



CLI Extended

General

Authenticating with nats cli password, nkey, creds
Explain nats server report in more detail, including new watch option
Explain nats server request in more detail
- Subscriptions
- kick
- ...
nats auth
Leadership change
Removing a node from a cluster - find meta group members?
Scaling a stream down and up
Catching a stream create with --trace and creating a stream with --config
TLS testing

Server Configuration

Obtain current server configuration and statistics (SYS)
`nats server request variables`
Reload server config file (SYS) - server id can be obtained from above
`nats server config reload <server id>`

Graphs - ASCII Dashboard

A number of commands have a `graph` subcommand or `--graph` option.
`nats server graph`
`nats stream graph <stream>`
`nats consumer graph <stream> <consumer>`
Graph subject traffic. E.g. Jetstream consumer management.
`nats sub`
`'$JS.API.CONSUMER.CREATE.>'`
`'$JS.API.CONSUMER.INFO.>'`
`'$JS.API.CONSUMER.DELETE.>'`
`--graph`

Extended Health Check

Health probe (SYS) - used by Kubernetes et. al.

`nats server report health`

- Ensure you see all servers and all report 200
- Repeat multiple times if needed

Check clusters and routes (SYS)

`nats server ls <server count>`

- Ensure all servers respond quickly. This means all expected servers replied.
- Ensure there are 0 slow consumers
- Ensure routes/GW are consistent
- Look for consistent versions
- Look for consistent CPU usage
- Look for consistent uptime
- Look for consistent memory usage. Is one server using RAM excessively?
- Check the number of connections.

Message traffic (SYS) - Run as system user for extended info

`nats traffic`

- **Raft:** Ensure votes are all to 0 (non zero may indicate instability)
- **Raft:** Ensure append is half of reply
- **General:** Ensure there are less than 1000 JS API Requests per second

Jetstream health - Note that not all servers may have Jetstream enabled (SYS)

`nats server report jetstream <JS server count>`

- Ensure all servers respond quickly. This means all expected servers replied.
- Ensure lag is 0
- Ensure the number of consumers is as expected
- Make sure there is a stable meta leader

Exhaustive Stream and consumer status (SYS)

WARNING - These reports can be large and impact server performance

`nats server stream-check`

`nats server consumer-check`

- Check for out of sync streams and consumers. Use `--unsynced` to filter.
- Check for expected replicas count, stream size, message count
- Check for offline peers

Gather and analyze information for auditing

`nats audit gather`

- Keep audit data for post mortem.

And do a quick analysis

`nats audit analyze`

- This is not an exhaustive report. Details may change over time.
- See `nats audit checks` for a list of checks.