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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'EVP\_SIGNATURE-RSA.7ossl' command**

**\$ man EVP\_SIGNATURE-RSA.7ossl**

EVP\_SIGNATURE-RSA(7ossl)      OpenSSL      EVP\_SIGNATURE-RSA(7ossl)

### NAME

EVP\_SIGNATURE-RSA - The EVP\_PKEY RSA signature implementation

### DESCRIPTION

Support for computing RSA signatures. See EVP\_PKEY-RSA(7) for information related to RSA keys.

### Signature Parameters

The following signature parameters can be set using EVP\_PKEY\_CTX\_set\_params(). This may be called after EVP\_PKEY\_sign\_init() or EVP\_PKEY\_verify\_init(), and before calling EVP\_PKEY\_sign() or EVP\_PKEY\_verify().

"digest" (OSSL\_SIGNATURE\_PARAM\_DIGEST) <UTF8 string>

"properties" (OSSL\_SIGNATURE\_PARAM\_PROPERTIES) <UTF8 string>

These common parameters are described in provider-signature(7).

"pad-mode" (OSSL\_SIGNATURE\_PARAM\_PAD\_MODE) <UTF8 string>

The type of padding to be used. Its value can be one of the following:

"none" (OSSL\_PKEY\_RSA\_PAD\_MODE\_NONE)

"pkcs1" (OSSL\_PKEY\_RSA\_PAD\_MODE\_PKCSV15)

"x931" (OSSL\_PKEY\_RSA\_PAD\_MODE\_X931)

"pss" (OSSL\_PKEY\_RSA\_PAD\_MODE\_PSS)

"mgf1-digest" (OSSL\_SIGNATURE\_PARAM\_MGF1\_DIGEST) <UTF8 string>

The digest algorithm name to use for the maskGenAlgorithm used by

"pss" mode.

"mgf1-properties" (OSSL\_SIGNATURE\_PARAM\_MGF1\_PROPERTIES) <UTF8 string>

Sets the name of the property query associated with the

"mgf1-digest" algorithm. NULL is used if this optional value is

not set.

"saltlen" (OSSL\_SIGNATURE\_PARAM\_PSS\_SALTLEN) <integer> or <UTF8 string>

The "pss" mode minimum salt length. The value can either be an

integer, a string value representing a number or one of the

following string values:

"digest" (OSSL\_PKEY\_RSA\_PSS\_SALT\_LEN\_DIGEST)

Use the same length as the digest size.

"max" (OSSL\_PKEY\_RSA\_PSS\_SALT\_LEN\_MAX)

Use the maximum salt length.

"auto" (OSSL\_PKEY\_RSA\_PSS\_SALT\_LEN\_AUTO)

Auto detect the salt length.

"auto-digestmax" (OSSL\_PKEY\_RSA\_PSS\_SALT\_LEN\_AUTO\_DIGEST\_MAX)

Auto detect the salt length when verifying. Maximize the salt

length up to the digest size when signing to comply with FIPS

186-4 section 5.5.

EVP\_PKEY\_CTX\_get\_params().

"algorithm-id" (OSSL\_SIGNATURE\_PARAM\_ALGORITHM\_ID) <octet string>

This common parameter is described in provider-signature(7).

"digest" (OSSL\_SIGNATURE\_PARAM\_DIGEST) <UTF8 string>

"pad-mode" (OSSL\_SIGNATURE\_PARAM\_PAD\_MODE) <UTF8 string>

"mgf1-digest" (OSSL\_SIGNATURE\_PARAM\_MGF1\_DIGEST) <UTF8 string>

"saltlen" (OSSL\_SIGNATURE\_PARAM\_PSS\_SALTLEN) <integer> or <UTF8 string>

These parameters are as described above.

#### SEE ALSO

EVP\_PKEY\_CTX\_set\_params(3), EVP\_PKEY\_sign(3), EVP\_PKEY\_verify(3),  
provider-signature(7),

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