

LED Banner

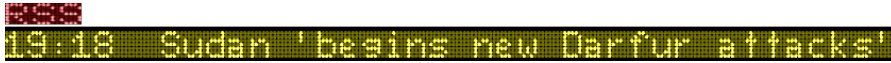
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Summary

LED Banner gives you a scrolling LED Banner on your desktop.

You can have your own messages, customize the LED and border colors, and resize the length and height of the banner.

You can enter a text in the preferences or specify a text file or an RSS URL to be used as the source of the text.



Character Sets

Every character in the LED Banner character set has to be created as a separate image file. This places a severe limitation on the character set that can be made available. Characters are displayed in the form of a 5x7 matrix of LEDs, which also places severe limitations on the characters which can be handled.

This version of LED Banner handles the Basic Latin Character Set (Unicode 0x0020 to 0x007F), the Latin-1 Supplement (Unicode 0x00A0 to 0x00FF) and the Katakana Character Set (Unicode 0x30A0 to 0x30FF).

Characters in the Hiragana Character Set (Unicode 0x3040 to 0x309F) are mapped onto the Katakana Character Set.

To forestall futile requests, we state now that we will not be able to implement extensions involving any extensive characters sets, such as CJK Ideographs.

RSS Features

LED Banner can fetch RSS (xml) feeds from the World Wide Web and display them. The Widget can display **titles**, or **titles and descriptions**.

It maintains a dictionary of the locations of the RSS feeds to be displayed. You can add locations to, or delete locations from, the dictionary and you can choose a location for display.

Context Menu Commands

Add a new location to the dictionary of locations. You must provide a description of the location and a URL from which an RSS feed can be downloaded.

Edit (or add an edited version of) the **current location**.

Select a location from the dictionary for display. You can also select locations with the RSS menu.

Delete a location from the dictionary of locations.

Open the current location in a web browser.

Save the Widget's **preferences** to a file in the Backup Folder.

Restore the Widget's **preferences** from a saved preference file.

Setting Up a Location

Locations are set up by clicking on the **Add a new location** context menu item, which causes the Add a New RSS Location dialog to appear.

Very often, it is only necessary to fill in a Description of the RSS feed and its (Primary) URL.

For example, there is an RSS feed from the BBC called **BBC Top Headlines**. Its URL is currently http://newsrss.bbc.co.uk/rss/newsonline_world_edition/front_page/rss.xml .

As this is a fixed (i.e. static) URL, all that is necessary is to fill in the Description and Primary URL fields in the dialog.

[Because the Primary URL field is too short to show the whole URL at one time, you would have to scroll the field to see the whole of the URL.]

Finally, you click on the Save button, and that's all there is to it!

This version has a macro feature which can be used in setting up the Primary URL. The string \$TIME may be included in a Primary URL and will be replaced by the current Unix Time in milliseconds. This can be used to defeat caching mechanisms. A typical use would be to append something like ?time=\$TIME to the end of a Primary URL.

Dealing with image URLs that change

Some of the best, most desirable feeds, have URLs that change frequently. The Widget has a way to automatically adjust for the changing URLs, so that it can show each new update without your constant intervention.

Even though the URL of the feed varies from day to day, the URL of the web page containing the feed URL will generally be fixed.

To display such feeds, the Widget has to fetch the web page at the fixed (Primary) URL, and look for the URL of the RSS feed in the source code of the web page. It can then fetch and display the RSS feed.

You have to provide some information to help the Widget locate the URL of the feed.

Five additional fields, called **Guard String**, **Prefix String**, **Start String**, **End String** and **Suffix String**, are provided in the Add a New Location dialog. These are used to define the beginning and end of the desired RSS feed URL.

To set up the five strings, you first use a web browser to fetch the web page containing the desired feed URL.

The URL of the web page is entered as the Primary URL, instead of the (fixed) URL of an RSS feed.

You then **View** the Page **Source**, using the browser's **View Source** menu item.

The RSS URL may not appear in its full form in the source of the web page, so you look for the actual link and construct the five strings from what is found.

For further information and worked examples of this process, please see the more extensive manual that is distributed with the WebImages Widget.

Preferences

General

Banner

Colors

Display Size

Errors

Show Alert Messages - use this checkbox if you wish (network) errors to cause alerts.

Log Error Messages to File - use this checkbox to enable logging to file.

Log File - use this button to select the location of the log file.

Backup Folder - use this button to select a Backup Folder where preference files are saved.

Extra Displays

Network

You can choose to use the URL or the CURL network access method. You may also set a proxy server, for use whenever proxy server support is not provided automatically (see below).

In general, it is better to use the URL method.

RSS

Window

Proxy Server Support

Proxy server support is automatic (on both the Macintosh and on Windows) when the URL access method is used. When the CURL access method is used, proxy server support is automatic on Mac OS X 10.3 and later. On earlier versions of Mac OS X, a proxy server can be set in the Widget's preferences.

Special Startup Mode

It can occasionally happen that a user enters an invalid URL, which causes LED Banner to fail and prevents it from restarting normally. The invalid URL could be deleted from the Widget's .plist file on the Macintosh or from the Windows Registry, but these operations are likely to be error prone. To get around this problem, LED banner has a special startup mode.

If the **caps-lock key** is down [Macintosh only] on startup of the Widget or there is a file called **debug.txt** in the Widget's **system.widgetDataFolder**, then the Widget puts up a dialog as it starts which asks the user if she would like to delete URLs. If the user says **"yes"**, it puts up the delete dialog (as if the **Delete a location** context menu item had been used). This is repeated until the user says **"no"**. After that the Widget starts as normal.

This saves the user from editing .plist files on the Macintosh or the Registry on Windows.

On the Macintosh, the system.widgetDataFolder is normally located at

~/Library/Application Support/Yahoo! Widget Engine/Widgets/LED banner.widget

On Windows, the system.widgetDataFolder is normally located at

C:/Documents and Settings/<user>/Local Settings/Application Data/Yahoo/Widget Engine/Widget Data/LED banner

The debug.txt file is used as a flag - its contents are irrelevant.

Widget Concept, Coding and Documentation

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Credits

About-box and license window graphics by Ricky Romero.

Proxy server support on the Macintosh platform uses code by Christopher Snell <chris.snell@gmail.com> based on code from bl0rg.net/software/frucht/ and Apple.