
HashCrypto Documentation

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As there was no code-review yet, this library should be considered NOT READY FOR PRODUCTION.

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CHAPTER 1

hashcrypto package

Submodules

hashcrypto.bytesop_fallback module

```
hashcrypto.bytesop_fallback.op_xor(a, b)  
XOR two bytes-like objects.
```

Module contents

```
class hashcrypto.CFB(key, hash_constructor=<built-in function openssl_sha512>, start_iv=None)  
    Bases: hashcrypto.WithIV  
  
    decrypt(cipher_blocks, iv=None)  
    decrypt_block(b, iv)  
    encrypt(plain_blocks, iv=None)  
  
class hashcrypto.CTR(key, hash_constructor=<built-in function openssl_sha512>, nonce=None)  
    Bases: hashcrypto.WithNonce  
  
    decrypt(plain_blocks, counter_start=0)  
    decrypt_block(b, counter)  
    encrypt(plain_blocks, counter_start=0)  
    encrypt_block(b, counter)  
    keystream(counter_start)  
  
    classmethod suggest_nonce_size(hash_constructor)
```

```
class hashcrypto.HashCrypt(key, hash_constructor=<built-in function openssl_sha512>)
    Bases: object

    block(b)

    decrypt_stream(infile, outfile, *args, **kwargs)
    encrypt_file(infile, outfile, *args, **kwargs)
    encrypt_stream(infile, outfile, *args, **kwargs)
    hash_name()
    header()

    classmethod suggest_key_size(hash_constructor)

exception hashcrypto.IVError
    Bases: exceptions.ValueError

class hashcrypto.OFB(key, hash_constructor=<built-in function openssl_sha512>, start_iv=None)
    Bases: hashcrypto.WithIV

    decrypt(plain_blocks, iv=None)
    encrypt(plain_blocks, iv=None)
    keystream(iv=None)

class hashcrypto.WithIV(key, hash_constructor=<built-in function openssl_sha512>, start_iv=None)
    Bases: hashcrypto.HashCrypt

    header()

    classmethod make_iv(hash_constructor)
    classmethod suggest_iv_size(hash_constructor)

class hashcrypto.WithNonce(key,      hash_constructor=<built-in      function      openssl_sha512>,
                           nonce=None)
    Bases: hashcrypto.HashCrypt

    header()

    classmethod make_nonce(hash_constructor=<built-in function openssl_sha512>)

hashcrypto.decrypt_file(infile, outfile, key)
hashcrypto.pack_plus(b)
hashcrypto.read_file(infile, block_size)
hashcrypto.read_plus(f)
hashcrypto.unpack_plus(b)
```

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Indices and tables

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