Red Hat Enterprise Linux Release 9.2 Manual Pages on 'rdisc.8' command

$ man rdisc.8

RDISC(8)   iputils   RDISC(8)

NAME

   rdisc - network router discovery daemon

SYNOPSIS

   rdisc [-abdfrstvV] [-p preference] [-T max_interval] [send_address]

      [receive_address]

DESCRIPTION

   rdisc implements client side of the ICMP Internet Router Discovery

   Protocol (IRDP). rdisc is invoked at boot time to populate the network

   routing tables with default routes.

   rdisc listens on the ALL_HOSTS (224.0.0.1) multicast address (or

   receive_address if it is provided) for ROUTER_ADVERTISE messages from

   routers. The received messages are handled by first ignoring those

   listed router addresses with which the host does not share a network.

   Among the remaining addresses the ones with the highest preference are

   selected as default routers and a default route is entered in the

   kernel routing table for each one of them.

   Optionally, rdisc can avoid waiting for routers to announce themselves

by sending out a few ROUTER_SOLICITATION messages to the ALL_ROUTERS

(224.0.0.2) multicast address (or send_address if it is provided) when

it is started.

A timer is associated with each router address and the address will no

longer be considered for inclusion in the routing tables if the timer

expires before a new advertise message is received from the router. The

address will also be excluded from consideration if the received

advertise message has a preference of maximum negative.

Server side of router discovery protocol is supported by Cisco IOS and

by any more or less complete UNIX routing daemon, for example gated. If

compiled with ENABLE_RDISC_SERVER, rdisc can act as responder.

OPTIONS

-a

Accept all routers independently of the preference they have in

their advertise messages. Normally rdisc only accepts (and enters

in the kernel routing tables) the router or routers with the

highest preference.

-b

Opposite to -a, i.e. install only router with the best preference

value. This is the default behaviour.

-d

Send debugging messages to syslog.

-f

Keep rdisc running in the background even if no routers are found.

Normally rdisc gives up if it has not received any advertise

message after soliciting three times. In this case it exits with a

non-zero exit code. If -f is not specified in the first form then

-s must be specified.

-r

Responder mode, available only if compiled with

ENABLE_RDISC_SERVER.

-s

Send three solicitation messages initially to quickly discover the

routers when the system is booted. When -s is specified rdisc exits

with a non-zero exit code if it can not find any routers. This can

be overridden with the -f option.

-p preference

Set preference in advertisement messages. Available only with -r

option.

-T max_interval

Set maximum advertisement interval in seconds. Default is 600.

Available only with -r option.

-t

Test mode. Do not go to background.

-v

Be verbose and send lots of debugging messages to syslog.

-V

Print version and exit.

HISTORY

This program was developed by Sun Microsystems (see copyright notice in

source file). It was ported to Linux by Alexey Kuznetsov

<kuznet@ms2.inr.ac.ru>.

SEE ALSO

icmp(7), inet(7), ping(8).

REFERENCES

RFC1256 ICMP Router Discovery Messages. S. Deering, Ed.. September

1991.

SECURITY

rdisc requires CAP_NET_RAW to listen and send ICMP messages and

capability CAP_NET_ADMIN to update routing tables.

AVAILABILITY

rdisc is part of iputils package.

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