SQL Server Default Audit Settings Properties

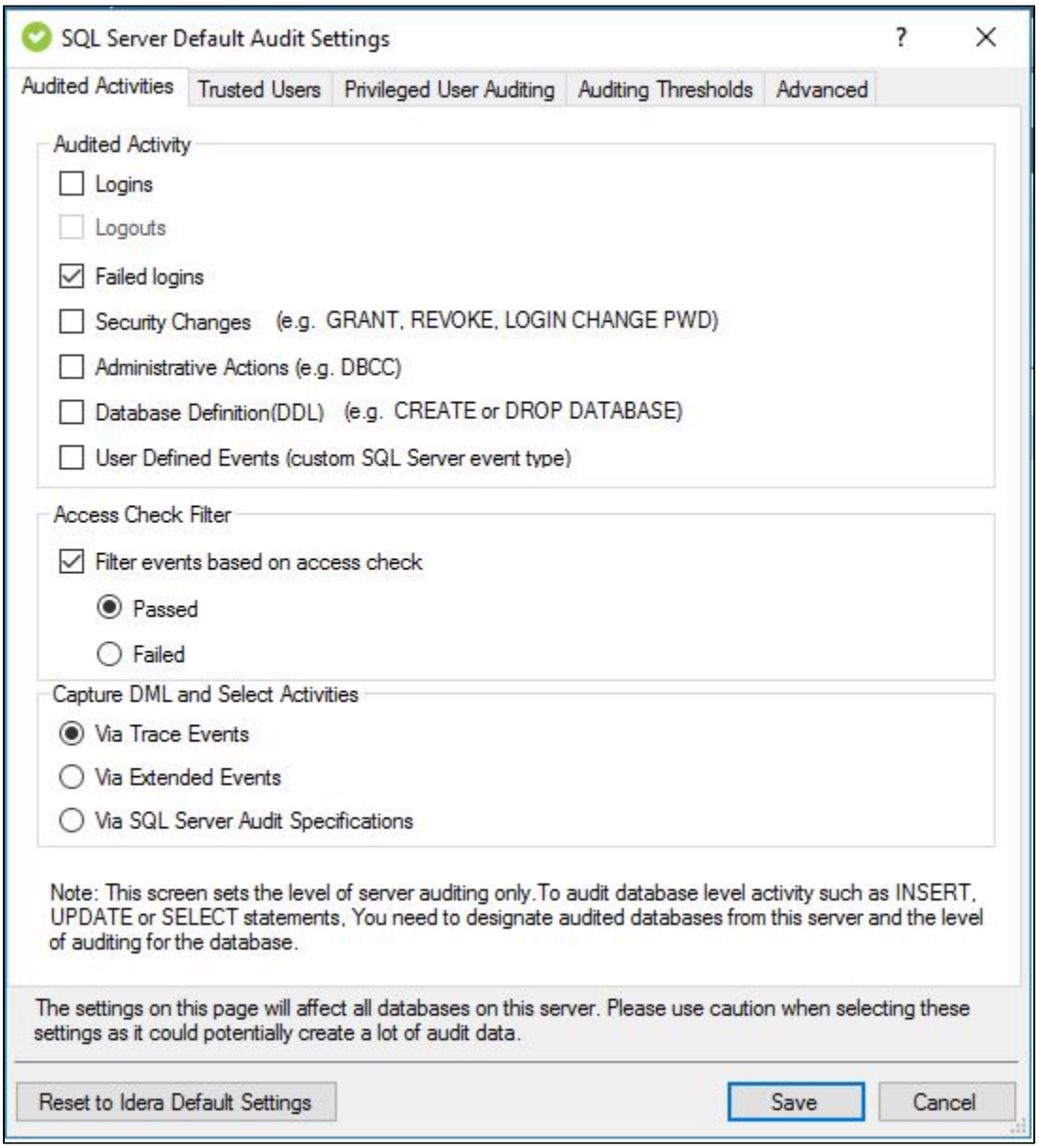
The IDERA SQL Compliance Manager SQL Server Default Audit Settings window allows you configure your default server settings.

This topic reviews the following tabs:

- Audited Activities tab
- Trusted Users tab
- Privileged User Auditing tab
- Auditing Thresholds tab
- Advanced tab

Audited Activities tab

The Audited Activities tab allows you to change which types of SQL Server events you want to audit. IDERA SQL Compliance Manager audits these events at the server level only.



Available fields

Audited Activity

Allows you select the type of activity you want to audit. Based on your selections, SQL Compliance Manager collects and processes the corresponding SQL Server events.

You can choose to audit event categories and user defined events. An event category includes related SQL Server events that occur at the server level. A user defined event is a custom event you create and track using the `sp_trace_generateevent` stored procedure.

Access Check Filter

Allows you to refine your audit trail for SQL Server login data by collecting events that better reflect your auditing requirements for security and user processes.

SQL Server validates login permissions and access rights when a user attempts to execute an operation or SQL statement on the audited SQL Server instance. ***If the access check filter is enabled for a registered instance*** , SQL Compliance Manager collects access check events at the server level.

Select this filter to help identify logins that may have inappropriate access rights or permissions. This filter may also help reduce the size of your audit data.

Type of Event Filter	Description
Audit only actions that passed access check	Omits events that track failed access checks performed by SQL Server.
Audit only actions that failed access check	Omits events that track passed access checks performed by SQL Server.

Capture DML and SELECT Activities

For each instance registered by default the option Extended Events is selected by SQL Compliance Manager to capture DML and Select activities.

Via Trace Events - Allows you to select Trace Events as your event handling system for DML and SELECT activities. For more information about this feature see, Understanding Traces.

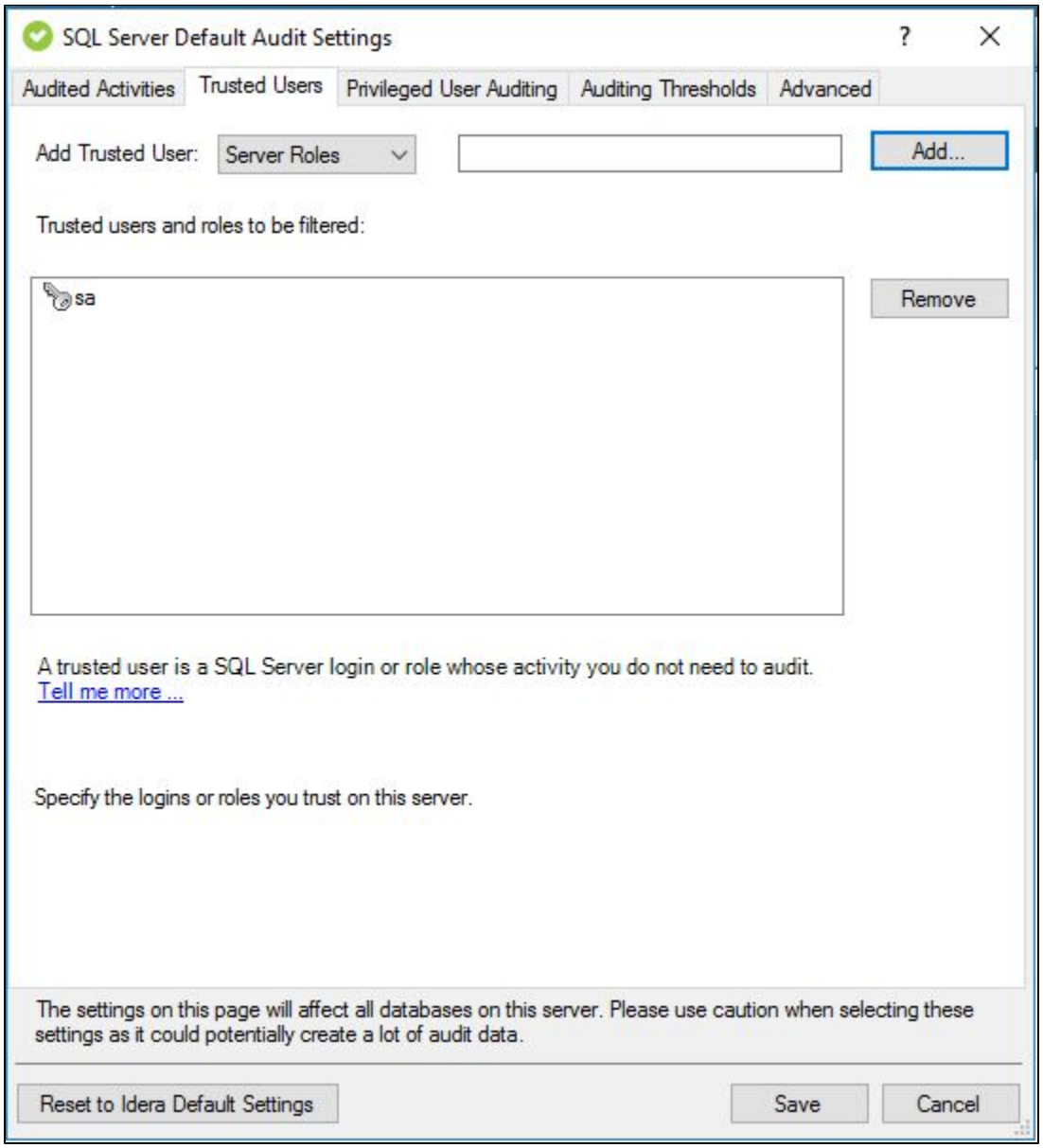
Via Extended Events - Allows you to select SQL Server Extended Events as your event handling system for DML and SELECT events for SQL Server 2012 and later versions. For more information about this feature, see Using SQL Server Extended Events.

Via SQL Server Audit Specifications - Allows you to select SQL Server Audit Logs as your event handling system for DML and SELECT events for SQL Server 2017 and later versions. For more information about this feature, see Using SQL Server Audit Logs.

⚠ SQL Compliance Manager does not support Extended Events functionality on SQL Server releases earlier than SQL Server 2012, therefore for the registration of SQL Server instances with versions lower than SQL Server 2012, the Capture DML and Select Activities option is set to Via Trace Events.

Trusted Users tab

The Trusted Users tab of the SQL Server Default Audit Settings window allows you to add Trusted Users at server level and set the default audit settings to be applied on SQL Server instances. Trusted users are SQL Server logins and members of SQL Server roles that you trust to read, update, or manage a particular audited server or databases. The SQL Compliance Manager Agent removes events generated by trusted users from the audit trail before sending the trace file to the Collection Server for processing. This exclusion occurs for all auditing, including DML and SELECT events related to sensitive columns and before and after data.



When you designate trusted users, consider limiting your list to a few specific logins. This approach optimizes event processing performance and ensures you filter the intended accounts.

If you are auditing privileged user activity and the trusted user is also a privileged user , IDERA SQL Compliance Manager will continue to audit this user because of its elevated privileges. For example, a service account that is a member of the sysadmin fixed SQL Server role will continue to be audited even though the account is designated as trusted. Keep in mind that trusted users are filtered at the database level whereas privileged users are audited at the server level.
To omit, or filter, events generated by specific logins and roles from your audit data trail, select the SQL Server login or role you want to trust and then click **Add**.

Available actions

Add a trusted user or role

Allows you to select which SQL Server logins or roles you want to trust on this database. When a login or role is designated as trusted, the SQL Compliance Manager Agent omits all database-level activity generated by these logins from the audit data trail.

Remove a user or role from the trusted list

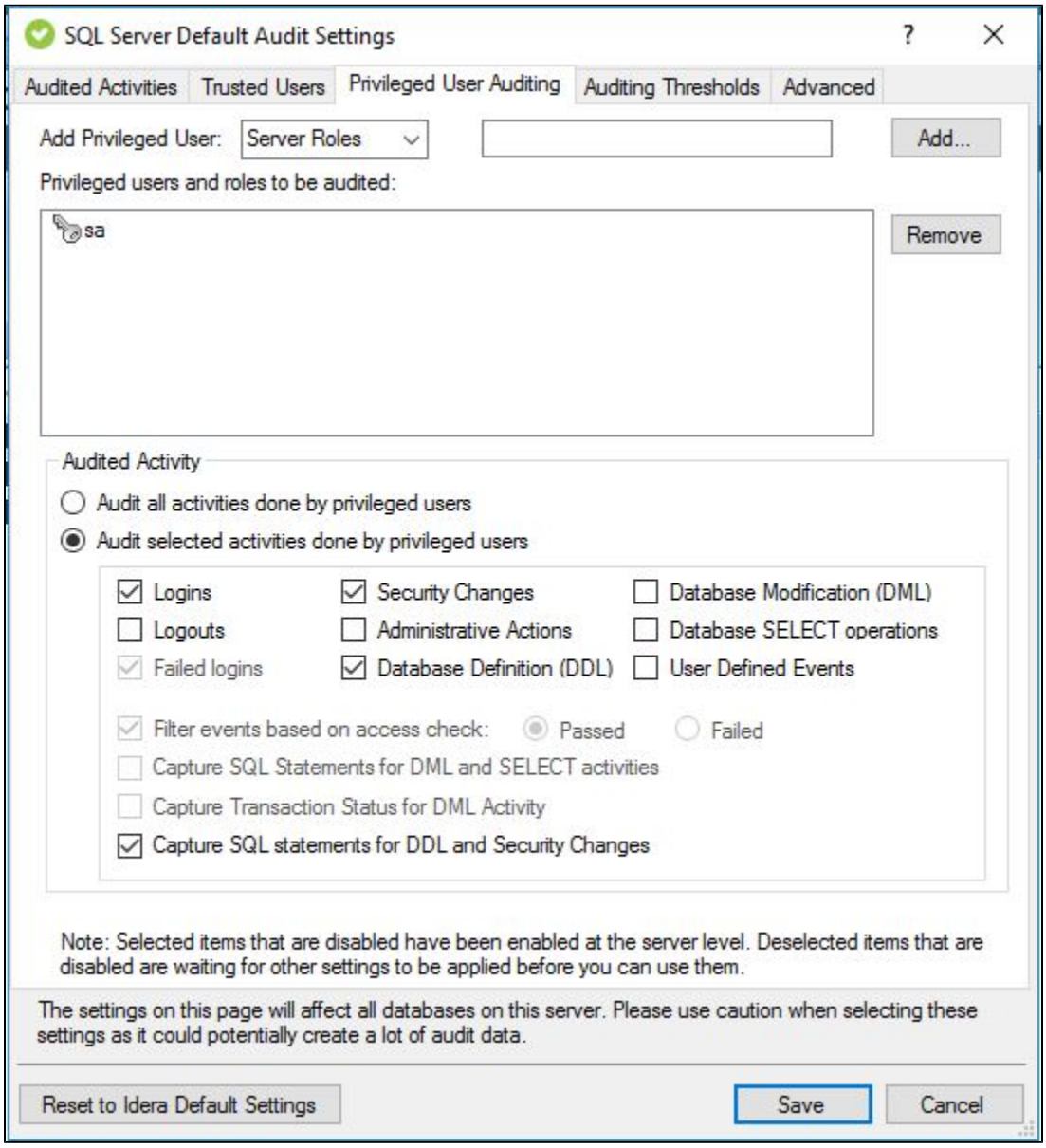
Allows you to designate a previously trusted user or SQL Server role as non-trusted. When a login or role becomes non-trusted, SQL Compliance Manager begins auditing database-level activity generated by this login or role, based on your current audit settings

Privileged User Auditing tab

The Privileged User Auditing tab of the SQL Server Default Audit Settings window allows you to add Privileged Users at server level and set the default audit settings to be applied on SQL Server instances. You can choose to audit event categories and user defined events. An event category includes related SQL Server events that occur at the server level. A user defined event is a custom event you create and track using the `sp_trace_generateevent` stored procedure.

For example, you can audit individual SQL Server logins with privileged access, logins that belong to specific fixed server roles, all activities, or specific activities.

When you update audit settings to audit privileged user activities, these changes are not applied until the SQL trace is refreshed. The SQL trace is refreshed when the SQL Compliance Manager Agent sends the trace files to the Collection Server. To ensure an immediate application of your new audit settings, click **Update Audit Settings Now** on the Agent menu.



Available actions

Add

Allows you to select one or more privileged users to audit. You can select privileged users by Server Roles or by Server Logins.

Remove

Allows you to remove the selected SQL Server login or fixed server role from the list of audited privileged users. When you remove the login or role, the SQL Compliance Manager Agent no longer collects events recorded for that login or the role members.

Available fields

Privileged users and roles to be audited

Lists the audited privileged users by login name or fixed server role. ***If you are auditing privileged users in a fixed server role*** , the SQL Compliance Manager Agent collects activities executed by all members of the selected role.

Audited Activity

Allows you to specify which activities (events) you want to audit for the selected privileged users.

Capture SQL statements for DML and SELECT activity

Allows you to specify whether you want to collect SQL statements associated with audited DML and SELECT activities. To capture these statements, you must also enable DML or SELECT auditing.

Ensure the Collection Server and the target SQL Server computers have ample resources to handle the additional data collection, storage, and processing. Because this setting can significantly increase resource requirements and negatively impact performance, choose this setting only when your compliance policies require you to audit SQL statements.

Capture Transaction Status for DML activity

Allows you to specify whether you want to collect the status of all DML transactions that are executed by T-SQL scripts run on your audited database. This setting captures begin, commit, rollback, and savepoint statuses. To capture these statuses, you must enable DML auditing.

Ensure the Collection Server and the target SQL Server computers have ample resources to handle the additional data collection, storage, and processing. Because this setting can significantly increase resource requirements and negatively impact performance, choose this setting only when your compliance policies require you to audit transaction status, such as rollbacks.

Capture SQL statements for DDL and Security Changes

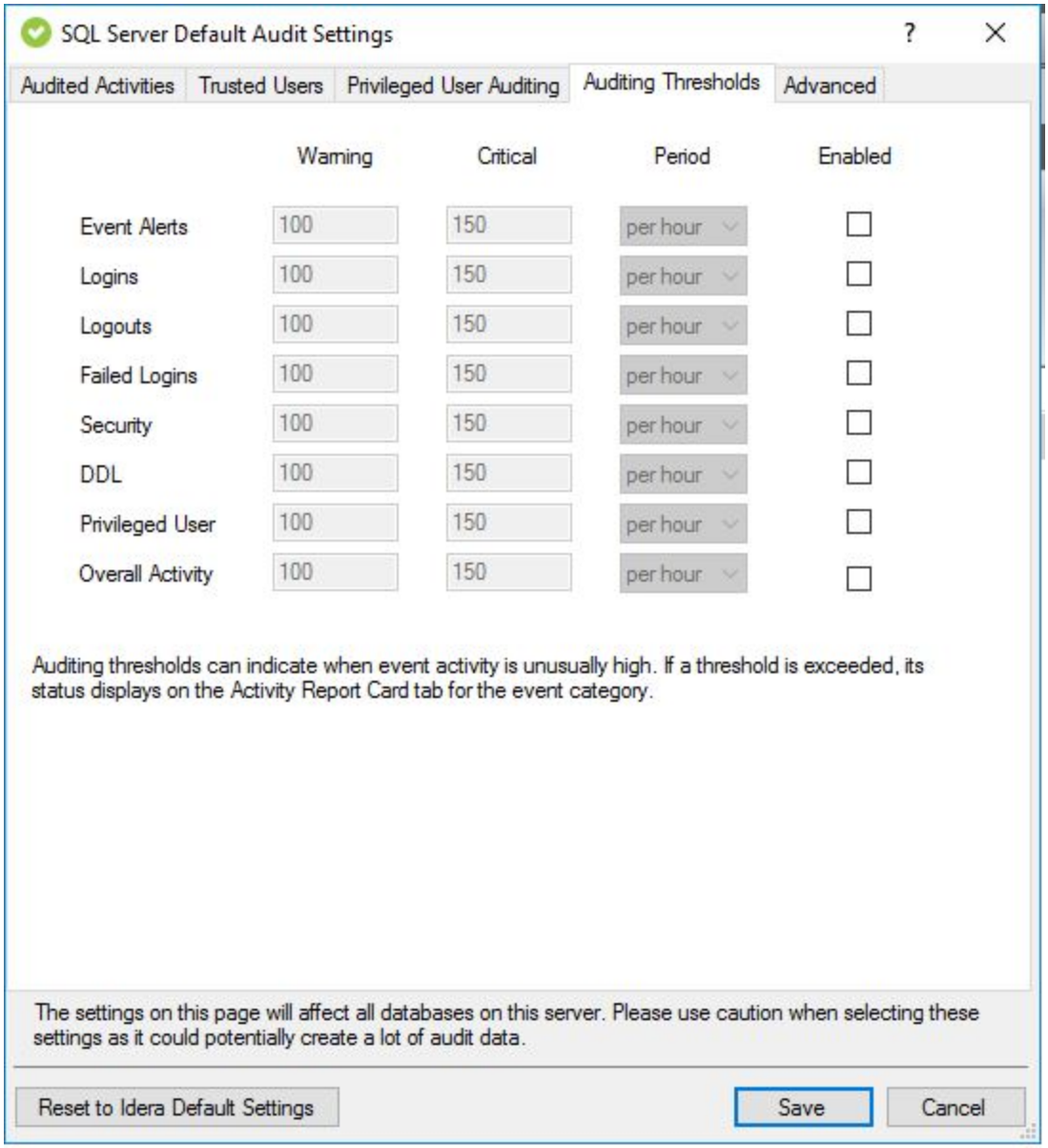
Allows you to specify whether you want to collect SQL statements associated with audited database definition (DDL) activities. To capture these statements, you must also enable DDL auditing.

Ensure the Collection Server and the target SQL Server computers have ample resources to handle the additional data collection, storage, and processing. Because this setting can significantly increase resource requirements and negatively impact performance, choose this setting only when your compliance policies require you to audit SQL statements.

Auditing Thresholds tab

The Auditing Thresholds tab of the SQL Server Default Audit Settings window allows you to set auditing thresholds to identify unusual activity on SQL Server instances. IDERA SQL Compliance Manager reports threshold violations through the Activity Report Cards on the Summary tabs.

Use auditing thresholds to display critical issues or warnings when a particular activity, such as privileged user events, is higher than expected. These thresholds can notify you about issues related to increased activity levels, such as a security breach, that may be occurring on this instance. Auditing thresholds can also inform you when an audited SQL Server instance is becoming non-compliant. Use thresholds to supplement the alert rules you have configured for your environment.



Available fields

Warning

Allows you to specify the number of events you expect to occur in a given event category for the selected time period. When the warning threshold is exceeded, this violation indicates an unusually high number of events. A warning threshold violation can lead to a non-compliant database or SQL Server instance.

Critical

Allows you to specify the maximum number of events that should occur in a given event category for the selected time period. When the critical threshold is exceeded, this violation indicates a serious issue, such as a security breach, which is compromising your ability to remain in compliance with your corporate and regulatory policies.

Period

Allows you to set an acceptable rate, or time span, for the warning and critical thresholds. For example, you may expect overall activity to be no more than 200 events per day on this instance.

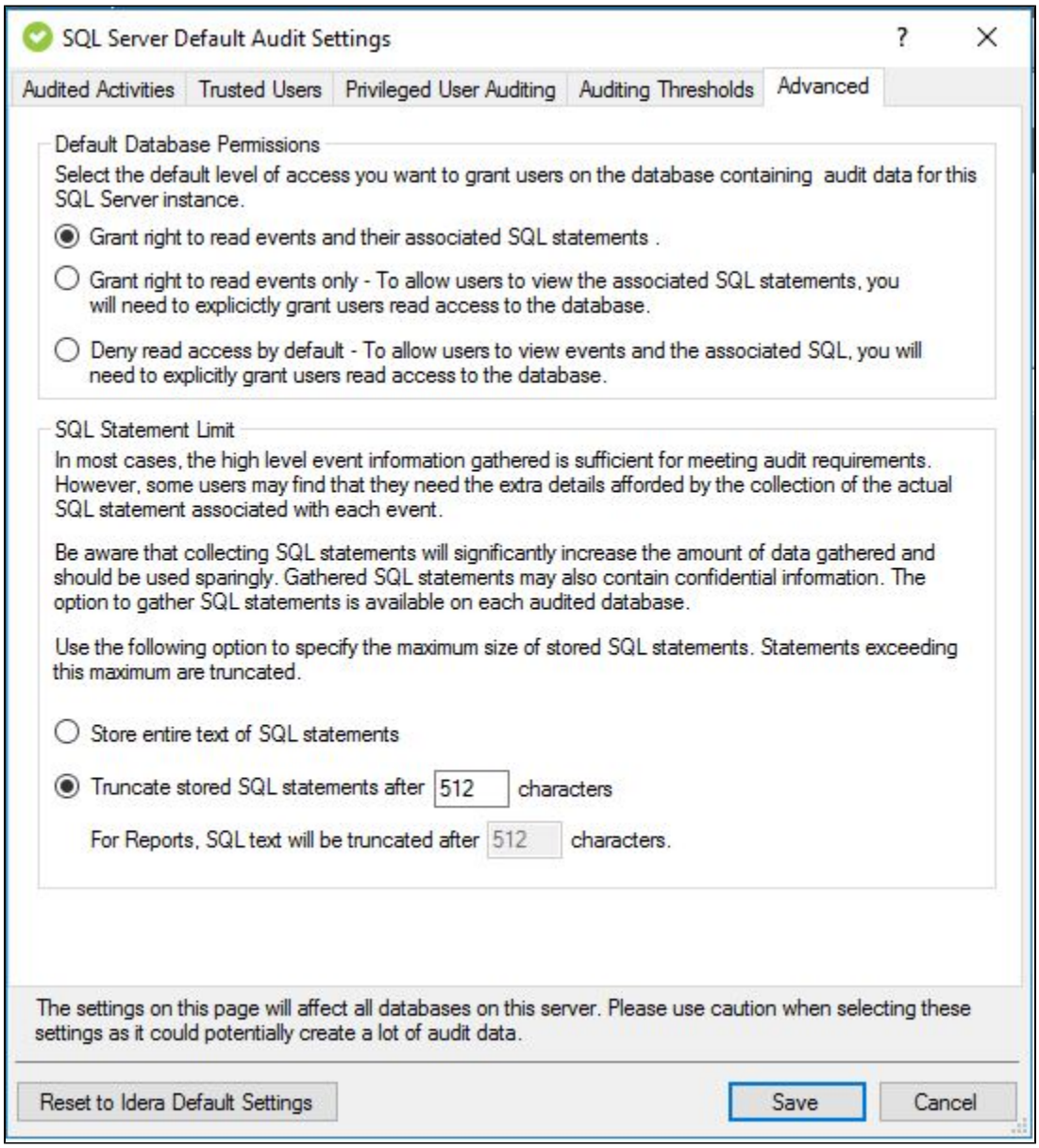
Enabled

Allows you to enable (select) or disable (clear) auditing thresholds for a particular event category.

Advanced tab

The Advanced tab of the SQL Server Default Audit Settings window allows you to configure the following settings:

- Control the default permission settings on the databases that contain audit data for this SQL Server instance.
- Indicate whether collected SQL statements should be truncated if they pass the specified character limit. This option is only available if you are auditing SQL statements executed at the server level on this instance.



Available fields

Default Database Permissions

Allows you to set the default permissions on the databases that contain audit data for this instance. Keep in mind that login permissions specified at the database are applied along with the default permissions you set here. You can select one of the following default permissions:

- Grant permission to view events and associated SQL statements
- Grant permission to view events only
- Deny permission to view events or SQL statements

SQL Statement Limit

Allows you to specify whether you want to truncate collected SQL statements associated with audited events. You can set the character limit for collected SQL statements. By default, this limit is 512 characters. The Collection Server truncates SQL statements that are longer than the specified character limit.