Applying Data Mining Techniques in Cyber Crimes

Abstract:

Cyber refers to something that can be done on internet. Crime refers to something that is done illegally or without authorization. All those crimes that are done on the internet in order to gain access to secured information or authorization rights is termed as ‘‘Cyber Crime’’. Globally the cyber-crime hindrance is spread across abundantly. Data Mining emphasizes the extraction of data from databases and various patterns can be concluded for deriving association rules. Although Data Mining is eventually gaining a wider scope in different areas, its research has made remarkable significance in Cyber Crimes.

Existing System:

Globally the internet is been accessed by enormous people within their restricted domains. When the client and server exchange messages among each other, there is an activity that can be observed in log files. Log files give a detailed description of the activities that occur in a network that shows the IP address, login and logout durations, the user’s behavior etc. We have applied the data mining techniques for identifying the Denial of Service attack. This type of attack is very dangerous as it jeopardizes the IT resources. It makes the server busy by imitation messages and repeated queries. The server is congested by traffic packets, in order to mitigate the server performance

Disadvantages:

- Less Security.

Proposed System:

In this research paper, we have discussed about Cyber security, cyber-crimes their types, clustering, outliers and pattern recognition. We have applied the famous data mining technique called as pattern recognition on the log file. We set a threshold value. If the number of similar requests are received at the server, which is greater than the threshold value, we assume this as an attack and the administrator is been informed. By this approach we can identify the denial of

service attack easily as in DoS attack, the attacker or the hacker sends same multiple requests in order to mitigate the server performance.

Advantages:

- More Security.

Modules:

- Denial of service.
- Data Mining.
- Outliers

SYSTEM REQUIREMENTS

H/W System Configuration:-

Processor	:	Pentium –III
RAM	:	256 MB (min)
Hard Disk	:	20 GB
Key Board	:	Standard Windows Keyboard
Mouse	:	Two or Three Button Mouse
Monitor	:	SVGA

S/W System Configuration:-

Operating System	:	Windows95/98/2000/XP
Application Server	:	Tomcat5.0/6.X
Front End	:	HTML, Jsp
Scripts	:	JavaScript.
Server side Script	:	Java Server Pages.
Database	:	MySQL 5.0

Database Connectivity : JDBC