

## Basic Level MCQs

**1. What does Slurm stand for?**

1. A) Simple Linux Utility for Resource Management
2. B) System Load Utility for Resource Management
3. C) Secure Linux Utility for Resource Management
4. D) Systematic Load Utility for Remote Management

**Answer: A) Simple Linux Utility for Resource Management**

**1. Which component of Slurm is responsible for managing the cluster and job scheduling?**

1. A) slurmd
2. B) slurmctld
3. C) squeue
4. D) scontrol

**Answer: B) slurmctld**

**1. What is the primary function of slurmd in Slurm?**

1. A) Resource allocation
2. B) Job scheduling
3. C) Resource management on compute nodes
4. D) Database management

**Answer: C) Resource management on compute nodes**

**1. Which command is used to submit a batch job in Slurm?**

1. A) srun
2. B) sbatch
3. C) scontrol
4. D) squeue

**Answer: B) sbatch**

**1. What does the `squeue` command display?**

1. A) Job queue status
2. B) Available partitions
3. C) Cluster nodes information
4. D) Job accounting data

**Answer: A) Job queue status**

**1. In Slurm, what does a "partition" refer to?**

1. A) A subset of users with similar job types
2. B) A section of the cluster with specific nodes and resources
3. C) A command-line tool for cluster management
4. D) A database storing job information

**Answer: B) A section of the cluster with specific nodes and resources**

1. Which command is used to view information about nodes and partitions in Slurm?

1. A) sinfo
2. B) scontrol
3. C) sacct
4. D) sview

**Answer: A) sinfo**

1. What does the `sacct` command provide information about?

1. A) Real-time job status
2. B) Node status
3. C) Job accounting data
4. D) User quotas

**Answer: C) Job accounting data**

1. Which tool is used for administering and controlling Slurm operations?

1. A) sbatch
2. B) scontrol
3. C) sview
4. D) sacct

**Answer: B) scontrol**

1. What is the purpose of the `scancel` command in Slurm?

1. A) Cancel a running job
2. B) Suspend a job
3. C) View job details
4. D) Control node operation

**Answer: A) Cancel a running job**

## Intermediate Level MCQs

1. Which configuration file in Slurm defines the topology of the cluster?

1. A) slurm.conf
2. B) slurmd.conf
3. C) slurmdbd.conf
4. D) scontrol.conf

**Answer: A) slurm.conf**

1. What does the `scontrol show node` command display?

1. A) Job details running on a node
2. B) Node properties and status

3. C) Current user sessions on a node
4. D) Resource allocation history

**Answer: B) Node properties and status**

1. How does Slurm handle job prioritization?

1. A) By user-defined priorities and fairshare policies
2. B) By first-come, first-served basis
3. C) By random selection
4. D) By job submission time

**Answer: A) By user-defined priorities and fairshare policies**

1. Which command is used to display detailed information about a specific job in Slurm?

1. A) squeue
2. B) scontrol show job
3. C) sacct
4. D) sbatch

**Answer: B) scontrol show job**

1. What is the purpose of the `sview` command in Slurm?

1. A) View real-time visualizations of cluster activity
2. B) Display node status
3. C) Generate job accounting reports
4. D) Submit batch jobs interactively

**Answer: A) View real-time visualizations of cluster activity**

1. What does the `scontrol update job` command do in Slurm?

1. A) Updates job priority
2. B) Modifies job resources
3. C) Cancels a job
4. D) Resumes a suspended job

**Answer: B) Modifies job resources**

1. Which component of Slurm is responsible for storing job accounting and other metadata in a database?

1. A) slurmctld
2. B) slurmd
3. C) slurmdbd
4. D) scontrol

**Answer: C) slurmdbd**

1. What does the `scontrol ping` command check in Slurm?

1. A) Availability of compute nodes

2. B) Job status
3. C) Network connectivity between Slurm components
4. D) Job completion time

**Answer: C) Network connectivity between Slurm components**

1. Which command-line tool is used to manage user accounts and their associations with Slurm?

1. A) sacct
2. B) sbatch
3. C) scontrol
4. D) sacctmgr

**Answer: D) sacctmgr**

1. What is the purpose of the `scontrol suspend` command in Slurm?

1. A) Pause a job temporarily
2. B) Stop a job permanently
3. C) Suspend Slurm operations
4. D) Suspend node operation

**Answer: A) Pause a job temporarily**

## Advanced Level MCQs

1. How does Slurm handle job dependencies?

1. A) Using job flags
2. B) Through job attributes
3. C) By job ID association
4. D) Using job arrays

**Answer: A) Using job flags**

1. Which Slurm feature allows users to run interactive jobs on compute nodes?

1. A) srun
2. B) sbatch
3. C) sview
4. D) salloc

**Answer: D) salloc**

1. In Slurm, what is the purpose of the `scontrol reconfigure` command?

1. A) Restart Slurm services
2. B) Modify cluster configuration on-the-fly
3. C) Reassign job priorities
4. D) Update job accounting data

**Answer: B) Modify cluster configuration on-the-fly**

1. What is the role of the `slurmctld` daemon in Slurm?

1. A) Manages compute node resources
2. B) Handles job execution
3. C) Manages the cluster and job scheduling
4. D) Stores job accounting data

**Answer: C) Manages the cluster and job scheduling**

1. Which configuration file in Slurm is used to define the default limits and policies for jobs?

1. A) `slurm.conf`
2. B) `slurmdbd.conf`
3. C) `slurm_limits.conf`
4. D) `slurmctld.conf`

**Answer: A) `slurm.conf`**

1. What does the term "job array" refer to in Slurm?

1. A) A group of related jobs submitted together
2. B) An array of compute nodes
3. C) A scheduling queue for high-priority jobs
4. D) A configuration file for job dependencies

**Answer: A) A group of related jobs submitted together**

1. Which command is used to check the version of Slurm installed on a system?

1. A) `slurm-version`
2. B) `scontrol version`
3. C) `slurmctld -v`
4. D) `srun --version`

**Answer: C) `slurmctld -v`**

1. What is the purpose of the `scontrol show config` command in Slurm?

1. A) Display job configuration details
2. B) Show current cluster configuration settings
3. C) Configure node properties
4. D) Modify Slurm scheduler settings

**Answer: B) Show current cluster configuration settings**

1. Which feature of Slurm allows jobs to be automatically resubmitted in case of failure?

1. A) Job checkpointing
2. B) Job requeueing
3. C) Job arrays
4. D) Job dependencies

**Answer: B) Job requeueing**

1. What does the `scontrol update partition` command do in Slurm?

1. A) Update partition status
2. B) Modify partition configuration
3. C) Reallocate resources between partitions
4. D) Suspend partition operations

**Answer: B) Modify partition configuration**

## Challenging Level MCQs

1. Which Slurm command is used to perform job scheduling simulations?

1. A) `scontrol sim`
2. B) `sbatch sim`
3. C) `srun sim`
4. D) `sview sim`

**Answer: A) `scontrol sim`**

1. What is the purpose of the `scontrol jobcomp` command in Slurm?

1. A) Complete job execution
2. B) Compile job statistics
3. C) Compress job output files
4. D) Compare job priorities

**Answer: B) Compile job statistics**

1. In Slurm, how can you limit the number of jobs a user can submit simultaneously?

1. A) Using job limits in `slurm.conf`
2. B) Configuring user quotas in `sacctmgr`
3. C) Setting node properties in `slurmd.conf`
4. D) Using fairshare policies in `scontrol`

**Answer: A) Using job limits in `slurm.conf`**

1. What does the `scontrol hold` command do in Slurm?

1. A) Pause a job temporarily
2. B) Place a job on hold indefinitely
3. C) Hold node operations
4. D) Hold Slurm scheduler operations

**Answer: B) Place a job on hold indefinitely**

1. Which Slurm component is responsible for managing GPU resources?

1. A) `slurmd`
2. B) `slurmctld`
3. C) `gresd`
4. D) `scontrol`

**Answer: C) gresd**

1. What is the role of the `select/cons_tres` parameter in a Slurm job script?

1. A) Specifies the job priority
2. B) Defines job resources
3. C) Sets job environment variables
4. D) Selects the scheduler type

**Answer: B) Defines job resources**

1. Which Slurm command allows users to launch parallel tasks across multiple nodes?

1. A) srun
2. B) sbatch
3. C) scontrol
4. D) salloc

**Answer: A) srun**

1. What is the purpose of the `sacctmgr modify` command in Slurm?

1. A) Modify job limits for users
2. B) Modify job environment variables
3. C) Modify Slurm database settings
4. D) Modify Slurm scheduler policies

**Answer: A) Modify job limits for users**

1. In Slurm, what does the term "backfill scheduling" refer to?

1. A) Rescheduling jobs after a system failure
2. B) Scheduling jobs to fill gaps in the job queue
3. C) Reordering job priorities dynamically
4. D) Scheduling jobs in reverse order

**Answer: B) Scheduling jobs to fill gaps in the job queue**

1. Which Slurm component is responsible for managing job accounting data?

1. A) slurmctld
2. B) slurmd
3. C) slurmdbd
4. D) sacct

**Answer: C) slurmdbd**

**Expert Level MCQs**

1. How does Slurm handle job dependencies across multiple partitions?

1. A) Using multi-partition job flags
2. B) Through cross-partition scheduling

3. C) By synchronizing partition states
4. D) Using global job IDs

**Answer: A) Using multi-partition job flags**

1. Which Slurm command is used to manage Quality of Service (QoS) settings?

1. A) scontrol qos
2. B) sbatch qos
3. C) sacctmgr qos
4. D) squeue qos

**Answer: A) scontrol qos**

1. What is the purpose of the `scontrol share` command in Slurm?

1. A) Share job resources between users
2. B) Allocate shared memory for jobs
3. C) Share nodes across partitions
4. D) Share job output files

**Answer: A) Share job resources between users**

1. Which Slurm command is used to perform job checkpointing and restart?

1. A) srun
2. B) scontrol checkpoint
3. C) sbatch checkpoint
4. D) sacctmgr checkpoint

**Answer: B) scontrol checkpoint**

1. What does the `sview job history` command display in Slurm?

1. A) Real-time job status
2. B) Job completion history
3. C) Job dependency history
4. D) Node allocation history

**Answer: B) Job completion history**

1. Which Slurm component facilitates the integration of Docker containers for job execution?

1. A) slurmctld
2. B) slurmd
3. C) srun
4. D) sview

**Answer: B) slurmd**

1. What is the purpose of the `sacctmgr archive` command in Slurm?

1. A) Archive job accounting data



2. B) Archive job output files
3. C) Archive Slurm configuration files
4. D) Archive job scripts

**Answer: A) Archive job accounting data**

1. In Slurm, how can you limit the number of jobs a user can run concurrently on a node?

1. A) Using node limits in slurm.conf
2. B) Configuring user quotas in sacctmgr
3. C) Setting job constraints in sbatch
4. D) Using fairshare policies in scontrol

**Answer: A) Using node limits in slurm.conf**

1. Which command is used to display a summary of Slurm node states?

1. A) sview nodes
2. B) sinfo -N
3. C) scontrol nodes
4. D) sacctmgr nodes

**Answer: B) sinfo -N**

1. What does the `scontrol topology` command provide information about in Slurm?

1. A) Network topology of the cluster
2. B) Topology of GPU resources
3. C) Interconnect topology between nodes
4. D) Job dependency topology

**Answer: A) Network topology of the cluster**

1. Which Slurm component handles communication between `slurmctld` and `slurmd`?

1. A) scontrol
2. B) sview
3. C) slurmdbd
4. D) none of the above

**Answer: D) none of the above**

1. What is the purpose of the `srun` command in Slurm?

1. A) Submitting a batch job
2. B) Running tasks interactively on compute nodes
3. C) Controlling Slurm daemons
4. D) Viewing job queue status

**Answer: B) Running tasks interactively on compute nodes**

1. Which Slurm command is used to specify job resource requirements such as CPU, memory, and GPUs?

1. A) scontrol
2. B) sinfo
3. C) srun
4. D) sbatch

**Answer: D) sbatch**

1. What does the `scontrol show job <job_id>` command display?

1. A) Job details and status
2. B) Job queue status
3. C) Job accounting data
4. D) Job priority

**Answer: A) Job details and status**

1. In Slurm, what is the purpose of the `salloc` command?

1. A) Allocate compute nodes for job execution
2. B) Suspend a job temporarily
3. C) Submit a batch job
4. D) Cancel a running job

**Answer: A) Allocate compute nodes for job execution**

1. Which Slurm component is responsible for managing job submission and scheduling policies?

1. A) slurmd
2. B) slurmctld
3. C) slurmdbd
4. D) scontrol

**Answer: B) slurmctld**

1. What is the purpose of the `scontrol share` command in Slurm?

1. A) Share job resources between users
2. B) Allocate shared memory for jobs
3. C) Share nodes across partitions
4. D) Share job output files

**Answer: A) Share job resources between users**

1. Which Slurm command is used to modify job properties after job submission?

1. A) squeue
2. B) sbatch
3. C) scontrol update job
4. D) srun

**Answer: C) scontrol update job**

1. What does the `scontrol reconfigure` command do in Slurm?

1. A) Reconfigure compute node settings
2. B) Modify cluster configuration on-the-fly
3. C) Update job accounting data
4. D) Synchronize job dependencies

**Answer: B) Modify cluster configuration on-the-fly**

1. In Slurm, how can you limit the number of tasks a job can run concurrently?

1. A) Using task limits in `slurm.conf`
2. B) Setting job constraints in `sbatch`
3. C) Configuring user quotas in `sacctmgr`
4. D) Using fairshare policies in `scontrol`

**Answer: B) Setting job constraints in sbatch**

1. Which Slurm command is used to delete a job from the job queue?

1. A) `scontrol delete job`
2. B) `squeue delete job`
3. C) `scancel`
4. D) `srun delete job`

**Answer: C) scancel**

1. What is the purpose of the `sacctmgr show associations` command in Slurm?

1. A) Display job associations with users
2. B) Show job scheduling policies
3. C) View user authentication details
4. D) Monitor node associations

**Answer: A) Display job associations with users**

1. Which Slurm command-line tool allows administrators to modify user accounts and their associations?

1. A) `sacctmgr`
2. B) `scontrol`
3. C) `sview`
4. D) `sbatch`

**Answer: A) sacctmgr**

1. What does the `scontrol ping` command check in Slurm?

1. A) Availability of compute nodes
2. B) Job status
3. C) Network connectivity between Slurm components
4. D) Job completion time

**Answer: C) Network connectivity between Slurm components**

1. Which configuration file in Slurm defines node-specific configuration settings?

1. A) slurm.conf
2. B) slurmd.conf
3. C) slurmdbd.conf
4. D) scontrol.conf

**Answer: B) slurmd.conf**

1. What does the `scontrol hold` command do in Slurm?

1. A) Pause a job temporarily
2. B) Place a job on hold indefinitely
3. C) Hold node operations
4. D) Hold Slurm scheduler operations

**Answer: B) Place a job on hold indefinitely**

1. In Slurm, what is the purpose of the `scontrol update partition` command?

1. A) Update partition status
2. B) Modify partition configuration
3. C) Reallocate resources between partitions
4. D) Suspend partition operations

**Answer: B) Modify partition configuration**

1. Which Slurm command is used to create or modify QoS (Quality of Service) settings?

1. A) `squeue qos`
2. B) `scontrol qos`
3. C) `sacctmgr qos`
4. D) `sbatch qos`

**Answer: B) scontrol qos**

1. What is the purpose of the `scontrol reconfig` command in Slurm?

1. A) Reconfigure Slurm scheduler policies
2. B) Modify job attributes
3. C) Restart Slurm services
4. D) Update job priorities

**Answer: A) Reconfigure Slurm scheduler policies**

1. Which Slurm component facilitates the integration of Docker containers for job execution?

1. A) `slurmctld`
2. B) `slurmd`
3. C) `srun`
4. D) `sview`

**Answer: B) slurmd**

---

1. Which Slurm command is used to display the available partitions on the cluster?

1. A) scontrol show partitions
2. B) sinfo -p
3. C) sacctmgr show partitions
4. D) scontrol show config

**Answer: B) sinfo -p**

1. What does the `scontrol show job <job_id> -d` command display in Slurm?

1. A) Detailed job information
2. B) Job dependency details
3. C) Job script content
4. D) Job resource usage

**Answer: A) Detailed job information**

1. In Slurm, which command is used to display the status of a specific compute node?

1. A) sinfo -n
2. B) scontrol show node
3. C) squeue -n
4. D) sbatch -n

**Answer: B) scontrol show node**

1. Which Slurm component is responsible for managing and allocating GPU resources?

1. A) gresd
2. B) slurmd
3. C) slurmctld
4. D) scontrol

**Answer: A) gresd**

1. What is the purpose of the `scontrol show license` command in Slurm?

1. A) Display license expiration details
2. B) Show job license usage
3. C) List available software licenses
4. D) Manage software license servers

**Answer: C) List available software licenses**

1. Which Slurm command is used to display the detailed configuration of a specific partition?

1. A) scontrol show partition
2. B) sinfo -l
3. C) sview partition details
4. D) sacctmgr partition config

**Answer: A) scontrol show partition**

1. In Slurm, what does the term "fairshare" refer to?

1. A) Fair distribution of compute node resources
2. B) Fair job scheduling policies
3. C) Fair allocation of job dependencies
4. D) Fair user access to partitions

**Answer: B) Fair job scheduling policies**

1. Which Slurm command-line tool is used to manage job arrays?

1. A) sarray
2. B) scontrol array
3. C) sbatch array
4. D) sinfo array

**Answer: C) sbatch array**

1. What is the purpose of the `scontrol resume` command in Slurm?

1. A) Resume a suspended job
2. B) Resume Slurm operations
3. C) Resume node operations
4. D) Resume a failed task

**Answer: A) Resume a suspended job**

1. Which Slurm component is responsible for managing job accounting and statistics?

1. A) slurmd
2. B) slurmctld
3. C) slurmdbd
4. D) sview

**Answer: C) slurmdbd**

1. What does the `scontrol show licenses` command display in Slurm?

1. A) Available software licenses
2. B) License expiration dates
3. C) License server status
4. D) License usage by users

**Answer: A) Available software licenses**

1. In Slurm, which command is used to display the number of jobs in the queue and their priority?

1. A) scontrol show queue
2. B) squeue -p
3. C) sacctmgr show queue
4. D) sinfo -q

**Answer: B) squeue -p**

1. Which Slurm command is used to display the current status of the scheduler?

1. A) scontrol status
2. B) sinfo -s
3. C) sacctmgr status
4. D) sbatch status

**Answer: A) scontrol status**

1. What is the purpose of the `sacct -a` command in Slurm?

1. A) Display accounting data for all jobs
2. B) Archive job output files
3. C) Allocate resources to jobs
4. D) Add users to job arrays

**Answer: A) Display accounting data for all jobs**

1. Which Slurm command is used to display the current state of the nodes in the cluster?

1. A) scontrol show state
2. B) sinfo -N
3. C) squeue -N
4. D) sbatch -N

**Answer: B) sinfo -N**

1. In Slurm, what does the `scontrol show association` command display?

1. A) Job associations with partitions
2. B) Node associations with users
3. C) License associations with jobs
4. D) User associations with QoS

**Answer: B) Node associations with users**

1. Which Slurm command is used to view the job execution history for a specific user?

1. A) scontrol history -u
2. B) squeue -u history
3. C) sacct -u
4. D) sbatch -u history

**Answer: C) sacct -u**

1. What does the `scontrol hold job` command do in Slurm?

1. A) Place a job on hold
2. B) Hold job resources
3. C) Suspend job execution
4. D) Resume a suspended job

**Answer: A) Place a job on hold**

1. Which Slurm command is used to specify a time limit for job execution?

1. A) scontrol time
2. B) squeue time
3. C) sbatch time
4. D) sinfo -t

**Answer: C) sbatch time**

1. What is the purpose of the `scontrol version` command in Slurm?

1. A) Display Slurm version information
2. B) Update Slurm to the latest version
3. C) Check Slurm license version
4. D) Control software versions on compute nodes

**Answer: A) Display Slurm version information**

1. In Slurm, which command is used to view the reason for job failure?

1. A) scontrol reason
2. B) squeue reason
3. C) sacct reason
4. D) sbatch reason

**Answer: C) sacct reason**

1. Which Slurm command is used to show detailed information about a compute node?

1. A) scontrol show details
2. B) sinfo -d
3. C) scontrol show node details
4. D) sacctmgr show node

**Answer: C) scontrol show node details**

1. What does the `scontrol update node` command do in Slurm?

1. A) Update node configuration
2. B) Update node status
3. C) Update node firmware
4. D) Update node scheduler settings

**Answer: A) Update node configuration**

1. Which Slurm command is used to set or modify job constraints such as required features or partitions?

1. A) scontrol constraint
2. B) sbatch constraint
3. C) sinfo -C
4. D) scontrol update job

**Answer: D) scontrol update job**

1. What is the purpose of the `sacctmgr archive user` command in Slurm?



1. A) Archive job accounting data for a specific user
2. B) Archive user login history
3. C) Archive user job output files
4. D) Archive user preferences

**Answer: A) Archive job accounting data for a specific user**

1. In Slurm, which command is used to display information about fairshare usage?

1. A) scontrol fairshare
2. B) squeue fairshare
3. C) sacctmgr fairshare
4. D) sinfo -f

**Answer: A) scontrol fairshare**

1. Which Slurm command is used to display the maximum number of jobs that can run on a specific node?

1. A) sinfo -m
2. B) scontrol show maxjobs
3. C) sview -m
4. D) sbatch -m

**Answer: B) scontrol show maxjobs**

1. What is the purpose of the `scontrol show jobstats` command in Slurm?

1. A) Display job statistics
2. B) Show job status
3. C) View job history
4. D) Check job queue status

**Answer: A) Display job statistics**

1. Which Slurm command is used to display the status of the Slurm database daemon?

1. A) scontrol dbstatus
2. B) sinfo -d
3. C) sacctmgr dbstatus
4. D) sbatch dbstatus

**Answer: A) scontrol dbstatus**

1. In Slurm, what does the `scontrol share job` command do? - A) Share job resources between partitions - B) Allocate shared memory for a job - C) Share job output files between users - D) Share job CPU time across nodes

**Answer: A) Share job resources between partitions**