Fraunhofer Institute for Open Communication Systems

Competence Center MOTION

Modeling and Testing for System and Service Solutions

Virtual ISP – VISP
IST FP6-027178

Business Workflows and SOA – Challenges and Solutions

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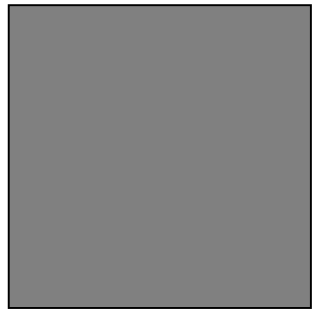
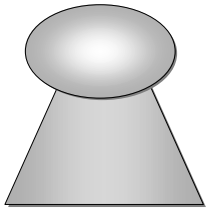
Business Processes and VISP Services

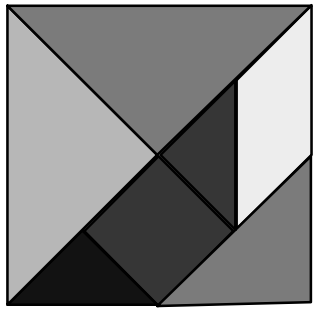
1) **Select** available ISP service like VoIP



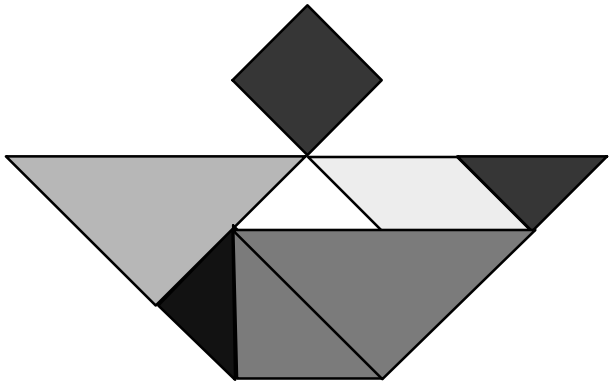
2) **Decompose** ISP service into reusable parts



VISP Service Architect

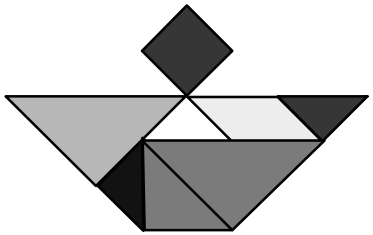


3) **Compose** new ISP service from the available parts – **Service orchestration**

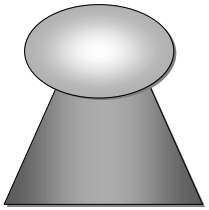


SOA Principles during Service Instantiation in VISP

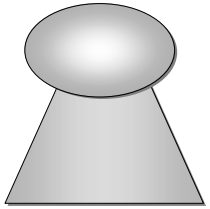
3) **Discover**, **select** and **configure** appropriate ISP service building blocks



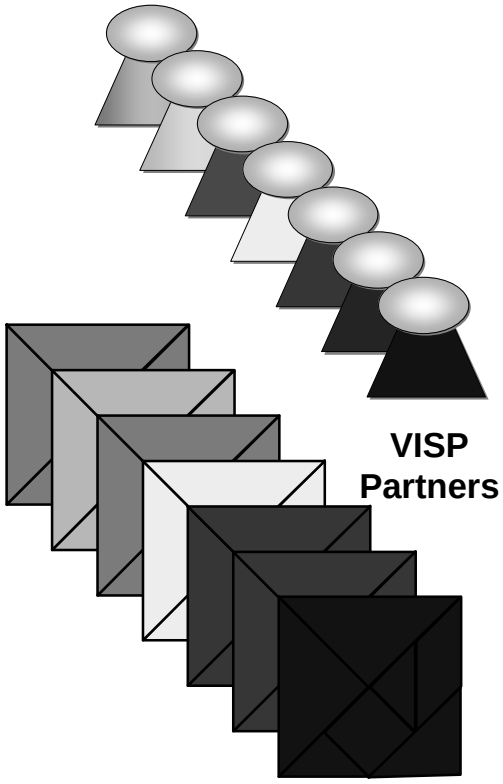
4) **Consume** instantiated ISP service



VISP Customer

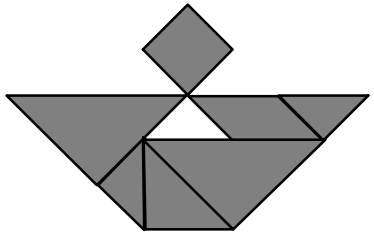


VISP Mediator & Controller

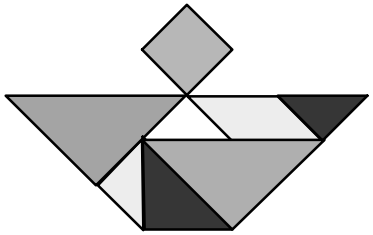


VISP Partners

5) **Supervise** and **reconfigure** ISP service building blocks

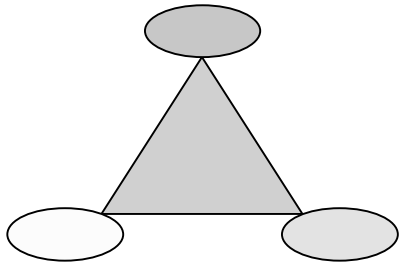


2) **Request** orchestrated ISP service



1) **Announce** available ISP service building blocks

Challenges



- **Discovery** of appropriate services
  - Consideration of different **business models**
  - Development of an ISP specific **taxonomy**

- **Announcement** of services and service building blocks
  - Design of a service **type** repository (service knowledge base)
  - Design of a service repository (**product** catalog)
  - Design of a transaction **state** repository (service instance base)
  - Separation of business and ISP related services

- Process **composition** utilizing
  - Graphical **choreography** specification in BPMN
  - Generated abstract BPEL templates
  - Executable service **orchestration** in concrete BPEL
  - Dynamic **binding** considering customer requirements, VISP offers, and different business models