

**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\\_new\(3\)](#), [RSA\\_generate\\_key\(3\)](#), [RSA\\_new\\_method\(3\)](#)

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