**Triggers and Order of Execution:**

When you save a record with an insert, update, or upsert statement, Salesforce performs the following events in order.

On the server, Salesforce:

1. Loads the original record from the database or initializes the record for an upsert statement.
2. Loads the new record field values from the request and overwrites the old values.

If the request came from a standard UI edit page, Salesforce runs system validation to check the record for:

* + Compliance with layout-specific rules
  + Required values at the layout level and field-definition level
  + Valid field formats
  + Maximum field length

When the request comes from other sources, such as an Apex application or a SOAP API call, Salesforce validates only the foreign keys.

1. Executes all before triggers.
2. Runs most system validation steps again, such as verifying that all required fields have a non-null value, and runs any user-defined validation rules. The only system validation that Salesforce doesn't run a second time (when the request comes from a standard UI edit page) is the enforcement of layout-specific rules.
3. Executes duplicate rules. If the duplicate rule identifies the record as a duplicate and uses the block action, the record is not saved and no further steps, such as after triggers and workflow rules, are taken.
4. Saves the record to the database, but doesn't commit yet.
5. Executes all after triggers.
6. Executes assignment rules.
7. Executes auto-response rules.
8. Executes workflow rules.
9. If there are workflow field updates, updates the record again.
10. If the record was updated with workflow field updates, fires before update triggers and after update triggers one more time (and only one more time), in addition to standard validations. Custom validation rules, duplicate rules, and escalation rules are not run again.
11. Executes processes.
12. Executes escalation rules.
13. Executes entitlement rules.
14. If the record contains a roll-up summary field or is part of a cross-object workflow, performs calculations and updates the roll-up summary field in the parent record. Parent record goes through save procedure.
15. If the parent record is updated, and a grandparent record contains a roll-up summary field or is part of a cross-object workflow, performs calculations and updates the roll-up summary field in the grandparent record. Grandparent record goes through save procedure.
16. Executes Criteria Based Sharing evaluation.
17. Commits all DML operations to the database.
18. Executes post-commit logic, such as sending email.

**Why email is not sent in salesforce?**

This should always be the first stop in analyzing any mail failures:  
1. Navigate to Setup and search on Email Log  
2. Run email logs and then download the log file.

3. Verify the email address is correct

Testing Deliverability

|  |
| --- |
| Available in: **All** Editions except **Database.com** |

| **User Permissions Needed** | |
| --- | --- |
| To test email deliverability: | “Modify All Data” |

Salesforce sends email from 52 different IP addresses. If your organization blocks any of these IP addresses, users might not receive all email sent from Salesforce.

To verify your organization can receive email from every Salesforce IP address:

1. Click ***Your Name*** | **Setup** | **Email Administration** | **Test Deliverability**.
2. Enter your business email address.
3. Click **Send**. Salesforce simultaneously sends a test message from all 52 IP addresses to your business email address. Each test message specifies the IP address from which it was sent.
4. Check your business email account to make sure it received all 52 test messages.

If you received less than 52 test messages, your organization's email administrator must whitelist the Salesforce IP ranges on your organization's email server. Whitelisting an IP address allows the email server to receive email from an IP address that might otherwise be blocked. The Salesforce IP ranges are:

* 96.43.144.64 to 96.43.144.65
* 96.43.148.64 to 96.43.148.65
* 182.50.78.64 to 182.50.78.79
* 204.14.232.64 to 204.14.232.79
* 204.14.234.64 to 204.14.234.79