

GAM Cheat Sheet

github.com/jay0lee/GAM

for GAM 4.03

User Email

gam <who> <attributes/values>
where attributes and values are:
language <language code>
pagesize 25|50|100
shortcuts | **arrows** | **snippets** | **utf** | **webclips** on|off
signature <signature text> |(file <signature file> [charset <Charset>]) (replace <Tag> <String>)* [name <String>] [replyto <EmailAddress>]
vacation on|off [subject <String> (message <String>)] (file <FileName> [charset <CharSet>]) (replace <Tag> <String>)* [html] [contactonly] [domainonly] [startdate <Date>] [enddate <Date>]]
[add] **label** <label name> [messagelistvisibility hide|show] [labellistvisibility hide|show|showifunread]
delete **label** <label name> | regex:<RegularExpression> | --ALL_LABELS--
update **label** search <search> replace <replace> [merge]
update **labelsettings** <label name> name <new label name> [message_list_visibility show|hide] [label_list_visibility show|hide|show_if_unread]
show **labels** [onlyuser]
filter from <email address> | to <email address> | subject <words> | haswords <words> | nowords <words> | musthaveattachment | label <label name> | markread | archive | star | forward <email address> | trash | neverspam
delete | info **filter** <FilterIDEntity>
[add] | update **sendas** <email address> <name> [default] [replyto <email address>] [treatasalias <Boolean>] [signature <String>] |(file <FileName> [charset <CharSet>]) (replace <RegularExpression> <String>)*
delete **sendas** <email address>
info **sendas** <email address> [format]
pop on|off [for allmail] [newmail] [fromnowown] [action keep | leaveinbox | archive | delete | trash | markread]
imap on|off [noautoexpunge] [expungebehavior archive | deleteforever | trash] [maxfoldersize 0 | 1000 | 2000 | 5000 | 10000]
forward on|off [email address] [keep | archive | delete]
delegate to <user email>
add **delegate** **forwardingaddress** <user email>
show **delegates** [csv]
show **forwardingaddress**
show **vacation** | **filters** | **imap** | **pop** | **forward** | **profile**
show **sendas** | **vacation** | **signature** [format]
print **delegates** | **forwardingaddress** [todrive]
delete **delegate** | **forwardingaddress** <user email>
profile shared|unshared
update **photo** <photo filename>
get **photo** [drivedir | (targetfolder <FilePath>)] [noshow]
delete **photo**
print **filters** | **forward** | **sendas** [todrive]
gam user <who> **delete** | **trash** | **untrash** messages
query <gmail search> [doit] [maxto<action> <number>]
gam user <who> **modify** messages
addlabel | removelabel <label> query <gmail search> [doit] [maxto<action> <number>]
where <action> is:
delete | trash | untrash | modify
e.g. maxtotrash, maxtountrash

Users



gam **create** | **update** user <user email> [options]
gam <who> **update** user [options]
Common options:
[firstname <First Name>] [lastname <Last Name>]
[password <Password>] [email <New Email>]
[gal on|off] [admin on|off] [suspended on|off] [sha] [md5] [crypt] [nohash]
[changepassword on|off] [org <Org Name>]
Extended options:
[relation <relation type> <relation value>]
[externalid <id type> <id value>]
[phone type <phone type> value <phone value> primary|notprimary]
[organization name <org name> title <org title> type <org type> department <org dept> symbol <org symbol> costcenter <org cost center> location <org location> description <org desc> domain <org domain> primary|notprimary]
[address type <address type> unstructured <unstructured address> extendedaddress <address extended address> streetaddress <address street address> locality <address locality> region <address region> postalcode <address postal code> countrycode <address country code> pobox <address pobox> primary|notprimary]
[im type <im type> protocol <im protocol> primary <im value>]
[agreedtotems on|off]
[schemaname.fieldname <fieldvalue>]
[schemaname.multivaluedfieldname multivalued <fieldvalue>]
Extended options for *update* only:
[customerid <string>]
[otheremail <type> <email address>]
where type is:
home | work | other | <custom>
gam **info** user <user email> [nogroups] [noaliases] [nolicensess] [noschemas] [schemas list,of,schemas] [userview] [skus <list,of,skus>]
gam **delete** user <user email>
gam **undelete** user <user email> [org <org Name>]
gam <who> **print**
gam **print** users [allfields] [custom all | list,of,schemas] [userview] [ims] [emails] [externalids] [relations] [addresses] [organizations] [phones] [licenses] [photo] [firstname] [lastname] [emailparts] [deleted_only] [id] [orderby email|firstname|lastname] [query <query>] [ascending|descending] [domain <Domain Name>] [fullname] [ou] [suspended] [changepassword] [gal] [agreed2terms] [admin] [creationtime] [aliases] [lastlogintime] [groups] [ismailboxsetup] [todrive]
gam <who> **show** gmailprofile | gplusprofile [todrive]

Calendars

gam calendar <calendar email> <action> [<options>]
where action and options are:
showacl | **wipe**
add | **update** freebusy | read | editor | owner <user email> | user <user email> | group <group email> | domain [<Domain name>] | default
delete <user email> | user <user email> | group <group email> | domain [<Domain name>] | default
addevent [attendee <user email>] [location <location>] [optionalattendee <user email>] [anyonecanaddself] [summary <summary>] [source <title> <url>] [description <event description>] [id <id>] [available] start allday <YYYY-MM-DD> | <start datetime> end allday <YYYY-MM-DD> | <end datetime> [guestscantinviteothers] [guestscantseeothers] [visibility default|public|private] [tentative] [notifyattendees] [noreminders] | [reminder <minutes> email | popup | sms] [recurrence <repeat>] [timezone <timezone>] [privateproperty <Key> <Value>] [sharedproperty <Key> <Value>] [colorindex <Number from 1 to 11>]
deleteevent [eventid <id>] [query <query>] [notifyattendees] [doit]
gam <who> **show** calendars | calsettings
gam <who> **delete** calendar <calendar email>
gam <who> **add** | **update** calendar <calendar email> [selected true|false] [hidden true|false] [reminder email | sms | popup (minutes)] [summary <summary>] [colorindex (1-24)] [backgroundcolor <htmlcolor>] [foregroundcolor <htmlcolor>]
gam <who> **update** calattendees csv <csv file> [start YYYY-MM-DD] [end YYYY-MM-DD] [allevents] [dryrun]
gam <who> **transfer** seccals <target user> [keepuser]
gam <who> **info** calendar <calendar email> | primary
gam <who> **print** calendars [todrive]

Calendar Resources

gam **create** resource <id> <Name> [description <description>] [type <type>]
gam **update** resource <id> [name <Name>] [description <Description>] [type <Type>]
gam **info** | **delete** resource <id>
gam **print** resources [id] [description] [email] [type] [allfields] [todrive]

User Drive Management

gam <who> **show** filelist [todrive] [query <query>] [allfields] [createddate] [description] [fileextension] [filesize] [id] [restricted] [starred] [trashed] [viewed] [lastmodifyingusername] [lastviewedbydate] [modifieddate] [originalfilename] [quoted] [shared] [writerscanshare]
gam <who> **show** driveactivity [todrive] [fileid <id>] [folderid <id>]
gam <who> **show** drivesettings [todrive]
gam <who> **show** fileinfo <id> | [allfields | <DriveFieldName>]*
gam <who> **show** filetree
gam <who> **show** filerevisions <id>
gam <who> **add** drivefile [localfile <filepath>] [drivefilename <filename>] [convert] [ocr] [ocrlanguage <language>] [restricted] [starred] [trashed] [viewed] [lastviewedbydate <date>] [modifieddate <date>] [description <description>] [mimetype <type>] [parentid <folder id>] [parentname <folder name>] [writerscantshare]
gam <who> **update** drivefile [localfile <filepath>] [newfilename <filename>] [id <drive file id> | drivefilename <filename>] [convert] [ocr] [ocrlanguage <language>] [restricted true|false] [starred true|false] [trashed true|false] [viewed true|false] [lastviewedbydate <date>] [modifieddate <date>] [description <description>] [mimetype <type>] [parentid <folder id>] [parentname <folder name>] [writerscantshare]
gam <who> **get** drivefile [id <file id> | query <query>] [format <openoffice | microsoft | pdf>] [targetfolder <local path>] [revision <number>]
gam <who> **delete** emptydrivefolders | drivefile <file id> [purge]
gam <who> **transfer** drive <target user> [keepuser]
gam <who> **empty** drivetrash
ACLs
gam user <user email> **show** drivefileacl <file id>
gam user <user email> **add** drivefileacl <file id> [user | group | domain <value> | anyone] [withlink] [role <reader | commenter | writer | owner>] [sendemail] [emailmessage <message text>]
gam user <user email> **update** drivefileacl <file id> <permission id> [withlink] [role <reader | commenter | writer | owner>] [transferownership <true | false>]
gam user <user email> **delete** drivefileacl <file id> <permission id>

Groups



gam **create** group <group email> <GroupAttributes>

gam **update** group <group email>
[admincreated true|false]
[email <EmailAddress>]
<GroupAttributes>

gam **info** group <group email> [nusers] [noaliases]
[groups]

gam **update** group <group email>
add | **update** | **sync**
owner | member | manager
{user <email address> |
group <group address> | org <org name> |
file <file name> | all users}

gam **update** group <group email> **clear**
[owner] [manager] [member]

gam **update** group <group email>
remove {user <email address> |
group <group address> | org <org name> |
file <file name> | all users}

gam **delete** group <group email>
gam <who> **delete** group

gam **print** groups [domain <domain>]
[member <user email>] [maxresults <results>]
[name] [description] [admincreated] [id] [aliases]
[members] [owners] [managers] [settings] [todrive]
[delimiter <delimchar>] [fields <list,of,fields>]

gam **print** group-members [group <group email>]
[domain <domain>] [member <user email>]
[fields <list,of,fields>] [membernames] [todrive]

Group Settings

gam **create** | **update** group <group email>
<attributes/values>

where attributes and values are:

- allow_external_members** true|false
- message_moderation_level** moderate_all_messages|
moderate_new_members|moderate_none|
moderate_non_members
- primary_language** <language>
- reply_to** reply_to_custom|reply_to_ignore|
reply_to_list|reply_to_managers|
reply_to_owner|reply_to_sender
- send_message_deny_notification** true|false
- show_in_group_directory** true|false
- who_can_invite** all_managers_can_invite|
all_members_can_invite
- who_can_join** all_in_domain_can_join|
anyone_can_join|can_request_to_join|
invited_can_join
- who_can_post_message** all_in_domain_can_post|
all_managers_can_post|all_members_can_post|
anyone_can_post|none_can_post
- who_can_view_group** all_in_domain_can_view|
all_managers_can_view|all_members_can_view|
anyone_can_view
- who_can_view_membership**
all_in_domain_can_view|all_managers_can_view|
all_members_can_view
- allow_google_communication** true|false
- allow_web_posting** true|false
- archive_only** true|false
- custom_reply_to** <email address>
- is_archived** true|false
- max_message_bytes** <integer>
- members_can_post_as_the_group** true|false
- message_display_font** default_font|fixed_width_font
- description** <group description>
- name** <new name>
- spam_moderation_level** allow|moderate|
silently_moderate|reject
- include_in_global_address_list** true|false
- who_can_leave_group** all_members_can_leave|
all_managers_can_leave
- who_can_contact_owner** anyone_can_contact|
all_in_domain_can_contact|
all_members_can_contact|
all_managers_can_contact

Classroom



gam **create** course [id|alias <alias>]
[teacher <teacher email>] <CourseAttributes>

gam **update** course <CourseID> <CourseAttributes>

where <CourseAttributes> is:
[name <name>] [section <section>]
[heading <heading>] [description <description>]
[room <room>] [status <PROVISIONED|ACTIVE|
ARCHIVED|DECLINED>]

gam **info** | **delete** course <CourseID>

gam course <CourseID> <command>

where <command> is:
add student|teacher <email address>
add | **delete** alias <alias>
sync students|teachers group <group email> |
ou <orgunit> | file <filename> |
query <users query> | course <id or alias>
remove student|teacher <email address>

gam **print** courses [teacher <email>]
[student <email>] [aliases] [todrive]

gam **print** course-participants [course <id or alias>]
[student <email>] [teacher <email>]
[show all|students|teachers] [todrive]

gam **create** | **delete** gaurdian <guardian email>
<student email>

gam **show** guardian [invitedguardian <guardian email>]
[student <StudentItem>] [invitations]
[states <GuardianStateList>] [<UserTypeEntity>]

gam **print** guardians [invitations] [student <email>]
[invitedguardian <email>]
[user <username>] | group <email> |
ou <ouname> | all users] [nocsv] [todrive]
[states <GuardianStateList>]

where GuardianStateList is:
COMPLETE|PENDING|
GUARDIAN_INVITATION_STATE_UNSPECIFIED

gam **cancel** guardianinvitation | guardianinvitations
<GuardianInvitationID> <student email>

Various

gam **version** | **help**

gam **create** project

gam **whatis** <user email>

User Security Settings

gam <who> | file <filename> <command>

where <command> is:

- show** tokens (oauth tokens)
- show** token clientid <client id>
- delete** token clientid <client id>
- show** asps (app-specific pwds)
- delete** asp <ID>
- show** backupcodes (2-step verification)
- update** backupcodes
- delete** backupcodes
- deprovision** (remove tokens, asps,
and backupcodes)

gam **print** tokens [todrive] [clientid <ClientID>] <who>

gam <who> **show** tokens

Email Aliases

gam **create** | **update** alias <alias> user | group | target
<primary address>

gam **info** alias <alias>

gam **delete** alias [user | group | target] <alias>

gam <who> **delete** alias

gam **print** aliases [todrive]

Custom User Schema

gam **create** | **update** schema <schemaname>
field <fieldname>
type <bool|double|email|int64|phone|string>
[indexed] [restricted] [multivalued]
[range <min number> <max number>] endfield

gam **print** | **show** schemas

gam **info** schema <schemaname>

gam **delete** schema <schemaname>

Definitions

<who> user <user email> | group <group email> |
ou <ouname> | all users

<datetime> RFC3339 formatted date and time,
e.g. YYYY-MM-DDThh:mm:ss.000Z

<user email> is a user in the domain

<group email> is a group in the domain

<email address> is any email address

Admin Roles

gam **create** admin <user> <role>
<customer | org_unit <OU>>

gam **delete** admin <role assignment id>

gam **print** admins [user <user>] [role <role>] [todrive]

gam **print** roles [todrive]

Reports

gam **report** users [todrive] [date <YYYY-MM-DD>]
[user <user email>] [filter <filter terms>]
[fields <included fields>]

gam **report** admin | calendar | logins |
tokens | drive | groups | mobile
[todrive] [user <user email>] [filter <filter terms>]
[ip <ip address>] [start <start datetime>]
[end <end datetime>] [event <event name>]

where the filter specifies the search terms¹.

gam **report** domain [todrive] [date <YYYY-MM-DD>]
[fields <included fields>]

<start datetime> and <end datetime> are in the format:
YYYY-MM-DDThh:mm:ss.000Z

¹ <https://developers.google.com/admin-sdk/reports/v1/reference/userUsageReport/get>

Chrome Devices

```
gam update cros <device id> [user <user info>]
[location <location info>] [notes <notes info>]
[ou <new org unit>] [assetid <asset id>]
[status active|deprovisioned|inactive|returnapproved|
returnrequested|shipped|unknown]

gam update cros <device id>
action disable|reenable|
deprovision_same_model_replace|
deprovision_different_model_replace|
deprovision_retiring_device
[acknowledge_device_touch_requirement]

gam info cros <device id>
[allfields|full|basic]
[nolists] [listlimit <Number>]
<CrOSFieldName>*
[fields <CrOSFieldNameList>]

gam print cros [query <query>]
[orderby location|user|lastsync|serialnumber|
supportenddate]
[ascending|descending] [todrive]
[allfields|full|basic] [nolists]
[listlimit <Number>]
<CrOSFieldName>*
[fields <CrOSFieldNameList>]
```

Mobile Devices

```
gam update mobile <mobile id>
action wipe | approve | block |
cancel_remote_wipe_then_activate|
cancel_remote_wipe_then_block
[model <String>]
[os <String>] [useragent <String>]

gam info mobile <mobile id>

gam print mobile [query <query>][basic|full]
[orderby deviceid|email|lastsync|
model|name|os|status|type]
[ascending|descending] [todrive]

gam delete mobile <mobile id>
```

Organizational Units

```
gam create org <name> [description <Description>]
[parent <Parent Org>] [inherit|noinherit]

gam update org <name> [name <Name>]
[description <Description>] [parent <Parent>]
[inherit|noinherit]

gam update org <name> add | move users <Users> |
file <File Name> | group <Group Name> |
all cros | cros <device id>

gam info org <name> [nouser|child]

gam delete org <name>

gam print orgs [todrive] [toplevelonly]
[fromparent <name>] [allfields|<list of fields>]
```

CloudPrint

```
gam printer register

gam update printer <id> [quotaEnabled <true|false>]
[dailyQuota <number>] [public <true|false>]
[name <name>] [proxy <proxy>]
[description <description>] [currentquota <Number>]
[defaultdisplayname <String>] [displayname <String>]
[firmware <String>] [gcpversion <String>]
[istosaccepted <Boolean>] [manufacturer <String>]
[model <String>] [ownerid <EmailAddress>]
[status <Number>] |[type <String>] |[uuid <String>] |
[setupurl <URL>] |[supporturl <URL>] |
[updateurl <URL>]

gam info printer <id> [everything]

gam delete printer <id>

gam print printers [query <query>] [type <type>]
[status <status>] [extrafields <connectionStatus|
semanticState|uiState|queuedJobsCount>] [todrive]

gam printer <id> <command>

where <command> is:
add user|manager|owner <group or user email> |
[domain:]<DomainName> | public
remove <group or user email> | <domain> | public
showacl

gam printjob <printer id> submit <file or url>
[title <string>] [tag <string>]

gam printjob <id> cancel | delete

gam printjob <PrintJobID> resubmit <PrinterID>

gam printjob <PrinterID> | any fetch
[olderthan|newerthan <number><m|h|d>]
[query <query>] [status done|error|held|
in_progress|queued|submitted]
[orderby create_time|status|title]
[ascending|descending] [owner <user email>]
[limit <number>]

gam print printjobs [older_than <number><m|h|d>]
[newer_than <number><m|h|d>] [query <query>]
[status <status>] [printer <printer id>]
[owner <user email>] [limit <number>]
[orderby create_time|status|title]
[ascending|descending] [todrive]
```

Licenses

```
gam <who> add | delete license <sku>

gam <who> update license <sku> [from] <oldsku>

gam print licenses [products <product>] [sku <sku>]
[todrive]

where <sku> is:
apps|gafw|gams|gau|coordinate|vault|vfe|coordinate|
drive20gb|drive50gb|drive200gb|drive400gb|
drive1tb|drive2tb|drive4tb|drive8tb|drive16tb

and <product> is
Google-Apps|Google-Drive-storage|
Google-Coordinate|Google-Vault
```

Domain Settings

```
gam info instance

gam info domain | domainalias <domain>

gam create domain <domain>

gam create domainalias <domainalias> <parentdomain>

gam delete domain | domainalias <domain>

gam print domains | domainaliases [todrive]

gam update domain <domain> primary
```

Domain Verification

```
gam create verify <domain>

gam update verify <domain> <cname|txt|site|file>

gam info verify
```

Admin Notifications

```
gam update notification id all | <notification ID>
unread|read

gam info notification [unreadonly]

gam delete notification id all | <notification ID>
```

Data Transfers

```
gam create datatransfer <old owner> drive|google+
<new owner> [parameter <value>]

gam info datatransfer <id>

gam print datatransfers [oldowner <old owner>]
[newowner <new owner>] [status completed|failed|
inProgress|pending] [todrive]

gam print transferapps
```

Customer

```
gam info customer

gam update customer
[alternateemail <EmailAddress>]
[language <LanguageCode>] [phone <String>]
[organizationname <String>] [contactname <String>]
[countrycode <String>] [addressline1 <String>]
[addressline2 <String>] [addressline3 <String>]
[locality <String>] [region <String>]
[postalcode <String>] [countrycode <String>]
```

Bulk Operations

```
gam csv <csv-filename> gam <regular command>

Arguments starting with ~ will be substituted with the
value from the CSV row. For example:

gam csv newusers.csv gam create user ~Email
firstname ~Firstname lastname ~Lastname
password ~Password gal off changepassword off
org Testing/Students

Note that the ~ (tilde) character may need to be escaped
in some environments.
```

Run multiple gam commands from batch file:
gam **batch** <batch-filename>

When the command “commit-batch” is found, all
previous commands will be completed before
execution continues.

Parallel Commands

For both csv and batch commands, GAM will run
multiple actions in parallel. By default, GAM starts 5
worker threads and can run 5 commands at a time. You
can raise or lower this setting by setting an environment
variable called GAM_THREADS.

Going much higher than 20 threads is not recommended
or you’re likely to see issues with Google API quotas.

OAuth Key Management

Set the variable OAUTHFILE in your shell to the file
containing the OAuth credentials and the variable
OAUTHSERVICEFILE to the file containing the service
account JSON key. The file must be in the same folder as
gam.exe/gam.py or contain a path relative to this folder.

```
gam oauth info [<access token>]
```

```
gam oauth create | revoke
```