\sim X_1 = (\sim M_1, \sim M_2, \sim M_3) = choice[(attvid_4,attsk_4,cert(attvid_4,pk(attsk_4),cask_4)),(attvid_5,attsk_5,cert(attvid_5,pk(attsk_5),cask_5))] ~M_5 = choice[aenc((groupkey_request,nonce_11, sign(groupkey_request,vsk_9),cert(vid_13,pk(vsk_9), cask_4)),pk(cask_4)),aenc((groupkey_request,nonce_13, sign(groupkey_request,vsk_11),cert(vid_15,pk(vsk_11), cask_5)),pk(cask_5))] ~M_7 = choice[aenc((groupkey_request,nonce_10, sign(groupkey_request,vsk_8),cert(vid_12,pk(vsk_8), cask_4)),pk(cask_4)),aenc((groupkey_request,nonce_12, sign(groupkey_request,vsk_10),cert(vid_14,pk(vsk_10), cask_5)),pk(cask_5))] A trace has been found. ~M_8 = choice[aenc(((groupkey_response,nonce_11, vid_13,gsk(vid_13,gmsk_4),gpk(gmsk_4)),sign((groupkey_response, nonce_11,vid_13,gsk(vid_13,gmsk_4),gpk(gmsk_4)), cask_4)),pk(vsk_9)),aenc(((groupkey_response,nonce_13, vid_15,gsk(vid_15,gmsk_5)),sign((groupkey_response, nonce_13,vid_15,gsk(vid_15,gmsk_5)),gpk(gmsk_5)), cask_5)),pk(vsk_11))] **Honest Process** Attacker {1}new gmsk_4 {2}new cask_4 {3}new vid_12 {4}new vsk_8 {5}new nonce_10 {6}new vid_13 {7}new vsk_9 {8}new nonce_11 {9}new attvid_4 {10} new attsk_4 {11}new gmsk_5 {12}new cask_5 {13}new vid_14 {14} new vsk_10 {15} new nonce_12 {16} new vid_15 {17} new vsk_11 {18} new nonce_13 {19}new attvid_5 {20} new attsk_5 \sim M = pk(choice[cask 4,cask 5]) {187}event choice[AttackerGetsEnrollmentCertificate(attvid_4,pk(attsk_4)),AttackerGetsEnrollmentCertificate(attvid_5,pk(attsk_5))] {192}event WaitingRequest \sim M_4 = choice[cert(vid_13,pk(vsk_9),cask_4),cert(vid_15,pk(vsk_11),cask_5)] {110}event ValidGroupKeyRequestSent(choice[vid_13, vid_15]) ~M 5 \sim M_6 = choice[cert(vid_12,pk(vsk_8),cask_4),cert(vid_14,pk(vsk_10),cask_5)] {30} event ValidGroupKeyRequestSent(choice[vid_12, vid_14]) ~M 7 ~M 5 {219}event GroupKeyRequestReceived(choice[aenc(groupkey_request,nonce_11,sign(groupkey_request,vsk_9),cert(vid_13,pk(vsk_9),cask_4)),pk(cask_4)), aenc((groupkey_request,nonce_13,sign(groupkey_request,vsk_11),cert(vid_15,pk(vsk_11),cask_5)),pk(cask_5))]) {220}event choice[ValidGroupKeyRequestReceived(cask_4,vid_13),ValidGroupKeyRequestReceived(cask_5,vid_15)] {225}event choice[ValidGroupPrivateKeySent(vid_13, gsk(vid_13,gmsk_4),gpk(gmsk_4)),ValidGroupPrivateKeySent(vid_15,gsk(vid_15,gmsk_5),gpk(gmsk_5))] ~M 8 ~M 8 {119}new vpseudosk_10 {120}new vpseudosk 11 {121} new m 12 [142] if choice[true,false]
This process performs a test that may succeed on one side and not on the other.

Abbreviations