PlcDate Members

Namespace: IPS7Lnk.Advanced
Assemblies: IPS7LnkNet.Advanced.dll, IPS7LnkNet.Advanced.dll
The PlcDate type exposes the following members.

Constructors

PlcDate(PlcDateType)

Initializes a new instance of the PlcDate class using the specified `type`

C#

```
public PlcDate(PlcDateType type)
```

Parameters

`type` PlcDateType

The PlcDateType of the new PlcDate to which the PLC value belongs.

Exceptions

ArgumentNullException

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

PlcDate(PlcDateType, DateTime)

Initializes a new instance of the PlcDate class using the specified `type` and `value`.

C#

```
public PlcDate(PlcDateType type, DateTime value)
```

Parameters

`type` PlcDateType

The PlcDateType of the new PlcDate to which the PLC value belongs.

`value` DateTime

The initial value of the new PlcDate.

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.

PlcDate(PlcDateType, PlcName)

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

C#

```
public PlcDate(PlcDateType type, PlcName name)
```

Parameters

`type` PlcDateType

The PlcDateType of the new PlcDate 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).

PlcDate(PlcDateType, PlcName, DateTime)

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

C#

```
public PlcDate(PlcDateType type, PlcName name, DateTime value)
```

Parameters

`type` PlcDateType

The PlcDateType of the new PlcDate to which the PLC value belongs.

`name` PlcName

The name of the value.

`value` DateTime

The initial value of the new PlcDate.

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.

PlcDate(PlcIdentity)

Initializes a new instance of the PlcDate class using the specified `identity`

C#

```
public PlcDate(PlcIdentity identity)
```

Parameters

`identity` PlcIdentity

The PlcIdentity of the new PlcDate to which the PLC value belongs.

Exceptions

ArgumentException

The `identity` does not refer to the Word.

ArgumentNullException

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

PlcDate(PlcIdentity, DateTime)

Initializes a new instance of the PlcDate class using the specified `identity` and `value`.

C#

```
public PlcDate(PlcIdentity identity, DateTime value)
```

Parameters

`identity` PlcIdentity

The PlcIdentity of the new PlcDate to which the PLC value belongs.

`value` DateTime

The initial value of the new PlcDate.

Exceptions

ArgumentException

The `identity` does not refer to the Word.

ArgumentNullException

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

ArgumentOutOfRangeException

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

PlcDate(PlcIdentity, PlcName)

Initializes a new instance of the PlcDate class using the specified `identity` and `name`.

C#

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

Parameters

`identity` PlcIdentity

The PlcIdentity of the new PlcDate to which the PLC value belongs.

`name` PlcName

The name of the value.

Exceptions

ArgumentException

The `identity` does not refer to the Word.

ArgumentNullException

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

PlcDate(PlcIdentity, PlcName, DateTime)

Initializes a new instance of the PlcDate class using the specified `identity`, `name` and `value`.

C#

```
public PlcDate(PlcIdentity identity, PlcName name, DateTime value)
```

Parameters

`identity` PlcIdentity

The PlcIdentity of the new PlcDate to which the PLC value belongs.

`name` PlcName

The name of the value.

`value` DateTime

The initial value of the new PlcDate.

Exceptions

ArgumentException

The `identity` does not refer to the Word.

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.

Fields

MaxValue

Represents the largest possible value of a PlcDate.

C#

```
public static readonly DateTime MaxValue
```

Field Value
DateTime

Remarks

The according PLC value would be: D#2168-12-31.

MinValue

Represents the smallest possible value of a PlcDate.

C#

```
public static readonly DateTime MinValue
```

Field Value
DateTime

Remarks

The according PLC value would be: D#1990-1-1.

Properties

Value

Gets or sets the value assigned to the PLC value.

C#

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

Property Value

DateTime

The DateTime 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 DateTime GetValueCore(PlcDeviceConnection connection)
```

Parameters

`connection` PlcDeviceConnection

The PlcDeviceConnection from that the data is to be retrieved.

Returns

DateTime

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, DateTime)

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

C#

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

Parameters

`connection` PlcDeviceConnection

The PlcDeviceConnection to use to store the `value`.

`value` DateTime

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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