NAME
mac_ntpd - policy allowing ntpd to run as non-root user

SYNOPSIS
To compile the ntpd policy into your kernel, place the following lines in your kernel configuration file:

> **options MAC**
> **options MAC_NTPD**

Alternately, to load the ntpd policy module at boot time, place the following line in your kernel configuration file:

> **options MAC**

and in loader.conf(5):

> mac_ntpd_load="YES"

DESCRIPTION
The **mac_ntpd** policy grants any process running as user 'ntpd' (uid 123) the privileges needed to manipulate system time, and to (re-)bind to the privileged NTP port.

When ntpd(8) is started with '**-u** *<user>[:group]*' on the command line, it performs all initializations requiring root privileges, then drops root privileges by switching to the given user id. From that point on, the only privileges it requires are the ability to manipulate system time, and the ability to re-bind a UDP socket to the NTP port (port 123) after a network interface change.

With the **mac_ntpd** policy active, it may also be possible to start ntpd as a non-root user, because the default ntpd options don't require any additional root privileges beyond those granted by the policy.

Privileges Granted
The exact set of kernel privileges granted to any process running with the configured uid is:
> PRIV_ADJTIME
> PRIV_CLOCK_SETTIME
> PRIV_NTP_ADJTIME
> PRIV_NETINET_RESERVEDPORT
> PRIV_NETINET_REUSEPORT

Runtime Configuration
The following sysctl(8) MIBs are available for fine-tuning this MAC policy. All sysctl(8) variables can

also be set as loader(8) tunables in loader.conf(5).

security.mac.ntpd.enabled
        Enable the **mac_ntpd** policy. (Default: 1).

security.mac.ntpd.uid
        The numeric uid of the ntpd user. (Default: 123).

SEE ALSO

mac(4), ntpd(8)

HISTORY

MAC first appeared in FreeBSD 5.0 and **mac_ntpd** first appeared in FreeBSD 12.0.