

# Moab

## Reservation failing to be created or failing to get all nodes

**Issue:** When creating a reservation there can be cases where it won't be created on the nodes you specify, or if you're specifying all nodes it can leave some nodes out.

**Solution:** The default behavior when creating a reservation is to not allow it to be created on nodes that are unavailable or otherwise occupied. If there are jobs with priority reservations that are blocking the reservation you're trying to create you can use the IGNIDLBJOBS flag. If there are currently jobs running on nodes that you want to include in the reservation you can include the IGNJOBRSV flag. If there is another reservation already on those nodes and you want a new reservation to overlap it you can use the IGNRSV flag. If there are nodes in a Down, Offline, or Drained state you can use the IGNSTATE flag.

These flags build on each other, so if the node you're trying to reserve has an active job and a reservation you can just specify the IGNRSV flag and it includes the logic to ignore the active job.

If you're creating a system wide reservation for a maintenance period it's a good idea to include the IGNSTATE flag in case you have any nodes that are Down. This will make sure that you don't have jobs start on those nodes when they become available again.

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Author: Ben Roberts

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