Tim Gorman, Oracle Ace Director

Addressing Today's Data Warehouse Challenges

Beyond Database Monitoring

Challenges of Analytics and Data Warehouses

The biggest challenge of managing analytics, data warehouses and Big Data is keeping up with dynamic business demands:

- Rapidly changing usage patterns
- Growing data variety, volumes and complexity
- Increasingly resource intensive visualization tools
- And expanding compliance and security demands

Analytics and data warehouses are now complicated and dynamic beasts. In fact, data management and analytics can no longer be viewed as two distinct processes or disciplines. Analytics is now intimately tied to the data with all its different formats, data platforms, and processing requirements. This demands a holistic understanding of the users, applications, objectives, and the data.

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How are DBA's Staying Ahead of Challenges?

Database Monitors – Database Perspective

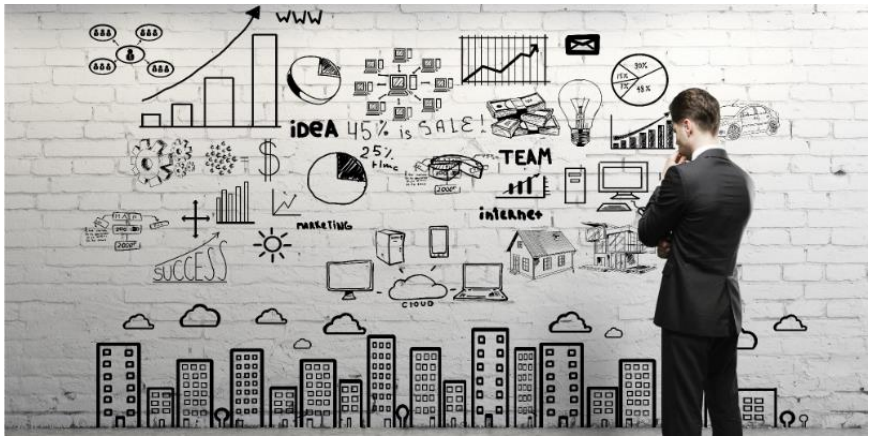
Database monitors like Oracle Enterprise Manager or Quest are great for tuning the database, but they don't deliver a business view of user, application and data usage that we need in these increasingly integrated, complex, and rapidly changing environments.

We Need a "Business Usage" Context

To understand and manage analytics, data warehouses and Big data requires a more holistic view than you get from database monitors.

We need a business context to answer questions like:

- What are user's really trying to do?
- How are applications behaving?
- What data are they using? How and When?



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Teleran: Delivering Value to the Business

Teleran offers an innovative usage analytics software solution. It is not another database monitor. Rather, it delivers a holistic view of analytics/data usage to ID issues that can not be visualized with DB monitors. In the next few pages you'll see how with Teleran you can:

- Analyze how data is used to ensure business value and resource efficiency
- Leverage usage metrics to effectively communicate and succeed with your business users
- Automatically prevent wasteful and inappropriate user behavior

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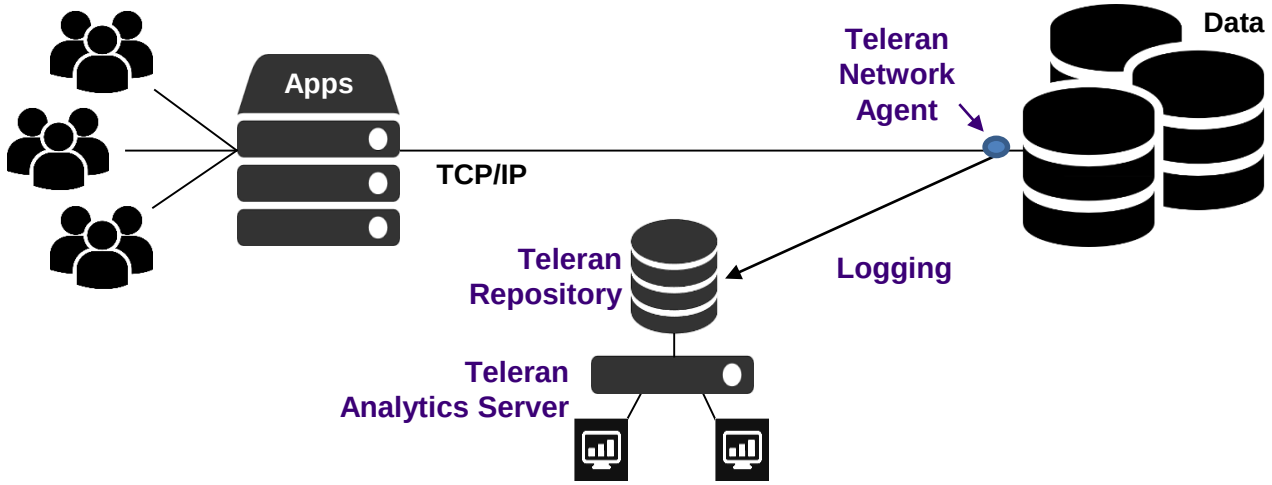
Teleran Usage Tracking and Analysis

Teleran's solution is designed from the ground up to address today's analytics and data warehouse issues and changes.



- Teleran's non-invasive usage capture agents reside outside data stores and do not impact data platform performance
- It provides a continuous and holistic view of usage vs. invasive in-the-database monitors that capture only periodic snapshots of database activity

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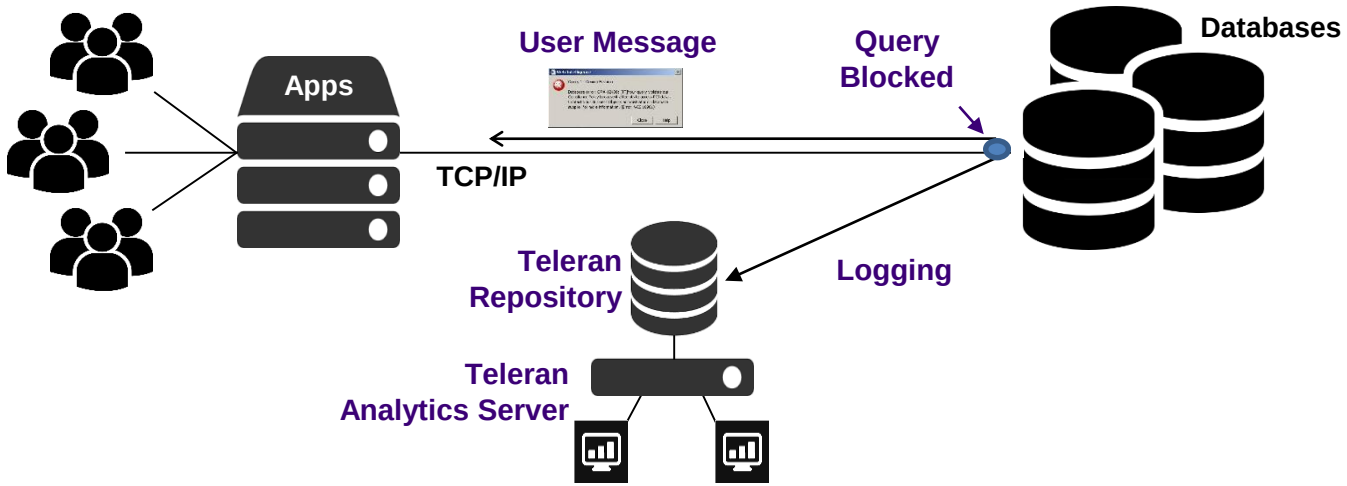
Teleran Usage Tracking and Management

It also delivers real-time application user/query controls that prevent inappropriate queries, while guiding application users via messages.



- Real-time user/query controls prevent inappropriate queries before database and…
- They guide users with real-time messages within the application

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Solutions to Real-World Challenges

On the next few pages we will show you how Teleran delivers real solutions to keep your analytics and Big Data warehouse delivering continuous value to the business.

- We will describe 3 common situations where user behavior is affecting service, generating bad results, and impacting compliance and security.
- And, that can not be easily addressed via database monitors.

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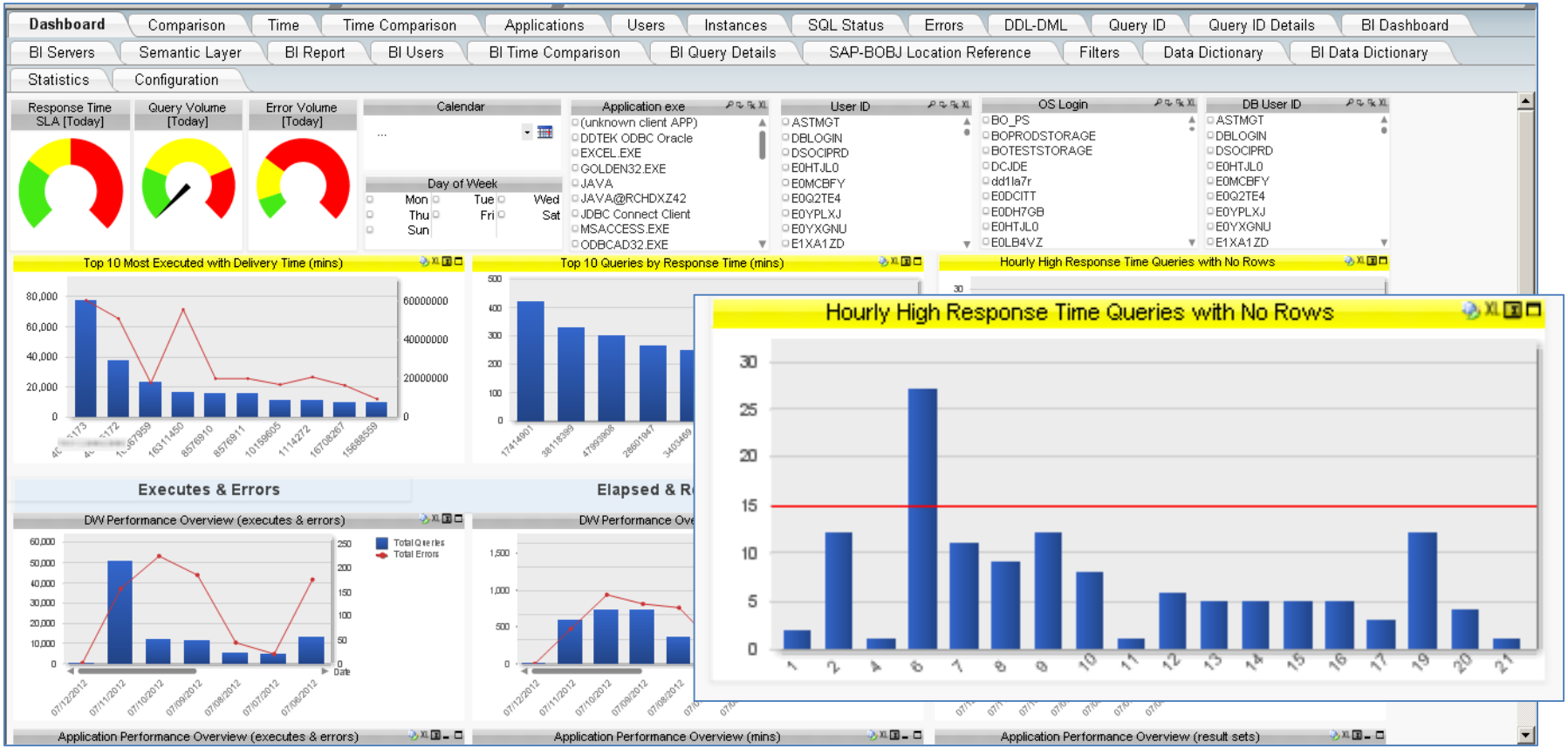
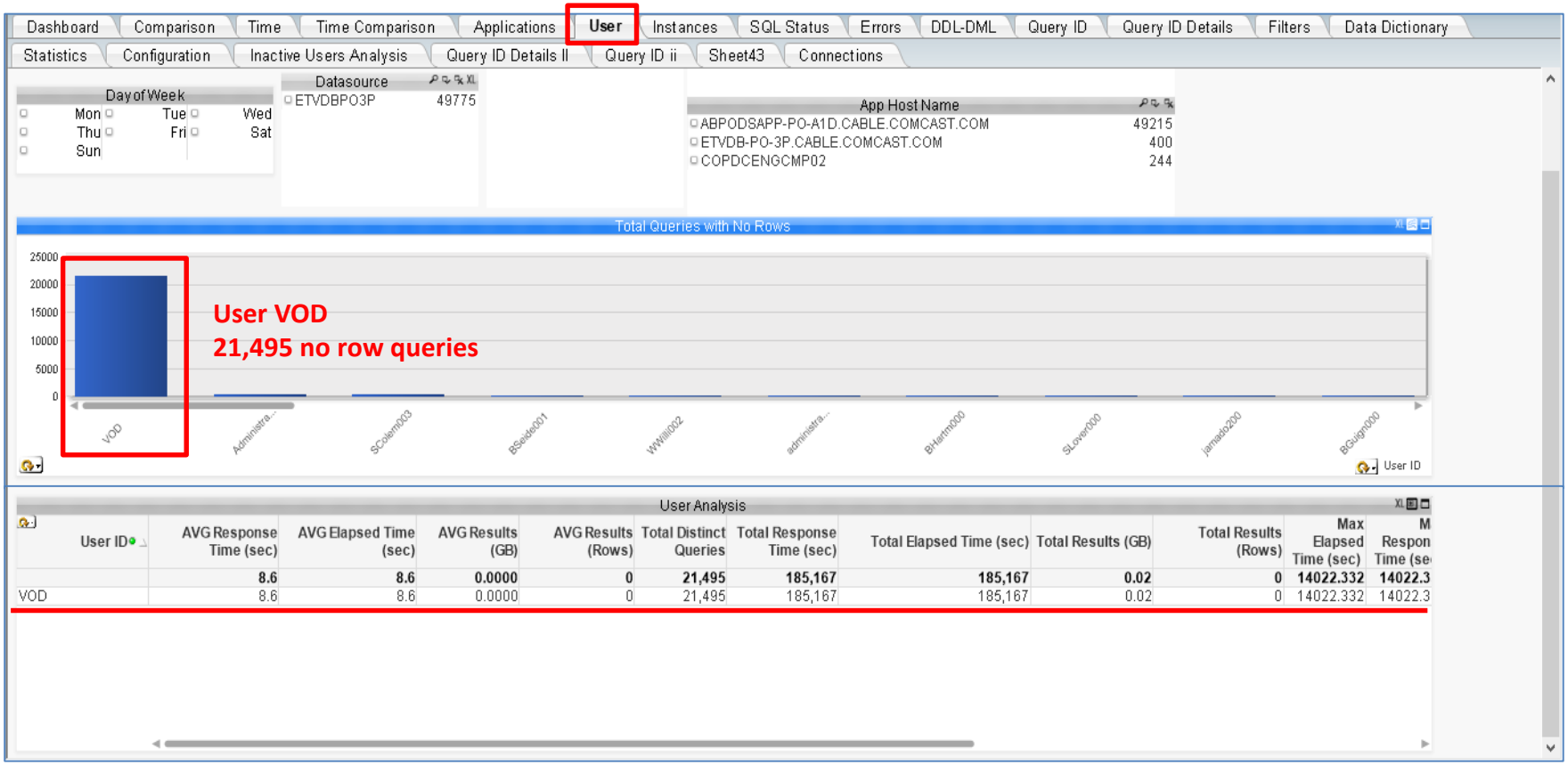
Case #1 – Big Queries. No Results



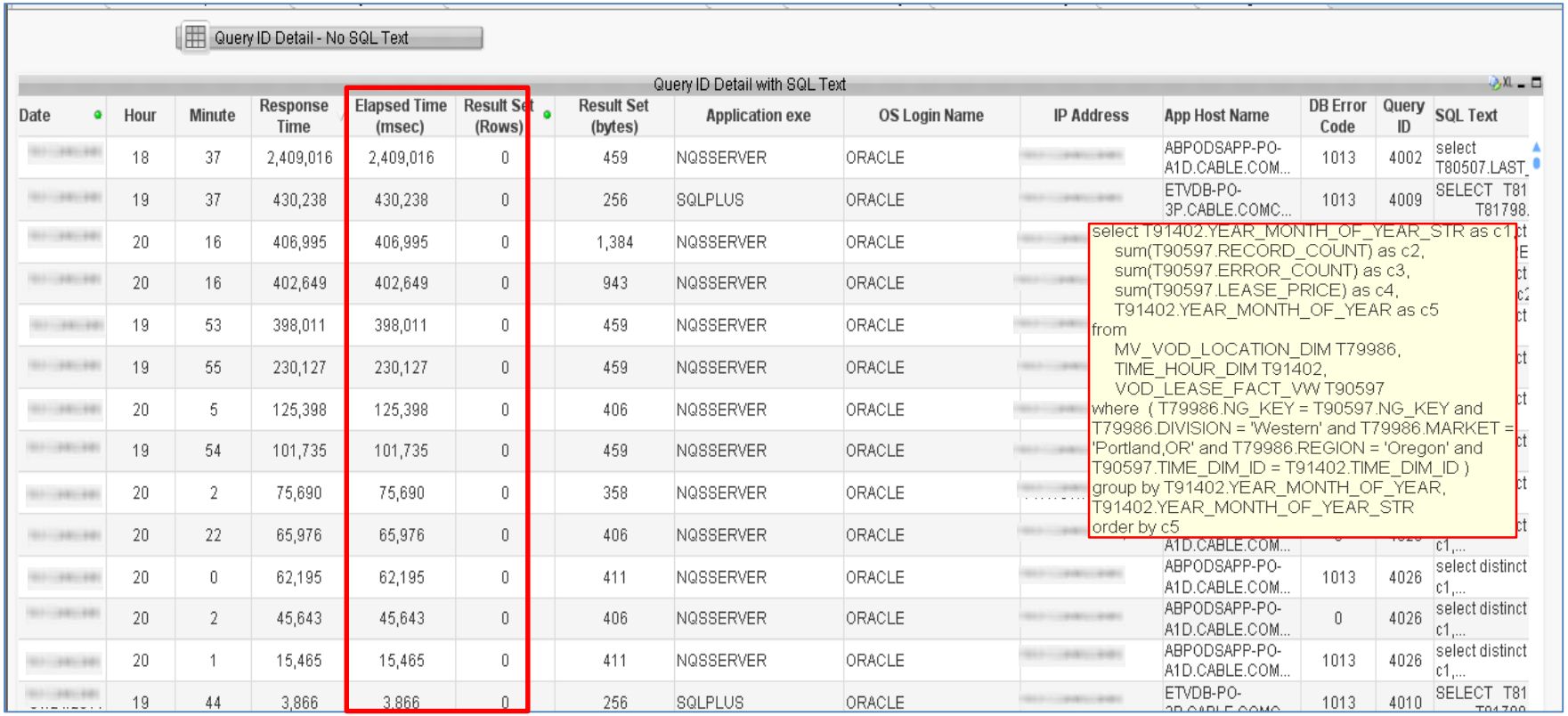
We start with the Teleran Dashboard, a customizable set of usage activity visualizations. We see that too many queries are running long and not bringing back *any* results. Users are wasting system resources and their own time and getting nothing back for their trouble.

Case #1 – Big Queries. No Results



Let's drill down on that. We see the user who is creating all these errant queries. Are they poorly formed queries? Are there other means of processing the information that will deliver actual results with less resources consumed? Let's find out.

Case #1 – Big Queries. No Results



Date	Hour	Minute	Response Time	Elapsed Time (msec)	Result Set (Rows)	Result Set (bytes)	Application exe	OS Login Name	IP Address	App Host Name	DB Error Code	Query ID	SQL Text
	18	37	2,409,016	2,409,016	0	459	NQSSERVER	ORACLE		ABPODSAPP-PO-A1D.CABLE.COM...	1013	4002	select T80507.LAST_
	19	37	430,238	430,238	0	256	SQLPLUS	ORACLE		ETVDB-PO-3P.CABLE.COMC...	1013	4009	SELECT T81 T81798.
	20	16	406,995	406,995	0	1,384	NQSSERVER	ORACLE					
	20	16	402,649	402,649	0	943	NQSSERVER	ORACLE					
	19	53	398,011	398,011	0	459	NQSSERVER	ORACLE					
	19	55	230,127	230,127	0	459	NQSSERVER	ORACLE					
	20	5	125,398	125,398	0	406	NQSSERVER	ORACLE					
	19	54	101,735	101,735	0	459	NQSSERVER	ORACLE					
	20	2	75,690	75,690	0	358	NQSSERVER	ORACLE					
	20	22	65,976	65,976	0	406	NQSSERVER	ORACLE		A1D.CABLE.COM...			c1,...
	20	0	62,195	62,195	0	411	NQSSERVER	ORACLE		ABPODSAPP-PO-A1D.CABLE.COM...	1013	4026	select distinct c1,...
	20	2	45,643	45,643	0	406	NQSSERVER	ORACLE		ABPODSAPP-PO-A1D.CABLE.COM...	0	4026	select distinct c1,...
	20	1	15,465	15,465	0	411	NQSSERVER	ORACLE		ABPODSAPP-PO-A1D.CABLE.COM...	1013	4026	select distinct c1,...
	19	44	3,866	3,866	0	256	SQLPLUS	ORACLE		ETVDB-PO-	1013	4010	SELECT T81

As we drill down further we see each query and exactly what errant SQL is being generated. We can then make corrections at the application level or with the user.

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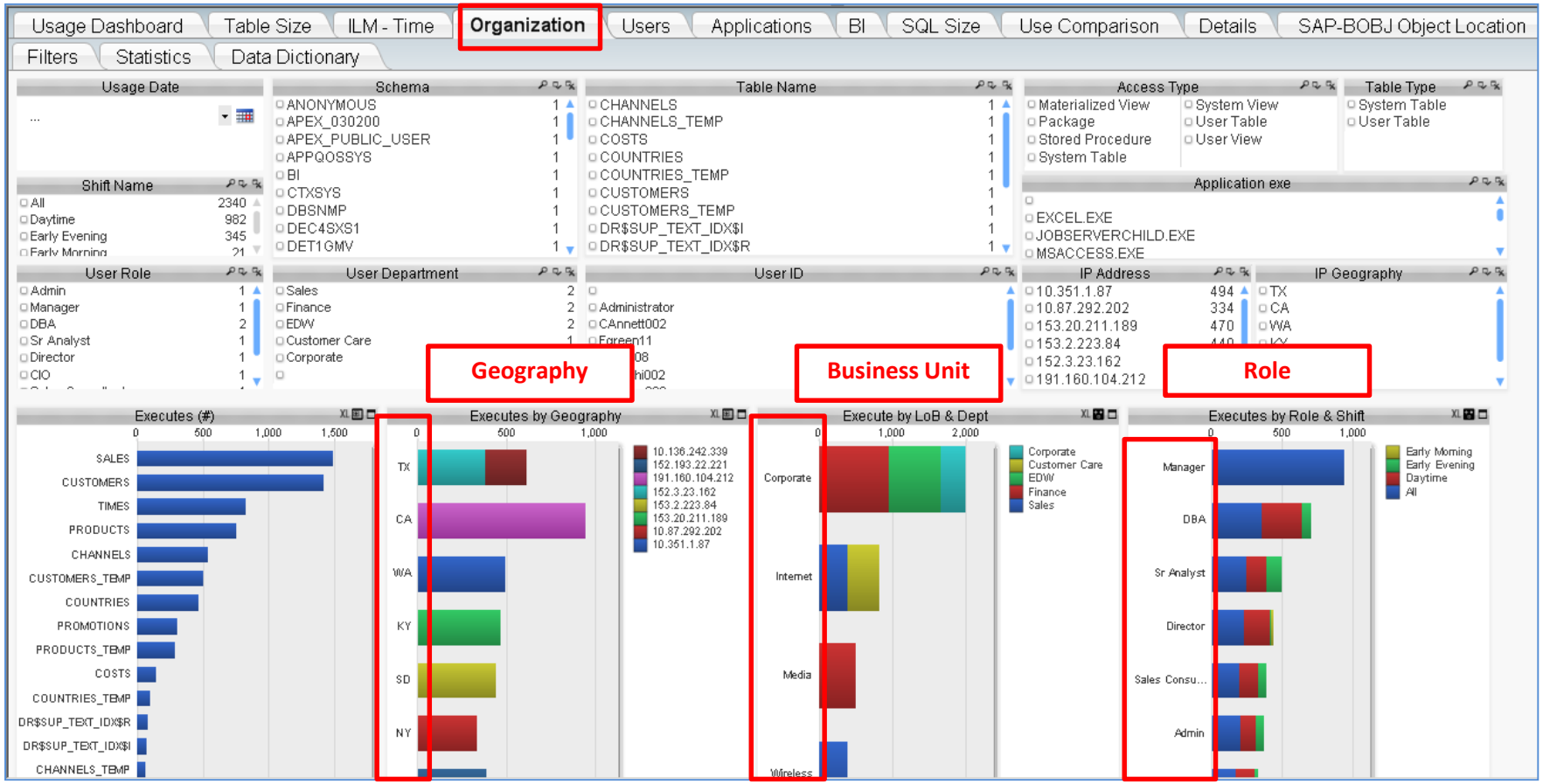
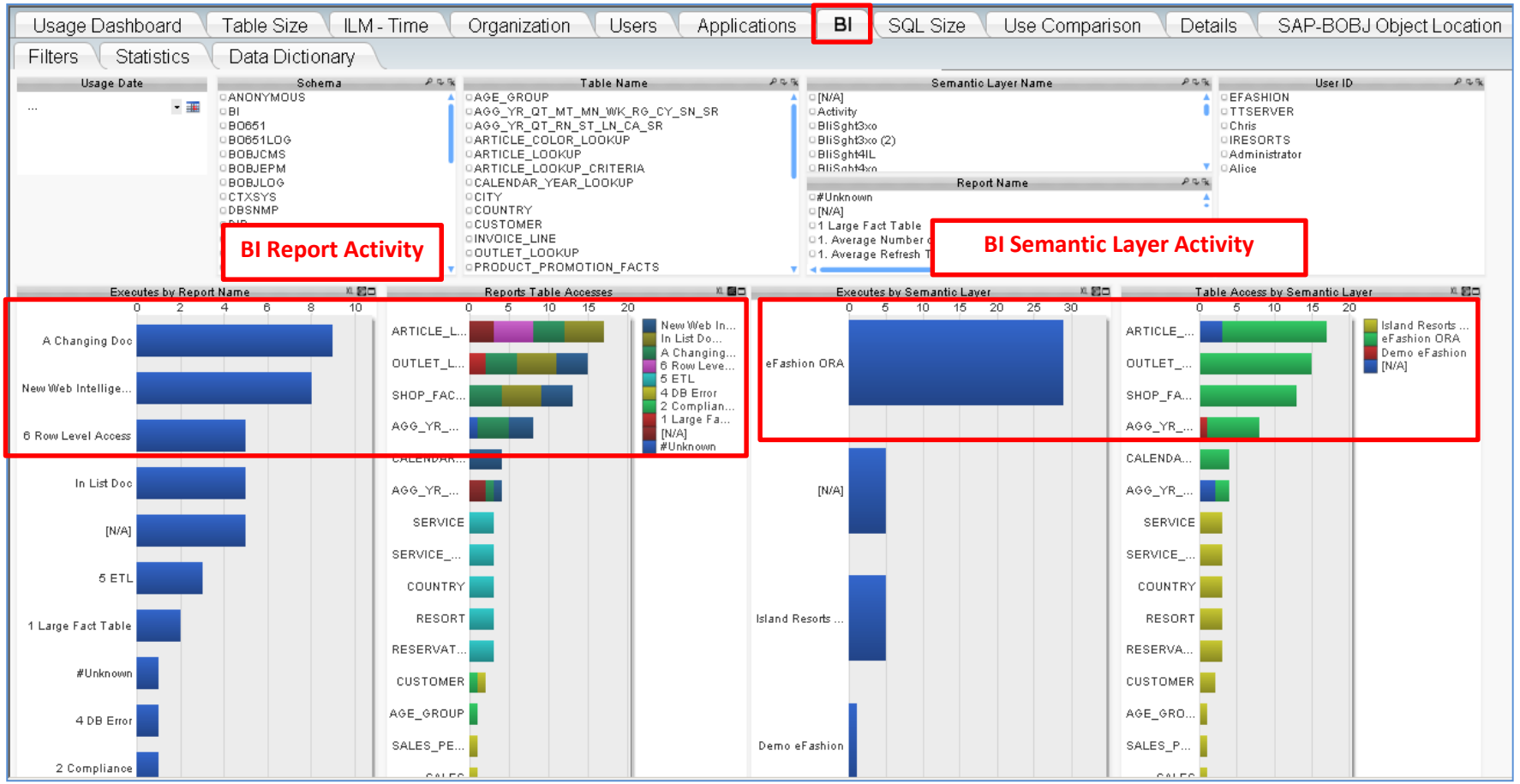
Establishing a Deeper Business Context



It's critical to establish a business-focused view of your data warehouse usage. With Teleran you can identify who is running what queries or reports from what functional area, department or business unit? And what data are they using?

Establishing a Deeper Business Context



In addition, with Teleran we can integrate BI and analytical application layer usage dimensions including BI reports run as well as semantic layer activity. This provides a holistic view of usage across users, queries, applications and data.

Case #2 – Rogue Datamarts

In this case we see very large data downloads and identify who is downloading the data, with what application to where (IP address) and when.

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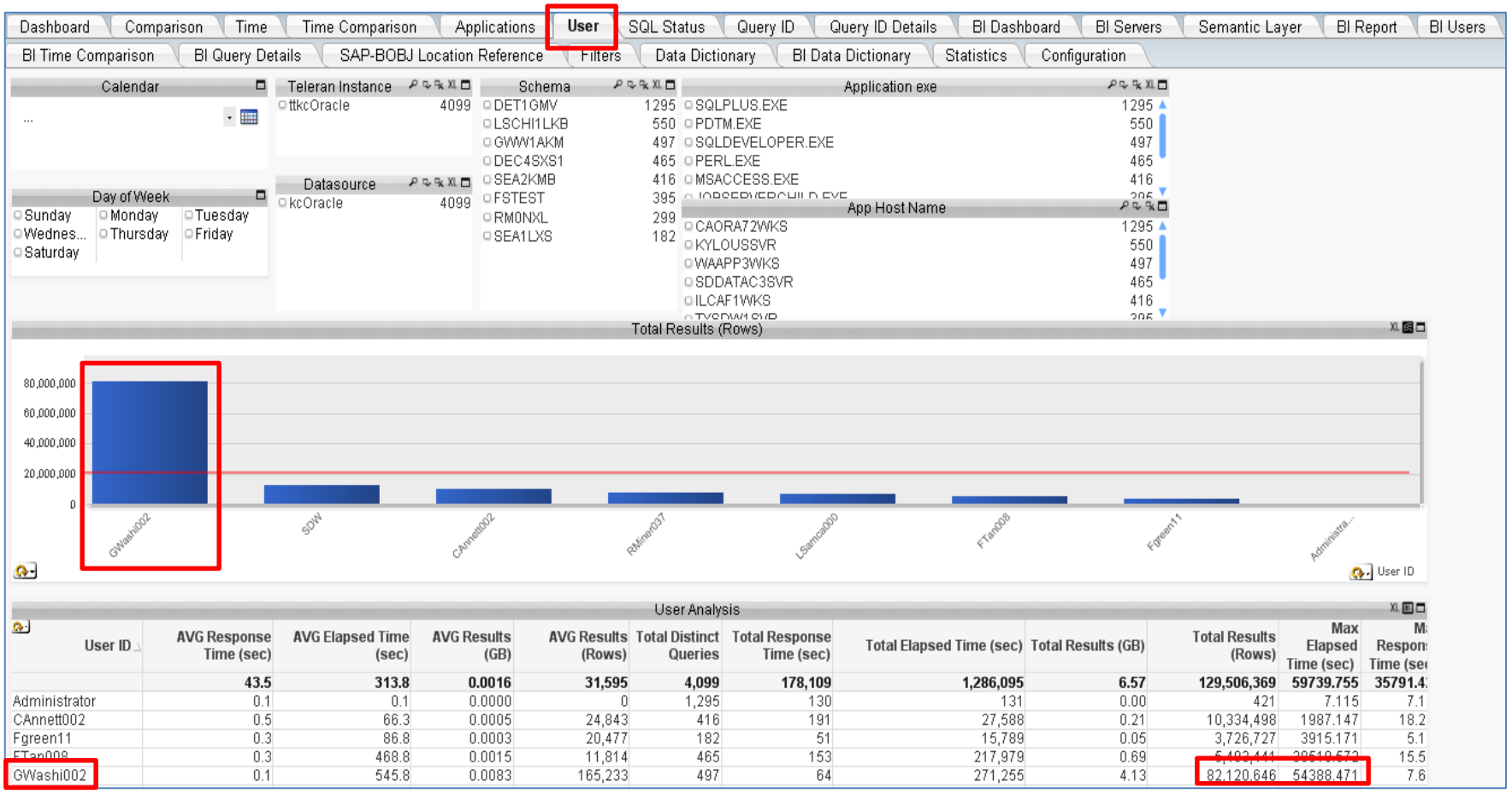
Case #2 – Rogue Datamarts



We drill down to the users to identify who is doing the downloads. With Teleran we can determine where they are located. Are they in compliance? Should this analysis be "repatriated" back into the data warehouse for better governance? Or, is it legitimate to consider maintaining a separate datamart for the analysis they are doing?

Case # 3 – Unproductive User Behavior

---Exception Alert---
From: iGuard
[mailto:501458408@chicisapp429v.corporate.gr.com
Sent: Monday, July 26, 2017 5:25PM
To: rsimon@gr.com
Subject: iGuard Daily Status for 7/26/15
Exception activity: large number of queries above processing threshold canceled by users.

Download report.

In this case we get a Teleran alert that users are canceling lots of queries. Let's download the active report.

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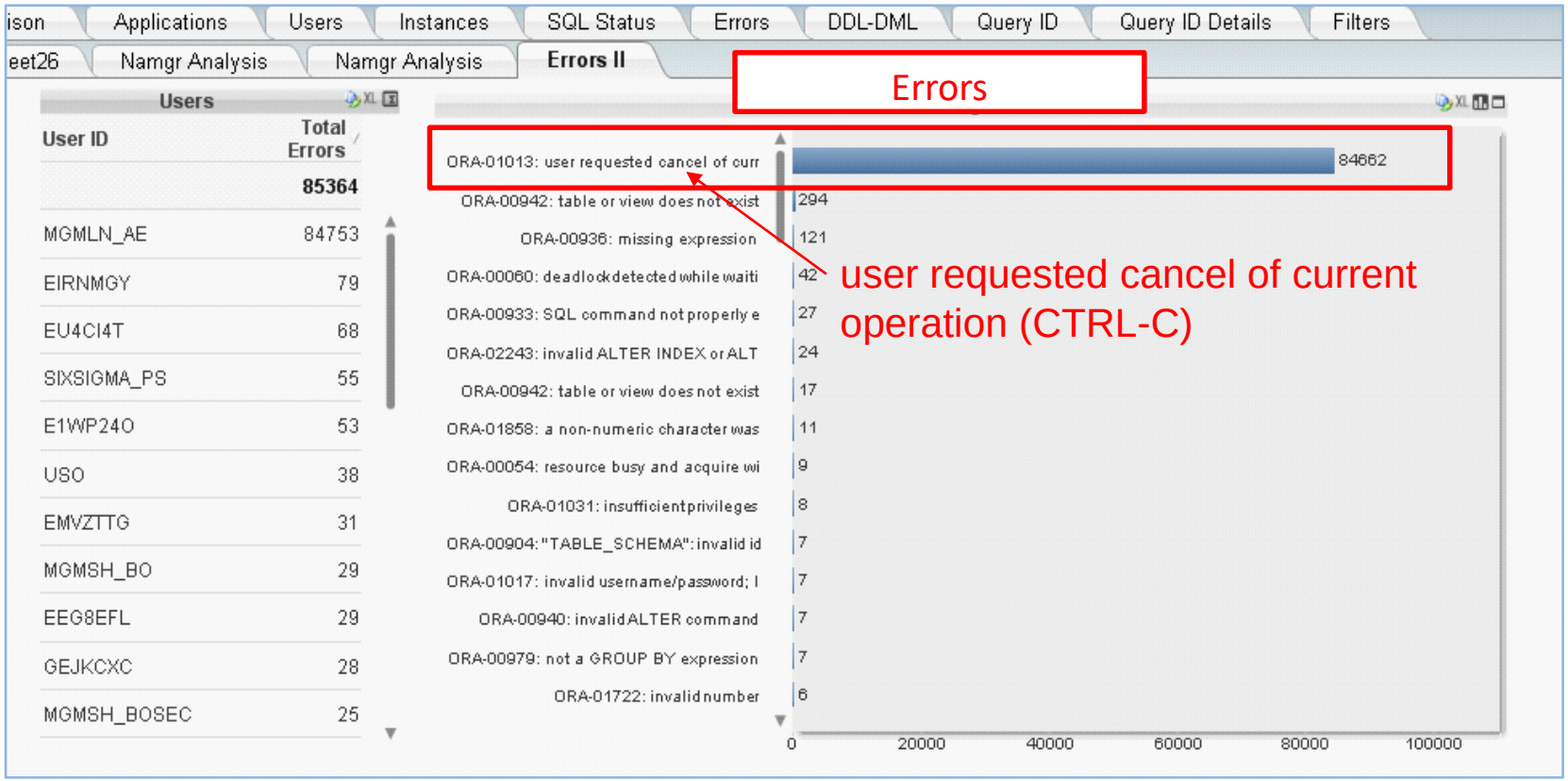
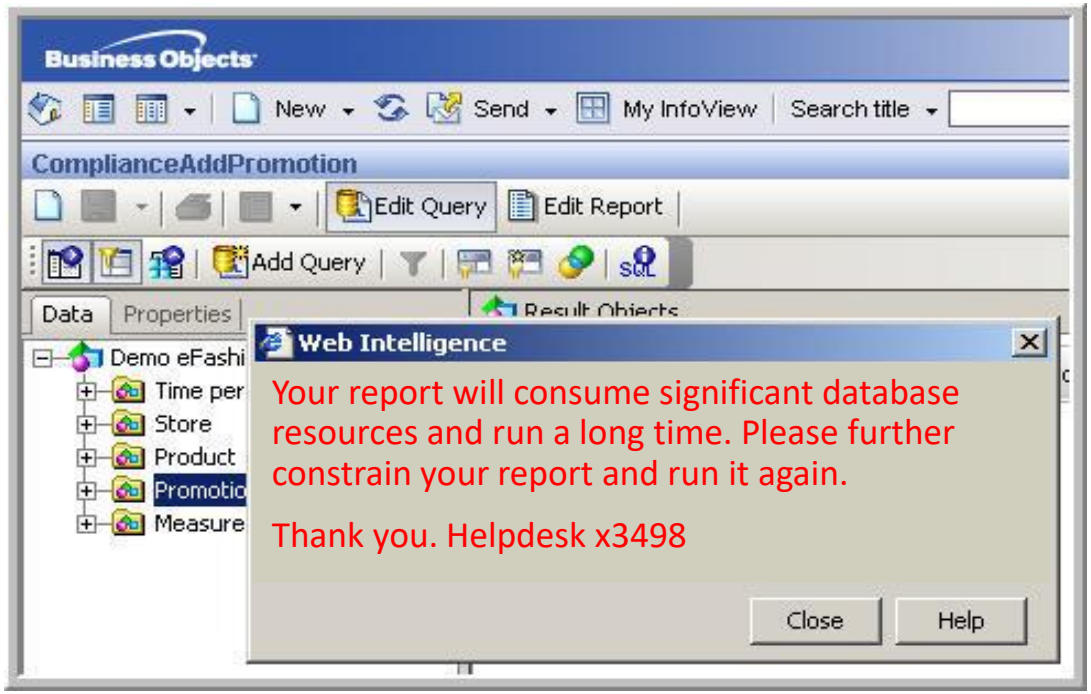
Case # 3 – Unproductive User Behavior



Here we see database errors associated with users and queries. We can drill down on who these users are and investigate why these queries are taking longer than expected. Are they nonsensical or poorly formed queries? Are they poorly constrained and processing too much data? With Teleran we can drill down further and answer these questions and take steps to prevent this wasteful behavior.

Case # 3 – Unproductive User Behavior



This iGuard policy stopped the query before it hit the database.

It instantly sent this message back to the BusinessObjects user.

We can also discourage users from launching and then canceling these resource intensive queries with Teleran's real-time user/query manager. iGuard evaluates queries and identifies those that are inefficient or even non-sensical. It can stop a query before it reaches the databases and automatically send a prescriptive message back to the application user guiding them to adjust their query.

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Key Takeaways

As you've seen Teleran delivers the user, analytics, and business perspective to analytics and data warehouse management. It is a strong complement to database monitors, yet brings a whole new business user context to ensure your analytical and data warehouse environment continuously meets business needs by delivering:

- A holistic picture of activity to quickly troubleshoot and resolve usage issues that you can't visualize with database oriented tools only
- The ability to track what data is important to the business to ensure productive applications and resource efficient use
- Usage metrics from the user, application and query/report perspective to effectively communicate with, manage and succeed with your business users
- Identify and automatically address wasteful user behavior and inefficient analytical and application use

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To Learn More How Teleran Can Help You..

Visit our website at: www.teleran.com

Request a demonstration here

Contact us at Sales@Teleran.com

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