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## The Deployment of Scalable and Reliable Service Based on a System to Match the Content

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### ABSTRACT:

Is increasingly characterized by the arrival of live material, and the emergence of the application rate of a challenge: scalable and reliable way for users interested in large-scale live content to publish. This is simply a great size because of its ability to expand the system of data dissemination of a large-scale publication / subscription model (pub / Korea) uses. However, event-mail / sub pub most current corrupt system to meet a large number of contributions, matching the low productivity, or when the deployment of a large number of server failure could cut. Cloud computing can rely on complex computing and communications to meet the needs, offers great opportunities.

In this paper, we SREM, event-mail service content in the cloud computing environment at the pub / sub-menu is characterized by reliable and efficient system for the proposal. Low latency and reliable routing connections between server and tips for managing overlay SREM server distributed SkipCloud. Hybrid technology space allocation HPartition ensure high productivity by mail, and for each service provides a multi-candidate event that many in the partially empty corrupt wide Subscriptions, has been set. In addition, the dynamic Maintenance Mode on a series of large-scale study is being done.

To evaluate performance SREM and 64 servers Cloud-Stack Test Live content spread test are millions of elements. Various parameter settings within experimental results show that lead in SkipCloud overhead traffic was in the water overlay function, and the minimum rate in SREM mail and one-dimensional distribution 40.4 times larger than the technology At 3.7 pounds, at least 60 percent smaller BlueDove. Furthermore, SREM incident rate of loss of a large number of servers at a time even if you fail, in tens of seconds managed to drop to 0.

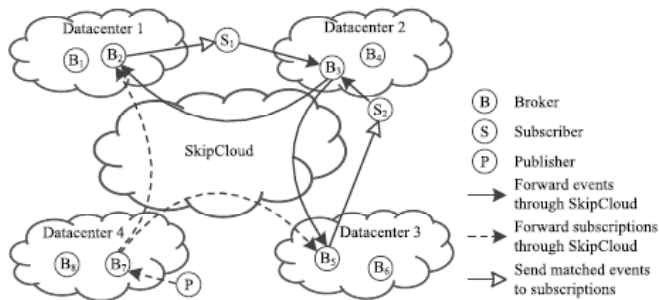
### I.INTRODUCTION:

The deployment of traditional data applications, live material pub / submarine's many events to promote multi-hop routing technology, which relies on low speed, has been created by the publisher. A variety of distribution, such as the design is based, cluster-based design and design-based DHT tree to cover the organization's broker-based pub / submarine events and a large group of subscription. System of a large amount of material can not scale to support. This broker based in Multihop routing technology to reach the current high rate of material is not enough to implement that leads to low productivity mail system.

For the most part because of the limited space technology division of the high-dimensional data with the appropriate mail content and that are not compatible with either low or high memory overhead. Specifically, we focus on mainly two problems: a guide to get scalable and reliable in a cloud computing environment for managing server. Another parallel between the server to receive matching contributions and to organize events. We manage the server in the cloud computing environment, SkipCloud a protocol overlay called the proposed distribution. SkipCloud subscription and scalable broker events and be able to be sent reliably between.

It also has implemented and is easy to maintain. Event scalable and reliable among multiple servers to achieve similar, we called HPartition, a multi-dimensional hybrid space technology division proposal. It contributes to the same server allows to be divided into several candidates for each event and provides the mail server. In addition, it reduces compatibility hotbeds of tension and between the size of the server's job to maintain a balance. We in the cloud computing environment, service-based pub / sub content, called Service for SREM suggest there are Wmut-out. We called HPartition SSPartition hybrid technology to a multi-dimensional space distribution proposal.

Located in a narrow space to alleviate Hot spots, we subscribe to a multi-dimensional hybrid technology through space division, propose to divide the group to participate, SREM legislative measure to subscribe scalable and highly balanced corrupt.



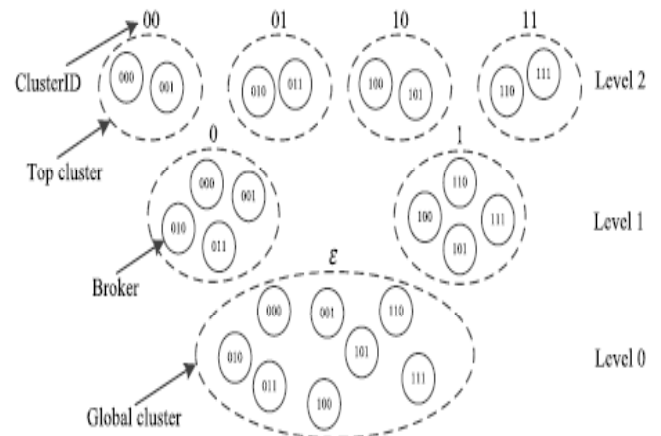
**FIG : Architecture Design**

## II. RELATED WORK: SREM:

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**FIG : Topology**

## III. SYSTEM PRELIMINARIES: A. TOPOLOGY CONSTRUCTION:

Usually, groups of every level to regulate Skip Cloud broker. As shown in Figure. Skip Cloud scale at every level 2, and the group as a whole can be considered as part of the broker group. Table 1 in this section takes the main symbols used. The top level, and mediators have complete topology graph, that are organized in several groups. Each group level Supreme block is called. This broker's leader Fred B-ary ID (for example, MD-5) by using the hash function generates a length of m is included. This is called Resilient identity. On the contrary, every broker ID Franciscan Th 1 and shares a common prefix with length ClusterID meter length of its kind with a unique series. In the same group level, and the broker for each event,

which provides multiple candidates meet the same half-empty content, is responsible for. In the top group of the same broker, such as update subscription and dispatch function makes frequent contact with each other, therefore, they in a jump in the chart to get each other are held.

### Algorithm 1. Neighbor List Maintenance

**Input:** *views*: the neighbor lists.  
*m*: the total number of levels in SkipCloud.  
*cycle*: current cycle.

- 1:  $j = cycle \% (m + 1);$
- 2: **for each** *i* **in**  $[0, m-1]$  **do**
- 3:     update *views*[*i*] by the peer sampling service based on Cyclon.
- 4: **for each** *i* **in**  $[0, m-1]$  **do**
- 5:     **if** *views*[*i*] **contains empty slots** **then**
- 6:         fill these empty slots with other levels' items who share common prefix of length *i* with the ClusterID of *views*[*i*].

## B.PREFIX ROUTING:

Routing prefixes and group events Skip top efficiency Cloud membership is mainly used in road. Block IDs first level Th 1 Deal a non-ary corresponding group in the first instance is created, remember that. Block IDs are based on the relationship between Directed to the target group. Summary of all levels as the next step and get routing-lists ClusterID goal with the longest common prefix part, when the neighbor chooses.

Broker ID other than myself that is near a neighbor can not find the position until the process repeats. Algorithm 2 prefix routing algorithm is described in a semi code. Broker vitality Or age group that is left of New broker may be the result of the dynamics of the group. In this section, instead of changing the size of the block, the block list of abandoned / broker coming mainly reflect.

Data center management services by creating a new broker, so the first message "broker to broker a leader in date established sends. Mediator, leader of personal identity by returning to the top block, and neighbor list Level Skip-Cloud, and the relative contribution of all parties, including empty. New Broker Top Cluster ID Private prabhasita ary number is added and the elements of each level is also the first of its neighbors seems generates.

## C.CLUSTER DYNAMICS:

Vision of age to join and leave the group, that can result in dynamic new group. Each subspace subspace is identified, which is near all cluster that is administered, therefore, to include in this group prior to the new community is necessary for the migration of a number of compatibility. Specifically, the broker group "block date" message is based on the new cluster leader ClusterID delivers peak. Other leading mediator in the group of the same group ID, near New ClusterID identifiers that are partially empty, and migrate to the new block.

## IV.CONCLUSIONS AND FUTURE WORK:

This paper matching service event content in the cloud computing environment reliability and system pup / sub-menu is characterized by efficiency, SREM offers. SREM group by means of a multi-level match ensures reliable connection between the broker, and by routing algorithm routing prefix which provides low latency distribution Skip Cloud, by adding intermediaries. A multi-dimensional hybrid Through the Space Technology Division, SREM measure to subscribe scalable and highly balanced assembly is corrupt, and each episode and server permits any candidate should be afforded. And also SREM ineffective and applications, and various parameter settings, a good balance of weight, efficiency and reliability offers, producing results that demonstrate that the test on the basis of actual CloudStack diplomats with extensive experiments conducted.

We Mail service event filtering to a large volume of user data is irrelevant, the maximum efficiency can be proposed that still need to solve a number of problems that are still there. First, it's a good price-performance ratio in this paper to get the strategy provides flexible resource settings. We workloads froth flexible strategy based on the table ready to modify server and are planning to implement. Second, it brokers access to real-time mode with various data sizes correspond to deploy a large live content, which is not guaranteed. Wholesale content to publish, share the performance bottleneck of a major Loading Capacity. On the basis of our proposed event Mail Service, our data service with various sizes of materials to obtain general data dissemination to stay clear with the help of a fast and scalable technology will appear on.



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