

Common Scenarios: **Unable to lock row** - Record currently unavailable

Email-To-Case

During E2C processing, the email message and related objects (parent account, case) will be locked. Another concomitant process may be locked out of those same records.

Recommendations:

- Consider using asynchronous Apex to perform some updates
- Minimize parent record updates if possible
- Avoid workflow rule field updates

After Insert Apex Trigger

A record trigger will likely apply a lock to a parent record

Recommendations:

- Consider using asynchronous Apex to perform some updates
- Minimize parent record updates if possible
- Avoid workflow rule field updates

Bulk API

Bulk API will process batches in parallel and for that reason multiple record inserts and updates may occur at once.

Recommendations:

- Reduce batch size
- Use Serial mode instead of parallel to process 1 batch at a time
- Sort records by their parent id, to have records of the same parent in the same batch

Master-detail Relationship

If a master record has too many child records, the master will be locked more often.

Recommendations:

- Move some child records to another parent

Lookup Relationship

If a lookup record has too many child records and it is configured to prevent orphaned records, it will be locked more often.

Recommendations:

- Consider configuring the lookup field to clear its value if the lookup record is deleted

SOURCES: <https://help.salesforce.com/s/articleView?id=000387767&type=1>
https://d259t2jj6zp7qm.cloudfront.net/images/20210727114613/SF_Record-Locking-Cheatsheet_web-1.pdf