## AWS training: crew.aws.batch in R

Instal

Create job queue

Credentials

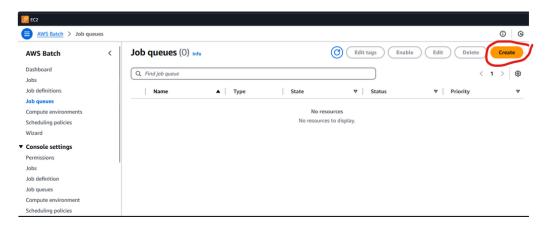
Run jobs

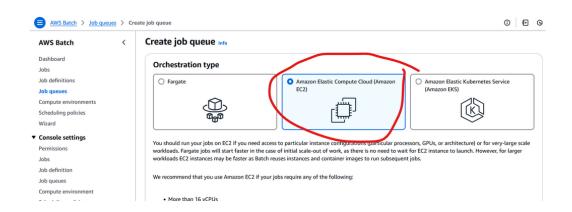
AWS Batch workers

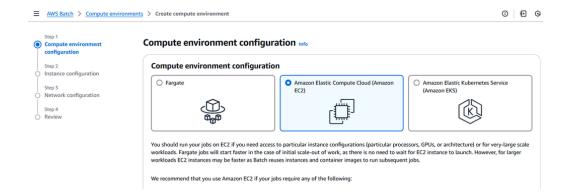
#### Install

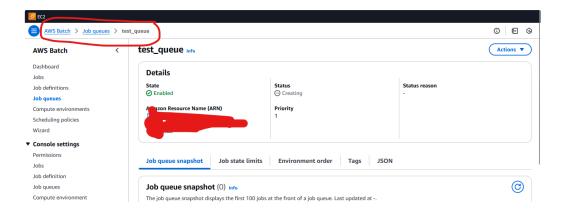
```
1 renv::install(c("crew", "crew.aws.batch"))
```

### Create job queue









#### Credentials

```
1 Sys.setenv("AWS_ACCESS_KEY_ID" = "foo")
2 Sys.setenv("AWS_SECRET_ACCESS_KEY" = "bar")
3 Sys.setenv("AWS_REGION" = "ap-southeast-2")
```

# Run jobs

```
1 library(crew.aws.batch)
2
3 definition <- crew_definition_aws_batch(</pre>
     job definition = "test job",
5
     job_queue = "test_queue"
6)
7
8 definition$register(
9
     image = "ghcr.io/jbris/stan-cmdstanr-gpu-docker:2.32.1",
     platform_capabilities = "EC2",
10
11
     memory_units = "gigabytes",
12
     memory = 1,
13
     cpus = 1
14 )
15
16 monitor <- crew_monitor_aws_batch(</pre>
17
     job definition = "test job",
18
     job_queue = "test_queue"
19 )
job1 <- definition$submit(name = "job1", command = c("echo", "hello\nworld"))</pre>
```

```
22 monitor$status(id = jobl$id)
23
24 monitor$jobs()
25 monitor$succeeded()
26 monitor$inactive()
27 monitor$terminate(id = jobl$id)
28 monitor$jobs()
```

#### **AWS Batch workers**

```
1 library(crew.aws.batch)
2
3 controller <- crew_controller_aws_batch(</pre>
4 name = "my_workflow", # for informative job names
5 workers = 2,
6 tasks_max = 1, # to avoid reaching wall time limits (if any exist)
7
    seconds_launch = 600, # to allow a 10-minute startup window
8
    seconds_idle = 60, # to release resources when they are not needed
9
     processes = NULL, # See the "Asynchronous worker management" section below.
10
    options_aws_batch = crew_options_aws_batch(
11
     job definition = "test job",
12
     job_queue = "test_queue",
     cpus = 1,
13
     gpus = NULL,
15
     memory = c(1, 2, 4),
16
     memory_units = "gigabytes"
17 )
18 )
19 controller$start()
20 controller$push(name = "task", command = sqrt(4))
21 controller$wait()
22 controller$pop()$result
23 controller$terminate()
```