OFFICIAL REPOSITORY

nats (/r/_/nats/) ☆

Last pushed: 4 hours ago

Short Description

NATS is an open-source, high-performance, cloud native messaging system.

Full Description

Supported tags and respective `Dockerfile` links

Simple Tags

- `1.3.0-linux` , `linux` (*amd64/Dockerfile*) (https://github.com/nats-io/nats-docker/blob/fedce51f05d228353ca56e87062ad23a671387a0/amd64/Dockerfile)
- `1.3.0-nanoserver` , `nanoserver` (*windows/nanoserver/Dockerfile*) (https://github.com/nats-io/nats-docker/blob/fedce51f05d228353ca56e87062ad23a671387a0/windows/nanoserver/Dockerfile)
- `1.3.0-windowsservercore` , `windowsservercore` (*windows/windowsservercore/Dockerfile*) (https://github.com/nats-io/nats-docker/blob/fedce51f05d228353ca56e87062ad23a671387a0/windows/windowsservercore/Dockerfile)

Shared Tags

- `1.3.0` , `latest` :
  - `1.3.0-linux` (*amd64/Dockerfile*) (https://github.com/nats-io/nats-docker/blob/fedce51f05d228353ca56e87062ad23a671387a0/amd64/Dockerfile)
  - `1.3.0-nanoserver` (*windows/nanoserver/Dockerfile*) (https://github.com/nats-io/nats-docker/blob/fedce51f05d228353ca56e87062ad23a671387a0/windows/nanoserver/Dockerfile)

Quick reference

- **Where to get help**:
  the Docker Community Forums (https://forums.docker.com/), the Docker Community Slack (https://blog.docker.com/2016/11/introducing-docker-community-directory-docker-community-slack/), or Stack Overflow (https://stackoverflow.com/search?tab=newest&q=docker)

- **Where to file issues**:
  https://github.com/nats-io/nats-docker/issues (https://github.com/nats-io/nats-docker/issues)

- **Maintained by**:
  the NATS Project (https://github.com/nats-io/nats-docker)

- **Supported architectures**: (more info (https://github.com/docker-library/official-images#architectures-other-than-amd64))
  `amd64` (https://hub.docker.com/r/amd64/nats/), `arm32v6` (https://hub.docker.com/r/arm32v6/nats/), `arm32v7` (https://hub.docker.com/r/arm32v7/nats/), `arm64v8` (https://hub.docker.com/r/arm64v8/nats/), `windows-amd64` (https://hub.docker.com/r/winamd64/nats/)

- **Published image artifact details**:
  repo-info repo's `repos/nats/` directory (https://github.com/docker-library/repo-info/blob/master/repos/nats) (history (https://github.com/docker-library/repo-info/commits/master/repos/nats))
  (image metadata, transfer size, etc)

- **Image updates**:
  official-images PRs with label `library/nats` (https://github.com/docker-library/official-images/pulls?q=label%3Alibrary%2Fnats)
  official-images repo's `library/nats` file (https://github.com/docker-library/official-images/blob/master/library/nats) (history (https://github.com/docker-library/official-images/commits/master/library/nats))

- **Source of this description**:
  docs repo's `nats/` directory (https://github.com/docker-library/docs/tree/master/nats) (history (https://github.com/docker-library/docs/commits/master/nats))

- **Supported Docker versions**:
  the latest release (https://github.com/docker/docker-ce/releases/latest) (down to 1.6 on a best-effort basis)

NATS (https://nats.io): A high-performance cloud native messaging system.

`nats` is a high performance server for the NATS Messaging System.

Example usage

```
 # Run a NATS server
# Each server exposes multiple ports
# 4222 is for clients.
# 8222 is an HTTP management port for information reporting.
# 6222 is a routing port for clustering.
#
# To actually publish the ports when running the container, use the Doc
# flag "docker run -p <hostport>:<containerport>" to publish and map on
# or the -P flag to publish all exposed ports and map them to high-orde
#
# This should not be confused with the NATS Server own -p parameter.
# For instance, to run the NATS Server and have it listen on port 4444,
# you would have to run like this:
#
#   docker run -p 4444:4444 nats -p 4444
#
# Or, if you want to publish the port 4444 as a different port, for exa
#
#   docker run -p 5555:4444 nats -p 4444
#
# Check "docker run" for more information.

$ docker run -d --name nats-main -p 4222:4222 -p 6222:6222 -p 8222:8222
[INF] Starting nats-server version 1.3.0
[INF] Git commit [eed4fbc]
[INF] Starting http monitor on 0.0.0.0:8222
[INF] Listening for client connections on 0.0.0.0:4222
[INF] Server is ready
[INF] Listening for route connections on 0.0.0.0:6222

...

# To run a second server and cluster them together..
# Note that since you are passing arguments, this overrides the CMD sec
# of the Dockerfile, so you need to pass all arguments, including the
# config file.
$ docker run -d --name=nats-2 --link nats-main -p 4222:4222 -p 6222:622

# If you want to verify the routes are connected, try this instead:
$ docker run -d --name=nats-2 --link nats-main -p 4222:4222 -p 6222:622
[INF] Starting nats-server version 1.3.0
[DBG] Go build version go1.11
[INF] Git commit [eed4fbc]
[INF] Starting http monitor on 0.0.0.0:8222
[INF] Listening for client connections on 0.0.0.0:4222
[DBG] Server id is TH1MRk9Mug4fgIDdcXIo6R
[INF] Server is ready
```

```
[INF] Listening for route connections on 0.0.0.0:6222
[DBG] Trying to connect to route on nats-main:6222
[DBG] 172.17.0.2:6222 - rid:1 - Route connection created
[DBG] 172.17.0.2:6222 - rid:1 - Route connect msg sent
[DBG] 172.17.0.2:6222 - rid:1 - Registering remote route "kxi2il81mIY4T
[DBG] 172.17.0.2:6222 - rid:1 - Route sent local subscriptions
```

The server will load the configuration file below. Any command line flags can override these values.

Default Configuration File

```
 # Client port of 4222 on all interfaces
port: 4222

# HTTP monitoring port
monitor_port: 8222

# This is for clustering multiple servers together.
cluster {

  # Route connections to be received on any interface on port 6222
  port: 6222

  # Routes are protected, so need to use them with --routes flag
  # e.g. --routes=nats-route://ruser:T0pS3cr3t@otherdockerhost:6222
  authorization {
    user: ruser
    password: T0pS3cr3t
    timeout: 0.75
  }

  # Routes are actively solicited and connected to from this server.
  # This Docker image has none by default, but you can pass a
  # flag to the gnatsd docker image to create one to an existing server
  routes = []
}
```

Commandline Options

```
Server Options:
    -a, --addr <host>                Bind to host address (default: 0.0
    -p, --port <port>                Use port for clients (default: 422
    -P, --pid <file>                 File to store PID
    -m, --http_port <port>           Use port for http monitoring
    -ms,--https_port <port>          Use port for https monitoring
    -c, --config <file>              Configuration file
    -sl,--signal <signal>[=<pid>]    Send signal to gnatsd process (sto
        --client_advertise <string>  Client URL to advertise to other s

Logging Options:
    -l, --log <file>                 File to redirect log output
    -T, --logtime                    Timestamp log entries (default: tr
    -s, --syslog                     Log to syslog or windows event log
    -r, --remote_syslog <addr>       Syslog server addr (udp://localhos
    -D, --debug                      Enable debugging output
    -V, --trace                      Trace the raw protocol
    -DV                              Debug and trace

Authorization Options:
        --user <user>                User required for connections
        --pass <password>            Password required for connections
        --auth <token>               Authorization token required for c

TLS Options:
        --tls                        Enable TLS, do not verify clients
        --tlscert <file>             Server certificate file
        --tlskey <file>              Private key for server certificate
        --tlsverify                  Enable TLS, verify client certific
        --tlscacert <file>           Client certificate CA for verifica

Cluster Options:
        --routes <rurl-1, rurl-2>    Routes to solicit and connect
        --cluster <cluster-url>      Cluster URL for solicited routes
        --no_advertise <bool>        Advertise known cluster IPs to cli
        --cluster_advertise <string> Cluster URL to advertise to other
        --connect_retries <number>   For implicit routes, number of con


Common Options:
    -h, --help                       Show this message
    -v, --version                    Show version
        --help_tls                   TLS help
```

Image Variants

The `nats` images come in many flavors, each designed for a specific use case.

nats:<version>

This is the defacto image. If you are unsure about what your needs are, you probably want to use this one. It is designed to be used both as a throw away container (mount your source code and start the container to start your app), as well as the base to build other images off of.

nats:<version>-windowsservercore

This image is based on Windows Server Core (`microsoft/windowsservercore`) (https://hub.docker.com/r/microsoft/windowsservercore/). As such, it only works in places which that image does, such as Windows 10 Professional/Enterprise (Anniversary Edition) or Windows Server 2016.

For information about how to get Docker running on Windows, please see the relevant "Quick Start" guide provided by Microsoft:

- Windows Server Quick Start (https://msdn.microsoft.com/en-us/virtualization/windowscontainers/quick_start/quick_start_windows_server)
- Windows 10 Quick Start (https://msdn.microsoft.com/en-us/virtualization/windowscontainers/quick_start/quick_start_windows_10)

License

View license information (https://github.com/nats-io/gnatsd/blob/master/LICENSE) for the software contained in this image.

As with all Docker images, these likely also contain other software which may be under other licenses (such as Bash, etc from the base distribution, along with any direct or indirect dependencies of the primary software being contained).

Some additional license information which was able to be auto-detected might be found in the `repo-info` repository's `nats/` directory (https://github.com/docker-library/repo-info/tree/master/repos/nats).

As for any pre-built image usage, it is the image user's responsibility to ensure that any use of this image complies with any relevant licenses for all software contained within.

Docker Pull Command

```
docker pull nats
```