

# OpcDataItemNode<T> Members

**Namespace:** Opc.UaFx

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

The [OpcDataItemNode<T>](#) type exposes the following members.

## Constructors

### OpcDataItemNode(IopcNode, OpcName)

Initializes a new instance of the [OpcDataItemNode`1](#) class accessible by the `name` specified as a child node of the `parent` node given.

**C#**

```
public OpcDataItemNode(IopcNode parent, OpcName name)
```

#### 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 data item node can be accessed.

### OpcDataItemNode(IopcNode, OpcName, OpcNodeId)

Initializes a new instance of the [OpcDataItemNode`1](#) class accessible by the `name` and `id` specified as a child node of the `parent` node given.

**C#**

```
public OpcDataItemNode(IopcNode parent, OpcName name, OpcNodeId id)
```

#### 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 data item node can be accessed.

`id` [OpcNodeId](#)

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

## OpcDataItemNode(IOPcNode, OpcName, OpcNodeId, T)

Initializes a new instance of the `OpcDataItemNode`1` class accessible by the `name` and `id` specified with the initial value defined by `value` as a child node of the `parent` node given.

### C#

```
public OpcDataItemNode(IOPcNode parent, OpcName name, OpcNodeId id, T value)
```

#### 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 data item node can be accessed.

`id` OpcNodeId

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

`value` T

The initial value of the new data item node.

## OpcDataItemNode(IOPcNode, OpcName, T)

Initializes a new instance of the `OpcDataItemNode`1` class accessible by the `name` specified with the initial value defined by `value` as a child node of the `parent` node given.

### C#

```
public OpcDataItemNode(IOPcNode parent, OpcName name, T value)
```

#### 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 data item node can be accessed.

`value` T

The initial value of the new data item node.

## OpcDataItemNode(OpcName)

Initializes a new instance of the `OpcDataItemNode`1` class accessible by the `name` specified.

**C#**

```
public OpcDataItemNode(OpcName name)
```

**Parameters**

**name** [OpcName](#)

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

## OpcDataItemNode(OpcName, OpcNodeId)

Initializes a new instance of the [OpcDataItemNode`1](#) class accessible by the **name** and **id** specified.

**C#**

```
public OpcDataItemNode(OpcName name, OpcNodeId id)
```

**Parameters**

**name** [OpcName](#)

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

**id** [OpcNodeId](#)

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

## OpcDataItemNode(OpcName, OpcNodeId, T)

Initializes a new instance of the [OpcDataItemNode`1](#) class accessible by the **name** and **id** specified with the initial value given by **value**.

**C#**

```
public OpcDataItemNode(OpcName name, OpcNodeId id, T value)
```

**Parameters**

**name** [OpcName](#)

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

**id** [OpcNodeId](#)

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

**value** [T](#)

The initial value of the new data item node.

# OpcDataItemNode(OpcName, T)

Initializes a new instance of the `OpcDataItemNode`1` class accessible by the `name` specified with the initial value given by `value`.

C#

```
public OpcDataItemNode(OpcName name, T value)
```

## Parameters

`name` `OpcName`

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

`value` `T`

The initial value of the new data item node.

# Properties

## 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.

C#

```
public override OpcDataType DataType { get; set; }
```

## Property Value

`OpcDataType`

One of the members defined by the `OpcDataType` enumeration.

## Value

Gets or sets the value of the data item node.

C#

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

## Property Value

`T`

A `T` representing the value of the data item node. This can be also a null reference (Nothing in Visual Basic).

# Methods

## InitializeDefaults()

Initializes the default values used by the [OpcDataItemNode`1](#).

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](#).

## ReadGenericValue(OpcReadVariableValueContext)

Reads the data item node value using the `context` specified.

C#

```
public T ReadGenericValue(OpcReadVariableValueContext context)
```

### Parameters

`context` [OpcReadVariableValueContext](#)

The [OpcReadVariableValueContext](#) to use to read the data item node value.

### Returns

T

The T data item node value associated with this node and read using the `context` specified. This can also be a null reference (Nothing in Visual Basic).

### Exceptions

[ArgumentNullException](#)

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

## WriteGenericValue(OpcWriteVariableValueContext, T)

Writes the `value` to the data item node value using the `context` specified.

C#

```
public void WriteGenericValue(OpcWriteVariableValueContext context, T value)
```

## Parameters

`context OpcWriteVariableValueContext`

The `OpcWriteVariableValueContext` to use to write the data item node `value` specified.

`value T`

The `T` to write to the data item node value.

## Exceptions

`ArgumentNullException`

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

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