

# OpcNodeStream Members

**Namespace:** Opc.UaFx.Client

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

The [OpcNodeStream](#) type exposes the following members.

## Constructors

### OpcNodeStream(OpcClient, OpcNodeId)

Initializes a new instance of the [OpcNodeStream](#) class using the specified `client` and `nodeId`.

**C#**

```
public OpcNodeStream(OpcClient client, OpcNodeId nodeId)
```

#### Parameters

`client` [OpcClient](#)

The [OpcClient](#) to use to access the binary variable node.

`nodeId` [OpcNodeId](#)

The [OpcNodeId](#) of the binary variable node to access.

#### Exceptions

[ArgumentNullException](#)

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

### OpcNodeStream(OpcNodeAccessContext)

Initializes a new instance of the [OpcNodeStream](#) class using the specified `context`.

**C#**

```
public OpcNodeStream(OpcNodeAccessContext context)
```

#### Parameters

`context` [OpcNodeAccessContext](#)

The [OpcNodeAccessContext](#) of the binary variable node to access.

#### Exceptions

[ArgumentNullException](#)

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

## OpcNodeStream(OpcVariableNodeInfo)

Initializes a new instance of the `OpcNodeStream` class using the specified `node`.

### C#

```
public OpcNodeStream(OpcVariableNodeInfo node)
```

### Parameters

`node` `OpcVariableNodeInfo`

The `OpcVariableNodeInfo` of the binary variable node to access.

### Exceptions

`ArgumentNullException`

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

## Properties

### CanRead

Gets a value indicating whether the current stream supports reading.

### C#

```
public override bool CanRead { get; }
```

### Property Value

`Boolean`

The value true if the stream supports reading; otherwise the value false.

### Remarks

If the stream is closed, this property returns false.

### CanSeek

Gets a value indicating whether the current stream supports seeking.

### C#

```
public override bool CanSeek { get; }
```

## Property Value

[Boolean](#)

The value true if the stream supports seeking; otherwise the value false.

## Remarks

If the stream is closed, this property returns false.

# CanWrite

Gets a value indicating whether the current stream supports writing.

**C#**

```
public override bool CanWrite { get; }
```

## Property Value

[Boolean](#)

The value true if the stream supports writing; otherwise the value false.

## Remarks

If the stream is closed, this property returns false.

# Length

Gets the length in bytes of the stream.

**C#**

```
public override long Length { get; }
```

## Property Value

[Int64](#)

A long value representing the length of the stream in bytes.

## Exceptions

[ObjectDisposedException](#)

The stream has been disposed of.

## Node

### C#

```
public OpcVariableNodeInfo Node { get; }
```

### Property Value

[OpcVariableNodeInfo](#)

## Position

Gets or sets the position within the current stream.

### C#

```
public override long Position { get; set; }
```

### Property Value

[Int64](#)

The current position within the stream.

### Exceptions

[ObjectDisposedException](#)

The stream has been disposed of.

## Methods

### Close()

Closes the current stream and releases any resources associated with the current stream. Instead of calling this method, ensure that the stream is properly disposed.

### C#

```
public override sealed void Close()
```

### Remarks

Attempts to manipulate the stream after the stream has been closed might throw an [ObjectDisposedException](#).

# Flush()

Clears all buffers for this stream and causes any buffered data to be written to the underlying device.

## C#

```
public override void Flush()
```

# Read(Byte[], Int32, Int32)

Reads a sequence of bytes from the current stream and advances the position within the stream by the number of bytes read.

## C#

```
public override int Read(byte[] buffer, int offset, int count)
```

## Parameters

**buffer** [Byte\[\]](#)

An array of bytes. When this method returns, the buffer contains the specified byte array with the values between **offset** and (**offset** + **count** - 1) replaced by the bytes read from the current source.

**offset** [Int32](#)

The zero-based byte offset in **buffer** at which to begin storing the data read from the current stream.

**count** [Int32](#)

The maximum number of bytes to be read from the current stream.

## Returns

[Int32](#)

The total number of bytes read into the **buffer**. This can be less than the number of bytes requested if that many bytes are not currently available, or zero (0) if the end of the stream has been reached.

## Exceptions

[ArgumentException](#)

The sum of **offset** and **count** is larger than the **buffer** length.

[ArgumentNullException](#)

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

[ArgumentOutOfRangeException](#)

The **offset** or **count** is negative.

[NotSupportedException](#)

The stream does not support reading.

[ObjectDisposedException](#)

The stream has been disposed of.

### Remarks

Use the [CanRead](#) property to determine whether the current instance supports reading.

## Seek(Int64, SeekOrigin)

Sets the position within the current stream.

### C#

```
public override long Seek(long offset, SeekOrigin origin)
```

### Parameters

**offset** [Int64](#)

A byte offset relative to the [origin](#) parameter.

**origin** [SeekOrigin](#)

A value of type [SeekOrigin](#) indicating the reference point used to obtain the new position.

### Returns

[Int64](#)

The new position within the current stream.

### Exceptions

[NotSupportedException](#)

The stream does not support seeking.

[ObjectDisposedException](#)

The stream has been disposed of.

### Remarks

Use the [CanSeek](#) property to determine whether the current instance supports seeking. Seeking to any location beyond the length of the stream is supported.

# SetLength(Int64)

Sets the length of the current stream.

## C#

```
public override void SetLength(long value)
```

## Parameters

**value** [Int64](#)

The desired length of the current stream in bytes.

## Exceptions

[ObjectDisposedException](#)

The stream has been disposed of.

[NotSupportedException](#)

The stream does not support both writing and seeking.

## Remarks

Use the [CanWrite](#) property to determine whether the current instance supports writing, and the [CanSeek](#) property to determine whether seeking is supported. If the specified value is less than the current length of the stream, the stream is truncated. If the specified value is larger than the current length of the stream, the stream is expanded. If the stream is expanded, the contents of the stream between the old and the new length are not defined.

# Write(Byte[], Int32, Int32)

Writes a sequence of bytes to the current stream and advances the current position within this stream by the number of bytes written.

## C#

```
public override void Write(byte[] buffer, int offset, int count)
```

## Parameters

**buffer** [Byte\[\]](#)

An array of bytes. This method copies count bytes from **buffer** to the current stream.

**offset** [Int32](#)

The zero-based byte offset in **buffer** at which to begin copying bytes to the current stream.

**count** [Int32](#)

The number of bytes to be written to the current stream.

## Exceptions

### [ArgumentException](#)

The sum of `offset` and `count` is larger than the `buffer` length.

### [ArgumentNullException](#)

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

### [ArgumentOutOfRangeException](#)

The `offset` or `count` is negative.

### [NotSupportedException](#)

The stream does not support writing.

### [ObjectDisposedException](#)

The stream has been disposed of.

## Remarks

Use the [CanWrite](#) property to determine whether the current instance supports writing.

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