

SimaticDevice Members

Namespace: IPS7Lnk.Advanced

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

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

Constructors

SimaticDevice()

Initializes a new instance of the [SimaticDevice](#) class.

C#

```
public SimaticDevice()
```

SimaticDevice(PlcDeviceEndPoint)

Initializes a new instance of the [SimaticDevice](#) class using the specified [endPoint](#).

C#

```
public SimaticDevice(PlcDeviceEndPoint endPoint)
```

Parameters

[endPoint](#) [PlcDeviceEndPoint](#)

The [PlcDeviceEndPoint](#) which identifies the network address of the device.

Exceptions

[ArgumentNullException](#)

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

SimaticDevice(PlcDeviceEndPoint, SimaticDeviceType)

Initializes a new instance of the [SimaticDevice](#) class using the specified [endPoint](#) and [type](#).

C#

```
public SimaticDevice(PlcDeviceEndPoint endPoint, SimaticDeviceType type)
```

Parameters

[endPoint](#) [PlcDeviceEndPoint](#)

The [PlcDeviceEndPoint](#) which identifies the network address of the device.

type [SimaticDeviceType](#)

The type of Siemens device to represent.

Exceptions

[ArgumentNullException](#)

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

SimaticDevice(String)

Initializes a new instance of the [SimaticDevice](#) class using the specified [addressOrHostName](#).

C#

```
public SimaticDevice(string addressOrHostName)
```

Parameters

[addressOrHostName](#) [String](#)

The string representation of an [IPAddress](#) or the host name to be resolved to an [IPAddress](#) of the endpoint to use.

Exceptions

[ArgumentNullException](#)

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

[ArgumentException](#)

The [addressOrHostName](#) is an empty string.

SimaticDevice(String, Int32)

Initializes a new instance of the [SimaticDevice](#) class using the specified [addressOrHostName](#) and [rack](#) number.

C#

```
public SimaticDevice(string addressOrHostName, int rack)
```

Parameters

[addressOrHostName](#) [String](#)

The string representation of an [IPAddress](#) or the host name to be resolved to an [IPAddress](#) of the endpoint to use.

[rack](#) [Int32](#)

The rack number associated with the endpoint to use.

Exceptions

ArgumentNullException

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

ArgumentException

The `addressOrHostName` is an empty string.

ArgumentOutOfRangeException

The `rack` is out of the bounds defined by `MinRack` or `MaxRack`.

SimaticDevice(String, Int32, Int32)

Initializes a new instance of the `SimaticDevice` class using the specified `addressOrHostName`, `rack` number and `slot` number.

C#

```
public SimaticDevice(string addressOrHostName, int rack, int slot)
```

Parameters

`addressOrHostName` String

The string representation of an `IPAddress` or the host name to be resolved to an `IPAddress` of the endpoint to use.

`rack` Int32

The rack number associated with the endpoint to use.

`slot` Int32

The slot number associated with the endpoint to use.

Exceptions

ArgumentNullException

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

ArgumentException

The `addressOrHostName` is an empty string.

ArgumentOutOfRangeException

The `rack` or `slot` is out of the bounds defined by `MinRack`, `MaxRack`, `MinSlot` or `MaxSlot`.

SimaticDevice(String, SimaticDeviceType)

Initializes a new instance of the [SimaticDevice](#) class using the specified [addressOrHostName](#) and [type](#).

C#

```
public SimaticDevice(string addressOrHostName, SimaticDeviceType type)
```

Parameters

[addressOrHostName](#) [String](#)

The string representation of an [IPAddress](#) or the host name to be resolved to an [IPAddress](#) of the endpoint to use.

[type](#) [SimaticDeviceType](#)

The type of Siemens device to represent.

Exceptions

[ArgumentNullException](#)

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

[ArgumentException](#)

The [addressOrHostName](#) is an empty string.

SimaticDevice(String, SimaticDeviceType, Int32)

Initializes a new instance of the [SimaticDevice](#) class using the specified [addressOrHostName](#), [type](#) and [rack](#) number.

C#

```
public SimaticDevice(string addressOrHostName, SimaticDeviceType type, int rack)
```

Parameters

[addressOrHostName](#) [String](#)

The string representation of an [IPAddress](#) or the host name to be resolved to an [IPAddress](#) of the endpoint to use.

[type](#) [SimaticDeviceType](#)

The type of Siemens device to represent.

[rack](#) [Int32](#)

The rack number associated with the endpoint to use.

Exceptions

ArgumentNullException

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

ArgumentException

The `addressOrHostName` is an empty string.

ArgumentOutOfRangeException

The `rack` is out of the bounds defined by `MinRack` or `MaxRack`.

SimaticDevice(String, SimaticDeviceType, Int32, Int32)

Initializes a new instance of the `SimaticDevice` class using the specified `addressOrHostName`, `type`, `rack` number and `slot` number.

C#

```
public SimaticDevice(string addressOrHostName, SimaticDeviceType type, int rack, int slot)
```

Parameters

`addressOrHostName` String

The string representation of an `IPAddress` or the host name to be resolved to an `IPAddress` of the endpoint to use.

`type` SimaticDeviceType

The type of Siemens device to represent.

`rack` Int32

The rack number associated with the endpoint to use.

`slot` Int32

The slot number associated with the endpoint to use.

Exceptions

ArgumentNullException

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

ArgumentException

The `addressOrHostName` is an empty string.

ArgumentOutOfRangeException

The `rack` or `slot` is out of the bounds defined by `MinRack`, `MaxRack`, `MinSlot` or `MaxSlot`.

Properties

ChannelType

Gets or sets a value that indicates how the connection will operate on the device.

C#

```
public SimaticChannelType ChannelType { get; set; }
```

Property Value

[SimaticChannelType](#)

One of the members defined by [SimaticChannelType](#) enumeration.

Options

Gets or sets additional characteristics used to communicate with the device represented.

C#

```
public SimaticDeviceOptions Options { get; set; }
```

Property Value

[SimaticDeviceOptions](#)

A combination of the members defined by the [SimaticDeviceOptions](#) enumeration.

Type

Gets or sets a value indicating the specific type of device represented.

C#

```
public SimaticDeviceType Type { get; set; }
```

Property Value

[SimaticDeviceType](#)

One of the members defined by the [SimaticDeviceType](#) enumeration. Which specifies the concrete type of Siemens device to represent.

Methods

CreateConnectionCore()

Creates a new instance of an object which is an instance of the [SimaticDeviceConnection](#) class which is associated with the [PlcDevice](#).

C#

```
protected override PlcDeviceConnection CreateConnectionCore()
```

Returns

[PlcDeviceConnection](#)

An instance of an object which is an instance of the [SimaticDeviceConnection](#) class and is associated with the [SimaticDevice](#).

GetBlockCore(PlcOperand)

Retrieves the block information for the PLC block accessible by the **operand** specified.

C#

```
protected override PlcBlockInfo GetBlockCore(PlcOperand operand)
```

Parameters

operand [PlcOperand](#)

The [PlcOperand](#) for that the according block information is to be retrieved.

Returns

[PlcBlockInfo](#)

An instance of the [SimaticBlockInfo](#) class containing the information of the block requested.

GetInfo()

Retrieves an instance of an object implementing the [IPlcDeviceInfo](#) interface which provides additional metadata about the device.

C#

```
public override IPlcDeviceInfo GetInfo()
```

Returns

[IPlcDeviceInfo](#)

An instance implementing the [IPlcDeviceInfo](#) interface which provides additional metadata about the device.

ToString()

Returns a string that represents the current [SimaticDevice](#).

C#

```
public override string ToString()
```

Returns

[String](#)

A string that represents the current [SimaticDevice](#).

Table of Contents

Constructors	1
SimaticDevice()	1
SimaticDevice(PlcDeviceEndPoint)	1
SimaticDevice(PlcDeviceEndPoint, SimaticDeviceType)	1
SimaticDevice(String)	2
SimaticDevice(String, Int32)	2
SimaticDevice(String, Int32, Int32)	3
SimaticDevice(String, SimaticDeviceType)	4
SimaticDevice(String, SimaticDeviceType, Int32)	4
SimaticDevice(String, SimaticDeviceType, Int32, Int32)	5
Properties	6
ChannelType	6
Options	6
Type	6
Methods	6
CreateConnectionCore()	7
GetBlockCore(PlcOperand)	7
GetInfo()	7
ToString()	8

