

PlcMember Members

Namespace: IPS7Lnk.Advanced

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

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

Constructors

PlcMember(PlcName, PlcType)

Initializes a new instance of the [PlcMember](#) class using the specified **name** and **type**.

C#

```
protected PlcMember(PlcName name, PlcType type)
```

Parameters

name [PlcName](#)

The name of the member.

type [PlcType](#)

The type of the member.

Exceptions

[ArgumentNullException](#)

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

Events

Changed

Occurs when the value of the member has changed.

C#

```
public event ValueChangedEventHandler Changed
```

Properties

CanRead

Gets or sets a value indicating whether the member can be read.

C#

```
public virtual bool CanRead { get; set; }
```

Property Value

Boolean

The value true, if the member can be read; otherwise the value false.

CanWrite

Gets or sets a value indicating whether the member can be written to.

C#

```
public virtual bool CanWrite { get; set; }
```

Property Value

Boolean

The value true, if the member can be written to; otherwise the value false.

Name

Gets the name of the member.

C#

```
public PlcName Name { get; }
```

Property Value

PlcName

An instance of the [PlcName](#) class containing the name of the member.

Tag

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

C#

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

Property Value

Object

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

Type

Gets the [PlcType](#) of the member.

C#

```
public PlcType Type { get; }
```

Property Value

[PlcType](#)

The [PlcType](#) used by the member.

Methods

GetValue(PlcObject)

Retrieves the value of the member supported by the given [instance](#).

C#

```
public object GetValue(PlcObject instance)
```

Parameters

[instance](#) [PlcObject](#)

The [PlcObject](#) from that the value of the member is to be retrieved.

Returns

[Object](#)

The value of the member supported by the [instance](#).

Exceptions

[ArgumentNullException](#)

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

GetValueCore(PlcObject)

When implemented in a derived class, retrieves the value of the member supported by the given **instance**.

C#

```
protected abstract object GetValueCore(PlcObject instance)
```

Parameters

instance [PlcObject](#)

The [PlcObject](#) from that the value of the member is to be retrieved.

Returns

[Object](#)

The value of the member supported by the **instance**.

HasValue(PlcObject)

Retrieves a value indicating whether the member supported by the given **instance** is associated with a value.

C#

```
public bool HasValue(PlcObject instance)
```

Parameters

instance [PlcObject](#)

The [PlcObject](#) its member value is to be tested.

Returns

[Boolean](#)

The value true, if a value is associated with the instance using this member; otherwise the value false.

Exceptions

[ArgumentNullException](#)

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

HasValueCore(PlcObject)

When implemented in a derived class, retrieves a value indicating whether the member supported by the given **instance** is associated with a value.

C#

```
protected abstract bool HasValueCore(PlcObject instance)
```

Parameters

instance [PlcObject](#)

The [PlcObject](#) its member value is to be tested.

Returns

[Boolean](#)

The value true, if a value is associated with the instance using this member; otherwise the value false.

MakeAbsoluteMember(PlcIdentity)

Retrieves the [PlcMember](#) as an absolute addressable PLC member.

C#

```
public abstract IPlcMemberInfo MakeAbsoluteMember(PlcIdentity identity)
```

Parameters

identity [PlcIdentity](#)

The [PlcIdentity](#) to use to define the absolute location. This identity is used to define the basis starting from that the member is located.

Returns

[IPlcMemberInfo](#)

In case there [IsAbsolute](#) is equals true the reference to this member; otherwise a new instance of the member which refers to an absolute [PlcType](#).

Exceptions

[ArgumentException](#)

The **identity** specified does not provide the necessary information required to address the type of data.

[ArgumentNullException](#)

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

OnChanged(ValueChangedEventArgs)

Raises the [Changed](#) event.

C#

```
protected virtual void OnChanged(ValueChangedEventArgs e)
```

Parameters

e [ValueChangedEventArgs](#)

The [ValueChangedEventArgs](#) that contains the event data.

RelocateCore(PlcAddress)

When implemented in a derived class, relocates the member to the **address** specified.

C#

```
protected abstract PlcMember RelocateCore(PlcAddress address)
```

Parameters

address [PlcAddress](#)

The [PlcAddress](#) to that the member is to be relocated.

Returns

[PlcMember](#)

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

SetValue(PlcObject, Object)

Stores the **value** of the member supported by the given **instance**.

C#

```
public void SetValue(PlcObject instance, object value)
```

Parameters

instance [PlcObject](#)

The [PlcObject](#) into that the value of the member is to be stored.

value [Object](#)

The value to store.

Exceptions

ArgumentNullException

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

SetValueCore(PlcObject, Object)

When implemented in a derived class, stores the `value` of the member supported by the given `instance`.

C#

```
protected abstract void SetValueCore(PlcObject instance, object value)
```

Parameters

`instance` `PlcObject`

The `PlcObject` into that the value of the member is to be stored.

`value` `Object`

The value to store.

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