# KMIP Opaque Managed Object Store Profile Version 1.0

## Committee Specification Draft ~~01~~02 / Public Review Draft ~~01~~02

## ~~09 January~~19 June 2014

### Specification URIs

**This version:**

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http://docs.oasis-open.org/kmip/kmip-opaque-obj-profile/v1.0/csprd02/kmip-opaque-obj-profile-v1.0-csprd02.html
http://docs.oasis-open.org/kmip/kmip-opaque-obj-profile/v1.0/csprd02/kmip-opaque-obj-profile-v1.0-csprd02.pdf

**Previous version:**

http://docs.oasis-open.org/kmip/kmip-opaque-obj-profile/v1.0/csprd01/kmip-opaque-obj-profile-v1.0-csprd01.doc (Authoritative)
http://docs.oasis-open.org/kmip/kmip-opaque-obj-profile/v1.0/csprd01/kmip-opaque-obj-profile-v1.0-csprd01.html
http://docs.oasis-open.org/kmip/kmip-opaque-obj-profile/v1.0/csprd01/kmip-opaque-obj-profile-v1.0-csprd01.pdf

~~**Previous version:**~~

~~N/A~~

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http://docs.oasis-open.org/kmip/kmip-opaque-obj-profile/v1.0/kmip-opaque-obj-profile-v1.0.html
http://docs.oasis-open.org/kmip/kmip-opaque-obj-profile/v1.0/kmip-opaque-obj-profile-v1.0.pdf

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**Related work:**

This specification is related to:

- *Key Management Interoperability Protocol Profiles Version 1.0*. Edited by Robert Griffin and Subhash Sankuratripati. 01 October 2010. OASIS Standard. http://docs.oasis-open.org/kmip/profiles/v1.0/os/kmip-profiles-1.0-os.html.

- *Key Management Interoperability Protocol Specification Version 1.1*. ~~Latest version.~~ Edited by Robert Haas and Indra Fitzgerald. 24 January 2013. OASIS Standard. http://docs.oasis-open.org/kmip/spec/v1.1/os/kmip-spec-v1.1-os.html.
- *Key Management Interoperability Protocol Specification Version 1.2*. Edited by Kiran Thota and Kelley Burgin. Latest version~~.~~: http://docs.oasis-open.org/kmip/spec/v1.2/kmip-spec-v1.2.html.

**Abstract:**

Describes a profile for a KMIP server performing opaque managed object storage operations based on requests received from a KMIP client.

**Status:**

This document was last revised or approved by the OASIS Key Management Interoperability Protocol (KMIP) TC on the above date. The level of approval is also listed above. Check the "Latest version" location noted above for possible later revisions of this document.

Technical Committee members should send comments on this specification to the Technical Committee's email list. Others should send comments to the Technical Committee by using the "Send A Comment" button on the Technical Committee's web page at https://www.oasis-open.org/committees/kmip/.

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**Citation format:**

When referencing this specification the following citation format should be used:

**[kmip-opaque-obj-v1.0]**

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# Table of Contents

# 1 Introduction

For normative definition of the elements of KMIP see the KMIP Specification [KMIP-SPEC] and the KMIP Profiles [KMIP-PROF].

~~Illustrative guidance for the implementation of KMIP clients and servers is provided in the KMIP Usage Guide [KMIP-UG].~~

This profile defines the necessary KMIP functionality that a KMIP ~~server~~implementation conforming to this profile SHALL support in order to interoperate in conformance with this profile.

## 1.1 Terminology

The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described in **[RFC2119]**.

## 1.2 Normative References

**[RFC2119]** Bradner, S., “Key words for use in RFCs to Indicate Requirement Levels”, BCP 14, RFC 2119, March 1997. http://www.ietf.org/rfc/rfc2119.txt.

**[KMIP-ENCODE]** *KMIP Additional Message Encodings Version 1.0.*
URL**[RFC2119]** ~~Bradner, S., “Key words for use in RFCs to Indicate Requirement Levels”, BCP 14, RFC 2119, March 1997. .~~

~~**[RFC2246]** T. Dierks and C. Allen, *The TLS Protocol, Version 1.0*, IETF RFC 2246, Jan 1999,~~
Candidate OASIS Standard 01. DD MMM YYYY.

**[KMIP-SPEC]** One or more of [KMIP-SPEC-1_0], [KMIP-SPEC-1_1], [KMIP-SPEC-1_2]

**[KMIP-SPEC-1_0]** Key Management Interoperability Protocol Specification Version 1.0
http://docs.oasis-open.org/kmip/spec/v1.0/os/kmip-spec-1.0-os.doc
OASIS Standard, October 2010.

**[KMIP-SPEC-1_1]** *Key Management Interoperability Protocol Specification Version 1.1.*
http://docs.oasis-open.org/kmip/spec/v1.1/os/kmip-spec-v1.1-os.doc
OASIS Standard. 24 January 2013.

**[KMIP-SPEC-1_2]** *Key Management Interoperability Protocol Specification Version 1.2.*
URL
Candidate OASIS Standard 01. DD MMM YYYY.

**[KMIP-PROF]** One or more of [KMIP-PROF-1_0], [KMIP-PROF-1_1], [KMIP-PROF-1_2]

**[KMIP-PROF-1_0]** *Key Management Interoperability Protocol ~~Usage Guide~~Profiles Version 1.0*.
http://docs.oasis-open.org/kmip/profiles/v1.0/os/kmip-profiles-1.0-os.doc
OASIS Standard. 1 October 2010.

**[KMIP-PROF-1_1]** *Key Management Interoperability Protocol ~~Usage Guide~~Profiles Version 1.1*.
http://docs.oasis-open.org/kmip/profiles/v1.1/os/kmip-profiles-v1.1-os.doc
OASIS Standard 01. 24 January 2013.

**[KMIP-PROF-1_2]** *Key Management Interoperability Protocol ~~Usage Guide~~Profiles Version 1.2*.
URL
Candidate OASIS Standard 01. DD MMM YYYY.

## ~~1.3 Non-Normative References~~

~~**[KMIP-UG]** One or more of [KMIP-UG-1_0], [KMIP-UG-1_1], [KMIP-UG-1_2]~~

~~**[KMIP-UG-1_0]** *Key Management Interoperability Protocol Usage Guide Version 1.0.*
Committee Note Draft, 1 December 2011~~

~~**[KMIP-UG-1_1]** *Key Management Interoperability Protocol Usage Guide Version 1.1.* Committee Note 01, 27 July 2012~~

~~**[KMIP-UG-1_2]** *Key Management Interoperability Protocol Usage Guide Version 1.2.* Committee Note Draft, DD MMM YYYY~~

~~**[KMIP-TC-1_1]** *Key Management Interoperability Protocol Test Cases Version 1.1.* , Committee Note 01, 27 July 2012.~~

~~**[KMIP-TC-1_2]** *Key Management Interoperability Protocol Test Cases Version 1.2.* , Committee Note Draft, DD MMM YYYY.~~

~~**[KMIP-UC]** *Key Management Interoperability Protocol Use Cases Version 1.0.* , Committee Specification, 15 June 2010.~~

# 2 Opaque Managed Object Store Profile

The Opaque Managed Object Store Profile is a KMIP server performing storage related operations on opaque objects based on requests received from a KMIP client.

## 2.1 Authentication Suite

Implementations conformant to this profile SHALL support at least one of the Authentication Suites defined within section 3 of [KMIP-PROF. The establishment of the trust relationship between the KMIP client and the KMIP server is the same as the defined base profiles.

## ~~2.2 Baseline~~

## 2.2 Opaque Managed Object Store – Client

KMIP clients conformant to this profile~~:~~ under [KMIP-SPEC-1_0]:

1. SHALL conform to the [KMIP-SPEC-1_0]

KMIP clients conformant to this profile under [KMIP-SPEC-1_1]:

2. SHALL conform to the *Baseline Client Clause* (section 5.12) of [KMIP-PROF-1_1]

KMIP clients conformant to this profile under [KMIP-SPEC-1_2]:

~~1.~~3. SHALL conform to the Baseline Client ~~profile in~~(section 5.2) of [KMIP-PROF~~] and [KMIP-SPEC-1_2~~]

KMIP clients conformant to this profile:

~~2.~~4. MAY support any clause within [KMIP-SPEC] provided it does not conflict with any other clause within this section 1.1

5. MAY support extensions outside the scope of this standard (e.g., vendor extensions, conformance clauses) that do not contradict any KMIP requirements.

## 2.3 Opaque Managed Object Store – Server

KMIP servers conformant to this profile~~:~~ under [KMIP-SPEC-1_0]:

1. SHALL conform to the [KMIP-SPEC-1_0]

KMIP servers conformant to this profile under [KMIP-SPEC-1_1]:

~~1.~~2. SHALL conform to the *Baseline Server* ~~profile in~~of [KMIP-PROF~~] and [KMIP-SPEC] and~~1_1]

KMIP servers conformant to this profile under [KMIP-SPEC-1_2]:

3. SHALL conform to the Baseline Server of [KMIP-PROF-1_2]

KMIP servers conformant to this profile:

~~2.~~4. SHALL support the following *Objects* [KMIP-SPEC]

a. *Opaque Object* [KMIP-SPEC]

~~3.~~5. SHALL support the following *Attributes* [KMIP-SPEC]

a. *Object Type* [KMIP-SPEC]

~~4.~~6. SHALL support the following *Client-to-Server* [KMIP-SPEC] operations:

a. *Register* [KMIP-SPEC]

~~5.~~7. SHALL support the following *Message Encoding* [KMIP-SPEC]:

a. *Opaque Data Type* [KMIP-SPEC]

b. *Object Type* [KMIP-SPEC] with value:

i. Opaque Object

~~2. SHALL support all Mandatory Test Cases, returning results in accordance with the test cases.~~

~~6.~~8. MAY support any clause within [KMIP-SPEC] provided it does not conflict with any other clause within this section 2.3~~2.2~~

~~3.~~1. ~~MAY support extensions outside the scope of this standard (e.g., vendor extensions, conformance clauses) that do not contradict any KMIP requirements.~~

9. ~~Opaque Managed Object Store~~ MAY support extensions outside the scope of this standard (e.g., vendor extensions, conformance clauses) that do not contradict any KMIP requirements.

# 3 Opaque Managed Object Store Profile - Test Cases

~~This section documents the test cases for a KMIP server performing management and storage operations of opaque objects, based on requests received from a KMIP client.~~

The test cases define a number of request-response pairs for KMIP operations. Each test case is provided in the XML format specified in [KMIP-ENCODE] intended to be both human-readable and usable by automated tools. The time sequence (starting from 0) for each request-response pair is noted and line numbers are provided for ease of cross-reference for a given test sequence.

Each test case has a unique label (the section name) which includes indication of mandatory (-M-) or optional (-O-) status and the protocol version major and minor numbers as part of the identifier.

The test cases may depend on a specific configuration of a KMIP client and server being configured in a manner consistent with the test case assumptions.

Where possible the flow of unique identifiers between tests, the date-time values, and other dynamic items are indicated using symbolic identifiers – in actual request and response messages these dynamic values will be filled in with valid values.

Note: the values for the returned items and the custom attributes are illustrative. Actual values from a real client system ~~will~~may vary as specified in section 4.7~~.~~.

## 3.1 Mandatory Test Cases KMIP 1.0

~~This section documents the test cases that a client or server conformant to the Opaque Managed Object Store Profile SHALL support under KMIP Specification 1.0.~~

### 3.1.1 OMOS-M-1-10

Register small opaque object

```
      # TIME 0
0001  <RequestMessage>
0002    <RequestHeader>
0003      <ProtocolVersion>
0004        <ProtocolVersionMajor type="Integer" value="1"/>
0005        <ProtocolVersionMinor type="Integer" value="0"/>
0006      </ProtocolVersion>
0007      <BatchCount type="Integer" value="1"/>
0008    </RequestHeader>
0009    <BatchItem>
0010      <Operation type="Enumeration" value="Register"/>
0011      <RequestPayload>
0012        <ObjectType type="Enumeration" value="OpaqueObject"/>
0013        <TemplateAttribute>
0014          <Attribute>
0015            <AttributeName type="TextString" value="Name"/>
0016            <AttributeValue>
0017              <NameValue type="TextString" value="OMOS-M-1-10"/>
0018              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0019            </AttributeValue>
0020          </Attribute>
0021        </TemplateAttribute>
0022        <OpaqueObject>
0023          <OpaqueDataType type="Enumeration" value="0x80000001"/>
0024          <OpaqueDataValue type="ByteString"
      value="53656372657450617373776f7264"/>
```

```
0025        </OpaqueObject>
0026      </RequestPayload>
0027    </BatchItem>
0028  </RequestMessage>
0029  <ResponseMessage>
0030    <ResponseHeader>
0031      <ProtocolVersion>
0032        <ProtocolVersionMajor type="Integer" value="1"/>
0033        <ProtocolVersionMinor type="Integer" value="0"/>
0034      </ProtocolVersion>
0035      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0036      <BatchCount type="Integer" value="1"/>
0037    </ResponseHeader>
0038    <BatchItem>
0039      <Operation type="Enumeration" value="Register"/>
0040      <ResultStatus type="Enumeration" value="Success"/>
0041      <ResponsePayload>
0042        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0043      </ResponsePayload>
0044    </BatchItem>
0045  </ResponseMessage>
      # TIME 1
0046  <RequestMessage>
0047    <RequestHeader>
0048      <ProtocolVersion>
0049        <ProtocolVersionMajor type="Integer" value="1"/>
0050        <ProtocolVersionMinor type="Integer" value="0"/>
0051      </ProtocolVersion>
0052      <BatchCount type="Integer" value="1"/>
0053    </RequestHeader>
0054    <BatchItem>
0055      <Operation type="Enumeration" value="Destroy"/>
0056      <RequestPayload>
0057        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0058      </RequestPayload>
0059    </BatchItem>
0060  </RequestMessage>
0061  <ResponseMessage>
0062    <ResponseHeader>
0063      <ProtocolVersion>
0064        <ProtocolVersionMajor type="Integer" value="1"/>
0065        <ProtocolVersionMinor type="Integer" value="0"/>
0066      </ProtocolVersion>
0067      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0068      <BatchCount type="Integer" value="1"/>
0069    </ResponseHeader>
0070    <BatchItem>
0071      <Operation type="Enumeration" value="Destroy"/>
0072      <ResultStatus type="Enumeration" value="Success"/>
0073      <ResponsePayload>
0074        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0075      </ResponsePayload>
0076    </BatchItem>
0077  </ResponseMessage>
```

## 3.2 Mandatory Test Cases KMIP 1.1

~~This section documents the test cases that a client or server conformant to the Opaque Managed Object Store Profile SHALL support under KMIP Specification 1.1.~~

### 3.2.1 OMOS-M-1-11

Register small opaque object

```
      # TIME 0
0001  <RequestMessage>
0002    <RequestHeader>
0003      <ProtocolVersion>
0004        <ProtocolVersionMajor type="Integer" value="1"/>
0005        <ProtocolVersionMinor type="Integer" value="1"/>
0006      </ProtocolVersion>
0007      <BatchCount type="Integer" value="1"/>
0008    </RequestHeader>
0009    <BatchItem>
0010      <Operation type="Enumeration" value="Register"/>
0011      <RequestPayload>
0012        <ObjectType type="Enumeration" value="OpaqueObject"/>
0013        <TemplateAttribute>
0014          <Attribute>
0015            <AttributeName type="TextString" value="Name"/>
0016            <AttributeValue>
0017              <NameValue type="TextString" value="OMOS-M-1-11"/>
0018              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0019            </AttributeValue>
0020          </Attribute>
0021        </TemplateAttribute>
0022        <OpaqueObject>
0023          <OpaqueDataType type="Enumeration" value="0x80000001"/>
0024          <OpaqueDataValue type="ByteString"
      value="53656372657450617373776f7264"/>
0025        </OpaqueObject>
0026      </RequestPayload>
0027    </BatchItem>
0028  </RequestMessage>
0029  <ResponseMessage>
0030    <ResponseHeader>
0031      <ProtocolVersion>
0032        <ProtocolVersionMajor type="Integer" value="1"/>
0033        <ProtocolVersionMinor type="Integer" value="1"/>
0034      </ProtocolVersion>
0035      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0036      <BatchCount type="Integer" value="1"/>
0037    </ResponseHeader>
0038    <BatchItem>
0039      <Operation type="Enumeration" value="Register"/>
0040      <ResultStatus type="Enumeration" value="Success"/>
0041      <ResponsePayload>
0042        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
```

```
0043        </ResponsePayload>
0044      </BatchItem>
0045    </ResponseMessage>
```

```
        # TIME 1
0046    <RequestMessage>
0047      <RequestHeader>
0048        <ProtocolVersion>
0049          <ProtocolVersionMajor type="Integer" value="1"/>
0050          <ProtocolVersionMinor type="Integer" value="1"/>
0051        </ProtocolVersion>
0052        <BatchCount type="Integer" value="1"/>
0053      </RequestHeader>
0054      <BatchItem>
0055        <Operation type="Enumeration" value="Destroy"/>
0056        <RequestPayload>
0057          <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0058        </RequestPayload>
0059      </BatchItem>
0060    </RequestMessage>
```

```
0061    <ResponseMessage>
0062      <ResponseHeader>
0063        <ProtocolVersion>
0064          <ProtocolVersionMajor type="Integer" value="1"/>
0065          <ProtocolVersionMinor type="Integer" value="1"/>
0066        </ProtocolVersion>
0067        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0068        <BatchCount type="Integer" value="1"/>
0069      </ResponseHeader>
0070      <BatchItem>
0071        <Operation type="Enumeration" value="Destroy"/>
0072        <ResultStatus type="Enumeration" value="Success"/>
0073        <ResponsePayload>
0074          <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0075        </ResponsePayload>
0076      </BatchItem>
0077    </ResponseMessage>
```

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133

## 134 3.3 Mandatory Test Cases KMIP 1.2

135 ~~This section documents the test cases that a client or server conformant to the Opaque Managed Object~~
136 ~~Store Profile SHALL support under KMIP Specification 1.2.~~

### 137 3.3.1 OMOS-M-1-12

138 Register small opaque object

```
        # TIME 0
0001    <RequestMessage>
0002      <RequestHeader>
0003        <ProtocolVersion>
0004          <ProtocolVersionMajor type="Integer" value="1"/>
0005          <ProtocolVersionMinor type="Integer" value="2"/>
0006        </ProtocolVersion>
0007        <BatchCount type="Integer" value="1"/>
```

  

```
0008    </RequestHeader>
0009    <BatchItem>
0010      <Operation type="Enumeration" value="Register"/>
0011      <RequestPayload>
0012        <ObjectType type="Enumeration" value="OpaqueObject"/>
0013        <TemplateAttribute>
0014          <Attribute>
0015            <AttributeName type="TextString" value="Name"/>
0016            <AttributeValue>
0017              <NameValue type="TextString" value="OMOS-M-1-12"/>
0018              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0019            </AttributeValue>
0020          </Attribute>
0021        </TemplateAttribute>
0022        <OpaqueObject>
0023          <OpaqueDataType type="Enumeration" value="0x80000001"/>
0024          <OpaqueDataValue type="ByteString"
      value="53656372657450617373776f7264"/>
0025        </OpaqueObject>
0026      </RequestPayload>
0027    </BatchItem>
0028  </RequestMessage>
0029  <ResponseMessage>
0030    <ResponseHeader>
0031      <ProtocolVersion>
0032        <ProtocolVersionMajor type="Integer" value="1"/>
0033        <ProtocolVersionMinor type="Integer" value="2"/>
0034      </ProtocolVersion>
0035      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0036      <BatchCount type="Integer" value="1"/>
0037    </ResponseHeader>
0038    <BatchItem>
0039      <Operation type="Enumeration" value="Register"/>
0040      <ResultStatus type="Enumeration" value="Success"/>
0041      <ResponsePayload>
0042        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0043      </ResponsePayload>
0044    </BatchItem>
0045  </ResponseMessage>
      # TIME 1
0046  <RequestMessage>
0047    <RequestHeader>
0048      <ProtocolVersion>
0049        <ProtocolVersionMajor type="Integer" value="1"/>
0050        <ProtocolVersionMinor type="Integer" value="2"/>
0051      </ProtocolVersion>
0052      <BatchCount type="Integer" value="1"/>
0053    </RequestHeader>
0054    <BatchItem>
0055      <Operation type="Enumeration" value="Destroy"/>
0056      <RequestPayload>
0057        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0058      </RequestPayload>
0059    </BatchItem>
0060  </RequestMessage>
```

```
0061 <ResponseMessage>
0062   <ResponseHeader>
0063     <ProtocolVersion>
0064       <ProtocolVersionMajor type="Integer" value="1"/>
0065       <ProtocolVersionMinor type="Integer" value="2"/>
0066     </ProtocolVersion>
0067     <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0068     <BatchCount type="Integer" value="1"/>
0069   </ResponseHeader>
0070   <BatchItem>
0071     <Operation type="Enumeration" value="Destroy"/>
0072     <ResultStatus type="Enumeration" value="Success"/>
0073     <ResponsePayload>
0074       <UniqueIdentifier type="TextString"
       value="$UNIQUE_IDENTIFIER_0"/>
0075     </ResponsePayload>
0076   </BatchItem>
0077 </ResponseMessage>
```

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## 141 3.4 Optional Test Cases KMIP 1.0

142 ~~This section documents the test cases that a client or server conformant to the Opaque Managed Object~~
143 ~~Store Profile MAY support under KMIP Specification 1.0.~~

### 144 3.4.1 OMOS-O-1-10

145 Register larger (>10k) opaque object

```
     # TIME 0
0001 <RequestMessage>
0002   <RequestHeader>
0003     <ProtocolVersion>
0004       <ProtocolVersionMajor type="Integer" value="1"/>
0005       <ProtocolVersionMinor type="Integer" value="0"/>
0006     </ProtocolVersion>
0007     <BatchCount type="Integer" value="1"/>
0008   </RequestHeader>
0009   <BatchItem>
0010     <Operation type="Enumeration" value="Register"/>
0011     <RequestPayload>
0012       <ObjectType type="Enumeration" value="OpaqueObject"/>
0013       <TemplateAttribute>
0014         <Attribute>
0015           <AttributeName type="TextString" value="Name"/>
0016           <AttributeValue>
0017             <NameValue type="TextString" value="OMOS-O-1-10"/>
0018             <NameType type="Enumeration"
       value="UninterpretedTextString"/>
0019           </AttributeValue>
0020         </Attribute>
0021       </TemplateAttribute>
0022       <OpaqueObject>
0023         <OpaqueDataType type="Enumeration" value="0x80000001"/>
0024         <OpaqueDataValue type="ByteString"
       value="168392816fd71b3d1c5d9cecfacf61f4e396374ede655d9d15305d6a0a04e
       5f0beab1de8be60fb716de00456c0b4adaadd5e1f4e72879251dbf7d25ca9f81076d
```

  

| | |
|---|---|
| | aa0b6464ae989a76a6f6710ea9560a60b99cb4f697cd075cd799cb7dbcfffab4c2ab<br>a5a19529f14307f6d217b1c84114eab50855b623d2e2a7602cdd230778939cce2a03<br>550b0e0c9a4ff7e0ad2af805a92bbe4a41ba3405565ca050c38c6d5b92d902c30544<br>b1460e2360459ee2ef3376b66caf91e0e0980d12ea6c19b5623cf03ad065652cf247<br>ee2be155deacfda3d96b35f21d2f97fe4fd28244dec67f61c32250f5fc93dc515c1b<br>5c7004f212b7c1d60972f3aa0372789364a3a762f80fda1d58389ea3cb3d204db887<br>b0db62623350d4ea7d1bfd91e6d522fab6942abe5ab9f76278e4cb280fed409268c2<br>731552c8292829a47355852d5780388a4e13691f8ec654226ce52e213fff30b0b3de<br>7ffb7444c7748f7e90dd893276d526a657bdf42ea588721788feb605e5d3443ebe06<br>91be98af902a3d6a459f1e160df7dc3a7507b05a238d49c6d5ef6803ffb964cd813d<br>b90f549c2393fae94fcfc8c05ddb62a71bfc031074f4d32ada48491c970dedf57c13<br>9cb04c94112fcef3eec9fdd7487eecd1470741f780e0d9e99ba68e97945b7ab7970f<br>8003f80ca9622c94192281c13380894dc1f6c6d88848ffe81fd994862d2c60db1b65<br>1dbf12a245d34fc0e2a1b7cf36428c1e481890607a4df45ea20619ea02946af0c7c4<br>1fc16bc620159871659c8105506fb0d4017921ea79ac082afad5cb9bf703a49ac79f<br>d1f428fdca5a8f693990bfbca9640a44bf43e5786111f624369d1d33a08cd7247be0<br>7f9bad26e531a2f3f9aea66536682296348cf86291af9c2521bc6196747986d02b3a<br>465dfbbe9468c3b364a8048441e32dc8ff190f0ad62b2c0f6a6d4aa715580b1fb2ca<br>b038560259981eee6f59f850c076c29507e9efd9cca183f5bd8a0a876820ed173f88<br>4f6a9773c8102859b59b286002147b86428c18537590ff9b3cbe3dd2f7607f2b7d84<br>227c5d9ca6e6f272631672960f0da9c69d6b31eb499d50d724e3e3d4f0c982424389<br>15de54f1a600acd13f9ce483c01dcd8c5d36a7cc57ead5f4066b849b8a5e00cc5601<br>9bebb2e8129a6481e9f4b234154808236538c500ccd597a273068dc442f3c1205005<br>0209538cb1ea3194a18278b55d589d34e7680f565ed411359eaddf12c0bdfe907b16<br>377827d6ca46460d19f703c7b17fd3b7be9f45c162a34502f507673d304487e11c27<br>c9827cbc9cc5e3992514aa6e62d3163e338af19e99fcddec6ee17f70af7c9644a297<br>af3ec237619b8580bd20ae8ada4ce7dfe834711560b598f5aab65eac8fd2a8d66f57<br>4c79e4f19faa08dda5823ddc4f532f3053841dc52213dc147b325599a4b5969fa264<br>2fb50c01030b14253d0f23fd34f663581e95da9bfb0e3f52a010b2f5911ff063ac2a<br>826c94a8789445bc229a1ef1fe74fd8b5f672e8ffa671a5c69d19a4d7611c149cd52<br>68d590788aa3e44e949beb46f38a8fa51a301824e88c220ae41ba4b036c672342c04<br>3ebc6db91035b70ae68d58f558a3a5d1a788a6694c4f74278a204743fae6d947b502<br>e29552ba65507e91b684a3955aafb43530f02ccccaeded9a6d1f877da2470f36c260<br>14653493c970613f25de9c21f0682062881de0fc6ce2712e6f924408e7d29d368c43<br>ed198f14f5e947bb2f721084e6c22f750a6cd2400c49b9689e4e0f5d3d52005c5e42<br>a6aa0ecdc237f7b1868b7e77bce2c0d8f160a061f0de6529967e82586fe854bc89ed<br>68dc7d9ac521aa2f40e1c4c3835ad8c2881ec579975d4cf9d9beb69d0f2c4b4f1e69<br>ace6da5b9f6e49801ac9e1c5922176e3c72b8f0b73629d457a10456d9c8f0ae56e40<br>cb01f64ba0b49ea69f23728cffa532fd01b966ff31c30fedc9a52b7b0a5fe6a2e3bd<br>53c87560cf74b12143696e52343317c408d8e13bdb1fbd2758aaa3cf8aa3fd229bb6<br>5a9e41228372889147470cee02ae4acb89d52e31f8da66543fc8a6c02a6b337ce10d<br>0f41f464a44509c245476be1e5b11df8dbb867664cec0882beee6e21a022abcb89de<br>d8a17cf6f17da33c094e42be30a3c070950ff300993abb40fac22f0ecf7d155c9261<br>516796cb1de4c0d6bfc21e716b04d23dbb8b465708204a3b96af8e46042e8205e7df<br>92b9e01c7794c94a5036b7f85fe0967515cc05ea460c7810c0c551d8fd94f7ad7d1a<br>641e73a1471e9364bf4e2b4687c7700381d46d39a3159f486d0323de59c5f555d323<br>e5c072fbfc0758e22aa6a1df04d13bf4bfe6632853424984d56d16ed61402a640c7e<br>1b07d9439d1fdc2df147df02639575b50da6cd769cb367dbfe3316e03939e85880f8<br>b19f2689d5504f25200560dd815fd4535a1b5f70c8332c95c9d292c75e971df28ec6<br>ff6d70a52ad78d236a51ec4a12243a650285fbd6aa4632fab8fa56eb26f638855147<br>d72efcdd8a0b4367122f8e2210d39ffc87ac29ab5c5f1226bea04693e0b5c671269d<br>96ac0c665fbd4f5fdb04ffcd7b76f0f8c1960e7a47c88226d6bd360e4dd65d70ed68<br>7e2fea04822f7c8394007ee085a9362a35506696c44e531786472a3db4bddd2b63ae<br>1a448d0442d11f28dfed4de000c820e40174e216d274ab1321be6f21d1e4eb7e2243<br>0c131b2050c1fcb9ebb2823dd6fb4f4972ea4167795f911fb8a3c7f14ecf71a0e675<br>657263c2f4b5eb72369d9d2d457999dc15392ccc10d98308830dd9b64d95427381af<br>a9549c5df5081de88849126197154968d96797c573901e80bc638bc4126c01dea36a<br>56c1afe01021a21a776f6b4e375dd42156cce98998bd3036401550b501fac4ad653b |

| | |
|---|---|
| | cf098db8f6d9ef76429a60137e0f507c67b57ddf829c5ed88f4369a6cc7287683fa2<br>25515697cc2e43ffd8108e7f1564736d043b6323ae17bda3031fab7712f886ac12af<br>beb2686700c1133017f64363293f93ab3c4e096aff76751377e5b6e5ead512a2f3d3<br>6635fcac28bf7fcf5c565bcf51bf650e7e3c80194a34b7348e7517fd4301f9986cdc<br>bbe27392291da368ca699d90bca1b49122b20649f6b95529a72ba8217546042cb975<br>720b3c6e08ea2ed9faf23f975524a3857f5d20f76f6df0b5cf16fe7b054f4c996042<br>728c8b41326f7edf94fe04b0c084762ecc7c604c3375d3e3f572afad8d27eb06a98a<br>99e9af63c5ee3ed2b5d20cb910eb29596ccb8391f06c376083247fc940598bd3d888<br>bc579a9496eba784dfea823a0a1a28cecc20951e4bef35596147f53d4957fa965e07<br>1d5a5c80b982ea26b6500b9a63e2a1c1196cde4deb61a0358ef822a0e00849e807b1<br>10d036d268480089e21d4f07ce43d9fcf233ec0e7044460410a6cc7254becfb27d31<br>679a63e4285632d7477561e4af332f2cc622443f8a94e7f03a93c8ca4b10871a562a<br>d9f6a00e9f70c273fd4bef730201d3bcd75e2bbfeac22d98c6667d7b8d0cb965b94d<br>1be33c5329821a6292239ac93a896d7086e435c249c484a66bf002b1b99a2f633bc8<br>fb9ffc8c7aeb4ed95301f4bc51441802ca28f56257e77efb556ea385e086c6e9c3fe<br>901b9bfa034ef9a5202d29030e5e962635baf5b878cc2b7f7414e6b68fcfd2606608<br>4e936eed103a4073bca9cfb6a209251aa59fc6caead3faef33ed547d47876656a55c<br>ebb5cb6cba8b294081540f627f2235588f69eef2c4b029781a31a5884f20bd3699ff<br>71a0726ee9a9e41caa19bd9ad50660dd9cda8852f2c555d1f4162e13ab0dfa63d666<br>1f28d856838ef093286447c277aba2b4d05a6559f1f214bc73bed5f47e1e73465c58<br>718904618ebcb16b6a3feb719c2f3ff4e5409d1aece9aca7bba3019d5def920e2b78<br>512f74e44326d23a42f78b7eece89296ed9315d7bc097eace97dc3691aad6b3d7d79<br>885d4e1def2800e6f3e94685e66b234daeef3d2d6c638e961408892941cafed16ccd<br>f523a91d2ae4b871250ed0b9b53e5e0e93837ca400f9d5f11030ef1536e39592a23e<br>e10ec0f568cc373b1d65fe424cc9382fb653fb5f347acc6dab0998ee6f9f9d26bf93<br>c6909d88fb0b0d05298c7424a7d30dc3f54b1bbb2b9d33903b3faf133f21aa723491<br>7269fefe6a2691526dfa7647bce8758598524c2532b695eb174ab4c08405a7532374<br>167317eef95d7b2044e6409e2bdc70b9463b5a50c8647692b334904e5906405766c7<br>f3f6fb5e07786c6fa37c2e8d96dcf0a3b65ed4d4f031b627920586b8c23092dcc1f9<br>9e6267ef25b0a75a00a48070a92032e9ed0a58eb7adc4b4571e85165b50449b44414<br>16e550ecd612b55ef2cc6a3f8036351b00db614c248c11a1a8b7d945ed719f2fb0d0<br>855cea744cb637e3e709a55274d9f41b9a9026a857c1c6c30257391e5b510cf06254<br>fcb85c3992634a50eba9f58974de34dfa65dceca9ac467b4efa9706fb5dc196d277f<br>07cd46e7431b785591c39387f6671542d9ab5caf9ef97aa43f7b46bb75a4fc8661b1<br>4513f13609bae9722f3b4b0d03d039e5e1ae3cddd29e729e6afa7ab605be00f7dae1<br>3d874349affad716385139c14f90296b2bab2bef5ac8a1086660701bd4b574e9c3cc<br>1b5999a3f5eb67ec10c1ab025a4d621955010e44dca1a08032f12478c65755678da2<br>6e411890e6bcddb30c1bce42d40d036c390e6a8a63ecbd6b1b6ca3be45d4dcc82bb8<br>c4b3c05a66ef039c2c22f733a6531a5cf8374db73ab67b4c50d4efd000e6346f345f<br>1c469813505683f67ebb120c9ce5f96d1b3476ddc8e320dde1ca0e0ccfba2f292219<br>5b4f73defcd2dc45b7f72a5f2cba86fc0b67587d317944acc3cee8f7461571137690<br>bca0c62f4df293348c1cb86e41abf55d90acdb1862bac1378b1f3e04b3d0a3fa8a28<br>115b2ec08103eb70e0bbd8c9c6a1b6597d06e14dab1b20b6a60020f061c1ab5380e4<br>00b27a583c22ea32a7b481dd855c2a26096020c40e0d0f20ed75052afb7f6bebe83a<br>794ea0662e149306d0b03083297ef6ac920a065805d96232715ca161271c33370a71<br>835bbe31b722b04168a20012953f425ced6ca60fe9926a510b879376508008c8bcb1<br>af5a97064c2309c809ff153ff242267b44dd0075e4bd9e0ece58516cc41fda213f21<br>a6cb40ad2f4395ccd100f985eaaada93cf9e3964e9ca23f6f9b5ae8d72a40a4d534e<br>a6fea998a2726615c72d86757a6c5946c45871850709855d5bd3c1683b476e21fd3a<br>fdffe94eca83e48c283fc8462f1a618481676ff987e12fc63a19feafcf54aa9754cc<br>39511c2750eb0ed6ec6e059810d3f0a49f7fd47830450b1d26d4db70a18d1d76e887<br>7dc24e1e89bb448cdf24d5664b2228bd4c8bfb6f344ac1f1c3f535ad6dc77641bad1<br>88d67eedbe34b42389708d6007bdd591a5dec58663f0c75c956d7e8dd1552639d831<br>3a5ddbf10aefbd2f1f153971f0ad1ed0a767c9ab66d4deffb1271eb4760d280899cd<br>afec6de7d13cd298cddf4e8450be0e7d63c9afa51139c9cc3c780557f659e37301e0<br>f268ff4811f8c04cd65adf3d676cee7e9c3fac68d792edb1af47edd08460fec81ae2<br>9dbeb3c3b4fe17f87be656102b4e654b67bff33b4e60e04171d8cd0795d58a93914d<br>f26b6f6bcd94838e9f563e19202d2ebd12544ac97a15ba32db7d8f449f36d512622e |

```
4054364c1e68df0f48688a6f9d66f3caca4651a4811d6562ebcb624e22d7bd8468e7
aa4451883b9e5421c4b849e07a52d5c4e686f19ebae0c75df57375d2f56bde33c6c9
715a4cf6f1272a0f18e88ff99eb9f79b5e48a20e1bd99a719b724c96d2c8ca07fb16
45aed79289dde7586aa9a8e219e02872c1f40c0107a2290ea950b3893273358f0230
1594d918a527555a8018786d357dfb348ce626c17cafb9b88905678b120a8d6c54a9
840e99dfb56d22e12ff7f09c2883058cfa106b54a289e02be522a0a4d19178fd7723
83ed9cfe3433bcd20c4f512d01d44ee734c71acae9785fef664de661535d1c1e4ae5
9bbb702727d07567c4266023072e3ec300322300dc601f6de9cb009bd9df68d0b54f
4adb2951af99b8d45d157d78b9bb908c079509ba3d3680e4cc4ed1ce990ba9a261cd
d1064a7755c18b67293350d2cc57a28ef1b9432326483b9c2020a1a7bf07178528b7
fcc0072eeb31019ba0cac461a55c46f7a30dd1554e2861ceb98ca52d0106c09bbfd6
e2d9c2061d797199846119294f293679740bfb06626974f93382e9e854df29bc8aef
4dc3bc1122dbabd3cc1ae646bafa5d5b5824fffc22860e737419800f8037f3d0ac05
bd041345e94e597817ff15a5f2332b697a97507954a664eed19e925daba33c575773
ebdbaf42babf42d17073e1d595fb612519ccc560451c66c82cf2f2b220d58fd6d666
a089b843f993c784e4b07027ccbb72437a69ce1b8e34050b254d3f9d195750edfaf9
2f5cff1140ea202cbc489b32ab4d78f6cbc7205cdd9ec64db4dba9477e141f1bb54a
af929e9fb766711eaa7b802818e03c2576bc5fbd54a8daf64fa8907a50b81db4b53f
87ad894342ba54304ff013586aadba30f40f8c62c127287f2ef26303fbb0be86f581
f51881686d3ee672a567c887c88122eddf9ea2e75ce4788b8b07b7bf30bd68ab766d
336d3de479d3b7b738873b53fb367af51e26e098d9f60b2ff9eb364db4847adb19f4
5a6644298dda56b1fa62857a55aeed02fd4b7ad11dabf45cc94b92e797c4d8e53646
da4847e0f84372466d6503cea856f000274afd00fd97b69d185fc14ab25a5cb9d897
b85f5e22f8f881b113b60e89b05f2717fe29a8c3eccba97755e827ef02cd95ad52a1
de25ae6deefa3f150c61f39256f3dc2959c4f0ad94ccab130c9f69642534484ba827
33bfc102aaffbd86103975cfb8146df3ffe895e462fabac9ab8e49ba900e7ddb63fd
32e2b6487fe52d1e2c42ec16da300214992fc45dbeb39474e2edce031c153c0ff88d
970c71707bde5eeb5a8cec19b79558d8cf6ba7d1fd6c6e6361fc4f4245850166cb3e
d529ba0f75c9eab38298cbbc1d365644633ad610c8bb4c82bf5d6f9eed300df18d84
f0244965c8df4df535f6e0e63dea6fe49e439f97aad7c74acc77887a35aeb46e4f7c
b648dd53b96350913d14c97106a528df78de8166c37dfc175eb8cd290b4eeafe4c03
47c2f691e41d30e0aceb7eb25d58aa81b05fe8f5300a1e38dee028cdfe196210fbe6
aa2cdcd1b426aafcf3bf086e1d34f930a1bb9ee32b575f4ae3b82ef52f44d8654353
9c358a7079b18c7178635fc1fb54f7ed6b51ad603293d21523f62b4d1978ac4014d5
07268c830c621995daf0a8937a7a820ef6ddba82a53503bd8c2e48d0863ecdfc28c4
fe15029337e1c7caf29e5dc05d447"/>
      </OpaqueObject>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Register"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
        # TIME 1
0046    <RequestMessage>
0047      <RequestHeader>
0048        <ProtocolVersion>
0049          <ProtocolVersionMajor type="Integer" value="1"/>
0050          <ProtocolVersionMinor type="Integer" value="0"/>
0051        </ProtocolVersion>
0052        <BatchCount type="Integer" value="1"/>
0053      </RequestHeader>
0054      <BatchItem>
0055        <Operation type="Enumeration" value="Destroy"/>
0056        <RequestPayload>
0057          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0058        </RequestPayload>
0059      </BatchItem>
0060    </RequestMessage>
```

```
0061    <ResponseMessage>
0062      <ResponseHeader>
0063        <ProtocolVersion>
0064          <ProtocolVersionMajor type="Integer" value="1"/>
0065          <ProtocolVersionMinor type="Integer" value="0"/>
0066        </ProtocolVersion>
0067        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0068        <BatchCount type="Integer" value="1"/>
0069      </ResponseHeader>
0070      <BatchItem>
0071        <Operation type="Enumeration" value="Destroy"/>
0072        <ResultStatus type="Enumeration" value="Success"/>
0073        <ResponsePayload>
0074          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0075        </ResponsePayload>
0076      </BatchItem>
0077    </ResponseMessage>
```

146

147

## 148 3.5 Optional Test Cases KMIP 1.1

149 This section documents the test cases that a client or server conformant to the Opaque Managed Object
150 Store Profile SHALL support under KMIP Specification 1.1.

### 151 3.5.1 OMOS-O-1-11

152 Register larger (>10k) opaque object

```
        # TIME 0
0001    <RequestMessage>
0002      <RequestHeader>
0003        <ProtocolVersion>
0004          <ProtocolVersionMajor type="Integer" value="1"/>
0005          <ProtocolVersionMinor type="Integer" value="1"/>
0006        </ProtocolVersion>
0007        <BatchCount type="Integer" value="1"/>
0008      </RequestHeader>
0009      <BatchItem>
0010        <Operation type="Enumeration" value="Register"/>
```

```
0011      <RequestPayload>
0012        <ObjectType type="Enumeration" value="OpaqueObject"/>
0013        <TemplateAttribute>
0014          <Attribute>
0015            <AttributeName type="TextString" value="Name"/>
0016            <AttributeValue>
0017              <NameValue type="TextString" value="OMOS-O-1-11"/>
0018              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0019            </AttributeValue>
0020          </Attribute>
0021        </TemplateAttribute>
0022        <OpaqueObject>
0023          <OpaqueDataType type="Enumeration" value="0x80000001"/>
0024          <OpaqueDataValue type="ByteString"
      value="168392816fd71b3d1c5d9cecfacf61f4e396374ede655d9d15305d6a0a04e
      5f0beab1de8be60fb716de00456c0b4adaadd5e1f4e72879251dbf7d25ca9f81076d
      aa0b6464ae989a76a6f6710ea9560a60b99cb4f697cd075cd799cb7dbcfffab4c2ab
      a5a19529f14307f6d217b1c84114eab50855b623d2e2a7602cdd230778939cce2a03
      550b0e0c9a4ff7e0ad2af805a92bbe4a41ba3405565ca050c38c6d5b92d902c30544
      b1460e2360459ee2ef3376b66caf91e0e0980d12ea6c19b5623cf03ad065652cf247
      ee2be155deacfda3d96b35f21d2f97fe4fd28244dec67f61c32250f5fc93dc515c1b
      5c7004f212b7c1d60972f3aa0372789364a3a762f80fda1d58389ea3cb3d204db887
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```

| | |
|---|---|
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```
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07268c830c621995daf0a8937a7a820ef6ddba82a53503bd8c2e48d0863ecdfc28c4
fe15029337e1c7caf29e5dc05d447"/>
0025        </OpaqueObject>
0026      </RequestPayload>
0027    </BatchItem>
0028  </RequestMessage>
0029  <ResponseMessage>
```

```
0030    <ResponseHeader>
0031      <ProtocolVersion>
0032        <ProtocolVersionMajor type="Integer" value="1"/>
0033        <ProtocolVersionMinor type="Integer" value="1"/>
0034      </ProtocolVersion>
0035      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0036      <BatchCount type="Integer" value="1"/>
0037    </ResponseHeader>
0038    <BatchItem>
0039      <Operation type="Enumeration" value="Register"/>
0040      <ResultStatus type="Enumeration" value="Success"/>
0041      <ResponsePayload>
0042        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0043      </ResponsePayload>
0044    </BatchItem>
0045  </ResponseMessage>
```

```
      # TIME 1
0046  <RequestMessage>
0047    <RequestHeader>
0048      <ProtocolVersion>
0049        <ProtocolVersionMajor type="Integer" value="1"/>
0050        <ProtocolVersionMinor type="Integer" value="1"/>
0051      </ProtocolVersion>
0052      <BatchCount type="Integer" value="1"/>
0053    </RequestHeader>
0054    <BatchItem>
0055      <Operation type="Enumeration" value="Destroy"/>
0056      <RequestPayload>
0057        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0058      </RequestPayload>
0059    </BatchItem>
0060  </RequestMessage>
```

```
0061  <ResponseMessage>
0062    <ResponseHeader>
0063      <ProtocolVersion>
0064        <ProtocolVersionMajor type="Integer" value="1"/>
0065        <ProtocolVersionMinor type="Integer" value="1"/>
0066      </ProtocolVersion>
0067      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0068      <BatchCount type="Integer" value="1"/>
0069    </ResponseHeader>
0070    <BatchItem>
0071      <Operation type="Enumeration" value="Destroy"/>
0072      <ResultStatus type="Enumeration" value="Success"/>
0073      <ResponsePayload>
0074        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0075      </ResponsePayload>
0076    </BatchItem>
0077  </ResponseMessage>
```

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## 3.6 Optional Test Cases KMIP 1.2

~~This section documents the test cases that a client or server conformant to the Opaque Managed Object Store Profile MAY support under KMIP Specification 1.2.~~

### 3.6.1 OMOS-O-1-12

Register larger (>10k) opaque object

```
      # TIME 0
0001  <RequestMessage>
0002    <RequestHeader>
0003      <ProtocolVersion>
0004        <ProtocolVersionMajor type="Integer" value="1"/>
0005        <ProtocolVersionMinor type="Integer" value="2"/>
0006      </ProtocolVersion>
0007      <BatchCount type="Integer" value="1"/>
0008    </RequestHeader>
0009    <BatchItem>
0010      <Operation type="Enumeration" value="Register"/>
0011      <RequestPayload>
0012        <ObjectType type="Enumeration" value="OpaqueObject"/>
0013        <TemplateAttribute>
0014          <Attribute>
0015            <AttributeName type="TextString" value="Name"/>
0016            <AttributeValue>
0017              <NameValue type="TextString" value="OMOS-O-1-12"/>
0018              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0019            </AttributeValue>
0020          </Attribute>
0021        </TemplateAttribute>
0022        <OpaqueObject>
0023          <OpaqueDataType type="Enumeration" value="0x80000001"/>
0024          <OpaqueDataValue type="ByteString"
      value="168392816fd71b3d1c5d9cecfacf61f4e396374ede655d9d15305d6a0a04e
      5f0beab1de8be60fb716de00456c0b4adaadd5e1f4e72879251dbf7d25ca9f81076d
      aa0b6464ae989a76a6f6710ea9560a60b99cb4f697cd075cd799cb7dbcfffab4c2ab
      a5a19529f14307f6d217b1c84114eab50855b623d2e2a7602cdd230778939cce2a03
      550b0e0c9a4ff7e0ad2af805a92bbe4a41ba3405565ca050c38c6d5b92d902c30544
      b1460e2360459ee2ef3376b66caf91e0e0980d12ea6c19b5623cf03ad065652cf247
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      5c7004f212b7c1d60972f3aa0372789364a3a762f80fda1d58389ea3cb3d204db887
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| | |
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0033        <ProtocolVersionMinor type="Integer" value="2"/>
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0075      </ResponsePayload>
0076    </BatchItem>
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# 4 Conformance

## 4.1 Opaque Managed Object Store Client KMIP v1.0 Profile

KMIP client ~~and server~~ implementations conformant to this profile:

1. SHALL support the Authentication Suite conditions (2.1) and;
2. SHALL support the Opaque Managed Object Store – Client conditions (1.1) and;
3. SHALL support all Mandatory Test Cases (3.1).

## 4.2 Opaque Managed Object Store Client KMIP v1.1 Profile

KMIP client implementations conformant to this profile:

1. SHALL support the Authentication Suite conditions (2.1) and;
2. SHALL support the Opaque Managed Object Store – Client conditions (1.1) and;
3. ~~1.~~SHALL support all Mandatory Test Cases (3.2 ~~and and ), for each supported protocol version (major and minor), returning results in accordance with the test cases.~~).

## 4.3 Opaque Managed Object Store Client KMIP v1.2 Profile

KMIP client implementations conformant to this profile:

1. SHALL support the Authentication Suite conditions (2.1) and;
2. SHALL support the Opaque Managed Object Store – Client conditions (1.1) and;
3. SHALL support all Mandatory Test Cases (3.3).

## 4.4 Opaque Managed Object Store Server KMIP v1.0 Profile

KMIP server implementations conformant to this profile:

1. SHALL support the Authentication Suite conditions (2.1) and;
2. SHALL support the Opaque Managed Object Store – Server conditions (2.3) and;
3. SHALL support all Mandatory Test Cases (3.1).

## 4.5 Opaque Managed Object Store Server KMIP v1.1 Profile

KMIP server implementations conformant to this profile:

1. SHALL support the Authentication Suite conditions (2.1) and;
2. SHALL support the Opaque Managed Object Store – Server conditions (2.3) and;
3. SHALL support all Mandatory Test Cases (3.2).

## 4.6 Opaque Managed Object Store Server KMIP v1.2 Profile

KMIP server implementations conformant to this profile:

1. SHALL support the Authentication Suite conditions (2.1) and;
2. SHALL support the Opaque Managed Object Store – Server conditions (2.3) and;
3. SHALL support all Mandatory Test Cases (3.3).

## ~~4.14~~4.7 Permitted Test Case Variations

Whilst the test cases provided in this Profile define the allowed request and response content, some inherent variations MAY occur and are permitted within a successfully completed test case.

Each test case MAY include allowed variations in the description of the test case in addition to the variations noted in this section.

Other variations not explicitly noted in this Profile SHALL be deemed non-conformant.

### ~~4.1.14~~4.7.1 Variable Items

An implementation conformant to this Profile MAY vary the following values:

1. UniqueIdentifier
2. PrivateKeyUniqueIdentifier
3. PublicKeyUniqueIdentifier
4. UniqueBatchItemIdentifier
5. AsynchronousCorrelationValue
6. TimeStamp
7. KeyValue / KeyMaterial including:
    a. key material content returned for managed cryptographic objects which are generated by the server
    b. wrapped versions of keys where the wrapping key is dynamic or the wrapping contains variable output for each wrap operation
8. For response containing the output of cryptographic operation in Data / SignatureData/ MACData / IVCounterNonce where:
    a. the managed object is generated by the server; or
    b. the operation inherently contains variable output
9. For the following DateTime attributes where the value is not specified in the request as a fixed DateTime value:
    a. ActivationDate
    b. ArchiveDate
    c. CompromiseDate
    d. CompromiseOccurrenceDate
    e. DeactivationDate
    f. DestroyDate
    g. InitialDate
    h. LastChangeDate
    i. ProtectStartDate
    j. ProcessStopDate
    k. ValidityDate
    l. OriginalCreationDate
10. LinkedObjectIdentifier
11. DigestValue
    a. For those managed cryptographic objects which are dynamically generated
12. KeyFormatType
    a. The key format type selected by the server when it creates managed objects
13. Digest

a. The HashingAlgorithm selected by the server when it calculates the digest for a managed object for which it has access to the key material
b. The Digest Value

14. Extensions reported in Query for ExtensionList and ExtensionMap
15. Application Namespaces reported in Query
16. Object Types reported in Query other than those noted as required in this profile
17. Operation Types reported in Query other than those noted as required in this profile (or any referenced profile documents)
18. For TextString attribute values containing test identifiers:
    a. Additional vendor or application prefixes
19. Additional attributes beyond those noted in the response

An implementation conformant to this Profile MAY allow the following response variations:

20. Object Group values – May or may not return one or more Object Group values not included in the requests
21. y-CustomAttributes – May or may not include additional server-specific associated attributes not included in requests
22. Message Extensions – May or may not include additional (non-critical) vendor extensions
23. TemplateAttribute – May or may not be included in responses where the Template Attribute response is noted as optional in [KMIP-SPEC]
24. AttributeIndex – May or may not include Attribute Index value where the Attribute Index value is 0 for Protocol Versions 1.1 and above.
25. ResultMessage – May or may not be included in responses and the value (if included) may vary from the text contained within the test case.
26. The list of Protocol Versions returned in a DiscoverVersion response may include additional protocol versions if the request has not specified a list of client supported Protocol Versions.
27. VendorIdentification - The value (if included) may vary from the text contained within the test case.

### ~~4.1.2~~4.7.2 Variable behavior

An implementation conformant to this Profile SHALL allow variation of the following behavior:

1. A test may omit the clean-up requests and responses (containing Revoke and/or Destroy) at the end of the test provided there is a separate mechanism to remove the created objects during testing.
2. A test may omit the test identifiers if the client is unable to include them in requests. This includes the following attributes:
    a. Name; and
    b. x-ID
3. A test MAY perform requests with multiple batch items or as multiple requests with a single batch item provided the sequence of operations are equivalent
4. A request MAY contain an optional *Authentication* [KMIP_SPEC] structure within each request

# Appendix A. Acknowledgments

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# Appendix B. KMIP Specification Cross Reference

| Reference Term | KMIP 1.0 | KMIP 1.1 | KMIP 1.2 |
|---|---|---|---|
| **1 Introduction** | | | |
| *Non-Normative References* | 1.3. | 1.3. | 1.3. |
| *Normative References* | 1.2. | 1.2. | 1.2. |
| *Terminology* | 1.1. | 1.1. | 1.1. |
| **2 Objects** | | | |
| *Attribute* | 2.1.1. | 2.1.1. | 2.1.1. |
| *Base Objects* | 2.1. | 2.1. | 2.1. |
| *Certificate* | 2.2.1. | 2.2.1. | 2.2.1. |
| *Credential* | 2.1.2. | 2.1.2. | 2.1.2. |
| *Data* | - | - | 2.1.10. |
| *Data Length* | - | - | 2.1.11. |
| *Extension Information* | - | 2.1.9. | 2.1.9. |
| *Key Block* | 2.1.3. | 2.1.3. | 2.1.3. |
| *Key Value* | 2.1.4. | 2.1.4. | 2.1.4. |
| *Key Wrapping Data* | 2.1.5. | 2.1.5. | 2.1.5. |
| *Key Wrapping Specification* | 2.1.6. | 2.1.6. | 2.1.6. |
| *MAC Data* | - | - | 2.1.13. |
| *Managed Objects* | 2.2. | 2.2. | 2.2. |
| *Nonce* | - | - | 2.1.14. |
| *Opaque Object* | 2.2.8. | 2.2.8. | 2.2.8. |
| *PGP Key* | - | - | 2.2.9. |
| *Private Key* | 2.2.4. | 2.2.4. | 2.2.4. |
| *Public Key* | 2.2.3. | 2.2.3. | 2.2.3. |
| *Secret Data* | 2.2.7. | 2.2.7. | 2.2.7. |
| *Signature Data* | - | - | 2.1.12. |
| *Split Key* | 2.2.5. | 2.2.5. | 2.2.5. |
| *Symmetric Key* | 2.2.2. | 2.2.2. | 2.2.2. |
| *Template* | 2.2.6. | 2.2.6. | 2.2.6. |
| *Template-Attribute Structures* | 2.1.8. | 2.1.8. | 2.1.8. |
| *Transparent DH Private Key* | 2.1.7.6. | 2.1.7.6. | 2.1.7.6. |
| *Transparent DH Public Key* | 2.1.7.7. | 2.1.7.7. | 2.1.7.7. |
| *Transparent DSA Private Key* | 2.1.7.2. | 2.1.7.2. | 2.1.7.2. |
| *Transparent DSA Public Key* | 2.1.7.3. | 2.1.7.3. | 2.1.7.3. |
| *Transparent ECDH Private Key* | 2.1.7.10. | 2.1.7.10. | 2.1.7.10. |
| *Transparent ECDH Public Key* | 2.1.7.11. | 2.1.7.11. | 2.1.7.11. |
| *Transparent ECDSA Private Key* | 2.1.7.8. | 2.1.7.8. | 2.1.7.8. |
| *Transparent ECDSA Public Key* | 2.1.7.9. | 2.1.7.9. | 2.1.7.9. |
| *Transparent ECMQV Private Key* | 2.1.7.12. | 2.1.7.12. | 2.1.7.12. |
| *Transparent ECMQV Public Key* | 2.1.7.13. | 2.1.7.13. | 2.1.7.13. |
| *Transparent Key Structures* | 2.1.7. | 2.1.7. | 2.1.7. |
| *Transparent RSA Private Key* | 2.1.7.4. | 2.1.7.4. | 2.1.7.4. |
| *Transparent RSA Public Key* | 2.1.7.5. | 2.1.7.5. | 2.1.7.5. |
| *Transparent Symmetric Key* | 2.1.7.1. | 2.1.7.1. | 2.1.7.1. |
| **3 Attributes** | | | |
| *Activation Date* | 3.19. | 3.24. | 3.24. |
| *Alternative Name* | - | - | 3.40. |
| *Application Specific Information* | 3.30. | 3.36. | 3.36. |
| *Archive Date* | 3.27. | 3.32. | 3.32. |

| Reference Term | KMIP 1.0 | KMIP 1.1 | KMIP 1.2 |
|---|---|---|---|
| *Attributes* | 3 | 3 | 3 |
| *Certificate Identifier* | 3.9. | 3.13. | 3.13. |
| *Certificate Issuer* | 3.11. | 3.15. | 3.15. |
| *Certificate Length* | - | 3.9. | 3.9. |
| *Certificate Subject* | 3.10. | 3.14. | 3.14. |
| *Certificate Type* | 3.8. | 3.8. | 3.8. |
| *Compromise Date* | 3.25. | 3.30. | 3.30. |
| *Compromise Occurrence Date* | 3.24. | 3.29. | 3.29. |
| *Contact Information* | 3.31. | 3.37. | 3.37. |
| *Cryptographic Algorithm* | 3.4. | 3.4. | 3.4. |
| *Cryptographic Domain Parameters* | 3.7. | 3.7. | 3.7. |
| *Cryptographic Length* | 3.5. | 3.5. | 3.5. |
| *Cryptographic Parameters* | 3.6. | 3.6. | 3.6. |
| *Custom Attribute* | 3.33. | 3.39. | 3.39. |
| *Deactivation Date* | 3.22. | 3.27. | 3.27. |
| *Default Operation Policy* | 3.13.2. | 3.18.2. | 3.18.2. |
| *Default Operation Policy for Certificates and Public Key Objects* | 3.13.2.2. | 3.18.2.2. | 3.18.2.2. |
| *Default Operation Policy for Secret Objects* | 3.13.2.1. | 3.18.2.1. | 3.18.2.1. |
| *Default Operation Policy for Template Objects* | 3.13.2.3. | 3.18.2.3. | 3.18.2.3. |
| *Destroy Date* | 3.23. | 3.28. | 3.28. |
| *Digest* | 3.12. | 3.17. | 3.17. |
| *Digital Signature Algorithm* | - | 3.16. | 3.16. |
| *Fresh* | - | 3.34. | 3.34. |
| *Initial Date* | 3.18. | 3.23. | 3.23. |
| *Key Value Location* | - | - | 3.42. |
| *Key Value Present* | - | - | 3.41. |
| *Last Change Date* | 3.32. | 3.38. | 3.38. |
| *Lease Time* | 3.15. | 3.20. | 3.20. |
| *Link* | 3.29. | 3.35. | 3.35. |
| *Name* | 3.2. | 3.2. | 3.2. |
| *Object Group* | 3.28. | 3.33. | 3.33. |
| *Object Type* | 3.3. | 3.3. | 3.3. |
| *Operation Policy Name* | 3.13. | 3.18. | 3.18. |
| *Operations outside of operation policy control* | 3.13.1. | 3.18.1. | 3.18.1. |
| *Original Creation Date* | - | - | 3.43. |
| *Process Start Date* | 3.20. | 3.25. | 3.25. |
| *Protect Stop Date* | 3.21. | 3.26. | 3.26. |
| *Revocation Reason* | 3.26. | 3.31. | 3.31. |
| *State* | 3.17. | 3.22. | 3.22. |
| *Unique Identifier* | 3.1. | 3.1. | 3.1. |
| *Usage Limits* | 3.16. | 3.21. | 3.21. |
| *X.509 Certificate Identifier* | - | 3.10. | 3.10. |
| *X.509 Certificate Issuer* | - | 3.12. | 3.12. |
| *X.509 Certificate Subject* | - | 3.11. | 3.11. |
| **4 Client-to-Server Operations** | | | |
| *Activate* | 4.18. | 4.19. | 4.19. |
| *Add Attribute* | 4.13. | 4.14. | 4.14. |
| *Archive* | 4.21. | 4.22. | 4.22. |
| *Cancel* | 4.25. | 4.27. | 4.27. |
| *Certify* | 4.6. | 4.7. | 4.7. |
| *Check* | 4.9. | 4.10. | 4.10. |
| *Create* | 4.1. | 4.1. | 4.1. |
| *Create Key Pair* | 4.2. | 4.2. | 4.2. |

  

| Reference Term | KMIP 1.0 | KMIP 1.1 | KMIP 1.2 |
|---|---|---|---|
| *Create Split Key* | - | - | 4.38. |
| *Decrypt* | - | - | 4.30. |
| *Delete Attribute* | 4.15. | 4.16. | 4.16. |
| *Derive Key* | 4.5. | 4.6. | 4.6. |
| *Destroy* | 4.20. | 4.21. | 4.21. |
| *Discover Versions* | - | 4.26. | 4.26. |
| *Encrypt* | - | - | 4.29. |
| *Get* | 4.10. | 4.11. | 4.11. |
| *Get Attribute List* | 4.12. | 4.13. | 4.13. |
| *Get Attributes* | 4.11. | 4.12. | 4.12. |
| *Get Usage Allocation* | 4.17. | 4.18. | 4.18. |
| *Hash* | - | - | 4.37. |
| *Join Split Key* | - | - | 4.39. |
| *Locate* | 4.8. | 4.9. | 4.9. |
| *MAC* | - | - | 4.33. |
| *MAC Verify* | - | - | 4.34. |
| *Modify Attribute* | 4.14. | 4.15. | 4.15. |
| *Obtain Lease* | 4.16. | 4.17. | 4.17. |
| *Poll* | 4.26. | 4.28. | 4.28. |
| *Query* | 4.24. | 4.25. | 4.25. |
| *Re-certify* | 4.7. | 4.8. | 4.8. |
| *Recover* | 4.22. | 4.23. | 4.23. |
| *Register* | 4.3. | 4.3. | 4.3. |
| *Re-key* | 4.4. | 4.4. | 4.4. |
| *Re-key Key Pair* | - | 4.5. | 4.5. |
| *Revoke* | 4.19. | 4.20. | 4.20. |
| *RNG Retrieve* | - | - | 4.35. |
| *RNG Seed* | - | - | 4.36. |
| *Sign* | - | - | 4.31. |
| *Signature Verify* | - | - | 4.32. |
| *Validate* | 4.23. | 4.24. | 4.24. |
| **5 Server-to-Client Operations** | | | |
| *Notify* | 5.1. | 5.1. | 5.1. |
| *Put* | 5.2. | 5.2. | 5.2. |
| **6 Message Contents** | | | |
| *Asynchronous Correlation Value* | 6.8. | 6.8. | 6.8. |
| *Asynchronous Indicator* | 6.7. | 6.7. | 6.7. |
| *Attestation Capable Indicator* | - | - | 6.17. |
| *Batch Count* | 6.14. | 6.14. | 6.14. |
| *Batch Error Continuation Option* | 6.13. | 6.13. | 6.13. |
| *Batch Item* | 6.15. | 6.15. | 6.15. |
| *Batch Order Option* | 6.12. | 6.12. | 6.12. |
| *Maximum Response Size* | 6.3. | 6.3. | 6.3. |
| *Message Extension* | 6.16. | 6.16. | 6.16. |
| *Operation* | 6.2. | 6.2. | 6.2. |
| *Protocol Version* | 6.1. | 6.1. | 6.1. |
| *Result Message* | 6.11. | 6.11. | 6.11. |
| *Result Reason* | 6.10. | 6.10. | 6.10. |
| *Result Status* | 6.9. | 6.9. | 6.9. |
| *Time Stamp* | 6.5. | 6.5. | 6.5. |
| *Unique Batch Item ID* | 6.4. | 6.4. | 6.4. |
| **7 Message Format** | | | |

  

| Reference Term | KMIP 1.0 | KMIP 1.1 | KMIP 1.2 |
|---|---|---|---|
| *Message Structure* | 7.1. | 7.1. | 7.1. |
| *Operations* | 7.2. | 7.2. | 7.2. |
| **8 Authentication** | | | |
| *Authentication* | 8 | 8 | 8 |
| **9 Message Encoding** | | | |
| *Alternative Name Type Enumeration* | - | - | 9.1.3.2.34. |
| *Attestation Type Enumeration* | - | - | 9.1.3.2.36. |
| *Batch Error Continuation Option Enumeration* | 9.1.3.2.29. | 9.1.3.2.30. | 9.1.3.2.30. |
| *Bit Masks* | 9.1.3.3. | 9.1.3.3. | 9.1.3.3. |
| *Block Cipher Mode Enumeration* | 9.1.3.2.13. | 9.1.3.2.14. | 9.1.3.2.14. |
| *Cancellation Result Enumeration* | 9.1.3.2.24. | 9.1.3.2.25. | 9.1.3.2.25. |
| *Certificate Request Type Enumeration* | 9.1.3.2.21. | 9.1.3.2.22. | 9.1.3.2.22. |
| *Certificate Type Enumeration* | 9.1.3.2.6. | 9.1.3.2.6. | 9.1.3.2.6. |
| *Credential Type Enumeration* | 9.1.3.2.1. | 9.1.3.2.1. | 9.1.3.2.1. |
| *Cryptographic Algorithm Enumeration* | 9.1.3.2.12. | 9.1.3.2.13. | 9.1.3.2.13. |
| *Cryptographic Usage Mask* | 9.1.3.3.1. | 9.1.3.3.1. | 9.1.3.3.1. |
| *Defined Values* | 9.1.3. | 9.1.3. | 9.1.3. |
| *Derivation Method Enumeration* | 9.1.3.2.20. | 9.1.3.2.21. | 9.1.3.2.21. |
| *Digital Signature Algorithm Enumeration* | - | 9.1.3.2.7. | 9.1.3.2.7. |
| *Encoding Option Enumeration* | - | 9.1.3.2.32. | 9.1.3.2.32. |
| *Enumerations* | 9.1.3.2. | 9.1.3.2. | 9.1.3.2. |
| *Examples* | 9.1.2. | 9.1.2. | 9.1.2. |
| *Hashing Algorithm Enumeration* | 9.1.3.2.15. | 9.1.3.2.16. | 9.1.3.2.16. |
| *Item Length* | 9.1.1.3. | 9.1.1.3. | 9.1.1.3. |
| *Item Tag* | 9.1.1.1. | 9.1.1.1. | 9.1.1.1. |
| *Item Type* | 9.1.1.2. | 9.1.1.2. | 9.1.1.2. |
| *Item Value* | 9.1.1.4. | 9.1.1.4. | 9.1.1.4. |
| *Key Compression Type Enumeration* | 9.1.3.2.2. | 9.1.3.2.2. | 9.1.3.2.2. |
| *Key Format Type Enumeration* | 9.1.3.2.3. | 9.1.3.2.3. | 9.1.3.2.3. |
| *Key Role Type Enumeration* | 9.1.3.2.16. | 9.1.3.2.17. | 9.1.3.2.17. |
| *Key Value Location Type Enumeration* | - | - | 9.1.3.2.35. |
| *Link Type Enumeration* | 9.1.3.2.19. | 9.1.3.2.20. | 9.1.3.2.20. |
| *Name Type Enumeration* | 9.1.3.2.10. | 9.1.3.2.11. | 9.1.3.2.11. |
| *Object Group Member Enumeration* | - | 9.1.3.2.33. | 9.1.3.2.33. |
| *Object Type Enumeration* | 9.1.3.2.11. | 9.1.3.2.12. | 9.1.3.2.12. |
| *Opaque Data Type Enumeration* | 9.1.3.2.9. | 9.1.3.2.10. | 9.1.3.2.10. |
| *Operation Enumeration* | 9.1.3.2.26. | 9.1.3.2.27. | 9.1.3.2.27. |
| *Padding Method Enumeration* | 9.1.3.2.14. | 9.1.3.2.15. | 9.1.3.2.15. |
| *Put Function Enumeration* | 9.1.3.2.25. | 9.1.3.2.26. | 9.1.3.2.26. |
| *Query Function Enumeration* | 9.1.3.2.23. | 9.1.3.2.24. | 9.1.3.2.24. |
| *Recommended Curve Enumeration for ECDSA, ECDH, and ECMQV* | 9.1.3.2.5. | 9.1.3.2.5. | 9.1.3.2.5. |
| *Result Reason Enumeration* | 9.1.3.2.28. | 9.1.3.2.29. | 9.1.3.2.29. |
| *Result Status Enumeration* | 9.1.3.2.27. | 9.1.3.2.28. | 9.1.3.2.28. |
| *Revocation Reason Code Enumeration* | 9.1.3.2.18. | 9.1.3.2.19. | 9.1.3.2.19. |
| *Secret Data Type Enumeration* | 9.1.3.2.8. | 9.1.3.2.9. | 9.1.3.2.9. |
| *Split Key Method Enumeration* | 9.1.3.2.7. | 9.1.3.2.8. | 9.1.3.2.8. |
| *State Enumeration* | 9.1.3.2.17. | 9.1.3.2.18. | 9.1.3.2.18. |
| *Storage Status Mask* | 9.1.3.3.2. | 9.1.3.3.2. | 9.1.3.3.2. |
| *Tags* | 9.1.3.1. | 9.1.3.1. | 9.1.3.1. |
| *TTLV Encoding* | 9.1. | 9.1. | 9.1. |
| *TTLV Encoding Fields* | 9.1.1. | 9.1.1. | 9.1.1. |
| *Usage Limits Unit Enumeration* | 9.1.3.2.30. | 9.1.3.2.31. | 9.1.3.2.31. |

  

| Reference Term | KMIP 1.0 | KMIP 1.1 | KMIP 1.2 |
|---|---|---|---|
| *Validity Indicator Enumeration* | 9.1.3.2.22. | 9.1.3.2.23. | 9.1.3.2.23. |
| *Wrapping Method Enumeration* | 9.1.3.2.4. | 9.1.3.2.4. | 9.1.3.2.4. |
| *XML Encoding* | 9.2. | - | - |
| **10 Transport** | | | |
| *Transport* | 10 | 10 | 10 |
| **12 KMIP Server and Client Implementation Conformance** | | | |
| *Conformance clauses for a KMIP Server* | 12.1. | - | - |
| *KMIP Client Implementation Conformance* | - | 12.2. | 12.2. |
| *KMIP Server Implementation Conformance* | - | 12.1. | 12.1. |

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# Appendix C. Revision History

| Revision | Date | Editor | Changes Made |
|---|---|---|---|
| wd01 | 26-June-2013 | Tim Hudson / Bob Lockhart | Updated conformance wording style. Updated test case style. Included test cases for 1.0, 1.1 and 1.2. Applied new OASIS template. |
| wd02 | 6-August-2013 | Tim Hudson / Bob Lockhart | Updated to include Permitted Test Case Variations and updated Test Cases based on July 2013 Interop |
| wd03 | 10-August-2013 | Tim Hudson | Updated Permitted Test Case Variations |
| wd03a | 24-October-2013 | Tim Hudson | Editorial update to include VendorIdentification in the list of allowed variations as per TC motion. |
| pr01update | 11-June-2014 | Tim Hudson | Updated following Public Review |