IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 3, June 2025

A Hybrid Approach for Cloud Bandwidth and Cost Reduction using TRE System

Deepa Rabindranath Bairagi¹, Roshni Bapuji Dakhare², Shruti Ashok Wadettiwar³, Harshita Niranjan Meshram⁴, Neehal Balkrishna Jiwane⁵, Ashish Baban Deharkar⁶

Student, Shri Sai college of Engineering & Technology, Bhadrawati, India ¹
Student, Shri Sai college of Engineering & Technology, Bhadrawati, India ²
Student, Shri Sai college of Engineering & Technology, Bhadrawati, India ³
Student, Shri Sai college of Engineering & Technology, Bhadrawati, India ⁴
Assistant professor, Shri Sai college of Engineering & Technology, Bhadrawati, India ⁵
Assistant Professor, Somayya Institute of Technology, Chandrapur, India ⁶

Abstract: In this paper as our title described An Approach to minimizing cloud cost and bandwidth by employing the TRE system where Cloud computing is run in order to mediate Traffic. Cloud computing provides customers with an affordable and accessible pay as you go, service model, also referred to as usage-based pricing. In this Research, we have introduced Predictive Acknowledgment where the impulsive Traffic Redundancy Elimination (TRE) is retrieved from Cloud Computing System. Through the usage of this Traffic Redundancy Elimination (TRE) Cloud Computing System in order to lower in cost of Traffic Redundancy Elimination (TRE) computation and storage will be increased. Cloud Computing Based on Predictive Acknowledgement can benefit from the fact that it can lower the workload of the Cloud server. So that we need to enhance the productivity of Server and decrease the workload. For studying prediction for Cloud consumers, the data transfer rate is an essential issue when we need to lower the costs in turn, by implementing a well-planned utilization of cloud resources, cloud consumers are motivated to make use of multiple Traffic Redundancy Elimination Systems, in Traffic Redundancy Elimination System (TRE). We suggest in this study new purposes for Lightweight Chunking Scheme. Lightweight Chunking Scheme is a new contribution to Rabin fingerprinting applied in Traffic Redundancy Elimination System (TRE). We can also make our server more efficient and lower the burden of our system. finally, we concluded Prediction Acknowledgement profit for cloud users from different sources of traffic traces

Keywords: Network Optimizing, Bandwidth, Signature, Cloud Computing, Traffic Redundancy Elimination

DOI: 10.48175/568





