

The Role of Session, Goal and Environment

role session (ED,NAD: agent, SKus: symmetric_key)

def=

local

SND1,SND2,RCV1,RCV2: channel(dy)

composition

edge (ED, NAD, SKus, SND1, RCV1)

\wedge networkdevice (ED, NAD, SKus, SND2, RCV2)

end role

role environment()

def=

const ed, nad: agent, skus: symmetric_key,

h: hash_func, sp1,sp2, sp3, a, b, bprime, dj, cu: protocol_id

intruder_knowledge = {ed, nad, h}

composition

session(ed, nad, skus)

\wedge session(i, nad, skus)

\wedge session(ed, i, skus)

end role

goal

secrecy_of sp1, sp2, sp3

authentication_on a,cu

authentication_on b, bprime,dj

end goal

environment()