

MX Breadcrumbs User Manual

version 1.0



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Introduction

Overview

MX Breadcrumbs is a **Dreamweaver MX** extension that allows developers to create dynamic breadcrumbs in their web sites. It will actually create a Yahoo like (<http://dir.yahoo.com/>) *Directory Index* displaying the database information in an hierarchical manner.

This is a simple extension that includes a Command and an Advanced Breadcrumbs Recordset.

MX Breadcrumbs is distributed in four versions: for PHP, ColdFusion and ASP developers using the **PHP_MySQL**, **PHAkt2** (PHP_ADODB), **ColdFusion** and **ASP_VBScript** server models.

Prerequisites

Requirements

This user manual requires basic knowledge of Macromedia Dreamweaver MX or MX 2004 development practices.

To use **MX Breadcrumbs**, you will have to install the following software programs:

- ◆ Macromedia Dreamweaver MX or MX 2004 <http://www.macromedia.com/>
- ◆ **PHAkt2** (for PHP_ADODB developers) <http://www.interaktonline.com/products/PHAkt/>
- ◆ **MX Breadcrumbs** <http://www.interaktonline.com/Products/Free-Products/MXBreadcrumbs/>
- ◆ Web server with PHP, ColdFusion or ASP support <http://www.php.net/>
- ◆ Database

Notes: Please follow the install notes found in each installation kit to configure your workspace. We presume you have a correctly configured platform for PHP/ColdFusion/ASP development under **Dreamweaver MX** or **MX 2004** (the configured Windows or Linux server, share or FTP access, a Dreamweaver MX site).



Tips

The **PHP_ADODB (PHAkt)** server model's most important advantage is that it allows a transparent connection to over thirteen database servers: MySQL, Oracle, Microsoft SQL Server, Sybase, Sybase SQL Anywhere, Informix, PostgreSQL, FrontBase, Interbase (Firebird and Borland variants), Foxpro, Access, ADO and ODBC. In order to download PHAkt for free, go to: <http://www.interaktonline.com/Products/Free-Products/PHAkt/Try-Download/>.

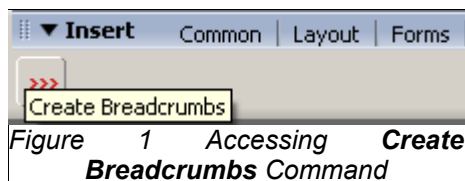
Typographic Conventions

The notations and text formats used in this tutorial are found below:

- ◆ Site page: mono-spaced italic "*index.php*"
- ◆ Database table: italic font "*directory_dir*"
- ◆ Database field: bold, italic font "***id_dir***"
- ◆ Recordset: italic, underlined font "*BreadcrumbsMenu*"
- ◆ Application button, menu or panel: bold font "**Button**"

Accessing MX Breadcrumbs Command and Advanced Recordset

To access the **Create Breadcrumbs** command, you should go to the **Insert** panel -> **InterAKT** tab.



If you are using **Dreamweaver MX 2004**, and the **Insert** Panel is not configured to show the Commands “as tabs”, they might be available in a slightly different way, requiring you to select **InterAKT** tab as shown below:

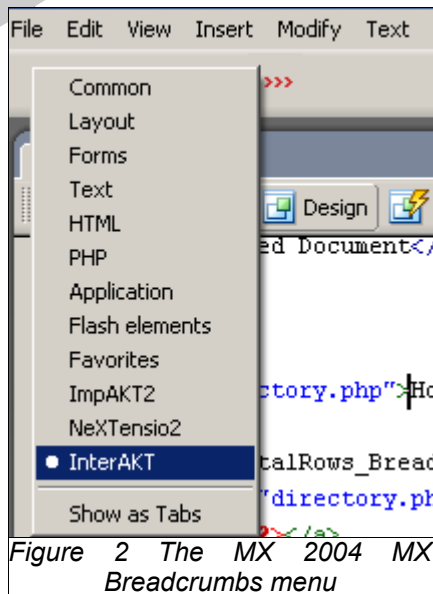
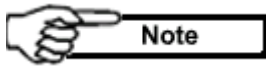


Figure 2 The MX 2004 MX Breadcrumbs menu



The screen-shots in this user manual are made when creating a site using the **PHP_ADODB** server model.

Using the InterAKT database for MX Breadcrumbs

The MX Breadcrumbs distribution package includes the **mx_breadcrumbs** database.



Caution

In order to use **MX Breadcrumbs**, your database should have a table with the same structure as the *directory_dir* one in the **mx_breadcrumbs** database. This table is supposed to store all the elements that will be displayed in the breadcrumbs further on.

Database Design

The **mx_breadcrumbs** InterAKT database has 2 tables.

Below you is a graphical representation of the database tables, made using the **InterAKT MX Query Builder** (<http://www.interaktonline.com/products/QuB/>).

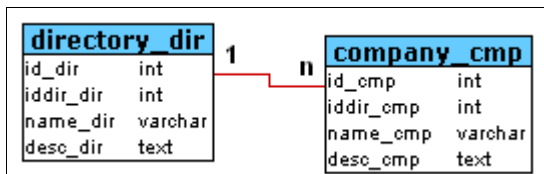


Figure 3 The **mx_breadcrumbs** Database
MX Query Builder Representation

These tables will store information on the elements that will be displayed in the breadcrumbs:

- ◆ *directory_dir* – this table stores all directories that are to be displayed in the breadcrumbs. The table fields are: **id_dir** (the primary key), **iddir_dir** (the self foreign key), **name_dir** (the directory name), **desc_dir** (the directory description).
- ◆ *company_cmp* – this table stores all companies that are to be displayed in the breadcrumbs. The table fields are: **id_cmp** (the primary key), **iddir_cmp** (the foreign key to the *directory_dir* table), **name_cmp** (the company name), **desc_cmp** (the company description).

The complete scripts used to generate the database tables are included with the **MX Breadcrumbs** distribution package in a zip archive.



Caution

The MySQL user must have certain rights as: SELECT, INSERT, UPDATE and DELETE for the data and ALTER, DROP AND CREATE TEMPORARY TABLES for the structure. For more information about setting the users rights for MySQL databases, please visit: http://www.mysql.com/doc/en/User_Account_Management.html

Concept

The breadcrumbs function based on *hierarchical database structure* implemented with self foreign key.

The directories that will be included in the breadcrumbs are stored in a table. The table provided in the **MX Breadcrumbs** kit is called *directories_dir*.

We will present an example in order to show you how to implement an hierarchical database structure by using self foreign keys.

If the *directories_dir* table has the following records:

 	id_dir	id_dir	name_dir
 	1	NULL	Computers and Internet
 	2	NULL	News and Media
 	3	1	Internet
 	4	3	Communication and Networking
 	5	3	Computer Science
 	6	1	Organizations
 	7	6	Multimedia
 	8	6	Computer Games
 	9	1	Software
 	10	9	Databases
 	11	2	Newspapers
 	12	11	History
 	13	2	Television
 	14	13	Education
 	15	9	Dreamweaver MX Extensions

Figure 4 Using self foreign key to implement an hierarchical database structure

the hierarchy will be:

- ◆ Computers and Internet
 - ◆ Internet
 - ◆ Communication and Networking
 - ◆ Computer Science
 - ◆ Organizations
 - ◆ Multimedia
 - ◆ Computer Games
 - ◆ Software
 - ◆ Databases
 - ◆ Dreamweaver MX Extensions

- ◆ News and Media
 - ◆ Newspapers
 - ◆ History
 - ◆ Television
 - ◆ Education

The navigation will be realized by passing the directory ID (*id_dir*) parameter: */directory.php?id_dir=2*, where *directory.php* is the page that will list all the directories (the so called “directory index” page). Creating this page will be mandatory for the user. For more information about *directory index*, refer to <http://examples.codecharge.com/ExamplePack/Directory/Directory.php> or <http://dir.yahoo.com/>.

Directory and Path Implementation

[View more information about this example](#)

Select "Computers and Internet" and then "Software"

[Main](#)

[Automotive](#)

[Accessories](#)
[Auto Wrecking](#)
[Dealers](#)
[Motorcycles](#)
[more...](#)

[Education and Instruction](#)

[Colleges and Universities](#)
[K-12](#)
[Language](#)
[Preschools](#)
[more...](#)

[Computers and Internet](#)

[Communications and Networking](#)
[Computer Graphics](#)
[Computer Rental](#)
[Computer Service and Repair](#)
[more...](#)

[Entertainment and Arts](#)

[Bars, Pubs, and Clubs](#)
[Dance](#)
[Entertainers](#)
[Movies and Film](#)
[more...](#)

Figure 5 The Codecharge directory and path implementation



Tips

MX Breadcrumbs enables breadcrumbs to also display elements that don't have the same properties (meaning they are stored in different tables).

For example – the type of relation “*directories – companies*”. The directories are stored in the *directories_dir* table where the hierarchical structure is implemented by self foreign keys, while the companies are stored in the *companies_cmp* table which has a foreign key to the *directories_dir* table.

For more information about implementing this kind of approach, please refer to the **Getting Started with MX Breadcrumbs** tutorial.

Product characteristics

Features

The most important feature of **MX Breadcrumbs** is that it creates directory index retrieving information dynamically from the database. The breadcrumbs can be added with several mouse clicks along with the directory index list.

From the Dreamweaver integration stand point, one important feature is the use of the Advanced Recordset for the breadcrumbs. Thanks to this recordset, the Dreamweaver MX developer is able to reuse any server behavior with the *Breadcrumbs Recordset* (like repeat region, conditional region and such).

The **PHP_ADODB** version allows transparent connection to over 13 database servers: MySQL, Oracle, Microsoft SQL Server, Sybase, Sybase SQL Anywhere, Informix, PostgreSQL, FrontBase, Interbase (Firebird and Borland variants), Foxpro, Access, ADO and ODBC.

Compatibility

MX Breadcrumbs is compatible with **Dreamweaver MX and 2004** and works with the **PHAkt**, **PHP_MySQL**, **ColdFusion** and **ASP_VBScript** server models.

Integration

MX Breadcrumbs can be easily included in a Dreamweaver MX site using the provided command and advanced recordset. **MX Breadcrumbs** user interfaces are available from both the **Application** Panel, and the **InterAKT** commands tab (in the **Insert** panel).

Breadcrumbs Recordset

Description

We have engineered a system that allows the reuse of any existing Server Behavior with our **Breadcrumbs Recordset**.

This allowed us to avoid re-implementing the regular recordset related Server Behaviors (repeat regions, conditional regions, alternate colors etc.), allowing you to keep the investment in your current extensions without having to pay again for those basic extensions.

The **Breadcrumbs Recordset** is automatically created when the **Create Breadcrumbs** Command is applied from the **Insert** Panel on a page or it can be created manually from the **Application Panel->Bindings->+> Recordset->Breadcrumbs** button.

The **Breadcrumbs Recordset** is used to retrieve information from the database in order to display in the breadcrumbs the currently selected directory.

Server Behavior User Interface

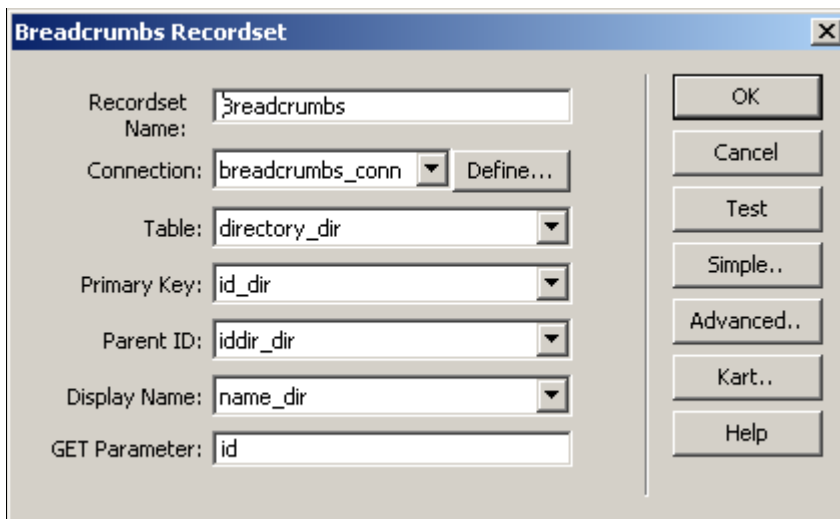


Figure 6 The Breadcrumbs Recordset user interface

Server Behavior User Interface Specifications

The user interface above contains the following fields:

- ◆ **Connection** – the connection to a database which should mandatory have a table a structure similar to the one presented for *directories_dir* (the table belonging to the **mx_breadcrumbs** database included in the **MX Breadcrumbs** kit).
- ◆ **Table** – the table containing data organized in an hierarchical manner that will be displayed in the breadcrumbs.
- ◆ **Primary Key** – the primary key of the table selected above.
- ◆ **Parent ID** – the self foreign key of the table selected above.
- ◆ **Display Name** – the field that will display the labels of the breadcrumbs elements.
- ◆ **GET Parameter** – the name of the URL parameter that will be sent by GET as the breadcrumb element's ID. The breadcrumb element is in fact a record from the table selected above.

Create Breadcrumbs Command

Description

In order to insert breadcrumbs on your site pages, you should apply the **Create Breadcrumbs** Command. It is accessible from the **Insert Panel->InterAKT** tab.

Command User Interface

Figure 7 The Create Breadcrumbs command interface

Command User Interface Specifications

This user interface has the following fields:

- ◆ **Connection** – the connection to a database which should mandatory have a table a structure similar to the one presented for *directories_dir* (the table belonging to the **mx_breadcrumbs** database included in the **MX Breadcrumbs** kit).
- ◆ **Table** – the table containing data organized in an hierarchical manner that will be displayed in the breadcrumbs.
- ◆ **Primary Key** – the primary key of the table selected above.
- ◆ **Parent ID** – the self foreign key of the table selected above.
- ◆ **Display Name** – the field that will display the labels of the breadcrumbs elements.
- ◆ **GET Parameter** – the name of the URL parameter that will be sent by GET as the breadcrumb element's ID. The breadcrumb element is in fact a record from the table selected above.
- ◆ **Page** – the name of the page that will list in an hierarchical manner all the data from the table selected above. This is the so called “directory index” page.
- ◆ **Apply directory recordset** – when checking this box, the command will insert the *BreadcrumbsMenu* recordset which will list at one moment all records from the *directories_dir* table having the same level. This box is pre-checked if the name of the page it will be applied on is the same as the one selected in the **Page** field of the command interface.

The Inserted Server Behaviors

Once applied, this command inserts the following elements in the Server Behaviors list (in the **Application** panel):

- ◆ **Breadcrumbs Recordset** – this is an advanced recordset used to display the currently selected directory in the breadcrumbs.

- ◆ **Repeat Region** – this server behavior is applied to the *Breadcrumbs Recordset*.
- ◆ **Show If Recordset Is Not Empty** – this conditional region is also applied over the *Breadcrumbs Recordset*.
- ◆ **Breadcrumbs Menu** – this recordset will list all records from the *directories_dir* table having the same level.
- ◆ **Repeat Region** – this server behavior is applied to the *BreadcrumbsMenu* Recordset.



Conclusions

MX Breadcrumbs is a mini-extension allowing you to dynamically include breadcrumbs in your site pages with just a few mouse clicks. The product enables you to create directory index retrieving information from your database and displaying it in the breadcrumbs.

Further Reading

In order to see an example of how to use **MX Breadcrumbs**, please refer to the **Getting Started with MX Breadcrumbs** tutorial.

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