

```

{
  "source" :
  {
    "pubsub" :
    {
      "project_id" : "ncbi-sandbox-blast",
      "subscript_id" : "spark-test-subscript",
      "use" : "true"
    },
    "max_backlog" : 10
  },
  "blastjni" :
  {
    "num_db_limit" : 15,
    "manifest_root" : "dbs_500M.json",
    "top_n" : 100,
    "jni_log_level" : "INFO",
    "location" : "/tmp/blast/db",
    "num_locations" : 1,
    "lib_name" : "libblastjni.so"
  },
  "result" :
  {
    "asn1" :
    {
      "bucket" : "blastgcp-pipeline-test",
      "file" : "output/%s/seq-annot.asn",
      "gs_or_hdfs" : "gs"
    },
    "status" :
    {
      "bucket" : "blastgcp-pipeline-test",
      "file" : "status/%s/status.txt",
      "running" : "RUNNING",
      "done" : "DONE",
      "error" : "ERROR"
    }
  },
  "spark" :
  {
    "transfer_files" : [ "libblastjni.so" ],
    "log_level" : "ERROR",
    "locality_wait" : "3s",
    "with_locality" : true,
    "with_dyn_alloc" : false,
    "executor_memory" : "",
    "shuffle_reduceLocality_enabled" : false,
    "scheduler_fair" : false,
    "parallel_jobs" : 6,
    "comm_port" : 10013,
    "num_executors" : 15,
    "num_executor_cores" : 2
  },
  "log" :
  {
    "host" : "",
    "port" : 10011,
    "request" : true,
    "start" : false,
    "done" : false,
    "cutoff" : false,
    "final" : true,
    "part_prep" : false,
    "worker_shift" : false,
    "pref_loc" : false,
    "db_copy" : false
  }
}

```

how deep is the request-queue

default-value for incomplete requests

log-level for c++ glue-code in libblastjni.so

location of the db-volumes at the worker-nodes

how many worker-nodes per db-volume

name of the lib used to perform BLAST

file-pattern for the output-asn

"gs" or "hdfs" or "time"

file-pattern for the status file

content of the status file

what files to transfer to the worker nodes

spark log-level

how long does spark wait before it may shuffle

dictate the preferred location of db-volumes

not used

how much memory for the executor "dflt 2GB"

allow multiple jobs at the same time

how many Job-threads on the master

port-nr to communicate with the master

host and port of a netcat-server the workers will communicate with