Package
org.idmef

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](java.lang.String message) Construct a IDMEFException

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`

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

Constructors

IDMEFException

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

> Construct a IDMEFException

> **Parameters:**
>> message - the message contained in the exception

---

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**() Construct an empty IDMEFObject.

Method Summary

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

Methods inherited from class java.lang.Object

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

Constructors

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.

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serialize

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

Serialize a Message to JSON bytes.

Returns:
the JSON bytes

Throws:
IDMEFException - if an exception occured during serialization

deserialize

```
public static IDMEFObject 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

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

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() Construct a IDMEFObjectDeserializer instance
public	IDMEFObjectDeserializer(java.lang.Class vc) Construct a IDMEFObjectDeserializer instance

Method Summary

IDMEFObject	deserialize(JsonParser jp, DeserializationContext context) Deserialize JSON content to a IDMEFObject

Methods inherited from class java.lang.Object

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

---

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

---

deserialize

```
public IDMEFObject 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.

```
public IDMEFObject deserialize(JsonParser jp,
        DeserializationContext context)
```

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() Constructs a Validator.

Method Summary

boolean	validate(byte[] json) Validate the bytes w.r.t. current IDMEF JSON schema.
boolean	validate(IDMEFObject idmefObject) Validate the object content w.r.t. current IDMEF JSON schema.

Methods inherited from class `java.lang.Object`

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

Constructors

IDMEFValidator

public **IDMEFValidator**()

Constructs a Validator.

Methods

validate

public boolean **validate**(IDMEFObject idmefObject)
  throws IDMEFException

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 - 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 - if an exception occured during validation (schema cannot be loaded)