

OpcAddVariableNode Members

Namespace: Opc.UaFx

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

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

Constructors

OpcAddVariableNode(OpcNodeId, OpcName)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified [typeDefinitionId](#) of variable node to add, which shall be accessible by the [name](#) defined. The according [OpcNodeId](#) to identify and access the new node is determined by the service. The new node will be a child of the [ObjectsFolder](#) node using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name)
```

Parameters

[typeDefinitionId](#) [OpcNodeId](#)

The [OpcNodeId](#) which identifies the type of object to use for the new node.

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

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

Exceptions

[ArgumentException](#)

The [typeDefinitionId](#) is equals [Null](#) or [name](#) is equals [Null](#).

[ArgumentNullException](#)

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

OpcAddVariableNode(OpcNodeId, OpcName, Object)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified [typeDefinitionId](#) of variable node to add, which shall be accessible by the [name](#) defined. The according [OpcNodeId](#) to identify and access the new node is determined by the service. The new node will be a child of the [ObjectsFolder](#) node using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, object value)
```

Parameters

typeDefinitionId [OpcNodeId](#)

The [OpcNodeId](#) which identifies the type of object to use for the new node.

name [OpcName](#)

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

value [Object](#)

The initial value of the new variable node.

Exceptions

[ArgumentException](#)

The **typeDefinitionId** is equals [Null](#) or **name** is equals [Null](#).

[ArgumentNullException](#)

The **typeDefinitionId** or **name** is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified **typeDefinitionId** of variable node to add, which shall be accessible by the **name** and **nodeId** defined. The new node will be a child of the [ObjectsFolder](#) node using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId)
```

Parameters

typeDefinitionId [OpcNodeId](#)

The [OpcNodeId](#) which identifies the type of object to use for the new node.

name [OpcName](#)

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

nodeId [OpcNodeId](#)

The [OpcNodeId](#) through that the new node can be identified and accessed. In case there [Null](#) is specified the server will determine the according [OpcNodeId](#) by its own.

Exceptions

[ArgumentException](#)

The **typeDefinitionId** is equals [Null](#) or **name** is equals [Null](#).

[ArgumentNullException](#)

The `typeDefinitionId`, `name` or `nodeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, Object)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `typeDefinitionId` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the `ObjectsFolder` node using `HasComponent` as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId, object value)
```

Parameters

`typeDefinitionId` `OpcNodeId`

The `OpcNodeId` which identifies the type of object to use for the new node.

`name` `OpcName`

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

`nodeId` `OpcNodeId`

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`value` `Object`

The initial value of the new variable node.

Exceptions

`ArgumentException`

The `typeDefinitionId` is equals `Null` or `name` is equals `Null`.

`ArgumentNullException`

The `typeDefinitionId`, `name` or `nodeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `typeDefinitionId` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using `HasComponent` as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId)
```

Parameters

typeDefinitionId [OpcNodeId](#)

The [OpcNodeId](#) which identifies the type of object to use for the new node.

name [OpcName](#)

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

nodeId [OpcNodeId](#)

The [OpcNodeId](#) through that the new node can be identified and accessed. In case there [Null](#) is specified the server will determine the according [OpcNodeId](#) by its own.

parentNodeId [OpcNodeId](#)

The [OpcNodeId](#) of the parent node to reference using [HasComponent](#) as the type of reference.

Exceptions

[ArgumentException](#)

The **typeDefinitionId** is equals [Null](#) or **parentNodeId** is equals [Null](#) or **name** is equals [Null](#).

[ArgumentNullException](#)

The **typeDefinitionId**, **name**, **nodeId** or **parentNodeId** is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, Object)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified **typeDefinitionId** of variable node to add, which shall be accessible by the **name** and **nodeId** defined. The new node will be a child of the node identified by **parentNodeId** using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, object value)
```

Parameters

typeDefinitionId [OpcNodeId](#)

The [OpcNodeId](#) which identifies the type of object to use for the new node.

name [OpcName](#)

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

nodeId [OpcNodeId](#)

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`parentNodeId` `OpcNodeId`

The `OpcNodeId` of the parent node to reference using `HasComponent` as the type of reference.

`value` `Object`

The initial value of the new variable node.

Exceptions

`ArgumentException`

The `typeDefinitionId` is equals `Null` or `parentNodeId` is equals `Null` or `name` is equals `Null`.

`ArgumentNullException`

The `typeDefinitionId`, `name`, `nodeId` or `parentNodeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcNodeId)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `typeDefinitionId` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using the type of reference identified by the `referenceTypeId` specified.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId,
OpcNodeId parentNodeId, OpcNodeId referenceTypeId)
```

Parameters

`typeDefinitionId` `OpcNodeId`

The `OpcNodeId` which identifies the type of object to use for the new node.

`name` `OpcName`

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

`nodeId` `OpcNodeId`

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`parentNodeId` `OpcNodeId`

The `OpcNodeId` of the parent node to reference using the type of reference identified by `referenceTypeId`.

`referenceTypeId` `OpcNodeId`

The `OpcNodeId` which identifies the type of reference to use for the new node and the existing parent node identified by `parentNodeId`.

Exceptions

ArgumentException

The `typeDefinitionId` is equals `Null` or `parentNodeId` or `referenceTypeId` is equals `Null` or `name` is equals `Null`.

ArgumentNullException

The `typeDefinitionId`, `name`, `nodeId`, `parentNodeId` or `referenceTypeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcNodeId, Object)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `typeDefinitionId` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using the type of reference identified by the `referenceTypeId` specified.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, OpcNodeId referenceTypeId, object value)
```

Parameters

`typeDefinitionId` `OpcNodeId`

The `OpcNodeId` which identifies the type of object to use for the new node.

`name` `OpcName`

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

`nodeId` `OpcNodeId`

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`parentNodeId` `OpcNodeId`

The `OpcNodeId` of the parent node to reference using the type of reference identified by `referenceTypeId`.

`referenceTypeId` `OpcNodeId`

The `OpcNodeId` which identifies the type of reference to use for the new node and the existing parent node identified by `parentNodeId`.

`value` `Object`

The initial value of the new variable node.

Exceptions

ArgumentException

The `typeDefinitionId` is equals `Null` or `parentNodeId` or `referenceTypeId` is equals `Null` or `name` is equals `Null`.

ArgumentNullException

The `typeDefinitionId`, `name`, `nodeId`, `parentNodeId` or `referenceTypeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `typeDefinitionId` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using the `referenceType` specified as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, OpcReferenceType referenceType)
```

Parameters

`typeDefinitionId` `OpcNodeId`

The `OpcNodeId` which identifies the type of object to use for the new node.

`name` `OpcName`

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

`nodeId` `OpcNodeId`

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`parentNodeId` `OpcNodeId`

The `OpcNodeId` of the parent node to reference using `HasComponent` as the type of reference.

`referenceType` `OpcReferenceType`

One of the members defined by the `OpcReferenceType` enumeration to use to setup the reference between the new node and the existing parent node identified by `parentNodeId`.

Exceptions

ArgumentException

The `typeDefinitionId` is equals `Null` or `parentNodeId` is equals `Null` or `name` is equals `Null`.

ArgumentNullException

The `typeDefinitionId`, `name`, `nodeId` or `parentNodeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType, Object)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified [typeDefinitionId](#) of variable node to add, which shall be accessible by the [name](#) and [nodeId](#) defined. The new node will be a child of the node identified by [parentNodeId](#) using the [referenceType](#) specified as the type of reference.

C#

```
protected OpcAddVariableNode(OpcNodeId typeDefinitionId, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, OpcReferenceType referenceType, object value)
```

Parameters

[typeDefinitionId](#) [OpcNodeId](#)

The [OpcNodeId](#) which identifies the type of object to use for the new node.

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

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

[nodeId](#) [OpcNodeId](#)

The [OpcNodeId](#) through that the new node can be identified and accessed. In case there [Null](#) is specified the server will determine the according [OpcNodeId](#) by its own.

[parentNodeId](#) [OpcNodeId](#)

The [OpcNodeId](#) of the parent node to reference using [HasComponent](#) as the type of reference.

[referenceType](#) [OpcReferenceType](#)

One of the members defined by the [OpcReferenceType](#) enumeration to use to setup the reference between the new node and the existing parent node identified by [parentNodeId](#).

[value](#) [Object](#)

The initial value of the new variable node.

Exceptions

[ArgumentException](#)

The [typeDefinitionId](#) is equals [Null](#) or [parentNodeId](#) is equals [Null](#) or [name](#) is equals [Null](#).

[ArgumentNullException](#)

The [typeDefinitionId](#), [name](#), [nodeId](#) or [parentNodeId](#) is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcVariableType, OpcName)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified [type](#) of variable node to add, which shall be accessible by the [name](#) defined. The according [OpcNodeId](#) to identify and access the new node is determined by the service. The new node will be a child of the [ObjectsFolder](#) node using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name)
```

Parameters

type [OpcVariableType](#)

One of the members defined by the [OpcVariableType](#) enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

name [OpcName](#)

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

Exceptions

[ArgumentException](#)

The **name** is equals [Null](#).

[ArgumentNullException](#)

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

OpcAddVariableNode(OpcVariableType, OpcName, Object)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified **type** of variable node to add, which shall be accessible by the **name** defined. The according [OpcNodeId](#) to identify and access the new node is determined by the service. The new node will be a child of the [ObjectsFolder](#) node using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, object value)
```

Parameters

type [OpcVariableType](#)

One of the members defined by the [OpcVariableType](#) enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

name [OpcName](#)

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

value [Object](#)

The initial value of the new variable node.

Exceptions

ArgumentException

The **name** is equals **Null**.

ArgumentNullException

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

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified **type** of variable node to add, which shall be accessible by the **name** and **nodeId** defined. The new node will be a child of the [ObjectsFolder](#) node using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId)
```

Parameters

type [OpcVariableType](#)

One of the members defined by the [OpcVariableType](#) enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

name [OpcName](#)

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

nodeId [OpcNodeId](#)

The [OpcNodeId](#) through that the new node can be identified and accessed. In case there **Null** is specified the server will determine the according [OpcNodeId](#) by its own.

Exceptions

ArgumentException

The **name** is equals **Null**.

ArgumentNullException

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

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, Object)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified **type** of variable node to add, which shall be accessible by the **name** and **nodeId** defined. The new node will be a child of the [ObjectsFolder](#) node using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId, object value)
```

Parameters

type [OpcVariableType](#)

One of the members defined by the [OpcVariableType](#) enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

name [OpcName](#)

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

nodeId [OpcNodeId](#)

The [OpcNodeId](#) through that the new node can be identified and accessed. In case there [Null](#) is specified the server will determine the according [OpcNodeId](#) by its own.

value [Object](#)

The initial value of the new variable node.

Exceptions

[ArgumentException](#)

The **name** is equals [Null](#).

[ArgumentNullException](#)

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

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified **type** of variable node to add, which shall be accessible by the **name** and **nodeId** defined. The new node will be a child of the node identified by **parentNodeId** using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId)
```

Parameters

type [OpcVariableType](#)

One of the members defined by the [OpcVariableType](#) enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

name [OpcName](#)

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

nodeId OpcNodeId

The [OpcNodeId](#) through that the new node can be identified and accessed. In case there [Null](#) is specified the server will determine the according [OpcNodeId](#) by its own.

parentNodeId OpcNodeId

The [OpcNodeId](#) of the parent node to reference using [HasComponent](#) as the type of reference.

Exceptions

ArgumentException

The [parentNodeId](#) is equals [Null](#) or [name](#) is equals [Null](#).

ArgumentNullException

The [name](#), [nodeId](#) or [parentNodeId](#) is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, Object)

Initializes a new instance of the [OpcAddVariableNode](#) class using the specified [type](#) of variable node to add, which shall be accessible by the [name](#) and [nodeId](#) defined. The new node will be a child of the node identified by [parentNodeId](#) using [HasComponent](#) as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, object value)
```

Parameters

type OpcVariableType

One of the members defined by the [OpcVariableType](#) enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

name OpcName

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

nodeId OpcNodeId

The [OpcNodeId](#) through that the new node can be identified and accessed. In case there [Null](#) is specified the server will determine the according [OpcNodeId](#) by its own.

parentNodeId OpcNodeId

The [OpcNodeId](#) of the parent node to reference using [HasComponent](#) as the type of reference.

value Object

The initial value of the new variable node.

Exceptions

ArgumentException

The `parentNodeId` is equals `Null` or `name` is equals `Null`.

ArgumentNullException

The `name`, `nodeId` or `parentNodeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcNodeId)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `type` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using the type of reference identified by the `referenceTypeId` specified.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, OpcNodeId referenceTypeId)
```

Parameters

`type` OpcVariableType

One of the members defined by the `OpcVariableType` enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

`name` OpcName

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

`nodeId` OpcNodeId

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`parentNodeId` OpcNodeId

The `OpcNodeId` of the parent node to reference using the type of reference identified by `referenceTypeId`.

`referenceTypeId` OpcNodeId

The `OpcNodeId` which identifies the type of reference to use for the new node and the existing parent node identified by `parentNodeId`.

Exceptions

ArgumentException

The `parentNodeId` or `referenceTypeId` is equals `Null` or `name` is equals `Null`.

ArgumentNullException

The `name`, `nodeId`, `parentNodeId` or `referenceTypeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcNodeId, Object)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `type` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using the type of reference identified by the `referenceTypeId` specified.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, OpcNodeId referenceTypeId, object value)
```

Parameters

`type` OpcVariableType

One of the members defined by the `OpcVariableType` enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

`name` OpcName

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

`nodeId` OpcNodeId

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`parentNodeId` OpcNodeId

The `OpcNodeId` of the parent node to reference using the type of reference identified by `referenceTypeId`.

`referenceTypeId` OpcNodeId

The `OpcNodeId` which identifies the type of reference to use for the new node and the existing parent node identified by `parentNodeId`.

`value` Object

The initial value of the new variable node.

Exceptions

ArgumentException

The `parentNodeId` or `referenceTypeId` is equals `Null` or `name` is equals `Null`.

ArgumentNullException

The `name`, `nodeId`, `parentNodeId` or `referenceTypeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `type` of variable node to

add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using the `referenceType` specified as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, OpcReferenceType referenceType)
```

Parameters

`type` OpcVariableType

One of the members defined by the `OpcVariableType` enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

`name` OpcName

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

`nodeId` OpcNodeId

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

`parentNodeId` OpcNodeId

The `OpcNodeId` of the parent node to reference using `HasComponent` as the type of reference.

`referenceType` OpcReferenceType

One of the members defined by the `OpcReferenceType` enumeration to use to setup the reference between the new node and the existing parent node identified by `parentNodeId`.

Exceptions

ArgumentException

The `parentNodeId` is equals `Null` or `name` is equals `Null`.

ArgumentNullException

The `name`, `nodeId` or `parentNodeId` is a null reference (Nothing in Visual Basic).

OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType, Object)

Initializes a new instance of the `OpcAddVariableNode` class using the specified `type` of variable node to add, which shall be accessible by the `name` and `nodeId` defined. The new node will be a child of the node identified by `parentNodeId` using the `referenceType` specified as the type of reference.

C#

```
protected OpcAddVariableNode(OpcVariableType type, OpcName name, OpcNodeId nodeId, OpcNodeId parentNodeId, OpcReferenceType referenceType, object value)
```

Parameters

type `OpcVariableType`

One of the members defined by the `OpcVariableType` enumeration which identifies the predefined underlying type definition the new node will represent an instance of.

name `OpcName`

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

nodeId `OpcNodeId`

The `OpcNodeId` through that the new node can be identified and accessed. In case there `Null` is specified the server will determine the according `OpcNodeId` by its own.

parentNodeId `OpcNodeId`

The `OpcNodeId` of the parent node to reference using `HasComponent` as the type of reference.

referenceType `OpcReferenceType`

One of the members defined by the `OpcReferenceType` enumeration to use to setup the reference between the new node and the existing parent node identified by `parentNodeId`.

value `Object`

The initial value of the new variable node.

Exceptions

`ArgumentException`

The `parentNodeId` is equals `Null` or `name` is equals `Null`.

`ArgumentNullException`

The `name`, `nodeId` or `parentNodeId` is a null reference (Nothing in Visual Basic).

Properties

AccessLevel

Gets or sets a value which indicates in which ways the `Value` attribute of the variable node can be accessed (read/write) and if it provides current and/or historic data.

C#

```
public OpcAccessLevel? AccessLevel { get; set; }
```

Property Value

`Nullable<OpcAccessLevel>`

One of the members defined by the `OpcAccessLevel` enumeration if specified; otherwise a null reference (Nothing in Visual Basic). In case of a null reference (Nothing in Visual Basic) the server defined default

value of the attribute is used.

ArrayDimensions

Gets the number/lengths of dimensions for an array [Value](#) with one or more fixed dimensions.

C#

```
public OpcArrayDimensions ArrayDimensions { get; set; }
```

Property Value

[OpcArrayDimensions](#)

An instance of the [OpcArrayDimensions](#) class which offers the number/lengths of dimensions for an array [Value](#).

Remarks

If the [ValueRank](#) does not identify an array of a specific dimension (i.e. $\text{ValueRank} \leftarrow 0$) [ArrayDimensions](#) can be a null reference (Nothing in Visual Basic). In case of a null reference (Nothing in Visual Basic) the server defined default value of the attribute is used.

DataType

Gets or sets a value which defines a pre-defined used [DataTypeId](#) as one of the members defined by the [OpcDataType](#) enumeration to simplify querying standard data types. A null reference (Nothing in Visual Basic) indicates that the attribute is undefined and its default value is used.

C#

```
public virtual OpcDataType? DataType { get; set; }
```

Property Value

[Nullable<OpcDataType>](#)

One of the members defined by the [OpcDataType](#) enumeration.

DataTypeId

Gets or sets the identifier which identifies the node that defines the type of data represented by the variable node. A null reference (Nothing in Visual Basic) indicates that the attribute is undefined and its default value is used.

C#

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

Property Value

OpcNodeId

The [OpcNodeId](#) of the data type node which defines the type of data represented by the variable node. These data type node defines either a simple or a complex type of data accessible by the [Value](#) property.

IsHistorizing

Gets or sets a value indicating whether the server is actively collecting data for the history of the variable.

C#

```
public bool? IsHistorizing { get; set; }
```

Property Value

Nullable<Boolean>

The value true if the server is actively collecting data; otherwise the value false (the default value) or a null reference (Nothing in Visual Basic). In case of a null reference (Nothing in Visual Basic) the server defined default value of the attribute is used.

Type

Gets value indicating the predefined underlying type definition the new node will represent an instance of.

C#

```
public OpcVariableType Type { get; }
```

Property Value

OpcVariableType

One of the members defined by the [OpcVariableType](#) enumeration or -1 in case of a custom type definition is used (see [TypeDefinitionId](#)).

UserAccessLevel

Gets or sets a value which indicates in which ways the [Value](#) attribute of the variable node can be accessed (read/write) and if it provides current and/or historic data taking user access rights into account.

C#

```
public OpcAccessLevel? UserAccessLevel { get; set; }
```

Property Value

Nullable<OpcAccessLevel>

One of the members defined by the [OpcAccessLevel](#) enumeration if specified; otherwise a null reference

(Nothing in Visual Basic). In case of a null reference (Nothing in Visual Basic) the server defined default value of the attribute is used.

Value

Gets or sets the value of the variable node which may be simple or complex. A null reference (Nothing in Visual Basic) indicates that the attribute is undefined and its default value is used.

C#

```
public object Value { get; set; }
```

Property Value

Object

A [Object](#) representing the value of the variable node.

ValueRank

Gets or sets a value which indicates whether the value attribute of the variable is an array and how many dimensions the array has.

C#

```
public int? ValueRank { get; set; }
```

Property Value

Nullable<Int32>

One of the values defined by the [ValueRanks](#) class or a null reference (Nothing in Visual Basic). In case of a null reference (Nothing in Visual Basic) the server defined default value of the attribute is used.

Methods

OfType(OpcNodeId)

Retrieves an instance which represents the definition of a variable type that can be used to define [OpcAddVariableNode](#) command instances using the type of variable node represented by the [TypeDefinition](#) instance provided.

C#

```
public static OpcAddVariableNode.TypeDefinition OfType(OpcNodeId typeDefinitionId)
```

Parameters

`typeDefinitionId` [OpcNodeId](#)

The `OpcNodeId` of the type definition to provide.

Returns

TypeDefinition

A new instance of the `TypeDefinition` class which can be used to define typed `OpcAddVariableNode` command instances.

Exceptions

ArgumentException

The `typeDefinitionId` is equals `Null`.

ArgumentNullException

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

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