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# Rivendell RDCatch Monitor Protocol

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## Overview

This defines the IP protocol used for communication between different modules of Rivendell and the **rdcatchd**(8) daemon.

Connection to ripcd is by means of a TCP SOCK\_STREAM connection to TCP port **6006**. The format of a message is as follows:

*cmd-code* [*arg*] [...]!

*cmd-code*                      A two letter command code, describing the generic action to be performed

*arg*                              Zero or more arguments, delimited by spaces or, if the last argument, by ! (see below)

!                                  The ASCII character 33, indicating the end of the command sequence.

## Unprivileged Commands

No authentication is required to execute these.

### Drop Connection

End the session and drop the TCP connection.

**DC!**

## Send Password

Send a password to the server for authentication.

**PW *passwd*!**

*passwd*                    A password to be supplied before granting the client access.

**rdcatchd**(8) will respond with PW +! or PW -!, indicating the success or failure of the authentication.

## Privileged Commands

A connection must be authenticated before these can be executed.

## Deck Event Processed

Sent by RDCatchd whenever a deck event is processed.

**DE *deck-num event-num*!**

*deck-num*    The number of the deck originating the event. Record decks have numbers in the range 1 through 127, while Play decks have numbers in the range 128 through 254.

*event-num*    The new event state of the specified deck.

See the section called “Request Deck Status” for the list of possible deck event states.

## Reload Deck List

Reload the record/play deck configuration.

**RD!**

**rdcatchd**(8) will respond with RS +!.

## Reload Event List

Reload the list of scheduled events.

**RS!**

**rdcatchd**(8) will respond with RS +!.

## Add Event

Add event to the event list.

**RA *event-num*!**

*event-num*    The number of the event to add.

**rdcatchd**(8) will respond with `RA event-num+ !.`

## Remove Event

Remove event from the event list.

**RR event-num!**

*event-num* The number of the event to remove.

**rdcatchd**(8) will respond with `RR event-num+ !.`

## Update Event

Update event from the event list.

**RU event-num!**

*event-num* The number of the event to update.

**rdcatchd**(8) will respond with `RU event-num+ !.`

## Request Deck Status

Request the current deck status.

**RE deck-num!**

*deck-num* The number of the deck for which to return status.

If *deck-num* is greater than zero, **rdcatchd**(8) will respond with `RE deck-num status id cutname !`

*deck-num* Channel number

*status* The current status of the deck. Possible values are:

**Table 1. Deck Status Codes**

Code	Meaning
0	Offline
1	Idle
2	Ready
3	Active (playing or recording)
4	Waiting (for a GPI)

*event-id* ID number of current event (from RECORDINGS table)

*cutname* The cutname of the event (present only for *status*==3).

If *channel* is zero, **rdcatchd**(8) will respond for every event whose status is non-idle.

An RE packet will also be sent automatically to all active connections upon any change of deck status.

## Enable Metering

Enable/Disable Audio Metering

**RM *state*!**

*state* 1 = Enabled, 0 = Disabled.

When metering is active, meter data packets will be periodically sent, as follows:

**RM *deck chan level*!**

*deck* Deck number

*chan* Channel, 0 = Left, 1 = Right

*level* Left audio level, in 1/100 of dbFS

## Stop Deck

Stop active event.

**SR *deck-num*!**

*deck-num* The number of the deck to stop.

## Purge Event

Report purging of one-shot event.

**PE *event-num*!**

*event-num* The number of the purged event.

Received upon completion of a one-shot event by **rdcatchd**(8) to indicate that the event has been purged.

## Reload Time Offset

Reload the time offset value from the database.

**RO!**

## Reload Heartbeat Configuration

Reload the heartbeat configuration from the database.

**RH!**

## Heartbeat Pulse

Heartbeat Pulse, for connection keep-alive.

**HB!**

## Restart Dropbox Instances

Restart all **rdimport**(1) instances for running dropboxes.

**RX!**

## Input Monitor State

Turn the input monitor on or off.

**MN *deck-num state*!**

*deck-num*    The number of the deck.

*state*        1 = Enabled, 0 = Disabled.

## Set Exit Code

Set the exit code of an event.

**SC *event-num code msg*!**

*event-num*    The number of the event.

*code*         The numeric code to set.

*msg*          The text message to set.