A PRESENTATION ON

# IDENTIFYING NON-COMPLIANT QUERIES USING D.A.M. TOOLS

By
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# INTRODUCTION

- Databases are everywhere
- Their **Security** is a **Prime Concern**
- Current Enterprise databases like Oracle 11g and IBM DB2 have inbuilt security features.
- But a protective layer around and outside the database is always important.
- DAM Tools provide this type of security.

# INTRODUCTION

- What inbuilt Security features do Enterprise databases have?

- So, why the outer layer of security?

- What are the Database Activity Monitoring tools in the Market?
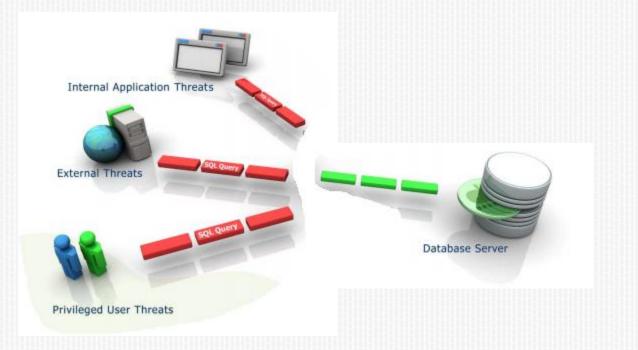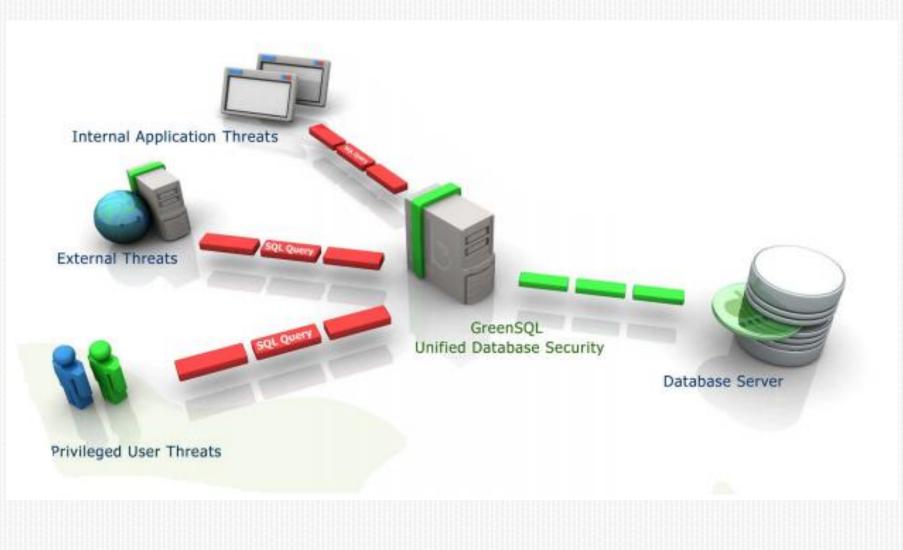
# GREENSQL

# WHY GREENSQL?

* Its an open source tool( Express edition)
* Very easy to install & configure.
* It was designed for MySQL. ( Also supports MS SQL Server and PostgreSQL)
* Simple & Clean GUI for control
* Super light-weight on the database
* Has advanced features to perform masking, auditing and caching

# THE REGULAR DATABASE INFRASTRUCTURE

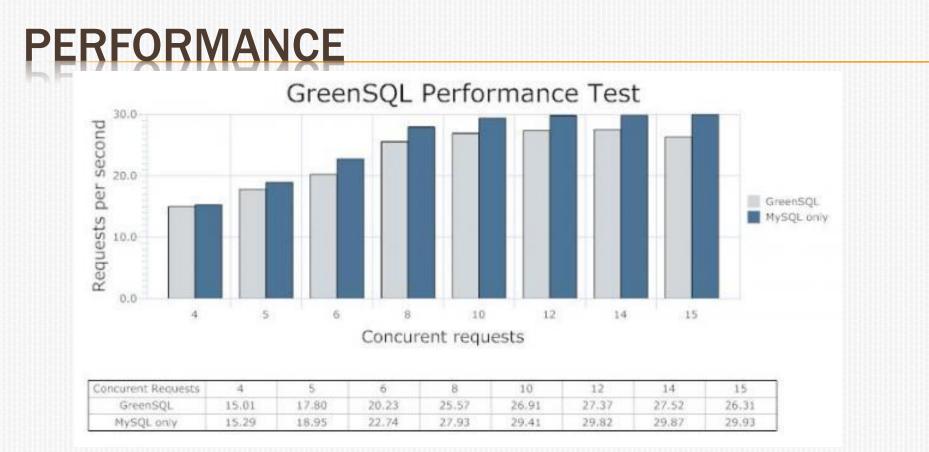# THE GREENSQL DATABASE INFRASTRUCTURE

# THE WHOLE IDEA

- Users connect to databases using various applications.

- Instead of allowing users to directly connect to the DB, make them connect to a REVERSE PROXY DB.

- A Reverse Proxy DB essentially looks like a database to a user but is not what it appears to be.

# THE PROJECT

- Using MySQL as the database.

- An arbitrary number of users exist classified as developers, testers and Support.

- Each of them must have different privileges on the database and the tables and schemas in them.

- This is enforced externally and securely without affecting the database.

# WHAT MORE CAN GREENSQL DO?

* Preventing SQL injection attacks.
* Provide real time alerts.
* As it is rule based, it can develop intelligence on its own using the Learning and IPS modes.
* Facilitate in compliance of SOX and PCIDSS standards.
* Reduce intranet bandwidth consumption.(How?? By Caching)
* Masking data in real time and thus providing data integrity and Separation of Duties.

# PERFORMANCE

## GreenSQL Performance Test

| Concurrent Requests | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|
| GreenSQL | 15.01 | 17.80 | 20.23 | 25.57 | 26.91 | 27.37 | 27.52 | 26.31 |
| MySQL only | 15.29 | 18.95 | 22.74 | 27.93 | 29.41 | 29.82 | 29.87 | 29.93 |

- ✖ A Difference of 2% to 7% depending on the number of requests.

# THANK YOU!!