

An Automatic Service Composition Model in IMS/Web 2.0 Converged Environment

TELECOM SudParis



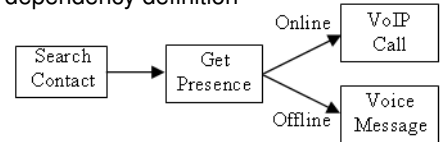
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Highlights

- Provide a unified service composition model (IMS/Web 2.0)
- Enforce user-centricity feature
- Enable automatic service creation and update

Automatic service composition

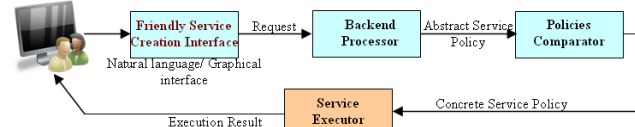
- Two phases for service composition
 - Abstract composition: functional tasks and data dependency definition



- Concrete composition: concrete service selection

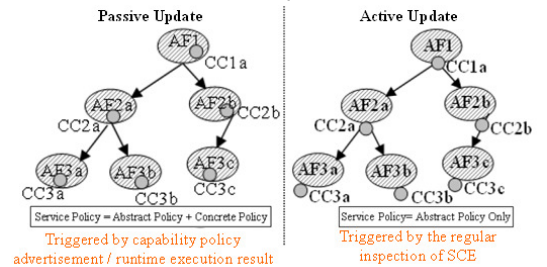
- Two relevant processes:

- Automatic service creation:



- Hide backend complexity
- Simplify service creation process

- Automatic service update:

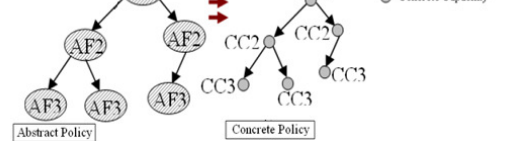


- Minimize user intervention
- Reduce maintenance cost
- Improve service execution efficiency

Service Policy = Abstract Policy + Concrete Policy
Triggered by capability policy advertisement / runtime execution result

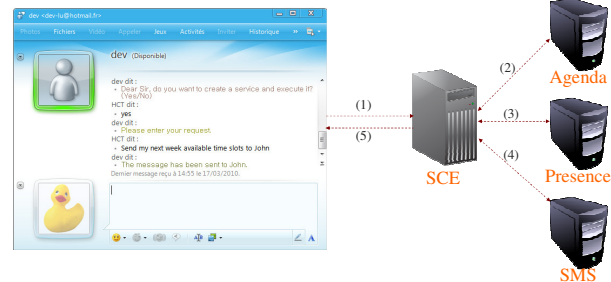
Service Policy = Abstract Policy Only
Triggered by the regular inspection of SCE

Hybrid Update

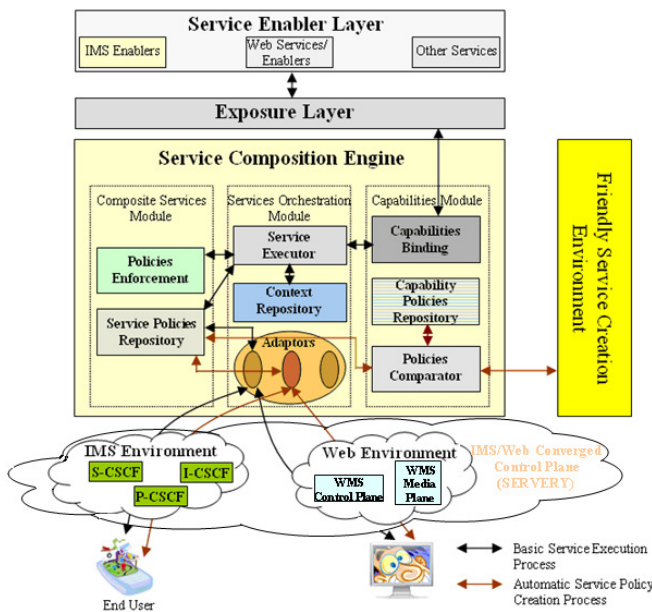


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- Reduce maintenance cost
- Improve service execution efficiency

- A natural language service composition example

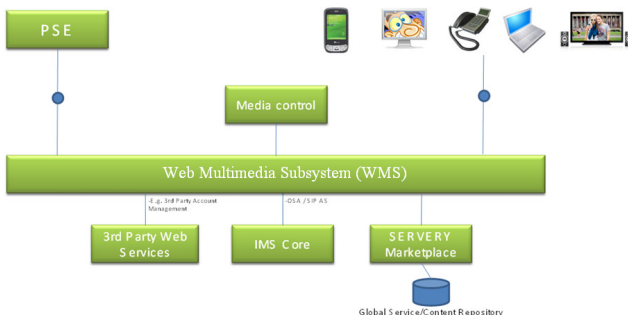


Architecture overview



Access IMS/Web services seamlessly

- Access service through IMS/Web converged control plane WMS (specified in SERVRY)



- Bridge: flexibility and openness (Web) + trustworthiness and reliability (IMS)

User centric service creation environment

- Natural language Composer
- Graphical interface (e.g. YahooPipe)
- Widget (e.g. EzWeb)
- IDE (e.g. Eclipse)

Conclusion

- Facilitate service creation process for user
- Reduce service maintenance cost for service provider
- Enhance cooperation among different parties
- Optimize service lifecycle

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