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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'podman-network-create.1' command

$ man podman-network-create.1

podman-network-create(1) General Commands Manual podman-network-create(1)

NAME

podman-network-create - Create a Podman network

SYNOPSIS

podman network create [options] [name]

DESCRIPTION

Create a network configuration for use with Podman. By default, Podman creates a bridge connection. A Macvlan connection can be created with the -d macvlan option. A parent device for macvlan can be designated with the -o parent=<device> option.

If no options are provided, Podman will assign a free subnet and name for the network.

Upon completion of creating the network, Podman will display the name of the newly added network.

NOTE: The support for the network name pasta is deprecated and will be removed in the next major release because it is used as a special net? work mode in podman run/create --network.

OPTIONS

--disable-dns

Disables the DNS plugin for this network which if enabled, can perform container to container name resolution.

--dns=ip

Set network-scoped DNS resolver/nameserver for containers in this net?

work. If not set, the host servers from /etc/resolv.conf will be used.

It can be overwritten on the container level with the podman run/create --dns option. This option can be specified multiple times to set more than one IP.

--driver, -d

Driver to manage the network. Currently bridge, macvlan and ipvlan are supported. Defaults to bridge. As rootless the macvlan and ipvlan driver have no access to the host network interfaces because rootless networking requires a separate network namespace.

Special considerations for the netavark backend: - The macvlan driver requires the --subnet option, DHCP is currently not supported. - The ipvlan driver is not currently supported.

--gateway

Define a gateway for the subnet. To provide a gateway address, a subnet option is required. Can be specified multiple times. The argument or? der of the --subnet, --gateway and --ip-range options must match.

--ignore

Ignore the create request if a network with the same name already ex? ists instead of failing. Note, trying to create a network with an ex? isting name and different parameters, will not change the configuration of the existing one

--internal

Restrict external access of this network. Note when using this option, the dnsname plugin will be automatically disabled.

--ip-range

Allocate container IP from a range. The range must be a complete sub? net and in CIDR notation. The ip-range option must be used with a sub? net option. Can be specified multiple times. The argument order of the --subnet, --gateway and --ip-range options must match.

--ipam-driver=driver

Set the ipam driver (IP Address Management Driver) for the network. When unset podman will choose an ipam driver automatically based on the network driver. Valid values are:

- host-local: IP addresses are assigned locally.

- dhcp: IP addresses are assigned from a dhcp server on the network.

This driver is not yet supported with netavark. For CNI the dhcp plugin needs to be activated before.

- none: No ip addresses are assigned to the interfaces.

View the driver in the podman network inspect output under the ipam_op? tions field.

--ipv6

Enable IPv6 (Dual Stack) networking. If not subnets are given it will allocate an ipv4 and an ipv6 subnet.

--label

Set metadata for a network (e.g., --label mykey=value).

--opt, -o=option

Set driver specific options.

All drivers accept the mtu and metric options. - mtu: Sets the Maximum Transmission Unit (MTU) and takes an integer value. - metric Sets the Route Metric for the default route created in every container joined to this network. Accepts a positive integer value. Can only be used with the Netavark network backend.

Additionally the bridge driver supports the following options: - vlan: This option assign VLAN tag and enables vlan_filtering. Defaults to none. - isolate: This option isolates networks by blocking traffic be? tween those that have this option enabled.

The macvlan and ipvlan driver support the following options: - parent: The host device which should be used for the macvlan interface. De? faults to the default route interface. - mode: This option sets the specified ip/macvlan mode on the interface.

- Supported values for macvlan are bridge, private, vepa, passthru. Defaults to bridge.

- Supported values for ipvlan are l2, l3, l3s. Defaults to l2.

Additionally the macvlan driver supports the bclim option:

? bclim: Set the threshold for broadcast queueing. Must be a 32 bit integer. Setting this value to -1 disables broadcast

queueing altogether.

--subnet

The subnet in CIDR notation. Can be specified multiple times to allo?

cate more than one subnet for this network. The argument order of the

--subnet, --gateway and --ip-range options must match. This is useful

to set a static ipv4 and ipv6 subnet.

EXAMPLE

Create a network with no options.

$ podman network create

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Create a network named newnet that uses 192.5.0.0/16 for its subnet.

$ podman network create --subnet 192.5.0.0/16 newnet

newnet

Create an IPv6 network named newnetv6 with a subnet of 2001:db8::/64.

$ podman network create --subnet 2001:db8::/64 --ipv6 newnetv6

newnetv6

Create a network named newnet that uses 192.168.33.0/24 and defines a

gateway as 192.168.133.3.

$ podman network create --subnet 192.168.33.0/24 --gateway 192.168.33.3 newnet

newnet

Create a network that uses a *192.168.55.0/24** subnet and has an IP

address range of 192.168.55.129 - 192.168.55.254.

$ podman network create --subnet 192.168.55.0/24 --ip-range 192.168.55.128/25

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Create a network with a static ipv4 and ipv6 subnet and set a gateway.

$ podman network create --subnet 192.168.55.0/24 --gateway 192.168.55.3 --subnet fd52:2a5a:747e:3acd::/64 --gateway fd52:2a5a:747e:3acd::10

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Create a Macvlan based network using the host interface eth0. Macvlan

networks can only be used as root.

$ sudo podman network create -d macvlan -o parent=eth0 --subnet 192.5.0.0/16 newnet

newnet

SEE ALSO

podman(1), podman-network(1), podman-network-inspect(1), podman-net?
work-ls(1)

HISTORY

August 2021, Updated with the new network format by Paul Holzinger
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August 2019, Originally compiled by Brent Baude bbaude@redhat.com
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