**Specification**

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Component: IEcoMemoryManager1

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|  |  |
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1. **Overview**

This document describes the requirements for the implementation of the Eco.MemoryManager1 component. (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.MemoryManager1 Component**

The Eco.MemoryManager1 component is

The component has the following description:

1. **IEcoMemoryManager1 Interface**
   1. **IEcoMemoryManager1 IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoMemoryAllocator1.idl" | | | |
| [  object,  uguid(00000000-0000-0000-0000-B00000000101),  ] | | | |
| interface IEcoMemoryManager1 : IEcoUnknown { | | | |
|  | | | |
| int16\_t | | ***Init*** | ([in] void\* startAddress,  [in] uint32\_t size); |
|  | |  |  |
| bool\_t | | ***get\_Status*** | ([in | out] ECOMEMORYMANAGER1STATUS\* status); |
|  | |  |  |
| bool\_t | | ***get\_UsedBlocks*** | ([in | out] ECOMEMORYMANAGER1BLOCK\* blocks,  [in | out] uint32\_t\* sizeInBlocks); |
|  | |  |  |
| } | |  |  |

* + 1. **Init function**

The function

* + 1. **get\_Status function**

The function

* + 1. **get\_UsedBlocks function**

The function

1. **IEcoMemoryAllocator1 Interface**
   1. **IEcoMemoryAllocator1 IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl" | | | |
| [  object,  uguid(00000000-0000-0000-0000-B00000000102),  ] | | | |
| interface IEcoMemoryAllocator1 : IEcoUnknown { | | | |
|  | | | |
| void\* | | ***Alloc*** | ([in] uint32\_t size); |
|  | | | |
| void | | ***Free*** | ([in] void \*pv); |
|  | |  |  |
| void\* | | ***Realloc*** | ([in] void \*pv,  [in] uint32\_t size); |
|  | |  |  |
| void\* | | ***Copy*** | ([in] void \*pvDst,  [in] void \*pvSrc,  [in] uint32\_t size); |
|  | |  |  |
| void\* | | ***Fill*** | ([in] void \*pvDst,  [in] char\_t Fill,  [in] uint32\_t size); |
|  | |  |  |
| int16\_t | | ***Compare*** | ([in] void \*pv1,  [in] void \*pv2,  [in] uint32\_t size); |
|  | |  |  |
| uint32\_t | | ***RetrieveSize*** | ([in] void \*pv); |
|  | | | |
| } | |  |  |

* + 1. **Alloc function**

The function

* + 1. **Free function**

The function

* + 1. **Realloc function**

The function

* + 1. **Copy function**

The function

* + 1. **Fill function**

The function

* + 1. **Compare function**

The function

* + 1. **RetrieveSize function**

The function

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**