

# OpcValue Class

**Namespace:** Opc.UaFx

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

Stores a value optionally associated with status and timestamp information.

**C#**

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

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

**Derived**

- [OpcHistoryValue](#)
- [OpcValue`1](#)

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

## Constructors

Name	Description
<a href="#">OpcValue(Object)</a>	Initializes a new instance of the <a href="#">OpcValue</a> class using the <a href="#">value</a> .
<a href="#">OpcValue(Object, DateTime)</a>	Initializes a new instance of the <a href="#">OpcValue</a> class using the <a href="#">value</a> and the <a href="#">sourceTimestamp</a> of the <a href="#">value</a> .
<a href="#">OpcValue(Object, DateTime, DateTime)</a>	Initializes a new instance of the <a href="#">OpcValue</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(Object, DateTime, DateTime, OpcStatus)</a>	Initializes a new instance of the <a href="#">OpcValue</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(Object, DateTime, DateTime, OpcStatusCode)</a>	Initializes a new instance of the <a href="#">OpcValue</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(Object, DateTime, OpcStatus)</a>	Initializes a new instance of the <a href="#">OpcValue</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(Object, DateTime, OpcStatusCode)</a>	Initializes a new instance of the <a href="#">OpcValue</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.
<a href="#">DataTypeId</a>	Gets the node identifier of the <a href="#">DataType</a> of the value represented.
<a href="#">Rank</a>	Gets the rank of the value represented.
<a href="#">ServerPicoseconds</a>	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.
<a href="#">ServerTimestamp</a>	Gets or sets the timestamp at which the server recorded the value.

Name	Description
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.
SourceTimestamp	Gets or sets the timestamp of the source from that the value originates.
Status	Gets the status information which defines the servers ability to access/provide the value.
Value	Gets or sets the value represented.

## Methods

Name	Description
As<T>()	Retrieves the underlying <a href="#">Value</a> as the type specified by <a href="#">T</a> .
AsValue<T>()	Retrieves a new <a href="#">OpcValue&lt;T&gt;</a> instance its <a href="#">Value</a> is of the type specified by <a href="#">T</a> .
CompareTo(Object)	Compares the current <a href="#">OpcValue</a> with the <a href="#">other</a> .
CompareTo(OpcValue)	Compares the current <a href="#">OpcValue</a> with another <a href="#">OpcValue</a> .
Equals(Object)	Determines whether the specified <a href="#">other</a> is equal to this <a href="#">OpcValue</a> .
Equals(OpcValue)	Determines whether the specified <a href="#">other</a> is equal to this <a href="#">OpcValue</a> .
GetHashCode	Retrieves a hash code for this <a href="#">OpcValue</a> .
ToString	Converts the value of this instance to its equivalent string representation.
ToString(String, IFormatProvider)	Converts the value of this instance to its equivalent string representation using the specified format and culture-specific format information.

## Operators

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

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



# Table of Contents

<b>Constructors</b> .....	1
<b>Properties</b> .....	1
<b>Methods</b> .....	2
<b>Operators</b> .....	2