

# PlcBoolean Members

**Namespace:** IPS7Lnk.Advanced

**Assemblies:** IPS7LnkNet.Advanced.dll, IPS7LnkNet.Advanced.dll

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

## Constructors

### PlcBoolean(PlcBooleanType)

Initializes a new instance of the [PlcBoolean](#) class using the specified [type](#)

**C#**

```
public PlcBoolean(PlcBooleanType type)
```

#### Parameters

[type](#) [PlcBooleanType](#)

The [PlcBooleanType](#) of the new [PlcBoolean](#) to which the PLC value belongs.

#### Exceptions

[ArgumentNullException](#)

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

### PlcBoolean(PlcBooleanType, Boolean)

Initializes a new instance of the [PlcBoolean](#) class using the specified [type](#) and [value](#).

**C#**

```
public PlcBoolean(PlcBooleanType type, bool value)
```

#### Parameters

[type](#) [PlcBooleanType](#)

The [PlcBooleanType](#) of the new [PlcBoolean](#) to which the PLC value belongs.

[value](#) [Boolean](#)

The initial value of the new [PlcBoolean](#).

#### Exceptions

[ArgumentNullException](#)

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

## PlcBoolean(PlcBooleanType, PlcName)

Initializes a new instance of the `PlcBoolean` class using the specified `type` and `name`.

**C#**

```
public PlcBoolean(PlcBooleanType type, PlcName name)
```

### Parameters

`type` `PlcBooleanType`

The `PlcBooleanType` of the new `PlcBoolean` to which the PLC value belongs.

`name` `PlcName`

The name of the value.

### Exceptions

`ArgumentNullException`

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

## PlcBoolean(PlcBooleanType, PlcName, Boolean)

Initializes a new instance of the `PlcBoolean` class using the specified `type`, `name` and `value`.

**C#**

```
public PlcBoolean(PlcBooleanType type, PlcName name, bool value)
```

### Parameters

`type` `PlcBooleanType`

The `PlcBooleanType` of the new `PlcBoolean` to which the PLC value belongs.

`name` `PlcName`

The name of the value.

`value` `Boolean`

The initial value of the new `PlcBoolean`.

### Exceptions

`ArgumentNullException`

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

# PlcBoolean(PlcIdentity)

Initializes a new instance of the [PlcBoolean](#) class using the specified [identity](#)

## C#

```
public PlcBoolean(PlcIdentity identity)
```

### Parameters

[identity](#) [PlcIdentity](#)

The [PlcIdentity](#) of the new [PlcBoolean](#) to which the PLC value belongs.

### Exceptions

[ArgumentException](#)

The [identity](#) does not refer to the [Bit](#).

[ArgumentNullException](#)

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

# PlcBoolean(PlcIdentity, Boolean)

Initializes a new instance of the [PlcBoolean](#) class using the specified [identity](#) and [value](#).

## C#

```
public PlcBoolean(PlcIdentity identity, bool value)
```

### Parameters

[identity](#) [PlcIdentity](#)

The [PlcIdentity](#) of the new [PlcBoolean](#) to which the PLC value belongs.

[value](#) [Boolean](#)

The initial value of the new [PlcBoolean](#).

### Exceptions

[ArgumentException](#)

The [identity](#) does not refer to the [Bit](#).

[ArgumentNullException](#)

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

## PlcBoolean(PlcIdentity, PlcName)

Initializes a new instance of the [PlcBoolean](#) class using the specified [identity](#) and [name](#).

### C#

```
public PlcBoolean(PlcIdentity identity, PlcName name)
```

### Parameters

[identity](#) [PlcIdentity](#)

The [PlcIdentity](#) of the new [PlcBoolean](#) to which the PLC value belongs.

[name](#) [PlcName](#)

The name of the value.

### Exceptions

[ArgumentException](#)

The [identity](#) does not refer to the [Bit](#).

[ArgumentNullException](#)

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

## PlcBoolean(PlcIdentity, PlcName, Boolean)

Initializes a new instance of the [PlcBoolean](#) class using the specified [identity](#), [name](#) and [value](#).

### C#

```
public PlcBoolean(PlcIdentity identity, PlcName name, bool value)
```

### Parameters

[identity](#) [PlcIdentity](#)

The [PlcIdentity](#) of the new [PlcBoolean](#) to which the PLC value belongs.

[name](#) [PlcName](#)

The name of the value.

[value](#) [Boolean](#)

The initial value of the new [PlcBoolean](#).

### Exceptions

[ArgumentException](#)

The [identity](#) does not refer to the [Bit](#).

## ArgumentNullException

The **identity** or **name** is a null reference (Nothing in Visual Basic).

# Methods

## GetValueCore(PlcDeviceConnection)

Retrieves the current value of the PLC value from a **IPlcDevice** using the **connection** specified.

### C#

```
protected override bool GetValueCore(PlcDeviceConnection connection)
```

### Parameters

**connection** **PlcDeviceConnection**

The **PlcDeviceConnection** from that the data is to be retrieved.

### Returns

**Boolean**

The current value of the PLC value.

### Exceptions

**InvalidOperationException**

The **connection** is in **Faulted** state and cannot longer be opened.

**ObjectDisposedException**

The **connection** has been disposed of.

## RelocateCore(PlcAddress)

Relocates the value to the **address** specified.

### C#

```
protected override IPlcValue RelocateCore(PlcAddress address)
```

### Parameters

**address** **PlcAddress**

The **PlcAddress** to that the value is to be relocated.

## Returns

### IPlcValue

A new instance of the same type as this PLC value instance relocated to the **address** specified.

# SetValueCore(PlcDeviceConnection, Boolean)

Stores the **value** in the **IPlcDevice** assigned to the **connection** specified.

## C#

```
protected override void SetValueCore(PlcDeviceConnection connection, bool value)
```

## Parameters

**connection** **PlcDeviceConnection**

The **PlcDeviceConnection** to use to store the **value**.

**value** **Boolean**

The value to be stored.

## Exceptions

### InvalidOperationException

The **connection** is in **Faulted** state and cannot longer be opened.

### ObjectDisposedException

The **connection** has been disposed of.

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