Abbreviations
~X_1 = Request(Header(~M_20110,~M_20111,~M_20112,~M_20113, ~M_20114),~M_20103,CoAP_Option_OSCORE_Option_context(~M_20107,~M_20108,~M_20109),payload_from_ciphertext(~M_20106)) = Request(Header(CoAP_versionOne,CoAP_nonConfirm, CoAP_tokenLength(token_19517),CoAP_GETCode,messageID_19518), token_19517,CoAP_Option_OSCORE_Option_context(partial_iv_19519,IDir_19480,idcontext_19481),payload_from_ciphertext(enc_COSE_ciphertext(derive_key_context(MasterSecret_19482, IDir_19480,default_aead_algorithm,idcontext_19481), aead_nonce(IDir_19480,derive_common_iv_context(MasterSecret_19482,idcontext_19481,default_aead_algorithm), partial_iv_19519),(CoAP_POSTCode,payload_19520), AAD(encrypt0_context,encrypt0(oscore_version_one, default_aead_algorithm,IDir_19480,partial_iv_19519)))))
~X_2 = Request(Header(~M_20545,~M_20546,~M_20547,~M_20548, ~M_20549),~M_20538,CoAP_Option_OSCORE_Option_context(~M_20542,~M_20543,~M_20544),payload_from_ciphertext(~M_20541)) = Request(Header(CoAP_versionOne,CoAP_nonConfirm, CoAP_tokenLength(token_19477),CoAP_GETCode,messageID_19478), token_19477,CoAP_Option_OSCORE_Option_context(partial_iv_19479,IDir_19480,idcontext_19481),payload_from_ciphertext(enc_COSE_ciphertext(derive_key_context(MasterSecret_19482, IDir_19480,default_aead_algorithm,idcontext_19481), aead_nonce(IDir_19480,derive_common_iv_context(MasterSecret_19482,idcontext_19481,default_aead_algorithm), partial_iv_19479),(CoAP_POSTCode,payload_19483), AAD(encrypt0_context,encrypt0(oscore_version_one, default_aead_algorithm,IDir_19480,partial_iv_19479)))))
~X_3 = Request(Header(a_19470,a_19471,a_19472,a_19473, a_19474),a_19469,CoAP_Option_OSCORE_Option_context(~M_20542,~M_20108,~M_19570),payload_from_ciphertext(~M_20541)) = Request(Header(a_19470,a_19471,a_19472, a_19473,a_19474),a_19469,CoAP_Option_OSCORE_Option_context(partial_iv_19479,IDir_19480,idcontext_19481),payload_from_ciphertext(enc_COSE_ciphertext(derive_key_context(MasterSecret_19482, IDir_19480,default_aead_algorithm,idcontext_19481), aead_nonce(IDir_19480,derive_common_iv_context(MasterSecret_19482,idcontext_19481,default_aead_algorithm), partial_iv_19479),(CoAP_POSTCode,payload_19483), AAD(encrypt0_context,encrypt0(oscore_version_one, default_aead_algorithm,IDir_19480,partial_iv_19479)))))
~X_4 = Request(Header(~M_20896,~M_20897,~M_20898,~M_20899, ~M_20900),~M_20892,CoAP_Option_OSCORE_Option_empty, payload_from_ciphertext(~M_20895)) = Request(Header(CoAP_versionOne,CoAP_nonConfirm,CoAP_tokenLength(a_19469),CoAP_CHANGEDCode,responseMessageId_19555), a_19469,CoAP_Option_OSCORE_Option_empty,payload_from_ciphertext(enc_COSE_ciphertext(derive_key_context(MasterSecret_19482, IDri_19498,default_aead_algorithm,idcontext_19481), aead_nonce(IDir_19480,derive_common_iv_context(MasterSecret_19482,idcontext_19481,default_aead_algorithm), partial_iv_19479),(generateResponseCode(CoAP_POSTCode, payload_19483),generateResponsePayload(CoAP_POSTCode, payload_19483)),AAD(encrypt0_context,encrypt0(oscore_version_one,default_aead_algorithm,IDri_19498, partial_iv_19479)))))
~X_5 = Request(Header(a_19463,a_19464,a_19465,a_19466, a_19467),~M_20538,CoAP_Option_OSCORE_Option_empty, payload_from_ciphertext(~M_20895)) = Request(Header(a_19463,a_19464,a_19465,a_19466,a_19467),token_19477, CoAP_Option_OSCORE_Option_empty,payload_from_ciphertext(enc_COSE_ciphertext(derive_key_context(MasterSecret_19482, IDri_19498,default_aead_algorithm,idcontext_19481), aead_nonce(IDir_19480,derive_common_iv_context(MasterSecret_19482,idcontext_19481,default_aead_algorithm), partial_iv_19479),(generateResponseCode(CoAP_POSTCode, payload_19483),generateResponsePayload(CoAP_POSTCode, payload_19483)),AAD(encrypt0_context,encrypt0(oscore_version_one,default_aead_algorithm,IDri_19498, partial_iv_19479)))))

A trace has been found.