NAME

EVP_MD-SHAKE, EVP_MD-KECCAK-KMAC - The SHAKE / KECCAK family EVP_MD implementations

DESCRIPTION

Support for computing SHAKE or KECCAK-KMAC digests through the EVP_MD API.

KECCAK-KMAC is a special digest that's used by the KMAC EVP_MAC implementation (see EVP_MAC-KMAC(7)).

Identities

This implementation is only available with the default provider, and includes the following varieties:

KECCAK-KMAC-128

Known names are "KECCAK-KMAC-128" and "KECCAK-KMAC128"

KECCAK-KMAC-256

Known names are "KECCAK-KMAC-256" and "KECCAK-KMAC256"

SHAKE-128

Known names are "SHAKE-128" and "SHAKE128"

SHAKE-256

Known names are "SHAKE-256" and "SHAKE256"

Gettable Parameters

This implementation supports the common gettable parameters described in EVP_MD-common (7).

Settable Context Parameters

These implementations support the following OSSL_PARAM(3) entries, settable for an EVP_MD_CTX with EVP_MD_CTX_set_params(3):

"xoflen" (OSSL_DIGEST_PARAM_XOFLEN) <unsigned integer>

Sets the digest length for extendable output functions. The length of the "xoflen" parameter should not exceed that of a $\mathbf{size_t}$.

SEE ALSO

EVP_MD_CTX_set_params (3), provider-digest (7), OSSL_PROVIDER-default (7)

COPYRIGHT

Copyright 2020 The OpenSSL Project Authors. All Rights Reserved.

Licensed under the Apache License 2.0 (the "License"). You may not use this file except in compliance with the License. You can obtain a copy in the file LICENSE in the source distribution or at https://www.openssl.org/source/license.html>.