

MultiMedia WWW PC

How to distribute interactive applications on the Internet

PAOLO TOSOLINI

University of Trieste

Via Bembo, 5 - 34015 Muggia (TS) - ITALY

Mobile: +39-360-877243 - Tel. +39-40-275030 - Fax. +39-40-311850

email: tosolini@psicosun.univ.trieste.it

An Introduction to MM-WWW-PC

This is a research tied to the PC and Microsoft Windows (R) platform.

MM-WWW-PC specs have been developed to fill the existing gap between the power of WWW in retrieving information, and the flexibility of PCs in running interactive hypermedia applications. This makes

MM-WWW-PC particularly suitable for different purposes, such as distance education, advanced business presentation and interactive kiosks development.

MM-WWW-PC v. 2.0 consists of a series of configuration settings and a software application that has been developed using the authoring system Asymetrix Multimedia Toolbook v. 3.0 (R) for Microsoft Windows.

With MM-WWW-PC you will be able to distribute your interactive PC applications using WWW, and the remote user will be able to launch them with a single mouse click from the Web page. MM-WWW-PC represents therefore an easier method to download and run locally hypermedia software using either Mosaic or Netscape browser.

MM-WWW-PC is **freeware** and is available at the URL:

<http://www.univ.trieste.it/mmwwwpc/mmwwwpc.html>

Configuration procedure

Although these instructions describe the way to run Asymetrix Toolbook applications from the Web, you can imagine to modify them according to the Microsoft Windows software you want to use. (Here it is assumed that you have already Multimedia Toolbook or its free runtime installed on your system).

Changing settings to your Mosaic browser

Although the latest Mosaic versions allow an easier configuration of their INI file (choosing the Preferences command in the Options menu), we describe here a manual procedure that works for sure

for every release of this browser.

Look for the MOSAIC.INI file in the WINDOWS directory, load it into a text editor and make these changes/additions:

Add a new data type reference in the [VIEWERS] section, writing a new line in sequence to the existing ones.

- If, i.e., the last data type was:
TYPE10="application/zip"

add the line:

```
TYPE11="application/toolbook"
```

- in the same section add another line that will allow Mosaic to associate the new data type to the Toolbook executable file. The syntax is:

```
application/toolbook="yourpath\mtb30.exe %ls"
```

or, if you use the MM Toolbook v. 3.0 runtime:

```
application/toolbook="yourpath\mtb30run.exe %ls"
```

The next step is to configure Mosaic in order it to associate the TBK suffix to the new data type.

- Add this line to the [SUFFIXES] section so that it contains this reference:

```
[SUFFIXES]
```

```
application/toolbook=.tbk
```

- Finally, save the MOSAIC.INI file in the Windows directory and restart Mosaic.

Configuring Netscape for MM-WWW-PC

To configure Netscape according to MM-WWW-PC specs, launch it and make these changes:

- Click the PREFERENCES item in the OPTION menu and choose to update the HELPER APPLICATIONS
- Choose to add a new MIME type
- In the new dialog box that appears, type application as MIME TYPE and toolbook as MIME SUBTYPE, then click OK
- Input tbk in the EXTENSION field

- Click the BROWSE button and find the Toolbook executable in your hard disk. This action will associate Toolbook to the new data type just inserted
- Click OK and exit the PREFERENCES dialog box

Configuring the WWW server

You need to configure your WWW server in the case only you are going to distribute MM-WWW-PC applications through it.

When you are retrieving information from an HTTP/1.X server (the most popular), the server automatically types data for you. It means that changing settings to your local Web browser is not enough to be MM-WWW-PC compliant.

You need to add the following line to the configuration file MIME.TYPES of your WWW server, so that it contains this reference:

- application/toolbook tbk

To let changes take effect, reboot now your WWW server.

Cool Interactive Demos

We strongly suggest you to use as a browser either Netscape (all versions) or Mosaic (v. 2.08 or higher). This will allow you to take full advantage of all features offered by MM-WWW-PC v. 2.0.

The following interactive applications available on MM-WWW-PC Web can be launched with a single mouse click and are able to keep basic control over the browser window.

- *The Functions Book*: discover the power of MM-WWW-PC v. 2.0! (68K)
- *The WWWalker*: use Toolbook to walk through the Internet (38K)
- *The Pie Menu and WWW*: use gestures to interact with the browser (44K)

Other MM-WWW-PC related initiatives

SuperCAL - Interactive CAL Applications for the Internet
<http://www.staffs.ac.uk/supercal/supercal.htm>

SCRIPTA Project - The History of Writing
<http://www.univ.trieste.it/scripta/scripta.html>

The MM-WWW-PC Network

The MM-WWW-PC Network is a world wide experimental project aimed at the creation of a cross-country network of developers interested in the fast evolution of Toolbook on the Internet.

Thanks to the new MM-WWW-PC v. 2.0 features that allow a closer interaction with the Web browser, it is possible now to retrieve and launch automatically from your Toolbook application any other MM-WWW-PC compliant software that resides on a remote server.

Launching a MM-WWW-PC Network Book (see below) from one of the sites that will join the initiative, you will be able to reach with simple mouse clicks all other Network members, avoiding the manual input of the URLs in the browser.

Joining the MM-WWW-PC Network is very simple. You have to follow these steps:

- Download the blank MM-WWW-PC Network Book Template available on the MM-WWW-PC Web.
- Add to the book every information you want to give public as per you, your organization and so on. Remember to keep unmodified the MM-WWW-PC scripts inside: this ensures the good working of this system on the net.
- Put your personalized Toolbook presentation on your Web server
- Check the configuration of your server according to MM-WWW-PC
- Notify the MM-WWW-PC author of its exact URL together with a brief header to associate to it

We hope this initiative will be of help to improve the mutual exchange of information about the use of interactive technologies on the Internet.

Should you have difficulties in finding a server where to put your MM-WWW-PC Network Book, you can be guest for a limited period of time of the WWW disk space of Trieste's University. Please contact the author about this offer.

MM-WWW-PC software

The following is a brief description of the MM-WWW-PC functions that can be easily integrated in your interactive application:

isBrowserOpen()

Returns the name of the current running browser

browserWinMode (..)

Controls the position and state of the browser window (i.e. onTop, on the back, maximized, iconized...)

appWinMode (..)

Controls the position and state of the application window (i.e. onTop, on the back, maximized, iconized...)

runBrowser (..)

Tries to launch the browser

getURL (..)

Instructs the browser to resolve a specified URL

printURL()

Prints the current page displayed by the browser

quitWindow (..)

Quits the browser or the current application

taskSwitch (..)

Enables/Disables the Windows task switch mode.-