

# Features

## Content by Type Web Part

Aggregate SharePoint 2007 data in an easy to configure view

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# Content by Type Web Part

*AGGREGATE SHAREPOINT 2007 DATA IN AN EASY TO CONFIGURE VIEW*

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## INTRODUCTION

The introduction of site columns and content types in SharePoint 2007 is a big step forward for organisations that want to organize their content in SharePoint. By using them it is possible to setup a central metadata model for all documents and/or web pages in a site. This is not limited to just documents and pages. It can be applied to any type of information. If we manage announcements in all our teamsites, we once define what columns we want people to enter when they create a new announcement. Site columns and content types are available both in Windows SharePoint Services 3.0 (WSS) and Microsoft Office SharePoint Server 2007 (MOSS).

Microsoft Office SharePoint Server 2007 also introduces the Content Query Web Part. This web part allows people to query their sites for items and display them in a list. Configuring this webpart to display multiple columns is possible and makes the Content Query web part very flexible. For a lot of users however, this process is too difficult. The Content by Type web part offers a solution for that. It allows users to easlily aggregate items of a specific content type in a view. The screenshot below shows an

example of the Content by Type web part in action.

The screenshot shows a SharePoint web part titled "Content by Type" with a navigation menu at the top containing "Documentation", "News", "Reports", "Resellers", "Search", and "Sites". Below the menu is a breadcrumb trail "Home > Documentation". The main content area is titled "New documentation posted in our intranet" and displays a table of items. The table has four columns: "Title", "Modified", "Modified By", and "Region". The items are grouped into three categories: "Contract", "Marketing information", and "Technical details".

Title	Modified	Modified By	Region
<b>Content Type : Contract</b>			
Improptu Trips support 2007	8/10/2007 11:19 PM	Brian Wilson	Europe
Maintenance 2008 Mountain Emporium	8/10/2007 11:19 PM	Brian Wilson	Europe
Retail Mall support 2007	8/10/2007 11:17 PM	John Smith	Europe
TopNotch bikes 2007-2008	8/10/2007 11:17 PM	John Smith	Europe
Support Contract Health Spa, limited	8/10/2007 11:15 PM	Ton Stegeman	Europe
<b>Content Type : Marketing information</b>			
Marketing plan US 2007	8/10/2007 11:32 PM	Brian Wilson	ASPAC
Marketing plan Europe 2007	8/10/2007 11:32 PM	Brian Wilson	Europe
Introduction Mountain range Australia	8/10/2007 11:30 PM	Ton Stegeman	ASPAC
Trends on mountain sales in Europe 2008	8/10/2007 11:29 PM	Ton Stegeman	Europe
Sales strategy Europe 2008	8/10/2007 11:28 PM	Ton Stegeman	Europe
<b>Content Type : Technical details</b>			
2007 specifications for the 2000 Touring	8/10/2007 11:19 PM	Brian Wilson	ASPAC
Technical specification for the Mountain 200	8/10/2007 11:19 PM	Brian Wilson	Americas
Technical specifications of the 2007 Road-350-W bike	8/10/2007 11:18 PM	John Smith	Americas

This example shows the results of a query for all content types descending from the "Document" content type. The view displays 4 columns of this content type. The view is grouped by content type and sorted by Modified date.

When configuring the webpart, users simply choose a content type and the web part lets them pick the columns they want. The screen shot on the right shows part of the configuration. Users can (un)select the available content type fields and configure the links for these fields. After configuring the other web part properties (scope, grouping, sorting, list type, etc.) the web part will query for items that match the selected content type(s) and display the results in a grid. This grid is using the out of the box SharePoint grid control. Changes to the user interface of your site are also applied to the items displayed in the Content by Type webpart, as is shown in the screenshot below.

New documentation posted in our intranet	
Title	Modified
<b>Content Type : Contract</b>	
Improptu Trips support 2007	8/10/2007 11:19 PM
Maintenance 2008 Mountain Emporium	8/10/2007 11:19 PM
Retail Mall support 2007	8/10/2007 11:17 PM
TopNotch bikes 2007-2008	8/10/2007 11:17 PM
Support Contract Health Spa, limited	8/10/2007 11:15 PM
<b>Content Type : Marketing information</b>	
Marketing plan US 2007	8/10/2007 11:32 PM
Marketing plan Europe 2007	8/10/2007 11:32 PM
Introduction Mountain range Australia	8/10/2007 11:30 PM

**Field settings**

Select fields to be displayed:  
(\* are generated link fields.)

- Link to item (\*)
- Link to item with menu (\*)
- Content Type
- Name

Add to selected fields

Selected fields:

Field	Link field
<input type="checkbox"/> Title	Link to item with menu (*)
<input type="checkbox"/> Modified	-- Please select a field --
<input type="checkbox"/> Modified By	Modified By Link (*)
<input type="checkbox"/> Region	-- Please select a field --
<input type="checkbox"/> Reseller	Reseller Link (*)

Remove selected fields

Group by:  
Content Type

Sort By:  
Modified

The next chapter describes the main features of the Content by Type webpart. The last chapter has the installation guide to install and uninstall the webpart. Just before that the known issues and possible new features of the web part are summarized.

## FEATURES

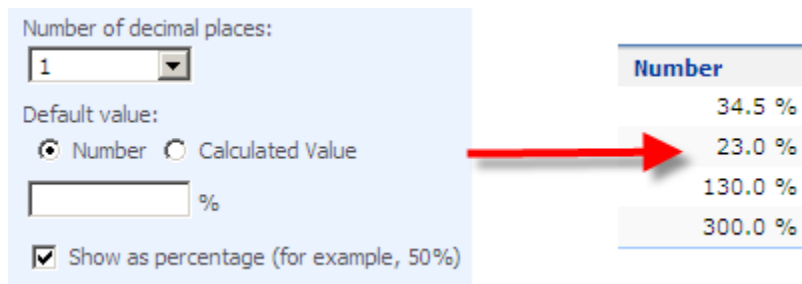
### PLATFORM

The Content by Type web part works on both Windows SharePoint Services 3.0 and Office SharePoint Server 2007. This introduces content aggregation to WSS sites. The out of the box Content Query webpart is only available in Office SharePoint Server.

**Technical info:** Before querying the web part decides if it is running in a WSS or a MOSS site. If the feature called “*Office SharePoint Server Publishing Infrastructure*” is activated for the site collection, it is considered to be a MOSS site. In that case the CrossListQueryCache object is used to query. In WSS sites, the SPSiteDataQuery object is used.

### FORMATTING

Data returned by the Content by Type webpart is casted and formatted as the datatype of the column. The formatting options that are applied to the site columns (currency, number of decimals, datetime format, etc.) are also applied to the query results. SharePoint items displayed by the Content by Type web part therefore look the same as items displayed by the SharePoint views. Casting the data to the correct datatype is also important for sorting. This ensures that when a user clicks a column header of a datetime field that the data is sorted like a date.



Modified
5-8-2007 21:19
5-8-2007 21:19
5-8-2007 21:19
5-8-2007 21:18
5-8-2007 17:19
4-8-2007 11:32
23-7-2007 21:40
23-7-2007 13:56
13-7-2007 7:39

### ITEM LINKS

For every item returned by the Content By Type webpart, at least 1 link is automatically generated. For documents, the link to the document itself is also available as a field value for every item. These links can be recognized by a ‘(\*)’ in the displayname in the user interface. These links can be displayed on every field. These links are available:

- Link to item – a link to the details page of the item/document. This is especially useful for documents. SharePoint normally automatically renders the link to the document itself. Getting to the information stored in the metadata of the document is now easy by using the “Link to item” field.

- Name Link – a link to the document itself (only available in content types with a “File” column (eg document content types).

For every link field, it is possible to render a dropdown menu. When a user expands that menu, 3 items appear automatically:

- Navigate to site – takes the user to the site that contains the item/document
- Navigate to list – takes the user to the list that contains the item/document
- Navigate to item – takes the user to the details page of the item/document. This is the same link as the “Link to item” described above.

In the screenshot above, you see an example of this menu.

Title	Priority	Task Status	% Complete	Assigned To
Project Task	(1) High	Completed	100 %	John Smith
Roottask	(2) Normal	Not Started	21 %	Brian Wilson
Test Content By Type v1.1	(3) Low	In Progress	29 %	Kathy Flood
Fix issue with links in managed path	(2) Normal	Not Started		Kathy Flood
Add Filters	(2) Normal	In Progress	15 %	Ton Stegeman
Update EditorPart for fields	(2) Normal	Not Started		John Smith
Error in Site Collection Scope	(3) Low	In Progress	10 %	Brian Wilson
Update installation manual	(1) High	In Progress	75 %	Ton Stegeman
Update user documentation	(3) Low	In Progress	15 %	Brian Wilson
Create installer package	(1) High	Completed	100 %	John Smith

In this case, the Title field has a link field “Link to item”. This shows the link on the title field. When they click the link, they are redirected to the item details. The webpart property “Select a link field to display the menu” is set to the “Link to item” field. This adds the dropdown menu to this column.

Selected fields:

Field	Link field
<input type="checkbox"/> Title	Link to item (*)
<input type="checkbox"/> Priority	-- Please select a field --
<input type="checkbox"/> Task Status	-- Please select a field --
<input type="checkbox"/> % Complete	-- Please select a field --
<input type="checkbox"/> Assigned To	Assigned To Link (*)
<input type="checkbox"/> Body	-- Please select a field --
<input type="checkbox"/> Start Date	-- Please select a field --
<input type="checkbox"/> Due Date	-- Please select a field --

Remove selected fields

Select a link field to display the menu:

Link to item (\*)

These menu options can be used to navigate directly to the site or the list that contains the item or document. This makes it much easier for users to get an idea of the context in which the item was published. The menu can be displayed on every column that shows a link.

### LOOKUP AND PERSON OR GROUP FIELDS

If the content type contains Lookup or Person or Group columns, the content by type webpart automatically adds link a field to the list of available fields. When selecting columns to be displayed, the user can choose to select a link for these fields. When the items are displayed, these columns now have a link to the person/group or the lookup item. This also applies to the out of the box Modified By and Created By fields.

Field	Link field
<input type="checkbox"/> Title	Link to item with menu (*)
<input type="checkbox"/> Modified	-- Please select a field --
<input type="checkbox"/> Modified By	Modified By Link (*)
<input type="checkbox"/> Region	-- Please select a field --
<input type="checkbox"/> Reseller	Reseller Link (*)

Modified By	Region	Reseller
Brian Wilson	Europe	Eastsite Cycle Shop
Brian Wilson	Europe	Cross-town Parts Shop
John Smith	Europe	Cross-town Parts Shop
John Smith	Europe	Eastsite Cycle Shop
Ton Stegeman	Europe	Eastsite Cycle Shop

### FILTERING

Office SharePoint Server offers a set of different filter webparts. They all can provide filter values available from different sources to other web parts. The Content by Type webpart supports incoming filters from these filter web parts. In the screenshot below the user has selected “Americas” in the choice filter. This SharePoint filter web part is connected to the Content by Type web part, filtering the Region field.

**Region**  
Americas

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**New documentation posted in our intranet**

Title	Modified	Modified By	Region
<b>Content Type : Technical details</b>			
Technical specification for the Mountain 200	8/10/2007 11:19 PM	Brian Wilson	Americas
Technical specifications of the 2007 Road-350-W bike	8/10/2007 11:18 PM	John Smith	Americas
<b>Content Type : User manual</b>			
How to install brakes on your Touring-3000	8/10/2007 11:49 PM	John Smith	Americas

When connecting the filter web part to Content by Type, you can select the content type field on which you want to filter. The Content By Type webpart support multiple connections, allowing you to configure a number of filter webparts for make it easier for users to find their items. In case multiple filters are connected, these are evaluated as an **“And”**. If the filter support multiple *values*, these are evaluated as an **“Or”**. In the screenshot below you will find an example:

Region:   Assigned To:

Priority:   % Complete:  Due Date:

**Content By Type v1.1**

Title	Priority	Task Status	% Complete	Assigned To	Start Date	Due Date	Region
<b>Content Type : MyTask</b>							
Add Filters	(2) Normal	In Progress	15 %	Ton Stegeman	10/29/2007	11/29/2007	East; West
<b>Content Type : Task</b>							
Update EditorPart for fields	(2) Normal	Not Started		John Smith	10/29/2007	11/29/2007	East; South
Update installation manual	(1) High	In Progress	75 %	Ton Stegeman	10/30/2007	10/30/2007	South; West
Create installer package	(1) High	Completed	100 %	John Smith	9/30/2007	9/30/2007	South

The webpart shows all items that:

- Apply to region East **OR** South **AND**
- Are assigned to John Smith **OR** Ton Stegeman **AND**
- Have priority Normal **OR** High

**Please note:** filter webparts are a MOSS only feature and are not available in WSS.

## PAGING

When configuring the web part, users can set up the maximum number of items that will be returned by the web part. They can also edit the pagesize.

**Grid settings**

Page size:  
(0 = no paging)

Maximum  
number of items  
(0 = unlimited)

### New documentation posted in our intranet

#### Title

- Trends touring bikes Europe 2008
- How to install brakes on your Touring-3000
- Cleaning your Mountain-350-W
- Introduction Touring North America
- Manual Touring-2000

1 2 3 4

## GROUPING AND SORTING

The Content by Type webpart supports grouping and sorting. When configuring the webpart, users can select a field to group by. They also can select the initial sort field and sort order. The sort order can be changed by clicking the column headers.