

# Feeding frenzy:selectivity materializing user’s event feeds

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## Abstract

In Social networks used to latest updates of each user in based on the query related problem of highly transient populations in unstructured and loosely structured peer-to-peer (P2P) systems. We propose a number of illustrative query-related strategies and organizational protocols that, that heavily depend on the partitioning and replication methodologies by taking into consideration the expected session times updates of each user characteristics more resilient to the natural instability of their Environments , including methods for query distribution, caching, and replication. The proposed method with hash- and enhanced graph-based schemes indicate that it significantly improves latency and throughput.

**Keywords:** Cassandra, social network partitioning, selective replication, replicated hypergraph partitioning, twitter, NoSQL

## 1.INTRODUCTION

Recently, a number of approaches based on modeling the social network structure and user interactions have been proposed [4], [6], [7] to alleviate the shortcomings of hash-based partitioning and random replication schemes. These approaches try to capture the interactions between social network users via two-way relations, e.g., edges in graphs. More importantly, graph model cannot accurately model the effect of replication on the span of multi-user operations.

## 2.EXISTING SYSTEM

Query strategy is *flooding*, where a query is propagated to all neighbors within a certain radius. Existing solutions for data distribution in these systems involve hash- or graph-based approaches. That ignores the multi-way relations among data.

## 2.PROPOSEDSYSTEM

Lifespan-based strategies for query distribution, caching, and replication. We present trace-driven simulation and wide-area experiment results that illustrate the performance advantages of considering peers’ estimated session time as a key system attribute in GP-based database partitioning scheme called SCHISM. Organizational protocols and query strategies, we use an age-weighted, probabilistic approach to select the target peers for replication partitioning of the proposed hyper graph model.

## 3.Tables,Figures and Equations:

### 3.1 Tables and figures

TABLE 1  
Properties of Used EC2 Instance Types

Instance Type	Micro	Medium
Memory	613 MB	3.75 GB
CPU (EC2 Comp. Unit)	1	2
Storage	EBS storage	410 GB
I/O Performance	Low	Moderate
API Name	t1.micro	m1.medium

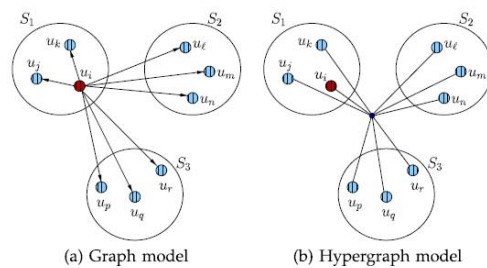


Fig. 1. User  $u_i$ 's tweet is propagated to his followers. (a) Graph model and (b) Hypergraph model for this operation.

### 3.2 equations

In the Replicated Hypergraph Partitioning Problem , given a hypergraph  $H = (V, \mathcal{N}, \mathcal{P})$ , an imbalance ratio  $\delta$  and a replication ratio  $r$ , we want to find a  $K$ -way

replicated partition PR that minimizes the cutsize defined in Eq. (2), while satisfying the following constraints:

Balancing constraint:  $W_{max} \leq (1 + \epsilon)W_{avg}$ , where  
 $W_{max} = \max_{1 \leq k \leq K} W(\mathcal{V}_k)$  and  $W_{avg} = (1 + \rho)W(\mathcal{V})/K$ .  
Replication constraint:  $\sum_{k=1}^K W(\mathcal{V}_k) \leq (1 + \rho)W(\mathcal{V})$

#### 4. Conclusion:

we proposed a temporal activity hypergraph model whose replicated partitioning can be used for data partitioning and replication in social networks. The proposed model naturally encodes multi-way interactions incurred by the most common social network operations. Experimental results using the Cassandra NoSQL system running over Amazon EC2 cluster indicate that the proposed model achieves significant improvements over state-of-the-art hash- and graph-partitioning-based counterparts in terms of important metrics such as latency, throughput, and scalability.

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