

## DB-Rider Reference Manual

### field-actions.r

field-actions.r script are found at the following location:

<DB-Rider install path>/db-overlays/<database-name>/<tablename>/field-actions.r

Each table has a field-actions.r script to affect how data entry happens within the Edit Record window.

You can edit the field-actions.r file by selecting the menu item: **Edit/Field Actions**

either in the Query window or Edit Record window.

This is a synopsis of what takes place within the field-actions.r file.

All of the code blocks described below take place **ONLY** in the Edit Record window they will **NOT** be run when any of these equivalent actions take place in the Query Window. This is designed this way to cleanly separate the two environments.

```
on-new-record [
    ; code block run when the 'New Record-F6' key is pressed
    ; useful for inserting default or custom values into a record before the user
    ; has to enter any data
]

on-display-record [
    ; code block run once record is displayed
    ; Good place to put common functions used by any of the other code blocks below
    ; or if you have longer scripts that you want to use
    ; you can put them in the "user-scripts" folder. Use the menu item: 'Edit/user-scripts'
]

on-duplicate-record [
    source-record-actions [
        ; code block run against the original SOURCE record when a record is duplicated
    ]

    target-record-actions [
        ; code block run against the NEW TARGET record when a record is duplicated
    ]
]

"<field-name-in-quotes>" [
    ; FIELD ACTIONS
    ; all actions particular to the named field
    ; below lists all of the available action events that can be customized.

    assist-button [
        ; code attached to the "... " button for this field
        ; Some code is automatically generated here when there is a relationship defined
        ; in the "relationships.r" file and if the datatype of the field is
        ; either a 'date', 'enum' or 'set'
    ]

    on-return [
        ; code to run when the Enter key or tab key is pressed
        ; in the typewriter days the enter key was referred to as the "RETURN" key
        ; this code will also run if you move the cursor with the mouse and
        ; click somewhere away from the field.
    ]

    on-new-target-record [
        ; code run when "New Target Record-F5" is pressed
        source-record-actions [] ; code block run against the original SOURCE record
        target-record-actions [] ; code block run against the TARGET record
    ]
]
```

Useful functions available withing the field actions environment.

- set-field
- get-field
- get-field/human

- set-focus "<the-field-name>"
- set-focus next-field
- request-db-list
- request-date-for-field
- request-enum-for-field
- request-set-for-field

**Note:** When attempting to do a 'set-field' on a date field make sure you convert your date with 'to-YYYY-MM-DD' function. IE: set-field "orderDate" to-YYYY-MM-DD now/date

## listing-layout.r

The listing-layout format is used to customize query output listing as well as report output listings. The example 'listing-layout.r' file is explained.

heading names are used in reports as variables so it's best to not include spaces in the names. dashes or underscores will work fine

```
[heading "Name" data [Name] format [info 180 edge [size: 1x1] left]]
[heading "MainContact" data [to-human "MainContact"] format [info 140 edge [size: 1x1] left]]
[heading "BillAddress" data [to-human "BillAddress"] format [info 150 edge [size: 1x1] left]]
[heading "ShipAddress" data [to-human "ShipAddress"] format [info 150 edge [size: 1x1] left]]
```

the above "listing-layout.r" creates a DB-Rider query listing that looks like this

Name	MainContact	BillAddress	ShipAddress
Baane Mini Imports	Carine Schmitt	C/ Moraltzarzal, 86 Madrid	Vinbltet 34 Kobenhavn
Mini Gifts Distributors Ltd.	Janine Labrune	2, rue du Commerce Lyon	0
Havel & Zbyszek Co	Jean King	Bronz Sok. Singapore	0
Blauer See Auto, Co.	Jonas Bergulfsen	C/ Moraltzarzal, 86 Madrid	0
Mini Wheels Co.	Peter Ferguson	Vinbltet 34 Kobenhavn	0
Acme Construction	Joe Blow	1234 7 Ave SE Calgary	

```
[heading "Name" data [Name] format [info 180 edge [size: 1x1] left]]
[heading "MainContact" data [to-human "MainContact"] format [info 140 edge [size: 1x1] left]]
[heading "BillAddress" data [to-human "BillAddress"] format [info 150 edge [size: 1x1] left]]
[heading "ShipAddress" data [to-human "ShipAddress"] format [info 150 edge [size: 1x1] left]]
```

data from the 'name' field is displayed exactly how it exists in the database

Name	MainContact	BillAddress	ShipAddress
Baane Mini Imports	Carine Schmitt	C/ Moraltzarzal, 86 Madrid	Vinbltet 34 Kobenhavn
Mini Gifts Distributors Ltd.	Janine Labrune	2, rue du Commerce Lyon	0
Havel & Zbyszek Co	Jean King	Bronz Sok. Singapore	0
Blauer See Auto, Co.	Jonas Bergulfsen	C/ Moraltzarzal, 86 Madrid	0
Mini Wheels Co.	Peter Ferguson	Vinbltet 34 Kobenhavn	0
Acme Construction	Joe Blow	1234 7 Ave SE Calgary	

data from the 'ShipAddress' field is converted to a human readable data format. If that data is available in the target table. This only works for fields that have a relationship with another table.

```
[heading "Name" data [Name] format [info 180 edge [size: 1x1] left]]
[heading "MainContact" data [to-human "MainContact"] format [info 140 edge [size: 1x1] left]]
[heading "BillAddress" data [to-human "BillAddress"] format [info 150 edge [size: 1x1] left]]
[heading "ShipAddress" data [to-human "ShipAddress"] format [info 150 edge [size: 1x1] left]]
```

Name	MainContact	BillAddress	ShipAddress
Baane Mini Imports	Carine Schmitt	C/ Moraltzarzal, 86 Madrid	Vinbltet 34 Kobenhavn
Mini Gifts Distributors Ltd.	Janine Labrune	2, rue du Commerce Lyon	0
Havel & Zbyszek Co	Jean King	Bronz Sok. Singapore	0
Blauer See Auto, Co.	Jonas Bergulfsen	C/ Moraltzarzal, 86 Madrid	0
Mini Wheels Co.	Peter Ferguson	Vinbltet 34 Kobenhavn	0
Acme Construction	Joe Blow	1234 7 Ave SE Calgary	

size of the cell edges

alignment of the data within the cell. It can be 'left', 'right' or 'center'

The data block in the layout can use the 'format' function to modify output as well, like this:

```
[heading "Price" data [ format to-decimal Price #0.2.24 ] format [info 80 edge [size: 1x1] left]]
```

Which will display the 'price' field with commas in the thousands field and prefix the data with the dollar (\$) symbol.

The 'format' function (provided by Eric Long) is used throughout DB-Rider to modify values for the listing layout during queries and for report creation. Type "help format" into the 'Rebol Command' field to see it's use.

## Data entry features in the 'Edit Record' window

### Date Handling

Any manual date entry fields will automatically do the following

- 1.) Convert the date into a format that is acceptable to the database.  
IE. 14-Aug-2011 is converted to 2011-08-04 or YYYY-MM-DD format
- 2.) Automatic date entry    format conversions

Data Entered	Corrected Date
-----	-----
a) "15 3 2011"	=> "2011-03-15"
b) "15 3 11"	=> "2011-03-15"
c) "3 15"	=> "<current year>-03-15"
d) "15"	=> if 15th is before the current day then "<current year>-<next-month>-15" => if 15th is after the current day then "<current year>-<current-month>-15"
e) " 15"	=> "<current year>-<current-month>-15" regardless of current day.
f) "-15"	=> "<current year>-<previous-month>-15"
g) " " (space)	=> <today's date>
h) "2011-Mar-15"	=> "2011-03-15"
i) "2011 Mar 15"	=> "2011-03-15"

- 3.) All of the above "shortcuts" apply to DateTime fields and TimeStamp fields as well.  
The last number in any input is considered the time portion  
IE. 5 7 11    => 2017-05-07 11:00  
" " (space) => <current-date> <current-time>

### Data Validation

Data is validated as soon as you enter the data into a field for the following datatypes:

- tinyint
- bool
- smallint
- mediumint

- int
- float
- bigint
- double
- decimal
- date
- datetime
- timestamp
- varchar
- char
- tinytext
- text
- mediumtext
- longtext
- time
- year
- enum
- set

There is currently NO data validation for the following datatypes:

- binary
- tinybinary
- varbinary
- blob
- longblob
- tinyblob
- mediumblob
- bit

### **Data Entry Assistance**

To assist with making valid data entry, requesters are automatically built for the following data types:

- Any field in a relationship with another table
- Dates
- Enum
- Sets

### **Edit Record Window shortcut keys**

Ctrl + l = Next record

Ctrl + k = Previous record

These are designed to aid in data entry it is equivalent of pressing enter on the current field and then pressing the ">" or "<" buttons.