



Salesforce Developer Limits Quick Reference

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SALESFORCE LIMITS QUICK REFERENCE GUIDE

This guide provides commonly referenced limits for Salesforce.

This guide might not cover all limits or might contain limits that don't apply to your Salesforce org. Stated limits aren't a promise that the specified resource is available at its limit in all circumstances. For example, load, performance and other system issues might prevent some limits from being reached. In addition, this guide doesn't include limits of:

- User interface elements in the Salesforce application
- Field lengths of Salesforce objects
- Desktop integration clients
- Your Salesforce contract

For limits related to Salesforce feature administration, see [Salesforce Limits](#).

Contractual limits may also apply, as per your Salesforce contract.

CHAPTER 1 Salesforce Application Limits

This chapter provides limits for Salesforce.

Salesforce Features and Editions Limits

The following are limits for Salesforce features by edition.

Salesforce Features and Editions Limits Table

This table summarizes the limits for some features in the Salesforce application by edition. Footnotes appear beneath this table. For features not included in this table, check the later sections in this guide for limit information.

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|------------------|-----------------|--|----------------------|--|-----------------------------------|-------------------|
| Action plans: maximum tasks | N/A | | | | 75 | | |
| Active lookup filters | 5 per object | | | | | | |
| Active validation rules per object | | 20 | | | 100 | 500 | 100 |
| Attachments: maximum size in the Notes & Attachments related list ¹ | N/A | | 25 MB for file attachments. 2 GB for feed attachments. | | | | |
| Categories: maximum default categories and hierarchy levels | N/A | | | | <ul style="list-style-type: none"> • 100 categories in a data category group • 5 levels in a data category group hierarchy | | |
| Category groups: maximum default | | | | | 5 category groups, with 3 groups active at a time | | |
| Certificates: maximum | | | | | 50 | | |
| Content deliveries: default delivery bandwidth per rolling 24-hour window | 20 GB | | | | | | |
| Content deliveries: default delivery view counts per rolling 24-hour window | 20,000 | | | | | | |

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|--|-----------------|---------------|--|--|-----------------------------------|-------------------|
| Content deliveries: maximum file size for online viewing | 25 MB | | | | | | |
| Content: maximum file size | <ul style="list-style-type: none"> • 2 GB • 2 GB (including headers) when uploaded via Chatter REST API • 2 GB (including headers) when uploaded via REST API • 38 MB when uploaded via SOAP API • 10 MB when uploaded via BULK API • 10 MB for Google Docs • 10 MB when uploaded via Visualforce | | | | | | |
| Content: maximum libraries | 2,000 | | | | | | |
| Content: maximum number of documents | 30,000,000 | | | | | | |
| Content: maximum number of documents and versions in a 24-hour period (adjustable) | 200,000 | | | | | | 2,500 |
| Content packs: maximum files | N/A | 50 | | | | | |
| Custom apps ² | N/A | 1 | | 255 To exceed this limit, contact Salesforce. | 260 To exceed this limit, contact Salesforce. | Unlimited | 10 |
| Custom big objects | 100 | | N/A | 100 | | | |
| Custom fields per object ³ | 5 | 25 | 100 | | 500 | 800 | 500 |
| Custom labels | N/A | | | 5,000 | | | |
| Custom links: maximum label length | 1,024 characters | | | | | | |
| Custom links: maximum URL length | 3,000 bytes ⁴ | | | | | | |
| Custom objects ⁵ | N/A | 5 | 50 | | 200 | 2,000 | 400 |

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|--|--|---------------|---|-----------------------------|-----------------------------------|-------------------|
| Custom objects: deletion of parent records in a many-to-many relationship | N/A | Available unless more than 200 junction object records are associated with the deleted parent record <i>and</i> the junction object has a roll-up summary field that rolls up to the other parent. | | | | | |
| Custom objects: maximum master-detail relationships | | 2 ⁶ | | | | | |
| Custom permissions | N/A | | | | 1,000 | | |
| Custom profiles: maximum | N/A | | | 2 | 1,500 per user license type | | |
| Custom settings: cached data limit | The lesser of 10 MB or 1 MB multiplied by the number of full-featured user licenses in your org (N/A in Contact Manager and Professional Editions) | | | | | | |
| Custom settings: maximum fields per setting | 5 | N/A | 100 | N/A | 300 | | |
| Divisions: maximum | N/A | | | 100 | | | N/A |
| Documents: maximum size of custom app logo | 20 KB | | | | | | |
| Documents: maximum size of document to upload | 5 MB | | | | | | |
| Documents: maximum size of file name (with extension) | 255 characters | | | | | | |
| Entitlement processes and milestones | N/A | | | You can create up to 1,000 entitlement processes total, with up to 10 milestones per process. If your org was created before Summer '13, its maximum entitlement processes can be lower. Contact Salesforce to increase it. | | | |
| External objects ⁷ | N/A | | | | 100 | | |
| Field history tracking: maximum standard or custom fields tracked for standard or custom objects | N/A | 20 | | | | | |
| File size: maximum in Chatter and on the Files tab | 2 GB | | | | | | |
| Fiscal years: maximum custom | 250 | | | | | | |
| Formulas: maximum displayed characters after an evaluation of a formula expression | 1,300 | | | | | | |

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|---------------------|-----------------|---------------|----------------------|--------------------|-----------------------------------|-------------------|
| Formulas: maximum length | 3,900 characters | | | | | | |
| Formulas: maximum size when compiled | 5,000 bytes | | | | | | |
| Formulas: maximum size when saved | 4,000 bytes | | | | | | |
| Formulas: unique relationships per object | 15 | | | | | | |
| Formulas: VLOOKUP functions per object | 10 | | | | | | |
| Ideas: maximum size of HTML idea comment | N/A | | | 4 KB | | | |
| Ideas: maximum size of HTML idea description | | | | 32 KB | | | |
| Lightning Apps | N/A | | | 10 | 25 | Unlimited | N/A |
| Lightning pages: maximum components in a region | 25 | | | | | | |
| Master-detail relationship: maximum child records | 10,000 ⁸ | | | | | | |
| Objects: maximum number of deleting combined objects and child records | 100,000 | | | | | | |
| Omni-Channel: maximum pending routing requests ⁹ | N/A | | | 30,000 | | | |
| Omni-Channel: maximum queued work items ¹⁰ | | | | 15,000 per hour | | | |
| Opportunity Teams: maximum members | N/A | | | | 30 | | |
| Permission sets: maximum (created) | N/A | 1 | | 10 | 1,000 | | |
| Permission sets: maximum (created and added as part of an installed managed AppExchange package) | N/A | | 1,500 | | | | |
| Question: maximum characters | N/A | | | | 1,000 | | N/A |

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|---|---|-----------------|---------------|---|--|--|-------------------|
| Question: maximum characters (with Chatter Answers Optimize Question Flow enabled) | | | | 32,000 | | | |
| Quote PDF: maximum logo height | N/A | | | 150 pixels | | | |
| Quote PDF: maximum logo size | | | | 5 MB | | | |
| Recycle Bin: maximum records | 25 times your MB storage capacity as records. For example, an org with a storage allocation of 2,000MB (2GB) can have 50,000 records in the Recycle Bin: 25 x 2,000 = 50,000 records. | | | | | | |
| Reply: maximum characters | N/A | | | 1,000 | | | N/A |
| Reply (private): maximum characters (with Chatter Answers Optimize Question Flow enabled) | | | | 4,000 | | | N/A |
| Reply (public): maximum characters (with Chatter Answers Optimize Question Flow enabled) | | | | 32,000 | | | N/A |
| Shared Activities | You can relate up to 50 contacts to nonrecurring tasks, nongroup tasks, and nonrecurring events. You can assign one primary contact. All others are secondary contacts. | | | | | | |
| Sharing rules | N/A | | | You can create up to 300 sharing rules per object, including up to 50 criteria-based rules. | | | |
| Static resources | A static resource can be up to 5 MB. An org can have up to 250 MB of static resources total. | | | | | | |
| Tabs ² | N/A | 3 | 5 | 1,210 To exceed this limit, contact Salesforce. | 1,225 To exceed this limit, contact Salesforce. | 1,225 To exceed this limit, contact Salesforce. | 100 |
| Tags | <p>A user is limited to a maximum of:</p> <ul style="list-style-type: none"> • 500 unique personal tags • 5,000 instances of personal tags applied to records | | | | | | |

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|--|-----------------|---------------|----------------------|--|-----------------------------------|-------------------|
| | Across all users, your org can have a maximum of: <ul style="list-style-type: none"> • 1,000 unique public tags • 50,000 instances of public tags applied to records • 5,000,000 instances of personal and public tags applied to records | | | | | | |
| Territories: maximum account assignment rules | N/A | | | | 15 | | |
| Users: maximum created | 1 | 5 | 10 | Unlimited | | 2 | |
| Users: maximum created (Chatter Free) | N/A | 5,000 | | | | | |
| Visual Workflow | N/A | | | | Each flow can have up to: <ul style="list-style-type: none"> • 50 versions • 2,000 steps Each org can have up to: <ul style="list-style-type: none"> • 500 active flows • 1,000 flows total • 30,000 waiting interviews at a given time • 1,000 events processed per hour • 20,000 defined relative alarm events across all flows and flow versions | | |
| Web-to-Case: maximum new cases generated in a 24-hour period | N/A | | | 5,000 ¹¹ | | | |
| Web-to-Lead: maximum new leads generated in a 24-hour period | | | | 500 ¹¹ | | | |

¹ You can add an attachment to the Attachments related list of a case, solution, campaign, task, or event, or to the Notes & Attachments related list of an account, contact, lead, opportunity, or custom object. If you don't see the related list on task or event page layouts, ask your admin to add it.

² The custom apps and custom tabs that are contained in a managed package that's publicly posted on the AppExchange don't count against the limits for your Salesforce edition.

³ Additional restrictions apply for activities, long text area fields, relationship fields, and roll-up summary fields.

⁴ When data is substituted for the tokens in the URL, the link can exceed 3,000 bytes. Some browsers enforce additional limits for the maximum URL length.

⁵The custom objects that are contained in a managed package that's publicly posted on the AppExchange don't count against the limits for your Salesforce edition. At the same time, an org can't have more than 2,000 custom objects, regardless of the source or namespace of those objects. Soft-deleted custom objects and their data count against your limits. We recommend that you hard delete or erase custom objects you no longer need.

⁶ Each relationship is included in the maximum custom fields allowed.

⁷ The limit of 100 external objects applies regardless of how many Salesforce Connect add-ons you purchase for your org. External objects don't count toward the limit for custom objects.

⁸ As a best practice, don't exceed 10,000 child records for a master-detail relationship.

⁹ Maximum objects that can be pending for Omni-Channel routing in an org. When an item is assigned to Omni-Channel-enabled queues, Omni attempts to route it to an available agent. If no agent is available, the work is pending routing. You may experience degraded performance in Omni-Channel Supervisor when queues surpass 10,000 pending routing requests.

¹⁰ Maximum records that can be queued per hour in an org, across all Omni-Channel-enabled queues. Each time an item is assigned to an Omni-Channel queue, the platform checks how many items were queued in the preceding hour. If the limit has been reached, the item isn't assigned to the queue.

¹¹ If your org exceeds its daily Web-to-Case or Web-to-Lead limit, the default case owner or default lead creator receives a notification email that contains information about the case or lead. When your org reaches the 24-hour limit, Salesforce stores additional requests in a pending request queue that contains Web-to-Case and Web-to-Lead requests. The requests are submitted when the limit refreshes. The pending request queue has a limit of 50,000 combined requests. If your org reaches the pending request limit, additional requests are rejected and not queued. Your admin receives email notifications for the first five rejected submissions. Contact Salesforce Customer Support to change your org's pending request limit.

Salesforce Reports and Dashboards Limits

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|------------------|-----------------|---------------|----------------------|--------------------|-----------------------------------|----------------------|
| Custom report types (Limits apply to all custom report types regardless of development status.) | N/A | | | 50 | 200 | 2,000 | 400 |
| Dashboard filters | | | | 3 per dashboard | | | |
| Dynamic dashboards per org | N/A | | | | Up to 5 | Up to 10 | Up to 3 |
| Field filters per report ¹ | 20 | | | | | | |
| Formulas per report | 5 | | | | | | |
| Reporting snapshots | N/A | | | 1 ^{2, 3, 4} | 1 ² | 2 ² | 1 ^{2, 3, 4} |
| Scheduled dashboard refreshes | N/A | | | | 1 ² | 2 ² | N/A |
| Scheduled reports per hour (Emailed reports can be up to 10 MB.) | N/A | | | 1 ^{2, 3, 5} | 1 ² | 2 ² | 1 ^{2, 3, 5} |

¹ These limits apply to the report builder. If you're using the report wizard, the limit is 10.

² Up to 200 total.

³ Off-peak hours (between 6 PM and 3 AM local time) only.

⁴ Limited to one preferred start time per day.

⁵ Limited to three preferred start times per day.

Campaign Limits

| Contact Source | Steps for Adding Contacts to Campaigns | Maximum Number of Records You Can Add |
|---|--|---------------------------------------|
| A report of existing contacts | Add Campaign Members from Standard and Custom Reports | 50,000 per report |
| A .csv file of existing contacts | Add Existing Contacts to a Campaign with the Data Import Wizard | 50,000 per import file |
| A .csv file of new contacts | Create Contacts and Add Them to a Campaign with the Data Import Wizard | 50,000 per import file |
| A list view of existing contacts | Add Multiple Members to a Campaign from a List View | 250 per list page |
| The Contacts related list on an Account | #campaigns_add_members_from_accounts | 200 per list page |

| Lead Source | Steps for Adding Leads to Campaigns | Maximum Number of Records You Can Add |
|-------------------------------|---|---------------------------------------|
| A report of existing leads | Add Campaign Members from Standard and Custom Reports | 50,000 per report |
| A .csv file of existing leads | Add Existing Leads to a Campaign with the Data Import Wizard | 50,000 per import file |
| A .csv file of new leads | Create Leads and Add Them to a Campaign with the Data Import Wizard | 50,000 per import file |
| A list view of existing leads | Add Multiple Members to a Campaign from a List View | 250 per list page |

Campaign Influence Time

The maximum campaign influence time frame is 9,999 days.

Campaign Hierarchy

Hierarchies contain up to five levels. Each campaign can have one parent campaign, but an unlimited number of sibling campaigns.

Chatter Limits

| Feature | Limit |
|---|--|
| Groups | |
| Groups a user can join | 300 ¹ |
| Groups in your org | 30,000 ¹ |
| Members in a group | Unlimited |
| Characters in the Information field in a group | 4,000 |
| Max size of email when posting to a group by email (including text and attachments) | 25 MB |
| Attachments you can include in a post to a group by email | 25 |
| Feeds | |
| Mentions in a single post or comment | 25 |
| Characters in a mention search string | 500 for a person's first and last name (combined), or for a group name |
| Characters in single post or comment | 10,000 |
| Email notifications sent after you like or comment on a post | 10 |
| Bookmarks | Unlimited |
| Favorites | 50 |
| People, topics, and records you can follow | 500 ² |
| Maximum posts you can see in your feed at any given time | The 500 most recent posts. This limit doesn't apply to profile, group, and record feeds. |
| Files | |
| File attachment size | 2 GB |
| Times a file can be shared | 100 |
| People and Profiles | |
| Profile photo size | 8 MB |
| People you can add to a chat | 10 |
| People you can add to Chat My Favorites | 100 |
| Characters in a Chatter message | 10,000 |
| Skills | |
| Skills assigned to a user | 100 |
| Characters in a skill name | 99 |

| Feature | Limit |
|----------------------------|-------|
| Topics | |
| Topics on a single post | 10 |
| Topics on a single record | 100 |
| Characters in a topic name | 99 |

¹All groups count toward this limit, except archived groups. For example, if you're a member of 300 groups, of which 10 are archived, you can join 10 more groups.

²You can follow a maximum combined total of 500 people, topics, and records. To see how many items you're following, view the Following list on your profile.

| Chatter Plus Feature | Limit |
|--|-----------|
| Chatter Plus licenses in your org | Unlimited |
| Data storage per Chatter Plus user | 20 MB |
| File storage per Chatter Plus user (Professional Edition) | 612 MB |
| File storage per Chatter Plus user (Enterprise, Performance, and Unlimited Editions) | 2 GB |

Posts and comments that users make in Chatter are retained during the entire time that a customer's applicable org remains provisioned. We reserve the right to enforce limits on:

- The number of system-generated tracked feed updates. Currently tracked feed updates that are older than 45 days and have no likes or comments are deleted automatically. The tracked feed updates no longer appear in the feed. However, if auditing is enabled for a tracked field, the audit history for that field is still available.
- The number of email notifications that can be sent per org per hour.

The limits are subject to change. Contact Salesforce for more information.

Search Limits for Salesforce Files

Search supports several file types and has file size limits. If a file exceeds the maximum size, the text within the file isn't searched, but the file's name, description, type, and owner are. This table lists the maximum file size for text within the file to be searchable.

| File Type | File Extensions | Maximum File Size for Search |
|-----------|---|------------------------------|
| HTML | .htm, .html, .xhtml | 5 MB |
| PDF | .pdf | 25 MB |
| PPT | .ppt, .pptx, .pptm | 25 MB |
| RTF | .rtf | 5 MB |
| Text | .c, .cpp, .css, .csv, .ini, .java, .log, .sql, .txt | 5 MB |

| File Type | File Extensions | Maximum File Size for Search |
|-----------|--------------------|------------------------------|
| Word | .doc, .docx, .docm | 25 MB |
| XLS | .xls, .xlsx, .xlsm | 5 MB |
| XML | .xml | 5 MB |

Custom Field Limits

The number of custom fields allowed per object varies according to your Salesforce Edition. The maximum number of activities, long text area fields, rich text area fields, relationship fields, and roll-up summary fields varies as well.

| Field Type | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Developer Edition | Unlimited and Performance Edition |
|-----------------|---|-----------------|---------------|----------------------|--------------------|-------------------|-----------------------------------|
| Activities | No additional limit | | | 20 | 100 | | |
| Long text area | An object can contain unlimited rich text area and long text area fields, although your edition's limit for total custom fields allowed on an object, regardless of field type, applies. Each object can contain 1,600,000 characters across long text area and rich text area fields. When you create a long text area or rich text area field, you set a character limit for the field—the maximum length of the text that can be entered. The default character limit for long text area and rich text area fields is 32,768 (32 KB). The maximum character limit for long text area and rich text area fields is 131,072 (128 KB). The minimum character limit is 256. The maximum size of an image that can be uploaded in a rich text area field is 1 MB. | | | | | | |
| Rich text area | | | | | | | |
| Relationship | No additional limit | 40 | | | | | |
| Roll-up summary | | 25 | | | | | |

Email Limits

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|---------------------------------|--|---------------|--|--------------------|-----------------------------------|-------------------|
| Email templates: maximum size | 384 KB for text email templates | <ul style="list-style-type: none"> 384 KB for text, HTML, and custom HTML templates 1 MB for Visualforce templates | | | | | |
| Email services: maximum email messages processed by Salesforce per day | N/A | | | Number of user licenses multiplied by 1,000; maximum 1,000,000 | | | |
| Email services: maximum size of email message (email) | N/A | | | 25 MB ¹ | | | |

| Feature | Personal Edition | Contact Manager | Group Edition | Professional Edition | Enterprise Edition | Unlimited and Performance Edition | Developer Edition |
|--|------------------|-----------------|---------------|----------------------|--------------------|--|-------------------|
| headers, body, attachments, and encoding) | | | | | | | |
| Extended mail merge: maximum records | 1,000 | | | | | | |
| Extended mail merge: maximum total size of selected templates | 1 MB | | | | | | |
| Inbound email sent to Salesforce | | | | | | <ul style="list-style-type: none"> Email body truncation size: 32 KB Maximum email activities created for each email received: 50 Total maximum size of file attachments: 25 MB¹ | |
| Merge field: <code>Case.Email_Thread</code> | N/A | | | | | <ul style="list-style-type: none"> Maximum emails: 200 Email body truncation size: 32 KB | |
| On-Demand Email-to-Case: maximum email messages processed by Salesforce per day (counts toward limit for email services) | N/A | | | | | Number of user licenses multiplied by 1,000; maximum 1,000,000 | |
| On-Demand Email-to-Case: maximum email size (email headers, body, attachments, and encoding) | | | | | | 25 MB ¹ | |

¹ The maximum size of email messages for email services varies depending on language and character set. The size of an email message includes the email headers, body, attachments, and encoding. As a result, an email with a 25 MB attachment likely exceeds the 25 MB size limit for an email message after accounting for the headers, body, and encoding.

For more information on outbound email limits, see [Email Limits](#).

Salesforce Knowledge Limits

| Salesforce Knowledge Limits | Details for Classic Knowledge | Details for Lightning Knowledge |
|---------------------------------|-------------------------------|---------------------------------|
| Maximum number of articles | 50,000 articles | 50,000 articles |
| Maximum number of article types | 100 article types | N/A |

| Salesforce Knowledge Limits | Details for Classic Knowledge | Details for Lightning Knowledge |
|---|--|---|
| Maximum number of custom fields per article type | Enterprise, Developer, and Unlimited editions: 500 custom fields per article type Performance editions: 800 custom fields per article type | N/A |
| Maximum file fields | 5 file fields | N/A |
| Maximum file size | File fields are counted as attachments and can be up to 25 MB. | Files can be up to 2 GB. |
| Maximum rich text area size | 131072 characters | 131072 characters |
| Maximum size of all rich text area fields on an article | 1638400 characters | 1638400 characters |
| Maximum unique article references (links) in a rich text area field | You can have up to 100 links to different Salesforce Knowledge articles in one rich text field. | You can have up to 100 links to different Salesforce Knowledge articles in one rich text field. |
| Article history tracking | Article events are tracked for up to 18 months. | Article events are tracked up to 18 months. |
| Maximum number of supported languages | 16 supported languages | 16 supported languages |
| Article import | <p>The import .zip file must meet the following requirements:</p> <ul style="list-style-type: none"> • There can only be one .csv file and one .properties file. • The .csv file and the .properties file must be in the root directory. • The compression process must preserve the folder and subfolder structure. • The .zip file name can't contain special characters. • The .zip file can't exceed 20 MB and the individual, uncompressed, files within the zip file can't exceed 10 MB. • .csv files can't have more than 10,000 rows, including the header row. Therefore, you can have a maximum of 9,999 articles and translations. • .csv file rows can't exceed 400,000 characters. • .csv file cells can't exceed 32 KB. • Each article in the .csv file can't have more than 49 translations. | <p>The import .zip file must meet the following requirements:</p> <ul style="list-style-type: none"> • There can only be one .csv file and one .properties file. • The .csv file and the .properties file must be in the root directory. • The compression process must preserve the folder and subfolder structure. • The .zip file name can't contain special characters. • The zip file can't exceed 20 MB and the individual, uncompressed, files within the zip file can't exceed 10 MB. • .csv files can't have more than 10,000 rows, including the header row. Therefore, you can have a maximum of 9,999 articles and translations • .csv file rows can't exceed 400,000 characters • .csv file cells can't exceed 32 KB. • Each article in the .csv file can't have more than 49 translations. |

| Salesforce Knowledge Limits | Details for Classic Knowledge | Details for Lightning Knowledge |
|--|--|--|
| Maximum number of data category groups and active data category groups | 5 category groups, with 3 groups active at a time | 5 category groups, with 3 groups active at a time |
| Maximum number of categories per data category group | 100 categories in a data category group | 100 categories in a data category group |
| Maximum number of levels in data category group hierarchy | 5 levels in a data category group hierarchy | 5 levels in a data category group hierarchy |
| Maximum number of data categories from a data category group assigned to an article | 8 data categories from a data category group assigned to an article | 8 data categories from a data category group assigned to an article |
| Maximum number of promoted search terms | Your organization can create a maximum of 2,000 promoted terms. | N/A |
| Maximum number of characters for Knowledge article searches | 100 characters If a user searches for more than 100 characters, results are returned, but the results only consider the first 100 characters. | 100 characters If a user searches for more than 100 characters, results are returned, but the results only consider the first 100 characters. |
| Maximum number of characters from a supported object record used to suggest Knowledge articles | 255 characters Admins choose which fields are used to suggest articles. | 255 characters Admins choose which fields are used to suggest articles. |

Picklist Limits

The maximum number of characters you can have in a picklist depends on the type of picklist. Each value in a picklist includes a line break and a return character that aren't visible. These two additional characters per value are counted as part of the character limit for each value.

Additional Limits for Standard Picklists

For standard picklists, each value can have up to 255 characters, not including line breaks and returns. This applies to single-select and multi-select picklists.

| Picklist Field | Maximum Number of Values |
|-----------------------|---------------------------------|
| Lead Status | 100 |
| Task Status | 100 |
| Task Priority | 50 |
| Case Status | 100 |
| Case Priority | 50 |
| Opportunity Stage | 100 |

Limits for Custom Picklists

Custom single-select picklists can have:

- Up to 1,000 values
- Up to 255 characters per value

Custom multi-select picklists can have:

- Up to 500 values
- Up to 255 characters per value

Users can select up to 100 values at a time on a record.

You can have up to 500 picklist global value sets in an org. Each global value set, or restricted picklist, can contain a mix of 1,000 active and inactive values. Unrestricted picklists can have up to 1,000 active values. There's no limit on the number of custom picklists that use global picklist value sets.

Sites Limits

| Edition | Maximum Number of Sites | Bandwidth Limit (per rolling 24-hour period per site) | Service Request Time (per rolling 24-hour period per site) | Maximum Page Views |
|---------------------|--------------------------------|--|---|---------------------------|
| Developer Edition | 1 | 500 MB | 10 minutes | N/A |
| Enterprise Edition | 25 | 1 GB for sandbox 40 GB for production | 30 minutes for sandbox 60 hours for production | 500,000 |
| Unlimited Edition | 25 | 1 GB for sandbox | 30 minutes for sandbox | 1,000,000 |
| Performance Edition | | 40 GB for production | 60 hours for production | |

Process Automation Limits

[Process Limits](#)

When building processes, keep shared limits and Apex governor limits in mind. In addition, a process's API name must be unique across all processes and flows in your org.

[Limits for Visual Workflow](#)

When using Visual Workflow, keep flow limits and Apex governor limits in mind.

[Workflow Limits](#)

[Daily Limits for Email Alerts](#)

The daily limit for emails sent through email alerts is 1,000 per standard Salesforce license per org—except for free Developer Edition and trial orgs, where the daily workflow email limit is 15. The overall org limit is 2,000,000. This limit applies to emails sent through email alerts in workflow rules, approval processes, flows, processes, or the REST API.

[Approval Process Limits](#)

Process Limits

When building processes, keep shared limits and Apex governor limits in mind. In addition, a process's API name must be unique across all processes and flows in your org.

Limits Shared with Other Features

Processes share some limits with rules and flows.

| Description | Per-Org Limit |
|---|---------------|
| Total number of active rules and active processes per object Rules include workflow rules, escalation rules, assignment rules, and auto-assignment rules. Invocable processes don't count toward this limit. | 50 |
| Total number of flows and processes (including event processes) | 1,000 |
| Total number of active flows and processes (including event processes) | 500 |
| Total number of event processes | 500 |
| Total number of active event processes | 50 |
| Total number of criteria nodes that are evaluated and actions that are executed at runtime | 2,000 |
| Total number of flow interviews that are resumed or groups of scheduled actions that are executed per hour | 1,000 |
| Total number of flow interviews or groups of scheduled actions that are waiting to be processed | 30,000 |
| Total number of relative time alarms defined in flow versions or schedules based on a field value in processes | 20,000 |

EDITIONS

Available in: both Salesforce Classic and Lightning Experience

Available in: **Professional, Enterprise, Performance, Unlimited, and Developer** Editions

The daily limit for emails sent from email alerts is 1,000 per standard Salesforce license per org, except for Developer Edition orgs. For a Developer Edition org, the daily workflow email limit is 15 per standard Salesforce license. The overall org limit is 2,000,000, which is shared across all features that use workflow email alerts: workflow rules, approval processes, flows, and processes.

Apex Governors and Limits for Processes

Salesforce strictly enforces limits to ensure that runaway processes don't monopolize shared resources in the multitenant environment. Processes are governed by the per-transaction limits that are enforced by Apex. If the process causes the transaction to exceed governor limits, the system rolls back the entire transaction. For details about the operations that are included in the transaction, see "Triggers and Order of Execution" in the *Apex Developer Guide*.

| Description | Per-Transaction Limit |
|---|-----------------------|
| Total number of SOQL queries issued | 100 |
| Total number of records retrieved by SOQL queries | 50,000 |
| Total number of DML statements issued | 150 |

| Description | Per-Transaction Limit |
|---|-----------------------|
| Total number of records processed as a result of DML statements | 10,000 |

Each Create a Record action uses one DML statement. Each Quick Action action uses one DML statement. Each Update Records action uses one SOQL query and one DML statement. Each Flows action can use multiple SOQL queries and DML statements, depending on the elements that the flow executes. For details, see [Limits for Visual Workflow](#) on page 18.

Limits for Creating and Managing Processes

Consider these limits when creating and managing processes.

| Description | Limit |
|--|-------|
| Total number of characters in a process name | 255 |
| Total number of characters in a process's API name | 77 |
| Total number of versions of a process | 50 |
| Total number of criteria nodes in a process | 200 |

Limits for Visual Workflow

When using Visual Workflow, keep flow limits and Apex governor limits in mind.

| | |
|--|--------|
| Maximum number of versions per flow | 50 |
| Maximum number of executed elements at run time | 2,000 |
| Maximum number of active flows and processes per org | 500 |
| Maximum number of flows and processes per org | 1,000 |
| Maximum number of flow interviews or groups of scheduled actions (from processes) that are waiting at one time | 30,000 |
| Maximum number of flow interviews that are resumed or groups of scheduled actions that are executed per hour | 1,000 |
| Maximum number of relative time alarms defined in flow versions or schedules based on a field value in processes | 20,000 |

EDITIONS

Available in: both Salesforce Classic and Lightning Experience

Available in: **Enterprise, Performance, Unlimited,** and **Developer** Editions

Workflow Limits

| Description | Per-Organization Limit |
|---|------------------------|
| Total workflow rules across objects | 2,000 |
| (This limit applies to any combination of workflow, assignment, auto-response, and escalation rules, both active and inactive.) | |

| Description | Per-Organization Limit |
|--|---|
| Total workflow rules per object (This limit applies to any combination of workflow, assignment, auto-response, and escalation rules, both active and inactive.) | 500 |
| Total active workflow rules per object (This limit applies to any combination of active processes and workflow, assignment, auto-response, and escalation rules.) | 50 |
| Total time triggers per workflow rule ¹ | 10 |
| Total immediate actions per workflow rule ¹ | 40 |
| Total time-dependent actions per time trigger | 40 |
| Workflow emails per day | 1,000 per standard Salesforce license (15 in Developer Edition); 2,000,000 per org |
| Workflow time triggers per hour | 1,000 |
| Flow trigger workflow actions: flow variable assignments ² | 25 (N/A in Professional Edition) |

¹The immediate actions and each time trigger can have:

- 10 email alerts
- 10 tasks
- 10 field updates
- 10 outbound messages
- 10 flow triggers²

²The pilot program for flow trigger workflow actions is closed. If you've already enabled the pilot in your org, you can continue to create and edit flow trigger workflow actions. If you didn't enable the pilot in your org, use the [Flows action](#) in Process Builder instead.

Daily Limits for Email Alerts

The daily limit for emails sent through email alerts is 1,000 per standard Salesforce license per org—except for free Developer Edition and trial orgs, where the daily workflow email limit is 15. The overall org limit is 2,000,000. This limit applies to emails sent through email alerts in workflow rules, approval processes, flows, processes, or the REST API.

After your org has reached its daily workflow email limit:

- Any emails in the workflow queue left over and not sent that day are discarded. Salesforce doesn't try to resend them later.
- If a workflow rule with an action and an email alert is triggered, only the email action is blocked.
- Final approval, final rejection, approval, rejection, and recall email actions are blocked.
- An error message is added to the debug log.

The following items don't count against the workflow email limit:

- Approval notification emails
- Task assignment notifications
- Lead assignment rules notifications

- Case assignment rules notifications
- Case escalation rules notifications
- Force.com sites usage alerts

The limit restriction is based on activity in the 24-hour period starting and ending at midnight GMT. Adding or removing a user license immediately adjusts the limit's total. If you send an email alert to a group, every recipient in that group counts against your daily workflow email limit.

When workflow email alerts approach or exceed certain limits, Salesforce sends a warning email to the default workflow user or—if the default workflow user isn't set—to an active system administrator.

| When... | Salesforce Sends... | Warning Email Includes... |
|---|---|---|
| An email alert isn't sent because the number of recipients exceeds the limit for a single email | A warning email for each unsent email alert | The unsent email alert's content and recipients |
| The organization reaches 90% of the limit of emails per day | One warning email | The limit and the organization's usage |
| The organization reaches 90% of the limit of workflow emails per day | One warning email | The limit and the organization's usage |
| An email alert isn't sent because the organization reaches the limit of emails per day | A warning email after every 100 attempted email alerts over the limit | The limit and the organization's usage |
| An email alert isn't sent because the organization reaches the limit of workflow emails per day | A warning email after every 100 attempted email alerts over the limit | The limit and the organization's usage |

Approval Process Limits

| Limit | Details |
|--|--|
| Total approval processes per org | 1,000 |
| Total approval processes per object | 300 |
| Total steps per approval process | 30 |
| Total approvers per step | 25 |
| Total initial submission actions per approval process ² | 40 |
| Total final approval actions per approval process ² | 40 |
| Total final rejection actions per approval process ² | 40 |
| Total recall actions per approval process ² | 40 |
| Maximum characters in approval request comments | 4,000 In Chinese, Japanese, or Korean, the limit is 1,333 characters. |

Data Related Limits

The following limits are related to data stored in Salesforce.

Dates: Valid Range for Date Fields

Only dates within a certain range are valid. The earliest valid date is 1700-01-01T00:00:00Z GMT, or just after midnight on January 1, 1700. The latest valid date is 4000-12-31T00:00:00Z GMT, or just after midnight on December 31, 4000. These values are offset by your time zone. For example, in the Pacific time zone, the earliest valid date is 1699-12-31T16:00:00, or 4:00 PM on December 31, 1699.

Import Limits

| Type of record | Import record limit | User permissions needed |
|---|---|--|
| Business accounts and contacts owned by you | 50,000 at a time via the Data Import Wizard | Import Personal Contacts |
| Business accounts and contacts owned by other users | 50,000 at a time | Modify All Data |
| Person accounts owned by you | 50,000 at a time | Create on accounts AND Edit on accounts AND Import Personal Contacts |
| Person accounts owned by other users | 50,000 at a time | Create on accounts AND Edit on accounts and contacts AND Modify All Data |
| Leads | 50,000 at a time | Import Leads |
| Campaign members | 50,000 at a time | Depends on what's being imported: <ul style="list-style-type: none"> • Campaign member statuses • Existing contacts • Existing leads • Existing person accounts • New contacts • New leads |
| Custom object | 50,000 at a time | Import Custom Objects AND |

| Type of record | Import record limit | User permissions needed |
|----------------|--|---|
| | | Create on the custom object AND Edit on the custom object |
| Solutions | 50,000 at a time | Import Solutions |
| Assets | You can't import these records via the Data Import Wizard. | |
| Cases | | |
| Campaigns | | |
| Contracts | | |
| Documents | | |
| Opportunities | | |
| Products | | |

 **Note:**

- Your import file can be up to 100 MB, but each record in your file can't exceed 400 KB, which is about 4,000 characters. To determine how many fields you can import, use this formula: $4,000 / (\text{average number of characters in an API field name} * 2)$. For example, if your average field character length is 40, you can import approximately 50 fields.
- You can import up to 90 fields per record.
- Each imported note and each imported description can't exceed 32 KB. Text longer than 32 KB is truncated.
- Other Bulk API limits apply. If you have missing records or truncated fields due to limits, see [Bulk API Limits](#) in the Bulk API Developer Guide.

Assets, cases, campaigns, contracts, documents, opportunities, and products can't be imported via import wizards.

External Data Integration Limits

Some limits apply to Salesforce Connect external objects and external data sources.

Salesforce Connect—All Adapters

The assigned user license determines the maximum number of custom objects that each user can access. You can also grant object permissions up to that same number of external objects. External objects don't count toward the limit for custom objects.

| | |
|--|------------------|
| Maximum external objects per org ¹ | 100 |
| Maximum joins per query across external objects and other types of objects | 4 |
| Maximum length of the OAuth token that's issued by the external system | 4,000 characters |
| Maximum new rows retrieved by SOSL and Salesforce searches per hour. This limit doesn't apply to high-data-volume external data sources. | 100,000 |

| | |
|---|--------|
| Maximum new rows retrieved or created per hour. This limit doesn't apply to: | 50,000 |
| <ul style="list-style-type: none"> • High-data-volume external data sources • Rows that are retrieved only as search results and aren't opened or edited • Other rows that have already been retrieved | |

¹ The limit of 100 external objects applies regardless of how many Salesforce Connect add-ons you purchase for your org. External objects don't count toward the limit for custom objects.

Salesforce Connect—OData 2.0 Adapter

An org is limited to:

- 10,000 OData callouts per hour for Enterprise, Performance, and Unlimited Editions. Higher limits are available on request.
- 1,000 OData callouts per hour for Developer Edition.

| | |
|---|------------|
| Maximum HTTP request size for OData | 8 MB |
| Maximum HTTP response size for OData | 8 MB |
| Maximum result set size for an OData query | 16 MB |
| Maximum result set size for an OData subquery | 1,000 rows |

Salesforce Connect—Custom Adapter

Apex data type limitations:

- Double—The value loses precision beyond 18 significant digits. For higher precision, use decimals instead of doubles.
- String—If the length is greater than 255 characters, the string is mapped to a long text area field in Salesforce.

Rules Limits

The following table shows the restrictions for rules.

| Restrictions | Details |
|--|---|
| Active rules per object (Limits apply to any combination of <i>active</i> workflow, assignment, auto-response, and escalation rules.) | 50 |
| Assignment, auto-response, and escalation rules | Each can have: <ul style="list-style-type: none"> • 3,000 rule entries • 300 formula criteria rule entries • 25 filter criteria per rule entry |
| Total actions allowed per rule | 200 |

Restrictions**Details**


Total rules allowed

(Limits apply to any combination of workflow, assignment, auto-response, and escalation rules, *active* and *inactive*.) 500 per object; 2,000 per org

Search Limits

The following file extensions and maximum file sizes are supported for Documents search.

| File Type | File Extensions | Maximum Size |
|--|---|--|
| HTML (only the text within a <body> tag) | .htm, .html, .xhtml | 5 MB |
| PDF | .pdf | 25 MB |
| PPT | .pot, .pps, .ppt | 25 MB |
| RTF | .rtf | 5 MB |
| Text | .c, .cpp, .css, .csv, .ini, .java, .log, .sql, .txt | 5 MB |
| Word | .doc, .dot | 25 MB |
| XLS | .xls, .xlt | 5 MB, or a maximum cell limit of 100,000 cells |
| XML | .xml | 5 MB |

 **Note:** The contents of documents that exceed the maximum sizes are not searched; however, the document fields are still searched. Only the first 1,000,000 characters of text are searched. Text beyond this limit is not included in the search.

Storage Capacity Limits

Storage Capacity

Storage is divided into two categories. File storage includes files in attachments, Files home, Salesforce CRM Content, Chatter files (including user photos), the Documents tab, the custom File field on Knowledge articles, and Site.com assets. Data storage includes the following:

- Accounts
- Article types (format: “[Article Type Name]”)
- Article type translations (format: “[Article Type Name] Version”)
- Campaigns
- Campaign Members
- Cases
- Case Teams

- Contacts
- Contracts
- Custom objects
- Email messages
- Events
- Forecast items
- Google docs
- Ideas
- Leads
- Notes
- Opportunities
- Opportunity Splits
- Orders
- Quotes
- Quote Template Rich Text Data
- Solutions
- Tags: Unique tags
- Tasks

Data Storage

For data storage, Contact Manager, Group, Professional, Enterprise, Performance, and Unlimited Editions are allocated the greater of 1 GB or a per-user limit. For example, a Professional Edition org with 10 users receives 1 GB, because 10 users multiplied by 20 MB per user is 200 MB, which is less than the 1 GB minimum. A Professional Edition org with 100 users receives more than the 1 GB minimum, because 100 users multiplied by 20 MB per user is 2,000 MB.

File Storage

Contact Manager, Group, Professional, Enterprise, Performance, and Unlimited Editions are allocated 10 GB of file storage per org.

Orgs are allocated additional file storage based on the number of standard user licenses. In Enterprise, Performance, and Unlimited Editions, orgs are allocated 2 GB of file storage per user license. Contact Manager, Group, Professional Edition orgs are allocated 612 MB per standard user license, which includes 100 MB per user license plus 512 MB per license for the Salesforce CRM Content feature license. An org with fewer than 10 users will receive a total of 1 GB of per-user file storage rather than 100 MB per user license.


 **Note:** Each Salesforce CRM Content feature license provides an additional 512 MB of file storage, whether Salesforce CRM Content is enabled or not.

File storage and data storage are calculated asynchronously, so if you import or add a large number of records or files, the change in your org's storage usage isn't reflected immediately.

The minimum values in the table below apply to Salesforce and Salesforce Platform user licenses. If your org uses custom user licenses, contact Salesforce to determine your exact storage amount. For a description of user licenses, see [User Licenses](#).

Big Object Storage

Contact Manager, Group, Enterprise, Performance, Unlimited, Developer, and Personal editions are allocated storage for 1 million big object records per org. Contact Salesforce to increase the limit. Big object storage is calculated asynchronously, so new records aren't immediately reflected. While big object record limits are not actively monitored, Salesforce reserves the right to enforce the limit if necessary.

 **Note:** In most cases, the allocation is enforced and records can't be added once the allocation is exceeded. For active production orgs, the allocation of big object records is enforced contractually.

| Salesforce Edition | Data Storage Minimum per Org | Data Storage Allocation per User License | File Storage Allocation per Org | File Storage Allocation per User License |
|--------------------|--------------------------------------|--|---------------------------------|--|
| Contact Manager | | | | |
| Group | | 20 MB | | 612 MB |
| Professional | 1 GB | | 10 GB | |
| Enterprise | | | | |
| Performance | | 120 MB | | 2 GB |
| Unlimited | | | | |
| Developer | 5 MB | | | |
| Personal | 20 MB (approximately 10,000 records) | N/A | 20 MB | N/A |

File-Related Limits

The following limits are related to files stored in Salesforce.

File Size Limits

| Feature | Details |
|--------------------------|--|
| Attachments related list | <ul style="list-style-type: none"> • 25 MB for file attachments • 2 GB for feed attachments |
| Documents tab | <ul style="list-style-type: none"> • 5 MB • 20 KB for a custom-app logo |
| Salesforce CRM Content | <ul style="list-style-type: none"> • 2 GB • 2 GB (including headers) when uploaded via Chatter REST API • 2 GB (including headers) when uploaded via REST API • 38 MB when uploaded via SOAP API • 10 MB when uploaded via BULK API • 10 MB for Google Docs • 10 MB when uploaded via Visualforce |
| Salesforce files | 2 GB |

| Feature | Details |
|----------------------|----------------------|
| Salesforce Knowledge | 5 MB for attachments |

File Share Limits

The maximum number of times a file can be shared is 100. This includes files shared with people, groups, and via links. If a file is privately shared and nears the 100 share maximum, consider making the file public by posting it to your feed.

Sandbox Limits

- You can refresh a full sandbox 29 days after you created or last refreshed it. If you delete a full sandbox within those 29 days, you need to wait until after the 29 day period, from the date of last refresh or creation, to replace it.
- You can refresh a Partial Copy sandbox 5 days after you created or last refreshed it. If you delete a Partial Copy sandbox within those 5 days, you need to wait until after the 5 day period, from the date of last refresh or creation, to replace it.
- You can refresh a Developer or Developer Pro sandbox once per day.
- Enterprise Edition includes licenses for 25 Developer sandboxes and 1 Partial Copy sandbox.
- Performance Edition includes licenses for 1 full sandbox, 5 Developer Pro sandboxes, 100 Developer sandbox, and 1 Partial Copy sandbox.
- Unlimited Edition includes licenses for 1 full sandbox, 5 Developer Pro sandboxes, 100 Developer sandboxes and 1 Partial Copy sandbox.
- Professional Edition includes licenses for 10 Developer sandboxes. (Change sets aren't available.)
- If you need licenses for more sandboxes, contact Salesforce to order sandboxes for your organization.

Sandbox Storage Limits

- Partial Copy sandboxes have a 5 GB of files and a 5 GB of data storage limit.
- Developer Pro sandboxes have a 1 GB of files and a 1 GB of data storage limit.
- Developer sandboxes have a 200 MB of files and a 200 MB of data storage limit.
- Full sandboxes have the same storage limit as your production organization.
- Sandboxes don't send email notifications when storage limits are reached. However, if you reach the storage limit of your sandbox, you can't save new data in your sandbox. To check your storage limits, from Setup, enter *Storage Usage* in the *Quick Find* box, then select **Storage Usage** in your sandbox.

CHAPTER 2 Force.com Platform Limits

This chapter provides limits for the Force.com platform.

Apex Governor Limits

Available in: Salesforce Classic and Lightning Experience

Available in: **Enterprise, Performance, Unlimited, Developer,** and **Database.com** Editions

Because Apex runs in a multitenant environment, the Apex runtime engine strictly enforces limits to ensure that runaway Apex code or processes don't monopolize shared resources.

Per-Transaction Apex Limits

These limits count for each Apex transaction. For Batch Apex, these limits are reset for each execution of a batch of records in the `execute` method.

This table lists limits for synchronous Apex and asynchronous Apex (Batch Apex and future methods) when they're different. Otherwise, this table lists only one limit that applies to both synchronous and asynchronous Apex.

| Description | Synchronous Limit | Asynchronous Limit |
|---|-------------------|--------------------|
| Total number of SOQL queries issued ¹ | 100 | 200 |
| Total number of records retrieved by SOQL queries | | 50,000 |
| Total number of records retrieved by <code>Database.getQueryLocator</code> | | 10,000 |
| Total number of SOSL queries issued | | 20 |
| Total number of records retrieved by a single SOSL query | | 2,000 |
| Total number of DML statements issued ² | | 150 |
| Total number of records processed as a result of DML statements, <code>Approval.process</code> , or <code>database.emptyRecycleBin</code> | | 10,000 |
| Total stack depth for any Apex invocation that recursively fires triggers due to <code>insert</code> , <code>update</code> , or <code>delete</code> statements ³ | | 16 |
| Total number of callouts (HTTP requests or Web services calls) in a transaction | | 100 |
| Maximum cumulative timeout for all callouts (HTTP requests or Web services calls) in a transaction | | 120 seconds |
| Maximum number of methods with the <code>future</code> annotation allowed per Apex invocation | | 50 |

| Description | Synchronous Limit | Asynchronous Limit |
|---|---------------------|---------------------|
| Maximum number of Apex jobs added to the queue with <code>System.enqueueJob</code> | | 50 |
| Total number of <code>sendEmail</code> methods allowed | | 10 |
| Total heap size ⁴ | 6 MB | 12 MB |
| Maximum CPU time on the Salesforce servers ⁵ | 10,000 milliseconds | 60,000 milliseconds |
| Maximum execution time for each Apex transaction | | 10 minutes |
| Maximum number of push notification method calls allowed per Apex transaction | | 10 |
| Maximum number of push notifications that can be sent in each push notification method call | | 2,000 |

¹ In a SOQL query with parent-child relationship subqueries, each parent-child relationship counts as an extra query. These types of queries have a limit of three times the number for top-level queries. The limit for subqueries corresponds to the value that `Limits.getLimitAggregateQueries()` returns. The row counts from these relationship queries contribute to the row counts of the overall code execution. This limit doesn't apply to custom metadata types. In a single Apex transaction, custom metadata records can have unlimited SOQL queries. In addition to static SOQL statements, calls to the following methods count against the number of SOQL statements issued in a request.

- `Database.countQuery`
- `Database.getQueryLocator`
- `Database.query`

² Calls to the following methods count against the number of DML queries issued in a request.

- `Approval.process`
- `Database.convertLead`
- `Database.emptyRecycleBin`
- `Database.rollback`
- `Database.setSavePoint`
- `delete` and `Database.delete`
- `insert` and `Database.insert`
- `merge` and `Database.merge`
- `undelete` and `Database.undelete`
- `update` and `Database.update`
- `upsert` and `Database.upsert`
- `System.runAs`

³ Recursive Apex that does not fire any triggers with `insert`, `update`, or `delete` statements exists in a single invocation, with a single stack. Conversely, recursive Apex that fires a trigger spawns the trigger in a new Apex invocation, separate from the invocation of the code that caused it to fire. Because spawning a new invocation of Apex is a more expensive operation than a recursive call in a single invocation, there are tighter restrictions on the stack depth of these types of recursive calls.

⁴ Email services heap size is 36 MB.

⁵ CPU time is calculated for all executions on the Salesforce application servers occurring in one Apex transaction. CPU time is calculated for the executing Apex code, and for any processes that are called from this code, such as package code and workflows. CPU time is private for a transaction and is isolated from other transactions. Operations that don't consume application server CPU time aren't counted toward CPU time. For example, the portion of execution time spent in the database for DML, SOQL, and SOSL isn't counted, nor is waiting time for Apex callouts.

 **Note:**


- Limits apply individually to each `testMethod`.
- To determine the code execution limits for your code while it is running, use the Limits methods. For example, you can use the `getDMLStatements` method to determine the number of DML statements that have already been called by your program. Or, you can use the `getLimitDMLStatements` method to determine the total number of DML statements available to your code.

Per-Transaction Certified Managed Package Limits

Certified managed packages—managed packages that have passed the security review for AppExchange—get their own set of limits for most per-transaction limits. Certified managed packages are developed by Salesforce ISV Partners, are installed in your org from Force.com AppExchange, and have unique namespaces.

Here is an example that illustrates the separate certified managed package limits for DML statements. If you install a certified managed package, all the Apex code in that package gets its own 150 DML statements. These DML statements are in addition to the 150 DML statements your org's native code can execute. This limit increase means more than 150 DML statements can execute during a single transaction if code from the managed package and your native org both execute. Similarly, the certified managed package gets its own 100-SOQL-query limit for synchronous Apex, in addition to the org's native code limit of 100 SOQL queries.

There's no limit on the number of certified namespaces that can be invoked in a single transaction. However, the number of operations that can be performed in each namespace must not exceed the per-transaction limits. There's also a limit on the cumulative number of operations that can be made across namespaces in a transaction. This cumulative limit is 11 times the per-namespace limit. For example, if the per-namespace limit for SOQL queries is 100, a single transaction can perform up to 1,100 SOQL queries. In this case, the cumulative limit is 11 times the per-namespace limit of 100. These queries can be performed across an unlimited number of namespaces, as long as any one namespace doesn't have more than 100 queries. The cumulative limit doesn't affect limits that are shared across all namespaces, such as the limit on maximum CPU time.

 **Note:** These cross-namespace limits apply only to namespaces in certified managed packages. Namespaces in packages that are not certified don't have their own separate governor limits. The resources they use continue to count against the same governor limits used by your org's custom code.

This table lists the cumulative cross-namespace limits.

| Description | Cumulative Cross-Namespace Limit |
|---|----------------------------------|
| Total number of SOQL queries issued | 1,100 |
| Total number of records retrieved by <code>Database.getQueryLocator</code> | 110,000 |
| Total number of SOSL queries issued | 220 |
| Total number of DML statements issued | 1,650 |
| Total number of callouts (HTTP requests or Web services calls) in a transaction | 1,100 |
| Total number of <code>sendEmail</code> methods allowed | 110 |

All per-transaction limits count separately for certified managed packages except for:

- The total heap size
- The maximum CPU time
- The maximum transaction execution time
- The maximum number of unique namespaces

These limits count for the entire transaction, regardless of how many certified managed packages are running in the same transaction.

Also, if you install a package from AppExchange that isn't created by a Salesforce ISV Partner and isn't certified, the code from that package doesn't have its own separate governor limits. Any resources it uses count against the total governor limits for your org. Cumulative resource messages and warning emails are also generated based on managed package namespaces.

For more information on Salesforce ISV Partner packages, see [Salesforce Partner Programs](#).

Force.com Platform Apex Limits

The limits in this table aren't specific to an Apex transaction and are enforced by the Force.com platform.

| Description | Limit |
|--|--|
| The maximum number of asynchronous Apex method executions (batch Apex, future methods, Queueable Apex, and scheduled Apex) per a 24-hour period ¹ | 250,000 or the number of user licenses in your org multiplied by 200, whichever is greater |
| Number of synchronous concurrent transactions for long-running transactions that last longer than 5 seconds for each org. ² | 10 |
| Maximum number of Apex classes scheduled concurrently | 100. In Developer Edition orgs the limit is 5. |
| Maximum number of batch Apex jobs in the Apex flex queue that are in <code>holding</code> status | 100 |
| Maximum number of batch Apex jobs queued or active concurrently ³ | 5 |
| Maximum number of batch Apex job <code>start</code> method concurrent executions ⁴ | 1 |
| Maximum number of batch jobs that can be submitted in a running test | 5 |
| Maximum number of test classes that can be queued per 24-hour period (production orgs other than Developer Edition) ⁵ | The greater of 500 or 10 multiplied by the number of test classes in the org |
| Maximum number of test classes that can be queued per 24-hour period (sandbox and Developer Edition orgs) ⁵ | The greater of 500 or 20 multiplied by the number of test classes in the org |
| Maximum number of query cursors open concurrently per user ⁶ | 50 |
| Maximum number of query cursors open concurrently per user for the Batch Apex <code>start</code> method | 15 |
| Maximum number of query cursors open concurrently per user for the Batch Apex <code>execute</code> and <code>finish</code> methods | 5 |

¹ For Batch Apex, method executions include executions of the `start`, `execute`, and `finish` methods. This limit is for your entire org and is shared with all asynchronous Apex: Batch Apex, Queueable Apex, scheduled Apex, and future methods. To check how many asynchronous Apex executions are available, make a request to the REST API `limits` resource. See [List Organization Limits](#) in the *Force.com REST API Developer Guide*. The licenses that count toward this limit are full Salesforce user licenses or Force.com App Subscription user licenses. Chatter Free, Chatter customer users, Customer Portal User, and partner portal User licenses aren't included.

² If more transactions are started while the 10 long-running transactions are still running, they're denied.

³ When batch jobs are submitted, they're held in the flex queue before the system queues them for processing.

⁴ Batch jobs that haven't started yet remain in the queue until they're started. If more than one job is running, this limit doesn't cause any batch job to fail and `execute` methods of batch Apex jobs still run in parallel.

⁵ This limit applies to tests running asynchronously. This group of tests includes tests started through the Salesforce user interface including the Developer Console or by inserting `ApexTestQueueItem` objects using SOAP API.

⁶ For example, if 50 cursors are open and a client application still logged in as the same user attempts to open a new one, the oldest of the 50 cursors is released. Cursor limits for different Force.com features are tracked separately. For example, you can have 50 Apex query cursors, 15 cursors for the Batch Apex `start` method, 5 cursors each for the Batch Apex `execute` and `finish` methods, and 5 Visualforce cursors open at the same time.

Static Apex Limits

| Description | Limit |
|---|--|
| Default timeout of callouts (HTTP requests or Web services calls) in a transaction | 10 seconds |
| Maximum size of callout request or response (HTTP request or Web services call) ¹ | 6 MB for synchronous Apex or 12 MB for asynchronous Apex |
| Maximum SOQL query run time before Salesforce cancels the transaction | 120 seconds |
| Maximum number of class and trigger code units in a deployment of Apex | 5,000 |
| For loop list batch size | 200 |
| Maximum number of records returned for a Batch Apex query in <code>Database.QueryLocator</code> | 50 million |

¹ The HTTP request and response sizes count towards the total heap size.

Size-Specific Apex Limits

| Description | Limit |
|---|---|
| Maximum number of characters for a class | 1 million |
| Maximum number of characters for a trigger | 1 million |
| Maximum amount of code used by all Apex code in an org ¹ | 3 MB |
| Method size limit ² | 65,535 bytecode instructions in compiled form |

¹ This limit does not apply to certified managed packages installed from AppExchange (that is, an app that has been marked AppExchange Certified). The code in those types of packages belongs to a namespace unique from the code in your org. For more information on AppExchange Certified packages, see the Force.com AppExchange online help. This limit also does not apply to any code included in a class defined with the `@isTest` annotation.

² Large methods that exceed the allowed limit cause an exception to be thrown during the execution of your code.

Miscellaneous Apex Limits

SOQL Query Performance

For best performance, SOQL queries must be selective, particularly for queries inside triggers. To avoid long execution times, the system can terminate nonselective SOQL queries. Developers receive an error message when a non-selective query in a trigger executes against an object that contains more than 200,000 records. To avoid this error, ensure that the query is selective. See [More Efficient SOQL Queries](#).

Chatter in Apex

For classes in the `ConnectApi` namespace, every write operation costs one DML statement against the Apex governor limit. `ConnectApi` method calls are also subject to rate limiting. `ConnectApi` rate limits match Chatter REST API rate limits. Both have a per user, per namespace, per hour rate limit. When you exceed the rate limit, a `ConnectApi.RateLimitException` is thrown. Your Apex code must catch and handle this exception.

Event Reports

The maximum number of records that an event report returns for a user who is not a system administrator is 20,000; for system administrators, 100,000.

Data.com Clean

If you use the Data.com Clean product and its automated jobs, and you have set up Apex triggers on account, contact, or lead records that run SOQL queries, the queries can interfere with Clean jobs for those objects. Your Apex triggers (combined) must not exceed 200 SOQL queries per batch. If they do, your Clean job for that object fails. In addition, if your triggers call `future` methods, they are subject to a limit of 10 `future` calls per batch.

Push Notification Limits

The maximum push notifications allowed for each mobile app associated with your Salesforce org depends on the type of app.

| Mobile application type | Maximum notifications per app per day |
|---|---------------------------------------|
| Provided by Salesforce (for example, Salesforce1) | 50,000 |
| Developed by your company for internal employee use | 35,000 |
| Installed from the AppExchange | 5,000 |

Only *deliverable* notifications count toward this limit. For example, consider the scenario where a notification is sent to 1,000 employees in your company, but 100 employees haven't installed the mobile application yet. Only the notifications sent to the 900 employees who have installed the mobile application count toward this limit.

Each test push notification that is generated through the Test Push Notification page is limited to a single recipient. Test push notifications count toward an application's daily push notification limit.

API Limits

The following are API limits for concurrent and total API requests, bulk API operations, API cursors, and limits of some selected APIs.

API Requests Limits

Concurrent API Request Limits

The following table lists the limits for various types of orgs for concurrent requests (calls) with a duration of 20 seconds or longer.

| Org Type | Limit |
|-------------------|-------|
| Developer Edition | 5 |
| Trial orgs | 5 |
| Production orgs | 25 |
| Sandbox | 25 |

Total API Request Limits

The following table lists the limits for the total API requests (calls) per 24-hour period for an org.

| Salesforce Edition | API Calls Per License Type | Total Calls Per 24-Hour Period |
|--|--|--|
| Developer Edition | N/A | 15,000 |
| <ul style="list-style-type: none"> Enterprise Edition Professional Edition with API access enabled | <ul style="list-style-type: none"> Salesforce: 1,000 Salesforce Platform: 1,000 Force.com - One App: 200 Customer Community: 0 Customer Community Login: 0 Customer Community Plus: 200 Customer Community Plus Login: 10 Partner Community: 200 Partner Community Login: 10 Employee Apps Starter: 1000 per member for Enterprise Edition orgs Employee Apps Plus: 1000 per member for Enterprise Edition orgs | 15,000 + (number of licenses X calls per license type), up to a maximum of 1,000,000 |
| <ul style="list-style-type: none"> Unlimited Edition Performance Edition | <ul style="list-style-type: none"> Salesforce: 5,000 Salesforce Platform: 5,000 Force.com - One App: 200 | 15,000 + (number of licenses X calls per license type) |


| Salesforce Edition | API Calls Per License Type | Total Calls Per 24-Hour Period |
|--------------------|---|--------------------------------|
| | <ul style="list-style-type: none"> • Customer Community: 0 • Customer Community Login: 0 • Customer Community Plus: 200 • Customer Community Plus Login: 10 • Partner Community: 200 • Partner Community Login: 10 • Employee Apps Starter: 5000 per member for Unlimited and Performance Edition orgs • Employee Apps Plus: 5000 per member for Unlimited and Performance Edition orgs | |
| Sandbox | N/A | 5,000,000 |

The DebuggingHeader has an extra usage limit of 1,000 calls per 24-hour period.

Limits are enforced against the aggregate of all API calls made to the org in a 24-hour period. Limits are not on a per-user basis. When an org exceeds a limit, all users in the org can be temporarily blocked from making additional calls. Calls are blocked until usage for the preceding 24 hours drops below the limit.

For Unlimited Edition and Performance Edition orgs, it's likely that other limiting factors, such as system load, can prevent you from using your entire allocation of calls in a 24-hour period.

In the Salesforce application, administrators can view how many API requests have been issued in the last 24 hours on the Company Information page (from Setup, enter *Company Information* in the Quick Find box, then select **Company Information**). Administrators can also view a more detailed report of API usage over the last seven days by navigating to the **Reports** tab, selecting the Administrative Reports folder and clicking the **API Usage Last 7 days** report.

 **Note:** Limits are automatically enforced for all editions.

Any action that sends a call to the API counts toward usage limits, except the following:

- Outbound messages
- Apex callouts

Also, certain API calls made by Salesforce products don't count toward usage limits even though they appear in the API Usage Last 7 days report. Calls made by the following apps don't count toward usage limits.

- Heroku Connect
- Salesforce IQ
- Salesforce Marketing Cloud
- Pardot

You can configure your org so that email is sent to a designated user when the number of API requests has exceeded a specified percentage of the limit. You can perform this configuration from Setup by entering *API Usage Notifications* in the Quick Find box and then selecting **API Usage Notifications**.

Example API Usage Metering Calculations

The following examples illustrate API usage metering calculations for several scenarios.

- For an Enterprise Edition org with 15 Salesforce licenses, the request limit is 30,000 requests (15,000 + 15 licenses X 1,000 calls).
- For an Enterprise Edition org with 60 Gold Partner licenses, the request limit is 27,000 (15,000 + 60 licenses X 200 calls).
- For an Enterprise Edition org with 15,000 Salesforce licenses, the request limit is 1,000,000. The number of licenses X 1,000 calls is greater than the maximum value, so the lower limit of 1,000,000 is used.
- For a Developer Edition org that made 14,500 calls at 5:00 AM Wednesday and 499 calls at 11:00 PM Wednesday, only one more call could successfully be made until 5:00 AM Thursday.

Increasing Total API Request Limit

The calculation of the API request limit based on user licenses is designed to allow sufficient capacity for your org based on your number of users. If you need a higher limit and you don't want to purchase extra user licenses or upgrade to Performance Edition, you can purchase additional API calls. For more information, contact your account representative.


Before you purchase more API calls, perform a due diligence of your current API usage. Client applications, whether it is your own enterprise applications or partner applications, that make calls to the API can often be optimized to use fewer API calls to do the same work. If you are using a partner product, consult with the vendor to verify that the product is making optimal use of the API. A product that makes inefficient use of the API incurs unnecessary costs for your company.

Chatter REST API Limits

Limits protect shared resources. These are the limits for consumers of Chatter REST API.

Chatter REST API requests are subject to rate limiting. Chatter REST API has a different rate limit than other Salesforce APIs. Chatter REST API has a per user, per application, per hour rate limit. When you exceed the rate limit, all Chatter REST API resources return a 503 Service Unavailable error code.

For applications using a session ID from Force.com, the rate limit is per user, per hour—there isn't a separate bucket for applications. All applications the user accesses with a session ID use this general quota. To take advantage of the per user, per application, per hour limit, use OAuth tokens.

 **Note:** Load, performance, and other system issues can prevent some limits from being reached. Limits can change without notice. Applications should make efficient use of available requests and gracefully handle the 503 error code.

Bulk API Limits

| Bulk API Limit | Limit Description |
|----------------|---|
| Batch limit | You can submit up to 10,000 batches per rolling 24-hour period. You can't create batches associated with a job that is more than 24 hours old. If a batch is submitted to a closed job, the batch will not be created, however it will still count against the batch limit as a submitted batch. |
| Batch lifespan | Batches and jobs that are older than seven days are removed from the queue regardless of job status. The seven days are measured from the youngest batch associated with a job, or the age of the job if there are no batches. You can't create batches associated with a job that is more than 24 hours old. |

| Bulk API Limit | Limit Description |
|--|--|
| Batch size | <ul style="list-style-type: none"> • Batches for data loads can consist of a single CSV, XML, or JSON file that is no larger than 10 MB. • A batch can contain a maximum of 10,000 records. • A batch can contain a maximum of 10,000,000 characters for all the data in a batch. • A field can contain a maximum of 32,000 characters. • A record can contain a maximum of 5,000 fields. • A record can contain a maximum of 400,000 characters for all its fields. • A batch must contain some content or an error occurs. |
| Batch processing time | Batches are processed in chunks. The chunk size depends on the API version. In API version 20.0 and earlier, the chunk size is 100 records. In API version 21.0 and later, the chunk size is 200 records. There's a 5-minute limit for processing each chunk. Also, if it takes longer than 10 minutes to process a whole batch, the Bulk API places the remainder of the batch back in the queue for later processing. If the Bulk API continues to exceed the 10-minute limit on subsequent attempts, the batch is placed back in the queue and reprocessed up to 10 times before the batch is permanently marked as failed. |
| Binary content | <ul style="list-style-type: none"> • The length of any file name can't exceed 512 bytes. • A zip file can't exceed 10 MB. • The total size of the unzipped content can't exceed 20 MB. • A maximum of 1,000 files can be contained in a zip file. Directories don't count toward this total. |
| Bulk query number of attempts to query | 15 attempts at 10 minutes each to process the batch. There is also a 2-minute limit on the time to process the query. If more than 15 attempts are made for the query, an error message of "Tried more than fifteen times" is returned. If the query takes more than 2 minutes to process, a QUERY_TIMEOUT error is returned. |
| Bulk query number of retrieved files | 15 files. If the query needs to return more than 15 files, add filters to the query to return less data. Bulk batch sizes are not used for bulk queries. |
| Bulk query results lifespan | 7 days. |
| Bulk query retrieved file size | 1 GB |
| Job open time | The maximum time that a job can remain open is 24 hours. The Bulk API doesn't support clients that, for example, post one batch every hour for many hours. |

API Query Cursor Limits

A user can have up to 10 query cursors open at a time. If 10 `QueryLocator` cursors are open when a client application, logged in as the same user, attempts to open a new one, then the oldest of the 10 cursors is released. If the client application attempts to open the released query cursor, an error results.


SOAP API Call Limits

| API Name | API Limit | Limit Description |
|---|--|---|
| <code>create()</code> | Maximum number of records created | Your client application can add up to 200 records in a single <code>create()</code> call. If a create request exceeds 200 objects, then the entire operation fails. |
| <code>describeSObjects()</code> | Maximum number of objects returned | The <code>describeSObjects()</code> call is limited to a maximum of 100 objects returned. |
| <code>emptyRecycleBin()</code> | Maximum number of records in the Recycle Bin | Your org can have up to 5,000 records per license in the Recycle Bin at any one time. For example, if your org has five user licenses, 25,000 records can be stored in the Recycle Bin. If your org reaches its Recycle Bin limit, Salesforce automatically removes the oldest records, as long as they have been in the recycle bin for at least two hours. |
| <code>getDeleted()</code> | Limits for returned records | <ul style="list-style-type: none"> If your <code>getDeleted()</code> call returns more than 600,000 records and the user is a system administrator, an exception <code>EXCEEDED_ID_LIMIT</code> is returned. If your <code>getDeleted()</code> call returns more than 20,000 records and the user is not a system administrator, an exception <code>OPERATION_TOO_LARGE</code> is returned. Note that this error is returned when more than 20,000 records across the organization have been deleted, not just the records viewable by the user. |
| <code>login()</code> | Login request size limit | The login request size is limited to 10 KB. |
| <code>login()</code> | Maximum calls per user | The limit is 3600 calls to <code>login()</code> per user per hour. Exceeding this limit results in a "Login Rate Exceeded" error. |
| <code>merge()</code> | Merge request limits | <ul style="list-style-type: none"> Up to 200 merge requests can be made in a single SOAP call. Up to three records can be merged in a single request, including the master record. This limit is the same as the limit enforced by the Salesforce user interface. To merge more than 3 records, do a successive merge. External ID fields cannot be used with <code>merge()</code>. |
| <code>update()</code> | Maximum number of records updated | Your client application can change up to 200 records in a single <code>update()</code> call. If an update request exceeds 200 records, the entire operation fails. |
| <code>query()</code> and <code>queryMore()</code> | Batch size limits | <p>WSC clients can set the batch size by calling <code>setQueryOptions()</code> on the connection object. C# client applications can change this setting by specifying the batch size in the call QueryOptions portion of the SOAP header before invoking the <code>query()</code> call. The maximum batch size is 2,000 records. However this setting is only a suggestion. There is no guarantee that the requested batch size will be the actual batch size. This is done to maximize performance.</p> <p>The batch size will be no more than 200 if the SOQL statement selects two or more custom fields of type long text. This is to prevent large SOAP messages from being returned.</p> |

Streaming API Limits

Limits protect shared resources. These default limits are for basic consumers of Streaming API.


| Description | Performance and Unlimited Editions | Enterprise Edition | All other supported editions |
|--|------------------------------------|--------------------|----------------------------------|
| Maximum number of topics (PushTopic records) per org | 100 | 50 | 40 |
| Maximum number of clients (subscribers) per topic | 2,000 | 1,000 | 20 |
| Maximum number of concurrent clients (subscribers) across all topics | 2,000 | 1,000 | 20 |
| Maximum number of events within a 24-hour period | 1,000,000 | 200,000 | 50,000 (10,000 for free orgs) |
| Socket timeout during connection (CometD session) | 110 seconds | 110 seconds | 110 seconds |
| Timeout to reconnect after successful connection (keepalive) | 40 seconds | 40 seconds | 40 seconds |
| Maximum length of the SOQL query in the <code>QUERY</code> field of a PushTopic record | 1,300 characters | 1,300 characters | 1,300 characters |
| Maximum length for a PushTopic name | 25 characters | 25 characters | 25 characters |

 **Note:** For free orgs, the maximum number of events within a 24-hour period is 10,000. Free orgs include Developer Edition orgs and trial orgs (all editions), such as partner test and demo orgs created through the Environment Hub. Sandboxes get the same limits as their associated production orgs.

Generic Streaming Limits

The following limits apply to generic streaming.

| Description | Performance and Unlimited Editions | Enterprise Edition | Professional Edition | Free Orgs |
|--|------------------------------------|--------------------|----------------------|-----------|
| Maximum streaming channels per org | 1,000 | 1,000 | 1,000 | 200 |
| Maximum events within a 24-hour period with Generic Streaming (API version 36.0 and earlier) | 100,000 | 100,000 | 100,000 | 10,000 |
| Maximum events within a 24-hour period with Durable Generic Streaming (API version 37.0 and later) | 1,000,000 | 200,000 | 100,000 | 10,000 |

 **Note:** Free orgs include Developer Edition orgs and trial orgs (all editions), such as partner test and demo orgs created through the Environment Hub. Sandboxes get the same limits as their associated production orgs.

Generic Streaming has the same limits for the maximum number of clients and maximum number of concurrent clients as PushTopic Streaming. The following limits apply to Generic Streaming and Durable Generic Streaming.

| Description | Performance and Unlimited Editions | Enterprise Edition | All other supported editions |
|--|------------------------------------|--------------------|------------------------------|
| Maximum clients (subscribers) per generic streaming channel | 2,000 | 1,000 | 20 |
| Maximum concurrent clients (subscribers) across all generic streaming channels | 2,000 | 1,000 | 20 |

Email Limits

Using the API or Apex, you can send single emails to a maximum of 5,000 external email addresses per day based on Greenwich Mean Time (GMT). Single emails sent using the email author or composer in Salesforce don't count toward this limit. There's no limit on sending individual emails to contacts, leads, person accounts, and users in your org directly from account, contact, lead, opportunity, case, campaign, or custom object pages.

When sending single emails, keep in mind:

- You can specify up to 100 recipients for the `To` field and up to 25 recipients for the `CC` and `BCC` fields in each `SingleEmailMessage`.
- If you use `SingleEmailMessage` to email your org's internal users, specifying the user's ID in `setTargetObjectId` means the email doesn't count toward the daily limit. However, specifying internal users' email addresses in `setToAddresses` means the email does count toward the limit.

You can send mass email to a maximum of 5,000 external email addresses per day per org based on Greenwich Mean Time (GMT).

Note:


- The single and mass email limits don't take unique addresses into account. For example, if you have `john.doe@example.com` in your email 10 times, that counts as 10 against the limit.
- You can send an unlimited amount of email to your org's internal users, which includes portal users.
- You can send mass emails only to contacts, person accounts, leads, and your org's internal users.
- In Developer Edition orgs and orgs evaluating Salesforce during a trial period, you can send mass email to no more than 10 external email addresses per day. This lower limit doesn't apply if your org was created before the Winter '12 release and already had mass email enabled with a higher limit. Additionally, your org can send single emails to a maximum of 15 email addresses per day.

Metadata Limits

The following limits apply to the Force.com IDE, the Force.com Migration Tool, and the Metadata API.

| Limit | Description |
|-----------------------------------|---|
| Retrieving and deploying metadata | <p>You can deploy or retrieve up to 10,000 files at once and the maximum size of the deployed or retrieved .zip file is 39 MB. Note the following:</p> <ul style="list-style-type: none"> • If using the Force.com Migration Tool to deploy an unzipped folder, all files in the folder are compressed first. The maximum size of uncompressed components in an unzipped folder is 400 MB or less depending on the compression ratio. If the files have a high compression ratio, you can migrate a total of approximately 400 MB because the compressed size would be under 39 MB. However, if the components can't be compressed much, like binary static resources, you can migrate less than 400 MB. • Metadata API base-64 encodes components after they're compressed. The resulting .zip file can't exceed 50 MB, which is the limit for SOAP messages. Base-64 encoding increases the size of the payload, so your compressed payload can't exceed approximately 39 MB before encoding. |
| Change sets | Inbound and outbound change sets can have up to 10,000 files of metadata. |

SOQL and SOSL Limits

| Feature | Limit | Limit Description |
|--------------------------------|---|--|
| SOQL statements | Maximum length of SOQL statements | <p>By default, 20,000 characters.</p> <p> Note: Long, complex SOQL statements, such as statements that contain many formula fields, can sometimes result in a <code>QUERY_TOO_COMPLICATED</code> error. The error occurs because the statement is expanded internally when processed by Salesforce, even though the original SOQL statement is under the 20,000 character limit. To avoid this, reduce the complexity of your SOQL statement.</p> |
| SOQL <code>WHERE</code> clause | Maximum length of SOQL <code>WHERE</code> clause | 4,000 characters. |
| SOSL statements | Maximum length of SOSL statements | By default, 20,000 characters. This limit is tied to the SOQL statement character limit defined for your org. |
| SOSL search query strings | Maximum length of <code>SearchQuery</code> string | If the <code>SearchQuery</code> string is longer than 10,000 characters, no result rows are returned. If <code>SearchQuery</code> is longer than 4,000 characters, any logical operators are removed. For example, the <code>AND</code> operator in a statement with a <code>SearchQuery</code> that's 4,001 characters will default to the <code>OR</code> operator, which could return more results than expected. |
| SOSL query results | Maximum rows returned | 2,000 results total (API version 28.0 and later), unless you specify custom limits in the query. Previous API versions return 200 results. |
| Relationship queries | Relationship query limits | <ul style="list-style-type: none"> • No more than 35 child-to-parent relationships can be specified in a query. A custom object allows up to 25 relationships, so you can reference all the child-to-parent relationships for a custom object in one query. |

| Feature | Limit | Limit Description |
|----------------------------|--|--|
| | | <ul style="list-style-type: none"> No more than 20 parent-to-child relationships can be specified in a query. In each specified relationship, no more than five levels can be specified in a child-to-parent relationship. For example, <code>Contact.Account.Owner.FirstName</code> (three levels). In each specified relationship, only one level of parent-to-child relationship can be specified in a query. For example, if the <code>FROM</code> clause specifies <code>Account</code>, the <code>SELECT</code> clause can specify only the <code>Contact</code> or other objects at that level. It could not specify a child object of <code>Contact</code>. |
| FOR VIEW and FOR REFERENCE | Maximum RecentlyViewed records allowed | The RecentlyViewed object is updated every time the logged-in user views or references a record. It is also updated when records are retrieved using the <code>FOR VIEW</code> or <code>FOR REFERENCE</code> clause in a SOQL query. To ensure that the most recent data is available, RecentlyViewed data is periodically truncated down to 200 records per object. |
| OFFSET clause | Maximum number of rows skipped by OFFSET | The maximum offset is 2,000 rows. Requesting an offset greater than 2,000 results in a <code>NUMBER_OUTSIDE_VALID_RANGE</code> error. |

The following are SOQL limitations and tips that are specific to some Salesforce objects.

| Object | Description |
|-----------------------|--|
| ContentDocumentLink | A SOQL query must filter on one of <code>Id</code> , <code>ContentDocumentId</code> , or <code>LinkedEntityId</code> . |
| ContentHubItem | A SOQL query must filter on one of <code>Id</code> , <code>ExternalId</code> , or <code>ContentHubRepositoryId</code> . |
| Custom metadata types | <p>Custom metadata types support the following SOQL query syntax.</p> <pre>SELECT fieldList [...] FROM objectType [USING SCOPE filterScope] [WHERE conditionExpression] [ORDER BY field {ASC DESC} [NULLS {FIRST LAST}]]</pre> <ul style="list-style-type: none"> You can use metadata relationship fields in the <code>fieldList</code> and <code>conditionExpression</code>. <code>FROM</code> can include only 1 object. You can use the following operators. <ul style="list-style-type: none"> <code>IN</code> and <code>NOT IN</code> <code>=</code>, <code>></code>, <code>>=</code>, <code><</code>, <code><=</code>, and <code>!=</code> <code>LIKE</code>, including wild cards <code>AND</code> You can use <code>ORDER BY</code> only with non-relationship fields. You can use <code>ORDER BY</code>, <code>ASC</code>, and <code>DESC</code> with multiple (non-relationship) fields. |

| Object | Description |
|------------------|--|
| | <ul style="list-style-type: none"> • You can only use <code>ORDER BY</code> when the ordered field is a selected field. • Metadata relationship fields support all standard relationship queries. |
| Big objects | <ul style="list-style-type: none"> • A SOQL query can only filter on the fields defined in the big object's index, in the order that they are defined, without gaps. • The last field in a query can use only the following operators. <ul style="list-style-type: none"> - <code>=</code>, <code><</code>, <code>></code>, <code><=</code>, <code>>=</code>, and <code>IN</code> - Any prior fields in a query can use only the <code>=</code> operator. • Big objects don't support the following operators. <ul style="list-style-type: none"> - <code>!=</code>, <code>LIKE</code>, <code>NOT IN</code>, <code>EXCLUDES</code>, and <code>INCLUDES</code> |
| External objects | <ul style="list-style-type: none"> • A subquery that involves external objects can fetch up to 1,000 rows of data. • Each SOQL query can have up to 4 joins across external objects and other types of objects. Each join requires a separate round trip to the external system when executing the query. Expect longer response times for each join in a query. • External objects don't support the following aggregate functions and clauses. <ul style="list-style-type: none"> - <code>AVG ()</code> function - <code>COUNT (<i>fieldName</i>)</code> function (however, <code>COUNT ()</code> is supported) - <code>HAVING</code> clause - <code>GROUP BY</code> clause - <code>MAX ()</code> function - <code>MIN ()</code> function - <code>SUM ()</code> function • External objects also don't support the following. <ul style="list-style-type: none"> - <code>EXCLUDES</code> operator - <code>FOR VIEW</code> clause - <code>FOR REFERENCE</code> clause - <code>INCLUDES</code> operator - <code>LIKE</code> operator - <code>toLabel ()</code> function - <code>TYPEOF</code> clause - <code>WITH</code> clause <p>The following limits apply only to the OData 2.0 and 4.0 adapters for Salesforce Connect.</p> <ul style="list-style-type: none"> • External objects have the following limitations for the <code>ORDER BY</code> clause. <ul style="list-style-type: none"> - <code>NULLS FIRST</code> and <code>NULLS LAST</code> are ignored. - External objects don't support the <code>ORDER BY</code> clause in relationship queries. |

| Object | Description |
|-------------------------|--|
| | <ul style="list-style-type: none"> The <code>COUNT ()</code> aggregate function is supported only on external objects whose external data sources have <code>Request Row Counts</code> enabled. Specifically, the response from the external system must include the total row count of the result set. <p>The following limits apply only to custom adapters for Salesforce Connect.</p> <ul style="list-style-type: none"> Location-based SOQL queries of external objects aren't supported. If a SOQL query of an external object includes the following, the query fails. <ul style="list-style-type: none"> <code>convertCurrency ()</code> function <code>UPDATE TRACKING</code> clause <code>UPDATE VIEWSTAT</code> clause <code>USING SCOPE</code> clause In an <code>ORDER BY</code> clause, the following are ignored. <ul style="list-style-type: none"> <code>NULLS FIRST</code> syntax <code>NULLS LAST</code> syntax In Apex tests, use dynamic SOQL to query external objects. Tests that perform static SOQL queries of external objects fail. <p>The following limits apply only to external objects associated with a SharePoint 2010/2013 external data source using SecureAgent.</p> <ul style="list-style-type: none"> In SOQL queries of external objects, <code>IN</code> clauses with more than approximately 15 IDs return the error "This operation is too complicated for Secure Agent." The exact <code>IN</code> clause limit varies based on SharePoint ID length. |
| KnowledgeArticleVersion | <ul style="list-style-type: none"> Always filter on a single value of <code>PublishStatus</code> unless the query filters on one or more primary key IDs. To support security, only users with the "Manage Articles" permission see articles whose <code>PublishStatus</code> value is <code>Draft</code>. Archived article versions are stored in the <code>articletype_kav</code> object. To query archived article versions, specify the article <code>Id</code> and set <code>IsLatestVersion='0'</code>. Always filter on a single value of <code>Language</code>. However, in SOQL, you can filter on more than one <code>Language</code> if there is a filter on <code>Id</code> or <code>KnowledgeArticleId</code>. |
| NewsFeed | <ul style="list-style-type: none"> No SOQL limit if logged-in user has "View All Data" permission. If not, specify a <code>LIMIT</code> clause of 1,000 records or fewer. SOQL <code>ORDER BY</code> on fields using relationships is not available. Use <code>ORDER BY</code> on fields on the root object in the SOQL query. |
| RecentlyViewed | <p>The <code>RecentlyViewed</code> object is updated every time the logged-in user views or references a record. It is also updated when records are retrieved using the <code>FOR VIEW</code> or <code>FOR REFERENCE</code> clause in a SOQL query. To ensure that the most recent data is available, <code>RecentlyViewed</code> data is periodically truncated down to 200 records per object.</p> |
| TopicAssignment | <p>No SOQL limit if logged-in user has "View All Data" permission. If not, do one of the following:</p> <ul style="list-style-type: none"> Specify a <code>LIMIT</code> clause of 1,100 records or fewer. |

| Object | Description |
|------------------|--|
| | <ul style="list-style-type: none"> Filter on <code>Id</code> or <code>Entity</code> when using a <code>WHERE</code> clause with <code>"="</code>. |
| UserRecordAccess | <ul style="list-style-type: none"> Always use the query formats specified in the SOAP API Developer's Guide. May include an <code>ORDER BY</code> clause. You must <code>ORDER BY HasAccess</code> if you <code>SELECT HasAccess</code>, and <code>ORDER BY MaxAccessLevel</code> if you <code>SELECT MaxAccessLevel</code>. Maximum number of records that can be queried is 200. |
| UserProfileFeed | <ul style="list-style-type: none"> No SOQL limit if logged-in user has "View All Data" permission. If not, specify a <code>LIMIT</code> clause of 1,000 records or fewer. SOQL <code>ORDER BY</code> on fields using relationships is not available. Use <code>ORDER BY</code> on fields on the root object in the SOQL query. <p>Also, a SOQL query must include <code>WITH UserId = {userId}</code>.</p> |
| Vote | <ul style="list-style-type: none"> <code>ParentId = [single ID]</code> <code>Parent.Type = [single type]</code> <code>Id = [single ID]</code> <code>Id IN = [list of IDs]</code> |

Visualforce Limits

| Limit | Value |
|---|------------------------------------|
| Maximum response size for a Visualforce page | Less than 15 MB |
| Maximum view state size in a Visualforce page | 135 KB |
| Maximum size of a Visualforce email template | 1 MB |
| Maximum file size for a file uploaded using a Visualforce page | 10 MB |
| Maximum size of HTML response <i>before</i> rendering, when Visualforce page is rendered as PDF | Less than 15 MB |
| Maximum PDF file size for a Visualforce page rendered as a PDF | 60 MB |
| Maximum total size of all images included in a Visualforce page rendered as a PDF | 30 MB |
| Maximum request size of a JavaScript remoting call | 4 MB |
| Maximum response size of a JavaScript remoting call | 15 MB |
| Default timeout for a JavaScript remoting call | 30,000 milliseconds (30 seconds) |
| Maximum timeout for a JavaScript remoting call | 120,000 milliseconds (120 seconds) |
| Maximum rows retrieved by queries for a single Visualforce page request | 50,000 |
| Maximum rows retrieved by queries for a single Visualforce page request in read-only mode | 1,000,000 |

| Limit | Value |
|---|--------|
| Maximum collection items that can be iterated in an iteration component such as <code><apex:pageBlockTable></code> and <code><apex:repeat></code> | 1,000 |
| Maximum collection items that can be iterated in an iteration component such as <code><apex:pageBlockTable></code> and <code><apex:repeat></code> in read-only mode | 10,000 |
| Maximum field sets that can be displayed on a single Visualforce page. | 50 |
| Maximum records that can be handled by <code>StandardSetController</code> | 10,000 |

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