

# Dnsmasq

## Info

[How DNS Works](#) | [Dnsmasq Homepage](#)

Dnsmasq provides network infrastructure for small networks: DNS, DHCP, router advertisement and network boot. It is designed to be lightweight and have a small footprint, suitable for resource constrained routers and firewalls.

Its simple configuration and lightweight nature makes it a perfect fit for a homelab DNS from a low-powered device like a Raspberry.

## Usage

### Configuration files

Dnsmasq reads all `.conf` files under `/etc/dnsmasq.d/`.

Some useful options for Dnsmasq configuration files:

#### Text Only

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```

181920212223242526272829303132

```
# Don't poll /etc/resolv.conf for changes
no-poll
# Don't read /etc/resolv.conf
no-resolv
# Only accept queries from local IPs
local-service
# Never forward queries for plain names, without
dots or domain parts, to upstream nameservers
domain-needed
# Bogus private reverse lookups. All reverse
lookups for private IP ranges (ie 192.168.x.x,
etc) which are not found in /etc/hosts or the
DHCP leases file are answered with "no such
domain" rather than being forwarded upstream
bogus-priv

# Specify other DNS servers for queries not
handled by internal DNSs
server=8.8.8.8
server=4.4.4.4

# Queries in these domains are answered from
/etc/hosts or DHCP only.
#local=/jamfox.dev/

# Allows DHCP hosts to have FQDN, provides the
domain part for "expand-hosts"
#domain=/jamfox.dev/

# Increase the size of dnsmasq's cache
cache-size=65536

# DNS records
address=/pve0.jamfox.dev/192.168.0.100

# Enable reverse DNS lookups for a netblock
rev-server=192.168.0.0/24,127.0.0.1#8600

# Enable forward lookup of the 'consul' domain
to consul server instances
server=/consul/192.168.0.120#8600
```