

# HEALTHCARE RELATED SOFTWARE COMPANY IN SOUTH AFRICA

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See how an Healthcare-related Company in South Africa  
Fixed Slow and Erratic SQL Server

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# OVERVIEW

Per Carl Edwards, a Systems Developer:

I am the lead developer for an IT company that deals with the healthcare industry in South Africa. We develop a variety of software products, which cover a wide range of services. One of the products uses SQL Server, which services a large client base. Clients connect using web services and data is processed within SQL Server. This means that we require a responsive, dependable and serviceable base.

## ORGANIZATON PROFILE

**Industry** Healthcare

**Headquarters** South Africa

## CHALLENGE

About a year ago I started looking for a resolution of a blocking issue on our production server. We started having slow-downs on the server. It was not anything that I could put my finger on as it was a random event. Usually, it had already passed when it was noticed and I had been alerted. It was frustrating and annoying and I knew that I needed to get help. Then, our server started behaving erratically. Queries were literally piling up and blocking was a major issue.

## SOLUTION

I came across IDERA SQL Doctor on one of my Google searches. I downloaded the trial copy and installed it and immediately found a major problem on the server to do with the setup of the server itself (lots of memory in a 32-bit environment). We purchased the product and I installed it.

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**SQL Doctor** pinpointed the issue, and allowed us to **implement the fix, within an incredibly short period of time.**

Carl Edwards **Systems Developer**

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The very first thing I did was to run SQL Doctor and do an analysis. Within 10 minutes, the analysis was complete and a host of issues were identified. However, the issue that was causing all of the problems was a very small query (small as in the number of lines) that was running multiple times. This query eventually ended up locking a table and blocking all other systems that were linked to that particular table. Because the query is fired off from a web service, it was not a visible query and in testing, it had always behaved. However, in a production environment and with multiple connections the behavior was not what had been planned for.

SQL Doctor pinpointed the issue, offered a resolution and allow us to implement the fix, within an incredibly short period of time. After only a few hours, the problem had been resolved and the server was running properly.

There was more – I implemented some of the other, performance-related suggestions that SQL Doctor had made and the server performance improved to a point that I would not have expected. Simple tweaks that are often overlooked (or tweaks that are not that well known) added speed and processing improvements that I would not have expected.

Based on how quickly I was able to find the problems, address them and resolve them I can loudly state and, better yet, show our director that his purchase of SQL Doctor has had an almost immediate return on investment. I have yet to implement all the fixes that SQL Doctor has highlighted, so performance should just get better and better.

We have our eye on another IDERA product and this experience will allow me to push our director into that purchase a lot more easily than if I had tried a week ago. IDERA saved my hide, something that I am very grateful for. Then there is the after-sales service! A friendly telephone call within days of purchase – something that I really was not expecting. IDERA has great products, combined with a great team. I am more than pleased with the purchase – it is money very well spent.

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# SQL Doctor

## OPTIMIZE SQL QUERIES FOR SQL SERVER

- Tune SQL Server for physical, virtual, and cloud environments
- View a summary of the health of the entire enterprise and a selected server
- Display prioritized list of performance optimization recommendations
- Generate executable SQL scripts to optimize performance
- Access analysis history and view trends
- View advice for SQL Server 2016 and 2017, Azure SQL Database, and Amazon RDS

TRY FOR FREE!

The screenshot displays the IDERA SQL Doctor application window. The title bar reads "IDERA SQL Doctor". The main interface is divided into several sections:

- Navigation:** Home, Community, License Info, and Add Licenses (button).
- Menu:** File, Edit, Tools, Help.
- Toolbar:** Add Server, Remove Server, Analyze Server, Diagnose Queries, and Schedule analysis.
- Left Panel:** A tree view showing a dashboard for SERVER\_1, with sub-items for All Analyses (Tuesday, Mar 21, 2017 3:06:03 PM), Applications, Categories, Databases, Logins, Recommendation, Prioritized Recommendation, Workstations, Sessions, Waits, and Query Plan Stats. Below this are links for SERVER\_2 through SERVER\_6.
- Main Content Area:**
  - Overview for SERVER\_1:** Microsoft SQL Server 12.0.4232.0 Enterprise Edition (64-bit) on Windows NT x64 Version 6.3 (10240). Refresh 3/22/2017 3:04 PM.
  - SQL Doctor Analysis (0 warnings):** Most Recent Analysis (Last analysis performed on 3/21/2017, Current Threshold: n/a), Recommendations (Last analysis produced 190 recommendations, Current Threshold: n/a), Priority (Last analysis did produce n/a priority recommendations).
  - Performance Metrics (0 warnings):** CPU Usage (Current CPU usage: 57 %, Current threshold: n/a), Memory Available (Current memory available: 2131 MB, Current threshold: n/a), Blocking Processes (Current blocking processes: 0, Current threshold: n/a), Network Retransmits (Current network retransmits: 0 %, Current threshold: n/a).
  - Drives / Storage (0 warnings):** Disk Space (0 disks drives are running low on space, Current threshold: n/a).
  - Disaster Recovery (1 warnings):** Recent Full Backups (28 databases have not had a full backup in n/a).
  - Quick Findings:** more... (3/22/2017 3:04 PM)
  - Finding:** The SQL Server user right "Lock Pages in Memory" is not being used, Single use Ad-hoc plans are using 22 MB of procedure cache, Disallow results from triggers is OFF, The Common Language Runtime (CLR) option is enabled, Authentication set to Mixed Mode, SQL Server password policy is vulnerable for login sa, New cardinality estimator is not being used.
- Right Panel:** Processes table with columns ProcessId and Name.

ProcessId	Name
0	Idle
2828	ReportingServicesServic
9924	SQLDoctor
4	System
496	smss
648	csrss
760	wininit
772	csrss#1
844	services
852	lsass
936	winlogon
1020	svchost
592	svchost#1
572	svchost#2