

am 명령 옵션

Activity manager (activity) commands:

help

Print this help text.

start-activity [-D] [-N] [-W] [-P <FILE>] [--start-profiler <FILE>]
 [--sampling INTERVAL] [--streaming] [-R COUNT] [-S]
 [--track-allocation] [--user <USER_ID> | current] <INTENT>

Start an Activity. Options are:

-D: enable debugging

-N: enable native debugging

-W: wait for launch to complete

--start-profiler <FILE>: start profiler and send results to <FILE>

--sampling INTERVAL: use sample profiling with INTERVAL microseconds
 between samples (use with --start-profiler)

--streaming: stream the profiling output to the specified file
 (use with --start-profiler)

-P <FILE>: like above, but profiling stops when app goes idle

--attach-agent <agent>: attach the given agent before binding

--attach-agent-bind <agent>: attach the given agent during binding

-R: repeat the activity launch <COUNT> times. Prior to each repeat,
 the top activity will be finished.

-S: force stop the target app before starting the activity

--track-allocation: enable tracking of object allocations

--user <USER_ID> | current: Specify which user to run as; if not
 specified then run as the current user.

--windowingMode <WINDOWING_MODE>: The windowing mode to launch the activity into.

--activityType <ACTIVITY_TYPE>: The activity type to launch the activity as.

--display <DISPLAY_ID>: The display to launch the activity into.

start-service [--user <USER_ID> | current] <INTENT>

Start a Service. Options are:

--user <USER_ID> | current: Specify which user to run as; if not
 specified then run as the current user.

start-foreground-service [--user <USER_ID> | current] <INTENT>
Start a foreground Service. Options are:
--user <USER_ID> | current: Specify which user to run as; if not specified then run as the current user.

stop-service [--user <USER_ID> | current] <INTENT>
Stop a Service. Options are:
--user <USER_ID> | current: Specify which user to run as; if not specified then run as the current user.

broadcast [--user <USER_ID> | all | current]
[--receiver-permission <PERMISSION>]
[--allow-background-activity-starts]
[--async] <INTENT>
Send a broadcast Intent. Options are:
--user <USER_ID> | all | current: Specify which user to send to; if not specified then send to all users.
--receiver-permission <PERMISSION>: Require receiver to hold permission.
--allow-background-activity-starts: The receiver may start activities even if in the background.
--async: Send without waiting for the completion of the receiver.

instrument [-r] [-e <NAME> <VALUE>] [-p <FILE>] [-w]
[--user <USER_ID> | current]
[--no-hidden-api-checks [--no-test-api-access]]
[--no-isolated-storage]
[--no-window-animation] [--abi <ABI>] <COMPONENT>
Start an Instrumentation. Typically this target <COMPONENT> is in the form <TEST_PACKAGE>/<RUNNER_CLASS> or only <TEST_PACKAGE> if there is only one instrumentation. Options are:
-r: print raw results (otherwise decode REPORT_KEY_STREAMRESULT). Use with [-e perf true] to generate raw output for performance measurements.
-e <NAME> <VALUE>: set argument <NAME> to <VALUE>. For test runners a common form is [-e <testrunner_flag> <value>[,<value>...]].
-p <FILE>: write profiling data to <FILE>
-m: Write output as protobuf to stdout (machine readable)
-f <Optional PATH/TO/FILE>: Write output as protobuf to a file (machine

readable). If path is not specified, default directory and file name will be used: /sdcard/instrument-logs/log-yyyyMMdd-hhmmss-SSS.instrumentation_data_proto

-w: wait for instrumentation to finish before returning. Required for test runners.

--user <USER_ID> | current: Specify user instrumentation runs in; current user if not specified.

--no-hidden-api-checks: disable restrictions on use of hidden API.

--no-test-api-access: do not allow access to test APIs, if hidden API checks are enabled.

--no-isolated-storage: don't use isolated storage sandbox and mount full external storage

--no-window-animation: turn off window animations while running.

--abi <ABI>: Launch the instrumented process with the selected ABI. This assumes that the process supports the selected ABI.

trace-ipc [start|stop] [--dump-file <FILE>]
Trace IPC transactions.
start: start tracing IPC transactions.
stop: stop tracing IPC transactions and dump the results to file.
--dump-file <FILE>: Specify the file the trace should be dumped to.

profile start [--user <USER_ID> current]
[--sampling INTERVAL | --streaming] <PROCESS> <FILE>
Start profiler on a process. The given <PROCESS> argument may be either a process name or pid. Options are:
--user <USER_ID> | current: When supplying a process name, specify user of process to profile; uses current user if not specified.
--sampling INTERVAL: use sample profiling with INTERVAL microseconds between samples.
--streaming: stream the profiling output to the specified file.

profile stop [--user <USER_ID> current] <PROCESS>
Stop profiler on a process. The given <PROCESS> argument may be either a process name or pid. Options are:
--user <USER_ID> | current: When supplying a process name, specify user of process to profile; uses current user if not

specified.

dumpheap [--user <USER_ID> current] [-n] [-g] <PROCESS> <FILE>

Dump the heap of a process. The given <PROCESS> argument may be either a process name or pid. Options are:

-n: dump native heap instead of managed heap

-g: force GC before dumping the heap

--user <USER_ID> | current: When supplying a process name, specify user of process to dump; uses current user if not specified.

set-debug-app [-w] [--persistent] <PACKAGE>

Set application <PACKAGE> to debug. Options are:

-w: wait for debugger when application starts

--persistent: retain this value

clear-debug-app

Clear the previously set-debug-app.

set-watch-heap <PROCESS> <MEM-LIMIT>

Start monitoring pss size of <PROCESS>, if it is at or above <HEAP-LIMIT> then a heap dump is collected for the user to report.

clear-watch-heap

Clear the previously set-watch-heap.

clear-exit-info [--user <USER_ID> | all | current] [package]

Clear the process exit-info for given package

bug-report [--progress | --telephony]

Request bug report generation; will launch a notification

when done to select where it should be delivered. Options are:

--progress: will launch a notification right away to show its progress.

--telephony: will dump only telephony sections.

fgs-notification-rate-limit {enable | disable}

Enable/disable rate limit on FGS notification deferral policy.

force-stop [--user <USER_ID> | all | current] <PACKAGE>

Completely stop the given application package.

crash [--user <USER_ID>] <PACKAGE|PID>

Induce a VM crash in the specified package or process

kill [--user <USER_ID> | all | current] <PACKAGE>

Kill all background processes associated with the given application.

kill-all

Kill all processes that are safe to kill (cached, etc).

make-uid-idle [--user <USER_ID> | all | current] <PACKAGE>

If the given application's uid is in the background and waiting to become idle (not allowing background services), do that now.

monitor [--gdb <port>]

Start monitoring for crashes or ANRs.

--gdb: start gdbserve on the given port at crash/ANR

watch-uids [--oom <uid>]

Start watching for and reporting uid state changes.

--oom: specify a uid for which to report detailed change messages.

hang [--allow-restart]

Hang the system.

--allow-restart: allow watchdog to perform normal system restart

restart

Restart the user-space system.

idle-maintenance

Perform idle maintenance now.

screen-compat [on|off] <PACKAGE>

Control screen compatibility mode of <PACKAGE>.

package-importance <PACKAGE>

Print current importance of <PACKAGE>.

to-uri [INTENT]

Print the given Intent specification as a URI.

to-intent-uri [INTENT]

Print the given Intent specification as an intent: URI.

to-app-uri [INTENT]

Print the given Intent specification as an android-app: URI.

switch-user <USER_ID>

Switch to put USER_ID in the foreground, starting execution of that user if it is currently stopped.

get-current-user

Returns id of the current foreground user.

start-user [-w] <USER_ID>

Start USER_ID in background if it is currently stopped;
use switch-user if you want to start the user in foreground.
-w: wait for start-user to complete and the user to be unlocked.

unlock-user <USER_ID> [TOKEN_HEX]
Attempt to unlock the given user using the given authorization token.

stop-user [-w] [-f] <USER_ID>
Stop execution of USER_ID, not allowing it to run any
code until a later explicit start or switch to it.
-w: wait for stop-user to complete.
-f: force stop even if there are related users that cannot be stopped.

is-user-stopped <USER_ID>
Returns whether <USER_ID> has been stopped or not.

get-started-user-state <USER_ID>
Gets the current state of the given started user.

track-associations
Enable association tracking.

untrack-associations
Disable and clear association tracking.

get-uid-state <UID>
Gets the process state of an app given its <UID>.

attach-agent <PROCESS> <FILE>
Attach an agent to the specified <PROCESS>, which may be either a process name or a PID.

get-config [--days N] [--device] [--proto] [--display <DISPLAY_ID>]
Retrieve the configuration and any recent configurations of the device.
--days: also return last N days of configurations that have been seen.
--device: also output global device configuration info.
--proto: return result as a proto; does not include --days info.
--display: Specify for which display to run the command; if not
specified then run for the default display.

supports-multiwindow
Returns true if the device supports multiwindow.

supports-split-screen-multi-window
Returns true if the device supports split screen multiwindow.

suppress-resize-config-changes <true|false>

Suppresses configuration changes due to user resizing an activity/task.

set-inactive [--user <USER_ID>] <PACKAGE> true|false
 Sets the inactive state of an app.

get-inactive [--user <USER_ID>] <PACKAGE>
 Returns the inactive state of an app.

set-standby-bucket [--user <USER_ID>] <PACKAGE> active|working_set|frequent|rare|restricted
 Puts an app in the standby bucket.

get-standby-bucket [--user <USER_ID>] <PACKAGE>
 Returns the standby bucket of an app.

send-trim-memory [--user <USER_ID>] <PROCESS>
 [HIDDEN|RUNNING_MODERATE|BACKGROUND|RUNNING_LOW|MODERATE|RUNNING_CRITICAL|COMPLETE]
 Send a memory trim event to a <PROCESS>. May also supply a raw trim int level.

display [COMMAND] [...]: sub-commands for operating on displays.

 move-stack <STACK_ID> <DISPLAY_ID>
 Move <STACK_ID> from its current display to <DISPLAY_ID>.

stack [COMMAND] [...]: sub-commands for operating on activity stacks.

 move-task <TASK_ID> <STACK_ID> [true|false]
 Move <TASK_ID> from its current stack to the top (true) or bottom (false) of <STACK_ID>.

 list
 List all of the activity stacks and their sizes.

 info <WINDOWING_MODE> <ACTIVITY_TYPE>
 Display the information about activity stack in <WINDOWING_MODE> and <ACTIVITY_TYPE>.

 remove <STACK_ID>
 Remove stack <STACK_ID>.

task [COMMAND] [...]: sub-commands for operating on activity tasks.

 lock <TASK_ID>
 Bring <TASK_ID> to the front and don't allow other tasks to run.

 lock stop
 End the current task lock.

 resizeable <TASK_ID> [0|1|2|3]
 Change resizeable mode of <TASK_ID> to one of the following:
 0: unresizeable
 1: crop_windows

2: resizable

3: resizable_and_pipable

resize <TASK_ID> <LEFT,TOP,RIGHT,BOTTOM>
 Makes sure <TASK_ID> is in a stack with the specified bounds.
 Forces the task to be resizable and creates a stack if no existing stack
 has the specified bounds.

update-appinfo <USER_ID> <PACKAGE_NAME> [<PACKAGE_NAME>...]
 Update the ApplicationInfo objects of the listed packages for <USER_ID>
 without restarting any processes.

write
 Write all pending state to storage.

compat [COMMAND] [...]: sub-commands for toggling app-compat changes.

enable|disable [--no-kill] <CHANGE_ID|CHANGE_NAME> <PACKAGE_NAME>
 Toggles a change either by id or by name for <PACKAGE_NAME>.
 It kills <PACKAGE_NAME> (to allow the toggle to take effect) unless --no-kill is provided.

reset <CHANGE_ID|CHANGE_NAME> <PACKAGE_NAME>
 Toggles a change either by id or by name for <PACKAGE_NAME>.
 It kills <PACKAGE_NAME> (to allow the toggle to take effect).

enable-all|disable-all <targetSdkVersion> <PACKAGE_NAME>
 Toggles all changes that are gated by <targetSdkVersion>.

reset-all [--no-kill] <PACKAGE_NAME>
 Removes all existing overrides for all changes for
 <PACKAGE_NAME> (back to default behaviour).
 It kills <PACKAGE_NAME> (to allow the toggle to take effect) unless --no-kill is provided.

memory-factor [command] [...]: sub-commands for overriding memory pressure factor

set <NORMAL|MODERATE|LOW|CRITICAL>
 Overrides memory pressure factor. May also supply a raw int level

show
 Shows the existing memory pressure factor

reset
 Removes existing override for memory pressure factor

service-restart-backoff <COMMAND> [...]: sub-commands to toggle service restart backoff policy.

enable|disable <PACKAGE_NAME>
 Toggles the restart backoff policy on/off for <PACKAGE_NAME>.

show <PACKAGE_NAME>

Shows the restart backoff policy state for <PACKAGE_NAME>.

get-isolated-pids <UID>

Get the PIDs of isolated processes with packages in this <UID>

<INTENT> specifications include these flags and arguments:

[-a <ACTION>] [-d <DATA_URI>] [-t <MIME_TYPE>] [-i <IDENTIFIER>]

[-c <CATEGORY> [-c <CATEGORY>] ...]

[-n <COMPONENT_NAME>]

[-e|--es <EXTRA_KEY> <EXTRA_STRING_VALUE> ...]

[--esn <EXTRA_KEY> ...]

[--ez <EXTRA_KEY> <EXTRA_BOOLEAN_VALUE> ...]

[--ei <EXTRA_KEY> <EXTRA_INT_VALUE> ...]

[--el <EXTRA_KEY> <EXTRA_LONG_VALUE> ...]

[--ef <EXTRA_KEY> <EXTRA_FLOAT_VALUE> ...]

[--eu <EXTRA_KEY> <EXTRA_URI_VALUE> ...]

[--ecn <EXTRA_KEY> <EXTRA_COMPONENT_NAME_VALUE>]

[--eia <EXTRA_KEY> <EXTRA_INT_VALUE>[,<EXTRA_INT_VALUE...>]

(multiple extras passed as Integer[])

[--eial <EXTRA_KEY> <EXTRA_INT_VALUE>[,<EXTRA_INT_VALUE...>]

(multiple extras passed as List<Integer>)

[--ela <EXTRA_KEY> <EXTRA_LONG_VALUE>[,<EXTRA_LONG_VALUE...>]

(multiple extras passed as Long[])

[--elal <EXTRA_KEY> <EXTRA_LONG_VALUE>[,<EXTRA_LONG_VALUE...>]

(multiple extras passed as List<Long>)

[--efa <EXTRA_KEY> <EXTRA_FLOAT_VALUE>[,<EXTRA_FLOAT_VALUE...>]

(multiple extras passed as Float[])

[--efal <EXTRA_KEY> <EXTRA_FLOAT_VALUE>[,<EXTRA_FLOAT_VALUE...>]

(multiple extras passed as List<Float>)

[--esa <EXTRA_KEY> <EXTRA_STRING_VALUE>[,<EXTRA_STRING_VALUE...>]

(multiple extras passed as String[]; to embed a comma into a string,
escape it using "\",")

[--esal <EXTRA_KEY> <EXTRA_STRING_VALUE>[,<EXTRA_STRING_VALUE...>]

(multiple extras passed as List<String>; to embed a comma into a string,

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    escape it using "\",")
[-f <FLAG>]
[--grant-read-uri-permission] [--grant-write-uri-permission]
[--grant-persistable-uri-permission] [--grant-prefix-uri-permission]
[--debug-log-resolution] [--exclude-stopped-packages]
[--include-stopped-packages]
[--activity-brought-to-front] [--activity-clear-top]
[--activity-clear-when-task-reset] [--activity-exclude-from-recents]
[--activity-launched-from-history] [--activity-multiple-task]
[--activity-no-animation] [--activity-no-history]
[--activity-no-user-action] [--activity-previous-is-top]
[--activity-reorder-to-front] [--activity-reset-task-if-needed]
[--activity-single-top] [--activity-clear-task]
[--activity-task-on-home] [--activity-match-external]
[--receiver-registered-only] [--receiver-replace-pending]
[--receiver-foreground] [--receiver-no-abort]
[--receiver-include-background]
[--selector]
[<URI> | <PACKAGE> | <COMPONENT>]
```