

Control data access using Row Count



In SQL Compliance Manager version 5.6.1 the Row count functionality may show as "Not Applicable". The issue occurs when you execute large query and during execution the start and the end of the SQL Statement get captured in different trace files. Since both events are located in different trace files, SQL CM is not able to map these events and therefore displays that Row count is "Not Applicable".

Users can increase the time of collection (default is set to 60 seconds) to capture Row count correctly



This feature is only **available** for SQL Server 2008 and above.



To capture row count information, **update** the SQL Compliance Manager Agent to version **5.5** or above.

IDERA SQL Compliance Manager audits and reports on the frequency that users access sensitive data, alerting about suspicious behavior.

The row count feature allows users to:

- Audit and capture row count for all event types and SQL statements.
- Audit and capture row count for joined query statements.
- Report on row count and access sensitive data.
- Set alerts based on thresholds for row counts, users, sensitive data, and specific queries.

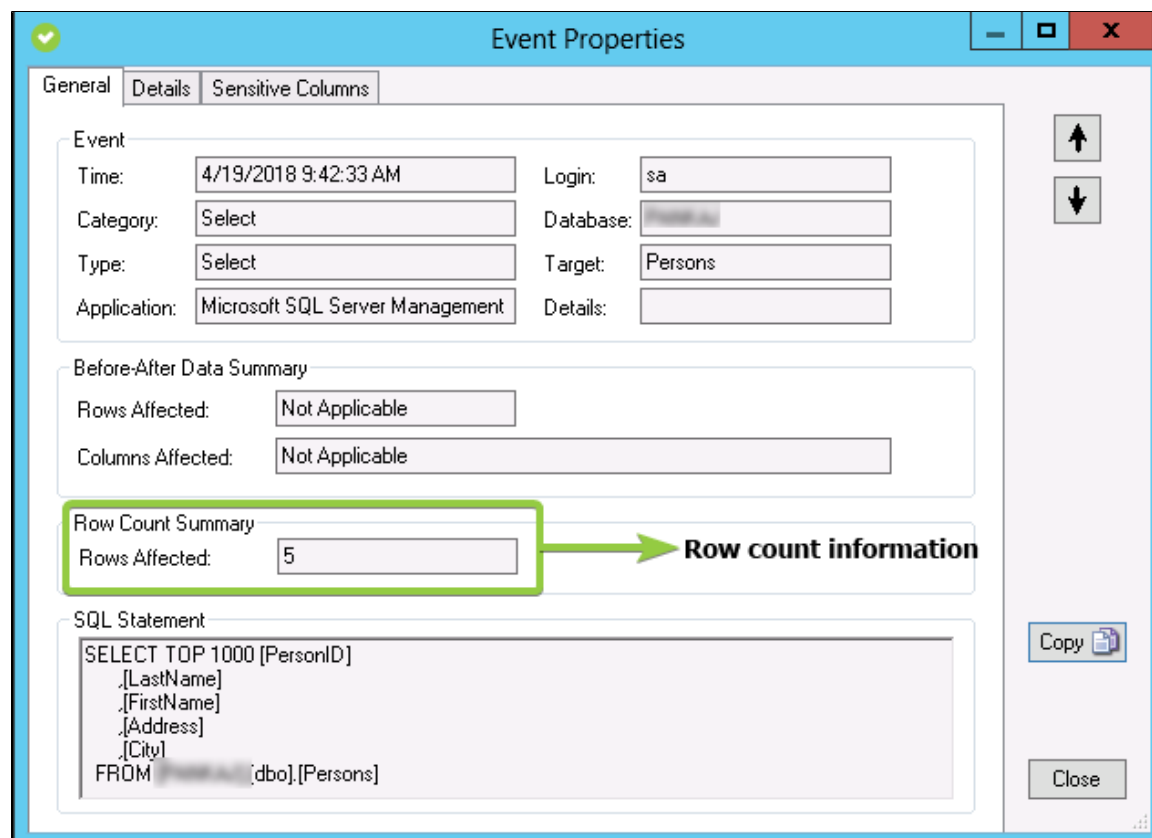
Row count information is captured as part of an audit event and gathers information from both, traces and extended events.



Row count information does not show when capturing DML and SELECT activities using SQL Server audit specifications.

See row count information

The row count information is available in the [General tab](#) of any event properties, as well as the [Audit Events tab](#) in the [Explore Activity View](#).



Event Properties

General Details Sensitive Columns

Event

Time: 4/19/2018 9:42:33 AM Login: sa

Category: Select Database: [redacted]

Type: Select Target: Persons

Application: Microsoft SQL Server Management Details: [redacted]

Before-After Data Summary

Rows Affected: Not Applicable

Columns Affected: Not Applicable

Row Count Summary

Rows Affected: 5

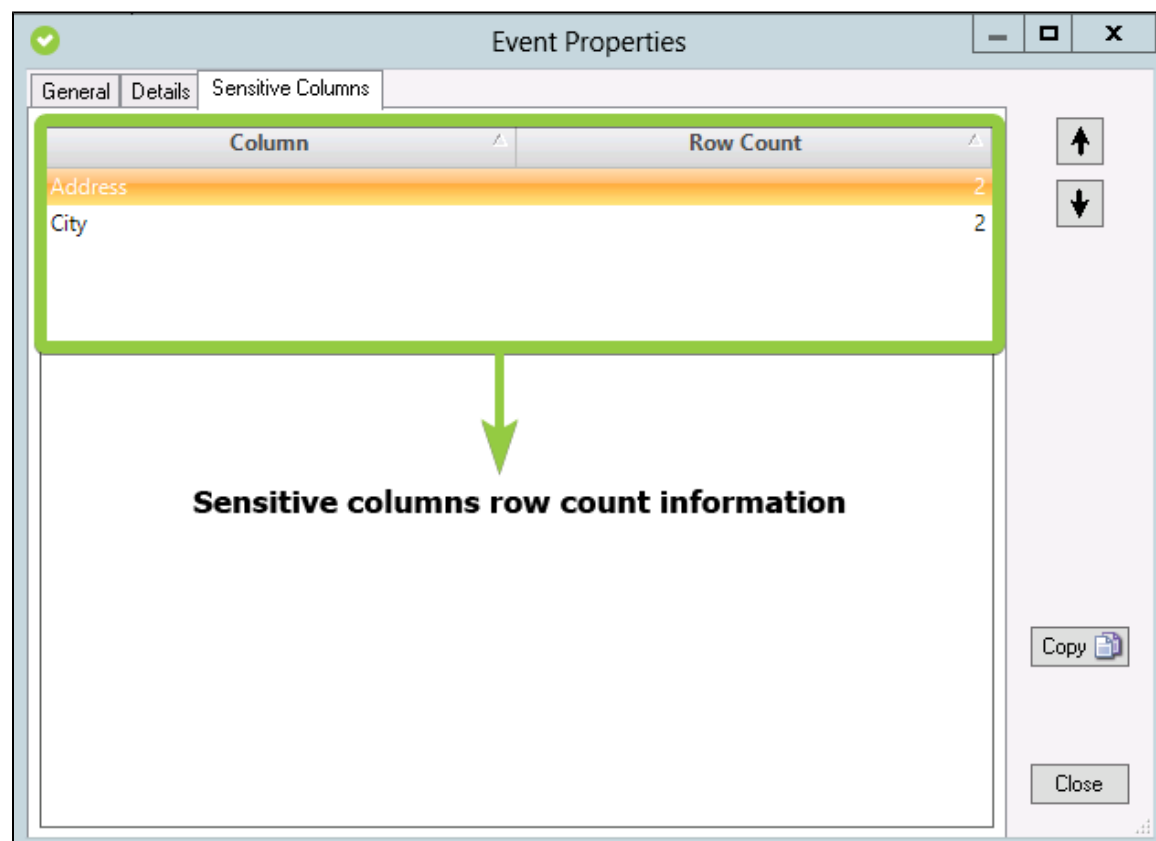
SQL Statement

```
SELECT TOP 1000 [PersonID]
      ,[LastName]
      ,[FirstName]
      ,[Address]
      ,[City]
FROM [redacted].[dbo].[Persons]
```

Copy Close

Row count information

For select statements with sensitive columns, event properties contain a [Sensitive Columns](#) tab which shows the row count value for each audited sensitive column.



Event Properties

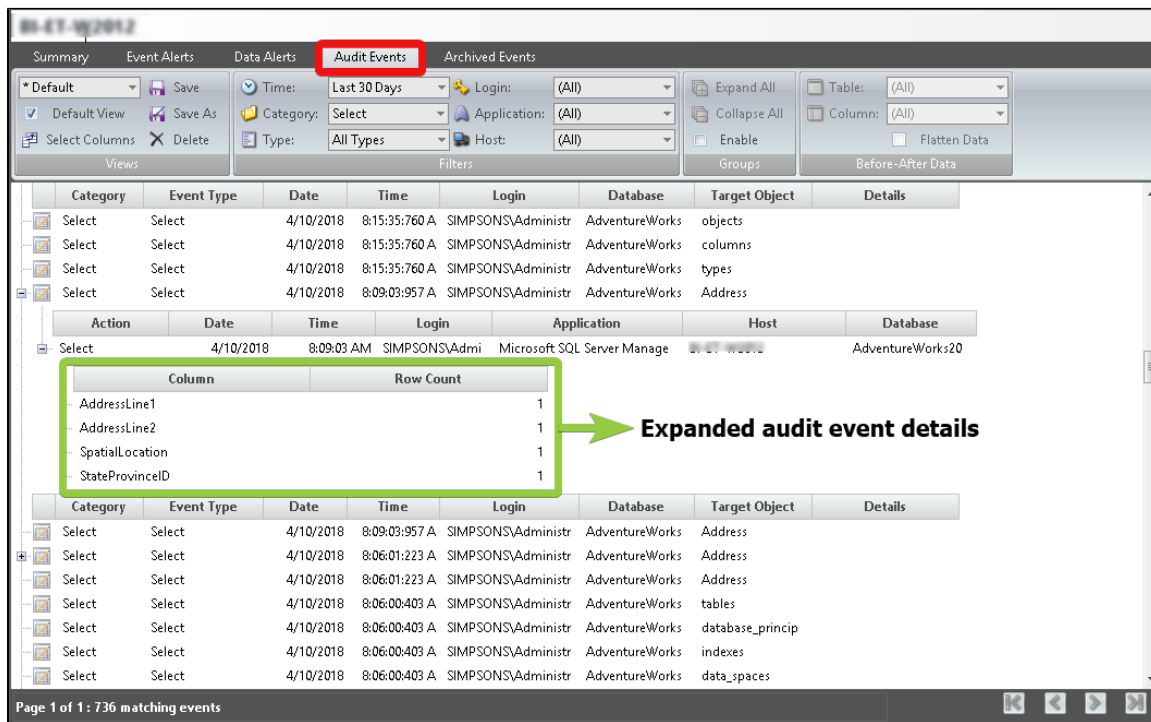
General Details Sensitive Columns

Column	Row Count
Address	2
City	2

Sensitive columns row count information

Copy Close

When you expand the audit events, the [Audit Events](#) tab shows the row count information in the event details.



The screenshot shows the IDERA SQL Compliance Manager interface. The 'Audit Events' tab is selected. The main table displays a list of audit events. One event is expanded, showing a detailed view of the data accessed. The expanded view includes a table with columns and row counts.

Category	Event Type	Date	Time	Login	Database	Target Object	Details
Select	Select	4/10/2018	8:15:35:760 A	SIMPSON\SAdminstr	AdventureWorks	objects	
Select	Select	4/10/2018	8:15:35:760 A	SIMPSON\SAdminstr	AdventureWorks	columns	
Select	Select	4/10/2018	8:15:35:760 A	SIMPSON\SAdminstr	AdventureWorks	types	
Select	Select	4/10/2018	8:09:03:957 A	SIMPSON\SAdminstr	AdventureWorks	Address	

Action	Date	Time	Login	Application	Host	Database
Select	4/10/2018	8:09:03 AM	SIMPSON\SAdmin	Microsoft SQL Server Manage	...	AdventureWorks20

Column	Row Count
AddressLine1	1
AddressLine2	1
SpatialLocation	1
StateProvinceID	1

Expanded audit event details

Category	Event Type	Date	Time	Login	Database	Target Object	Details
Select	Select	4/10/2018	8:09:03:957 A	SIMPSON\SAdminstr	AdventureWorks	Address	
Select	Select	4/10/2018	8:06:01:223 A	SIMPSON\SAdminstr	AdventureWorks	Address	
Select	Select	4/10/2018	8:06:01:223 A	SIMPSON\SAdminstr	AdventureWorks	Address	
Select	Select	4/10/2018	8:06:00:403 A	SIMPSON\SAdminstr	AdventureWorks	tables	
Select	Select	4/10/2018	8:06:00:403 A	SIMPSON\SAdminstr	AdventureWorks	database_princip	
Select	Select	4/10/2018	8:06:00:403 A	SIMPSON\SAdminstr	AdventureWorks	indexes	
Select	Select	4/10/2018	8:06:00:403 A	SIMPSON\SAdminstr	AdventureWorks	data_spaces	

Page 1 of 1: 736 matching events



If you use SQL statements with joined queries, SQL Compliance Manager displays multiple (equivalent to the number of distinct queries joined) events, however, row count information is available only with the primary statement and not applicable with other statements.

Row count Alerts

IDERA SQL Compliance Manager allows you to set alerts on row count and data access. Alerts can be set by row count alone or adding a specific time interval.

For more information, see [Alert on Audit Data and Status](#).

The screenshot shows the IDERA SQL Compliance Manager application window. The interface is divided into several sections:

- Administration Panel (Left):** Contains a tree view with 'Registered SQL Servers', 'Alert Rules', 'Audit Event Filters', 'Logins', 'Activity Log', and 'Change Log'. The 'Alert Rules' item is highlighted with a red box and an arrow pointing to the main panel.
- Main Panel (Right):** Titled 'Alert Rules', it contains a toolbar with icons for 'Event', 'Status', 'Data', 'Import', and 'From Existing'. The 'Data' icon is highlighted with a red box and an arrow pointing to the table below.
- Table:** A table with columns: Rule, Rule Type, Server, Level, Email, EventLo, and SnmpTrap. It contains two rows:

Rule	Rule Type	Server	Level	Email	EventLo	SnmpTrap
Sensitive Data	Event	WIN-B5VL79U2ADV	Medium	No	No	No
Sensitive Column Accessed	Data	WIN-B5VL79U2ADV	Medium	No	Yes	No
- Bottom Panel:** Contains 'Explore Activity', 'Audit Reports', and 'Administration' (highlighted with a red box and an arrow pointing to the text '1. Go to Administration').

Annotations on the screenshot include:

- 2. Go to Alert Rules:** Points to the 'Alert Rules' item in the Administration Panel.
- 3. Select Event and/or Data alerts:** Points to the 'Data' icon in the toolbar.
- 1. Go to Administration:** Points to the 'Administration' item in the bottom panel.

If you use SQL statements with joined queries, only the primary statement triggers any alert set for row count.

Row count Reports

IDERA SQL Compliance Manager allows you to generate reports on data access, including the new row count feature. You can generate reports with the SQL Compliance Manager console and with Reporting Services.

For more information, see [Report on Audit Data](#).

