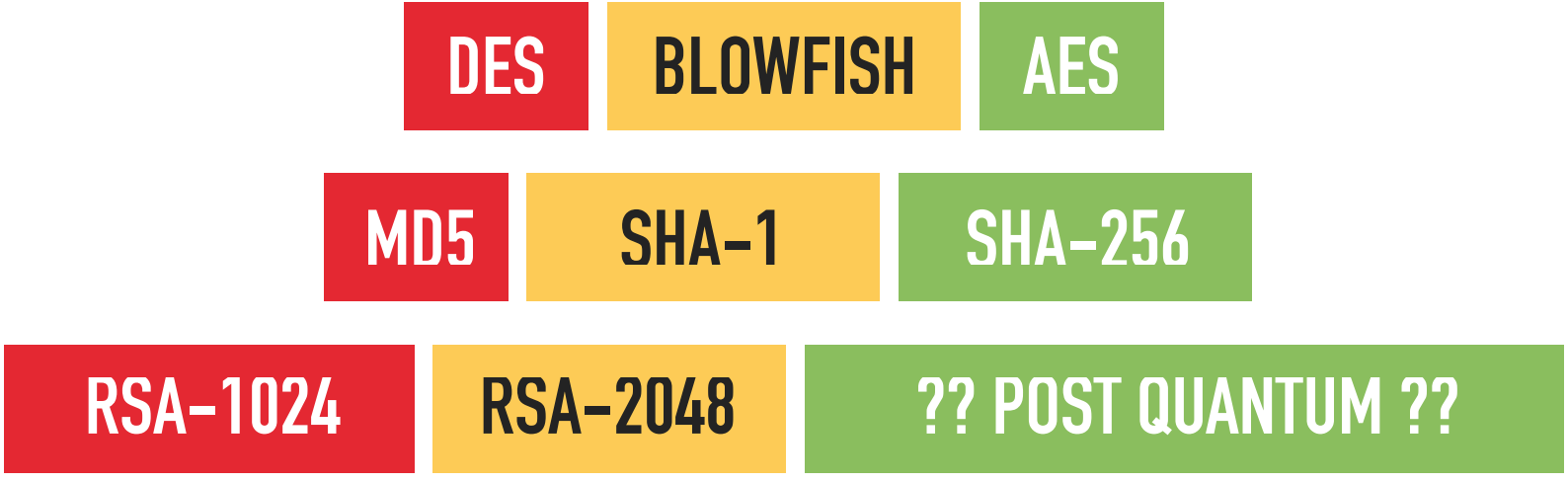
JENS NEUHALFEN

SLEEP BETTER WITH CONTENT ENCRYPTION

ALGORITHM ROLLOVER


DES
BLOWFISH
AES
MD5
SHA-1
SHA-256
RSA-1024
RSA-2048
?? POST QUANTUM ??

Problem: Algorithms must be changed and data migrated

Solution: Design for online data migration

Record-ID	…	Masterkey ID	(Data…)
B9E10DEE-C97E-…	…	B874920B-E801-…	…
FDE0C6E3-8BF0-…	…	9A6580FC-1248-…	…
…	…	9A6580FC-1248-…	…

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MD5 SHA-1 SHA-256
RSA-1024 RSA-2048 ?? POST QUANTUM ??

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Record-ID	Algorithms	Masterkey ID	(Data…)
B9E10DEE-C97E-…	▸ PBKDF2(…) ▸ AES128–GCM	B874920B-E801-…	…
FDE0C6E3-8BF0-…	▸ SCRYPT(…) ▸ AES256–CBC ▸ PKCS#5	9A6580FC-1248-…	…
…	…	9A6580FC-1248-…	…

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