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1. **Overview**

This document describes the requirements for the implementation of the Eco.COFF1component.

* 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.COFF1 Component**

The Eco.COFF1 component is

The component has the following description:

1. **IEcoCOFF1 Interface**
   1. **IEcoCOFF1 IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoCOFF1ObjectFile.idl"  import "IEcoCOFF1OptionalHeader.idl"  import "IEcoCOFF1SectionHeader.idl"  import "IEcoCOFF1RelocationTableEntry.idl"  import "IEcoCOFF1ArchiveFile.idl"  import "IEcoCOFF1ArchiveMemberHeader.idl"  import "IEcoCOFF1ArchiveSymbolTable.idl"  import "IEcoCOFF1ArchiveLongnames.idl"  import "IEcoRawData1.idl" | | | |
| [  object,  uguid(BDF3DDFC-DF6F-4EFF-95CC-A02142A8EFC3),  ] | | | |
| interface IEcoCOFF1: IEcoUnknown { | | | |
|  | | | |
| IEcoCOFF1ObjectFile | | ***readObjectFile*** | ([in] char\_t\* fileName); |
|  | |  |  |
| int16\_t | | ***writeObjectFile*** | ([in] IEcoCOFF1ObjectFile\* pIObjectFile,  [in] char\_t\* fileName); |
|  | |  |  |
| IEcoCOFF1ArchiveFile | | ***readArchiveFile*** | ([in] char\_t\* fileName); |
|  | |  |  |
| int16\_t | | ***writeArchiveFile*** | ([in] IEcoCOFF1ArchiveFile\* pIArchiveFile,  [in] char\_t\* fileName); |
|  | |  |  |
| IEcoCOFF1ObjectFile | | ***createObjectFile*** | (); |
|  | |  |  |
| IEcoCOFF1ArchiveFile | | ***createArchiveFile*** | (); |
|  | |  |  |
| IEcoCOFF1FileHeader | | ***createFileHeader*** | (); |
|  | |  |  |
| IEcoCOFF1OptionalHeader | | ***createOptionalHeader*** | (); |
|  | |  |  |
| IEcoCOFF1SectionHeader | | ***createSectionHeader*** | (); |
|  | |  |  |
| IEcoCOFF1RelocationTableEntry | | ***createRelocationTableEntry*** | (); |
|  | |  |  |
| IEcoCOFF1ArchiveMemberHeader | | ***createArchiveMemberHeader*** | (); |
|  | |  |  |
| IEcoCOFF1ArchiveSymbolTable | | ***createArchiveSymbolTable*** | (); |
|  | |  |  |
| IEcoCOFF1ArchiveLongnames | | ***createArchiveLongnames*** | (); |
|  | |  |  |
| IEcoRawData1 | | ***createRawData*** | (); |
|  | |  |  |
| } | |  |  |

* + 1. **readObjectFile function**

The function

* + 1. **writeObjectFile function**

The function

* + 1. **readArchiveFile function**

The function

* + 1. **writeArchiveFile function**

The function

* + 1. **createObjectFile function**

The function

* + 1. **createArchiveFile function**

The function

* + 1. **createFileHeader function**

The function

* + 1. **createOptionalHeader function**

The function

* + 1. **createSectionHeader function**

The function

* + 1. **createRelocationTableEntry function**

The function

* + 1. **createArchiveMemberHeader function**

The function

* + 1. **createArchiveSymbolTable function**

The function

* + 1. **createArchiveLongnames function**

The function

* + 1. **createRawData function**

The function

1. **IEcoCOFF1ArchiveFile** **Interface**
   1. **IEcoCOFF1ArchiveFile IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoCOFF1.idl"  import "IEcoList1.idl" | | | |
| [  object,  uguid(F2A3737F-6B68-4C37-B747-82AC95B84341),  ] | | | |
| interface IEcoCOFF1ArchiveFile : IEcoUnknown { | | | |
|  | | | |
| char\_t\* | | ***get\_Signature*** | (); |
|  | | | |
| void | | ***set\_Signature*** | ([in] char\_t\* magic); |
|  | |  |  |
| IEcoList1\* | | ***get\_MemberHeaders*** | (); |
|  | |  |  |
| void | | ***set\_MemberHeaders*** | ([in] IEcoList1\* pIMemberHeaders); |
|  | | | |
| } | |  |  |

* + 1. **get\_Signature function**

The function

* + 1. **set\_Signature function**

The function

* + 1. **get\_MemberHeaders function**

The function

* + 1. **set\_MemberHeaders function**

The function

1. **IEcoCOFF1ArchiveMemberHeader** **Interface**
   1. **IEcoCOFF1ArchiveMemberHeader IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoCOFF1.idl"  import "IEcoList1.idl" | | | |
| [  object,  uguid(DF8F3D0F-5474-4EF4-863E-8F8CF4C92711),  ] | | | |
| interface IEcoCOFF1ArchiveMemberHeader : IEcoUnknown { | | | |
|  | | | |
| COFF1\_ARCHIVE\_MEMBER\_HEADER\_DESCRIPTOR\* | | ***get\_Descriptor*** | (); |
|  | | | |
| void | | ***set\_Descriptor*** | ([in] COFF1\_ARCHIVE\_MEMBER\_HEADER\_DESCRIPTOR\* descriptor); |
|  | |  |  |
| IEcoUnknown\* | | ***get\_RawData*** | (); |
|  | |  |  |
| void | | ***set\_RawData*** | ([in] IEcoUnknown\* pIContent); |
|  | | | |
| } | |  |  |

* + 1. **get\_Descriptor function**

The function

* + 1. **set\_Descriptor function**

The function

* + 1. **get\_RawData function**

The function

* + 1. **set\_RawData function**

The function

1. **IEcoCOFF1ArchiveLongnames** **Interface**
   1. **IEcoCOFF1ArchiveLongnames IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoCOFF1.idl"  import "IEcoList1.idl" | | | |
| [  object,  uguid(8F134D6F-F087-4F07-ABF7-92FFE14D90E5),  ] | | | |
| interface IEcoCOFF1ArchiveLongnames : IEcoCOFF1ArchiveMemberHeader { | | | |
|  | | | |
| uint32\_t | | ***Count*** | (); |
|  | | | |
| char\_t \* | | ***get\_Longname*** | ([in] uint32\_t n); |
|  | |  |  |
| uint32\_t | | ***AddLongname*** | ([in] char\_t\* name); |
|  | |  |  |
| int16\_t | | ***UpdateMember*** | ([in] IEcoList1\* members); |
|  | | | |
| } | |  |  |

* + 1. **Count function**

The function

* + 1. **get\_Longname function**

The function

* + 1. **AddLongname function**

The function

* + 1. **UpdateMember function**

The function

1. **IEcoCOFF1ArchiveSymbolTable** **Interface**
   1. **IEcoCOFF1ArchiveSymbolTable IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoCOFF1.idl"  import "IEcoList1.idl" | | | |
| [  object,  uguid(872FA5FA-974C-4963-BF4B-8A75654750B6),  ] | | | |
| interface IEcoCOFF1ArchiveSymbolTable : IEcoCOFF1ArchiveMemberHeader { | | | |
|  | | | |
| uint32\_t | | ***get\_NumberOfSymbols*** | (); |
|  | | | |
| uint32\_t | | ***get\_Offset*** | ([in] uint32\_t n); |
|  | |  |  |
| char\_t\* | | ***get\_SymbolName*** | ([in] uint32\_t n); |
|  | |  |  |
| int16\_t | | ***AddSymbolName*** | ([in] char\_t\* name,  [in] IEcoCOFF1ArchiveMemberHeader\* reference); |
|  | |  |  |
| int16\_t | | ***UpdateMember*** | ([in] IEcoList1\* members); |
|  | | | |
| } | |  |  |

* + 1. **get\_NumberOfSymbols function**

The function

* + 1. **get\_Offset function**

The function

* + 1. **get\_SymbolName function**

The function

* + 1. **AddSymbolName function**

The function

* + 1. **UpdateMember function**

The function

1. **IEcoCOFF1FileHeader** **Interface**
   1. **IEcoCOFF1FileHeader IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl" | | | |
| [  object,  uguid(E2C4CB3D-ACCD-4431-A0EA-F64AF769493E),  ] | | | |
| interface IEcoCOFF1FileHeader : IEcoUnknown { | | | |
|  | | | |
| COFF1\_FILE\_HEADER\_DESCRIPTOR\* | | ***get\_Descriptor*** | (); |
|  | | | |
| void | | ***set\_Descriptor*** | ([in] COFF1\_FILE\_HEADER\_DESCRIPTOR\* descriptor); |
|  | |  |  |
| IEcoUnknown\* | | ***get\_SymbolTable*** | (); |
|  | |  |  |
| void | | ***set\_SymbolTable*** | ([in] IEcoUnknown\* pISymbolTable); |
|  | | | |
| } | |  |  |

* + 1. **get\_Descriptor function**

The function

* + 1. **set\_Descriptor function**

The function

* + 1. **get\_SymbolTable function**

The function

* + 1. **set\_SymbolTable function**

The function

1. **IEcoCOFF1ObjectFile** **Interface**
   1. **IEcoCOFF1ObjectFile IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoCOFF1FileHeader.idl" | | | |
| [  object,  uguid(755079FE-49A0-4634-8A11-F915C941FFA3),  ] | | | |
| interface IEcoCOFF1ObjectFile : IEcoUnknown { | | | |
|  | | | |
| IEcoCOFF1FileHeader\* | | ***get\_FileHeader*** | (); |
|  | | | |
| void | | ***set\_FileHeader*** | ([in] IEcoCOFF1FileHeader\* pIHeader); |
|  | |  |  |
| } | |  |  |

* + 1. **get\_FileHeader function**

The function

* + 1. **set\_FileHeader function**

The function

1. **IEcoCOFF1OptionalHeader** **Interface**
   1. **IEcoCOFF1OptionalHeader IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl" | | | |
| [  object,  uguid(BDF3DDFC-DF6F-4EFF-95CC-A02142A8EFC3),  ] | | | |
| interface IEcoCOFF1OptionalHeader : IEcoUnknown { | | | |
|  | | | |
| COFF1\_OPTIONAL\_HEADER\_DESCRIPTOR\* | | ***get\_Descriptor*** | (); |
|  | | | |
| void | | ***set\_Descriptor*** | ([in] COFF1\_OPTIONAL\_HEADER\_DESCRIPTOR\* descriptor); |
|  | |  |  |
| } | |  |  |

* + 1. **get\_Descriptor function**

The function

* + 1. **set\_Descriptor function**

The function

1. **IEcoCOFF1RelocationTableEntry** **Interface**
   1. **IEcoCOFF1RelocationTableEntry IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl" | | | |
| [  object,  uguid(CDBD2DF8-0D61-49AE-9601-1E2718D4C5D3),  ] | | | |
| interface IEcoCOFF1RelocationTableEntry : IEcoUnknown { | | | |
|  | | | |
| COFF1\_RELOCATION\_TABLE\_ENTRY\_DESCRIPTOR\* | | ***get\_Descriptor*** | (); |
|  | | | |
| void | | ***set\_Descriptor*** | ([in] COFF1\_RELOCATION\_TABLE\_ENTRY\_DESCRIPTOR\* descriptor); |
|  | |  |  |
| } | |  |  |

* + 1. **get\_Descriptor function**

The function

* + 1. **set\_Descriptor function**

The function

1. **IEcoCOFF1SectionHeader** **Interface**
   1. **IEcoCOFF1SectionHeader IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl"  import "IEcoList1.idl" | | | |
| [  object,  uguid(8F79E9B9-5B8E-4B98-A5CF-700EB4D4B4D1),  ] | | | |
| interface IEcoCOFF1SectionHeader : IEcoUnknown { | | | |
|  | | | |
| COFF1\_SECTION\_HEADER\_DESCRIPTOR\* | | ***get\_Descriptor*** | (); |
|  | | | |
| void | | ***set\_Descriptor*** | ([in] COFF1\_SECTION\_HEADER\_DESCRIPTOR\* descriptor); |
|  | |  |  |
| IEcoUnknown\* | | ***get\_RawData*** | (); |
|  | |  |  |
| void | | ***set\_RawData*** | ([in] IEcoUnknown\* pIRawData); |
|  | |  |  |
| IEcoList1\* | | ***get\_Relocations*** | (); |
|  | |  |  |
| void | | ***set\_Relocations*** | ([in] IEcoList1\* pIRelocations); |
|  | | | |
| } | |  |  |

* + 1. **get\_Descriptor function**

The function

* + 1. **set\_Descriptor function**

The function

* + 1. **get\_RawData function**

The function

* + 1. **set\_RawData function**

The function

* + 1. **get\_Relocations function**

The function

* + 1. **set\_Relocations function**

The function

1. **IEcoRawData1** **Interface**
   1. **IEcoRawData1 IDL**

|  |
| --- |
| **ECO IDL** |
| import "IEcoBase1.idl" | | | |
| [  object,  uguid(E532E7FC-3578-4E61-A528-D5397B0F8D98),  ] | | | |
| interface IEcoRawData1 : IEcoUnknown { | | | |
|  | | | |
| byte\_t\* | | ***Alloc*** | ([in] uint32\_t size)); |
|  | | | |
| void | | ***Fill*** | ([in] byte\_t value); |
|  | |  |  |
| void | | ***Free*** | (); |
|  | |  |  |
| uint32\_t | | ***get\_Size*** | (); |
|  | |  |  |
| byte\_t\* | | ***get\_Pointer*** | ([in] uint32\_t offset); |
|  | | | |
| } | |  |  |

* + 1. **Alloc function**

The function

* + 1. **Fill function**

The function

* + 1. **Free function**

The function

* + 1. **get\_Size function**

The function

* + 1. **get\_Pointer 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**