumerable](#) <[Type](#)>

Methods

RegisterHandlers(IServiceCollection)

```
public static abstract IServiceCollection RegisterHandlers(IServiceCollection services)
```

Parameters

services [IServiceCollection](#) 

Returns

[IServiceCollection](#) 

Interface ICommand

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
public interface ICommand
```

Properties

Id

```
Guid Id { get; }
```

Property Value

[Guid](#)

Interface ICommandHandler<TCommand>

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
public interface ICommandHandler<in TCommand> where TCommand : ICommand
```

Type Parameters

TCommand

Methods

Execute(Guid, TCommand)

```
Task<object> Execute(Guid id, TCommand command)
```

Parameters

id [Guid](#)

command TCommand

Returns

[Task](#) <[object](#)>

Class RequestInvokerExtensions

Namespace: [MicroPlumberd.DirectConnect](#)








Assembly: MicroPlumberd.DirectConnect.dll

```
public static class RequestInvokerExtensions
```

Inheritance

[object](#)  ← RequestInvokerExtensions

Inherited Members

[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) , [object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) , [object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#) 

Methods

Execute(IRequestInvoker, Guid, ICommand)

```
public static Task Execute(this IRequestInvoker ri, Guid id, ICommand c)
```

Parameters

ri IRequestInvoker

id [Guid](#) 

c [ICommand](#)

Returns

[Task](#) 

Execute<TResponse>(IRequestInvoker, Guid, ICommand)

```
public static Task<TResponse> Execute<TResponse>(this IRequestInvoker ri, Guid id, ICommand c)
```

Parameters

ri `IRequestInvoker`

id [Guid](#)

c [ICommand](#)

Returns

[Task](#) `<TResponse>`

Type Parameters

TResponse

Class ReturnsAttribute

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
public abstract class ReturnsAttribute : Attribute
```


Inheritance

[object](#)  ← [Attribute](#)  ← ReturnsAttribute

Derived

[ReturnsAttribute<TResult>](#)

Inherited Members

[Attribute.Equals\(object\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Module\)](#)  ,
[Attribute.GetCustomAttributes\(Module, bool\)](#)  , [Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,
[Attribute.IsDefined\(Module, Type, bool\)](#)  , [Attribute.IsDefined\(ParameterInfo, Type\)](#)  ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#)  , [Attribute.Match\(object\)](#)  , [Attribute.TypeId](#)  ,
[object.Equals\(object, object\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Constructors

ReturnsAttribute(Type)

```
protected ReturnsAttribute(Type returnType)
```

Parameters

returnType [Type](#)

Properties

ReturnType

```
public Type ReturnType { get; init; }
```

Property Value

[Type](#)

Class ReturnsAttribute<TResult>

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
[AttributeUsage(AttributeTargets.Class)]  
public class ReturnsAttribute<TResult> : ReturnsAttribute
```










Type Parameters

TResult

Inheritance

[object](#)  ← [Attribute](#)  ← [ReturnsAttribute](#)  ← ReturnsAttribute<TResult>

Inherited Members

[ReturnsAttribute.ReturnType](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Module\)](#)  ,
[Attribute.GetCustomAttributes\(Module, bool\)](#)  , [Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,
[Attribute.IsDefined\(Module, Type, bool\)](#)  , [Attribute.IsDefined\(ParameterInfo, Type\)](#)  ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#)  , [Attribute.Match\(object\)](#)  , [Attribute.TypeId](#)  ,

[object.Equals\(object, object\)](#) , [object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) ,
[object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#)

Constructors

ReturnsAttribute()

```
public ReturnsAttribute()
```



Class ThrowsFaultExceptionAttribute

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
public abstract class ThrowsFaultExceptionAttribute : Attribute
```


Inheritance

[object](#)  ← [Attribute](#)  ← ThrowsFaultExceptionAttribute

Derived

[ThrowsFaultExceptionAttribute<TMessage>](#)

Inherited Members

[Attribute.Equals\(object\)](#)  , [Attribute.GetCustomAttribute\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(Module, Type\)](#)  , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, bool\)](#)  , [Attribute.GetCustomAttributes\(Assembly, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(MemberInfo\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(Module\)](#)  ,
[Attribute.GetCustomAttributes\(Module, bool\)](#)  , [Attribute.GetCustomAttributes\(Module, Type\)](#)  ,
[Attribute.GetCustomAttributes\(Module, Type, bool\)](#)  , [Attribute.GetCustomAttributes\(ParameterInfo\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#)  ,
[Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#)  , [Attribute.GetHashCode\(\)](#)  ,
[Attribute.IsDefaultAttribute\(\)](#)  , [Attribute.IsDefined\(Assembly, Type\)](#)  ,
[Attribute.IsDefined\(Assembly, Type, bool\)](#)  , [Attribute.IsDefined\(MemberInfo, Type\)](#)  ,
[Attribute.IsDefined\(MemberInfo, Type, bool\)](#)  , [Attribute.IsDefined\(Module, Type\)](#)  ,
[Attribute.IsDefined\(Module, Type, bool\)](#)  , [Attribute.IsDefined\(ParameterInfo, Type\)](#)  ,
[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#)  , [Attribute.Match\(object\)](#)  , [Attribute.TypeId](#)  ,
[object.Equals\(object, object\)](#)  , [object.GetType\(\)](#)  , [object.MemberwiseClone\(\)](#)  ,
[object.ReferenceEquals\(object, object\)](#)  , [object.ToString\(\)](#) 

Constructors

ThrowsFaultExceptionAttribute(Type)

```
protected ThrowsFaultExceptionAttribute(Type thrownType)
```

Parameters

thrownType [Type](#)

Properties

ThrownType

```
public Type ThrownType { get; init; }
```

Property Value

[Type](#)

Class

ThrowsFaultExceptionAttribute<TMessage>

Namespace: [MicroPlumberd.DirectConnect](#)

Assembly: MicroPlumberd.DirectConnect.dll

```
[AttributeUsage(AttributeTargets.Class|AttributeTargets.Method)]
```

```
public class ThrowsFaultExceptionAttribute<TMessage> : ThrowsFaultExceptionAttribute
```

Type Parameters

TMessage

Inheritance

[object](#)  ← [Attribute](#)  ← [ThrowsFaultExceptionAttribute](#)  ← [ThrowsFaultExceptionAttribute<TMessage>](#)

Inherited Members

[ThrowsFaultExceptionAttribute.ThrownType](#) , [Attribute.Equals\(object\)](#) , [Attribute.GetCustomAttribute\(Assembly, Type\)](#) , [Attribute.GetCustomAttribute\(Assembly, Type, bool\)](#) , [Attribute.GetCustomAttribute\(MemberInfo, Type\)](#) , [Attribute.GetCustomAttribute\(MemberInfo, Type, bool\)](#) , [Attribute.GetCustomAttribute\(Module, Type\)](#) , [Attribute.GetCustomAttribute\(Module, Type, bool\)](#) , [Attribute.GetCustomAttribute\(ParameterInfo, Type\)](#) , [Attribute.GetCustomAttribute\(ParameterInfo, Type, bool\)](#) , [Attribute.GetCustomAttributes\(Assembly\)](#) , [Attribute.GetCustomAttributes\(Assembly, bool\)](#) , [Attribute.GetCustomAttributes\(Assembly, Type\)](#) , [Attribute.GetCustomAttributes\(Assembly, Type, bool\)](#) , [Attribute.GetCustomAttributes\(MemberInfo\)](#) , [Attribute.GetCustomAttributes\(MemberInfo, bool\)](#) , [Attribute.GetCustomAttributes\(MemberInfo, Type\)](#) , [Attribute.GetCustomAttributes\(MemberInfo, Type, bool\)](#) , [Attribute.GetCustomAttributes\(Module\)](#) , [Attribute.GetCustomAttributes\(Module, bool\)](#) , [Attribute.GetCustomAttributes\(Module, Type\)](#) , [Attribute.GetCustomAttributes\(Module, Type, bool\)](#) , [Attribute.GetCustomAttributes\(ParameterInfo\)](#) , [Attribute.GetCustomAttributes\(ParameterInfo, bool\)](#) , [Attribute.GetCustomAttributes\(ParameterInfo, Type\)](#) , [Attribute.GetCustomAttributes\(ParameterInfo, Type, bool\)](#) , [Attribute.GetHashCode\(\)](#) , [Attribute.IsDefaultAttribute\(\)](#) , [Attribute.IsDefined\(Assembly, Type\)](#) , [Attribute.IsDefined\(Assembly, Type, bool\)](#) , [Attribute.IsDefined\(MemberInfo, Type\)](#) , [Attribute.IsDefined\(MemberInfo, Type, bool\)](#) , [Attribute.IsDefined\(Module, Type\)](#) , [Attribute.IsDefined\(Module, Type, bool\)](#) , [Attribute.IsDefined\(ParameterInfo, Type\)](#) ,

[Attribute.IsDefined\(ParameterInfo, Type, bool\)](#) , [Attribute.Match\(object\)](#) , [Attribute.TypeId](#) ,
[object.Equals\(object, object\)](#) , [object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) ,
[object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#)

Constructors

ThrowsFaultExceptionAttribute()

```
public ThrowsFaultExceptionAttribute()
```

Namespace MicroPlumberd.SourceGenerators

Classes

[AggregateSourceGenerator](#)

[CommandHandlerSourceGenerator](#)

[EventHandlerSourceGenerator](#)

Class AggregateSourceGenerator

Namespace: [MicroPlumberd.SourceGenerators](#)

Assembly: MicroPlumberd.SourceGenerators.dll

[Generator]

```
public class AggregateSourceGenerator : ISourceGenerator
```

Inheritance

[object](#) ← AggregateSourceGenerator

Implements

[ISourceGenerator](#)

Inherited Members

[object.Equals\(object\)](#), [object.Equals\(object, object\)](#), [object.GetHashCode\(\)](#), [object.GetType\(\)](#), [object.MemberwiseClone\(\)](#), [object.ReferenceEquals\(object, object\)](#), [object.ToString\(\)](#)

Methods

Execute(GeneratorExecutionContext)

Called to perform source generation. A generator can use the `context` to add source files via the [AddSource\(string, SourceText\)](#) method.

```
public void Execute(GeneratorExecutionContext context)
```

Parameters

`context` [GeneratorExecutionContext](#)

The [GeneratorExecutionContext](#) to add source to

Remarks

This call represents the main generation step. It is called after a [Compilation](#) is created that contains the user written code.

A generator can use the [Compilation](#) property to discover information about the users compilation and make decisions on what source to provide.

Initialize(GeneratorInitializationContext)

Called before generation occurs. A generator can use the `context` to register callbacks required to perform generation.

```
public void Initialize(GeneratorInitializationContext context)
```

Parameters

`context` [GeneratorInitializationContext](#)

The [GeneratorInitializationContext](#) to register callbacks on

Class CommandHandlerSourceGenerator

Namespace: [MicroPlumberd.SourceGenerators](#)

Assembly: MicroPlumberd.SourceGenerators.dll

[Generator]

```
public class CommandHandlerSourceGenerator : ISourceGenerator
```

Inheritance

[object](#) ← CommandHandlerSourceGenerator

Implements

[ISourceGenerator](#)

Inherited Members

[object.Equals\(object\)](#), [object.Equals\(object, object\)](#), [object.GetHashCode\(\)](#), [object.GetType\(\)](#), [object.MemberwiseClone\(\)](#), [object.ReferenceEquals\(object, object\)](#), [object.ToString\(\)](#)

Methods

Execute(GeneratorExecutionContext)

Called to perform source generation. A generator can use the `context` to add source files via the [AddSource\(string, SourceText\)](#) method.

```
public void Execute(GeneratorExecutionContext context)
```

Parameters

`context` [GeneratorExecutionContext](#)

The [GeneratorExecutionContext](#) to add source to

Remarks

This call represents the main generation step. It is called after a [Compilation](#) is created that contains the user written code.

A generator can use the [Compilation](#) property to discover information about the users compilation and make decisions on what source to provide.

Initialize(GeneratorInitializationContext)

Called before generation occurs. A generator can use the `context` to register callbacks required to perform generation.

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public void Initialize(GeneratorInitializationContext context)
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`context` [GeneratorInitializationContext](#)

The [GeneratorInitializationContext](#) to register callbacks on

Class EventHandlerSourceGenerator

Namespace: [MicroPlumberd.SourceGenerators](#)

Assembly: MicroPlumberd.SourceGenerators.dll

[Generator]

```
public class EventHandlerSourceGenerator : ISourceGenerator
```

Inheritance

[object](#) ← EventHandlerSourceGenerator

Implements

[ISourceGenerator](#)

Inherited Members

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