

OpcMemberSwitch Members

Namespace: Opc.UaFx

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

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

Constructors

OpcMemberSwitch(Int32)

Initializes a new instance of the [OpcMemberSwitch](#) class which refers to the [bit](#) specified. Using this constructor results in a [OpcMemberSwitch](#) which evaluates to the value true in case there the [bit](#) referenced is set (= high) in the 'EncodingMask'.

C#

```
public OpcMemberSwitch(int bit)
```

Parameters

[bit](#) [Int32](#)

The zero-based number of the bit in the 'EncodingMask' which controls the existence of an optional member. The value needs to be between 0 and 63 (inclusive).

Exceptions

[ArgumentOutOfRangeException](#)

The [bit](#) is less than 0 or greater than 63.

Remarks

This constructor uses the [OpcMemberSwitchConditionsBit](#) for the [Conditions](#) property.

OpcMemberSwitch(String)

Initializes a new instance of the [OpcMemberSwitch](#) class which refers to the switch member using its [name](#) specified. Using this constructor results in a [OpcMemberSwitch](#) which evaluates to the value true in case there the value of the switch member referenced by the [name](#) is not equals zero.

C#

```
public OpcMemberSwitch(string name)
```

Parameters

[name](#) [String](#)

The name of the switch member its value is compared to control the existence of an optional member.

Exceptions

ArgumentException

The `name` is equals `Empty`.

ArgumentNullException

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

Remarks

This constructor uses the `OpcMemberSwitchConditionsField` for the `Conditions` property.

OpcMemberSwitch(String, Int64)

Initializes a new instance of the `OpcMemberSwitch` class which refers to the switch member using its `name` while its value needs to be equals to the `value` specified. Using this constructor results in a `OpcMemberSwitch` which evaluates to the value true in case there the value of the switch member referenced by the `name` is equals to the `value`.

C#

```
public OpcMemberSwitch(string name, long value)
```

Parameters

`name` String

The name of the switch member its value is compared to the `value` to control the existence of an optional member.

`value` Int64

The value towards the value of the switch member is to be compared using the `OpcMemberSwitchOperatorEquals`. The value needs to be between `MinValue` and `MaxValue`.

Exceptions

ArgumentException

The `name` is equals `Empty`.

ArgumentNullException

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

ArgumentOutOfRangeException

The `value` is less than `MinValue` or greater than `MaxValue`.

Remarks

This constructor uses the [OpcMemberSwitchConditionsField](#) and [Value](#) for the [Conditions](#) property.

OpcMemberSwitch(String, Int64, OpcMemberSwitchOperator)

Initializes a new instance of the [OpcMemberSwitch](#) class which refers to the switch member using its [name](#) while its values is compared to the [value](#) using the [operator](#) specified. Using this constructor results in a [OpcMemberSwitch](#) which evaluates to the value true in case there the comparison of value of the switch member referenced by the [name](#) using the [operator](#) and the [value](#) results to the value true.

C#

```
public OpcMemberSwitch(string name, long value, OpcMemberSwitchOperator operator)
```

Parameters

[name](#) [String](#)

The name of the switch member its value is compared to the [value](#) to control the existence of an optional member.

[value](#) [Int64](#)

The value towards the value of the switch member is to be compared using the [operator](#) specified. The value needs to be between [MinValue](#) and [MaxValue](#).

[operator](#) [OpcMemberSwitchOperator](#)

One of the members defined by the [OpcMemberSwitchOperator](#) enumeration which defines the operator to use when comparing the value of the switch member with the [value](#) specified.

Exceptions

[ArgumentException](#)

The [name](#) is equals [Empty](#).

[ArgumentNullException](#)

The [name](#) is a null reference (Nothing in Visual Basic).

[ArgumentOutOfRangeException](#)

The [value](#) is less than [MinValue](#) or greater than [MaxValue](#).

Remarks

This constructor uses the [OpcMemberSwitchConditionsField](#), [Value](#) and [Operator](#) for the [Conditions](#) property.

Properties

Bit

Gets the zero-based number of the bit in the 'EncodingMask' which controls the existence of an optional member.

C#

```
public int Bit { get; }
```

Property Value

Int32

A value between 0 and 63 (inclusive) which refers to the bit in the 'EncodingMask' evaluated to control the existence of an optional member or -1 in case there the [OpcMemberSwitch](#) refers to a switch member using its [Name](#).

Conditions

Gets a value which identities in which way the current [OpcMemberSwitch](#) decides whether a member exists.

C#

```
public OpcMemberSwitchConditions Conditions { get; }
```

Property Value

OpcMemberSwitchConditions

A combination of the members defined by the [OpcMemberSwitchConditions](#) enumeration.

Remarks

The value of this property depends on which constructor of the [OpcMemberSwitch](#) class has been used. For more details see the documentation of the constructors.

Name

Gets the name of the switch member its value is compared to control the existence of an optional member.

C#

```
public string Name { get; }
```

Property Value

String

The [String](#) which identifies the member its value is to be evaluated.

Operator

Gets a value which defines the relational operator to use when comparing the value of a referenced [Bit](#) or the value of a referenced switch member referred to by [Name](#).

C#

```
public OpcMemberSwitchOperator Operator { get; }
```

Property Value

OpcMemberSwitchOperator

One of the members defined by the [OpcMemberSwitchOperator](#) enumeration.

Value

Gets the value towards the value of the switch member, referenced by the [Bit](#) of the 'EncodingMask' or by the [Name](#), is to be compared using the [Operator](#) of the [OpcMemberSwitch](#).

C#

```
public long Value { get; }
```

Property Value

Int64

The value towards the value of the switch member is compared.

Methods

Matches(Int64)

Evaluates the switch condition against the [value](#) specified.

C#

```
public bool Matches(long value)
```

Parameters

[value](#) [Int64](#)

The value of the 'EncodingMask' or the value of the switch member referenced by the **Name** to evaluate (the **value** is evaluated on the left using the **Operator** against the **Value** on the right).

Returns

Boolean

The value true if the value of the 'EncodingMask' specified declares the according **Bit** equals 'high' or if the **value** of the switch member compares to the **Value** with a result equals true; otherwise the value false.

ToString()

Returns a **String** representing the information used by the current **OpcMemberSwitch**.

C#

```
public override string ToString()
```

Returns

String

A **String** representing the current **OpcMemberSwitch**.

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