SELF MANAGING DATABASE

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PREVIOUS RESEARCH:

Database Performance: Prevention for Bottlenecks

Abstract

The study presents the factors why database performance has been an issue. Separated in two; infrastructure and software design issues are common cause of bottlenecks. Most of these problems boil down to slow read-write speeds, network concern, server capacity, lack of backup and monitoring, query performance, scaling problems and poor database design. Monitoring is the best way to ensure that we will not encounter bottlenecks on database which causes performance issues. Having created an algorithm that will monitor and alert the administrators once reached a certain level. This will help prevent database performance issues.

Introduction

DBAs are often overburdened with the time-consuming manual tasks of managing and maintaining databases. Can impact uptime, performance and security.

Propose to use machine learning to automate database tuning, security, backups, updates, and other routine management tasks traditionally performed by DBAs.

SELF MANAGING DATABASE

Self Driving

Self Tuning and scaling helps you to store and compute resources more efficiently

Self Securing

Automatic back up of data and applies all security updates including end to end encryption

Self Repairing

Data Warehouse automatically recovers from any downtime, including system failures, human errors and maintenance.

Self Database Tuning

It maximizes use of system resources to perform work as efficiently and rapidly as possible.

THERE IS ALWAYS ROOM FOR IMPROVEMENT. But aside from infrastructure concerns you can always improve the efficiency of the system by customizing the settings and configuration.

Methods

- Review of Related Literature
- Intelligent Query Processing wherein the research will use Decision Support System for Auto tuning
- Track and monitor database changes

Results and Discussion

The tool can help organizations and database administrators to efficiently manage databases by eliminating the time-consuming manual tasks of managing databases