DATABASE THREAT ANALYSING TOOL (DTAT) FOR TOP-K OBJECTS QUERIES

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Abstract—Top-k pairs monitor the general functionality restricts the work space of sub domains processing the result which influence some query. There are many top-k queries which significantly query over k-closest pairs which answers wide variety of top-k pairs. When dataset defines every row which retrieves highest scoring query that has efficient evaluation will be active research topic with different instants. Efficient query for contents such as buffer will have clear idea for efficient maintenance of constant of top-k queries. For updating and querying the complexity of algorithms top-k query implements them for maintaining their query pairs. In our proposed model we can make top-k pairs querying process so speed and make their transaction faster with verification. It also helps prevention of leeching attack in database which can also leads to SQL injection. Here we have the technique which helps finding out the set of code which is defenseless and vulnerable to attacks. So here we develop tool termed Database Threat Analyzing Tool (DTAT) which helps make those places guarded and defensible.

Index Terms—Top-k leeching, SQL injection, defenseless, Database Threat Analyzing Tool (DTAT).

I. INTRODUCTION

A top-k pairs that computes object scores which have query returns which have smallest scores of all possible pairs for closest pair queries which has distant functions of ranking pairs of queries. From number of algorithms for answering several variances of top-k queries proposes top-k pairs queries [1]. Efficient technique for expanding top-k queries from sliding window develops different application receives research attention significantly.

In our paper rather than concentrating mainly on answering top-k queries for sliding windows we also concentrate on anti attacking scheme which helps prevent database attack threat. Interesting applications for wireless sensor network, traffic signal monitoring, share market and wide internet application have different top-k queries used for database transactions [2]. According to neutral strategy for two stock correlated same day to day instant for cost helps profit earning and their correlation gets weak as there many ups and downs in the stock market [3]. For top-k pair queries for obtaining pairs for stock correlated sector having same business having market dividends. They display different ways to expose their modernization.

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Data analysis in certain issue for emerging applications of sensor networks which have integration over data cleaning and moves object over market surveillance [4]. Uncertain data in streaming fashion computes recent top-k queries and aggregates collection of streamed data. For a recorded deal of two different aspects we need to consider the cost effective measures for dataset comparing in top-k pairs [5]. The next factor which will have cumbersome quantity for shares is highly desirable for efficient computation.

The series of packets for sending and receiving IP will have more data rate for transaction over many gigabytes per day. The start time and finish time for sending and receiving number of packets and byte for such availability of records [6]. They have central server for continuous evaluation of measuring network security which also helps in estimating traffic and trouble shooting.

From an auction website which provide deals online in which a user may interested in finding pair of products that have very small specifications which can be sold for different pairs [7]. That can be used for understanding behavior and trends for users [8] [9]. They found various criteria for buyers and sellers bidding time and closing bid time for them. Analyst and the users of stock market follows issues on controlling query for obtaining products that sold for last few days according to the users need which needs some absolute difference between final bids they receive from the last user. When in pair of query for products that have large difference for selling their prices which ensures data sets pairs which is not repeated.

Top-k pairs query for database research have devoting those research for processing k-closest pairs for queries and variances [10]. For k-closest pairs queries of mentioning techniques for unified framework for broad class of moving object over sliding windows are trivial.

Data streams for querying and processing the top-k objects for nearest query. They propose efficient computation for sliding windows and interesting observations that can be answered for small subset of objects for sky band [11]. They answer multiple queries for different values for different sizes of sliding windows. The conditions that have interest observations top-k objects query for answering the small subset of objects for sky band [12]. For senses of algorithm maintains sky band to answer top-k queries.

Queries for answering efficient technique is to answer top-k pairs for complexity of answering them in the worst case is their size [13]. For conducting detailed complexity analysis for evaluation of algorithm and determining the low bound cost for supreme algorithm [14]. For designing extended algorithm over oracle which allows supreme to meet its bounded cost very low. In our real and reinforced data demonstrations is magnitude of faster naïve algorithm.
II. RELATED WORKS

From previous works of SQL injection attacks which have serious security threats for web applications that allow attackers for obtaining unconditional and unlimited access for underlying database applications of databases containing sensitive information. As researchers practitioners addresses SQL injection problem for approaching current problems full scope which prevents adoption and use of limitations. The wide range of techniques used by attackers is to take advantage of attack vulnerability [15] [16] [17]. For consequences of many solutions propose literature issues for SQL injection related issues.

Databases of sensitive customers vulnerable to attacks such as SQL injection that takes control over corrupt of host system for web applications have more security violation threat than any other web applications. Identification of loss of confidential information over fraudulent identity threat in some case leads to security violations [18].

For code of injection attacks in data provided by user which includes SQL query for users input treated by SQL code. For vulnerable SQL commands attack directly to database are serious to threat of receiving input which incorporates SQL queries for underlying database.

Vulnerability for cause of SQL injection is simple and well understood insufficient validation of inputs from the user. For addressing the problem of developing a proposed range of guidelines to coding the defensive coding practice that promotes encoding of user input and validating it [19]. For rigorous systematic applications of these techniques is effective solution for preventing SQL injection vulnerabilities.

Recently there are various great deals for addressing the SQL injection which have no further attack prevention techniques for attacks. There are numerous variations for basic type of researchers who often unaware of different techniques used to perform attacks [20]. Most of the solutions for proposing detection and prevention techniques against SQL injection attacks.

For other data streams resulting data with very high data rate accounts hundreds of gigabytes. Techniques proposed for snapshot of top-k queries that have conventional databases and repositories for distribution. There is no best algorithm for processing multiple queries for continuous evaluation online. Top-k monitoring over sliding windows assumes append only data stream model [21]. For continuous streams in system considered for valid sliding window.

In other attributes for object obtained by combining different monotone for aggregate functions for combining a rule such average or min. for determining the top-k objects for k-objects with high overall grades for naïve algorithm for accessing every object in the database [22]. There is an algorithm for much more efficient monotone aggregation functions which is optimal with high probability in worst case. For an elegant and simple algorithm for optimal stronger sense of monotone functions are essentially optimal.

For top-k object queries extensive study of Fagin’s algorithm, threshold algorithm and random access for proposing top-k processing algorithms combining multiple ranks of lists and top-k objects [23]. From the unified framework of efficiently answered wider class of queries including closest pairs of moving objects answers nontrivial sliding windows for consequences of attacks.

For software injection of faults that represents software injection attacks from time spent excessively for faulty attacks [24]. For acceleration process of failure for injection errors representing emulation of software errors not hardware errors are encountered with dependability models.

III. ACCESS TOKEN VERIFICATION (ATV) ALGORITHM

For creating and maintaining query transactions for overcoming leeching and SQL injection attack in query processing of speed will be high during transaction by user. Verification is done in all the fields of querying using top-k queries. For verifying the privileges for query entering the system that will send alarm notification for sending query to the database admin will find attacks succeeding.

For encryption of data between admin during response transfer of processing the transaction information will ensure cryptography system. Prevention of hacking attack can be done with encryption and decryption of providing privilege clients. For verifying the privilege of clients that will send query to all admin who verify attacking query they will scrutinize thoroughly checks whether it is a attacker or not.

![Fig.1 Access Token Verification (ATV) algorithm application](image)

Access Token Verification (ATV) algorithm helps verification of attacking nodes and detects leeching attack if any. For leech attack from different Wi-Fi wireless networks without the knowledge of network holders for accessing the internet. From services providing free Wi-Fi networks somebody uses internet for downloading large amount of data within the buildings range like parking lots.

Bandwidth for hot linking and direct linking that occur for unauthorized linked project often for image from web page belonging to other site. Behavior of downloading more data over time an individual is uploading to other clients leads to
draining speed from network.

For Wi-Fi networks implements various authentication and controls access for preventing leech attack. In existing system for preventing bandwidth leeching they run anti-leeching code for websites server which can automatically block IP that attacks and redirect them for attacking files.

The leech system which is used but unaware to the client system which is active when it is running uses the client system without bounding physically to the system. as the workload distributed to number of different nodes without the knowledge of the legible user who will be getting so slow in speed.

Any node or system that uses other systems network without the knowledge of the owner termed to be leeching attack. This kind of attack will be previously detected by our proposed Access Token Verification (ATV) algorithm which have verification code that thoroughly check out the nodes using their network facilities.

From Fig.1 we can explain how ATV algorithm not only detects the attacking or leeching node it also gives prevention measures for attackers getting sensitive information from legible user. Thus they provide high security concern to the systems implied with ATV algorithm.

This ATV algorithm procedure thoroughly checks out whether any other non-ambiguous IP involving in their network related activities. ATV will constantly check over slow down of system for suspicious attacking nodes. Thus they verify in many ways to make sure whether it is a attacking node or not.

In relevance to the verification algorithm results they detect the attack vulnerability and if it suspects any attacking node then it prevents the attack by eliminating the further transactions from that particular node and blocks the IP from network which helps other system prone to attack.

IV. DATABASE THREAT ANALYZING TOOL (DTAT)

Besides with leeching attack there also exists threat to attack of database with attacking malicious codes that steals information from the database. Database Threat Analyzing Tool (DTAT) will be implied in database for detecting any defenseless part of coding that is vulnerable to attacking through malicious coding. When an attacker is blocked using ATV algorithm they find the set of codes that is defenseless and vulnerable to codes. The set of codes will be devoted in DTA Tool which checks for defenseless coded area after they are blocked by ATV algorithm.

Fig.2 Database Threat Analyzing Tool for attacking query detection.

From Fig.2 we can infer how the tool DTAT is useful for analyzing query for scrutinizing entire code to find defenseless set of codes vulnerable to threat of attack. Thus it will be used for eliminating code application.

When processing memory savings scheme for attacking information the vectors obtained for encoding process used in number of different applications such as intrusion and firewalls where attack classification is made. In an encoding scheme the techniques used for classifying measures that reduce memory consumption and effort computation which omits redundancy.

They mutually categorize the nodes which overlap with each other that is exhausted and taken all the possibilities within. For clear and precise classification of uncertain repeated applications of repeated attacking code suspects. They also checks for logical and intuitive acceptance of categories approved commonly.

Analyzing codes from vulnerable attacks using this analyzer tool which clearly abridge the attacking set of codes which is defenseless. This tool analyzes weak set of codes for making it much stronger than other codes which try to inject attacking code.

Then DTAT tool analyze the code thoroughly for areas which are accessible to attacks. These unsafe codes will be quoted and focused by the developer for making it strong. The unsafe codes will be sent for further modification to make it much strong so that they will be double strong and protected safe from attack prone codes.

V. CONCLUSION

From this paper we infer how we restrict top-k pairs of analyzing leeching attacks of threat analyzing. Query processing speed will be high during transaction by the user. The leeching attack verification will help prevention of attack. When attacking query enters system an alarm notification will be sent to all database admin. Access Token Verification (ATV) used for finding attacking nodes which makes leeching attack from other nodes for malicious system
which try to attack the networks. Database threat analyzing tool helps detecting attack vulnerable codes. Leeching attack there also exist threat to attack of database with attacking malicious codes that steals information from the database. Database Threat Analyzing Tool (DTAT) will be implied in database for detecting any defenseless part of coding that is vulnerable to attacking through malicious coding. This also prevents attacker from attacking and make codes protected.

REFERENCES


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