

IPlcValue Members

Namespace: IPS7Lnk.Advanced

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

The [IPlcValue](#) interface defines the following members.

Events

Changed

Occurs when the value of the [Value](#) property has changed.

C#

```
event ValueChangedEventHandler Changed
```

Properties

Tag

Gets or sets the object that contains additional user data about the value.

C#

```
object Tag { get; set; }
```

Property Value

[Object](#)

An [Object](#) that contains additional user data about the value. The default is null (Nothing in Visual Basic).

Value

Gets or sets the value assigned to the PLC value.

C#

```
object Value { get; set; }
```

Property Value

[Object](#)

The value assigned to the PLC value.

Methods

GetValue(IPlcDevice)

Retrieves the current value of the PLC value from the **device** specified.

C#

```
object GetValue(IPlcDevice device)
```

Parameters

device [IPlcDevice](#)

The [IPlcDevice](#) from that the data is to be retrieved.

Returns

[Object](#)

The current value of the PLC value.

Exceptions

[ArgumentNullException](#)

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

GetValue(PlcDeviceConnection)

Retrieves the current value of the PLC value from a [IPlcDevice](#) using the **connection** specified.

C#

```
object GetValue(PlcDeviceConnection connection)
```

Parameters

connection [PlcDeviceConnection](#)

The [PlcDeviceConnection](#) from that the data is to be retrieved.

Returns

[Object](#)

The current value of the PLC value.

Exceptions

ArgumentNullException

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

InvalidOperationException

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

ObjectDisposedException

The `connection` has been disposed of.

IsValidType(Object)

Determines whether a specified value is acceptable for this `IPlcValue`.

C#

```
bool IsValidType(object value)
```

Parameters

`value` `Object`

The value to check.

Returns

`Boolean`

The value true, if the specified `value` is the `Type` or an acceptable derived type; otherwise the value false.

IsValidValue(Object)

Determines whether the provided value is accepted for the type of PLC value through basic type checking and also potentially if it is within the allowed range of value for that type.

C#

```
bool IsValidValue(object value)
```

Parameters

`value` `Object`

The value to check.

Returns

`Boolean`

The value true, if the specified `value` is acceptable and is of the correct type or a derived type; otherwise

the value false.

SetValue(IPlcDevice)

Stores the **Value** in the **device** specified.

C#

```
void SetValue(IPlcDevice device)
```

Parameters

device [IPlcDevice](#)

The [IPlcDevice](#) in that the data is to be stored.

Exceptions

[ArgumentNullException](#)

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

SetValue(IPlcDevice, Object)

Stores the **value** in the **device** specified.

C#

```
void SetValue(IPlcDevice device, object value)
```

Parameters

device [IPlcDevice](#)

The [IPlcDevice](#) in that the data is to be stored.

value [Object](#)

The value to be stored.

Exceptions

[ArgumentException](#)

The **value** is invalid. It either does not fall within an expected value range or its type is not supported by the [IPlcValue](#).

[ArgumentNullException](#)

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

SetValue(PlcDeviceConnection)

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

C#

```
void SetValue(PlcDeviceConnection connection)
```

Parameters

connection **PlcDeviceConnection**

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

Exceptions

ArgumentNullException

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

InvalidOperationException

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

ObjectDisposedException

The **connection** has been disposed of.

SetValue(PlcDeviceConnection, Object)

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

C#

```
void SetValue(PlcDeviceConnection connection, object value)
```

Parameters

connection **PlcDeviceConnection**

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

value **Object**

The value to be stored.

Exceptions

ArgumentException

The **value** is invalid. It either does not fall within an expected value range or its type is not supported by the **IPlcValue**.

ArgumentNullException

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

InvalidOperationException

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

ObjectDisposedException

The `connection` has been disposed of.

ValidateValue(Object)

Validates the specified `value` whether it can be assigned to this `IPlcValue`.

C#

```
void ValidateValue(object value)
```

Parameters

`value` `Object`

The value to validate.

Exceptions

ArgumentException

The `value` is invalid. It either does not fall within an expected value range or its type is not supported by the `IPlcValue`.

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