Abbreviations
~X_1 = Request(Header(~M_33557,~M_33558,~M_33559,~M_33560, ~M_33561),~M_33550,CoAP_Option_OSCORE(~M_33554, ~M_33555,~M_33556),payload_from_ciphertext(~M_33553)) = Request(Header(CoAP_versionOne,CoAP_nonConfirm, CoAP_tokenLength(token_32836),CoAP_GETCode,messageID_32837), token_32836,CoAP_Option_OSCORE(partial_iv_32838, IDir_32798,idcontext_32799),payload_from_ciphertext(enc_COSE_ciphertext(toKey(HKDF(msecret_32800,msalt_32801, info(IDir_32798,idcontext_32799,default_aead_algorithm, label_key),alg_key_length(default_aead_algorithm, label_key))),aead_nonce(IDir_32798,tolV(HKDF(msecret_32800, msalt_32801,info(emptyId,idcontext_32799,default_aead_algorithm, label_iv),alg_key_length(default_aead_algorithm, label_iv))),partial_iv_32838),(CoAP_POSTCode,payload_32839), AAD(encrypt0_context,encrypt0(oscore_version_one, default_aead_algorithm,IDir_32798,partial_iv_32838)))))
~X_2 = Request(Header(~M_34093,~M_34094,~M_34095,~M_34096, ~M_34097),~M_34086,CoAP_Option_OSCORE(~M_34090, ~M_34091,~M_34092),payload_from_ciphertext(~M_34089)) = Request(Header(CoAP_versionOne,CoAP_nonConfirm, CoAP_tokenLength(token_32795),CoAP_GETCode,messageID_32796), token_32795,CoAP_Option_OSCORE(partial_iv_32797, IDir_32798,idcontext_32799),payload_from_ciphertext(enc_COSE_ciphertext(toKey(HKDF(msecret_32800,msalt_32801, info(IDir_32798,idcontext_32799,default_aead_algorithm, label_key),alg_key_length(default_aead_algorithm, label_key))),aead_nonce(IDir_32798,tolV(HKDF(msecret_32800, msalt_32801,info(emptyId,idcontext_32799,default_aead_algorithm, label_iv),alg_key_length(default_aead_algorithm, label_iv))),partial_iv_32797),(CoAP_POSTCode,payload_32802), AAD(encrypt0_context,encrypt0(oscore_version_one, default_aead_algorithm,IDir_32798,partial_iv_32797)))))
~X_3 = Request(Header(a_32788,a_32789,a_32790,a_32791, a_32792),a_32787,CoAP_Option_OSCORE(~M_34090,~M_33555, ~M_32892),payload_from_ciphertext(~M_34089)) = Request(Header(a_32788,a_32789,a_32790,a_32791, a_32792),a_32787,CoAP_Option_OSCORE(partial_iv_32797, IDir_32798,idcontext_32799),payload_from_ciphertext(enc_COSE_ciphertext(toKey(HKDF(msecret_32800,msalt_32801, info(IDir_32798,idcontext_32799,default_aead_algorithm, label_key),alg_key_length(default_aead_algorithm, label_key))),aead_nonce(IDir_32798,tolV(HKDF(msecret_32800, msalt_32801,info(emptyId,idcontext_32799,default_aead_algorithm, label_iv),alg_key_length(default_aead_algorithm, label_iv))),partial_iv_32797),(CoAP_POSTCode,payload_32802), AAD(encrypt0_context,encrypt0(oscore_version_one, default_aead_algorithm,IDir_32798,partial_iv_32797)))))
~X_4 = Request(Header(~M_34531,~M_34532,~M_34533,~M_34534, ~M_34535),~M_34524,CoAP_Option_OSCORE(~M_34528, ~M_34529,~M_34530),payload_from_ciphertext(~M_34527)) = Request(Header(CoAP_versionOne,CoAP_nonConfirm, CoAP_tokenLength(a_32787),CoAP_CHANGEDCode,responseMessageId_32874), a_32787,CoAP_Option_OSCORE(emptyIv,emptyId,emptyIdC), payload_from_ciphertext(enc_COSE_ciphertext(toKey(HKDF(msecret_32800,msalt_32801,info(IDri_32817, idcontext_32799,default_aead_algorithm,label_key), alg_key_length(default_aead_algorithm,label_key))), aead_nonce(IDir_32798,tolV(HKDF(msecret_32800, msalt_32801,info(emptyId,idcontext_32799,default_aead_algorithm, label_iv),alg_key_length(default_aead_algorithm, label_iv))),partial_iv_32797),(generateResponseCode(CoAP_POSTCode,payload_32802),generateResponsePayload(CoAP_POSTCode,payload_32802)),AAD(encrypt0_context, encrypt0(oscore_version_one,default_aead_algorithm, IDri_32817,partial_iv_32797))))
~X_5 = Request(Header(a_32781,a_32782,a_32783,a_32784, a_32785),~M_34086,CoAP_Option_OSCORE(emptyIv,emptyId, emptyIdC),payload_from_ciphertext(~M_34527)) = Request(Header(a_32781,a_32782,a_32783,a_32784, a_32785),token_32795,CoAP_Option_OSCORE(emptyIv, emptyId,emptyIdC),payload_from_ciphertext(enc_COSE_ciphertext(toKey(HKDF(msecret_32800,msalt_32801,info(IDri_32817, idcontext_32799,default_aead_algorithm,label_key), alg_key_length(default_aead_algorithm,label_key))), aead_nonce(IDir_32798,tolV(HKDF(msecret_32800, msalt_32801,info(emptyId,idcontext_32799,default_aead_algorithm, label_iv),alg_key_length(default_aead_algorithm, label_iv))),partial_iv_32797),(generateResponseCode(CoAP_POSTCode,payload_32802),generateResponsePayload(CoAP_POSTCode,payload_32802)),AAD(encrypt0_context, encrypt0(oscore_version_one,default_aead_algorithm, IDri_32817,partial_iv_32797))))

A trace has been found.