

User commands

Viewing information about your cluster

Command	Description
bhosts	Displays hosts and their static and dynamic resources
bhpart	Displays information about host partitions
bmggroup	Displays information about host groups
bparams	Displays information about tunable batch system parameters
bqueues	Displays information about batch queues
brsvs	Displays advance reservations
bugroup	Displays information about user groups
busers	Displays information about users and user groups
lshosts	Displays hosts and their static resource information
lsid	Displays the current LSF version number, cluster name and the master host name
lsinfo	Displays load sharing configuration information
lsload	Displays dynamic load indices for hosts

Monitoring jobs and tasks

Command	Description
bhist	Displays historical information about jobs
bjgroup	Displays information about job groups
bjobs	Displays information about jobs
blimits	Displays information about resource allocation limits
bpeek	Displays stdout and stderr of unfinished jobs
bsla	Displays information about service class configuration for goal-oriented service-level agreement (SLA) scheduling
bstatus	Reads or sets external job status messages and data files

Submitting and controlling jobs

Command	Description
bbot	Moves a pending job relative to the last job in the queue
bchkpnt	Checkpoints a checkpointable job
bgadd	Creates job groups
bgdel	Deletes job groups
bkill	Sends a signal to a job
bmig	Migrates a checkpointable or rerunnable job
bmod	Modifies job submission options
bpost	Sends a messages and attaches data files to a job
bread	Reads messages and attached data files from a job
brequeue	Kills and requeues a job
brestart	Restarts a checkpointed job
bresume	Resumes a suspended job
bstop	Suspends a job
bsub	Submits a job

Command	Description
bswitch	Moves unfinished jobs from one queue to another
btop	Moves a pending job relative to the first job in the queue

bsub command

Syntax

bsub [options] command [arguments]

Options

Option	Description
-B	Sends email when the job is dispatched
-H	Holds the job in the PSUSP state at submission
-I   -lp   -ls	Submits a batch interactive job. -lp creates a pseudo-terminal. -ls creates a pseudo-terminal in shell mode.
-K	Submits a job and waits for the job to finish
-N	Emails the job report when the job finishes
-r	Makes a job rerunnable
-x	Exclusive execution
-b begin_time	Dispatches the job on or after the specified date and time in the form <i>[[month:]day:]hour:minute</i>
-C core_limit	Sets a per-process (soft) core file size limit (KB) for all the processes that belong to this job
-c cpu_time[/host_name   / host_model]	Limits the total CPU time the job can use. CPU time is in the form <i>[hour:]minute</i>
-D data_limit	Sets per-process (soft) data segment size limit (KB) for each process that belong to the job
-e error_file	Appends the standard error output to a file
-ext[sched]	Application-specific external scheduling options for the job (-extsched can be abbreviated to -ext)
-E "pre_exec_command [arguments ...]"	Runs the specified pre-exec command on the execution host before running the job
-f "local_file op [remote_file]" ...	Copies a file between the local (submission) host and remote (execution) host. <i>op</i> is one of >, <, <<, ><, <>
-F file_limit	Sets per-process (soft) file size limit (KB) for each process that belong to the job
-G user_group	Associates job with a specified user group
-g job_group_name	Associates job with a specified job group
-i input_file   -is input_file	Gets the standard input for the job from specified file
-J "job_name[index_list] %job_slot_limit"	Assigns the specified name to the job. <i>Index_list</i> for job arrays has the form <i>start[-end[:step]]</i> , where <i>start</i> , <i>end</i> , and <i>step</i> are positive integers, and <i>%job_slot_limit</i> is the maximum number of jobs that can run at any given time.
-k "chkpnt_dir [chkpnt_period] [method=method_name]"	Makes a job checkpointable and specifies the checkpoint directory, period in minutes, and method
-L login_shell	Initializes the execution environment using the specified login shell

Option	Description
-m "host_name [@cluster_name] [+pref_level]]   host_group[+pref_level]] ..."	Runs job on one of the specified hosts. Plus (+) after the names of hosts or host groups indicates a preference. Optionally, a positive integer indicates a preference level. Higher numbers indicate greater preferences for those hosts.
-M mem_limit	Sets the memory limit (KB)
-n min_proc[,max_proc]	Specifies the minimum and maximum numbers of processors required for a parallel job
-o output_file	Appends the standard output to a file
-P project_name	Assigns job to specified project
-p process_limit	Sets the limit of the number of processes for the whole job
-q "queue_name ..."	Submits job to specified queues
-R "res_req"	Specifies host resource requirements
sla service_class_name	Specifies the service class where the job is to run
-sp priority	Specifies user-assigned job priority to allow users to order their jobs in a queue
-S stack_limit	Sets a per-process (soft) stack segment size limit (KB) for each of the processes that belong to the job
-T thread_limit	Sets the limit of the number of concurrent threads for the whole job
-t term_time	Specifies the job termination deadline in the form <i>[[month:]day:]hour:minute</i>
-U reservation_ID	Use advance reservation created with brsvadd
-u mail_user	Sends mail to the specified email address
-v swap_limit	Set the total process virtual memory limit (KB) for the whole job
-w 'dependency_expression'	Places a job when the dependency expression evaluates to TRUE
-wa '[signal   command   CHKPNT]'	Specifies the job action to be taken before a job control action occurs
-wt '[hour:]minute'	Specifies the amount of time before a job control action occurs that a job warning action is to be taken
-W run_time[/host_name   / host_model]	Sets the run time limit of the job in the form <i>[hour:]minute</i>
-Zs	Spools a command file for the job to the directory specified by the JOB_SPOOL_DIR in lsb.params
-h	Prints command usage to stderr and exits
-V	Prints LSF release version to stderr and exits