# 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.

# Table of Contents

***Constructors*** ..... 1
PlcTime(PlcIdentity) ..... 1
PlcTime(PlcIdentity, PlcName) ..... 1
PlcTime(PlcIdentity, PlcName, TimeSpan) ..... 2
PlcTime(PlcIdentity, TimeSpan) ..... 2
PlcTime(PlcTimeType) ..... 3
PlcTime(PlcTimeType, PlcName) ..... 3
PlcTime(PlcTimeType, PlcName, TimeSpan) ..... 4
PlcTime(PlcTimeType, TimeSpan) ..... 4
***Fields*** ..... 5
MaxValue ..... 5
MinValue ..... 5
***Properties*** ..... 6
Value ..... 6
***Methods*** ..... 6
GetValueCore(PlcDeviceConnection) ..... 6
IsValidValue(Object) ..... 7
RelocateCore(PlcAddress) ..... 7
SetValueCore(PlcDeviceConnection, TimeSpan) ..... 8