OpcArgumentInfo Members

Namespace: Opc.UaFx.Client
Assemblies: Opc.UaFx.Advanced.dll, Opc.UaFx.Advanced.dll
The OpcArgumentInfo type exposes the following members.

Properties

ArrayDimensions

Gets the length for each dimension of an array value of the argument represented.

C#

```
public uint[] ArrayDimensions { get; }
```

Property Value

UInt32[]

An empty array in case there the value of the argument represented is a scalar value; otherwise an UInt32 array there each entry indicates a single dimension while the value of the entry defines the length of that dimension.

ArrayLength

Gets the total number of elements in all the dimensions of the array value of the argument represented.

C#

```
public long ArrayLength { get; }
```

Property Value

Int64

The total number of elements in all the dimensions of the array value of the argument represented; zero if there are no elements in the array.

ArrayRank

Gets the rank (number of dimensions) of the array value of the argument represented. For example, a one-dimensional array returns 1, a two-dimensional array returns 2, and so on.

C#

```
public int ArrayRank { get; }
```

Property Value

Int32

The rank (number of dimensions) of the array value of the argument represented.

DataType

Gets the OpcTypeNodeInfo about the data type node of the argument represented.

C#

```
public OpcTypeNodeInfo DataType { get; }
```

Property Value

OpcTypeNodeInfo

An instance of the OpcTypeNodeInfo representing the type definition of the argument represented. In case there is no known type definition for the data type referenced by the argument a null reference (Nothing in Visual Basic).

DataTypeId

Gets the OpcNodeId about the data type node of the argument represented.

C#

```
public OpcNodeId DataTypeId { get; }
```

Property Value

OpcNodeId

An instance of the OpcNodeId which identifies the type node definition of the argument represented. In case there is no type definition for the type of value provided by the argument represented a null reference (Nothing in Visual Basic).

DefaultValue

Gets the value of the argument that is by default used in case there is no custom value specified for the argument.

C#

```
public object DefaultValue { get; }
```

Property Value

Object

The default value used by argument by definition.

Description

Gets the textual description of the use of the argument represented.

C#

```
public OpcText Description { get; }
```

Property Value

OpcText

A string which describes the use of the argument.

IsArray

Gets a value indicating whether the value of the argument represented is an array.

C#

```
public bool IsArray { get; }
```

Property Value

Boolean

The value true if the value of the argument represented is an array; otherwise the false.

Name

Gets the name of the argument.

C#

```
public string Name { get; }
```

Property Value

String

The name of the argument.

Methods

GetArrayLength(Int32)

Gets a 32-bit integer that represents the number of elements in the specified dimension of the array value of the argument.

C#

```
public long GetArrayLength(int dimension)
```

Parameters

`dimension` Int32

A zero-based dimension of the array value whose length needs to be determined.

Returns

Int64

A 32-bit integer that represents the number of elements in the specified dimension of the array value.

Exceptions

ArgumentOutOfRangeException

The `dimension` is less than zero or equals to or greater than ArrayRank.

InvalidOperationException

The value of the argument represented is not an array (see IsArray).

Remarks

The time consumed by the first call of the property depends on the availability of the server, because of the ArrayDimensions attribute is requested on-demand and is cached for subsequent calls. This means, that further ArrayDimensions attribute requests will take use of already retrieved attribute information and will not demand additional network resources.

GetArrayLowerBound(Int32)

Gets the index of the first element of the specified dimension in the array value of the argument.

C#

```
public long GetArrayLowerBound(int dimension)
```

Parameters

`dimension` Int32

A zero-based dimension of the array value whose starting index needs to be determined.

Returns

Int64

The index of the first element of the specified dimension in the array value.

Exceptions

ArgumentOutOfRangeException

The `dimension` is less than zero or equals to or greater than ArrayRank.

InvalidOperationException

The value of the argument represented is not an array (see IsArray).

GetArrayUpperBound(Int32)

Gets the index of the last element of the specified dimension in the array value of the argument.

C#

```
public long GetArrayUpperBound(int dimension)
```

Parameters

`dimension` Int32

A zero-based dimension of the array value whose upper bound needs to be determined.

Returns

Int64

The index of the last element of the specified dimension in the array value, or -1 if the specified dimension is empty.

Exceptions

ArgumentOutOfRangeException

The `dimension` is less than zero or equals to or greater than ArrayRank.

InvalidOperationException

The value of the argument represented is not an array (see IsArray).

Remarks

The time consumed by the first call of the property depends on the availability of the server, because of the ArrayDimensions attribute is requested on-demand and is cached for subsequent calls. This means, that further ArrayDimensions attribute requests will take use of already retrieved attribute information and will not demand additional network resources.

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