
BOOKMARK WHITE PAPER

Introduction

Every person who regularly uses the Internet knows how convenient it is to have instant access to his / her favorite links through the use of a bookmark manager, most often provided with every internet navigator.

However the problem with such navigators is that the links are stored locally on a machine, and therefore cannot be accessed whilst surfing the Web from a different computer. The other inconvenience lies in the fact that each navigator creates its own bookmark manager, and it is usually impossible to switch from one manager to another when using another navigator.

The Bookmark application solves these problems through the technology used to implement it. This application acts as a Web service which can be accessed from any internet-linked device. The technical features are described in further detail below.

The aim of the Bookmark application is to allow a user to create and organise his/her favorite bookmarks within a category structure, and inside his/her personal workspace.

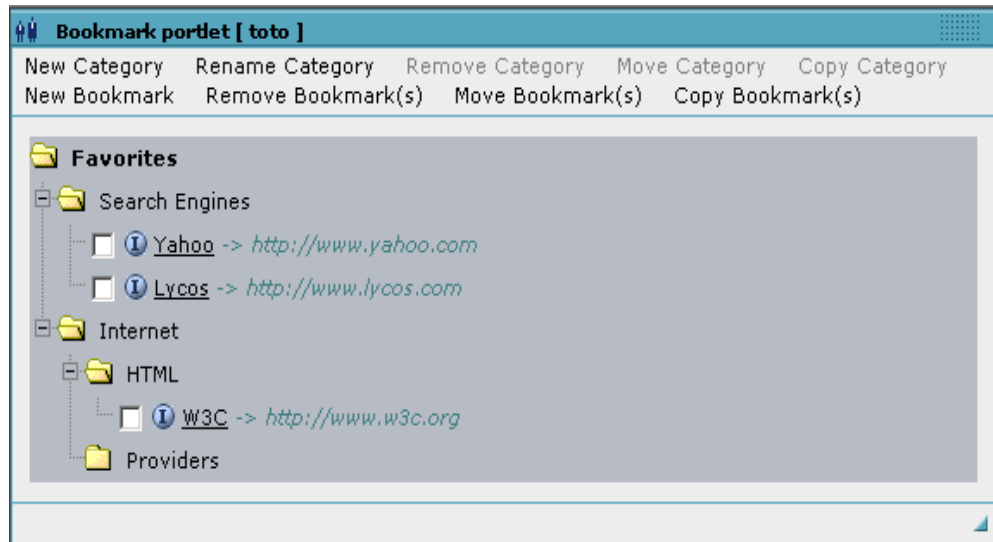
Features

The technical features provided by this application are defined below :

- **Based on Java standards:**
The Bookmark web application is a 100% Java application that leverages server-side Java technologies such as Servlets, JSP, and JDBC. Java provides great performance on a wide variety of platforms.
- **Platform support**
Any platform with Java 2 and any web server with Servlet 2.2 and JSP 1.0 support will work. It has been tested under Linux and Windows platforms, and with web environments such as Apache with Tomcat and Orion server.
- **Database backend:**
A database backend gives this application excellent performance and scalability. The database schema has been carefully tuned to work with a wide variety of products. Currently supported databases include: Hypersonic SQL, MySQL, Postgres. Built-in database connection pooling gives maximum database performance.

The following functional needs are available :

- Category management**
 A category is represented by a folder (or directory) described by a name. Each category can in turn contain other categories (called sub-categories), and / or bookmarks. Below is an illustration showing an example of a typical category organisation:



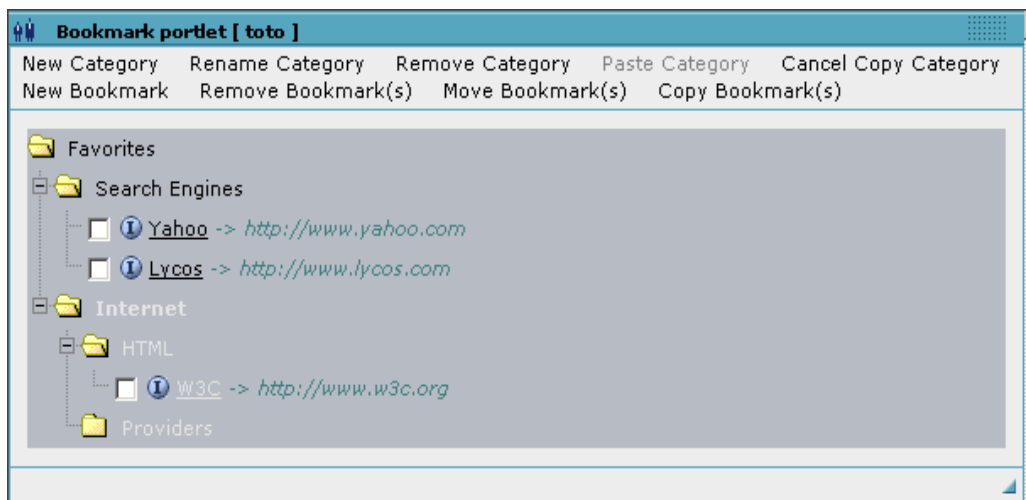
The system automatically creates a root category, named 'Favorites' by default, which can be renamed but cannot be removed, moved or copied.

A category is selected by clicking on its name. It can then be renamed, copied or moved. All subcategories and bookmarks under the selected category are concerned during the remove, copy or move operations.

A new category or bookmark can be added under the currently selected category by clicking on the desired button (either 'New Category' or 'New Bookmark').

- *Copy and Move operations:*

When a category is selected, the concerned branch is placed inside a buffer and made distinguishable by appearing in white, as displayed below:

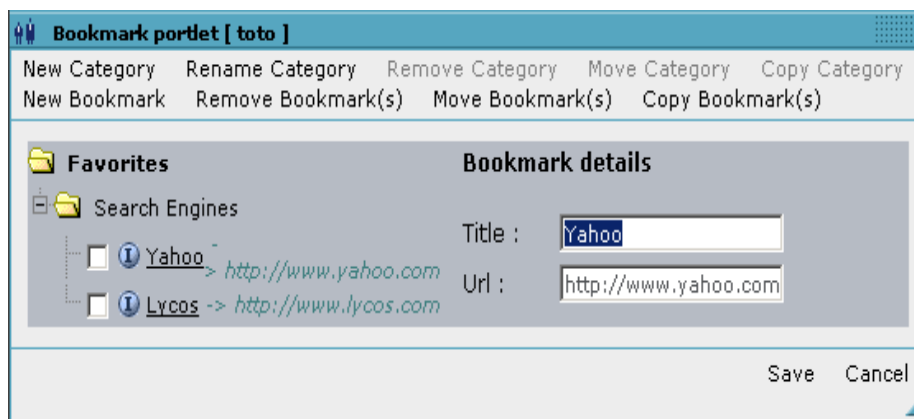


The 'Paste Category' button is activated if the user clicks on the destination category (which must not be part of the selected branch to copy or move).

- **Bookmark management**

A bookmark is composed of an URL link to a web site or to any other web resource, and of a name serving as a description for this bookmark.

The properties of a bookmark can be edited by pressing on the information icon ('i') next to the concerned bookmark, and appear on the same page :



Several bookmarks can be removed, copied or moved simultaneously by first selecting them using the checkboxes.

The move and copy operations for the bookmarks are based on the same concept as for the categories, in other words through a buffer system which is emptied after a cancel, paste, or remove operation is executed.

- **Tree structure**

Each bookmark workspace is organised in a tree structure. The categories can therefore be considered as nodes, which can be expanded or reduced using the '+' or '-' sign beside each parent node. The state of tree is saved after a logout, and is restored at the next login.

- **Authentication**

The application can be run in two modes : either under a portal or in stand-alone mode. When it is run in standalone mode, the system offers a registration service for identifying the user logging in.

Conclusion

The Bookmark application therefore acts as a storage base for bookmark workspaces, where each workspace is associated with a unique user. The intuitive interface allows rapid construction of a personal bookmark 'desktop', which can then be reached from any machine with internet access.

When running under a portal, the information is linked to a context. This feature allows a user to have several workspaces within one web site, where each workspace will store bookmarks related to the present location of the application.

