

# OpcAddVariableNode Class

**Namespace:** Opc.UaFx

**Assemblies:** Opc.UaFx.Advanced.dll

Defines an abstract base class for a single command of the [IOpcAddNodesService](#) used to add one variable node (nodes of the category [Variable](#)).

**C#**

```
public abstract class OpcAddVariableNode : OpcAddInstanceNode
```

**Inheritance** [Object](#) > [OpcServiceCommand](#) > [OpcNodeServiceCommand](#) > [OpcAddNode](#) > [OpcAddInstanceNode](#) > [OpcAddVariableNode](#)

## Derived

- [OpcAddDataItemNode](#)
- [OpcAddDataVariableNode](#)
- [OpcAddPropertyNode](#)
- [OpcAddPropertyNode`1](#)

## Constructors

Name	Description
<a href="#">OpcAddVariableNode(OpcNodeId, OpcName)</a>	Initializes a new instance of the <a href="#">OpcAddVariableNode</a> class using the specified <a href="#">typeDefinitionId</a> of variable node to add, which shall be accessible by the <a href="#">name</a> defined. The according <a href="#">OpcNodeId</a> to identify and access the new node is determined by the service. The new node will be a child of the <a href="#">ObjectsFolder</a> node using <a href="#">HasComponent</a> as the type of reference.
<a href="#">OpcAddVariableNode(OpcNodeId, OpcName, Object)</a>	Initializes a new instance of the <a href="#">OpcAddVariableNode</a> class using the specified <a href="#">typeDefinitionId</a> of variable node to add, which shall be accessible by the <a href="#">name</a> defined. The according <a href="#">OpcNodeId</a> to identify and access the new node is determined by the service. The new node will be a child of the <a href="#">ObjectsFolder</a> node using <a href="#">HasComponent</a> as the type of reference.
<a href="#">OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId)</a>	Initializes a new instance of the <a href="#">OpcAddVariableNode</a> class using the specified <a href="#">typeDefinitionId</a> of variable node to add, which shall be accessible by the <a href="#">name</a> and <a href="#">nodeId</a> defined. The new node will be a child of the <a href="#">ObjectsFolder</a> node using <a href="#">HasComponent</a> as the type of reference.
<a href="#">OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, Object)</a>	Initializes a new instance of the <a href="#">OpcAddVariableNode</a> class using the specified <a href="#">typeDefinitionId</a> of variable node to add, which shall be accessible by the <a href="#">name</a> and <a href="#">nodeId</a> defined. The new node will be a child of the <a href="#">ObjectsFolder</a> node using <a href="#">HasComponent</a> as the type of reference.

Name	Description
<code>OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>typeDefinitionId</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using <code>HasComponent</code> as the type of reference.
<code>OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>typeDefinitionId</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using <code>HasComponent</code> as the type of reference.
<code>OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcNodeId)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>typeDefinitionId</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the type of reference identified by the <code>referenceTypeId</code> specified.
<code>OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcNodeId, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>typeDefinitionId</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the type of reference identified by the <code>referenceTypeId</code> specified.
<code>OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>typeDefinitionId</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the <code>referenceType</code> specified as the type of reference.
<code>OpcAddVariableNode(OpcNodeId, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>typeDefinitionId</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the <code>referenceType</code> specified as the type of reference.
<code>OpcAddVariableNode(OpcVariableType, OpcName)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> defined. The according <code>OpcNodeId</code> to identify and access the new node is determined by the service. The new node will be a child of the <code>ObjectsFolder</code> node using <code>HasComponent</code> as the type of reference.
<code>OpcAddVariableNode(OpcVariableType, OpcName, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> defined. The according <code>OpcNodeId</code> to identify and access the new node is determined by the service. The new node will be a child of the <code>ObjectsFolder</code> node using <code>HasComponent</code> as the type of reference.
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the <code>ObjectsFolder</code> node using <code>HasComponent</code> as the type of reference.

Name	Description
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the <code>ObjectsFolder</code> node using <code>HasComponent</code> as the type of reference.
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using <code>HasComponent</code> as the type of reference.
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using <code>HasComponent</code> as the type of reference.
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcNodeId)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the type of reference identified by the <code>referenceTypeId</code> specified.
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcNodeId, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the type of reference identified by the <code>referenceTypeId</code> specified.
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the <code>referenceType</code> specified as the type of reference.
<code>OpcAddVariableNode(OpcVariableType, OpcName, OpcNodeId, OpcNodeId, OpcReferenceType, Object)</code>	Initializes a new instance of the <code>OpcAddVariableNode</code> class using the specified <code>type</code> of variable node to add, which shall be accessible by the <code>name</code> and <code>nodeId</code> defined. The new node will be a child of the node identified by <code>parentNodeId</code> using the <code>referenceType</code> specified as the type of reference.

## Properties

Name	Description
<code>AccessLevel</code>	Gets or sets a value which indicates in which ways the <code>Value</code> attribute of the variable node can be accessed (read/write) and if it provides current and/or historic data.
<code>ArrayDimensions</code>	Gets the number/lengths of dimensions for an array <code>Value</code> with one or more fixed dimensions.
<code>Category</code>	Gets a value indicating the classification of the node in the address space. (Inherited from <code>OpcAddNode</code> )

Name	Description
Children	Gets a collection of <a href="#">OpcAddNode</a> instances which define the sub-ordinated nodes to add as children to the node to add. (Inherited from <a href="#">OpcAddInstanceNode</a> )
DataType	Gets or sets a value which defines a pre-defined used <a href="#">DataTypeId</a> as one of the members defined by the <a href="#">OpcDataType</a> 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.
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.
Description	Gets or sets the localized description of the meaning of the node. (Inherited from <a href="#">OpcAddNode</a> )
DisplayName	Gets or sets the localized name of the node. (Inherited from <a href="#">OpcAddNode</a> )
IsHistorizing	Gets or sets a value indicating whether the server is actively collecting data for the history of the variable.
Name	Gets the non-localised human-readable name of the node in the address space. (Inherited from <a href="#">OpcAddNode</a> )
NodeId	Gets the node identifier of the node on which a node orientated service have to operate on. (Inherited from <a href="#">OpcNodeServiceCommand</a> )
ParentNodeId	Gets the identifier of the existing parent node of the new node. (Inherited from <a href="#">OpcAddNode</a> )
ReferenceType	Gets a value which defines a pre-defined used <a href="#">ReferenceTypeId</a> as one of the members defined by the <a href="#">OpcReferenceType</a> enumeration to simplify querying standard reference types. (Inherited from <a href="#">OpcAddInstanceNode</a> )
ReferenceTypeId	Gets the identifier which identifies the node that defines the semantic of the reference between a source and a target node and generally reflects an operation between the two, such as "A contains B". (Inherited from <a href="#">OpcAddInstanceNode</a> )
SupportsNullNodeId	Gets a value indicating whether the <a href="#">OpcNodeServiceCommand</a> supports instances of the <a href="#">OpcNodeId</a> class its <a href="#">IsNull</a> provides a value equals to the value true. (Inherited from <a href="#">OpcNodeServiceCommand</a> )
SupportsNullNodeId	Gets a value indicating whether the <a href="#">OpcAddNode</a> supports instances of the <a href="#">OpcNodeId</a> class its <a href="#">IsNull</a> provides a value equals to the value true. (Inherited from <a href="#">OpcAddNode</a> )
Type	Gets value indicating the predefined underlying type definition the new node will represent an instance of.
TypeDefinitionId	Gets the identifier which identifies the node that defines the underlying node type from that the instance node is to be created. (Inherited from <a href="#">OpcAddInstanceNode</a> )
UserAccessLevel	Gets or sets a value which indicates in which ways the <a href="#">Value</a> 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.
UserWriteAccess	Gets or sets a value which exposes the possibilities of a client to write the attributes of the node taking user access rights into account. (Inherited from <a href="#">OpcAddNode</a> )
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.
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.

Name	Description
WriteAccess	Gets or sets a value which exposes the possibilities of a client to write the attributes of the node without taking user access rights into account. (Inherited from <a href="#">OpcAddNode</a> )

## Methods

Name	Description
<a href="#">DenyNullIdentifier(OpcNodeId, String)</a>	Verifies whether the <b>value</b> is a null identifier by checking the <a href="#">IsNull</a> property. (Inherited from <a href="#">OpcNodeServiceCommand</a> )
<a href="#">OfType(OpcNodeId)</a>	Retrieves an instance which represents the definition of a variable type that can be used to define <a href="#">OpcAddVariableNode</a> command instances using the type of variable node represented by the <a href="#">TypeDefinition</a> instance provided.



# Table of Contents

<b>Constructors</b>	1
<b>Properties</b>	3
<b>Methods</b>	5