



Connecting Students  
*with handhelds*

# Web Page BroadCast

## User's Manual

Plucker Palm application web page viewer

JPluck desktop web page converter

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For more information: [www.tribeam.com](http://www.tribeam.com)

<http://jpluck.sourceforge.net>

<http://www.plkr.org/>

# Introduction

**Q.** *What do I use this for?*

**A.** A way for teachers to provide selected web pages to students on their Palms.

**Q.** *What's good about it?*

**A.**

- 1) It's easy to use.
- 2) It gives teachers control by selecting web content to provide to students.
- 3) It provides the students with a graphics capable web page viewer.
- 4) The students are focused on the web content you want them to have.

**Q.** *Can I broadcast the web pages to the student's Palms using TriBeam's Broadcast?*

**A.** Absolutely! That's the idea: Select a web page and give it to all the students at once!.

**Q.** *Can it display pictures?*

**A.** Yes, it can. It's up to the teacher. You can choose to display images or just text.

**Q.** *What's the tradeoff?*

**A.** Images require more memory, so the files get larger (more on this later).

**Q.** *What's the name of the desktop program?*

**A.** The teacher uses a program called *JPluck X*. This is the program that extracts the web site content and converts it to a format compatible with the Palm viewer.

**Q.** *What's the name of the Palm application program?*

**A.** The students use a program called *Plucker* on their Palms. This is the program to view the web site content—like a web browser.

**Q.** *Okay, where'd the name come from?*

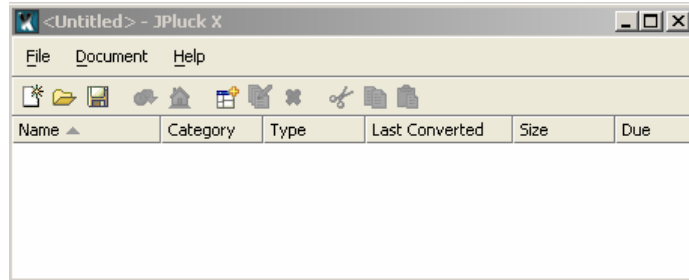
**A.** The idea is that web site content is “plucked” and converted to be viewed on Palms.

# Using JPluck on the Desktop (for the teacher)

Start JPluck. Since you've installed JPluck on your computer, you should see an icon like this on your desktop:

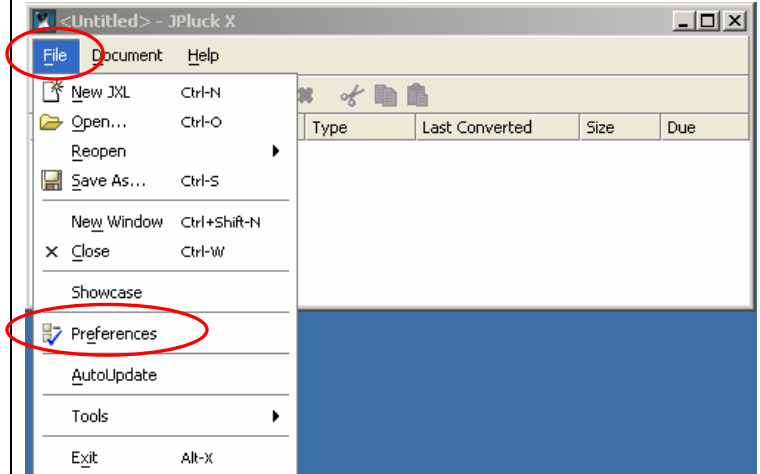


And when it starts, it should look like this.



If you installed JPluck, you should have already selected a destination directory.

Click File→Preferences



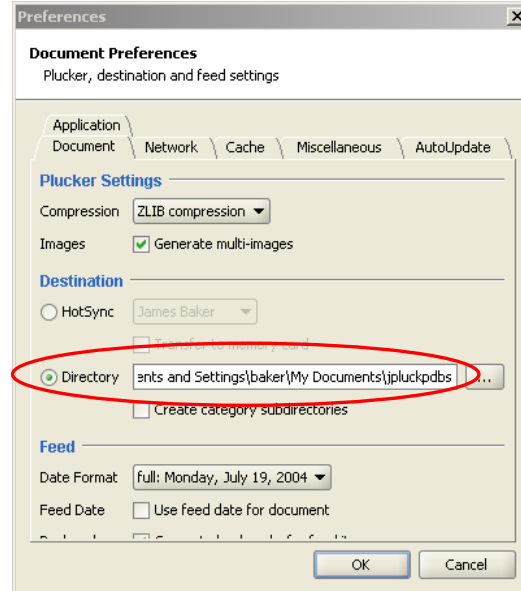
In the Preferences screen you should see a Destination Directory Path. This is where the converted web pages (pdb files) will be stored on your desktop computer. These are the files you broadcast to the Palms.

Make a note of this directory.

There's more information about creating the Destination Directory in the Installation Manual.

In the example here we named the folder *jpluckpdbc* and it is in *My Documents*.

Click OK

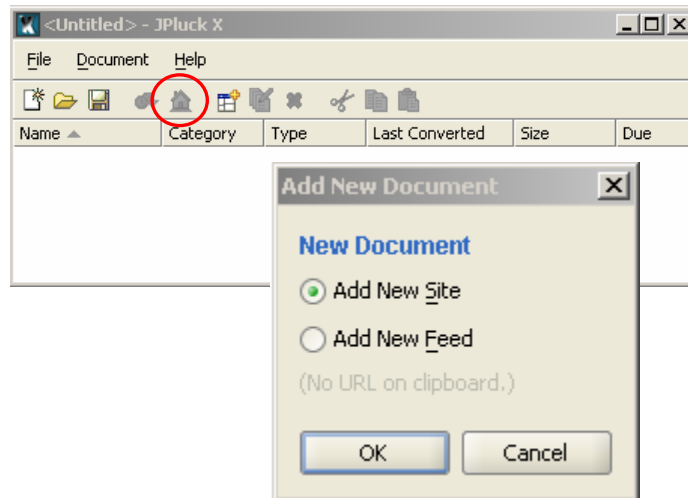


## Converting a web page:

Click the *Add* button

Select *Add New Site*

Click **OK**



Give the Site a Name (USAtoday)

Fill in the URL, or copy and paste.

**NOTE:** you must include the complete URL, including the *http://* and the *www*.

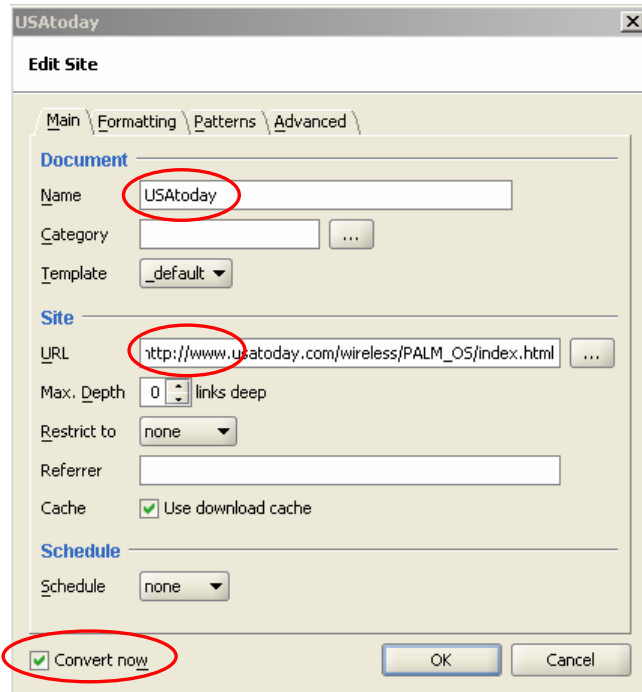
Check *Convert now* (at the bottom)

Click **OK**

You'll get a message when the conversion is complete. The USAtoday.pdb file is created and saved in the Destination Directory specified in the Preferences menu.

Click **Close**

**Note:** If you are viewing a web site on your desktop browser, cut and paste is a great way to copy the URL.

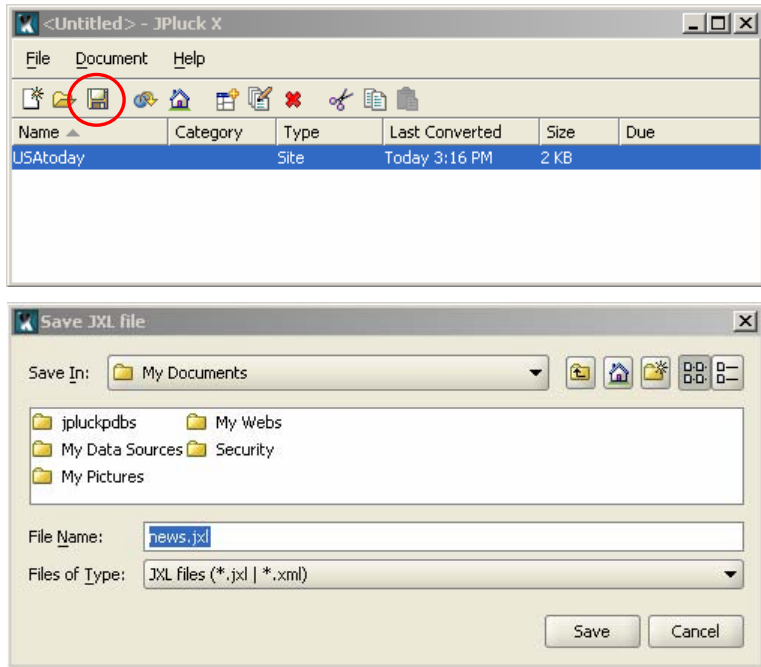


You will see the information about the conversion.

**Click** the *Save* button.

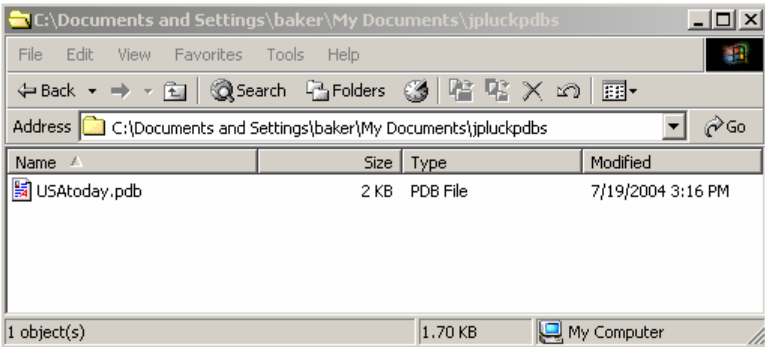
Choose a location and give the file a name (news.jxl).

This saves the .jxl file. More about this later.

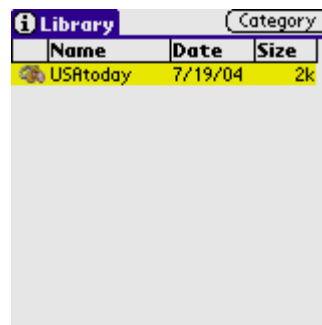


The file to BroadCast to the Palms (USAtoday.pdb) is in the Destination Directory specified in the Preferences menu.

(We called it *jpluckpdbc* in *My Documents*)



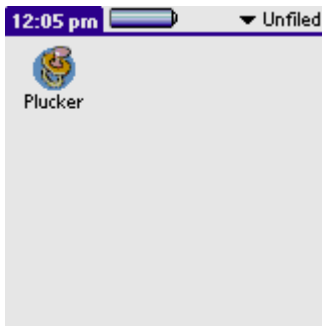
Use TriBeam's BroadCast feature to send the USAtoday.pdb web page to all the student's Palms at the same time!



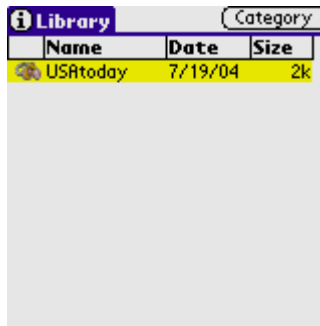
# Using Plucker on the Palms (for students)

1. Start Plucker on the Palm.

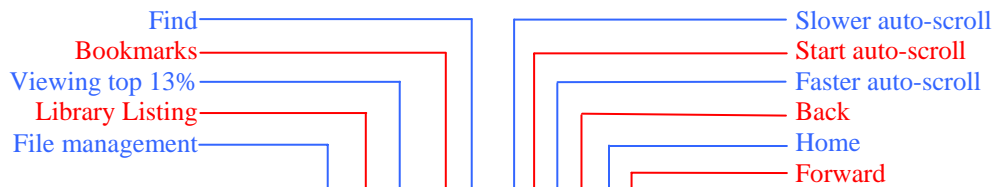
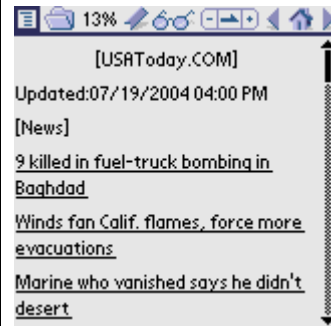
Tap *Plucker*



2. A listing of web pages is shown. Tap *USAtoday*

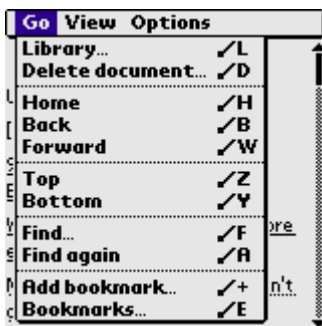


3. Here's the top screen.

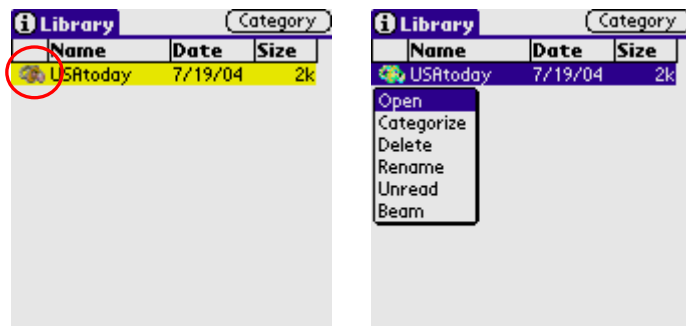


Tap screen to stop auto-scroll.

## File Management

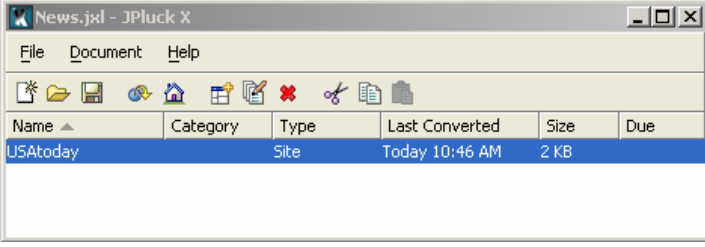
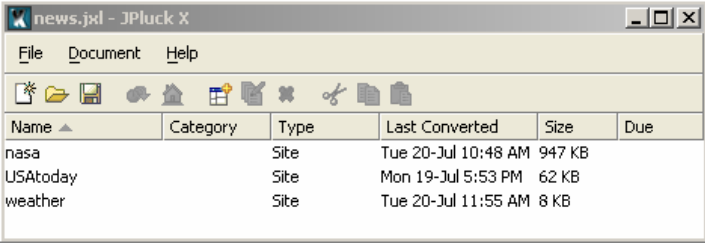
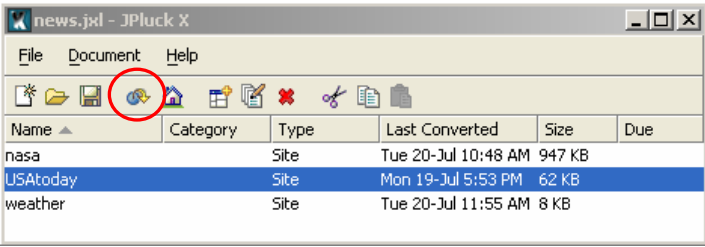


## Library management



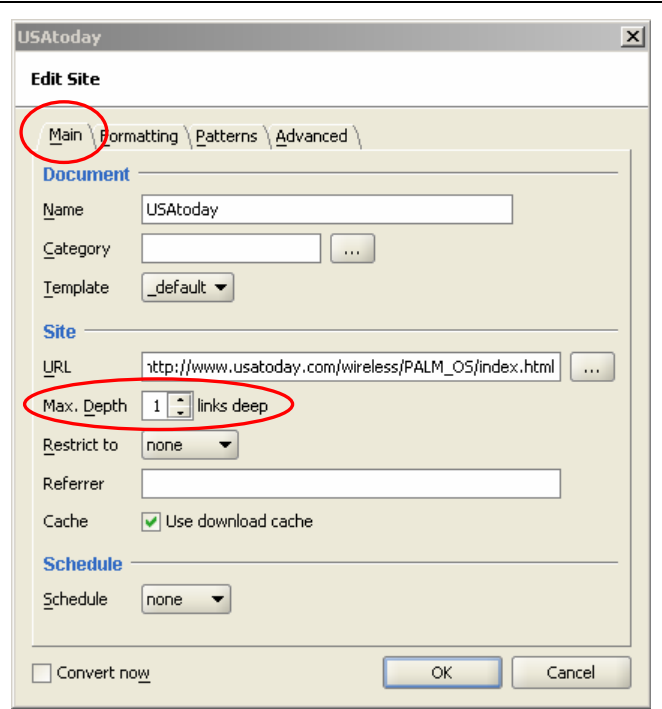
# More about JPluck

**JXL files:** Jxl files store the list of web sites that you have converted.

<p>When you open JPluck X, you'll see something like this. Note the title is now called News.jxl. This is what we called it when we saved it.</p>	 <table border="1"><thead><tr><th>Name</th><th>Category</th><th>Type</th><th>Last Converted</th><th>Size</th><th>Due</th></tr></thead><tbody><tr><td>USAtoday</td><td></td><td>Site</td><td>Today 10:46 AM</td><td>2 KB</td><td></td></tr></tbody></table>	Name	Category	Type	Last Converted	Size	Due	USAtoday		Site	Today 10:46 AM	2 KB													
Name	Category	Type	Last Converted	Size	Due																				
USAtoday		Site	Today 10:46 AM	2 KB																					
<p>As you add more web sites, the file grows. You can save multiple .jxl files.</p>	 <table border="1"><thead><tr><th>Name</th><th>Category</th><th>Type</th><th>Last Converted</th><th>Size</th><th>Due</th></tr></thead><tbody><tr><td>nasa</td><td></td><td>Site</td><td>Tue 20-Jul 10:48 AM</td><td>947 KB</td><td></td></tr><tr><td>USAtoday</td><td></td><td>Site</td><td>Mon 19-Jul 5:53 PM</td><td>62 KB</td><td></td></tr><tr><td>weather</td><td></td><td>Site</td><td>Tue 20-Jul 11:55 AM</td><td>8 KB</td><td></td></tr></tbody></table>	Name	Category	Type	Last Converted	Size	Due	nasa		Site	Tue 20-Jul 10:48 AM	947 KB		USAtoday		Site	Mon 19-Jul 5:53 PM	62 KB		weather		Site	Tue 20-Jul 11:55 AM	8 KB	
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weather		Site	Tue 20-Jul 11:55 AM	8 KB																					
<p>To update a website with current content, such as a News or Business site, just select it and click the convert button.</p>	 <table border="1"><thead><tr><th>Name</th><th>Category</th><th>Type</th><th>Last Converted</th><th>Size</th><th>Due</th></tr></thead><tbody><tr><td>nasa</td><td></td><td>Site</td><td>Tue 20-Jul 10:48 AM</td><td>947 KB</td><td></td></tr><tr><td>USAtoday</td><td></td><td>Site</td><td>Mon 19-Jul 5:53 PM</td><td>62 KB</td><td></td></tr><tr><td>weather</td><td></td><td>Site</td><td>Tue 20-Jul 11:55 AM</td><td>8 KB</td><td></td></tr></tbody></table>	Name	Category	Type	Last Converted	Size	Due	nasa		Site	Tue 20-Jul 10:48 AM	947 KB		USAtoday		Site	Mon 19-Jul 5:53 PM	62 KB		weather		Site	Tue 20-Jul 11:55 AM	8 KB	
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USAtoday		Site	Mon 19-Jul 5:53 PM	62 KB																					
weather		Site	Tue 20-Jul 11:55 AM	8 KB																					

**Link Depth and Images:** The two most important parameters you need to know about are Link Depths and Images. The Link Depth sets how “deep” the web page conversion goes. In other words, with link depth of 0, you will get the main page but will not be able to follow links. With a depth of 1, you can follow the links on the main page, but no further. You can also determine whether or not to include images and the pixel quality of the images.

Select Link Depth on the Main tab.



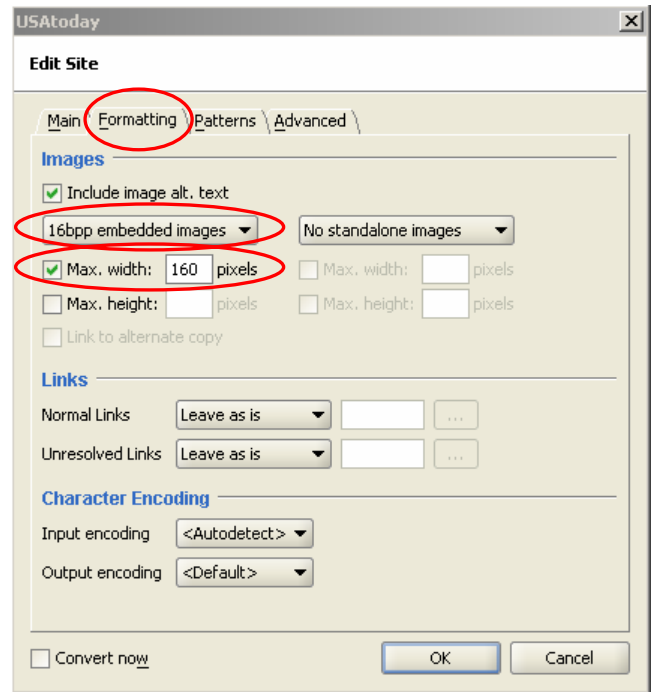
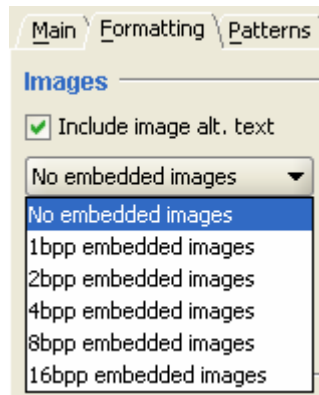
Select Images on the Formatting tab.

No embedded images or one to 16 bits per pixel resolution.

If you include images, select a Max. width. Try 160 for low res.

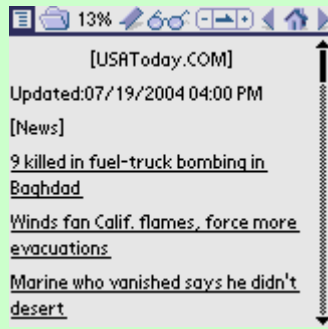

Palms or 320 for high res. Palms. You may have to experiment with this.

Keep in mind, higher bpp resolution and max width means larger files.









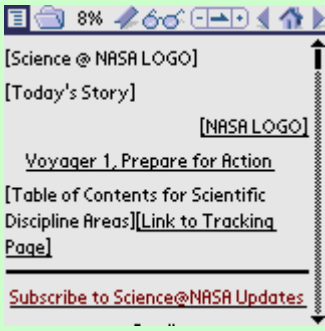

**File Size:** As seen by the following examples, the Link Depth and inclusion of embedded images affects the size of the resulting pdb file that will be sent to the Palms for viewing.

URL:	http://www.usatoday.com/wireless/PALM_OS/index.html		
Link Depth	Embedded images	Resulting PDB size	Example
0	No	2 KB	
1		59 KB	
0	Yes 16 bpp (bits per pixels) Max width, 160 pixels	13 KB	
1		109 KB	

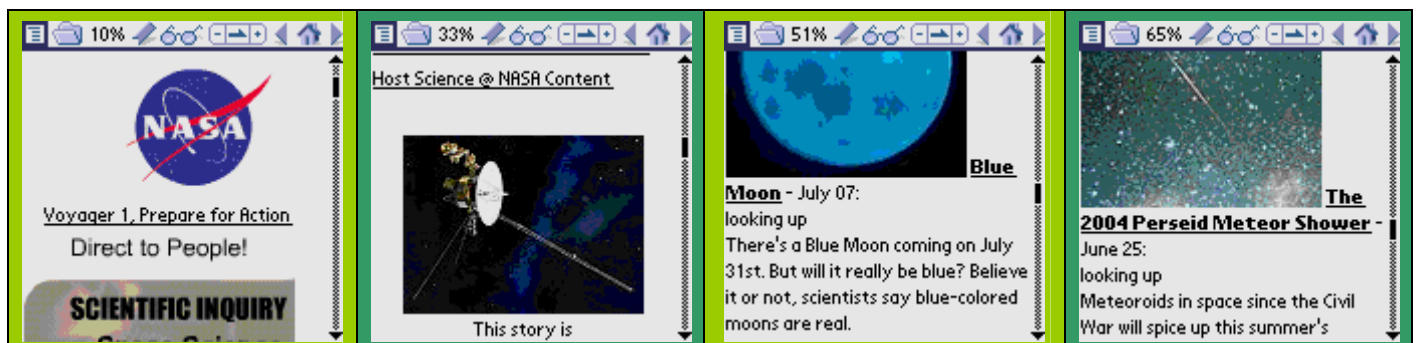
**Link Depth:** The Table below shows the result on the Palm of following a link. Follow a link by tapping on the underline (Winds fan Calif. flames, force more evacuations). If the selected link is not included, a “Sorry” message is shown.

No Images		With Images	
Link depth 0	Link depth 1	Link depth 0	Link depth 1
			

**File Size:** Another Example, <http://science.nasa.gov/>

URL:	http://science.nasa.gov/		
Link Depth	Embedded images	Resulting PDB size	Example
0	No	3 KB	
1		67 KB	
0	Yes 16 bpp (bits per pixels) Max width, 160 pixels	109 KB	
1		947 KB	

A few more screen shots of the Nasa site main page, with images.



**The Moral of the story:** A picture is worth a thousand words...and a lot of Kilobytes.

# Tips and Tricks

## Link Depth and Images:

- Carefully consider what you want give to the students. If all the information is on the main page, set the link depth to 0.
- Include images only if they are useful.
- Set the link depth only as deep as you need to go.
- For a news site where you want the students to be able select various stories (links), bump the link depth to one, but consider not including images.
- A link depth of one or more with images may result in very large files.
- Set the URL to the exact web page you want. If a particular news article is down a link, set the URL here with a link depth of 0.
- Consider the **Restrict to domain** option (see picture) to keep links from being followed off-site if the link depth is one or more.

Site configuration panel showing URL, Max. Depth (1), Restrict to (domain), Referrer (none), Cache (load cache), Schedule (none), and a Convert now checkbox.

## URL:

- The URL must include all information including the *http://* and the *www*
- Be careful of URL addresses that re-redirect. For example <http://pocket.usatoday.com/palm/> re-redirects to [http://www.usatoday.com/wireless/PALM\\_OS/index.html](http://www.usatoday.com/wireless/PALM_OS/index.html). Be sure to use the actual URL.

Edit Site dialog box showing Document (Name: USAtoday, Category: ..., Template: \_default) and Site (URL: [http://www.usatoday.com/wireless/PALM\\_OS/index.html](http://www.usatoday.com/wireless/PALM_OS/index.html), Max. Depth: 1) sections.

## Websites:

While JPluck can convert and Plucker can display any website, there are many sites that have been designed for handhelds. Consider these sites as they look very good on handheld displays.

News	
BBC	<a href="http://news.bbc.co.uk/text_only.stm">http://news.bbc.co.uk/text_only.stm</a>
USA TODAY	<a href="http://www.usatoday.com/wireless/PALM_OS/index.html">http://www.usatoday.com/wireless/PALM_OS/index.html</a>
Washington Post	<a href="http://www.washingtonpost.com/wp-srv/avantgo.html">http://www.washingtonpost.com/wp-srv/avantgo.html</a>
ITN: Headlines	<a href="http://avantgo.itn.co.uk/">http://avantgo.itn.co.uk/</a>
Guardian Unlimited	<a href="http://www.guardian.co.uk/avantgo/">http://www.guardian.co.uk/avantgo/</a>
Sidney Morning Herald	<a href="http://www.smh.com.au/handheld/">http://www.smh.com.au/handheld/</a>
New York Post	<a href="http://www.nypost.com/avantgo/">http://www.nypost.com/avantgo/</a>
LA Times	<a href="http://www.latimes.com/wireless/avantgo/">http://www.latimes.com/wireless/avantgo/</a>
San Diego Union	<a href="http://go.sosd.com/">http://go.sosd.com/</a>
Detroit Free Press	<a href="http://www.freep.com/avantgo_detroit/index.htm">http://www.freep.com/avantgo_detroit/index.htm</a>
Dallas News	<a href="http://www.dallasnews.com/pda/">http://www.dallasnews.com/pda/</a>
Houston chronicle	<a href="http://www.chron.com/content/chronicle/handheld/index.html">http://www.chron.com/content/chronicle/handheld/index.html</a>
Amarillo Globe	<a href="http://www.amarillonet.com/palm_pilot/palm_index.html">http://www.amarillonet.com/palm_pilot/palm_index.html</a>
Honolulu Advertiser	<a href="http://the.honoluluadvertiser.com/palm">http://the.honoluluadvertiser.com/palm</a>
Cincinnati Enquirer	<a href="http://www.cincinnati.com/text/">http://www.cincinnati.com/text/</a>
Fredericksburg	<a href="http://fredericksburg.com/news/palm/index.html">http://fredericksburg.com/news/palm/index.html</a>
Jacksonville	<a href="http://www.jax2go.com/palm/">http://www.jax2go.com/palm/</a>

Business	
Yahoo! Reuters News	<a href="http://wap.oa.yahoo.com/raw?dp=news&amp;f=/us/news/580/index.xml">http://wap.oa.yahoo.com/raw?dp=news&amp;f=/us/news/580/index.xml</a>
Yahoo! AP News	<a href="http://wap.oa.yahoo.com/raw?dp=news&amp;f=/us/news/530/index.xml">http://wap.oa.yahoo.com/raw?dp=news&amp;f=/us/news/530/index.xml</a>
The Motley Fool	<a href="http://64.94.26.1/partners/avantgo/index.htm">http://64.94.26.1/partners/avantgo/index.htm</a>
USA Today	<a href="http://www.usatoday.com/wireless/PALM_OS/index.html">http://www.usatoday.com/wireless/PALM_OS/index.html</a>
Industry Week	<a href="http://www.industryweek.com/avantgo/">http://www.industryweek.com/avantgo/</a>
Yahoo! Finance	<a href="http://wap.oa.yahoo.com/raw?dp=quote">http://wap.oa.yahoo.com/raw?dp=quote</a>
Bloomberg	<a href="http://tv.bloomberg.com/imode/en/home.asp">http://tv.bloomberg.com/imode/en/home.asp</a>
The Street	<a href="http://www.thestreet.com/offers/avantgo/html/markets/index.html">http://www.thestreet.com/offers/avantgo/html/markets/index.html</a>
Business Week	<a href="http://pda.businessweek.com/index.html">http://pda.businessweek.com/index.html</a>

Education Sites	
Cell Biology	<a href="http://www.tribeam.com/edu2/education.html">http://www.tribeam.com/edu2/education.html</a>
Nasa Science	<a href="http://science.nasa.gov/">http://science.nasa.gov/</a>
Plucker books	<a href="http://dave.pluckerbooks.com:81/">http://dave.pluckerbooks.com:81/</a>
Bibliomania	<a href="http://www.bibliomania.com/">http://www.bibliomania.com/</a>

Handheld Portals	
TriBeam	<a href="http://www.tribeam.com/webconnect.html">http://www.tribeam.com/webconnect.html</a>
Yahoo!	<a href="http://wap.oa.yahoo.com/">http://wap.oa.yahoo.com/</a>

Weather	
AccuWeather	<a href="http://www.accuweather.com/pda/pda_5dy.asp?thisZip=60004">http://www.accuweather.com/pda/pda_5dy.asp?thisZip=60004</a> (change zip code for your weather)

### Sports

ESPN	<a href="http://proxy.espn.go.com/wireless/espn/html/pocketpc">http://proxy.espn.go.com/wireless/espn/html/pocketpc</a>
USA Today	<a href="http://www.usatoday.com/wireless/PALM_OS/index.html">http://www.usatoday.com/wireless/PALM_OS/index.html</a>
Yahoo! Sports	<a href="http://wap.oa.yahoo.com/raw?dp=sports">http://wap.oa.yahoo.com/raw?dp=sports</a>
The Sporting News	<a href="http://mobile.sportingnews.com/">http://mobile.sportingnews.com/</a>

### Reference

Handy Facts	<a href="http://squeezenet.com/HandyFact/default.htm">http://squeezenet.com/HandyFact/default.htm</a>
Consumer Info	<a href="http://squeezenet.com/PDATab/InfoP/Consumer/default.html">http://squeezenet.com/PDATab/InfoP/Consumer/default.html</a>
Mapquest	<a href="http://www.mapquest.com/pda/main.adp">http://www.mapquest.com/pda/main.adp</a>
MSN Horoscopes	<a href="http://mobile.msn.com/pocketpc/horoscopes.asp">http://mobile.msn.com/pocketpc/horoscopes.asp</a>

### Technology







Wired News	<a href="http://www.wired.com/news_drop/palmpilot/">http://www.wired.com/news_drop/palmpilot/</a>
PDA Geek	<a href="http://www.geek.com/pdageek/portable/index.htm">http://www.geek.com/pdageek/portable/index.htm</a>
Pen Computing	<a href="http://www.pencomputing.com/palm/avantgo/palmmain.html">http://www.pencomputing.com/palm/avantgo/palmmain.html</a>




### Entertainment

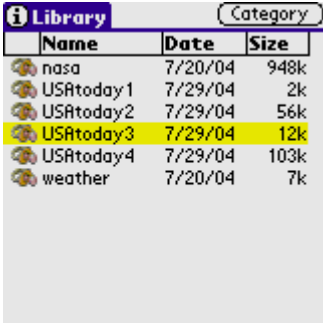


















TV Guide	<a href="http://tvguide.com/palm/">http://tvguide.com/palm/</a>
Variety	<a href="http://www.variety.com/index.asp?layout=channel">http://www.variety.com/index.asp?layout=channel</a>
The Onion	<a href="http://mobile.theonion.com/">http://mobile.theonion.com/</a>
Good Clean Funnies	<a href="http://www.gcf.net/avantgo/mobile.php">http://www.gcf.net/avantgo/mobile.php</a>
Pfft	<a href="http://avantgo.pfft.net/">http://avantgo.pfft.net/</a>


# Previewing web pages on the Palm

Would you like to be able to see what the web page is going to look like on a Palm?  
Well you can, and it's very easy.

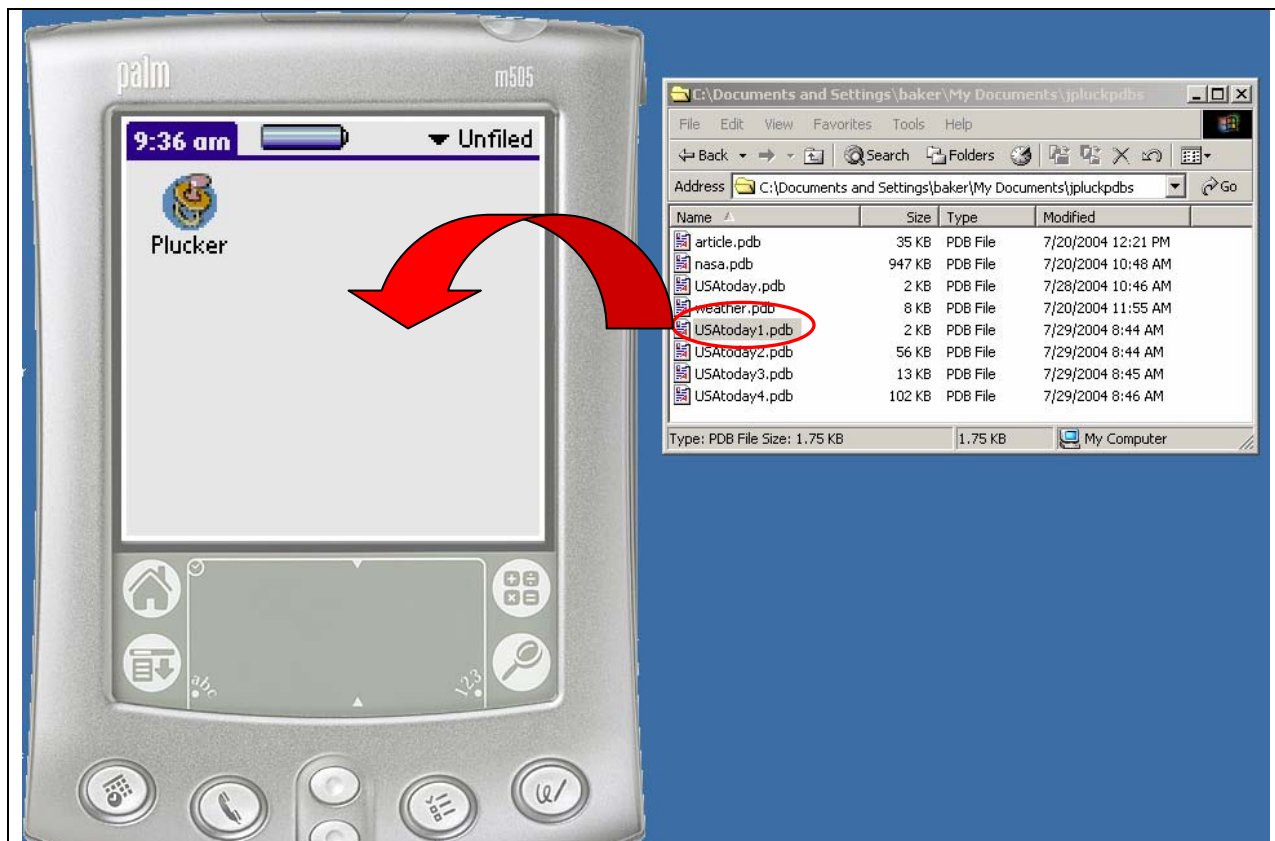
<p>Two versions of the emulator are included.</p> <p>Copy them to your desktop computer.</p>	<table border="1"> <thead> <tr> <th>Name ▲</th> <th>Size</th> <th>Type</th> <th>Modified</th> </tr> </thead> <tbody> <tr> <td> Emulator.exe</td> <td>6,512 KB</td> <td>Application</td> <td>7/29/2004 8:38 AM</td> </tr> <tr> <td> Emulator_examples.exe</td> <td>6,520 KB</td> <td>Application</td> <td>7/29/2004 8:52 AM</td> </tr> </tbody> </table>	Name ▲	Size	Type	Modified	 Emulator.exe	6,512 KB	Application	7/29/2004 8:38 AM	 Emulator_examples.exe	6,520 KB	Application	7/29/2004 8:52 AM
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 Emulator_examples.exe	6,520 KB	Application	7/29/2004 8:52 AM										

<p>Double click to start  Emulator_examples.exe</p> <p>It has Plucker installed along with some example web pages.</p> <p>Tap the  icon.</p>	
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<p>You'll see the Plucker Library which shows the list of loaded files. Tap a name to view it.</p> <table border="1"> <tr> <td>Nasa</td> <td>Link depth 1, with images</td> </tr> <tr> <td>USAtoday1</td> <td>Link depth 0, no images</td> </tr> <tr> <td>USAtoday2</td> <td>Link depth 1, no images</td> </tr> <tr> <td>USAtoday3</td> <td>Link depth 0, with images</td> </tr> <tr> <td>USAtoday4</td> <td>Link depth 1, with images</td> </tr> <tr> <td>weather</td> <td>Link depth 0, with images</td> </tr> </table>	Nasa	Link depth 1, with images	USAtoday1	Link depth 0, no images	USAtoday2	Link depth 1, no images	USAtoday3	Link depth 0, with images	USAtoday4	Link depth 1, with images	weather	Link depth 0, with images	 <table border="1"> <thead> <tr> <th colspan="3">Library</th> <th>Category</th> </tr> <tr> <th>Name</th> <th>Date</th> <th>Size</th> <th></th> </tr> </thead> <tbody> <tr> <td> nasa</td> <td>7/20/04</td> <td>948k</td> <td></td> </tr> <tr> <td> USAtoday1</td> <td>7/29/04</td> <td>2k</td> <td></td> </tr> <tr> <td> USAtoday2</td> <td>7/29/04</td> <td>56k</td> <td></td> </tr> <tr style="background-color: yellow;"> <td> USAtoday3</td> <td>7/29/04</td> <td>12k</td> <td></td> </tr> <tr> <td> USAtoday4</td> <td>7/29/04</td> <td>103k</td> <td></td> </tr> <tr> <td> weather</td> <td>7/20/04</td> <td>7k</td> <td></td> </tr> </tbody> </table>	Library			Category	Name	Date	Size		 nasa	7/20/04	948k		 USAtoday1	7/29/04	2k		 USAtoday2	7/29/04	56k		 USAtoday3	7/29/04	12k		 USAtoday4	7/29/04	103k		 weather	7/20/04	7k	
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Use  Emulator.exe to view your .pdb files. It has Plucker installed with no web pages.

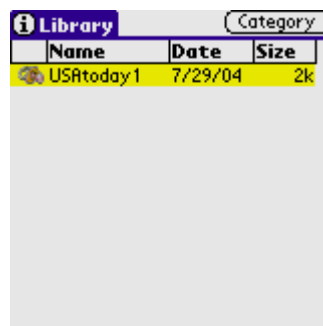
Just “drag and drop” a .pdb file you created with JPluck onto the emulator. (see below)



Click Plucker and you'll see the web page listed.

Note, if you move a .pdb file onto the emulator and it doesn't show in the library list, just tap

home  and start Plucker again.



# e-books

Plucker is an excellent e-Book Reader, especially with its automatic scroll capability. There are numerous e-book sites. Many have free-to-download e-books. And many already have e-books formatted for Plucker. A few sites are listed here. These are all free.

<b>Site</b>	<b>Format</b>	<b>What to do</b>
<a href="http://www.memoware.com/">http://www.memoware.com/</a>	Plucker	Download and send to Palms
<a href="http://home.clarksville.com/~bcollins/PalmDocs.htm">http://home.clarksville.com/~bcollins/PalmDocs.htm</a>	Plucker	Download and send to Palms
<a href="http://www.pluckerbooks.com/">http://www.pluckerbooks.com/</a>	Plucker	Download and send to Palms
<a href="http://unpress.bandersnatch.org/">http://unpress.bandersnatch.org/</a>	Plucker	Download and send to Palms
<a href="http://www.gutenberg.net/">http://www.gutenberg.net/</a>	text	Download text file and convert it to Plucker using JPluck
<a href="http://www.bibliomania.com/">http://www.bibliomania.com/</a>	text	Copy and save text file, convert it to Plucker using JPluck