



```

i -> (a, 6): {Ea(1)}_kab
(a, 6) -> i: {{K(2)}_Ea(1)}_kab
i -> (a, 3): {{K(2)}_Ea(1)}_kab
(a, 3) -> i: {Na(3)}_K(2) witness(a, b, na, Na(3))
i -> (a, 6): {Na(3)}_K(2)
(a, 6) -> i: {Na(3), Nb(4)}_K(2) witness(a, b, nb, Nb(4))
i -> (a, 3): {Na(3), Nb(4)}_K(2)
(a, 3) -> i: {Nb(4)}_K(2) request(a, b, nb, Nb(4))

```

Parallel session attack, man-in-the-middle between A as initiator and A as responder, attacker masquerades as B, but no secret nos are exposed.

---

## HLP Specification

```

ro eke_Init (A, B: agent,
            Kab: symmetric_key,
            Snd, Rcv: channel (dy))

```

```

played_by A
def=

```

```

|ol State   : nat,
   Ea       : public_key,
   Na, Nb, K : text

```

```

cot sec_k1 : protocol_id

```

```

init State := 0

```

```

transitio

```

1. State = 0
  - ∧ Rstart)
  - =|>
  - State' := 1





