

# OpcValue<T> Class

**Namespace:** Opc.UaFx

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

Stores a generic value optionally associated with status and timestamp information.

**C#**

```
public class OpcValue<T> : OpcValue, IFormattable, IComparable<OpcValue>,
IEquatable<OpcValue>, IComparable, IComparable<OpcValue<T>>, IEquatable<OpcValue<T>>
```

**Inheritance** [Object](#) > [OpcValue](#) > [OpcValue<T>](#)

**Derived**

- [OpcNodeAttribute`1](#)

**Implements** [IFormattable](#), [IComparable<OpcValue>](#), [IEquatable<OpcValue>](#), [IComparable](#), [IComparable<OpcValue`1>](#), [IEquatable<OpcValue`1>](#)

## Constructors

Name	Description
<a href="#">OpcValue`1()</a>	Initializes a new instance of the <a href="#">OpcValue`1</a> class using the <a href="#">value</a> .
<a href="#">OpcValue`1(, DateTime)</a>	Initializes a new instance of the <a href="#">OpcValue`1</a> class using the <a href="#">value</a> and the <a href="#">sourceTimestamp</a> of the <a href="#">value</a> .
<a href="#">OpcValue`1(, DateTime, DateTime)</a>	Initializes a new instance of the <a href="#">OpcValue`1</a> class using the <a href="#">value</a> , <a href="#">sourceTimestamp</a> and <a href="#">serverTimestamp</a> of the <a href="#">value</a> .
<a href="#">OpcValue`1(, DateTime, DateTime, OpcStatus)</a>	Initializes a new instance of the <a href="#">OpcValue`1</a> class using the <a href="#">value</a> , <a href="#">sourceTimestamp</a> , <a href="#">serverTimestamp</a> and <a href="#">status</a> of the <a href="#">value</a> .
<a href="#">OpcValue`1(, DateTime, DateTime, OpcStatusCode)</a>	Initializes a new instance of the <a href="#">OpcValue`1</a> class using the <a href="#">value</a> , <a href="#">sourceTimestamp</a> , <a href="#">serverTimestamp</a> and <a href="#">statusCode</a> of the <a href="#">value</a> .
<a href="#">OpcValue`1(, DateTime, OpcStatus)</a>	Initializes a new instance of the <a href="#">OpcValue`1</a> class using the <a href="#">value</a> , <a href="#">sourceTimestamp</a> and <a href="#">status</a> of the <a href="#">value</a> .
<a href="#">OpcValue`1(, DateTime, OpcStatusCode)</a>	Initializes a new instance of the <a href="#">OpcValue`1</a> class using the <a href="#">value</a> , <a href="#">sourceTimestamp</a> and <a href="#">statusCode</a> of the <a href="#">value</a> .

## Properties

Name	Description
<a href="#">DataType</a>	Gets the type of value represented. (Inherited from <a href="#">OpcValue</a> )
<a href="#">DataTypeId</a>	Gets the node identifier of the <a href="#">DataType</a> of the value represented.
<a href="#">DataTypeId</a>	Gets the node identifier of the <a href="#">DataType</a> of the value represented. (Inherited from <a href="#">OpcValue</a> )
<a href="#">Rank</a>	Gets the rank of the value represented. (Inherited from <a href="#">OpcValue</a> )

Name	Description
ServerPicoseconds	Gets or sets the difference between a high resolution timestamp with a resolution of 10 picoseconds and the <a href="#">ServerTimestamp</a> which only has a 100 ns resolution. (Inherited from <a href="#">OpcValue</a> )
ServerTimestamp	Gets or sets the timestamp at which the server recorded the value. (Inherited from <a href="#">OpcValue</a> )
SourcePicoseconds	Gets or sets the difference between a high resolution timestamp with a resolution of 10 picoseconds and the <a href="#">SourceTimestamp</a> which only has a 100 ns resolution. (Inherited from <a href="#">OpcValue</a> )
SourceTimestamp	Gets or sets the timestamp of the source from that the value originates. (Inherited from <a href="#">OpcValue</a> )
Status	Gets the status information which defines the servers ability to access/provide the value. (Inherited from <a href="#">OpcValue</a> )
Value	Gets or sets the <b>T</b> value represented.
Value	Gets or sets the value represented. (Inherited from <a href="#">OpcValue</a> )
ValueAsObject	Gets or sets the value represented.

## Methods

Name	Description
As`1()	Retrieves the underlying <a href="#">Value</a> as the type specified by <b>T</b> . (Inherited from <a href="#">OpcValue</a> )
AsValue`1	Retrieves a new <a href="#">OpcValue`1</a> instance its <a href="#">Value</a> is of the type specified by <b>T</b> . (Inherited from <a href="#">OpcValue</a> )
CompareTo(Object)	Compares the current <a href="#">OpcValue`1</a> with the <b>other</b> .
CompareTo(Object)	Compares the current <a href="#">OpcValue</a> with the <b>other</b> . (Inherited from <a href="#">OpcValue</a> )
CompareTo(OpcValue)	Compares the current <a href="#">OpcValue`1</a> with another <a href="#">OpcValue`1</a> .
CompareTo(OpcValue)	Compares the current <a href="#">OpcValue</a> with another <a href="#">OpcValue</a> . (Inherited from <a href="#">OpcValue</a> )
CompareTo(OpcValue)	Compares the current <a href="#">OpcValue`1</a> with another <a href="#">OpcValue`1</a> .
Equals(Object)	Determines whether the specified <b>other</b> is equal to this <a href="#">OpcValue`1</a> .
Equals(Object)	Determines whether the specified <b>other</b> is equal to this <a href="#">OpcValue</a> . (Inherited from <a href="#">OpcValue</a> )
Equals(OpcValue)	Determines whether the specified <b>other</b> is equal to this <a href="#">OpcValue`1</a> .
Equals(OpcValue)	Determines whether the specified <b>other</b> is equal to this <a href="#">OpcValue</a> . (Inherited from <a href="#">OpcValue</a> )
Equals(OpcValue)	Determines whether the specified <b>other</b> is equal to this <a href="#">OpcValue</a> .
GetHashCode	Retrieves a hash code for this <a href="#">OpcValue`1</a> .
GetHashCode	Retrieves a hash code for this <a href="#">OpcValue</a> . (Inherited from <a href="#">OpcValue</a> )
ToString	Converts the value of this instance to its equivalent string representation. (Inherited from <a href="#">OpcValue</a> )
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 <a href="#">OpcValue</a> )

# Operators

Name	Description
op_Equality(OpcValue, OpcValue)	Returns a value indicating whether two instance of <b>OpcValue</b> are equal. (Inherited from <b>OpcValue</b> )
op_Equality(OpcValue, OpcValue)	Returns a value indicating whether two instance of <b>OpcValue`1</b> are equal.
op_Explicit(Ua.DataValue)	Converts a <b>OpcValue</b> to an <b>DataValue</b> object. (Inherited from <b>OpcValue</b> )
op_Explicit(OpcValue)	Converts a <b>OpcValue`1</b> to an <b>DataValue</b> object.
op_GreaterThan(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue</b> object is greater than the second specified <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_GreaterThan(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue`1</b> object is greater than the second specified <b>OpcValue`1</b> object.
op_GreaterThanOrEqual(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue</b> object is greater than or equal to the second specified <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_GreaterThanOrEqual(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue`1</b> object is greater than or equal to the second specified <b>OpcValue`1</b> object.
op_Implicit(UaFx.OpcValue)	Converts a <b>Boolean</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>Byte</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>Char</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(DataValue)~Opc.UaFx.OpcValue)	Converts a <b>DataValue</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(DataValue)~Opc.UaFx.OpcValue)	Converts a <b>DataValue</b> to an <b>OpcValue`1</b> object.
op_Implicit(UaFx.OpcValue)	Converts a <b>Decimal</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>Double</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>UInt16</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>Int32</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>UInt64</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>Boolean</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>Byte</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>Char</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>Decimal</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>Double</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )

Name	Description
op_Implicit(Nullable)	Converts a null-able <b>UInt16</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>Int32</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>UInt64</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>SByte</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>Single</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>UInt16</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>UInt32</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Nullable)	Converts a null-able <b>UInt64</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>SByte</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>Single</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>String</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>UInt16</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>UInt32</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(UaFx.OpcValue)	Converts a <b>UInt64</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Variant)~Opc.UaFx.OpcValue)	Converts a <b>Variant</b> to an <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_Implicit(Variant)~Opc.UaFx.OpcValue)	Converts a <b>Variant</b> to an <b>OpcValue`1</b> object.
op_Inequality(OpcValue, OpcValue)	Returns a value indicating whether two instances of <b>OpcValue</b> are not equal. (Inherited from <b>OpcValue</b> )
op_Inequality(OpcValue, OpcValue)	Returns a value indicating whether two instances of <b>OpcValue`1</b> are not equal.
op_LessThan(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue</b> object is less than the second specified <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_LessThan(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue`1</b> object is less than the second specified <b>OpcValue`1</b> object.
op_LessThanOrEqual(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue</b> object is less than or equal to the second <b>OpcValue</b> object. (Inherited from <b>OpcValue</b> )
op_LessThanOrEqual(OpcValue, OpcValue)	Determines whether the first specified <b>OpcValue`1</b> object is less than or equal to the second <b>OpcValue`1</b> object.

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