**Specification**USPD: US.ECO.00004-01 90

Component: IEcoSemaphore1

UGUID:

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|  |  |
| --- | --- |
| **Authors** | **Company** |
| Vladimir Bashev | PEERF |
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1. **Overview**

This document describes the requirements for the implementation of the Eco.Semaphore1 component.

* 1. **Introduction**

Description.

* 1. **Note**
* Keywords
  1. **Links**

This paragraph contains links to information to help you understand this document:

[] – name of the link

Available by: http://address

1. **Eco.Semaphore1 Component**

The Eco.Semaphore1 component

The component has the following description:

* 1. **IEcoSemaphore1 IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.h" | | | |
| [  object,  uguid(661C3E2E-7494-4555-B8E1-F82B2C2D3979),  ] | | | |
| interface IEcoSemaphore1 : IEcoUnknown { | | | |
|  | | | |
| int16\_t | | ***Init*** | ([in] int32\_t MaxCount); |
|  | | | |
| int16\_t | | ***InitWithName*** | ([in] int32\_t MaxCount,  [in] char\_t\* Name); |
|  | | | |
| int16\_t | | ***OpenExisting*** | ([in] char\_t\* Name); |
|  | | | |
| int16\_t | | ***Close*** | (); |
|  | | | |
| int32\_t | | ***Post*** | (); |
|  | |  |  |
| bool\_t | | ***Wait*** | ([in] int32\_t Milliseconds); |
| } | |  |  |

* + 1. **Init function**

The function initializes the unnamed semaphore at the address.

* + 1. **InitWithName function**

The function

* + 1. **OpenExisting function**

The function creates a new POSIX semaphore or opens an existing semaphore.

* + 1. **Close function**

The function closes the named semaphore.

* + 1. **Post function**

The function increments (unlocks) the semaphore.

* + 1. **Wait function**

The function decrements (locks) the semaphore.

* 1. **Error codes**

The following table contains the error codes.

|  |  |  |
| --- | --- | --- |
| **Error code** | **Value** | **Description** |
| ERR\_ECO\_SUCCESES | 0x0000 | Operation successful. |
| ERR\_ECO\_UNEXPECTED | 0xFFFF | Unexpected condition. |
| ERR\_ECO\_POINTER | 0xFFEE | NULL was passed incorrectly for a pointer value. |
| ERR\_ECO\_NOINTERFACE | 0xFFED | No such interface supported. |
| ERR\_ECO\_COMPONENT\_NOTFOUND | 0xFFE9 | The component was not found. |
|  |  |  |
|  |  |  |

# **Appendix A: Training programs**