

**NAME**

DSA\_do\_sign, DSA\_do\_verify – raw DSA signature operations

**SYNOPSIS**

```
#include <openssl/dsa.h>
```

The following functions have been deprecated since OpenSSL 3.0, and can be hidden entirely by defining **OPENSSL\_API\_COMPAT** with a suitable version value, see **openssl\_user\_macros**(7):

```
DSA_SIG *DSA_do_sign(const unsigned char *dgst, int dlen, DSA *dsa);

int DSA_do_verify(const unsigned char *dgst, int dgst_len,
                  DSA_SIG *sig, DSA *dsa);
```

**DESCRIPTION**

All of the functions described on this page are deprecated. Applications should instead use **EVP\_PKEY\_sign\_init**(3), **EVP\_PKEY\_sign**(3), **EVP\_PKEY\_verify\_init**(3) and **EVP\_PKEY\_verify**(3).

**DSA\_do\_sign**() computes a digital signature on the **len** byte message digest **dgst** using the private key **dsa** and returns it in a newly allocated **DSA\_SIG** structure.

**DSA\_sign\_setup**(3) may be used to precompute part of the signing operation in case signature generation is time-critical.

**DSA\_do\_verify**() verifies that the signature **sig** matches a given message digest **dgst** of size **len**. **dsa** is the signer's public key.

**RETURN VALUES**

**DSA\_do\_sign**() returns the signature, NULL on error. **DSA\_do\_verify**() returns 1 for a valid signature, 0 for an incorrect signature and -1 on error. The error codes can be obtained by **ERR\_get\_error**(3).

**SEE ALSO**

**DSA\_new**(3), **ERR\_get\_error**(3), **RAND\_bytes**(3), **DSA\_SIG\_new**(3), **DSA\_sign**(3)

**HISTORY**

All of these functions were deprecated in OpenSSL 3.0.

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