

# Methods of Improving Quality of Web Services

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**ABSTRACT:** Web services have vital role on the Web for supporting the distributed service -based economy on a global scale. There are number of web services are available today but they face several problems like isolation of services and lack of social relationship among related services has been known as reason for poor uptake. Web services have beenormouse impact on the Web as a potential silver bullet for supported a distributing service-based, economy on a global service scale. However, despite the superb progress, their uptake on a Web scale has been remarkable less than initially predict. The isolation of a services, the lack of social relation among related services, inadequate trade-offs between the expressivity and semantics of the service descriptions, and poor scalability, exponentially expanded search time in large search spaces, have been identified as causes for the poor uptake. In this paper, we propose study of connecting the isolated service islands into the global social service network to enhance the services' sociability for service discovery, recommendation and formation on a global scale.

**KEYWORDS:** Global social service network, linked data principles, positive negative feedback, link-as-you-go

## I. INTRODUCTION

To overcome such drawbacks of the previous system, we need to be provide web discovery methodology. This paper we propose innovative methodology from isolated Services to global social service network .In this services are interlinked to related services. Moreover to connect isolated services to the linked social service and that proposed to connect global social service network with social link based on linked social service specific principles Finally an effective service discovery approach called link as you go has been proposed. Here, main idea is to implement link as you go system where user can put the criteria of his interest so that he can navigate to their interested service from the web. In existing system user is not involving in the search process called as black box browsing or searching but with this approach user can able to search or navigate with their own interest called white box browsing. Another most important thing is that previously user is not able to provide their feedback about system but with new enhancement user can able to give their opinion as positive or negative and able to see how many people have positive or negative response for the services returned by the system with the help of bar chart. Different software system often need to be exchange data with depends on each other, and a web service is the process of communication that allow two software systems to exchange this data over the internet. The software system which requests data is called a service requester, whereas the software system which would process the request and provide the data is called as service providers.

## II. RELATED WORK

1. A Paper on "Comparative Study of Mechanisms for Web Service Discovery based on the Centralized Approach Focusing on UDDI [1]"

The work that is discovery mechanism tries to get the resulting mechanism not only applicable to web services, but also web-based or other software based components in general. This might require introducing some additional specifications about the platform, the system requirements etc. Many more approaches have been proposed using different view-points like the centralized approach, UDDI based

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mechanisms are very important. Web service discovery mechanisms are more important than the web searching, because they facilitate the need for the collaboration among business applications and consumers over widely accepted web standards and in general use.

## 2. A Paper on “Distributed Web Service Discovery Architecture [2]”

In this paper presented a discovery architecture that is designed to support distributed, scalable, reliable and address heterogeneity problems coming from resource limited devices such as PDA, mobile phone etc. But shared space is centralized one.

## 3. A Paper on “Why Web Services Need Social Networks”

Web services have progressed tremendously from their inception for addressing business problems to their subsequent democratization to their anticipated socialization. Social networks, with their underlying principles and metrics, can offer innovative solutions to some of the issues Web services face today. The growing number of initiatives reflecting the blend of social computing with service-oriented computing is certainly a positive impact of this area is gaining importance. In this paper, we achieved the web service discovery ,social networking has been achieved but suffers from isolated service island and lack of interaction among entities.

## 4. A Paper on “Improving efficiency of service discovery using the Linked data-based service publications [3]”

Wuhui Chen & Incheon Paik Proposed the methodology to implement an innovation from isolated service platform to linked social service in order to reduce the threshold for both service providers and consumers. As well described the light weight ontologies using RDF. Linked the related services on the global social service network.

### A. *Functionality and QoS:*

Web services and Web APIs are service models that consider only the functionality and QoS of service but not semantic annotations or the service’s social activities. On the one hand, the stack of Web service technologies has brought a considerable level of complexity and yet suffers from the fact that descriptions are purely syntactic. As a consequence, discovering, composing, and mediating Web services remain predominantly manual tasks. As well, current discovery techniques are registry-based, such as UDDI; [4] however, UDDI was not adopted widely enough. One of the main reasons for the lack of success of UDDI is the isolation of the services without social relationships among related services in these registries. Services know only about themselves but not about their peers; the registries do not support expressive queries or guarantee the quality of query results. On the other hand, Web APIs are generally described using plain, unstructured HTML, except for a few that use the XML-based format WADL.

### B. *Service Sociability:*

Service’s sociability is the skill, tendency or property of being sociable or social, and of interacting well with related services, which is supported by the network models we refer to here as service social networks. The issue with service’s sociability is how best to capture the way Web services interact via service social networks, and to know with whom they have worked in the past and with whom they might work in the future. A service social network is constructed to reflect services’ social reality, describe the mutual consciousness of mutual agreement about a social situation and to support the services’ future social activities. Therefore, by connecting distributed services into one single service social network, we can capitalize on users’ willingness to interact, share, collaborate, and make recommendations for improving the quality of service discovery and service composition. For example, a user, Bob, wants to create a mashup that finds the weather description for his city so that he can post it on his blog. He uses the following services: MyLocation, Weather, Translator, BlogPost, tinyURL, and either PostTwitter or Email. Suppose Alice also wants to create a new mashup based on a weather forecast service. In this case, she can benefit from any of Bob’s service mashups by learning service’s past social interactions, such as both successful and unsuccessful service invocation and compositions.

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## III. EXISTING SYSTEM

No Security Provided for Users Data. Traditionally, leakage detection is handled by watermarking, e.g., a unique code is embedded in each distributed copy. If that copy is later discovered in the hands of an unauthorized party, the leaker can be identified. Watermarks can be very useful in some cases, but again, involve some modification of the original data. Furthermore, watermarks can sometimes be destroyed if the data recipient is malicious. E.g. A hospital may give patient records to researchers who will devise new treatments. Similarly, a company may have partnerships with other companies that require sharing customer data. Another enterprise may outsource its data processing, so data must be given to various other companies. We call the owner of the data the distributor and the supposedly trusted third parties the agents.

## IV. PROPOSED SYSTEM

The tremendous popularity of using the social media networking could never have been realized before. In fact, social media have become an important tool of marketing in true sense of customer orientation. The scope of social networking is widening, and today it offers a strong support to the companies in providing the much desired touch of concern. Future of social media networking brings exciting promises as expected from the experience of limited users from a few companies in the top bracket.

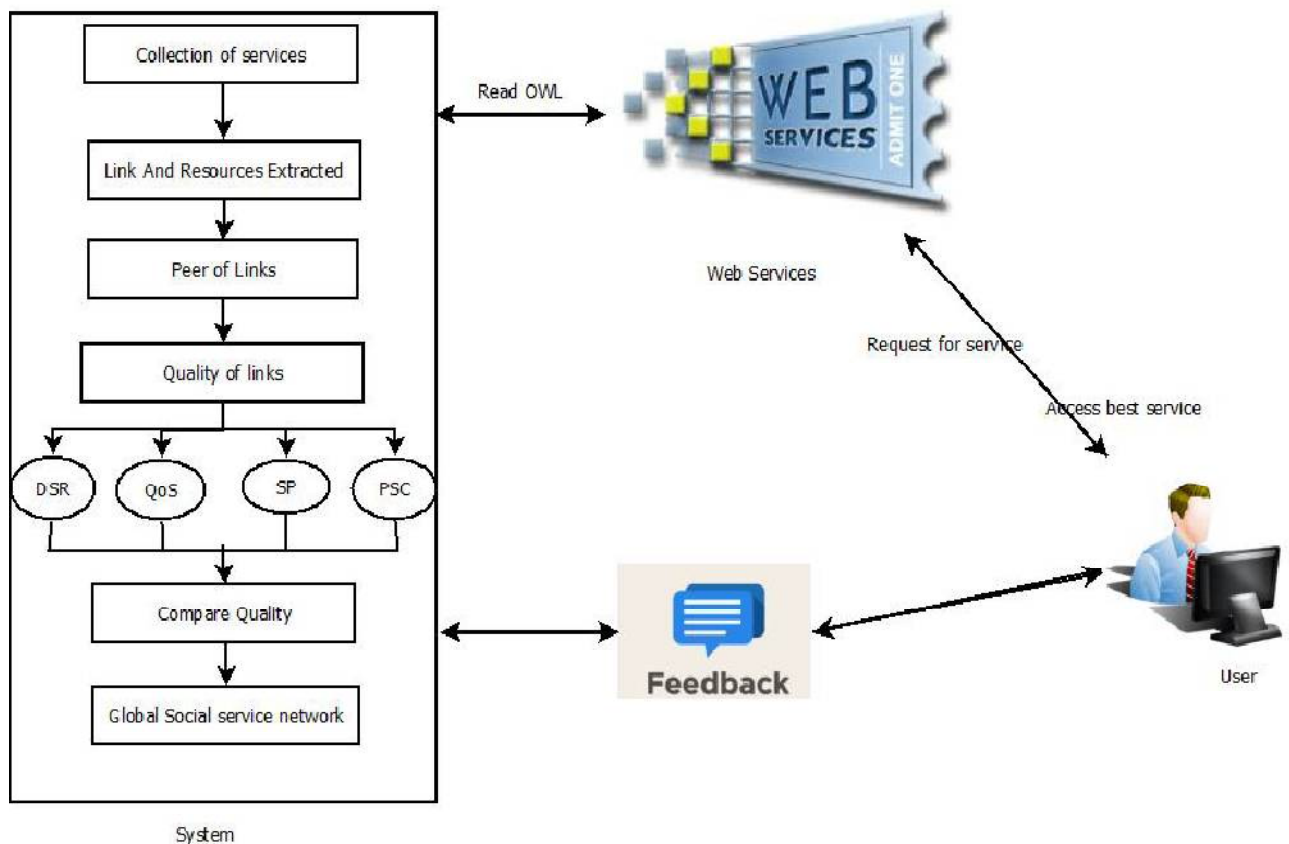


Fig. 1 System Architecture

This is the beginning of interweaving social media networking as a positive business process bringing two people together than merely two organizational entities. People can communicate their message to the suppliers or customers

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and also convey any difference of opinion over the social networks. The business community has started to take a keen interest in the enormous possibilities of reaching and serving the buyers in this emerging domain of marketing.

### A. Algorithm used:

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Input:  $G \langle V, E \rangle$ , threshold  $\lambda$ , resource service  $S$ ,  $Q(R, T_s)$ ,  $m$ 
Output: A set of  $m$  social services  $\{S_m\}$ 
Variables: service has SocialLink S.L, input of service S.I,
output of service S.O, service set  $\{S_1\}, \{S_2\}, \{S_m\}$ 
2. For each  $S_i \in G.V$  do
2.   if  $(Q_{DSS}(S.I, S_i.I) > \lambda \ \&\& \ Q_{DSS}(S.O, S_i.O) > \lambda)$  then
3.      $S_i.L := L(=)$ ;
4.      $\{S_m\} := \{S_m\} \cup S_i$ ;
5.   end
6.   else if  $(Q_{DSS}(S.I, S_i.O) > \lambda \ || \ S_i.O \supset S.I)$  then
7.      $S_i.L := L(\leftarrow)$ ;
8.      $\{S_1\} = \{S_1\} \cup S_i$ ;
9.   end else
10.  else if  $(S_i.O \subset S.I)$  then
11.     $S_i.L := L(< \oplus)$ ;
12.     $\{S_2\} = \{S_2\} \cup S_i$ ;
13.  end else
14. End
15. For each  $S_i \in G.V$  do
16.  if  $(\exists max\{S_k\} \subset \{S_1\}, \forall S_k \in \{S_k\}: Q_{DSS}(S_k, S_i) > \lambda)$  then
17.     $S_k.L = L(< |)$ ;
18.     $\{S_1\} = \{S_1\} - \{S_k\}$ ;
19.     $\{S_m\} = \{S_m\} \cup \{S_k\}$ ;
20.  end
21. End
22.  $\{S_{SS}\} = \{S_{SS}\} \cup \{S_1\}$ ;
23. while  $\{S_2\} \neq \emptyset$  do
24.  if  $(\exists min\{S_k\} \subset \{S_2\}, Q_{DSS}(S, S_k) > \lambda)$  then
25.     $S_k.L = L(< \oplus)$ ;
26.     $\{S_2\} = \{S_2\} - \{S_k\}$ ;
27.     $\{S_m\} = \{S_m\} \cup \{S_k\}$ ;
28.  end
29.  else break;
30. End else
31. end
32. if  $(\{S_{SS}\} \neq \emptyset)$  then
33.   $\{S_m\} = rankingSocialServiceQuality(\{S_{SS}\}, m)$ 
34.  return  $\{S_m\}$ .
35. end

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```
32. if( $\{S_{ij}\} \neq \emptyset$ ) then
33.    $\{S_m\} = \text{rankingSocialServiceQuality}(\{S_{ij}\}, m)$ 
34.   return  $\{S_m\}$ .
35. end
```

## V. EXPERIMENTAL RESULT

We analyzed the performance of our approach by:

- 1 Observing the properties of the global social service network
- 2 Evaluating the effectiveness of LSSaaS in terms of service discovering time
- 3 Evaluating the quality of LSSaaS in terms of success rate
- 4 Observing the evolution of the global social service network over QSP(R, T) and QPSC(R, T), by varying the number of transaction items and the parameter m, which is the number of links added and/or rewired at every step of the construction procedure.

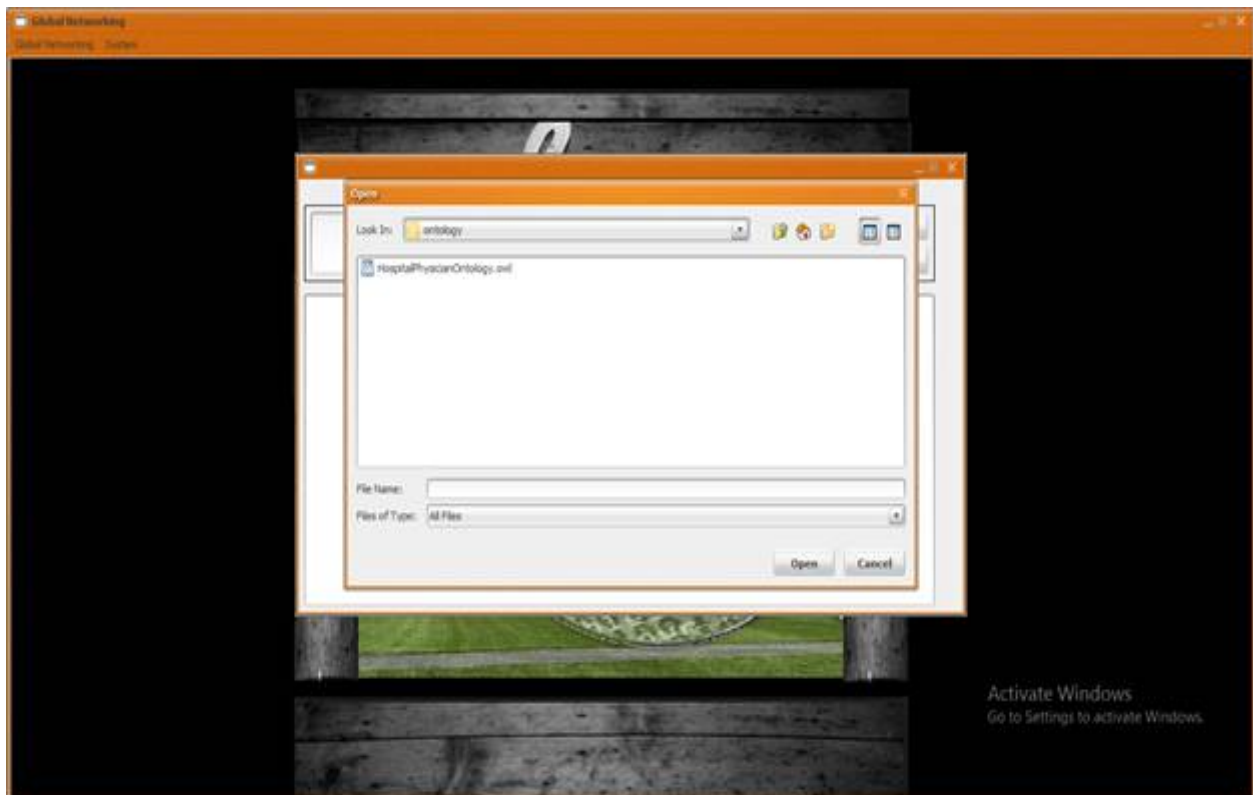


Fig2. Browse dataset

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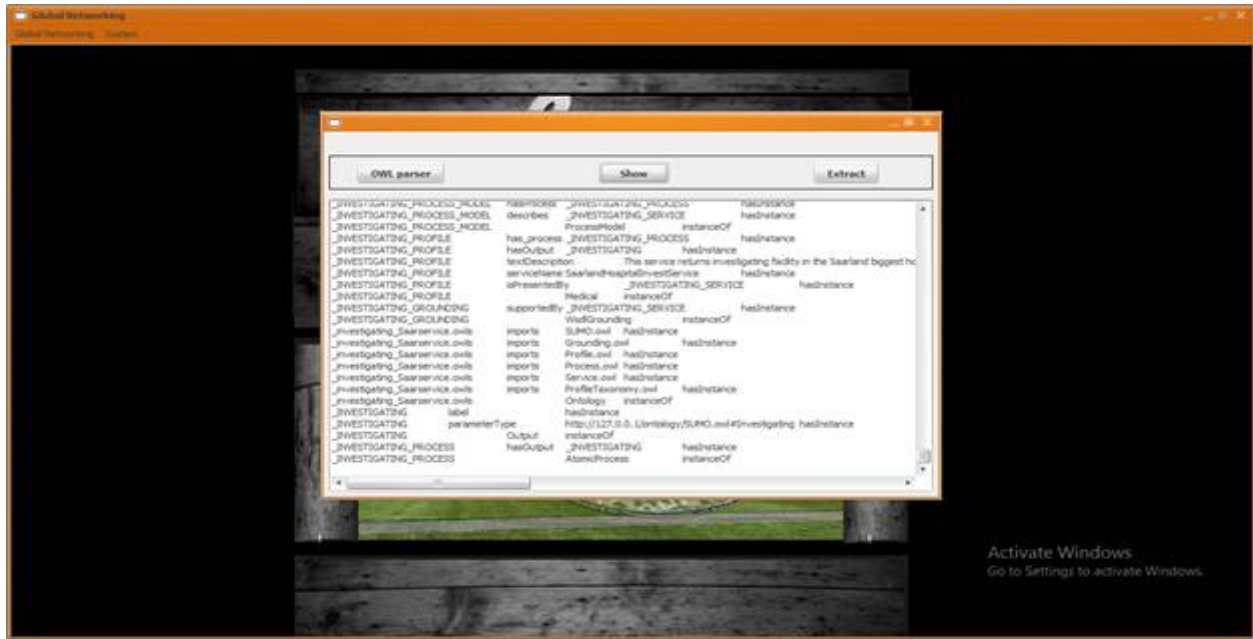


Fig3. Result set after owl parser.

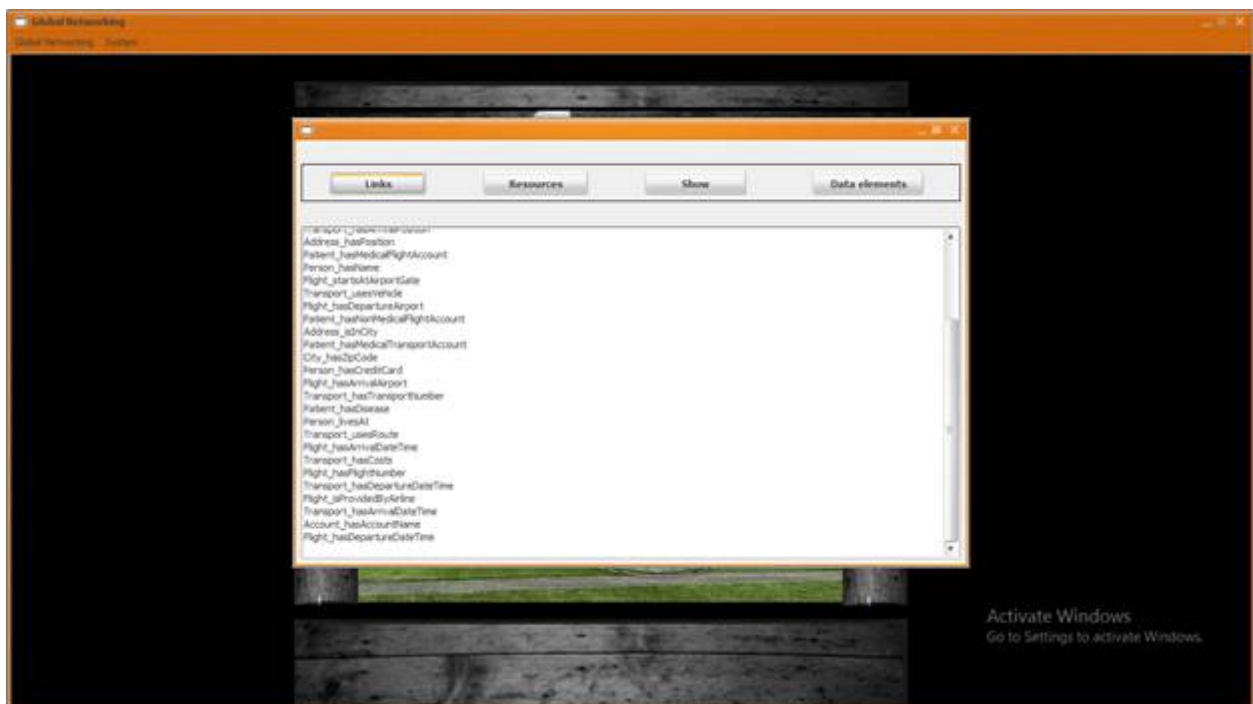


Fig4. Links Extracted

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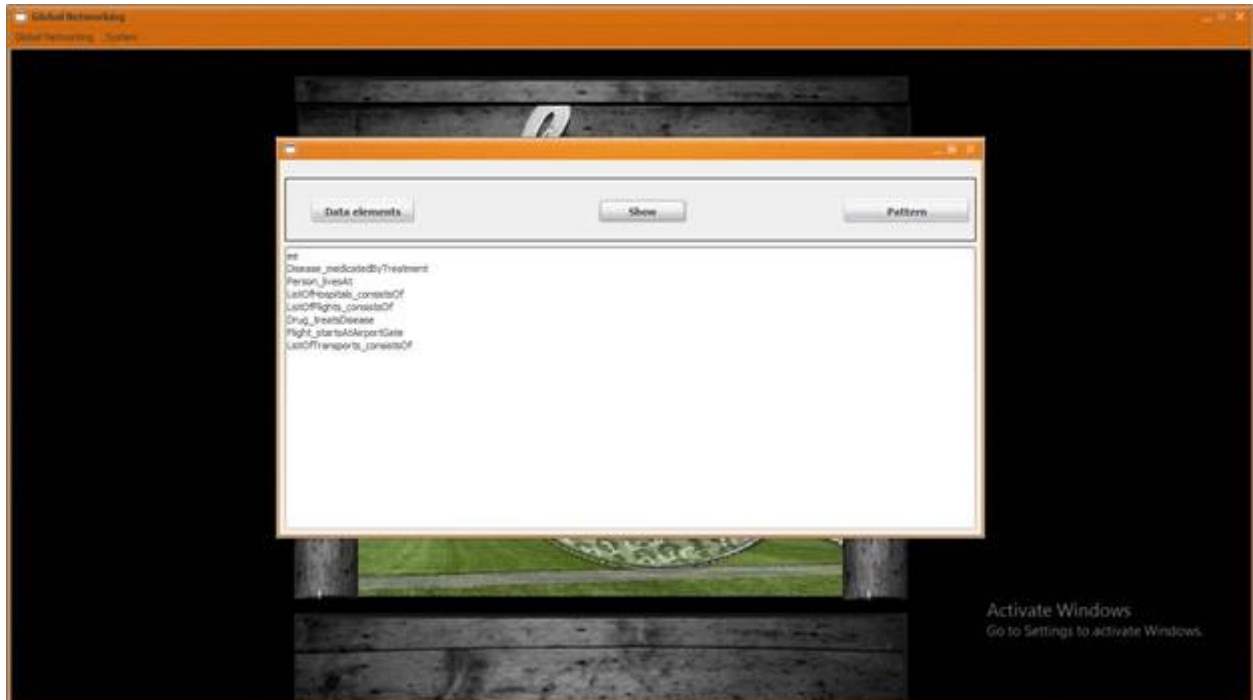


Fig5. Data element extract

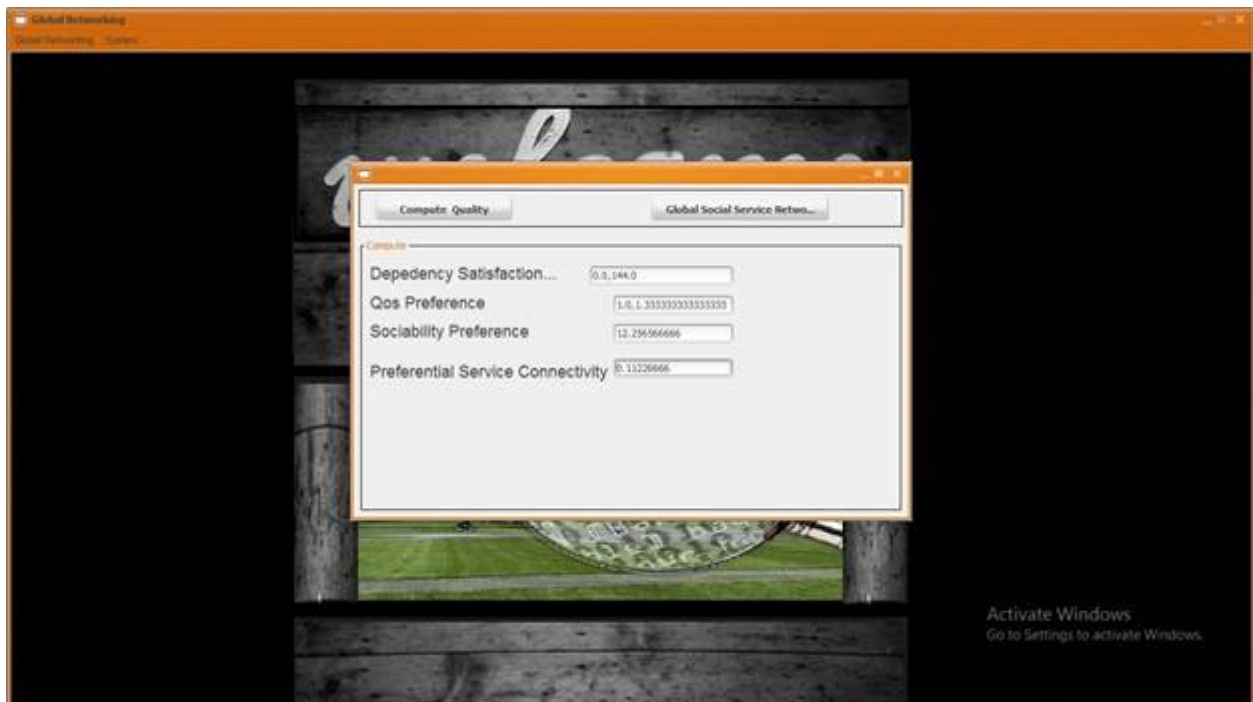


Fig6. Compute quality parser

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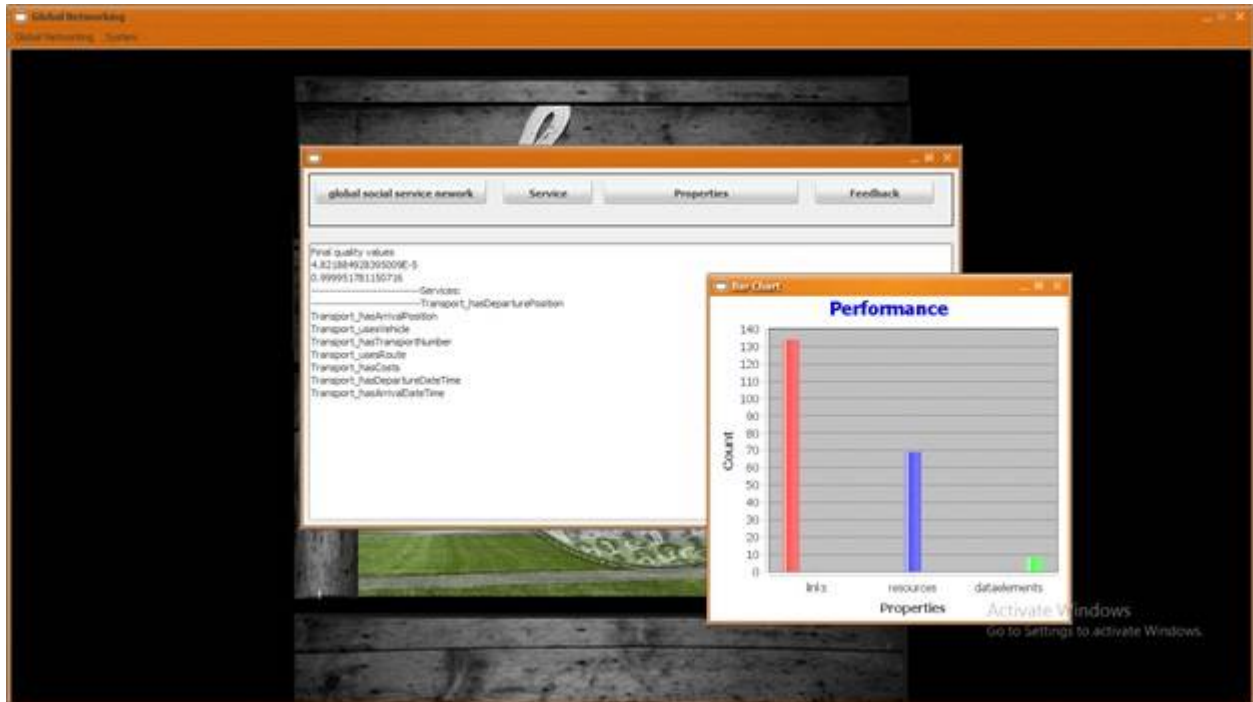


Fig7. Performance Analysis

## VI. CONCLUSION

The study shows that web services have had enormous impact on the Web for supporting a distributed service-based economy on a global scale. However, despite the outstanding progress, their uptake on a Web scale has been significantly less than initially anticipated. The isolation of services, the lack of social relationships among related services, inadequate trade-offs between the expressivity and semantics of the service descriptions, and poor scalability, exponentially expanded search time in large search spaces, have been identified as reasons for the poor uptake. Firstly, to improve the quality of service discovery, we have proposed a methodology to drive an innovation from isolated service islands to Linked social service. Thus, services can link to and be linked by related services functionally on the Web into a global social service network, enabling exploration from service to service.

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