

## To Provide Security through Agent Mining System

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### ABSTRACT:

Security is major factor any system. In various existing projects we are having authentication and authorization technique to identify the valid user and provide right privileges to whom. When we are using user ID and password to protect from unauthorized accessibility it is not sufficient and not at all reliable also, because in the server client architecture whenever we are transferring this data it may access by anyone else (hackers). This data may be misused which will be very harmful for the entire system. Here we need to solve this problem by introducing some trustable technique on which we can easily secure our sensitive data during transaction. In order to prevent this and make more secure the RSA algorithm is used. The information that we enter for user name and password is encrypted by RSA algorithm. So it is impossible for the hackers to identify the user name and password.

**Keywords:** Agent, Encryption, Decryption, Key, RSA

### 1. INTRODUCTION

With the development and popularity of E-commerce and electronic government affairs, many units are constructing or have already finished the constructing of websites, and the proportion of adopting configuration of ASP(AS-PX) + SQL Server2000 + IIS or ASP(ASPX) +ACCESS + IIS is very large, so the application of database penetrated into various fields. As the aggregation of information, database system is the core part of computer information system, so its security is very important, which concerning with the rise and decline of enterprise. SQL Server is the large scale network database system launched by Microsoft; it uses many advantages from Sybase database for reference and provides effective security control strategy for developers and DBA, which is one of the most popular commercial database systems at present. Strengthening the safety control of SQL Server database is the most common and effective mean to ensure the database security of the system. Database system does not allow users without authority to operate the database. Database account is the outmost security protection measure provided by the system.

In general, by means of capture the database account of one site, the attacker may obtain the visits to many other sites immediately, and cause the users to suffer from more damages. SQL Server provides two methods of user's management.

One is to use Windows identification; the user can connect the SQL Server as long as it can pass the Windows user account validation. Operation system can manage users to avoid user name and password embedded in the concatenation string, by means of setting password expiration date, minimum length and locking the account after many times ineffective logging in, the logging in security was improved greatly. However, when using this configuration, the users need to bind tightly to the Windows field in the application system under Web environment, which is lack of flexibility. As for the Internet application program in charge of thousands upon thousands and even millions of users, Windows identification is not convenient.

The other method is SQL Server authentication mode, that is, to entitle users with certain authority by means of user logging in, and then comparing the data store in the SQL Server database with afferent data, if correct, it

will have right to do corresponding operation. The disadvantage of this method is that the database is easy to be downloaded or copied, and also easy to be attacked by SQL Injection.

Hence in our project we propose a method to encrypt the username and password and encrypting them using RSA algorithm.

## **2. RELATED WORK**

### **2.1 Multi-Agent Learning**

A number of co-operative distributed learning systems have been produced. MALE (Sian, 1991) is a homogeneous, blackboard-based system. Each agent has a data-source and a clustering algorithm. The agents propose rules which characterise the data seen and critique other agents' proposals. Eventually a consensus about the knowledge extracted from the data is reached. ANIMALS are a heterogeneous multi-agent learning system. Each agent has local knowledge and either an inductive or deductive learning algorithm. Agents attempt to solve a problem-solving task by either retrieving the knowledge required, or by using learning to acquire it. Failures result in communication with other agents which are passed sub-goals, which are then treated as tasks. Both MALE and ANIMALS used propositional learning methods.

### **2.2 First Order Knowledge Discovery**

Some ILP systems have been applied to data-mining. One example is ENIGMA (Bergadano, Giordana & Saitta, 1991), which learnt fault diagnosis, rules based on mechanical vibration data another is GOLEM (Muggleton, King & Sternberg, 1992), which learnt rules that predicted structural features in new proteins from existing protein data.

### **2.3 Multi-Agent Knowledge Discovery**

The Carnot Project addresses the problem of logically unifying distributed, heterogeneous business information. It appears that the underlying architecture uses software agents. Carnot provides a knowledge discovery system, presumably as an agent. However, we are uncertain whether this agent co-operates with similar agents, and whether a first-order learning algorithm is used.

### **2.4 Distributed Database Mining**

One approach which has emerged for mining distributed databases is to use a distributed database manager to provide seamless integration of the distributed data to data-mining algorithms. Our approach differs in that network traffic is restricted to the exchange of knowledge between agents.

## **3. PROPOSED WORK**

The proposed system is a computerized one. This has greater accuracy and efficiency. This takes only limited time for calculation. The proposed system can be used to maintain efficiently the Monitoring Department schedule of any type of company. In larger organizations employees are large. At that time also the proposed system is useful and helpful.

### **3.1 System details**

There are three modules in the project

- Client
- Agent
- Security

#### **Client**

Client is a module in the project how can access the all basic functionality of banking system in more secure







