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´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`.

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´1 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´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`.

`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´1 are equal.

C#

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

Explicit(OpcNodeAttribute<T> to DataValue)

Converts a OpcNodeAttribute´1 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´1 object is greater than the second specified OpcNodeAttribute´1 object.

C#

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

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

Determines whether the first specified OpcNodeAttribute´1 object is greater than or equal to the second specified OpcNodeAttribute´1 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