

# Control data access using Row Count



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**.

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 → **Row count information**

**SQL Statement**

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

Copy Close

Event Properties

General

Details

Sensitive Columns

Event

Time

Apr 19 2018 09:43 AM

Login

sa

Category

Select

Database

Personnel

Type

Select

Target

Persons

Application

Microsoft SQL Server Manager

Event Details

Before-After Data Summary

Rows Affected

Not Applicable

Column Affected

Not Applicable

Row Count

Row Count

5

→ Row count information

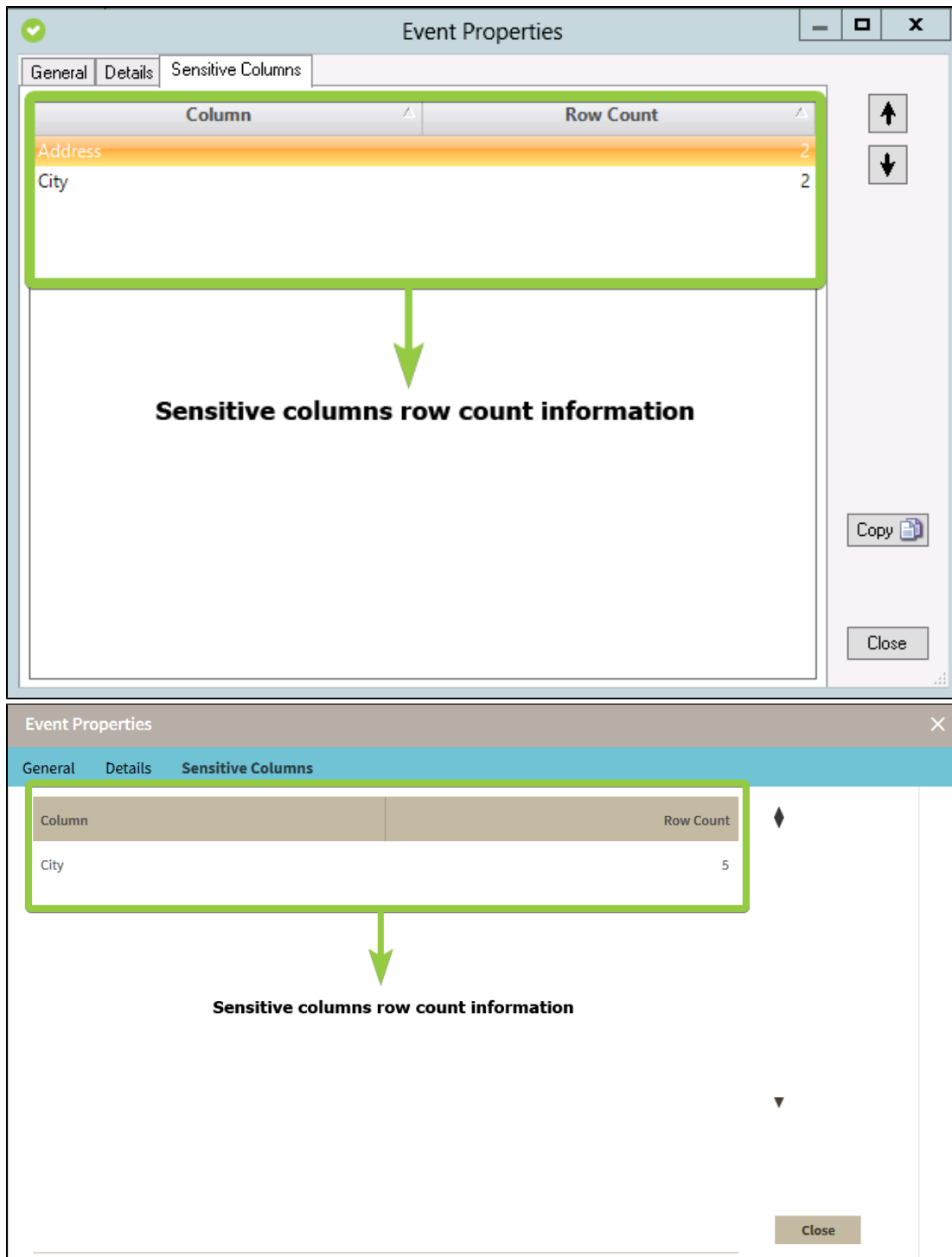
SQL Statement

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

▼ Copy

Close

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



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

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

| Category | Event Type | Date      | Time          | Login          | Database       | Target Object | Details |
|----------|------------|-----------|---------------|----------------|----------------|---------------|---------|
| Select   | Select     | 4/10/2018 | 8:15:35:760 A | SIMPSON\SAdmin | AdventureWorks | objects       |         |
| Select   | Select     | 4/10/2018 | 8:15:35:760 A | SIMPSON\SAdmin | AdventureWorks | columns       |         |
| Select   | Select     | 4/10/2018 | 8:15:35:760 A | SIMPSON\SAdmin | AdventureWorks | types         |         |
| Select   | Select     | 4/10/2018 | 8:09:03:957 A | SIMPSON\SAdmin | 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\SAdmin | AdventureWorks | Address          |         |
| Select   | Select     | 4/10/2018 | 8:06:01:223 A | SIMPSON\SAdmin | AdventureWorks | Address          |         |
| Select   | Select     | 4/10/2018 | 8:06:01:223 A | SIMPSON\SAdmin | AdventureWorks | Address          |         |
| Select   | Select     | 4/10/2018 | 8:06:00:403 A | SIMPSON\SAdmin | AdventureWorks | tables           |         |
| Select   | Select     | 4/10/2018 | 8:06:00:403 A | SIMPSON\SAdmin | AdventureWorks | database_princip |         |
| Select   | Select     | 4/10/2018 | 8:06:00:403 A | SIMPSON\SAdmin | AdventureWorks | indexes          |         |
| Select   | Select     | 4/10/2018 | 8:06:00:403 A | SIMPSON\SAdmin | AdventureWorks | data_spaces      |         |

Page 1 of 1: 736 matching events

**i** 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](#).

**Administration**

- Registered SQL Servers
- Alert Rules**
- Audit Event Filters
- Logins
- Activity Log
- Change Log

**Alert Rules**

Registered SQL Servers | **Alert Rules** | Event Filters | SQL Logins | Activity Log | Change Log

Event Status Data Import From Existing

Edit Details Export Settings

Enable Disable Delete

Rule Management

Filter

| 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       |

**3. Select Event and/or Data alerts**

Rule Description (click an underlined value to edit)

**1. Go to Administration**

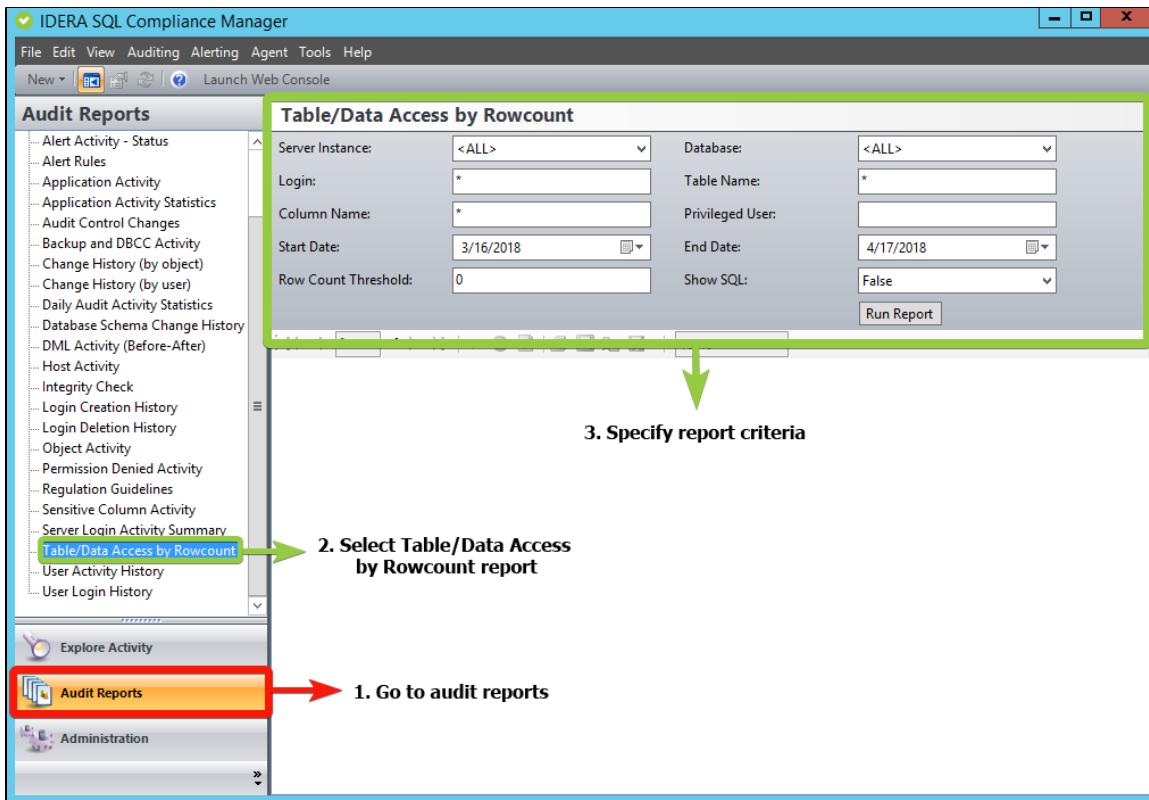
**2. Go to Alert Rules**

**i** 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](#).



SQL Compliance Manager monitor, audit and alert on SQL user activity and data changes.

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