

PlcTime Members

Namespace: IPS7Lnk.Advanced

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

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

Constructors

PlcTime(PlcIdentity)

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

C#

```
public PlcTime(PlcIdentity identity)
```

Parameters

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

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

Exceptions

[ArgumentException](#)

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

[ArgumentNullException](#)

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

PlcTime(PlcIdentity, PlcName)

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

C#

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

Parameters

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

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

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

The name of the value.

Exceptions

ArgumentException

The **identity** does not refer to the **DWord**.

ArgumentNullException

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

PlcTime(PlcIdentity, PlcName, TimeSpan)

Initializes a new instance of the **PlcTime** class using the specified **identity**, **name** and **value**.

C#

```
public PlcTime(PlcIdentity identity, PlcName name, TimeSpan value)
```

Parameters

identity **PlcIdentity**

The **PlcIdentity** of the new **PlcTime** to which the PLC value belongs.

name **PlcName**

The name of the value.

value **TimeSpan**

The initial value of the new **PlcTime**.

Exceptions

ArgumentException

The **identity** does not refer to the **DWord**.

ArgumentNullException

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

ArgumentOutOfRangeException

The **value** is out of the bounds defined by **MinValue** and **MaxValue**.

PlcTime(PlcIdentity, TimeSpan)

Initializes a new instance of the **PlcTime** class using the specified **identity** and **value**.

C#

```
public PlcTime(PlcIdentity identity, TimeSpan value)
```

Parameters

identity PlcIdentity

The **PlcIdentity** of the new **PlcTime** to which the PLC value belongs.

value TimeSpan

The initial value of the new **PlcTime**.

Exceptions

ArgumentException

The **identity** does not refer to the **DWord**.

ArgumentNullException

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

ArgumentOutOfRangeException

The **value** is out of the bounds defined by **MinValue** and **MaxValue**.

PlcTime(PlcTimeType)

Initializes a new instance of the **PlcTime** class using the specified **type**

C#

```
public PlcTime(PlcTimeType type)
```

Parameters

type PlcTimeType

The **PlcTimeType** of the new **PlcTime** to which the PLC value belongs.

Exceptions

ArgumentNullException

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

PlcTime(PlcTimeType, PlcName)

Initializes a new instance of the **PlcTime** class using the specified **type** and **name**.

C#

```
public PlcTime(PlcTimeType type, PlcName name)
```

Parameters

type PlcTimeType

The **PlcTimeType** of the new **PlcTime** 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).

PlcTime(PlcTimeType, PlcName, TimeSpan)

Initializes a new instance of the **PlcTime** class using the specified **type**, **name** and **value**.

C#

```
public PlcTime(PlcTimeType type, PlcName name, TimeSpan value)
```

Parameters

type **PlcTimeType**

The **PlcTimeType** of the new **PlcTime** to which the PLC value belongs.

name **PlcName**

The name of the value.

value **TimeSpan**

The initial value of the new **PlcTime**.

Exceptions

ArgumentNullException

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

ArgumentOutOfRangeException

The **value** is out of the bounds defined by **MinValue** and **MaxValue**.

PlcTime(PlcTimeType, TimeSpan)

Initializes a new instance of the **PlcTime** class using the specified **type** and **value**.

C#

```
public PlcTime(PlcTimeType type, TimeSpan value)
```

Parameters

type PlcTimeType

The **PlcTimeType** of the new **PlcTime** to which the PLC value belongs.

value TimeSpan

The initial value of the new **PlcTime**.

Exceptions

ArgumentNullException

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

ArgumentOutOfRangeException

The **value** is out of the bounds defined by **MinValue** and **MaxValue**.

Fields

MaxValue

Represents the largest possible value of a **PlcTime**.

C#

```
public static readonly TimeSpan MaxValue
```

Field Value

TimeSpan

Remarks

The according PLC value would be: T#24D_20H_31M_23S_647MS.

MinValue

Represents the smallest possible value of a **PlcTime**.

C#

```
public static readonly TimeSpan MinValue
```

Field Value

TimeSpan

Remarks

The according PLC value would be: T#0D_0H_0M_0S_0MS.

Properties

Value

Gets or sets the value assigned to the PLC value.

C#

```
public override TimeSpan Value { get; set; }
```

Property Value

[TimeSpan](#)

The [TimeSpan](#) value assigned to the PLC value.

Exceptions

[ArgumentNullException](#)

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

[ArgumentOutOfRangeException](#)

The **value** is out of the bounds defined by [MinValue](#) and [MaxValue](#).

Methods

GetValueCore(PlcDeviceConnection)

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

C#

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

Parameters

connection [PlcDeviceConnection](#)

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

Returns

[TimeSpan](#)

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.

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#

```
public override 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.

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, TimeSpan)

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

C#

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

Parameters

connection **PlcDeviceConnection**

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

value **TimeSpan**

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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