Rebuild or create index slow

Last updated by | Vitor Tomaz | Feb 24, 2023 at 3:32 AM PST

Contents

- Issue
- Investigation/Analysis
- Mitigation

Issue

Customer complains that an Index rebuild or creation.

Investigation/Analysis

Run the query below and pay special attention to the wait type of the query (WAIT_TYPE column)

```
SET NOCOUNT ON ;
                        @@SERVERNAME Server,
            SELECT
                                   [SPID] = SESSION ID ,
                        percent_complete [%] ,
                        [DATABASE] = DB NAME(SP.DBID) ,
                        [STATUS] = ER.STATUS,
                        [WAIT] = WAIT TYPE,
                        wait resource,
                        reads,
                        writes,
                        logical_reads ,
                        command,
                        [INDIVIDUAL QUERY] = SUBSTRING(QT.TEXT,
                                                        ER.STATEMENT START OFFSET
                                                        / 2,
                                                        ( CASE WHEN ER.STATEMENT END OFFSET = -1
                                                               THEN LEN(CONVERT(NVARCHAR(MAX), QT.TEXT))
                                                               ELSE ER.STATEMENT END OFFSET
                                                          END
                                                          - ER.STATEMENT START OFFSET )
                                                        / 2),
                        [QUERY] = QT.TEXT,
                        PROGRAM = PROGRAM_NAME ,
                        [USER] = NT_USERNAME ,
                        HOSTNAME,
                        NT DOMAIN ,
                        START TIME
                        QP.query_plan AS xml_batch_query_plan
            FROM
                        sys.dm exec requests ER WITH (NOLOCK)
                        INNER JOIN sys.sysprocesses SP WITH (NOLOCK) ON ER.SESSION ID = SP.SPID
                        CROSS APPLY sys.dm_exec_sql_text(ER.SQL_HANDLE) AS QT
                        CROSS APPLY sys.dm exec query plan(ER.plan handle) QP
                        SESSION ID > 50
            WHERE
                        AND SESSION_ID NOT IN ( @@SPID )
                        and command like '%ALTER INDEX%' or command like '%CREATE INDEX%'
ORDER BY
                        2
```

Mitigation

The mitigation is largely dependent on the wait type that you are seeing. For example, if the ALTER or CREATE INDEX is being blocked by another transaction, you need to check the lead blocker. It could mean that the customer needs to wait for the lead blocker to finish or kill the transaction.

If you see IO waits, check this TSG.

Other options for minimizing the effects of Index creation / rebuild here.

How good have you found this content?

