NAME

rtap – real-time application program

SYNOPSIS

rtap [**–f** *file_name*]

DESCRIPTION

Rtap is an interactive test program that drives the RSVP daemon through the RSVP API. *Rtap* may be used either as a standalone application, or it may be linked directly into the RSVP daemon.

Rtap repeatedly displays the command prompt > and executes each command as it is entered. For the standalone version, **–f** parameter will execute a stream of commands from the file *file_name*; at the end of that file, *rtap* will enter interactive mode. Multiple sessions can be opened simultaneously.

This man page describes the *rtap* program included with Release 4.2 of RSVP. This version of *rtap* can open multiple sessions simultaneously.

COMMANDS

Each *rtap* command is a single line, starting with the command verb. The command verb can be abbreviated. The command verb may optionally be preceded by a thread designator of the form: 'Tn' where n is a positive integer. If there is no thread designator on a command, it assume the thread of the last designator that appeared. When *rtap* starts, thread T1 is assumed.

The basic *rtap* commands are as follows:.

help or **?**

Display a complete list of *rtap* commands and their syntax.

quit

Exit.

dest <proto> <dest addr>[/<dest port>]

Calls rapi_session() to define a new session by destination address and optional port. Any previous session for the same thread must have been closed. The required <proto> parameter must be one of the strings: 'udp' or 'tcp', or 'proto <nn>', where <nn> is an integer IP protocol id.

sender [[<src host>/]<src port> <Tspec> [<Adspec>]]

Calls rapi_sender() to specify sender attributes and start sending path state. It may be issued repeatedly to modify the sender attributes. The destination from the most recent **dest** command is assumed. If the parameters are entirely omitted, the current sender is removed.

The source host (<src host>) parameter is optional; its default is the default IP address of the local node. The Tspec parameter is required. The TTL passed in the rapi_sender call is the most recent value specified in a **ttl** command, or the default TTL value. The <Adspec> parameter is optional.

reserve [<recv addr>] <style> [<reservation parameters>]

The optional <recv addr> parameter specifies the IP address or DNS name of the interface on which data will be received, for a multihomed host. The required <style> parameter can be any of: wf, ff, or se.

If <reservation parameters> is omitted, the command deletes the current reservation (<style> is actually irrelevant, but it must be present). Otherwise, they must take the form appropriate to the style:

wf

[*] <flowspec>

ff

<filter spec> <flowspec> [<filter spec> <flowspec>] ...

se

[<filter spec> ...] <flowspec>

See below for definitions of <filter spec> and <flowspec>.

close

Call rapi_release() to close the session.

ttl <integer>

Specify TTL for use in the next *sender* command in this thread.

dmask <integer>

Specify debug mask of daemon.

dlevel <integer>

Specify debug level of daemon.

confirm

Cause next **reserve** command to trigger confirmation upcall.

receive [<receive host>]

Joins the multicast group indicated by *receive host*. This is necessary for a UDP-encapsulation-only host running the RSVP daemon, in order for the daemon to receive Path messages. The optional <receive host> parameter specifies the address of a local interface on which group will be joined; if it is omitted, the default interface will be used.

sleep <seconds>

Delay for specified number of seconds.

Command parameters include filterspecs, flowspecs, and Tspecs.

Filter spec

A filterspec is represented as <host> [/<port>], where <host> is an IP host name or numeric IP address and the optional parameter <port> is an integer.

Flowspec

A flowspec is a sequence of parameters enclosed in square brackets. The following forms are allowed:

‘[’ g <R> <S> <r> <b> <p> <m> [<M>] ‘]’

‘[’ cl <r> <b> <p> <m> [<M>] ‘]’

These two forms correspond to the Guaranteed and Controlled-Load integrated service specifications, respectively, and result in Simplified-format parameter lists for the API. The parameters are as defined in the corresponding service documents. Only the <M> parameters are optional.

Tspecs

A Tspec is a sequence of parameters enclosed in square brackets, in the following form:

‘[’ t <r> <b> <p> <m> [<M>] ‘]’

This creates a Simplified-format parameter list for a general Tspec, according to the integrated services specifications. Only the <M> parameter is optional.

SEE ALSO

rsvpd, rsvpeep

BUGS