Rocky Enterprise Linux 9.2 Manual Pages on command 'systemd.dnssd.5'

$ man systemd.dnssd.5

SYSTEMD.DNSSD(5)   systemd.dnssd   SYSTEMD.DNSSD(5)

NAME

   systemd.dnssd - DNS-SD configuration

SYNOPSIS

   network_service.dnssd

DESCRIPTION

   DNS-SD setup is performed by systemd-resolved(8).

   The main network service file must have the extension .dnssd; other

   extensions are ignored.

   The .dnssd files are read from the files located in the system network

   directories /usr/lib/systemd/dnssd and /usr/local/lib/systemd/dnssd,

   the volatile runtime network directory /run/systemd/dnssd and the local

   administration network directory /etc/systemd/dnssd. All configuration

files are collectively sorted and processed in lexical order, regardless of the directories in which they live. However, files with identical filenames replace each other. Files in /etc/ have the highest priority, files in /run/ take precedence over files with the same name in /usr/lib/. This can be used to override a system-supplied configuration file with a local file if needed.

Along with the network service file foo.dnssd, a "drop-in" directory foo.dnssd.d/ may exist. All files with the suffix ".conf" from this directory will be parsed after the file itself is parsed. This is useful to alter or add configuration settings, without having to modify the main configuration file. Each drop-in file must have appropriate section headers.

In addition to /etc/systemd/dnssd, drop-in ".d" directories can be placed in /usr/lib/systemd/dnssd or /run/systemd/dnssd directories. Drop-in files in /etc/ take precedence over those in /run/ which in turn take precedence over those in /usr/lib/ or /usr/local/lib. Drop-in files under any of these directories take precedence over the main network service file wherever located.

[SERVICE] SECTION OPTIONS

The network service file contains a [Service] section, which specifies a discoverable network service announced in a local network with Multicast DNS broadcasts.

Name=

An instance name of the network service as defined in the section 4.1.1 of RFC 6763[1], e.g. "webserver".

The option supports simple specifier expansion. The following expansions are understood:

Table 1. Specifiers available

Specifier	Meaning	Details
"%a"	Architecture	A short string identifying the architecture of the local system. A string such as x86, x86-64 or arm64. See the architectures defined for ConditionArchitecture= in systemd.unit(5) for a full list.
"%A"	Operating system image version	The operating system image version identifier of the running system, as read from the IMAGE_VERSION= field of /etc/os-release. If not set, resolves to an empty string. See os-release(5) for more information.
"%b"	Boot ID	The boot ID of the running system, formatted as string. See random(4) for more

| | | ? information. | |
| | | | |

?"%B" | Operating system | The operating system
| build ID | build identifier of
| | the running system, as
| | read from the
| | BUILD_ID= field of
| | /etc/os-release. If
| | not set, resolves to
| | an empty string. See
| | os-release(5) for more
| | information.

?"%H" | Host name | The hostname of the
| | running system.

?"%m" | Machine ID | The machine ID of the
| | running system,
| | formatted as string.
| | See machine-id(5) for
| | more information.

?"%M" | Operating system | The operating system
| image identifier | image identifier of
| | the running system, as
| | read from the
| | IMAGE_ID= field of
| | /etc/os-release. If
| | not set, resolves to
| | an empty string. See
| | os-release(5) for more
| | information.

Specifier	Meaning	Details
"%o"	Operating system ID	The operating system identifier of the running system, as read from the ID= field of /etc/os-release. See os-release(5) for more information.
"%v"	Kernel release	Identical to uname -r output.
"%w"	Operating system version ID	The operating system version identifier of the running system, as read from the VERSION_ID= field of /etc/os-release. If not set, resolves to an empty string. See os-release(5) for more information.
"%W"	Operating system variant ID	The operating system variant identifier of the running system, as read from the VARIANT_ID= field of /etc/os-release. If not set, resolves to an empty string. See os-release(5) for more information.

```
?????????????????????????????????????????????????????????????
?"%%"    ? Single percent sign ? Use "%%" in place of  ?
?       ?                ? "%" to specify a      ?
?       ?                ? single percent sign.   ?
?????????????????????????????????????????????????????????????
```

Type=

A type of the network service as defined in the section 4.1.2 of

RFC 6763[1], e.g. "_http._tcp".

Port=

An IP port number of the network service.

Priority=

A priority number set in SRV resource records corresponding to the

network service.

Weight=

A weight number set in SRV resource records corresponding to the

network service.

TxtText=

A whitespace-separated list of arbitrary key/value pairs conveying

additional information about the named service in the corresponding

TXT resource record, e.g. "path=/portal/index.html". Keys and

values can contain C-style escape sequences which get translated

upon reading configuration files.

This option together with TxtData= may be specified more than once,

in which case multiple TXT resource records will be created for the

service. If the empty string is assigned to this option, the list

is reset and all prior assignments will have no effect.

TxtData=

    A whitespace-separated list of arbitrary key/value pairs conveying

    additional information about the named service in the corresponding

    TXT resource record where values are base64-encoded string

    representing any binary data, e.g.

    "data=YW55IGJpbmFyeSBkYXRhCg==". Keys can contain C-style escape

    sequences which get translated upon reading configuration files.

    This option together with TxtText= may be specified more than once,

    in which case multiple TXT resource records will be created for the

    service. If the empty string is assigned to this option, the list

    is reset and all prior assignments will have no effect.

EXAMPLES

Example 1. HTTP service


```
# /etc/systemd/dnssd/http.dnssd
[Service]
Name=%H
Type=_http._tcp
Port=80
TxtText=path=/stats/index.html t=temperature_sensor
```


This makes the http server running on the host discoverable in the

local network given MulticastDNS is enabled on the network interface.

Now the utility "resolvectl" should be able to resolve the service to

the host's name:


```
$ resolvectl service meteo._http._tcp.local
meteo._http._tcp.local: meteo.local:80 [priority=0, weight=0]
                        169.254.208.106%senp0s21f0u2u4
                        fe80::213:3bff:fe49:8aa%senp0s21f0u2u4
```

```
                         path=/stats/index.html

                         t=temperature_sensor

                         (meteo/_http._tcp/local)
```

-- Information acquired via protocol mDNS/IPv6 in 4.0ms.

-- Data is authenticated: yes

"Avahi" running on a different host in the same local network should see the service as well:

```
$ avahi-browse -a -r
+ enp3s0 IPv6 meteo                          Web Site        local
+ enp3s0 IPv4 meteo                          Web Site        local
= enp3s0 IPv6 meteo                          Web Site        local
  hostname = [meteo.local]
  address = [fe80::213:3bff:fe49:8aa]
  port = [80]
  txt = ["path=/stats/index.html" "t=temperature_sensor"]
= enp3s0 IPv4 meteo                          Web Site        local
  hostname = [meteo.local]
  address = [169.254.208.106]
  port = [80]
  txt = ["path=/stats/index.html" "t=temperature_sensor"]
```

SEE ALSO

systemd(1), systemd-resolved.service(8), resolvectl(1)

NOTES

 1. RFC 6763

   https://tools.ietf.org/html/rfc6763

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