



# The Big Picture

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# IRoNet Prototype

- General idea:
  - To build an adaptive mini Internet which can adapt into time varying changes in network
    - Traffic
    - Users
    - Applications



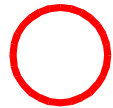
# IRoNet Prototype

- Implementation
  - DiffServ based network architecture
  - External processing
    - Authentication
    - Traffic Engineering
      - Routing
      - Provisioning
    - Composition of filters
  - Quick and dirty
    - Of the shelf standard PC hardware and FreeBSD OS

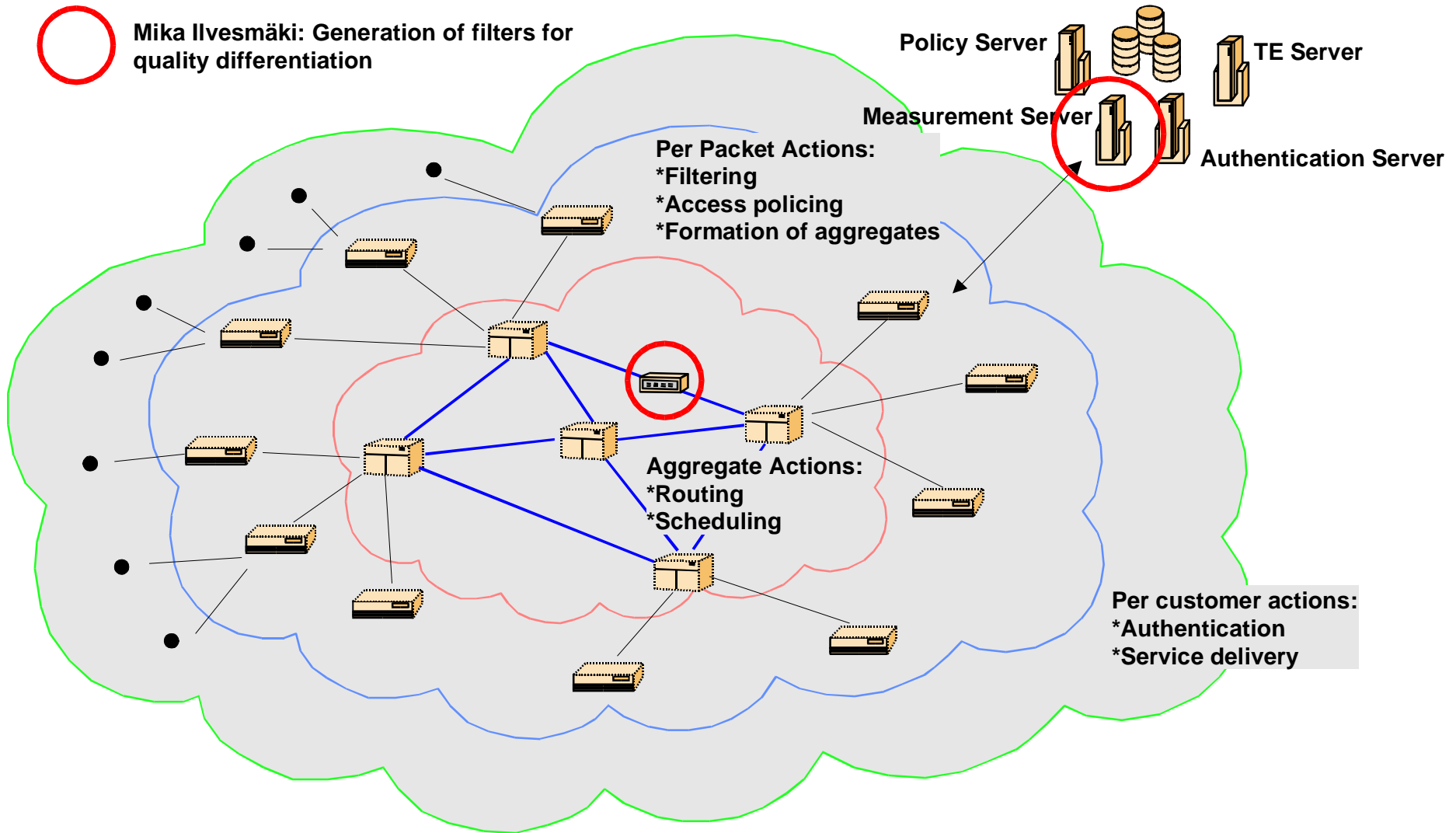


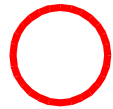
# IRoNet Prototype

- We use adaptive (measurement based) mechanisms where ever they are suitable for usage or atleast prototyping
  - In generation of filters for traffic grouping
  - In generation of best possible routes for TE purposes
  - In provisioning of network
    - External provisioning (TE server)
    - Internal provisioning (Individual scheduling algorithms)

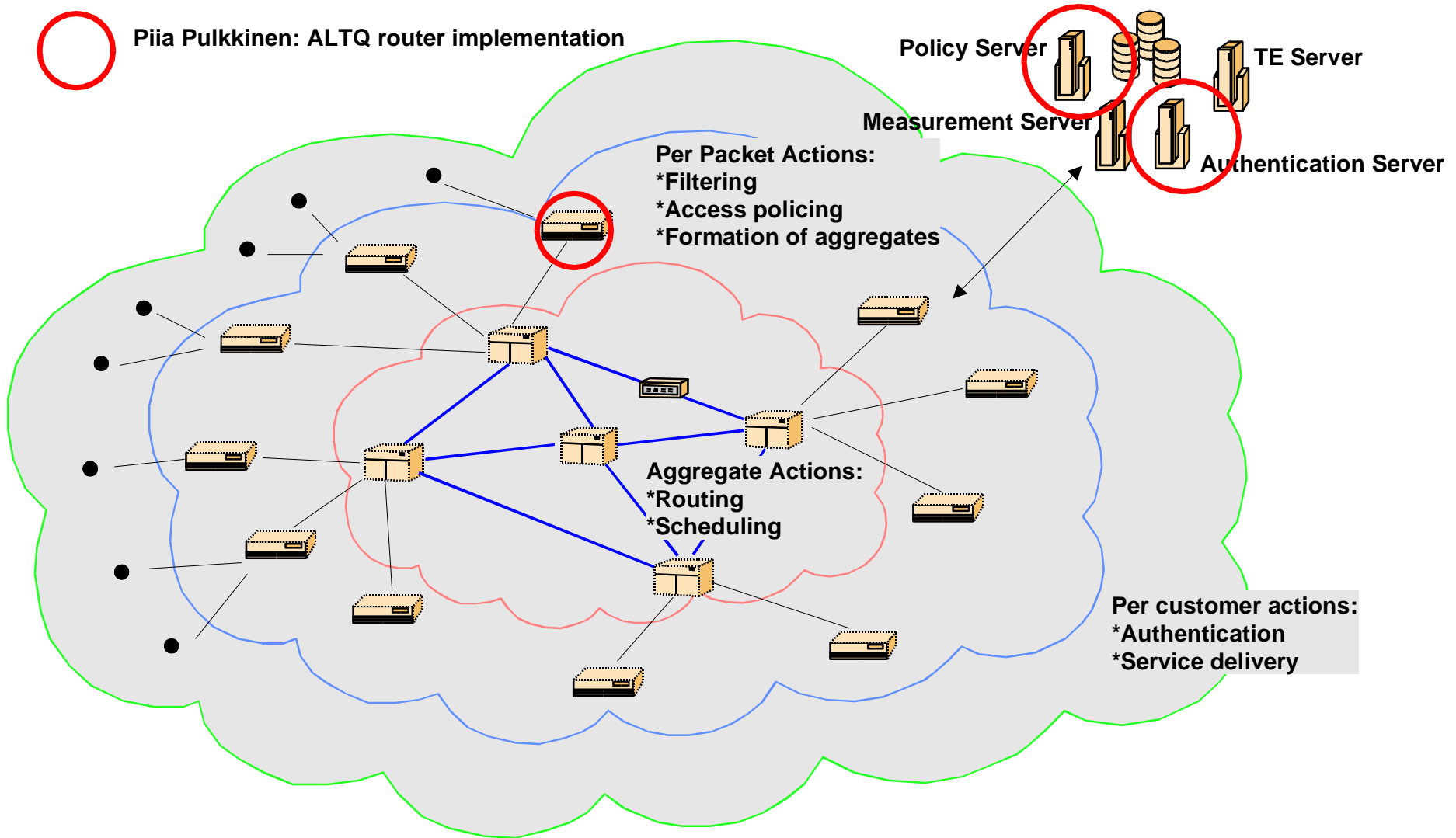


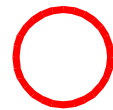
**Mika Ilvesmäki: Generation of filters for quality differentiation**



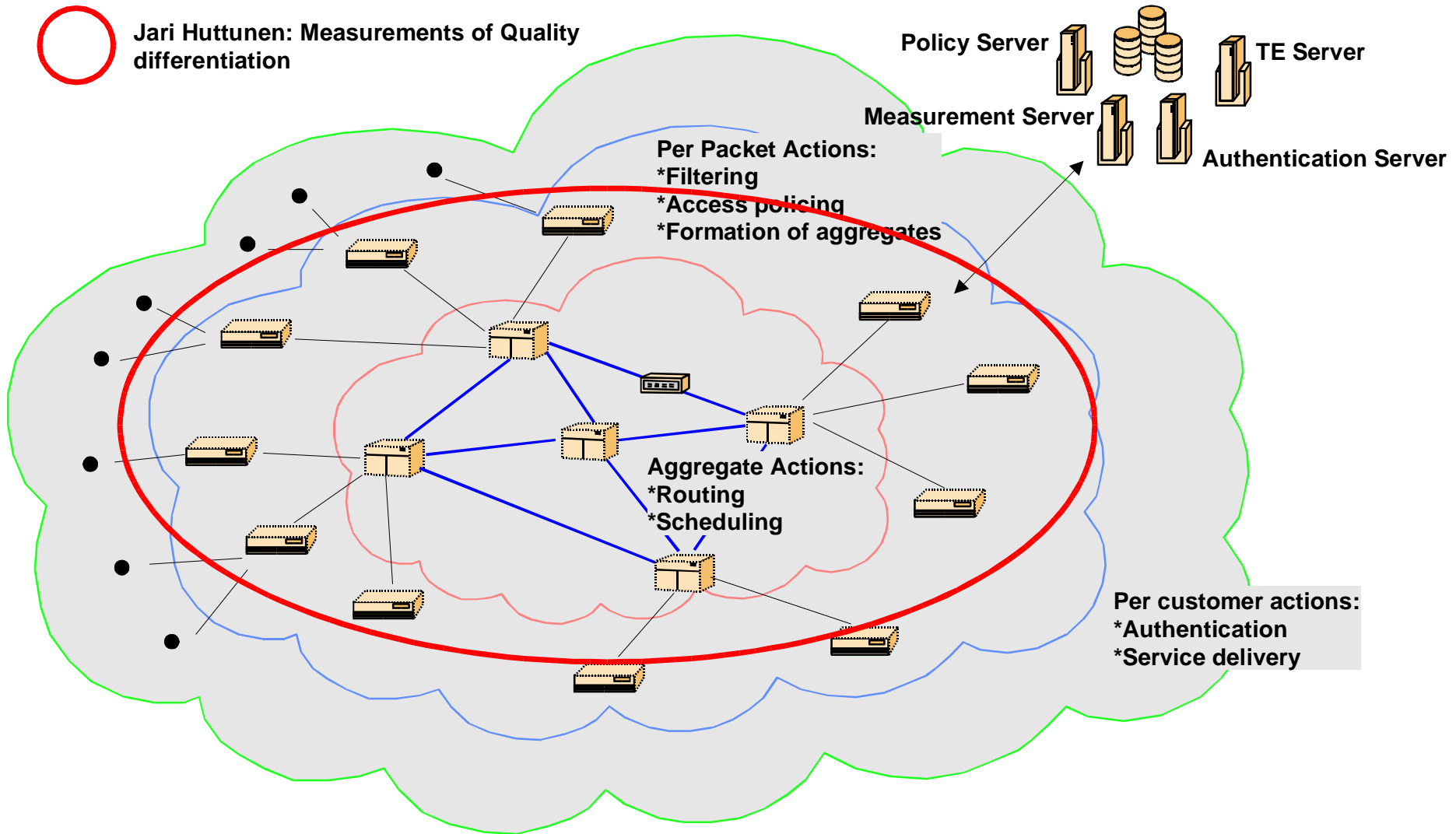


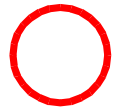
Piia Pulkkinen: ALTQ router implementation



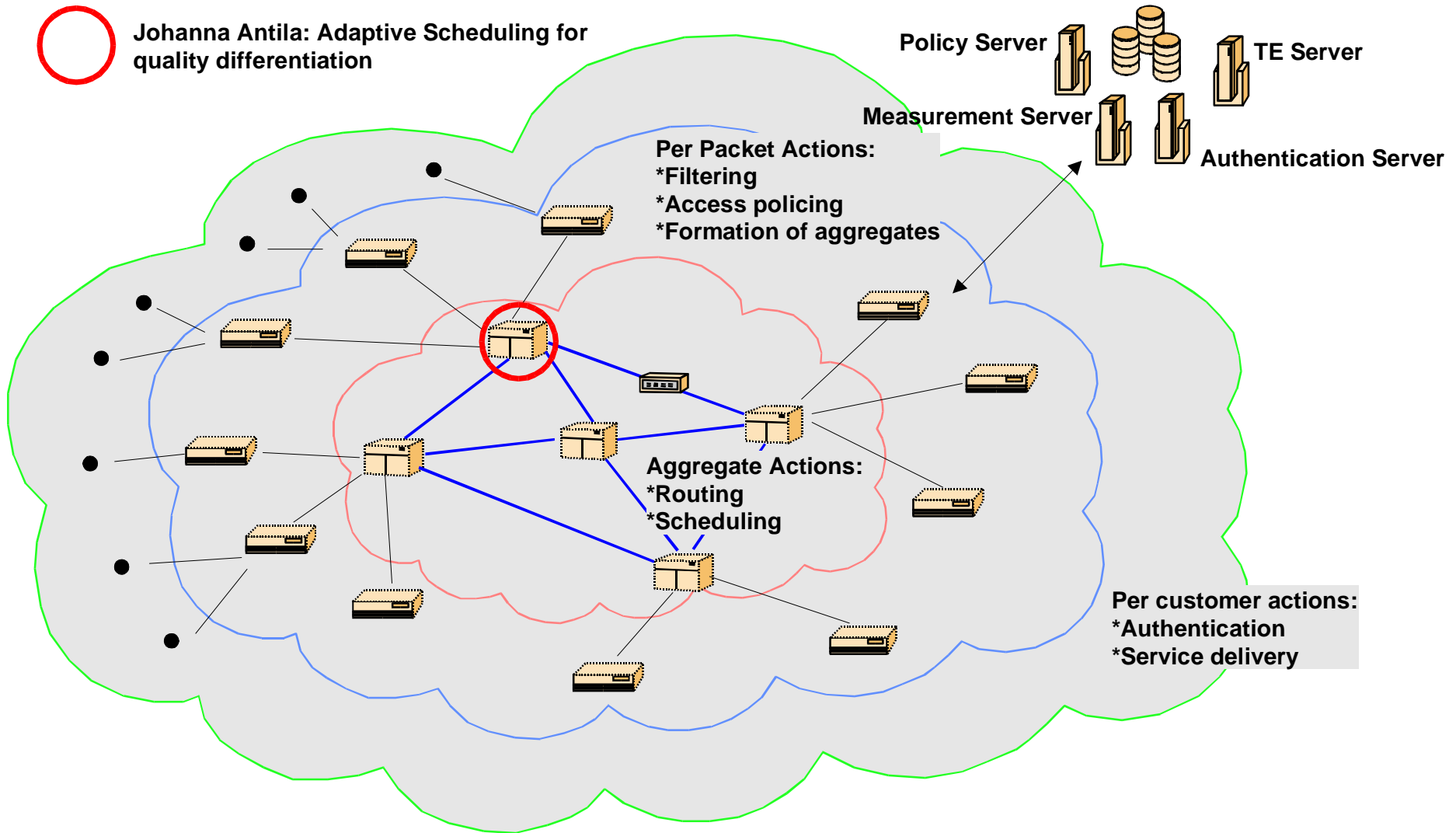


Jari Huttunen: Measurements of Quality differentiation

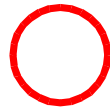




**Johanna Antila: Adaptive Scheduling for quality differentiation**







**Sampo Kaikkonen: Centralized routing prototype**

