

OpcRelativePath Members

Namespace: Opc.UaFx

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

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

Constructors

OpcRelativePath(IEnumerable<OpcName>)

Initializes a new instance of the [OpcRelativePath](#) class with the `pathElements` specified to define a path following hierarchical references using the `pathElements` as the browse names of the nodes their path is to be expressed.

C#

```
public OpcRelativePath(IEnumerable<OpcName> pathElements)
```

Parameters

`pathElements` [IEnumerable<OpcName>](#)

A sequence of [OpcName](#) objects representing the value of the [BrowseName](#) attribute of the hierarchical nodes their path is to be expressed by the new [OpcRelativePath](#).

Exceptions

[ArgumentException](#)

One of the items in `pathElements` does not indicate a name (see [IsNullOrEmpty](#)).

[ArgumentNullException](#)

The `pathElements` or one of its items is a null reference (Nothing in Visual Basic).

OpcRelativePath(IEnumerable<OpcRelativePathElement>)

Initializes a new instance of the [OpcRelativePath](#) class with the `pathElements` specified.

C#

```
public OpcRelativePath(IEnumerable<OpcRelativePathElement> pathElements)
```

Parameters

`pathElements` [IEnumerable<OpcRelativePathElement>](#)

A sequence of [OpcRelativePathElement](#) objects representing the [BrowseName](#) and reference of the nodes

their path is to be expressed by the new [OpcRelativePath](#).

Exceptions

ArgumentNullException

The `pathElements` or one of its items is a null reference (Nothing in Visual Basic).

OpcRelativePath(IEnumerable<String>)

Initializes a new instance of the [OpcRelativePath](#) class with the `pathElements` specified to define a path following hierarchical references using the `pathElements` as the browse names of the nodes their path is to be expressed.

C#

```
public OpcRelativePath(IEnumerable<string> pathElements)
```

Parameters

pathElements IEnumerable<String>

A sequence of `String` objects representing the value of the `BrowseName` attribute of the hierarchical nodes their path is to be expressed by the new [OpcRelativePath](#).

Exceptions

ArgumentException

One of the items in `pathElements` is equals to `Empty`.

ArgumentNullException

The `pathElements` or one of its items is a null reference (Nothing in Visual Basic).

OpcRelativePath(OpcName[])

Initializes a new instance of the [OpcRelativePath](#) class with the `pathElements` specified to define a path following hierarchical references using the `pathElements` as the browse names of the nodes their path is to be expressed.

C#

```
public OpcRelativePath(params OpcName[] pathElements)
```

Parameters

pathElements OpcName[]

An array of `OpcName` objects representing the value of the `BrowseName` attribute of the hierarchical nodes their path is to be expressed by the new [OpcRelativePath](#).

Exceptions

ArgumentException

One of the items in `pathElements` does not indicate a name (see `IsNull`).

ArgumentNullException

The `pathElements` or one of its items is a null reference (Nothing in Visual Basic).

OpcRelativePath(OpcRelativePathElement[])

Initializes a new instance of the `OpcRelativePath` class with the `pathElements` specified.

C#

```
public OpcRelativePath(params OpcRelativePathElement[] pathElements)
```

Parameters

pathElements OpcRelativePathElement[]

An array of `OpcRelativePathElement` objects representing the `BrowseName` and reference of the nodes their path is to be expressed by the new `OpcRelativePath`.

Exceptions

ArgumentNullException

The `pathElements` or one of its items is a null reference (Nothing in Visual Basic).

OpcRelativePath(String[])

Initializes a new instance of the `OpcRelativePath` class with the `pathElements` specified to define a path following hierarchical references using the `pathElements` as the browse names of the nodes their path is to be expressed.

C#

```
public OpcRelativePath(params string[] pathElements)
```

Parameters

pathElements String[]

An array of `String` objects representing the value of the `BrowseName` attribute of the hierarchical nodes their path is to be expressed by the new `OpcRelativePath`.

Exceptions

ArgumentException

One of the items in `pathElements` is equals to `Empty`.

ArgumentNullException

The `pathElements` or one of its items is a null reference (Nothing in Visual Basic).

Properties

Item[Int32]

Gets the [OpcRelativePathElement](#) at the specified index.

C#

```
public OpcRelativePathElement this[int index] { get; }
```

Property Value

[OpcRelativePathElement](#)

The [OpcRelativePathElement](#) at the specified index.

Exceptions

ArgumentOutOfRangeException

The `index` is not a valid index in the [OpcRelativePath](#).

Length

Gets the total number of elements in the [OpcRelativePath](#).

C#

```
public int Length { get; }
```

Property Value

[Int32](#)

The total number of elements in the [OpcRelativePath](#); zero if there are no elements in the path.

Methods

Combine(OpcRelativePath[])

Combines the `paths` into a single [OpcRelativePath](#).

C#

```
public static OpcRelativePath Combine(params OpcRelativePath[] paths)
```

Parameters

`paths` `OpcRelativePath[]`

An array of parts of the path to construct.

Returns

`OpcRelativePath`

The combined `paths`.

Exceptions

`ArgumentNullException`

The `paths` or one of its items is a null reference (Nothing in Visual Basic).

GetEnumerator()

Returns an enumerator that iterates through the path.

C#

```
public IEnumerator<OpcRelativePathElement> GetEnumerator()
```

Returns

`IEnumerator<OpcRelativePathElement>`

An enumerator that can be used to iterate through the path.

Parse(OpcContext, String)

Converts a path string to a `OpcRelativePath` instance using a specific `OpcContext`.

C#

```
public static OpcRelativePath Parse(OpcContext context, string value)
```

Parameters

`context` `OpcContext`

The `OpcContext` to use to parse the reference types used in the `value`.

`value` `String`

A string that contains a path.

Returns

OpcRelativePath

An instance of the [OpcRelativePath](#) class.

Exceptions

ArgumentException

The `value` is an empty string.

ArgumentNullException

The `value` is a null reference (Nothing in Visual Basic).

FormatException

The `value` is not a valid path.

Parse(String)

Converts a path string to a [OpcRelativePath](#) instance.

C#

```
public static OpcRelativePath Parse(string value)
```

Parameters

value String

A string that contains a path.

Returns

OpcRelativePath

An instance of the [OpcRelativePath](#) class.

Exceptions

ArgumentException

The `value` is an empty string.

ArgumentNullException

The `value` is a null reference (Nothing in Visual Basic).

FormatException

The `value` is not a valid path.

ToString()

Returns a string representing the relative path.

C#

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

Returns

String

A string formatted using the elements of the current [OpcRelativePath](#).

ToString(OpcContext)

Returns a string representing the relative path using the [context](#) specified.

C#

```
public string ToString(OpcContext context)
```

Parameters

[context](#) [OpcContext](#)

The [OpcContext](#) to use to resolve the names of reference types used among the elements in the path.

Returns

String

A string formatted using the elements of the current [OpcRelativePath](#).

Exceptions

[ArgumentNullException](#)

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

TryParse(OpcContext, String, out OpcRelativePath)

Determines whether a string is a valid path using a specific [OpcContext](#).

C#

```
public static bool TryParse(OpcContext context, string value, out OpcRelativePath path)
```

Parameters

[context](#) [OpcContext](#)

The [OpcContext](#) to use to parse the reference types used in the **value**.

value String

The string to validate.

path OpcRelativePath

The [OpcRelativePath](#) version of the string.

Returns

Boolean

The value true, if **value** is a valid path; otherwise the value false.

TryParse(String, out OpcRelativePath)

Determines whether a string is a valid path.

C#

```
public static bool TryParse(string value, out OpcRelativePath path)
```

Parameters

value String

The string to validate.

path OpcRelativePath

The [OpcRelativePath](#) version of the string.

Returns

Boolean

The value true, if **value** is a valid path; otherwise the value false.

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