Abbreviations
~M = symenc(hkdf(hash(exp(g,emul(r_2,b))),concat(exp(g,a),exp(g,b),getid(exp(g,a)),getid(exp(g,b)),kCTX)),secretMsg)
~M_1 = sauthtag(hkdf(hash(exp(g,emul(r_2,b))),concat(exp(g,a),exp(g,b),getid(exp(g,a)),getid(exp(g,b)),kCTX)),symenc(hkdf(hash(exp(g,emul(r_2,b))),concat(exp(g,a),exp(g,b),getid(exp(g,a)),getid(exp(g,b)),kCTX)),secretMsg))
~M_2 = ediv(r_2,eadd(sauthtag(hkdf(hash(exp(g,emul(r_2,b))),concat(exp(g,a),exp(g,b),getid(exp(g,a)),getid(exp(g,b)),kCTX)),symenc(hkdf(hash(exp(g,emul(r_2,b))),concat(exp(g,a),exp(g,b),getid(exp(g,a)),getid(exp(g,b)),kCTX)),secretMsg)),a))

A trace has been found.