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TECHNICAL CORRIGENDUM 1
2024-11

Information security — Message authentication codes (MACs)

Part 2: Mechanisms using a dedicated hash-function

TECHNICAL CORRIGENDUM 1

Sécurité de l'information — Codes d'authentication de message (MAC)

Partie 2:
Mécanismes utilisant une fonction de hachage dédiée

RECTIFICATIF TECHNIQUE 1

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Information security — Message authentication codes (MACs) —
Part 2:
Mechanisms using a dedicated hash-function
TECHNICAL CORRIGENDUM 1

Clause 4

Add the following at the end of the clause:

$\lceil x \rceil$ the smallest integer greater than or equal to the real number x

6.2.2

Replace the first sentence with the following:

If K is shorter than 128 bits, concatenate K to itself $\lceil 128/k \rceil$ times and select the leftmost 128 bits of the result to form the 128-bit key K':

Replace the last equation with the following:

$$K_1 = K_1[0] \parallel K_1[1] \parallel K_1[2] \parallel K_1[3] \parallel K_1[4] \parallel K_1[5] \parallel K_1[6] \parallel K_1[7]$$

6.4.2

Replace the last line with the following:

$C_i' = K_1[1]$ $(64 \leq i \leq 79)$

6.4.3

Replace the last line with the following:

$C_i' = K_1[3]$ $(48 \leq i \leq 63)$

6.4.5

Replace the first sentence with the following:

The 128-bit constant strings T_i for dedicated hash-function 4 are defined as follows (in hexadecimal representation):

6.4.6

Replace the first sentence with the following:

The 128-bit constant strings T_i for dedicated hash-function 5 are defined as follows (in hexadecimal representation):

6.4.7

Replace the first sentence with the following:

The 128-bit constant strings T_i for dedicated hash-function 6 are defined as follows (in hexadecimal representation):

6.4.8

Replace the first sentence with the following:

The 128-bit constant strings T_i for dedicated hash-function 8 are defined as follows (in hexadecimal representation):

8.2.2

Replace the first sentence with the following:

If K is shorter than 128 bits, concatenate K to itself $\lceil 128/k \rceil$ times and select the leftmost 128 bits of the result to form the 128-bit key K':

9.4.3

Replace the last three sentences with the following:

The characters 00 in item c) specify two zero bits.

NOTE The number 168 is the rate (in bytes) of SPONGE[*f*, *pad*, 1 344], where f = KECCAK-p[1 600, 24]. SPONGE[*f*, *pad*, 1 344] is referred to as KECCAK[256] in Reference [12].

9.5.3

Replace the last three sentences with the following:

The characters 00 in item c) specify two zero bits.

NOTE The number 136 is the rate (in bytes) of SPONGE[*f*, *pad*, 1 088], where f = KECCAK-p[1 600, 24]. SPONGE[*f*, *pad*, 1 088] is referred to as KECCAK[512] in Reference [12].

9.6.2

Replace the first sentence of NOTE with the following:

When used as a XOF, KMAC is computed by setting the encoded output length to 0, as shown in *right_encode*(0) in item b).

9.6.3

Replace the last three sentences with the following:

The characters 00 in item c) specify two zero bits.

NOTE The number 168 is the rate (in bytes) of SPONGE[*f*, *pad*, 1 344], where f = KECCAK-p[1 600, 24]. SPONGE[*f*, *pad*, 1 344] is referred to as KECCAK[256] in Reference [12].