

Agent Dialogue Using KQML and KIF

Alice (Procurement Agent) initiates the conversation:

```
(KQML (performative tell)
  (sender Alice)
  (receiver Bob)
  (content
    (KIF (forall ?x
      (=> (and (isa ?x Television)
        (size ?x 50inch))
        (ask (stock-level ?x)))))))
```

Bob (Warehouse Agent) responds to the stock level query:

```
(KQML (performative tell)
  (sender Bob)
  (receiver Alice)
  (content
    (KIF (number (stock-level (Television 50inch)) 30))))
```

Alice now queries the number of HDMI slots in the televisions:

```
(KQML (performative ask-if)
  (sender Alice)
  (receiver Bob)
  (content
    (KIF (number-of (HDMI-slots (Television 50inch)) ?n))))
```

Bob responds with the number of HDMI slots:

```
(KQML (performative tell)
  (sender Bob)
  (receiver Alice)
  (content
    (KIF (number (HDMI-slots (Television 50inch)) 3))))
```