

Items List and Item Link Tracker Fields

This is one of the tracker *field types* in Trackers. See also Relations Tracker Field

The *item link* field provides a selection list with all the unique values in a particular field of another tracker. This allows the use of trackers for simple relational database applications. Using an *items list* field instead of a text field or text area guarantees that always the same text/phrase is used to describe something, which helps in searching etc. Especially powerful is the combination with the *filter field* and *filter value* options of the TrackerList plugin, which allows the display of only those tracker fields on a particular topic. To use this, the same exact phrase in every record of the tracker is required, which the items list field makes possible.

Example

You want to display the list of products of a company

- tracker Company (id 6)
 - id 14: Company name - text field
 - id 16: Product list - **items list** = 5,15,leave localFieldId blank since remote field is a [itemlink back to this tracker,12](#)
 - id 17: Address - text field

Note: prior to Tiki 9, you have to specify the localFieldId even of the remote field is an itemLink field. From Tiki 9, the localFieldId is used only when you are trying to match values and not simply looking for items that are linked back here.

- tracker Products (id 5)
 - id 12: Product name - text field
 - id 15: Company name - **item link** 6,14

The view of the tracker Company will look like



The view of the tracker Products will look like



The insert of a Product item will look like



Company name will be drop down with Macromedia, Apple, Microsoft

Item link parameters

trackerId	the tracker you want to display fields
Field ID	the fieldId of the tracker you want to display
linkToItem	1 or 0 to create a link to the item in view mode and listing
Multiple Fields	A list of Fields which will be displayed instead of the <i>Field ID</i> parameter. It is also possible to select one single field here, for instance if you want one item per value without the (<i>itemId:XXX</i>) part
Format for Customising Multiple Fields	This only shows up if one of <i>Multiple Fields</i> is selected. It gives control on how the multiple fields are displayed
status	limit the choice of values to the items with a specific status (values:o,c,p,op,oc,pc or opc)
pageLink (Tiki 6+)	the item to the name of the wiki page to link to. If this is set, and when linkToItem is set to 0, the link will go to the wiki page where a PluginTrackerlist is present, instead of to tiki-view_tracker_item.php
One item per value (Tiki 9+)	The default value is to display absolutely the value/items for the same label with a notation value (itemId) - ie: name (itemId:1), name (itemId:2), name (itemId:3), etc. The other option is to display only one random item for each label/value - ie: name (single display for all the same item). Be aware that if this is good for a usage where you need a display of the value it will give <u>unpredictable</u> result where the value is to be manipulate as data. Selecting any field in <i>Multiple Fields</i> will ignore displaying the itemId value

In the above example, Company name in Products tracker is a item link

If you add the option 1 to the item link parameter, you will create a link to the company when displaying a product

If you use the parameters 6,14,0,14|17, instead of seeing the company name, you will see the company name concatenated to the address.

S: If the Company tracker is not know before you enter the products, you will have not to use the itemlink type for the field 15 but a simple text field.

PPS: Since Tiki8, the new interface to edit tracker fields and their options does not allow to modify the type of a field once it is created.

Items list parameters

trackerId	the other tracker you want to display fields	
fieldIdThere	the fieldId in the other tracker you want to match with the fieldId of your tracker	This can be a list of fieldIds separated with colons (see below)
fieldIdHere	the fieldId in your tracker you want to match	
displayFieldIdThere	the fieldId in the other tracker that is displayed.	In tw>2.0 FieldIds separated with vertical bar to display this list of fields
linkToItems	1 or 0 to create a link to items in view mode and listing	
status	filter the status of the items. Value: o, c, p, op, oc, pc or opc.	tw>=5.0

Do not forget the result can be a list

FieldIdThere can be a list of fieldId - so that you cross as many trackers you want. For instance imagine your product tracker has a field contact(fieldId=50) that is an item link to a person tracker , and imagine the person tracker has 2 fields : a name (fieldId=51) and a phone number (fieldId:52)

If you want to display the phone numbers of all your product contact in the company tracker, you will have a field
5,15:50:51,14,52

To visualize you can use this kind of table

item0 in company	fieldId 14	Apple
item1 in product	fieldId 15	Apple
item1	fieldId 50	sg
item2 in person	fieldId 51	sg
item2	fieldId 52	800 200 4000

Since Tiki8, there is a new interface to edit tracker fields and their options, and thus, this tracker field looks like:

The screenshot shows the 'Edit Field' dialog box with the 'Options for Item Link' section expanded. The 'Tracker ID' field contains the value '6'. The 'Field ID' field contains the value '314'. The 'Display' dropdown menu is set to 'Link'. The 'Multiple Fields' field contains the value '314|317|244|317|270'. The 'OK' and 'Cancel' buttons are visible at the bottom right.

General

Options for Item Link

Link to an other item, similar to a foreign key.

Tracker ID
6
Tracker to link to

Field ID
314
Default field to display

Display
Link
How the link to the item should be rendered

Multiple Fields
314|317|244|317|270
Display the values from multiple fields instead of a single one.

OK Cancel

Displaying Multiple Fields

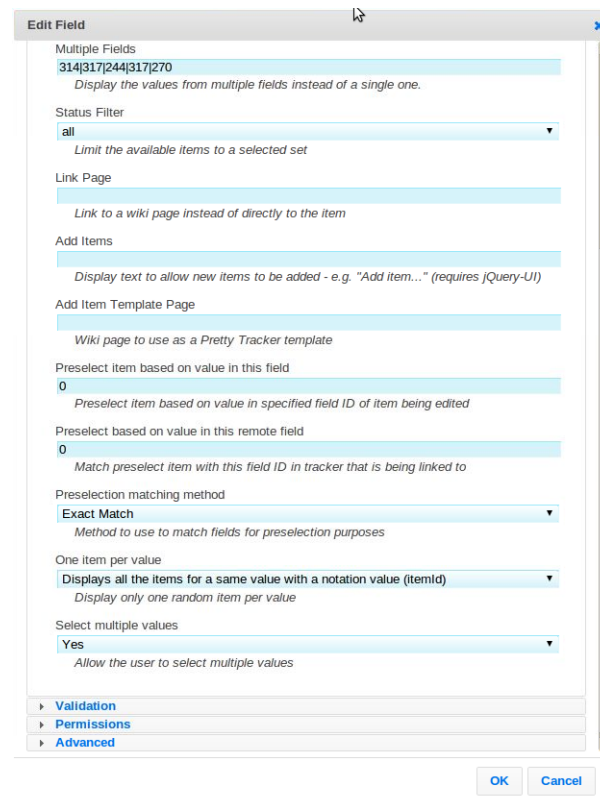
In the case below, both 29 and 30 are "text" fields.

```
FIELD46
name = Responses (Person,Yacht)
position = 9
type = l
options = 7,27,19,29|30,0
isMain = y
isTblVisible = y
isSearchable = y
isPublic = y
isHidden = n
```

New options added in Tiki 9

In Tiki9 some new options were added to "**item link**", which include:

- allow selecting more than one item from Tracker B as linked with that item in Tracker A,
- you can use a "static text" tracker item field as a separator for the fields displayed from each item in tracker B (for instance, a "dash" (-) can be used)
- and many other improvements (see some in the image below).



The image shows a screenshot of the "Edit Field" dialog box in Tiki 9. The dialog is titled "Edit Field" and contains several configuration options for a field. The options are:

- Multiple Fields:** A text input field containing "314|317|244|317|270". Below it is the description: "Display the values from multiple fields instead of a single one."
- Status Filter:** A dropdown menu with "all" selected. Below it is the description: "Limit the available items to a selected set"
- Link Page:** A text input field. Below it is the description: "Link to a wiki page instead of directly to the item"
- Add Items:** A text input field. Below it is the description: "Display text to allow new items to be added - e.g. 'Add item...' (requires JQuery-UI)"
- Add Item Template Page:** A text input field. Below it is the description: "Wiki page to use as a Pretty Tracker template"
- Preselect item based on value in this field:** A text input field containing "0". Below it is the description: "Preselect item based on value in specified field ID of item being edited"
- Preselect based on value in this remote field:** A text input field containing "0". Below it is the description: "Match preselect item with this field ID in tracker that is being linked to"
- Preselection matching method:** A dropdown menu with "Exact Match" selected. Below it is the description: "Method to use to match fields for preselection purposes"
- One item per value:** A dropdown menu with "Displays all the items for a same value with a notation value (itemid)" selected. Below it is the description: "Display only one random item per value"
- Select multiple values:** A dropdown menu with "Yes" selected. Below it is the description: "Allow the user to select multiple values"

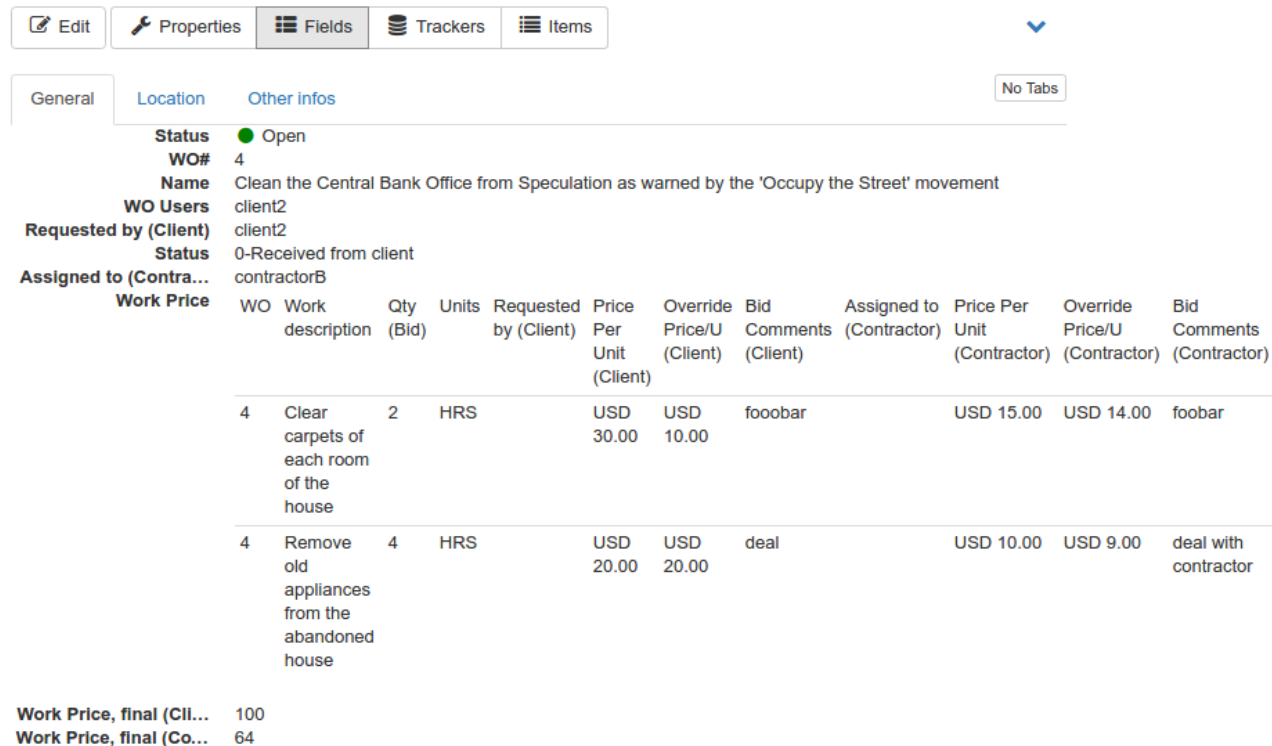
At the bottom of the dialog, there are three expandable sections: "Validation", "Permissions", and "Advanced". Below the dialog, there are "OK" and "Cancel" buttons.

New options added in Tiki 17

Table display with optional TrackerList parameters

New options have been added in Tiki17 to the tracker field "**item link**", which allow to display the linked items as a table with the UI and potential features of PluginTrackerList, which opens the door to have custom inline editable fields, sortable tables, etc.

In addition, you can get sums of values of the linked tracker items in a mathematical calculation field in the same source tracker. See an example in the profile `Work_Custom_Pricing`



The screenshot shows a Tiki TrackerList interface. At the top, there are navigation buttons: Edit, Properties, Fields, Trackers, and Items. Below these are tabs for General, Location, and Other infos, with a 'No Tabs' button. The main content area displays the following information:

- Status:** Open (indicated by a green dot)
- WO#:** 4
- Name:** Clean the Central Bank Office from Speculation as warned by the 'Occupy the Street' movement
- WO Users:** client2
- Requested by (Client):** client2
- Status:** 0-Received from client
- Assigned to (Contractor):** contractorB

Below this information is a table with the following columns: WO, Work description, Qty (Bid), Units, Requested by (Client), Price Per Unit (Client), Override Price/U (Client), Bid Comments (Client), Assigned to (Contractor), Price Per Unit (Contractor), Override Price/U (Contractor), and Bid Comments (Contractor).

WO	Work description	Qty (Bid)	Units	Requested by (Client)	Price Per Unit (Client)	Override Price/U (Client)	Bid Comments (Client)	Assigned to (Contractor)	Price Per Unit (Contractor)	Override Price/U (Contractor)	Bid Comments (Contractor)
4	Clear carpets of each room of the house	2	HRS		USD 30.00	USD 10.00	foobar		USD 15.00	USD 14.00	foobar
4	Remove old appliances from the abandoned house	4	HRS		USD 20.00	USD 20.00	deal		USD 10.00	USD 9.00	deal with contractor

At the bottom of the table, there are two summary rows:

- Work Price, final (Client):** 100
- Work Price, final (Contractor):** 64

When editing that field, you can select through checkboxes which items you want to be really linked (from all the ones matching the pre-selection method defined in the tracker field definition).

Assigned to (Contractor)

contractorB

Work Price

Page 1 | Rows 5

WO	Work description	Units	Qty (Bid)	Requested by (Client)	Price Per Unit (Client)	Override Price/U (Client)
<input checked="" type="checkbox"/>	4 Clear carpets of each room of the house	HRS	2	client2	USD 30.00	USD 10.00
<input type="checkbox"/>	4 Fix wooden fence at the garden	HRS	3	client2	USD 16.00	USD 14.00
<input checked="" type="checkbox"/>	4 Remove old appliances from the abandoned house	HRS	4	client2	USD 20.00	USD 20.00

Add

Work Price, final (Client)
Value will be re-calculated on save. Current value: 100

Work Price, final (Contractor)
Value will be re-calculated on save. Current value: 64

Close Save

Those ones selected (two out of three in the previous screenshot) are the ones taken into account later on as linked and shown in the table display, and used in the mathematical calculation formula in the corresponding tracker fields of that profile.

As previously indicated, you can indicate which fields you want displayed, which format, the options you want to be used in the table display, the pre-selection match criteria, and a few other options:

General

Options for Item Link

Link to another item, similar to a foreign key.

Tracker ID

Tracker to link to

Field ID

Default field to display

Display

How the link to the item should be rendered

Multiple Fields

Display the values from multiple fields instead of a single one.

Format for Customising Multiple Fields

Uses the translate function to replace %0 etc with the field values. E.g. "%0 any text %1"

Multiple Fields display type

Display multiple fields as concatenated list in a dropdown or as a table.

Plugin TrackerList options

Override one or more options of Plugin TrackerList to customize displayed table at item edit time (e.g. editable, tsfilters, etc.)

Status Filter

Limit the available items to a selected set

Link Page

Link to a wiki page instead of directly to the item

Add Items

Display text to allow new items to be added - e.g. "Add item…" (requires jQuery-UI)

Add Item Template Page

Wiki page to use as a Pretty Tracker template

Preselect item based on value in this field

Preselect item based on value in specified field ID of item being edited

Preselect based on the value in this remote field

Match preselect item to this field ID in the tracker that is being linked to

Preselection matching method

Method to use to match fields for preselection purposes

One item per value

Display only one item for each label (at random, needed for filtering records in a dynamic items list) or all items

Select multiple values

Yes

Allow the user to select multiple values

Index remote fields

...Client Side (Tracker-4)
...Contractor Side (Tracker-4)
...Photos (Tracker-4)
Assigned to (Contractor) (Tracker-4)

Index one or multiple fields from the master tracker along with the child, separated by |

Cascade actions

No

Elements to cascade when the master is updated or deleted. Categories may conflict if multiple item links are used to different items attempting to manage the same categories. Same for status.

Validation

Permissions

Advanced

Close Save

As indicated above, see more details in your own tiki instance after applying profile Work_Custom_Pricing

Wildcard items

Since Tiki17 (backported to Tiki 16.2), you can use wildcard items in the remote tracker:

1. the tracker field can display items from the remote tracker which match the value of the common field between the two tracker **plus those with a wildcard (asterisk, *)** in that field.
 - An **Update** button is shown then below the table, which will proceed as follows:
 - all selected wildcard items are cloned and become linked items
 - all selected normal items stay the same

- all unselected normal items are deleted

This allows users to make some selections, update, then edit as necessary. Cloned items are safe to edit (they no longer edit the wildcard item but the cloned one), and then save the whole form.

The **Update** button makes sure this works for new items when we still don't have the itemId to clone to, etc.

Update Item

1) Main: 2) Tasks & Resources: 3) Map: 4) Other data: No Tabs

Checklist of Project Tasks

Page 1 1 - 5 / 5 (5) Rows

pID	Task description (text)	Assigned to (Team Members)	Duration (Expected)
<input checked="" type="checkbox"/> 2	Get insititutional email for the new user		15
<input checked="" type="checkbox"/> 2	Assess project development at the end of the project (take-home messages for improvement?)		1
<input type="checkbox"/> *	Assess project development at the end of the project (take-home messages for improvement?)		1
<input type="checkbox"/> *	Create a Gantt Chart for the whole project		2
<input type="checkbox"/> *	Get insititutional email for the new user		15

Add NEW Task Update

Time invested
Value will be re-calculated on save. Current value: 0

Close Save

New options added in Tiki 18

ItemsList field can now use an already present DynamicItemList link to another tracker to list fields in addition to ones displayed in DynamicItemsList. For this purpose, Link Field ID must be left empty and Value Field ID must be set to the DynamicItemList field.

New options added in Tiki 21

ItemsList fields Editable: In edit and view mode, ItemsList fields now offer these options: add item, edit item, delete item.

(See: <https://dev.tiki.org/item7206-Make-ItemsList-Tracker-Fields-Editable>)

Related

See also Dynamic items list.

alias

Items list | item link | item list | items link | tracker field items list | tracker field item link | tracker field item list |
tracker field items link | itemslist | itemlink | itemlist | itemslink | foreign key | Wildcard items | Wildcard |
Wildcard_items | WildcardItems