

NAME

ng_bluetooth - placeholder for global Bluetooth variables

SYNOPSIS

```
#include <sys/types.h>
#include <netgraph/bluetooth/include/ng_bluetooth.h>
```

DESCRIPTION

The **ng_bluetooth** module is a placeholder for global Bluetooth variables. All Bluetooth variables can be examined and changed via `sysctl(8)`.

Bluetooth Variables

Below is the description of default variables. Each Bluetooth module might add its own variables to the tree.

net.bluetooth.version

A read-only integer variable that shows the current version of the Bluetooth stack.

net.bluetooth.hci.command_timeout

A read-write integer variable that controls the Host Controller Interface (HCI) command timeout (in seconds), i.e., how long the HCI layer will wait for the `Command_Complete` or `Command_Status` event from a Bluetooth device.

net.bluetooth.hci.connection_timeout

A read-write integer variable that controls the HCI connection timeout, i.e. how long the HCI layer will wait for the `Connection_Complete` event. Normally this should not be required as Bluetooth devices have connection timeout of their own and will send event back. This timeout is required to ensure that no connection will stall in case when the HCI transport layer is broken. Be careful when changing this variable. Make sure you understand what you are doing.

net.bluetooth.hci.max_neighbor_age

A read-write integer variable that controls time-to-live (in seconds) for entries in the HCI neighbor cache. Every time a Bluetooth device performs an Inquiry operation, the results will be put in cache. Later when a Bluetooth device establishes a baseband connection, it will try to find the matching entry in the cache and use it. This might speed up establishment of the baseband connection.

net.bluetooth.l2cap.rtx_timeout

A read-write integer variable that controls the Link Layer Control and Adaptation Protocol (L2CAP) Retransmission Timeout (RTX) (in seconds). Every time the L2CAP layer submits a

control command, the RTX timeout is set. The value of the RTX timeout should be greater or equal to the value of the HCI connection timeout. Be careful when changing this variable. Make sure you understand what you are doing.

net.bluetooth.l2cap.ertx_timeout

A read-write integer variable that controls the L2CAP Extended Retransmission Timeout (ERTX) (in seconds). In some cases remote peer may respond with PENDING status to the L2CAP control command. In this case the L2CAP command timeout is reset to the ERTX timeout value. The value of the ERTX timeout should be greater or equal to the value of the RTX timeout. Be careful when changing this variable. Make sure you understand what you are doing.

SEE ALSO

ng_btsocket(4), ng_hci(4), ng_l2cap(4), sysctl(8)

HISTORY

The **ng_bluetooth** module was implemented in FreeBSD 5.0.

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