

Namespace GrpcCurl.Net.DescriptorSources

Classes

[ProtosetSource](#)

Descriptor source that loads descriptors from compiled FileDescriptorSet files (protoset files). These files are created using: protoc --descriptor_set_out=output.protoset --include_imports input.proto

[ReflectionSource](#)

Descriptor source that uses gRPC server reflection to dynamically discover service schemas. Requires the server to have the grpc.reflection.v1alpha.ServerReflection service enabled.

Interfaces

[IDescriptorSource](#)

Provides access to protobuf descriptors for gRPC services. Can be backed by server reflection, proto files, or protoset files.

Interface IDescriptorSource

Namespace: [GrpCurl.Net.DescriptorSources](#)

Assembly: GrpCurl.Net.dll

Provides access to protobuf descriptors for gRPC services. Can be backed by server reflection, proto files, or protoset files.

```
public interface IDescriptorSource
```

Properties

FileDescriptorSet

Gets the file descriptor set containing all loaded descriptors.

```
FileDescriptorSet? FileDescriptorSet { get; }
```

Property Value

FileDescriptorSet

Methods

FindSymbolAsync(string, CancellationToken)

Finds a descriptor for the given fully-qualified symbol name.

```
Task<IDescriptor?> FindSymbolAsync(string fullyQualifiedName, CancellationToken  
cancellationToken = default)
```

Parameters

fullyQualifiedName [string](#)

The fully-qualified name (e.g., "my.package.Service")

cancellationToken [CancellationToken](#)

Cancellation token

Returns

[Task](#) <IDescriptor>

The descriptor for the symbol, or null if not found

ListServicesAsync(CancellationToken)

Lists all available service names.

```
Task<IReadOnlyList<string>> ListServicesAsync(CancellationToken cancellationToken  
= default)
```

Parameters

cancellationToken [CancellationToken](#)

Returns

[Task](#) <[IReadOnlyList](#) <[string](#)>>

Fully-qualified service names

Class ProtoSetSource

Namespace: [GrpCurl.Net.DescriptorSources](#)

Assembly: GrpCurl.Net.dll

Descriptor source that loads descriptors from compiled FileDescriptorSet files (protoSet files). These files are created using: protoc --descriptor_set_out=output.protoSet --include_imports input.proto

```
public sealed class ProtoSetSource : IDescriptorSource
```

Inheritance

[object](#) ← ProtoSetSource

Implements

[IDescriptorSource](#)

Inherited Members

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

Properties

FileDescriptorSet

Gets the file descriptor set containing all loaded descriptors.

```
public FileDescriptorSet? FileDescriptorSet { get; }
```

Property Value

FileDescriptorSet

Methods

FindSymbolAsync(string, CancellationToken)

Finds a descriptor for the given fully-qualified symbol name.

```
public Task<IDescriptor?> FindSymbolAsync(string fullyQualifiedNamespace,  
CancellationToken cancellationToken = default)
```

Parameters

fullyQualifiedNamespace [string](#)

The fully-qualified name (e.g., "my.package.Service")

cancellationToken [CancellationToken](#)

Cancellation token

Returns

[Task](#)<IDescriptor>

The descriptor for the symbol, or null if not found

ListServicesAsync(CancellationToken)

Lists all available service names.

```
public Task<IReadOnlyList<string>> ListServicesAsync(CancellationToken  
cancellationToken = default)
```

Parameters

cancellationToken [CancellationToken](#)

Returns

[Task](#)<[IReadOnlyList](#)<[string](#)>>

Fully-qualified service names

LoadFromFileAsync(string, CancellationToken)

Loads a protoset file from the given path.

```
public static Task<ProtosetSource> LoadFromFileAsync(string filePath,  
CancellationToken cancellationToken = default)
```

Parameters

`filePath` [string](#)

Path to the protoset file.

`cancellationToken` [CancellationToken](#)

Cancellation token.

Returns

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

A new ProtosetSource instance with the loaded descriptors.

LoadFromFilesAsync(IEnumerable<string>, CancellationToken)

Loads multiple protoset files.

```
public static Task<ProtosetSource> LoadFromFilesAsync(IEnumerable<string> filePaths,  
CancellationToken cancellationToken = default)
```

Parameters

`filePaths` [IEnumerable](#)<[string](#)>

Paths to the protoset files.

`cancellationToken` [CancellationToken](#)

Cancellation token.

Returns

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

A new ProtosetSource instance with the loaded descriptors.

Class ReflectionSource

Namespace: [GrpCurl.Net.DescriptorSources](#)

Assembly: GrpCurl.Net.dll

Descriptor source that uses gRPC server reflection to dynamically discover service schemas. Requires the server to have the grpc.reflection.v1alpha.ServerReflection service enabled.

```
public sealed class ReflectionSource : IDescriptorSource, IDisposable
```

Inheritance

[object](#) ← ReflectionSource

Implements

[IDescriptorSource](#), [IDisposable](#)

Inherited Members

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

Constructors

ReflectionSource(GrpcChannel, Metadata?, bool)

Descriptor source that uses gRPC server reflection to dynamically discover service schemas. Requires the server to have the grpc.reflection.v1alpha.ServerReflection service enabled.

```
public ReflectionSource(GrpcChannel channel, Metadata? metadata = null, bool  
ownsChannel = false)
```

Parameters

channel [GrpcChannel](#)

The gRPC channel to use for server reflection.

metadata [Metadata](#)

Optional metadata to send with reflection requests.

ownsChannel [bool](#)

If true, the channel will be disposed when this object is disposed. Default is false.

Properties

FileDescriptorSet

Gets the FileDescriptorSet containing all discovered file descriptors. Built dynamically from cached FileDescriptors for protoset export.

```
public FileDescriptorSet FileDescriptorSet { get; }
```

Property Value

FileDescriptorSet

Methods

Create(string, GrpcChannelOptions?)

Creates a new ReflectionSource for the specified server address.

```
public static ReflectionSource Create(string address, GrpcChannelOptions? options  
= null)
```

Parameters

address [string](#)

The gRPC server address.

options [GrpcChannelOptions](#)

Optional channel options.

Returns

[ReflectionSource](#)

A new ReflectionSource instance that owns its channel.

Dispose()

Disposes the channel if this instance owns it.

```
public void Dispose()
```

FindSymbolAsync(string, CancellationToken)

Finds a descriptor for the given fully-qualified symbol name.

```
public Task<IDescriptor?> FindSymbolAsync(string fullyQualifiedNamespace,  
CancellationToken cancellationToken = default)
```

Parameters

fullyQualifiedNamespace [string](#)

The fully-qualified name (e.g., "my.package.Service")

cancellationToken [CancellationToken](#)

Cancellation token

Returns

[Task](#)<IDescriptor>

The descriptor for the symbol, or null if not found

ListServicesAsync(CancellationToken)

Lists all available service names.

```
public Task<IReadOnlyList<string>> ListServicesAsync(CancellationToken
```

```
cancellationToken = default)
```

Parameters

cancellationToken [CancellationToken](#)

Returns

[Task](#) <[IReadOnlyList](#) <[string](#)>>>

Fully-qualified service names

Namespace GrpCurl.Net.Exceptions

Classes

[GrpcCommandException](#)

Exception thrown by command handlers to signal an error that should result in a specific exit code. This replaces Environment.Exit() calls to allow proper cleanup and testability.

Class GrpcCommandException

Namespace: [GrpCurl.Net.Exceptions](#)

Assembly: GrpCurl.Net.dll

Exception thrown by command handlers to signal an error that should result in a specific exit code. This replaces Environment.Exit() calls to allow proper cleanup and testability.

```
public sealed class GrpcCommandException : Exception, ISerializable
```

Inheritance

[object](#) ← [Exception](#) ← GrpcCommandException

Implements

[ISerializable](#)

Inherited Members

[Exception.GetBaseException\(\)](#) , [Exception.GetType\(\)](#) , [Exception.ToString\(\)](#) ,
[Exception.Data](#) , [Exception.HelpLink](#) , [Exception.HResult](#) , [Exception.InnerException](#) ,
[Exception.Message](#) , [Exception.Source](#) , [Exception.StackTrace](#) , [Exception.TargetSite](#) ,
[object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) , [object.GetHashCode\(\)](#) ,
[object.ReferenceEquals\(object, object\)](#)

Constructors

GrpcCommandException(string, int)

Exception thrown by command handlers to signal an error that should result in a specific exit code. This replaces Environment.Exit() calls to allow proper cleanup and testability.

```
public GrpcCommandException(string message, int exitCode = 1)
```

Parameters

message [string](#)

The error message.

exitCode [int](#)

The exit code to return (default is 1).

Properties

ExitCode

Gets the exit code that should be returned to the operating system.

```
public int ExitCode { get; }
```

Property Value

[int](#)

Namespace GrpCurl.Net.Invocation

Classes

[AsyncStreamExtensions](#)

Extension methods for async streams.

Class AsyncStreamExtensions

Namespace: [GrpCurl.Net.Invocation](#)

Assembly: GrpCurl.Net.dll

Extension methods for async streams.

```
public static class AsyncStreamExtensions
```

Inheritance

[object](#) ← AsyncStreamExtensions

Inherited Members

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

Methods

ReadAllAsync<T>(IStreamReader<T>, CancellationToken)

Reads all items from an async stream reader as an async enumerable.

```
public static IAsyncEnumerable<T> ReadAllAsync<T>(this IStreamReader<T> stream,  
CancellationToken cancellationToken = default)
```

Parameters

stream [IStreamReader](#)<T>

The async stream reader to read from.

cancellationToken [CancellationToken](#)

Cancellation token.

Returns

[IAsyncEnumerable](#) <T>

An async enumerable of all items from the stream.

Type Parameters

T

The type of items in the stream.

Namespace Grpc.Curl.Net.TestServer.Protos

Classes

[EchoStatus](#)

A protobuf representation for grpc status. This is used by test clients to specify a status that the server should attempt to return.

[Empty](#)

[Payload](#)

A block of data, to simply increase gRPC message size.

[ResponseParameters](#)

Configuration for a particular response.

[SimpleRequest](#)

Unary request.

[SimpleResponse](#)

Unary response, as configured by the request.

[StreamingInputCallRequest](#)

Client-streaming request.

[StreamingInputCallResponse](#)

Client-streaming response.

[StreamingOutputCallRequest](#)

Server-streaming request.

[StreamingOutputCallResponse](#)

Server-streaming response, as configured by the request and parameters.

[TestReflection](#)

Holder for reflection information generated from Protos/test.proto

[TestService](#)

A simple service to test the various types of RPCs and experiment with performance with various types of payload.

[TestService.TestServiceBase](#)

Base class for server-side implementations of TestService

[UnimplementedService](#)

A simple service NOT implemented at servers so clients can test for that case.

[UnimplementedService.UnimplementedServiceBase](#)

Base class for server-side implementations of UnimplementedService

Enums

[PayloadType](#)

The type of payload that should be returned.

Class EchoStatus

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

A protobuf representation for grpc status. This is used by test clients to specify a status that the server should attempt to return.

```
public sealed class EchoStatus : IMessage<EchoStatus>, IEquatable<EchoStatus>,
IDeepCloneable<EchoStatus>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← EchoStatus

Implements

IMessage<[EchoStatus](#)>, [IEquatable](#)<[EchoStatus](#)>, [IDeepCloneable](#)<[EchoStatus](#)>,
IBufferMessage, IMessage

Inherited Members

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

Constructors

EchoStatus()

```
public EchoStatus()
```

EchoStatus(EchoStatus)

```
public EchoStatus(EchoStatus other)
```

Parameters

other [EchoStatus](#)

Fields

CodeFieldNumber

Field number for the "code" field.

```
public const int CodeFieldNumber = 1
```

Field Value

[int](#)

MessageFieldNumber

Field number for the "message" field.

```
public const int MessageFieldNumber = 2
```

Field Value

[int](#)

Properties

Code

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

Property Value

[int](#)

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Message

```
public string Message { get; set; }
```

Property Value

[string](#)

Parser

```
public static MessageParser<EchoStatus> Parser { get; }
```

Property Value

MessageParser<[EchoStatus](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public EchoStatus Clone()
```

Returns

[EchoStatus](#)

A deep clone of this object.

Equals(EchoStatus)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(EchoStatus other)
```

Parameters

other [EchoStatus](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

[input](#) CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(EchoStatus)

Merges the given message into this one.

```
public void MergeFrom(EchoStatus other)
```

Parameters

other [EchoStatus](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class Empty

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

```
public sealed class Empty : IMessage<Empty>, IEquatable<Empty>,
IDeepCloneable<Empty>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← Empty

Implements

IMessage<[Empty](#)>, [IEquatable](#)<[Empty](#)>, [IDeepCloneable](#)<[Empty](#)>, [IBufferMessage](#),
IMessage

Inherited Members

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

Constructors

Empty()

```
public Empty()
```

Empty(Empty)

```
public Empty(Empty other)
```

Parameters

other [Empty](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Parser

```
public static MessageParser<Empty> Parser { get; }
```

Property Value

MessageParser<[Empty](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#) ↗

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public Empty Clone()
```

Returns

[Empty](#)

A deep clone of this object.

Equals(Empty)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(Empty other)
```

Parameters

[other](#) [Empty](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the [other](#) parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

[other](#) [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

[input](#) CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(Empty)

Merges the given message into this one.

```
public void MergeFrom(Empty other)
```

Parameters

[other](#) [Empty](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class Payload

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

A block of data, to simply increase gRPC message size.

```
public sealed class Payload : IMessage<Payload>, IEquatable<Payload>,
IDeepCloneable<Payload>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← Payload

Implements

IMessage<[Payload](#)>, [IEquatable](#)<[Payload](#)>, [IDeepCloneable](#)<[Payload](#)>, [IBufferMessage](#),
IMessage

Inherited Members

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

Constructors

Payload()

```
public Payload()
```

Payload(Payload)

```
public Payload(Payload other)
```

Parameters

other [Payload](#)

Fields

BodyFieldNumber

Field number for the "body" field.

```
public const int BodyFieldNumber = 2
```

Field Value

[int](#)

TypeFieldNumber

Field number for the "type" field.

```
public const int TypeFieldNumber = 1
```

Field Value

[int](#)

Properties

Body

Primary contents of payload.

```
public ByteString Body { get; set; }
```

Property Value

ByteString

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Parser

```
public static MessageParser<Payload> Parser { get; }
```

Property Value

MessageParser<[Payload](#)>

Type

The type of data in body.

```
public PayloadType Type { get; set; }
```

Property Value

[PayloadType](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public Payload Clone()
```

Returns

[Payload](#)

A deep clone of this object.

Equals(Payload)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(Payload other)
```

Parameters

other [Payload](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(Payload)

Merges the given message into this one.

```
public void MergeFrom(Payload other)
```

Parameters

other [Payload](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Enum PayloadType

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

The type of payload that should be returned.

```
public enum PayloadType
```

Fields

[`OriginalName("COMPRESSABLE")`] `Compressable = 0`

Compressable text format.

[`OriginalName("RANDOM")`] `Random = 2`

Randomly chosen from all other formats defined in this enum.

[`OriginalName("UNCOMPRESSABLE")`] `Uncompressable = 1`

Uncompressable binary format.

Class ResponseParameters

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Configuration for a particular response.

```
public sealed class ResponseParameters : IMessage<ResponseParameters>,
IEquatable<ResponseParameters>, IDeepCloneable<ResponseParameters>,
IBufferMessage, IMessage
```

Inheritance

[object](#) ← ResponseParameters

Implements

IMessage<[ResponseParameters](#)>, [IEquatable](#)<[ResponseParameters](#)>,
IDeepCloneable<[ResponseParameters](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ResponseParameters()

```
public ResponseParameters()
```

ResponseParameters(ResponseParameters)

```
public ResponseParameters(ResponseParameters other)
```

Parameters

other [ResponseParameters](#)

Fields

IntervalUsFieldNumber

Field number for the "interval_us" field.

```
public const int IntervalUsFieldNumber = 2
```

Field Value

[int](#)

SizeFieldNumber

Field number for the "size" field.

```
public const int SizeFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

IntervalUs

Desired interval between consecutive responses in the response stream in microseconds.

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

Property Value

[int](#)

Parser

```
public static MessageParser<ResponseParameters> Parser { get; }
```

Property Value

[MessageParser<ResponseParameters>](#)

Size

Desired payload sizes in responses from the server. If response_type is COMPRESSABLE, this denotes the size before compression.

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

Property Value

[int](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public ResponseParameters Clone()
```

Returns

[ResponseParameters](#)

A deep clone of this object.

Equals(ResponseParameters)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ResponseParameters other)
```

Parameters

other [ResponseParameters](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input [CodedInputStream](#)

Remarks

See the user guide for precise merge semantics.

MergeFrom(ResponseParameters)

Merges the given message into this one.

```
public void MergeFrom(ResponseParameters other)
```

Parameters

other [ResponseParameters](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class SimpleRequest

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Unary request.

```
public sealed class SimpleRequest : IMessage<SimpleRequest>,
IEquatable<SimpleRequest>, IDeepCloneable<SimpleRequest>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← SimpleRequest

Implements

IMessage<[SimpleRequest](#)>, IEquatable<[SimpleRequest](#)>,
IDeepCloneable<[SimpleRequest](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

SimpleRequest()

```
public SimpleRequest()
```

SimpleRequest(SimpleRequest)

```
public SimpleRequest(SimpleRequest other)
```

Parameters

other [SimpleRequest](#)

Fields

FillOauthScopeFieldNumber

Field number for the "fill_oauth_scope" field.

```
public const int FillOauthScopeFieldNumber = 5
```

Field Value

[int](#)

FillUsernameFieldNumber

Field number for the "fill_username" field.

```
public const int FillUsernameFieldNumber = 4
```

Field Value

[int](#)

PayloadFieldNumber

Field number for the "payload" field.

```
public const int PayloadFieldNumber = 3
```

Field Value

[int](#)

ResponseSizeFieldNumber

Field number for the "response_size" field.

```
public const int ResponseSizeFieldNumber = 2
```

Field Value

[int](#)

ResponseStatusFieldNumber

Field number for the "response_status" field.

```
public const int ResponseStatusFieldNumber = 7
```

Field Value

[int](#)

ResponseTypeFieldNumber

Field number for the "response_type" field.

```
public const int ResponseTypeFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

FillOauthScope

Whether SimpleResponse should include OAuth scope.

```
public bool FillOauthScope { get; set; }
```

Property Value

[bool](#)

FillUsername

Whether SimpleResponse should include username.

```
public bool FillUsername { get; set; }
```

Property Value

[bool](#)

Parser

```
public static MessageParser<SimpleRequest> Parser { get; }
```

Property Value

[MessageParser<SimpleRequest>](#)

Payload

Optional input payload sent along with the request.

```
public Payload Payload { get; set; }
```

Property Value

[Payload](#)

ResponseSize

Desired payload size in the response from the server. If response_type is COMPRESSABLE, this denotes the size before compression.

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

Property Value

[int ↗](#)

ResponseStatus

Whether server should return a given status

```
public EchoStatus ResponseStatus { get; set; }
```

Property Value

[EchoStatus](#)

ResponseType

Desired payload type in the response from the server. If response_type is RANDOM, server randomly chooses one from other formats.

```
public PayloadType ResponseType { get; set; }
```

Property Value

[PayloadType](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public SimpleRequest Clone()
```

Returns

[SimpleRequest](#)

A deep clone of this object.

Equals(SimpleRequest)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(SimpleRequest other)
```

Parameters

other [SimpleRequest](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the [other](#) parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

[other](#) [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(SimpleRequest)

Merges the given message into this one.

```
public void MergeFrom(SimpleRequest other)
```

Parameters

other [SimpleRequest](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class SimpleResponse

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Unary response, as configured by the request.

```
public sealed class SimpleResponse : IMessage<SimpleResponse>,
IEquatable<SimpleResponse>, IDeepCloneable<SimpleResponse>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← SimpleResponse

Implements

IMessage<[SimpleResponse](#)>, IEquatable<[SimpleResponse](#)>,
IDeepCloneable<[SimpleResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

SimpleResponse()

```
public SimpleResponse()
```

SimpleResponse(SimpleResponse)

```
public SimpleResponse(SimpleResponse other)
```

Parameters

other [SimpleResponse](#)

Fields

OauthScopeFieldNumber

Field number for the "oauth_scope" field.

```
public const int OauthScopeFieldNumber = 3
```

Field Value

[int](#)

PayloadFieldNumber

Field number for the "payload" field.

```
public const int PayloadFieldNumber = 1
```

Field Value

[int](#)

UsernameFieldNumber

Field number for the "username" field.

```
public const int UsernameFieldNumber = 2
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

OauthScope

OAuth scope.

```
public string OauthScope { get; set; }
```

Property Value

[string](#)

Parser

```
public static MessageParser<SimpleResponse> Parser { get; }
```

Property Value

MessageParser<[SimpleResponse](#)>

Payload

Payload to increase message size.

```
public Payload Payload { get; set; }
```

Property Value

[Payload](#)

Username

The user the request came from, for verifying authentication was successful when the client expected it.

```
public string Username { get; set; }
```

Property Value

[string](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public SimpleResponse Clone()
```

Returns

[SimpleResponse](#)

A deep clone of this object.

Equals(SimpleResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(SimpleResponse other)
```

Parameters

other [SimpleResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(SimpleResponse)

Merges the given message into this one.

```
public void MergeFrom(SimpleResponse other)
```

Parameters

other [SimpleResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class StreamingInputCallRequest

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Client-streaming request.

```
public sealed class StreamingInputCallRequest : IMessage<StreamingInputCallRequest>,
IEquatable<StreamingInputCallRequest>, IDeepCloneable<StreamingInputCallRequest>,
IBufferMessage, IMessage
```

Inheritance

[object](#) ← StreamingInputCallRequest

Implements

IMessage<[StreamingInputCallRequest](#)>, IEquatable<[StreamingInputCallRequest](#)>,
IDeepCloneable<[StreamingInputCallRequest](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

StreamingInputCallRequest()

```
public StreamingInputCallRequest()
```

StreamingInputCallRequest(StreamingInputCallRequest)

```
public StreamingInputCallRequest(StreamingInputCallRequest other)
```

Parameters

other [StreamingInputCallRequest](#)

Fields

PayloadFieldNumber

Field number for the "payload" field.

```
public const int PayloadFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Parser

```
public static MessageParser<StreamingInputCallRequest> Parser { get; }
```

Property Value

MessageParser<[StreamingInputCallRequest](#)>

Payload

Optional input payload sent along with the request.

```
public Payload Payload { get; set; }
```

Property Value

[Payload](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public StreamingInputCallRequest Clone()
```

Returns

[StreamingInputCallRequest](#)

A deep clone of this object.

Equals(StreamingInputCallRequest)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(StreamingInputCallRequest other)
```

Parameters

`other` [StreamingInputCallRequest](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the `other` parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

`other` [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(StreamingInputCallRequest)

Merges the given message into this one.

```
public void MergeFrom(StreamingInputCallRequest other)
```

Parameters

other [StreamingInputCallRequest](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class StreamingInputCallResponse

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Client-streaming response.

```
public sealed class StreamingInputCallResponse :  
IMessage<StreamingInputCallResponse>, IEquatable<StreamingInputCallResponse>,  
IDeepCloneable<StreamingInputCallResponse>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← StreamingInputCallResponse

Implements

IMessage<[StreamingInputCallResponse](#)>, IEquatable<[StreamingInputCallResponse](#)>,
IDeepCloneable<[StreamingInputCallResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

StreamingInputCallResponse()

```
public StreamingInputCallResponse()
```

StreamingInputCallResponse(StreamingInputCall Response)

```
public StreamingInputCallResponse(StreamingInputCallResponse other)
```

Parameters

other [StreamingInputCallResponse](#)

Fields

AggregatedPayloadSizeFieldNumber

Field number for the "aggregated_payload_size" field.

```
public const int AggregatedPayloadSizeFieldNumber = 1
```

Field Value

[int ↗](#)

Properties

AggregatedPayloadSize

Aggregated size of payloads received from the client.

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

Property Value

[int ↗](#)

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Parser

```
public static MessageParser<StreamingInputCallResponse> Parser { get; }
```

Property Value

MessageParser<[StreamingInputCallResponse](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public StreamingInputCallResponse Clone()
```

Returns

[StreamingInputCallResponse](#)

A deep clone of this object.

Equals(StreamingInputCallResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(StreamingInputCallResponse other)
```

Parameters

other [StreamingInputCallResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(StreamingInputCallResponse)

Merges the given message into this one.

```
public void MergeFrom(StreamingInputCallResponse other)
```

Parameters

other [StreamingInputCallResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class StreamingOutputCallRequest

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Server-streaming request.

```
public sealed class StreamingOutputCallRequest :  
IMessage<StreamingOutputCallRequest>, IEquatable<StreamingOutputCallRequest>,  
IDeepCloneable<StreamingOutputCallRequest>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← StreamingOutputCallRequest

Implements

IMessage<[StreamingOutputCallRequest](#)>, IEquatable<[StreamingOutputCallRequest](#)>,
IDeepCloneable<[StreamingOutputCallRequest](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

StreamingOutputCallRequest()

```
public StreamingOutputCallRequest()
```

StreamingOutputCallRequest(StreamingOutputCallRequest)

```
public StreamingOutputCallRequest(StreamingOutputCallRequest other)
```

Parameters

other [StreamingOutputCallRequest](#)

Fields

PayloadFieldNumber

Field number for the "payload" field.

```
public const int PayloadFieldNumber = 3
```

Field Value

[int](#)

ResponseParametersFieldNumber

Field number for the "response_parameters" field.

```
public const int ResponseParametersFieldNumber = 2
```

Field Value

[int](#)

ResponseStatusFieldNumber

Field number for the "response_status" field.

```
public const int ResponseStatusFieldNumber = 7
```

Field Value

[int](#)

ResponseTypeFieldNumber

Field number for the "response_type" field.

```
public const int ResponseTypeFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Parser

```
public static MessageParser<StreamingOutputCallRequest> Parser { get; }
```

Property Value

MessageParser<[StreamingOutputCallRequest](#)>

Payload

Optional input payload sent along with the request.

```
public Payload Payload { get; set; }
```

Property Value

[Payload](#)

ResponseParameters

Configuration for each expected response message.

```
public RepeatedField<ResponseParameters> ResponseParameters { get; }
```

Property Value

RepeatedField<[ResponseParameters](#)>

ResponseStatus

Whether server should return a given status

```
public EchoStatus ResponseStatus { get; set; }
```

Property Value

[EchoStatus](#)

ResponseType

Desired payload type in the response from the server. If response_type is RANDOM, the payload from each response in the stream might be of different types. This is to simulate a mixed type of payload stream.

```
public PayloadType ResponseType { get; set; }
```

Property Value

[PayloadType](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public StreamingOutputCallRequest Clone()
```

Returns

[StreamingOutputCallRequest](#)

A deep clone of this object.

Equals(StreamingOutputCallRequest)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(StreamingOutputCallRequest other)
```

Parameters

other [StreamingOutputCallRequest](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the [other](#) parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

[other](#) [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(StreamingOutputCallRequest)

Merges the given message into this one.

```
public void MergeFrom(StreamingOutputCallRequest other)
```

Parameters

other [StreamingOutputCallRequest](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class StreamingOutputCallResponse

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Server-streaming response, as configured by the request and parameters.

```
public sealed class StreamingOutputCallResponse :  
IMessage<StreamingOutputCallResponse>, IEquatable<StreamingOutputCallResponse>,  
IDeepCloneable<StreamingOutputCallResponse>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← StreamingOutputCallResponse

Implements

IMessage<[StreamingOutputCallResponse](#)>, IEquatable<[StreamingOutputCallResponse](#)>,
IDeepCloneable<[StreamingOutputCallResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

StreamingOutputCallResponse()

```
public StreamingOutputCallResponse()
```

StreamingOutputCallResponse(StreamingOutputCall Response)

```
public StreamingOutputCallResponse(StreamingOutputCallResponse other)
```

Parameters

other [StreamingOutputCallResponse](#)

Fields

PayloadFieldNumber

Field number for the "payload" field.

```
public const int PayloadFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Parser

```
public static MessageParser<StreamingOutputCallResponse> Parser { get; }
```

Property Value

MessageParser<[StreamingOutputCallResponse](#)>

Payload

Payload to increase response size.

```
public Payload Payload { get; set; }
```

Property Value

[Payload](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public StreamingOutputCallResponse Clone()
```

Returns

[StreamingOutputCallResponse](#)

A deep clone of this object.

Equals(StreamingOutputCallResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(StreamingOutputCallResponse other)
```

Parameters

other [StreamingOutputCallResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(StreamingOutputCallResponse)

Merges the given message into this one.

```
public void MergeFrom(StreamingOutputCallResponse other)
```

Parameters

other [StreamingOutputCallResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class TestReflection

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Holder for reflection information generated from Protos/test.proto

```
public static class TestReflection
```

Inheritance

[object](#) ← TestReflection

Inherited Members

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

Properties

Descriptor

File descriptor for Protos/test.proto

```
public static FileDescriptor Descriptor { get; }
```

Property Value

FileDescriptor

Class TestService

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

A simple service to test the various types of RPCs and experiment with performance with various types of payload.

```
public static class TestService
```

Inheritance

[object](#) ← TestService

Inherited Members

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

Properties

Descriptor

Service descriptor

```
public static ServiceDescriptor Descriptor { get; }
```

Property Value

ServiceDescriptor

Methods

BindService(TestServiceBase)

Creates service definition that can be registered with a server

```
public static ServerServiceDefinition BindService(TestService.TestServiceBase serviceImpl)
```

Parameters

serviceImpl [TestService.TestServiceBase](#)

An object implementing the server-side handling logic.

Returns

[ServerServiceDefinition](#)

BindService(ServiceBinderBase, TestServiceBase)

Register service method with a service binder with or without implementation. Useful when customizing the service binding logic. Note: this method is part of an experimental API that can change or be removed without any prior notice.

```
public static void BindService(ServiceBinderBase serviceBinder,  
TestService.TestServiceBase serviceImpl)
```

Parameters

serviceBinder [ServiceBinderBase](#)

Service methods will be bound by calling [AddMethod](#) on this object.

serviceImpl [TestService.TestServiceBase](#)

An object implementing the server-side handling logic.

Class TestService.TestServiceBase

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

Base class for server-side implementations of TestService

```
[BindServiceMethod(typeof(TestService), "BindService")]
public abstract class TestService.TestServiceBase
```

Inheritance

[object](#) ← TestService.TestServiceBase

Derived

[TestServiceImpl](#)

Inherited Members

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

Methods

EmptyCall(Empty, ServerCallContext)

One empty request followed by one empty response.

```
public virtual Task<Empty> EmptyCall(Empty request, ServerCallContext context)
```

Parameters

request [Empty](#)

The request received from the client.

context [ServerCallContext](#)

The context of the server-side call handler being invoked.

Returns

[Task](#) <Empty>

The response to send back to the client (wrapped by a task).

FullDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>, IServerStreamWriter<StreamingOutputCallResponse>, ServerCallContext)

A sequence of requests with each request served by the server immediately. As one request could lead to multiple responses, this interface demonstrates the idea of full duplexing.

```
public virtual Task FullDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>  
requestStream, IServerStreamWriter<StreamingOutputCallResponse> responseStream,  
ServerCallContext context)
```

Parameters

requestStream [IAsyncStreamReader](#)<[StreamingOutputCallRequest](#)>

Used for reading requests from the client.

responseStream [IServerStreamWriter](#)<[StreamingOutputCallResponse](#)>

Used for sending responses back to the client.

context [ServerCallContext](#)

The context of the server-side call handler being invoked.

Returns

[Task](#)

A task indicating completion of the handler.

HalfDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>, IServerStreamWriter<StreamingOutputCallResponse>, ServerCallContext)

A sequence of requests followed by a sequence of responses. The server buffers all the client requests and then serves them in order. A stream of responses are returned to the client when the server starts with first request.

```
public virtual Task HalfDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>
requestStream, IServerStreamWriter<StreamingOutputCallResponse> responseStream,
ServerCallContext context)
```

Parameters

`requestStream` [IAsyncStreamReader](#)<[StreamingOutputCallRequest](#)>

Used for reading requests from the client.

`responseStream` [IServerStreamWriter](#)<[StreamingOutputCallResponse](#)>

Used for sending responses back to the client.

`context` [ServerCallContext](#)

The context of the server-side call handler being invoked.

Returns

[Task](#)

A task indicating completion of the handler.

StreamingInputCall(IAsyncStreamReader<StreamingInputCallRequest>, ServerCallContext)

A sequence of requests followed by one response (streamed upload). The server returns the aggregated size of client payload as the result.

```
public virtual Task<StreamingInputCallResponse>
StreamingInputCall(IAsyncStreamReader<StreamingInputCallRequest> requestStream,
ServerCallContext context)
```

Parameters

requestStream [IAsyncStreamReader](#)<[StreamingInputCallRequest](#)>

Used for reading requests from the client.

context [ServerCallContext](#)

The context of the server-side call handler being invoked.

Returns

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

The response to send back to the client (wrapped by a task).

StreamingOutputCall(StreamingOutputCallRequest,
IStreamWriter<StreamingOutputCallResponse>,
ServerCallContext)

One request followed by a sequence of responses (streamed download). The server returns the payload with client desired type and sizes.

```
public virtual Task StreamingOutputCall(StreamingOutputCallRequest
request, IStreamWriter<StreamingOutputCallResponse> responseStream,
ServerCallContext context)
```

Parameters

request [StreamingOutputCallRequest](#)

The request received from the client.

responseStream [IStreamWriter](#)<[StreamingOutputCallResponse](#)>

Used for sending responses back to the client.

`context` [ServerCallContext](#)

The context of the server-side call handler being invoked.

Returns

[Task](#)

A task indicating completion of the handler.

UnaryCall(SimpleRequest, ServerCallContext)

One request followed by one response. The server returns the client payload as-is.

```
public virtual Task<SimpleResponse> UnaryCall(SimpleRequest request,  
ServerCallContext context)
```

Parameters

`request` [SimpleRequest](#)

The request received from the client.

`context` [ServerCallContext](#)

The context of the server-side call handler being invoked.

Returns

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

The response to send back to the client (wrapped by a task).

Class UnimplementedService

Namespace: [GrpCurl.Net.TestServer.Protos](#)

Assembly: GrpCurl.Net.TestServer.dll

A simple service NOT implemented at servers so clients can test for that case.

```
public static class UnimplementedService
```

Inheritance

[object](#) ← UnimplementedService

Inherited Members

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

Properties

Descriptor

Service descriptor

```
public static ServiceDescriptor Descriptor { get; }
```

Property Value

ServiceDescriptor

Methods

BindService(UnimplementedServiceBase)

Creates service definition that can be registered with a server

```
public static ServerServiceDefinition
```

```
BindService(UnimplementedService.UnimplementedServiceBase serviceImpl)
```

Parameters

serviceImpl [UnimplementedService.UnimplementedServiceBase](#)

An object implementing the server-side handling logic.

Returns

[ServerServiceDefinition](#)

BindService(ServiceBinderBase, UnimplementedServiceBase)

Register service method with a service binder with or without implementation. Useful when customizing the service binding logic. Note: this method is part of an experimental API that can change or be removed without any prior notice.

```
public static void BindService(ServiceBinderBase serviceBinder,  
    UnimplementedService.UnimplementedServiceBase serviceImpl)
```

Parameters

serviceBinder [ServiceBinderBase](#)

Service methods will be bound by calling [AddMethod](#) on this object.

serviceImpl [UnimplementedService.UnimplementedServiceBase](#)

An object implementing the server-side handling logic.

Class UnimplementedService. UnimplementedServiceBase

Namespace: [GrpCurl.Net.TestServer.Pros](#)

Assembly: GrpCurl.Net.TestServer.dll

Base class for server-side implementations of UnimplementedService

```
[BindServiceMethod(typeof(UnimplementedService), "BindService")]
public abstract class UnimplementedService.UnimplementedServiceBase
```

Inheritance

[object](#) ← UnimplementedService.UnimplementedServiceBase

Inherited Members

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

Methods

UnimplementedCall(Empty, ServerCallContext)

A call that no server should implement

```
public virtual Task<Empty> UnimplementedCall(Empty request,
ServerCallContext context)
```

Parameters

request [Empty](#)

The request received from the client.

context [ServerCallContext](#)

The context of the server-side call handler being invoked.

Returns

[Task](#) <Empty>

The response to send back to the client (wrapped by a task).

Namespace GrpCurl.Net.TestServer.Services

Classes

[MetadataConstants](#)

Metadata header constants for controlling test server behavior. These match the Go grpcurl test server implementation.

[MetadataProcessor](#)

Processes incoming metadata to extract test control headers.

[TestServiceImpl](#)

Implementation of TestService with metadata-driven behavior control. Mirrors the Go grpcurl test server for feature parity testing.

Class MetadataConstants

Namespace: [GrpCurl.Net.TestServer.Services](#)

Assembly: GrpCurl.Net.TestServer.dll

Metadata header constants for controlling test server behavior. These match the Go grpcurl test server implementation.

```
public static class MetadataConstants
```

Inheritance

[object](#) ← MetadataConstants

Inherited Members

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

Fields

DelayMs

Request header that, if present, adds a delay to the response in milliseconds. Useful for testing timeouts.

```
public const string DelayMs = "delay-ms"
```

Field Value

[string](#)

FailEarly

Request header that, if present and not zero, indicates that the RPC should fail immediately with that code.

```
public const string FailEarly = "fail-early"
```

Field Value

[string](#) ↗

FailLate

Request header that, if present and not zero, indicates that the RPC should fail at the end with that code. This is different from FailEarly only for streaming calls. An early failure means the call fails before any request stream is read or any response stream is generated. A late failure means the entire request and response streams will be consumed/processed and only then will the error code be sent.

```
public const string FailLate = "fail-late"
```

Field Value

[string](#) ↗

ReplyWithHeaders

Request header that contains values that will be echoed back to the client as response headers. The format of the value is "key: val". To have the server reply with more than one response header, supply multiple values in request metadata.

```
public const string ReplyWithHeaders = "reply-with-headers"
```

Field Value

[string](#) ↗

ReplyWithTrailers

Request header that contains values that will be echoed back to the client as response trailers. Its format is the same as ReplyWithHeaders.

```
public const string ReplyWithTrailers = "reply-with-trailers"
```

Field Value

[string](#) ↗

Class MetadataProcessor

Namespace: [GrpCurl.Net.TestServer.Services](#)

Assembly: GrpCurl.Net.TestServer.dll

Processes incoming metadata to extract test control headers.

```
public static class MetadataProcessor
```

Inheritance

[object](#) ← MetadataProcessor

Inherited Members

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

Methods

ProcessMetadata(ServerCallContext)

Processes incoming metadata and returns control values for test behavior.

```
public static (Metadata headers, Metadata trailers, StatusCode? failEarly,  
StatusCode? failLate, int delayMs) ProcessMetadata(ServerCallContext context)
```

Parameters

context [ServerCallContext](#)

Returns

([Metadata](#) [headers](#) , [Metadata](#) [trailers](#) , [StatusCode](#)? [failEarly](#) , [StatusCode](#)? [failLate](#) , [int](#) [delayMs](#))

SetResponseHeadersAsync(ServerCallContext, Metadata)

Sets response headers on the context.

```
public static Task SetResponseHeadersAsync(ServerCallContext context,  
Metadata headers)
```

Parameters

context [ServerCallContext](#)

headers [Metadata](#)

Returns

[Task](#)

SetResponseTrailers(ServerCallContext, Metadata)

Sets response trailers on the context.

```
public static void SetResponseTrailers(ServerCallContext context, Metadata trailers)
```

Parameters

context [ServerCallContext](#)

trailers [Metadata](#)

Class TestServiceImpl

Namespace: [GrpCurl.Net.TestServer.Services](#)

Assembly: GrpCurl.Net.TestServer.dll

Implementation of TestService with metadata-driven behavior control. Mirrors the Go grpcurl test server for feature parity testing.

```
public class TestServiceImpl : TestService.TestServiceBase
```

Inheritance

[object](#) ← [TestService.TestServiceBase](#) ← TestServiceImpl

Inherited Members

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

Methods

EmptyCall(Empty, ServerCallContext)

One empty request followed by one empty response.

```
public override Task<Empty> EmptyCall(Empty request, ServerCallContext context)
```

Parameters

request [Empty](#)

context [ServerCallContext](#)

Returns

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

**FullDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>,
IServerStreamWriter<StreamingOutputCallResponse>,
ServerCallContext)**

A sequence of requests with each request served by the server immediately. As one request could lead to multiple responses, this interface demonstrates the idea of full duplexing.

```
public override Task FullDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>  
requestStream, IServerStreamWriter<StreamingOutputCallResponse> responseStream,  
ServerCallContext context)
```

Parameters

requestStream [IAsyncStreamReader<StreamingOutputCallRequest>](#)

responseStream [IServerStreamWriter<StreamingOutputCallResponse>](#)

context [ServerCallContext](#)

Returns

[Task](#)

**HalfDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>,
IServerStreamWriter<StreamingOutputCallResponse>,
ServerCallContext)**

A sequence of requests followed by a sequence of responses. The server buffers all the client requests and then serves them in order. A stream of responses is returned to the client once the client half-closes the stream.

```
public override Task HalfDuplexCall(IAsyncStreamReader<StreamingOutputCallRequest>  
requestStream, IServerStreamWriter<StreamingOutputCallResponse> responseStream,  
ServerCallContext context)
```

Parameters

requestStream [IAsyncStreamReader](#)<[StreamingOutputCallRequest](#)>

responseStream [IServerStreamWriter](#)<[StreamingOutputCallResponse](#)>

context [ServerCallContext](#)

Returns

[Task](#)

StreamingInputCall(IAsyncStreamReader<StreamingInputCallRequest>, ServerCallContext)

A sequence of requests followed by one response (streamed upload). The server returns the aggregated size of client payloads as the result.

```
public override Task<StreamingInputCallResponse>
StreamingInputCall(IAsyncStreamReader<StreamingInputCallRequest> requestStream,
ServerCallContext context)
```

Parameters

requestStream [IAsyncStreamReader](#)<[StreamingInputCallRequest](#)>

context [ServerCallContext](#)

Returns

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

StreamingOutputCall(StreamingOutputCallRequest, IServerStreamWriter<StreamingOutputCallResponse>, ServerCallContext)

One request followed by a sequence of responses (streamed download). The server returns the payload with client desired type and sizes.

```
public override Task StreamingOutputCall(StreamingOutputCallRequest  
request, IServerStreamWriter<StreamingOutputCallResponse> responseStream,  
ServerCallContext context)
```

Parameters

request [StreamingOutputCallRequest](#)

responseStream [IServerStreamWriter](#)<[StreamingOutputCallResponse](#)>

context [ServerCallContext](#)

Returns

[Task](#)

UnaryCall(SimpleRequest, ServerCallContext)

One request followed by one response. The server returns the client payload as-is.

```
public override Task<SimpleResponse> UnaryCall(SimpleRequest request,  
ServerCallContext context)
```

Parameters

request [SimpleRequest](#)

context [ServerCallContext](#)

Returns

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

Namespace GrpcCurl.Net.Tests.Integration. DescriptorSources

Classes

[ReflectionSourceTests](#)

Integration tests for ReflectionSource against a real gRPC server with reflection enabled.

Class ReflectionSourceTests

Namespace: [GrpCurl.Net.Tests.Integration.DescriptorSources](#)

Assembly: GrpCurl.Net.Tests.Integration.dll

Integration tests for ReflectionSource against a real gRPC server with reflection enabled.

```
[Collection("GrpcServer")]
public class ReflectionSourceTests
```

Inheritance

[object](#) ← ReflectionSourceTests

Inherited Members

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

Constructors

ReflectionSourceTests(GrpcTestFixture)

```
public ReflectionSourceTests(GrpcTestFixture fixture)
```

Parameters

fixture [GrpcTestFixture](#)

Methods

FileDescriptorSet_AfterLoadingService_IsPopulated()

```
[Fact]
public Task FileDescriptorSet_AfterLoadingService_IsPopulated()
```

Returns

[Task ↗](#)

FindSymbolAsync_AllMessages_ReturnsCorrect Descriptors()

[Fact]

```
public Task FindSymbolAsync_AllMessages_ReturnsCorrectDescriptors()
```

Returns

[Task ↗](#)

FindSymbolAsync_AllMethodTypes_ReturnsCorrect Descriptors()

[Fact]

```
public Task FindSymbolAsync_AllMethodTypes_ReturnsCorrectDescriptors()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingEnum_ReturnsEnum Descriptor()

[Fact]

```
public Task FindSymbolAsync_ExistingEnum_ReturnsEnumDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingMessage_ReturnsMessageDescriptor()

[Fact]

```
public Task FindSymbolAsync_ExistingMessage_ReturnsMessageDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingMethod_ReturnsMethodDescriptor()

[Fact]

```
public Task FindSymbolAsync_ExistingMethod_ReturnsMethodDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingService_ReturnsServiceDescriptor()

[Fact]

```
public Task FindSymbolAsync_ExistingService_ReturnsServiceDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_FieldAccessedViaMessage_ReturnsFieldDescriptor()

```
[Fact]
public Task FindSymbolAsync_FieldAccessedViaMessage_ReturnsFieldDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_NonExistentService_ReturnsNull()

```
[Fact]
public Task FindSymbolAsync_NonExistentService_ReturnsNull()
```

Returns

[Task ↗](#)

FindSymbolAsync_SequentialCalls_AllSucceed()

```
[Fact]
public Task FindSymbolAsync_SequentialCalls_AllSucceed()
```

Returns

[Task ↗](#)

FindSymbolAsync_UnimplementedService_ReturnsServiceDescriptor()

```
[Fact]
public Task FindSymbolAsync_UnimplementedService_ReturnsServiceDescriptor()
```

Returns

[Task ↗](#)

ListServicesAsync_MultipleCallsReturnSameResults()

[Fact]

```
public Task ListServicesAsync_MultipleCallsReturnSameResults()
```

Returns

[Task](#)

ListServicesAsync_ReturnsAvailableServices()

[Fact]

```
public Task ListServicesAsync_ReturnsAvailableServices()
```

Returns

[Task](#)

ListServicesAsync_ReturnsReflectionService()

[Fact]

```
public Task ListServicesAsync_ReturnsReflectionService()
```

Returns

[Task](#)

ListServicesAsync_SequentialCalls_AllSucceed()

[Fact]

```
public Task ListServicesAsync_SequentialCalls_AllSucceed()
```

Returns

[Task](#)

ListServicesAsync_ServicesAreSorted()

```
[Fact]
public Task ListServicesAsync_ServicesAreSorted()
```

Returns

[Task](#)

ListServicesAsync_WithCancellation_ThrowsCanceledException()

```
[Fact]
public Task ListServicesAsync_WithCancellation_ThrowsCanceledException()
```

Returns

[Task](#)

Namespace GrpcCurl.Net.Tests.Integration.Fixtures

Classes

[GrpcServerCollection](#)

Collection definition for tests that share the gRPC server fixture.

[GrpcTestFixture](#)

Fixture that starts an in-process gRPC server for integration testing.

Class GrpcServerCollection

Namespace: [GrpCurl.Net.Tests.Integration.Fixtures](#)

Assembly: GrpCurl.Net.Tests.Integration.dll

Collection definition for tests that share the gRPC server fixture.

```
[CollectionDefinition("GrpcServer")]
public class GrpcServerCollection : ITestFixture<GrpcTestFixture>
```

Inheritance

[object](#) ← GrpcServerCollection

Implements

ITestFixture<[GrpcTestFixture](#)>

Inherited Members

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

Class GrpcTestFixture

Namespace: [GrpCurl.Net.Tests.Integration.Fixtures](#)

Assembly: GrpCurl.Net.Tests.Integration.dll

Fixture that starts an in-process gRPC server for integration testing.

```
public class GrpcTestFixture : IAsyncLifetime
```

Inheritance

[object](#) ← GrpcTestFixture

Implements

IAsyncLifetime

Inherited Members

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

Properties

Address

```
public string Address { get; }
```

Property Value

[string](#)

Port

```
public int Port { get; }
```

Property Value

Methods

DisposeAsync()

Called when an object is no longer needed. Called just before [Dispose\(\)↗](#) if the class also implements that.

```
public Task DisposeAsync()
```

Returns

[Task↗](#)

InitializeAsync()

Called immediately after the class has been created, before it is used.

```
public Task InitializeAsync()
```

Returns

[Task↗](#)

Namespace GrpCurl.Net.Tests.Integration.Invocation

Classes

[DynamicInvokerTests](#)

Integration tests for DynamicInvoker against a real gRPC server.

[StreamingScenarioTests](#)

Advanced streaming scenario tests for DynamicInvoker.

Class DynamicInvokerTests

Namespace: [GrpCurl.Net.Tests.Integration.Invocation](#)

Assembly: GrpCurl.Net.Tests.Integration.dll

Integration tests for DynamicInvoker against a real gRPC server.

```
[Collection("GrpcServer")]
public class DynamicInvokerTests
```

Inheritance

[object](#) ← DynamicInvokerTests

Inherited Members

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

Constructors

DynamicInvokerTests(GrpcTestFixture)

```
public DynamicInvokerTests(GrpcTestFixture fixture)
```

Parameters

fixture [GrpcTestFixture](#)

Methods

HalfDuplexCall_BuffersAllRequests_ThenResponds()

```
[Fact]
public Task HalfDuplexCall_BuffersAllRequests_ThenResponds()
```

Returns

[Task ↗](#)

InvokeClientStreamingAsync_EmptyRequests_ReturnsZeroSize()

[Fact]

```
public Task InvokeClientStreamingAsync_EmptyRequests_ReturnsZeroSize()
```

Returns

[Task ↗](#)

InvokeClientStreamingAsync_MultipleRequests_ReturnsCorrectTotal()

[Fact]

```
public Task InvokeClientStreamingAsync_MultipleRequests_ReturnsCorrectTotal()
```

Returns

[Task ↗](#)

InvokeClientStreamingAsync_SingleRequest_ReturnsAggregatedSize()

[Fact]

```
public Task InvokeClientStreamingAsync_SingleRequest_ReturnsAggregatedSize()
```

Returns

[Task ↗](#)

InvokeDuplexStreamingAsync_EmptyRequests_ReturnsNoResponses()

[Fact]

```
public Task InvokeDuplexStreamingAsync_EmptyRequests_ReturnsNoResponses()
```

Returns

[Task ↗](#)

InvokeDuplexStreamingAsync_MultipleRequests_ReturnsMultipleResponses()

[Fact]

```
public Task InvokeDuplexStreamingAsync_MultipleRequests_ReturnsMultipleResponses()
```

Returns

[Task ↗](#)

InvokeDuplexStreamingAsync_SingleRequest_ReturnsSingleResponse()

[Fact]

```
public Task InvokeDuplexStreamingAsync_SingleRequest_ReturnsSingleResponse()
```

Returns

[Task ↗](#)

InvokeServerStreamingAsync_EmptyResponseParameters_ReturnsNoMessages()

```
[Fact]
public Task InvokeServerStreamingAsync_EmptyResponseParameters_ReturnsNoMessages()
```

Returns

[Task ↗](#)

InvokeServerStreamingAsync_MultipleResponses_ReturnsAllMessages()

```
[Fact]
public Task InvokeServerStreamingAsync_MultipleResponses_ReturnsAllMessages()
```

Returns

[Task ↗](#)

InvokeServerStreamingAsync_ResponsesHavePayloads()

```
[Fact]
public Task InvokeServerStreamingAsync_ResponsesHavePayloads()
```

Returns

[Task ↗](#)

InvokeServerStreamingAsync_SingleResponse_ReturnsOneMessage()

```
[Fact]
public Task InvokeServerStreamingAsync_SingleResponse_ReturnsOneMessage()
```

Returns

[Task ↗](#)

InvokeUnaryAsync_EmptyCall_ReturnsEmptyResponse()

[Fact]

```
public Task InvokeUnaryAsync_EmptyCall_ReturnsEmptyResponse()
```

Returns

[Task ↗](#)

InvokeUnaryAsync_Uncall_ReturnsResponse()

[Fact]

```
public Task InvokeUnaryAsync_Uncall_ReturnsResponse()
```

Returns

[Task ↗](#)

InvokeUnaryAsync_WithCancellation_ThrowsCanceledException()

[Fact]

```
public Task InvokeUnaryAsync_WithCancellation_ThrowsCanceledException()
```

Returns

[Task ↗](#)

InvokeUnaryAsync_WithMetadata_SendsHeaders()

[Fact]

```
public Task InvokeUnaryAsync_WithMetadata_SendsHeaders()
```

Returns

[Task ↗](#)

InvokeUnaryAsync_WithPayload_ReturnsPayload InResponse()

[Fact]

```
public Task InvokeUnaryAsync_WithPayload_ReturnsPayloadInResponse()
```

Returns

[Task ↗](#)

Class StreamingScenarioTests

Namespace: [GrpCurl.Net.Tests.Integration.Invocation](#)

Assembly: GrpCurl.Net.Tests.Integration.dll

Advanced streaming scenario tests for DynamicInvoker.

```
[Collection("GrpcServer")]
public class StreamingScenarioTests
```

Inheritance

[object](#) ← StreamingScenarioTests

Inherited Members

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

Constructors

StreamingScenarioTests(GrpcTestFixture)

```
public StreamingScenarioTests(GrpcTestFixture fixture)
```

Parameters

fixture [GrpcTestFixture](#)

Methods

ClientStreaming_LargeNumberOfRequests_HandlesCorrectly()

```
[Fact]
public Task ClientStreaming_LargeNumberOfRequests_HandlesCorrectly()
```

Returns

[Task ↗](#)

ClientStreaming_PreCancelledToken_ThrowsImmediately()

[Fact]

```
public Task ClientStreaming_PreCancelledToken_ThrowsImmediately()
```

Returns

[Task ↗](#)

ClientStreaming_VariablePayloadSizes_AccumulatesCorrectly()

[Fact]

```
public Task ClientStreaming_VariablePayloadSizes_AccumulatesCorrectly()
```

Returns

[Task ↗](#)

ClientStreaming_WithMetadata_HeadersSent()

[Fact]

```
public Task ClientStreaming_WithMetadata_HeadersSent()
```

Returns

[Task ↗](#)

DuplexStreaming_ManyMessagesEachDirection_AllReceived()

[Fact]

```
public Task DuplexStreaming_ManyMessagesEachDirection_AllReceived()
```

Returns

[Task](#)

DuplexStreaming_MultipleResponsesPerRequest_AllReceived()

[Fact]

```
public Task DuplexStreaming_MultipleResponsesPerRequest_AllReceived()
```

Returns

[Task](#)

DuplexStreaming_PreCancelledToken_ThrowsImmediately()

[Fact]

```
public Task DuplexStreaming_PreCancelledToken_ThrowsImmediately()
```

Returns

[Task](#)

DuplexStreaming_WithMetadata_HeadersSent()

[Fact]

```
public Task DuplexStreaming_WithMetadata_HeadersSent()
```

Returns

[Task ↗](#)

ServerStreaming_CancellationDuringStream_StopsProcessing()

[Fact]

```
public Task ServerStreaming_CancellationDuringStream_StopsProcessing()
```

Returns

[Task ↗](#)

ServerStreaming_LargePayloadSizes_HandlesCorrectly()

[Fact]

```
public Task ServerStreaming_LargePayloadSizes_HandlesCorrectly()
```

Returns

[Task ↗](#)

ServerStreaming_PreCancelledToken_ThrowsImmediately()

[Fact]

```
public Task ServerStreaming_PreCancelledToken_ThrowsImmediately()
```

Returns

[Task ↗](#)

ServerStreaming_WithMetadata_HeadersSent()

[Fact]

```
public Task ServerStreaming_WithMetadata_HeadersSent()
```

Returns

[Task](#)

Namespace GrpCurl.Net.Tests.Unit.Commands

Classes

[CommandConstantsTests](#)

[DescribeCommandTests](#)

[InvokeCommandTests](#)

[ListCommandTests](#)

Class CommandConstantsTests

Namespace: [GrpCurl.Net.Tests.Unit.Commands](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

```
public class CommandConstantsTests
```

Inheritance

[object](#) ← CommandConstantsTests

Inherited Members

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

Methods

AllConstants_AreNotNull()

```
[Fact]  
public void AllConstants_AreNotNull()
```

CommandFailed_HasExpectedValue()

```
[Fact]  
public void CommandFailed_HasExpectedValue()
```

NetworkRoundTrip_HasExpectedValue()

```
[Fact]  
public void NetworkRoundTrip_HasExpectedValue()
```

RequestSerialisation_IsNotEmpty()

```
[Fact]
public void RequestSerialisation_IsNotEmpty()
```

ResponseDeserialization_HasExpectedValue()

```
[Fact]
public void ResponseDeserialization_HasExpectedValue()
```

Suggestions_ContainsSuggestionsWord()

```
[Fact]
public void Suggestions_ContainsSuggestionsWord()
```

Suggestions_StartsWithDimMarkup()

```
[Fact]
public void Suggestions_StartsWithDimMarkup()
```

Class DescribeCommandTests

Namespace: [GrpCurl.Net.Tests.Unit.Commands](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

```
public class DescribeCommandTests
```

Inheritance

[object](#) ← DescribeCommandTests

Inherited Members

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

Methods

Create_AddressArgument_IsOptional()

```
[Fact]  
public void Create_AddressArgument_IsOptional()
```

Create_HasAddressArgument()

```
[Fact]  
public void Create_HasAddressArgument()
```

Create_HasDescription()

```
[Fact]  
public void Create_HasDescription()
```

Create_HasMultipleOptions()

```
[Fact]
public void Create_HasMultipleOptions()
```

Create_HasSymbolArgument()

```
[Fact]
public void Create_HasSymbolArgument()
```

Create_HasTwoArguments()

```
[Fact]
public void Create_HasTwoArguments()
```

Create_ReturnsValidCommand()

```
[Fact]
public void Create_ReturnsValidCommand()
```

Create_SymbolArgument_IsOptional()

```
[Fact]
public void Create_SymbolArgument_IsOptional()
```

Class InvokeCommandTests

Namespace: [GrpCurl.Net.Tests.Unit.Commands](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

```
public class InvokeCommandTests
```

Inheritance

[object](#) ← InvokeCommandTests

Inherited Members

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

Methods

Create_AddressArgument_IsRequired()

[Fact]

```
public void Create_AddressArgument_IsRequired()
```

Create_HasAddressArgument()

[Fact]

```
public void Create_HasAddressArgument()
```

Create_HasDescription()

[Fact]

```
public void Create_HasDescription()
```

Create_HasMethodArgument()

```
[Fact]
public void Create_HasMethodArgument()
```

Create_HasMultipleOptions()

```
[Fact]
public void Create_HasMultipleOptions()
```

Create_HasTwoArguments()

```
[Fact]
public void Create_HasTwoArguments()
```

Create_MethodArgument_IsRequired()

```
[Fact]
public void Create_MethodArgument_IsRequired()
```

Create_ReturnsValidCommand()

```
[Fact]
public void Create_ReturnsValidCommand()
```

Class ListCommandTests

Namespace: [GrpCurl.Net.Tests.Unit.Commands](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

```
public class ListCommandTests
```

Inheritance

[object](#) ← ListCommandTests

Inherited Members

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

Methods

Create_AddressArgument_IsOptional()

[Fact]

```
public void Create_AddressArgument_IsOptional()
```

Create_HasAddressArgument()

[Fact]

```
public void Create_HasAddressArgument()
```

Create_HasDescription()

[Fact]

```
public void Create_HasDescription()
```

Create_HasMultipleOptions()

```
[Fact]
public void Create_HasMultipleOptions()
```

Create_HasServiceArgument()

```
[Fact]
public void Create_HasServiceArgument()
```

Create_HasTwoArguments()

```
[Fact]
public void Create_HasTwoArguments()
```

Create_ReturnsValidCommand()

```
[Fact]
public void Create_ReturnsValidCommand()
```

Create_ServiceArgument_IsOptional()

```
[Fact]
public void Create_ServiceArgument_IsOptional()
```

Namespace Grpc.CSharp.Tests.Unit. DescriptorSources

Classes

[ProtosetSourceTests](#)

Tests for ProtosetSource which loads descriptors from compiled FileDescriptorSet files.

Class ProtoSetSourceTests

Namespace: [GrpCurl.Net.Tests.Unit.DescriptorSources](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

Tests for ProtoSetSource which loads descriptors from compiled FileDescriptorSet files.

```
public class ProtoSetSourceTests
```

Inheritance

[object](#) ← ProtoSetSourceTests

Inherited Members

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

Constructors

ProtoSetSourceTests()

```
public ProtoSetSourceTests()
```

Methods

FileDescriptorSet_AfterLoading_IsPopulated()

[Fact]

```
public Task FileDescriptorSet_AfterLoading_IsPopulated()
```

Returns

[Task](#)

`FileDescriptorSet_ContainsAllProtoFiles()`

[Fact]

```
public Task FileDescriptorSet_ContainsAllProtoFiles()
```

Returns

[Task](#)

`FindSymbolAsync_AllMessages_ReturnsCorrect Descriptors()`

[Fact]

```
public Task FindSymbolAsync_AllMessages_ReturnsCorrectDescriptors()
```

Returns

[Task](#)

`FindSymbolAsync_AllMethodTypes_ReturnsCorrect Descriptors()`

[Fact]

```
public Task FindSymbolAsync_AllMethodTypes_ReturnsCorrectDescriptors()
```

Returns

[Task](#)

`FindSymbolAsync_CaseSensitive_ReturnsNull()`

[Fact]

```
public Task FindSymbolAsync_CaseSensitive_ReturnsNull()
```

Returns

[Task ↗](#)

FindSymbolAsync_ConcurrentCalls_AllSucceed()

[Fact]

```
public Task FindSymbolAsync_ConcurrentCalls_AllSucceed()
```

Returns

[Task ↗](#)

FindSymbolAsync_EmptyName_ReturnsNull()

[Fact]

```
public Task FindSymbolAsync_EmptyName_ReturnsNull()
```

Returns

[Task ↗](#)

FindSymbolAsync_EnumValue_ReturnsEnumValueDescriptor()

[Fact]

```
public Task FindSymbolAsync_EnumValue_ReturnsEnumValueDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingEnum_ReturnsEnumDescriptor()

```
[Fact]
public Task FindSymbolAsync_ExistingEnum_ReturnsEnumDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingField_ReturnsFieldDescriptor()

```
[Fact]
public Task FindSymbolAsync_ExistingField_ReturnsFieldDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingMessage_ReturnsMessageDescriptor()

```
[Fact]
public Task FindSymbolAsync_ExistingMessage_ReturnsMessageDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingMethod_ReturnsMethodDescriptor()

```
[Fact]
public Task FindSymbolAsync_ExistingMethod_ReturnsMethodDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_ExistingService_ReturnsServiceDescriptor()

[Fact]

```
public Task FindSymbolAsync_ExistingService_ReturnsServiceDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_NestedMessageField_ReturnsFieldDescriptor()

[Fact]

```
public Task FindSymbolAsync_NestedMessageField_ReturnsFieldDescriptor()
```

Returns

[Task ↗](#)

FindSymbolAsync_NonExistentService_ReturnsNull()

[Fact]

```
public Task FindSymbolAsync_NonExistentService_ReturnsNull()
```

Returns

[Task ↗](#)

FindSymbolAsync_PartialName_ReturnsNull()

```
[Fact]
public Task FindSymbolAsync_PartialName_ReturnsNull()
```

Returns

[Task](#)

FindSymbolAsync_RepeatedField_ReturnsFieldDescriptor()

```
[Fact]
public Task FindSymbolAsync_RepeatedField_ReturnsFieldDescriptor()
```

Returns

[Task](#)

FindSymbolAsync_WellKnownDuration_ReturnsDescriptor()

```
[Fact]
public Task FindSymbolAsync_WellKnownDuration_ReturnsDescriptor()
```

Returns

[Task](#)

FindSymbolAsync_WellKnownTimestamp_ReturnsDescriptor()

```
[Fact]
public Task FindSymbolAsync_WellKnownTimestamp_ReturnsDescriptor()
```

Returns

[Task ↗](#)

ListServicesAsync_ConcurrentCalls_AllSucceed()

[Fact]

```
public Task ListServicesAsync_ConcurrentCalls_AllSucceed()
```

Returns

[Task ↗](#)

ListServicesAsync_EmptyProtoset_ReturnsEmptyList()

[Fact]

```
public Task ListServicesAsync_EmptyProtoset_ReturnsEmptyList()
```

Returns

[Task ↗](#)

ListServicesAsync_MultipleCallsReturnSameResults()

[Fact]

```
public Task ListServicesAsync_MultipleCallsReturnSameResults()
```

Returns

[Task ↗](#)

ListServicesAsync_ServicesAreSorted()

[Fact]

```
public Task ListServicesAsync_ServicesAreSorted()
```

Returns

[Task ↗](#)

ListServicesAsync_ValidProtoset_ReturnsServices()

[Fact]

```
public Task ListServicesAsync_ValidProtoset_ReturnsServices()
```

Returns

[Task ↗](#)

LoadFromFileAsync_EmptyProtoset_LoadsSuccessfully()

[Fact]

```
public Task LoadFromFileAsync_EmptyProtoset_LoadsSuccessfully()
```

Returns

[Task ↗](#)

LoadFromFileAsync_InvalidProtoset_ThrowsException()

[Fact]

```
public Task LoadFromFileAsync_InvalidProtoset_ThrowsException()
```

Returns

[Task ↗](#)

LoadFromFileAsync_NonExistentFile_ThrowsFileNotFoundException()

```
[Fact]
public Task LoadFromFileAsync_NonExistentFile_ThrowsFileNotFoundException()
```

Returns

[Task](#)

LoadFromFileAsync_ValidProtoset_LoadsSuccessfully()

```
[Fact]
public Task LoadFromFileAsync_ValidProtoset_LoadsSuccessfully()
```

Returns

[Task](#)

LoadFromFileAsync_WellKnownTypes_LoadsSuccessfully()

```
[Fact]
public Task LoadFromFileAsync_WellKnownTypes_LoadsSuccessfully()
```

Returns

[Task](#)

LoadFromFileAsync_WithCancellationToken_RespectsCancellation()

```
[Fact]
public Task LoadFromFileAsync_WithCancellationToken_RespectsCancellation()
```

Returns

[Task ↗](#)

LoadFromFilesAsync_EmptyCollection_ReturnsEmptySource()

[Fact]

```
public Task LoadFromFilesAsync_EmptyCollection_ReturnsEmptySource()
```

Returns

[Task ↗](#)

LoadFromFilesAsync_MultipleProtosets_LoadsAll()

[Fact]

```
public Task LoadFromFilesAsync_MultipleProtosets_LoadsAll()
```

Returns

[Task ↗](#)

LoadFromFilesAsync_SingleFile_LoadsSuccessfully()

[Fact]

```
public Task LoadFromFilesAsync_SingleFile_LoadsSuccessfully()
```

Returns

[Task ↗](#)

MethodDescriptor_BidirectionalStreaming_HasCorrectProperties()

```
[Fact]
public Task MethodDescriptor_BidirectionalStreaming_HasCorrectProperties()
```

Returns

[Task](#)

MethodDescriptor_ClientStreaming_HasCorrectProperties()

```
[Fact]
public Task MethodDescriptor_ClientStreaming_HasCorrectProperties()
```

Returns

[Task](#)

MethodDescriptor_ServerStreaming_HasCorrectProperties()

```
[Fact]
public Task MethodDescriptor_ServerStreaming_HasCorrectProperties()
```

Returns

[Task](#)

MethodDescriptor_UnaryCall_HasCorrectProperties()

```
[Fact]
public Task MethodDescriptor_UnaryCall_HasCorrectProperties()
```

Returns

Task ↗

Namespace GrpcCurl.Net.Tests.Unit. Exceptions

Classes

[GrpcCommandExceptionTests](#)

Class GrpcCommandExceptionTests

Namespace: [GrpCurl.Net.Tests.Unit.Exceptions](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

```
public class GrpcCommandExceptionTests
```

Inheritance

[object](#) ← GrpcCommandExceptionTests

Inherited Members

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

Methods

Constructor_WithEmptyMessage_SetsMessage()

[Fact]

```
public void Constructor_WithEmptyMessage_SetsMessage()
```

Constructor_WithLargeExitCode_SetsExitCode()

[Fact]

```
public void Constructor_WithLargeExitCode_SetsExitCode()
```

Constructor_WithMessageAndExitCode_SetsProperties()

[Fact]

```
public void Constructor_WithMessageAndExitCode_SetsProperties()
```

Constructor_WithMessageOnly_SetsDefaultExitCode()

```
[Fact]
public void Constructor_WithMessageOnly_SetsDefaultExitCode()
```

Constructor_WithNegativeExitCode_SetsExitCode()

```
[Fact]
public void Constructor_WithNegativeExitCode_SetsExitCode()
```

Constructor_WithZeroExitCode_SetsExitCode()

```
[Fact]
public void Constructor_WithZeroExitCode_SetsExitCode()
```

ExitCode_CommonValues_AreSupported(int, string)

```
[Theory]
[InlineData(new object[] { 0, "Success" })]
[InlineData(new object[] { 1, "General error" })]
[InlineData(new object[] { 64, "RPC base code" })]
[InlineData(new object[] { 130, "User cancellation (Ctrl+C)" })]
public void ExitCode_CommonValues_AreSupported(int exitCode, string description)
```

Parameters

exitCode [int](#)

description [string](#)

ExitCode_RpcStatusCodes_CanBeEncoded()

```
[Fact]
public void ExitCode_RpcStatusCodes_CanBeEncoded()
```

GrpcCommandException_CanBeCaught_AsException()

[Fact]

```
public void GrpcCommandException_CanBeCaught_AsException()
```

GrpcCommandException_InheritsFromException()

[Fact]

```
public void GrpcCommandException_InheritsFromException()
```

Namespace Grpc.CSharp.Tests.Unit.Fixtures

Classes

[TestDescriptorProvider](#)

Provides message descriptors for unit testing by loading protoset files.

Class TestDescriptorProvider

Namespace: [GrpCurl.Net.Tests.Unit.Fixtures](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

Provides message descriptors for unit testing by loading protoset files.

```
public static class TestDescriptorProvider
```

Inheritance

[object](#) ← TestDescriptorProvider

Inherited Members

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

Properties

AvailableMessageTypes

Lists all available message types in the test protoset.

```
public static IEnumerable<string> AvailableMessageTypes { get; }
```

Property Value

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

Empty

Gets the Empty message descriptor for testing.

```
public static MessageDescriptor Empty { get; }
```

Property Value

MessageDescriptor

Payload

Gets the Payload message descriptor for testing.

```
public static MessageDescriptor Payload { get; }
```

Property Value

MessageDescriptor

ResponseParameters

Gets the ResponseParameters message descriptor for testing.

```
public static MessageDescriptor ResponseParameters { get; }
```

Property Value

MessageDescriptor

SimpleRequest

Gets the SimpleRequest message descriptor for testing.

```
public static MessageDescriptor SimpleRequest { get; }
```

Property Value

MessageDescriptor

SimpleResponse

Gets the SimpleResponse message descriptor for testing.

```
public static MessageDescriptor SimpleResponse { get; }
```

Property Value

MessageDescriptor

StreamingOutputCallRequest

Gets the StreamingOutputCallRequest message descriptor for testing.

```
public static MessageDescriptor StreamingOutputCallRequest { get; }
```

Property Value

MessageDescriptor

Methods

GetMessageDescriptor(string)

Gets a message descriptor by full name from the test protoset.

```
public static MessageDescriptor GetMessageDescriptor(string fullName)
```

Parameters

fullName [string](#)

Returns

MessageDescriptor

GetWellKnownTypeDescriptor(string)

Gets a message descriptor for a well-known type.

```
public static MessageDescriptor GetWellKnownTypeDescriptor(string fullName)
```

Parameters

fullName [string](#)

Returns

MessageDescriptor

Namespace GrpCurl.Net.Tests.Unit. Invocation Classes

[ProtobufReaderWriterTests](#)

Tests for ProtobufReader and ProtobufWriter which handle binary protobuf serialization and deserialization for SimpleDynamicMessage.

[SimpleDynamicMessageTests](#)

Comprehensive tests for SimpleDynamicMessage covering all field types, JSON parsing, serialization, and edge cases.

[WellKnownTypeHandlerTests](#)

Tests for WellKnownTypeHandler which handles conversion of Google protobuf well-known types between JSON and protobuf formats.

Class ProtobufReaderWriterTests

Namespace: [GrpCurl.Net.Tests.Unit.Invocation](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

Tests for ProtobufReader and ProtobufWriter which handle binary protobuf serialization and deserialization for SimpleDynamicMessage.

```
public class ProtobufReaderWriterTests
```

Inheritance

[object](#) ← ProtobufReaderWriterTests

Inherited Members

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

Methods

CalculateSize_EmptyMessage_ReturnsZero()

[Fact]

```
public void CalculateSize_EmptyMessage_ReturnsZero()
```

CalculateSize_WithNestedMessage_CalculatesCorrectly()

[Fact]

```
public void CalculateSize_WithNestedMessage_CalculatesCorrectly()
```

CalculateSize_WithRepeatedField_CalculatesCorrectly()

```
[Fact]
public void CalculateSize_WithRepeatedField_CalculatesCorrectly()
```

CalculateSize_WithScalarFields_CalculatesCorrectly()

```
[Fact]
public void CalculateSize_WithScalarFields_CalculatesCorrectly()
```

MergeFrom_EmptyInput_ReturnsEmptyMessage()

```
[Fact]
public void MergeFrom_EmptyInput_ReturnsEmptyMessage()
```

MergeFrom_NestedMessage_ReadsCorrectly()

```
[Fact]
public void MergeFrom_NestedMessage_ReadsCorrectly()
```

MergeFrom_RepeatedMessageField_ReadsCorrectly()

```
[Fact]
public void MergeFrom_RepeatedMessageField_ReadsCorrectly()
```

MergeFrom_UnknownField_SkipsCorrectly()

```
[Fact]
public void MergeFrom_UnknownField_SkipsCorrectly()
```

MergeFrom_ValidBool_ReadsCorrectly()

```
[Fact]
public void MergeFrom_ValidBool_ReadsCorrectly()
```

MergeFrom_ValidInt32_ReadsCorrectly()

```
[Fact]
public void MergeFrom_ValidInt32_ReadsCorrectly()
```

MergeFrom_ValidString_ReadsCorrectly()

```
[Fact]
public void MergeFrom_ValidString_ReadsCorrectly()
```

RoundTrip_AllScalarTypes_Succeeds()

```
[Fact]
public void RoundTrip_AllScalarTypes_Succeeds()
```

RoundTrip_ComplexMessage_Succeeds()

```
[Fact]
public void RoundTrip_ComplexMessage_Succeeds()
```

RoundTrip_EmptyMessage_Succeeds()

```
[Fact]
public void RoundTrip_EmptyMessage_Succeeds()
```

RoundTrip_LargeByteArray_Succeeds()

```
[Fact]
public void RoundTrip_LargeByteArray_Succeeds()
```

RoundTrip_MessageWithRepeatedField_Succeeds()

```
[Fact]
public void RoundTrip_MessageWithRepeatedField_Succeeds()
```

RoundTrip_MultipleNestedLevels_Succeeds()

```
[Fact]
public void RoundTrip_MultipleNestedLevels_Succeeds()
```

RoundTrip_NegativeIntegers_Succeeds(int)

```
[Theory]
[InlineData(new object[] { -1 })]
[InlineData(new object[] { -127 })]
[InlineData(new object[] { -128 })]
[InlineData(new object[] { -16383 })]
[InlineData(new object[] { -2097151 })]
public void RoundTrip_NegativeIntegers_Succeeds(int value)
```

Parameters

value [int](#)

RoundTrip_VariousVarintSizes_Succeeds(int)

```
[Theory]
[InlineData(new object[] { 0 })]
[InlineData(new object[] { 1 })]
[InlineData(new object[] { 127 })]
[InlineData(new object[] { 128 })]
```

```
[InlineData(new object[] { 16383 })]
[InlineData(new object[] { 16384 })]
[InlineData(new object[] { 2097151 })]
[InlineData(new object[] { 2097152 })]
public void RoundTrip_VariousVarintSizes_Succeeds(int value)
```

Parameters

value [int](#)

WriteTo_BoolField_SerializesCorrectly(bool)

```
[Theory]
[InlineData(new object[] { true })]
[InlineData(new object[] { false })]
public void WriteTo_BoolField_SerializesCorrectly(bool value)
```

Parameters

value [bool](#)

WriteTo_BytesField_SerializesCorrectly()

```
[Fact]
public void WriteTo_BytesField_SerializesCorrectly()
```

WriteTo_DeeplyNestedMessage_SerializesCorrectly()

```
[Fact]
public void WriteTo_DeeplyNestedMessage_SerializesCorrectly()
```

WriteTo_EmptyBytesField_SerializesCorrectly()

```
[Fact]
```

```
public void WriteTo_EmptyBytesField_SerializesCorrectly()
```

WriteTo_EmptyRepeatedField_SerializesCorrectly()

[Fact]

```
public void WriteTo_EmptyRepeatedField_SerializesCorrectly()
```

WriteTo_EnumField_SerializesCorrectly(int)

[Theory]

```
[InlineData(new object[] { 0 })]
```

```
[InlineData(new object[] { 1 })]
```

```
[InlineData(new object[] { 2 })]
```

```
public void WriteTo_EnumField_SerializesCorrectly(int enumValue)
```

Parameters

enumValue [int](#)

WriteTo_Int32Field_SerializesCorrectly(int)

[Theory]

```
[InlineData(new object[] { 0 })]
```

```
[InlineData(new object[] { 42 })]
```

```
[InlineData(new object[] { -100 })]
```

```
[InlineData(new object[] { 2147483647 })]
```

```
[InlineData(new object[] { -2147483648 })]
```

```
public void WriteTo_Int32Field_SerializesCorrectly(int value)
```

Parameters

value [int](#)

WriteTo_NestedMessage_SerializesCorrectly()

```
[Fact]
public void WriteTo_NestedMessage_SerializesCorrectly()
```

WriteTo_NullFieldValue_SkipsField()

```
[Fact]
public void WriteTo_NullFieldValue_SkipsField()
```

WriteTo_RepeatedMessageField_SerializesCorrectly()

```
[Fact]
public void WriteTo_RepeatedMessageField_SerializesCorrectly()
```

WriteTo_StringField_SerializesCorrectly(string)

```
[Theory]
[InlineData(new object[] { "" })]
[InlineData(new object[] { "hello" })]
[InlineData(new object[] { "hello world with special chars: éàü" })]
[InlineData(new object[] { "unicode: \u00f6" })]
public void WriteTo_StringField_SerializesCorrectly(string value)
```

Parameters

value [string](#)

Class SimpleDynamicMessageTests

Namespace: [GrpCurl.Net.Tests.Unit.Invocation](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

Comprehensive tests for SimpleDynamicMessage covering all field types, JSON parsing, serialization, and edge cases.

```
public class SimpleDynamicMessageTests
```

Inheritance

[object](#) ← SimpleDynamicMessageTests

Inherited Members

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

Methods

CalculateSize_EmptyMessage_ReturnsZero()

```
[Fact]  
public void CalculateSize_EmptyMessage_ReturnsZero()
```

CalculateSize_MatchesActualWrittenSize()

```
[Fact]  
public void CalculateSize_MatchesActualWrittenSize()
```

CalculateSize_WithFields_ReturnsCorrectSize()

```
[Fact]  
public void CalculateSize_WithFields_ReturnsCorrectSize()
```

Constructor_WithDescriptor_CreatesEmptyMessage()

```
[Fact]
```

```
public void Constructor_WithDescriptor_CreatesEmptyMessage()
```

Constructor_WithEmptyJson_CreatesEmptyMessage()

```
[Fact]
```

```
public void Constructor_WithEmptyJson_CreatesEmptyMessage()
```

Constructor_WithNullJson_CreatesEmptyMessage()

```
[Fact]
```

```
public void Constructor_WithNullJson_CreatesEmptyMessage()
```

Descriptor_ReturnsCorrectDescriptor()

```
[Fact]
```

```
public void Descriptor_ReturnsCorrectDescriptor()
```

ParseJson_BooleanField_ParsesFalse()

```
[Fact]
```

```
public void ParseJson_BooleanField_ParsesFalse()
```

ParseJson_BooleanField_ParsesTrue()

```
[Fact]
```

```
public void ParseJson_BooleanField_ParsesTrue()
```

ParseJson_BytesField_Base64_ParsesCorrectly()

```
[Fact]
public void ParseJson_BytesField_Base64_ParsesCorrectly()
```

ParseJson_BytesField_EmptyString_ParsesAsEmpty()

```
[Fact]
public void ParseJson_BytesField_EmptyString_ParsesAsEmpty()
```

ParseJson_CaseInsensitive_ParsesCorrectly()

```
[Fact]
public void ParseJson_CaseInsensitive_ParsesCorrectly()
```

ParseJson_EnumField_NumericValue_ParsesCorrectly()

```
[Fact]
public void ParseJson_EnumField_NumericValue_ParsesCorrectly()
```

ParseJson_EnumField_StringName_ParsesCorrectly()

```
[Fact]
public void ParseJson_EnumField_StringName_ParsesCorrectly()
```

ParseJson_EnumField_UnknownName_ThrowsException()

```
[Fact]
public void ParseJson_EnumField_UnknownName_ThrowsException()
```

ParseJson_Int32Field_ParsesCorrectly()

```
[Fact]
public void ParseJson_Int32Field_ParsesCorrectly()
```

ParseJson_InvalidJsonSyntax_ThrowsException()

```
[Fact]
public void ParseJson_InvalidJsonSyntax_ThrowsException()
```

ParseJson_JsonName_ParsesCorrectly()

```
[Fact]
public void ParseJson_JsonName_ParsesCorrectly()
```

ParseJson_NestedMessage_ParsesCorrectly()

```
[Fact]
public void ParseJson_NestedMessage_ParsesCorrectly()
```

ParseJson_NotAnObject_ThrowsException()

```
[Fact]
public void ParseJson_NotAnObject_ThrowsException()
```

ParseJson_NullNestedMessage_ParsesAsNull()

```
[Fact]
public void ParseJson_NullNestedMessage_ParsesAsNull()
```

ParseJson_ProtoName_ParsesCorrectly()

```
[Fact]  
public void ParseJson_ProtoName_ParsesCorrectly()
```

ParseJson_RepeatedField_EmptyArray_ParsesCorrectly()

```
[Fact]  
public void ParseJson_RepeatedField_EmptyArray_ParsesCorrectly()
```

ParseJson_RepeatedField_MultipleElements_Parses Correctly()

```
[Fact]  
public void ParseJson_RepeatedField_MultipleElements_ParsesCorrectly()
```

ParseJson_RepeatedField_NullElement_Throws Exception()

```
[Fact]  
public void ParseJson_RepeatedField_NullElement_ThrowsException()
```

ParseJson_RepeatedField_SingleElement_Parses Correctly()

```
[Fact]  
public void ParseJson_RepeatedField_SingleElement_ParsesCorrectly()
```

ParseJson_UnknownField_AllowUnknownFalse_Throws Exception()

```
[Fact]
public void ParseJson_UnknownField_AllowUnknownFalse_ThrowsException()
```

ParseJson_UnknownField_AllowUnknownTrue_SkipsField()

```
[Fact]
public void ParseJson_UnknownField_AllowUnknownTrue_SkipsField()
```

RoundTrip_NestedMessage_PreservesData()

```
[Fact]
public void RoundTrip_NestedMessage_PreservesData()
```

RoundTrip_RepeatedField_PreservesData()

```
[Fact]
public void RoundTrip_RepeatedField_PreservesData()
```

RoundTrip_SimpleMessage_PreservesData()

```
[Fact]
public void RoundTrip_SimpleMessage_PreservesData()
```

ToJson_BoolField_SerializesCorrectly()

```
[Fact]
public void ToJson_BoolField_SerializesCorrectly()
```

ToJson_BytesField_SerializesAsBase64()

```
[Fact]
public void ToJson_BytesField_SerializesAsBase64()
```

ToJson_EmptyMessage_ReturnsEmptyObject()

```
[Fact]
public void ToJson_EmptyMessage_ReturnsEmptyObject()
```

ToJson_EnumField_SerializesAsString()

```
[Fact]
public void ToJson_EnumField_SerializesAsString()
```

ToJson_Int32Field_SerializesCorrectly()

```
[Fact]
public void ToJson_Int32Field_SerializesCorrectly()
```

ToJson_NestedMessage_SerializesCorrectly()

```
[Fact]
public void ToJson_NestedMessage_SerializesCorrectly()
```

ToJson_RepeatedField_SerializesAsArray()

```
[Fact]
public void ToJson_RepeatedField_SerializesAsArray()
```

UnknownFields_Property_ReturnsCollectedUnknownFields()

[Fact]

```
public void UnknownFields_Property_ReturnsCollectedUnknownFields()
```

Class WellKnownTypeHandlerTests

Namespace: [GrpCurl.Net.Tests.Unit.Invocation](#)

Assembly: GrpCurl.Net.Tests.Unit.dll

Tests for WellKnownTypeHandler which handles conversion of Google protobuf well-known types between JSON and protobuf formats.

```
public class WellKnownTypeHandlerTests
```

Inheritance

[object](#) ← WellKnownTypeHandlerTests

Inherited Members

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

Methods

ConvertAny_EmptyObject_ReturnsEmptyMessage()

[Fact]

```
public void ConvertAny_EmptyObject_ReturnsEmptyMessage()
```

ConvertAny_NonObjectValue_ReturnsNull()

[Fact]

```
public void ConvertAny_NonObjectValue_ReturnsNull()
```

ConvertAny_ValidObject_ParsesTypeUrl()

[Fact]

```
public void ConvertAny_ValidObject_ParsesTypeUrl()
```

ConvertAny_WithEmbeddedFields_SerializesValue()

```
[Fact]
public void ConvertAny_WithEmbeddedFields_SerializesValue()
```

ConvertDuration_EmptyString_ReturnsNull()

```
[Fact]
public void ConvertDuration_EmptyString_ReturnsNull()
```

ConvertDuration_ExcessivePrecision_TruncatesCorrectly(string)

```
[Theory]
[InlineData(new object[] { "1.123456789012s" })]
public void ConvertDuration_ExcessivePrecision_TruncatesCorrectly(string duration)
```

Parameters

duration [string ↗](#)

ConvertDuration_InvalidNumber_ReturnsNull()

```
[Fact]
public void ConvertDuration_InvalidNumber_ReturnsNull()
```

ConvertDuration_MissingSuffix_ReturnsNull()

```
[Fact]
public void ConvertDuration_MissingSuffix_ReturnsNull()
```

ConvertDuration_NonStringValue_ReturnsNull()

[Fact]

```
public void ConvertDuration_NonStringValue_ReturnsNull()
```

ConvertDuration_ValidFormat_ParsesCorrectly(string, long, int)

[Theory]

```
[InlineData(new object[] { "10s", 10, 0 })]  
[InlineData(new object[] { "1.5s", 1, 500000000 })]  
[InlineData(new object[] { "0s", 0, 0 })]  
[InlineData(new object[] { "3600s", 3600, 0 })]  
[InlineData(new object[] { "1.000000001s", 1, 1 })]  
[InlineData(new object[] { "0.123456789s", 0, 123456789 })]  
public void ConvertDuration_ValidFormat_ParsesCorrectly(string duration, long  
expectedSeconds, int expectedNanos)
```

Parameters

duration [string](#)

expectedSeconds [long](#)

expectedNanos [int](#)

ConvertEmpty_ReturnsEmptyMessage()

[Fact]

```
public void ConvertEmpty_ReturnsEmptyMessage()
```

ConvertFieldMask_EmptyString_ReturnsEmptyMessage()

[Fact]

```
public void ConvertFieldMask_EmptyString_ReturnsEmptyMessage()
```

ConvertFieldMask_NonStringValue_ReturnsNull()

```
[Fact]
public void ConvertFieldMask_NonStringValue_ReturnsNull()
```

ConvertFieldMask_ValidPaths_ParsesCorrectly(string, string[])

```
[Theory]
[InlineData(new object[] { "name,email,age", new string[] { "name", "email", "age" } })]
[InlineData(new object[] { "user.name", new string[] { "user.name" } })]
[InlineData(new object[] { "field1", new string[] { "field1" } })]
public void ConvertFieldMask_ValidPaths_ParsesCorrectly(string fieldMask,
string[] expectedPaths)
```

Parameters

fieldMask [string](#)

expectedPaths [string](#)[]

ConvertFieldMask_WithWhitespace_TrimsCorrectly()

```
[Fact]
public void ConvertFieldMask_WithWhitespace_TrimsCorrectly()
```

ConvertListValue_EmptyArray_ReturnsEmptyList()

```
[Fact]
public void ConvertListValue_EmptyArray_ReturnsEmptyList()
```

ConvertListValue_NestedArrays_ParsesCorrectly()

```
[Fact]
public void ConvertListValue_NestedArrays_ParsesCorrectly()
```

ConvertListValue_NonArrayValue_ReturnsNull()

```
[Fact]
public void ConvertListValue_NonArrayValue_ReturnsNull()
```

ConvertListValue_ValidArray_ParsesCorrectly()

```
[Fact]
public void ConvertListValue_ValidArray_ParsesCorrectly()
```

ConvertStruct_EmptyObject_ReturnsEmptyMessage()

```
[Fact]
public void ConvertStruct_EmptyObject_ReturnsEmptyMessage()
```

ConvertStruct_NestedObjects_ParsesCorrectly()

```
[Fact]
public void ConvertStruct_NestedObjects_ParsesCorrectly()
```

ConvertStruct_NonObjectValue_ReturnsNull()

```
[Fact]
public void ConvertStruct_NonObjectValue_ReturnsNull()
```

ConvertStruct_ValidObject_ParsesCorrectly()

```
[Fact]
public void ConvertStruct_ValidObject_ParsesCorrectly()
```

ConvertTimestamp_EmptyString_ReturnsNull()

```
[Fact]
public void ConvertTimestamp_EmptyString_ReturnsNull()
```

ConvertTimestamp_InvalidDateFormat_ReturnsNull()

```
[Fact]
public void ConvertTimestamp_InvalidDateFormat_ReturnsNull()
```

ConvertTimestamp_LocalTime_ConvertsToUtc()

```
[Fact]
public void ConvertTimestamp_LocalTime_ConvertsToUtc()
```

ConvertTimestamp_NonStringValue_ReturnsNull()

```
[Fact]
public void ConvertTimestamp_NonStringValue_ReturnsNull()
```

ConvertTimestamp_ValidRfc3339_Parses Correctly(string, long, int)

```
[Theory]
[InlineData(new object[] { "2024-01-15T10:30:00Z", 1705314600, 0 })]
[InlineData(new object[] { "2024-01-15T10:30:00.123Z", 1705314600, 123000000 })]
[InlineData(new object[] { "2024-01-15T10:30:00.123456789Z", 1705314600,
123456789 })]
[InlineData(new object[] { "1970-01-01T00:00:00Z", 0, 0 })]
```

```
[InlineData(new object[] { "2000-01-01T00:00:00Z", 946684800, 0 })]  
public void ConvertTimestamp_ValidRfc3339_ParsesCorrectly(string timestamp, long  
expectedSeconds, int expectedNanos)
```

Parameters

timestamp [string](#)

expectedSeconds [long](#)

expectedNanos [int](#)

ConvertValue_ArrayValue_CreatesListValue()

[Fact]

```
public void ConvertValue_ArrayValue_CreatesListValue()
```

ConvertValue_BooleanValue_ParsesCorrectly(string, bool)

[Theory]

```
[InlineData(new object[] { "true", true })]  
[InlineData(new object[] { "false", false })]
```

```
public void ConvertValue_BooleanValue_ParsesCorrectly(string jsonValue, bool expected)
```

Parameters

jsonValue [string](#)

expected [bool](#)

ConvertValue_NullValue_ParsesCorrectly()

[Fact]

```
public void ConvertValue_NullValue_ParsesCorrectly()
```

ConvertValue_NumberValue_ParsesCorrectly(string, double)

```
[Theory]
[InlineData(new object[] { "42", 42 })]
[InlineData(new object[] { "3.14", 3.14 })]
[InlineData(new object[] { "-100", -100 })]
[InlineData(new object[] { "0", 0 })]
public void ConvertValue_NumberValue_ParsesCorrectly(string jsonValue,
double expected)
```

Parameters

jsonValue [string](#)

expected [double](#)

ConvertValue_ObjectValueCreatesStructValue()

```
[Fact]
public void ConvertValue_ObjectValueCreatesStructValue()
```

ConvertValue_StringValue_ParsesCorrectly(string, string)

```
[Theory]
[InlineData(new object[] { "\"hello\"", "hello" })]
[InlineData(new object[] { "\"\"", "" })]
public void ConvertValue_StringValue_ParsesCorrectly(string jsonValue,
string expected)
```

Parameters

jsonValue [string](#)

expected [string](#)

ConvertValue_TracksOneofField()

[Fact]

```
public void ConvertValue_TracksOneofField()
```

ConvertWrapperType_BooleanValue_ParsesCorrectly(string, string, bool)

[Theory]

```
[InlineData(new object[] { "google.protobuf.BoolValue", "true", true })]
[InlineData(new object[] { "google.protobuf.BoolValue", "false", false })]
public void ConvertWrapperType_BooleanValue_ParsesCorrectly(string typeName, string
jsonValue, bool expected)
```

Parameters

typeName [string](#)

jsonValue [string](#)

expected [bool](#)

ConvertWrapperType_BytesValue_ParsesCorrectly(string, string)

[Theory]

```
[InlineData(new object[] { "google.protobuf.BytesValue", "\"SGVsbG8=\"", })
public void ConvertWrapperType_BytesValue_ParsesCorrectly(string typeName,
string jsonValue)
```

Parameters

typeName [string](#)

jsonValue [string](#)

ConvertWrapperType_DoubleValue_ParsesCorrectly(string, string)

```
[Theory]
[InlineData(new object[] { "google.protobuf.DoubleValue", "3.141592653589793" })]
[InlineData(new object[] { "google.protobuf.DoubleValue", "-1e10" })]
public void ConvertWrapperType_DoubleValue_ParsesCorrectly(string typeName,
    string jsonValue)
```

Parameters

typeName [string](#)

jsonValue [string](#)

ConvertWrapperType_FloatValue_ParsesCorrectly(string, string)

```
[Theory]
[InlineData(new object[] { "google.protobuf.FloatValue", "3.14" })]
[InlineData(new object[] { "google.protobuf.FloatValue", "-0.5" })]
[InlineData(new object[] { "google.protobuf.FloatValue", "0" })]
public void ConvertWrapperType_FloatValue_ParsesCorrectly(string typeName,
    string jsonValue)
```

Parameters

typeName [string](#)

jsonValue [string](#)

ConvertWrapperType_Int32Value_ParsesCorrectly(string, string, int)

```
[Theory]
[InlineData(new object[] { "google.protobuf.Int32Value", "42", 42 })]
[InlineData(new object[] { "google.protobuf.Int32Value", "-100", -100 })]
[InlineData(new object[] { "google.protobuf.Int32Value", "0", 0 })]
```

```
public void ConvertWrapperType_Int32Value_ParsesCorrectly(string typeName, string jsonValue, int expected)
```

Parameters

typeName [string](#)

jsonValue [string](#)

expected [int](#)

ConvertWrapperType_Int64Value_ParsesCorrectly(string, string)

[Theory]

```
[InlineData(new object[] { "google.protobuf.Int64Value", "9223372036854775807" })]
[InlineData(new object[] { "google.protobuf.Int64Value", "-9223372036854775808" })]
public void ConvertWrapperType_Int64Value_ParsesCorrectly(string typeName,
string jsonValue)
```

Parameters

typeName [string](#)

jsonValue [string](#)

ConvertWrapperType_StringValue_ParsesCorrectly(string, string, string)

[Theory]

```
[InlineData(new object[] { "google.protobuf.StringValue", "\"hello world\"", "hello
world" })]
[InlineData(new object[] { "google.protobuf.StringValue", "\"\"", "" })]
[InlineData(new object[] { "google.protobuf.StringValue", "\"unicode: \u00e9\"", "
unicode: é" })]
public void ConvertWrapperType_StringValue_ParsesCorrectly(string typeName, string
jsonValue, string expected)
```

Parameters

typeName [string](#)

jsonValue [string](#)

expected [string](#)

ConvertWrapperType_UInt32Value_Parses Correctly(string, string)

[Theory]

```
[InlineData(new object[] { "google.protobuf.UInt32Value", "4294967295" })]
```

```
[InlineData(new object[] { "google.protobuf.UInt32Value", "0" })]
```

```
public void ConvertWrapperType_UInt32Value_ParsesCorrectly(string typeName,  
string jsonValue)
```

Parameters

typeName [string](#)

jsonValue [string](#)

ConvertWrapperType_UInt64Value_Parses Correctly(string, string)

[Theory]

```
[InlineData(new object[] { "google.protobuf.UInt64Value", "18446744073709551615" })]
```

```
public void ConvertWrapperType_UInt64Value_ParsesCorrectly(string typeName,  
string jsonValue)
```

Parameters

typeName [string](#)

jsonValue [string](#)

WriteAnyJson_EmptyMessage_WritesEmptyObject()

```
[Fact]
public void WriteAnyJson_EmptyMessage_WritesEmptyObject()
```

WriteAnyJson_WithUrlIncludesTypeField()

```
[Fact]
public void WriteAnyJson_WithUrlIncludesTypeField()
```

WriteAnyJson_WithValueIncludesEmbeddedFields()

```
[Fact]
public void WriteAnyJson_WithValueIncludesEmbeddedFields()
```

WriteDurationJson_PreciseNanos_FormatsCorrectly()

```
[Fact]
public void WriteDurationJson_PreciseNanos_FormatsCorrectly()
```

WriteDurationJson_WholeSeconds_FormatsCorrectly(long, int, string)

```
[Theory]
[InlineData(new object[] { 10, 0, "\"10s\"" })]
[InlineData(new object[] { 0, 0, "\"0s\"" })]
[InlineData(new object[] { 3600, 0, "\"3600s\"" })]
public void WriteDurationJson_WholeSeconds_FormatsCorrectly(long seconds, int nanos,
string expected)
```

Parameters

seconds [long](#)

nanos [int](#)

expected [string](#)

WriteDurationJson_WithNanos_IncludesFractional()

[Fact]

```
public void WriteDurationJson_WithNanos_IncludesFractional()
```

WriteEmptyJson_WritesEmptyObject()

[Fact]

```
public void WriteEmptyJson_WritesEmptyObject()
```

WriteFieldMaskJson_EmptyPaths_WritesEmptyString()

[Fact]

```
public void WriteFieldMaskJson_EmptyPaths_WritesEmptyString()
```

WriteFieldMaskJson_MultiplePaths_WritesCommaSeparated()

[Fact]

```
public void WriteFieldMaskJson_MultiplePaths_WritesCommaSeparated()
```

WriteFieldMaskJson_SinglePath_WritesAsString()

[Fact]

```
public void WriteFieldMaskJson_SinglePath_WritesAsString()
```

WriteJsonValue_EmptyArray_WritesEmptyArray()

```
[Fact]
```

```
public void WriteJsonValue_EmptyArray_WritesEmptyArray()
```

WriteJsonValue_NoValuesField_WritesEmptyArray()

```
[Fact]
```

```
public void WriteJsonValue_NoValuesField_WritesEmptyArray()
```

WriteJsonValue_NullValues_WritesNullElements()

```
[Fact]
```

```
public void WriteJsonValue_NullValues_WritesNullElements()
```

WriteJsonValue_ValidArray_WritesJsonArray()

```
[Fact]
```

```
public void WriteJsonValue_ValidArray_WritesJsonArray()
```

WriteStructJson_EmptyStruct_WritesEmptyObject()

```
[Fact]
```

```
public void WriteStructJson_EmptyStruct_WritesEmptyObject()
```

WriteStructJson_ValidStruct_WritesObject()

```
[Fact]
```

```
public void WriteStructJson_ValidStruct_WritesObject()
```

WriteTimestampJson_Epoch_FormatsCorrectly()

```
[Fact]
public void WriteTimestampJson_Epoch_FormatsCorrectly()
```

WriteTimestampJson_ValidTimestamp_FormatsAsRfc3339()

```
[Fact]
public void WriteTimestampJson_ValidTimestamp_FormatsAsRfc3339()
```

WriteTimestampJson_WithNanos_IncludesFractionalSeconds()

```
[Fact]
public void WriteTimestampJson_WithNanos_IncludesFractionalSeconds()
```

WriteValueJson_BooleanFalse_WritesFalse()

```
[Fact]
public void WriteValueJson_BooleanFalse_WritesFalse()
```

WriteValueJson_BooleanTrue_WritesTrue()

```
[Fact]
public void WriteValueJson_BooleanTrue_WritesTrue()
```

WriteValueJson_EmptyMessage_WritesNull()

```
[Fact]
```

```
public void WriteValueJson_EmptyMessage_WritesNull()
```

WriteValueJson_NullValue_WritesNull()

[Fact]

```
public void WriteValueJson_NullValue_WritesNull()
```

WriteValueJson_NumberValue_WritesNumber()

[Fact]

```
public void WriteValueJson_NumberValue_WritesNumber()
```

WriteValueJson_StringValue_WritesQuotedString()

[Fact]

```
public void WriteValueJson_StringValue_WritesQuotedString()
```

WriteWrapperJson_BoolValue_WritesTrueOrFalse()

[Fact]

```
public void WriteWrapperJson_BoolValue_WritesTrueOrFalse()
```

WriteWrapperJson_Int32Value_WritesRawValue()

[Fact]

```
public void WriteWrapperJson_Int32Value_WritesRawValue()
```

WriteWrapperJson_MissingValue_WritesNull()

```
[Fact]
```

```
public void WriteWrapperJson_MissingValue_WritesNull()
```

WriteWrapperJson_StringValue_WritesQuotedString()

```
[Fact]
```

```
public void WriteWrapperJson_StringValue_WritesQuotedString()
```

Namespace GrpcCurl.Net.Tests.Unit.Utilities

Classes

[GrpcChannelFactoryTests](#)

Tests for GrpcChannelFactory utility methods including duration parsing, size parsing, metadata creation, and channel configuration.

Class GrpcChannelFactoryTests

Namespace: [GrpcCurl.Net.Tests.Unit.Utilities](#)

Assembly: GrpcCurl.Net.Tests.Unit.dll

Tests for GrpcChannelFactory utility methods including duration parsing, size parsing, metadata creation, and channel configuration.

```
public class GrpcChannelFactoryTests
```

Inheritance

[object](#) ← GrpcChannelFactoryTests

Inherited Members

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

Methods

ChannelOptions_AllPropertiesSettable()

```
[Fact]  
public void ChannelOptions_AllPropertiesSettable()
```

ChannelOptions_DefaultValues()

```
[Fact]  
public void ChannelOptions_DefaultValues()
```

CreateMetadata_CustomUserAgent_OverridesDefault()

```
[Fact]  
public void CreateMetadata_CustomUserAgent_OverridesDefault()
```

CreateMetadata_EmptyEnvironmentVariable_Expands()

```
[Fact]
```

```
public void CreateMetadata_EmptyEnvironmentVariable_Expands()
```

CreateMetadata_EmptyHeaders_ReturnsDefaultUserAgent()

```
[Fact]
```

```
public void CreateMetadata_EmptyHeaders_ReturnsDefaultUserAgent()
```

CreateMetadata_ExpandsEnvironmentVariable()

```
[Fact]
```

```
public void CreateMetadata_ExpandsEnvironmentVariable()
```

CreateMetadata_HeaderTrimsWhitespace()

```
[Fact]
```

```
public void CreateMetadata_HeaderTrimsWhitespace()
```

CreateMetadata_HeaderWithColonInValue_ParsesCorrectly()

```
[Fact]
```

```
public void CreateMetadata_HeaderWithColonInValue_ParsesCorrectly()
```

CreateMetadata_InvalidHeaderFormat_ThrowsException()

```
[Fact]
public void CreateMetadata_InvalidHeaderFormat_ThrowsException()
```

CreateMetadata_MissingEnvironmentVariable_ThrowsException()

```
[Fact]
public void CreateMetadata_MissingEnvironmentVariable_ThrowsException()
```

CreateMetadata_MultipleEnvironmentVariables()

```
[Fact]
public void CreateMetadata_MultipleEnvironmentVariables()
```

CreateMetadata_MultipleHeaders_ParsesCorrectly()

```
[Fact]
public void CreateMetadata_MultipleHeaders_ParsesCorrectly()
```

CreateMetadata_NullHeaders_ReturnsDefaultUserAgent()

```
[Fact]
public void CreateMetadata_NullHeaders_ReturnsDefaultUserAgent()
```

CreateMetadata_SingleHeader_ParsesCorrectly()

```
[Fact]
public void CreateMetadata_SingleHeader_ParsesCorrectly()
```

CreateMetadata_WhitespaceHeader_IsSkipped()

```
[Fact]
public void CreateMetadata_WhitespaceHeader_IsSkipped()
```

Create_WithHttpScheme_CreatesChannel()

```
[Fact]
public void Create_WithHttpScheme_CreatesChannel()
```

Create_WithHttpsScheme_CreatesChannel()

```
[Fact]
public void Create_WithHttpsScheme_CreatesChannel()
```

Create_WithNullOptions_UsesDefaults()

```
[Fact]
public void Create_WithNullOptions_UsesDefaults()
```

Create_WithPlaintextOption_CreatesChannel()

```
[Fact]
public void Create_WithPlaintextOption_CreatesChannel()
```

Create_WithoutScheme_CreatesChannel()

```
[Fact]
public void Create_WithoutScheme_CreatesChannel()
```

ParseDuration_Decimal_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1.5s", 1500 })]
[InlineData(new object[] { "0.5s", 500 })]
[InlineData(new object[] { "1.5m", 90000 })]
[InlineData(new object[] { "0.5h", 1800000 })]
public void ParseDuration_Decimal_ParsesCorrectly(string input, int expectedMs)
```

Parameters

input [string](#)

expectedMs [int](#)

ParseDuration_EmptyString_ThrowsException(string)

```
[Theory]
[InlineData(new object[] { "" })]
[InlineData(new object[] { " " })]
public void ParseDuration_EmptyString_ThrowsException(string input)
```

Parameters

input [string](#)

ParseDuration_Hours_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1h", 3600000 })]
[InlineData(new object[] { "2h", 7200000 })]
public void ParseDuration_Hours_ParsesCorrectly(string input, int expectedMs)
```

Parameters

input [string](#)

expectedMs [int](#)

ParseDuration_InvalidFormat_ThrowsException(string)

```
[Theory]
[InlineData(new object[] { "abc" })]
[InlineData(new object[] { "10x" })]
[InlineData(new object[] { "s10" })]
[InlineData(new object[] { "10 seconds" })]
public void ParseDuration_InvalidFormat_ThrowsException(string input)
```

Parameters

input [string](#)

ParseDuration_Milliseconds_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "500ms", 500 })]
[InlineData(new object[] { "1ms", 1 })]
[InlineData(new object[] { "1000ms", 1000 })]
[InlineData(new object[] { "0ms", 0 })]
public void ParseDuration_Milliseconds_ParsesCorrectly(string input, int expectedMs)
```

Parameters

input [string](#)

expectedMs [int](#)

ParseDuration_Minutes_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1m", 60000 })]
[InlineData(new object[] { "5m", 300000 })]
[InlineData(new object[] { "0m", 0 })]
public void ParseDuration_Minutes_ParsesCorrectly(string input, int expectedMs)
```

Parameters

input `string`

expectedMs `int`

ParseDuration_PlainNumber_DefaultsToSeconds(string, int)

```
[Theory]
[InlineData(new object[] { "10", 10000 })]
[InlineData(new object[] { "1", 1000 })]
[InlineData(new object[] { "0", 0 })]
public void ParseDuration_PlainNumber_DefaultsToSeconds(string input,
    int expectedMs)
```

Parameters

input `string`

expectedMs `int`

ParseDuration_Seconds_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "10s", 10000 })]
[InlineData(new object[] { "1s", 1000 })]
[InlineData(new object[] { "0s", 0 })]
[InlineData(new object[] { "100s", 100000 })]
public void ParseDuration_Seconds_ParsesCorrectly(string input, int expectedMs)
```

Parameters

input `string`

expectedMs `int`

ParseSize_Decimal_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1.5MB", 1572864 })]
[InlineData(new object[] { "0.5KB", 512 })]
public void ParseSize_Decimal_ParsesCorrectly(string input, int expectedBytes)
```

Parameters

input [string](#)

expectedBytes [int](#)

ParseSize_EmptyString_ThrowsException(string)

```
[Theory]
[InlineData(new object[] { "" })]
[InlineData(new object[] { " " })]
public void ParseSize_EmptyString_ThrowsException(string input)
```

Parameters

input [string](#)

ParseSize_ExplicitBytes_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1B", 1 })]
[InlineData(new object[] { "100B", 100 })]
[InlineData(new object[] { "1024B", 1024 })]
public void ParseSize_ExplicitBytes_ParsesCorrectly(string input, int expectedBytes)
```

Parameters

input [string](#)

expectedBytes [int](#)

ParseSize_Gigabytes_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1GB", 1073741824 })]
[InlineData(new object[] { "1gb", 1073741824 })]
public void ParseSize_Gigabytes_ParsesCorrectly(string input, int expectedBytes)
```

Parameters

input [string](#)

expectedBytes [int](#)

ParseSize_InvalidFormat.ThrowsException(string)

```
[Theory]
[InlineData(new object[] { "abc" })]
[InlineData(new object[] { "10TB" })]
[InlineData(new object[] { "MB10" })]
public void ParseSize_InvalidFormat.ThrowsException(string input)
```

Parameters

input [string](#)

ParseSize_Kilobytes_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1KB", 1024 })]
[InlineData(new object[] { "10KB", 10240 })]
[InlineData(new object[] { "1kb", 1024 })]
public void ParseSize_Kilobytes_ParsesCorrectly(string input, int expectedBytes)
```

Parameters

input [string](#)

expectedBytes [int](#)

ParseSize_Megabytes_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1MB", 1048576 })]
[InlineData(new object[] { "4MB", 4194304 })]
[InlineData(new object[] { "10MB", 10485760 })]
[InlineData(new object[] { "1mb", 1048576 })]
public void ParseSize_Megabytes_ParsesCorrectly(string input, int expectedBytes)
```

Parameters

input [string](#)

expectedBytes [int](#)

ParseSize_Overflow_ThrowsException()

```
[Fact]
public void ParseSize_Overflow_ThrowsException()
```

ParseSize_PlainBytes_ParsesCorrectly(string, int)

```
[Theory]
[InlineData(new object[] { "1024", 1024 })]
[InlineData(new object[] { "0", 0 })]
[InlineData(new object[] { "100", 100 })]
public void ParseSize_PlainBytes_ParsesCorrectly(string input, int expectedBytes)
```

Parameters

input [string](#)

expectedBytes [int](#)

Namespace Grpc.Reflection.V1Alpha

Classes

[ErrorResponse](#)

The error code and error message sent by the server when an error occurs.

[ExtensionNumberResponse](#)

A list of extension numbers sent by the server answering all_extension_numbers_of_type request.

[ExtensionRequest](#)

The type name and extension number sent by the client when requesting file_containing_extension.

[FileDescriptorResponse](#)

Serialized FileDescriptorProto messages sent by the server answering a file_by_filename, file_containing_symbol, or file_containing_extension request.

[ListServiceResponse](#)

A list of ServiceResponse sent by the server answering list_services request.

[ReflectionReflection](#)

Holder for reflection information generated from Protos/reflection.proto

[ServerReflection](#)

[ServerReflection.ServerReflectionClient](#)

Client for ServerReflection

[ServerReflectionRequest](#)

The message sent by the client when calling ServerReflectionInfo method.

[ServerReflectionResponse](#)

The message sent by the server to answer ServerReflectionInfo method.

[ServiceResponse](#)

The information of a single service used by ListServiceResponse to answer list_services request.

Enums

[ServerReflectionRequest.MessageRequestOneofCase](#)

Enum of possible cases for the "message_request" oneof.

[ServerReflectionResponse.MessageResponseOneofCase](#)

Enum of possible cases for the "message_response" oneof.

Class ErrorResponse

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

The error code and error message sent by the server when an error occurs.

```
public sealed class ErrorResponse : IMessage<ErrorResponse>,
IEquatable<ErrorResponse>, IDeepCloneable<ErrorResponse>, IBufferMessage, IMessage
```

Inheritance

[object](#) ← ErrorResponse

Implements

IMessage<[ErrorResponse](#)>, [IEquatable](#)<[ErrorResponse](#)>,
IDeepCloneable<[ErrorResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ErrorResponse()

```
public ErrorResponse()
```

ErrorResponse(ErrorResponse)

```
public ErrorResponse(ErrorResponse other)
```

Parameters

other [ErrorResponse](#)

Fields

ErrorCodeFieldNumber

Field number for the "error_code" field.

```
public const int ErrorCodeFieldNumber = 1
```

Field Value

[int](#)

ErrorMessageFieldNumber

Field number for the "error_message" field.

```
public const int ErrorMessageFieldNumber = 2
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

ErrorCode

This field uses the error codes defined in grpc::StatusCode.

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

Property Value

[int](#)

ErrorMessage

```
public string ErrorMessage { get; set; }
```

Property Value

[string](#)

Parser

```
public static MessageParser<ErrorResponse> Parser { get; }
```

Property Value

[MessageParser<ErrorResponse>](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public ErrorResponse Clone()
```

Returns

[ErrorResponse](#)

A deep clone of this object.

Equals(ErrorResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ErrorResponse other)
```

Parameters

other [ErrorResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the *other* parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

[other object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

[input](#) CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(ErrorResponse)

Merges the given message into this one.

```
public void MergeFrom(ErrorResponse other)
```

Parameters

other [ErrorResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class ExtensionNumberResponse

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

A list of extension numbers sent by the server answering all_extension_numbers_of_type request.

```
public sealed class ExtensionNumberResponse : IMessage<ExtensionNumberResponse>,
IEquatable<ExtensionNumberResponse>, IDeepCloneable<ExtensionNumberResponse>,
IBufferMessage, IMessage
```

Inheritance

[object](#) ← ExtensionNumberResponse

Implements

IMessage<[ExtensionNumberResponse](#)>, IEquatable<[ExtensionNumberResponse](#)>,
IDeepCloneable<[ExtensionNumberResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ExtensionNumberResponse()

```
public ExtensionNumberResponse()
```

ExtensionNumberResponse(ExtensionNumberResponse)

```
public ExtensionNumberResponse(ExtensionNumberResponse other)
```

Parameters

other [ExtensionNumberResponse](#)

Fields

BaseTypeNameFieldNumber

Field number for the "base_type_name" field.

```
public const int BaseTypeNameFieldNumber = 1
```

Field Value

[int](#)

ExtensionNumberFieldNumber

Field number for the "extension_number" field.

```
public const int ExtensionNumberFieldNumber = 2
```

Field Value

[int](#)

Properties

BaseTypeName

Full name of the base type, including the package name. The format is <package>.<type>

```
public string BaseTypeName { get; set; }
```

Property Value

[string](#)

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

ExtensionNumber

```
public RepeatedField<int> ExtensionNumber { get; }
```

Property Value

RepeatedField<[int](#)>

Parser

```
public static MessageParser<ExtensionNumberResponse> Parser { get; }
```

Property Value

MessageParser<[ExtensionNumberResponse](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public ExtensionNumberResponse Clone()
```

Returns

[ExtensionNumberResponse](#)

A deep clone of this object.

Equals(ExtensionNumberResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ExtensionNumberResponse other)
```

Parameters

other [ExtensionNumberResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(ExtensionNumberResponse)

Merges the given message into this one.

```
public void MergeFrom(ExtensionNumberResponse other)
```

Parameters

other [ExtensionNumberResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class ExtensionRequest

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

The type name and extension number sent by the client when requesting file_containing_extension.

```
public sealed class ExtensionRequest : IMessage<ExtensionRequest>,
IEquatable<ExtensionRequest>, IDeepCloneable<ExtensionRequest>,
IBufferMessage, IMessage
```

Inheritance

[object](#) ← ExtensionRequest

Implements

IMessage<[ExtensionRequest](#)>, IEquatable<[ExtensionRequest](#)>,
IDeepCloneable<[ExtensionRequest](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ExtensionRequest()

```
public ExtensionRequest()
```

ExtensionRequest(ExtensionRequest)

```
public ExtensionRequest(ExtensionRequest other)
```

Parameters

other [ExtensionRequest](#)

Fields

ContainingTypeFieldNumber

Field number for the "containing_type" field.

```
public const int ContainingTypeFieldNumber = 1
```

Field Value

[int](#)

ExtensionNumberFieldNumber

Field number for the "extension_number" field.

```
public const int ExtensionNumberFieldNumber = 2
```

Field Value

[int](#)

Properties

ContainingType

Fully-qualified type name. The format should be <package>. <type>

```
public string ContainingType { get; set; }
```

Property Value

[string](#)

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

ExtensionNumber

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

Property Value

[int](#)

Parser

```
public static MessageParser<ExtensionRequest> Parser { get; }
```

Property Value

MessageParser<[ExtensionRequest](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public ExtensionRequest Clone()
```

Returns

[ExtensionRequest](#)

A deep clone of this object.

Equals(ExtensionRequest)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ExtensionRequest other)
```

Parameters

other [ExtensionRequest](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(ExtensionRequest)

Merges the given message into this one.

```
public void MergeFrom(ExtensionRequest other)
```

Parameters

other [ExtensionRequest](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class FileDescriptorResponse

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

Serialized FileDescriptorProto messages sent by the server answering a file_by_filename, file_containing_symbol, or file_containing_extension request.

```
public sealed class FileDescriptorResponse : IMessage<FileDescriptorResponse>,  
IEquatable<FileDescriptorResponse>, IDeepCloneable<FileDescriptorResponse>,  
IBufferMessage, IMessage
```

Inheritance

[object](#) ← FileDescriptorResponse

Implements

IMessage<[FileDescriptorResponse](#)>, IEquatable<[FileDescriptorResponse](#)>,
IDeepCloneable<[FileDescriptorResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

FileDescriptorResponse()

```
public FileDescriptorResponse()
```

FileDescriptorResponse(FileDescriptorResponse)

```
public FileDescriptorResponse(FileDescriptorResponse other)
```

Parameters

other [FileDescriptorResponse](#)

Fields

FileDescriptorProtoFieldNumber

Field number for the "file_descriptor_proto" field.

```
public const int FileDescriptorProtoFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

FileDescriptorProto

Serialized FileDescriptorProto messages. We avoid taking a dependency on descriptor.proto, which uses proto2 only features, by making them opaque bytes instead.

```
public RepeatedField<ByteString> FileDescriptorProto { get; }
```

Property Value

RepeatedField<ByteString>

Parser

```
public static MessageParser<FileDescriptorResponse> Parser { get; }
```

Property Value

MessageParser<[FileDescriptorResponse](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public FileDescriptorResponse Clone()
```

Returns

[FileDescriptorResponse](#)

A deep clone of this object.

Equals(FileDescriptorResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(FileDescriptorResponse other)
```

Parameters

other [FileDescriptorResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the `other` parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(FileDescriptorResponse)

Merges the given message into this one.

```
public void MergeFrom(FileDescriptorResponse other)
```

Parameters

other [FileDescriptorResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class ListServiceResponse

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

A list of ServiceResponse sent by the server answering list_services request.

```
public sealed class ListServiceResponse : IMessage<ListServiceResponse>,
IEquatable<ListServiceResponse>, IDeepCloneable<ListServiceResponse>,
IBufferMessage, IMessage
```

Inheritance

[object](#) ← ListServiceResponse

Implements

IMessage<[ListServiceResponse](#)>, [IEquatable](#)<[ListServiceResponse](#)>,
IDeepCloneable<[ListServiceResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ListServiceResponse()

```
public ListServiceResponse()
```

ListServiceResponse(ListServiceResponse)

```
public ListServiceResponse(ListServiceResponse other)
```

Parameters

other [ListServiceResponse](#)

Fields

ServiceFieldNumber

Field number for the "service" field.

```
public const int ServiceFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Parser

```
public static MessageParser<ListServiceResponse> Parser { get; }
```

Property Value

MessageParser<[ListServiceResponse](#)>

Service

The information of each service may be expanded in the future, so we use ServiceResponse message to encapsulate it.

```
public RepeatedField<ServiceResponse> Service { get; }
```

Property Value

RepeatedField<[ServiceResponse](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public ListServiceResponse Clone()
```

Returns

[ListServiceResponse](#)

A deep clone of this object.

Equals(ListServiceResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ListServiceResponse other)
```

Parameters

other [ListServiceResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the `other` parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(ListServiceResponse)

Merges the given message into this one.

```
public void MergeFrom(ListServiceResponse other)
```

Parameters

other [ListServiceResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Class ReflectionReflection

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpcCurl.Net.dll

Holder for reflection information generated from Protos/reflection.proto

```
public static class ReflectionReflection
```

Inheritance

[object](#) ← ReflectionReflection

Inherited Members

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

Properties

Descriptor

File descriptor for Protos/reflection.proto

```
public static FileDescriptor Descriptor { get; }
```

Property Value

FileDescriptor

Class ServerReflection

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpcCurl.Net.dll

```
public static class ServerReflection
```

Inheritance

[object](#) ← ServerReflection

Inherited Members

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

Properties

Descriptor

Service descriptor

```
public static ServiceDescriptor Descriptor { get; }
```

Property Value

ServiceDescriptor

Class ServerReflection.ServerReflectionClient

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

Client for ServerReflection

```
public class ServerReflection.ServerReflectionClient :  
ClientBase<ServerReflection.ServerReflectionClient>
```

Inheritance

[object](#) ← [ClientBase](#) ← [ClientBase](#)<[ServerReflection.ServerReflectionClient](#)> ←
ServerReflection.ServerReflectionClient

Inherited Members

[ClientBase<ServerReflection.ServerReflectionClient>.WithHost\(string\)](#) ,
[ClientBase.CallInvoker](#) , [object.Equals\(object\)](#) , [object.Equals\(object, object\)](#) ,
[object.GetHashCode\(\)](#) , [object.GetType\(\)](#) , [object.MemberwiseClone\(\)](#) ,
[object.ReferenceEquals\(object, object\)](#) , [object.ToString\(\)](#)

Constructors

ServerReflectionClient()

Protected parameterless constructor to allow creation of test doubles.

```
protected ServerReflectionClient()
```

ServerReflectionClient(CallInvoker)

Creates a new client for ServerReflection that uses a custom [CallInvoker](#).

```
public ServerReflectionClient(CallInvoker callInvoker)
```

Parameters

callInvoker [CallInvoker](#)

The callInvoker to use to make remote calls.

ServerReflectionClient(ChannelBase)

Creates a new client for ServerReflection

```
public ServerReflectionClient(ChannelBase channel)
```

Parameters

channel [ChannelBase](#)

The channel to use to make remote calls.

ServerReflectionClient(ClientBaseConfiguration)

Protected constructor to allow creation of configured clients.

```
protected ServerReflectionClient(ClientBase.ClientBaseConfiguration configuration)
```

Parameters

configuration [ClientBase](#).[ClientBaseConfiguration](#)

The client configuration.

Methods

NewInstance(ClientBaseConfiguration)

Creates a new instance of client from given [ClientBaseConfiguration](#).

```
protected override ServerReflection.ServerReflectionClient
```

```
NewInstance(ClientBase.ClientBaseConfiguration configuration)
```

Parameters

configuration [ClientBase.ClientBaseConfiguration](#)

Returns

[ServerReflection.ServerReflectionClient](#)

ServerReflectionInfo(CallOptions)

The reflection service is structured as a bidirectional stream, ensuring all related requests go to a single server.

```
public virtual AsyncDuplexStreamingCall<ServerReflectionRequest,  
ServerReflectionResponse> ServerReflectionInfo(CallOptions options)
```

Parameters

options [CallOptions](#)

The options for the call.

Returns

[AsyncDuplexStreamingCall](#)<ServerReflectionRequest, ServerReflectionResponse>

The call object.

ServerReflectionInfo(Metadata, DateTime?, Cancellation Token)

The reflection service is structured as a bidirectional stream, ensuring all related requests go to a single server.

```
public virtual AsyncDuplexStreamingCall<ServerReflectionRequest,  
ServerReflectionResponse> ServerReflectionInfo(Metadata headers = null, DateTime?
```

```
deadline = null, CancellationToken cancellationToken = default)
```

Parameters

headers [Metadata](#)?

The initial metadata to send with the call. This parameter is optional.

deadline [DateTime](#)?

An optional deadline for the call. The call will be cancelled if deadline is hit.

cancellationToken [CancellationToken](#)?

An optional token for canceling the call.

Returns

[AsyncDuplexStreamingCall](#)<ServerReflectionRequest, ServerReflectionResponse>

The call object.

Class ServerReflectionRequest

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpcCurl.Net.dll

The message sent by the client when calling ServerReflectionInfo method.

```
public sealed class ServerReflectionRequest : IMessage<ServerReflectionRequest>,  
IEquatable<ServerReflectionRequest>, IDeepCloneable<ServerReflectionRequest>,  
IBufferMessage, IMessage
```

Inheritance

[object](#) ← ServerReflectionRequest

Implements

IMessage<[ServerReflectionRequest](#)>, IEquatable<[ServerReflectionRequest](#)>,
IDeepCloneable<[ServerReflectionRequest](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ServerReflectionRequest()

```
public ServerReflectionRequest()
```

ServerReflectionRequest(ServerReflectionRequest)

```
public ServerReflectionRequest(ServerReflectionRequest other)
```

Parameters

other [ServerReflectionRequest](#)

Fields

AllExtensionNumbersOfTypeFieldNumber

Field number for the "all_extension_numbers_of_type" field.

```
public const int AllExtensionNumbersOfTypeFieldNumber = 6
```

Field Value

[int](#)

FileByFilenameFieldNumber

Field number for the "file_by_filename" field.

```
public const int FileByFilenameFieldNumber = 3
```

Field Value

[int](#)

FileContainingExtensionFieldNumber

Field number for the "file_containing_extension" field.

```
public const int FileContainingExtensionFieldNumber = 5
```

Field Value

[int](#)

FileContainingSymbolFieldNumber

Field number for the "file_containing_symbol" field.

```
public const int FileContainingSymbolFieldNumber = 4
```

Field Value

[int ↗](#)

HostFieldNumber

Field number for the "host" field.

```
public const int HostFieldNumber = 1
```

Field Value

[int ↗](#)

ListServicesFieldNumber

Field number for the "list_services" field.

```
public const int ListServicesFieldNumber = 7
```

Field Value

[int ↗](#)

Properties

AllExtensionNumbersOfType

Finds the tag numbers used by all known extensions of the given message type, and appends them to ExtensionNumberResponse in an undefined order. Its corresponding method is best-effort: it's not guaranteed that the reflection service will implement this method, and it's not guaranteed that this method will provide all extensions. Returns StatusCode::UNIMPLEMENTED if it's not implemented. This field should be a fully-qualified type name. The format is <package>.<type>

```
public string AllExtensionNumbersOfType { get; set; }
```

Property Value

[string](#)

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

FileByFilename

Find a proto file by the file name.

```
public string FileByFilename { get; set; }
```

Property Value

[string](#)

FileContainingExtension

Find the proto file which defines an extension extending the given message type with the given field number.

```
public ExtensionRequest FileContainingExtension { get; set; }
```

Property Value

[ExtensionRequest](#)

FileContainingSymbol

Find the proto file that declares the given fully-qualified symbol name. This field should be a fully-qualified symbol name (e.g. <package>.<service>[.<method>] or <package>.<type>).

```
public string FileContainingSymbol { get; set; }
```

Property Value

[string](#)

HasAllExtensionNumbersOfType

Gets whether the "all_extension_numbers_of_type" field is set

```
public bool HasAllExtensionNumbersOfType { get; }
```

Property Value

[bool](#)

HasFileByFilename

Gets whether the "file_by_filename" field is set

```
public bool HasFileByFilename { get; }
```

Property Value

[bool](#)

HasFileContainingSymbol

Gets whether the "file_containing_symbol" field is set

```
public bool HasFileContainingSymbol { get; }
```

Property Value

[bool](#) ↗

HasListServices

Gets whether the "list_services" field is set

```
public bool HasListServices { get; }
```

Property Value

[bool](#) ↗

Host

```
public string Host { get; set; }
```

Property Value

[string](#) ↗

ListServices

List the full names of registered services. The content will not be checked.

```
public string ListServices { get; set; }
```

Property Value

[string](#) ↗

MessageRequestCase

```
public ServerReflectionRequest.MessageRequestOneofCase MessageRequestCase { get; }
```

Property Value

[ServerReflectionRequest.MessageRequestOneofCase](#)

Parser

```
public static MessageParser<ServerReflectionRequest> Parser { get; }
```

Property Value

[MessageParser<ServerReflectionRequest>](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

ClearAllExtensionNumbersOfType()

Clears the value of the oneof if it's currently set to "all_extension_numbers_of_type"

```
public void ClearAllExtensionNumbersOfType()
```

ClearFileByFilename()

Clears the value of the oneof if it's currently set to "file_by_filename"

```
public void ClearFileByFilename()
```

ClearFileContainingSymbol()

Clears the value of the oneof if it's currently set to "file_containing_symbol"

```
public void ClearFileContainingSymbol()
```

ClearListServices()

Clears the value of the oneof if it's currently set to "list_services"

```
public void ClearListServices()
```

ClearMessageRequest()

```
public void ClearMessageRequest()
```

Clone()

Creates a deep clone of this object.

```
public ServerReflectionRequest Clone()
```

Returns

[ServerReflectionRequest](#)

A deep clone of this object.

Equals(ServerReflectionRequest)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ServerReflectionRequest other)
```

Parameters

other [ServerReflectionRequest](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(ServerReflectionRequest)

Merges the given message into this one.

```
public void MergeFrom(ServerReflectionRequest other)
```

Parameters

other [ServerReflectionRequest](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Enum ServerReflectionRequest.MessageRequestOneofCase

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

Enum of possible cases for the "message_request" oneof.

```
public enum ServerReflectionRequest.MessageRequestOneofCase
```

Fields

AllExtensionNumbersOfType = 6

FileByFilename = 3

FileContainingExtension = 5

FileContainingSymbol = 4

ListServices = 7

None = 0

Class ServerReflectionResponse

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpcCurl.Net.dll

The message sent by the server to answer ServerReflectionInfo method.

```
public sealed class ServerReflectionResponse : IMessage<ServerReflectionResponse>,  
IEquatable<ServerReflectionResponse>, IDeepCloneable<ServerReflectionResponse>,  
IBufferMessage, IMessage
```

Inheritance

[object](#) ← ServerReflectionResponse

Implements

IMessage<[ServerReflectionResponse](#)>, IEquatable<[ServerReflectionResponse](#)>,
IDeepCloneable<[ServerReflectionResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ServerReflectionResponse()

```
public ServerReflectionResponse()
```

ServerReflectionResponse(ServerReflectionResponse)

```
public ServerReflectionResponse(ServerReflectionResponse other)
```

Parameters

other [ServerReflectionResponse](#)

Fields

AllExtensionNumbersResponseFieldNumber

Field number for the "all_extension_numbers_response" field.

```
public const int AllExtensionNumbersResponseFieldNumber = 5
```

Field Value

[int](#)

ErrorResponseFieldNumber

Field number for the "error_response" field.

```
public const int ErrorResponseFieldNumber = 7
```

Field Value

[int](#)

FileDescriptorResponseFieldNumber

Field number for the "file_descriptor_response" field.

```
public const int FileDescriptorResponseFieldNumber = 4
```

Field Value

[int](#)

ListServicesResponseFieldNumber

Field number for the "list_services_response" field.

```
public const int ListServicesResponseFieldNumber = 6
```

Field Value

[int](#)

OriginalRequestFieldNumber

Field number for the "original_request" field.

```
public const int OriginalRequestFieldNumber = 2
```

Field Value

[int](#)

ValidHostFieldNumber

Field number for the "valid_host" field.

```
public const int ValidHostFieldNumber = 1
```

Field Value

[int](#)

Properties

AllExtensionNumbersResponse

This message is used to answer all_extension_numbers_of_type request.

```
public ExtensionNumberResponse AllExtensionNumbersResponse { get; set; }
```

Property Value

[ExtensionNumberResponse](#)

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

ErrorResponse

This message is used when an error occurs.

```
public ErrorResponse ErrorResponse { get; set; }
```

Property Value

[ErrorResponse](#)

FileDescriptorResponse

This message is used to answer file_by_filename, file_containing_symbol, file_containing_extension requests with transitive dependencies. As the repeated label is not allowed in oneof fields, we use a FileDescriptorResponse message to encapsulate the repeated fields. The reflection service is allowed to avoid sending FileDescriptorProtos that were previously sent in response to earlier requests in the stream.

```
public FileDescriptorResponse FileDescriptorResponse { get; set; }
```

Property Value

[FileDescriptorResponse](#)

ListServicesResponse

This message is used to answer list_services request.

```
public ListServiceResponse ListServicesResponse { get; set; }
```

Property Value

[ListServiceResponse](#)

MessageResponseCase

```
public ServerReflectionResponse.MessageResponseOneofCase MessageResponseCase {  
    get; }
```

Property Value

[ServerReflectionResponse.MessageResponseOneofCase](#)

OriginalRequest

```
public ServerReflectionRequest OriginalRequest { get; set; }
```

Property Value

[ServerReflectionRequest](#)

Parser

```
public static MessageParser<ServerReflectionResponse> Parser { get; }
```

Property Value

[MessageParser<ServerReflectionResponse>](#)

ValidHost

```
public string ValidHost { get; set; }
```

Property Value

[string](#)

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

ClearMessageResponse()

```
public void ClearMessageResponse()
```

Clone()

Creates a deep clone of this object.

```
public ServerReflectionResponse Clone()
```

Returns

[ServerReflectionResponse](#)

A deep clone of this object.

Equals(ServerReflectionResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ServerReflectionResponse other)
```

Parameters

other [ServerReflectionResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the **other** parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

[input](#) CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(ServerReflectionResponse)

Merges the given message into this one.

```
public void MergeFrom(ServerReflectionResponse other)
```

Parameters

[other](#) [ServerReflectionResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#)

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.

Enum ServerReflectionResponse.MessageResponseOneofCase

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

Enum of possible cases for the "message_response" oneof.

```
public enum ServerReflectionResponse.MessageResponseOneofCase
```

Fields

AllExtensionNumbersResponse = 5

ErrorResponse = 7

FileDescriptorResponse = 4

ListServicesResponse = 6

None = 0

Class ServiceResponse

Namespace: [Grpc.Reflection.V1Alpha](#)

Assembly: GrpCurl.Net.dll

The information of a single service used by ListServiceResponse to answer list_services request.

```
public sealed class ServiceResponse : IMessage<ServiceResponse>,
IEquatable<ServiceResponse>, IDeepCloneable<ServiceResponse>,
IBufferMessage, IMessage
```

Inheritance

[object](#) ← ServiceResponse

Implements

IMessage<[ServiceResponse](#)>, IEquatable<[ServiceResponse](#)>,
IDeepCloneable<[ServiceResponse](#)>, IBufferMessage, IMessage

Inherited Members

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

Constructors

ServiceResponse()

```
public ServiceResponse()
```

ServiceResponse(ServiceResponse)

```
public ServiceResponse(ServiceResponse other)
```

Parameters

other [ServiceResponse](#)

Fields

NameFieldNumber

Field number for the "name" field.

```
public const int NameFieldNumber = 1
```

Field Value

[int](#)

Properties

Descriptor

```
public static MessageDescriptor Descriptor { get; }
```

Property Value

MessageDescriptor

Name

Full name of a registered service, including its package name. The format is <package>. <service>

```
public string Name { get; set; }
```

Property Value

[string](#)

Parser

```
public static MessageParser<ServiceResponse> Parser { get; }
```

Property Value

MessageParser<[ServiceResponse](#)>

Methods

CalculateSize()

Calculates the size of this message in Protocol Buffer wire format, in bytes.

```
public int CalculateSize()
```

Returns

[int](#)

The number of bytes required to write this message to a coded output stream.

Clone()

Creates a deep clone of this object.

```
public ServiceResponse Clone()
```

Returns

[ServiceResponse](#)

A deep clone of this object.

Equals(ServiceResponse)

Indicates whether the current object is equal to another object of the same type.

```
public bool Equals(ServiceResponse other)
```

Parameters

other [ServiceResponse](#)

An object to compare with this object.

Returns

[bool](#)

[true](#) if the current object is equal to the `other` parameter; otherwise, [false](#).

Equals(object)

Determines whether the specified object is equal to the current object.

```
public override bool Equals(object other)
```

Parameters

other [object](#)

Returns

[bool](#)

[true](#) if the specified object is equal to the current object; otherwise, [false](#).

GetHashCode()

Serves as the default hash function.

```
public override int GetHashCode()
```

Returns

[int](#)

A hash code for the current object.

MergeFrom(CodedInputStream)

Merges the data from the specified coded input stream with the current message.

```
public void MergeFrom(CodedInputStream input)
```

Parameters

input CodedInputStream

Remarks

See the user guide for precise merge semantics.

MergeFrom(ServiceResponse)

Merges the given message into this one.

```
public void MergeFrom(ServiceResponse other)
```

Parameters

other [ServiceResponse](#)

Remarks

See the user guide for precise merge semantics.

ToString()

Returns a string that represents the current object.

```
public override string ToString()
```

Returns

[string](#) ↗

A string that represents the current object.

WriteTo(CodedOutputStream)

Writes the data to the given coded output stream.

```
public void WriteTo(CodedOutputStream output)
```

Parameters

output CodedOutputStream

Coded output stream to write the data to. Must not be null.