NAME

sr-rockettrace – Robust traceroute for network mapping

SYNOPSIS

sr-rockettrace [-S starting-hop] [-n] [--use-tcp] [-q <probes>] <destination>

DESCRIPTION

A traceroute-like program that sends probes in columns-first order, gives up after a couple timeouts, stops when a routing loop is encountered, and uses the undns library (if present) to decode router location.

Columns-first order is useful because routing changes during execution are apparent - if a routing change occurs, two columns will differ. With traceroute's row-first order, routing changes between rows can go undetected, giving the illusion of false links.

If a couple hops don't respond in a row, it's likely that either your trace is hitting a firewall, or your traffic is disappearing into a routing hole. In either case, more traffic is more likely to cause complaints than yield new information, so rockettrace stops.

Finally, the undns library provides a pretty good guess for which AS actually owns the router and where the router lies based on DNS hostname. When run locally with undns installed, sr-rockettrace prints AS numbers in square brackets, the AS inferred by name first, by origin IP address second. It prints city locations in curly braces.

Aside from the enhancements, rockettrace outputs data intended to clone traceroute as closely as possible to support common parsing and analysis scripts.

OPTIONS

The command line options supported by sr-rockettrace are generally a subset of those supported by common traceroute implementations.

–S Start tracing n hops away from the source. This is useful if you're executing many traces that you expect will overlap near the source, or if you're behind an access link full of routers that don't respond and rockettrace gives up too early.

–n Do no hostname lookup or interpretation. This is redundant if being executed remotely using sr-remotely.rb.

–q <probes-per-hop>
Send a specified number of probes per hop. The default is 3. Other useful values are 1 and 5.

–-use-tcp
Use TCP instead of UDP for probe packets. Some believe that TCP is more likely to traverse firewalls.

BUGS

Some routers (firewalls?) decrement the TTL twice, which will cause sr-rockettrace to detect a loop and terminate. For example, sr-rockettrace planetlab2.cs.uiuc.edu will stop where sr-traceroute will not. (at least as tested August 2, 2004).

Send bug reports or suggestions to <bugs@scriptroute.org>.

AUTHOR

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SEE ALSO

sr-remotely.rb(1), **scriptrouted**(8)