**Package**

org.idmef

org.idmef.IDMEFException

**org.idmef**

**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.

|  |  |
| --- | --- |
| Constructor Summary | |
| public | [IDMEFException](#_bookmark1)(java.lang.String message)  Construct a IDMEFException |

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

**Methods inherited from class** java.lang.Throwable

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

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

Constructors

**IDMEFException**

public **IDMEFException**(java.lang.String message)

Construct a IDMEFException

## Parameters:

message - the message contained in the exception

org.idmef.IDMEFObject

**org.idmef**

**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

.

|  |  |
| --- | --- |
| Constructor Summary | |
| public | [IDMEFObject](#_bookmark3)()  Construct an empty IDMEFObject. |

|  |  |
| --- | --- |
| Method Summary | |
| static [IDMEFObject](#_bookmark2) | [deserialize](#_bookmark9)(byte[] json)  Deserialize JSON bytes to a IDMEFObject |
| boolean | [equals](#_bookmark7)(java.lang.Object obj)  Indicates whether some other object is "equal to" this one. |
| java.lang.Object | [get](#_bookmark5)(java.lang.String key)  Get a property by its key. |
| java.util.Map | [getProperties](#_bookmark4)()  Get all properties of the object. |
| java.lang.Object | [put](#_bookmark6)(java.lang.String key, java.lang.Object value)  Set a property of the Message. |
| byte[] | [serialize](#_bookmark8)()  Serialize a Message to JSON bytes. |

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

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

Constructors

(continued on next page)

org.idmef.IDMEFObject

(continued from last page)

**IDMEFObject**

public **IDMEFObject**()

Construct an empty IDMEFObject.

Methods

# getProperties

public java.util.Map **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.

## Parameters:

obj - the reference object with which to compare.

## Returns:

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

(continued on next page)

org.idmef.IDMEFObject

(continued from last page)

# serialize

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

Serialize a Message to JSON bytes.

## Returns:

the JSON bytes

## Throws:

[IDMEFException](#_bookmark0) - if an exception occured during serialization

# deserialize

public static [IDMEFObject](#_bookmark2) **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

org.idmef.IDMEFObjectDeserializer

**org.idmef**

**Class IDMEFObjectDeserializer**

java.lang.Object

|

+-<any>

|

## +-org.idmef.IDMEFObjectDeserializer

public class **IDMEFObjectDeserializer**

extends <any>

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

## See Also:

com.fasterxml.jackson.databind.deser.std.StdDeserializer

|  |  |
| --- | --- |
| Constructor Summary | |
| public | [IDMEFObjectDeserializer](#_bookmark10)()  Construct a IDMEFObjectDeserializer instance |
| public | [IDMEFObjectDeserializer](#_bookmark11)(java.lang.Class vc)  Construct a IDMEFObjectDeserializer instance |

|  |  |
| --- | --- |
| Method Summary | |
| [IDMEFObject](#_bookmark2) | [deserialize](#_bookmark12)(JsonParser jp, DeserializationContext context)  Deserialize JSON content to a IDMEFObject |

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

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

Constructors

**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

Methods

org.idmef.IDMEFObjectDeserializer

(continued from last page)

# deserialize

public [IDMEFObject](#_bookmark2) **deserialize**(JsonParser jp, DeserializationContext context)

throws java.io.IOException, JsonProcessingException

Deserialize JSON content to a IDMEFObject

## 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:

IOException - if an exception occurred during JSON content reading

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

org.idmef.IDMEFValidator

**org.idmef**

**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 | |
| public | [IDMEFValidator](#_bookmark13)()  Constructs a Validator. |

|  |  |
| --- | --- |
| Method Summary | |
| boolean | [validate](#_bookmark15)(byte[] json)  Validate the bytes w.r.t. current IDMEF JSON schema. |
| boolean | [validate](#_bookmark14)([IDMEFObject](#_bookmark2) idmefObject)  Validate the object content w.r.t. current IDMEF JSON schema. |

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

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

Constructors

**IDMEFValidator**

public **IDMEFValidator**()

Constructs a Validator.

Methods

# validate

public boolean **validate**([IDMEFObject](#_bookmark2) idmefObject) throws [IDMEFException](#_bookmark0)

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

org.idmef.IDMEFValidator

(continued from last page)

## Throws:

[IDMEFException](#_bookmark0) - 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](#_bookmark0) - if an exception occured during validation (schema cannot be loaded)