

**NAME**

RSA\_new, RSA\_free – allocate and free RSA objects

**SYNOPSIS**

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

RSA *RSA_new(void);

void RSA_free(RSA *rsa);
```

**DESCRIPTION**

**RSA\_new()** allocates and initializes an **RSA** structure. It is equivalent to calling **RSA\_new\_method(NULL)**.

**RSA\_free()** frees the **RSA** structure and its components. The key is erased before the memory is returned to the system. If **rsa** is **NULL** nothing is done.

**RETURN VALUES**

If the allocation fails, **RSA\_new()** returns **NULL** and sets an error code that can be obtained by **ERR\_get\_error(3)**. Otherwise it returns a pointer to the newly allocated structure.

**RSA\_free()** returns no value.

**SEE ALSO**

[ERR\\_get\\_error\(3\)](#), [RSA\\_generate\\_key\(3\)](#), [RSA\\_new\\_method\(3\)](#)

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