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Composite ML-DSA for use in X.509 Public Key Infrastructure
draft-ietf-lamps-pq-composite-sigs-07

Abstract

This document defines combinations of ML-DSA [FIPS.204] in hybrid with traditional algorithms RSASSA-PKCS1-v1_5, RSASSA-PSS, ECDSA, Ed25519, and Ed448. These combinations are tailored to meet security best practices and regulatory guidelines. Composite ML-DSA is applicable in any application that uses X.509 or PKIX data structures that accept ML-DSA, but where the operator wants extra protection against breaks or catastrophic bugs in ML-DSA.

About This Document

This note is to be removed before publishing as an RFC.

The latest revision of this draft can be found at https://lamps-wg.github.io/draft-composite-sigs/draft-ietf-lamps-pq-composite-sigs.html. Status information for this document may be found at https://datatracker.ietf.org/doc/draft-ietf-lamps-pq-composite-sigs/.

Discussion of this document takes place on the LAMPS Working Group mailing list (mailto:spams@ietf.org), which is archived at https://datatracker.ietf.org/wg/lamps/about/. Subscribe at https://www.ietf.org/mailman/listinfo/spams/.

Source for this draft and an issue tracker can be found at https://github.com/lamps-wg/draft-composite-sigs.

Status of This Memo

This Internet-Draft will expire on 8 January 2026.

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1. Changes in -07

Interop-affecting changes:

* Fixed the ASN.1 module for the pk-CompositeSignature and sa-CompositeSignature to indicate no ASN.1 wrapping is used.

Editorial changes:

* Added back MLDSA65-RSA3072-PKCS15-SHA512 which was missing from table 3, table 6 and the test vectors.

* Fixed a few problems with the test vectors (incorrect private keys).

* Fixed a number of editorial issues.

2. Introduction

The advent of quantum computing poses a significant threat to current cryptographic systems. Traditional cryptographic signature algorithms such as RSA, DSA and its elliptic curve variants are vulnerable to quantum attacks. During the transition to post-quantum cryptography (PQC), there is considerable uncertainty regarding the robustness of both existing and new cryptographic algorithms. While we can no longer fully trust traditional cryptography, we also cannot immediately place complete trust in post-quantum replacements until they have undergone extensive scrutiny and real-world testing to uncover and rectify both algorithmic weaknesses as well as implementation flaws across all the new implementations.

Unlike previous migrations between cryptographic algorithms, the decision of when to migrate and which algorithms to adopt is far from straightforward. For instance, the aggressive migration timelines may require deploying PQC algorithms before their implementations have been fully hardened or certified, and dual-algorithm data protection may be desirable over a longer time period to hedge against CVEs and other implementation flaws in the new implementations.

Cautious implementers may opt to combine cryptographic algorithms in such a way that an attacker would need to break all of them simultaneously to compromise the protected data. These mechanisms are referred to as Post-Quantum/Traditional (PQ/T) Hybrids [I-D.ietf-pquip-pqt-hybrid-terminology].

Certain jurisdictions are already recommending or mandating that PQC lattice schemes be used exclusively within a PQ/T hybrid framework. The use of a composite scheme provides a straightforward implementation of hybrid solutions compatible with (and advocated by) some governments and cybersecurity agencies [BSI2021], [ANSSI2024].

This specification defines a specific instantiation of the PQ/T Hybrid paradigm called "composite" where multiple cryptographic algorithms are combined to form a single signature algorithm presenting a single public key and signature value such that it can be treated as a single atomic algorithm at the protocol level; a property referred to as "protocol backwards compatibility" since it can be applied to protocols that are not explicitly hybrid-aware. Composite algorithms address algorithm strength uncertainty because the composite algorithm remains strong so long as one of its components remains strong. Concrete instantiations of composite ML-DSA algorithms are provided based on ML-DSA, RSASSA-PKCS1-v1_5, RSASSA-PSS, ECDSA, Ed25519, and Ed448. Backwards compatibility in the sense of upgraded systems continuing to inter-operate with legacy systems is not directly covered in this specification, but is the subject of Section 11.2.

Composite ML-DSA is applicable in any PKIX-related application that would otherwise use ML-DSA.

2.1. Conventions and Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in BCP 14 [RFC2119] [RFC8174] when, and only when, they appear in all capitals, as shown here. These words may also appear in this document in lower case as plain English words, absent their normative meanings.

This specification is consistent with the terminology defined in [I-D.ietf-pquip-pqt-hybrid-terminology]. In addition, the following terminology is used throughout this specification:

ALGORITHM: The usage of the term "algorithm" within this specification generally refers to any function which has a registered Object Identifier (OID) for use within an ASN.1 AlgorithmIdentifier. This loosely, but not precisely, aligns with the definitions of "cryptographic algorithm" and "cryptographic scheme" given in [I-D.ietf-pquip-pqt-hybrid-terminology].

COMPONENT / PRIMITIVE: The words "component" or "primitive" are used interchangeably to refer to a cryptographic algorithm that is used internally within a composite algorithm. For example this could be an asymmetric algorithm such as "ML-DSA-65" or "RSASSA-PSS", or a Hash such as "SHA256".

DER: Distinguished Encoding Rules as defined in [X.690].

PKI: Public Key Infrastructure, as defined in [RFC5280].

SIGNATURE: A digital cryptographic signature, making no assumptions about which algorithm.

Notation: The algorithm descriptions use python-like syntax. The following symbols deserve special mention:

* || represents concatenation of two byte arrays.

* [:] represents byte array slicing.

* (a, b) represents a pair of values a and b. Typically this indicates that a function returns multiple values; the exact conveyance mechanism -- tuple, struct, output parameters, etc. -- is left to the implementer.

* (a, _): represents a pair of values where one -- the second one in this case -- is ignored.

* Func<TYPE>(): represents a function that is parametrized by <TYPE> meaning that the function's implementation will have minor differences depending on the underlying TYPE. Typically this means that a function will need to look up different constants or use different underlying cryptographic primitives depending on which composite algorithm it is implementing.

2.2. Composite Design Philosophy

[I-D.ietf-pquip-pqt-hybrid-terminology] defines composites as:

> _Composite Cryptographic Element_: A cryptographic element that incorporates multiple component cryptographic elements of the same type in a multi-algorithm scheme.

Composite algorithms, as defined in this specification, follow this definition and should be regarded as a single key that performs a single cryptographic operation typical of a digital signature algorithm, such as key generation, signing, or verifying -- using its internal sequence of component keys as if they form a single key. This generally means that the complexity of combining algorithms can and should be handled by the cryptographic library or cryptographic module, and the single composite public key, private key, and signature value can be carried in existing fields in protocols such as PKCS#10 [RFC2986], CMP [RFC4210], X.509 [RFC5280], the CMS [RFC5652], and the Trust Anchor Format [RFC5914]. In this way, composites achieve "protocol backwards-compatibility" in that they will drop cleanly into any protocol that accepts an analogous single-algorithm cryptographic scheme without requiring any modification of the protocol to handle multiple algorithms.

Discussion of the specific choices of algorithm pairings can be found in Section 7.2.

3. Overview of the Composite ML-DSA Signature Scheme

Composite ML-DSA is a Post-Quantum / Traditional hybrid signature scheme which combines ML-DSA as specified in [FIPS.204] and [I-D.ietf-lamps-dilithium-certificates] with one of RSASSA-PKCS1-v1_5 or RSASSA-PSS algorithms defined in [RFC8017], the Elliptic Curve Digital Signature Algorithm ECDSA scheme defined in section 6 of [FIPS.186-5], or Ed25519 / Ed448 defined in [RFC8410]. The two component signatures are combined into a composite algorithm via a "signature combiner" function which performs randomized pre-hashing and prepends several domain separator values to the message prior to passing it to the component algorithms. Composite ML-DSA achieves weak non-separability as well as several other security properties which are described in the Security Considerations in Section 10.

Composite signature schemes are defined as cryptographic primitives that consist of three algorithms:

* KeyGen() -> (pk, sk): A probabilistic key generation algorithm which generates a public key pk and a secret key sk. Some cryptographic modules may also expose a KeyGen(seed) -> (pk, sk), which generates pk and sk deterministically from a seed. This specification assumes a seed-based keygen for ML-DSA.

* Sign(sk, M) -> s: A signing algorithm which takes as input a secret key sk and a message M, and outputs a signature s. Signing routines may take additional parameters such as a context string or a hash function to use for pre-hashing the message.

* Verify(pk, M, s) -> true or false: A verification algorithm which takes as input a public key pk, a message M and a signature s, and outputs true if the signature verifies correctly and false or an error otherwise. Verification routines may take additional parameters such as a context string or a hash function to use for pre-hashing the message.

The following algorithms are defined for serializing and deserializing component values. These algorithms are inspired by similar algorithms in [RFC9180].

* SerializePublicKey(mlkdsaPK, tradPK) -> bytes: Produce a byte string encoding of the component public keys.

* DeserializePublicKey(bytes) -> (mldsaPK, tradPK): Parse a byte string to recover the component public keys.

* SerializePrivateKey(mldsaSeed, tradSK) -> bytes: Produce a byte string encoding of the component private keys. Note that the keygen seed is used as the interoperable private key format for ML-DSA.

* DeserializePrivateKey(bytes) -> (mldsaSeed, tradSK): Parse a byte string to recover the component private keys.

* SerializeSignatureValue(r, mldsaSig, tradSig) -> bytes: Produce a byte string encoding of the component signature values. The randomizer r is explained in Section 3.1.

* DeserializeSignatureValue(bytes) -> (r, mldsaSig, tradSig): Parse a byte string to recover the randomizer and the component signature values.

Full definitions of serialization and deserialization algorithms can be found in Section 5.

3.1. Pre-hashing and Randomizer

In [FIPS.204] NIST defines separate algorithms for pure and pre-hashed modes of ML-DSA, referred to as "ML-DSA" and "HashML-DSA" respectively. This specification defines a single mode which is similar in construction to HashML-DSA with the addition of a pre-hash randomizer inspired by [BonehShoup]. See Section 10.5 for detailed discussion of the security properties of the randomized pre-hash. This design provides a compromised balance between performance and security. Since pre-hashing is done at the composite level, "pure" ML-DSA is used as the underlying ML-DSA primitive.

The primary design motivation behind pre-hashing is to perform only a single pass over the potentially large input message M, compared to passing the full message to both component primitives, and to allow for optimizations in cases such as signing the same message digest with multiple different keys. The actual length of the to-be-signed message M’ depends on the application context ctx provided at runtime but since ctx has a maximum length of 255 bytes, M’ has a fixed maximum length which depends on the output size of the hash function chosen as PH, but can be computed per composite algorithm.

This simplification into a single strongly-pre-hashed algorithm avoids the need for duplicate sets of "Composite-ML-DSA" and "Hash-Composite-ML-DSA" algorithms.

See Section 10.5 for a discussion of security implications of the randomized pre-hash.

See Section 11.4 for a discussion of externalizing the pre-hashing step.

3.2. Prefix, Domain Separators and CTX

When constructing the to-be-signed message representative M’, several domain separator values are pre-pended to the message pre-hash prior to signing.

```
M’ :=  Prefix || Domain || len(ctx) || ctx || r || PH( M )
```

First a fixed prefix string is pre-pended which is the byte encoding of the ASCII string "CompositeAlgorithmSignatures2025" which in hex is:

```
436F6D706F73697465416C676F726974686D5369676E61747572657332303235
```

Additional discussion of the prefix can be found in Section 10.4.

Next, the Domain separator defined in Section 7.1 which is the DER encoding of the OID of the specific composite algorithm is concatenated with the length of the context in bytes, the context, the randomizer r, and finally the hash of the message to be signed. The Domain separator serves to bind the signature to the specific composite algorithm used. The context string allows for applications to bind the signature to some application context. The randomizer is described in detail in Section 3.1.

Note that there are two different context strings ctx at play: the first is the application context that is passed in to Composite-ML-DSA.Sign and bound to the to-be-signed message M’. The second is the ctx that is passed down into the underlying ML-DSA.Sign and here Composite ML-DSA itself is the application that we wish to bind and so the DER-encoded OID of the composite algorithm, called Domain, is used as the ctx for the underlying ML-DSA primitive.

4. Composite ML-DSA Functions

This section describes the composite ML-DSA functions needed to instantiate the public API of a digital signature scheme as defined in Section 3.

4.1. Key Generation

In order to maintain security properties of the composite, applications that use composite keys MUST always perform fresh key generations of both component keys and MUST NOT reuse existing key material. See Section 10.3 for a discussion.

To generate a new key pair for composite schemes, the KeyGen() -> (pk, sk) function is used. The KeyGen() function calls the two key generation functions of the component algorithms independently. Multi-process or multi-threaded applications might choose to execute the key generation functions in parallel for better key generation performance.

The following describes how to instantiate a KeyGen() function for a given composite algorithm represented by <OID>.

```
Composite-ML-DSA<OID>.KeyGen() -> (pk, sk)

Explicit inputs:

  None

Implicit inputs mapped from <OID>:

  ML-DSA     The underlying ML-DSA algorithm and
             parameter set, for example, could be "ML-DSA-65".

  Trad       The underlying traditional algorithm and
             parameter set, for example "RSASSA-PSS"
             or "Ed25519".

Output:

  (pk, sk)   The composite key pair.


Key Generation Process:

  1. Generate component keys

     mldsaSeed = Random(32)
     (mldsaPK, _) = ML-DSA.KeyGen(mldsaSeed)
     (tradPK, tradSK) = Trad.KeyGen()

  2. Check for component key gen failure

     if NOT (mldsaPK, mldsaSK) or NOT (tradPK, tradSK):
       output "Key generation error"

  3. Output the composite public and private keys

     pk = SerializePublicKey(mldsaPK, tradPK)
     sk = SerializePrivateKey(mldsaSeed, tradSK)
     return (pk, sk)
```

Figure 1: Composite-ML-DSA<OID>.KeyGen() -> (pk, sk)

In order to ensure fresh keys, the key generation functions MUST be executed for both component algorithms. Compliant parties MUST NOT use, import or export component keys that are used in other contexts, combinations, or by themselves as keys for standalone algorithm use. For more details on the security considerations around key reuse, see Section 10.3.

Note that in step 2 above, both component key generation processes are invoked, and no indication is given about which one failed. This SHOULD be done in a timing-invariant way to prevent side-channel attackers from learning which component algorithm failed.

Variations in the keygen process above and signature processes below to accommodate particular private key storage mechanisms or alternate interfaces to the underlying cryptographic modules are considered to be conformant to this specification so long as they produce the same output and error handling. For example, component private keys stored in separate software or hardware modules where it is not possible to do a joint simultaneous keygen would be considered compliant so long as both keys are freshly generated. It is also possible that the underlying cryptographic module does not expose a ML-DSA.KeyGen(seed) that accepts an externally-generated seed, and instead an alternate keygen interface must be used. Note however that cryptographic modules that do not support seed-based ML-DSA key generation will be incapable of importing or exporting composite keys in the standard format since the private key serialization routines defined in Section 5.2 only support ML-DSA keys as seeds.

4.2. Sign

The Sign() algorithm of Composite ML-DSA mirrors the construction of ML-DSA.Sign(sk, M, ctx) defined in Algorithm 3 Section 5.2 of [FIPS.204]. Composite ML-DSA exposes an API similar to that of ML-DSA, despite the fact that it includes pre-hashing in a similar way to HashML-DSA. Internally it uses pure ML-DSA as the component algorithm since there is no advantage to pre-hashing twice.

See Section 3.1 for a discussion of the pre-hashed design and randomizer r.

See Section 3.2 for a discussion on the domain separator and context values.

See Section 11.4 for a discussion of externalizing the pre-hashing step.

The following describes how to instantiate a Sign() function for a given Composite ML-DSA algorithm represented by <OID>.

```
Composite-ML-DSA<OID>.Sign(sk, M, ctx) -> s

Explicit inputs:

  sk    Composite private key consisting of signing private keys for
        each component.

  M     The message to be signed, an octet string.

  ctx     The application context string used in the composite
          signature combiner, which defaults to the empty string.

Implicit inputs mapped from <OID>:

  ML-DSA  The underlying ML-DSA algorithm and
          parameter set, for example, could be "ML-DSA-65".

  Trad    The underlying traditional algorithm and
          parameter set, for example "RSASSA-PSS with id-sha256"
          or "Ed25519".

  Prefix  The prefix String which is the byte encoding of the String
          "CompositeAlgorithmSignatures2025" which in hex is
      436F6D706F73697465416C676F726974686D5369676E6174757265733230323235

  Domain  Domain separator value for binding the signature to the
          Composite ML-DSA OID. Additionally, the composite Domain
          is passed into the underlying ML-DSA primitive as the ctx.
          Domain values are defined in the "Domain Separator Values"
          section below.

  PH      The hash function to use for pre-hashing.


Output:
  s      The composite signature value.


Signature Generation Process:

  1. If len(ctx) > 255:
      return error

  2. Compute the Message representative M’.
     As in FIPS 204, len(ctx) is encoded as a single unsigned byte.
```

Randomize the message representative

```
r = Random(32)
M' :=  Prefix || Domain || len(ctx) || ctx || r
                                    || PH( M )
```

3. Separate the private key into component keys and re-generate the ML-DSA key from seed.

```
(mldsaSeed, tradSK) = DeserializePrivateKey(sk)
(_, mldsaSK) = ML-DSA.KeyGen(mldsaSeed)
```

4. Generate the two component signatures independently by calculating the signature over M' according to their algorithm specifications.

```
mldsaSig = ML-DSA.Sign( mldsaSK, M', ctx=Domain )
tradSig = Trad.Sign( tradSK, M' )
```

5. If either ML-DSA.Sign() or Trad.Sign() return an error, then this process MUST return an error.

```
if NOT mldsaSig or NOT tradSig:
  output "Signature generation error"
```

6. Output the encoded composite signature value.

```
s = SerializeSignatureValue(r, mldsaSig, tradSig)
return s
```

Figure 2: Composite-ML-DSA<OID>.Sign(sk, M, ctx) -> s

Note that in step 4 above, both component signature processes are invoked, and no indication is given about which one failed. This SHOULD be done in a timing-invariant way to prevent side-channel attackers from learning which component algorithm failed.

It is possible to use component private keys stored in separate software or hardware keystores. Variations in the process to accommodate particular private key storage mechanisms are considered to be conformant to this specification so long as it produces the same output and error handling as the process sketched above.

4.3. Verify

The Verify() algorithm of Composite ML-DSA mirrors the construction of ML-DSA.Verify(pk, M, s, ctx) defined in Algorithm 3 Section 5.3 of [FIPS.204]. Composite ML-DSA exposes an API similar to that of ML-DSA, despite the fact that it includes pre-hashing in a similar way to HashML-DSA. Internally it uses pure ML-DSA as the component algorithm since there is no advantage to pre-hashing twice.

Compliant applications MUST output "Valid signature" (true) if and only if all component signatures were successfully validated, and "Invalid signature" (false) otherwise.

The following describes how to instantiate a Verify() function for a given composite algorithm represented by <OID>.

```
Composite-ML-DSA<OID>.Verify(pk, M, s, ctx) -> true or false

Explicit inputs:

  pk      Composite public key consisting of verification public
          keys for each component.

  M       Message whose signature is to be verified, an octet
          string.

  s       A composite signature value to be verified.

  ctx     The application context string used in the composite
          signature combiner, which defaults to the empty string.

Implicit inputs mapped from <OID>:

  ML-DSA  The underlying ML-DSA algorithm and
          parameter set, for example, could be "ML-DSA-65".

  Trad    The underlying traditional algorithm and
          parameter set, for example "RSASSA-PSS with id-sha256"
          or "Ed25519".

  Prefix  The prefix String which is the byte encoding of the String
          "CompositeAlgorithmSignatures2025" which in hex is
      436F6D706F73697465416C676F726974686D5369676E6174757265733230323235

  Domain  Domain separator value for binding the signature to the
          Composite ML-DSA OID. Additionally, the composite Domain
          is passed into the underlying ML-DSA primitive as the ctx.
          Domain values are defined in the "Domain Separators"
```

section below.

PH The Message Digest Algorithm for pre-hashing. See section on pre-hashing the message below.

Output:

Validity (bool) "Valid signature" (true) if the composite signature is valid, "Invalid signature" (false) otherwise.

Signature Verification Process:

```
  1. If len(ctx) > 255
       return error

  2. Separate the keys and signatures

     (mldsaPK, tradPK)       = DeserializePublicKey(pk)
     (r, mldsaSig, tradSig)  = DeserializeSignatureValue(s)

   If Error during deserialization, or if any of the component
   keys or signature values are not of the correct type or
   length for the given component algorithm then output
   "Invalid signature" and stop.

  3. Compute a Hash of the Message.
     As in FIPS 204, len(ctx) is encoded as a single unsigned byte.

      M' = Prefix || Domain || len(ctx) || ctx || r
                                        || PH( M )

  4. Check each component signature individually, according to its
     algorithm specification.
     If any fail, then the entire signature validation fails.

      if not ML-DSA.Verify( mldsaPK, M', mldsaSig, ctx=Domain ) then
          output "Invalid signature"

      if not Trad.Verify( tradPK, M', tradSig ) then
          output "Invalid signature"

      if all succeeded, then
         output "Valid signature"
```

Figure 3: Composite-ML-DSA<OID>.Verify(pk, M, signature, ctx)

Note that in step 4 above, the function fails early if the first component fails to verify. Since no private keys are involved in a signature verification, there are no timing attacks to consider, so this is ok.

5. Serialization

This section presents routines for serializing and deserializing composite public keys, private keys, and signature values to bytes via simple concatenation of the underlying encodings of the component algorithms. The functions defined in this section are considered internal implementation detail and are referenced from within the public API definitions in Section 4.

Deserialization is possible because ML-DSA has fixed-length public keys, private keys (seeds), and signature values as shown in the following table.

Algorithm	Public key	Private key	Signature
ML-DSA-44	1312	32	2420
ML-DSA-65	1952	32	3309
ML-DSA-87	2592	32	4627

Table 1: ML-DSA Key and Signature Sizes in bytes

For all serialization routines below, when these values are required to be carried in an ASN.1 structure, they are wrapped as described in Section 6.1.

While ML-DSA has a single fixed-size representation for each of public key, private key (seed), and signature, the traditional component might allow multiple valid encodings; for example an elliptic curve public key might be validly encoded as either compressed or uncompressed [SEC1], or an RSA private key could be encoded in Chinese Remainder Theorem form [RFC8017]. In order to obtain interoperability, composite algorithms MUST use the following encodings of the underlying components:

* *ML-DSA*: MUST be encoded as specified in [FIPS.204], using a 32-byte seed as the private key.

* *RSA*: MUST be encoded with the (n,e) public key representation as specified in A.1.1 of [RFC8017] and the private key representation as specified in A.1.2 of [RFC8017].

* *ECDSA*: public key MUST be encoded as an ECPoint as specified in section 2.2 of [RFC5480], with both compressed and uncompressed keys supported. For maximum interoperability, it is RECOMMENDED to use uncompressed points. A signature MUST be DER encoded as an Ecdsa-Sig-Value as specified in section 2.2.3 of [RFC3279].

* *EdDSA*: MUST be encoded as per section 3 of [RFC8032].

Even with fixed encodings for the traditional component, there may be slight differences in size of the encoded value due to, for example, encoding rules that drop leading zeroes. See Appendix A for further discussion of encoded size of each composite algorithm.

The deserialization routines described below do not check for well-formedness of the cryptographic material they are recovering. It is assumed that underlying cryptographic primitives will catch malformed values and raise an appropriate error.

5.1. SerializePublicKey and DeserializePublicKey

The serialization routine for keys simply concatenates the public keys of the component signature algorithms, as defined below:

Composite-ML-DSA.SerializePublicKey(mldsaPK, tradPK) -> bytes

Explicit inputs:

mldsaPK The ML-DSA public key, which is bytes.

tradPK The traditional public key in the appropriate encoding for the underlying component algorithm.

Implicit inputs:

None

Output:

bytes The encoded composite public key.

Serialization Process:

1. Combine and output the encoded public key

```
output mldsaPK || tradPK
```

Figure 4: Composite-ML-DSA.SerializePublicKey(mldsaPK, tradPK) -> bytes

Deserialization reverses this process. Each component key is deserialized according to their respective specification as shown in Appendix B.

The following describes how to instantiate a DeserializePublicKey(bytes) function for a given composite algorithm represented by <OID>.

```
Composite-ML-DSA<OID>.DeserializePublicKey(bytes) -> (mldsaPK, tradPK)

Explicit inputs:

  bytes   An encoded composite public key.

Implicit inputs mapped from <OID>:

  ML-DSA   The underlying ML-DSA algorithm and
           parameter set to use, for example, could be "ML-DSA-65".

Output:

  mldsaPK  The ML-DSA public key, which is bytes.

  tradPK   The traditional public key in the appropriate
           encoding for the underlying component algorithm.

Deserialization Process:

  1. Parse each constituent encoded public key.
       The length of the mldsaKey is known based on the size of
       the ML-DSA component key length specified by the Object ID.

     switch ML-DSA do
        case ML-DSA-44:
          mldsaPK = bytes[:1312]
          tradPK  = bytes[1312:]
        case ML-DSA-65:
          mldsaPK = bytes[:1952]
          tradPK  = bytes[1952:]
        case ML-DSA-87:
          mldsaPK = bytes[:2592]
          tradPK  = bytes[2592:]

     Note that while ML-DSA has fixed-length keys, RSA and ECDSA
     may not, depending on encoding, so rigorous length-checking
     of the overall composite key is not always possible.

  2. Output the component public keys

     output (mldsaPK, tradPK)
```

Figure 5: Composite-ML-DSA<OID>.DeserializePublicKey(bytes) -> (mldsaPK, tradPK)

5.2. SerializePrivateKey and DeserializePrivateKey

The serialization routine for keys simply concatenates the private keys of the component signature algorithms, as defined below:

```
Composite-ML-DSA.SerializePrivateKey(mldsaSeed, tradSK) -> bytes

Explicit inputs:

  mldsaSeed  The ML-DSA private key, which is the bytes of the seed.

  tradSK     The traditional private key in the appropriate
             encoding for the underlying component algorithm.

Implicit inputs:

  None

Output:

  bytes   The encoded composite private key.


Serialization Process:

  1. Combine and output the encoded private key.

     output mldsaSeed || tradSK
```

Figure 6: Composite-ML-DSA.SerializePrivateKey(mldsaSeed, tradSK) -> bytes

Deserialization reverses this process. Each component key is deserialized according to their respective specification as shown in Appendix B.

The following describes how to instantiate a DeserializePrivateKey(bytes) function. Since ML-DSA private keys are 32 bytes for all parameter sets, this function does not need to be parametrized.

```
Composite-ML-DSA.DeserializePrivateKey(bytes) -> (mldsaSeed, tradSK)

Explicit inputs:

  bytes   An encoded composite private key.

Implicit inputs:

  That an ML-DSA private key is 32 bytes for all parameter sets.

Output:

  mldsaSeed  The ML-DSA private key, which is the bytes of the seed.

  tradSK     The traditional private key in the appropriate
             encoding for the underlying component algorithm.

Deserialization Process:

  1. Parse each constituent encoded key.
     The length of an ML-DSA private key is always a 32 byte seed
     for all parameter sets.

     mldsaSeed = bytes[:32]
     tradSK  = bytes[32:]

     Note that while ML-DSA has fixed-length keys, RSA and ECDSA
     may not, depending on encoding, so rigorous length-checking
     of the overall composite key is not always possible.

  2. Output the component private keys

     output (mldsaSeed, tradSK)
```

Figure 7: Composite-ML-DSA.DeserializePrivateKey(bytes) -> (mldsaSeed, tradSK)

5.3. SerializeSignatureValue and DeserializeSignatureValue

The serialization routine for the composite signature value simply concatenates the fixed-length ML-DSA signature value with the signature value from the traditional algorithm, as defined below:

```
Composite-ML-DSA.SerializeSignatureValue(r, mldsaSig, tradSig) -> bytes

Explicit inputs:

  r         The 32 byte signature randomizer.

  mldsaSig  The ML-DSA signature value, which is bytes.

  tradSig   The traditional signature value in the appropriate
            encoding for the underlying component algorithm.

Implicit inputs:

  None

Output:

  bytes   The encoded composite signature value.

Serialization Process:

  1. Combine and output the encoded composite signature

     output r || mldsaSig || tradSig
```

Figure 8: Composite-ML-DSA.SerializeSignatureValue(r, mldsaSig, tradSig) -> bytes

Deserialization reverses this process, raising an error in the event that the input is malformed. Each component signature is deserialized according to their respective specification as shown in Appendix B.

The following describes how to instantiate a DeserializeSignatureValue(bytes) function for a given composite algorithm represented by <OID>.

```
Composite-ML-DSA<OID>.DeserializeSignatureValue(bytes)
                                             -> (r, mldsaSig, tradSig)

Explicit inputs:

  bytes   An encoded composite signature value.

Implicit inputs mapped from <OID>:

  ML-DSA  The underlying ML-DSA algorithm and
          parameter set to use, for example, could be "ML-DSA-65".
```

Output:

r The 32 byte signature randomizer.

mldsaSig The ML-DSA signature value, which is bytes.

tradSig The traditional signature value in the appropriate encoding for the underlying component algorithm.

Deserialization Process:

1. Parse the randomizer r.

```
r = bytes[:32]
sigs = bytes[32:]  # truncate off the randomizer
```

2. Parse each constituent encoded signature.
   The length of the mldsaSig is known based on the size of
   the ML-DSA component signature length specified by the Object ID.

```
switch ML-DSA do
   case ML-DSA-44:
     mldsaSig = sigs[:2420]
     tradSig  = sigs[2420:]
   case ML-DSA-65:
     mldsaSig = sigs[:3309]
     tradSig  = sigs[3309:]
   case ML-DSA-87:
     mldsaSig = sigs[:4627]
     tradSig  = sigs[4627:]
```

   Note that while ML-DSA has fixed-length signatures, RSA and ECDSA may not, depending on encoding, so rigorous length-checking is not always possible here.

3. Output the component signature values

```
output (r, mldsaSig, tradSig)
```

Figure 9: Composite-ML-DSA<OID>.DeserializeSignatureValue(bytes) -> (r, mldsaSig, tradSig)

6. Use within X.509 and PKIX

The following sections provide processing logic and the ASN.1 modules necessary to use composite ML-DSA within X.509 and PKIX protocols. Use within the Cryptographic Message Syntax (CMS) will be covered in a separate specification.

While composite ML-DSA keys and signature values MAY be used raw, the following sections provide conventions for using them within X.509 and other PKIX protocols such that Composite ML-DSA can be used as a drop-in replacement for existing digital signature algorithms in PKCS#10 [RFC2986], CMP [RFC4210], X.509 [RFC5280], and related protocols.

6.1. Encoding to DER

The serialization routines presented in Section 5 produce raw binary values. When these values are required to be carried within a DER-encoded message format such as an X.509's subjectPublicKey and signatureValue BIT STRING [RFC5280] or a CMS SignerInfo.signature OCTET STRING [RFC5652], then the composite value MUST be wrapped into a DER BIT STRING or OCTET STRING in the obvious ways.

When a BIT STRING is required, the octets of the composite data value SHALL be used as the bits of the bit string, with the most significant bit of the first octet becoming the first bit, and so on, ending with the least significant bit of the last octet becoming the last bit of the bit string.

When an OCTET STRING is required, the DER encoding of the composite data value SHALL be used directly.

6.2. Key Usage Bits

When any Composite ML-DSA Object Identifier appears within the SubjectPublicKeyInfo.AlgorithmIdentifier field of an X.509 certificate [RFC5280], the key usage certificate extension MUST only contain signing-type key usages.

The normal keyUsage rules for signing-type keys from [RFC5280] apply, and are reproduced here for completeness.

For Certification Authority (CA) certificates that carry a Composite ML-DSA public key, any combination of the following values MAY be present and any other values MUST NOT be present:

digitalSignature;
nonRepudiation;
keyCertSign; and
cRLSign.

For End Entity certificates, any combination of the following values MAY be present and any other values MUST NOT be present:

digitalSignature; and
nonRepudiation;

Composite ML-DSA keys MUST NOT be used in a "dual usage" mode because even if the traditional component key supports both signing and encryption, the post-quantum algorithms do not and therefore the overall composite algorithm does not. Implementations MUST NOT use one component of the composite for the purposes of digital signature and the other component for the purposes of encryption or key establishment.

6.3. ASN.1 Definitions

Composite ML-DSA uses a substantially non-ASN.1 based encoding, as specified in Section 5. However, as composite algorithms will be used within ASN.1-based X.509 and PKIX protocols, some conventions for ASN.1 wrapping are necessary.

The following ASN.1 Information Object Classes are defined to allow for compact definitions of each composite algorithm, leading to a smaller overall ASN.1 module.

```
pk-CompositeSignature {OBJECT IDENTIFIER:id}
    PUBLIC-KEY ::= {
      IDENTIFIER id
      -- KEY without ASN.1 wrapping --
      PARAMS ARE absent
      CERT-KEY-USAGE { digitalSignature, nonRepudiation, keyCertSign,
                                                             cRLSign}
    }

sa-CompositeSignature{OBJECT IDENTIFIER:id,
   PUBLIC-KEY:publicKeyType }
      SIGNATURE-ALGORITHM ::=  {
         IDENTIFIER id
         -- VALUE without ASN.1 wrapping --
         PARAMS ARE absent
         PUBLIC-KEYS {publicKeyType}
      }
```

Figure 10: ASN.1 Object Information Classes for Composite ML-DSA

As an example, the public key and signature algorithm types associated with id-MLDSA44-ECDSA-P256-SHA256 are defined as:

```
pk-MLDSA44-ECDSA-P256-SHA256 PUBLIC-KEY ::=
  pk-CompositeSignature{ id-MLDSA44-ECDSA-P256-SHA256}

sa-MLDSA44-ECDSA-P256-SHA256 SIGNATURE-ALGORITHM ::=
    sa-CompositeSignature{
       id-MLDSA44-ECDSA-P256-SHA256,
       pk-MLDSA44-ECDSA-P256-SHA256 }
```

The full set of key types defined by this specification can be found in the ASN.1 Module in Section 8.

Use cases that require an interoperable encoding for composite private keys will often need to place a composite private key inside a OneAsymmetricKey structure defined in [RFC5958], such as when private keys are carried in PKCS #12 [RFC7292], CMP [RFC4210] or CRMF [RFC4211]. The definition of OneAsymmetricKey is copied here for convenience:

```
 OneAsymmetricKey ::= SEQUENCE {
       version                   Version,
       privateKeyAlgorithm       PrivateKeyAlgorithmIdentifier,
       privateKey                PrivateKey,
       attributes            [0] Attributes OPTIONAL,
       ...,
       [[2: publicKey        [1] PublicKey OPTIONAL ]],
       ...
     }
  ...
  PrivateKey ::= OCTET STRING
                        -- Content varies based on type of key.  The
                        -- algorithm identifier dictates the format of
                        -- the key.
```

Figure 11: OneAsymmetricKey as defined in [RFC5958]

When a composite private key is conveyed inside a OneAsymmetricKey structure (version 1 of which is also known as PrivateKeyInfo) [RFC5958], the privateKeyAlgorithm field SHALL be set to the corresponding composite algorithm identifier defined according to Section 7 and its parameters field MUST be absent. The privateKey field SHALL contain the OCTET STRING representation of the serialized composite private key as per Section 5.2. The publicKey field remains OPTIONAL. If the publicKey field is present, it MUST be a composite public key as per Section 5.1.

Some applications might need to reconstruct the SubjectPublicKeyInfo or OneAsymmetricKey objects corresponding to each component key individually, for example if this is required for invoking the underlying primitive. Section 7 provides the necessary mapping between composite and their component algorithms for doing this reconstruction.

Component keys of a composite MUST NOT be used in any other type of key or as a standalone key. For more details on the security considerations around key reuse, see Section 10.3.

7. Algorithm Identifiers

This table summarizes the OID and the component algorithms for each Composite ML-DSA algorithm.

EDNOTE: these are prototyping OIDs to be replaced by IANA.

<CompSig> is equal to 2.16.840.1.114027.80.9.1

Composite Signature Algorithm	OID	ML-DSA	Trad	Pre-Hash
id-MLDSA44-RSA2048-PSS-SHA256	<CompSig>.0	ML-DSA-44	RSASSA-PSS with SHA256	SHA256
id-MLDSA44-RSA2048-PKCS15-SHA256	<CompSig>.1	ML-DSA-44	sha256WithRSAEncryption	SHA256
id-MLDSA44-Ed25519-SHA512	<CompSig>.2	ML-DSA-44	Ed25519	SHA512
id-MLDSA44-ECDSA-P256-SHA256	<CompSig>.3	ML-DSA-44	ecdsa-with-SHA256 with secp256r1	SHA256
id-MLDSA65-RSA3072-PSS-SHA512	<CompSig>.4	ML-DSA-65	RSASSA-PSS with SHA256	SHA512

id-MLDSA65-RSA3072-PKCS15-SHA512	<CompSig>.5	ML-DSA-65	sha256WithRSAEncryption	SHA512
id-MLDSA65-RSA4096-PSS-SHA512	<CompSig>.6	ML-DSA-65	RSASSA-PSS with SHA384	SHA512

id-MLDSA65-RSA4096-PKCS15-SHA512	<CompSig>.7	ML-DSA-65	sha384WithRSAEncryption	SHA512
id-MLDSA65-ECDSA-P256-SHA512	<CompSig>.8	ML-DSA-65	ecdsa-with-SHA256 with secp256r1	SHA512
id-MLDSA65-ECDSA-P384-SHA512	<CompSig>.9	ML-DSA-65	ecdsa-with-SHA384 with secp384r1	SHA512
id-MLDSA65-ECDSA-brainpoolP256r1-SHA512	<CompSig>.10	ML-DSA-65	ecdsa-with-SHA256 with brainpoolP256r1	SHA512
id-MLDSA65-Ed25519-SHA512	<CompSig>.11	ML-DSA-65	Ed25519	SHA512
id-MLDSA87-ECDSA-P384-SHA512	<CompSig>.12	ML-DSA-87	ecdsa-with-SHA384 with secp384r1	SHA512
id-MLDSA87-ECDSA-brainpoolP384r1-SHA512	<CompSig>.13	ML-DSA-87	ecdsa-with-SHA384 with brainpoolP384r1	SHA512
id-MLDSA87-Ed448-SHAKE256	<CompSig>.14	ML-DSA-8	Ed448	SHAKE256/512*

		7		
id-MLDSA87-RSA3072-PSS-SHA512	<CompSig>.15	ML-DSA-87	RSASSA-PSS with SHA384	SHA512
id-MLDSA87-RSA4096-PSS-SHA512	<CompSig>.16	ML-DSA-87	RSASSA-PSS with SHA384	SHA512
id-MLDSA87-ECDSA-P521-SHA512	<CompSig>.17	ML-DSA-87	ecdsa-with-SHA512 with secp521r1	SHA512

Table 2: ML-DSA Composite Signature Algorithms

*Note: The pre-hash functions were chosen to roughly match the security level of the stronger component. In the case of Ed25519 and Ed448 they match the hash function defined in [RFC8032]; SHA512 for Ed25519ph and SHAKE256(x, 64), which is SHAKE256 producing 64 bytes (512 bits) of output, for Ed448ph.

Full specifications for the referenced algorithms can be found in Appendix B.

As the number of algorithms can be daunting to implementers, see Section 11.3 for a discussion of choosing a subset to support.

7.1. Domain Separator Values

Each Composite ML-DSA algorithm has a unique domain separator value which is used in constructing the message representative M’ in the Composite-ML-DSA.Sign() (Section 4.2) and Composite-ML-DSA.Verify() (Section 4.3). This helps protect against component signature values being removed from the composite and used out of context.

The domain separator is simply the DER encoding of the OID. The following table shows the HEX-encoded domain separator value for each Composite ML-DSA algorithm.

Composite Signature Algorithm	Domain Separator (in Hex encoding)
id-MLDSA44-RSA2048-PSS-SHA256	060B6086480186FA6B50090100
id-MLDSA44-RSA2048-PKCS15-SHA256	060B6086480186FA6B50090101
id-MLDSA44-Ed25519-SHA512	060B6086480186FA6B50090102
id-MLDSA44-ECDSA-P256-SHA256	060B6086480186FA6B50090103
id-MLDSA65-RSA3072-PSS-SHA512	060B6086480186FA6B50090104
id-MLDSA65-RSA3072-PKCS15-SHA512	060B6086480186FA6B50090105
id-MLDSA65-RSA4096-PSS-SHA512	060B6086480186FA6B50090106
id-MLDSA65-RSA4096-PKCS15-SHA512	060B6086480186FA6B50090107
id-MLDSA65-ECDSA-P256-SHA512	060B6086480186FA6B50090108
id-MLDSA65-ECDSA-P384-SHA512	060B6086480186FA6B50090109
id-MLDSA65-ECDSA-brainpoolP256r1-SHA512	060B6086480186FA6B5009010A
id-MLDSA65-Ed25519-SHA512	060B6086480186FA6B5009010B
id-MLDSA87-ECDSA-P384-SHA512	060B6086480186FA6B5009010C
id-MLDSA87-ECDSA-brainpoolP384r1-SHA512	060B6086480186FA6B5009010D
id-MLDSA87-Ed448-SHAKE256	060B6086480186FA6B5009010E
id-MLDSA87-RSA3072-PSS-SHA512	060B6086480186FA6B5009010F
id-MLDSA87-RSA4096-PSS-SHA512	060B6086480186FA6B50090110
id-MLDSA87-ECDSA-P521-SHA512	060B6086480186FA6B50090111

Table 3: ML-DSA Composite Signature Domain Separators

EDNOTE: these domain separators are based on the prototyping OIDs assigned on the Entrust arc. We will need to ask for IANA early assignment of these OIDs so that we can re-compute the domain separators over the final OIDs.

7.2. Rationale for choices

In generating the list of composite algorithms, the idea was to provide composite algorithms at various security levels with varying performance characteristics.

The main design consideration in choosing pairings is to prioritize providing pairings of each ML-DSA security level with commonly-deployed traditional algorithms. This supports the design goal of using composites as a stepping stone to efficiently deploy post-quantum on top of existing hardened and certified traditional algorithm implementations. This was prioritized rather than attempting to exactly match the security level of the post-quantum and traditional components -- which in general is difficult to do since there is no academic consensus on how to compare the "bits of security" against classical attackers and "qubits of security" against quantum attackers.

SHA2 is prioritized over SHA3 in order to facilitate implementations that do not have easy access to SHA3 outside of the ML-DSA module. However SHAKE256 is used with Ed448 since this is already the recommended hash functions chosen for ED448ph in [RFC8032].

In some cases, multiple hash functions are used within the same composite algorithm. Consider for example id-MLDSA65-ECDSA-P256-SHA512 which requires SHA512 as the overall composite pre-hash in order to maintain the security level of ML-DSA-65, but uses SHA256 within the ecdsa-with-SHA256 with secp256r1 traditional component. While this increases the implementation burden of needing to carry multiple hash functions for a single composite algorithm, this aligns with the design goal of choosing commonly-implemented traditional algorithms since ecdsa-with-SHA256 with secp256r1 is far more common than, for example, ecdsa-with-SHA512 with secp256r1.

7.3. RSASSA-PSS Parameters

Use of RSASSA-PSS [RFC8017] requires extra parameters to be specified.

As with the other composite signature algorithms, when a composite algorithm OID involving RSA-PSS is used in an AlgorithmIdentifier, the parameters MUST be absent.

When RSA-PSS is used at the 2048-bit security level, RSASSA-PSS SHALL be instantiated with the following parameters:

RSASSA-PSS Parameter	Value
MaskGenAlgorithm.algorithm	id-mgf1
MaskGenAlgorithm.parameters	id-sha256
Message Digest Algorithm	id-sha256
Salt Length in bits	256

Table 4: RSASSA-PSS 2048 Parameters

When RSA-PSS is used at the 3072-bit or 4096-bit security level, RSASSA-PSS SHALL be instantiated with the following parameters:

RSASSA-PSS Parameter	Value
MaskGenAlgorithm.algorithm	id-mgf1
MaskGenAlgorithm.parameters	id-sha512
Message Digest Algorithm	id-sha512
Salt Length in bits	512

Table 5: RSASSA-PSS 3072 and 4096 Parameters

Full specifications for the referenced algorithms can be found in Appendix B.

8. ASN.1 Module

```
<CODE STARTS>

Composite-MLDSA-2025
  { iso(1) identified-organization(3) dod(6) internet(1)
        security(5) mechanisms(5) pkix(7) id-mod(0)
        id-mod-composite-mldsa-2025(TBDMOD) }


DEFINITIONS IMPLICIT TAGS ::= BEGIN

EXPORTS ALL;
```

```
   IMPORTS
     PUBLIC-KEY, SIGNATURE-ALGORITHM, SMIME-CAPS, AlgorithmIdentifier{}
       FROM AlgorithmInformation-2009  -- RFC 5912 [X509ASN1]
         { iso(1) identified-organization(3) dod(6) internet(1)
           security(5) mechanisms(5) pkix(7) id-mod(0)
           id-mod-algorithmInformation-02(58) }
   ;

   --
   -- Object Identifiers
   --

   --
   -- Information Object Classes
   --

   pk-CompositeSignature {OBJECT IDENTIFIER:id}
       PUBLIC-KEY ::= {
         IDENTIFIER id
         -- KEY without ASN.1 wrapping --
         PARAMS ARE absent
         CERT-KEY-USAGE { digitalSignature, nonRepudiation, keyCertSign,
                                                                cRLSign}
       }

   sa-CompositeSignature{OBJECT IDENTIFIER:id,
      PUBLIC-KEY:publicKeyType }
         SIGNATURE-ALGORITHM ::=  {
            IDENTIFIER id
            -- VALUE without ASN.1 wrapping --
            PARAMS ARE absent
            PUBLIC-KEYS {publicKeyType}
         }


   -- Composite ML-DSA which uses a PreHash Message

   -- TODO: OID to be replaced by IANA
   id-MLDSA44-RSA2048-PSS-SHA256 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 0 }

   pk-MLDSA44-RSA2048-PSS-SHA256 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA44-RSA2048-PSS-SHA256}

   sa-MLDSA44-RSA2048-PSS-SHA256 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA44-RSA2048-PSS-SHA256,
```

```
          pk-MLDSA44-RSA2048-PSS-SHA256 }

   -- TODO: OID to be replaced by IANA
   id-MLDSA44-RSA2048-PKCS15-SHA256 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 1 }

   pk-MLDSA44-RSA2048-PKCS15-SHA256 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA44-RSA2048-PKCS15-SHA256}

   sa-MLDSA44-RSA2048-PKCS15-SHA256 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA44-RSA2048-PKCS15-SHA256,
          pk-MLDSA44-RSA2048-PKCS15-SHA256 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA44-Ed25519-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 2 }

   pk-MLDSA44-Ed25519-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA44-Ed25519-SHA512}

   sa-MLDSA44-Ed25519-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA44-Ed25519-SHA512,
          pk-MLDSA44-Ed25519-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA44-ECDSA-P256-SHA256 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 3 }

   pk-MLDSA44-ECDSA-P256-SHA256 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA44-ECDSA-P256-SHA256}

   sa-MLDSA44-ECDSA-P256-SHA256 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA44-ECDSA-P256-SHA256,
          pk-MLDSA44-ECDSA-P256-SHA256 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA65-RSA3072-PSS-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 4 }
```

```
   pk-MLDSA65-RSA3072-PSS-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA65-RSA3072-PSS-SHA512}

   sa-MLDSA65-RSA3072-PSS-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-RSA3072-PSS-SHA512,
          pk-MLDSA65-RSA3072-PSS-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA65-RSA3072-PKCS15-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 5 }

   pk-MLDSA65-RSA3072-PKCS15-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA65-RSA3072-PKCS15-SHA512}

   sa-MLDSA65-RSA3072-PKCS15-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-RSA3072-PKCS15-SHA512,
          pk-MLDSA65-RSA3072-PKCS15-SHA512 }

   -- TODO: OID to be replaced by IANA
   id-MLDSA65-RSA4096-PSS-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 6 }

   pk-MLDSA65-RSA4096-PSS-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA65-RSA4096-PSS-SHA512}

   sa-MLDSA65-RSA4096-PSS-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-RSA4096-PSS-SHA512,
          pk-MLDSA65-RSA4096-PSS-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA65-RSA4096-PKCS15-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 7 }

   pk-MLDSA65-RSA4096-PKCS15-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA65-RSA4096-PKCS15-SHA512}

   sa-MLDSA65-RSA4096-PKCS15-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-RSA4096-PKCS15-SHA512,
          pk-MLDSA65-RSA4096-PKCS15-SHA512 }
```

```
   -- TODO: OID to be replaced by IANA
   id-MLDSA65-ECDSA-P256-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 8 }

   pk-MLDSA65-ECDSA-P256-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA65-ECDSA-P256-SHA512}

   sa-MLDSA65-ECDSA-P256-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-ECDSA-P256-SHA512,
          pk-MLDSA65-ECDSA-P256-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA65-ECDSA-P384-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 9 }

   pk-MLDSA65-ECDSA-P384-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA65-ECDSA-P384-SHA512}

   sa-MLDSA65-ECDSA-P384-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-ECDSA-P384-SHA512,
          pk-MLDSA65-ECDSA-P384-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA65-ECDSA-brainpoolP256r1-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 10 }

   pk-MLDSA65-ECDSA-brainpoolP256r1-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA65-ECDSA-brainpoolP256r1-SHA512}

   sa-MLDSA65-ECDSA-brainpoolP256r1-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-ECDSA-brainpoolP256r1-SHA512,
          pk-MLDSA65-ECDSA-brainpoolP256r1-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA65-Ed25519-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 11 }

   pk-MLDSA65-Ed25519-SHA512 PUBLIC-KEY ::=
```

```
     pk-CompositeSignature{ id-MLDSA65-Ed25519-SHA512}

   sa-MLDSA65-Ed25519-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA65-Ed25519-SHA512,
          pk-MLDSA65-Ed25519-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA87-ECDSA-P384-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 12 }

   pk-MLDSA87-ECDSA-P384-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA87-ECDSA-P384-SHA512}

   sa-MLDSA87-ECDSA-P384-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA87-ECDSA-P384-SHA512,
          pk-MLDSA87-ECDSA-P384-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA87-ECDSA-brainpoolP384r1-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 13 }

   pk-MLDSA87-ECDSA-brainpoolP384r1-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA87-ECDSA-brainpoolP384r1-SHA512}

   sa-MLDSA87-ECDSA-brainpoolP384r1-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA87-ECDSA-brainpoolP384r1-SHA512,
          pk-MLDSA87-ECDSA-brainpoolP384r1-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA87-Ed448-SHAKE256 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 14 }

   pk-MLDSA87-Ed448-SHAKE256 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA87-Ed448-SHAKE256}

   sa-MLDSA87-Ed448-SHAKE256 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA87-Ed448-SHAKE256,
          pk-MLDSA87-Ed448-SHAKE256 }
```

```
   -- TODO: OID to be replaced by IANA
   id-MLDSA87-RSA3072-PSS-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 15 }

   pk-MLDSA87-RSA3072-PSS-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA87-RSA3072-PSS-SHA512}

   sa-MLDSA87-RSA3072-PSS-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA87-RSA3072-PSS-SHA512,
          pk-MLDSA87-RSA3072-PSS-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA87-RSA4096-PSS-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 16 }

   pk-MLDSA87-RSA4096-PSS-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA87-RSA4096-PSS-SHA512}

   sa-MLDSA87-RSA4096-PSS-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA87-RSA4096-PSS-SHA512,
          pk-MLDSA87-RSA4096-PSS-SHA512 }


   -- TODO: OID to be replaced by IANA
   id-MLDSA87-ECDSA-P521-SHA512 OBJECT IDENTIFIER ::= {
      joint-iso-itu-t(2) country(16) us(840) organization(1)
      entrust(114027) algorithm(80) composite-mldsa(9) signature(1) 17 }

   pk-MLDSA87-ECDSA-P521-SHA512 PUBLIC-KEY ::=
     pk-CompositeSignature{ id-MLDSA87-ECDSA-P521-SHA512}

   sa-MLDSA87-ECDSA-P521-SHA512 SIGNATURE-ALGORITHM ::=
       sa-CompositeSignature{
          id-MLDSA87-ECDSA-P521-SHA512,
          pk-MLDSA87-ECDSA-P521-SHA512 }


   SignatureAlgorithmSet SIGNATURE-ALGORITHM ::= {
     sa-MLDSA44-RSA2048-PSS-SHA256 |
     sa-MLDSA44-RSA2048-PKCS15-SHA256 |
     sa-MLDSA44-Ed25519-SHA512 |
     sa-MLDSA44-ECDSA-P256-SHA256 |
     sa-MLDSA65-RSA3072-PSS-SHA512 |
```

```
      sa-MLDSA65-RSA3072-PKCS15-SHA512 |
      sa-MLDSA65-RSA4096-PSS-SHA512 |
      sa-MLDSA65-RSA4096-PKCS15-SHA512 |
      sa-MLDSA65-ECDSA-P256-SHA512 |
      sa-MLDSA65-ECDSA-P384-SHA512 |
      sa-MLDSA65-ECDSA-brainpoolP256r1-SHA512 |
      sa-MLDSA65-Ed25519-SHA512 |
      sa-MLDSA87-ECDSA-P384-SHA512 |
      sa-MLDSA87-ECDSA-brainpoolP384r1-SHA512 |
      sa-MLDSA87-Ed448-SHAKE256 |
      sa-MLDSA87-RSA3072-PSS-SHA512 |
      sa-MLDSA87-RSA4096-PSS-SHA512 |
      sa-MLDSA87-ECDSA-P521-SHA512,
      ... }

   END
```

<CODE ENDS>

9. IANA Considerations

IANA is requested to allocate a value from the "SMI Security for PKIX Module Identifier" registry [RFC7299] for the included ASN.1 module, and allocate values from "SMI Security for PKIX Algorithms" to identify the eighteen algorithms defined within.

9.1. Object Identifier Allocations

EDNOTE to IANA: OIDs will need to be replaced in both the ASN.1 module and in Table 2.

9.1.1. Module Registration

The following is to be registered in "SMI Security for PKIX Module Identifier":

* Decimal: IANA Assigned - *Replace TBDMOD*

* Description: Composite-Signatures-2025 - id-mod-composite-signatures

* References: This Document

9.1.2. Object Identifier Registrations

The following are to be registered in "SMI Security for PKIX Algorithms":

* id-MLDSA44-RSA2048-PSS-SHA256

  - Decimal: IANA Assigned

  - Description: id-MLDSA44-RSA2048-PSS-SHA256

  - References: This Document

* id-MLDSA44-RSA2048-PKCS15-SHA256

  - Decimal: IANA Assigned

  - Description: id-MLDSA44-RSA2048-PKCS15-SHA256

  - References: This Document

* id-MLDSA44-Ed25519-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA44-Ed25519-SHA512

  - References: This Document

* id-MLDSA44-ECDSA-P256-SHA256

  - Decimal: IANA Assigned

  - Description: id-MLDSA44-ECDSA-P256-SHA256

  - References: This Document

* id-MLDSA65-RSA3072-PSS-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-RSA3072-PSS-SHA512

  - References: This Document

* id-MLDSA65-RSA3072-PKCS15-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-RSA3072-PKCS15-SHA512

  - References: This Document

* id-MLDSA65-RSA4096-PSS-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-RSA4096-PSS-SHA512

  - References: This Document

* id-MLDSA65-RSA4096-PKCS15-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-RSA4096-PKCS15-SHA512

  - References: This Document

* id-MLDSA65-ECDSA-P256-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-ECDSA-P256-SHA512

  - References: This Document

* id-MLDSA65-ECDSA-P384-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-ECDSA-P384-SHA512

  - References: This Document

* id-MLDSA65-ECDSA-brainpoolP256r1-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-ECDSA-brainpoolP256r1-SHA512

  - References: This Document

* id-MLDSA65-Ed25519-SHA512

  - Decimal: IANA Assigned

  - Description: id-MLDSA65-Ed25519-SHA512

  - References: This Document

* id-MLDSA87-ECDSA-P384-SHA512
  - Decimal: IANA Assigned
  - Description: id-MLDSA87-ECDSA-P384-SHA512
  - References: This Document
* id-MLDSA87-ECDSA-brainpoolP384r1-SHA512
  - Decimal: IANA Assigned
  - Description: id-MLDSA87-ECDSA-brainpoolP384r1-SHA512
  - References: This Document
* id-MLDSA87-Ed448-SHAKE256
  - Decimal: IANA Assigned
  - Description: id-MLDSA87-Ed448-SHAKE256
  - References: This Document
* id-MLDSA87-RSA3072-PSS-SHA512
  - Decimal: IANA Assigned
  - Description: id-MLDSA87-RSA3072-PSS-SHA512
  - References: This Document
* id-MLDSA87-RSA4096-PSS-SHA512
  - Decimal: IANA Assigned
  - Description: id-MLDSA87-RSA4096-PSS-SHA512
  - References: This Document
* id-MLDSA87-ECDSA-P521-SHA512
  - Decimal: IANA Assigned
  - Description: id-MLDSA87-ECDSA-P521-SHA512
  - References: This Document

10. Security Considerations

10.1. Why Hybrids?

In broad terms, a PQ/T Hybrid can be used either to provide dual-algorithm security or to provide migration flexibility. Let’s quickly explore both.

Dual-algorithm security. The general idea is that the data is protected by two algorithms such that an attacker would need to break both in order to compromise the data. As with most of cryptography, this property is easy to state in general terms, but becomes more complicated when expressed in formalisms. Section 10.2 goes into more detail here. One common counter-argument against PQ/T hybrid signatures is that if an attacker can forge one of the component algorithms, then why attack the hybrid-signed message at all when they could simply forge a completely new message? The answer to this question must be found outside the cryptographic primitives themselves, and instead in policy; once an algorithm is known to be broken it ought to be disallowed for single-algorithm use by cryptographic policy, while hybrids involving that algorithm may continue to be used and to provide value.

Migration flexibility. Some PQ/T hybrids exist to provide a sort of "OR" mode where the application can choose to use one algorithm or the other or both. The intention is that the PQ/T hybrid mechanism builds in backwards compatibility to allow legacy and upgraded applications to co-exist and communicate. The composites presented in this specification do not provide this since they operate in a strict "AND" mode. They do, however, provide codebase migration flexibility. Consider that an organization has today a mature, validated, certified, hardened implementation of RSA or ECC; composites allow them to add an ML-DSA implementation which immediately starts providing benefits against long-term document integrity attacks even if that ML-DSA implementation is still an experimental, non-validated, non-certified, non-hardened implementation. More details of obtaining FIPS certification of a composite algorithm can be found in Section 11.1.

10.2. Non-separability, EUF-CMA and SUF

The signature combiner defined in this specification is Weakly Non-Separable (WNS), as defined in [I-D.ietf-pquip-hybrid-signature-spectrums], since the forged message M’ will include the composite domain separator as evidence. The prohibition on key reuse between composite and single-algorithm contexts discussed in Section 10.3 further strengthens the non-separability in practice, but does not achieve Strong Non-

Separability (SNS) since policy mechanisms such as this are outside the definition of SNS.

Unforgeability properties are somewhat more nuanced. We recall first the definitions of Existential Unforgeability under Chosen Message Attack (EUF-CMA) and Strong Unforgeability (SUF). The classic EUF-CMA game is in reference to a pair of algorithms (Sign(), Verify()) where the attacker has access to a signing oracle using the Sign() and must produce a message-signature pair (m’, s’) that is accepted by the verifier using Verify() and where m’ was never signed by the oracle. SUF is similar but requires only that (m’, s’) != (m, s) for any honestly-generated (m, s), i.e. that the attacker cannot construct a new signature to an already-signed message.

The pair (CompositeML-DSA.Sign(), CompositeML-DSA.Verify()) is EUF-CMA secure so long as at least one component algorithm is EUF-CMA secure since any attempt to modify the message would cause the EUF-CMA secure component to fail its Verify() which in turn will cause CompositeML-DSA.Verify() to fail.

Composite ML-DSA only achieves SUF security if both components are SUF secure, which is not a useful property; the argument is that if the first component algorithm is not SUF secure then by definition it admits at least one (m, s1’) pair where s1’ was not produced by the honest signer, and the attacker can then combine it with an honestly-signed (m, s2) signature produced by the second algorithm over the same message m to create (m, (s1’, s2)) which violates SUF for the composite algorithm. Of the traditional signature component algorithms used in this specification, only Ed25519 and Ed448 are SUF secure and therefore applications that require SUF security to be maintained even in the event that ML-DSA is broken SHOULD use it in composite with Ed25519 or Ed448.

In addition to the classic EUF-CMA game, we also consider a “cross-protocol” version of the EUF-CMA game that is relevant to hybrids. Specifically, we want to consider a modified version of the EUF-CMA game where the attacker has access to either a signing oracle over the two component algorithms in isolation, Trad.Sign() and ML-DSA.Sign(), and attempts to fraudulently present them as a composite, or where the attacker has access to a composite signing oracle and then attempts to split the signature back into components and present them to either ML-DSA.Verify() or Trad.Verify().

In the case of Composite ML-DSA, a specific message forgery exists for a cross-protocol EUF-CMA attack, namely introduced by the prefix construction used to construct the to-be-signed message representative M’. This applies to use of individual component signing oracles with fraudulent presentation of the signature to a composite verification oracle, and use of a composite signing oracle with fraudulent splitting of the signature for presentation to component verification oracle(s) of either ML-DSA.Verify() or Trad.Verify(). In the first case, an attacker with access to signing oracles for the two component algorithms can sign M' and then trivially assemble a composite. In the second case, the message M' (containing the composite domain separator) can be presented as having been signed by a standalone component algorithm. However, use of the context string for domain separation enables Weak Non-Separability and auditable checks on hybrid use, which is deemed a reasonable trade-off. Moreover and very importantly, the cross-protocol EUF-CMA attack in either direction is foiled if implementers strictly follow the prohibition on key reuse presented in Section 10.3 since there cannot exist simultaneously composite and non-composite signers and verifiers for the same keys.

10.2.1. Implications of multiple encodings

As noted in Section 5, this specification leaves some flexibility the choice of encoding of the traditional component. As such it is possible for the same composite public key to carry multiple valid representations (mldsaPK, tradPK1) and (mldsaPK, tradPK2) where tradPK1 and tradPK2 are alternate encodings of the same key, for example compressed vs uncompressed EC points. In theory alternate encodings of the traditional signature value are also possible, although the authors are not aware of any.

In theory this introduces complications for EUF-CMA and SUF-CMA security proofs. Implementers who are concerned with this SHOULD choose implementations of the traditional component that only accept a single encoding and performs appropriate length-checking, and reject composites which contain any other encodings. This would reduce interoperability with other Composite ML-DSA implementations, but it is permitted by this specification.

10.3. Key Reuse

While conformance with this specification requires that both components of a composite key MUST be freshly generated, the designers are aware that some implementers may be forced to break this rule due to operational constraints. This section documents the implications of doing so.

When using single-algorithm cryptography, the best practice is to always generate fresh key material for each purpose, for example when renewing a certificate, or obtaining both a TLS and S/MIME certificate for the same device. However, in practice key reuse in such scenarios is not always catastrophic to security and therefore often tolerated. However this reasoning does not hold in the PQ/T hybrid setting.

Within the broader context of PQ/T hybrids, we need to consider new attack surfaces that arise due to the hybrid constructions that did not exist in single-algorithm contexts. One of these is key reuse where the component keys within a hybrid are also used by themselves within a single-algorithm context. For example, it might be tempting for an operator to take an already-deployed RSA key pair and combine it with an ML-DSA key pair to form a hybrid key pair for use in a hybrid algorithm. Within a hybrid signature context this leads to a class of attacks referred to as "stripping attacks" discussed in Section 10.2 and may also open up risks from further cross-protocol attacks. Despite the weak non-separability property offered by the composite signature combiner, key reuse MUST be avoided to prevent the introduction of EUF-CMA vulnerabilities.

In addition, there is a further implication to key reuse regarding certificate revocation. Upon receiving a new certificate enrolment request, many certification authorities will check if the requested public key has been previously revoked due to key compromise. Often a CA will perform this check by using the public key hash. Therefore, if one, or even both, components of a composite have been previously revoked, the CA may only check the hash of the combined composite key and not find the revocations. Therefore, because the possibility of key reuse exists even though forbidden in this specification, CAs performing revocation checks on a composite key SHOULD also check both component keys independently to verify that the component keys have not been revoked.

Some application might disregard the requirements of this specification to not reuse key material between single-algorithm and composite contexts. While doing so is still a violation of this specification, the weakening of security from doing so can be mitigated by using an appropriate ctx value, such as ctx=Foobar-dual-cert-sig to indicate that this signature belongs to the Foobar protocol where two certificates were used to create a single composite signature. This specification does not endorse such uses, and per-application security analysis is needed.

10.4. Use of Prefix for attack mitigation

The Prefix value specified in Section 3.2 allows for cautious implementers to wrap their existing Traditional Verify() implementations with a guard that looks for messages starting with this string and fail with an error -- i.e. this can act as an extra protection against taking a composite signature and splitting it back into components. However, an implementation that does this will be unable to perform a Traditional signature and verification on a message which happens to start with this string. The designers accepted this trade-off.

10.5. Implications of signature randomizer

The primary design motivation behind pre-hashing is to perform only a single pass over the potentially large input message M and to allow for optimizations in cases such as signing the same message digest with multiple different keys.

Composite ML-DSA introduces a 32-byte randomizer into the signature representative M’. This is to prevent a class of attacks unique to composites, which we define as a "mixed-key forgery attack": Take two composite keys (mldsaPK1, tradPK1) and (mldsaPK2, tradPK2) which do not share any key material and have them produce signatures (r1, mldsaSig1, tradSig1) and (r2, mldsaSig2, tradSig2) respectively over the same message M. Consider whether it is possible to construct a forgery by swapping components and presenting (r, mldsaSig1, tradSig2) that verifies under a forged public key (mldsaPK1, tradPK2). This forgery attack is blocked by the randomizer r so long as r1 != r2.

A failure of randomness, for example r = 0, or a fixed value of ’r’ effectively reduces r to a prefix that doesn’t add value, but it is no worse than the security properties that Composite ML-DSA would have had without the randomizer.

Introduction of the randomizer might introduce other beneficial security properties, but these are outside the scope of design consideration.

10.6. Policy for Deprecated and Acceptable Algorithms

Traditionally, a public key or certificate contains a single cryptographic algorithm. If and when an algorithm becomes deprecated (for example, RSA-512, or SHA1), the path to deprecating it through policy and removing it from operational environments is, at least is principle, straightforward.

In the composite model this is less obvious since a PQ/T hybrid is expected to still be considered valid after the traditional component is deprecated for individual use. As such, a single composite public key or certificate may contain a mixture of deprecated and non-deprecated algorithms. In general this should be manageable through policy by removing OIDs for the standalone component algorithms while still allowing OIDs for composite algorithms. However, complications may arise when the composite implementation needs to invoke the cryptographic module for a deprecated component algorithm. In particular, this could lead to complex Cryptographic Bills of Materials that show implementations of deprecated algorithms still present and being used.

11. Implementation Considerations

11.1. FIPS certification

The following sections give guidance to implementers wishing to FIPS-certify a composite implementation.

This guidance is not authoritative and has not been endorsed by NIST.

One of the primary design goals of this specification is for the overall composite algorithm to be able to be considered FIPS-approved even when one of the component algorithms is not.

Implementers seeking FIPS certification of a composite signature algorithm where only one of the component algorithms has been FIPS-validated or FIPS-approved should credit the FIPS-validated component algorithm with full security strength, the non-FIPS-validated component algorithm with zero security, and the overall composite should be considered at least as strong and thus FIPS-approved.

The composite algorithm has been designed to treat the underlying primitives as "black-box implementations" and not impose any additional requirements on them that could require an existing implementation of an underlying primitive to run in a mode different from the one under which it was certified. For example, the KeyGen defined in Section 4.1 invokes ML-DSA.KeyGen(seed) which might not be available in a cryptographic module running in FIPS-mode, but Section 4.1 is only a suggested implementation and the composite KeyGen MAY be implemented using a different available interface for ML-DSA.KeyGen. Another example is pre-hashing; a pre-hash is inherent to RSA, ECDSA, and ML-DSA (mu), and composite makes no assumptions or requirements about whether component-specific pre-hashing is done locally as part of the composite, or remotely as part of the component primitive.

The signature randomizer r requires the composite implementation to have access to a cryptographic random number generator. However, as noted in Section 10.5, this provides additional security properties on top of those provided by ML-DSA, RSA, ECDSA, and EdDSA, and failure of randomness does not compromise the Composite ML-DSA algorithm or the underlying primitives. Therefore it should be possible to exclude this RNG invocation from the FIPS boundary if an implementation is not able to guarantee use of a FIPS-approved RNG.

The authors wish to note that composite algorithms provide a design pattern to provide utility in future situations that require care to remain FIPS-compliant, such as future cryptographic migrations as well as bridging across jurisdictions with non-intersecting cryptographic requirements.

11.2. Backwards Compatibility

The term "backwards compatibility" is used here to mean that existing systems as they are deployed today can interoperate with the upgraded systems of the future. This draft explicitly does not provide backwards compatibility, only upgraded systems will understand the OIDs defined in this specification.

If backwards compatibility is required, then additional mechanisms will be needed. Migration and interoperability concerns need to be thought about in the context of various types of protocols that make use of X.509 and PKIX with relation to digital signature objects, from online negotiated protocols such as TLS 1.3 [RFC8446] and IKEv2 [RFC7296], to non-negotiated asynchronous protocols such as S/MIME signed email [RFC8551], document signing such as in the context of the European eIDAS regulations [eIDAS2014], and publicly trusted code signing [codesigningbrsv3.8], as well as myriad other standardized and proprietary protocols and applications that leverage CMS [RFC5652] signed structures. Composite simplifies the protocol design work because it can be implemented as a signature algorithm that fits into existing systems.

11.3. Profiling down the number of options

One daunting aspect of this specification is the number of composite algorithm combinations. Each option has been specified because there is a community that has a direct application for it; typically because the traditional component is already deployed in a change-managed environment, or because that specific traditional component is required for regulatory reasons.

However, this large number of combinations leads either to fracturing of the ecosystem into non-interoperable sub-groups when different communities choose non-overlapping subsets to support, or on the other hand it leads to spreading development resources too thin when trying to support all options.

This specification does not list any particular composite algorithm as mandatory-to-implement, however organizations that operate within specific application domains are encouraged to define profiles that select a small number of composites appropriate for that application domain. For applications that do not have any regulatory requirements or legacy implementations to consider, it is RECOMMENDED to focus implementation effort on:

id-MLDSA65-ECDSA-P256-SHA512

In applications that require RSA, it is RECOMMENDED to focus implementation effort on:

id-MLDSA65-RSA3072-PSS-SHA512

In applications that only allow NIST PQC Level 5, it is RECOMMENDED to focus implementation effort on:

id-MLDSA87-ECDSA-P384-SHA512

11.4. External Pre-hashing

Implementers MAY externalize the pre-hash computation outside the module that computes Composite-ML-DSA.Sign() in an analogous way to how pre-hash signing is used for RSA, ECDSA or HashML-DSA. Such a modification to the Composite-ML-DSA.Sign() algorithm is considered compliant to this specification so long as it produces the same output and error conditions.

Below is a suggested implementation for splitting the pre-hashing and signing between two parties.

```
Composite-ML-DSA<OID>.Prehash(M) ->  ph

Explicit inputs:

  M       The message to be signed, an octet string.

Implicit inputs mapped from <OID>:

  PH      The hash function to use for pre-hashing.

Output:

   ph     The pre-hash which equals PH ( M )

Process:


1. Compute the Prehash of the message using the Hash function
    defined by PH

   ph = PH ( M )

2. Output ph
```

Figure 12: Generation of the external pre-hash

```
Composite-ML-DSA<OID>.Sign_ph(sk, ph, ctx) -> s

Explicit inputs:

  sk    Composite private key consisting of signing private keys for
        each component.

  ph     The pre-hash digest over the message

 ctx    The Message context string used in the composite signature
        combiner, which defaults to the empty string.


Implicit inputs mapped from <OID>:

  ML-DSA    The underlying ML-DSA algorithm and
            parameter set, for example, could be "ML-DSA-65".

  Trad      The underlying traditional algorithm and
            parameter set, for example "RSASSA-PSS with id-sha256"
            or "Ed25519".

  Prefix    The prefix String which is the byte encoding of the String
            "CompositeAlgorithmSignatures2025" which in hex is
            436F6D706F73697465416C676F726974686D5369676E61747572657332303235

  Domain    Domain separator value for binding the signature to the
            Composite OID. Additionally, the composite Domain is passed into
            the underlying ML-DSA primitive as the ctx.
            Domain values are defined in the "Domain Separators" section below.

Process:

   1.  Identical to Composite-ML-DSA<OID>.Sign (sk, M, ctx) but replace the internally
       generated PH( M ) from step 2 of Composite-ML-DSA<OID>.Sign (sk, M, ctx)
       with ph which is input into this function.
```

Figure 13: Suggested implementation of external pre-hashing

12. References

12.1. Normative References

[FIPS.186-5]
National Institute of Standards and Technology (NIST), "Digital Signature Standard (DSS)", February 2023, <https://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.186-5.pdf>.

[FIPS.202] National Institute of Standards and Technology (NIST), "SHA-3 Standard: Permutation-Based Hash and Extendable-Output Functions", August 2015, <https://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.202.pdf>.

[FIPS.204] National Institute of Standards and Technology (NIST), "Module-Lattice-Based Digital Signature Standard", FIPS PUB 204, August 2024, <https://nvlpubs.nist.gov/nistpubs/FIPS/NIST.FIPS.204.pdf>.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, DOI 10.17487/RFC2119, March 1997, <https://www.rfc-editor.org/info/rfc2119>.

[RFC2986] Nystrom, M. and B. Kaliski, "PKCS #10: Certification Request Syntax Specification Version 1.7", RFC 2986, DOI 10.17487/RFC2986, November 2000, <https://www.rfc-editor.org/info/rfc2986>.

[RFC3279] Bassham, L., Polk, W., and R. Housley, "Algorithms and Identifiers for the Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile", RFC 3279, DOI 10.17487/RFC3279, April 2002, <https://www.rfc-editor.org/info/rfc3279>.

[RFC4210] Adams, C., Farrell, S., Kause, T., and T. Mononen, "Internet X.509 Public Key Infrastructure Certificate Management Protocol (CMP)", RFC 4210, DOI 10.17487/RFC4210, September 2005, <https://www.rfc-editor.org/info/rfc4210>.

[RFC4211] Schaad, J., "Internet X.509 Public Key Infrastructure Certificate Request Message Format (CRMF)", RFC 4211, DOI 10.17487/RFC4211, September 2005, <https://www.rfc-editor.org/info/rfc4211>.

[RFC5280] Cooper, D., Santesson, S., Farrell, S., Boeyen, S., Housley, R., and W. Polk, "Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile", RFC 5280, DOI 10.17487/RFC5280, May 2008, <https://www.rfc-editor.org/info/rfc5280>.

[RFC5480] Turner, S., Brown, D., Yiu, K., Housley, R., and T. Polk, "Elliptic Curve Cryptography Subject Public Key Information", RFC 5480, DOI 10.17487/RFC5480, March 2009, <https://www.rfc-editor.org/info/rfc5480>.

[RFC5639] Lochter, M. and J. Merkle, "Elliptic Curve Cryptography (ECC) Brainpool Standard Curves and Curve Generation", RFC 5639, DOI 10.17487/RFC5639, March 2010, <https://www.rfc-editor.org/info/rfc5639>.

[RFC5652] Housley, R., "Cryptographic Message Syntax (CMS)", STD 70, RFC 5652, DOI 10.17487/RFC5652, September 2009, <https://www.rfc-editor.org/info/rfc5652>.

[RFC5758] Dang, Q., Santesson, S., Moriarty, K., Brown, D., and T. Polk, "Internet X.509 Public Key Infrastructure: Additional Algorithms and Identifiers for DSA and ECDSA", RFC 5758, DOI 10.17487/RFC5758, January 2010, <https://www.rfc-editor.org/info/rfc5758>.

[RFC5958] Turner, S., "Asymmetric Key Packages", RFC 5958, DOI 10.17487/RFC5958, August 2010, <https://www.rfc-editor.org/info/rfc5958>.

[RFC6090] McGrew, D., Igoe, K., and M. Salter, "Fundamental Elliptic Curve Cryptography Algorithms", RFC 6090, DOI 10.17487/RFC6090, February 2011, <https://www.rfc-editor.org/info/rfc6090>.

[RFC6234] Eastlake 3rd, D. and T. Hansen, "US Secure Hash Algorithms (SHA and SHA-based HMAC and HKDF)", RFC 6234, DOI 10.17487/RFC6234, May 2011, <https://www.rfc-editor.org/info/rfc6234>.

[RFC8032] Josefsson, S. and I. Liusvaara, "Edwards-Curve Digital Signature Algorithm (EdDSA)", RFC 8032, DOI 10.17487/RFC8032, January 2017, <https://www.rfc-editor.org/info/rfc8032>.

[RFC8174] Leiba, B., "Ambiguity of Uppercase vs Lowercase in RFC 2119 Key Words", BCP 14, RFC 8174, DOI 10.17487/RFC8174, May 2017, <https://www.rfc-editor.org/info/rfc8174>.

[RFC8410] Josefsson, S. and J. Schaad, "Algorithm Identifiers for Ed25519, Ed448, X25519, and X448 for Use in the Internet X.509 Public Key Infrastructure", RFC 8410, DOI 10.17487/RFC8410, August 2018, <https://www.rfc-editor.org/info/rfc8410>.

[SEC1] Certicom Research, "SEC 1: Elliptic Curve Cryptography", May 2009, <https://www.secg.org/sec1-v2.pdf>.

[SEC2] Certicom Research, "SEC 2: Recommended Elliptic Curve Domain Parameters", January 2010, <https://www.secg.org/sec2-v2.pdf>.

[X.690] ITU-T, "Information technology - ASN.1 encoding Rules: Specification of Basic Encoding Rules (BER), Canonical Encoding Rules (CER) and Distinguished Encoding Rules (DER)", ISO/IEC 8825-1:2015, November 2015.

[X9.62_2005] American National Standards Institute, "Public Key Cryptography for the Financial Services Industry The Elliptic Curve Digital Signature Algorithm (ECDSA)", November 2005.

12.2. Informative References

[ANSSI2024] French Cybersecurity Agency (ANSSI), Federal Office for Information Security (BSI), Netherlands National Communications Security Agency (NLNCSA), and Swedish National Communications Security Authority, Swedish Armed Forces, "Position Paper on Quantum Key Distribution", n.d., <https://cyber.gouv.fr/sites/default/files/document/Quantum_Key_Distribution_Position_Paper.pdf>.

[Bindel2017] Bindel, N., Herath, U., McKague, M., and D. Stebila, "Transitioning to a quantum-resistant public key infrastructure", 2017, <https://link.springer.com/chapter/10.1007/978-3-319-59879-6_22>.

[BonehShoup] Boneh, D. and V. Shoup, "A Graduate Course in Applied Cryptography v0.6", January 2023, <https://crypto.stanford.edu/~dabo/cryptobook/BonehShoup_0_6.pdf>.

[BSI2021] Federal Office for Information Security (BSI), "Quantum-safe cryptography - fundamentals, current developments and recommendations", October 2021, <https://www.bsi.bund.de/SharedDocs/Downloads/EN/BSI/Publications/Brochure/quantum-safe-cryptography.pdf>.

[codesigningbrsv3.8]
CA/Browser Forum, "Baseline Requirements for the Issuance and Management of Publicly‐Trusted Code Signing Certificates Version 3.8.0", n.d., <https://cabforum.org/working-groups/code-signing/documents/>.

[eIDAS2014]
European Parliament and Council, "Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC", n.d., <https://eur-lex.europa.eu/eli/reg/2014/910/oj/eng>.

[I-D.ietf-lamps-dilithium-certificates]
Massimo, J., Kampanakis, P., Turner, S., and B. Westerbaan, "Internet X.509 Public Key Infrastructure - Algorithm Identifiers for the Module-Lattice-Based Digital Signature Algorithm (ML-DSA)", Work in Progress, Internet-Draft, draft-ietf-lamps-dilithium-certificates-11, 22 May 2025, <https://datatracker.ietf.org/doc/html/draft-ietf-lamps-dilithium-certificates-11>.

[I-D.ietf-pquip-hybrid-signature-spectrums]
Bindel, N., Hale, B., Connolly, D., and F. D, "Hybrid signature spectrums", Work in Progress, Internet-Draft, draft-ietf-pquip-hybrid-signature-spectrums-06, 9 January 2025, <https://datatracker.ietf.org/doc/html/draft-ietf-pquip-hybrid-signature-spectrums-06>.

[I-D.ietf-pquip-pqt-hybrid-terminology]
D, F., P, M., and B. Hale, "Terminology for Post-Quantum Traditional Hybrid Schemes", Work in Progress, Internet-Draft, draft-ietf-pquip-pqt-hybrid-terminology-06, 10 January 2025, <https://datatracker.ietf.org/doc/html/draft-ietf-pquip-pqt-hybrid-terminology-06>.

[RFC5914] Housley, R., Ashmore, S., and C. Wallace, "Trust Anchor Format", RFC 5914, DOI 10.17487/RFC5914, June 2010, <https://www.rfc-editor.org/info/rfc5914>.

[RFC7292] Moriarty, K., Ed., Nystrom, M., Parkinson, S., Rusch, A., and M. Scott, "PKCS #12: Personal Information Exchange Syntax v1.1", RFC 7292, DOI 10.17487/RFC7292, July 2014, <https://www.rfc-editor.org/info/rfc7292>.

[RFC7296] Kaufman, C., Hoffman, P., Nir, Y., Eronen, P., and T. Kivinen, "Internet Key Exchange Protocol Version 2 (IKEv2)", STD 79, RFC 7296, DOI 10.17487/RFC7296, October 2014, <https://www.rfc-editor.org/info/rfc7296>.

[RFC7299] Housley, R., "Object Identifier Registry for the PKIX Working Group", RFC 7299, DOI 10.17487/RFC7299, July 2014, <https://www.rfc-editor.org/info/rfc7299>.

[RFC8017] Moriarty, K., Ed., Kaliski, B., Jonsson, J., and A. Rusch, "PKCS #1: RSA Cryptography Specifications Version 2.2", RFC 8017, DOI 10.17487/RFC8017, November 2016, <https://www.rfc-editor.org/info/rfc8017>.

[RFC8411] Schaad, J. and R. Andrews, "IANA Registration for the Cryptographic Algorithm Object Identifier Range", RFC 8411, DOI 10.17487/RFC8411, August 2018, <https://www.rfc-editor.org/info/rfc8411>.

[RFC8446] Rescorla, E., "The Transport Layer Security (TLS) Protocol Version 1.3", RFC 8446, DOI 10.17487/RFC8446, August 2018, <https://www.rfc-editor.org/info/rfc8446>.

[RFC8551] Schaad, J., Ramsdell, B., and S. Turner, "Secure/Multipurpose Internet Mail Extensions (S/MIME) Version 4.0 Message Specification", RFC 8551, DOI 10.17487/RFC8551, April 2019, <https://www.rfc-editor.org/info/rfc8551>.

[RFC9180] Barnes, R., Bhargavan, K., Lipp, B., and C. Wood, "Hybrid Public Key Encryption", RFC 9180, DOI 10.17487/RFC9180, February 2022, <https://www.rfc-editor.org/info/rfc9180>.

Appendix A. Approximate Key and Signature Sizes

The sizes listed below are approximate: these values are measured from the test vectors, however, several factors could cause fluctuations in the size of the traditional component. For example, this could be due to:

* Compressed vs uncompressed EC point.

* The RSA public key (n, e) allows e to vary in size between 3 and n - 1 [RFC8017].

* When the underlying RSA or EC value is itself DER-encoded, integer values could occasionally be shorter than expected due to leading zeros being dropped from the encoding.

By contrast, ML-DSA values are always fixed size, so composite values can always be correctly de-serialized based on the size of the ML-DSA component. It is expected for the size values of RSA and ECDSA variants to fluctuate by a few bytes even between subsequent runs of the same composite implementation.

Implementations MUST NOT perform strict length checking based on the values in this table except for ML-DSA + EdDSA; since these algorithms produce fixed-size outputs, the values in the table below for these variants MAY be treated as constants.

Non-hybrid ML-DSA is included for reference.

Algorithm	Public key	Private key	Signature
id-ML-DSA-44	1312	32	2420
id-ML-DSA-65	1952	32	3309
id-ML-DSA-87	2592	32	4627
id-MLDSA44-RSA2048-PSS-SHA256	1582	1222	2708
id-MLDSA44-RSA2048-PKCS15-SHA256	1582	1223	2708
id-MLDSA44-Ed25519-SHA512	1344	64	2516
id-MLDSA44-ECDSA-P256-SHA256	1377	153	2522
id-MLDSA65-RSA3072-PSS-SHA512	2350	1799	3725
id-MLDSA65-RSA3072-PKCS15-SHA512	2350	1800	3725
id-MLDSA65-RSA4096-PSS-SHA512	2478	2380	3853
id-MLDSA65-RSA4096-PKCS15-SHA512	2478	2380	3853
id-MLDSA65-ECDSA-P256-SHA512	2017	153	3412
id-MLDSA65-ECDSA-P384-SHA512	2049	199	3444
id-MLDSA65-ECDSA-brainpoolP256r1-SHA512	2017	154	3411
id-MLDSA65-Ed25519-SHA512	1984	64	3405
id-MLDSA87-ECDSA-P384-SHA512	2689	199	4763

id-MLDSA87-ECDSA-brainpoolP384r1-SHA512	2689	203	4761
id-MLDSA87-Ed448-SHAKE256	2649	89	4773
id-MLDSA87-RSA3072-PSS-SHA512	2990	1801	5043
id-MLDSA87-RSA4096-PSS-SHA512	3118	2381	5171
id-MLDSA87-ECDSA-P521-SHA512	2725	255	4798

Table 6: Approximate size values of composite ML-DSA

Appendix B. Component Algorithm Reference

This section provides references to the full specification of the algorithms used in the composite constructions.

Component Signature Algorithm ID	OID	Specification
id-ML-DSA-44	2.16.840.1.101.3.4.3.17	[FIPS.204]
id-ML-DSA-65	2.16.840.1.101.3.4.3.18	[FIPS.204]
id-ML-DSA-87	2.16.840.1.101.3.4.3.19	[FIPS.204]
id-Ed25519	1.3.101.112	[RFC8032], [RFC8410]
id-Ed448	1.3.101.113	[RFC8032], [RFC8410]
ecdsa-with-SHA256	1.2.840.10045.4.3.2	[RFC5758], [RFC5480], [SEC1], [X9.62_2005]
ecdsa-with-SHA384	1.2.840.10045.4.3.3	[RFC5758], [RFC5480], [SEC1], [X9.62_2005]
ecdsa-with-SHA512	1.2.840.10045.4.3.4	[RFC5758], [RFC5480], [SEC1], [X9.62_2005]
sha256WithRSAEncryption	1.2.840.113549.1.1.11	[RFC8017]
sha384WithRSAEncryption	1.2.840.113549.1.1.12	[RFC8017]
id-RSASSA-PSS	1.2.840.113549.1.1.10	[RFC8017]

Table 7: Component Signature Algorithms used in Composite Constructions

Elliptic CurveID	OID	Specification
secp256r1	1.2.840.10045.3.1.7	[RFC6090], [SEC2]
secp384r1	1.3.132.0.34	[RFC5480], [RFC6090], [SEC2]
secp521r1	1.3.132.0.35	[RFC5480], [RFC6090], [SEC2]
brainpoolP256r1	1.3.36.3.3.2.8.1.1.7	[RFC5639]
brainpoolP384r1	1.3.36.3.3.2.8.1.1.11	[RFC5639]

Table 8: Elliptic Curves used in Composite Constructions

HashID	OID	Specification
id-sha256	2.16.840.1.101.3.4.2.1	[RFC6234]
id-sha512	2.16.840.1.101.3.4.2.3	[RFC6234]
id-shake256	2.16.840.1.101.3.4.2.18	[FIPS.202]
id-mgf1	1.2.840.113549.1.1.8	[RFC8017]

Table 9: Hash algorithms used in pre-hashed Composite Constructions to build PH element

Appendix C. Component AlgorithmIdentifiers for Public Keys and Signatures

The following sections list explicitly the DER encoded AlgorithmIdentifier that MUST be used when reconstructing SubjectPublicKeyInfo and Signature Algorithm objects for each component algorithm type, which may be required for example if cryptographic library requires the public key in this form in order to process each component algorithm. The public key BIT STRING should be taken directly from the respective component of the Composite ML-DSA public key.

For newer Algorithms like Ed25519 or ML-DSA the AlgorithmIdentifiers are the same for Public Key and Signature. Older Algorithms have different AlgorithmIdentifiers for keys and signatures and are specified separately here for each component.

ML-DSA-44

AlgorithmIdentifier of Public Key and Signature

ASN.1:

```
algorithm AlgorithmIdentifier ::= {
  algorithm id-ML-DSA-44   -- (2 16 840 1 101 3 4 3 17)
 }
```

DER:

```
30 0B 06 09 60 86 48 01 65 03 04 03 11
```

ML-DSA-65

AlgorithmIdentifier of Public Key and Signature

ASN.1:

```
algorithm AlgorithmIdentifier ::= {
  algorithm id-ML-DSA-65   -- (2 16 840 1 101 3 4 3 18)
 }
```

DER:

```
30 0B 06 09 60 86 48 01 65 03 04 03 12
```

ML-DSA-87

AlgorithmIdentifier of Public Key and Signature

ASN.1:

```
algorithm AlgorithmIdentifier ::= {
  algorithm id-ML-DSA-87   -- (2 16 840 1 101 3 4 3 19)
 }
```

DER:

```
30 0B 06 09 60 86 48 01 65 03 04 03 13
```

RSASSA-PSS 2048

AlgorithmIdentifier of Public Key

Note that we suggest here to use id-RSASSA-PSS (1.2.840.113549.1.1.10) as the public key OID for RSA-PSS, although most implementations also would accept rsaEncryption (1.2.840.113549.1.1.1), and some might in fact prefer or require it.

```
ASN.1:
  algorithm AlgorithmIdentifier ::= {
    algorithm id-RSASSA-PSS   -- (1.2.840.113549.1.1.10)
    }

DER:
  30 0B 06 09 2A 86 48 86 F7 0D 01 01 0A
```

AlgorithmIdentifier of Signature

```
ASN.1:
  signatureAlgorithm AlgorithmIdentifier ::= {
    algorithm id-RSASSA-PSS,   -- (1.2.840.113549.1.1.10)
    parameters ANY ::= {
      AlgorithmIdentifier ::= {
        algorithm id-sha256,   -- (2.16.840.1.101.3.4.2.1)
        parameters NULL
        },
      AlgorithmIdentifier ::= {
        algorithm id-mgf1,       -- (1.2.840.113549.1.1.8)
        parameters AlgorithmIdentifier ::= {
          algorithm id-sha256,   -- (2.16.840.1.101.3.4.2.1)
          parameters NULL
          }
        },
      saltLength 32
      }
    }

DER:
  30 41 06 09 2A 86 48 86 F7 0D 01 01 0A 30 34 A0 0F 30 0D 06 09 60 86
  48 01 65 03 04 02 01 05 00 A1 1C 30 1A 06 09 2A 86 48 86 F7 0D 01 01
  08 30 0D 06 09 60 86 48 01 65 03 04 02 01 05 00 A2 03 02 01 20
```

RSASSA-PSS 3072 & 4096

AlgorithmIdentifier of Public Key

```
   ASN.1:
     algorithm AlgorithmIdentifier ::= {
       algorithm id-RSASSA-PSS   -- (1.2.840.113549.1.1.10)
       }

   DER:
     30 0B 06 09 2A 86 48 86 F7 0D 01 01 0A
```

AlgorithmIdentifier of Signature

```
  ASN.1:
    signatureAlgorithm AlgorithmIdentifier ::= {
      algorithm id-RSASSA-PSS,   -- (1.2.840.113549.1.1.10)
      parameters ANY ::= {
        AlgorithmIdentifier ::= {
          algorithm id-sha512,   -- (2.16.840.1.101.3.4.2.3)
          parameters NULL
          },
        AlgorithmIdentifier ::= {
          algorithm id-mgf1,       -- (1.2.840.113549.1.1.8)
          parameters AlgorithmIdentifier ::= {
            algorithm id-sha512,   -- (2.16.840.1.101.3.4.2.3)
            parameters NULL
            }
          },
        saltLength 64
        }
      }

  DER:
    30 41 06 09 2A 86 48 86 F7 0D 01 01 0A 30 34 A0 0F 30 0D 06 09 60 86
    48 01 65 03 04 02 03 05 00 A1 1C 30 1A 06 09 2A 86 48 86 F7 0D 01 01
    08 30 0D 06 09 60 86 48 01 65 03 04 02 03 05 00 A2 03 02 01 40
```

RSASSA-PKCS1-v1_5 2048

AlgorithmIdentifier of Public Key

```
   ASN.1:
     algorithm AlgorithmIdentifier ::= {
       algorithm rsaEncryption,   -- (1.2.840.113549.1.1.1)
       parameters NULL
       }

   DER:
     30 0D 06 09 2A 86 48 86 F7 0D 01 01 01 05 00
```

AlgorithmIdentifier of Signature

```
ASN.1:
  signatureAlgorithm AlgorithmIdentifier ::= {
    algorithm sha256WithRSAEncryption,   -- (1.2.840.113549.1.1.11)
    parameters NULL
    }
```

```
DER:
  30 0D 06 09 2A 86 48 86 F7 0D 01 01 0D 05 00
```

RSASSA-PKCS1-v1_5 3072 & 4096

AlgorithmIdentifier of Public Key

```
ASN.1:
  algorithm AlgorithmIdentifier ::= {
    algorithm rsaEncryption,   -- (1.2.840.113549.1.1.1)
    parameters NULL
    }
```

```
DER:
  30 0D 06 09 2A 86 48 86 F7 0D 01 01 01 05 00
```

AlgorithmIdentifier of Signature

```
ASN.1:
  signatureAlgorithm AlgorithmIdentifier ::= {
    algorithm sha512WithRSAEncryption,   -- (1.2.840.113549.1.1.13)
    parameters NULL
    }
```

```
DER:
  30 0D 06 09 2A 86 48 86 F7 0D 01 01 0D 05 00
```

ECDSA NIST P256

AlgorithmIdentifier of Public Key

ASN.1:

```
  algorithm AlgorithmIdentifier ::= {
    algorithm id-ecPublicKey   -- (1.2.840.10045.2.1)
    parameters ANY ::= {
      AlgorithmIdentifier ::= {
        algorithm secp256r1   -- (1.2.840.10045.3.1.7)
        }
      }
    }
```

DER:

```
  30 13 06 07 2A 86 48 CE 3D 02 01 06 08 2A 86 48 CE 3D 03 01 07
```

AlgorithmIdentifier of Signature

ASN.1:

```
  signature AlgorithmIdentifier ::= {
    algorithm ecdsa-with-SHA256   -- (1.2.840.10045.4.3.2)
    }
```

DER:

```
  30 0A 06 08 2A 86 48 CE 3D 04 03 02
```

ECDSA NIST P384

AlgorithmIdentifier of Public Key

ASN.1:

```
  algorithm AlgorithmIdentifier ::= {
    algorithm id-ecPublicKey   -- (1.2.840.10045.2.1)
    parameters ANY ::= {
      AlgorithmIdentifier ::= {
        algorithm secp384r1   -- (1.3.132.0.34)
        }
      }
    }
```

DER:

```
  30 10 06 07 2A 86 48 CE 3D 02 01 06 05 2B 81 04 00 22
```

AlgorithmIdentifier of Signature

ASN.1:

```
  signature AlgorithmIdentifier ::= {
    algorithm ecdsa-with-SHA384   -- (1.2.840.10045.4.3.3)
    }
```

DER:

```
  30 0A 06 08 2A 86 48 CE 3D 04 03 03
```

ECDSA NIST P521

AlgorithmIdentifier of Public Key

ASN.1:

```
  algorithm AlgorithmIdentifier ::= {
    algorithm id-ecPublicKey   -- (1.2.840.10045.2.1)
    parameters ANY ::= {
      AlgorithmIdentifier ::= {
        algorithm secp521r1   -- (1.3.132.0.35)
        }
      }
    }
```

DER:

```
  30 10 06 07 2A 86 48 CE 3D 02 01 06 05 2B 81 04 00 23
```

AlgorithmIdentifier of Signature

ASN.1:

```
  signature AlgorithmIdentifier ::= {
    algorithm ecdsa-with-SHA512   -- (1.2.840.10045.4.3.4)
    }
```

DER:

```
  30 0A 06 08 2A 86 48 CE 3D 04 03 04
```

ECDSA Brainpool-P256

AlgorithmIdentifier of Public Key

```
ASN.1:
  algorithm AlgorithmIdentifier ::= {
    algorithm id-ecPublicKey   -- (1.2.840.10045.2.1)
    parameters ANY ::= {
      AlgorithmIdentifier ::= {
        algorithm brainpoolP256r1   -- (1.3.36.3.3.2.8.1.1.7)
        }
      }
    }
```

```
DER:
  30 14 06 07 2A 86 48 CE 3D 02 01 06 09 2B 24 03 03 02 08 01 01 07
```

AlgorithmIdentifier of Signature

```
ASN.1:
  signature AlgorithmIdentifier ::= {
    algorithm ecdsa-with-SHA256   -- (1.2.840.10045.4.3.2)
    }
```

```
DER:
  30 0A 06 08 2A 86 48 CE 3D 04 03 02
```

ECDSA Brainpool-P384

AlgorithmIdentifier of Public Key

```
ASN.1:
  algorithm AlgorithmIdentifier ::= {
    algorithm id-ecPublicKey   -- (1.2.840.10045.2.1)
    parameters ANY ::= {
      AlgorithmIdentifier ::= {
        algorithm brainpoolP384r1   -- (1.3.36.3.3.2.8.1.1.11)
        }
      }
    }
```

```
DER:
  30 14 06 07 2A 86 48 CE 3D 02 01 06 09 2B 24 03 03 02 08 01 01 0B
```

AlgorithmIdentifier of Signature

ASN.1:
```
  signature AlgorithmIdentifier ::= {
    algorithm ecdsa-with-SHA384   -- (1.2.840.10045.4.3.3)
    }
```

DER:
```
  30 0A 06 08 2A 86 48 CE 3D 04 03 03
```

Ed25519

AlgorithmIdentifier of Public Key and Signature

ASN.1:
```
  algorithm AlgorithmIdentifier ::= {
    algorithm id-Ed25519   -- (1.3.101.112)
    }
```

DER:
```
  30 05 06 03 2B 65 70
```

Ed448

AlgorithmIdentifier of Public Key and Signature

ASN.1:
```
  algorithm AlgorithmIdentifier ::= {
    algorithm id-Ed448   -- (1.3.101.113)
    }
```

DER:
```
  30 05 06 03 2B 65 71
```

Appendix D. Message Representative Examples

This section provides examples of constructing the message representative M’, showing all intermediate values. This is intended to be useful for debugging purposes.

The input message for this example is the hex string "00 01 02 03 04 05 06 07 08 09".

Each input component is shown. Note that values are shown hex-encoded for display purposes only, they are actually raw binary values.

* Prefix is the fixed constant defined in Section 3.2.

* Domain is the specific domain separator for this composite algorithm, as defined in Section 7.1.

* len(ctx) is the length of the Message context String which is 00 when no context is used.

* ctx is the Message context string used in the composite signature combiner. It is empty in this example.

* r is a random 32-byte value chosen by the signer.

* PH(r||M) is the output of hashing the randomizer together with the message M.

Finally, the fully assembled M' is given, which is simply the concatenation of the above values.

First is an example of constructing the message representative M' for MLDSA65-ECDSA-P256-SHA256 without a context string ctx.

Example of id-MLDSA65-ECDSA-P256-SHA512 construction of M’.

```
# Inputs:

M: 00010203040506070809
ctx: <empty>

# Components of M':

Prefix:
436f6d706f73697465416c676f726974686d5369676e61747572657332303235

Domain: 060b6086480186fa6b50090108

len(ctx): 00

ctx: <empty>
r: 9b45a9e08f38cd31f7eaff5a05b572c763b81f2b6a802e3a4d1e0d86de049c22
PH(M): 0f89ee1fcb7b0a4f7809d1267a029719004c5a5e5ec323a7c3523a20974f9a3
f202f56fadba4cd9e8d654ab9f2e96dc5c795ea176fa20ede8d854c342f903533


# Outputs:
# M' = Prefix || Domain || len(ctx) || ctx || r || PH(M)

M': 436f6d706f73697465416c676f726974686d5369676e617475726573323032350б
0b6086480186fa6b50090108009b45a9e08f38cd31f7eaff5a05b572c763b81f2b6a80
2e3a4d1e0d86de049c220f89ee1fcb7b0a4f7809d1267a029719004c5a5e5ec323a7c3
523a20974f9a3f202f56fadba4cd9e8d654ab9f2e96dc5c795ea176fa20ede8d854c34
2f903533
```

Second is an example of constructing the message representative M’ for MLDSA65-ECDSA-P256-SHA256 with a context string ctx.

The inputs are similar to the first example with the exception that there is an 8 byte context string ’ctx’.

```
Example of id-MLDSA65-ECDSA-P256-SHA512 construction of M’.

# Inputs:

M: 00010203040506070809
ctx: 0813061205162623

# Components of M’:

Prefix:
436f6d706f73697465416c676f726974686d5369676e6174757265733230323235

Domain: 060b6086480186fa6b50090108

len(ctx): 08

ctx: 0813061205162623

r: ef7fcb00232f6229aee169e398d78ecc642ac02a7bc82bbe168021be945b4653
PH(M): 0f89ee1fcb7b0a4f7809d1267a029719004c5a5e5ec323a7c3523a20974f9a3
f202f56fadba4cd9e8d654ab9f2e96dc5c795ea176fa20ede8d854c342f903533


# Outputs:
# M’ = Prefix || Domain || len(ctx) || ctx || r || PH(M)

M’: 436f6d706f73697465416c676f726974686d5369676e6174757265733230323506
0b6086480186fa6b5009010808081306120516262 3ef7fcb00232f6229aee169e398d7
8ecc642ac02a7bc82bbe168021be945b46530f89ee1fcb7b0a4f7809d1267a02971900
4c5a5e5ec323a7c3523a20974f9a3f202f56fadba4cd9e8d654ab9f2e96dc5c795ea17
6fa20ede8d854c342f903533
```

Appendix E. Test Vectors

The following test vectors are provided in a format similar to the NIST ACVP Known-Answer-Tests (KATs).

The structure is that a global message m is signed over in all test cases. m is the ASCII string "The quick brown fox jumps over the lazy dog."

Within each test case there are the following values:

* tcId the name of the algorithm.

* pk the verification public key.

* x5c a self-signed X.509 certificate of the public key.

* sk the raw signature private key.

* sk_pkcs8 the signature private key in a PKCS#8 object.

* s the signature value.

Implementers should be able to perform the following tests using the test vectors below:

1. Load the public key pk or certificate x5c and use it to verify the signature s over the message m.

2. Validate the self-signed certificate x5c.

3. Load the signing private key sk or sk_pkcs8 and use it to produce a new signature which can be verified using the provided pk or x5c.

Test vectors are provided for each underlying ML-DSA algorithm in isolation for the purposes of debugging.

Due to the length of the test vectors, some readers will prefer to retrieve the non-word-wrapped copy from GitHub. The reference implementation written in python that generated them is also available:

https://github.com/lamps-wg/draft-composite-sigs/tree/main/src

TODO: lock this to a specific commit.


```
{
"m":
"VGhlIHF1aWNrIGJyb3duIGZveCBqdW1wcyBvdmVyIHRoZSBsYXp5IGRvZy4=",

"tests": [
{
"tcId": "id-ML-DSA-44",
"pk": "hkOk8B4qwY0tx6meGcqaSVRZ
IeA9v3ceRDStgZuu/C1PCUKjQkTdjCYmc475HNVvveHJjKGo7aBO6VnDgd0vs9p8chiw
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kXh5d00oBsFsqF65CSkbqOwe4MEOerF7j0X7Qw/SyCo2frPcjzN3PzryKWOq0D04Z+DC
Rx3QgpaaGqyYFfUSu0wgTzpq0wHKQMseM8PnlAGx/u5FwLaIqpx4kAHDEDOZd93tH5Fy
```

8ybsJRJzNzQawYUzS535oEg698DZNJK8oaZX9mHQXUbxW55iaJ7rsNmVy+nqybtDvUDA
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}
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Appendix F. Intellectual Property Considerations

The following IPR Disclosure relates to this draft:

https://datatracker.ietf.org/ipr/3588/

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