# Package org.idmef

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| **Class Summary** | |
| **Class** | **Description** |
| [**IDMEFObject**](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObject.html) | IDMEF base object. |
| [**IDMEFObjectDeserializer**](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObjectDeserializer.html) | Class for IDMEFObject deserialization. |
| [**IDMEFValidator**](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFValidator.html) | IDMEF validator class. |

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| **Exception Summary** | |
| **Exception** | **Description** |
| [**IDMEFException**](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFException.html) | IDMEF exception class. |

Package [org.idmef](\\\\192.168.56.1\\francois\\projects\\SECEF\\work\\java-idmef-library\\build\\docs\\javadoc\\org\\idmef\\package-summary.html)

## Class IDMEFObject

* java.lang.Object
  + org.idmef.IDMEFObject
* public class IDMEFObject

extends java.lang.Object

IDMEF base object.

This implementation provides:

* + property getting
  + property setting: no check is done on property key, check is done by IDMEFValidator
  + serialization of a IDMEFObject instance to JSON bytes
  + deserialization if JSON bytes to a IDMEFObject instance

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* + ***Constructor Summary***

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| **Constructors** | |
| **Constructor** | **Description** |
| [IDMEFObject](#%3Cinit%3E())() | Construct an empty IDMEFObject. |

* + ***Method Summary***

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| --- | --- | --- |
| **All Methods**[**Static Methods**](javascript:show(1);)[**Instance Methods**](javascript:show(2);)[**Concrete Methods**](javascript:show(8);) | | |
| **Modifier and Type** | **Method** | **Description** |
| static [**IDMEFObject**](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObject.html) | [deserialize](#deserialize(byte%5B%5D))​(byte[] json) | Deserialize JSON bytes to a IDMEFObject |
| boolean | [equals](#equals(java.lang.Object))​(java.lang.Object obj) | Indicates whether some other object is "equal to" this one. |
| java.lang.Object | [get](#get(java.lang.String))​(java.lang.String key) | Get a property by its key. |
| java.util.Map<java.lang.String,​java.lang.Object> | [getProperties](#getProperties())() | Get all properties of the object. |
| java.lang.Object | [put](#put(java.lang.String,java.lang.Object))​(java.lang.String key, java.lang.Object value) | Set a property of the Message. |
| byte[] | [serialize](#serialize())() | Serialize a Message to JSON bytes. |

* + - **Methods inherited from class java.lang.Object**

getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

* + ***Constructor Detail***
    - **IDMEFObject**

public IDMEFObject()

Construct an empty IDMEFObject.

* + ***Method Detail***
    - **getProperties**

public java.util.Map<java.lang.String,​java.lang.Object> getProperties()

Get all properties of the object.

Returns:

a Map containing IDMEFObject properties

* + - **get**

public java.lang.Object get​(java.lang.String key)

Get a property by its key.

Parameters:

key - the property key

Returns:

the value associated to the key or null

* + - **put**

public java.lang.Object put​(java.lang.String key, java.lang.Object value)

Set a property of the Message. If value is an array, transform it to a List before setting the property

Parameters:

key - the property key

value - the property value

Returns:

the real value that was set

* + - **equals**

public boolean equals​(java.lang.Object obj)

Indicates whether some other object is "equal to" this one.

Overrides:

equals in class java.lang.Object

Parameters:

obj - the reference object with which to compare.

Returns:

if this object is the same as the obj argument; false otherwise.

* + - **serialize**

public byte[] serialize() throws java.io.IOException

Serialize a Message to JSON bytes.

Returns:

the JSON bytes

Throws:

[IDMEFException](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFException.html) - if an exception occured during serialization

java.io.IOException

* + - **deserialize**

public static [IDMEFObject](\\\\192.168.56.1\\francois\\projects\\SECEF\\work\\java-idmef-library\\build\\docs\\javadoc\\org\\idmef\\IDMEFObject.html" \o "class in org.idmef) deserialize​(byte[] json) throws java.io.IOException

Deserialize JSON bytes to a IDMEFObject

Parameters:

json - the JSON bytes

Returns:

a IDMEFObject object with content filled from JSON

Throws:

java.io.IOException

Package [org.idmef](\\\\192.168.56.1\\francois\\projects\\SECEF\\work\\java-idmef-library\\build\\docs\\javadoc\\org\\idmef\\package-summary.html)

## Class IDMEFObjectDeserializer

* java.lang.Object
  + com.fasterxml.jackson.databind.JsonDeserializer<T>
    - com.fasterxml.jackson.databind.deser.std.StdDeserializer<[IDMEFObject](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObject.html)>
      * org.idmef.IDMEFObjectDeserializer
* **All Implemented Interfaces:**

com.fasterxml.jackson.databind.deser.NullValueProvider, com.fasterxml.jackson.databind.deser.ValueInstantiator.Gettable, java.io.Serializable

public class IDMEFObjectDeserializer

extends com.fasterxml.jackson.databind.deser.std.StdDeserializer<[IDMEFObject](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObject.html)>

Class for IDMEFObject deserialization. Class inherits from com.fasterxml.jackson.databind.deser.std.StdDeserializer and overrides deserialize method.

See Also:

StdDeserializer, [Serialized Form](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\serialized-form.html#org.idmef.IDMEFObjectDeserializer)

* + ***Nested Class Summary***
    - **Nested classes/interfaces inherited from class com.fasterxml.jackson.databind.JsonDeserializer**

com.fasterxml.jackson.databind.JsonDeserializer.None

* + ***Constructor Summary***

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| **Constructors** | |
| **Constructor** | **Description** |
| [IDMEFObjectDeserializer](#%3Cinit%3E())() | Construct a IDMEFObjectDeserializer instance |
| [IDMEFObjectDeserializer](#%3Cinit%3E(java.lang.Class))​(java.lang.Class<?> vc) | Construct a IDMEFObjectDeserializer instance |

* + ***Method Summary***

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| --- | --- | --- |
| **All Methods**[**Instance Methods**](javascript:show(2);)[**Concrete Methods**](javascript:show(8);) | | |
| **Modifier and Type** | **Method** | **Description** |
| [**IDMEFObject**](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObject.html) | [deserialize](#deserialize(com.fasterxml.jackson.core.)​(com.fasterxml.jackson.core.JsonParser jp, com.fasterxml.jackson.databind.DeserializationContext context) | Deserialize JSON content to a IDMEFObject |

* + - **Methods inherited from class com.fasterxml.jackson.databind.deser.std.StdDeserializer**

deserializeWithType, getValueClass, getValueInstantiator, getValueType, getValueType, handledType

* + - **Methods inherited from class com.fasterxml.jackson.databind.JsonDeserializer**

deserialize, deserializeWithType, findBackReference, getDelegatee, getEmptyAccessPattern, getEmptyValue, getEmptyValue, getKnownPropertyNames, getNullAccessPattern, getNullValue, getNullValue, getObjectIdReader, isCachable, logicalType, replaceDelegatee, supportsUpdate, unwrappingDeserializer

* + - **Methods inherited from class java.lang.Object**

equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

* + ***Constructor Detail***
    - **IDMEFObjectDeserializer**

public IDMEFObjectDeserializer()

Construct a IDMEFObjectDeserializer instance

* + - **IDMEFObjectDeserializer**

public IDMEFObjectDeserializer​(java.lang.Class<?> vc)

Construct a IDMEFObjectDeserializer instance

Parameters:

vc - the class to which to deserialize

* + ***Method Detail***
    - **deserialize**

public [IDMEFObject](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObject.html) deserialize​(com.fasterxml.jackson.core.JsonParser jp, com.fasterxml.jackson.databind.DeserializationContext context) throws java.io.IOException, com.fasterxml.jackson.core.JsonProcessingException

Deserialize JSON content to a IDMEFObject

Specified by:

deserialize in class com.fasterxml.jackson.databind.JsonDeserializer<[IDMEFObject](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFObject.html)>

Parameters:

jp - Parsed used for reading JSON content

context - Context that can be used to access information about this deserialization activity.

Returns:

deserialized IDMEFObject

Throws:

java.io.IOException - if an exception occurred during JSON content reading

com.fasterxml.jackson.core.JsonProcessingException - if an exception occurred when processing (parsing, generating) JSON content that are not pure I/O problems.

Package [org.idmef](\\\\192.168.56.1\\francois\\projects\\SECEF\\work\\java-idmef-library\\build\\docs\\javadoc\\org\\idmef\\package-summary.html)

## Class IDMEFValidator

* java.lang.Object
  + org.idmef.IDMEFValidator
* public class IDMEFValidator

extends java.lang.Object

IDMEF validator class. This class can validate a IDMEF object or an array of bytes containing JSON data. Validation is done against version 2 revision 0.3 of the IDMEF schema.

* + ***Constructor Summary***

|  |  |
| --- | --- |
| **Constructors** | |
| **Constructor** | **Description** |
| [IDMEFValidator](#%3Cinit%3E())() | Constructs a Validator. |

* + ***Method Summary***

|  |  |  |
| --- | --- | --- |
| **All Methods** [**Instance Methods**](javascript:show(2);)[**Concrete Methods**](javascript:show(8);) | | |
| **Modifier and Type** | **Method** | **Description** |
| boolean | [validate](#validate(byte%5B%5D))​(byte[] json) | Validate the bytes w.r.t. current IDMEF JSON schema. |
| boolean | [validate](#validate(org.idmef.IDMEFObject))​(**[IDMEFObject](\\\\192.168.56.1\\francois\\projects\\SECEF\\work\\java-idmef-library\\build\\docs\\javadoc\\org\\idmef\\IDMEFObject.html" \o "class in org.idmef)** idmefObject) | Validate the object content w.r.t. current IDMEF JSON schema. |

* + - **Methods inherited from class java.lang.Object**

equals, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

* + ***Constructor Detail***
    - **IDMEFValidator**

public IDMEFValidator()

Constructs a Validator.

* + ***Method Detail***
    - **validate**

public boolean validate​([IDMEFObject](\\\\192.168.56.1\\francois\\projects\\SECEF\\work\\java-idmef-library\\build\\docs\\javadoc\\org\\idmef\\IDMEFObject.html" \o "class in org.idmef) idmefObject) throws [IDMEFException](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFException.html)

Validate the object content w.r.t. current IDMEF JSON schema.

Parameters:

idmefObject - a IDMEF object instance

Returns:

true is json contains a valid IDMEF object according to schema, false if not

Throws:

[IDMEFException](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFException.html) - if an exception occured during validation (schema cannot be loaded)

* + - **validate**

public boolean validate​(byte[] json) throws java.io.IOException

Validate the bytes w.r.t. current IDMEF JSON schema.

Parameters:

json - a byte array containing the JSON data

Returns:

true is json contains a valid IDMEF object according to schema, false if not

Throws:

[IDMEFException](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\org\idmef\IDMEFException.html) - if an exception occured during validation (schema cannot be loaded)

java.io.IOException

Package [org.idmef](\\\\192.168.56.1\\francois\\projects\\SECEF\\work\\java-idmef-library\\build\\docs\\javadoc\\org\\idmef\\package-summary.html)

## Class IDMEFException

* java.lang.Object
  + java.lang.Throwable
    - java.lang.Exception
      * java.io.IOException
        + org.idmef.IDMEFException
* **All Implemented Interfaces:**

java.io.Serializable

public class IDMEFException

extends java.io.IOException

IDMEF exception class. IDMEF exceptions are thrown when validating, serializing an object or deserializing bytes.

See Also:

[Serialized Form](file:///\\192.168.56.1\francois\projects\SECEF\work\java-idmef-library\build\docs\javadoc\serialized-form.html#org.idmef.IDMEFException)

* + ***Constructor Summary***

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| --- | --- |
| **Constructors** | |
| **Constructor** | **Description** |
| [IDMEFException](#%3Cinit%3E(java.lang.String))​(java.lang.String message) | Construct a IDMEFException |

* + ***Method Summary***
    - **Methods inherited from class java.lang.Throwable**

addSuppressed, fillInStackTrace, getCause, getLocalizedMessage, getMessage, getStackTrace, getSuppressed, initCause, printStackTrace, printStackTrace, printStackTrace, setStackTrace, toString

* + - **Methods inherited from class java.lang.Object**

equals, getClass, hashCode, notify, notifyAll, wait, wait, wait

* + ***Constructor Detail***
    - **IDMEFException**

public IDMEFException​(java.lang.String message)

Construct a IDMEFException

Parameters:

message - the message contained in the exception