

OpcBidirectionalReference Members

Namespace: Opc.UaFx

Assemblies: Opc.UaFx.Advanced.dll, Opc.UaFx.Advanced.dll

The [OpcBidirectionalReference](#) type exposes the following members.

Constructors

OpcBidirectionalReference(IOpcNode, OpcNodeId)

Initializes a new instance of the [OpcBidirectionalReference](#) class using the [targetNode](#) as the target using the type of reference identified by the [typeId](#) specified.

C#

```
public OpcBidirectionalReference(IOpcNode targetNode, OpcNodeId typeId)
```

Parameters

[targetNode](#) [IOpcNode](#)

The [IOpcNodeInfo](#) in which the reference constructed ceases.

[typeId](#) [OpcNodeId](#)

The [OpcNodeId](#) which identifies the type of reference to represent between the [targetNode](#) and its opponent.

Exceptions

[ArgumentNullException](#)

The [targetNode](#) or [typeId](#) is a null reference (Nothing in Visual Basic).

OpcBidirectionalReference(IOpcNode, OpcReferenceType)

Initializes a new instance of the [OpcBidirectionalReference](#) class using the [targetNode](#) as the target of the reference and using the value of the [type](#) parameter as the type of reference.

C#

```
public OpcBidirectionalReference(IOpcNode targetNode, OpcReferenceType type)
```

Parameters

[targetNode](#) [IOpcNode](#)

The [IOpcNodeInfo](#) in which the reference constructed ceases.

type OpcReferenceType

One of the members defined by the [OpcReferenceType](#) enumeration to use to setup the type of reference represented.

Exceptions

ArgumentNullException

The [targetNode](#) is a null reference (Nothing in Visual Basic).

OpcBidirectionalReference(OpcNodeId, OpcNodeId)

Initializes a new instance of the [OpcBidirectionalReference](#) class using the [targetNodeId](#) as the identifier of the target and using the type of reference identified by the [typeId](#) specified.

C#

```
public OpcBidirectionalReference(OpcNodeId targetNodeId, OpcNodeId typeId)
```

Parameters

[targetNodeId](#) OpcNodeId

The [OpcNodeId](#) which identifies the node in which the reference constructed ceases.

[typeId](#) OpcNodeId

The [OpcNodeId](#) which identifies the type of reference to represent between the target identified by the [targetNodeId](#) and its opponent.

Exceptions

ArgumentNullException

The [targetNodeId](#) or [typeId](#) is a null reference (Nothing in Visual Basic).

OpcBidirectionalReference(OpcNodeId, OpcReferenceType)

Initializes a new instance of the [OpcBidirectionalReference](#) class using the [targetNodeId](#) as the identifier of the target of the reference using the value of the [type](#) parameter as the type of the reference.

C#

```
public OpcBidirectionalReference(OpcNodeId targetNodeId, OpcReferenceType type)
```

Parameters

[targetNodeId](#) OpcNodeId

The [OpcNodeId](#) which identifies the node in which the reference constructed ceases.

type OpcReferenceType

One of the members defined by the [OpcReferenceType](#) enumeration to use to setup the type of reference represented.

Exceptions

[ArgumentNullException](#)

The [targetNodeId](#) is a null reference (Nothing in Visual Basic).

Properties

TargetNode

Gets the node to which the reference refers to.

C#

```
public IOpcNode TargetNode { get; }
```

Property Value

[IOpcNode](#)

The [IOpcNode](#) to which the reference refers to or a null reference (Nothing in Visual Basic) in case there this [OpcBidirectionalReference](#) has been initialized using a [OpcNodeId](#) which identifies the node the reference refers to.

TargetNodeId

Gets the identifier of the node to which the reference refers to.

C#

```
public OpcNodeId TargetNodeId { get; }
```

Property Value

[OpcNodeId](#)

The [OpcNodeId](#) which identifies the node to which the reference refers to.

Type

Gets a value which defines the pre-defined type of reference represented.

C#

```
public OpcReferenceType? Type { get; }
```

Property Value

[Nullable<OpcReferenceType>](#)

One of the members defined by the [OpcReferenceType](#) enumeration or a null reference (Nothing in Visual Basic) if [TypeId](#) refers to a type of reference which is not a built in reference type. The default value is [Organizes](#).

TypeId

Gets the identifier which identifies the node that defines the semantic of the reference between the source and the target node represented through this [OpcBidirectionalReference](#) and generally reflects an operation between the two, such as "A contains B" and vice versa.

C#

```
public OpcNodeId TypeId { get; }
```

Property Value

[OpcNodeId](#)

The [OpcNodeId](#) of the reference type node which defines the relation semantic between the source and the target node. The default value is [Organizes](#).

Methods

GetReferences()

Retrieves an empty sequence of [OpcNodeReference](#) instances.

C#

```
public IEnumerable<OpcNodeReference> GetReferences()
```

Returns

[IEnumerable<OpcNodeReference>](#)

An empty [IEnumerable<1>](#) of [OpcNodeReference](#) instances.

GetReferences(IOpcNode)

Retrieves a sequence with two [OpcNodeReference](#) instances using the [node](#) specified as the source and target of the references.

C#

```
public IEnumerable<OpcNodeReference> GetReferences(IOpcNode node)
```

Parameters

node IOpcNode

The IOpcNode instance from which one OpcNodeReference instance will originate from and in which one will cease.

Returns

IEnumerable<OpcNodeReference>

An IEnumerable'1 of OpcNodeReference instances which contains two instances.

Exceptions

ArgumentNullException

The **node** is a null reference (Nothing in Visual Basic).

GetReferences(OpcNodeId)

Retrieves a sequence with two OpcNodeReference instances using the nodeId specified as the source and target of the references.

C#

```
public IEnumerable<OpcNodeReference> GetReferences(OpcNodeId nodeId)
```

Parameters

nodeId OpcNodeId

The OpcNodeId which identifies the node from which one OpcNodeReference instance will originate from and in which one will cease.

Returns

IEnumerable<OpcNodeReference>

An IEnumerable'1 of OpcNodeReference instances which contains two instances.

Exceptions

ArgumentNullException

The **nodeId** is a null reference (Nothing in Visual Basic).

ToString()

Returns a string representing the information contained in the OpcBidirectionalReference.

C#

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

Returns

[String](#)

A string which describes the information in this [OpcBidirectionalReference](#).

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