



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	N/A	20			100	500	100
Attachments: maximum size in the Notes & Attachments related list ¹		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 group5 levels in a data category group hierarchy		
Category groups: maximum default					5 category groups; 3 active		
Certificates: maximum					50		
Content deliveries: default delivery bandwidth per rolling 24-hour window	10 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	6,000,000						
Content: maximum number of documents and versions in a 24-hour period (adjustable)	36,000						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 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 navigation menus in Lightning Experience	N/A			5	10		
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	10						
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 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			10,000			
Omni-Channel: maximum queued work items ¹⁰				5,000 per hour			
Opportunity Teams: maximum members	N/A				30		
Permission sets: maximum (created)	N/A	1		2	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 storage capacity in MBs						
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	N/A	A static resource can be up to 5 MB. An org can have up to 250 MB of static resources total.					
Tabs ²		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	A user is limited to a maximum of: <ul style="list-style-type: none">500 unique personal tags5,000 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 tags50,000 instances of public tags applied to records5,000,000 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 versions2,000 steps Each org can have up to: <ul style="list-style-type: none">500 active flows1,000 flows total30,000 waiting interviews at a given time1,000 events processed per hour20,000 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.

⁵ The 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.

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.

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.

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.

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	N/A			1 ² , 3, 5	1 ²	2 ²	1 ² , 3, 5

Feature	Personal Edition	Contact Manager	Group Edition	Professional Edition	Enterprise Edition	Unlimited and Performance Edition	Developer Edition
(Emailed reports can be up to 10 MB.)							

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

Adding Contacts to Campaigns

Contact Source	Recommended Campaign Member Tool	Maximum Number of Records
A report of existing contacts	Add Campaign Members from 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	Adding Contacts or Leads from a List View to a Campaign	250 per list page

Adding Leads to Campaigns

Lead Source	Recommended Campaign Member Tool	Maximum Number of Records
A report of existing leads	Add Campaign Members from 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	Adding Contacts or Leads from a List View to a Campaign	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

Feature	Limit
Characters in a Chatter message	10,000
Skills	
Skills assigned to a user	100
Characters in a skill name	99
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

File Type	File Extensions	Maximum File Size for Search
PPT	.ppt, .pptx, .pptm	25 MB
RTF	.rtf	5 MB
Text	.c, .cpp, .css, .csv, .ini, .java, .log, .sql, .txt	5 MB
Word	.doc, .docx, .docm	25 MB
XLS	.xls, .xlsx, .xslm	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 					

Feature	Personal Edition	Contact Manager	Group Edition	Professional Edition	Enterprise Edition	Unlimited and Performance Edition	Developer Edition
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 headers, body, attachments, and encoding)				25 MB ¹			
Email-to-Case: maximum emails converted into cases				2,500 per day			
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 KBMaximum email activities created for each email received: 50Maximum size of a file attachment: 5 MBTotal maximum size of file attachments: 25 MB¹						
Merge field: <code>Case.Email_Thread</code>	N/A		<ul style="list-style-type: none">Maximum emails: 200Email 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 Performance, Unlimited, Enterprise, and Developer Editions
Maximum number of articles	50,000 articles
Maximum number of article types	100 article types
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
Maximum file fields	5 file fields
Maximum file field size	File fields are counted as attachments and can be up to 25 MB.
Maximum rich text area size	131072 characters
Maximum size of all rich text area fields on an article	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.
Article history tracking	Article events are tracked for up to 18 months.
Maximum number of 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.
Maximum number of data category groups and active data category groups	5 category groups; 3 active
Maximum number of categories per 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

Salesforce Knowledge Limits**Details for Performance, Unlimited, Enterprise, and Developer Editions**

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

Maximum number of promoted search terms Your organization can create a maximum of 2,000 promoted terms.

Picklist Limits

The maximum entries you can have in a picklist is determined by the total number of characters allowed in the picklist, which is 15,000. Each entry includes a line break and a return character that aren't visible. These two additional characters per entry are counted as part of the 15,000 limit.

Additional Limits for Standard Picklists

For standard picklists, each entry can have up to 40 characters, not including line breaks and returns. For standard multi-select picklists, the total number of characters for all entries combined can't exceed 255.

For standard picklists in orgs that use record types or the Translation Workbench, you can have unlimited entries with these exceptions for special picklists.

Picklist Field	Maximum Number of Entries
Lead Status	100
Task Status	100
Task Priority	50
Case Status	100
Case Priority	50
Opportunity Stage	100

Additional Limits for Custom Picklists

Within the 15,000 total character limit, custom picklists can have:

- Up to 1,000 entries
- Up to 255 characters per entry

Custom multi-select picklists can have up to 500 values. Users can select up to 100 values at a time on a record.

You can have up to 500 global picklists (or picklist value sets) in an org. This limit doesn't apply to custom picklists that are based on global picklists. Each global picklist value set can contain up to 500 values.

You can have up to 1000 values in a custom *restricted* picklist.

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	

Workflow and Approval Limits

Limit	Details				
Approval Processes	N/A	N/A	N/A	N/A	<p>Each organization can have:</p> <ul style="list-style-type: none"> • 1,000 approval processes • 300 approval processes per object <p>Each approval process can have:</p> <ul style="list-style-type: none"> • 30 steps • 25 approvers per step • 40 initial submission actions • 40 final approval actions • 40 final rejection actions • 40 recall actions <p>Each set of initial submission, final approval, final rejection, and recall actions can have:</p> <ul style="list-style-type: none"> • 10 email alerts

Limit	Details
	<ul style="list-style-type: none"> • 10 tasks • 10 field updates • 10 outbound messages
Approval request comments: maximum characters	Approval request comments are limited to 4,000 characters. In Chinese, Japanese, or Korean, the limit is 1,333 characters.
Flow trigger workflow actions: flow variable assignments	25 (N/A in Professional Edition)
Workflow emails per day	1,000 per standard Salesforce license (15 in Developer Edition); 2,000,000 per org
Workflow rules	<p>Each workflow rule can have:</p> <ul style="list-style-type: none"> • 10 time triggers • 40 immediate actions • 40 time-dependent actions per time trigger <p>The immediate actions and each time trigger can have:</p> <ul style="list-style-type: none"> • 10 email alerts • 10 tasks • 10 field updates • 10 outbound messages • 10 flow triggers¹
Workflow time triggers per hour	50

¹ The Process Builder has superseded flow trigger workflow actions, formerly available in a pilot program. Organizations that are using flow trigger workflow actions can continue to create and edit them, but flow trigger workflow actions aren't available for new organizations.

Workflow Alert Emails: Daily Workflow Alert Email Limits

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

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	500 at a time via the Import My Accounts & Contacts wizard	None
	50,000 at a time via the Data Import Wizard	"Create" on accounts AND "Edit" on accounts AND "Import Personal Contacts"
Business accounts and contacts owned by other users	50,000 at a time	"Create" on accounts AND "Edit" on accounts and contacts AND "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
		"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't exceed 100 MB, and each record in the file can't exceed 400 KB. In addition, each imported note and each imported description can't exceed 32 KB. Descriptions longer than 32 KB are truncated. 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

For each user, the maximum number of external objects to which you can grant object permissions is equal to the maximum number of custom objects that the user is allowed to access. This limit is determined by the user license that's assigned to the user.

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 per hour per external data source. This limit doesn't apply to high-data-volume external data sources or to rows that have previously been retrieved.	50,000

¹ The limit of 100 external objects applies regardless of how many Salesforce Connect add-ons you purchase for your org.

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
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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 limits:

- 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
Total rules allowed (Limits apply to any combination of workflow, assignment, auto-response, and escalation rules, <i>active</i> and <i>inactive</i> .)	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

File Type	File Extensions	Maximum Size
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](#).

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	1 GB	20 MB	10 GB	612 MB
Group				
Professional				
Enterprise				
Performance	120 MB	120 MB		2 GB
Unlimited				
Developer	5 MB	N/A	20 MB	N/A
Personal	20 MB (approximately 10,000 records)			

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
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 sandboxes, and 1 Partial Copy sandbox.
- Unlimited Edition includes licenses for 1 Full sandbox, 5 Developer Pro sandboxes, and 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 (This limit doesn't apply to custom metadata types. In a single Apex transaction, custom metadata records can have unlimited SOQL queries.)	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 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 row counts from these relationship queries contribute to the row counts of the overall code execution. 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 organization 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 organization'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 organization both execute. Similarly, the certified managed package gets its own 100-SOQL-query limit for synchronous Apex, in addition to the organization'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 organization. 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 organization multiplied by 200, whichever is greater
Number of synchronous concurrent requests for long-running requests that last longer than 5 seconds for each organization. ²	10
Maximum number of Apex classes scheduled concurrently	100
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 organizations other than Developer Edition) ⁵	The greater of 500 or 10 multiplied by the number of test classes in the organization
Maximum number of test classes that can be queued per 24-hour period (sandbox and Developer Edition organizations) ⁵	The greater of 500 or 20 multiplied by the number of test classes in the organization
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
Maximum simultaneous requests to URLs with the same host for a callout request ⁷	To external endpoints: 20

Description	Limit
	To endpoints within your Salesforce org's domain: unlimited

¹ For Batch Apex, method executions include executions of the `start`, `execute`, and `finish` methods. This limit is for your entire organization and is shared with all asynchronous Apex: Batch Apex, Queueable Apex, scheduled Apex, and future methods. 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 requests are made while the 10 long-running requests 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.

⁷ The host is defined by the unique subdomain for the URL—for example, `www.mysite.com` and `extra.mysite.com` are two different hosts. This limit is calculated across all organizations that access the same host. If this limit is exceeded, a `CalloutException` is thrown.

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 organization 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 organization. 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

Mobile application type	Maximum notifications per app per day
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 organizations for concurrent requests (calls) with a duration of 20 seconds or longer.

Organization Type	Limit
Developer Edition	5
Trial organizations	5
Production organizations	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 organization.

Salesforce Edition	API Calls Per License Type	Minimum	Maximum
All Editions: DebuggingHeader on API testing calls for Apex specified. Valid in API version 20 and later.	N/A	1,000	1,000
Developer Edition	N/A	15,000	15,000
<ul style="list-style-type: none"> Enterprise Edition 	<ul style="list-style-type: none"> Salesforce: 1,000 	15,000	1,000,000

Salesforce Edition	API Calls Per License Type	Minimum	Maximum
<ul style="list-style-type: none"> Professional Edition with API access enabled 	<ul style="list-style-type: none"> Salesforce Platform: 1,000 Force.com - One App: 200 Gold Partner: 200 		
<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 Gold Partner: 200 	15,000	Unlimited. However, at any high limit, it is likely that other limiting factors such as system load may prevent you from using your entire allocation of calls in a 24-hour period.
Sandbox	N/A	N/A	5,000,000

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

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

You can configure your organization 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 organization with fifteen Salesforce licenses, the request limit is 15,000 requests (15 licenses X 1,000 calls).
- For an Enterprise Edition organization 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 organization that made 14,500 calls at 5:00 AM Wednesday, 499 calls at 11:00 PM Wednesday, only one more call could successfully be made until 5:00 AM Thursday.
- For an Enterprise Edition organization with 60 Gold Partner licenses, the request limit is 15,000 (the number of licenses X 200 calls is less than the minimum value of 15,000).

Increasing Total API Request Limit

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

Before you purchase additional API calls, you should 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, you should 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 will incur unnecessary cost for your organization.

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 5,000 batches per rolling 24 hour period. You can't create new batches associated with a job that is more than 24 hours old.
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 new batches associated with a job that is more than 24 hours old.
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 five-minute limit for processing each chunk. Also, if it takes longer

Bulk API Limit	Limit Description
	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 two 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 two 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, the query should be filtered 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 gigabyte.
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.


API Name	API Limit	Limit Description
<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 is the same limit as the Salesforce user interface. If you have more than three records to merge, use the same master record in each request to avoid errors. 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 <code>QueryOptions</code> 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 are the default limits intended for basic consumers of Streaming API.

Description	Performance and Unlimited Editions	Enterprise Edition	All other editions
Maximum number of topics (PushTopic records) per org	100	50	40
Maximum number of clients (subscribers) per topic	2,000	1,000	20


Description	Performance and Unlimited Editions	Enterprise Edition	All other editions
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, sandboxes, trial orgs (all editions) including partner test and demo orgs created through the Environment Hub.

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, sandboxes, and trial orgs (all editions) such as partner test and demo orgs created through the Environment Hub.

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 editions
Maximum clients (subscribers) per generic streaming channel	2,000	1,000	20

Description	Performance and Unlimited Editions	Enterprise Edition	All other editions
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 1,000 external email addresses per day based on Greenwich Mean Time (GMT). Single emails sent using the Salesforce application 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 send 100 emails per `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 1,000 external email addresses per day per org based on Greenwich Mean Time (GMT). The maximum number of external addresses you can include in each mass email depends on your edition:

Edition	External Address Limit per Mass Email
Personal, Contact Manager, and Group	N/A
Professional	250
Enterprise	500
Unlimited and Performance	1,000

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	Metadata API can deploy and retrieve up to 10,000 files or 400 MB (39 MB compressed) at one time. If any of these limits is exceeded, the deployment or retrieval fails.
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	By default, 20,000 characters.  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.
SOSL statements	Maximum length of SOSL statements	By default, 20,000. 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. 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>.

Feature	Limit	Limit Description
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 FOR VIEW or FOR REFERENCE 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 will result in a NUMBER_OUTSIDE_VALID_RANGE 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 Id, ContentDocumentId, or LinkedEntityId.
ContentHubItem	A SOQL query must filter on one of Id, ExternalId, or ContentHubRepositoryId.
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"> The <i>fieldList</i> can include only non-relationship fields. FROM can include only one object. You can use the following operators. <ul style="list-style-type: none"> IN and NOT IN =, >, >=, <, <=, and != LIKE, including wild cards AND You can use ORDER BY, ASC, and DESC with multiple fields. You can only use ORDER BY when the ordered field is a selected field.
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"> AVG () function COUNT (fieldName) function (however, COUNT () is supported) HAVING clause GROUP BY clause

Object	Description
	<ul style="list-style-type: none"> – <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. • 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 <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 will return the error "This operation is too complicated for Secure Agent." The exact <code>IN</code> clause limit varies based on SharePoint ID length.

Object	Description
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>sLatestVersion='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	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.
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. 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 response size of a JavaScript remote 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
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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