

# OpcAnalogItemNode<T> Members

**Namespace:** Opc.UaFx

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

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

## Constructors

### OpcAnalogItemNode(IOpcNode, OpcName)

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

**C#**

```
public OpcAnalogItemNode(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 analog item node can be accessed.

### OpcAnalogItemNode(IOpcNode, OpcName, OpcNodeId)

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

**C#**

```
public OpcAnalogItemNode(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 analog item node can be accessed.

**id** [OpcNodeId](#)

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

# OpcAnalogItemNode(IOpcNode, OpcName, OpcNodeId, T)

Initializes a new instance of the [OpcAnalogItemNode'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 OpcAnalogItemNode(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 analog item node can be accessed.

**id** [OpcNodeId](#)

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

**value** [T](#)

The initial value of the new analog item node.

# OpcAnalogItemNode(IOpcNode, OpcName, T)

Initializes a new instance of the [OpcAnalogItemNode'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 OpcAnalogItemNode(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 analog item node can be accessed.

**value** [T](#)

The initial value of the new analog item node.

# OpcAnalogItemNode(OpcName)

Initializes a new instance of the [OpcAnalogItemNode'1](#) class accessible by the **name** specified.

**C#**

```
public OpcAnalogItemNode(OpcName name)
```

**Parameters**

**name** OpcName

The **OpcName** through that the new analog item node can be accessed.

## OpcAnalogItemNode(OpcName, OpcNodeId)

Initializes a new instance of the **OpcAnalogItemNode`1** class accessible by the **name** and **id** specified.

**C#**

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

**Parameters**

**name** OpcName

The **OpcName** through that the new analog item node can be accessed.

**id** OpcNodeId

The **OpcNodeId** through that the new analog item node can be identified and accessed.

## OpcAnalogItemNode(OpcName, OpcNodeId, T)

Initializes a new instance of the **OpcAnalogItemNode`1** class accessible by the **name** and **id** specified with the initial value given by **value**.

**C#**

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

**Parameters**

**name** OpcName

The **OpcName** through that the new analog item node can be accessed.

**id** OpcNodeId

The **OpcNodeId** through that the new analog item node can be identified and accessed.

**value** T

The initial value of the new analog item node.

# OpcAnalogItemNode(OpcName, T)

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

**C#**

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

## Parameters

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

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

[value](#) [T](#)

The initial value of the new analog 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 analog item node.

**C#**

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

## Property Value

[T](#)

A [T](#) representing the value of the analog item node. This can be also a null reference (Nothing in Visual Basic).

# Methods

## InitializeDefaults()

Initializes the default values used by the [OpcAnalogItemNode`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 analog item node value using the **context** specified.

**C#**

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

### Parameters

**context** [OpcReadVariableValueContext](#)

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

### Returns

**T**

The **T** analog 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 analog 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 analog item node **value** specified.

**value** [T](#)

The [T](#) to write to the analog item node value.

## Exceptions

[ArgumentNullException](#)

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

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