

NAME

RSA_blinding_on, RSA_blinding_off - protect the RSA operation from timing attacks

SYNOPSIS

```
#include <openssl/rsa.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)**:

```
int RSA_blinding_on(RSA *rsa, BN_CTX *ctx);
```

```
void RSA_blinding_off(RSA *rsa);
```

DESCRIPTION

All of the functions described on this page are deprecated.

RSA is vulnerable to timing attacks. In a setup where attackers can measure the time of RSA decryption or signature operations, blinding must be used to protect the RSA operation from that attack.

RSA_blinding_on() turns blinding on for key **rsa** and generates a random blinding factor. **ctx** is **NULL** or a preallocated and initialized **BN_CTX**.

RSA_blinding_off() turns blinding off and frees the memory used for the blinding factor.

RETURN VALUES

RSA_blinding_on() returns 1 on success, and 0 if an error occurred.

RSA_blinding_off() returns no value.

HISTORY

All of these functions were deprecated in OpenSSL 3.0.

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