modbus\_set\_error\_recovery(3)

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NAME

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modbus\_set\_error\_recovery - set the error recovery mode

SYNOPSIS

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\*int modbus\_set\_error\_recovery(modbus\_t \*'ctx', modbus\_error\_recovery\_mode 'error\_recovery');\*

DESCRIPTION

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The \*modbus\_set\_error\_recovery()\* function shall set the error recovery mode to

apply when the connection fails or the byte received is not expected. The

argument \_error\_recovery\_ may be bitwise-or'ed with zero or more of the

following constants.

By default there is no error recovery (`MODBUS\_ERROR\_RECOVERY\_NONE`) so the

application is responsible for controlling the error values returned by

libmodbus functions and for handling them if necessary.

When `MODBUS\_ERROR\_RECOVERY\_LINK` is set, the library will attempt an

reconnection after a delay defined by response timeout of the libmodbus context.

This mode will try an infinite close/connect loop until success on send call and

will just try one time to re-establish the connection on select/read calls (if the

connection was down, the values to read are certainly not available any more after

reconnection, except for slave/server). This mode will also run flush requests

after a delay based on the current response timeout in some situations (eg.

timeout of select call). The reconnection attempt can hang for several seconds

if the network to the remote target unit is down.

When `MODBUS\_ERROR\_RECOVERY\_PROTOCOL` is set, a sleep and flush sequence will be

used to clean up the ongoing communication, this can occurs when the message

length is invalid, the TID is wrong or the received function code is not the

expected one. The response timeout delay will be used to sleep.

The modes are mask values and so they are complementary.

It's not recommended to enable error recovery for slave/server.

RETURN VALUE

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The function shall return 0 if successful. Otherwise it shall return -1 and set

errno to one of the values defined below.

ERRORS

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\*EINVAL\*::

The value of the argument \_error\_recovery\_ is not positive.

EXAMPLE

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[source,c]

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modbus\_set\_error\_recovery(ctx,

MODBUS\_ERROR\_RECOVERY\_LINK |

MODBUS\_ERROR\_RECOVERY\_PROTOCOL);

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AUTHORS

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