

OpcNodeAttribute<T> Members

Namespace: Opc.UaFx

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

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

Constructors

OpcNodeAttribute(OpcNodeId, OpcAttribute)

Initializes a new instance of the [OpcNodeAttribute`1](#) class with the [nodeId](#) of the node the [attribute](#) specified belongs to.

C#

```
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute)
```

Parameters

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

The [OpcNodeId](#) of the node its [attribute](#) value is to be represented.

[attribute](#) [OpcAttribute](#)

The [OpcAttribute](#) value indentifying the kind of attribute the new [OpcNodeAttribute`1](#) relates to.

Exceptions

[ArgumentNullException](#)

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

OpcNodeAttribute(OpcNodeId, OpcAttribute, T)

Initializes a new instance of the [OpcNodeAttribute`1](#) class with the [nodeId](#) of the node the [attribute](#) and its [value](#) specified belongs to.

C#

```
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute, T value)
```

Parameters

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

The [OpcNodeId](#) of the node its [attribute](#) value is to be represented.

[attribute](#) [OpcAttribute](#)

The [OpcAttribute](#) value indentifying the kind of attribute the new [OpcNodeAttribute`1](#) relates to.

value T

The value to represent.

Exceptions

[ArgumentNullException](#)

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

OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime)

Initializes a new instance of the [OpcNodeAttribute`1](#) class with the `nodeId` of the node the `attribute` and its `value` with the `sourceTimestamp` of the `value` specified belongs to.

C#

```
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute, T value, DateTime sourceTimestamp)
```

Parameters

`nodeId` [OpcNodeId](#)

The [OpcNodeId](#) of the node its `attribute` value is to be represented.

`attribute` [OpcAttribute](#)

The [OpcAttribute](#) value indentifying the kind of attribute the new [OpcNodeAttribute`1](#) relates to.

value T

The value to represent.

`sourceTimestamp` [DateTime](#)

The timestamp at which the source produced the `value`.

Exceptions

[ArgumentNullException](#)

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

OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, DateTime)

Initializes a new instance of the [OpcNodeAttribute`1](#) class with the `nodeId` of the node the `attribute` and its `value`, `sourceTimestamp` and `serverTimestamp` of the `value` specified belongs to.

C#

```
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute, T value, DateTime
sourceTimestamp, DateTime serverTimestamp)
```

Parameters

nodeId [OpcNodeId](#)

The [OpcNodeId](#) of the node its **attribute** value is to be represented.

attribute [OpcAttribute](#)

The [OpcAttribute](#) value indentifying the kind of attribute the new [OpcNodeAttribute](#) relates to.

value [T](#)

The value to represent.

sourceTimestamp [DateTime](#)

The timestamp at which the source produced the **value**.

serverTimestamp [DateTime](#)

The timestamp at which the server recorded the **value**.

Exceptions

[ArgumentNullException](#)

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

OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, DateTime, OpcStatus)

Initializes a new instance of the [OpcNodeAttribute](#) class with the **nodeId** of the node the **attribute** and its **value**, **sourceTimestamp**, **serverTimestamp** and **status** of the **value** specified belongs to.

C#

```
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute, T value, DateTime
sourceTimestamp, DateTime serverTimestamp, OpcStatus status)
```

Parameters

nodeId [OpcNodeId](#)

The [OpcNodeId](#) of the node its **attribute** value is to be represented.

attribute [OpcAttribute](#)

The [OpcAttribute](#) value indentifying the kind of attribute the new [OpcNodeAttribute](#) relates to.

value [T](#)

The value to represent.

sourceTimestamp DateTime

The timestamp at which the source produced the **value**.

serverTimestamp DateTime

The timestamp at which the server recorded the **value**.

status OpcStatus

The status information associated with the **value**.

Exceptions

ArgumentNullException

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

OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, DateTime, OpcStatusCode)

Initializes a new instance of the **OpcNodeAttribute`1** class with the **nodeId** of the node the **attribute** and its **value**, **sourceTimestamp**, **serverTimestamp** and **statusCode** of the **value** specified belongs to.

C#

```
[CLSCompliant(false)]
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute, T value, DateTime
sourceTimestamp, DateTime serverTimestamp, OpcStatusCode statusCode)
```

Parameters

nodeId OpcNodeId

The **OpcNodeId** of the node its **attribute** value is to be represented.

attribute OpcAttribute

The **OpcAttribute** value indentifying the kind of attribute the new **OpcNodeAttribute`1** relates to.

value T

The value to represent.

sourceTimestamp DateTime

The timestamp at which the source produced the **value**.

serverTimestamp DateTime

The timestamp at which the server recorded the **value**.

statusCode OpcStatusCode

One of the **OpcStatusCode** members which defines the status information associated with the **value**.

Exceptions

ArgumentNullException

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

OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, OpcStatus)

Initializes a new instance of the `OpcNodeAttribute`1` class with the `nodeId` of the node the `attribute` and its `value`, `sourceTimestamp` and `status` of the `value` specified belongs to.

C#

```
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute, T value, DateTime sourceTimestamp, OpcStatus status)
```

Parameters

`nodeId` `OpcNodeId`

The `OpcNodeId` of the node its `attribute` value is to be represented.

`attribute` `OpcAttribute`

The `OpcAttribute` value indentifying the kind of attribute the new `OpcNodeAttribute`1` relates to.

`value` `T`

The value to represent.

`sourceTimestamp` `DateTime`

The timestamp at which the source produced the value.

`status` `OpcStatus`

The status information associated with the `value`.

Exceptions

ArgumentNullException

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

OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, OpcStatusCode)

Initializes a new instance of the `OpcNodeAttribute`1` class with the `nodeId` of the node the `attribute` and its `value`, `sourceTimestamp` and `statusCode` of the `value` specified belongs to.

C#

```
[CLSCompliant(false)]
public OpcNodeAttribute(OpcNodeId nodeId, OpcAttribute attribute, T value, DateTime sourceTimestamp, OpcStatusCode statusCode)
```

Parameters

nodeId [OpcNodeId](#)

The [OpcNodeId](#) of the node its **attribute** value is to be represented.

attribute [OpcAttribute](#)

The [OpcAttribute](#) value indentifying the kind of attribute the new [OpcNodeAttribute](#) '1 relates to.

value [T](#)

The value to represent.

sourceTimestamp [DateTime](#)

The timestamp at which the source produced the value.

statusCode [OpcStatusCode](#)

One of the [OpcStatusCode](#) members which defines the status information associated with the **value**.

Exceptions

[ArgumentNullException](#)

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

Properties

Attribute

Gets a value indicating which attribute of a node is represented.

C#

```
public OpcAttribute Attribute { get; }
```

Property Value

[OpcAttribute](#)

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

NodeId

Gets the node identifier of the node described.

C#

```
public OpcNodeId NodeId { get; }
```

Property Value

OpcNodeId

An instance of the [OpcNodeId](#) class identifying the node described.

Methods

CompareTo(Object)

Compares the current [OpcNodeAttribute`1](#) with the [other](#).

C#

```
public override int CompareTo(object other)
```

Parameters

[other](#) [Object](#)

The [OpcNodeAttribute`1](#) to compare with this [OpcNodeAttribute`1](#).

Returns

[Int32](#)

A 32-bit signed integer that indicates the relative order of the objects being compared ([CompareTo\(Object\)](#)).

CompareTo(OpcNodeAttribute<T>)

Compares the current [OpcNodeAttribute`1](#) with another [OpcNodeAttribute`1](#).

C#

```
public virtual int CompareTo(OpcNodeAttribute<T> other)
```

Parameters

[other](#) [OpcNodeAttribute`1](#)

The [OpcNodeAttribute`1](#) to compare with this [OpcNodeAttribute`1](#).

Returns

[Int32](#)

A 32-bit signed integer that indicates the relative order of the objects being compared ([CompareTo\(\)](#)).

CompareTo(OpcValue)

Compares the current [OpcNodeAttribute`1](#) with the [other](#).

C#

```
public override int CompareTo(OpcValue other)
```

Parameters

[other](#) [OpcValue](#)

The [OpcNodeAttribute`1](#) to compare with this [OpcNodeAttribute`1](#).

Returns

[Int32](#)

A 32-bit signed integer that indicates the relative order of the objects being compared ([CompareTo\(Object\)](#)).

CompareTo(OpcValue<T>)

Compares the current [OpcNodeAttribute`1](#) with the [other](#).

C#

```
public override int CompareTo(OpcValue<T> other)
```

Parameters

[other](#) [OpcValue<T>](#)

The [OpcNodeAttribute`1](#) to compare with this [OpcNodeAttribute`1](#).

Returns

[Int32](#)

A 32-bit signed integer that indicates the relative order of the objects being compared ([CompareTo\(Object\)](#)).

Equals(Object)

Determines whether the specified [other](#) is equal to this [OpcNodeAttribute`1](#).

C#

```
public override bool Equals(object other)
```

Parameters

other Object

The `OpcNodeAttribute`1` to compare to the current `OpcNodeAttribute`1`.

Returns

Boolean

The value true if the specified `OpcNodeAttribute`1` is equal to the current `OpcNodeAttribute`1`; otherwise the value false.

Equals(OpcNodeAttribute<T>)

Determines whether the specified `other` is equal to this `OpcNodeAttribute`1`.

C#

```
public virtual bool Equals(OpcNodeAttribute<T> other)
```

Parameters

`other` `OpcNodeAttribute`1`

The `OpcNodeAttribute`1` to compare to the current `OpcNodeAttribute`1`.

Returns

Boolean

The value true if the specified `OpcNodeAttribute`1` is equal to the current `OpcNodeAttribute`1`; otherwise the value false.

Equals(OpcValue)

Determines whether the specified `other` is equal to this `OpcNodeAttribute`1`.

C#

```
public override bool Equals(OpcValue other)
```

Parameters

`other` `OpcValue`

The `OpcNodeAttribute`1` to compare to the current `OpcNodeAttribute`1`.

Returns

Boolean

The value true if the specified `OpcNodeAttribute`1` is equal to the current `OpcNodeAttribute`1`; otherwise the value false.

Equals(OpcValue<T>)

Determines whether the specified `other` is equal to this `OpcNodeAttribute`1`.

C#

```
public override bool Equals(OpcValue<T> other)
```

Parameters

`other` `OpcValue<T>`

The `OpcNodeAttribute`1` to compare to the current `OpcNodeAttribute`1`.

Returns

`Boolean`

The value true if the specified `OpcNodeAttribute`1` is equal to the current `OpcNodeAttribute`1`; otherwise the value false.

GetHashCode()

Retrieves a hash code for this `OpcNodeAttribute`1`.

C#

```
public override int GetHashCode()
```

Returns

`Int32`

An `Int32` that contains the hash code for the `OpcNodeAttribute`1`.

ToString(String, IFormatProvider)

Converts the value of this instance to its equivalent string representation using the specified format and culture-specific format information.

C#

```
public override string ToString(string format, IFormatProvider formatProvider)
```

Parameters

`format` `String`

A standard or custom format string.

`formatProvider` `IFormatProvider`

An object that supplies culture-specific formatting information.

Returns

String

The string representation of the value of this instance as specified by format and provider.

Exceptions

FormatException

The `format` is invalid or not supported.

Operators

Equality(OpcNodeAttribute<T>, OpcNodeAttribute<T>)

Returns a value indicating whether two instance of `OpcNodeAttribute<T>` are equal.

C#

```
public static bool operator ==(OpcNodeAttribute<T> left, OpcNodeAttribute<T> right)
```

Explicit(OpcNodeAttribute<T> to DataValue)

Converts a `OpcNodeAttribute<T>` to an `DataValue` object.

C#

```
[CLSCompliant(false)]  
public static explicit operator DataValue(OpcNodeAttribute<T> value)
```

GreaterThan(OpcNodeAttribute<T>, OpcNodeAttribute<T>)

Determines whether the first specified `OpcNodeAttribute<T>` object is greater than the second specified `OpcNodeAttribute<T>` object.

C#

```
public static bool operator >(OpcNodeAttribute<T> left, OpcNodeAttribute<T> right)
```

GreaterThanOrEqual(OpcNodeAttribute<T>, OpcNodeAttribute<T>)

Determines whether the first specified `OpcNodeAttribute<T>` object is greater than or equal to the second specified `OpcNodeAttribute<T>` object.

C#

```
public static bool operator >=(OpcNodeAttribute<T> left, OpcNodeAttribute<T> right)
```

Inequality(OpcNodeAttribute<T>, OpcNodeAttribute<T>)

Returns a value indicating whether two instances of [OpcNodeAttribute'1](#) are not equal.

C#

```
public static bool operator !=(OpcNodeAttribute<T> left, OpcNodeAttribute<T> right)
```

LessThan(OpcNodeAttribute<T>, OpcNodeAttribute<T>)

Determines whether the first specified [OpcNodeAttribute'1](#) object is less than the second specified [OpcNodeAttribute'1](#) object.

C#

```
public static bool operator <(OpcNodeAttribute<T> left, OpcNodeAttribute<T> right)
```

Exceptions

[ArgumentNullException](#)

The [left](#) is a null reference (Nothing in Visual Basic).

LessThanOrEqual(OpcNodeAttribute<T>, OpcNodeAttribute<T>)

Determines whether the first specified [OpcNodeAttribute'1](#) object is less than or equal to the second [OpcNodeAttribute'1](#) object.

C#

```
public static bool operator <=(OpcNodeAttribute<T> left, OpcNodeAttribute<T> right)
```

Exceptions

[ArgumentNullException](#)

The [left](#) is a null reference (Nothing in Visual Basic).

Table of Contents

Constructors	1
OpcNodeAttribute(OpcNodeId, OpcAttribute)	1
OpcNodeAttribute(OpcNodeId, OpcAttribute, T)	1
OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime)	2
OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, DateTime)	2
OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, DateTime, OpcStatus)	3
OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, DateTime, OpcStatusCode)	4
OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, OpcStatus)	5
OpcNodeAttribute(OpcNodeId, OpcAttribute, T, DateTime, OpcStatusCode)	5
Properties	6
Attribute	6
NodeId	6
Methods	7
CompareTo(Object)	7
CompareTo(OpcNodeAttribute<T>)	7
CompareTo(OpcValue)	8
CompareTo(OpcValue<T>)	8
Equals(Object)	8
Equals(OpcNodeAttribute<T>)	9
Equals(OpcValue)	9
Equals(OpcValue<T>)	10
GetHashCode()	10
ToString(String, IFormatProvider)	10
Operators	11
Equality(OpcNodeAttribute<T>, OpcNodeAttribute<T>)	11
Explicit(OpcNodeAttribute<T> to DataValue)	11
GreaterThan(OpcNodeAttribute<T>, OpcNodeAttribute<T>)	11
GreaterThanOrEqual(OpcNodeAttribute<T>, OpcNodeAttribute<T>)	11
Inequality(OpcNodeAttribute<T>, OpcNodeAttribute<T>)	12
LessThan(OpcNodeAttribute<T>, OpcNodeAttribute<T>)	12
LessThanOrEqual(OpcNodeAttribute<T>, OpcNodeAttribute<T>)	12

