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A Survey on Distributed data Transfer for disaster Using Cloud Computing Infrastructure

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Abstract— This project is to enhance the data storage security during disaster. So that IaaS (Infrastructure as a Service) methodology will be implemented here. This is to provide prior security for the storage devices during malware attacks and also during disaster. In this paper we have discussed about the data partitioning and data security during transfer of data. Related papers are taken survey and its advantage and disadvantages are discussed.

Keywords— cloud computing, energy-efficient computing, fault-tolerant computing, big data

I. INTRODUCTION

Basically massive computation power and storage capacity of cloud computing systems allow scientists to deploy computation and data intensive applications without infrastructure investment, where large application data sets can be stored in the cloud. Based on the pay-as-you-go model, storage strategies and benchmarking approaches have been developed for cost-effectively storing large volume of generated application data sets in the cloud. However, they are either insufficiently cost-effective for the storage or impractical to be used at runtime. In this paper, toward achieving the minimum cost benchmark, we propose a novel highly cost-effective and practical storage strategy that can automatically decide whether a generated data set should be stored or not at runtime in the cloud. The main focus of this strategy is the local-optimization for the trade off between computation and storage, while secondarily also taking users' (optional) preferences on storage into consideration. Both theoretical analysis and simulations conducted on general (random) data sets as well as specific real world applications with Amazon's cost model show that the cost-effectiveness of our strategy is close to or even the same as the minimum cost benchmark, and the efficiency is very high for practical runtime utilization in the cloud.

The remote monitoring system is growing very rapidly due to the growth of supporting technologies as well. And also problem that may occur in remote monitoring such as the number of objects to be monitored and how fast, how much data to be transmitted to the data centre to be processed properly. This study proposes using a cloud computing infrastructure as processing centre in the remote sensing data. This study focuses on the situation for sensing on the environment condition and disaster early detection. Where those two things, it has become an important issue, especially in big cities big cities that have many residents. This study proposes to build the conceptual and also prototype model in a comprehensive manner from the remote terminal unit until development method for data retrieval. We also propose using FTR-HTTP method to guarantee the delivery from remote client to server. In added with the remote monitoring system will keep on tracking the database architecture for the data transfer. Whenever destruction occur the data base architecture will transfer the database to the concern location assigned from the admin. So that data base can be saving exactly with the last fine transaction. Here data loss will not occur at any cost. This method is based on IP conflict procedure. So that roll backing process can also be possible. Using the same procedure of IP conflict method and this method will shows the data upto last minute transaction.

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II. VARIOUS DATA PARTITIONING AND DATA TRANSFER TECHNIQUES

S.NO	TITLE	DESCRIPTION
1.	MapReduce : Simplified Data Processing on Large Clusters[1]	Users specify a map function that processes a key/value pair to generate a set of intermediate key/value pairs, and a reduce function that merges all intermediate values associated with the same intermediate key
2.	Load Balancing in Structured P2P Systems[2]	Explore the space of designing load-balancing algorithms that uses the notion of "virtual servers". Presenting three schemes that differ primarily in the amount of information used to decide how to re-arrange load

3.	Simple Efficient Load Balancing Algorithms for Peer-to-Peer Systems[3]	A simple protocol that balances load by moving nodes to arbitrary locations “where they are needed.” As an application, we use the last protocol to give an optimal implementation of a distributed data structure for range searches on ordered data.
4.	Balanced Binary Trees for ID Management and Load Balance in Distributed Hash Tables[4]	a low-cost, decentralized algorithm for ID management in distributed hash tables (DHTs) managed by a dynamic set of hosts
5.	Locality-Aware and Churn-Resilient Load Balancing Algorithms in Structured P2P Networks[5]	A locality-aware randomized load-balancing algorithm to deal with both the proximity and network churn at the same time
6.	Distributed energy-efficient scheduling for data-intensive applications with deadline constraints on data grids[6]	It can successfully schedule tasks and save energy without knowledge of a complete grid state .It encompasses energy aware ranking ,performance and dispatching.
7.	Energy-aware resource allocation heuristics for efficient management of data centers for cloud computing[7]	Energy aware allocation heuristics provision data center resources to client applications in a way that improves energy efficiency of the data center while delivering the negotiated quality of service
8.	Network aware resource allocation in distributed clouds[8]	A heuristics for partitioning the requested resources for the task amongst the chosen data centers and racks.
9.	Pastry: Scalable, Distributed Object Location and Routing for Large-Scale Peer-to-Peer Systems[9]	Design and evaluation of Pastry, a scalable, distributed object location and routing substrate for wide-area peer-to-peer applications
10.	Online Balancing of Range-Partitioned Data with Applications to Peer-to-Peer Systems.	Anefficient, asymptotically optimal algorithms that ensure storage balance at all times, even against an adversarial in-section and deletion of tuples

III. CONCLUSION

In this paper, we have studied about various data transfer techniques and protocols for data partitioning and security in cloud computing . But some security protocols are too costly to implement in real time. The results of these protocols are analyzed. Compared to all the result proxy encryption algorithm gives the better result and is cost effective.

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