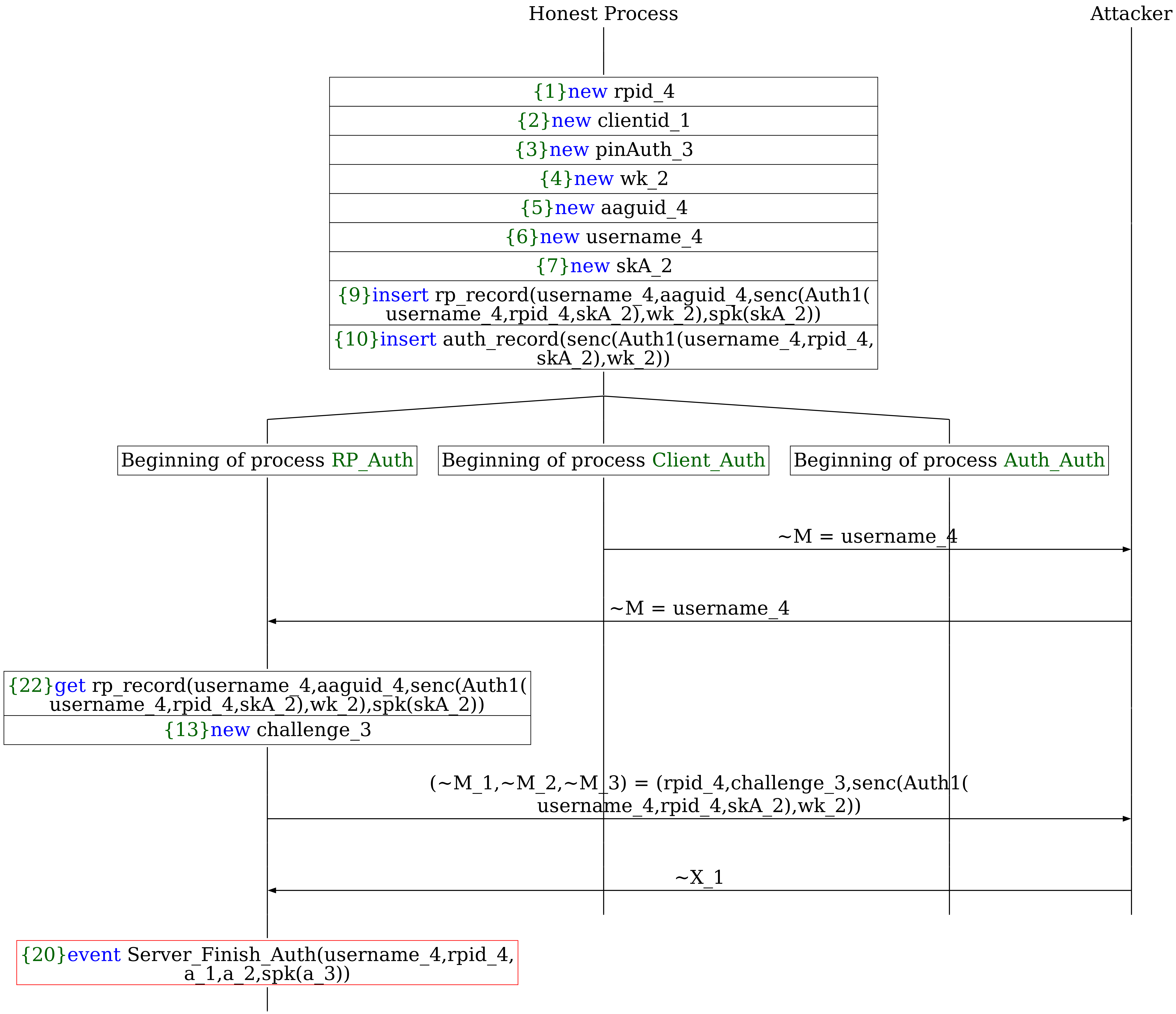
Abbreviations

~X_1 = (Auth2(h(~M_1),a_1,a_2,spk(a_3)),sign(Auth3(Auth2(h(~M_1),a_1,a_2,spk(a_3)),hash(Client1(~M_1,~M_2))),a_3),Client1(~M_1,~M_2))
= (Auth2(h(rpid_4),a_1,a_2,spk(a_3)),sign(Auth3(Auth2(h(rpid_4),a_1,a_2,spk(a_3)),hash(Client1(rpid_4,challenge_3))),a_3),Client1(rpid_4,challenge_3))

A trace has been found.



Honest Process
Attacker
{1}new rpid_4
{2}new clientid_1
{3}new pinAuth_3
{4}new wk_2
{5}new aaguid_4
{6}new username_4
{7}new skA_2
{9}insert rp_record(username_4,aaguid_4,senc(Auth1(username_4,rpid_4,skA_2),wk_2),spk(skA_2))
{10}insert auth_record(senc(Auth1(username_4,rpid_4,skA_2),wk_2))
Beginning of process RP_Auth
Beginning of process Client_Auth
Beginning of process Auth_Auth
~M = username_4
~M = username_4
{22}get rp_record(username_4,aaguid_4,senc(Auth1(username_4,rpid_4,skA_2),wk_2),spk(skA_2))
{13}new challenge_3
(~M_1,~M_2,~M_3) = (rpid_4,challenge_3,senc(Auth1(username_4,rpid_4,skA_2),wk_2))
~X_1
{20}event Server_Finish_Auth(username_4,rpid_4,a_1,a_2,spk(a_3))