*This is a living document. Make it your own!*

Instance Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Triaged By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date and Time: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Can you connect ?

Connect to SQL Server and run:

SELECT name, user\_access\_desc, state\_desc, log\_reuse\_wait\_desc

FROM sys.databases;

Did you connect successfully? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Anything notable in returned columns? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Problems connecting?

Try the dedicated admin connection: <http://BrentOzar.com/go/DAC>

1. Who’s running?

Gather key pieces of information using Adam Machanic’s sp\_whoisactive:

EXEC dbo.sp\_whoisactive;

Did you run this successfully? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How many rows did it return? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Was blocking present? (blocking\_session\_id column)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

More info: <http://BrentOzar.com/go/active>

1. Identify root cause of blocking (if present)

If there’s blocking, save off the sql\_text from the root query of the blocking. Get a screenshot that records the runtime, host name, and other relevant information from sp\_whoisactive.

If you didn’t catch it in time, consider setting up alerts or the Blocked Process Report. More info at: <http://BrentOzar.com/go/lockthis>

1. What does sp\_BlitzFirst say?

Check activity over a short sample using sp\_BlitzFirst:

EXEC dbo.sp\_BlitzFirst @ExpertMode=1;

Did you run this successfully? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Did it find running queries? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Did it make a diagnosis? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

More info: <http://BrentOzar.com/AskBrent>

1. What’s SQL Server’s Error Log tell you?

SQL Server Management Studio: ‘Management’ ➔ ‘SQL Server Logs’.

Or query the log with this command:

EXEC xp\_readerrorlog @p1=0, @p2=1

Check all logs since at least the last startup and just prior.   
(Use @p1=2, @p1=3, etc to access prior logs.)

* Any recent errors/login failures?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* When was the last startup? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Was the last restart planned?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What’s the Windows Event Log got to say?

Are there events in the windows logs at the same time or just before the problem periods?

System log: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Application log: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Security log: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Remember, particularly in the system log, informational events may help explain errors you’re seeing. *Don’t filter and look at ONLY errors all the time!*

1. Capture SQL Server Activity to a Table

Run sp\_BlitzFirst in a loop to log activity to a table. This gathers data while you keep looking.

Activity is being captured to the table: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

EXEC sp\_BlitzFirst @OutputDatabaseName = 'DBATools', @OutputSchemaName = 'dbo', @OutputTableName = 'BlitzFirstResults'

More info: <http://BrentOzar.com/AskBrent>

(If you use this option, make sure to clean up old data from that table!)

1. Capture SQL Server Overall Waits

Find the top three SQL Server waits in sys.dm\_os\_wait\_stats by percent since the last restart using <http://BrentOzar.com/go/getWaits>

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Or find high waits captured by sp\_BlitzFirst within 15 minutes of a time (if you were running it in a loop):

EXEC sp\_ BlitzFirst @AsOf = '2013-10-15 18:45', @OutputDatabaseName = 'DBAtools', @OutputSchemaName = 'dbo', @OutputTableName = 'BlitzFirstResults'

1. Review Performance Counters

Look at performance counters (and, ideally, their history) to identify system performance patterns and problems.

Performance counters checked? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Notable counter info : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

More info: <http://BrentOzar.com/go/perfmon>

1. Make an assessment by major areas. Can you identify a bottleneck specific to one of these?

CPU: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Memory: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Network: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Disk: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Identify Recent changes

Have there been recent changes in these areas?

App Tier: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Stored procedures:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Schema changes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Index changes:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Major data changes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Infrastructure changes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Maintenance changes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

SQL config changes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Windows config changes: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

References:

Adam Machanic created sp\_whoisactive: <http://sqlblog.com/blogs/adam_machanic/default.aspx>

Latest version of this checklist: <https://www.BrentOzar.com/first-aid/>