IPS7Lnk.Advanced Namespace

The IPS7Lnk.Advanced namespace defines the following members.

Classes

Name	Description
BcdConverter	Converts base data types to an array of bytes, and an array of bytes to base data types using the binary coded decimal format (BCD).
DnsDeviceEndPoint	Represents a network endpoint as DNS entry, rack and slot number of a PLC device.
IECOperandTypes	Defines all operand types supported by the International Electronical Commission (IEC).
IPDeviceEndPoint	Represents a network endpoint as an IP address, rack and slot number of a PLC device.
Licenser	Defines mechanism required to register the whole IP S7 Link .NET SDK.
PlcAddress	Represents an address which refers to a specific data area stored within a programmable logic controller (PLC).
PlcArrayType	Provides an abstract PLC type declarations to represent simple array types which map a .NET framework array Type to the according array type representation within a PLC.
PlcBitAddress	Represents a bit address which refers to a specific data area stored within a programmable logic controller (PLC).
PlcBlockInfo	Provides an abstract base class for provider specific information about blocks stored in a single programmable logic controller (PLC).
PlcBlockInfoCollection	Provides a collection of PlcBlockInfo objects.
PlcBoolean	Represents a Boolean value (in PLC a BOOL) its value is interpreted as a boolean expression.
PlcBooleanArray	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are interpreted as boolean expressions (Boolean).
PlcBooleanArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are interpreted as boolean expressions (Boolean).
PlcBooleanArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are interpreted as boolean expressions (Boolean).

Name	Description
PlcBooleanInfo	Represents a Boolean value member (in PLC a BOOL) its value is interpreted as a boolean expression.
PlcBooleanType	Represents a Boolean type declaration (in PLC a BOOL) its value is interpreted as a boolean expression.
PlcByte	Represents a Byte value (in PLC a BYTE) its value defines a 8-bit unsigned integer value.
PlcByteAddress	Represents a byte address which refers to a specific data area stored within a programmable logic controller (PLC).
PlcByteArray	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 8-bit unsigned integer values (Byte).
PlcByteArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 8-bit unsigned integer values (Byte).
PlcByteArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 8-bit unsigned integer values (Byte).
PlcByteInfo	Represents a Byte value member (in PLC a BYTE) its value defines a 8-bit unsigned integer value.
PlcByteType	Represents a Byte type declaration (in PLC a BYTE) its value defines a 8-bit unsigned integer value.
PlcChar	Represents a Char value (in PLC a CHAR) its value defines a single character.
PlcCharArray	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values represent Char values.
PlcCharArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values represent Char values.
PlcCharArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values represent Char values.
PlcCharInfo	Represents a Char value member (in PLC a CHAR) its value defines a single character.
PlcCharType	Represents a Char type declaration (in PLC a CHAR) its value defines a single character.
PlcCounterOperand	Represents an operand which addresses a counter memory blocks within a programmable logic controller (PLC).

Name	Description
PlcDataBlockOperand	Represents an operand which addresses a data block within a programmable logic controller (PLC).
PlcDataNode	Provides an abstract base class to represent information about a single PLC data node to operate on.
PlcDataNodeCollection	Represents a collection of PlcDataNode objects.
PlcDataNodeSourceCollection	Represents a collection of Object instances.
PlcDate	Represents a DateTime value (in PLC a DATE) its value defines an instant in time, where only the date of day is expressed.
PlcDateInfo	Represents a DateTime value member (in PLC a DATE) its value defines an instant in time, where only the date of day is expressed.
PlcDateTime	Represents a DateTime value (in PLC a DATE_AND_TIME) its value defines an instant in time, typically expressed as a date and time of day.
PlcDateTimeInfo	Represents a DateTime value member (in PLC a DATE_AND_TIME) its value defines an instant in time, typically expressed as a date and time of day.
PlcDateTimeType	Represents a DateTime type declaration (in PLC a DATE_AND_TIME) its value defines an instant in time, typically expressed as a date and time of day.
PlcDateType	Represents a DateTime type declaration (in PLC a DATE) its value defines an instant in time, where only the date of day is expressed.
PlcDevice	Provides an abstract base class which represents a single programmable logic controller (PLC).
PlcDeviceCollection	Provides a collection of IPlcDevice objects.
PlcDeviceConnection	Provides an abstract base class which represents a connection to a device.
PlcDeviceConnectionChannel	Represents an abstract based class to define an immutable low level access layer used by PlcDeviceConnection objects to perform the necessary device operations.
PlcDeviceConnectionStateChangedEventArgs	Provides the event data for the StateChanged event.
PlcDeviceEndPoint	Provides an abstract base class which identifies a network address of a PLC device.
PlcDeviceInfo	Provides a simple implementation of the IPlcDeviceInfo interface to store additional metadata of a single programmable logic controller (PLC).
PlcDouble	Represents a Double value (in PLC a DOUBLE) its value defines a double-precision floating-point number.

Name	Description
PlcDoubleArray	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are double-precision floating-point numbers (Double).
PlcDoubleArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are double-precision floating-point numbers (Double).
PlcDoubleArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are double-precision floating-point numbers (Double).
PlcDoubleInfo	Represents a Double value member (in PLC a DOUBLE) its value defines a double-precision floating-point number.
PlcDoubleType	Represents a Double type declaration (in PLC a DOUBLE) its value defines a double-precision floating-point number.
PlcDWordAddress	Represents a double word address which refers to a specific data area stored within a programmable logic controller (PLC).
PlcEntityReadResult	
PlcEntityResult	
PlcEntityWriteResult	
PlcException	The exception that is thrown when a driver operation has failed.
PlcFlagOperand	Represents an operand which addresses a flag memory blocks within a programmable logic controller (PLC).
PlcIdentity	Represents an identity which addresses a specific memory area within a programmable logic controller (PLC).
PlcInputOperand	Represents an operand which addresses a input memory blocks within a programmable logic controller (PLC).
PlcInt16	Represents a Int16 value (in PLC a INT) its value defines a 16-bit signed integer value.
PlcInt16Array	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 16-bit signed integer values (Int16).
PlcInt16ArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 16-bit signed integer values (Int16).

Name	Description
PlcInt16ArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 16-bit signed integer values (Int16).
PlcInt16Info	Represents a Int16 value member (in PLC a INT) its value defines a 16-bit signed integer value.
PlcInt16Type	Represents a Int16 type declaration (in PLC a INT) its value defines a 16-bit signed integer value.
PlcInt32	Represents a Int32 value (in PLC a DINT) its value defines a 32-bit signed integer value.
PlcInt32Array	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 32-bit signed integer values (Int32).
PlcInt32ArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 32-bit signed integer values (Int32).
PlcInt32ArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 32-bit signed integer values (Int32).
PlcInt32Info	Represents a Int32 value member (in PLC a DINT) its value defines a 32-bit signed integer value.
PlcInt32Type	Represents a Int32 type declaration (in PLC a DINT) its value defines a 32-bit signed integer value.
PlcInt64	Represents a Int64 value (in PLC a LINT) its value defines a 64-bit signed integer value.
PlcInt64Array	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 64-bit signed integer values (Int64).
PlcInt64ArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 64-bit signed integer values (Int64).
PlcInt64Type	Represents a Int64 type declaration (in PLC a LINT) its value defines a 32-bit signed integer value.
PlcLReal	Represents a Double value (in PLC a LREAL) its value defines a double-precision floating-point number.

Name	Description
PlcLRealArray	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are double-precision floating-point numbers (Double).
PlcLRealArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are double-precision floating-point numbers (Double).
PlcLRealType	Represents a Double type declaration (in PLC a LREAL) its value defines a double-precision floating-point number.
PlcMember	Provides an abstract base class to represent a member of a PlcObject.
PlcMemberAttribute	Specifies that a particular class member is to be used as a PlcMember.
PlcMemberChangedEventArgs	Provides event data for member changed events.
PlcMemberCollection	Represents a collection of PlcMember objects.
PlcMemberInfo	Represents an abstract implementation of the IPlcMemberInfo interface.
PlcName	Represents a case insensitive name which addresses a specific memory area within a programmable logic controller (PLC).
PlcNotifications	Provides a set of static (Shared in Visual Basic) members to notify about status and progress changes within the whole component.
PlcNotifications.PlcDeviceConnectionEventArgs	Provides PlcDeviceConnection data for events based on this type of object.
PlcNotifications.PlcDeviceConnectionStateChangedEventArgs	Provides PlcDeviceConnection data for state changes.
PlcNull	Represents a logical null value which will not inferred with a PLC device.
PlcObject	Represents an object stored within a programmable logic controller (PLC).
PlcObjectCollection	Provides a collection of PlcObject objects.
PlcObjectInfo	Provide information about the attributes of a object and provides access to member metadata.
PlcObjectMemberNode	Provides information about a single PLC object member data node to operate on.
PlcObjectNode	Provides information about a single PLC object data node to operate on.
PlcObjectType	Represents a PlcObject type declaration (in PLC a STRUCT).
PlcOperand	Represents an operand which addresses a specific memory block within a programmable logic controller (PLC).

Name	Description
PlcOperandTypes	Provides a set of static (Shared in Visual Basic) methods for the PlcOperandType enumeration.
PlcOutputOperand	Represents an operand which addresses a output memory blocks within a programmable logic controller (PLC).
PlcPeripheryInputOperand	Represents an operand which addresses a periphery input memory blocks within a programmable logic controller (PLC).
PlcPeripheryOutputOperand	Represents an operand which addresses a periphery output memory blocks within a programmable logic controller (PLC).
PlcRawTypeExtension	Provides a set of static (Shared in Visual Basic) methods for PlcRawType values.
PlcRawTypes	Provides a set of static (Shared in Visual Basic) methods for the PlcRawType enumeration and all raw types supported by a programmable logic controller (PLC) for read/write operations.
PlcReal	Represents a Single value (in PLC a REAL) its value defines a single-precision floating-point number.
PlcRealArray	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are single-precision floating-point numbers (Single).
PlcRealArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are single-precision floating-point numbers (Single).
PlcRealArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are single-precision floating-point numbers (Single).
PlcRealInfo	Represents a Single value member (in PLC a REAL) its value defines a single-precision floating-point number.
PlcRealType	Represents a Single type declaration (in PLC a REAL) its value defines a single-precision floating-point number.
PlcS5Time	Represents a TimeSpan value (in PLC a S5TIME) its value defines an time interval.
PlcS5TimeInfo	Represents a TimeSpan value member (in PLC a S5TIME) its value defines an time interval.
PlcS5TimeRanges	Provides the different Range´1s of TimeSpan values which can be applied to a PlcS5Time depending on the different PlcS5TimeOrigins.

Name	Description
PlcS5TimeType	Represents a TimeSpan type declaration (in PLC a S5TIME) its value defines an time interval.
PlcStatus	Provides all available status metadata provided through the interoperability layer of the software driver.
PlcString	Represents a String value (in PLC a STRING) its value defines a series of characters.
PlcStringInfo	Represents a String value member (in PLC a STRING) its value defines a series of characters.
PlcStringType	Represents a String type declaration (in PLC a STRING) its value defines a series of characters.
PlcSymbolCollection	Provides a collection of IPlcSymbol objects.
PlcTime	Represents a TimeSpan value (in PLC a TIME) its value defines an time interval.
PlcTimeInfo	Represents a TimeSpan value member (in PLC a TIME) its value defines an time interval.
PlcTimeOfDay	Represents a TimeSpan value (in PLC a TIME_OF_DAY) its value defines an time interval.
PlcTimeOfDayInfo	Represents a TimeSpan value member (in PLC a TIME_OF_DAY) its value defines an time interval.
PlcTimeOfDayType	Represents a TimeSpan type declaration (in PLC a TIME_OF_DAY) its value defines an time interval.
PlcTimerOperand	Represents an operand which addresses a timer memory blocks within a programmable logic controller (PLC).
PlcTimeType	Represents a TimeSpan type declaration (in PLC a TIME) its value defines an time interval.
PlcType	Represents PLC type declarations while each declaration does provide the necessary information required to map a .NET framework Type to the according type representation within a PLC.
PlcTypeCollection	Provides a collection of PlcType objects.
PlcTypeLayout	Defines the characteristics to use to absolutely align the Members of a PlcType.
PlcTypeMemberNode	Provides information about a single PLC member data node to operate on.
PlcTypeNode	Provides information about a single PLC type node to operate on.
PlcUInt16	Represents a UInt16 value (in PLC a WORD) its value defines a 16-bit unsigned integer value.

Name	Description
PlcUInt16Array	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 16-bit unsigned integer values (UInt16).
PlcUInt16ArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 16-bit unsigned integer values (UInt16).
PlcUInt16ArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 16-bit unsigned integer values (UInt16).
PlcUInt16Info	Represents a UInt16 value member (in PLC a WORD) its value defines a 16-bit unsigned integer value.
PlcUInt16Type	Represents a UInt16 type declaration (in PLC a WORD) its value defines a 16-bit unsigned integer value.
PlcUInt32	Represents a UInt32 value (in PLC a DWORD) its value defines a 32-bit unsigned integer value.
PlcUInt32Array	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 32-bit unsigned integer values (UInt32).
PlcUInt32ArrayInfo	Represents a PLC array member which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 32-bit unsigned integer values (UInt32).
PlcUInt32ArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 32-bit unsigned integer values (UInt32).
PlcUInt32Info	Represents a UInt32 value member (in PLC a DWORD) its value defines a 32-bit unsigned integer value.
PlcUInt32Type	Represents a UInt32 type declaration (in PLC a DWORD) its value defines a 32-bit unsigned integer value.
PlcUInt64	Represents a UInt64 value (in PLC a LWORD) its value defines a 64-bit unsigned integer value.
PlcUInt64Array	Represents a PLC array which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 64-bit unsigned integer values (UInt64).

Name	Description
PlcUInt64ArrayType	Represents a PLC array type declaration which addresses an unique data entry stored within a programmable logic controller (PLC) its values are 64-bit unsigned integer values (UInt64).
PlcUInt64Type	Represents a UInt64 type declaration (in PLC a LWORD) its value defines a 64-bit unsigned integer value.
PlcUserDefinedTypeOperand	Represents an operand which addresses a user defined type within a programmable logic controller (PLC).
PlcValueCollection	Provides a collection of IPlcValue objects.
PlcValueMember	Represents a specific implementation of the PlcMember class which represents a IPlcValue as a PLC member.
PlcValueNode	Provides information about a single PLC value data node to operate on.
PlcValueType	Provides an abstract PLC type declarations to represent simple value types which map a .NET framework value Type to the according value type representation within a PLC.
PlcWordAddress	Represents a word address which refers to a specific data area stored within a programmable logic controller (PLC).
SiemensOperandTypes	Defines all operand types supported by the Siemens AG in Germany.
SimaticBlockInfo	Provides information about blocks stored in a single Siemens AG specific programmable logic controller (PLC).
SimaticDevice	Represents a single Siemens AG specific programmable logic controller (PLC).
SimaticDeviceConnection	Represents a connection to a SimaticDevice.
ValueChangedEventArgs	Provides event data for value changed events there an old has been substituted by a new value.
VirtualBlockInfo	Provides information about blocks stored in a single programmable logic controller (PLC) stored in the virtual memory.
VirtualDevice	Represents a single virtual programmable logic controller (PLC).
VirtualDeviceConnection	Represents a connection to a VirtualDevice.

Interfaces

Name	Description
IPlcArray	Represents an array stored within a programmable logic controller (PLC).
IPlcArrayInfo	Provides information about the attributes of an array and provides access to array metadata.
IPlcDevice	Represents a single programmable logic controller (PLC) and is implemented by different device providers.
IPlcDeviceInfo	Provides metadata of a single programmable logic controller (PLC).

Name	Description
IPlcEntity	Represents an entity which does encapsulate PLC stored data of a specific PlcType.
IPlcMemberInfo	Represents information about the attributes of a member and provides access to member metadata.
IPlcRelocatable	Defines mechanism to relocate a PLC entity using different relative offsets and absolute PlcAddress information.
IPlcStatusProvider	Defines members required to provide PlcStatus information.
IPlcSymbol	Represents a single symbol that can be used to access PLC data just using a simple name.
IPlcValue	Represents a value stored within a programmable logic controller (PLC).
IPlcValueInfo	Provides information about the attributes of a value and provides access to value metadata.

Delegates

Name	Description
PlcMemberChangedEventHandler	Represents the method that will handle a member changed event.
PlcNotifications.EvaluateStatusDelegate	Defines a method that evaluates the PlcStatus provided through the object implementing the IPlcStatusProvider interface.
ValueChangedEventHandler	Represents the method that will handle a value changed event.

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