Mind Your Ps: Processes, Policies, Protocols

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Akhil Sahai (Ph.D)
HP Laboratories, Palo-Alto, CA
asahai@hpl.hp.com

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Confusions galore !

- Global Processes = Local Processes + Protocols ?
- Policies = Processes?
- Protocols = Processes?
- Policies = Protocols ?

Market Research Data

- In 2002, the worldwide BPM market saw license revenue of $452.5 million, and is expected to have grown between 15 percent and 20 percent (between $520 million and $543 million) in 2003 (Latimer Nicole S, Gartner, Jan 2004)
- The demand for lower costs, increased agility and improved service-level manageability is driving the trend toward PBCS. Although the shift to the new model will not be rapid, it is inevitable, and technologies and initiatives will emerge through 2010 to make it successful. (Scott, Bittman. Gartner July 2002)

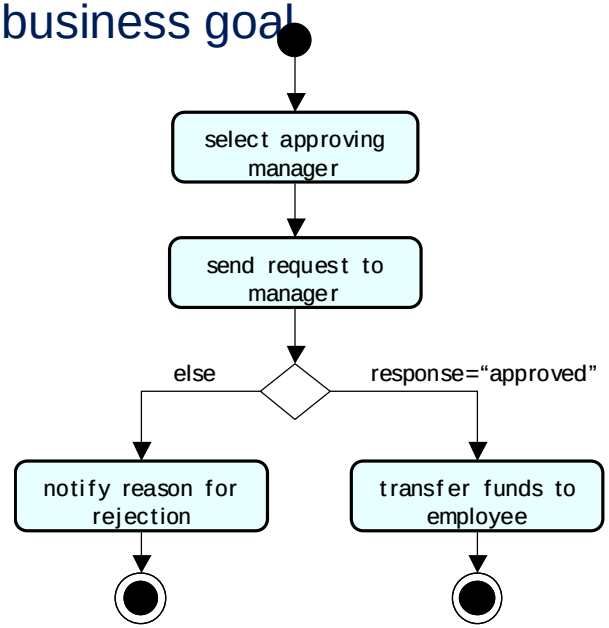
Outline

- Processes
- Protocols
- Policies
- Common Scenario

Processes

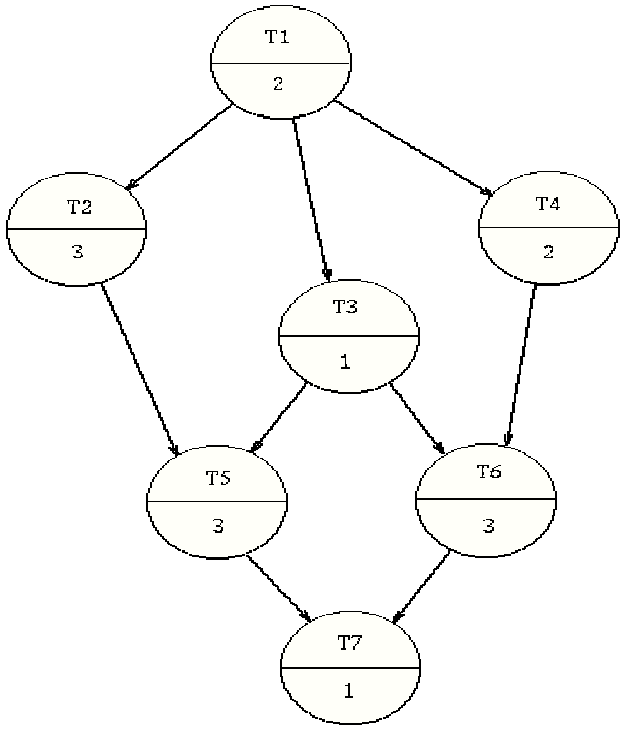
Business Processes and Workflows

business process denotes a set of tasks, executed by human or automated resources according to some ordering criteria that collectively achieve a certain business goal



Task Graphs

a Task graph is a graph in which each node represents a task to be performed

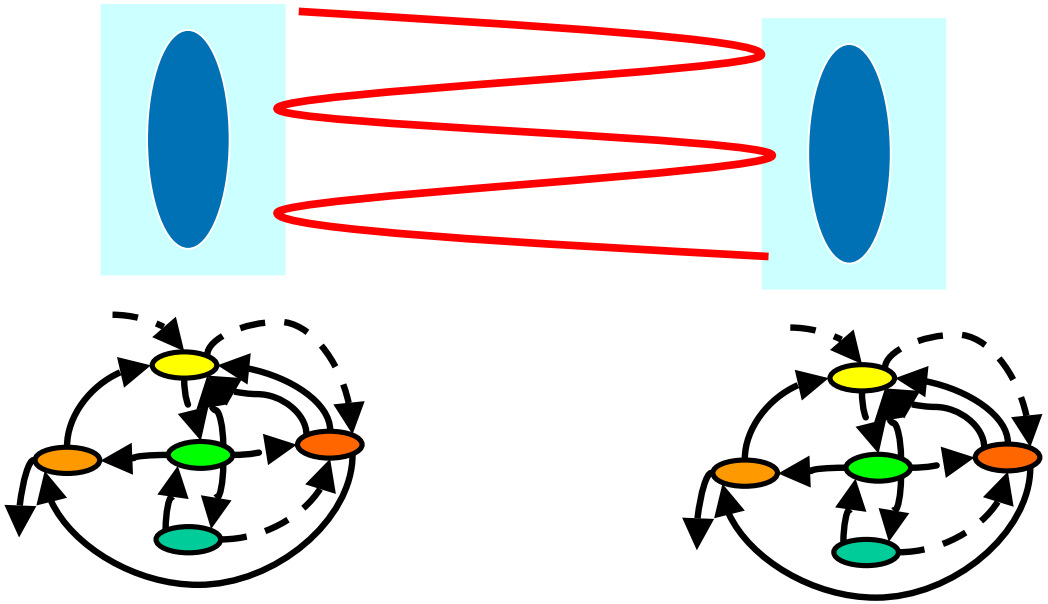


Processes

- Constructs
  - Activities : Invoke, Receive, Reply, Throw, Wait, Assign, Terminate, Empty
  - Primitive : Sequence, Switch, While, Pick, Flow
- Proposals and Standards
  - WSFL
  - XLANG
  - BPEL4WS
  - WfMC
  - …

Protocols

A formal description of messages to be exchanged and rules to be followed for two or more systems to exchange information. A protocol is a standardized set of rules that specify how a conversation is to take place, including the format, timing, sequencing and/or error checking, e.g. TCP, FTP, WS-Reliability, WS-Transactionality etc.



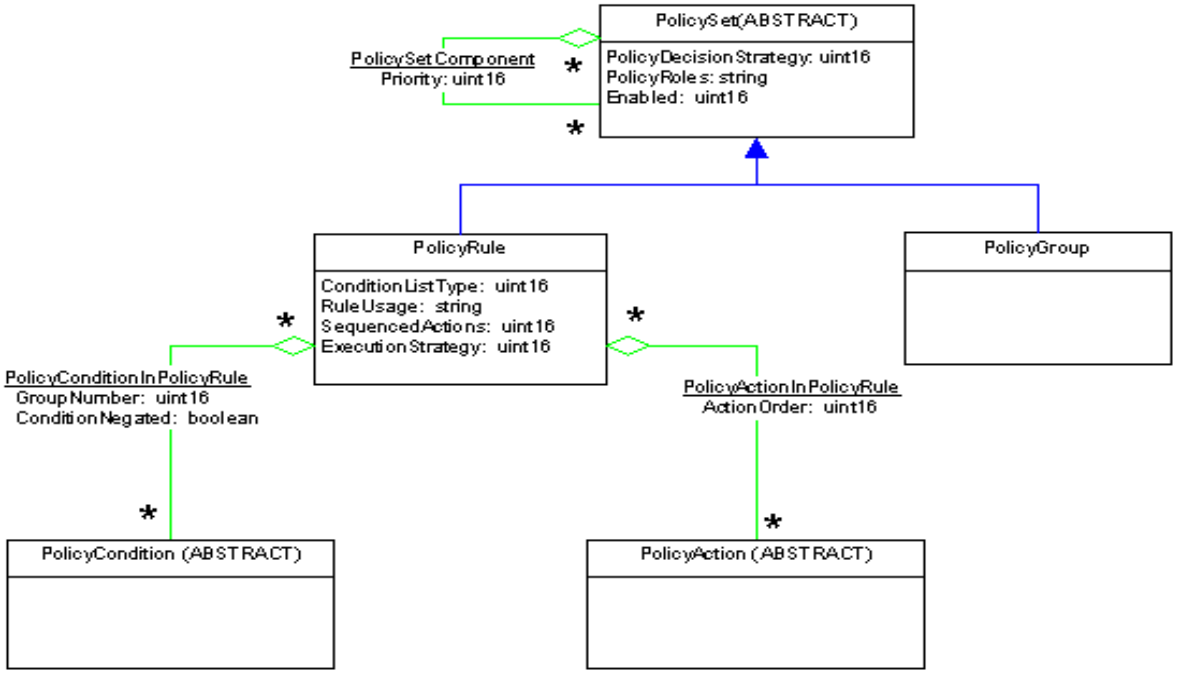
Policies

a "policy" is a "definite goal, course or method of action to guide and determine present and future decisions." [RFC3198]

when used in the context of computer systems, "policy" is a term that frequently used to describe any system configuration that control system behaviors such as in "security policies" or "quality of service policies."

Policy may be defined as constraints that maintain system within desired behavior. Policies can specify resource management directives

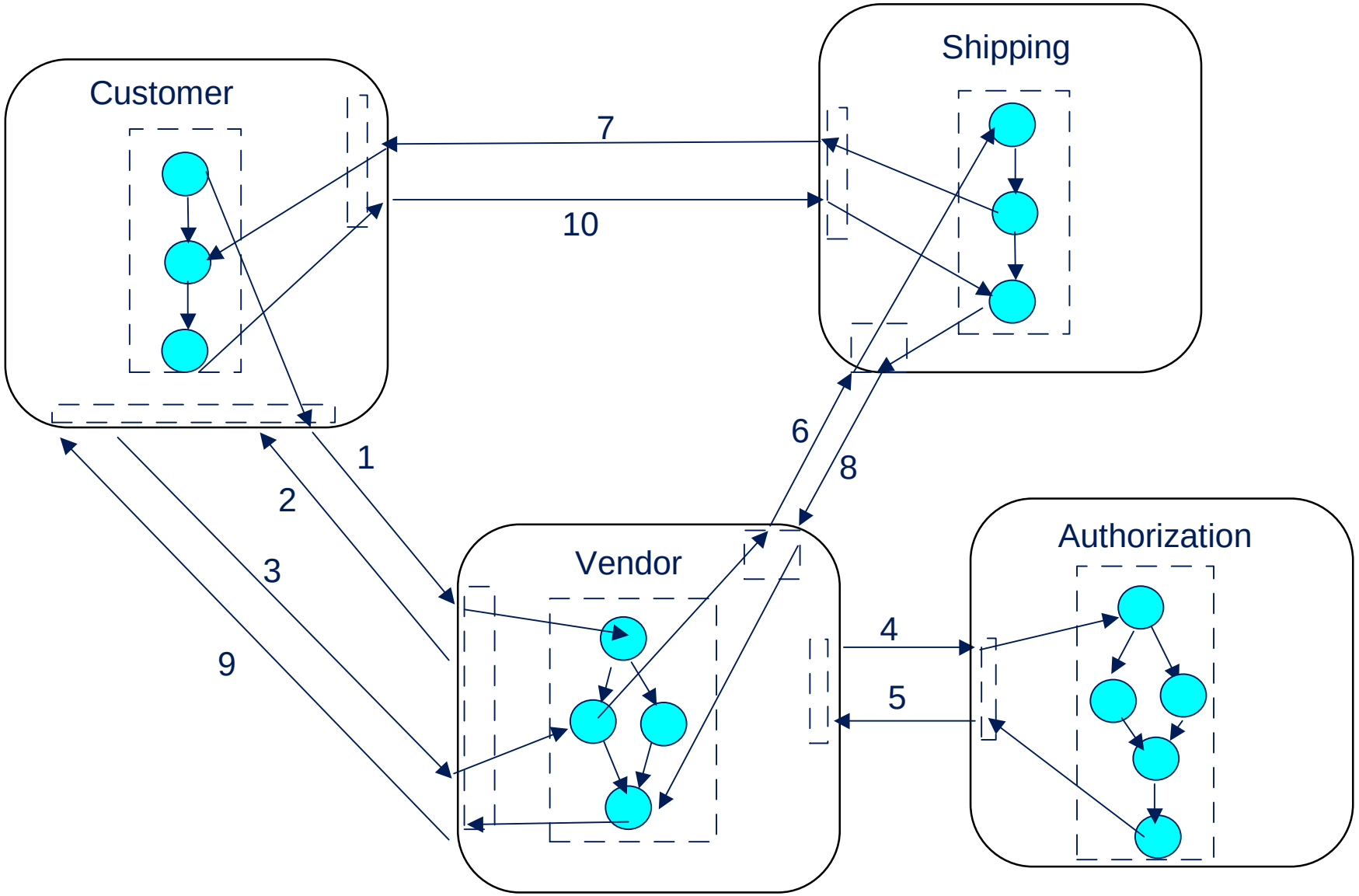
- CIM Policy (IETF, DMTF)
- PARLAY (ETSI, JAIN)
- Ponder (Imperial College)
- QuarterMaster (HP Labs)
- WS-Policy (GGF)



Common Scenario

- A customer (C) looks up a book at a Vendor (V) and is quoted price and availability
- C orders the book from V
- V arranges for a Shipper (S) to deliver the book to C
- C pays V

Processes, Protocols, Policies



Summary

- Lots of impact of these P's!
- Policies, Processes, Protocols often get confused. Important to make the distinction
- The same scenario can be addressed using multiple approaches

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