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## **User Manual for WAPman Palm**

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Version 1.5  
Nov 2000

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## 1. Introduction to WAPman for Palm OS

WAPman is a Wireless Markup Language (WML) browser that is designed to enable mobile or fixed end terminals to access WML content from the Internet.

Typical end terminals include:

- PDAs;
- various mobile phones (GSM/CDMA/TDMA);
- fixed-line videophones;
- in-car Internet devices.

WAPman has been designed with portability, interoperability, security and multi-lingual capability (i.e. Asian languages) as key features to meet the demands of mobile commerce, mobile banking and mobile trading. With all the above features and the flexibility to be expanded to meet future WAP requirements, WAPman is a truly flexible WML browser for a global audience.

WAPman enables users to access the wealth and availability of WAP content and services that are immediately available at WAP sites using devices like PCs and PDAs such as the Palm.

Packed with features such as bookmarking and code viewing, WAPman provides flexible, convenient and easy access to WAP services.

## 2. WAPman Highlights

- Palm OS 3.1, 3.3 and 3.5 on Palm IIIx, IIle, IIlc, V, Vx devices
- WAP 1.2 compliant supports WML 1.2 and standard WML Script 1.2 libraries
- WAPman supports WAP content in roman character based languages (e.g.: English, French, Malay, etc.) and non-roman character based languages (e.g.: Chinese, Korean, etc.) where support is available on the operating system or with the support of 3rd party font libraries. Currently the PalmOS version of WAPman ships with translation databases from UNICODE to GB2312 and Big5
- Supports connection-oriented and connection-less communication with a WAP Gateway
- Supports UDP (CSD and GPRS IP) bearer type
- Supports compiled WML, compiled WML Script and WBMP data
- Compatible with UP, Nokia, Angleone, Ericsson and others
- Support for bookmarks
- Support for caching
- Supports offline browsing of cached content
- Supports industry standard vCard format
- WAPman provides an interface for the user to set their preferences and configure the browser as required during runtime
- Convenient size: Total WAP stack is only 150k, the browser is 50k

### 3. Downloading WAPman Palm

From the website, [www.edgematrix.com](http://www.edgematrix.com), select **Products - WAPman - Download**. You will have various versions and platforms to choose from. Select a **Palm** version to download.

Click on the **Download** icon and this will prompt you to select your destination folder. Make your selection and wait for a few minutes. You will be prompted once download is complete.

**NOTE:** The installers are currently only available for the Windows platform.

## 4. Installing and Using WAPman for Palm OS

### 4.1 Installing WAPman

1. Double click on the downloaded installer and follow the instructions. The installer will automatically search for and launch the **Palm Install Tool** application. From this, select your user name to add WAPman to.
2. WAPman will be installed onto the Palm device the next time you perform a hotsync.
3. If you completed the above two steps correctly, you should see WAPman on your Palm.

#### For Non-Roman Character display

1. Download and hotsync a third party font library into your Palm (e.g. CJKOS).
2. Hotsync unicode\_big5.pdb or unicode\_gb.pdb into the Palm.
3. You now need to start WAPman and configure which translation tables to use. Please refer to the Language Preferences section later in this manual on how to do this.



### 4.2 Using WAPman

1. Dial up using your modem or via IrDA communication tool to a local ISP. (See **Appendix A** on how to do this with Palm OS 3.3)
2. Run WAPman by clicking on the WAPman icon.
3. If you have successfully established a dialup connection to a local ISP in step 1 above, then a demo WML content site will be loaded. You can also surf to another WAP site with the navigation bar.



### 4.3 Navigation Bar

From left to right :

1. Back Button - Goes to the previous URL
  2. Reload Button - Reloads the current URL
  3. Home Button - Goes to the default home URL
  4. Stop Button - Stops the current URL from loading
  5. Go Button - Allows the user to enter a URL
- (Note : This must be a WML 1.1 or above content site)



### 4.4 WAPman Menu Options

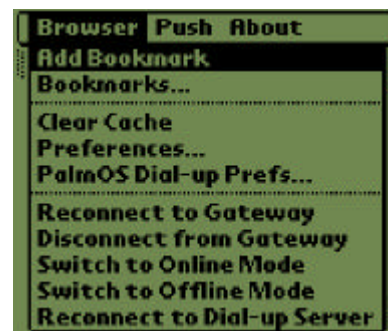
Click on the Palm menu button to pull down the WAPman menu. Here you will see three tabs located at the top of the screen, namely **Browser**, **Push** and **About**.



### 4.5 Add Bookmark

Easily adds the current page's URL to the bookmark list. WAPman will store the bookmark by using the header of the current web page as the title.

The capacity of the bookmark list is as large as memory permits.



### 4.6 Bookmarks

Access this feature if you wish to go to bookmarked sites or if you wish to edit any of the previous bookmarks.

To **go** to a bookmarked site:

1. Tap on the bookmark you want to go to.
2. Tap on '**Go**'.

To **add** a bookmark:

1. Tap on the '**New**' button. A New Bookmark dialog box will appear.
2. Fill in the URL and Title.
3. Tap on '**Ok**'.



To **edit/change** a bookmarked site:

1. Tap on the bookmark you want to edit.
2. Tap on the '**Change**' button. This brings up the Bookmark dialog box.
2. Change the URL and/or Title.
3. Tap on '**Ok**'.

To **delete** a bookmarked site:

1. Tap on the bookmark you want to delete.
2. Tap on '**Delete**'.

### Clear All Bookmarks

This function will remove all the bookmarks from the list leaving it empty.

### Exit

This will exit the bookmarks dialog.

## 4.7 Clear Cache

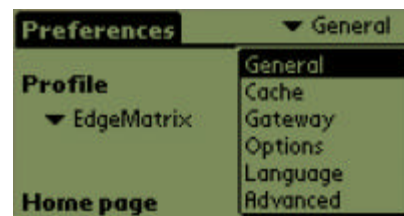
Selecting '**Clear Cache**' will clear the cache, thus deleting all previous records of pages accessed.



## 4.8 Preferences

This will bring up the WAPman preferences panel, which allows you to change the various settings available in WAPman. The six types of preferences are:

1. General
2. Cache
3. Gateway
4. Options
5. Language
6. Advanced



Each of these types are accessible by tapping on the *triangular downward arrow* at the upper right corner of the screen and selecting from the drop down list.

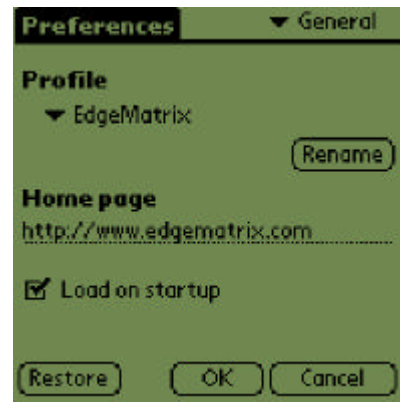


### ▪ General

This panel allows you to customize up to a maximum of 5 user profiles. Each profile contains a name, a homepage and a gateway setting. WAPman will use the settings from the currently selected profile. WAPman comes preconfigured with an EdgeMatrix profile.

To enter a new profile:

1. Tap on the *triangular downward arrow* below **Profile**.
2. Select an entry from the drop down list. You will be presented with a clean profile.
3. Rename the profile by tapping on the **Rename** button.
4. Fill in the **Homepage**. The **Homepage** URL contains the URL that WAPman will access when the **Home** icon on the navigation bar is tapped.
5. If **Load on startup** is *checked*, WAPman will access this home page every time it is started.

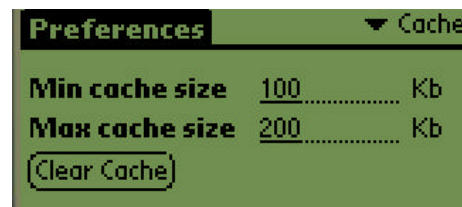


Tapping on the **Restore** button will reset preferences back to the original factory settings. Tapping on the **OK** button will save any changes you have made to the preferences and exit the preferences dialog. Tapping on **Cancel** will ignore any changes you have made to the preferences and exit the preferences dialog.

### ▪ Cache

Displays the Minimum and Maximum cache sizes allocated.

The Minimum cache size indicates the minimum amount of memory automatically allocated for the recording of pages you have previously visited. The default setting for **Min Cache Size** is **100 kb**.



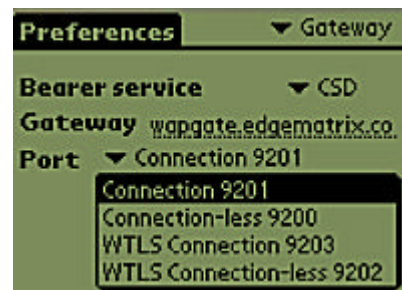
The Maximum cache size is the largest amount of memory that may be reserved for storing records of pages you have visited. The default setting for **Max cache Size** is **200 kb**.

Tapping on **Clear Cache** will delete all previous records of pages accessed.

### ▪ Gateway

Displays the WAP gateway server address through which WAPman is connected and the port number of this connection. To change the server, simply type a new address within the address bar. To change the port, tap on the downward point arrow and select from the resulting drop down list.

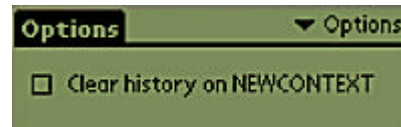
WAPman comes preconfigured with Edgematrix gateway and port settings.



### Options

Allows users to alternate the behavior of WAPman.

Checking **Clear History on NEWCONTEXT** will clear the navigational history together with the variable context that has been or is to be generated. That is, if WAPman encounters a WML newcontext tag, the user will not be able to use the *Back* button to navigate to the previous pages when this option is selected. By default, this option is not checked.



### Language

WAPman allows the user to view Chinese or non-Roman characters by downloading a 3<sup>rd</sup> party font library such as CJKOS. WAPman is able to convert Unicode WML content to the character set available on the Palm. Currently, WAPman supports Unicode to Big 5 and Unicode to GB. Only one conversion may be enabled at any given time. Use the **Translate UNICODE** to drop down list to select the conversion to use.

Users can input non-Roman characters onto WAPman to respond to the WML application in the local character set. If the **Convert Text Input** option is selected, WAPman will convert the user input to Unicode before sending the input to the WML application.

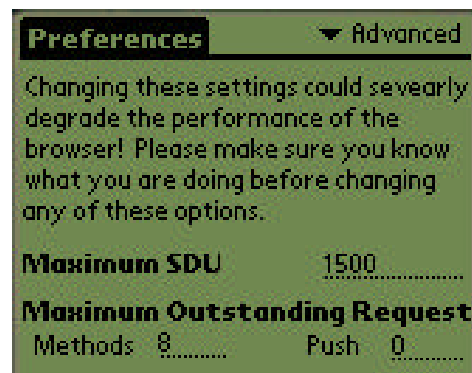


### Advanced

Enables you to alter WAPman's settings for maximum SDU and maximum outstanding requests. Altering the Maximum SDU affects the maximum amount of information WAPman is able to receive from the WAP Gateway server. The default **Maximum SDU** is 1500 bytes.

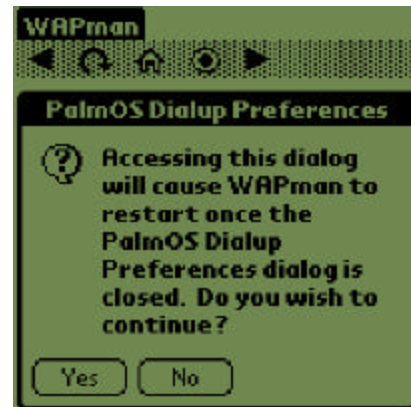
Altering Maximum outstanding requests for **Methods** changes the maximum number of items the server can attempt to send simultaneously to your browser as content. The default number of items the server can send simultaneously is 8.

Maximum outstanding requests for **Push** is the maximum number of page requests your browser can accept simultaneously. The default number of page requests the server can accept simultaneously is 0. This is in anticipation for WAP 1.2.



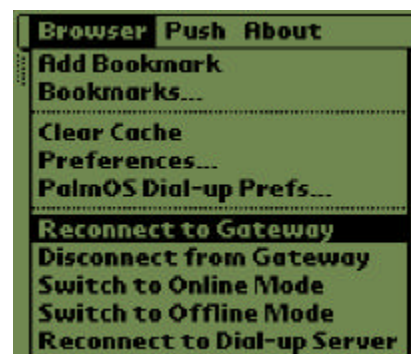
## 4.9 PalmOS Dial-up Prefs

Users can use this option to set which Palm dial-up preference is going to be used with WAPman. Answering **Yes** will take them into the Palm prefs setup page. Please refer to Palm prefs setup for further details at the end of this user guide.



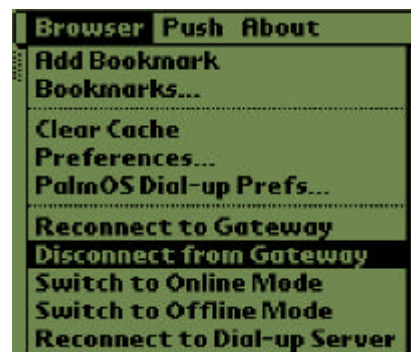
## 4.10 Reconnect to Gateway

If Palm OS is connected to a network (i.e. online) selecting **Reconnect to Gateway** re-establishes a WAP connection between WAPman and the WAP gateway server. You may wish to re-establish a connection with your WAP Gateway server if your connection was interrupted previously. This only applies when connecting to the gateway using connection mode (port 9201).



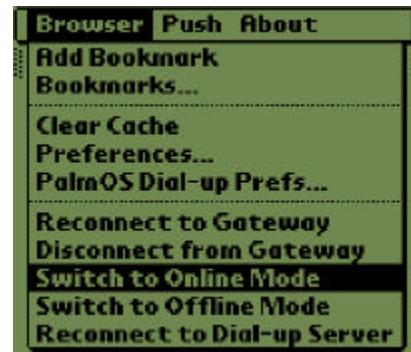
## 4.11 Disconnect from Gateway

Disconnects WAPman from the WAP gateway. However, the Palm OS will maintain the network connection (i.e. it will stay online). This only applies when connecting to the gateway using connection mode (port 9200).



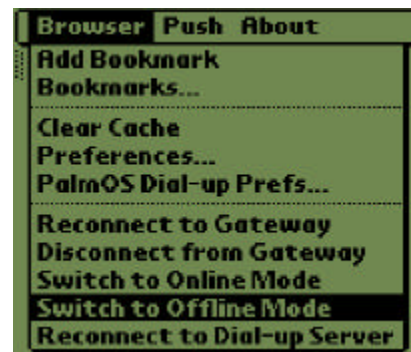
## 4.12 Switch to Online Mode

This enables WAPman to access WML pages via the Internet. If no dialup connection to an ISP has been established, WAPman will attempt to establish a dialup connection. Once online, WML pages that are not in WAPman's cache may be accessed.



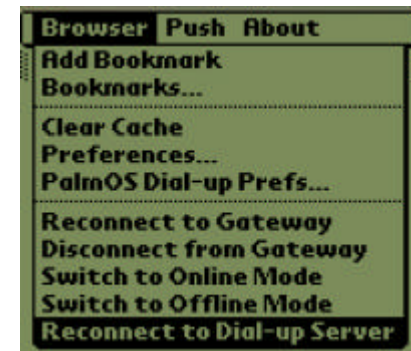
## 4.13 Switch to Offline Mode

Selecting this option causes WAPman to direct the Palm OS to drop the dialup connection to an ISP. In offline mode, only WML pages in WAPman's cache may be accessed.



## 4.14 Reconnect to Dial Up Server

If the telephone line that you are using (wireless) drops out for any reason e.g. low network coverage, accidentally switched off, etc, this option will simulate the process of disconnecting and reconnecting the dialing process to reconnect a phone connection. At present the Palm OS has a time delay before it checks to see if there is an active phone connection, hence this facility has been developed to bypass Palm's built-in time delay.



## 4.15 Push

Push messages are WML pages that are sent to WAPman from the WAP gateway without the user explicitly requesting for that particular WML page.



Select **Push messages** from the **Push** menu to view a list of the messages.

Select a message and tap on **Go** to read the content of the message. To delete a message, select the message you wish to delete and tap on the **Delete**.

Note: Only WAP 1.2 gateways support this feature.



## 4.16 About

Tap on **About** from the main menu to view your WAPman version and contact details.



**Register WAPman** allows user to enter their 13 character registration key into WAPman.





## 4.17 vCard Support in WAPman

When a vCard is encountered by WAPman, a dialog box will appear showing the name and number contained in the vCard. Tapping on the 'OK' button will return you to the page prior to the vCard, and will be stored internally for later processing.



Upon exiting WAPman, if there is any vCard data from the session to be processed, WAPman will prompt you to either accept or reject the vCard(s). On the palm, acceptance of a vCard will cause it to be saved into the address book.



## 5. Appendix A: Setup to connect to an IrDA Phone for OS 3.3

In order to employ the full advantage of WAPman, you need mobility and here is how you can do it! Make sure that you have the following:

- IrDA Phone such as S35I, S25, Motorola L Series+, Motorola Timeport, Nokia 7110, Nokia 8210, etc.
- Your SIM card may have to be data enabled (able to make data calls to a modem). If you are having difficulties connecting, please contact your Mobile Operator.
- This documentation is for Palm OS 3.3 (you can get a FREE upgrade at <http://www.palm.com>).

The benefits of such a configuration would be:

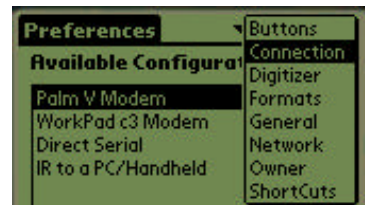
- Larger Screen
- Larger Cache Size.
- Easier Navigation.
- Better Interface.
- Faster text input.
- Offline browsing: Limited by the amount of memory your palm has.

### Step 1: Setting up your Connection

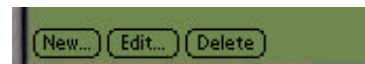
1. From the main application menu launch your **Prefs** application:



2. Tap on **General**, located at the top right hand portion of the screen and you will extend the pull down menu. Select **Connection**.



3. Tap on the **New** icon.



4. Change the name to **IrDA to Modem** and connection type to **Ir Comm to Modem**.
5. Tap on **OK**.



## Step 2: Setting up the Network


1. While in **Preferences**, tap on the **Network**.



2. Fill out the network settings:
  - Set the **Service** to any name. Here it is called '**WAP Connection**'.
  - Set the **User Name** to be your ISP user name.
  - Set the **Password** to be your ISP password.
  - Set the **Connection** to be **IrDA to Modem**, what you have entered in earlier.
  - Set the **Phone** to be your ISP phone number.



## Step 3: Connect via WAPman

1. Tap on the WAPman icon: 
2. If this is your first time you are connecting to the WAP gateway, the system will dial up straight away. If not then it might surf the cached content on the system. In any case you should keep your phone in IrDA range of the palm device.
3. Happy WAP'ing!





## 6. Appendix B: WAPman Colour

### WAPman Colour Specifications Version 1.0 dated 30 Oct 2000

Though WAP specifications do not support color, support for color images can be included within the framework of WAP. **EdgeMatrix's** WAPman browser extends it's WAP capabilities by supporting color images. This document provides the technical specifications for this color image support and provides a guide to start developing WAP applications in color.

#### Usage Summary

The WAP 1.2 specifications support images in WML using the img tag. The only image format supported currently is the WBMP format. Thus a typical img tag in a WML would look like this:

```

```

The WBMP format (part of WAP specifications) does not support color or compression and therefore falls short of the requirements for many applications. WAPman now supports the GIF format in addition to the WBMP format for the img tags. GIF has been a popular image format for the Web for a long time. Thus an application developer could easily include color GIF images in his WML:

```

```

However, due to the WAP specifications, it is common for gateways and browsers to support single data units of maximum 1400 bytes. This is changing as more browsers and gateways are implementing the optional segmentation/reassembly support that allows larger data units. But until this support becomes common, it is recommended that developers constrain their GIF images to 1400 bytes. This constraint is not very restrictive, as multiple color GIFs can be included in a single WML to form a larger image. For example,

```
<p mode="nowrap">
<br/>

</p>
```

Some WAP gateways are capable of automatically converting GIF images to WBMP images before sending to the browser. WAPman specifically informs the gateway that it accepts GIF images (image/gif) so that the gateway can disable the automatic conversion.

#### Technical Specifications

Image Formats Supported	GIF87a, GIF89a
Interlaced Image Support	Yes
Animated Image Support	No
Color Depth Support	1, 2, 4 or 8 bit (up to 256 color palette)
Image Size Constraints	None
Image File Size Constraints	1400 bytes (based on WAP data size constraints)
WML Tags supporting Images	<img src = "..." />

## 7. Contact Information

Please visit <http://www.edgematrix.com/downloads/> for updates and patches.

### SINGAPORE

115 Amoy Street #02-00  
Singapore 069935  
Tel:+65 226 0788  
Fax:+65 226 0733

### HONG KONG

Suites 2206-7, 22nd Floor Shell Tower,  
Times Square  
Causeway Bay, Hong Kong

### AUSTRALIA

Level 9, 17  
Castlereagh Street  
Sydney NSW 2000  
Australia  
Tel:+61 2 8226 8888  
Fax:+61 2 8226 8800

### MALAYSIA

Suite 20.02 Level 20, Plaza 138  
138 Jalan Ampang  
Kuala Lumpur 50450  
Malaysia  
Tel:+603 2710 6788  
Fax:+603 2710 6787

### TAIWAN

5F-2, No. 89, Sung Jen Road  
Taipei, Taiwan

For more information, please email: [info@edgematrix.com](mailto:info@edgematrix.com)  
For sales inquiries, please email: [sales@edgematrix.com](mailto:sales@edgematrix.com)  
For support inquiries, please email: [support@edgematrix.com](mailto:support@edgematrix.com)  
Please visit our website at <http://www.edgematrix.com>

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