

**Review Form: 1<sup>st</sup> International Workshop on  
Services and Infrastructure for the Ubiquitous and Mobile Internet (SIUMI'05)**



**SIUMI 2005**

**WEB MINDS**

Columbus, Ohio,  
USA, June 6<sup>th</sup>, 2005

In conjunction with the 25th Int. Conference on Distributed Computing Systems (**ICDCS'05**)

Paper Number: #18

Paper Title: "Service-cloud model: whole lifecycle model on dynamic composing services"

Authors: Chen Yanping, Li Zengzhi, Chen Yan, Yang Huaizhou

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**Reviewer1:**

<b>Familiarity</b> Rate your familiarity with the topic	1	2	<b>3x</b>		4
	Novice	Some knowledge	<b>Familiar</b>		Expert
<b>Significance</b> Technical relevance and practicality of ideas in the paper	1	<b>2x</b>		3	
	Not significant	<b>Somewhat significant</b>		Highly significant	
<b>Novelty</b> How original the problem and/or solution method is	1	<b>2x</b>		3	
	Not novel	<b>Somewhat novel</b>		Highly novel	
<b>Quality of Presentation</b> Writing and presentation style/accuracy	1	<b>2x</b>		3	
	Poorly written	<b>Could be improved</b>		Well written	
<b>Overall Recommendation</b>	1	<b>2x</b>	3	4	5
	Strong reject	<b>Weak reject</b>	Weak accept	Accept	Strong accept

**Contributions**

The paper provides an abstract framework for web service composition, based on the "cloud metaphor". The authors make a case for assimilating the process for composing web services to the process for cloud formation.

In spite of the poetic elegance of the metaphor, there seems to be little substance to the approach. In particular, it is not clear how the embodiment described by the authors would map to existing web service standards. It would have been more interesting to go down a level in abstraction and provide an application based on real standards.

**Strengths and weaknesses**

The strength of the paper lies in an elegant metaphor. However, the way the paper is written gives the impression that the authors used it more to comprehend the problem of service composition in their own minds rather than leveraging it as a solid foundation for a working framework.

The metaphor remains at a very abstract level and does not address the problem in practical terms any better than alternative frameworks do. The authors actually seem to know little about alternative approaches, as indicated by a rather weak session on related work.

Finally, the authors seem to have written the paper in a rush, with little effort put in formatting. Many paragraph start with one font size and continue with a different font.

### Detailed public comments

The metaphor that the authors used is elegant but too abstract. A clear mapping to existing web service standards, possibly combined with a practical application, would have given more substance to the work. Since the topic of service composition is very popular in the academic community, a more thorough analysis of related work would have strengthened the case, especially if made in relation to the service cloud metaphor. There have been several attempts to address the lifecycle issues for web service composition, and the authors should have demonstrated more familiarity with the alternative approaches.

The main suggestion is to ground the work in web service standards, and show how this approach is superior to the alternatives.

The authors should have paid more attention to the formatting of the paper, which is quite poor. Several paragraphs have mixed font sizes in it.

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### Reviewer2:

<b>Familiarity</b> Rate your familiarity with the topic	1	2	3	4	
	<u>Novice</u>	Some knowledge	Familiar	Expert	
<b>Significance</b> Technical relevance and practicality of ideas in the paper	1	2	3		
	<u>Not significant</u>	Somewhat significant	Highly significant		
<b>Novelty</b> How original the problem and/or solution method is	1	2	3		
	<u>Not novel</u>	Somewhat novel	Highly novel		
<b>Quality of Presentation</b> Writing and presentation style/accuracy	1	2	3		
	<u>Poorly written</u>	Could be improved	Well written		
<b>Overall Recommendation</b>	1	2	3	4	5
	<u>Strong reject</u>	Weak reject	Weak accept	Accept	Strong accept

### Contributions

This paper tries to describe a model for composing web-services. An analogy is made to the formation of rain clouds composed of individual rain drops. The analogy is not very good and detracts from the paper. Not much details are given about the actual composition process.

### Strengths and weaknesses

The analogy the paper makes to composition of rain clouds is not very good and detracts from the paper. The paper is not well written and has several grammatical errors. The relevance to the workshop is marginal and the actual service composition approach is not very well described.

### Detailed public comments

Your analogy to the formation of rain clouds is not very good and really detracts from the quality of the paper. Even if you wish to make the analogy, you could do it in a small paragraph and use the rest of the space to better describe the actual service composition approach. A real-world example would be a good way to illustrate the actual algorithm in your system, which is not explained very well. Also, there are a number of grammatical and spelling errors in your paper that need to be fixed.

**Reviewer3:**

<b>Familiarity</b> Rate your familiarity with the topic	1	2	3	4	
	Novice	Some knowledge	Familiar	Expert	
<b>Significance</b> Technical relevance and practicality of ideas in the paper	1	2	3		
	Not significant	Somewhat significant	Highly significant		
<b>Novelty</b> How original the problem and/or solution method is	1	2	3		
	Not novel	Somewhat novel	Highly novel		
<b>Quality of Presentation</b> Writing and presentation style/accuracy	1	2	3		
	Poorly written	Could be improved	Well written		
<b>Overall Recommendation</b>	1	2	3	4	5
	Strong reject	Weak reject	Weak accept	Accept	Strong accept

**Contributions**

Authors present a model named Service-Cloud Model for dynamic composition of web services. Their idea is inspired by the forming picture of clouds. They give the mapping between the forming picture of clouds and their Service-Cloud model. They present how to generate service “cloud” from service “drips” by using the Situation Calculus theory, and finally they present their prototype.

**Strengths and weaknesses**

Showing how clouds are forming, detailing how the Web-service paradigm works (discovery, compose, offer and terminate) and providing the mapping between them as motivation of the approach is not useful especially if such motivations keep 3 pages of 8 paper pages, while the effective results are explained in 1 page. In briefly, my opinion is that, the paper does not offer any research contribution.

Moreover, authors miss the objectives defined in the paper: the paper lacks the sufficient theory; the paper lacks design of architecture and the prototype's implementation.

Finally, English has to be strongly revised.

**Detailed public comments**

The mapping between Forming clouds and Composing Web Services is useless for the comprehension of the paper. Authors will give more contribution on their research, providing the reader with more details about the theory and the design issues. It may be useful to provide a case of study and the mapping between the theory and the practical experience. It is useless explaining only technologies being used in the implementation, without any details on prototype. Figures will be explained in the paper, if captions are too brief. Finally, the paper has too many English errors.