

PlcObjectType Members

Namespace: IPS7Lnk.Advanced

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

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

Properties

DefaultValue

Gets the type dependent default value which can be assigned to an entity of the type represented.

C#

```
public override object DefaultValue { get; }
```

Property Value

[Object](#)

The type dependent default value.

Methods

CreateEntity()

Creates a new [IPlcEntity](#) object which represents a concrete accessible entity of this [PlcType](#).

C#

```
public override IPlcEntity CreateEntity()
```

Returns

[IPlcEntity](#)

An instance implementing the [IPlcEntity](#) interface its [Type](#) property does refer to this [PlcType](#).

Exceptions

[NotSupportedException](#)

This pure [PlcType](#) instance can't create an entity, because it is an abstract type representation.

Of(PlcIdentity, PlcName, PlcTypeLayout, IEnumerable<IPlcMemberInfo>)

Retrieves the according [PlcObjectType](#) which matches the supplied type metadata.

C#

```
public static PlcObjectType Of(PlcIdentity identity, PlcName name, PlcTypeLayout layout,
    IEnumerable<IPlcMemberInfo> members)
```

Parameters

identity [PlcIdentity](#)

The [PlcIdentity](#) to which the [PlcObjectType](#) does refer.

name [PlcName](#)

The [PlcName](#) of the [PlcType](#).

layout [PlcTypeLayout](#)

An instance of the [PlcTypeLayout](#) class which provides the characteristics to use to absolutely align the **members**.

members [IEnumerable<IPlcMemberInfo>](#)

The [IPlcMemberInfo](#) objects to associate with the [PlcType](#).

Returns

[PlcObjectType](#)

The [PlcObjectType](#) which matches with the characteristics supplied.

Exceptions

[ArgumentException](#)

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

[ArgumentNullException](#)

The **identity**, **name**, **layout** or **members** or one of its items is a null reference (Nothing in Visual Basic).

Of(PlcIdentity, PlcName, PlcTypeLayout, IPlcMemberInfo[])

Retrieves the according [PlcObjectType](#) which matches the supplied type metadata.

C#

```
public static PlcObjectType Of(PlcIdentity identity, PlcName name, PlcTypeLayout layout,
    params IPlcMemberInfo[] members)
```

Parameters

identity [PlcIdentity](#)

The [PlcIdentity](#) to which the [PlcObjectType](#) does refer.

name [PlcName](#)

The [PlcName](#) of the [PlcType](#).

layout [PlcTypeLayout](#)

An instance of the [PlcTypeLayout](#) class which provides the characteristics to use to absolutely align the **members**.

members [IPlcMemberInfo\[\]](#)

The [IPlcMemberInfo](#) objects to associate with the [PlcType](#).

Returns

[PlcObjectType](#)

The [PlcObjectType](#) which matches with the characteristics supplied.

Exceptions

[ArgumentException](#)

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

[ArgumentNullException](#)

The **identity**, **name**, **layout** or **members** or one of its items is a null reference (Nothing in Visual Basic).

Of(PlcIdentity, PlcTypeLayout)

Retrieves the according [PlcObjectType](#) which matches the supplied type metadata.

C#

```
public static PlcObjectType Of(PlcIdentity identity, PlcTypeLayout layout)
```

Parameters

identity [PlcIdentity](#)

The [PlcIdentity](#) to which the [PlcObjectType](#) does refer.

layout [PlcTypeLayout](#)

An instance of the [PlcTypeLayout](#) class which provides the characteristics to use to absolutely align the

Members.

Returns

PlcObjectType

The [PlcObjectType](#) which matches with the characteristics supplied.

Exceptions

ArgumentException

The [identity](#) does not provide the necessary information required to address the type of data.

ArgumentNullException

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

Of(PlcIdentity, PlcTypeLayout, IEnumerable<IPlcMemberInfo>)

Retrieves the according [PlcObjectType](#) which matches the supplied type metadata.

C#

```
public static PlcObjectType Of(PlcIdentity identity, PlcTypeLayout layout,
IEnumerable<IPlcMemberInfo> members)
```

Parameters

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

The [PlcIdentity](#) to which the [PlcObjectType](#) does refer.

[layout](#) [PlcTypeLayout](#)

An instance of the [PlcTypeLayout](#) class which provides the characteristics to use to absolutely align the [members](#).

[members](#) [IEnumerable<IPlcMemberInfo>](#)

The [IPlcMemberInfo](#) objects to associate with the [PlcType](#).

Returns

PlcObjectType

The [PlcObjectType](#) which matches with the characteristics supplied.

Exceptions

ArgumentException

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

ArgumentNullException

The `identity`, `layout` or `members` or one of its items is a null reference (Nothing in Visual Basic).

Of(PlcIdentity, PlcTypeLayout, IPlcMemberInfo[])

Retrieves the according `PlcObjectType` which matches the supplied type metadata.

C#

```
public static PlcObjectType Of(PlcIdentity identity, PlcTypeLayout layout, params  
IPlcMemberInfo[] members)
```

Parameters

`identity` `PlcIdentity`

The `PlcIdentity` to which the `PlcObjectType` does refer.

`layout` `PlcTypeLayout`

An instance of the `PlcTypeLayout` class which provides the characteristics to use to absolutely align the `members`.

`members` `IPlcMemberInfo[]`

The `IPlcMemberInfo` objects to associate with the `PlcType`.

Returns

`PlcObjectType`

The `PlcObjectType` which matches with the characteristics supplied.

Exceptions

ArgumentException

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

ArgumentNullException

The `identity`, `layout` or `members` or one of its items is a null reference (Nothing in Visual Basic).

Of(PlcTypeLayout, IEnumerable<IPlcMemberInfo>)

Retrieves the according `PlcObjectType` which matches the supplied type metadata.

C#

```
public static PlcObjectType Of(PlcTypeLayout layout, IEnumerable<IPlcMemberInfo> members)
```

Parameters

layout [PlcTypeLayout](#)

An instance of the [PlcTypeLayout](#) class which provides the characteristics to use to absolutely align the **members**.

members [IEnumerable<IPlcMemberInfo>](#)

The [IPlcMemberInfo](#) objects to associate with the [PlcType](#).

Returns

[PlcObjectType](#)

The [PlcObjectType](#) which matches with the characteristics supplied.

Exceptions

[ArgumentNullException](#)

The **layout** or **members** or one of its items is a null reference (Nothing in Visual Basic).

Of(PlcTypeLayout, IPlcMemberInfo[])

Retrieves the according [PlcObjectType](#) which matches the supplied type metadata.

C#

```
public static PlcObjectType Of(PlcTypeLayout layout, params IPlcMemberInfo[] members)
```

Parameters

layout [PlcTypeLayout](#)

An instance of the [PlcTypeLayout](#) class which provides the characteristics to use to absolutely align the **members**.

members [IPlcMemberInfo\[\]](#)

The [IPlcMemberInfo](#) objects to associate with the [PlcType](#).

Returns

[PlcObjectType](#)

The [PlcObjectType](#) which matches with the characteristics supplied.

Exceptions

[ArgumentNullException](#)

The `layout` or `members` or one of its items is a null reference (Nothing in Visual Basic).

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