NAME

OSSL_PARAM_dup, OSSL_PARAM_merge, OSSL_PARAM_free - OSSL_PARAM array copy functions

SYNOPSIS

#include <openssl/params.h>

OSSL_PARAM *OSSL_PARAM_dup(const OSSL_PARAM *params);
OSSL_PARAM *OSSL_PARAM_merge(const OSSL_PARAM *params, const OSSL_PARAM *params1);
void OSSL_PARAM_free(OSSL_PARAM *params);

DESCRIPTION

Algorithm parameters can be exported/imported from/to providers using arrays of **OSSL_PARAM**(3). The following utility functions allow the parameters to be duplicated and merged with other **OSSL_PARAM**(3) to assist in this process.

OSSL_PARAM_dup() duplicates the parameter array *params*. This function does a deep copy of the data.

OSSL_PARAM_merge() merges the parameter arrays *params* and *params1* into a new parameter array. If *params* and *params1* contain values with the same 'key' then the value from *params1* will replace the *param* value. This function does a shallow copy of the parameters. Either *params* or *params1* may be NULL. The behaviour of the merge is unpredictable if *params* and *params1* contain the same key, and there are multiple entries within either array that have the same key.

OSSL_PARAM_free() frees the parameter array *params* that was created using **OSSL_PARAM_dup()**, **OSSL_PARAM_merge()** or **OSSL_PARAM_BLD_to_param()**.

RETURN VALUES

The functions **OSSL_PARAM_dup()** and **OSSL_PARAM_merge()** return a newly allocated **OSSL_PARAM**(3) array, or NULL if there was an error. If both parameters are NULL then NULL is returned.

SEE ALSO

OSSL_PARAM(3), **OSSL_PARAM_BLD**(3)

HISTORY

The functions were added in OpenSSL 3.0.

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