KMIP Asymmetric Key Lifecycle Profile Version 1.0

Committee Specification Draft 01 / Public Review Draft 01

09 January 2014

Specification URIs

This version:

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

Previous version:

N/A

Latest version:

http://docs.oasis-open.org/kmip/kmip-asym-key-profile/v1.0/kmip-asym-key-profile-v1.0.doc (Authoritative)
http://docs.oasis-open.org/kmip/kmip-asym-key-profile/v1.0/kmip-asym-key-profile-v1.0.html
http://docs.oasis-open.org/kmip/kmip-asym-key-profile/v1.0/kmip-asym-key-profile-v1.0.pdf

Technical Committee:

OASIS Key Management Interoperability Protocol (KMIP) TC

Chairs:

Robert Griffin (robert.griffin@rsa.com), EMC Corporation
Subhash Sankuratripati (Subhash.Sankuratripati@netapp.com), NetApp

Editors:

Tim Hudson (tjh@cryptsoft.com), Cryptsoft Pty Ltd.
Robert Lockhart (Robert.Lockhart@thalesesec.com), Thales e-Security

Related work:

This specification is related to:

- *Key Management Interoperability Protocol Profiles Version 1.0*. 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. http://docs.oasis-open.org/kmip/spec/v1.1/kmip-spec-v1.1.html.
- *Key Management Interoperability Protocol Specification Version 1.2*. 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 asymmetric key lifecycle 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 http://www.oasis-open.org/committees/kmip/.

For information on whether any patents have been disclosed that may be essential to implementing this specification, and any offers of patent licensing terms, please refer to the Intellectual Property Rights section of the Technical Committee web page (http://www.oasis-open.org/committees/kmip/ipr.php).

Citation format:

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

[kmip-asym-key-v1.0]

KMIP Asymmetric Key Lifecycle Profile Version 1.0. Edited by Tim Hudson and Robert Lockhart. 09 January 2014. OASIS Committee Specification Draft 01 / Public Review Draft 01. http://docs.oasis-open.org/kmip/kmip-asym-key-profile/v1.0/csprd01/kmip-asym-key-profile-v1.0-csprd01.html. Latest version: http://docs.oasis-open.org/kmip/kmip-asym-key-profile/v1.0/kmip-asym-key-profile-v1.0.html.

Notices

All capitalized terms in the following text have the meanings assigned to them in the OASIS Intellectual Property Rights Policy (the "OASIS IPR Policy"). The full Policy may be found at the OASIS website.

This document and translations of it may be copied and furnished to others, and derivative works that comment on or otherwise explain it or assist in its implementation may be prepared, copied, published, and distributed, in whole or in part, without restriction of any kind, provided that the above copyright notice and this section are included on all such copies and derivative works. However, this document itself may not be modified in any way, including by removing the copyright notice or references to OASIS, except as needed for the purpose of developing any document or deliverable produced by an OASIS Technical Committee (in which case the rules applicable to copyrights, as set forth in the OASIS IPR Policy, must be followed) or as required to translate it into languages other than English.

The limited permissions granted above are perpetual and will not be revoked by OASIS or its successors or assigns.

This document and the information contained herein is provided on an "AS IS" basis and OASIS DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY THAT THE USE OF THE INFORMATION HEREIN WILL NOT INFRINGE ANY OWNERSHIP RIGHTS OR ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

OASIS requests that any OASIS Party or any other party that believes it has patent claims that would necessarily be infringed by implementations of this OASIS Committee Specification or OASIS Standard, to notify OASIS TC Administrator and provide an indication of its willingness to grant patent licenses to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification.

OASIS invites any party to contact the OASIS TC Administrator if it is aware of a claim of ownership of any patent claims that would necessarily be infringed by implementations of this specification by a patent holder that is not willing to provide a license to such patent claims in a manner consistent with the IPR Mode of the OASIS Technical Committee that produced this specification. OASIS may include such claims on its website, but disclaims any obligation to do so.

OASIS takes no position regarding the validity or scope of any intellectual property or other rights that might be claimed to pertain to the implementation or use of the technology described in this document or the extent to which any license under such rights might or might not be available; neither does it represent that it has made any effort to identify any such rights. Information on OASIS' procedures with respect to rights in any document or deliverable produced by an OASIS Technical Committee can be found on the OASIS website. Copies of claims of rights made available for publication and any assurances of licenses to be made available, or the result of an attempt made to obtain a general license or permission for the use of such proprietary rights by implementers or users of this OASIS Committee Specification or OASIS Standard, can be obtained from the OASIS TC Administrator. OASIS makes no representation that any information or list of intellectual property rights will at any time be complete, or that any claims in such list are, in fact, Essential Claims.

The name "OASIS" is a trademark of OASIS, the owner and developer of this specification, and should be used only to refer to the organization and its official outputs. OASIS welcomes reference to, and implementation and use of, specifications, while reserving the right to enforce its marks against misleading uses. Please see http://www.oasis-open.org/policies-guidelines/trademark for above guidance.

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 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.
[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.
[RFC2246]	T. Dierks and C. Allen, *The TLS Protocol, Version 1.0***,** IETF RFC 2246, Jan 1999, http://www.ietf.org/rfc/rfc2246.txt
[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 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 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 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.* http://docs.oasis-open.org/kmip/ug/v1.1/kmip-ug-v1.1-cnd01.doc Committee Note Draft, 1 December 2011

[KMIP-UG-1_1] *Key Management Interoperability Protocol Usage Guide Version 1.1.* http://docs.oasis-open.org/kmip/ug/v1.1/cn01/kmip-ug-v1.1-cn01.doc Committee Note 01, 27 July 2012

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

[KMIP-TC-1_1] *Key Management Interoperability Protocol Test Cases Version 1.1.* http://docs.oasis-open.org/kmip/testcases/v1.1/cn01/kmip-testcases-v1.1-cn01.doc, Committee Note 01, 27 July 2012.

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

[KMIP-UC] *Key Management Interoperability Protocol Use Cases Version 1.0.* http://docs.oasis-open.org/kmip/usecases/v1.0/cs01/kmip-usecases-1.0-cs-01.doc, Committee Specification, 15 June 2010.

2 Asymmetric Key Lifecycle Profile

The Asymmetric Key Lifecycle Profile is a KMIP server performing asymmetric key lifecycle operations 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

KMIP clients conformant to this profile:

1. SHALL conform to the KMIP Baseline Client profile in [KMIP-PROF] and [KMIP-SPEC]

KMIP servers conformant to this profile:

2. SHALL conform to the KMIP Baseline Server profile in [KMIP-PROF] and [KMIP-SPEC] and
3. SHALL support the following *Objects* [KMIP-SPEC]
    a. *Public Key* [KMIP-SPEC]
    b. *Private Key* [KMIP-SPEC]
    c. *Key Format Type* [KMIP-SPEC]
4. SHALL support the following *Attributes* [KMIP-SPEC]
    a. *Cryptographic Algorithm* [KMIP-SPEC]
    b. *Object Type* [KMIP-SPEC]
    c. *Process Start Date* [KMIP-SPEC]
    d. *Process Stop Date* [KMIP-SPEC]
5. SHALL support the following *Client-to-Server* [KMIP-SPEC] operations:
    a. *Create Key Pair* [KMIP-SPEC]
6. SHALL support the following *Message Encoding* [KMIP-SPEC]:
    a. *Cryptographic Algorithm* [KMIP-SPEC] with values:
        i. RSA
    b. *Object Type* [KMIP-SPEC] with value:
        i. Public Key
        ii. Private Key
    c. *Key Format Type* [KMIP-SPEC] with value:
        i. PKCS#1
        ii. PKCS#8
        iii. Transparent RSA Public Key
        iv. Transparent RSA Private Key
7. SHALL support all Mandatory Test Cases, returning results in accordance with the test cases.
8. MAY support any clause within [KMIP-SPEC] provided it does not conflict with any other clause within this section 2.2
9. MAY support extensions outside the scope of this standard (e.g., vendor extensions, conformance clauses) that do not contradict any KMIP requirements.

3 Asymmetric Key Lifecycle Profile - Test Cases

This section documents the test cases for a KMIP server performing asymmetric key lifecycle operations based on requests received from a KMIP client.

Note: the values for the returned items and the custom attributes are illustrative. Actual values from a real client system will vary.

3.1 Mandatory Test Cases KMIP 1.0

This section documents the test cases that a client or server conformant to the Asymmetric Key Lifecycle Profile SHALL support under KMIP Specification 1.0.

3.1.1 AKLC-M-1-10

CreateKeyPair, GetAttributes, GetAttributes, Destroy

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
      Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-M-1-10-
      private"/>
0027              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
```

```
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-1-10-
    public"/>
0040              <NameType type="Enumeration"
    value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
    Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="0"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
```

```
      # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
0073        <ProtocolVersionMinor type="Integer" value="0"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
    Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
```

```
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0086        <AttributeName type="TextString" value="Cryptographic
      Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
0088        <AttributeName type="TextString" value="Initial Date"/>
0089        <AttributeName type="TextString" value="Last Change Date"/>
0090        <AttributeName type="TextString" value="Activation Date"/>
0091      </RequestPayload>
0092    </BatchItem>
0093  </RequestMessage>
0094  <ResponseMessage>
0095    <ResponseHeader>
0096      <ProtocolVersion>
0097        <ProtocolVersionMajor type="Integer" value="1"/>
0098        <ProtocolVersionMinor type="Integer" value="0"/>
0099      </ProtocolVersion>
0100      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0101      <BatchCount type="Integer" value="1"/>
0102    </ResponseHeader>
0103    <BatchItem>
0104      <Operation type="Enumeration" value="GetAttributes"/>
0105      <ResultStatus type="Enumeration" value="Success"/>
0106      <ResponsePayload>
0107        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0108        <Attribute>
0109          <AttributeName type="TextString" value="State"/>
0110          <AttributeValue type="Enumeration" value="PreActive"/>
0111        </Attribute>
0112        <Attribute>
0113          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0114          <AttributeValue type="Integer" value="Sign"/>
0115        </Attribute>
0116        <Attribute>
0117          <AttributeName type="TextString" value="Unique Identifier"/>
0118          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0119        </Attribute>
0120        <Attribute>
0121          <AttributeName type="TextString" value="Object Type"/>
0122          <AttributeValue type="Enumeration" value="PrivateKey"/>
0123        </Attribute>
0124        <Attribute>
0125          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0126          <AttributeValue type="Enumeration" value="RSA"/>
0127        </Attribute>
0128        <Attribute>
0129          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0130          <AttributeValue type="Integer" value="2048"/>
0131        </Attribute>
0132        <Attribute>
0133          <AttributeName type="TextString" value="Digest"/>
0134          <AttributeValue>
```

```
0135            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0136            <DigestValue type="ByteString"
value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
230"/>
0137          </AttributeValue>
0138        </Attribute>
0139        <Attribute>
0140          <AttributeName type="TextString" value="Initial Date"/>
0141          <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
0142        </Attribute>
0143        <Attribute>
0144          <AttributeName type="TextString" value="Last Change Date"/>
0145          <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
0146        </Attribute>
0147      </ResponsePayload>
0148    </BatchItem>
0149  </ResponseMessage>
```

```
      # TIME 2
0150  <RequestMessage>
0151    <RequestHeader>
0152      <ProtocolVersion>
0153        <ProtocolVersionMajor type="Integer" value="1"/>
0154        <ProtocolVersionMinor type="Integer" value="0"/>
0155      </ProtocolVersion>
0156      <BatchCount type="Integer" value="1"/>
0157    </RequestHeader>
0158    <BatchItem>
0159      <Operation type="Enumeration" value="GetAttributes"/>
0160      <RequestPayload>
0161        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0162        <AttributeName type="TextString" value="State"/>
0163        <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
0164        <AttributeName type="TextString" value="Unique Identifier"/>
0165        <AttributeName type="TextString" value="Object Type"/>
0166        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
0167        <AttributeName type="TextString" value="Cryptographic
Length"/>
0168        <AttributeName type="TextString" value="Digest"/>
0169        <AttributeName type="TextString" value="Initial Date"/>
0170        <AttributeName type="TextString" value="Last Change Date"/>
0171        <AttributeName type="TextString" value="Activation Date"/>
0172      </RequestPayload>
0173    </BatchItem>
0174  </RequestMessage>
```

```
0175  <ResponseMessage>
0176    <ResponseHeader>
0177      <ProtocolVersion>
0178        <ProtocolVersionMajor type="Integer" value="1"/>
0179        <ProtocolVersionMinor type="Integer" value="0"/>
0180      </ProtocolVersion>
0181      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0182      <BatchCount type="Integer" value="1"/>
0183    </ResponseHeader>
```

```
0184    <BatchItem>
0185      <Operation type="Enumeration" value="GetAttributes"/>
0186      <ResultStatus type="Enumeration" value="Success"/>
0187      <ResponsePayload>
0188        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_1"/>
0189        <Attribute>
0190          <AttributeName type="TextString" value="State"/>
0191          <AttributeValue type="Enumeration" value="PreActive"/>
0192        </Attribute>
0193        <Attribute>
0194          <AttributeName type="TextString" value="Cryptographic Usage
          Mask"/>
0195          <AttributeValue type="Integer" value="Verify"/>
0196        </Attribute>
0197        <Attribute>
0198          <AttributeName type="TextString" value="Unique Identifier"/>
0199          <AttributeValue type="TextString"
          value="$UNIQUE_IDENTIFIER_1"/>
0200        </Attribute>
0201        <Attribute>
0202          <AttributeName type="TextString" value="Object Type"/>
0203          <AttributeValue type="Enumeration" value="PublicKey"/>
0204        </Attribute>
0205        <Attribute>
0206          <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0207          <AttributeValue type="Enumeration" value="RSA"/>
0208        </Attribute>
0209        <Attribute>
0210          <AttributeName type="TextString" value="Cryptographic
          Length"/>
0211          <AttributeValue type="Integer" value="2048"/>
0212        </Attribute>
0213        <Attribute>
0214          <AttributeName type="TextString" value="Digest"/>
0215          <AttributeValue>
0216            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0217            <DigestValue type="ByteString"
          value="82bcff8afab753809db804e654013ded708c3996a50c6ce9313f9b3915442
          ce9"/>
0218          </AttributeValue>
0219        </Attribute>
0220        <Attribute>
0221          <AttributeName type="TextString" value="Initial Date"/>
0222          <AttributeValue type="DateTime" value="2013-01-
          11T08:19:49+00:00"/>
0223        </Attribute>
0224        <Attribute>
0225          <AttributeName type="TextString" value="Last Change Date"/>
0226          <AttributeValue type="DateTime" value="2013-01-
          11T08:19:49+00:00"/>
0227        </Attribute>
0228      </ResponsePayload>
0229    </BatchItem>
0230  </ResponseMessage>
```

```
        # TIME 3
0231    <RequestMessage>
```

```
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 4
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
```

```
0286    </ResponseHeader>
0287    <BatchItem>
0288      <Operation type="Enumeration" value="Destroy"/>
0289      <ResultStatus type="Enumeration" value="Success"/>
0290      <ResponsePayload>
0291        <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_1"/>
0292      </ResponsePayload>
0293    </BatchItem>
0294  </ResponseMessage>
```

108

109 3.1.2 AKLC-M-2-10

110 CreateKeyPair, GetAttributes, Activate, GetAttributes, Destroy, Revoke, GetAttributes, Destroy

```
        # 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="CreateKeyPair"/>
0011        <RequestPayload>
0012          <CommonTemplateAttribute>
0013            <Attribute>
0014              <AttributeName type="TextString" value="Cryptographic
        Algorithm"/>
0015              <AttributeValue type="Enumeration" value="RSA"/>
0016            </Attribute>
0017            <Attribute>
0018              <AttributeName type="TextString" value="Cryptographic
        Length"/>
0019              <AttributeValue type="Integer" value="2048"/>
0020            </Attribute>
0021          </CommonTemplateAttribute>
0022          <PrivateKeyTemplateAttribute>
0023            <Attribute>
0024              <AttributeName type="TextString" value="Name"/>
0025              <AttributeValue>
0026                <NameValue type="TextString" value="AKLC-M-2-10-
        private"/>
0027                <NameType type="Enumeration"
        value="UninterpretedTextString"/>
0028              </AttributeValue>
0029            </Attribute>
0030            <Attribute>
0031              <AttributeName type="TextString" value="Cryptographic
        Usage Mask"/>
0032              <AttributeValue type="Integer" value="Sign"/>
0033            </Attribute>
0034          </PrivateKeyTemplateAttribute>
0035          <PublicKeyTemplateAttribute>
0036            <Attribute>
```

```
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-2-10-
    public"/>
0040              <NameType type="Enumeration"
    value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
    Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="0"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
    value="$UNIQUE IDENTIFIER 1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
```

```
      # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
0073        <ProtocolVersionMinor type="Integer" value="0"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
    Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
    Algorithm"/>
```

```
0086        <AttributeName type="TextString" value="Cryptographic
      Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
0088        <AttributeName type="TextString" value="Initial Date"/>
0089        <AttributeName type="TextString" value="Last Change Date"/>
0090      </RequestPayload>
0091    </BatchItem>
0092  </RequestMessage>
0093  <ResponseMessage>
0094    <ResponseHeader>
0095      <ProtocolVersion>
0096        <ProtocolVersionMajor type="Integer" value="1"/>
0097        <ProtocolVersionMinor type="Integer" value="0"/>
0098      </ProtocolVersion>
0099      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0100      <BatchCount type="Integer" value="1"/>
0101    </ResponseHeader>
0102    <BatchItem>
0103      <Operation type="Enumeration" value="GetAttributes"/>
0104      <ResultStatus type="Enumeration" value="Success"/>
0105      <ResponsePayload>
0106        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0107        <Attribute>
0108          <AttributeName type="TextString" value="State"/>
0109          <AttributeValue type="Enumeration" value="PreActive"/>
0110        </Attribute>
0111        <Attribute>
0112          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0113          <AttributeValue type="Integer" value="Sign"/>
0114        </Attribute>
0115        <Attribute>
0116          <AttributeName type="TextString" value="Unique Identifier"/>
0117          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0118        </Attribute>
0119        <Attribute>
0120          <AttributeName type="TextString" value="Object Type"/>
0121          <AttributeValue type="Enumeration" value="PrivateKey"/>
0122        </Attribute>
0123        <Attribute>
0124          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0125          <AttributeValue type="Enumeration" value="RSA"/>
0126        </Attribute>
0127        <Attribute>
0128          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0129          <AttributeValue type="Integer" value="2048"/>
0130        </Attribute>
0131        <Attribute>
0132          <AttributeName type="TextString" value="Digest"/>
0133          <AttributeValue>
0134            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0135            <DigestValue type="ByteString"
      value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
      230"/>
```

```
0136          </AttributeValue>
0137        </Attribute>
0138        <Attribute>
0139          <AttributeName type="TextString" value="Initial Date"/>
0140          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0141        </Attribute>
0142        <Attribute>
0143          <AttributeName type="TextString" value="Last Change Date"/>
0144          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0145        </Attribute>
0146      </ResponsePayload>
0147    </BatchItem>
0148  </ResponseMessage>
```

```
      # TIME 2
0149  <RequestMessage>
0150    <RequestHeader>
0151      <ProtocolVersion>
0152        <ProtocolVersionMajor type="Integer" value="1"/>
0153        <ProtocolVersionMinor type="Integer" value="0"/>
0154      </ProtocolVersion>
0155      <BatchCount type="Integer" value="1"/>
0156    </RequestHeader>
0157    <BatchItem>
0158      <Operation type="Enumeration" value="Activate"/>
0159      <RequestPayload>
0160        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0161      </RequestPayload>
0162    </BatchItem>
0163  </RequestMessage>
```

```
0164  <ResponseMessage>
0165    <ResponseHeader>
0166      <ProtocolVersion>
0167        <ProtocolVersionMajor type="Integer" value="1"/>
0168        <ProtocolVersionMinor type="Integer" value="0"/>
0169      </ProtocolVersion>
0170      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0171      <BatchCount type="Integer" value="1"/>
0172    </ResponseHeader>
0173    <BatchItem>
0174      <Operation type="Enumeration" value="Activate"/>
0175      <ResultStatus type="Enumeration" value="Success"/>
0176      <ResponsePayload>
0177        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0178      </ResponsePayload>
0179    </BatchItem>
0180  </ResponseMessage>
```

```
      # TIME 3
0181  <RequestMessage>
0182    <RequestHeader>
0183      <ProtocolVersion>
0184        <ProtocolVersionMajor type="Integer" value="1"/>
0185        <ProtocolVersionMinor type="Integer" value="0"/>
0186      </ProtocolVersion>
0187      <BatchCount type="Integer" value="1"/>
```

```
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <AttributeName type="TextString" value="State"/>
      <AttributeName type="TextString" value="Activation Date"/>
      <AttributeName type="TextString" value="Deactivation Date"/>
    </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="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="Active"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Activation Date"/>
        <AttributeValue type="DateTime" value="2013-01-
10T23:36:01+00:00"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 4
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <AttributeName type="TextString" value="State"/>
      <AttributeName type="TextString" value="Activation Date"/>
      <AttributeName type="TextString" value="Deactivation Date"/>
    </RequestPayload>
  </BatchItem>
```

```
0241  </RequestMessage>
0242  <ResponseMessage>
0243    <ResponseHeader>
0244      <ProtocolVersion>
0245        <ProtocolVersionMajor type="Integer" value="1"/>
0246        <ProtocolVersionMinor type="Integer" value="0"/>
0247      </ProtocolVersion>
0248      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0249      <BatchCount type="Integer" value="1"/>
0250    </ResponseHeader>
0251    <BatchItem>
0252      <Operation type="Enumeration" value="GetAttributes"/>
0253      <ResultStatus type="Enumeration" value="Success"/>
0254      <ResponsePayload>
0255        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0256        <Attribute>
0257          <AttributeName type="TextString" value="State"/>
0258          <AttributeValue type="Enumeration" value="PreActive"/>
0259        </Attribute>
0260      </ResponsePayload>
0261    </BatchItem>
0262  </ResponseMessage>
      # TIME 5
0263  <RequestMessage>
0264    <RequestHeader>
0265      <ProtocolVersion>
0266        <ProtocolVersionMajor type="Integer" value="1"/>
0267        <ProtocolVersionMinor type="Integer" value="0"/>
0268      </ProtocolVersion>
0269      <BatchCount type="Integer" value="1"/>
0270    </RequestHeader>
0271    <BatchItem>
0272      <Operation type="Enumeration" value="Destroy"/>
0273      <RequestPayload>
0274        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0275      </RequestPayload>
0276    </BatchItem>
0277  </RequestMessage>
0278  <ResponseMessage>
0279    <ResponseHeader>
0280      <ProtocolVersion>
0281        <ProtocolVersionMajor type="Integer" value="1"/>
0282        <ProtocolVersionMinor type="Integer" value="0"/>
0283      </ProtocolVersion>
0284      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0285      <BatchCount type="Integer" value="1"/>
0286    </ResponseHeader>
0287    <BatchItem>
0288      <Operation type="Enumeration" value="Destroy"/>
0289      <ResultStatus type="Enumeration" value="OperationFailed"/>
0290      <ResultReason type="Enumeration" value="PermissionDenied"/>
0291      <ResultMessage type="TextString" value="DENIED"/>
0292    </BatchItem>
0293  </ResponseMessage>
      # TIME 6
0294  <RequestMessage>
```

```
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 7
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Revoke"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <RevocationReason>
        <RevocationReasonCode type="Enumeration"
value="KeyCompromise"/>
      </RevocationReason>
      <CompromiseOccurrenceDate type="DateTime" value="1970-01-
01T00:00:06+00:00"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
```

```
0347        <ProtocolVersion>
0348          <ProtocolVersionMajor type="Integer" value="1"/>
0349          <ProtocolVersionMinor type="Integer" value="0"/>
0350        </ProtocolVersion>
0351        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0352        <BatchCount type="Integer" value="1"/>
0353      </ResponseHeader>
0354      <BatchItem>
0355        <Operation type="Enumeration" value="Revoke"/>
0356        <ResultStatus type="Enumeration" value="Success"/>
0357        <ResponsePayload>
0358          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0359        </ResponsePayload>
0360      </BatchItem>
0361    </ResponseMessage>
```

```
    # TIME 8
0362    <RequestMessage>
0363      <RequestHeader>
0364        <ProtocolVersion>
0365          <ProtocolVersionMajor type="Integer" value="1"/>
0366          <ProtocolVersionMinor type="Integer" value="0"/>
0367        </ProtocolVersion>
0368        <BatchCount type="Integer" value="1"/>
0369      </RequestHeader>
0370      <BatchItem>
0371        <Operation type="Enumeration" value="GetAttributes"/>
0372        <RequestPayload>
0373          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0374          <AttributeName type="TextString" value="State"/>
0375        </RequestPayload>
0376      </BatchItem>
0377    </RequestMessage>
```

```
0378    <ResponseMessage>
0379      <ResponseHeader>
0380        <ProtocolVersion>
0381          <ProtocolVersionMajor type="Integer" value="1"/>
0382          <ProtocolVersionMinor type="Integer" value="0"/>
0383        </ProtocolVersion>
0384        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0385        <BatchCount type="Integer" value="1"/>
0386      </ResponseHeader>
0387      <BatchItem>
0388        <Operation type="Enumeration" value="GetAttributes"/>
0389        <ResultStatus type="Enumeration" value="Success"/>
0390        <ResponsePayload>
0391          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0392          <Attribute>
0393            <AttributeName type="TextString" value="State"/>
0394            <AttributeValue type="Enumeration" value="Compromised"/>
0395          </Attribute>
0396        </ResponsePayload>
0397      </BatchItem>
0398    </ResponseMessage>
```

```
    # TIME 9
0399    <RequestMessage>
```

```
0400    <RequestHeader>
0401      <ProtocolVersion>
0402        <ProtocolVersionMajor type="Integer" value="1"/>
0403        <ProtocolVersionMinor type="Integer" value="0"/>
0404      </ProtocolVersion>
0405      <BatchCount type="Integer" value="1"/>
0406    </RequestHeader>
0407    <BatchItem>
0408      <Operation type="Enumeration" value="Destroy"/>
0409      <RequestPayload>
0410        <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0411      </RequestPayload>
0412    </BatchItem>
0413  </RequestMessage>
```

```
0414  <ResponseMessage>
0415    <ResponseHeader>
0416      <ProtocolVersion>
0417        <ProtocolVersionMajor type="Integer" value="1"/>
0418        <ProtocolVersionMinor type="Integer" value="0"/>
0419      </ProtocolVersion>
0420      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0421      <BatchCount type="Integer" value="1"/>
0422    </ResponseHeader>
0423    <BatchItem>
0424      <Operation type="Enumeration" value="Destroy"/>
0425      <ResultStatus type="Enumeration" value="Success"/>
0426      <ResponsePayload>
0427        <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0428      </ResponsePayload>
0429    </BatchItem>
0430  </ResponseMessage>
```

111

112 3.1.3 AKLC-M-3-10

113 CreateKeyPair, GetAttributes, Activate, GetAttributes, Destroy, Revoke, GetAttributes, Destroy

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
        Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
```

```
0018            <AttributeName type="TextString" value="Cryptographic
        Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-M-3-10-
        private"/>
0027              <NameType type="Enumeration"
        value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
        Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-3-10-
        public"/>
0040              <NameType type="Enumeration"
        value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
        Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="0"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
```

```
0067      </BatchItem>
0068    </ResponseMessage>
```

```
        # TIME 1
0069    <RequestMessage>
0070      <RequestHeader>
0071        <ProtocolVersion>
0072          <ProtocolVersionMajor type="Integer" value="1"/>
0073          <ProtocolVersionMinor type="Integer" value="0"/>
0074        </ProtocolVersion>
0075        <BatchCount type="Integer" value="1"/>
0076      </RequestHeader>
0077      <BatchItem>
0078        <Operation type="Enumeration" value="GetAttributes"/>
0079        <RequestPayload>
0080          <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0081          <AttributeName type="TextString" value="State"/>
0082          <AttributeName type="TextString" value="Cryptographic Usage
        Mask"/>
0083          <AttributeName type="TextString" value="Unique Identifier"/>
0084          <AttributeName type="TextString" value="Object Type"/>
0085          <AttributeName type="TextString" value="Cryptographic
        Algorithm"/>
0086          <AttributeName type="TextString" value="Cryptographic
        Length"/>
0087          <AttributeName type="TextString" value="Digest"/>
0088          <AttributeName type="TextString" value="Initial Date"/>
0089          <AttributeName type="TextString" value="Last Change Date"/>
0090        </RequestPayload>
0091      </BatchItem>
0092    </RequestMessage>
```

```
0093    <ResponseMessage>
0094      <ResponseHeader>
0095        <ProtocolVersion>
0096          <ProtocolVersionMajor type="Integer" value="1"/>
0097          <ProtocolVersionMinor type="Integer" value="0"/>
0098        </ProtocolVersion>
0099        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0100        <BatchCount type="Integer" value="1"/>
0101      </ResponseHeader>
0102      <BatchItem>
0103        <Operation type="Enumeration" value="GetAttributes"/>
0104        <ResultStatus type="Enumeration" value="Success"/>
0105        <ResponsePayload>
0106          <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0107          <Attribute>
0108            <AttributeName type="TextString" value="State"/>
0109            <AttributeValue type="Enumeration" value="PreActive"/>
0110          </Attribute>
0111          <Attribute>
0112            <AttributeName type="TextString" value="Cryptographic Usage
        Mask"/>
0113            <AttributeValue type="Integer" value="Sign"/>
0114          </Attribute>
0115          <Attribute>
0116            <AttributeName type="TextString" value="Unique Identifier"/>
0117            <AttributeValue type="TextString"
```

```
      value="$UNIQUE_IDENTIFIER_0"/>
0118        </Attribute>
0119        <Attribute>
0120          <AttributeName type="TextString" value="Object Type"/>
0121          <AttributeValue type="Enumeration" value="PrivateKey"/>
0122        </Attribute>
0123        <Attribute>
0124          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0125          <AttributeValue type="Enumeration" value="RSA"/>
0126        </Attribute>
0127        <Attribute>
0128          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0129          <AttributeValue type="Integer" value="2048"/>
0130        </Attribute>
0131        <Attribute>
0132          <AttributeName type="TextString" value="Digest"/>
0133          <AttributeValue>
0134            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0135            <DigestValue type="ByteString"
      value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
      230"/>
0136          </AttributeValue>
0137        </Attribute>
0138        <Attribute>
0139          <AttributeName type="TextString" value="Initial Date"/>
0140          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0141        </Attribute>
0142        <Attribute>
0143          <AttributeName type="TextString" value="Last Change Date"/>
0144          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0145        </Attribute>
0146      </ResponsePayload>
0147    </BatchItem>
0148  </ResponseMessage>
```

```
      # TIME 2
0149  <RequestMessage>
0150    <RequestHeader>
0151      <ProtocolVersion>
0152        <ProtocolVersionMajor type="Integer" value="1"/>
0153        <ProtocolVersionMinor type="Integer" value="0"/>
0154      </ProtocolVersion>
0155      <BatchCount type="Integer" value="1"/>
0156    </RequestHeader>
0157    <BatchItem>
0158      <Operation type="Enumeration" value="Activate"/>
0159      <RequestPayload>
0160        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0161      </RequestPayload>
0162    </BatchItem>
0163  </RequestMessage>
```

```
0164  <ResponseMessage>
0165    <ResponseHeader>
0166      <ProtocolVersion>
```

```
0167        <ProtocolVersionMajor type="Integer" value="1"/>
0168        <ProtocolVersionMinor type="Integer" value="0"/>
0169      </ProtocolVersion>
0170      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0171      <BatchCount type="Integer" value="1"/>
0172    </ResponseHeader>
0173    <BatchItem>
0174      <Operation type="Enumeration" value="Activate"/>
0175      <ResultStatus type="Enumeration" value="Success"/>
0176      <ResponsePayload>
0177        <UniqueIdentifier type="TextString"
      value="$UNIQUE IDENTIFIER 0"/>
0178      </ResponsePayload>
0179    </BatchItem>
0180  </ResponseMessage>
```

```
      # TIME 3
0181  <RequestMessage>
0182    <RequestHeader>
0183      <ProtocolVersion>
0184        <ProtocolVersionMajor type="Integer" value="1"/>
0185        <ProtocolVersionMinor type="Integer" value="0"/>
0186      </ProtocolVersion>
0187      <BatchCount type="Integer" value="1"/>
0188    </RequestHeader>
0189    <BatchItem>
0190      <Operation type="Enumeration" value="GetAttributes"/>
0191      <RequestPayload>
0192        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0193        <AttributeName type="TextString" value="State"/>
0194        <AttributeName type="TextString" value="Activation Date"/>
0195        <AttributeName type="TextString" value="Deactivation Date"/>
0196      </RequestPayload>
0197    </BatchItem>
0198  </RequestMessage>
```

```
0199  <ResponseMessage>
0200    <ResponseHeader>
0201      <ProtocolVersion>
0202        <ProtocolVersionMajor type="Integer" value="1"/>
0203        <ProtocolVersionMinor type="Integer" value="0"/>
0204      </ProtocolVersion>
0205      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0206      <BatchCount type="Integer" value="1"/>
0207    </ResponseHeader>
0208    <BatchItem>
0209      <Operation type="Enumeration" value="GetAttributes"/>
0210      <ResultStatus type="Enumeration" value="Success"/>
0211      <ResponsePayload>
0212        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0213        <Attribute>
0214          <AttributeName type="TextString" value="State"/>
0215          <AttributeValue type="Enumeration" value="Active"/>
0216        </Attribute>
0217        <Attribute>
0218          <AttributeName type="TextString" value="Activation Date"/>
0219          <AttributeValue type="DateTime" value="2013-01-
      10T23:36:01+00:00"/>
```

```
0220        </Attribute>
0221      </ResponsePayload>
0222    </BatchItem>
0223  </ResponseMessage>
```

```
      # TIME 4
0224  <RequestMessage>
0225    <RequestHeader>
0226      <ProtocolVersion>
0227        <ProtocolVersionMajor type="Integer" value="1"/>
0228        <ProtocolVersionMinor type="Integer" value="0"/>
0229      </ProtocolVersion>
0230      <BatchCount type="Integer" value="1"/>
0231    </RequestHeader>
0232    <BatchItem>
0233      <Operation type="Enumeration" value="ModifyAttribute"/>
0234      <UniqueBatchItemID type="ByteString" value="0752c951bb9926cc"/>
0235      <RequestPayload>
0236        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0237        <Attribute>
0238          <AttributeName type="TextString" value="Activation Date"/>
0239          <AttributeValue type="DateTime" value="$NOW"/>
0240        </Attribute>
0241      </RequestPayload>
0242    </BatchItem>
0243  </RequestMessage>
```

```
0244  <ResponseMessage>
0245    <ResponseHeader>
0246      <ProtocolVersion>
0247        <ProtocolVersionMajor type="Integer" value="1"/>
0248        <ProtocolVersionMinor type="Integer" value="0"/>
0249      </ProtocolVersion>
0250      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0251      <BatchCount type="Integer" value="1"/>
0252    </ResponseHeader>
0253    <BatchItem>
0254      <Operation type="Enumeration" value="ModifyAttribute"/>
0255      <UniqueBatchItemID type="ByteString" value="0752c951bb9926cc"/>
0256      <ResultStatus type="Enumeration" value="OperationFailed"/>
0257      <ResultReason type="Enumeration" value="PermissionDenied"/>
0258      <ResultMessage type="TextString" value="DENIED"/>
0259    </BatchItem>
0260  </ResponseMessage>
```

```
      # TIME 5
0261  <RequestMessage>
0262    <RequestHeader>
0263      <ProtocolVersion>
0264        <ProtocolVersionMajor type="Integer" value="1"/>
0265        <ProtocolVersionMinor type="Integer" value="0"/>
0266      </ProtocolVersion>
0267      <BatchCount type="Integer" value="1"/>
0268    </RequestHeader>
0269    <BatchItem>
0270      <Operation type="Enumeration" value="Revoke"/>
0271      <RequestPayload>
0272        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0273        <RevocationReason>
```

```
0274          <RevocationReasonCode type="Enumeration"
      value="KeyCompromise"/>
0275        </RevocationReason>
0276        <CompromiseOccurrenceDate type="DateTime" value="1970-01-
      01T00:00:06+00:00"/>
0277      </RequestPayload>
0278    </BatchItem>
0279  </RequestMessage>
```

```
0280  <ResponseMessage>
0281    <ResponseHeader>
0282      <ProtocolVersion>
0283        <ProtocolVersionMajor type="Integer" value="1"/>
0284        <ProtocolVersionMinor type="Integer" value="0"/>
0285      </ProtocolVersion>
0286      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0287      <BatchCount type="Integer" value="1"/>
0288    </ResponseHeader>
0289    <BatchItem>
0290      <Operation type="Enumeration" value="Revoke"/>
0291      <ResultStatus type="Enumeration" value="Success"/>
0292      <ResponsePayload>
0293        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0294      </ResponsePayload>
0295    </BatchItem>
0296  </ResponseMessage>
```

```
      # TIME 6
0297  <RequestMessage>
0298    <RequestHeader>
0299      <ProtocolVersion>
0300        <ProtocolVersionMajor type="Integer" value="1"/>
0301        <ProtocolVersionMinor type="Integer" value="0"/>
0302      </ProtocolVersion>
0303      <BatchCount type="Integer" value="1"/>
0304    </RequestHeader>
0305    <BatchItem>
0306      <Operation type="Enumeration" value="GetAttributes"/>
0307      <RequestPayload>
0308        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0309        <AttributeName type="TextString" value="State"/>
0310      </RequestPayload>
0311    </BatchItem>
0312  </RequestMessage>
```

```
0313  <ResponseMessage>
0314    <ResponseHeader>
0315      <ProtocolVersion>
0316        <ProtocolVersionMajor type="Integer" value="1"/>
0317        <ProtocolVersionMinor type="Integer" value="0"/>
0318      </ProtocolVersion>
0319      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0320      <BatchCount type="Integer" value="1"/>
0321    </ResponseHeader>
0322    <BatchItem>
0323      <Operation type="Enumeration" value="GetAttributes"/>
0324      <ResultStatus type="Enumeration" value="Success"/>
0325      <ResponsePayload>
0326        <UniqueIdentifier type="TextString"
```

```
value="$UNIQUE_IDENTIFIER_0"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="Compromised"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 7
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <AttributeName type="TextString" value="State"/>
    </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="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="PreActive"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 8
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
```

```
0380      <Operation type="Enumeration" value="Destroy"/>
0381      <RequestPayload>
0382        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0383      </RequestPayload>
0384    </BatchItem>
0385  </RequestMessage>
```

```
0386  <ResponseMessage>
0387    <ResponseHeader>
0388      <ProtocolVersion>
0389        <ProtocolVersionMajor type="Integer" value="1"/>
0390        <ProtocolVersionMinor type="Integer" value="0"/>
0391      </ProtocolVersion>
0392      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0393      <BatchCount type="Integer" value="1"/>
0394    </ResponseHeader>
0395    <BatchItem>
0396      <Operation type="Enumeration" value="Destroy"/>
0397      <ResultStatus type="Enumeration" value="Success"/>
0398      <ResponsePayload>
0399        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0400      </ResponsePayload>
0401    </BatchItem>
0402  </ResponseMessage>
```

```
      # TIME 9
0403  <RequestMessage>
0404    <RequestHeader>
0405      <ProtocolVersion>
0406        <ProtocolVersionMajor type="Integer" value="1"/>
0407        <ProtocolVersionMinor type="Integer" value="0"/>
0408      </ProtocolVersion>
0409      <BatchCount type="Integer" value="1"/>
0410    </RequestHeader>
0411    <BatchItem>
0412      <Operation type="Enumeration" value="Destroy"/>
0413      <RequestPayload>
0414        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0415      </RequestPayload>
0416    </BatchItem>
0417  </RequestMessage>
```

```
0418  <ResponseMessage>
0419    <ResponseHeader>
0420      <ProtocolVersion>
0421        <ProtocolVersionMajor type="Integer" value="1"/>
0422        <ProtocolVersionMinor type="Integer" value="0"/>
0423      </ProtocolVersion>
0424      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0425      <BatchCount type="Integer" value="1"/>
0426    </ResponseHeader>
0427    <BatchItem>
0428      <Operation type="Enumeration" value="Destroy"/>
0429      <ResultStatus type="Enumeration" value="Success"/>
0430      <ResponsePayload>
0431        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0432      </ResponsePayload>
```

```
0433    </BatchItem>
0434  </ResponseMessage>
```

114

115 3.2 Mandatory Test Cases KMIP 1.1

116 This section documents the mandatory test cases that a client or server conformant to the Asymmetric
117 Key Lifecycle Profile SHALL support under KMIP Specification 1.1.

118 3.2.1 AKLC-M-1-11

119 CreateKeyPair, GetAttributes, GetAttributes, Destroy

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
      Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-M-1-11-
      private"/>
0027              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-1-11-
```

```
public"/>
0040              <NameType type="Enumeration"
value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="1"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
    # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
0073        <ProtocolVersionMinor type="Integer" value="1"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
0086        <AttributeName type="TextString" value="Cryptographic
Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
```

```
      <AttributeName type="TextString" value="Initial Date"/>
      <AttributeName type="TextString" value="Last Change Date"/>
      <AttributeName type="TextString" value="Activation Date"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="PreActive"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
        <AttributeValue type="Integer" value="Sign"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Unique Identifier"/>
        <AttributeValue type="TextString"
value="$UNIQUE IDENTIFIER 0"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Object Type"/>
        <AttributeValue type="Enumeration" value="PrivateKey"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
        <AttributeValue type="Enumeration" value="RSA"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Length"/>
        <AttributeValue type="Integer" value="2048"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Digest"/>
        <AttributeValue>
          <HashingAlgorithm type="Enumeration" value="SHA_256"/>
          <DigestValue type="ByteString"
value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
230"/>
          <KeyFormatType type="Enumeration" value="PKCS_1"/>
        </AttributeValue>
```

```
0139        </Attribute>
0140        <Attribute>
0141          <AttributeName type="TextString" value="Initial Date"/>
0142          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0143        </Attribute>
0144        <Attribute>
0145          <AttributeName type="TextString" value="Last Change Date"/>
0146          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0147        </Attribute>
0148      </ResponsePayload>
0149    </BatchItem>
0150  </ResponseMessage>
```

```
      # TIME 2
0151  <RequestMessage>
0152    <RequestHeader>
0153      <ProtocolVersion>
0154        <ProtocolVersionMajor type="Integer" value="1"/>
0155        <ProtocolVersionMinor type="Integer" value="1"/>
0156      </ProtocolVersion>
0157      <BatchCount type="Integer" value="1"/>
0158    </RequestHeader>
0159    <BatchItem>
0160      <Operation type="Enumeration" value="GetAttributes"/>
0161      <RequestPayload>
0162        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0163        <AttributeName type="TextString" value="State"/>
0164        <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0165        <AttributeName type="TextString" value="Unique Identifier"/>
0166        <AttributeName type="TextString" value="Object Type"/>
0167        <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0168        <AttributeName type="TextString" value="Cryptographic
      Length"/>
0169        <AttributeName type="TextString" value="Digest"/>
0170        <AttributeName type="TextString" value="Initial Date"/>
0171        <AttributeName type="TextString" value="Last Change Date"/>
0172        <AttributeName type="TextString" value="Activation Date"/>
0173      </RequestPayload>
0174    </BatchItem>
0175  </RequestMessage>
```

```
0176  <ResponseMessage>
0177    <ResponseHeader>
0178      <ProtocolVersion>
0179        <ProtocolVersionMajor type="Integer" value="1"/>
0180        <ProtocolVersionMinor type="Integer" value="1"/>
0181      </ProtocolVersion>
0182      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0183      <BatchCount type="Integer" value="1"/>
0184    </ResponseHeader>
0185    <BatchItem>
0186      <Operation type="Enumeration" value="GetAttributes"/>
0187      <ResultStatus type="Enumeration" value="Success"/>
0188      <ResponsePayload>
0189        <UniqueIdentifier type="TextString"
```

```
      value="$UNIQUE_IDENTIFIER_1"/>
0190        <Attribute>
0191          <AttributeName type="TextString" value="State"/>
0192          <AttributeValue type="Enumeration" value="PreActive"/>
0193        </Attribute>
0194        <Attribute>
0195          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0196          <AttributeValue type="Integer" value="Verify"/>
0197        </Attribute>
0198        <Attribute>
0199          <AttributeName type="TextString" value="Unique Identifier"/>
0200          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0201        </Attribute>
0202        <Attribute>
0203          <AttributeName type="TextString" value="Object Type"/>
0204          <AttributeValue type="Enumeration" value="PublicKey"/>
0205        </Attribute>
0206        <Attribute>
0207          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0208          <AttributeValue type="Enumeration" value="RSA"/>
0209        </Attribute>
0210        <Attribute>
0211          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0212          <AttributeValue type="Integer" value="2048"/>
0213        </Attribute>
0214        <Attribute>
0215          <AttributeName type="TextString" value="Digest"/>
0216          <AttributeValue>
0217            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0218            <DigestValue type="ByteString"
      value="82bcff8afab753809db804e654013ded708c3996a50c6ce9313f9b3915442
      ce9"/>
0219            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0220          </AttributeValue>
0221        </Attribute>
0222        <Attribute>
0223          <AttributeName type="TextString" value="Initial Date"/>
0224          <AttributeValue type="DateTime" value="2013-01-
      11T08:19:49+00:00"/>
0225        </Attribute>
0226        <Attribute>
0227          <AttributeName type="TextString" value="Last Change Date"/>
0228          <AttributeValue type="DateTime" value="2013-01-
      11T08:19:49+00:00"/>
0229        </Attribute>
0230      </ResponsePayload>
0231    </BatchItem>
0232  </ResponseMessage>
```

```
      # TIME 3
0233  <RequestMessage>
0234    <RequestHeader>
0235      <ProtocolVersion>
0236        <ProtocolVersionMajor type="Integer" value="1"/>
0237        <ProtocolVersionMinor type="Integer" value="1"/>
```

```
0238      </ProtocolVersion>
0239      <BatchCount type="Integer" value="1"/>
0240    </RequestHeader>
0241    <BatchItem>
0242      <Operation type="Enumeration" value="Destroy"/>
0243      <RequestPayload>
0244        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0245      </RequestPayload>
0246    </BatchItem>
0247  </RequestMessage>
```

```
0248  <ResponseMessage>
0249    <ResponseHeader>
0250      <ProtocolVersion>
0251        <ProtocolVersionMajor type="Integer" value="1"/>
0252        <ProtocolVersionMinor type="Integer" value="1"/>
0253      </ProtocolVersion>
0254      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0255      <BatchCount type="Integer" value="1"/>
0256    </ResponseHeader>
0257    <BatchItem>
0258      <Operation type="Enumeration" value="Destroy"/>
0259      <ResultStatus type="Enumeration" value="Success"/>
0260      <ResponsePayload>
0261        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0262      </ResponsePayload>
0263    </BatchItem>
0264  </ResponseMessage>
```

```
      # TIME 4
0265  <RequestMessage>
0266    <RequestHeader>
0267      <ProtocolVersion>
0268        <ProtocolVersionMajor type="Integer" value="1"/>
0269        <ProtocolVersionMinor type="Integer" value="1"/>
0270      </ProtocolVersion>
0271      <BatchCount type="Integer" value="1"/>
0272    </RequestHeader>
0273    <BatchItem>
0274      <Operation type="Enumeration" value="Destroy"/>
0275      <RequestPayload>
0276        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0277      </RequestPayload>
0278    </BatchItem>
0279  </RequestMessage>
```

```
0280  <ResponseMessage>
0281    <ResponseHeader>
0282      <ProtocolVersion>
0283        <ProtocolVersionMajor type="Integer" value="1"/>
0284        <ProtocolVersionMinor type="Integer" value="1"/>
0285      </ProtocolVersion>
0286      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0287      <BatchCount type="Integer" value="1"/>
0288    </ResponseHeader>
0289    <BatchItem>
0290      <Operation type="Enumeration" value="Destroy"/>
0291      <ResultStatus type="Enumeration" value="Success"/>
```

```
0292      <ResponsePayload>
0293        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_1"/>
0294      </ResponsePayload>
0295    </BatchItem>
0296  </ResponseMessage>
```

120

121 3.2.2 AKLC-M-2-11

122 CreateKeyPair, GetAttributes, Activate, GetAttributes, Destroy, Revoke, GetAttributes, Destroy

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
          Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-M-2-11-
          private"/>
0027              <NameType type="Enumeration"
          value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
          Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-2-11-
          public"/>
```

```
0040              <NameType type="Enumeration"
value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="1"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
```

```
      # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
0073        <ProtocolVersionMinor type="Integer" value="1"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
0086        <AttributeName type="TextString" value="Cryptographic
Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
0088        <AttributeName type="TextString" value="Initial Date"/>
```

```
0089        <AttributeName type="TextString" value="Last Change Date"/>
0090      </RequestPayload>
0091    </BatchItem>
0092  </RequestMessage>
0093  <ResponseMessage>
0094    <ResponseHeader>
0095      <ProtocolVersion>
0096        <ProtocolVersionMajor type="Integer" value="1"/>
0097        <ProtocolVersionMinor type="Integer" value="1"/>
0098      </ProtocolVersion>
0099      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0100      <BatchCount type="Integer" value="1"/>
0101    </ResponseHeader>
0102    <BatchItem>
0103      <Operation type="Enumeration" value="GetAttributes"/>
0104      <ResultStatus type="Enumeration" value="Success"/>
0105      <ResponsePayload>
0106        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0107        <Attribute>
0108          <AttributeName type="TextString" value="State"/>
0109          <AttributeValue type="Enumeration" value="PreActive"/>
0110        </Attribute>
0111        <Attribute>
0112          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0113          <AttributeValue type="Integer" value="Sign"/>
0114        </Attribute>
0115        <Attribute>
0116          <AttributeName type="TextString" value="Unique Identifier"/>
0117          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0118        </Attribute>
0119        <Attribute>
0120          <AttributeName type="TextString" value="Object Type"/>
0121          <AttributeValue type="Enumeration" value="PrivateKey"/>
0122        </Attribute>
0123        <Attribute>
0124          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0125          <AttributeValue type="Enumeration" value="RSA"/>
0126        </Attribute>
0127        <Attribute>
0128          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0129          <AttributeValue type="Integer" value="2048"/>
0130        </Attribute>
0131        <Attribute>
0132          <AttributeName type="TextString" value="Digest"/>
0133          <AttributeValue>
0134            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0135            <DigestValue type="ByteString"
      value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
      230"/>
0136            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0137          </AttributeValue>
0138        </Attribute>
0139        <Attribute>
```

```
0140          <AttributeName type="TextString" value="Initial Date"/>
0141          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0142        </Attribute>
0143        <Attribute>
0144          <AttributeName type="TextString" value="Last Change Date"/>
0145          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0146        </Attribute>
0147      </ResponsePayload>
0148    </BatchItem>
0149  </ResponseMessage>
```

```
      # TIME 2
0150  <RequestMessage>
0151    <RequestHeader>
0152      <ProtocolVersion>
0153        <ProtocolVersionMajor type="Integer" value="1"/>
0154        <ProtocolVersionMinor type="Integer" value="1"/>
0155      </ProtocolVersion>
0156      <BatchCount type="Integer" value="1"/>
0157    </RequestHeader>
0158    <BatchItem>
0159      <Operation type="Enumeration" value="Activate"/>
0160      <RequestPayload>
0161        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0162      </RequestPayload>
0163    </BatchItem>
0164  </RequestMessage>
```

```
0165  <ResponseMessage>
0166    <ResponseHeader>
0167      <ProtocolVersion>
0168        <ProtocolVersionMajor type="Integer" value="1"/>
0169        <ProtocolVersionMinor type="Integer" value="1"/>
0170      </ProtocolVersion>
0171      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0172      <BatchCount type="Integer" value="1"/>
0173    </ResponseHeader>
0174    <BatchItem>
0175      <Operation type="Enumeration" value="Activate"/>
0176      <ResultStatus type="Enumeration" value="Success"/>
0177      <ResponsePayload>
0178        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0179      </ResponsePayload>
0180    </BatchItem>
0181  </ResponseMessage>
```

```
      # TIME 3
0182  <RequestMessage>
0183    <RequestHeader>
0184      <ProtocolVersion>
0185        <ProtocolVersionMajor type="Integer" value="1"/>
0186        <ProtocolVersionMinor type="Integer" value="1"/>
0187      </ProtocolVersion>
0188      <BatchCount type="Integer" value="1"/>
0189    </RequestHeader>
0190    <BatchItem>
0191      <Operation type="Enumeration" value="GetAttributes"/>
```

```
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <AttributeName type="TextString" value="State"/>
      <AttributeName type="TextString" value="Activation Date"/>
      <AttributeName type="TextString" value="Deactivation Date"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="Active"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Activation Date"/>
        <AttributeValue type="DateTime" value="2013-01-
10T23:36:01+00:00"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 4
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <AttributeName type="TextString" value="State"/>
      <AttributeName type="TextString" value="Activation Date"/>
      <AttributeName type="TextString" value="Deactivation Date"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
```

```
0245        <ProtocolVersion>
0246          <ProtocolVersionMajor type="Integer" value="1"/>
0247          <ProtocolVersionMinor type="Integer" value="1"/>
0248        </ProtocolVersion>
0249        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0250        <BatchCount type="Integer" value="1"/>
0251      </ResponseHeader>
0252      <BatchItem>
0253        <Operation type="Enumeration" value="GetAttributes"/>
0254        <ResultStatus type="Enumeration" value="Success"/>
0255        <ResponsePayload>
0256          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0257          <Attribute>
0258            <AttributeName type="TextString" value="State"/>
0259            <AttributeValue type="Enumeration" value="PreActive"/>
0260          </Attribute>
0261        </ResponsePayload>
0262      </BatchItem>
0263    </ResponseMessage>
```

```
    # TIME 5
0264    <RequestMessage>
0265      <RequestHeader>
0266        <ProtocolVersion>
0267          <ProtocolVersionMajor type="Integer" value="1"/>
0268          <ProtocolVersionMinor type="Integer" value="1"/>
0269        </ProtocolVersion>
0270        <BatchCount type="Integer" value="1"/>
0271      </RequestHeader>
0272      <BatchItem>
0273        <Operation type="Enumeration" value="Destroy"/>
0274        <RequestPayload>
0275          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0276        </RequestPayload>
0277      </BatchItem>
0278    </RequestMessage>
```

```
0279    <ResponseMessage>
0280      <ResponseHeader>
0281        <ProtocolVersion>
0282          <ProtocolVersionMajor type="Integer" value="1"/>
0283          <ProtocolVersionMinor type="Integer" value="1"/>
0284        </ProtocolVersion>
0285        <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0286        <BatchCount type="Integer" value="1"/>
0287      </ResponseHeader>
0288      <BatchItem>
0289        <Operation type="Enumeration" value="Destroy"/>
0290        <ResultStatus type="Enumeration" value="OperationFailed"/>
0291        <ResultReason type="Enumeration" value="PermissionDenied"/>
0292        <ResultMessage type="TextString" value="DENIED"/>
0293      </BatchItem>
0294    </ResponseMessage>
```

```
    # TIME 6
0295    <RequestMessage>
0296      <RequestHeader>
0297        <ProtocolVersion>
0298          <ProtocolVersionMajor type="Integer" value="1"/>
```

```
0299        <ProtocolVersionMinor type="Integer" value="1"/>
0300      </ProtocolVersion>
0301      <BatchCount type="Integer" value="1"/>
0302    </RequestHeader>
0303    <BatchItem>
0304      <Operation type="Enumeration" value="Destroy"/>
0305      <RequestPayload>
0306        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0307      </RequestPayload>
0308    </BatchItem>
0309  </RequestMessage>
0310  <ResponseMessage>
0311    <ResponseHeader>
0312      <ProtocolVersion>
0313        <ProtocolVersionMajor type="Integer" value="1"/>
0314        <ProtocolVersionMinor type="Integer" value="1"/>
0315      </ProtocolVersion>
0316      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0317      <BatchCount type="Integer" value="1"/>
0318    </ResponseHeader>
0319    <BatchItem>
0320      <Operation type="Enumeration" value="Destroy"/>
0321      <ResultStatus type="Enumeration" value="Success"/>
0322      <ResponsePayload>
0323        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0324      </ResponsePayload>
0325    </BatchItem>
0326  </ResponseMessage>
      # TIME 7
0327  <RequestMessage>
0328    <RequestHeader>
0329      <ProtocolVersion>
0330        <ProtocolVersionMajor type="Integer" value="1"/>
0331        <ProtocolVersionMinor type="Integer" value="1"/>
0332      </ProtocolVersion>
0333      <BatchCount type="Integer" value="1"/>
0334    </RequestHeader>
0335    <BatchItem>
0336      <Operation type="Enumeration" value="Revoke"/>
0337      <RequestPayload>
0338        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
0339        <RevocationReason>
0340          <RevocationReasonCode type="Enumeration"
value="KeyCompromise"/>
0341        </RevocationReason>
0342        <CompromiseOccurrenceDate type="DateTime" value="1970-01-
01T00:00:06+00:00"/>
0343      </RequestPayload>
0344    </BatchItem>
0345  </RequestMessage>
0346  <ResponseMessage>
0347    <ResponseHeader>
0348      <ProtocolVersion>
0349        <ProtocolVersionMajor type="Integer" value="1"/>
0350        <ProtocolVersionMinor type="Integer" value="1"/>
```

```
0351        </ProtocolVersion>
0352        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0353        <BatchCount type="Integer" value="1"/>
0354      </ResponseHeader>
0355      <BatchItem>
0356        <Operation type="Enumeration" value="Revoke"/>
0357        <ResultStatus type="Enumeration" value="Success"/>
0358        <ResponsePayload>
0359          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0360        </ResponsePayload>
0361      </BatchItem>
0362    </ResponseMessage>
```

```
    # TIME 8
0363    <RequestMessage>
0364      <RequestHeader>
0365        <ProtocolVersion>
0366          <ProtocolVersionMajor type="Integer" value="1"/>
0367          <ProtocolVersionMinor type="Integer" value="1"/>
0368        </ProtocolVersion>
0369        <BatchCount type="Integer" value="1"/>
0370      </RequestHeader>
0371      <BatchItem>
0372        <Operation type="Enumeration" value="GetAttributes"/>
0373        <RequestPayload>
0374          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0375          <AttributeName type="TextString" value="State"/>
0376        </RequestPayload>
0377      </BatchItem>
0378    </RequestMessage>
```

```
0379    <ResponseMessage>
0380      <ResponseHeader>
0381        <ProtocolVersion>
0382          <ProtocolVersionMajor type="Integer" value="1"/>
0383          <ProtocolVersionMinor type="Integer" value="1"/>
0384        </ProtocolVersion>
0385        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0386        <BatchCount type="Integer" value="1"/>
0387      </ResponseHeader>
0388      <BatchItem>
0389        <Operation type="Enumeration" value="GetAttributes"/>
0390        <ResultStatus type="Enumeration" value="Success"/>
0391        <ResponsePayload>
0392          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0393          <Attribute>
0394            <AttributeName type="TextString" value="State"/>
0395            <AttributeValue type="Enumeration" value="Compromised"/>
0396          </Attribute>
0397        </ResponsePayload>
0398      </BatchItem>
0399    </ResponseMessage>
```

```
    # TIME 9
0400    <RequestMessage>
0401      <RequestHeader>
0402        <ProtocolVersion>
0403          <ProtocolVersionMajor type="Integer" value="1"/>
```

```
0404        <ProtocolVersionMinor type="Integer" value="1"/>
0405      </ProtocolVersion>
0406      <BatchCount type="Integer" value="1"/>
0407    </RequestHeader>
0408    <BatchItem>
0409      <Operation type="Enumeration" value="Destroy"/>
0410      <RequestPayload>
0411        <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0412      </RequestPayload>
0413    </BatchItem>
0414  </RequestMessage>
```

```
0415  <ResponseMessage>
0416    <ResponseHeader>
0417      <ProtocolVersion>
0418        <ProtocolVersionMajor type="Integer" value="1"/>
0419        <ProtocolVersionMinor type="Integer" value="1"/>
0420      </ProtocolVersion>
0421      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0422      <BatchCount type="Integer" value="1"/>
0423    </ResponseHeader>
0424    <BatchItem>
0425      <Operation type="Enumeration" value="Destroy"/>
0426      <ResultStatus type="Enumeration" value="Success"/>
0427      <ResponsePayload>
0428        <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0429      </ResponsePayload>
0430    </BatchItem>
0431  </ResponseMessage>
```

123

124 3.2.3 AKLC-M-3-11

125 CreateKeyPair, GetAttributes, Activate, GetAttributes, Destroy, Revoke, GetAttributes, Destroy

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
    Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
    Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
```

```
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-M-3-11-
    private"/>
0027              <NameType type="Enumeration"
    value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
    Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-3-11-
    public"/>
0040              <NameType type="Enumeration"
    value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
    Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="1"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
```

```
      # TIME 1
```

```
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <AttributeName type="TextString" value="State"/>
      <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
      <AttributeName type="TextString" value="Unique Identifier"/>
      <AttributeName type="TextString" value="Object Type"/>
      <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
      <AttributeName type="TextString" value="Cryptographic
Length"/>
      <AttributeName type="TextString" value="Digest"/>
      <AttributeName type="TextString" value="Initial Date"/>
      <AttributeName type="TextString" value="Last Change Date"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="PreActive"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
        <AttributeValue type="Integer" value="Sign"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Unique Identifier"/>
        <AttributeValue type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      </Attribute>
      <Attribute>
```

```
0120          <AttributeName type="TextString" value="Object Type"/>
0121          <AttributeValue type="Enumeration" value="PrivateKey"/>
0122        </Attribute>
0123        <Attribute>
0124          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0125          <AttributeValue type="Enumeration" value="RSA"/>
0126        </Attribute>
0127        <Attribute>
0128          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0129          <AttributeValue type="Integer" value="2048"/>
0130        </Attribute>
0131        <Attribute>
0132          <AttributeName type="TextString" value="Digest"/>
0133          <AttributeValue>
0134            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0135            <DigestValue type="ByteString"
      value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
      230"/>
0136            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0137          </AttributeValue>
0138        </Attribute>
0139        <Attribute>
0140          <AttributeName type="TextString" value="Initial Date"/>
0141          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0142        </Attribute>
0143        <Attribute>
0144          <AttributeName type="TextString" value="Last Change Date"/>
0145          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0146        </Attribute>
0147      </ResponsePayload>
0148    </BatchItem>
0149  </ResponseMessage>
```

```
      # TIME 2
0150  <RequestMessage>
0151    <RequestHeader>
0152      <ProtocolVersion>
0153        <ProtocolVersionMajor type="Integer" value="1"/>
0154        <ProtocolVersionMinor type="Integer" value="1"/>
0155      </ProtocolVersion>
0156      <BatchCount type="Integer" value="1"/>
0157    </RequestHeader>
0158    <BatchItem>
0159      <Operation type="Enumeration" value="Activate"/>
0160      <RequestPayload>
0161        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0162      </RequestPayload>
0163    </BatchItem>
0164  </RequestMessage>
```

```
0165  <ResponseMessage>
0166    <ResponseHeader>
0167      <ProtocolVersion>
0168        <ProtocolVersionMajor type="Integer" value="1"/>
0169        <ProtocolVersionMinor type="Integer" value="1"/>
```

```
0170      </ProtocolVersion>
0171      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0172      <BatchCount type="Integer" value="1"/>
0173    </ResponseHeader>
0174    <BatchItem>
0175      <Operation type="Enumeration" value="Activate"/>
0176      <ResultStatus type="Enumeration" value="Success"/>
0177      <ResponsePayload>
0178        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0179      </ResponsePayload>
0180    </BatchItem>
0181  </ResponseMessage>
```

```
      # TIME 3
0182  <RequestMessage>
0183    <RequestHeader>
0184      <ProtocolVersion>
0185        <ProtocolVersionMajor type="Integer" value="1"/>
0186        <ProtocolVersionMinor type="Integer" value="1"/>
0187      </ProtocolVersion>
0188      <BatchCount type="Integer" value="1"/>
0189    </RequestHeader>
0190    <BatchItem>
0191      <Operation type="Enumeration" value="GetAttributes"/>
0192      <RequestPayload>
0193        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0194        <AttributeName type="TextString" value="State"/>
0195        <AttributeName type="TextString" value="Activation Date"/>
0196        <AttributeName type="TextString" value="Deactivation Date"/>
0197      </RequestPayload>
0198    </BatchItem>
0199  </RequestMessage>
```

```
0200  <ResponseMessage>
0201    <ResponseHeader>
0202      <ProtocolVersion>
0203        <ProtocolVersionMajor type="Integer" value="1"/>
0204        <ProtocolVersionMinor type="Integer" value="1"/>
0205      </ProtocolVersion>
0206      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0207      <BatchCount type="Integer" value="1"/>
0208    </ResponseHeader>
0209    <BatchItem>
0210      <Operation type="Enumeration" value="GetAttributes"/>
0211      <ResultStatus type="Enumeration" value="Success"/>
0212      <ResponsePayload>
0213        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0214        <Attribute>
0215          <AttributeName type="TextString" value="State"/>
0216          <AttributeValue type="Enumeration" value="Active"/>
0217        </Attribute>
0218        <Attribute>
0219          <AttributeName type="TextString" value="Activation Date"/>
0220          <AttributeValue type="DateTime" value="2013-01-
      10T23:36:01+00:00"/>
0221        </Attribute>
0222      </ResponsePayload>
```

```
0223      </BatchItem>
0224    </ResponseMessage>
```

```
          # TIME 4
0225    <RequestMessage>
0226      <RequestHeader>
0227        <ProtocolVersion>
0228          <ProtocolVersionMajor type="Integer" value="1"/>
0229          <ProtocolVersionMinor type="Integer" value="1"/>
0230        </ProtocolVersion>
0231        <BatchCount type="Integer" value="1"/>
0232      </RequestHeader>
0233      <BatchItem>
0234        <Operation type="Enumeration" value="ModifyAttribute"/>
0235        <UniqueBatchItemID type="ByteString" value="0752c951bb9926cc"/>
0236        <RequestPayload>
0237          <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0238          <Attribute>
0239            <AttributeName type="TextString" value="Activation Date"/>
0240            <AttributeValue type="DateTime" value="$NOW"/>
0241          </Attribute>
0242        </RequestPayload>
0243      </BatchItem>
0244    </RequestMessage>
```

```
0245    <ResponseMessage>
0246      <ResponseHeader>
0247        <ProtocolVersion>
0248          <ProtocolVersionMajor type="Integer" value="1"/>
0249          <ProtocolVersionMinor type="Integer" value="1"/>
0250        </ProtocolVersion>
0251        <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0252        <BatchCount type="Integer" value="1"/>
0253      </ResponseHeader>
0254      <BatchItem>
0255        <Operation type="Enumeration" value="ModifyAttribute"/>
0256        <UniqueBatchItemID type="ByteString" value="0752c951bb9926cc"/>
0257        <ResultStatus type="Enumeration" value="OperationFailed"/>
0258        <ResultReason type="Enumeration" value="PermissionDenied"/>
0259        <ResultMessage type="TextString" value="DENIED"/>
0260      </BatchItem>
0261    </ResponseMessage>
```

```
          # TIME 5
0262    <RequestMessage>
0263      <RequestHeader>
0264        <ProtocolVersion>
0265          <ProtocolVersionMajor type="Integer" value="1"/>
0266          <ProtocolVersionMinor type="Integer" value="1"/>
0267        </ProtocolVersion>
0268        <BatchCount type="Integer" value="1"/>
0269      </RequestHeader>
0270      <BatchItem>
0271        <Operation type="Enumeration" value="Revoke"/>
0272        <RequestPayload>
0273          <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0274          <RevocationReason>
0275            <RevocationReasonCode type="Enumeration"
          value="KeyCompromise"/>
```

```
      </RevocationReason>
      <CompromiseOccurrenceDate type="DateTime" value="1970-01-
01T00:00:06+00:00"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

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

```
# TIME 6
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <AttributeName type="TextString" value="State"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

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

```
0329          <AttributeName type="TextString" value="State"/>
0330          <AttributeValue type="Enumeration" value="Compromised"/>
0331        </Attribute>
0332      </ResponsePayload>
0333    </BatchItem>
0334  </ResponseMessage>
```

```
      # TIME 7
0335  <RequestMessage>
0336    <RequestHeader>
0337      <ProtocolVersion>
0338        <ProtocolVersionMajor type="Integer" value="1"/>
0339        <ProtocolVersionMinor type="Integer" value="1"/>
0340      </ProtocolVersion>
0341      <BatchCount type="Integer" value="1"/>
0342    </RequestHeader>
0343    <BatchItem>
0344      <Operation type="Enumeration" value="GetAttributes"/>
0345      <RequestPayload>
0346        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0347        <AttributeName type="TextString" value="State"/>
0348      </RequestPayload>
0349    </BatchItem>
0350  </RequestMessage>
```

```
0351  <ResponseMessage>
0352    <ResponseHeader>
0353      <ProtocolVersion>
0354        <ProtocolVersionMajor type="Integer" value="1"/>
0355        <ProtocolVersionMinor type="Integer" value="1"/>
0356      </ProtocolVersion>
0357      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0358      <BatchCount type="Integer" value="1"/>
0359    </ResponseHeader>
0360    <BatchItem>
0361      <Operation type="Enumeration" value="GetAttributes"/>
0362      <ResultStatus type="Enumeration" value="Success"/>
0363      <ResponsePayload>
0364        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0365        <Attribute>
0366          <AttributeName type="TextString" value="State"/>
0367          <AttributeValue type="Enumeration" value="PreActive"/>
0368        </Attribute>
0369      </ResponsePayload>
0370    </BatchItem>
0371  </ResponseMessage>
```

```
      # TIME 8
0372  <RequestMessage>
0373    <RequestHeader>
0374      <ProtocolVersion>
0375        <ProtocolVersionMajor type="Integer" value="1"/>
0376        <ProtocolVersionMinor type="Integer" value="1"/>
0377      </ProtocolVersion>
0378      <BatchCount type="Integer" value="1"/>
0379    </RequestHeader>
0380    <BatchItem>
0381      <Operation type="Enumeration" value="Destroy"/>
0382      <RequestPayload>
```

```
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 9
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

3.3 Mandatory Test Cases KMIP 1.2

This section documents the mandatory test cases that a client or server conformant to the Asymmetric Key Lifecycle Profile SHALL support under KMIP Specification 1.2.

3.3.1 AKLC-M-1-12

CreateKeyPair, GetAttributes, GetAttributes, Destroy

```
        # 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="CreateKeyPair"/>
0011        <RequestPayload>
0012          <CommonTemplateAttribute>
0013            <Attribute>
0014              <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0015              <AttributeValue type="Enumeration" value="RSA"/>
0016            </Attribute>
0017            <Attribute>
0018              <AttributeName type="TextString" value="Cryptographic
          Length"/>
0019              <AttributeValue type="Integer" value="2048"/>
0020            </Attribute>
0021          </CommonTemplateAttribute>
0022          <PrivateKeyTemplateAttribute>
0023            <Attribute>
0024              <AttributeName type="TextString" value="Name"/>
0025              <AttributeValue>
0026                <NameValue type="TextString" value="AKLC-M-1-12-
          private"/>
0027                  <NameType type="Enumeration"
          value="UninterpretedTextString"/>
0028              </AttributeValue>
0029            </Attribute>
0030            <Attribute>
0031              <AttributeName type="TextString" value="Cryptographic
          Usage Mask"/>
0032              <AttributeValue type="Integer" value="Sign"/>
0033            </Attribute>
0034          </PrivateKeyTemplateAttribute>
0035          <PublicKeyTemplateAttribute>
0036            <Attribute>
0037              <AttributeName type="TextString" value="Name"/>
0038              <AttributeValue>
0039                <NameValue type="TextString" value="AKLC-M-1-12-
          public"/>
0040                <NameType type="Enumeration"
```

```
value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="2"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
      # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
0073        <ProtocolVersionMinor type="Integer" value="2"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
0086        <AttributeName type="TextString" value="Cryptographic
Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
0088        <AttributeName type="TextString" value="Initial Date"/>
0089        <AttributeName type="TextString" value="Last Change Date"/>
```

```
0090        <AttributeName type="TextString" value="Activation Date"/>
0091        <AttributeName type="TextString" value="Original Creation
            Date"/>
0092      </RequestPayload>
0093    </BatchItem>
0094  </RequestMessage>
0095  <ResponseMessage>
0096    <ResponseHeader>
0097      <ProtocolVersion>
0098        <ProtocolVersionMajor type="Integer" value="1"/>
0099        <ProtocolVersionMinor type="Integer" value="2"/>
0100      </ProtocolVersion>
0101      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0102      <BatchCount type="Integer" value="1"/>
0103    </ResponseHeader>
0104    <BatchItem>
0105      <Operation type="Enumeration" value="GetAttributes"/>
0106      <ResultStatus type="Enumeration" value="Success"/>
0107      <ResponsePayload>
0108        <UniqueIdentifier type="TextString"
            value="$UNIQUE_IDENTIFIER_0"/>
0109        <Attribute>
0110          <AttributeName type="TextString" value="State"/>
0111          <AttributeValue type="Enumeration" value="PreActive"/>
0112        </Attribute>
0113        <Attribute>
0114          <AttributeName type="TextString" value="Cryptographic Usage
            Mask"/>
0115          <AttributeValue type="Integer" value="Sign"/>
0116        </Attribute>
0117        <Attribute>
0118          <AttributeName type="TextString" value="Unique Identifier"/>
0119          <AttributeValue type="TextString"
            value="$UNIQUE IDENTIFIER 0"/>
0120        </Attribute>
0121        <Attribute>
0122          <AttributeName type="TextString" value="Object Type"/>
0123          <AttributeValue type="Enumeration" value="PrivateKey"/>
0124        </Attribute>
0125        <Attribute>
0126          <AttributeName type="TextString" value="Cryptographic
            Algorithm"/>
0127          <AttributeValue type="Enumeration" value="RSA"/>
0128        </Attribute>
0129        <Attribute>
0130          <AttributeName type="TextString" value="Cryptographic
            Length"/>
0131          <AttributeValue type="Integer" value="2048"/>
0132        </Attribute>
0133        <Attribute>
0134          <AttributeName type="TextString" value="Digest"/>
0135          <AttributeValue>
0136            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0137            <DigestValue type="ByteString"
            value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
            230"/>
0138            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0139          </AttributeValue>
```

```
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Initial Date"/>
        <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Last Change Date"/>
        <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Original Creation
Date"/>
        <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 2
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <AttributeName type="TextString" value="State"/>
      <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
      <AttributeName type="TextString" value="Unique Identifier"/>
      <AttributeName type="TextString" value="Object Type"/>
      <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
      <AttributeName type="TextString" value="Cryptographic
Length"/>
      <AttributeName type="TextString" value="Digest"/>
      <AttributeName type="TextString" value="Initial Date"/>
      <AttributeName type="TextString" value="Last Change Date"/>
      <AttributeName type="TextString" value="Activation Date"/>
      <AttributeName type="TextString" value="Original Creation
Date"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
```

```
0188      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0189      <BatchCount type="Integer" value="1"/>
0190    </ResponseHeader>
0191    <BatchItem>
0192      <Operation type="Enumeration" value="GetAttributes"/>
0193      <ResultStatus type="Enumeration" value="Success"/>
0194      <ResponsePayload>
0195        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0196        <Attribute>
0197          <AttributeName type="TextString" value="State"/>
0198          <AttributeValue type="Enumeration" value="PreActive"/>
0199        </Attribute>
0200        <Attribute>
0201          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0202          <AttributeValue type="Integer" value="Verify"/>
0203        </Attribute>
0204        <Attribute>
0205          <AttributeName type="TextString" value="Unique Identifier"/>
0206          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0207        </Attribute>
0208        <Attribute>
0209          <AttributeName type="TextString" value="Object Type"/>
0210          <AttributeValue type="Enumeration" value="PublicKey"/>
0211        </Attribute>
0212        <Attribute>
0213          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0214          <AttributeValue type="Enumeration" value="RSA"/>
0215        </Attribute>
0216        <Attribute>
0217          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0218          <AttributeValue type="Integer" value="2048"/>
0219        </Attribute>
0220        <Attribute>
0221          <AttributeName type="TextString" value="Digest"/>
0222          <AttributeValue>
0223            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0224            <DigestValue type="ByteString"
      value="82bcff8afab753809db804e654013ded708c3996a50c6ce9313f9b3915442
      ce9"/>
0225            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0226          </AttributeValue>
0227        </Attribute>
0228        <Attribute>
0229          <AttributeName type="TextString" value="Initial Date"/>
0230          <AttributeValue type="DateTime" value="2013-01-
      11T08:19:49+00:00"/>
0231        </Attribute>
0232        <Attribute>
0233          <AttributeName type="TextString" value="Last Change Date"/>
0234          <AttributeValue type="DateTime" value="2013-01-
      11T08:19:49+00:00"/>
0235        </Attribute>
0236        <Attribute>
```

```
0237          <AttributeName type="TextString" value="Original Creation
      Date"/>
0238          <AttributeValue type="DateTime" value="2013-01-
      11T08:19:49+00:00"/>
0239        </Attribute>
0240      </ResponsePayload>
0241    </BatchItem>
0242  </ResponseMessage>
```

```
      # TIME 3
0243  <RequestMessage>
0244    <RequestHeader>
0245      <ProtocolVersion>
0246        <ProtocolVersionMajor type="Integer" value="1"/>
0247        <ProtocolVersionMinor type="Integer" value="2"/>
0248      </ProtocolVersion>
0249      <BatchCount type="Integer" value="1"/>
0250    </RequestHeader>
0251    <BatchItem>
0252      <Operation type="Enumeration" value="Destroy"/>
0253      <RequestPayload>
0254        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0255      </RequestPayload>
0256    </BatchItem>
0257  </RequestMessage>
```

```
0258  <ResponseMessage>
0259    <ResponseHeader>
0260      <ProtocolVersion>
0261        <ProtocolVersionMajor type="Integer" value="1"/>
0262        <ProtocolVersionMinor type="Integer" value="2"/>
0263      </ProtocolVersion>
0264      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0265      <BatchCount type="Integer" value="1"/>
0266    </ResponseHeader>
0267    <BatchItem>
0268      <Operation type="Enumeration" value="Destroy"/>
0269      <ResultStatus type="Enumeration" value="Success"/>
0270      <ResponsePayload>
0271        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0272      </ResponsePayload>
0273    </BatchItem>
0274  </ResponseMessage>
```

```
      # TIME 4
0275  <RequestMessage>
0276    <RequestHeader>
0277      <ProtocolVersion>
0278        <ProtocolVersionMajor type="Integer" value="1"/>
0279        <ProtocolVersionMinor type="Integer" value="2"/>
0280      </ProtocolVersion>
0281      <BatchCount type="Integer" value="1"/>
0282    </RequestHeader>
0283    <BatchItem>
0284      <Operation type="Enumeration" value="Destroy"/>
0285      <RequestPayload>
0286        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0287      </RequestPayload>
```

```
0288    </BatchItem>
0289  </RequestMessage>
```

```
0290  <ResponseMessage>
0291    <ResponseHeader>
0292      <ProtocolVersion>
0293        <ProtocolVersionMajor type="Integer" value="1"/>
0294        <ProtocolVersionMinor type="Integer" value="2"/>
0295      </ProtocolVersion>
0296      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0297      <BatchCount type="Integer" value="1"/>
0298    </ResponseHeader>
0299    <BatchItem>
0300      <Operation type="Enumeration" value="Destroy"/>
0301      <ResultStatus type="Enumeration" value="Success"/>
0302      <ResponsePayload>
0303        <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_1"/>
0304      </ResponsePayload>
0305    </BatchItem>
0306  </ResponseMessage>
```

132

133 3.3.2 AKLC-M-2-12

134 CreateKeyPair, GetAttributes, Activate, GetAttributes, Destroy, Revoke, GetAttributes, Destroy

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
        Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
        Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-M-2-12-
        private"/>
0027              <NameType type="Enumeration"
        value="UninterpretedTextString"/>
```

```
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-2-12-
      public"/>
0040              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="2"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
```

```
      # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
0073        <ProtocolVersionMinor type="Integer" value="2"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
```

```
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
          Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0086        <AttributeName type="TextString" value="Cryptographic
          Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
0088        <AttributeName type="TextString" value="Initial Date"/>
0089        <AttributeName type="TextString" value="Last Change Date"/>
0090        <AttributeName type="TextString" value="Original Creation
          Date"/>
0091      </RequestPayload>
0092    </BatchItem>
0093  </RequestMessage>
```

```
0094  <ResponseMessage>
0095    <ResponseHeader>
0096      <ProtocolVersion>
0097        <ProtocolVersionMajor type="Integer" value="1"/>
0098        <ProtocolVersionMinor type="Integer" value="2"/>
0099      </ProtocolVersion>
0100      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0101      <BatchCount type="Integer" value="1"/>
0102    </ResponseHeader>
0103    <BatchItem>
0104      <Operation type="Enumeration" value="GetAttributes"/>
0105      <ResultStatus type="Enumeration" value="Success"/>
0106      <ResponsePayload>
0107        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0108        <Attribute>
0109          <AttributeName type="TextString" value="State"/>
0110          <AttributeValue type="Enumeration" value="PreActive"/>
0111        </Attribute>
0112        <Attribute>
0113          <AttributeName type="TextString" value="Cryptographic Usage
          Mask"/>
0114          <AttributeValue type="Integer" value="Sign"/>
0115        </Attribute>
0116        <Attribute>
0117          <AttributeName type="TextString" value="Unique Identifier"/>
0118          <AttributeValue type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0119        </Attribute>
0120        <Attribute>
0121          <AttributeName type="TextString" value="Object Type"/>
0122          <AttributeValue type="Enumeration" value="PrivateKey"/>
0123        </Attribute>
0124        <Attribute>
0125          <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0126          <AttributeValue type="Enumeration" value="RSA"/>
0127        </Attribute>
```

```
0128        <Attribute>
0129          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0130          <AttributeValue type="Integer" value="2048"/>
0131        </Attribute>
0132        <Attribute>
0133          <AttributeName type="TextString" value="Digest"/>
0134          <AttributeValue>
0135            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0136            <DigestValue type="ByteString"
      value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
      230"/>
0137            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0138          </AttributeValue>
0139        </Attribute>
0140        <Attribute>
0141          <AttributeName type="TextString" value="Initial Date"/>
0142          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0143        </Attribute>
0144        <Attribute>
0145          <AttributeName type="TextString" value="Last Change Date"/>
0146          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0147        </Attribute>
0148        <Attribute>
0149          <AttributeName type="TextString" value="Original Creation
      Date"/>
0150          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0151        </Attribute>
0152      </ResponsePayload>
0153    </BatchItem>
0154  </ResponseMessage>
```

```
      # TIME 2
0155  <RequestMessage>
0156    <RequestHeader>
0157      <ProtocolVersion>
0158        <ProtocolVersionMajor type="Integer" value="1"/>
0159        <ProtocolVersionMinor type="Integer" value="2"/>
0160      </ProtocolVersion>
0161      <BatchCount type="Integer" value="1"/>
0162    </RequestHeader>
0163    <BatchItem>
0164      <Operation type="Enumeration" value="Activate"/>
0165      <RequestPayload>
0166        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0167      </RequestPayload>
0168    </BatchItem>
0169  </RequestMessage>
```

```
0170  <ResponseMessage>
0171    <ResponseHeader>
0172      <ProtocolVersion>
0173        <ProtocolVersionMajor type="Integer" value="1"/>
0174        <ProtocolVersionMinor type="Integer" value="2"/>
0175      </ProtocolVersion>
0176      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
```

```
0177        <BatchCount type="Integer" value="1"/>
0178      </ResponseHeader>
0179      <BatchItem>
0180        <Operation type="Enumeration" value="Activate"/>
0181        <ResultStatus type="Enumeration" value="Success"/>
0182        <ResponsePayload>
0183          <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0184        </ResponsePayload>
0185      </BatchItem>
0186    </ResponseMessage>
```

```
        # TIME 3
0187    <RequestMessage>
0188      <RequestHeader>
0189        <ProtocolVersion>
0190          <ProtocolVersionMajor type="Integer" value="1"/>
0191          <ProtocolVersionMinor type="Integer" value="2"/>
0192        </ProtocolVersion>
0193        <BatchCount type="Integer" value="1"/>
0194      </RequestHeader>
0195      <BatchItem>
0196        <Operation type="Enumeration" value="GetAttributes"/>
0197        <RequestPayload>
0198          <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0199          <AttributeName type="TextString" value="State"/>
0200          <AttributeName type="TextString" value="Activation Date"/>
0201          <AttributeName type="TextString" value="Deactivation Date"/>
0202        </RequestPayload>
0203      </BatchItem>
0204    </RequestMessage>
```

```
0205    <ResponseMessage>
0206      <ResponseHeader>
0207        <ProtocolVersion>
0208          <ProtocolVersionMajor type="Integer" value="1"/>
0209          <ProtocolVersionMinor type="Integer" value="2"/>
0210        </ProtocolVersion>
0211        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0212        <BatchCount type="Integer" value="1"/>
0213      </ResponseHeader>
0214      <BatchItem>
0215        <Operation type="Enumeration" value="GetAttributes"/>
0216        <ResultStatus type="Enumeration" value="Success"/>
0217        <ResponsePayload>
0218          <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0219          <Attribute>
0220            <AttributeName type="TextString" value="State"/>
0221            <AttributeValue type="Enumeration" value="Active"/>
0222          </Attribute>
0223          <Attribute>
0224            <AttributeName type="TextString" value="Activation Date"/>
0225            <AttributeValue type="DateTime" value="2013-01-
      10T23:36:01+00:00"/>
0226          </Attribute>
0227        </ResponsePayload>
0228      </BatchItem>
0229    </ResponseMessage>
```

```
# TIME 4
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <AttributeName type="TextString" value="State"/>
      <AttributeName type="TextString" value="Activation Date"/>
      <AttributeName type="TextString" value="Deactivation Date"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="PreActive"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 5
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </RequestPayload>
  </BatchItem>
```

```
0283  </RequestMessage>
0284  <ResponseMessage>
0285    <ResponseHeader>
0286      <ProtocolVersion>
0287        <ProtocolVersionMajor type="Integer" value="1"/>
0288        <ProtocolVersionMinor type="Integer" value="2"/>
0289      </ProtocolVersion>
0290      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0291      <BatchCount type="Integer" value="1"/>
0292    </ResponseHeader>
0293    <BatchItem>
0294      <Operation type="Enumeration" value="Destroy"/>
0295      <ResultStatus type="Enumeration" value="OperationFailed"/>
0296      <ResultReason type="Enumeration" value="PermissionDenied"/>
0297      <ResultMessage type="TextString" value="DENIED"/>
0298    </BatchItem>
0299  </ResponseMessage>
      # TIME 6
0300  <RequestMessage>
0301    <RequestHeader>
0302      <ProtocolVersion>
0303        <ProtocolVersionMajor type="Integer" value="1"/>
0304        <ProtocolVersionMinor type="Integer" value="2"/>
0305      </ProtocolVersion>
0306      <BatchCount type="Integer" value="1"/>
0307    </RequestHeader>
0308    <BatchItem>
0309      <Operation type="Enumeration" value="Destroy"/>
0310      <RequestPayload>
0311        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0312      </RequestPayload>
0313    </BatchItem>
0314  </RequestMessage>
0315  <ResponseMessage>
0316    <ResponseHeader>
0317      <ProtocolVersion>
0318        <ProtocolVersionMajor type="Integer" value="1"/>
0319        <ProtocolVersionMinor type="Integer" value="2"/>
0320      </ProtocolVersion>
0321      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0322      <BatchCount type="Integer" value="1"/>
0323    </ResponseHeader>
0324    <BatchItem>
0325      <Operation type="Enumeration" value="Destroy"/>
0326      <ResultStatus type="Enumeration" value="Success"/>
0327      <ResponsePayload>
0328        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0329      </ResponsePayload>
0330    </BatchItem>
0331  </ResponseMessage>
      # TIME 7
0332  <RequestMessage>
0333    <RequestHeader>
0334      <ProtocolVersion>
0335        <ProtocolVersionMajor type="Integer" value="1"/>
0336        <ProtocolVersionMinor type="Integer" value="2"/>
```

```
0337      </ProtocolVersion>
0338      <BatchCount type="Integer" value="1"/>
0339    </RequestHeader>
0340    <BatchItem>
0341      <Operation type="Enumeration" value="Revoke"/>
0342      <RequestPayload>
0343        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0344        <RevocationReason>
0345          <RevocationReasonCode type="Enumeration"
      value="KeyCompromise"/>
0346        </RevocationReason>
0347        <CompromiseOccurrenceDate type="DateTime" value="1970-01-
      01T00:00:06+00:00"/>
0348      </RequestPayload>
0349    </BatchItem>
0350  </RequestMessage>
0351  <ResponseMessage>
0352    <ResponseHeader>
0353      <ProtocolVersion>
0354        <ProtocolVersionMajor type="Integer" value="1"/>
0355        <ProtocolVersionMinor type="Integer" value="2"/>
0356      </ProtocolVersion>
0357      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0358      <BatchCount type="Integer" value="1"/>
0359    </ResponseHeader>
0360    <BatchItem>
0361      <Operation type="Enumeration" value="Revoke"/>
0362      <ResultStatus type="Enumeration" value="Success"/>
0363      <ResponsePayload>
0364        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0365      </ResponsePayload>
0366    </BatchItem>
0367  </ResponseMessage>
      # TIME 8
0368  <RequestMessage>
0369    <RequestHeader>
0370      <ProtocolVersion>
0371        <ProtocolVersionMajor type="Integer" value="1"/>
0372        <ProtocolVersionMinor type="Integer" value="2"/>
0373      </ProtocolVersion>
0374      <BatchCount type="Integer" value="1"/>
0375    </RequestHeader>
0376    <BatchItem>
0377      <Operation type="Enumeration" value="GetAttributes"/>
0378      <RequestPayload>
0379        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0380        <AttributeName type="TextString" value="State"/>
0381      </RequestPayload>
0382    </BatchItem>
0383  </RequestMessage>
0384  <ResponseMessage>
0385    <ResponseHeader>
0386      <ProtocolVersion>
0387        <ProtocolVersionMajor type="Integer" value="1"/>
0388        <ProtocolVersionMinor type="Integer" value="2"/>
```

```
0389      </ProtocolVersion>
0390      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0391      <BatchCount type="Integer" value="1"/>
0392    </ResponseHeader>
0393    <BatchItem>
0394      <Operation type="Enumeration" value="GetAttributes"/>
0395      <ResultStatus type="Enumeration" value="Success"/>
0396      <ResponsePayload>
0397        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0398        <Attribute>
0399          <AttributeName type="TextString" value="State"/>
0400          <AttributeValue type="Enumeration" value="Compromised"/>
0401        </Attribute>
0402      </ResponsePayload>
0403    </BatchItem>
0404  </ResponseMessage>
```

```
      # TIME 9
0405  <RequestMessage>
0406    <RequestHeader>
0407      <ProtocolVersion>
0408        <ProtocolVersionMajor type="Integer" value="1"/>
0409        <ProtocolVersionMinor type="Integer" value="2"/>
0410      </ProtocolVersion>
0411      <BatchCount type="Integer" value="1"/>
0412    </RequestHeader>
0413    <BatchItem>
0414      <Operation type="Enumeration" value="Destroy"/>
0415      <RequestPayload>
0416        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0417      </RequestPayload>
0418    </BatchItem>
0419  </RequestMessage>
```

```
0420  <ResponseMessage>
0421    <ResponseHeader>
0422      <ProtocolVersion>
0423        <ProtocolVersionMajor type="Integer" value="1"/>
0424        <ProtocolVersionMinor type="Integer" value="2"/>
0425      </ProtocolVersion>
0426      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0427      <BatchCount type="Integer" value="1"/>
0428    </ResponseHeader>
0429    <BatchItem>
0430      <Operation type="Enumeration" value="Destroy"/>
0431      <ResultStatus type="Enumeration" value="Success"/>
0432      <ResponsePayload>
0433        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0434      </ResponsePayload>
0435    </BatchItem>
0436  </ResponseMessage>
```

135

136 3.3.3 AKLC-M-3-12

137 CreateKeyPair, GetAttributes, Activate, GetAttributes, Destroy, Revoke, GetAttributes, Destroy

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
      Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-M-3-12-
      private"/>
0027              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-M-3-12-
      public"/>
0040              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
```

```
0050 </RequestMessage>
0051 <ResponseMessage>
0052   <ResponseHeader>
0053     <ProtocolVersion>
0054       <ProtocolVersionMajor type="Integer" value="1"/>
0055       <ProtocolVersionMinor type="Integer" value="2"/>
0056     </ProtocolVersion>
0057     <TimeStamp type="DateTime" value="2012-04-27T08:14:39+00:00"/>
0058     <BatchCount type="Integer" value="1"/>
0059   </ResponseHeader>
0060   <BatchItem>
0061     <Operation type="Enumeration" value="CreateKeyPair"/>
0062     <ResultStatus type="Enumeration" value="Success"/>
0063     <ResponsePayload>
0064       <PrivateKeyUniqueIdentifier type="TextString"
       value="$UNIQUE_IDENTIFIER_0"/>
0065       <PublicKeyUniqueIdentifier type="TextString"
       value="$UNIQUE_IDENTIFIER_1"/>
0066     </ResponsePayload>
0067   </BatchItem>
0068 </ResponseMessage>
     # TIME 1
0069 <RequestMessage>
0070   <RequestHeader>
0071     <ProtocolVersion>
0072       <ProtocolVersionMajor type="Integer" value="1"/>
0073       <ProtocolVersionMinor type="Integer" value="2"/>
0074     </ProtocolVersion>
0075     <BatchCount type="Integer" value="1"/>
0076   </RequestHeader>
0077   <BatchItem>
0078     <Operation type="Enumeration" value="GetAttributes"/>
0079     <RequestPayload>
0080       <UniqueIdentifier type="TextString"
       value="$UNIQUE_IDENTIFIER_0"/>
0081       <AttributeName type="TextString" value="State"/>
0082       <AttributeName type="TextString" value="Cryptographic Usage
       Mask"/>
0083       <AttributeName type="TextString" value="Unique Identifier"/>
0084       <AttributeName type="TextString" value="Object Type"/>
0085       <AttributeName type="TextString" value="Cryptographic
       Algorithm"/>
0086       <AttributeName type="TextString" value="Cryptographic
       Length"/>
0087       <AttributeName type="TextString" value="Digest"/>
0088       <AttributeName type="TextString" value="Initial Date"/>
0089       <AttributeName type="TextString" value="Last Change Date"/>
0090       <AttributeName type="TextString" value="Original Creation
       Date"/>
0091     </RequestPayload>
0092   </BatchItem>
0093 </RequestMessage>
0094 <ResponseMessage>
0095   <ResponseHeader>
0096     <ProtocolVersion>
0097       <ProtocolVersionMajor type="Integer" value="1"/>
0098       <ProtocolVersionMinor type="Integer" value="2"/>
0099     </ProtocolVersion>
```

```
0100        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0101        <BatchCount type="Integer" value="1"/>
0102      </ResponseHeader>
0103      <BatchItem>
0104        <Operation type="Enumeration" value="GetAttributes"/>
0105        <ResultStatus type="Enumeration" value="Success"/>
0106        <ResponsePayload>
0107          <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0108          <Attribute>
0109            <AttributeName type="TextString" value="State"/>
0110            <AttributeValue type="Enumeration" value="PreActive"/>
0111          </Attribute>
0112          <Attribute>
0113            <AttributeName type="TextString" value="Cryptographic Usage
          Mask"/>
0114            <AttributeValue type="Integer" value="Sign"/>
0115          </Attribute>
0116          <Attribute>
0117            <AttributeName type="TextString" value="Unique Identifier"/>
0118            <AttributeValue type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0119          </Attribute>
0120          <Attribute>
0121            <AttributeName type="TextString" value="Object Type"/>
0122            <AttributeValue type="Enumeration" value="PrivateKey"/>
0123          </Attribute>
0124          <Attribute>
0125            <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0126            <AttributeValue type="Enumeration" value="RSA"/>
0127          </Attribute>
0128          <Attribute>
0129            <AttributeName type="TextString" value="Cryptographic
          Length"/>
0130            <AttributeValue type="Integer" value="2048"/>
0131          </Attribute>
0132          <Attribute>
0133            <AttributeName type="TextString" value="Digest"/>
0134            <AttributeValue>
0135              <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0136              <DigestValue type="ByteString"
          value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
          230"/>
0137              <KeyFormatType type="Enumeration" value="PKCS_1"/>
0138            </AttributeValue>
0139          </Attribute>
0140          <Attribute>
0141            <AttributeName type="TextString" value="Initial Date"/>
0142            <AttributeValue type="DateTime" value="2013-01-
          11T08:18:21+00:00"/>
0143          </Attribute>
0144          <Attribute>
0145            <AttributeName type="TextString" value="Last Change Date"/>
0146            <AttributeValue type="DateTime" value="2013-01-
          11T08:18:21+00:00"/>
0147          </Attribute>
0148          <Attribute>
```

```
0149          <AttributeName type="TextString" value="Original Creation
      Date"/>
0150          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0151        </Attribute>
0152      </ResponsePayload>
0153    </BatchItem>
0154  </ResponseMessage>
```

```
      # TIME 2
0155  <RequestMessage>
0156    <RequestHeader>
0157      <ProtocolVersion>
0158        <ProtocolVersionMajor type="Integer" value="1"/>
0159        <ProtocolVersionMinor type="Integer" value="2"/>
0160      </ProtocolVersion>
0161      <BatchCount type="Integer" value="1"/>
0162    </RequestHeader>
0163    <BatchItem>
0164      <Operation type="Enumeration" value="Activate"/>
0165      <RequestPayload>
0166        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0167      </RequestPayload>
0168    </BatchItem>
0169  </RequestMessage>
```

```
0170  <ResponseMessage>
0171    <ResponseHeader>
0172      <ProtocolVersion>
0173        <ProtocolVersionMajor type="Integer" value="1"/>
0174        <ProtocolVersionMinor type="Integer" value="2"/>
0175      </ProtocolVersion>
0176      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0177      <BatchCount type="Integer" value="1"/>
0178    </ResponseHeader>
0179    <BatchItem>
0180      <Operation type="Enumeration" value="Activate"/>
0181      <ResultStatus type="Enumeration" value="Success"/>
0182      <ResponsePayload>
0183        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0184      </ResponsePayload>
0185    </BatchItem>
0186  </ResponseMessage>
```

```
      # TIME 3
0187  <RequestMessage>
0188    <RequestHeader>
0189      <ProtocolVersion>
0190        <ProtocolVersionMajor type="Integer" value="1"/>
0191        <ProtocolVersionMinor type="Integer" value="2"/>
0192      </ProtocolVersion>
0193      <BatchCount type="Integer" value="1"/>
0194    </RequestHeader>
0195    <BatchItem>
0196      <Operation type="Enumeration" value="GetAttributes"/>
0197      <RequestPayload>
0198        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0199        <AttributeName type="TextString" value="State"/>
```

```
0200        <AttributeName type="TextString" value="Activation Date"/>
0201        <AttributeName type="TextString" value="Deactivation Date"/>
0202      </RequestPayload>
0203    </BatchItem>
0204  </RequestMessage>
0205  <ResponseMessage>
0206    <ResponseHeader>
0207      <ProtocolVersion>
0208        <ProtocolVersionMajor type="Integer" value="1"/>
0209        <ProtocolVersionMinor type="Integer" value="2"/>
0210      </ProtocolVersion>
0211      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0212      <BatchCount type="Integer" value="1"/>
0213    </ResponseHeader>
0214    <BatchItem>
0215      <Operation type="Enumeration" value="GetAttributes"/>
0216      <ResultStatus type="Enumeration" value="Success"/>
0217      <ResponsePayload>
0218        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0219        <Attribute>
0220          <AttributeName type="TextString" value="State"/>
0221          <AttributeValue type="Enumeration" value="Active"/>
0222        </Attribute>
0223        <Attribute>
0224          <AttributeName type="TextString" value="Activation Date"/>
0225          <AttributeValue type="DateTime" value="2013-01-
      10T23:36:01+00:00"/>
0226        </Attribute>
0227      </ResponsePayload>
0228    </BatchItem>
0229  </ResponseMessage>
      # TIME 4
0230  <RequestMessage>
0231    <RequestHeader>
0232      <ProtocolVersion>
0233        <ProtocolVersionMajor type="Integer" value="1"/>
0234        <ProtocolVersionMinor type="Integer" value="2"/>
0235      </ProtocolVersion>
0236      <BatchCount type="Integer" value="1"/>
0237    </RequestHeader>
0238    <BatchItem>
0239      <Operation type="Enumeration" value="ModifyAttribute"/>
0240      <UniqueBatchItemID type="ByteString" value="0752c951bb9926cc"/>
0241      <RequestPayload>
0242        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0243        <Attribute>
0244          <AttributeName type="TextString" value="Activation Date"/>
0245          <AttributeValue type="DateTime" value="$NOW"/>
0246        </Attribute>
0247      </RequestPayload>
0248    </BatchItem>
0249  </RequestMessage>
0250  <ResponseMessage>
0251    <ResponseHeader>
0252      <ProtocolVersion>
0253        <ProtocolVersionMajor type="Integer" value="1"/>
```

```
0254        <ProtocolVersionMinor type="Integer" value="2"/>
0255      </ProtocolVersion>
0256      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0257      <BatchCount type="Integer" value="1"/>
0258    </ResponseHeader>
0259    <BatchItem>
0260      <Operation type="Enumeration" value="ModifyAttribute"/>
0261      <UniqueBatchItemID type="ByteString" value="0752c951bb9926cc"/>
0262      <ResultStatus type="Enumeration" value="OperationFailed"/>
0263      <ResultReason type="Enumeration" value="PermissionDenied"/>
0264      <ResultMessage type="TextString" value="DENIED"/>
0265    </BatchItem>
0266  </ResponseMessage>
```

```
      # TIME 5
0267  <RequestMessage>
0268    <RequestHeader>
0269      <ProtocolVersion>
0270        <ProtocolVersionMajor type="Integer" value="1"/>
0271        <ProtocolVersionMinor type="Integer" value="2"/>
0272      </ProtocolVersion>
0273      <BatchCount type="Integer" value="1"/>
0274    </RequestHeader>
0275    <BatchItem>
0276      <Operation type="Enumeration" value="Revoke"/>
0277      <RequestPayload>
0278        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0279        <RevocationReason>
0280          <RevocationReasonCode type="Enumeration"
      value="KeyCompromise"/>
0281        </RevocationReason>
0282        <CompromiseOccurrenceDate type="DateTime" value="1970-01-
      01T00:00:06+00:00"/>
0283      </RequestPayload>
0284    </BatchItem>
0285  </RequestMessage>
```

```
0286  <ResponseMessage>
0287    <ResponseHeader>
0288      <ProtocolVersion>
0289        <ProtocolVersionMajor type="Integer" value="1"/>
0290        <ProtocolVersionMinor type="Integer" value="2"/>
0291      </ProtocolVersion>
0292      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0293      <BatchCount type="Integer" value="1"/>
0294    </ResponseHeader>
0295    <BatchItem>
0296      <Operation type="Enumeration" value="Revoke"/>
0297      <ResultStatus type="Enumeration" value="Success"/>
0298      <ResponsePayload>
0299        <UniqueIdentifier type="TextString"
      value="$UNIQUE IDENTIFIER 0"/>
0300      </ResponsePayload>
0301    </BatchItem>
0302  </ResponseMessage>
```

```
      # TIME 6
0303  <RequestMessage>
0304    <RequestHeader>
0305      <ProtocolVersion>
```

```
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <AttributeName type="TextString" value="State"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <Attribute>
        <AttributeName type="TextString" value="State"/>
        <AttributeValue type="Enumeration" value="Compromised"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 7
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <AttributeName type="TextString" value="State"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
```

```
0360        <ProtocolVersionMinor type="Integer" value="2"/>
0361      </ProtocolVersion>
0362      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0363      <BatchCount type="Integer" value="1"/>
0364    </ResponseHeader>
0365    <BatchItem>
0366      <Operation type="Enumeration" value="GetAttributes"/>
0367      <ResultStatus type="Enumeration" value="Success"/>
0368      <ResponsePayload>
0369        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0370        <Attribute>
0371          <AttributeName type="TextString" value="State"/>
0372          <AttributeValue type="Enumeration" value="PreActive"/>
0373        </Attribute>
0374      </ResponsePayload>
0375    </BatchItem>
0376  </ResponseMessage>
```

```
      # TIME 8
0377  <RequestMessage>
0378    <RequestHeader>
0379      <ProtocolVersion>
0380        <ProtocolVersionMajor type="Integer" value="1"/>
0381        <ProtocolVersionMinor type="Integer" value="2"/>
0382      </ProtocolVersion>
0383      <BatchCount type="Integer" value="1"/>
0384    </RequestHeader>
0385    <BatchItem>
0386      <Operation type="Enumeration" value="Destroy"/>
0387      <RequestPayload>
0388        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0389      </RequestPayload>
0390    </BatchItem>
0391  </RequestMessage>
```

```
0392  <ResponseMessage>
0393    <ResponseHeader>
0394      <ProtocolVersion>
0395        <ProtocolVersionMajor type="Integer" value="1"/>
0396        <ProtocolVersionMinor type="Integer" value="2"/>
0397      </ProtocolVersion>
0398      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0399      <BatchCount type="Integer" value="1"/>
0400    </ResponseHeader>
0401    <BatchItem>
0402      <Operation type="Enumeration" value="Destroy"/>
0403      <ResultStatus type="Enumeration" value="Success"/>
0404      <ResponsePayload>
0405        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0406      </ResponsePayload>
0407    </BatchItem>
0408  </ResponseMessage>
```

```
      # TIME 9
0409  <RequestMessage>
0410    <RequestHeader>
0411      <ProtocolVersion>
0412        <ProtocolVersionMajor type="Integer" value="1"/>
```

```
0413        <ProtocolVersionMinor type="Integer" value="2"/>
0414      </ProtocolVersion>
0415      <BatchCount type="Integer" value="1"/>
0416    </RequestHeader>
0417    <BatchItem>
0418      <Operation type="Enumeration" value="Destroy"/>
0419      <RequestPayload>
0420        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0421      </RequestPayload>
0422    </BatchItem>
0423  </RequestMessage>
```

```
0424  <ResponseMessage>
0425    <ResponseHeader>
0426      <ProtocolVersion>
0427        <ProtocolVersionMajor type="Integer" value="1"/>
0428        <ProtocolVersionMinor type="Integer" value="2"/>
0429      </ProtocolVersion>
0430      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0431      <BatchCount type="Integer" value="1"/>
0432    </ResponseHeader>
0433    <BatchItem>
0434      <Operation type="Enumeration" value="Destroy"/>
0435      <ResultStatus type="Enumeration" value="Success"/>
0436      <ResponsePayload>
0437        <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0438      </ResponsePayload>
0439    </BatchItem>
0440  </ResponseMessage>
```

138

139 3.4 Optional Test Cases KMIP 1.0

140 This section documents the optional test cases that a client or server conformant to the Asymmetric Key
141 Lifecycle Profile SHALL support under KMIP Specification 1.0.

142 3.4.1 AKLC-O-1-10

143 CreateKeyPair, GetAttributes, Destroy, GetAttributes

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
```

```
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
      Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-O-1-10-
      private"/>
0027              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-O-1-10-
      public"/>
0040              <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
      Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="0"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2013-01-11T08:32:04+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
```

```
      value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
```

```
      # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
0073        <ProtocolVersionMinor type="Integer" value="0"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0086        <AttributeName type="TextString" value="Cryptographic
      Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
0088        <AttributeName type="TextString" value="Initial Date"/>
0089        <AttributeName type="TextString" value="Last Change Date"/>
0090        <AttributeName type="TextString" value="Activation Date"/>
0091      </RequestPayload>
0092    </BatchItem>
0093  </RequestMessage>
```

```
0094  <ResponseMessage>
0095    <ResponseHeader>
0096      <ProtocolVersion>
0097        <ProtocolVersionMajor type="Integer" value="1"/>
0098        <ProtocolVersionMinor type="Integer" value="0"/>
0099      </ProtocolVersion>
0100      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0101      <BatchCount type="Integer" value="1"/>
0102    </ResponseHeader>
0103    <BatchItem>
0104      <Operation type="Enumeration" value="GetAttributes"/>
0105      <ResultStatus type="Enumeration" value="Success"/>
0106      <ResponsePayload>
0107        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0108        <Attribute>
0109          <AttributeName type="TextString" value="State"/>
0110          <AttributeValue type="Enumeration" value="PreActive"/>
0111        </Attribute>
0112        <Attribute>
0113          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0114          <AttributeValue type="Integer" value="Sign"/>
0115        </Attribute>
```

```
      <Attribute>
        <AttributeName type="TextString" value="Unique Identifier"/>
        <AttributeValue type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Object Type"/>
        <AttributeValue type="Enumeration" value="PrivateKey"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
        <AttributeValue type="Enumeration" value="RSA"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Length"/>
        <AttributeValue type="Integer" value="2048"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Digest"/>
        <AttributeValue>
          <HashingAlgorithm type="Enumeration" value="SHA_256"/>
          <DigestValue type="ByteString"
value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
230"/>
        </AttributeValue>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Initial Date"/>
        <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Last Change Date"/>
        <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 2
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 3
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="0"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      <Attribute>
        <AttributeName type="TextString" value="Unique Identifier"/>
        <AttributeValue type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Object Type"/>
        <AttributeValue type="Enumeration" value="PrivateKey"/>
```

```
0218        </Attribute>
0219        <Attribute>
0220          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0221          <AttributeValue type="Enumeration" value="RSA"/>
0222        </Attribute>
0223        <Attribute>
0224          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0225          <AttributeValue type="Integer" value="2048"/>
0226        </Attribute>
0227        <Attribute>
0228          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0229          <AttributeValue type="Integer" value="Sign"/>
0230        </Attribute>
0231        <Attribute>
0232          <AttributeName type="TextString" value="Destroy Date"/>
0233          <AttributeValue type="DateTime" value="2013-01-
      11T08:40:05+00:00"/>
0234        </Attribute>
0235        <Attribute>
0236          <AttributeName type="TextString" value="Digest"/>
0237          <AttributeValue>
0238            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0239            <DigestValue type="ByteString"
      value="4abc48c2ba00a6bba22cb6fc2827b46107354968872b395edb31354e78878
      be6"/>
0240          </AttributeValue>
0241        </Attribute>
0242        <Attribute>
0243          <AttributeName type="TextString" value="Initial Date"/>
0244          <AttributeValue type="DateTime" value="2013-01-
      11T08:40:05+00:00"/>
0245        </Attribute>
0246        <Attribute>
0247          <AttributeName type="TextString" value="Last Change Date"/>
0248          <AttributeValue type="DateTime" value="2013-01-
      11T08:40:05+00:00"/>
0249        </Attribute>
0250        <Attribute>
0251          <AttributeName type="TextString" value="Lease Time"/>
0252          <AttributeValue type="Interval" value="3600"/>
0253        </Attribute>
0254        <Attribute>
0255          <AttributeName type="TextString" value="Link"/>
0256          <AttributeValue>
0257            <LinkType type="Enumeration" value="PublicKeyLink"/>
0258            <LinkedObjectIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0259          </AttributeValue>
0260        </Attribute>
0261        <Attribute>
0262          <AttributeName type="TextString" value="Name"/>
0263          <AttributeValue>
0264            <NameValue type="TextString" value="AKLC-O-1-10-private"/>
0265            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
```

```
0266          </AttributeValue>
0267        </Attribute>
0268        <Attribute>
0269          <AttributeName type="TextString" value="State"/>
0270          <AttributeValue type="Enumeration" value="Destroyed"/>
0271        </Attribute>
0272      </ResponsePayload>
0273    </BatchItem>
0274  </ResponseMessage>
```

```
      # TIME 4
0275  <RequestMessage>
0276    <RequestHeader>
0277      <ProtocolVersion>
0278        <ProtocolVersionMajor type="Integer" value="1"/>
0279        <ProtocolVersionMinor type="Integer" value="0"/>
0280      </ProtocolVersion>
0281      <BatchCount type="Integer" value="1"/>
0282    </RequestHeader>
0283    <BatchItem>
0284      <Operation type="Enumeration" value="GetAttributes"/>
0285      <RequestPayload>
0286        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0287      </RequestPayload>
0288    </BatchItem>
0289  </RequestMessage>
```

```
0290  <ResponseMessage>
0291    <ResponseHeader>
0292      <ProtocolVersion>
0293        <ProtocolVersionMajor type="Integer" value="1"/>
0294        <ProtocolVersionMinor type="Integer" value="0"/>
0295      </ProtocolVersion>
0296      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0297      <BatchCount type="Integer" value="1"/>
0298    </ResponseHeader>
0299    <BatchItem>
0300      <Operation type="Enumeration" value="GetAttributes"/>
0301      <ResultStatus type="Enumeration" value="Success"/>
0302      <ResponsePayload>
0303        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0304        <Attribute>
0305          <AttributeName type="TextString" value="Unique Identifier"/>
0306          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0307        </Attribute>
0308        <Attribute>
0309          <AttributeName type="TextString" value="Object Type"/>
0310          <AttributeValue type="Enumeration" value="PublicKey"/>
0311        </Attribute>
0312        <Attribute>
0313          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0314          <AttributeValue type="Enumeration" value="RSA"/>
0315        </Attribute>
0316        <Attribute>
0317          <AttributeName type="TextString" value="Cryptographic
      Length"/>
```

```
0318          <AttributeValue type="Integer" value="2048"/>
0319        </Attribute>
0320        <Attribute>
0321          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0322          <AttributeValue type="Integer" value="Verify"/>
0323        </Attribute>
0324        <Attribute>
0325          <AttributeName type="TextString" value="Digest"/>
0326          <AttributeValue>
0327            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0328            <DigestValue type="ByteString"
      value="330306b0e337e32dd1b5acf92cb96fd39adb802f305e7406062248324816f
      445"/>
0329          </AttributeValue>
0330        </Attribute>
0331        <Attribute>
0332          <AttributeName type="TextString" value="Initial Date"/>
0333          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0334        </Attribute>
0335        <Attribute>
0336          <AttributeName type="TextString" value="Last Change Date"/>
0337          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0338        </Attribute>
0339        <Attribute>
0340          <AttributeName type="TextString" value="Lease Time"/>
0341          <AttributeValue type="Interval" value="3600"/>
0342        </Attribute>
0343        <Attribute>
0344          <AttributeName type="TextString" value="Link"/>
0345          <AttributeValue>
0346            <LinkType type="Enumeration" value="PrivateKeyLink"/>
0347            <LinkedObjectIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0348          </AttributeValue>
0349        </Attribute>
0350        <Attribute>
0351          <AttributeName type="TextString" value="Name"/>
0352          <AttributeValue>
0353            <NameValue type="TextString" value="AKLC-O-1-10-public"/>
0354            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0355          </AttributeValue>
0356        </Attribute>
0357        <Attribute>
0358          <AttributeName type="TextString" value="State"/>
0359          <AttributeValue type="Enumeration" value="PreActive"/>
0360        </Attribute>
0361      </ResponsePayload>
0362    </BatchItem>
0363  </ResponseMessage>
```

```
      # TIME 5
0364  <RequestMessage>
0365    <RequestHeader>
0366      <ProtocolVersion>
0367        <ProtocolVersionMajor type="Integer" value="1"/>
```

```
0368        <ProtocolVersionMinor type="Integer" value="0"/>
0369      </ProtocolVersion>
0370      <BatchCount type="Integer" value="1"/>
0371    </RequestHeader>
0372    <BatchItem>
0373      <Operation type="Enumeration" value="Destroy"/>
0374      <RequestPayload>
0375        <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0376      </RequestPayload>
0377    </BatchItem>
0378  </RequestMessage>
0379  <ResponseMessage>
0380    <ResponseHeader>
0381      <ProtocolVersion>
0382        <ProtocolVersionMajor type="Integer" value="1"/>
0383        <ProtocolVersionMinor type="Integer" value="0"/>
0384      </ProtocolVersion>
0385      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0386      <BatchCount type="Integer" value="1"/>
0387    </ResponseHeader>
0388    <BatchItem>
0389      <Operation type="Enumeration" value="Destroy"/>
0390      <ResultStatus type="Enumeration" value="Success"/>
0391      <ResponsePayload>
0392        <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0393      </ResponsePayload>
0394    </BatchItem>
0395  </ResponseMessage>
    # TIME 6
0396  <RequestMessage>
0397    <RequestHeader>
0398      <ProtocolVersion>
0399        <ProtocolVersionMajor type="Integer" value="1"/>
0400        <ProtocolVersionMinor type="Integer" value="0"/>
0401      </ProtocolVersion>
0402      <BatchCount type="Integer" value="1"/>
0403    </RequestHeader>
0404    <BatchItem>
0405      <Operation type="Enumeration" value="GetAttributes"/>
0406      <RequestPayload>
0407        <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0408      </RequestPayload>
0409    </BatchItem>
0410  </RequestMessage>
0411  <ResponseMessage>
0412    <ResponseHeader>
0413      <ProtocolVersion>
0414        <ProtocolVersionMajor type="Integer" value="1"/>
0415        <ProtocolVersionMinor type="Integer" value="0"/>
0416      </ProtocolVersion>
0417      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0418      <BatchCount type="Integer" value="1"/>
0419    </ResponseHeader>
0420    <BatchItem>
0421      <Operation type="Enumeration" value="GetAttributes"/>
```

```
0422      <ResultStatus type="Enumeration" value="Success"/>
0423      <ResponsePayload>
0424        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_1"/>
0425        <Attribute>
0426          <AttributeName type="TextString" value="Unique Identifier"/>
0427          <AttributeValue type="TextString"
          value="$UNIQUE_IDENTIFIER_1"/>
0428        </Attribute>
0429        <Attribute>
0430          <AttributeName type="TextString" value="Object Type"/>
0431          <AttributeValue type="Enumeration" value="PublicKey"/>
0432        </Attribute>
0433        <Attribute>
0434          <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0435          <AttributeValue type="Enumeration" value="RSA"/>
0436        </Attribute>
0437        <Attribute>
0438          <AttributeName type="TextString" value="Cryptographic
          Length"/>
0439          <AttributeValue type="Integer" value="2048"/>
0440        </Attribute>
0441        <Attribute>
0442          <AttributeName type="TextString" value="Cryptographic Usage
          Mask"/>
0443          <AttributeValue type="Integer" value="Verify"/>
0444        </Attribute>
0445        <Attribute>
0446          <AttributeName type="TextString" value="Destroy Date"/>
0447          <AttributeValue type="DateTime" value="2013-01-
          11T08:38:18+00:00"/>
0448        </Attribute>
0449        <Attribute>
0450          <AttributeName type="TextString" value="Digest"/>
0451          <AttributeValue>
0452            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0453            <DigestValue type="ByteString"
          value="b06f3e3d107a282adb5fe316356d13679d7cf7429d14a6f20665f45ba4d28
          83c"/>
0454          </AttributeValue>
0455        </Attribute>
0456        <Attribute>
0457          <AttributeName type="TextString" value="Initial Date"/>
0458          <AttributeValue type="DateTime" value="2013-01-
          11T08:38:18+00:00"/>
0459        </Attribute>
0460        <Attribute>
0461          <AttributeName type="TextString" value="Last Change Date"/>
0462          <AttributeValue type="DateTime" value="2013-01-
          11T08:38:18+00:00"/>
0463        </Attribute>
0464        <Attribute>
0465          <AttributeName type="TextString" value="Lease Time"/>
0466          <AttributeValue type="Interval" value="3600"/>
0467        </Attribute>
0468        <Attribute>
0469          <AttributeName type="TextString" value="Link"/>
```

```
0470          <AttributeValue>
0471            <LinkType type="Enumeration" value="PrivateKeyLink"/>
0472            <LinkedObjectIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0473          </AttributeValue>
0474        </Attribute>
0475        <Attribute>
0476          <AttributeName type="TextString" value="Name"/>
0477          <AttributeValue>
0478            <NameValue type="TextString" value="AKLC-O-1-10-public"/>
0479            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0480          </AttributeValue>
0481        </Attribute>
0482        <Attribute>
0483          <AttributeName type="TextString" value="State"/>
0484          <AttributeValue type="Enumeration" value="Destroyed"/>
0485        </Attribute>
0486      </ResponsePayload>
0487    </BatchItem>
0488  </ResponseMessage>
```

144

145 3.5 Optional Test Cases KMIP 1.1

146 This section documents the optional test cases that a client or server conformant to the Asymmetric Key
147 Lifecycle Profile SHALL support under KMIP Specification 1.1.

148 3.5.1 AKLC-O-1-11

149 CreateKeyPair, GetAttributes, Destroy, GetAttributes

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
0018            <AttributeName type="TextString" value="Cryptographic
      Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
```

```
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-O-1-11-
    private"/>
0027              <NameType type="Enumeration"
    value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
    Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-O-1-11-
    public"/>
0040              <NameType type="Enumeration"
    value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
    Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="1"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2013-01-11T08:32:04+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
0067    </BatchItem>
0068  </ResponseMessage>
```

```
      # TIME 1
0069  <RequestMessage>
0070    <RequestHeader>
0071      <ProtocolVersion>
0072        <ProtocolVersionMajor type="Integer" value="1"/>
```

```
0073        <ProtocolVersionMinor type="Integer" value="1"/>
0074      </ProtocolVersion>
0075      <BatchCount type="Integer" value="1"/>
0076    </RequestHeader>
0077    <BatchItem>
0078      <Operation type="Enumeration" value="GetAttributes"/>
0079      <RequestPayload>
0080        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0081        <AttributeName type="TextString" value="State"/>
0082        <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0083        <AttributeName type="TextString" value="Unique Identifier"/>
0084        <AttributeName type="TextString" value="Object Type"/>
0085        <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0086        <AttributeName type="TextString" value="Cryptographic
      Length"/>
0087        <AttributeName type="TextString" value="Digest"/>
0088        <AttributeName type="TextString" value="Initial Date"/>
0089        <AttributeName type="TextString" value="Last Change Date"/>
0090        <AttributeName type="TextString" value="Activation Date"/>
0091      </RequestPayload>
0092    </BatchItem>
0093  </RequestMessage>
```

```
0094  <ResponseMessage>
0095    <ResponseHeader>
0096      <ProtocolVersion>
0097        <ProtocolVersionMajor type="Integer" value="1"/>
0098        <ProtocolVersionMinor type="Integer" value="1"/>
0099      </ProtocolVersion>
0100      <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0101      <BatchCount type="Integer" value="1"/>
0102    </ResponseHeader>
0103    <BatchItem>
0104      <Operation type="Enumeration" value="GetAttributes"/>
0105      <ResultStatus type="Enumeration" value="Success"/>
0106      <ResponsePayload>
0107        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0108        <Attribute>
0109          <AttributeName type="TextString" value="State"/>
0110          <AttributeValue type="Enumeration" value="PreActive"/>
0111        </Attribute>
0112        <Attribute>
0113          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0114          <AttributeValue type="Integer" value="Sign"/>
0115        </Attribute>
0116        <Attribute>
0117          <AttributeName type="TextString" value="Unique Identifier"/>
0118          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0119        </Attribute>
0120        <Attribute>
0121          <AttributeName type="TextString" value="Object Type"/>
0122          <AttributeValue type="Enumeration" value="PrivateKey"/>
0123        </Attribute>
```

```
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
        <AttributeValue type="Enumeration" value="RSA"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Length"/>
        <AttributeValue type="Integer" value="2048"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Digest"/>
        <AttributeValue>
          <HashingAlgorithm type="Enumeration" value="SHA_256"/>
          <DigestValue type="ByteString"
value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
230"/>
          <KeyFormatType type="Enumeration" value="PKCS_1"/>
        </AttributeValue>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Initial Date"/>
        <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Last Change Date"/>
        <AttributeValue type="DateTime" value="2013-01-
11T08:18:21+00:00"/>
      </Attribute>
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```

```
# TIME 2
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="Destroy"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_0"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
```

```
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="1"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
```

```
0174    </ResponseHeader>
0175    <BatchItem>
0176      <Operation type="Enumeration" value="Destroy"/>
0177      <ResultStatus type="Enumeration" value="Success"/>
0178      <ResponsePayload>
0179        <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0180      </ResponsePayload>
0181    </BatchItem>
0182  </ResponseMessage>
```

```
        # TIME 3
0183  <RequestMessage>
0184    <RequestHeader>
0185      <ProtocolVersion>
0186        <ProtocolVersionMajor type="Integer" value="1"/>
0187        <ProtocolVersionMinor type="Integer" value="1"/>
0188      </ProtocolVersion>
0189      <BatchCount type="Integer" value="1"/>
0190    </RequestHeader>
0191    <BatchItem>
0192      <Operation type="Enumeration" value="GetAttributes"/>
0193      <RequestPayload>
0194        <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0195      </RequestPayload>
0196    </BatchItem>
0197  </RequestMessage>
```

```
0198  <ResponseMessage>
0199    <ResponseHeader>
0200      <ProtocolVersion>
0201        <ProtocolVersionMajor type="Integer" value="1"/>
0202        <ProtocolVersionMinor type="Integer" value="1"/>
0203      </ProtocolVersion>
0204      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0205      <BatchCount type="Integer" value="1"/>
0206    </ResponseHeader>
0207    <BatchItem>
0208      <Operation type="Enumeration" value="GetAttributes"/>
0209      <ResultStatus type="Enumeration" value="Success"/>
0210      <ResponsePayload>
0211        <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0212        <Attribute>
0213          <AttributeName type="TextString" value="Unique Identifier"/>
0214          <AttributeValue type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0215        </Attribute>
0216        <Attribute>
0217          <AttributeName type="TextString" value="Object Type"/>
0218          <AttributeValue type="Enumeration" value="PrivateKey"/>
0219        </Attribute>
0220        <Attribute>
0221          <AttributeName type="TextString" value="Cryptographic
        Algorithm"/>
0222          <AttributeValue type="Enumeration" value="RSA"/>
0223        </Attribute>
0224        <Attribute>
0225          <AttributeName type="TextString" value="Cryptographic
```

```
Length"/>
0226          <AttributeValue type="Integer" value="2048"/>
0227        </Attribute>
0228        <Attribute>
0229          <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
0230          <AttributeValue type="Integer" value="Sign"/>
0231        </Attribute>
0232        <Attribute>
0233          <AttributeName type="TextString" value="Destroy Date"/>
0234          <AttributeValue type="DateTime" value="2013-01-
11T08:40:05+00:00"/>
0235        </Attribute>
0236        <Attribute>
0237          <AttributeName type="TextString" value="Digest"/>
0238          <AttributeValue>
0239            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0240            <DigestValue type="ByteString"
value="4abc48c2ba00a6bba22cb6fc2827b46107354968872b395edb31354e78878
be6"/>
0241            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0242          </AttributeValue>
0243        </Attribute>
0244        <Attribute>
0245          <AttributeName type="TextString" value="Fresh"/>
0246          <AttributeValue type="Boolean" value="true"/>
0247        </Attribute>
0248        <Attribute>
0249          <AttributeName type="TextString" value="Initial Date"/>
0250          <AttributeValue type="DateTime" value="2013-01-
11T08:40:05+00:00"/>
0251        </Attribute>
0252        <Attribute>
0253          <AttributeName type="TextString" value="Last Change Date"/>
0254          <AttributeValue type="DateTime" value="2013-01-
11T08:40:05+00:00"/>
0255        </Attribute>
0256        <Attribute>
0257          <AttributeName type="TextString" value="Lease Time"/>
0258          <AttributeValue type="Interval" value="3600"/>
0259        </Attribute>
0260        <Attribute>
0261          <AttributeName type="TextString" value="Link"/>
0262          <AttributeValue>
0263            <LinkType type="Enumeration" value="PublicKeyLink"/>
0264            <LinkedObjectIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
0265          </AttributeValue>
0266        </Attribute>
0267        <Attribute>
0268          <AttributeName type="TextString" value="Name"/>
0269          <AttributeValue>
0270            <NameValue type="TextString" value="AKLC-O-1-11-private"/>
0271            <NameType type="Enumeration"
value="UninterpretedTextString"/>
0272          </AttributeValue>
0273        </Attribute>
0274        <Attribute>
```

```
0275          <AttributeName type="TextString" value="State"/>
0276          <AttributeValue type="Enumeration" value="Destroyed"/>
0277        </Attribute>
0278      </ResponsePayload>
0279    </BatchItem>
0280  </ResponseMessage>
```

```
      # TIME 4
0281  <RequestMessage>
0282    <RequestHeader>
0283      <ProtocolVersion>
0284        <ProtocolVersionMajor type="Integer" value="1"/>
0285        <ProtocolVersionMinor type="Integer" value="1"/>
0286      </ProtocolVersion>
0287      <BatchCount type="Integer" value="1"/>
0288    </RequestHeader>
0289    <BatchItem>
0290      <Operation type="Enumeration" value="GetAttributes"/>
0291      <RequestPayload>
0292        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0293      </RequestPayload>
0294    </BatchItem>
0295  </RequestMessage>
```

```
0296  <ResponseMessage>
0297    <ResponseHeader>
0298      <ProtocolVersion>
0299        <ProtocolVersionMajor type="Integer" value="1"/>
0300        <ProtocolVersionMinor type="Integer" value="1"/>
0301      </ProtocolVersion>
0302      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0303      <BatchCount type="Integer" value="1"/>
0304    </ResponseHeader>
0305    <BatchItem>
0306      <Operation type="Enumeration" value="GetAttributes"/>
0307      <ResultStatus type="Enumeration" value="Success"/>
0308      <ResponsePayload>
0309        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0310        <Attribute>
0311          <AttributeName type="TextString" value="Unique Identifier"/>
0312          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0313        </Attribute>
0314        <Attribute>
0315          <AttributeName type="TextString" value="Object Type"/>
0316          <AttributeValue type="Enumeration" value="PublicKey"/>
0317        </Attribute>
0318        <Attribute>
0319          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0320          <AttributeValue type="Enumeration" value="RSA"/>
0321        </Attribute>
0322        <Attribute>
0323          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0324          <AttributeValue type="Integer" value="2048"/>
0325        </Attribute>
0326        <Attribute>
```

```
0327          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0328          <AttributeValue type="Integer" value="Verify"/>
0329        </Attribute>
0330        <Attribute>
0331          <AttributeName type="TextString" value="Digest"/>
0332          <AttributeValue>
0333            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0334            <DigestValue type="ByteString"
      value="330306b0e337e32dd1b5acf92cb96fd39adb802f305e7406062248324816f
      445"/>
0335            <KeyFormatType type="Enumeration" value="PKCS 1"/>
0336          </AttributeValue>
0337        </Attribute>
0338        <Attribute>
0339          <AttributeName type="TextString" value="Fresh"/>
0340          <AttributeValue type="Boolean" value="true"/>
0341        </Attribute>
0342        <Attribute>
0343          <AttributeName type="TextString" value="Initial Date"/>
0344          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0345        </Attribute>
0346        <Attribute>
0347          <AttributeName type="TextString" value="Last Change Date"/>
0348          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0349        </Attribute>
0350        <Attribute>
0351          <AttributeName type="TextString" value="Lease Time"/>
0352          <AttributeValue type="Interval" value="3600"/>
0353        </Attribute>
0354        <Attribute>
0355          <AttributeName type="TextString" value="Link"/>
0356          <AttributeValue>
0357            <LinkType type="Enumeration" value="PrivateKeyLink"/>
0358            <LinkedObjectIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0359          </AttributeValue>
0360        </Attribute>
0361        <Attribute>
0362          <AttributeName type="TextString" value="Name"/>
0363          <AttributeValue>
0364            <NameValue type="TextString" value="AKLC-O-1-11-public"/>
0365            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0366          </AttributeValue>
0367        </Attribute>
0368        <Attribute>
0369          <AttributeName type="TextString" value="State"/>
0370          <AttributeValue type="Enumeration" value="PreActive"/>
0371        </Attribute>
0372      </ResponsePayload>
0373    </BatchItem>
0374  </ResponseMessage>
```

```
      # TIME 5
0375  <RequestMessage>
0376    <RequestHeader>
```

```
0377        <ProtocolVersion>
0378          <ProtocolVersionMajor type="Integer" value="1"/>
0379          <ProtocolVersionMinor type="Integer" value="1"/>
0380        </ProtocolVersion>
0381        <BatchCount type="Integer" value="1"/>
0382      </RequestHeader>
0383      <BatchItem>
0384        <Operation type="Enumeration" value="Destroy"/>
0385        <RequestPayload>
0386          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0387        </RequestPayload>
0388      </BatchItem>
0389    </RequestMessage>
0390    <ResponseMessage>
0391      <ResponseHeader>
0392        <ProtocolVersion>
0393          <ProtocolVersionMajor type="Integer" value="1"/>
0394          <ProtocolVersionMinor type="Integer" value="1"/>
0395        </ProtocolVersion>
0396        <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0397        <BatchCount type="Integer" value="1"/>
0398      </ResponseHeader>
0399      <BatchItem>
0400        <Operation type="Enumeration" value="Destroy"/>
0401        <ResultStatus type="Enumeration" value="Success"/>
0402        <ResponsePayload>
0403          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0404        </ResponsePayload>
0405      </BatchItem>
0406    </ResponseMessage>
        # TIME 6
0407    <RequestMessage>
0408      <RequestHeader>
0409        <ProtocolVersion>
0410          <ProtocolVersionMajor type="Integer" value="1"/>
0411          <ProtocolVersionMinor type="Integer" value="1"/>
0412        </ProtocolVersion>
0413        <BatchCount type="Integer" value="1"/>
0414      </RequestHeader>
0415      <BatchItem>
0416        <Operation type="Enumeration" value="GetAttributes"/>
0417        <RequestPayload>
0418          <UniqueIdentifier type="TextString"
    value="$UNIQUE_IDENTIFIER_1"/>
0419        </RequestPayload>
0420      </BatchItem>
0421    </RequestMessage>
0422    <ResponseMessage>
0423      <ResponseHeader>
0424        <ProtocolVersion>
0425          <ProtocolVersionMajor type="Integer" value="1"/>
0426          <ProtocolVersionMinor type="Integer" value="1"/>
0427        </ProtocolVersion>
0428        <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0429        <BatchCount type="Integer" value="1"/>
0430      </ResponseHeader>
```

```
0431    <BatchItem>
0432      <Operation type="Enumeration" value="GetAttributes"/>
0433      <ResultStatus type="Enumeration" value="Success"/>
0434      <ResponsePayload>
0435        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_1"/>
0436        <Attribute>
0437          <AttributeName type="TextString" value="Unique Identifier"/>
0438          <AttributeValue type="TextString"
          value="$UNIQUE_IDENTIFIER_1"/>
0439        </Attribute>
0440        <Attribute>
0441          <AttributeName type="TextString" value="Object Type"/>
0442          <AttributeValue type="Enumeration" value="PublicKey"/>
0443        </Attribute>
0444        <Attribute>
0445          <AttributeName type="TextString" value="Cryptographic
          Algorithm"/>
0446          <AttributeValue type="Enumeration" value="RSA"/>
0447        </Attribute>
0448        <Attribute>
0449          <AttributeName type="TextString" value="Cryptographic
          Length"/>
0450          <AttributeValue type="Integer" value="2048"/>
0451        </Attribute>
0452        <Attribute>
0453          <AttributeName type="TextString" value="Cryptographic Usage
          Mask"/>
0454          <AttributeValue type="Integer" value="Verify"/>
0455        </Attribute>
0456        <Attribute>
0457          <AttributeName type="TextString" value="Destroy Date"/>
0458          <AttributeValue type="DateTime" value="2013-01-
          11T08:38:18+00:00"/>
0459        </Attribute>
0460        <Attribute>
0461          <AttributeName type="TextString" value="Digest"/>
0462          <AttributeValue>
0463            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0464            <DigestValue type="ByteString"
          value="b06f3e3d107a282adb5fe316356d13679d7cf7429d14a6f20665f45ba4d28
          83c"/>
0465            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0466          </AttributeValue>
0467        </Attribute>
0468        <Attribute>
0469          <AttributeName type="TextString" value="Fresh"/>
0470          <AttributeValue type="Boolean" value="true"/>
0471        </Attribute>
0472        <Attribute>
0473          <AttributeName type="TextString" value="Initial Date"/>
0474          <AttributeValue type="DateTime" value="2013-01-
          11T08:38:18+00:00"/>
0475        </Attribute>
0476        <Attribute>
0477          <AttributeName type="TextString" value="Last Change Date"/>
0478          <AttributeValue type="DateTime" value="2013-01-
          11T08:38:18+00:00"/>
```

```
0479        </Attribute>
0480        <Attribute>
0481          <AttributeName type="TextString" value="Lease Time"/>
0482          <AttributeValue type="Interval" value="3600"/>
0483        </Attribute>
0484        <Attribute>
0485          <AttributeName type="TextString" value="Link"/>
0486          <AttributeValue>
0487            <LinkType type="Enumeration" value="PrivateKeyLink"/>
0488            <LinkedObjectIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0489          </AttributeValue>
0490        </Attribute>
0491        <Attribute>
0492          <AttributeName type="TextString" value="Name"/>
0493          <AttributeValue>
0494            <NameValue type="TextString" value="AKLC-O-1-11-public"/>
0495            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0496          </AttributeValue>
0497        </Attribute>
0498        <Attribute>
0499          <AttributeName type="TextString" value="State"/>
0500          <AttributeValue type="Enumeration" value="Destroyed"/>
0501        </Attribute>
0502      </ResponsePayload>
0503    </BatchItem>
0504  </ResponseMessage>
```

3.6 Optional Test Cases KMIP 1.2

This section documents the optional test cases that a client or server conformant to the Asymmetric Key Lifecycle Profile SHALL support under KMIP Specification 1.2.

3.6.1 AKLC-O-1-12

CreateKeyPair, GetAttributes, Destroy, GetAttributes

```
      # 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="CreateKeyPair"/>
0011      <RequestPayload>
0012        <CommonTemplateAttribute>
0013          <Attribute>
0014            <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0015            <AttributeValue type="Enumeration" value="RSA"/>
0016          </Attribute>
0017          <Attribute>
```

```
0018            <AttributeName type="TextString" value="Cryptographic
        Length"/>
0019            <AttributeValue type="Integer" value="2048"/>
0020          </Attribute>
0021        </CommonTemplateAttribute>
0022        <PrivateKeyTemplateAttribute>
0023          <Attribute>
0024            <AttributeName type="TextString" value="Name"/>
0025            <AttributeValue>
0026              <NameValue type="TextString" value="AKLC-O-1-12-
        private"/>
0027              <NameType type="Enumeration"
        value="UninterpretedTextString"/>
0028            </AttributeValue>
0029          </Attribute>
0030          <Attribute>
0031            <AttributeName type="TextString" value="Cryptographic
        Usage Mask"/>
0032            <AttributeValue type="Integer" value="Sign"/>
0033          </Attribute>
0034        </PrivateKeyTemplateAttribute>
0035        <PublicKeyTemplateAttribute>
0036          <Attribute>
0037            <AttributeName type="TextString" value="Name"/>
0038            <AttributeValue>
0039              <NameValue type="TextString" value="AKLC-O-1-12-
        public"/>
0040              <NameType type="Enumeration"
        value="UninterpretedTextString"/>
0041            </AttributeValue>
0042          </Attribute>
0043          <Attribute>
0044            <AttributeName type="TextString" value="Cryptographic
        Usage Mask"/>
0045            <AttributeValue type="Integer" value="Verify"/>
0046          </Attribute>
0047        </PublicKeyTemplateAttribute>
0048      </RequestPayload>
0049    </BatchItem>
0050  </RequestMessage>
```

```
0051  <ResponseMessage>
0052    <ResponseHeader>
0053      <ProtocolVersion>
0054        <ProtocolVersionMajor type="Integer" value="1"/>
0055        <ProtocolVersionMinor type="Integer" value="2"/>
0056      </ProtocolVersion>
0057      <TimeStamp type="DateTime" value="2013-01-11T08:32:04+00:00"/>
0058      <BatchCount type="Integer" value="1"/>
0059    </ResponseHeader>
0060    <BatchItem>
0061      <Operation type="Enumeration" value="CreateKeyPair"/>
0062      <ResultStatus type="Enumeration" value="Success"/>
0063      <ResponsePayload>
0064        <PrivateKeyUniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0065        <PublicKeyUniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_1"/>
0066      </ResponsePayload>
```

```
0067      </BatchItem>
0068    </ResponseMessage>
```

```
        # TIME 1
0069    <RequestMessage>
0070      <RequestHeader>
0071        <ProtocolVersion>
0072          <ProtocolVersionMajor type="Integer" value="1"/>
0073          <ProtocolVersionMinor type="Integer" value="2"/>
0074        </ProtocolVersion>
0075        <BatchCount type="Integer" value="1"/>
0076      </RequestHeader>
0077      <BatchItem>
0078        <Operation type="Enumeration" value="GetAttributes"/>
0079        <RequestPayload>
0080          <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0081          <AttributeName type="TextString" value="State"/>
0082          <AttributeName type="TextString" value="Cryptographic Usage
        Mask"/>
0083          <AttributeName type="TextString" value="Unique Identifier"/>
0084          <AttributeName type="TextString" value="Object Type"/>
0085          <AttributeName type="TextString" value="Cryptographic
        Algorithm"/>
0086          <AttributeName type="TextString" value="Cryptographic
        Length"/>
0087          <AttributeName type="TextString" value="Digest"/>
0088          <AttributeName type="TextString" value="Initial Date"/>
0089          <AttributeName type="TextString" value="Last Change Date"/>
0090          <AttributeName type="TextString" value="Activation Date"/>
0091          <AttributeName type="TextString" value="Original Creation
        Date"/>
0092        </RequestPayload>
0093      </BatchItem>
0094    </RequestMessage>
```

```
0095    <ResponseMessage>
0096      <ResponseHeader>
0097        <ProtocolVersion>
0098          <ProtocolVersionMajor type="Integer" value="1"/>
0099          <ProtocolVersionMinor type="Integer" value="2"/>
0100        </ProtocolVersion>
0101        <TimeStamp type="DateTime" value="2012-04-27T08:12:24+00:00"/>
0102        <BatchCount type="Integer" value="1"/>
0103      </ResponseHeader>
0104      <BatchItem>
0105        <Operation type="Enumeration" value="GetAttributes"/>
0106        <ResultStatus type="Enumeration" value="Success"/>
0107        <ResponsePayload>
0108          <UniqueIdentifier type="TextString"
        value="$UNIQUE_IDENTIFIER_0"/>
0109          <Attribute>
0110            <AttributeName type="TextString" value="State"/>
0111            <AttributeValue type="Enumeration" value="PreActive"/>
0112          </Attribute>
0113          <Attribute>
0114            <AttributeName type="TextString" value="Cryptographic Usage
        Mask"/>
0115            <AttributeValue type="Integer" value="Sign"/>
0116          </Attribute>
```

```
0117        <Attribute>
0118          <AttributeName type="TextString" value="Unique Identifier"/>
0119          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0120        </Attribute>
0121        <Attribute>
0122          <AttributeName type="TextString" value="Object Type"/>
0123          <AttributeValue type="Enumeration" value="PrivateKey"/>
0124        </Attribute>
0125        <Attribute>
0126          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0127          <AttributeValue type="Enumeration" value="RSA"/>
0128        </Attribute>
0129        <Attribute>
0130          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0131          <AttributeValue type="Integer" value="2048"/>
0132        </Attribute>
0133        <Attribute>
0134          <AttributeName type="TextString" value="Digest"/>
0135          <AttributeValue>
0136            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0137            <DigestValue type="ByteString"
      value="8eb422ae2b006a05d3c8a542a28536735241b6dc1c37926bc8007bd6220d9
      230"/>
0138            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0139          </AttributeValue>
0140        </Attribute>
0141        <Attribute>
0142          <AttributeName type="TextString" value="Initial Date"/>
0143          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0144        </Attribute>
0145        <Attribute>
0146          <AttributeName type="TextString" value="Last Change Date"/>
0147          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0148        </Attribute>
0149        <Attribute>
0150          <AttributeName type="TextString" value="Original Creation
      Date"/>
0151          <AttributeValue type="DateTime" value="2013-01-
      11T08:18:21+00:00"/>
0152        </Attribute>
0153      </ResponsePayload>
0154    </BatchItem>
0155  </ResponseMessage>
```

```
      # TIME 2
0156  <RequestMessage>
0157    <RequestHeader>
0158      <ProtocolVersion>
0159        <ProtocolVersionMajor type="Integer" value="1"/>
0160        <ProtocolVersionMinor type="Integer" value="2"/>
0161      </ProtocolVersion>
0162      <BatchCount type="Integer" value="1"/>
0163    </RequestHeader>
0164    <BatchItem>
```

```
0165      <Operation type="Enumeration" value="Destroy"/>
0166      <RequestPayload>
0167        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0168      </RequestPayload>
0169    </BatchItem>
0170  </RequestMessage>
```

```
0171  <ResponseMessage>
0172    <ResponseHeader>
0173      <ProtocolVersion>
0174        <ProtocolVersionMajor type="Integer" value="1"/>
0175        <ProtocolVersionMinor type="Integer" value="2"/>
0176      </ProtocolVersion>
0177      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0178      <BatchCount type="Integer" value="1"/>
0179    </ResponseHeader>
0180    <BatchItem>
0181      <Operation type="Enumeration" value="Destroy"/>
0182      <ResultStatus type="Enumeration" value="Success"/>
0183      <ResponsePayload>
0184        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0185      </ResponsePayload>
0186    </BatchItem>
0187  </ResponseMessage>
```

```
      # TIME 3
0188  <RequestMessage>
0189    <RequestHeader>
0190      <ProtocolVersion>
0191        <ProtocolVersionMajor type="Integer" value="1"/>
0192        <ProtocolVersionMinor type="Integer" value="2"/>
0193      </ProtocolVersion>
0194      <BatchCount type="Integer" value="1"/>
0195    </RequestHeader>
0196    <BatchItem>
0197      <Operation type="Enumeration" value="GetAttributes"/>
0198      <RequestPayload>
0199        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0200      </RequestPayload>
0201    </BatchItem>
0202  </RequestMessage>
```

```
0203  <ResponseMessage>
0204    <ResponseHeader>
0205      <ProtocolVersion>
0206        <ProtocolVersionMajor type="Integer" value="1"/>
0207        <ProtocolVersionMinor type="Integer" value="2"/>
0208      </ProtocolVersion>
0209      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0210      <BatchCount type="Integer" value="1"/>
0211    </ResponseHeader>
0212    <BatchItem>
0213      <Operation type="Enumeration" value="GetAttributes"/>
0214      <ResultStatus type="Enumeration" value="Success"/>
0215      <ResponsePayload>
0216        <UniqueIdentifier type="TextString"
          value="$UNIQUE_IDENTIFIER_0"/>
0217        <Attribute>
```

```
0218          <AttributeName type="TextString" value="Unique Identifier"/>
0219          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0220        </Attribute>
0221        <Attribute>
0222          <AttributeName type="TextString" value="Object Type"/>
0223          <AttributeValue type="Enumeration" value="PrivateKey"/>
0224        </Attribute>
0225        <Attribute>
0226          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0227          <AttributeValue type="Enumeration" value="RSA"/>
0228        </Attribute>
0229        <Attribute>
0230          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0231          <AttributeValue type="Integer" value="2048"/>
0232        </Attribute>
0233        <Attribute>
0234          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0235          <AttributeValue type="Integer" value="Sign"/>
0236        </Attribute>
0237        <Attribute>
0238          <AttributeName type="TextString" value="Destroy Date"/>
0239          <AttributeValue type="DateTime" value="2013-01-
      11T08:40:05+00:00"/>
0240        </Attribute>
0241        <Attribute>
0242          <AttributeName type="TextString" value="Digest"/>
0243          <AttributeValue>
0244            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0245            <DigestValue type="ByteString"
      value="4abc48c2ba00a6bba22cb6fc2827b46107354968872b395edb31354e78878
      be6"/>
0246            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0247          </AttributeValue>
0248        </Attribute>
0249        <Attribute>
0250          <AttributeName type="TextString" value="Fresh"/>
0251          <AttributeValue type="Boolean" value="true"/>
0252        </Attribute>
0253        <Attribute>
0254          <AttributeName type="TextString" value="Initial Date"/>
0255          <AttributeValue type="DateTime" value="2013-01-
      11T08:40:05+00:00"/>
0256        </Attribute>
0257        <Attribute>
0258          <AttributeName type="TextString" value="Last Change Date"/>
0259          <AttributeValue type="DateTime" value="2013-01-
      11T08:40:05+00:00"/>
0260        </Attribute>
0261        <Attribute>
0262          <AttributeName type="TextString" value="Lease Time"/>
0263          <AttributeValue type="Interval" value="3600"/>
0264        </Attribute>
0265        <Attribute>
0266          <AttributeName type="TextString" value="Link"/>
```

```
0267          <AttributeValue>
0268            <LinkType type="Enumeration" value="PublicKeyLink"/>
0269            <LinkedObjectIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0270          </AttributeValue>
0271        </Attribute>
0272        <Attribute>
0273          <AttributeName type="TextString" value="Name"/>
0274          <AttributeValue>
0275            <NameValue type="TextString" value="AKLC-O-1-12-private"/>
0276            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0277          </AttributeValue>
0278        </Attribute>
0279        <Attribute>
0280          <AttributeName type="TextString" value="Original Creation
      Date"/>
0281          <AttributeValue type="DateTime" value="2013-01-
      11T08:40:05+00:00"/>
0282        </Attribute>
0283        <Attribute>
0284          <AttributeName type="TextString" value="State"/>
0285          <AttributeValue type="Enumeration" value="Destroyed"/>
0286        </Attribute>
0287      </ResponsePayload>
0288    </BatchItem>
0289  </ResponseMessage>
```

```
      # TIME 4
0290  <RequestMessage>
0291    <RequestHeader>
0292      <ProtocolVersion>
0293        <ProtocolVersionMajor type="Integer" value="1"/>
0294        <ProtocolVersionMinor type="Integer" value="2"/>
0295      </ProtocolVersion>
0296      <BatchCount type="Integer" value="1"/>
0297    </RequestHeader>
0298    <BatchItem>
0299      <Operation type="Enumeration" value="GetAttributes"/>
0300      <RequestPayload>
0301        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0302      </RequestPayload>
0303    </BatchItem>
0304  </RequestMessage>
```

```
0305  <ResponseMessage>
0306    <ResponseHeader>
0307      <ProtocolVersion>
0308        <ProtocolVersionMajor type="Integer" value="1"/>
0309        <ProtocolVersionMinor type="Integer" value="2"/>
0310      </ProtocolVersion>
0311      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0312      <BatchCount type="Integer" value="1"/>
0313    </ResponseHeader>
0314    <BatchItem>
0315      <Operation type="Enumeration" value="GetAttributes"/>
0316      <ResultStatus type="Enumeration" value="Success"/>
0317      <ResponsePayload>
0318        <UniqueIdentifier type="TextString"
```

```
      value="$UNIQUE_IDENTIFIER_1"/>
0319        <Attribute>
0320          <AttributeName type="TextString" value="Unique Identifier"/>
0321          <AttributeValue type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0322        </Attribute>
0323        <Attribute>
0324          <AttributeName type="TextString" value="Object Type"/>
0325          <AttributeValue type="Enumeration" value="PublicKey"/>
0326        </Attribute>
0327        <Attribute>
0328          <AttributeName type="TextString" value="Cryptographic
      Algorithm"/>
0329          <AttributeValue type="Enumeration" value="RSA"/>
0330        </Attribute>
0331        <Attribute>
0332          <AttributeName type="TextString" value="Cryptographic
      Length"/>
0333          <AttributeValue type="Integer" value="2048"/>
0334        </Attribute>
0335        <Attribute>
0336          <AttributeName type="TextString" value="Cryptographic Usage
      Mask"/>
0337          <AttributeValue type="Integer" value="Verify"/>
0338        </Attribute>
0339        <Attribute>
0340          <AttributeName type="TextString" value="Digest"/>
0341          <AttributeValue>
0342            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0343            <DigestValue type="ByteString"
      value="330306b0e337e32dd1b5acf92cb96fd39adb802f305e7406062248324816f
      445"/>
0344            <KeyFormatType type="Enumeration" value="PKCS_1"/>
0345          </AttributeValue>
0346        </Attribute>
0347        <Attribute>
0348          <AttributeName type="TextString" value="Fresh"/>
0349          <AttributeValue type="Boolean" value="true"/>
0350        </Attribute>
0351        <Attribute>
0352          <AttributeName type="TextString" value="Initial Date"/>
0353          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0354        </Attribute>
0355        <Attribute>
0356          <AttributeName type="TextString" value="Last Change Date"/>
0357          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0358        </Attribute>
0359        <Attribute>
0360          <AttributeName type="TextString" value="Lease Time"/>
0361          <AttributeValue type="Interval" value="3600"/>
0362        </Attribute>
0363        <Attribute>
0364          <AttributeName type="TextString" value="Link"/>
0365          <AttributeValue>
0366            <LinkType type="Enumeration" value="PrivateKeyLink"/>
0367            <LinkedObjectIdentifier type="TextString"
```

```
      value="$UNIQUE_IDENTIFIER_0"/>
0368          </AttributeValue>
0369        </Attribute>
0370        <Attribute>
0371          <AttributeName type="TextString" value="Name"/>
0372          <AttributeValue>
0373            <NameValue type="TextString" value="AKLC-O-1-12-public"/>
0374            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0375          </AttributeValue>
0376        </Attribute>
0377        <Attribute>
0378          <AttributeName type="TextString" value="Original Creation
      Date"/>
0379          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0380        </Attribute>
0381        <Attribute>
0382          <AttributeName type="TextString" value="State"/>
0383          <AttributeValue type="Enumeration" value="PreActive"/>
0384        </Attribute>
0385      </ResponsePayload>
0386    </BatchItem>
0387  </ResponseMessage>
```

```
      # TIME 5
0388  <RequestMessage>
0389    <RequestHeader>
0390      <ProtocolVersion>
0391        <ProtocolVersionMajor type="Integer" value="1"/>
0392        <ProtocolVersionMinor type="Integer" value="2"/>
0393      </ProtocolVersion>
0394      <BatchCount type="Integer" value="1"/>
0395    </RequestHeader>
0396    <BatchItem>
0397      <Operation type="Enumeration" value="Destroy"/>
0398      <RequestPayload>
0399        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0400      </RequestPayload>
0401    </BatchItem>
0402  </RequestMessage>
```

```
0403  <ResponseMessage>
0404    <ResponseHeader>
0405      <ProtocolVersion>
0406        <ProtocolVersionMajor type="Integer" value="1"/>
0407        <ProtocolVersionMinor type="Integer" value="2"/>
0408      </ProtocolVersion>
0409      <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
0410      <BatchCount type="Integer" value="1"/>
0411    </ResponseHeader>
0412    <BatchItem>
0413      <Operation type="Enumeration" value="Destroy"/>
0414      <ResultStatus type="Enumeration" value="Success"/>
0415      <ResponsePayload>
0416        <UniqueIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_1"/>
0417      </ResponsePayload>
0418    </BatchItem>
```

```
</ResponseMessage>
# TIME 6
<RequestMessage>
  <RequestHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <BatchCount type="Integer" value="1"/>
  </RequestHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <RequestPayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
    </RequestPayload>
  </BatchItem>
</RequestMessage>
<ResponseMessage>
  <ResponseHeader>
    <ProtocolVersion>
      <ProtocolVersionMajor type="Integer" value="1"/>
      <ProtocolVersionMinor type="Integer" value="2"/>
    </ProtocolVersion>
    <TimeStamp type="DateTime" value="2012-04-27T08:12:25+00:00"/>
    <BatchCount type="Integer" value="1"/>
  </ResponseHeader>
  <BatchItem>
    <Operation type="Enumeration" value="GetAttributes"/>
    <ResultStatus type="Enumeration" value="Success"/>
    <ResponsePayload>
      <UniqueIdentifier type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      <Attribute>
        <AttributeName type="TextString" value="Unique Identifier"/>
        <AttributeValue type="TextString"
value="$UNIQUE_IDENTIFIER_1"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Object Type"/>
        <AttributeValue type="Enumeration" value="PublicKey"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Algorithm"/>
        <AttributeValue type="Enumeration" value="RSA"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic
Length"/>
        <AttributeValue type="Integer" value="2048"/>
      </Attribute>
      <Attribute>
        <AttributeName type="TextString" value="Cryptographic Usage
Mask"/>
        <AttributeValue type="Integer" value="Verify"/>
      </Attribute>
      <Attribute>
```

```
0470          <AttributeName type="TextString" value="Destroy Date"/>
0471          <AttributeValue type="DateTime" value="2013-01-
      11T08:38:18+00:00"/>
0472        </Attribute>
0473        <Attribute>
0474          <AttributeName type="TextString" value="Digest"/>
0475          <AttributeValue>
0476            <HashingAlgorithm type="Enumeration" value="SHA_256"/>
0477            <DigestValue type="ByteString"
      value="b06f3e3d107a282adb5fe316356d13679d7cf7429d14a6f20665f45ba4d28
      83c"/>
0478            <KeyFormatType type="Enumeration" value="PKCS 1"/>
0479          </AttributeValue>
0480        </Attribute>
0481        <Attribute>
0482          <AttributeName type="TextString" value="Fresh"/>
0483          <AttributeValue type="Boolean" value="true"/>
0484        </Attribute>
0485        <Attribute>
0486          <AttributeName type="TextString" value="Initial Date"/>
0487          <AttributeValue type="DateTime" value="2013-01-
      11T08:38:18+00:00"/>
0488        </Attribute>
0489        <Attribute>
0490          <AttributeName type="TextString" value="Last Change Date"/>
0491          <AttributeValue type="DateTime" value="2013-01-
      11T08:38:18+00:00"/>
0492        </Attribute>
0493        <Attribute>
0494          <AttributeName type="TextString" value="Lease Time"/>
0495          <AttributeValue type="Interval" value="3600"/>
0496        </Attribute>
0497        <Attribute>
0498          <AttributeName type="TextString" value="Link"/>
0499          <AttributeValue>
0500            <LinkType type="Enumeration" value="PrivateKeyLink"/>
0501            <LinkedObjectIdentifier type="TextString"
      value="$UNIQUE_IDENTIFIER_0"/>
0502          </AttributeValue>
0503        </Attribute>
0504        <Attribute>
0505          <AttributeName type="TextString" value="Name"/>
0506          <AttributeValue>
0507            <NameValue type="TextString" value="AKLC-O-1-12-public"/>
0508            <NameType type="Enumeration"
      value="UninterpretedTextString"/>
0509          </AttributeValue>
0510        </Attribute>
0511        <Attribute>
0512          <AttributeName type="TextString" value="Original Creation
      Date"/>
0513          <AttributeValue type="DateTime" value="2013-01-
      11T08:37:43+00:00"/>
0514        </Attribute>
0515        <Attribute>
0516          <AttributeName type="TextString" value="State"/>
0517          <AttributeValue type="Enumeration" value="Destroyed"/>
0518        </Attribute>
```

```
    </ResponsePayload>
  </BatchItem>
</ResponseMessage>
```


4 Conformance

4.1 Conformance Statement

KMIP client and server implementations conformant to this profile:

1. SHALL support the Authentication Suite conditions (2.1) and;
2. SHALL support the Baseline conditions (2.2) and;
3. SHALL support all Mandatory Test Cases (3.1 and 3.2 and 3.3), for each supported protocol version (major and minor), returning results in accordance with the test cases.

4.2 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.

4.2.1 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:

1. Object Group values – May or may not return one or more Object Group values not included in the requests
2. y-CustomAttributes – May or may not include additional server-specific associated attributes not included in requests
3. Message Extensions – May or may not include additional (non-critical) vendor extensions
4. TemplateAttribute – May or may not be included in responses where the Template Attribute response is noted as optional in [KMIP-SPEC]
5. AttributeIndex – May or may not include Attribute Index value where the Attribute Index value is 0 for Protocol Versions 1.1 and above.
6. ResultMessage – May or may not be included in responses and the value (if included) may vary from the text contained within the test case.
7. 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.
8. VendorIdentification - The value (if included) may vary from the text contained within the test case.

4.2.2 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

Appendix A. Acknowledgments

The following individuals have participated in the creation of this specification and are gratefully acknowledged:

Participants:

Hal Aldridge, Sypris Electronics
Mike Allen, Symantec
Gordon Arnold, IBM
Todd Arnold, IBM
Richard Austin, Hewlett-Packard
Lars Bagnert, PrimeKey
Elaine Barker, NIST
Peter Bartok, Venafi, Inc.
Tom Benjamin, IBM
Anthony Berglas, Cryptsoft
Mathias Björkqvist, IBM
Kevin Bocket, Venafi
Anne Bolgert, IBM
Alan Brown, Thales e-Security
Tim Bruce, CA Technologies
Chris Burchett, Credant Technologies, Inc.
Kelley Burgin, National Security Agency
Robert Burns, Thales e-Security
Chuck Castleton, Venafi
Kenli Chong, QuintessenceLabs
John Clark, Hewlett-Packard
Tom Clifford, Symantec Corp.
Doron Cohen, SafeNet, Inc
Tony Cox, Cryptsoft
Russell Dietz, SafeNet, Inc
Graydon Dodson, Lexmark International Inc.
Vinod Duggirala, EMC Corporation
Chris Dunn, SafeNet, Inc.
Michael Duren, Sypris Electronics
James Dzierzanowski, American Express CCoE
Faisal Faruqui, Thales e-Security
Stan Feather, Hewlett-Packard
David Finkelstein, Symantec Corp.
James Fitzgerald, SafeNet, Inc.
Indra Fitzgerald, Hewlett-Packard
Judith Furlong, EMC Corporation
Susan Gleeson, Oracle
Robert Griffin, EMC Corporation
Paul Grojean, Individual
Robert Haas, IBM
Thomas Hardjono, M.I.T.
ChengDong He, Huawei Technologies Co., Ltd.
Steve He, Vormetric
Kurt Heberlein, Hewlett-Packard
Larry Hofer, Emulex Corporation
Maryann Hondo, IBM
Walt Hubis, NetApp
Tim Hudson, Cryptsoft
Jonas Iggbom, Venafi, Inc.

Sitaram Inguva, American Express CCoE
Jay Jacobs, Target Corporation
Glen Jaquette, IBM
Mahadev Karadiguddi, NetApp
Greg Kazmierczak, Wave Systems Corp.
Marc Kenig, SafeNet, Inc.
Mark Knight, Thales e-Security
Kathy Kriese, Symantec Corporation
Mark Lambiase, SecureAuth
John Leiseboer, Quintenssence Labs
Hal Lockhart, Oracle Corporation
Robert Lockhart, Thales e-Security
Anne Luk, Cryptsoft
Sairam Manidi, Freescale
Luther Martin, Voltage Security
Neil McEvoy, iFOSSF
Marina Milshtein, Individual
Dale Moberg, Axway Software
Jishnu Mukeri, Hewlett-Packard
Bryan Olson, Hewlett-Packard
John Peck, IBM
Rob Philpott, EMC Corporation
Denis Pochuev, SafeNet, Inc.
Reid Poole, Venafi, Inc.
Ajai Puri, SafeNet, Inc.
Saravanan Ramalingam, Thales e-Security
Peter Reed, SafeNet, Inc.
Bruce Rich, IBM
Christina Richards, American Express CCoE
Warren Robbins, Dell
Peter Robinson, EMC Corporation
Scott Rotondo, Oracle
Saikat Saha, SafeNet, Inc.
Anil Saldhana, Red Hat
Subhash Sankuratripati, NetApp
Boris Schumperli, Cryptomathic
Greg Singh, QuintessenceLabs
David Smith, Venafi, Inc
Brian Spector, Certivox
Terence Spies, Voltage Security
Deborah Steckroth, RouteOne LLC
Michael Stevens, QuintessenceLabs
Marcus Streets, Thales e-Security
Satish Sundar, IBM
Kiran Thota, VMware
Somanchi Trinath, Freescale Semiconductor, Inc.
Nathan Turajski, Thales e-Security
Sean Turner, IECA, Inc.
Paul Turner, Venafi, Inc.
Rod Wideman, Quantum Corporation
Steven Wierenga, Hewlett-Packard
Jin Wong, QuintessenceLabs
Sameer Yami, Thales e-Security
Peter Yee, EMC Corporation
Krishna Yellepeddy, IBM
Catherine Ying, SafeNet, Inc.
Tatu Ylonen, SSH Communications Security (Tectia Corp)

Michael Yoder, Vormetric. Inc.
Magda Zdunkiewicz, Cryptsoft
Peter Zelechoski, Election Systems & Software

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.

358

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.