

Infowise Associated Tasks Field User Guide

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Introduction

Infowise Associated Tasks Field is a set of custom Microsoft SharePoint field types that allow entering and managing items or documents related to any list item or document from within the context of the parent item itself.

The product can also work as a companion to regular lookup field, by showing the items looking up the current item or it can work with a set of provided content types, for advanced functionality. The content types include item, document and task content types that can be used as a basis of your own content types.

When used together with the provided content types, the field allows users to create new items/documents related to an item, manage their lifecycles and run workflows, all without leaving the context of the parent item and being able to view the details the related items as part of the parent item's own properties.

The product installs the following components:

- Associated Item, Associated Document and Associated Task content types, based on SharePoint Item, Document and Task content types. The content types contain hidden fields that are managed by the product for storing information necessary to link every item to its parent item. To be used with the product, your items/documents must inherit from this content type.
- *Associated Tasks* list template uses the *Associated Task* content type as a ready-made implementation to be used directly without modification. You can use this list template or add the task content type to your own list.
- *Associated Items* field is added to parent list to view, enter and edit associated items.
- *Associated Items Summary* field performs calculations based on the number of related items or their values
- *Associated Items* web part that allows you to manage the related item on the *Edit/Display* form outside the field.
- Workflow conditions *All Tasks in Status* and *Associated items value check* can be used in *SharePoint Designer* workflows to test if all tasks, documents or items, associated with the same parent item adhere to the specified condition. The conditions can be used in workflow scenarios of your own design.
- Workflow action *Generate Associated Tasks* that can automatically generated individual tasks for multiple users defined in a *User/Group* column of the parent item.
- Workflow action *Extract parent item ID* that can store the parent item's ID in a workflow variable. You can use this ID to update the parent item.

NOTE: Custom fields in SharePoint will remain read-only in Spreadsheet view and in Document Information Panel in Office 2007 or above.

Installation

Note: as the product is installed as a SharePoint Solution, you need to install it only once, regardless of the number of your front-end servers.

Copy the installation package to one your front-end server machine and run it. The package will unzip into a temporary folder and start the installation automatically. Follow the on-screen instructions; you do not have to change the default settings.

If you have purchased the product, use the *Infowise Product Registration* management page accessible through the *Central Administration* site. Enter the License Key under corresponding product. If no License Key is entered, the version is time-limited to 30 days. Both full and time-limited versions contain the same functionality.

A site collection level feature must be activated on all site collections where you want to use the product. The feature enables content type and list template and also registers the workflow condition as safe in the web.config file. Please note, due to the implementation specifics of the SharePoint web.config modification module, errors in the web.config file[s] may cause the modification to fail silently. If you are unable to use the condition from SharePoint Designer, please check that the following line is present in the *Configuration / System.Workflow.ComponentModel.WorkflowCompiler / authorizedTypes* section:

```
<authorizedType Assembly="Infowise.AssociatedTasks,
Version=1.0.0.0, Culture=neutral, PublicKeyToken=23853b1f8d5855a5"
Namespace="Infowise.Sharepoint.V3.Fields.Workflow" TypeName="*"
Authorized="True" />
```

NOTE: *Infowise Associated Items* field uses ASP.NET 3.5 AJAX if available. This is the recommended configuration, which allows users to add tasks without reloading the page. Refer to the following page for AJAX installation instructions:

<http://www.infowisesolutions.com/ajax.aspx>

SharePoint 2010 comes with AJAX preinstalled.

Usage

The field behaves differently depending on the content type it is connected to in the related items' list:

1. Any content type with a lookup column to the current list – you will be able to add new related items to the parent item using New Form, default view or datasheet view. When using the New Form, you do not have to select the correct value for the parent item, it will be done automatically. The parent item must be in Edit mode.
2. Associated Item content type – use this content type as a basis for your own content types for the general item-based content. You will be able to add new items using the New Form from the Edit and New forms of the parent item; meaning that the parent item may even not exist yet.

3. Associated Document content type – use this content type as a basis for your own document-based content types. You will be able to upload documents and edit their metadata directly from the field. You can even specify the folder where the new document is to be stored, using text and/or parent item column values. To specify a column, enter column name surrounded by square brackets.
4. Associated Task content type – use this content type for task management. You will be able to create new tasks directly from the parent item. The task generation mode allows you to create multiple similar tasks automatically based on user and/or group defined in the item. Usage of this content type is described in full detail in the demo below.

The following instruction guides you step-by-step through the process of setting up a sample Infowise Associated Tasks Field implementation. Your real-life settings procedure is very similar.

Using the Associated Tasks Field for entering and managing of tasks related to any list item or document:

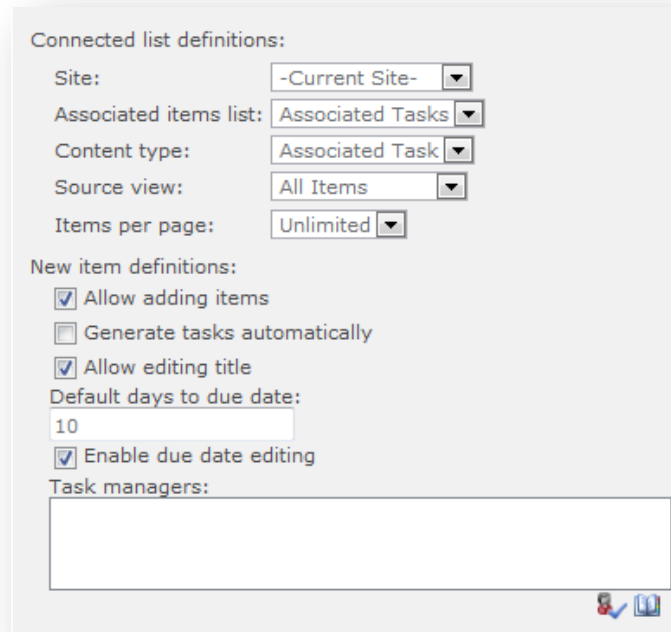
Creating a Tasks list

The field requires using tasks of the special content type, supplied with the product. You can either use the content type (or inherit from it) in your own lists or you can create an instance of the supplied list template. The second option is the easiest and is demonstrated here.

Enter the *Create* page and click on *Associated Task* list. Enter the list name and save you settings.

Defining a new column

- Choose a list to add the field it. It must NOT be the same list created in the previous section.
- Go to *Add Column* page and enter the new column name (e.g. *Tasks*)
- Choose *Associated Tasks* as the column type
- Select the tasks list in the appropriate field.
- All the other settings should be filled out automatically



The screenshot shows a configuration window for the 'Associated Tasks' field. It is divided into two main sections: 'Connected list definitions' and 'New item definitions'.

Connected list definitions:

- Site:** A dropdown menu currently showing '-Current Site-'.
- Associated items list:** A dropdown menu showing 'Associated Tasks'.
- Content type:** A dropdown menu showing 'Associated Task'.
- Source view:** A dropdown menu showing 'All Items'.
- Items per page:** A dropdown menu showing 'Unlimited'.

New item definitions:

- ☒ Allow adding items
- ☐ Generate tasks automatically
- ☒ Allow editing title
- Default days to due date:** A text input field containing the number '10'.
- ☒ Enable due date editing
- Task managers:** A large empty text area for defining task managers.

At the bottom right of the dialog box, there are three small icons: a red 'X' for cancel, a blue checkmark for OK, and a document icon for help.

- *Site* – select the site where your related list is located. This can be the current site or any other site of the site collection.
- *Associated items list* – list or document library storing the related items.
- *Task content type* – if more than one content type exists in the list, select the appropriate one, otherwise no changes are required or possible.
- *Source view* – specifies the view of the tasks list to display in the field. Using this setting you can define which fields will appear and in what order.
- *Link to parent reference* – field of the target content type that contains a link back to the parent item. This is the only field visible through the user interface; the field value is read-only for end-users. No change is required.
- *Allow adding items* – whether or not to display the task generation controls on the item's Edit form.
- *Allow adding when parent item in Display mode* - allow adding new related items even when the parent item is in Display mode.
- *Generate tasks automatically* – enables automatic generation of tasks, based on content type, users/groups entered in the referred column and predefined task title and due date.
- *Source column* – column in the current list to pull the users/groups for task auto-generation.
- *Allow editing title* – you can allow users enter their own task title or enter a preselected title for all tasks. In some cases, when you need to assign the same tasks to all users (e.g. Please review this document), it is easier not to enter the same title every time. You cannot enable title editing when using auto-generation.
- *Default days to due date* – default number of days between today and the default task due date

- *Enable due date editing* – enable users modify due date. You cannot enable this option when using task auto-generation
- *Task managers* – optionally specify users who can modify tasks even if they are not assigned the tasks directly.

Adding new tasks

You can add new tasks while adding or editing the parent item. Consider the following scenario – you are managing events in your calendar and you need to assign tasks for several employees to prepare the event. You need to create an Associated Tasks column as described above. Afterwards, while entering each new event you can add all the accompanying tasks without leaving the context of the event.

TV > Event Calendar > Calendar > New Item

Calendar: New Item

OK Cancel

Attach File | Spelling... * indicates a required field

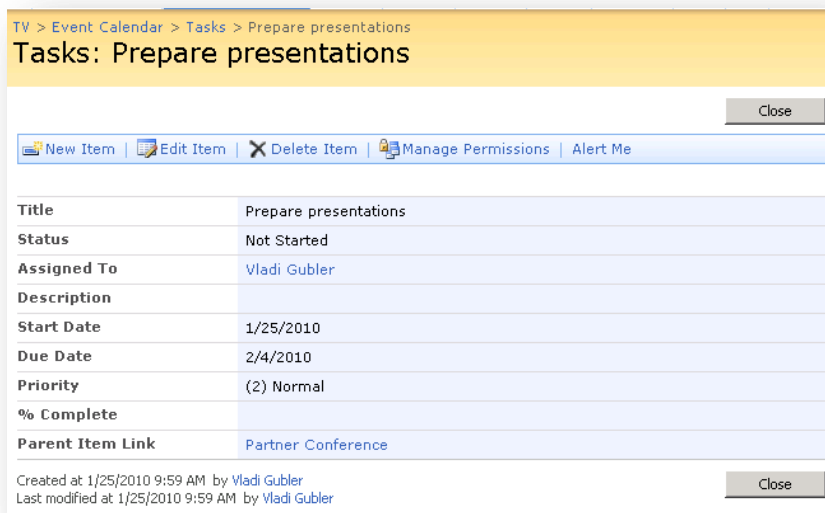
Title *	Partner Conference												
Location	Main Seminar Center												
Start Time *	2/5/2010												
End Time *	2/6/2010												
Description	<div>Rich text editor toolbar and area</div>												
All Day Event	<input checked="" type="checkbox"/> Make this an all-day activity that doesn't start or end at a specific hour.												
Recurrence	<input type="checkbox"/> Make this a repeating event.												
Workspace	<input type="checkbox"/> Use a Meeting Workspace to organize attendees, agendas, documents, minutes, and other details for this event.												
Category	(None)												
Tasks	<table border="1"> <thead> <tr> <th>Title</th> <th>Assigned To</th> <th>Status</th> <th>Priority</th> <th>Due Date</th> <th>% Complete</th> </tr> </thead> <tbody> <tr> <td>Prepare presentations</td> <td>Vladi Gubler</td> <td>Not Started (2)</td> <td>Normal</td> <td>2/4/2010 12:00:00 AM</td> <td></td> </tr> </tbody> </table> <div> Task title: Send out invitations Assigned To: Mor Shemesh Due date: 2/3/2010 </div>	Title	Assigned To	Status	Priority	Due Date	% Complete	Prepare presentations	Vladi Gubler	Not Started (2)	Normal	2/4/2010 12:00:00 AM	
Title	Assigned To	Status	Priority	Due Date	% Complete								
Prepare presentations	Vladi Gubler	Not Started (2)	Normal	2/4/2010 12:00:00 AM									

Add

NOTE: each task links back to the parent item (in this case, an event) using a special hyperlink field. The field value is managed automatically and is entered by the system. For the link to function correctly, it needs to contain the ID of the parent item. This ID is assigned only after the parent item has been created, thus when entering the tasks during the parent item's initial entry stage will not fill out the parent link. When viewing/modifying the parent item for the first time after the initial entry, the system will fill out the missing parent links automatically, so if your business process

requires parent link functionality, which is not a must, you need to add the associated tasks during the Edit stage of the parent item or open and view the item after the initial entry to make sure the links are generated.

The following screenshot demonstrates the parent link appearance:



TV > Event Calendar > Tasks > Prepare presentations

Tasks: Prepare presentations

Close

New Item | Edit Item | Delete Item | Manage Permissions | Alert Me

Title	Prepare presentations
Status	Not Started
Assigned To	Vladi Gubler
Description	
Start Date	1/25/2010
Due Date	2/4/2010
Priority	(2) Normal
% Complete	
Parent Item Link	Partner Conference

Created at 1/25/2010 9:59 AM by Vladi Gubler
Last modified at 1/25/2010 9:59 AM by Vladi Gubler

Close

Task Auto-generation

This powerful feature allows you to create a comprehensive task management system in second. For instance, you can manage periodical review of SOP's by all involved employees with a touch of a button.

Follow the easy steps below:

- Create a column in your list, where you will store the names of users and/or groups, who need to review the SOP. Domain groups will be expanded and the tasks will be assigned to their members individually. Nested domain groups are supported as well.
- Create an Associated Tasks list or add the Associated Tasks content type to an existing Tasks list
- Create an Associated Tasks column in your SOP document library
- Enable auto-generation, enter a title, such as "Review and confirm reading" and specify the number of days for completing the task.
- You are done.

Now, when you edit the properties of an SOP, a button for creating the tasks will be shown. Just one click on that button will create tasks for all the users you entered in the User/Group column for the SOP.

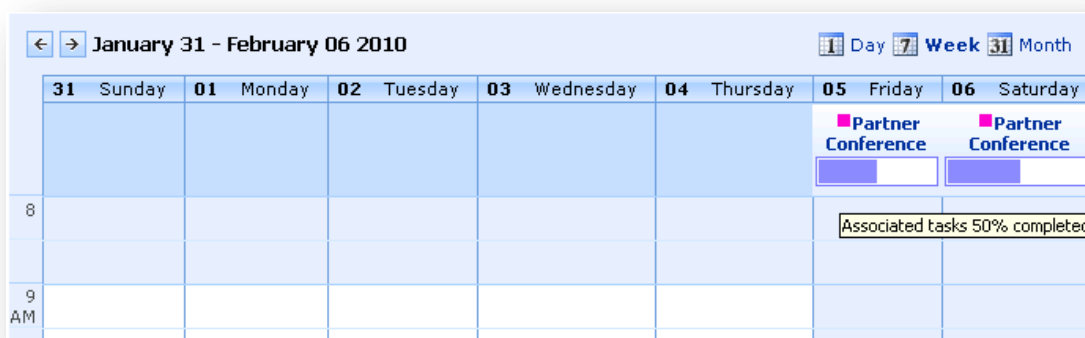
NOTE: Tasks can also be created in a SharePoint Designer workflow using the provided action.

Event Calendar Plus integration

Infowise Event Calendar Plus is an advanced calendar viewer that enhances the default SharePoint calendar with new features. Some of these features are:

- Multiple views, including quarter, half-year and year view
- Color coding according to event category and status
- User-defined additional fields presented on mouse hover
- Attached to any list, events or not, located at any site.

Event Calendar Plus integrates with the Associated Tasks field by displaying a progress bar inside the calendar for each event that possesses associated tasks. The progress bar indicates the percentage of completed tasks. Clicking on the progress bar displays a floating window that presents a view of the tasks and allows marking tasks as completed directly from the calendar.



Using Associated Tasks Field to preview any list items by a connected field:

Creating a custom SharePoint list

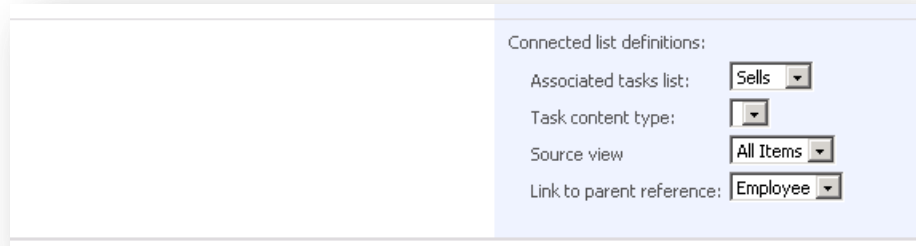
- Create a custom SharePoint list with a title (e.g. Employees).

Creating another custom SharePoint list

- Create another custom SharePoint list (e.g. Sells).
- Add to the following list a lookup field or Infowise Connected Field while the source data is from the first list and any other fields..
- Fill the two lists with data.

Defining the Associated Items column

- The Associated Items Field will preview the list items according to the lookup field or the Infowise Connected Field data.
- Enter to the first list (Employees).
- Go to Add Column page and enter the new column name (e.g. Sells).
- Choose Associated Items as the column type.



Connected list definitions:

Associated tasks list:	Sells
Task content type:	
Source view	All Items
Link to parent reference:	Employee

- *Associated tasks list*- all lists with a lookup field/Infowise Connected Field to the following list will appear.
- *Task content type* – if more than one content type exists in the list, select the appropriate one, otherwise no changes are required or possible
- *Source view* – specifies the view of the list to display in the field. Using this setting you can define which fields will appear and in what order.
- *Link to parent reference* – field from the second list (Sells) that connect between the two lists. Field that contains a link back to the parent item. This is the only field visible through the user interface; the field value is read-only for end-users.

View the Associated Items Field

- Enter to the list including the Associated Items Field (Employees).
- View or edit one of the items.
- The Associated Items Field previews all items from the second list with the same employee name.
- Clicking the sell title will open the current sell properties.

Employees: Vladi

Close

New Item | Edit Item | Delete Item | Manage Permissions | Alert Me

Employee Name	Vladi			
sells	Title	Employee	Date	Sum
	Sell1	Vladi	8/25/2010 12:00:00 AM	1000
	Sell2	Vladi	8/31/2010 12:00:00 AM	2000

Created at 8/24/2010 3:45 PM by Tali Levy
Last modified at 8/24/2010 3:45 PM by Tali Levy

Close

Related Item in Views

When included in views, the Associated Tasks column displays a link *Click for details*. When clicked it will fetch and display related items below the parent items within the view

Associated Items Web Part

The web part provides an alternative method of managing and viewing related items, on the Display/Edit form, but as a separate web part from the item Display/Edit control. This allows you to visually separate the related items from the parent item while still remaining in the context of the same item.

To place the web part on page:

- Make sure to activate the web application scoped feature named *Infowise Associated Tasks Field Workflow*
- Activate the site collection feature *Infowise Associated Tasks Field web parts*
- Enter the Edit/Display form you want to add the web part to
- Enter edit mode of the page. If option is not available, add “?toolpaneview=2” parameter to the URL.
- Add Infowise Associated Items web part
- In web part properties select the Associated Tasks column name.

- Select whether or not you want to be able to add new items using the web parts. You can use the field settings, always allow or never allow.
- You now can view, edit and optionally add related items for the current item using the web part. When the web part is present, the field it is attached to will remain blank at all times.

Associated Items Summary Field

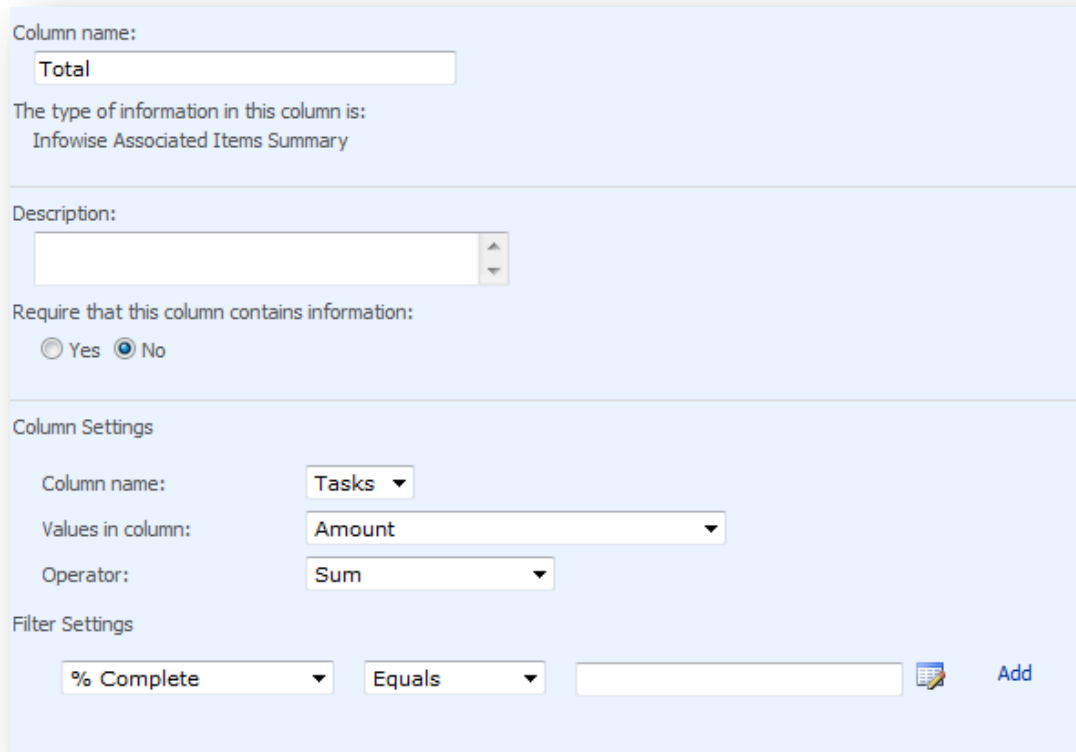
The field type is included in the product to make it easy to calculate summary data based on the related items managed by an Associated Items column.

NOTE: the field can only be used when you've already created at least one Associated Items column in the list.

You can count the number of related items or perform summary operation on numeric columns of the related items, sum as Sum, Average, Minimum, Maximum or Standard Deviation.

- Add the column to the list
- Select the desired Associated Items field under *Column Name*
- Select a column in the related list to perform calculation on under *Values in Column*
- Select the operator. Unless a numeric column is selected, only the *Count* option is shown

When items are added, updated or deleted in the related list, the calculation is performed and the updated value is set in the Associated Items Summary column of the parent.



Column name:
Total

The type of information in this column is:
Infowise Associated Items Summary

Description:

Require that this column contains information:
☐ Yes ☒ No

Column Settings

Column name: Tasks

Values in column: Amount

Operator: Sum

Filter Settings


% Complete Equals  [Add](#)

Figure 1 - Summary column settings

You can also choose to set filters to include only certain related items in the calculation. You can use a combination of any columns and set value using typed-in values, other column values and functions. Use the value picker to facilitate entry of filters.

Value Picker

Use the value picker for selecting values for conditions and/or parameters. The value picker looks like a regular text box with an adjacent picker icon:





Figure 2 - Value Picker

Depending on the value type of the column/parameter for which the value is being entered, the picker will check your input or disallow invalid entry. The picker allows one of the following data types:

1. Text – any input is allowed.
2. Number – the entered value must be a number or the calculation result must produce a number
3. Date – the entered value must be a valid date or the calculation result must produce a date

4. Boolean – the entered value must be a Boolean (yes/no)

Value Calculations

You can enter scalar values, such as “Title” or “1”, column values in the form of column name surrounded by square brackets (such as “[Title]”), functions (such as “\$Month([Created])”) or arithmetic operators (“+”, “-”, “*” or “/”).

When entering a **text** value, all the different parts of the value are concatenated into one string, such as “[Title] 1” may produce “My title 1”.

When entering a **number**, each part is evaluated as a number and the arithmetic operations are performed on those numbers. For example, “[Amount]/[Count]” can produce “6/2”, which results in “3”. Note that only simple calculations are performed; you should not use any parentheses or advanced mathematical symbols.

When entering a **date**, the first part is evaluated as a date. Additionally, you can include additional parts, evaluating as a number and either “+” or “-” between them. When calculating, the specified number of days is subtracted or added to the date. For example, “[Due Date]-[Warning Period]” may result in “12/12/2011 – 7”, which will produce “12/5/2011”.

When entering a **Boolean**, you must either enter “True” or “False” or select a yes/no column. No arithmetic operations are supported.

Picker Pop-up

You may want to click on the picker icon to bring up a picker pop-up window. The window presents a selection of available columns and functions for building the value expression.

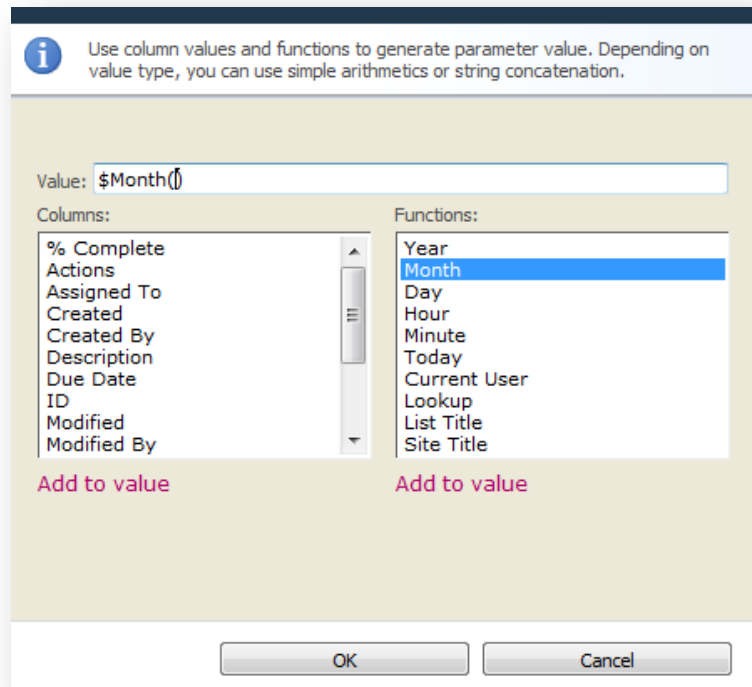


Figure 3 - Picker pop-up

Functions

You use functions to either enter values that are not column value or to perform operations on column values

- *Year* – takes date/time as parameter and produces number from the Year part of that date, e.g. “\$Year([Created])” → “\$Year(12/12/2010)” → “2010”.
- *Month* – takes date/time as parameter and produces number from the Month part of that date, e.g. “\$Month([Created])” → “\$Month(12/12/2010)” → “12”.
- *Day* – takes date/time as parameter and produces number from the Day part of that date, e.g. “\$Day([Created])” → “\$Day(12/12/2010)” → “12”.
- *Hour* – takes date/time as parameter and produces number from the Hour part of that date/time, e.g. “\$Hour([Created])” → “\$Hour(12/12/2010 12:00 PM)” → “12”.
- *Minute* – takes date/time as parameter and produces number from the Minute part of that date/time, e.g. “\$Minute([Created])” → “\$Minute(12/12/2010 12:00 PM)” → “0”.
- *Today* – [Today], returns date/time of when the action is performed. You can also use this function as input for the above functions.
- *Current User* – [Me] or [Current User], returns the display name of the user performing the action.
- *Lookup* – for any lookup column returns the column value of an additional column given the selected lookup value for the list item. For example, suppose your column lookups a list of states and shows the state name abbreviation, such as IL or NY. Additionally, the *Title* column in the *States* list contains the full name of that state, *Illinois* or *New York*. By adding the following function \$Lookup([State]|[Title]) – you can return the full name (from the column *Title*) for the value selected in the column *State* of the current item.
- *List Title* – [List Title], returns the title of the current list
- *Site Title* – [Site Title], returns the title of the current site.