# **File Activity panel**

The File Activity panel displays the top five database files with the highest relative activity since the last refresh. Available metrics allow you to view the top Reads/sec, Writes/sec, and Transfers/sec activity for all files or a selected database, disk, or file. Unexpected spikes in the amount of file activity may warn you of ineffective or excessive indexing or out-of-date statistics. For additional information, see View file activity.

# I/O stall chart (ms/sec)

The I/O Stall ms/sec chart displays the total time per second (in milliseconds) that the SQL Server processes were waiting on an I/O to complete. Chronically high I/O stall metrics may indicate a disk bottleneck.

# Reads chart (per second)

The **Reads/sec** chart displays the number of physical reads per second the disk sub-system is performing to bring SQL Server database pages into the data (buffer) cache. If the reads rate is excessive for a long period of time, consider taking action to avoid performance issues.

# Reads KB chart (per second)

The **Reads KB/sec** chart displays the size of the physical reads per second the disk sub-system is performing to bring SQL Server database pages into the data (buffer) cache.

# **Total KB chart (per second)**

The Total KB/sec chart displays the total size of activity per second across all databases on the monitored instance.

# Writes chart (per second)

The **Writes/sec** chart displays the number of physical database writes per second the disk sub-system is performing. If the writes rate is excessive for a long period of time, consider taking action to avoid performance issues.

# Writes KB chart (per second)

The Writes KB/sec chart displays the size of the physical database writes per second the disk sub-system is performing.

# **Transfers chart (per second)**

The **Transfers/sec** chart displays the total number of transfers per second across all databases on the monitored instance. Transfers are the sum of reads and writes. A higher transfer rate indicates a higher risk of resource issues.

# When the File Activity panel displays no data

There are circumstances under which the File Activity panel does not display any data. For example, when you lose connection to the Collection Service or SQL Diagnostic Manager Repository. Another reason is the lack of collection data points. On new instances, file activity collection occurs once per hour by default. By increasing the length of time shown on the desktop client views, you may be able to see more data points. You can modify the timeframe of data displayed in SQL Diagnostic Manager by clicking **Tools > Console Options** while in the File Activity view and changing the **Keep data for the last** and **Show data for the last** values.

You also can change the database collection interval and grooming options to help you see more data points. Use the **Collect and alert on database metrics** field in the General tab of the Monitored SQL Server Properties window to manage your database collection. For grooming options, use the **Groom Sessions, Queries, Deadlocks, Waits, and History Browser data older than** field in the Grooming Options window.



Decreasing the collection interval and grooming your data less often can result in performance issues and require additional storage space in your Repository.

#### Activity for a new monitored SQL Server instance

The File Activity panel displays results based on activity since the last refresh. You must have two collections to create a point on the graph, three collections to create a line. By default, the database collection interval is set at one hour, which means that the File Activity panel does not show a point until an hour after adding the instance unless you perform a manual refresh. You can refresh and collect data by clicking the **Refresh** button in the SQL Diagnostic Manager Management Console menu bar.

#### **Activity when using the History Browser**

The History Browser allows you to view the state of your SQL Server instance at the time a snapshot occurs, which is every six minutes by default. When using the History Browser with the File Activity panel, note that data may appear in one snapshot but not in others because no file activity occurred during that interval. Remember that file activity data does not appear for the first two hours of monitoring a SQL Server instance because the metrics are based on the activity since the last database refresh.

SQL Diagnostic Manager identifies and resolves SQL Server performance problems before they happen. Learn more > >

