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[scontrol show](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ihxauaku8ajg) [68](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ihxauaku8ajg)

[sinfo](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.fqgumwv54pxq) [68](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.fqgumwv54pxq)

[sview](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.qbs2eb530241) [77](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.qbs2eb530241)

**[Managing Jobs Exercises](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.owvfruxxqx6) [78](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.owvfruxxqx6)**

[Exercise 1-Modify a job using scontrol](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.eh5vnodzqoud) [78](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.eh5vnodzqoud)

[Cleanup](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.izutkya6qekj) [78](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.izutkya6qekj)

**[Slurm Accounting and Reporting Discussion](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.rnakm9p0743v) [100](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.rnakm9p0743v)**

[sreport](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.sflqdhv0vfuv) [100](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.sflqdhv0vfuv)

[sstat](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.txxdic33woo3) [102](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.txxdic33woo3)

[sacct (end-user) and sacctmgr (administrator)](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.l4me19aj9mx8) [102](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.l4me19aj9mx8)

**[Accounting and Reporting Exercises](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.9qmbr26e5ord) [104](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.9qmbr26e5ord)**

[Exercise 1: Use the sstat command to view job information stored in the database:](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.q7q2guj3i2so) [104](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.q7q2guj3i2so)

[Exercise 2: Use the sacct command to view accounting database information:](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.uz6qnrtdi5ki) [105](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.uz6qnrtdi5ki)

[Cleanup](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.21tg4rdpqywr) [105](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.21tg4rdpqywr)

**[Accounting Discussion](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.twslxsinsde3) [107](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.twslxsinsde3)**

[Infrastructure](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ke9tmocv15du) [108](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ke9tmocv15du)

[Slurm JobComp Configuration](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.3iwv7ce1fxe2) [109](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.3iwv7ce1fxe2)

[Slurm Accounting Configuration Before Build](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ajroadiaexhe) [109](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ajroadiaexhe)

[Slurm Accounting Configuration After Build](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.rdeigf9fvnau) [110](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.rdeigf9fvnau)

[SlurmDBD Configuration](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.lin19b1uk2i6) [111](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.lin19b1uk2i6)

[MySQL Configuration](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.h843iid8by6c) [112](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.h843iid8by6c)

[Tools](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.3wvbxwajm3vm) [113](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.3wvbxwajm3vm)

[Database Configuration](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.4jabwjb5q0pt) [114](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.4jabwjb5q0pt)

[Database Maintenance](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.jygqxy4ltslv) [115](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.jygqxy4ltslv)

[Cluster Options](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.apr91h595xtt) [116](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.apr91h595xtt)

[Account Options](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.hfgmieu1q3ls) [116](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.hfgmieu1q3ls)

[User Options](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.f25r8i5t20bw) [116](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.f25r8i5t20bw)

[Limit Enforcement](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.3ra27jgda2g4) [116](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.3ra27jgda2g4)

[Modifying Entities](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.er5a3plhluhq) [117](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.er5a3plhluhq)

[Removing Entities](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.tf2bqqbx7dxd) [117](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.tf2bqqbx7dxd) [171](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.wkuma3s2imvs)

**[Advanced Resource Reservations Discussion](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.b8ybnop4t8lx) [174](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.b8ybnop4t8lx)**

[Reservation Creation](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.qw5go82sa9v1) [174](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.qw5go82sa9v1)

[Reservation Use](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.avusqxkkrsky) [177](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.avusqxkkrsky)

[Reservation Modification](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.z1jg6jk17zlh) [177](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.z1jg6jk17zlh)

[Reservation Deletion](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.tu106ucwgys8) [178](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.tu106ucwgys8)

[Overlapping Reservations](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.6999nvmr0mhr) [178](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.6999nvmr0mhr)

[Reservations Floating Through Time](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.1t3h5sf) [179](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.1t3h5sf)

[Reservations that Replace Allocated Resources](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.4d34og8) [179](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.4d34og8)

[Reservation Purging After Last Job](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.2s8eyo1) [180](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.2s8eyo1)

[Reservation Accounting](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.17dp8vu) [180](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.17dp8vu)

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**[Slurm Scheduling Discussion](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.fv2pjbp5hl73) [190](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.fv2pjbp5hl73)**

[Scheduling Configuration](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.13erzjr4vpzk) [190](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.13erzjr4vpzk)

[Main Scheduler](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.o524aukioy80) [191](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.o524aukioy80)

[Backfill Scheduling](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.nx9bi21g8857) [191](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.nx9bi21g8857)

[Consumable Resources](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.kya80pnwz5a2) [192](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.kya80pnwz5a2)

[Using the Consumable Resource Allocation Plugin:
select/cons\_res](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ilrfw0i81bvl) [193](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.ilrfw0i81bvl)

[General Comments](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.soekw6ys6ovz) [194](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.soekw6ys6ovz)

[Examples of CR\_Memory, CR\_Socket\_Memory, and CR\_CPU\_Memory type consumable resources](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.khetagxvg48y) [194](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.khetagxvg48y)

[Example of Node Allocations Using Consumable Resource Plugin](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.igxpr2khswjt) [195](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.igxpr2khswjt)

[Using Slurm's Default Node Allocation (Non-shared Mode)](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.hxrijgbrcd4w) [196](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.hxrijgbrcd4w)

[Using a Processor Consumable Resource Approach](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.g86t2bmpok43) [196](https://docs.google.com/document/d/1iXO9pomE9WcIGjvPeiry2hwL5S6qyyJjBUvayi2Yw-c/edit%22%20%5Cl%20%22heading%3Dh.tenhoj5hq90w)