

PONDICHERRY UNIVERSITY, PONDICHERRY – 605014
DEPARTMENT OF COMPUTER SCIENCE
SCHOOL OF ENGINEERING AND TECHNOLOGY

UGC MAJOR RESEARCH PROJECT

EXECUTIVE SUMMARY OF FINAL REPORT OF THE WORK DONE ON THE PROJECT

1. Title of the Project	Web Service Suitability Assessment for Cloud Computing
2. Name and Address of the Principal Investigator	Dr. S.K.V. Jayakumar Office: Associate Professor, Dept. of Computer Science, Pondicherry University, R.V. Nagar, Kalapet, Puducherry – 605014 Residential: 1A, Pacific Apartment, Golden Avenue, Vivekanandha Nagar Extn., Puducherry – 605014.
3. Name and Address of the Institution	Pondicherry University, R.V. Nagar, Kalapet, Puducherry – 605014.
4. UGC Approval Letter No. and Date	F.No. 41-627/2012 (SR), Dated 16. Jul. 2012
5. Date of Implementation	01-Jul-2012
6. Tenure of the Project	THREE years from 01-07-2012 to 30-06-2015
7. Total Grant Allocated	Rs. 6,75,000/-
8. Total Grant Received	Rs. 5,92,500/-
9. Final Expenditure	Rs. 1,84,268/-
10. Title of the Project	Web Service Suitability Assessment for Cloud Computing
11. Objectives of the Project	1. Evaluate Web Service Properties. 2. Evaluate Cloud Properties. 3. Evaluate Web Service suitability assessment for Cloud Computing which includes Efficient Web Service composition, Deployment decision and Interoperability over Cloud.
12. Whether Objectives were Achieved (Give Details)	YES. Details enclosed in the detailed report
13. Achievements from the Project	This research enabled to identify whether the web service under consideration is cloud deployable or not. This is decided based on various QoS parameters of the Web Service.
14. Summary of the Findings	➤ Web services are software programs that are interacting to other software program through internet. As more and more web

<p>(in 500 Words)</p>	<p>services are available, quality of web service (QoS) is a decisive factor to distinguish web services.</p> <ul style="list-style-type: none"> ➤ Many of the QoS factors of web service depend on the deployment environment. The traditional methods for deploying web services using dedicated server may suffice in many circumstances, with a growing number of services that are not frequently used and for which significant compute power needs to be reserved for high QoS value. ➤ Cloud computing is an evolutionary technology that provides computing power, middle ware, and business logic as a service over internet with zero initial investment. ➤ The service offered by cloud is highly dynamic and scalable. So application deployed in cloud computing environment will gain high QoS value due to the elastic and automatic nature of the deployment environment. ➤ This research work propose an alternative approach towards web service deployment capable of delivering on demand services with high QoS values using cloud infrastructure capabilities and then asses the gain in QoS properties qualitatively and quantitatively.
<p>15. Contribution to the Society (Give Details)</p>	<p>As Cloud Computing is the order of the day, and on the other side there is huge explosion of number of Web Services being made available over UDDI, deployability of such web services is if measurable, will be really useful for cloud service providers.</p>
<p>16. Whether any Ph.D. Enrolled/Produced out of the Project</p>	<p>No, but M.Tech students worked on this project. Details enclosed in the detailed report.</p>
<p>17. No. of Publications out of the Project (Please Attach)</p>	<p>International Journals: 2 National Conferences: 3 Thesis at M.Tech Level: 1 All papers and thesis attached in detailed report.</p>



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