



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'life_cycle-mac.7oss1' command

\$ man life_cycle-mac.7oss1

LIFE_CYCLE-MAC(7oss1) OpenSSL LIFE_CYCLE-MAC(7oss1)

NAME

life_cycle-mac - The MAC algorithm life-cycle

DESCRIPTION

All message authentication codes (MACs) go through a number of stages in their life-cycle:

start

This state represents the MAC before it has been allocated. It is the starting state for any life-cycle transitions.

newed

This state represents the MAC after it has been allocated.

initialised

This state represents the MAC when it is set up and capable of processing input.

updated

This state represents the MAC when it is set up and capable of processing additional input or generating output.

finalised

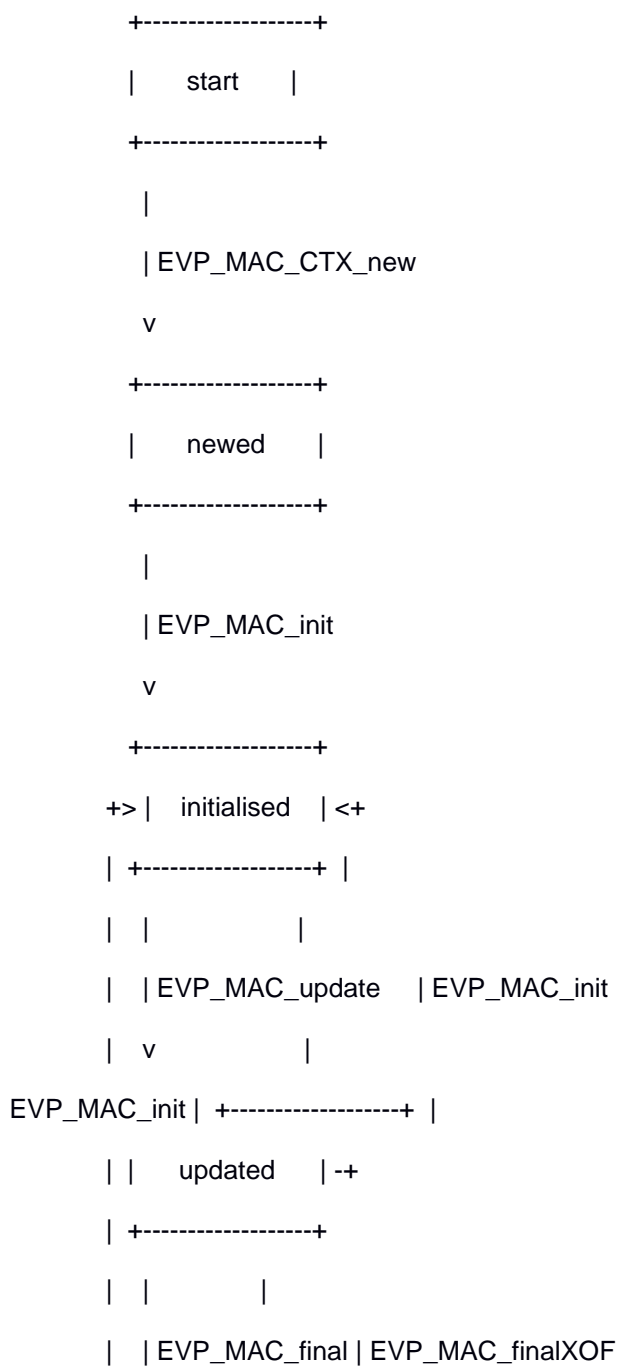
This state represents the MAC when it has generated output.

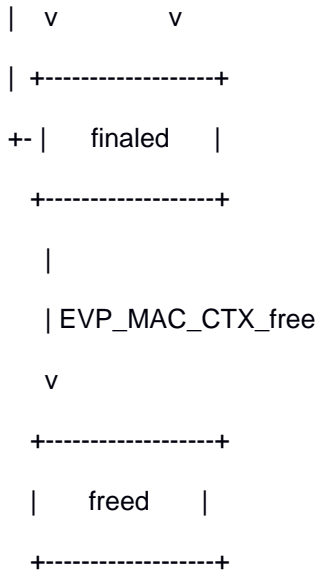
freed

This state is entered when the MAC is freed. It is the terminal state for all life-cycle transitions.

State Transition Diagram

The usual life-cycle of a MAC is illustrated:





Formal State Transitions

This section defines all of the legal state transitions. This is the canonical list.

Function Call	-----	Current State

	start	newed initialised updated
finaled freed		
EVP_MAC_CTX_new		newed
EVP_MAC_init		initialised initialised
initialised initialised		
EVP_MAC_update		updated updated
EVP_MAC_final		finaled
EVP_MAC_finalXOF		finaled
EVP_MAC_CTX_free	freed freed	freed freed
freed		
EVP_MAC_CTX_get_params		newed initialised updated
EVP_MAC_CTX_set_params		newed initialised updated
EVP_MAC_CTX_gettable_params		newed initialised updated
EVP_MAC_CTX_settable_params		newed initialised updated

NOTES

At some point the EVP layer will begin enforcing the transitions

described herein.

SEE ALSO

provider-mac(7), EVP_MAC(3).

HISTORY

The provider MAC interface was introduced in OpenSSL 3.0.

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3.0.7 2023-07-13 LIFE_CYCLE-MAC(7openssl)