NAME

OSSL_PROVIDER-base - OpenSSL base provider

DESCRIPTION

The OpenSSL base provider supplies the encoding for OpenSSL's asymmetric cryptography.

Properties

The implementations in this provider specifically have this property defined:

```
"provider=base"
```

It may be used in a property query string with fetching functions.

It isn't mandatory to query for this property, except to make sure to get implementations of this provider and none other.

```
"type=parameters"
```

These may be used in a property query string with fetching functions to select which data are to be encoded. Either the private key material, the public key material or the domain parameters can be selected.

```
"format=der"
```

These may be used in a property query string with fetching functions to select the encoding output format. Either the DER, PEM and plaintext are currently permitted.

OPERATIONS AND ALGORITHMS

The OpenSSL base provider supports these operations and algorithms:

Asymmetric Key Encoder

In addition to "provider=base", some of these encoders define the property "fips=yes", to allow them to be used together with the FIPS provider.

```
RSA, see OSSL_ENCODER-RSA (7)
```

DH, see OSSL_ENCODER-DH (7)

DSA, see OSSL_ENCODER-DSA (7)

EC, see OSSL_ENCODER-EC (7)

X25519, see OSSL_ENCODER-X25519 (7)

X448, see **OSSL_ENCODER-X448** (7)

SEE ALSO

 $\pmb{OSSL_PROVIDER-default~(7), openssl_core_h~(7), openssl_core_dispatch.h~(7), provider~(7)}\\$

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[&]quot;type=private"

[&]quot;type=public"

[&]quot;format=pem"

[&]quot;format=text"