yesyesnono&AboutE&xit&PrintyesyesyesFALSEHelp for Map THIS!MapThisyesLast saved at:Tuesday, July 11,1995 4:44 pm

**Map THIS!**

**Common topics (a.k.a.: The Contents Page)**

# About Map *THIS!*

Map *THIS!* is, in a nutshell, a program to create and edit World Wide Web image maps. On your tour around the Web, you may have seen things like this:

Clicking on the different things - say, the second glyph, which looks like an "information" icon, might bring up information about the person running that particular Web page. Clicking on the first one might take you to the next page in the information base, while the third one would email the author of the web page. The idea is that you (or someone else) has created a graphic - be a simple navigation bar like this, or a larger and more complicated graphic. Obviously, it takes some skill to create a decent looking graphic. Map *THIS!* can't do that, obviously (computers can't create - yet), but it can do the boring, painstaking, and prone-to-error work of "mapping out" the locations that you want the image map to respond to user's clicks.

The "official" method (from NSCA and CERN HTTPD tutorial pages, two of the most widely used HTTPD servers) of creating image maps is to use a painting program, such as Paintbrush, XV, Lview, or whatever, to find the "points" that define the map. Then you have to write them down, and type them into a specially formatted text file to place on your server. Talk about a lot of work!

Map *THIS!* takes care of all the "where is this" stuff, in a graphical, user-friendly (for the most part) way. You can drag-n-plot your rectangles, circles, and polygons to your heart's content, reshape them, and then set up what they point to. And you can *see* what goes on, as you do it. A true WISIWYG image map creator program!

# Advantages of Map *THIS!*

There are other "mappers" out there for Windows; however, Map *THIS!* has some spiffy features that the others that I've seen lack

- It's absolutely, totally, *FREE!*
- It's faster than most others.
- Supports moving and reshaping of Polygons.
- Handles GIF's of almost any size (up to 1280x768).
- Handles interlaced GIFs.
- Handles multiple open files at once.
- Keeps a tracking header comment block in the image map file.
- Keeps track of the GIF that goes with the map by way of a special comment line.
- Supports descriptions per each area, and one for the entire map.
- Opens existing map files that you might have.
- Written as a Win32 app - runs under Win32s, NT, or Win95.
- Docking/floating toolbars.
- Supports both NSCA and CERN data file formats..
- Listing of the areas, alongside with the GIF.
- Allows you to save or load as either .IMP or .MAP files.

# Who wrote it?

Map _THIS!_ was written by Todd C. Wilson. It is Copyright © 1995 by Molly Penguin Software.
You can contact Todd by either emailing him at:
> **tc@galadriel.ecaetc.ohio-state.edu**

Or you can surf to his tasty series of web pages:
> **http://galadriel.ecaetc.ohio-state.edu/tc**

This program is totally ***FREE***! No charge to you to use it or pass it on to others. I only ask a few things (hehehe):

- If you played with this program and thought it stunk, <u>email me</u> and tell me why!
- If you used this program and loved it, <u>email me</u> and thank me!
- If you used this program to create a map page, <u>email me</u> and tell me the URL (and send me a copy of the map file, please).
- If you plan to put this on a <u>CD collection</u>, please consider giving me a copy of the CD - I believe it would be only fair.

Be sure to read the <u>Licence Restriction</u>.

**Todd C. Wilson**

email:          tc@galadriel.ecaetc.ohio-state.edu
home page:     http://galadriel.ecaetc.ohio-state.edu/tc

# Why free?

The main reason is that too many programmers belive that they can make a living writing crappy shareware and charge $25-$75 for it. I have also gotten a LOT of enjoyment out Internet over the last fifteen years and I finally came up with something that people could possibly use.
I could go on and on about the utter abuse of shareware, on both sides of the fence (authors vs users), but I'd probably bore you to death. If you really must hear me vent my spleen, feel free to email me!
Be sure to read the licence restrictionns and copyright notice.

# The Dreaded Licence Restriction

This program is FREE. There is *no charge* to use, copy, or distribute this program. You may place this program on ANY file transfer site, of ANY kind. You may give it to your friends. You may delete it. You may use it to wrap fish in.

You may NOT attempt to turn this program into a virus carrier. If you suspect that you have an infected program, contact the person you got it from and then contact me.

This program is provided AS-IS. See below for more legal-speak.

If you wish to include this on a CD collection, or to put it on a disk that is to be included with a book, please contact me. I almost always say "yes", and would appreciate a free copy of the book/disk for my collection.

**Exception**: FTP sites such as Oakland, Garbo, Cica, etc., who create CD collections on an annual or semi-annual basis in order to cover operating costs do not have to ask permission. Permission was granted the instant the program was upload (most sites have a paragraph covering this, but why not get it all in there?).

The really ugly part (you can skip it, it's there for the lawyers):

# What is Molly Penguin Software?

It's the pseudo-company that I release freeware under. The name directly refers to my wife and my daughter. "Molly" is the phonetic pronunciation of "mali", which means "small". Therefor, Molly Penguin means "small penguin". There's a lot more story behind all of this, but I sense that you are bored enough as it is...

# Things to be done to the program ☕

1. Check the boundaries of the areas to see if they fit within the GIF when loading (although it is not illegal to have "offscreen" areas) and warn you.
2. Allow "points" to be used (closest-point-wins scheme) for NSCA maps.
3. Check the map file to see if an area is "dead".
4. Support for testing, both on-the-fly and almost-live.

# Map file not created by Map *THIS!*

When Map *THIS!* writes out the image map file, it includes some special comment lines that define what GIF file was used and where it was last located. If you are importing an existing image map file, these lines are obviously not there, so Map *THIS!* has no way of knowing which GIF goes with what map. It's your job to point Map *THIS!* at the right file.

If you point Map *THIS!* at the wrong file, well, you'll have to close the map and re-open it to get the right one. Map *THIS!* can't tell if its got the right image or not.

# Comment lines in image map files

The NSCA and CERN formats both support comment lines. These are simply lines that start with the pound sign ("#"). Very much like REM statements in Basic, or // lines in C++.

Map *THIS!* uses some special "comment leads" to flag directives to the program. This allows Map *THIS!* to bury information in the map file that the Web Server ignores, but Map *THIS!* can extract to simplify maintaining the map file.

# Unable to locate GIF

Map *THIS!* maintains two special comment lines in the image map file when it writes it out to the disk: the filename of the GIF, and where the GIF was at when the map was saved. If the GIF or the map is moved on the disk (say, from one directory to another), Map *THIS!* will try to look in the directory where the map is currently at, and where the GIF was last known to be at. If both of these fail, Map *THIS!* gives up and asks you to find the GIF for it. If you manage to give it the wrong GIF, you will have to close the map and re-open it.

# Creating a new image map

All image maps require a GIF background. This is defined in the NSCA and CERN standard for image maps. It doesn't make much sense to try to create a map file on a white background - you need to see what you're doing!

The GIF doesn't have to be in the same directory or hard drive as your image map file - Map *THIS!* keeps a recording of where the GIF was last known to be at so that it can load it the next time you edit your map file.

Once the GIF is loaded and decompressed (this is very quick), the document window opens up showing the image and the toolbar. By default, the arrow tool is selected. Click the rectangle, the circle, or the polygon tool to create new areas.

# Editing the image map's general information

For each image map file, there is only one required line: the default URL to execute if the user clicks outside of any defined area. You can think of this as the "background" URL, if you wish.

The other pieces of information - Title, Author, Description - are all optional, and have nothing to do with the actual function of the image map.

You can click on some areas of this graphic for more information:
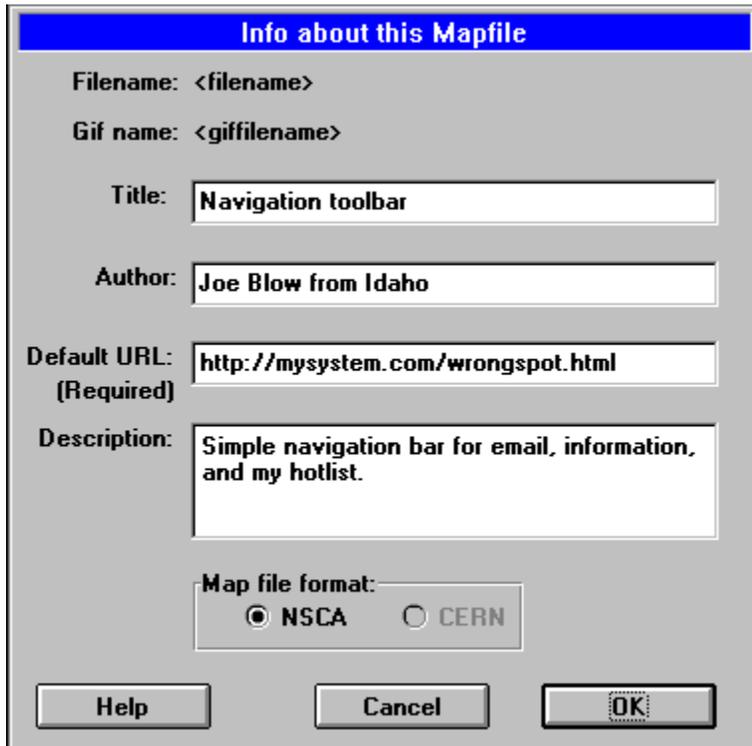
## Info about this Mapfile

Filename: &lt;filename&gt;

Gif name: &lt;giffilename&gt;

Title: `Navigation toolbar`

Author: `Joe Blow from Idaho`

Default URL: (Required) `http://mysystem.com/wrongspot.html`

Description: `Simple navigation bar for email, information, and my hotlist.`

Map file format:
(•) NSCA    ( ) CERN

[ Help ]    [ Cancel ]    [ OK ]

This is the filename of the map file. If nothing is here, then the map is brand-new and has never been saved. This is for informational purposes only.

This is the filename of the GIF file. This is for informational purposes only.

Title of the mapfile. This field is not required by the Web Server, but is used so that you know what it is.

Author. Your name here. Optional.

Description of the map file. This field is optional, and can be used to describe what you are doing with this map file. Can be several lines long. The Web Server will not use this field.

This is the default URL. Required by the Web Server. You must give it the complete URL to whatever resource you wish to activate when the user clicks outside of any defined area.

Image map format. I know of two formats: [NSCA and CERN](). If you know of any others, email me and I'll put them in!

Click this to cancel the form.

Click this to accept the data.

# What is HTTPD?

HTTPD stands for http "Demon". It's the background program that is run on a computer to act as the "web server". Under UNIX parlance, "Demon" is just a program that runs in the background and has no real user interface (be it GUI or command-line). There are several flavors of web servers, but most either confirm to [NSCA or CERN](#) style of image maps.

# What is a URL?

URL stands for Uniform Resource Locator. It is a "command" to the Web Server to tell it what kind of information to get and where to get it from. These commands usually start with "http" for web pages, "ftp" for file transfers, "gopher" for gopher services, "news" for UseNet news, and "mailto" to send a mail letter. [Examples](#).

**What is a URL?**

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# Examples of some URL's

**(you can click on each URL type to get more info):**

http://www.microsoft.com/
This is a Web page run by Microsoft
http://www-swiss.ai.mit.edu/samantha/table-of-contents.html
This is the Travels with Samantha book/photo tour.
ftp://oak.oakland.edu/simtel/win3/eudora/eudrm144.zip
This will FTP to the Oakland ftp server and retrieve the manual to Eudora 1.44
gopher://gopher.creaf.com/
Gopher to Creative Lab's server.
news:rec.humor.funny
Goes to the UseNet newsgroup rec.humor.funny
mailto:pres@whitehouse.gov
Ask for a tax break!

# The HTTP URL

This refers to HyperText Transport Protocol. Which is a fancy way of saying "visit the web page, stupid!". http always has one of these two forms:

> http://SERVER.NAME
> http://SERVER.NAME/FILEPATH

The "server name" is the complete name of the server. For example, **www.microsoft.com** or **galadriel.ecaetc.ohio-state.edu** (say that with a mouthful of cookies). The server name may be OPTIONALLY followed by a colon and a number - this refers to the "port" that the target system is listening for a connection on. You usually don't need to add this "port" option - most systems are set to use the default port value of 80. If you think your server is configured differently, contact your system administrator.

"File path" refers to how to get to the file or directory. This depends on where the data is set up. If you are running your own personal page out of your user directory, you will probably use:

> ~joe/file.html

"Joe" is you, "file.html" is the filename. The last part of the filename is important. Like DOS, HTTPD servers use the dot-name to figure out what the file really is! You usually want to keep it .html unless you have special requirements. However, since each server is configured differently due to the system, you should ask your system administrator about personal web pages, and how relative links work. If you get very, very stuck, feel free to email me.

# The FTP URL

File Transfer Protocol. I would prefer is this was called "leech". It's just a way to retrieve a file from the sever to your machine. The format of FTP is this:

ftp://SERVER.NAME/FILEPATH

The "server name" is the complete name of the server. For example. **ftp.microsoft.com** or **oak.oakland.edu**. The server name may be OPTIONALLY followed by a colon and a number - this refers to the "port" that the target system is listening for a connection on. You usually don't need to add this "port" option - most systems are set to use the default port value of 23. However, sometimes the server may be running in a non-standard configuration, so you should contact your system administrator if you have problems.

"File path" refers to how to get to the file or directory. This depends on where the file is stored from the FTP root directory (usually PUB for public). For example, on Oakland, you could use simtel/win3/network to get into the network directory, or simtel/win3/graphics/00index.txt to retrieve the index listing.

# The GOPHER URL

Gopher is a yet another way to retrieve information. It arrived just before World Wide Web hit the scene, so it never really took off to the point that a lot of systems are running it. Gopher is sort of between FTP and HTTP in the way it handles information. Like FTP, Gopher presents information as files and directories. Like HTTP, it can refer to information that is elsewhere on the system or not even on the same network (pointing to a file in England for example).

Using Gopher commands is just like FTP or HTTPD:

    gopher://SERVER.NAME/FILEPATH

The "server name" is the complete name of the server.

"File path" refers to how to get to the file or directory.

# The NEWS URL

This is UseNet news. In order for this to work correctly, the USER must have news access and be able to read it over the World Wide Web; you do not. For example, Galadriel doesn't have a news feed (too much bandwidth and we get it elsewhere), but I can refer information to alt.rec.foods all I want.
The format of news is:

     news:NEWSGROUP

Where NEWSGROUP is a full newsgroup name. Just copy this from the list that you are using.

# The MAILTO URL

The mailto tag is very limited. All it does is tell the browser software the user is using to start a mail message to the person specified in the mailto tag. There is no facility to supply subject or default text. The format of mailto is:

mailto:USER@SYSTEM.NAME

Where USER is the user name (duh) and SYSTEM.NAME is the name of the system where the user has the mail account. You can usually copy-and-paste email addresses from newsgroup posts or email letters in here.

Since it is perfectly legal to give the mailto with only a user name, beware: if you do so, the system will use the SYSTEM.NAME of where the *user* is from, not where you are from. So if you do this:

mailto:admin

The hapless user will cheerfully send a letter to *his* admin asking why the web page is broken and where are all the nasty pictures?

# The Image Map file format

They say a picture tells a thousand words. Okay, here is two shots of the same clickable map image, one as you see it and one as the server sees it (I apologize for the quality):



The one on the left is what you see when you browse your system. The one on the right is what the system sees - the red blocks are the "areas" that are set up to refer to some type of URL command.

Image map files are just text files that describe the areas of the image. They consist of a keyword (rect, circle, polygon), the URL, and the points that make up the area.

Lines that start with a pound sign (#) are considered comments, and are ignored by the system.

The NSCA format describes the following five keyword types for image map files (the CERN format is very similar. See NSCA vs. CERN):

```
default URL
```

This is the default or "background" URL to execute. This is used when the user clicks in an area that is not defined.

```
rect URL x1,y1 x2,y2
```

Rectangle. If the mouse click is within the rectangle enclosed by x1y1 and x2y2, the URL given is used.

```
circle URL cx,cy ex,ey
```

Circle. CX and CY define the center of the circle, and ex,ey define a point on the edge. The NSCA format does not mention that the circle can be an ovoid (i.e.: an oval or egg-shaped object). If the difference

between ex & cx or ey & cy is less than 2, then Map *THIS!* considers the circle a "round" object, and adjusts the points accordingly. If the difference between ex & cx or ey & cy is greater than 2, then Map *THIS!* considers the object an ovoid and does not adjust it.

Circles have a very limited use, since most objects are either square-shaped or irregular shaped.

```
poly URL x1,y1 x2,y2 x3,y3 ... xn,yn
```

Polygon. This is an irregularly shaped object of 3 points or more. Map *THIS!* will reject any polygon that has less than 3 points - this defines either a point or a line. The NSCA specification does not require the last point of the polygon to come back to the first point - it is assumed to be closed. Map *THIS!* closes the polygon, since both the NSCA and Windows specification on polygon outlines are either incorrectly documented or incorrectly implemented. The CERN specification explicitly states "if the path given is not closed...the first and last...pairs will be connected".

For very twisty polygons (say, one that is shaped similar to a sand-filled hourglass), you may get "holes" in the polygon. This is due to the way the system interprets the enclosing area. The best solution is to either simplify the polygon or define overlapping polygons.

```
point URL x1,y1
```

***Map THIS! does not currently support the point method***. The CERN format also does not support the point method. The idea behind a point is to have more than one point in the display and the closest one to the mouse click wins, if the mouse did not click in another area. Points are evaluated last. Using a point will cause the system to ignore the default URL. A later version of Map *THIS!* may support the point method if enough people ask for it.

Image maps are evaluated on the order the areas appear. If the first area covers the entire image, then that will get all the mouse clicks. This is the simplest way of ordering the image map, and creates the possibility of overlapping areas. It also creates the possibility of "dead" areas - areas that are completely covered by previous areas in the list. Map *THIS!* does not currently check for "dead" areas, but a future version will.

Here is an example image map file created by hand:
```
default none.html
poly blob.html 298,93 251,26 300,0 453,0 511,48 511,101 474,65 420,55 358,88
poly table.html 117,96 116,267 172,283 192,299 247,254 242,101
poly rod.html 11,0 26,225 18,261 83,270 109,264 110,97 105,0
poly floor.html 0,383 82,383 82,271 2,267
rect post.html 83,284 180,383
poly railroad.html 175,320 227,383 347,268 345,166
poly stairs.html 223,383 371,261 511,341 511,383
poly dude.html 307,199 245,177 239,115 511,91 511,121 292,144 346,166
```

And here is one created using Map *THIS!*:
```
#$MTIMFH
#$TITLE:Country Lake
#$PATH:c:\src\mapthis\examples
#$GIF:LAKE.GIF
#$FORMAT:NSCA
#$EOH
default tryagain.html
rect door.html 213,296 289,336
circle liferaft.html 499,355 513,367
poly lake.html 637,362 551,366 550,373 545,375 448,366 371,367 347,367 336,367 293,356 256,352 0,356 0,477
642,478 637,365 637,362
# Table
rect lunch.htm 125,308 167,335
rect boat.html 350,335 539,365
rect boat.html 452,295 538,334
```

rect biff.html 424,300 449,333
# The lady in the pink shirt
rect lady.htm 332,275 362,323
rect house.html 87,204 290,338
rect house.html 292,261 325,328
poly roof.html 97,173 88,199 290,201 283,174 97,173
poly roof.html 292,225 292,259 332,257 319,228 292,228 294,224 292,225
# the left mountain
poly mountain.html 0,136 81,197 80,335 0,335 0,216 0,136
# The right mountain
poly mountain.htm 294,205 294,223 324,227 329,317 632,320 638,102 582,57 488,128 469,123 310,200 294,205

As you can see, you get similar results, but Map *THIS!* makes working with the files a lot easier.

# Editing Area Data

When the arrow tool is selected, you can (a) double-click on an area; (b) click once and select the pencil tool; or (c) right-click to show a pop-up menu. Any of these actions will bring up the Region (Area) Info dialog box. This dialog shows information about the area, such as the type, position, and size, and allows you to enter the URL for it, and the optional comment.

Click on one of the hot spots in the image below for some more info:
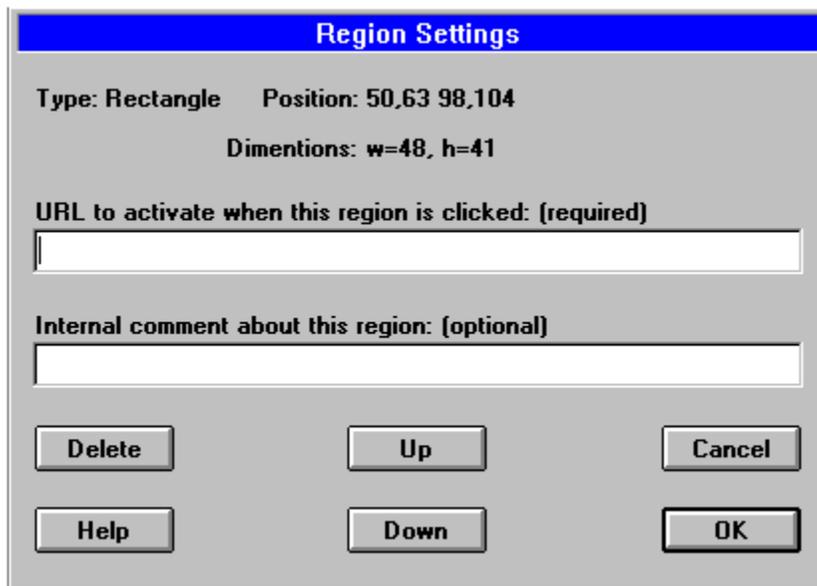
**Region Settings**

Type: Rectangle    Position: 50,63 98,104

Dimentions: w=48, h=41

URL to activate when this region is clicked: (required)

Internal comment about this region: (optional)

| Delete | Up | Cancel |
| Help | Down | OK |

This is the URL that is to be used when the user clicks on this area. Required by the Web Server. You must give it the complete URL to whatever resource you wish to activate.

Comment about this area. This comment is never presented to the user, and the Web Server will ignore it. Can be up to 200 characters long.

This shows what type of area this area is. Rectangle, circle, or polygon. The type of area defines how the server and Map _THIS!_ use the data that is attached to this area. The position and size also reflect the type. This is for informational purposes only.

This is the position of the area. For rectangles, this is the upper-left to the bottom right. For circles, this is the center point. For polygons, this is the smallest rectangle that covers the entire area. This is for informational purposes only.

This is the dimensions of the area. This depends upon the area type. For rectangles, this is the width and height. For circles, this the radius along both the X and Y axis's. For polygons, this is the total number of points. This is for informational purposes only.

Click this to accept the changes.

Click this to reject the changes

Click this to delete the area from the list. You will be prompted for an OK.

Click this to move the area up in the list. Areas higher (lower numbered) are checked first.

Click this to move the area down in the list. Areas lower (higher numbered) are checked last.

# Differences between NSCA and CERN image map formats

Besides the difficulties in getting image map files into the server and getting them working correctly, the image map files are different enough to cause headache when porting from one system to another. Map *THIS!* can read and write both formats - in fact, you can load in one format and save in another!
The differences between the two formats boil down to the way the areas are represented in the lines in the file.
Here's how NSCA shows it:

```
rect http://furball.com 50,23 75,96
```

And this is how CERN does it:

```
rect (50,23) (75,96) http://furball.com
```

Fun, right? Try writing a loader that can handle both formats without any user input!
The "keywords" also differ between NSCA and CERN:

```
NSCA            CERN

default         default,def
rect            rectangle,rect
circle          circle,circ
poly            polygon,poly
point           n/a
#comment        #comment
```

CERN also has a tighter restriction on the circle method: it only allows TRUE circles. CERN takes the center point and a radius; NSCA takes the center point and a point on the edge of the circle (which most people abuse to become ovals). When Map *THIS!* has to convert from NSCA to CERN, it will convert the NSCA "oval" to a CERN "circle" that covers the most area. So if you have a fat oval under NSCA, you will get a LARGE circle under CERN!

# The File Menu

New          (control-N)
Open...     (control-O)
Close
Save         (control-S)
Save As...
Print...      (control-P)
Print Preview
Print Setup...
Exit

```
    END
    POPUP "&Edit"
    BEGIN
        MENUITEM "&Undo\tCtrl+Z",              ID_EDIT_UNDO, GRAYED
        MENUITEM SEPARATOR
        MENUITEM "Cu&t\tCtrl+X",               ID_EDIT_CUT, GRAYED
        MENUITEM "&Copy\tCtrl+C",              ID_EDIT_COPY, GRAYED
        MENUITEM "&Paste\tCtrl+V",             ID_EDIT_PASTE, GRAYED
        MENUITEM SEPARATOR
        MENUITEM "Delete",                     IDC_DELETETOOL
        MENUITEM SEPARATOR
        MENUITEM "Edit Map Info",              IDC_EDITINFO
    END
    POPUP "&View"
    BEGIN
        MENUITEM "&Toolbar",                   ID_VIEW_TOOLBAR
        MENUITEM "&Status Bar",                ID_VIEW_STATUS_BAR
        MENUITEM "Area List",                  IDC_SHOWTOOL
    END
    POPUP "Mapping"
    BEGIN
        MENUITEM "Rectangle",                  IDC_RECTTOOL
        MENUITEM "Circle",                     IDC_CIRCLETOOL
        MENUITEM "Polygon",                    IDC_POLYTOOL
        MENUITEM "Arrow",                      IDC_ARROWTOOL
        MENUITEM SEPARATOR
        MENUITEM "Show all",                   IDC_SHOWTOOL, GRAYED
        MENUITEM "Test it",                    IDC_TESTTOOL, GRAYED
        MENUITEM SEPARATOR
        MENUITEM "Zoom In",                    IDC_ZOOMIN
        MENUITEM "Zoom Out",                   IDC_ZOOMOUT
        MENUITEM SEPARATOR
        MENUITEM "Delete",                     IDC_DELETETOOL
        MENUITEM "Edit Area Info",             IDC_EDITTOOL
    END
    POPUP "&Window"
    BEGIN
        MENUITEM "&New Window",                ID_WINDOW_NEW
        MENUITEM "&Cascade",                   ID_WINDOW_CASCADE
        MENUITEM "&Tile",                      ID_WINDOW_TILE_HORZ
        MENUITEM "&Arrange Icons",             ID_WINDOW_ARRANGE
    END
    POPUP "&Help"
    BEGIN
        MENUITEM "&Contents",                  ID_HELP_INDEX
        MENUITEM "&Using Help",                ID_HELP_USING
        MENUITEM SEPARATOR
        MENUITEM "&About Map THIS!",           ID_APP_ABOUT
    END
END
```

# New Image Map (File Menu)

Selecting this will create a new image map. You will have to select an existing GIF file to use as the image background. See also Open.

# Open existing Image Map (File Menu)

Selecting this will bring up the standard file selection dialog. By default, Map *THIS!* will show only files ending with ".IMP" (for Image MaP). You can select the file type selection box to change it to "all files" in order to get Map *THIS!* to import a "foreign" image map file. See also New, Close, Save, Save As.

# Close (File Menu)

Select this to close the open image map. If the map has been changed since it was last saved, you will be given the option of saving it. See also New, Open, Save, Save As.

# Save Image Map (File Menu)

Select this to save the image map file to the diskette. If the image map is new (untitled), then this will invoke the Save As menu option. See also Close, Save As.

# Save Image Map As (File Menu)

Select this to save the image map under a different filename or to a new location on the diskette. See also
Close, Save.

# Exit (File Menu)

If you really must quit using this totally awesome program, then go ahead and select this...

# Toolbar (View menu)

Use this command to toggle the display of the Toolbar, which includes buttons for most of the commands. A check mark next to the menu item indicates the that the Toolbar is being displayed. See also