

# qb\_preemptcmp(\$runningjob, \$candidatejob, \$host)

This is a comparison function which is slightly different from the previous cmp functions. This routine is passed the job which the system plans to replace \$runningjob and the \$host it is running on. The routine is also passed the \$candidatejob which is could replace the \$runningjob. If developer wants to cancel the preemption, the function must return the value 0, to use the default policy set in the supervisor\_preempt\_policy setting the function must return a -1. To aggressively preempt the job, the function must return a 2 and for passive preemption the function must return a 1.

1. 0 = Skip preemption
2. -1 = Use default preemption setting
3. 1 = Passively preempt job
4. 2 = Aggressively preempt job

The format of the input parameters for jobs and hosts are standard Perl hash structures.

```
$job = {  
  "id" => 1000,  
  
  "pid" => 1,  
  "pgrp" => 1000,  
  "priority"=> 2,  
  "user" => "username", "status" => "pending", "name" => "my job's name", "label" => "qubel", "cluster" =>  
  "/my/cluster/", "cpus" => 2,  
  "prototype" => "cmdline", "requirements" => "", "reservations" => "", "restrictions" => "", "account" =>  
  "shotname",  
  
};  
$host = {  
  
  "name" => "host's name ",  
  "state" => "active",  
  "cluster" => "/my/cluster", "resources" => "host.processors=10", "restrictions" => "",  
  
  "address" => "192.168.10.22"  
  
};
```

**Important:** If you implement this routine in a custom algorithm and mix passive and aggressive preemptions, make sure that the qb\_supervisor\_preempt\_policy is set to "mixed".  
See [supervisor\\_preempt\\_policy](#) for details.