Abbreviations

~M_5 = AES_CMAC(AES_CMAC(AES_CMAC(ZERO, concat(concat(concat(concat(PI,PCap),PS),p256(gen,exp_P_1)),gen)),p256(gen,exp_P_1)),prck),concat(rand_prov_2,auth_val_3))

~M_7 = AES_CCM((ivindex,keys),AES_CMAC(AES_CMAC(AES_CMAC(AES_CMAC(ZERO,concat(concat(concat(AES_CMAC(ZERO,concat(concat(Concat(PI,PCap),PS),p256(gen,exp_P_1)), gen)),rand_prov_2),rand_prov_2)),p256(gen,exp_P_1)),prsk),AES_CMAC(AES_CMAC(AES_CMAC(ZERO,concat(concat(AES_CMAC(ZERO,concat(concat(AES_CMAC(ZERO,concat(concat(concat(PI,PCap), PS),p256(gen,exp_P_1)),gen)),rand_prov_2),rand_prov_2)),p256(gen,exp_P_1)),gen)),rand_prov_2),rand_prov_2)),p256(gen,exp_P_1)),prsn))

Attacker **Honest Process**

Beginning of process invite_prov Beginning of process invite_dev Beginning of process pubkey_exchange_noob_prov Beginning of process auth_outputoob_dev Beginning of process send_data_	Beginning of process recv_data_dev Beginning of process outputoob_user Beginning of process Mesh_stack_central Beginning of process Mesh_stack_peripheral [177] insert mesh_seq_c(addr_prov,seq1_4) Beginning of process Meshapp_central Beginning of process Meshapp_peripheral [177] insert mesh_seq_c(addr_prov,seq1_4)
	[177] insert mesh_seq_c(addr_prov,seq1_4)
\sim M = PI	PI
a a	
{7}insert pi_table_prov(addr_dev,PI) {8}insert pcap_table_prov(addr_dev,a)	
	a_1
	\sim M_1 = PCap
{11}insert pi table dev(addr prov.a.1)	
[11] insert pi_table_dev(addr_prov,a_1) [12] insert pcap_table_dev(addr_prov,PCap)	
{21}get pcap_table_prov(addr_dev,a)	
	\sim M_2 = PS
	$\sim M_3 = p256(gen, exp_P_1)$
	gen
{18}insert pubkey_table_prov(addr_prov,p256(gen,	
{19}insert pubkey_table_prov(addr_dev,gen) {20}insert dhkey_table_prov(addr_prov,p256(gen,	
(30) get pi table dev(addr prov,a 1)	
	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
	a_3
	$\sim M_4 = p256(gen, exp_D_1)$
{27}insert pubkey_table_dev(addr_prov,a_3) {28}insert pubkey_table_dev(addr_dev,p256(gen,	
$\frac{\exp_D_1)}{\{29\} \text{insert dhkey_table_dev(addr_dev,p256(a_3,exp_D_1))}}$	
{57} get pubkey_table_prov(addr_prov,p256(gen,exp_P_1)) {56} get pubkey_table_prov(addr_dev,gen) {55} get dhkey_table_prov(addr_prov,p256(gen,exp_P_1)) {31} new rand_prov_2	
{31} new rand_prov_2 {31} new rand_prov_2	
\[\{87\\\ \text{get pubkey_table_dev(addr_prov,a_3)} \] \[\{86\\\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	
	auth_val_3
auth_val_3	
	~M_5
	\sim M_5
$[42] \textcolor{red}{\textbf{event send_prov(p256(gen,exp_P_1))}}$	
	~M 6 - rand prov 2
	M. C
	~M_b = rana_prov_2
{46} event recv_prov(p256(gen,exp_P_1)) {51} insert key_table_prov(addr_dev,AES_CMAC(AES_CMA	
$\begin{array}{c} \text{concat}(\text{concat}(\text{PI,PCap}),\text{PS}),\bar{p}256(\text{gen},\text{exp}[P_1]),\\ \text{gen})),\text{rand_prov}_2),\text{rand_prov}_2)),\text{p}256(\text{gen},\text{exp}[P_1]),\\ \text{prsk}) \end{array}$	
{54} insert nonce table prov(addr_dev,AES_CMAC(AES_CMAC(AES_CMAC(ZERO,concat(Concat(AES_CMAC(ZERO,concat(concat(PI,PCap),PS), p256(gen,exp_P_1)),gen)),rand_prov_2),rand_prov_2)), p256(gen,exp_P_1)),prsn))	
	CMAC(AFS CMAC(
{95}get key table_prov(addr_dev,AES_CMA(AES_CMA(ZERO,concat(concat(concat(AES_CMA(Concat(concat(concat(concat(concat(concat(concat(concat(concat(pI,PCap),PS),p256(good gen)),rand_prov_2),	CMAC(ZERO,concat(5256(gen,exp P 1)), 256(gen,exp P 1)),
nrsk))	