

OpcNodeValue<T> Class

Namespace: Opc.UaFx

Assemblies: Opc.UaFx.Advanced.dll

Stores the generic value of the [Value](#) attribute associated with a specific node optionally associated with status and timestamp information.

C#

```
public class OpcNodeValue<T> : OpcNodeAttribute<T>, IFormattable, IComparable<OpcValue>,
IEquatable<OpcValue>, IComparable<OpcValue<T>>, IEquatable<OpcValue<T>>,
IComparable<OpcNodeAttribute<T>>, IEquatable<OpcNodeAttribute<T>>, IOpcNodeValue,
IOpcNodeAttribute, IOpcNodeDescriptor, IComparable, IComparable<OpcNodeValue<T>>,
IEquatable<OpcNodeValue<T>>
```

Inheritance [Object](#) > [OpcValue](#) > [OpcValue<T>](#) > [OpcNodeAttribute<T>](#) > [OpcNodeValue<T>](#)

Implements [IFormattable](#), [IComparable<OpcValue>](#), [IEquatable<OpcValue>](#), [IComparable<OpcValue>](#), [IEquatable<OpcValue>](#), [IComparable<OpcNodeAttribute>](#), [IEquatable<OpcNodeAttribute>](#), [IOpcNodeValue](#), [IOpcNodeAttribute](#), [IOpcNodeDescriptor](#), [IComparable](#), [IComparable<OpcNodeValue`1>](#), [IEquatable<OpcNodeValue`1>](#)

Constructors

Name	Description
OpcNodeValue`1(OpcNodeId)	Initializes a new instance of the OpcNodeValue`1 class with the nodeId of the node the Value attribute represented belongs to.
OpcNodeValue`1(OpcNodeId,)	Initializes a new instance of the OpcNodeValue`1 class with the nodeId of the node the Value attribute and its value specified belongs to.
OpcNodeValue`1(OpcNodeId, , DateTime)	Initializes a new instance of the OpcNodeValue`1 class with the nodeId of the node the Value attribute and its value and the sourceTimestamp of the value specified belongs to.
OpcNodeValue`1(OpcNodeId, , DateTime, DateTime)	Initializes a new instance of the OpcNodeValue`1 class with the nodeId of the node the Value attribute and its value , sourceTimestamp and serverTimestamp of the value specified belongs to.
OpcNodeValue`1(OpcNodeId, , DateTime, DateTime, OpcStatus)	Initializes a new instance of the OpcNodeValue`1 class with the nodeId of the node the Value attribute and its value , sourceTimestamp , serverTimestamp and status of the value specified belongs to.
OpcNodeValue`1(OpcNodeId, , DateTime, DateTime, OpcStatusCode)	Initializes a new instance of the OpcNodeValue`1 class with the nodeId of the node the Value attribute and its value , sourceTimestamp , serverTimestamp and statusCode of the value specified belongs to.
OpcNodeValue`1(OpcNodeId, , DateTime, OpcStatus)	Initializes a new instance of the OpcNodeValue`1 class with the nodeId of the node the Value attribute and its value , sourceTimestamp and status of the value specified belongs to.

Name	Description
<code>OpcNodeValue`1(OpcNodeid, , DateTime, OpcStatusCode)</code>	Initializes a new instance of the <code>OpcNodeValue`1</code> class with the <code>nodeId</code> of the node the <code>Value</code> attribute and its <code>value</code> , <code>sourceTimestamp</code> and <code>statusCode</code> of the <code>value</code> specified belongs to.

Properties

Name	Description
<code>DataType</code>	Gets the type of value represented. (Inherited from <code>OpcValue</code>)
<code>DataTypeId</code>	Gets the node identifier of the <code>DataType</code> of the value represented. (Inherited from <code>OpcValue</code>)
<code>Rank</code>	Gets the rank of the value represented. (Inherited from <code>OpcValue</code>)
<code>ServerPicoSeconds</code>	Gets or sets the difference between a high resolution timestamp with a resolution of 10 picoseconds and the <code>ServerTimestamp</code> which only has a 100 ns resolution. (Inherited from <code>OpcValue</code>)
<code>ServerTimestamp</code>	Gets or sets the timestamp at which the server recorded the value. (Inherited from <code>OpcValue</code>)
<code>SourcePicoSeconds</code>	Gets or sets the difference between a high resolution timestamp with a resolution of 10 picoseconds and the <code>SourceTimestamp</code> which only has a 100 ns resolution. (Inherited from <code>OpcValue</code>)
<code>SourceTimestamp</code>	Gets or sets the timestamp of the source from that the value originates. (Inherited from <code>OpcValue</code>)
<code>Status</code>	Gets the status information which defines the servers ability to access/provide the value. (Inherited from <code>OpcValue</code>)
<code>Value</code>	Gets or sets the value represented. (Inherited from <code>OpcValue</code>)

Methods

Name	Description
<code>As`1()</code>	Retrieves the underlying <code>Value</code> as the type specified by <code>T</code> . (Inherited from <code>OpcValue</code>)
<code>AsValue`1</code>	Retrieves a new <code>OpcValue`1</code> instance its <code>Value</code> is of the type specified by <code>T</code> . (Inherited from <code>OpcValue</code>)
<code>CompareTo(Object)</code>	Compares the current <code>OpcNodeValue`1</code> with the <code>other</code> .
<code>CompareTo(Object)</code>	Compares the current <code>OpcValue</code> with the <code>other</code> . (Inherited from <code>OpcValue</code>)
<code>CompareTo(OpcNodeAttribute)</code>	Compares the current <code>OpcNodeValue`1</code> with the <code>other</code> .
<code>CompareTo(OpcNodeValue)</code>	Compares the current <code>OpcNodeValue`1</code> with another <code>OpcNodeValue`1</code> .
<code>CompareTo(OpcValue)</code>	Compares the current <code>OpcNodeValue`1</code> with the <code>other</code> .
<code>CompareTo(OpcValue)</code>	Compares the current <code>OpcValue</code> with another <code>OpcValue</code> . (Inherited from <code>OpcValue</code>)
<code>CompareTo(OpcValue)</code>	Compares the current <code>OpcNodeValue`1</code> with the <code>other</code> .
<code>Equals(Object)</code>	Determines whether the specified <code>other</code> is equal to this <code>OpcNodeValue`1</code> .

Name	Description
Equals(Object)	Determines whether the specified other is equal to this OpcValue . (Inherited from OpcValue)
Equals(OpcNodeAttribute)	Determines whether the specified other is equal to this OpcNodeValue`1 .
Equals(OpcNodeValue)	Determines whether the specified other is equal to this OpcNodeValue`1 .
Equals(OpcValue)	Determines whether the specified other is equal to this OpcNodeValue`1 .
Equals(OpcValue)	Determines whether the specified other is equal to this OpcValue . (Inherited from OpcValue)
Equals(OpcValue)	Determines whether the specified other is equal to this OpcNodeValue`1 .
GetHashCode	Retrieves a hash code for this OpcNodeValue`1 .
GetHashCode	Retrieves a hash code for this OpcValue . (Inherited from OpcValue)
ToString	Converts the value of this instance to its equivalent string representation. (Inherited from OpcValue)
ToString(String, IFormatProvider)	Converts the value of this instance to its equivalent string representation using the specified format and culture-specific format information. (Inherited from OpcValue)

Operators

Name	Description
op_Equality(OpcNodeValue, OpcNodeValue)	Returns a value indicating whether two instance of OpcNodeValue`1 are equal.
op_Equality(OpcValue, OpcValue)	Returns a value indicating whether two instance of OpcValue are equal. (Inherited from OpcValue)
op_Explicit(OpcNodeValue)	Converts a OpcNodeValue`1 to an DataValue object.
op_Explicit(Ua.DataValue)	Converts a OpcValue to an DataValue object. (Inherited from OpcValue)
op_GreaterThan(OpcNodeValue, OpcNodeValue)	Determines whether the first specified OpcNodeValue`1</b> object is greater than the second specified <b>OpcNodeValue`1 object.
op_GreaterThan(OpcValue, OpcValue)	Determines whether the first specified OpcValue object is greater than the second specified OpcValue object. (Inherited from OpcValue)
op_GreaterThanOrEqual(OpcNodeValue, OpcNodeValue)	Determines whether the first specified OpcNodeValue`1</b> object is greater than or equal to the second specified <b>OpcNodeValue`1 object.
op_GreaterThanOrEqual(OpcValue, OpcValue)	Determines whether the first specified OpcValue object is greater than or equal to the second specified OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a Boolean to an OpcValue object. (Inherited from OpcValue)

Name	Description
op_Implicit(UaFx.OpcValue)	Converts a Byte to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a Char to an OpcValue object. (Inherited from OpcValue)
op_Implicit(DataValue)~Opc.UaFx.OpcValue)	Converts a DataValue to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a Decimal to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a Double to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a UInt16 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a Int32 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a UInt64 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able Boolean to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able Byte to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able Char to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able Decimal to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able Double to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able UInt16 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able Int32 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able UInt64 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able SByte to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able Single to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able UInt16 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able UInt32 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Nullable)	Converts a null-able UInt64 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a SByte to an OpcValue object. (Inherited from OpcValue)

Name	Description
op_Implicit(UaFx.OpcValue)	Converts a Single to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a String to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a UInt16 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a UInt32 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(UaFx.OpcValue)	Converts a UInt64 to an OpcValue object. (Inherited from OpcValue)
op_Implicit(Variant)~Opc.UaFx.OpcValue)	Converts a Variant to an OpcValue object. (Inherited from OpcValue)
op_Inequality(OpcNodeValue, OpcNodeValue)	Returns a value indicating whether two instances of OpcNodeValue`1 are not equal.
op_Inequality(OpcValue, OpcValue)	Returns a value indicating whether two instances of OpcValue are not equal. (Inherited from OpcValue)
op_LessThan(OpcNodeValue, OpcNodeValue)	Determines whether the first specified OpcNodeValue`1</a> object is less than the second specified <a href="#">OpcNodeValue`1 object.
op_LessThan(OpcValue, OpcValue)	Determines whether the first specified OpcValue object is less than the second specified OpcValue object. (Inherited from OpcValue)
op_LessThanOrEqual(OpcNodeValue, OpcNodeValue)	Determines whether the first specified OpcNodeValue`1</a> object is less than or equal to the second <a href="#">OpcNodeValue`1 object.
op_LessThanOrEqual(OpcValue, OpcValue)	Determines whether the first specified OpcValue object is less than or equal to the second OpcValue object. (Inherited from OpcValue)

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