

NixOS /
nixpkgs

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New issue



Package request: pi-hole #61617

Open

Labels

0.kind: packaging request



LinArcX opened on May 17, 2019

<https://github.com/pi-hole/pi-hole>

Arch package to get ideas how to package it:

<https://aur.archlinux.org/packages/pi-hole-server/>

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veprbl added 9.needs: package (...) on May 17, 2019



boredom101 on May 28, 2019



I think I'll give this package a try.



8



expiplus1 on Jun 11, 2019 · edited by expiplus1

Edits ▼

Contributor

@boredom101 looking forward to it!

FWIW I've got pi-hole running quite nicely in docker from nix with

```
docker-containers.pihole = {  
  image = "pihole/pihole:latest";  
  ports = [  
    "${serverIP}:53:53/tcp"  
    "${serverIP}:53:53/udp"  
    "3080:80"  
    "30443:443"  
  ];  
  volumes = [  

```



```
"/var/lib/pihole/:/etc/pihole/"
"/var/lib/dnsmasq.d:/etc/dnsmasq.d/"
];
environment = {
  ServerIP = serverIP;
};
extraDockerOptions = [
  "--cap-add=NET_ADMIN"
  "--dns=127.0.0.1"
  "--dns=1.1.1.1"
];
workdir = "/var/lib/pihole/";
};
```



❤️ 29

**LinArcX** on Jun 12, 2019

Contributor

Author



@expipius1 Hi, thank you for your reply. But i don't have docker on my system.
How to use it like a normal package in nixos?

**expipius1** on Jun 13, 2019 via email

Contributor



Hopefully this issue will help answer that very question, @LinArcX

...

**lovesegfault** on Aug 27, 2019

Member



@expipius1 It's not clear to me how to use that snippet you posted. Can you show me a complete example?

**lovesegfault** on Aug 27, 2019

Member



Oh, I think it got renamed to <https://nixos.org/nixpkgs/manual/#ssec-pkgs-dockerTools-buildImage>

**expipius1** on Aug 28, 2019 via email

Contributor



The docker-containers module is a recent addition (last few months I think).

I also have an nginx virtualhost forwarding http to port 3080 for access to the pi-hole admin console.

Hope this helps

...



expipiplus1 on Oct 5, 2019

Contributor



@boredom101 Did you end up making anything?



matthiasbeyer on Mar 26, 2020

Contributor



Any updates here?



ashkan-leo on Apr 7, 2020



this would be an extremely valuable addition!



nuxeh on Apr 23, 2020

Contributor



Any updates? I would consider assisting, or packaging this myself if not.



ksevelyar on May 5, 2020 · edited by ksevelyar

Edits ▾



Any updates? I would consider assisting, or packaging this myself if not.

Could you explain why you want pi-hole? Why you don't want to use plain dnsmasq? Is it dashboard or performance?

```
services.dnsmasq.enable = true;  
services.dnsmasq.extraConfig = ''  
    domain-needed
```



```

bogus-priv
no-resolv

server=208.67.220.220
server=8.8.4.4

listen-address=::1,127.0.0.1,192.168.0.1
bind-interfaces

cache-size=10000
log-queries
log-facility=/tmp/ad-block.log
local-ttl=300

conf-file=/etc/nixos/assets/hosts-blocklists/domains.txt
addn-hosts=/etc/nixos/assets/hosts-blocklists/hostnames.txt
'';

```

<https://github.com/ksevelyar/dotfiles/blob/b633fa5b725988c8b521e5f99984e25bc13be1e5/modules/router.nix#L36-L55>

<https://github.com/notracking/hosts-blocklists>



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nuxeh on May 5, 2020

Contributor



Pi hole is a well established turnkey solution, which additionally provides monitoring and configuration as you say. I for one wasn't aware that it was so easy to configure dnsmasq to do the same thing so easily, albeit in a slightly less user friendly or visible way.

Really I think it comes down to the fact that people know about pi hole and want to install it on their NixOS system, if there's a package for it that's an advantage, surely?



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horkhork on May 6, 2020 · edited by horkhork

Edits ▼



I came to a similar conclusion as ksevelyar. I've used pihole for quite a while and it is very nice, but it's got a lot of bells and whistles that aren't really necessary.

I'm in the process of switching to dnscrypt-proxy2, which looks like it will do the job of adblocking just as well as pihole.

I started started to create my own custom channel + derivation for wrapping

<https://github.com/DNSCrypt/dnscrypt-proxy/blob/master/utils/generate-domains-blacklists/generate-domains-blacklist.py> to automate blacklist updates, and while it does work, it might be a bit too crufty to share at this point.



**nuxeh** on May 11, 2020

Contributor



It's been a while, but I have the pi-hole tools (`pihole` and `pihole-FTL`) packaged and working, and the web interface running. Now I'm just working on the modules, and configuring it all to work as it should.

It's not the easiest project in the world to package, lots of hard-coded paths for the files it needs at runtime, many of which have a mysterious function that needs some research to find out what it's needed for, across quite a lot of bash scripts. Also a couple of small hurdles needed to be overcome to get FTL building with the currently packaged Nix build tools and libraries, and being able to have it spawned by systemd correctly at runtime.

When it's doing something useful, I'll put it on a branch/draft PR so that anyone who's interested can test it.



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**JamieMagee** on Oct 4, 2020

Member



@nuxeh Thank you for your effort in packaging pi-hole. Could you share your configuration so that others can continue to work on it?



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**nuxeh** on Oct 4, 2020

Contributor



@JamieMagee sure, I'll review it and point you to a branch in the next few days. I'm away at the moment and don't have access to my development computer until next week.



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**JamieMagee** on Oct 26, 2020

Member



@nuxeh Have you had a chance to create a branch for your work?

**nuxeh** on Nov 1, 2020

Contributor



Hey @JamieMagee, apologies, I've had some difficulty getting a chance to look at this again, but here is a branch for the original work I did on it.

<https://github.com/nuxeh/nixpkgs/tree/add-pi-hole>

I was planning to upgrade all the packages, but they changed the `pihole-FTL` to using CMake recently, so that turned out to be a non-trivial change, and since I did a certain amount of testing with the 5.0 I thought it could be better to share it with that "working" version.

Here is a `vm.nix` for testing with [nixos-shell](#):

```
{ config, pkgs, ... }:  
  
{  
  boot.kernelPackages = pkgs.linuxPackages_latest;  
  services.openssh.enable = true;  
  
  virtualisation.qemu.networkingOptions = [  
    "-net nic,netdev=user.0,model=virtio"  
    "-netdev user,id=user.0,hostfwd=tcp::8888-:80"  
  ];  
  
  services.pihole = {  
    enable = true;  
    interface = "eth0";  
    webInterface = true;  
  };  
  
  networking.firewall.enable = false;  
}
```



Which can be run with the following from a checked out nixpkgs tree:

```
NIX_PATH=nixpkgs=. nixos-shell
```



From there, you can access the port-forwarded web UI at <http://localhost:8888/pihole/>.

Generally regarding my original progress on this, I got the `pihole-FTL` service to build and run, and the web interface hosted with `lighttpd`, but after that point, since I haven't actually used pihole before, I wasn't very sure what a "working" install would look like, so I lost some momentum.

The pihole core is a bunch of bash scripts with hard-coded paths, I took a naive approach of attempting to patch all those paths, but somehow feel that there might be a better way to get it working.

Hope this helps!



JamieMagee mentioned this on Dec 31, 2020

[pihole-ftl: init at 5.8.1 #108055](#)

lunik1 mentioned this on Apr 25, 2021

[nixos/adguardhome: init #120568](#)

**stale** on Jun 5, 2021

I marked this as stale due to inactivity. → [More info](#)

**stale** added **2.status: stale** on Jun 5, 2021**JamieMagee** on Jun 5, 2021

Member



Not stale. There is a PR in progress.

**stale** removed **2.status: stale** on Jun 5, 2021**nixos-discourse** on Sep 8, 2021

This issue has been mentioned on **NixOS Discourse**. There might be relevant details there:

<https://discourse.nixos.org/t/is-pi-hole-available-in-nixpkgs/14916/2>

**mausch** on Jan 4, 2022

Member



Another easy alternative that even got a flake last October: <https://github.com/StevenBlack/hosts#nixos>

**nixos-discourse** on May 10, 2022

This issue has been mentioned on **NixOS Discourse**. There might be relevant details there:

<https://discourse.nixos.org/t/why-did-pihole-container-stop-working/19066/1>

**samhh** mentioned this on Jun 3, 2022[Declarative Pi-Hole config](#) [samhh/dotfiles#322](#)



bjornfor on Nov 8, 2022

Contributor



PSA: In addition to AdGuard Home, NixOS also has a module for [blocky](#). Both seem like nice alternatives to Pi-hole.

Open

Package request: pi-hole #61617



samhh mentioned this on Nov 8, 2022



[Don't inherit DNS from DHCP on Tentacool samhh/dotfiles#364](#)



williamvds mentioned this on Apr 5, 2023



[pihole: init at various #224881](#)



SgtPooki on Apr 2, 2024



Thanks samhh for [samhh/dotfiles@ 8193c3e](#) . I tried blocky and dnsmasq and as a NixOS noob I couldn't get them working, but your pihole in docker container .nix file worked flawlessly



FabianRig on Apr 8, 2024

Contributor



PSA: In addition to AdGuard Home, NixOS also has a module for [blocky](#). Both seem like nice alternatives to Pi-hole.

<https://github.com/TechnitiumSoftware/DnsServer> is another alternative. It replaced Pi-hole and Unbound for me. I recently added a package and a module for it.



2



Pandapip1 added `0.kind: packaging r...` and removed `9.needs: package (...` on Sep 22, 2024



williamvds mentioned this on Dec 3, 2024



[pihole: init at various #361571](#)



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