NAME

mDNSResponder - Multicast and Unicast DNS daemon

SYNOPSIS

mDNSResponder

DESCRIPTION

mDNSResponder (also known as **mdnsd** on some systems) is a daemon invoked at boot time to implement Multicast DNS and DNS Service Discovery. On Mac OS X 10.6 (Snow Leopard), **mDNSResponder** is also the system-wide Unicast DNS Resolver.

mDNSResponder listens on UDP port 5353 for Multicast DNS Query packets. When it receives a query for which it knows an answer, **mDNSResponder** issues the appropriate Multicast DNS Reply packet.

mDNSResponder also performs Unicast and Multicast DNS Queries on behalf of client processes, and maintains a cache of the replies.

mDNSResponder has no user-specifiable command-line argument, and users should not run **mDNSResponder** manually.

LOGGING

There are several methods with which to examine **mDNSResponder**'s internal state for debugging and diagnostic purposes. The syslog(1) logging levels map as follows:

 Error - Error messages
 Warning - Client-initiated operations
 Notice - Sleep proxy operations
 Info - Informational messages

By default, only log level Error is logged.

A SIGUSR1 signal toggles additional logging, with Warning and Notice enabled by default:

 % sudo killall -USR1 mDNSResponder

Once this logging is enabled, users can additionally use syslog(1) to change the log filter for the process. For example, to enable log levels Emergency - Debug:

 % sudo syslog -c mDNSResponder -d

A SIGUSR2 signal toggles packet logging:

    % sudo killall -USR2 mDNSResponder

A SIGINFO signal will dump a snapshot summary of the internal state to */var/log/system.log*:

    % sudo killall -INFO mDNSResponder

OPTIONAL ARGUMENTS
mDNSResponder accepts the following optional arguments:

-AlwaysAppendSearchDomains
                    Append search domains for multi-labeled Partially Qualified Domain
                    Name as well as single-labeled Partially Qualified Domain Name. This
                    argument is not recommended because of the extra DNS traffic it
                    generates and its adverse effect on battery life.

-NoMulticastAdvertisements   Prevent the system from advertising Bonjour services via Multicast
                    DNS.

To cause **mDNSResponder** to run with these optional arguments when it launches on OS X 10.11 (El
Capitan) and later, set the **AlwaysAppendSearchDomains** or **NoMulticastAdvertisements** boolean keys
to true in /Library/Preferences/com.apple.mDNSResponder.plist and reboot.

FILES
/usr/sbin/mDNSResponder /Library/Preferences/com.apple.mDNSResponder.plist

INFO
For information on Multicast DNS, see *http://www.multicastdns.org/*

For information on DNS Service Discovery, see *http://www.dns-sd.org/*

For information on how to use the Multicast DNS and the DNS Service Discovery APIs on Mac OS X
and other platforms, see *http://developer.apple.com/bonjour/*

For the source code to **mDNSResponder**, see *http://developer.apple.com/darwin/projects/bonjour/*

BUGS
mDNSResponder bugs are tracked in Apple Radar component "mDNSResponder".

HISTORY

The **mDNSResponder** daemon first appeared in Mac OS X 10.2 (Jaguar).

Also available from the Darwin open source repository (though not officially supported by Apple) are **mDNSResponder** daemons for other platforms, including Microsoft Windows, Linux, FreeBSD, NetBSD, Solaris, and other POSIX systems.