

OpcFileNode Members

Namespace: Opc.UaFx

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

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

Constructors

OpcFileNode(IOpcNode, OpcName, FileInfo)

Initializes a new instance of the [OpcFileNode](#) class accessible by the [name](#) specified with the file to represent defined by [fileInfo](#) as a child node of the [parent](#) node given.

C#

```
public OpcFileNode(IOpcNode parent, OpcName name, FileInfo fileInfo)
```

Parameters

[parent](#) [IOpcNode](#)

The [IOpcNode](#) used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

[name](#) [OpcName](#)

The [OpcName](#) through that the new file node can be accessed.

[fileInfo](#) [FileInfo](#)

The file information to use by the new file node.

Exceptions

[ArgumentNullException](#)

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

OpcFileNode(IOpcNode, OpcName, IOpcFileInfo)

Initializes a new instance of the [OpcFileNode](#) class accessible by the [name](#) specified with the file to represent defined by [fileInfo](#) as a child node of the [parent](#) node given.

C#

```
public OpcFileNode(IOpcNode parent, OpcName name, IOpcFileInfo fileInfo)
```

Parameters

[parent](#) [IOpcNode](#)

The `IOpcNode` used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

`name` `OpcName`

The `OpcName` through that the new file node can be accessed.

`fileInfo` `IOpcFileInfo`

The file information to use by the new file node.

Exceptions

`ArgumentNullException`

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

OpcFileNode(IOpcNode, OpcName, OpcNodeId, FileInfo)

Initializes a new instance of the `OpcFileNode` class accessible by the `name` and `id` specified with the file information defined by `fileInfo` as a child node of the `parent` node given.

C#

```
public OpcFileNode(IOpcNode parent, OpcName name, OpcNodeId id, FileInfo fileInfo)
```

Parameters

`parent` `IOpcNode`

The `IOpcNode` used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

`name` `OpcName`

The `OpcName` through that the new file node can be accessed.

`id` `OpcNodeId`

The `OpcNodeId` through that the new file node can be identified and accessed.

`fileInfo` `FileInfo`

The file information to use by the new file node.

Exceptions

`ArgumentNullException`

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

OpcFileNode(IOpcNode, OpcName, OpcNodeId,

IOpcFileInfo)

Initializes a new instance of the [OpcFileNode](#) class accessible by the [name](#) and [id](#) specified with the file information defined by [fileInfo](#) as a child node of the [parent](#) node given.

C#

```
public OpcFileNode(IOpcNode parent, OpcName name, OpcNodeId id, IOpcFileInfo fileInfo)
```

Parameters

[parent](#) [IOpcNode](#)

The [IOpcNode](#) used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

[name](#) [OpcName](#)

The [OpcName](#) through that the new file node can be accessed.

[id](#) [OpcNodeId](#)

The [OpcNodeId](#) through that the new file node can be identified and accessed.

[fileInfo](#) [IOpcFileInfo](#)

The file information to use by the new file node.

Exceptions

[ArgumentNullException](#)

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

OpcFileNode(IOpcNode, OpcName, OpcNodeId, String)

Initializes a new instance of the [OpcFileNode](#) class accessible by the [name](#) and [id](#) specified with the file information defined by [filePath](#) as a child node of the [parent](#) node given.

C#

```
public OpcFileNode(IOpcNode parent, OpcName name, OpcNodeId id, string filePath)
```

Parameters

[parent](#) [IOpcNode](#)

The [IOpcNode](#) used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

[name](#) [OpcName](#)

The [OpcName](#) through that the new file node can be accessed.

[id](#) [OpcNodeId](#)

The `OpcNode` through that the new file node can be identified and accessed.

`filePath` String

The path to the file to use by the new file node.

Exceptions

`ArgumentException`

The `filePath` is an empty string.

`ArgumentNullException`

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

OpcFileNode(IOpcNode, OpcName, String)

Initializes a new instance of the `OpcFileNode` class accessible by the `name` specified with the file to represent defined by `filePath` as a child node of the `parent` node given.

C#

```
public OpcFileNode(IOpcNode parent, OpcName name, string filePath)
```

Parameters

`parent` IOpcNode

The `IOpcNode` used as the parent node or a null reference (Nothing in Visual Basic) in the case there is no parent node available.

`name` OpcName

The `OpcName` through that the new file node can be accessed.

`filePath` String

The path to the file to use by the new file node.

Exceptions

`ArgumentException`

The `filePath` is an empty string.

`ArgumentNullException`

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

OpcFileNode(OpcName, FileInfo)

Initializes a new instance of the `OpcFileNode` class accessible by the `name` specified with the file to represent given by `fileInfo`.

C#

```
public OpcFileNode(OpcName name, FileInfo fileInfo)
```

Parameters

name [OpcName](#)

The [OpcName](#) through that the new file node can be accessed.

fileInfo [FileInfo](#)

The file information to use by the new file node.

Exceptions

[ArgumentNullException](#)

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

OpcFileNode(OpcName, IOpcFileInfo)

Initializes a new instance of the [OpcFileNode](#) class accessible by the **name** specified with the file to represent given by **fileInfo**.

C#

```
public OpcFileNode(OpcName name, IOpcFileInfo fileInfo)
```

Parameters

name [OpcName](#)

The [OpcName](#) through that the new file node can be accessed.

fileInfo [IOpcFileInfo](#)

The file information to use by the new file node.

Exceptions

[ArgumentNullException](#)

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

OpcFileNode(OpcName, OpcNodeId, FileInfo)

Initializes a new instance of the [OpcFileNode](#) class accessible by the **name** and **id** specified with the file to represent given by **fileInfo**.

C#

```
public OpcFileNode(OpcName name, OpcNodeId id, FileInfo fileInfo)
```

Parameters

name [OpcName](#)

The [OpcName](#) through that the new file node can be accessed.

id [OpcNodeId](#)

The [OpcNodeId](#) through that the new file node can be identified and accessed.

fileInfo [FileInfo](#)

The file information to use by the new file node.

Exceptions

[ArgumentNullException](#)

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

OpcFileNode(OpcName, OpcNodeId, IOpcFileInfo)

Initializes a new instance of the [OpcFileNode](#) class accessible by the [name](#) and [id](#) specified with the file to represent given by [fileInfo](#).

C#

```
public OpcFileNode(OpcName name, OpcNodeId id, IOpcFileInfo fileInfo)
```

Parameters

name [OpcName](#)

The [OpcName](#) through that the new file node can be accessed.

id [OpcNodeId](#)

The [OpcNodeId](#) through that the new file node can be identified and accessed.

fileInfo [IOpcFileInfo](#)

The file information to use by the new file node.

Exceptions

[ArgumentNullException](#)

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

OpcFileNode(OpcName, OpcNodeId, String)

Initializes a new instance of the [OpcFileNode](#) class accessible by the [name](#) and [id](#) specified with the file to represent given by [filePath](#).

C#

```
public OpcFileNode(OpcName name, OpcNodeId id, string filePath)
```

Parameters

name OpcName

The OpcName through that the new file node can be accessed.

id OpcNodeId

The OpcNodeId through that the new file node can be identified and accessed.

filePath String

The path to the file to use by the new file node.

Exceptions

ArgumentException

The filePath is an empty string.

ArgumentNullException

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

OpcFileNode(OpcName, String)

Initializes a new instance of the OpcFileNode class accessible by the name specified with the file to represent given by filePath.

C#

```
public OpcFileNode(OpcName name, string filePath)
```

Parameters

name OpcName

The OpcName through that the new file node can be accessed.

filePath String

The path to the file to use by the new file node.

Exceptions

ArgumentException

The filePath is an empty string.

ArgumentNullException

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

Properties

CanUserWrite

Gets or sets a value indicating whether by default a user can access the file represented for writing taking user access rights into account.

C#

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

Property Value

Boolean

The value true if the file represented is accessible for writing by the user; otherwise the value false.

Remarks

The property does not take into account whether the file is currently opened for writing by another client and thus currently locked and not writable by others.

CanUserWriteNode

Gets the [OpcPropertyNode`1](#) of the [CanUserWrite](#) property.

C#

```
public OpcPropertyNode<bool> CanUserWriteNode { get; }
```

Property Value

[OpcPropertyNode<Boolean>](#)

An instance of the [OpcPropertyNode`1](#) class.

CanWrite

Gets or sets a value indicating whether the file is writable. It does not take any user access rights into account, i.e. although the file is writable this may be restricted to a certain user / user group.

C#

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

Property Value

Boolean

The value true if the file represented is accessible for writing; otherwise the value false.

Remarks

The property does not take into account whether the file is currently opened for writing by another client and thus currently locked and not writable by others.

CanWriteNode

Gets the [OpcPropertyNode`1](#) of the [CanWrite](#) property.

C#

```
public OpcPropertyNode<bool> CanWriteNode { get; }
```

Property Value

[OpcPropertyNode<Boolean>](#)

An instance of the [OpcPropertyNode`1](#) class.

CloseNode

Gets the [OpcFileCloseMethodNode](#) used to handle 'Close' method calls to close the file represented.

C#

```
public OpcFileCloseMethodNode CloseNode { get; }
```

Property Value

[OpcFileCloseMethodNode](#)

An instance of the [OpcFileCloseMethodNode](#) class. Which uses an [OpcFileNode](#) defined callback to close the file.

DefaultTypeDefinitionId

Gets the default identifier which identifies the node that defines the underlying node type from that this [OpcInstanceNode](#) has been created.

C#

```
protected override OpcNodeId DefaultTypeDefinitionId { get; }
```

Property Value

[OpcNodeId](#)

The [OpcNodeId](#) of the type node from that this [OpcInstanceNode](#) has been created from. These type node

defines the typical structure of an instance node of its type definition. If there exists no specific type definition node a null reference (Nothing in Visual Basic).

File

Gets the [IOpcFileInfo](#) used to access the file represented.

C#

```
public IOpcFileInfo File { get; }
```

Property Value

[IOpcFileInfo](#)

The [IOpcFileInfo](#) used to access the file and its metadata represented.

FileInfo

Gets the [FileInfo](#) of the file represented.

C#

```
public FileInfo FileInfo { get; }
```

Property Value

[FileInfo](#)

The [FileInfo](#) used to access the file and its metadata represented or a null reference (Nothing in Visual Basic) if [File](#) represents a custom implementation of the [IOpcFileInfo](#) interface.

GetPositionNode

Gets the [OpcFileGetPositionMethodNode](#) used to handle 'GetPosition' method calls to query the position in the file represented.

C#

```
public OpcFileGetPositionMethodNode GetPositionNode { get; }
```

Property Value

[OpcFileGetPositionMethodNode](#)

An instance of the [OpcFileGetPositionMethodNode](#) class. Which uses an [OpcFileNode](#) defined callback to query the position in the file.

MimeType

Gets the media type of the file.

C#

```
public string MimeType { get; }
```

Property Value

[String](#)

The type of media represented by the [OpcFileNode](#) based on RFC 2046.

MimeTypeNode

Gets the [OpcPropertyNode`1](#) of the [MimeType](#) property.

C#

```
public OpcPropertyNode<string> MimeTypeNode { get; }
```

Property Value

[OpcPropertyNode<String>](#)

An instance of the [OpcPropertyNode`1](#) class.

OpenCount

Gets the number of currently valid file handles on the file.

C#

```
[CLSCompliant(false)]  
public ushort OpenCount { get; }
```

Property Value

[UInt16](#)

The number of currently valid file handles on the file.

OpenCountNode

Gets the [OpcPropertyNode`1](#) of the [OpenCount](#) property.

C#

```
[CLSCompliant(false)]  
public OpcPropertyNode<ushort> OpenCountNode { get; }
```

Property Value

[OpcPropertyNode<UInt16>](#)

An instance of the [OpcPropertyNode`1](#) class.

OpenNode

Gets the [OpcFileOpenMethodNode](#) used to handle 'Open' method calls to open the file represented.

C#

```
public OpcFileOpenMethodNode OpenNode { get; }
```

Property Value

[OpcFileOpenMethodNode](#)

An instance of the [OpcFileOpenMethodNode](#) class. Which uses an [OpcFileNode](#) defined callback to open the file.

ReadNode

Gets the [OpcFileReadMethodNode](#) used to handle 'Read' method calls to read data from the file represented.

C#

```
public OpcFileReadMethodNode ReadNode { get; }
```

Property Value

[OpcFileReadMethodNode](#)

An instance of the [OpcFileReadMethodNode](#) class. Which uses an [OpcFileNode](#) defined callback to read data from the file.

SetPositionNode

Gets the [OpcFileSetPositionMethodNode](#) used to handle 'SetPosition' method calls to update the position in the file represented.

C#

```
public OpcFileSetPositionMethodNode SetPositionNode { get; }
```

Property Value

[OpcFileSetPositionMethodNode](#)

An instance of the [OpcFileSetPositionMethodNode](#) class. Which uses an [OpcFileNode](#) defined callback to update the position in the file.

Size

Gets the size of the file in bytes.

C#

```
[CLSCompliant(false)]
public ulong Size { get; }
```

Property Value

UInt64

The size of the file in bytes.

Remarks

When a file is opened for write and the file handle is still valid the size might not be accurate.

SizeNode

Gets the [OpcPropertyNode`1](#) of the [Size](#) property.

C#

```
[CLSCompliant(false)]
public OpcPropertyNode<ulong> SizeNode { get; }
```

Property Value

OpcPropertyNode<UInt64>

An instance of the [OpcPropertyNode`1](#) class.

WriteNode

Gets the [OpcFileWriteMethodNode](#) used to handle 'Write' method calls to write data to the file represented.

C#

```
public OpcFileWriteMethodNode WriteNode { get; }
```

Property Value

OpcFileWriteMethodNode

An instance of the [OpcFileWriteMethodNode](#) class. Which uses an [OpcFileNode](#) defined callback to write data to the file.

Methods

InitializeDefaults()

Initializes the default values used by the [OpcFileNode](#).

C#

```
protected override void InitializeDefaults()
```

Remarks

This method is used to ensure the availability of appropriate node specific default values. For more information like when this method is to be overwritten see [InitializeDefaults](#).

ReadCanUserWrite(OpcReadPropertyValueContext<OpcPropertyNode<Boolean>>, OpcPropertyValue<Boolean>)

Reads the value of the [CanUserWrite](#) property.

C#

```
protected virtual OpcPropertyValue<bool>  
ReadCanUserWrite(OpcReadPropertyValueContext<OpcPropertyNode<bool>> context,  
OpcPropertyValue<bool> value)
```

Parameters

context [OpcReadPropertyValueContext<OpcPropertyNode>](#)

The [OpcReadPropertyValueContext](#) to use to read the property value.

value [OpcPropertyValue<Boolean>](#)

The preliminary [OpcPropertyValue](#).

Returns

[OpcPropertyValue<Boolean>](#)

The determined [OpcPropertyValue](#).

ReadCanWrite(OpcReadPropertyValueContext<OpcPropertyNode<Boolean>>, OpcPropertyValue<Boolean>)

Reads the value of the [CanWrite](#) property.

C#

```
protected virtual OpcPropertyValue<bool>
ReadCanWrite(OpcReadPropertyValueContext<OpcPropertyNode<bool>> context,
OpcPropertyValue<bool> value)
```

Parameters

context [OpcReadPropertyValueContext<OpcPropertyNode>](#)

The [OpcReadPropertyValueContext](#) to use to read the property value.

value [OpcPropertyValue<Boolean>](#)

The preliminary [OpcPropertyValue](#).

Returns

[OpcPropertyValue<Boolean>](#)

The determined [OpcPropertyValue](#).

Table of Contents

Constructors	1
OpcFileNode(IOpcNode, OpcName, FileInfo)	1
OpcFileNode(IOpcNode, OpcName, IOpcFileInfo)	1
OpcFileNode(IOpcNode, OpcName, OpcNodeId, FileInfo)	2
OpcFileNode(IOpcNode, OpcName, OpcNodeId, IOpcFileInfo)	2
OpcFileNode(IOpcNode, OpcName, OpcNodeId, String)	3
OpcFileNode(IOpcNode, OpcName, String)	4
OpcFileNode(OpcName, FileInfo)	4
OpcFileNode(OpcName, IOpcFileInfo)	5
OpcFileNode(OpcName, OpcNodeId, FileInfo)	5
OpcFileNode(OpcName, OpcNodeId, IOpcFileInfo)	6
OpcFileNode(OpcName, OpcNodeId, String)	6
OpcFileNode(OpcName, String)	7
Properties	8
CanUserWrite	8
CanUserWriteNode	8
CanWrite	8
CanWriteNode	9
CloseNode	9
DefaultTypeDefinitionId	9
File	10
FileInfo	10
GetPositionNode	10
MimeType	11
MimeTypeNode	11
OpenCount	11
OpenCountNode	11
OpenNode	12
ReadNode	12
SetPositionNode	12
Size	13
SizeNode	13
WriteNode	13
Methods	14
InitializeDefaults()	14
ReadCanUserWrite(OpcReadPropertyValueContext<OpcPropertyNode<Boolean>>, OpcPropertyValue<Boolean>)	14
ReadCanWrite(OpcReadPropertyValueContext<OpcPropertyNode<Boolean>>, OpcPropertyValue<Boolean>)	14