

# OpcDataTypeNode<T> Class

**Namespace:** Opc.UaFx

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

Defines a generic data type node.

**C#**

```
public class OpcDataTypeNode<T> : OpcDataTypeNode, IOpcNode, IOpcNodeInfo
```

**Inheritance** [Object](#) > [OpcNode](#) > [OpcTypeNode](#) > [OpcDataTypeNode](#) > [OpcDataTypeNode<T>](#)

**Implements** [IOpcNode](#), [IOpcNodeInfo](#)

## Remarks

The data type node is a specialization of the [OpcTypeNode](#).

## Constructors

Name	Description
<a href="#">OpcDataTypeNode`1</a>	Initializes a new instance of the <a href="#">OpcDataTypeNode`1</a> class.
<a href="#">OpcDataTypeNode`1(OpcNodeId)</a>	Initializes a new instance of the <a href="#">OpcDataTypeNode`1</a> class accessible by the <b>id</b> specified.
<a href="#">OpcDataTypeNode`1(OpcNodeId, OpcName)</a>	Initializes a new instance of the <a href="#">OpcDataTypeNode`1</a> class accessible by the <b>name</b> and <b>id</b> specified.

## Events

Name	Description
<a href="#">AfterApplyChanges</a>	Occurs after one or more changes on the node has been notified. (Inherited from <a href="#">OpcNode</a> )
<a href="#">BeforeApplyChanges</a>	Occurs before one or more changes on the node are notified. (Inherited from <a href="#">OpcNode</a> )

## Properties

Name	Description
<a href="#">Category</a>	Gets the <a href="#">NodeCategoryOpcAttribute</a> which identifies the kind of node and is therefore used to classify the node regarding its use and purpose. (Inherited from <a href="#">OpcNode</a> )
<a href="#">Description</a>	Gets or sets the value of the optional <a href="#">DescriptionOpcAttribute</a> which shall explain the meaning of the node. (Inherited from <a href="#">OpcNode</a> )

Name	Description
Descriptions	Gets the <a href="#">OpcNodeGlobalization</a> instance used to control the localization and other globalization related tasks for the <a href="#">Description</a> attribute of the current node. (Inherited from <a href="#">OpcNode</a> )
DisplayName	Gets or sets the value of the <a href="#">DisplayNameOpcAttribute</a> which defines the localizable name of the node. (Inherited from <a href="#">OpcNode</a> )
DisplayNames	Gets the <a href="#">OpcNodeGlobalization</a> instance used to control the localization and other globalization related tasks for the <a href="#">DisplayName</a> attribute of the current node. (Inherited from <a href="#">OpcNode</a> )
HasPendingChanges	Gets a value indicating whether there exists any pending change on the node. (Inherited from <a href="#">OpcNode</a> )
Id	Gets the value of the <a href="#">NodeIdOpcAttribute</a> which unambiguously identifies the node. (Inherited from <a href="#">OpcNode</a> )
IsAbstract	Gets or sets a value indicating whether the <a href="#">OpcTypeNode</a> is abstract and must be overridden. (Inherited from <a href="#">OpcTypeNode</a> )
Name	Gets or sets the value of the <a href="#">BrowseNameOpcAttribute</a> which defines the non-localizable human-readable name used when browsing the address space. (Inherited from <a href="#">OpcNode</a> )
Namespace	(Inherited from <a href="#">OpcNode</a> )
Parent	Gets the parent node of the node. (Inherited from <a href="#">OpcNode</a> )
PendingChanges	Gets a value indicating the most recent changes performed on the node since their last notification. (Inherited from <a href="#">OpcNode</a> )
QueryEventsCallback	Gets or sets a callback used to query any event information which belongs to the node. (Inherited from <a href="#">OpcNode</a> )
ReadDescriptionCallback	(Inherited from <a href="#">OpcNode</a> )
ReadDisplayNameCallback	(Inherited from <a href="#">OpcNode</a> )
ReadUserWriteAccessCallback	(Inherited from <a href="#">OpcNode</a> )
ReadWriteAccessCallback	(Inherited from <a href="#">OpcNode</a> )
SuperTypeId	Gets or sets the identifier of the <a href="#">OpcTypeNode</a> which represents the super type of the type represented by this <a href="#">OpcTypeNode</a> . (Inherited from <a href="#">OpcTypeNode</a> )
SymbolicName	(Inherited from <a href="#">OpcNode</a> )
Tag	Gets or sets the object that contains additional user data about the node. (Inherited from <a href="#">OpcNode</a> )
TypeInfo	
TypeInfo	(Inherited from <a href="#">OpcDataTypeNode</a> )
UserWriteAccess	Gets or sets the value of the optional <a href="#">UserWriteAccessOpcAttribute</a> which exposes the possibilities of a client to write the attributes of the node taking user access rights into account. (Inherited from <a href="#">OpcNode</a> )
WriteAccess	Gets or sets the value of the optional <a href="#">WriteAccessOpcAttribute</a> which exposes the possibilities of a client to write the attributes of the node. (Inherited from <a href="#">OpcNode</a> )

Name	Description
WriteDescriptionCallback	(Inherited from <a href="#">OpcNode</a> )
WriteDisplayNameCallback	(Inherited from <a href="#">OpcNode</a> )
WriteUserWriteAccessCallback	(Inherited from <a href="#">OpcNode</a> )
WriteWriteAccessCallback	(Inherited from <a href="#">OpcNode</a> )

## Methods

Name	Description
AddNotifier( <a href="#">OpcContext</a> , <a href="#">IOpcNode</a> )	(Inherited from <a href="#">OpcNode</a> )
ApplyChanges( <a href="#">OpcContext</a> )	Notifies about changes performed on the node since the last notification and resets the pending changes to <a href="#">None</a> . (Inherited from <a href="#">OpcNode</a> )
ApplyChanges( <a href="#">OpcContext</a> , <a href="#">Boolean</a> )	Notifies about changes performed on the node (and optionally on its children) since the last notification and resets the pending changes to <a href="#">None</a> . (Inherited from <a href="#">OpcNode</a> )
AttributeValue( <a href="#">OpcAttribute</a> )	Retrieves the value of the <a href="#">attribute</a> specified. (Inherited from <a href="#">OpcNode</a> )
AttributeValue`1( <a href="#">OpcAttribute</a> )	Retrieves the value of the <a href="#">attribute</a> specified. (Inherited from <a href="#">OpcNode</a> )
Child( <a href="#">OpcContext</a> , <a href="#">OpcName</a> )	Retrieves the child node its <a href="#">Name</a> property matches exactly the <a href="#">name</a> specified. (Inherited from <a href="#">OpcNode</a> )
Children( <a href="#">OpcContext</a> )	Retrieves a sequence of all nodes organized as children of this node. (Inherited from <a href="#">OpcNode</a> )
Create( <a href="#">Type</a> )	Creates a new <a href="#">OpcDataTypeNode</a> used to represent the type specified by <a href="#">dataType</a> . (Inherited from <a href="#">OpcDataTypeNode</a> )
Create( <a href="#">Type</a> , <a href="#">OpcNodeid</a> )	Creates a new <a href="#">OpcDataTypeNode</a> used to represent the type specified by <a href="#">dataType</a> which can be identified by the <a href="#">id</a> . (Inherited from <a href="#">OpcDataTypeNode</a> )
Create( <a href="#">Type</a> , <a href="#">OpcNodeid</a> , <a href="#">OpcName</a> )	Creates a new <a href="#">OpcDataTypeNode</a> used to represent the type specified by <a href="#">dataType</a> which can be identified by the <a href="#">id</a> and <a href="#">name</a> . (Inherited from <a href="#">OpcDataTypeNode</a> )
Create`1	Creates a new <a href="#">OpcDataTypeNode</a> used to represent the type specified by <a href="#">T</a> . (Inherited from <a href="#">OpcDataTypeNode</a> )

Name	Description
Create`1(OpcNodeId)	Creates a new <a href="#">OpcDataTypeNode</a> used to represent the type specified by <b>T</b> which can be identified by the <b>id</b> . (Inherited from <a href="#">OpcDataTypeNode</a> )
Create`1(OpcNodeId, OpcName)	Creates a new <a href="#">OpcDataTypeNode</a> used to represent the type specified by <b>T</b> which can be identified by the <b>id</b> and <b>name</b> . (Inherited from <a href="#">OpcDataTypeNode</a> )
InitializeDefaults	Initializes the default values used by the node implementation represented / required. (Inherited from <a href="#">OpcNode</a> )
IsChangePending(OpcNodeChanges)	(Inherited from <a href="#">OpcNode</a> )
OnAfterApplyChanges(OpcNodeChangesEventArgs)	Raises the <a href="#">AfterApplyChanges</a> event using the event data specified. (Inherited from <a href="#">OpcNode</a> )
OnBeforeApplyChanges(OpcNodeChangesEventArgs)	Raises the <a href="#">BeforeApplyChanges</a> event using the event data specified. (Inherited from <a href="#">OpcNode</a> )
QueryEventsCore(OpcNodeContext, OpcEventCollection)	(Inherited from <a href="#">OpcNode</a> )
ReadAttributeValueCore`1(OpcReadAttributeValueContext, OpcAttributeValue)	(Inherited from <a href="#">OpcNode</a> )
RemoveNotifier(OpcContext, IOpcNode)	(Inherited from <a href="#">OpcNode</a> )
ReportEvent(OpcContext, OpcEvent)	(Inherited from <a href="#">OpcNode</a> )
UpdateChanges(OpcContext, OpcNodeChanges)	Notifies about the <b>changes</b> on behalf of the node and removes pending changes which intersect with the <b>changes</b> specified. (Inherited from <a href="#">OpcNode</a> )
UpdateChanges(OpcContext, OpcNodeChanges, Boolean)	Notifies about the <b>changes</b> on behalf of the node (and optionally on its children) and removes pending changes which intersect with the <b>changes</b> specified. (Inherited from <a href="#">OpcNode</a> )
WriteAttributeValueCore`1(OpcWriteAttributeValueContext, OpcAttributeValue)	(Inherited from <a href="#">OpcNode</a> )

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