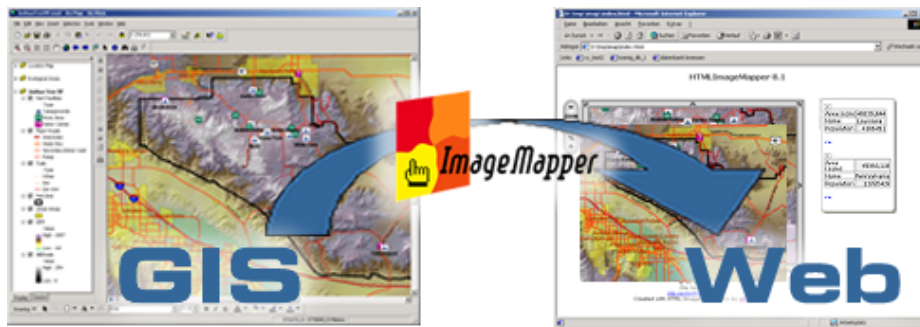


HTML ImageMapper 9.2

Manual



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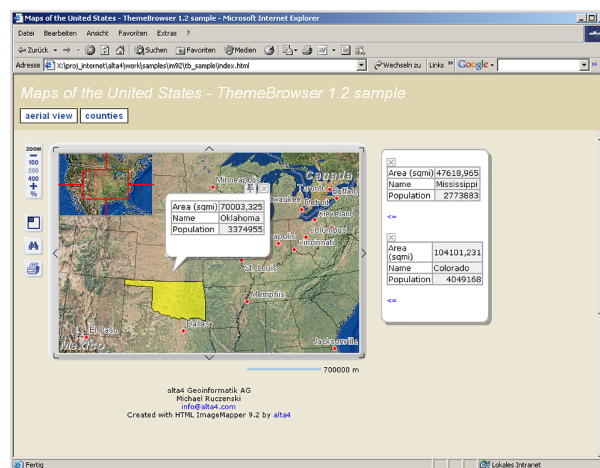
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1 HTML ImageMapper - the Internet Publishing Tool for ArcGIS

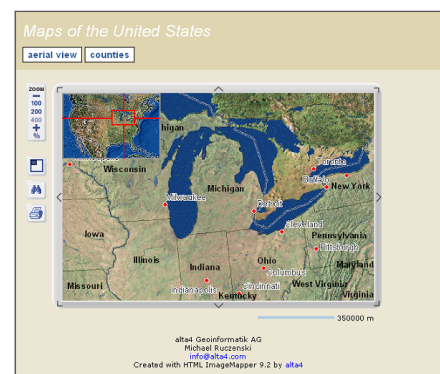
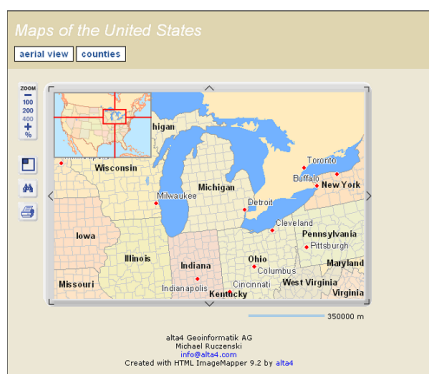
Publishing maps online has great advantages over traditional paper maps:

- reach a broad audience via Internet
- easy to update content to reflect change
- for the end user it's interactive and fun to use
- let the user drill down in content, zoom in, query and explore



GIS professionals already using ArcGIS to create maps now have the right tool to export those maps to online mapping projects keeping exactly the cartography as defined in ArcGIS. With HTML ImageMapper GIS professionals do not need to be web site administrators or programmers to publish maps online.

With HTML ImageMapper you are guaranteed to reach the broadest audience possible. The online mapping projects created can be viewed with a standard web browser without plug-ins required.



Since 1999 HTML ImageMapper has been used to publish maps online by over 1.000 GIS professionals world wide.

With HTML ImageMapper you can publish

- place finder applications
- street maps
- urban development projects
- tourism maps
- election results
- environmental maps
- etc.

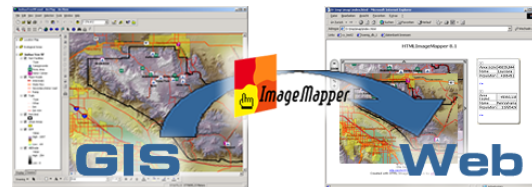
2 Introduction

HTML ImageMapper 9.2 extends ArcGIS with a very easy internet publishing functionality. You can publish your GIS maps as interactive HTML maps which allows the user to zoom in, pan, search, identify, hot-link and much more.

HTML ImageMapper is a very intuitive, WYSIWYG based software which produces astonishing web mapping results within a few minutes. The HTML web mapping project produced by HTML ImageMapper will work without any server side software and also from CDROM. This is the easiest and most cost effective way to share your GIS online with the Non-GIS users who only need a browser to view and interact with your maps.

Benefits include:

- easy to learn
- easy to use
- very cost effective
- powerfull results, rich in features
- no special hardware requirements
- no programming knowledge required
- no web site administration knowledge required
- no software to be installed on the server
- no plug-ins required on the client
- comes with a full year of maintenance



Dynamic display of attributes.

Highlighted Object.

Dashboard

Legend

Overview Map

Zoom Levels

Show/Hide Overview Map

Show Legend.

Show object search window.

Print

Move map section.

Author- und Copyright-information

Scale bar.

Object search window.

Show search results in map.

Search results.

Name	Minneapolis
Administrative Area	Minnesota
Country	United States
Population Class	1,000,000 to 5,000,000

Name	El Paso
Administrative Area	Area
Country	
Population Class	

Suche nach:

Exakter Ausdruck

Beachte Groß-/ Kleinschreibung

Ergebnis

- Illinois
- Indianapolis
- Indiana
- Iowa

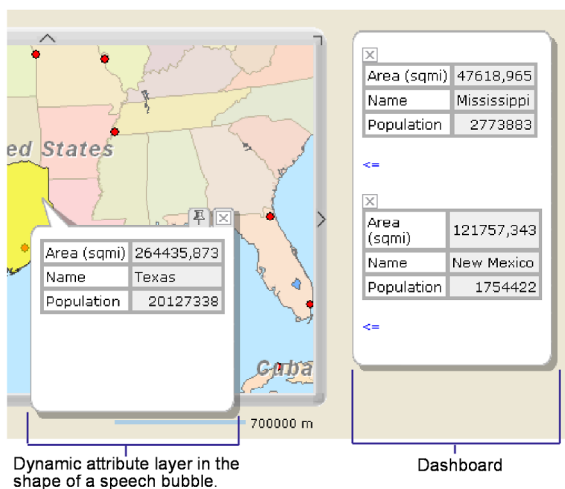
3 What's new?

3.1 What's new in 9.2?

The new HTML output is much more attractive than in previous versions, like GoogleMaps! We believe it is the most practical map style - it is just fun to browse the maps. You can see all the map attributes simply and easily by moving the mouse over the different map features. Of course, with some advanced programming users get customization as they please: Now there is a new batch routine. These two new features are only a few among many included.

Dynamic Attributes

In Version 9.2, the attributes are shown on the fly like in GoogleMaps with the use of speech bubbles. The attributes immediately pop up by moving over a selectable map element. They can be fixed on the spot by clicking, also there several different attributes can be shown at the same time.



Dashboard

There is the pin needle in the speech bubble that can be used to fix attributes on the map, you can also fix them on a dashboard. The displayed information can easily be stored beside the map for comparing attributes and a free view of the map. It also works the other way around: Map features can be found by selecting the attributes on the dashboard.

Batch Routine

For much more effective working, now there

is a batch routine in the version 9.2. With this routine, it is possible to automate your daily work. This becomes handy if you have to update your maps or if you want to design maps with similar map styles. With use of this tool, there will be great continuity in your map projects. Using the Visual Basic Editor, you can remotely start up ArcMap and your HTML ImageMapper.

ThemeBrowser 9.2

This easy to use but nevertheless very useful tool is included in the HTML ImageMapper 9.2 software. It is designed specifically to combine several map projects. Say for example you want to show different map themes with the same extent. This feature spans map projects increasing the amount of available information on any given area.

Easy to Use

In the new version, the HTML ImageMapper dialog is more straight forward. Similar options are now grouped and new features were put in. As in modern web styles, frames are dismissed so the map layout is more clear and easy to use.

Xhtml Compatibility

As expected, the web output from the HTML ImageMapper 9.2 is fully xhtml compatible. Because of this, all maps created with the HTML ImageMapper can be easily and without any trouble included in complex xhtml web projects.

3.2 What was new in 9.1?

HTML ImageMapper 9.1 - the web publishing extension to ArcGIS 9.0 - contained a number of significant improvements in quality and functionality based on our customer's feedback:

- Quality
- GIF and PNG Support, World Files
- HTML ImageMapper API
- User Interface now also in Chinese and Dutch
- XHTML Conformity
- More features in created web mapping applications
- Improved user interface
- Service

Over all more than 50 improvements have been made. As a part of their maintenance subscription, existing HTML ImageMapper users with a valid maintenance contract automatically received HTML ImageMapper 9.1 for no additional charge.

Quality

With HTML ImageMapper 9.1, we have focused on researching and addressing the critical issues our users may face. This work has resulted in much better XHTML conformity, reduced file size of the application, better update service with an automated check-for-update mechanism, many more improvements resulting in software that is easier to use and more robust.

GIF and PNG Support, World Files

Besides JPG format, map images can now also be saved to PNG and GIF. Those newly supported image formats have great advantages over JPG. GIF gives you crystal clear images with sharp edges around text and borders. PNG combines the advantages of GIF and JPG, the best format for continuous data such as aerial photographs, satellite images or any color ramps, while keeping the file size

small and the web site fast in loading images over the web. The map tiling functionality of HTML ImageMapper can now also be used to produce maps for other GIS systems and users hence world files (*.tfw, *.jgw, *.pgw, *.bpw) can optionally be created.

HTML ImageMapper API

The biggest enhancement of version 9.1 is the HTML ImageMapper API which enables developers to more fully integrate maps produced with HTML ImageMapper into existing online applications and web sites or even develop new database driven mapping applications. The key feature is the new Export Database API which exports attribute tables enriched by map location information. Developers can now program a custom search on a database and then bring up the map with the object searched for highlighted.

User Interface now also in Chinese and Dutch

HTML ImageMapper is now also available in Chinese and Dutch. This reflects alta4's desire to market this product internationally. The user interface is also available in English, German, French, Spanish, Swedish and Czech.

XHTML Conformity

In building version 9.1 of HTML ImageMapper we have taken a forward stance and support the World Wide Web Consortium's first recommendation for XHTML which became the official recommendation in 2000. XHTML successfully allows a vastly larger percentage of browsers or code parsers to properly parse the output map files produced by HTML ImageMapper. This means more people can see your site in the way you meant for them to see it, and fewer people see your site with unintentional map elements strewn all over their page.

More features in created web mapping applications

The web mapping pages that can be produced with HTML ImageMapper 9.1 have been enriched: the over view map is now equipped with cross hairs showing the actual position and zoom extent of the main map. The printable output has a nicer layout and includes the

attributes of the selected object on the map. Now it is possible for the end user to search for something, find it on the map, highlight it and print it together with attribute information.

Improved user interface

The user interface has become easier and smarter - automatically remembering settings made before and a new feature that synchronizes the map with the current ArcMap document.

Service

Last but not least, alta4 improves customer service by delivering an automated feature that checks for updates in the new product. Whenever there's a new version or service pack available for download from the website www.alt4.com users will automatically be informed when using the software.

3.3 What was new in 9.0?

The new version 9.0 of HTML ImageMapper reflects many changes and improvements requested by our customers. The most significant improvement is the new software module "ThemeBrowser 1.0" which is a stand alone software component delivered with either ImageMapper 9.0 or 3.5.

ThemeBrowser

The ThemeBrowser enables you to enhance your interactive internet maps by allowing the user to simultaneously view thematic maps. Now you give your audience the possibility to look at the several different maps of the same geographic extent and toggle between different thematic views. You as the map author just export several ImageMapper projects from your ArcView GIS projects, let's say one showing environmental themes, the other urban planning themes and the third demographic themes. The ThemeBrowser combines separate HTML maps into one projects. This is just like adding layers in your GIS but the end user can do it in their web browser without the need to install additional software. The end user can zoom into the geographic location of their desire, then select the appropriate button to switch between the

thematic views of the zoomed in area. ThemeBrowser is also very suitable for displaying temporal changes, for example, one map shows aerial photographs from the 1950's, the other from the 1990's and so on.

ThemeBrowser has a clear and intuitive user interface. Themes created by ImageMapper 3.5 or 9.0 can be selected and custom text corresponding to buttons can be added by the user.

You have the option to configure a custom output or use predefined settings.

Higher performance

Our users have helped us to identify problems with old versions in order to improve performance, some examples of these improvements are:

Improved conformity to W3C-HTML 4.01-standard

A better accommodation to W3C-standards has been improved to guarantee a better compatibility with W3c standards of projects created by HTML ImageMapper 9.0.

General

With the simultaneous release of HTML ImageMapper version 3.5 for ArcView 3 and 9.0 for ArcGIS 8 and 9, ImageMapper versions now have the same features though different user interfaces.

3.4 What was new in 8.4?

Zoom to Objects

In response to the many requests we received from users we've decided to re-install the Zoom to Objects feature. Zoom to objects allows the user to zoom from the main map directly to the extent of one of the objects. This feature is useful for such things as viewing a parcel of land or street maps where you want to give the user the option to zoom directly to a specific parcel or street. A link list with all object names for objects which can be zoomed to will be generated automatically. The hierarchical zoom by the factor of 2 will remain the other alternative.

Export only specific attributes

You can now easily choose the attributes you

wish to export by marking the corresponding box next to the attribute. This is a very useful feature in case you want to publish only a subset of attributes you want to share with the public.

Search for Objects

The Search for Objects feature has been improved in the way that the search result will not only show zoom to and highlight the object on the map, but will also automatically show its attributes

Define and control web design by CSS

The output HTML design will be mostly controlled by a `format.css` style sheet file which you may edit later on to change the output design without having to reprocess the maps by HTML ImageMapper. CSS style sheets conform to W3C and are supported well by all of the newer browsers like Internet Explorer 5.5 or 6 and Netscape 7.

Language Editions

Besides English, HTML ImageMapper now also ships with Spanish, French, German Swedish and Czech language versions. The language may be switched on the fly while running the software. The language editions not only affect the HTML ImageMapper graphical user interface but also the output HTML pages you create. All map tips and tool tips will be exported in the language of your choice.

Theme Browser

ImageMapper now comes with a theme browser which enables you to combine several GIS projects into one web page. For example you may want to show a map of the present and a map for the future. Now you can run HTML ImageMapper twice to create these two views and then combine the output into one web page where the user can switch between views, independent of zoom level.

Keeping the Settings

All settings you make in the ImageMapper dialog will now be saved with the extension and are available the next time you run the extension.

Loading and Saving Batch Files

All settings can now be saved to batch file which you can load again at a later time. This is valuable feature because you may have several projects you're using the extension with and want to recover your old settings.

Specify Output Map Size in Pixels

Now you have two fields available to specify the output map size's width and height in pixels. This is helpful if you need precise output, say for example when you want to integrate the map in an existing web site and your web administrator gives you only a certain frame size for the mapping application.

Support of individual Legends

A legend you may have created in an ArcGIS layout will now be exported as well.

Joined Tables

ImageMapper now supports joined tables. Attributes from a joined table will now also be exported together with those of your primary table.

Text and Number Alignment in Tables

Text in attribute tables will now automatically be aligned left whereas numbers will be aligned right (like in Microsoft Excel). This improves the functionality of your tables by making cell values easier to compare.

Dynamic Call of Output

Integration in ImageMapper Output in other Web Applications: You can now easily integrate the maps produced by ImageMapper in other internet applications on your server. For example, if you have a database search, you can now provide the user with a link to the map of a specific object. This works essentially by passing the object's ID to the `index.html` page of the ImageMapper page.(e.g.: `...\\index.html?pagename=20002&attrname=USA`. The map `m20002.html` is activated and attribute USA is highlighted).

Further Improvements

- Opening the Search Pop Up Window, the mouse pointer will automatically be placed in the search window (like in Google).

- The Overview map will remember its extent when panning or zooming in the browser. When the user turns the overview map off, it will stay off until the user turns it on again. In the file `allmodule.js`, which you can find in the map-file, you can modify the settings of the overview map in line 8.
- Highlighted objects will remain highlighted when panning or zooming in the browser.
- Large GIS applications with more than 17.000 objects are now fully supported. This is useful in case you want to publish large parcel maps.

You'll find many examples how ImageMapper is used by our customers in our map gallery available online at <http://www.alta4.com>.

3.5 What was new in 8.3?

Object search

The object search feature allows the search for objects based on their attributes. The search field opens in a separate popup window. Users can type in a string and all terms containing this query string will be displayed in a result list. Double clicking one of the results will display the corresponding feature on the map.

Numerical scale input

Besides selecting the level of detail of your map using the zoom tools you can now also type in the exact scale you wish to use.

Print feature

By using the print feature a print preview will be created displaying the current map detail, the legend, and the overview map. After entering a title for the document you will receive a completely formatted print preview.

Layout template

ImageMapper 8.3 comes with an additional HTML template to enhance your possibilities in map layout.

Hyperlink to URL and email addresses

Hyperlinks are automatically integrated in URL and email addresses which are displayed in the attribute table. Clicking on a URL will

open a new browser window. Clicking on an email address will launch your default email program.

BMP export

Now you can select between JPEG and BMP format fo exporting your map images.

Browser compatibility

ImageMapper 8.3 supports InternetExplorer 5, Netscape 4.7, Mozilla 1.1, Opera 6.04 and all higher versions of these browser types.

4 Installation and licensing

- System Requirements
- Installation
- Unkeying the demo version
- Loading HTML ImageMapper 9.2 in ArcGIS
- Removal

4.1 System Requirements

System-requirements on your computer:

disk space	about 3 MB
operating system	Windows 2000/NT/XP
GIS Software	ArcGIS 9.0 (ArcView, ArcEditor oder ArcInfo) or higher (ESRI)
Browser Software	Netscape 4.7 or higher, Microsoft Internet Explorer 5.x or higher, Mozilla Opera Support of JavaScript
installation	main user rights required

4.2 Installation

Before installing HTML ImageMapper 9.2 please read the "What's new" chapter. HTML ImageMapper 9.2 is an internet GIS extension for ArcGIS 9.0 (ArcView, ArcEditor or ArcInfo) and higher.

4.2.1 Install ImageMapper 9.2

1. Please make sure, that you have the right to install software on your computer which often requires you have administrator or main-user privileges. Uninstall earlier versions from HTML ImageMapper, if you have installed them on your Computer.
2. Uncompress the download ZIP file by double-clicking on the file in your explorer. You need WinZip or any equivalent data compression software to do this. (Download WinZip for free from <http://www.winzip.com>).
3. Double-click on setup.exe in Windows Explorer to start the setup wizard. The software will be installed in the correct directory and you will prompted to provide your license number.

After downloading the demo version (<http://www.alta4.com>) of HTML ImageMapper you will receive a license number by email or by invoice from alta4.

4.3 Load HTML ImageMapper in ArcGIS

1. Start ArcMap.
2. Click Extensions in the menu Tools.
3. A window pops up with the available extensions.
4. Check the checkbox next to HTML ImageMapper 9.2.

Note: If HTML ImageMapper is not listed in the dialog, the installation has not been successful. A potential cause for this is that you have tried to install HTML ImageMapper without having main user rights on your system.



The HTML ImageMapper icon appears in the GUI of your ArcMap. If no data has been added to the map document, the icon will be grayed out and inactive. It will be colored and activated as soon as you add data to the view.

If you are using a Demo- or an Edu-version, a dialog will pop up each time you open ArcMap after the installation. **Click "Switch" or "Continue".**

4.4 Unkeying the demo version

If you are using the demo- or the edu-version and would like to change to the commercial version, you can use the dialog that appears each time you start ArcMap with your old version.

1. Click "register and load".
2. Type in your name and the license number you got from alta4 after you purchased the commercial version. The dialog will not appear again.

4.5 Uninstall

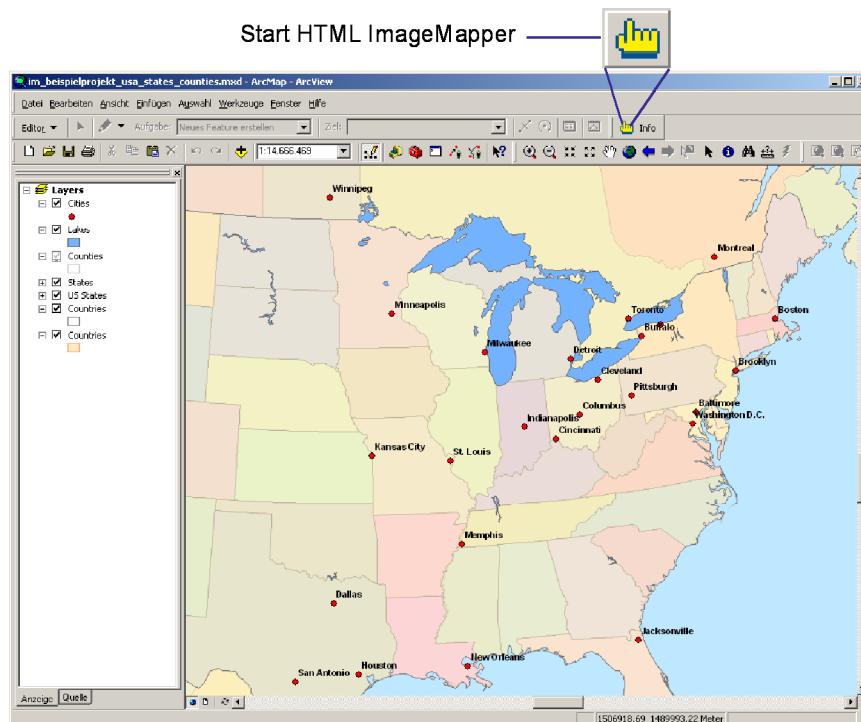
You can uninstall HTML ImageMapper as other Windows software by using the Windows Controlpanel.

1. Close ArcMap if the program is still running.
2. Open the windows start-menu (at the left bottom of your desktop) and select "Settings" > "System" > "Software".
3. Select the HTML ImageMapper version you wish to remove. Click "Alter/Remove".

5 Quickstart Tutorial

- Offers a short and quick introduction to HTML ImageMapper 9.2
- Demonstrates the most important functions
- Guides you through HTML ImageMapper 9.2 wizard step by step

5.1 Start HTML ImageMapper



Open an existing mxd-file or create a new map document in ArcMap.

You can choose the right map section by zooming and using the pan tool. Make the view active and click the HTML ImageMapper icon in the GUI.

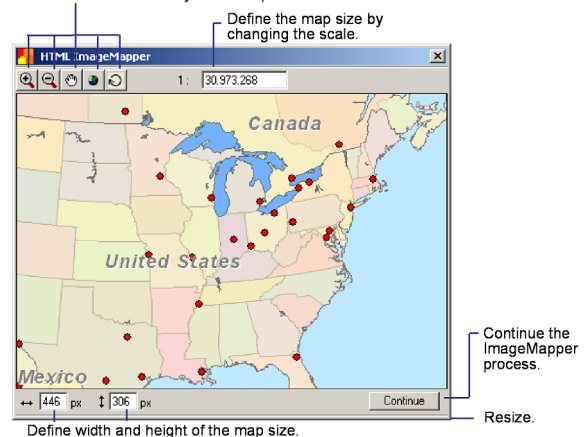
Note: ImageMapper is only available in the Data View, not in Layout View.

5.2 Map Extent

A dialog window appears, which shows the map extent in the way it is displayed in your ArcGIS view.

HTML ImageMapper works with the "What-you-see-is-what-you-get" principle: The map on the HTML pages in the browser will be displayed in exactly the same size with exactly the same map extent that you choose in this window. So make sure to adjust the map in the way you want it to look like later.

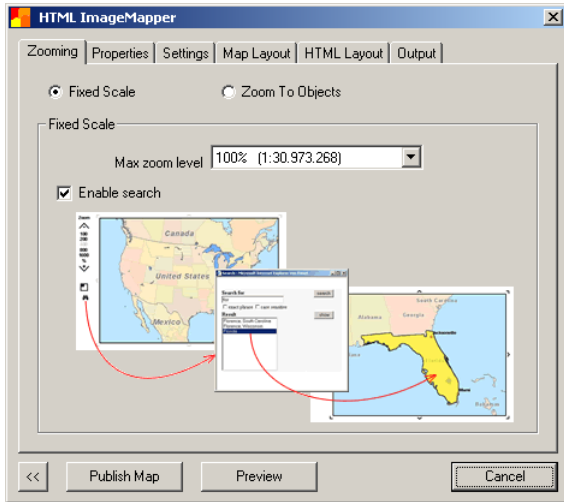
Use these buttons to adjust the map view.



Use the pan and zoom tools to define the map extent. Click and drag the edges of the map window to change the output size of the map. Click the button **Continue** to continue with the HTML ImageMapping process.

5.3 Zoom

Select the maximum zoom level and enable or disable the object search feature. Choose between Fixed Scale or Zoom to Objects.



Choose Fixed Scale. Select "200%" and enable object search.

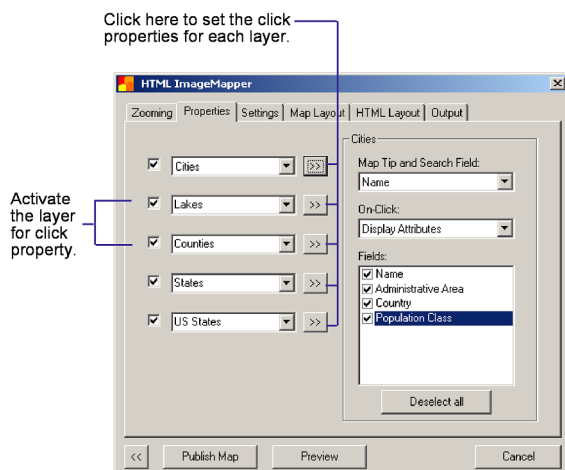
For this example, we recommend a zoom level no higher than 200% to keep the processing time short. By enabling object search, users can search objects by their names in the HTML output.

5.4 Properties

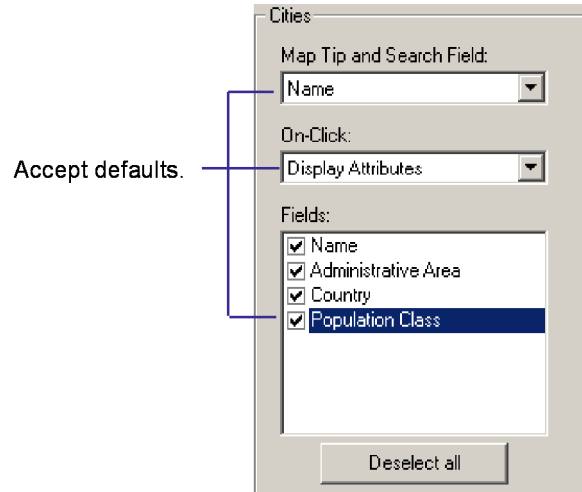
Click on the tab "Properties". Choose what will happen when the user clicks on an object in your map.

Uncheck some checkboxes, but leave two of them checked.

The unchecked layers will not be clickable in the map.



Click on the button on the right side of a checked layer. You will get a pull-down menu to select the click properties for this theme. Accept the default for the map tip field.



A map tip is the text which is displayed in a small yellow box next to the mouse as it hovers over a clickable area. By default the first field that contains the word "NAME" is used for the map tip field. When the user for example moves the mouse over a city symbol, the name will be displayed in a small yellow window. You can also use any other field as map tip field.

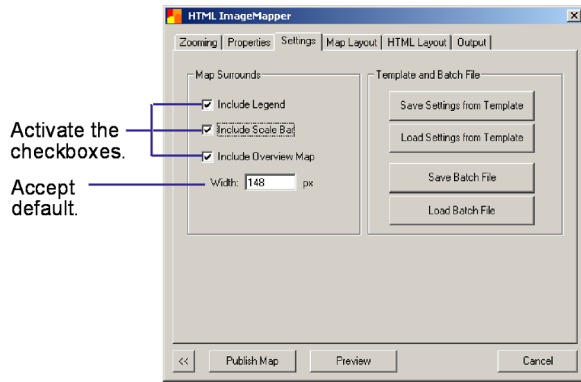
Accept the default "Display Attributes" in the "Properties" pull-down menu.

This is the most common setting, which shows your web users the attributes of your objects, when they click on them. It was new with version 8.4, that you have the possibility to choose attributes which should be exported.

5.5 Settings

Click on the "Settings" tab.

In the "Settings" tab you can add more elements to your map and select the map alignment and quality.

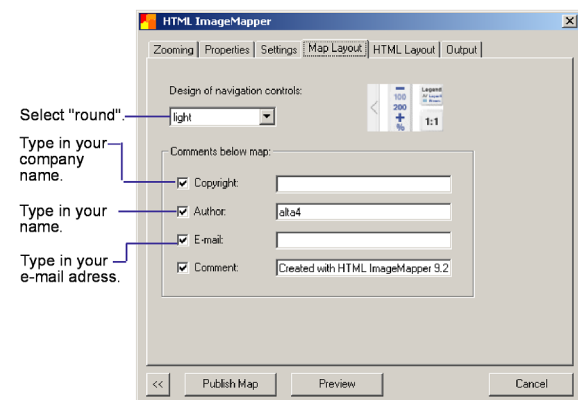


Check the checkboxes next to "Scale-bar", "Include Legend" and "Include Overview Map" in the group "Map Surrounds". Accept the default for the width of the overview map.

5.6 Map Layout

Click on the tab "Map Layout".

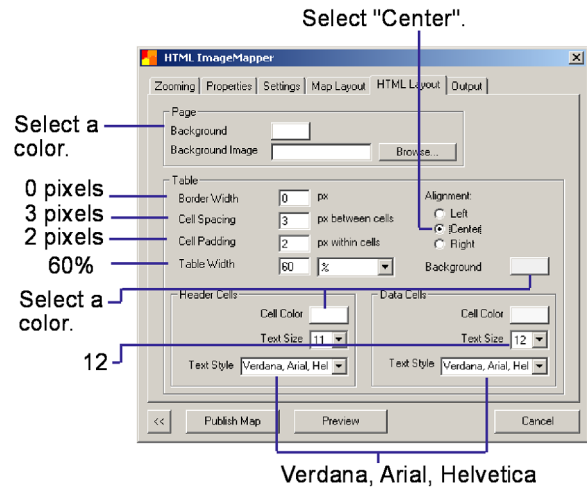
Select "simple" from the pull-down menu to change the design of the navigation control.



In the group "Comments below map" you can type in your company name in the text field of "Copyright". Now add your e-mail address in the field below. Activate the checkboxes to display the copyrights information below the map.

5.7 HTML Layout

Click on the tab "HTML Layout".



Here you do the formatting of the page and the attribute table. The HTML Layout tab is basically organized in two groups: "Page" and "Table". The group "Table" also includes the subgroups "Header Cells" and "Data Cells". All terms are explained in more detail in the chapter "Description of all Functions".

Select a background color for the page. Select the following settings in the "Table" group:

- Alignment: center
- Border Width: 0 pixel
- Cell Spacing: 3 pixel
- Cell Padding: 4 pixel
- Table Width: 60%

Select a background color and determine how the grid will be displayed.

Select a background color in the group "Header Cells". Set in the same group the following parameters:

- Text Size: 12
- Text Style: Verdana, Arial, Helvetica

Now select a background color in the group "Data Cells". Use a different color for the header cells and the grid. Also select the following parameters:

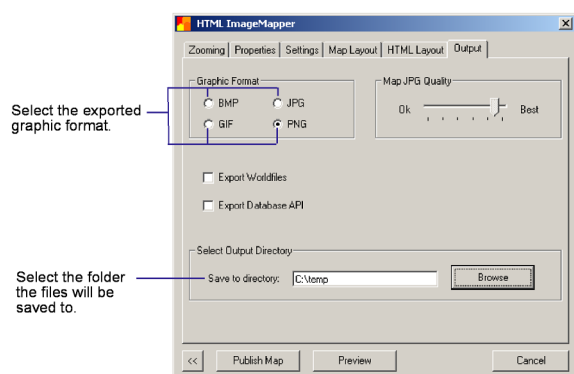
- Text Size: 12
- Text Style: Verdana, Arial, Helvetica

Use the "Preview" button on the bottom of the page to view the map and an example table. Close the preview to return to the dialog. Change the table format if you're not satisfied with the table layout.

5.8 Output

Click on the "Output" tab.

In the "Output" tab you can select the directory where you want the generated files to be saved, select the output format of the graphic files and change the quality of the JPEG files.



Select the output directory.

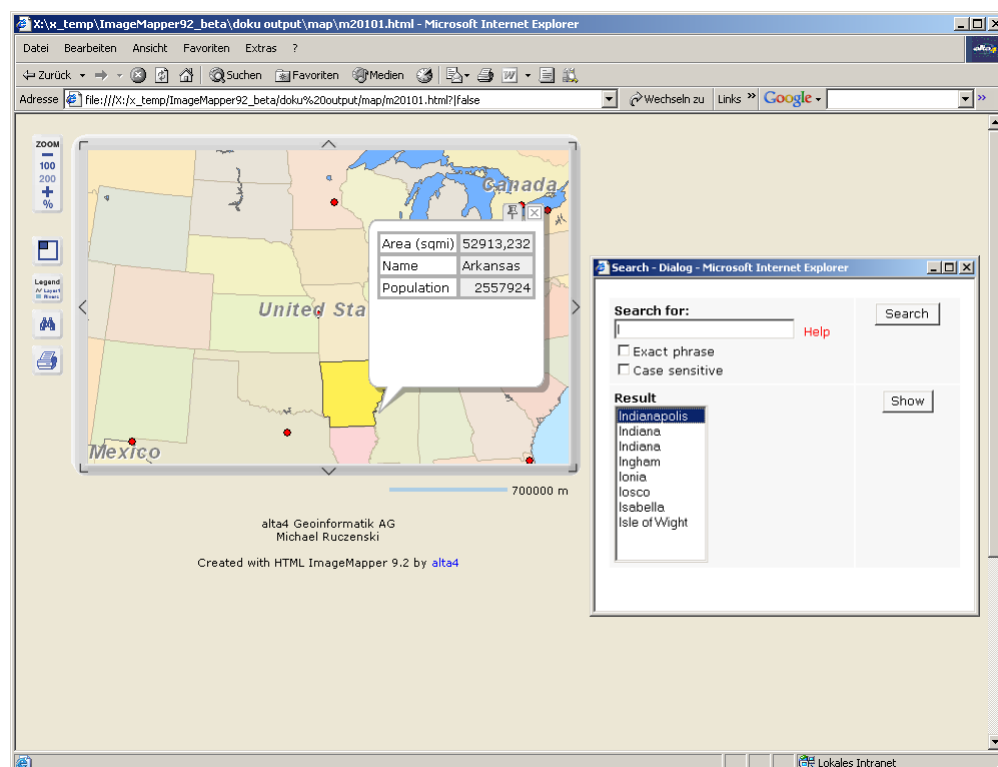
Select the graphic format PNG.

5.9 Create the Map

Click on the "Create Map" button on the bottom of the page to generate the HTML pages. As soon as the processing is done you will be asked if you want to view the pages now or later.

Click OK.

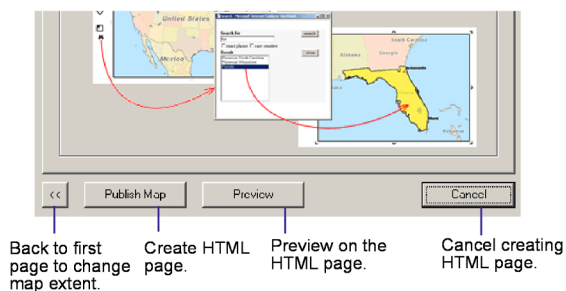
Your standard internet browser will start automatically and will show the HTML pages you've just created.



6 User Interface

- Description of the three main buttons
- Map Extent
- Zooming
- Properties
- Settings
- Map Layout
- HTML Layout
- Output
- Info Button

6.1 Three main buttons



6.1.1 Create Map

With this button you create the HTML pages and save all necessary files in the directory you selected. The following subdirectories are created automatically:

- /att for the attribute files
- /map for the map files
- /nav for the navigation files

If you defined hotlinks as a click action for one of your themes, the following subdirectory will also be created: /hot for the hotlink files.

If you export database API files an additional /dbapi folder will be created.

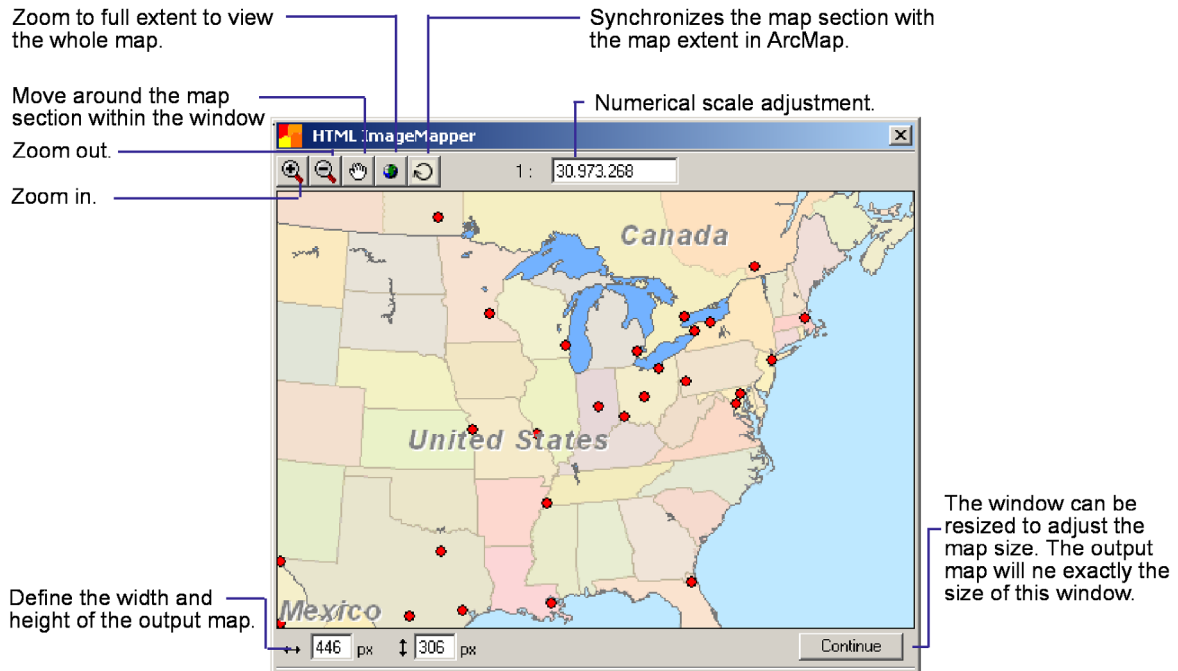
6.1.2 Preview

This allows you to preview the output in your default web browser. We advise you to preview your layout before creating the map. You might want to make changes after viewing the preview. The preview shows the map, all other elements from the "Settings" tab and one attribute table. However, the click functions are not available in the preview.

6.1.3 Cancel

Use this cancel button to stop the HTML ImageMapper dialog. The map will not be created.

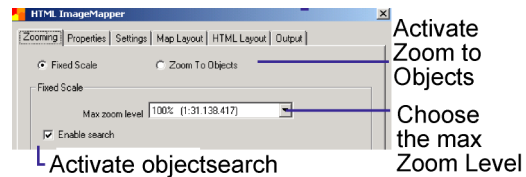
6.2 Select the Map Extent



In this window you can select the exact map extent and size that will be displayed on your HTML page. By default the map is displayed in this window in the way it is in your view in ArcMap. You can use the same pan and zoom tools as you can in ArcMap. The refresh button synchronizes the map extent in the ImageMapper dialog with the one in ArcMap. You also can specify the map scale. You can resize the window by clicking on one edge of the window and holding down the mouse key while you move the mouse to change the size of the map. Be aware that the size of this window is the same as the size of the map on the HTML pages you create.

When you have finished adjusting the map extent and dimensions click the **Continue** button to continue to the creation process. HTML ImageMapper follows the "What-You-See-Is-What-You-Get" principle. Use this window to define the size of the output map, its extent, and cartography. HTML ImageMapper uses the same scale dependent display of themes that are defined in each of the theme's properties dialog in ArcMap.

6.3 Zooming



You can choose between two kinds of zooming: Fixed Scale or Zoom to Objects.

6.3.1 Fixed Scale

The Fixed Scale option allows the user to zoom to all areas and objects in the map within fixed zoom levels. You can choose between pre-set zoom levels: 100%, 200%, 400%, 800% and 1600%.

100% The map is exported with the same dimensions as you set in the "Map Section" window.

200% Generates additional maps at the 200% zoom level. If you want some themes to be visible only in certain zoom levels, you will need to make this setting in ArcGIS in the layer properties dialog box.

Please note that the processing time increases by a factor of approximately 3 to 4.

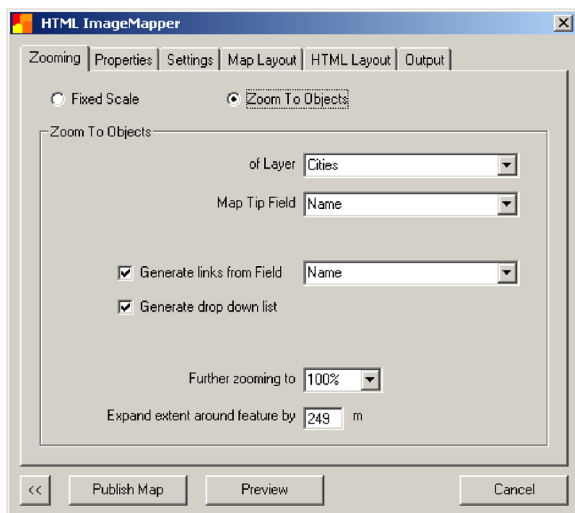
400%-1600% Note that the processing time increases exponentially. Please be patient while the necessary files are created with zoom levels of 400% - 1600%.

6.3.2 Enable search

The Object Search adds search capabilities to the HTML output. Search works on the map tip field of each clickable theme (see the properties menu).

6.3.3 Zoom to Objects

This option generates a zoom to a selectable object. You can click on the object you would like to zoom to either in the overview map, in a list or in the main map. For example you could zoom from the map of the United States to the state of Indiana. As soon as you select the Zoom to Objects option another dialog pops up.



Zoom to Objects of Theme

All layers visible in your view appear in the pull-down menu. Here you can select the layer that will be zoomed to in the map.

Generate Links

This function generates a list with links or a drop-down menu through which the user can select objects from outside the map. The list will appear on the right side in the document. The user can zoom to an object when an object is selected from the list. Use the pull-down menu behind "generate links from field"

and select a field from the attribute table to name the links. In our example we used the "NAME" field.

Further Zooming

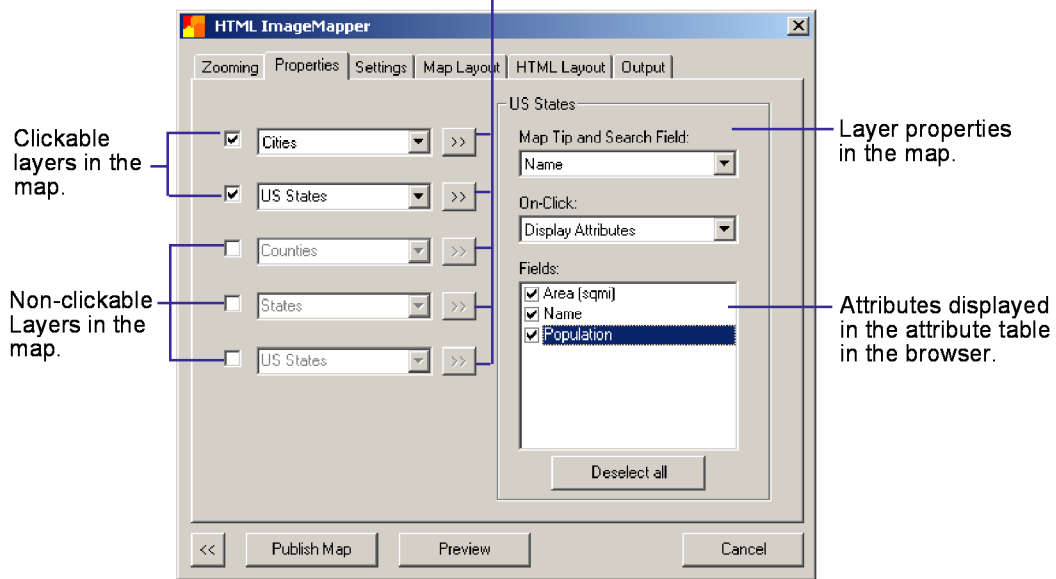
There's the option to zoom even further to the object after the Zoom to Objects zoom level. You can choose between the 200%, 400%, 800% and 1600%. Again be aware of the processing time.

Extent around Feature

You might want to see not only the selected object in the map but also the surroundings. Here you can define how much of the area around an object will be visible in the map when you use the zoom to objects function. In this example 249m around the feature are visible.

6.4 Properties

These buttons display the menus on the right side for each layer.

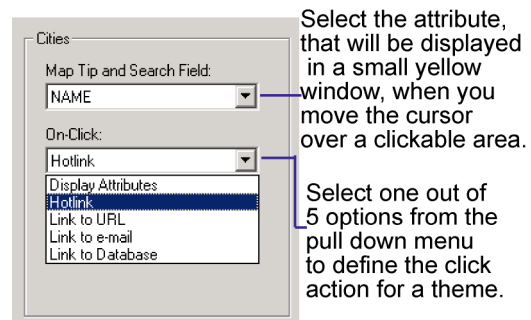


The "Properties" tab offers the option of defining the click properties for each layer. Here you decide what will happen if the user clicks on an object in the map. Up to 5 feature themes are clickable. Those themes are also called hyperlink themes. The number of available feature themes depends on the number of feature themes you added in your Map-Document.

The layers "Counties" and "States" were unselected by un-checking the checkbox. If the user clicks on objects that belong to one of those themes, nothing will happen. The buttons next to the pull-down menus of the themes "Rivers", "Lakes" and "States" are grayed out. For the other themes the button is clickable and displays further menus in the frame on the right side.

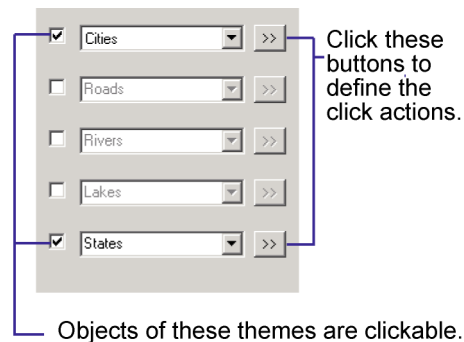


A **map tip** is the text that is displayed in a small yellow box when you move the mouse over a clickable area. Additionally, the map tip field is the same attribute of a theme that will be used for object search.



Select the attribute, that will be displayed in a small yellow window, when you move the cursor over a clickable area.

Select one out of 5 options from the pull down menu to define the click action for a theme.



Objects of these themes are clickable.

Note: Netscape4 is inconsistent with displaying map tips. Map Tips always work with Internet Explorer.

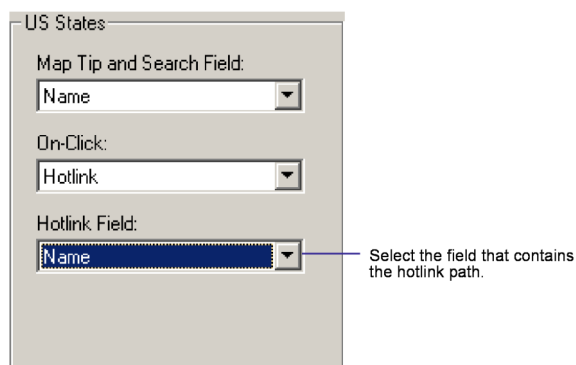
The "Properties" pull-down menu offers five different click actions you can use with your themes.

1. Display Attributes

This function exports the attributes of all records within the view extent to HTML tables. The author can select the fields to be available in the browser by clicking on or off the checkboxes. If the table contains a large number of fields it is often easier to use the "Deselect all" button and check the boxes of the few fields to be exported. The attributes immediately pop up by moving over a clickable map element. Attributes can be attached to a location by clicking. In fact, several different attributes can be shown at the same time.

2. Hotlink

You can hotlink to any web compatible multi-media files such as GIF-, JPEG-, or PNG-Images, MPEG or AVI movies, WAV or MP3 sound files etc. Those files must be referenced with the file name in the hotlink field of your attribute table. (Look for the hotlink online help in ArcGIS) You can specify this field in the pull-down menu "Hotlink Field" as soon as you select "Hotlink" in the upper pull-down menu.



After the output files have been generated you will need to copy the hotlink files into the /hot directory. A pop-up window will remind you to do so after the HTML ImageMapper project has been processed.

3. Link to URL

A click on an object in the map will automatically open the website defined by

this URL in a new browser window. The complete path name has to be written in a field of your attribute table. This field can be chosen in the "Link to URL" pull-down menu. If the URL does not start with http:// check the "add http" checkbox below.

4. Link to e-mail

This feature is comparable to "Hotlink" or "Link to URL". A click on the map opens the user's default e-mail program with the e-mail address specified in the email field of the attribute table.

5. Link to Database

You can add links from your database on your webserver. The default is: `path/filename?attribute=<<fieldname>>` To create the link to your database, replace path/filename with a valid path to the file, you wish to establish the link to your database from. Fill in your own variable name instead of **attribute** behind the path. You need to replace **fieldname** by a field in your attribute table.

For example:

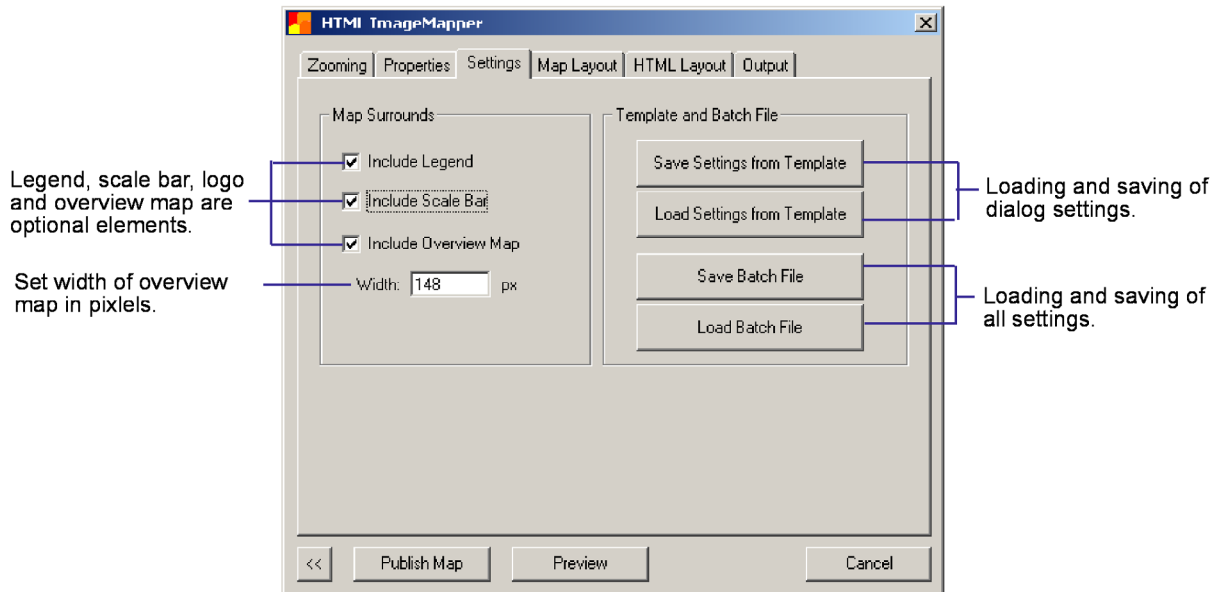
```
showattributes.php?feature_id=<<FID>>
```

where FID is a field name in your attribute table.

Tip: You can find all field names in the Map Tip pull-down menu above.

The referenced file will be displayed in the browser after a click on one of the objects. Link to a database has the advantage of always displaying the most up to date information to the user. For instance you might want to show the user climatic data that changes every day. Changes are only necessary in the database. You do not have to generate the HTML page all over again. Contact your webmaster if you need more help to link databases to your webserver.


6.5 Settings



6.5.1 Map Surrounds

Legend: Automatically generates a legend which can be accessed through a button on the output web site that opens the legend in a popup window.

Include Scale Bar: A scale bar will be displayed under the lower right corner of the map.

Overview Map:  Creates an overview map that will be displayed in the upper left corner of the map. The overview map shows an extent rectangle where the user can see which part of the overview map is shown. The overview map is available from zoom level 200% to 1600%. The width of the map can be defined in pixels in the text box below. The default depends on the size of the map.

6.5.2 Template and Batch file

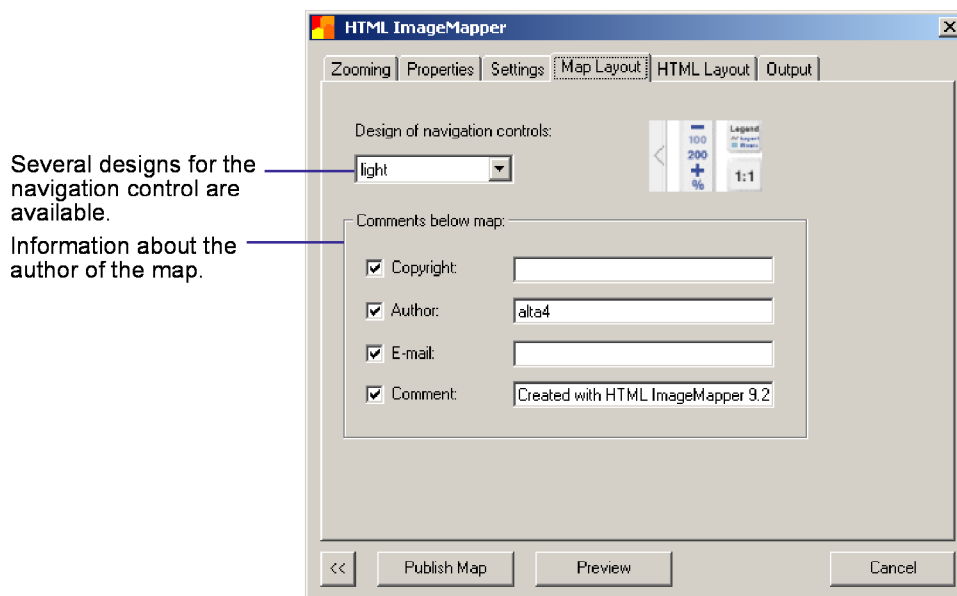
Save/Load Settings from Template:

Save all settings from the Tabs "Settings", "Map Layout" and "HTML Layout". With the loading of these settings you create several alike looking ImageMapper projects and save the time of clicking through the dialog each time.

Save/Load Batch File:

In a batch file all settings from the HTML ImageMapper dialog are saved, including map extent and zoom levels. The usage of a batch file allows the automated processing of your HTML ImageMapper projects. Read Chapter 12 to learn how to run the batch mode using the Visual Basic Editor.

6.6 Map layout



6.6.1 Design of navigation control

Several designs for the navigation control are available. A preview of the design is displayed on the right side of the pull-down menu.

copyright:

default: ©[ArcView Licensed Site] Add the name of your company here.

author:

default: [ArcView Licensed User] Add your name here.

e-mail:

You can add your e-mail address here. It will automatically be made a clickable reference to your e-mail address.

comment:

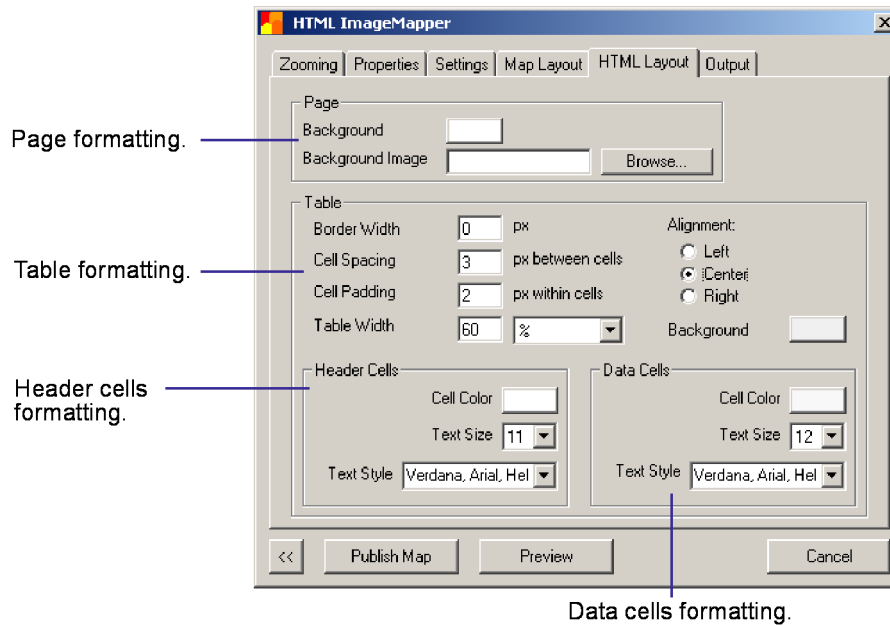
default: Created with HTML ImageMapper 9.1 by alta4. If you are using the demo- or edu-version you are not able and not permitted to make any changes in this field. Users of the commercial license can add more information below the map. These are aligned to the center.

6.6.2 Add your URL to the comment field

If you'd like to provide a hyperlinked URL, simply include an HTML tag such as:
`[My Web Site]`

You can use the default in the comment box as an example.

6.7 HTML Layout



Specify the HTML page design here.

6.7.1 Page

You can change the background of your HTML pages by selecting either a background color or a background image. The color dialog box pops up as soon as you click the button next to **Background**. Use the button **Browse** to specify your image. The background image always has priority. Should you select both a color and an image, the background color will be ignored.

6.7.2 Table

The width of the table can be selected. You can specify either an absolute size in pixels or a percentage of the parent frame, when you specify the table width. If you choose for instance a width of 60%, the table will fill 60% of the table frame or the popup window.

The terms Border Width, Cell Spacing, and Cell Padding are illustrated by the demo table on the next page. The background color of the cells as well as the background color of the table can be selected. The background color of the table is the same as the color of the grid.

6.7.3 Header and Data Cells

The available formatting menus for the header and for the data cells are alike. The settings for background color, text size and text style only apply to different cells.

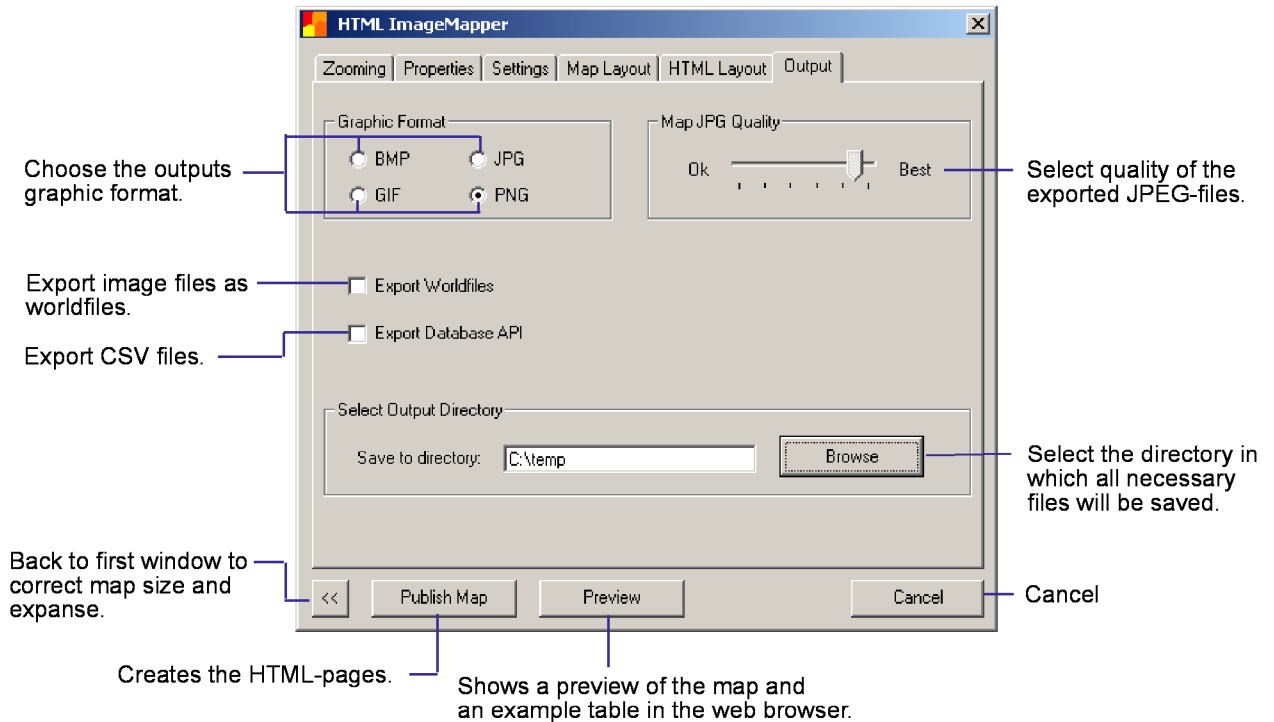
- Text Size: 8-17 are available text sizes.
- Text Style: Each choice consists of three alternative fonts. The display in the browser depends upon the fonts that have been installed on the users system. The first font in a series has priority. If it is not installed, the browser looks for the next font in the series.

The diagram illustrates an HTML table with various styling attributes. The table has a yellow background and a red border. The first row is a header with a red background, and the remaining rows are data cells with an orange background. Annotations point to specific styling features:

- Table Width:** A horizontal line above the table indicates its width.
- Background Colour:** Points to the yellow background of the table.
- Border Width:** Points to the red border of the table.
- Cell Padding:** Points to the space between the text and the cell border in the first data cell.
- Cell Spacing:** Points to the gap between the two columns of the table.
- Text Size & Text Style Header Cells:** Points to the text in the header row.
- Text Size & Text Style Data Cells:** Points to the text in the data rows.
- Cell Colour Header Cells:** Points to the red background of the header row.
- Cell Colour Data Cells:** Points to the orange background of the data rows.

FID	14
AREA	19369,415
CODE	MX04
NAME	Campeche
POP1990	535185
POP90_SQMI	27,28666
P_URBAN90	70,02438
P_ING_LANG	19
P_EMPL_SEC	19,4
HSE_UNIT90	107894

6.8 Output



6.8.1 Graphic Format

You can select between the output graphic formats JPEG, BMP, PNG and GIF. JPEG generates files with a smaller file size by applying a compression algorithm. Therefore it's recommended to use this format for on-line publishing. The BMP format creates graphic exports without any loss in quality but they have larger file sizes. This format is recommended for generating maps on local drives, CD-ROMS or within an intranet. BMP is not supported by all browsers.

6.8.2 Map JPG Quality

You can adjust the quality of your map. Your view is exported as a number of images in the JPG format. JPG is a compressed data format. The higher the compression the lower the quality of the maps you create and vice versa. The default is 90%, which is a good compromise between quality and file size. The map tip field that appears as the mouse hovers over the slider gives you the percentage.

6.8.3 Export worldfiles

You can export the image files additionally as worldfiles. For example if you select PNG as the exported graphic format the images will also be exported as PNW. Worldfiles contain additional information that allows you to load the images into a GIS and process them further. Included in the files are geographic coordinates and the pixel size. This determines the exact position of an image on a map.

6.8.4 Export database API files

The export of database files enable users with programming skills to make various customizations. Two files are exported for each layer. They contain the table definition and the attribute table with a reference to an image file. This image file contains the map section in which an object of a layer is positioned and displayed best.

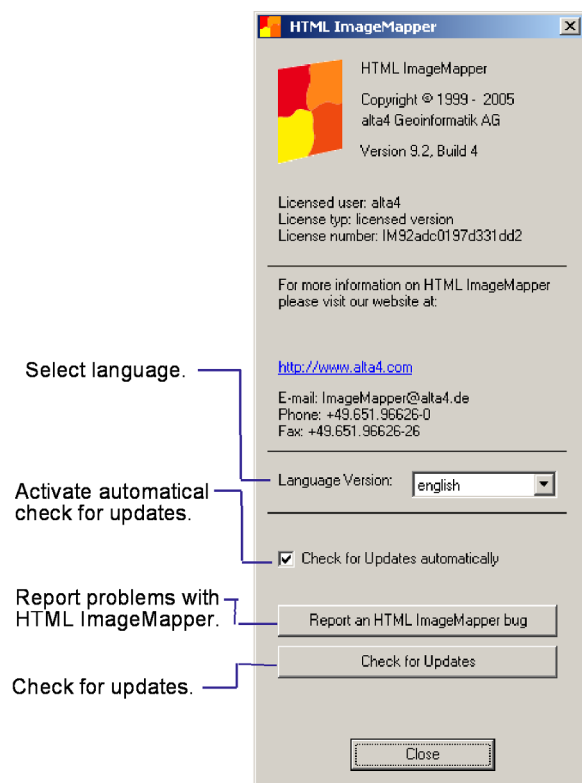
An example for the usage of database API files can be found in the back of this manual and on <http://www.alta4.com>.

6.8.5 Select Output Directory

Browse to the directory you want the created folders and files to be saved to. By default the home directory of a user is selected. This information is stored in the user profile.

6.9 Info Menu

The Info dialog is available through the Info button in HTML ImageMapper toolbar. It provides the HTML ImageMapper version number, copyright and contact information. You can change the interface language, activate the automatically check for updates feature, check for updates manually or report an HTML ImageMapper bug.

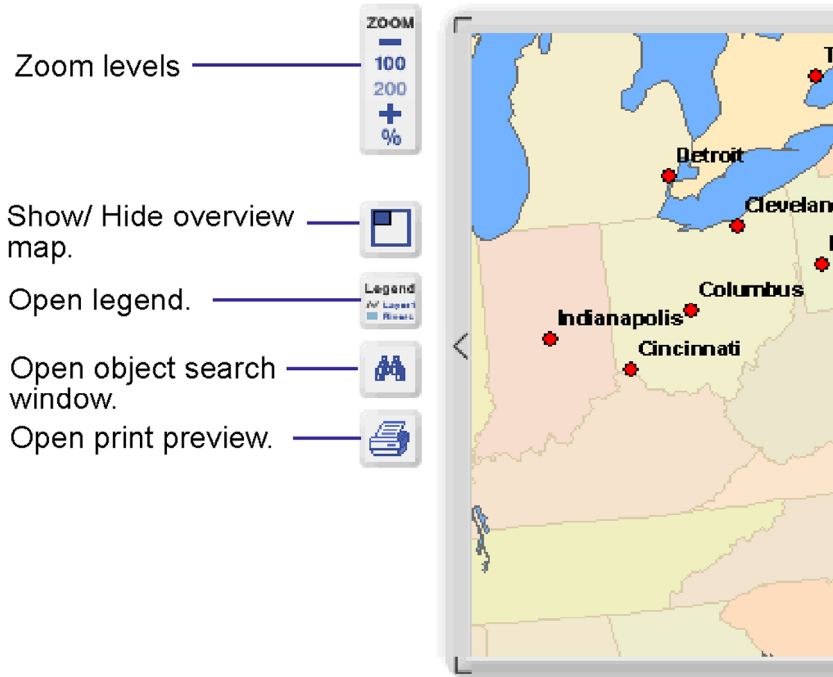


Available language versions are: German, English, French, Spanish, Czech, Dutch and Chinese.

After changing the language through the HTML ImageMapper Info dialog you have to close ImageMapper and reopen it.

7 Features of the HTML page created

- Zoom Levels
- Overview Map
- Legend
- Print
- Object Search

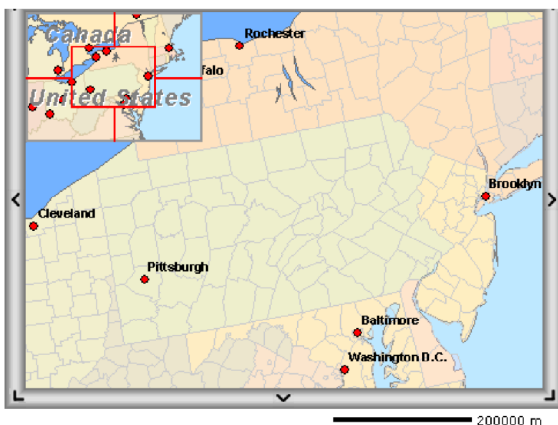


7.1 Zoom Levels

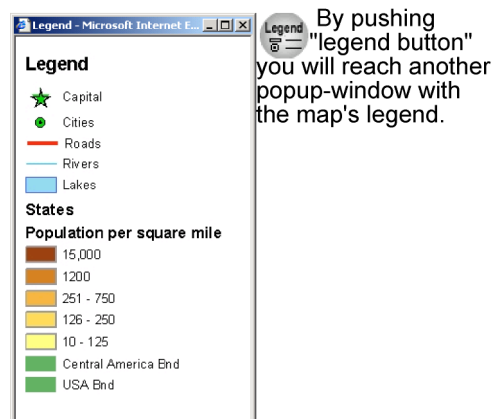
The zoom buttons enable the user to enlarge the map section in previously defined zoom levels.

7.2 Overview Map

The overview map is an optional feature and serves for a better orientation in the main map at high zoom levels. A crosshair marks the map section that is currently displayed in the main map.



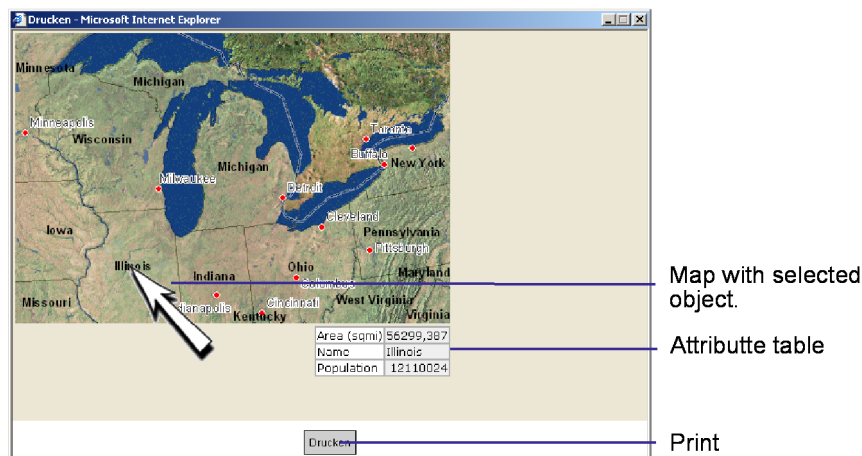
7.3 Legend



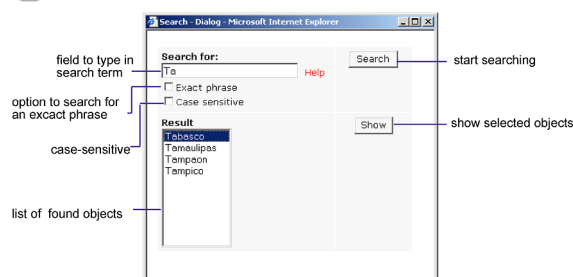
7.4 Print

The printing feature allows printing the current map with the corresponding legend. If you selected an object, this object will be marked with an arrow and the attribute table will be included in the print out.

- Pushing the print-button will open another popup window with a print preview of the current map, the legend and the overview map.



7.5 Object search



By using the search feature you can search for objects by their names. First you will be prompted to enter a search string in the "search for" field. Then click on the search button or press enter. You will receive a list of objects which match to your query. Now you can select the requested object. Pressing "enter" again or clicking on "show" will display the object at full-extent and in best zoom level. The searched object will also be highlighted.

Search options:

- Enabling exact phrase:** If you have checked the field exact phrase ImageMapper will search for the exact term you have entered.
- Enabling case sensitivity:** Lower and upper case is respected with case sensitivity turned on.
- Searching with a blank search field:** If you perform search with a blank field

all searchable objects will be listed.

- Performing search by using the initial letters:
All objects, starting with the entered tags will appear in the result list.
- Performing search by using wild cards:
The symbol * replaces all tags before and after the entered tag. The symbol . replaces exactly one tag.
- Performing search by using OR function:
By using the symbol | you can search for objects fulfilling different criteria. If you use this possibility all objects will be displayed which comply at least one of these criteria. E.g. a*d* will find all objects which start with a or d.

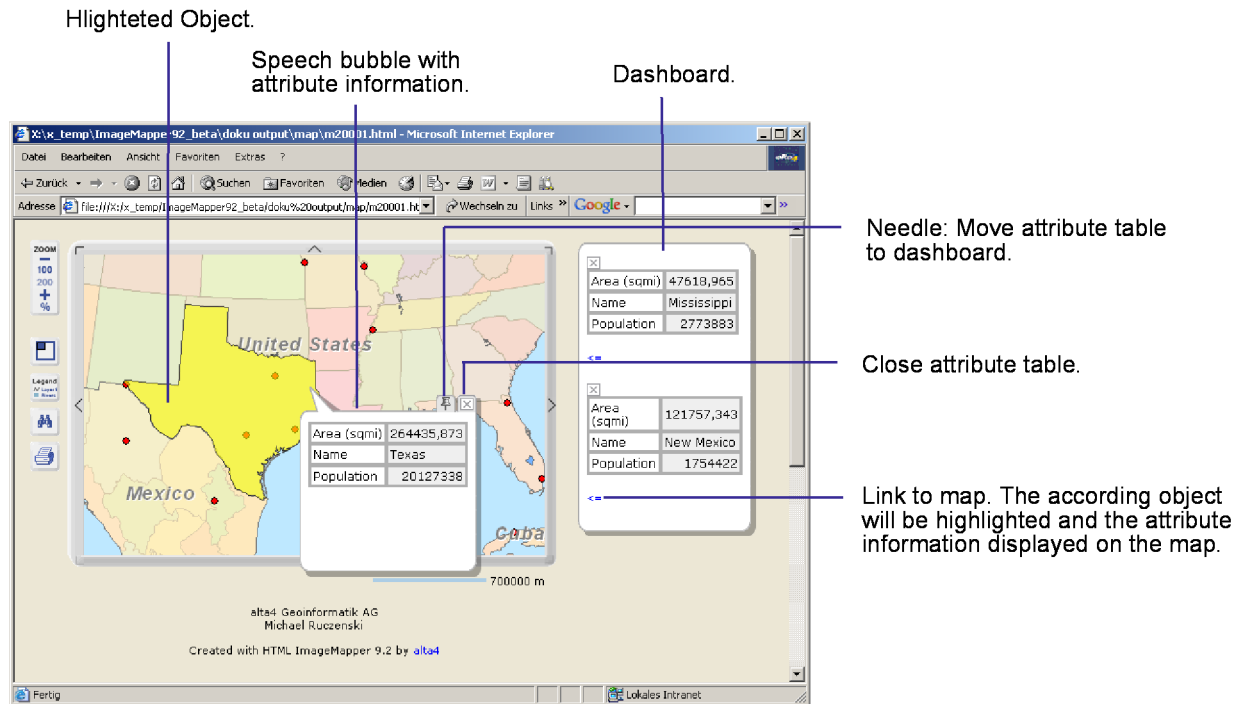
Note: If you want to use the OR function you must enter the terms one after another without any blanks between the terms and the OR function.

7.6 Display Attributes

Attributes are displayed next to the mouse in speech bubble shaped dynamic layers as soon as the mouse tip touches a clickable object on the map. A click on the object in the map makes the speech bubble freeze. That way several attribute tables can be displayed on the map simultaneously. They can be closed like a regular pop-up window.

In order to get a better overview, the speech

bubbles can be moved to the dashboard on the right hand side of the map. There the attribute information is no longer visibly connected to the object in the map. A map link at the end of each attribute table enables the user to display the information in a speech bubble on the map again and highlight the according object.



8 Customization

- Advanced options for "highlighting"
- Adjusting layout using CSS
- Usage of database API files
- Integration of language files

8.1 Advanced options for "highlighting"

At the end of the script config.js, which can be found in the "map" folder, you will find the following settings:

```
// *****  
// ***** HTML ImageMapper Config file.  
// *****  
// ***** Modify the values of variables in order to change the  
// ***** color of highlighted shapes.  
// *****  
  
FILL_COLOR_RED      = 255; // integer value from 0 to 255  
FILL_COLOR_GREEN    = 255; // integer value from 0 to 255  
FILL_COLOR_BLUE     = 0;   // integer value from 0 to 255  
  
BORDER_COLOR_RED    = 0;   // integer value from 0 to 255  
BORDER_COLOR_GREEN  = 0;   // integer value from 0 to 255  
BORDER_COLOR_BLUE   = 0;   // integer value from 0 to 255  
  
TRANSPARENCY_LEVEL = 0.6; // real value from 0 to 1  
  
BORDER_WIDTH       = 1;   // integer value from 0 to 10  
  
//-->
```

After generating the map you can make further adjustments to change the appearance of the highlighting. This is accomplished by modifying the java script file "config.js" with a text editor. The file is located in the folder "map" which is created by ImageMapper.

You can change the red marked values to modify the appearance of highlighting.

The first three values represent the red, green and blue part of the highlighting filling (integers between 0 and 255 are allowed).

The following three values represent the color of the highlighting border (integers between 0 and 255 are allowed).

Possible values for the transparency level are between 0 and 1. The lower the values the greater the transparency will be.

Note: Highlighting is only possible with Internet Explorer.

8.2 Customizing page layout with CSS

While building the HTML-map ImageMapper 9.2 generates a stylesheet file which determines the appearance of the map. With only a few settings you can customize the output's appearance.

You can find this stylesheet (formate.css) in the map-folder of your ImageMapper output. It can be opened and modified with any text editor.

The passages in the text between `/*` and `*/` give further information about each editable parameter. They don't have any influences on the HTML sites.

Editable classes:

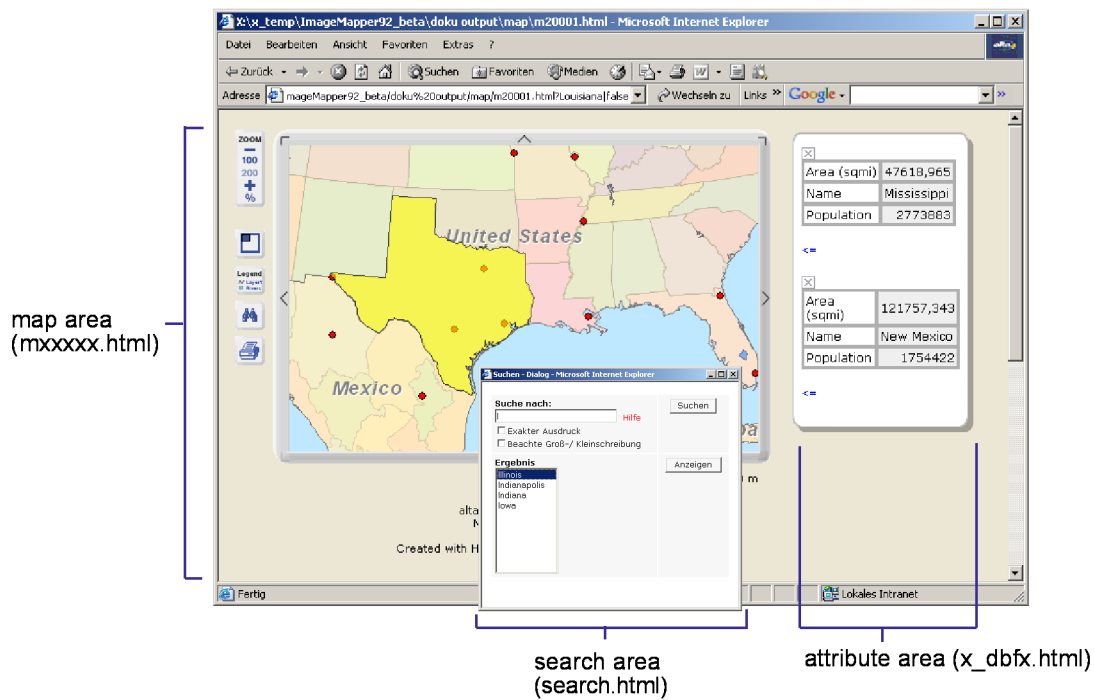
- background color
- font size
- font style
- font color
- text alignment
- the table's border width
- the table's border color
- cell-padding
- rollover effects for the navigation-bar and the hyperlinks (e.g. highlighting)

```

formate.css
1 /*!maptitle.html*/
2 /*****
3 body.Title { background-color:#FFFFFF; } /*Document Hintergrund!*/
4 font.Title ( font:16pt Verdana, Arial, Helvetica, sans-serif; ) /*!*/
5
6 /*X_dbfX.html*/
7 /*****
8 body.dbf ( background-color:#FFFFFF;
9 text-align:left; ) /*AttributBody Position Tabelle*/
10 font.dbfR ( font:14px Verdana, Arial, Helvetica, sans-serif; ) /*Schrift AttributeTabelle rechts*/
11 font.dbfL ( font:14px Verdana, Arial, Helvetica, sans-serif; ) /*Schrift AttributeTabelle links*/
12
13 td.dbfL ( background-color:#CCCCCC; /*Hintergrund AttributeTabelle links*/
14 border:2px solid; /*Rahmenseite links (Zellenabstan/2)*/
15 border-color:#CCCCCC; /*Rahmenseitefarbe*/
16 padding:2px; ) /*Zellenraum*/
17
18 td.dbfR ( background-color:#E8E8E8; /*Hintergrund AttributeTabelle rechts*/
19 border:2px solid; /*Rahmenseite rechts (Zellenabstan/2)*/
20 border-color:#CCCCCC; /*Rahmenseitefarbe*/
21 padding:2px; ) /*Zellenraum*/
22
23 table.dbf ( background-color:#CCCCCC; /*Hintergrund AttributeTabelle */
24 border:0px solid; /*Tabellenrahmen dicke und Art, Border*/
25 border-color:#CCCCCC; /*Rahmentabellefarbe*/
26
27 /*search.html*/
28 /*****
29 body.Search ( background-color:#FFFFFF; ) /*Document Hintergrund Search*/
30 font.Search ( font:10pt Verdana, Arial, Helvetica, sans-serif; ) /*Schrift Search*/
31 button.Search ( background-color:#F7F7F7; ) /*suchbuttoneneigenschaften!*/
32 input.Search ( background-color:#F7F7F7; ) /*für Mozilla!*/
33 select.Search ( background-color:#FFFFFF; )
34
35 table.Search { background-color:#FFFFFF; /*Hintergrund SearchTabelle !*/
36 border:0px solid; /*Tabellenrahmen dicke und Art, Border!*/
37 border-color:#000000; /*Rahmentabellefarbe!*/
38
39 td.Search( background-color:#F7F7F7; /*Hintergrund AttributeTabelle rechts!*/
40 border:0px solid; /*Rahmenseite rechts (Zellenabstan/2)!*/
41 border-color:#000000; /*Rahmenseitefarbe!*/

```

8.2.1 CSS classes and what they affect



8.2.2 Modifications of the CSS for the attribute area (X_dbfX.html)

site properties (body.dbf)

font, left inner table (font.dbfL)

font, right table (font.dbfR)

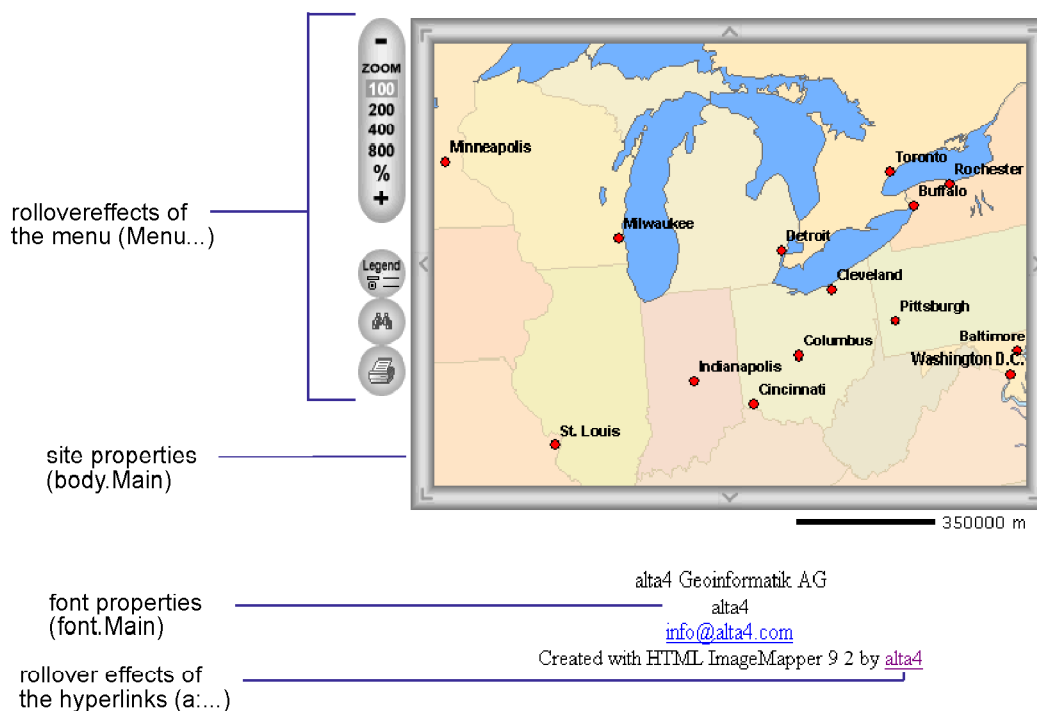
inner left table (td.dbfL)

right inner table (td.dbfR)

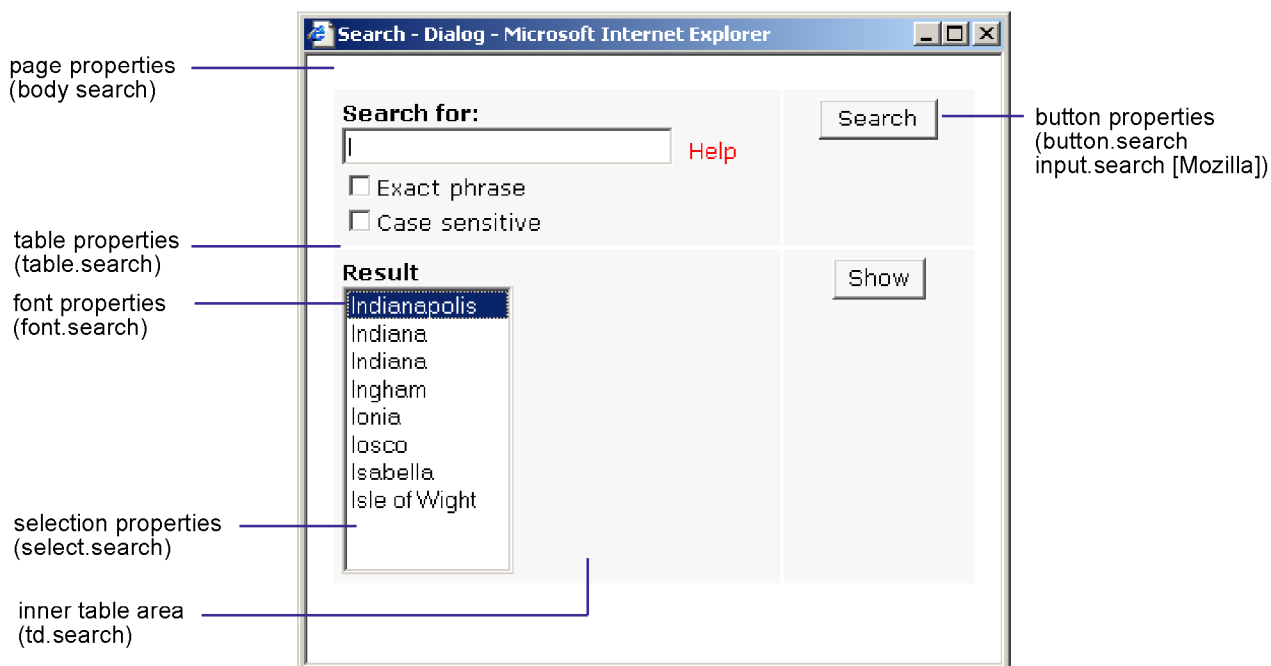
outer table (table.dbf)

Area	110669.975
State_name	Nevada
Pop1999	1818259
Pop90_sqmi	11
Households	466297
Males	611880
Females	589953
Age_under5	92217
Age_5_17	204731
Age_18_29	229528
Age_30_49	377937
Age_50_64	169789
Age_65_up	127631

8.2.3 Modification of the CSS for the map area (mXXXXXX.html)



8.2.4 Modification of the CSS for the search area (search.html)



8.3 Usage of database API files

With HTML ImageMapper 9.1 you had for the first time the possibilities to export database API files. These files contain the raw data for HTML ImageMapper projects. With this data, users with programming skills have unlimited possibilities to adapt the HTML ImageMapper output to their wishes. For example, a search engine can be put together that offers the search for more than one attribute of a layer.

HTML ImageMapper projects can be integrated smoother and easier into existing websites and their logic. However the usage is not limited to webprojects.

Two files are exported per layer. A SQL file contains the table definition for a layer. A CSV file contains the attribute table, additionally equipped with a reference to an image file. This image file contains the map section in which a distinct object of a layer is located and displayed at its best.

The image files can be found in the "map" folder. The database API files are saved in the "dbapi" folder.

8.4 Integration of language files

The author has the possibility to integrate additional language files into HTML ImageMapper thus making the user interface available in these languages.

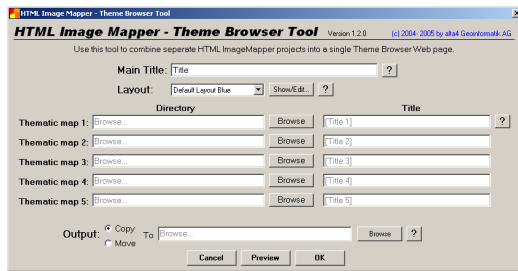
Open an existing language file from the "language" folder, for example english.txt. Substitute the english words with expressions in the new language. Save the file under a new name, for example italian.txt, to the "language" folder.

HTML ImageMapper recognizes the new file automatically as soon as you open the HTML ImageMapper dialog. You can select the language in the "About" menu by using the pull-down menu.

9 ThemeBrowser 1.0 and 9.2

- What ThemeBrowser can do for you
- Installation
- Browser View
- Settings
- Additional changes

9.1 What ThemeBrowser can do for you



The ThemeBrowser enables you to enrich your interactive internet maps by a thematic component. Now you give your audience the option to look at the several different maps of the same geographic extent and toggle between different thematic views within the same geographic extent. You as the map author and GIS user just export several ImageMapper projects from your GIS projects, let's say one showing environmental aspects, the other urban planning aspects and the third population growth, and use the ThemeBrowser to combine those HTML maps to one project. This is just like adding layers in your GIS but your audience can do it in their web browser without the need to install additional software. The end user of the map can zoom in to the geographic location of his desire, then select the appropriate button to switch between the thematic views of the zoomed in area. ThemeBrowser is also very suitable for displaying temporal changes, let's say one map shows aerial photographs from the 1950's, the other from the 1990's and so on.

9.2 Installation

ThemeBrowser exists in the versions 1.0 for HTML ImageMapper 3.5 and version 9.2 for HTML ImageMapper 9.2. ThemeBrowser Setup.exe is included in the installation archives of both ImageMapper 3.5 and 9.2. Unzipping those files creates the HTML ImageMapper's setup-file and a subdirectory with the ThemeBrowser's setup-file. Note that the ThemeBrowser's setup-file has to be started separately for installation.

9.3 Browser view

The Browser view is the central user interface of ThemeBrowser 1.0 and 9.2. Here you can adjust the main settings, i.e. the main title, the maps' data source, the layout and the output's directory path. In analogy to HTML ImageMapper you can preview the results.

The commercial ThemeBrowser can merge up to five regular HTML ImageMapper projects into one ThemeBrowser project. Choose the ImageMapper projects by using the "browse" button, then navigate to the directory where you stored the ImageMaps you previously created with HTML ImageMapper.

Enter topic names for each thematic map in the "Title" field. Topic names will appear on the web site as navigation buttons to each thematic map.

9.4 Layout-Editor

The three standard layout-types are predefined in the browser-window. (Layout Blue, Red, Green). The layout can be created as "custom layer" in the opening layout editor with the "Show/edit"- button. The layout settings can be previewed - note that preview is meant for only checking correct graphical display; The preview has only limited functionality.

9.4.1 Title

Set your font face, font color, font size and other text formatting in the main title.

9.4.2 Themes

In this field background color, typeface, font color and font size of the thematic map's title can be set.

9.4.3 Background

Here background-color is set. Use the color inspector or type in hexadecimal code.

9.4.4 Borders

This option defines the line's type and color of the theme-buttons.

9.4.5 Hover

Define graphical appearance of buttons and button text as the user moves the mouse over them.

9.5 Output

Pressing the "OK"-button will start the output generating process. Now your existing ImageMapper projects will be copied or moved to one central location and linked by a new index.html file you should use as the new starting page. Note that here no new maps are created, but existing HTML ImageMapper projects are linked. The "copy" option will leave the original files at its location, the "move" option will move the original files and directories to a new location - the new theme browser directory.

Before you start the generating process you can use the Preview button to view the output in a browser.

Note: Due to browser specifications the Preview button does not work with Firefox.

9.6 Additional changes

If you wish to make additional adjustments, take a look at the following files in the output directory: Sizes of the frameset are specified in the "index.html" file, the top navigation page is defined in "imaptitle.html". The ThemeBrowser's layout is defined in the "browser.css" file. All three files can be opened in text or web editors for making changes. Note that making changes in those files should be done with care and experience in HTML, JavaScript and Cascading Style Sheets (css). Talk to your web site administrator for additional advice.

10 Publishing

- View your HTML maps in a browser
- Publish your results on a webserver or a CD-ROM

10.1 View your HTML maps in a browser

When HTML ImageMapper has finished exporting, you will be asked if you want to view your results immediately in your default browser. However you can also open those pages manually:

1. Open your internet browser.
2. Go to "File" in the menu bar and select "Open Page".
3. Browse to your output directory and select the file "index.html". Your results will be displayed.

10.2 Publish your results on a web-server or a CD

To transfer your results from the local disc to your webserver you need FTP Software like Cute FTP, WS.FTP or FTP Voyager.

1. It is a good idea to add a new sub-directory to your homepage.
2. Relocate with the FTP Software all files and subdirectories of your newly created output directory to the new location.
3. To add links to your newly created maps from other pages just add a link to the frameset, which is "index.html". There is no need to add individual links to each of the files that have been created by HTML ImageMapper.

To publish your results on CD do it the same way without the FTP. Just link to the "index.html" file.

Please feel free to contact us via e-mail (imagemapper@alta4.com) or via our web site to give feedback and get your questions answered quickly and efficiently.

11 Restrictions of the non-commercial versions

- Restriction of the Demo-Version
- Restriction of the Edu-Version

11.1 Restriction of the Demo-Version

The Demo Version is valid for 30 days. The time runs from the day you downloaded the HTML ImageMapper 9.2.

During those 30 days the version has the following restrictions:

1. On 25% of all output jpg files appears the term "demo version".
2. You cannot make any changes in the authors dialogbox. Default is: "Created with ImageMapper 9.2 by alta4".
3. Each 10th result string contains the additional term "DEMO".

After the 30 days are over, the HTML ImageMapper 9.2 will still working. However, only 75% of the attribute tables will be created correctly. In 25% of the cases you will see a note that you are using an expired Demo Version. In all cases you are not permitted to use HTML ImageMapper 9.2 for commercial purposes.

You are permitted to publish maps that have been created with a demo version. However you are not allowed to delete or change the note "Created with HTML ImageMapper 9.2 by alta4".

11.2 Restriction of the Edu-Version

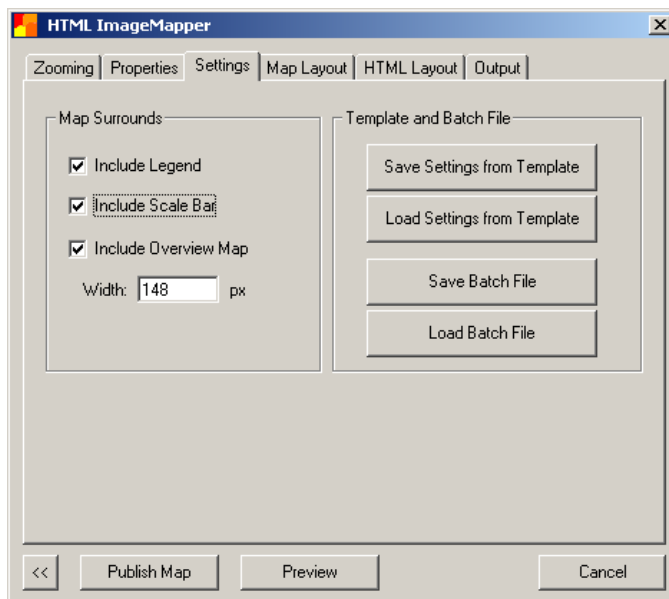
Edu-Version only has one restriction: As with partial versions you are permitted to publish maps that have been created with an Edu-version. You are not allowed to delete or change the note "Created with HTML ImageMapper 9.2 by alta4" or use HTML ImageMapper for commercial purposes.

12 Using the Batch Mode of HTML ImageMapper

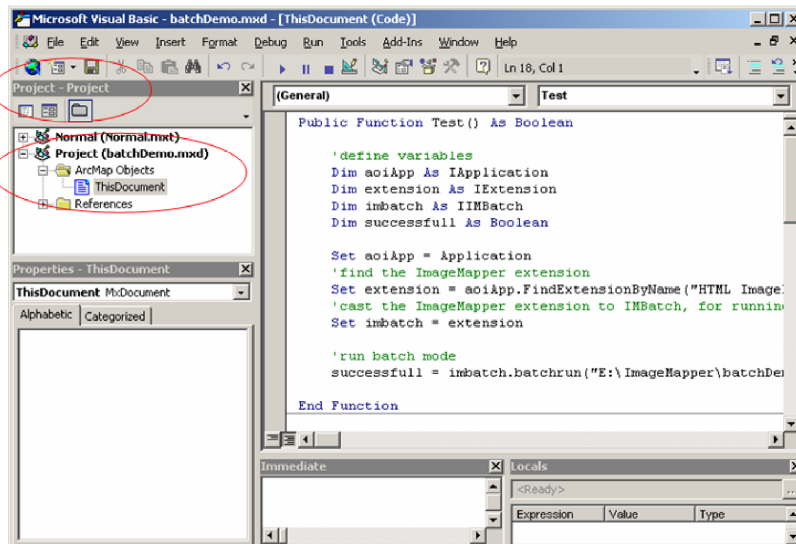
This chapter will describe how to use the batch mode of the HTML ImageMapper. The batch mode was designed for automating the HTML ImageMapper project processing. First of all, you will learn how to run the batch file using the Visual Basic Editor. Further on, a description of the included example will follow. It contains the optional ability to be executed and processed within the start of ArcMap.

12.1 Setting up the connection between the batch file and the Visual Basic Editor

1. The HTML ImageMapper has to be installed.
2. Launch ArcMap and open your project.
3. Start the HTML ImageMapper dialog and adjust the parameters as you want to.
4. Save the parameters using a batch-file.



5. Close the HTML ImageMapper dialog.
6. Save your ArcMap project.
7. The next step is to enable the automatic start up using the Visual Basic Editor. You will find the Visual Basic Editor in the menu Tools -> Macros -> Visual Basic Editor. Choose your ArcMap project using the "Project" window and double click "ArcMap Objects" -> This Document.



8. Insert the following code:

```
Private Function MxDocument_OpenDocument() As Boolean

    If RunInBatchMode = "false" Then Exit Function

    'define variables
    Dim aoiApp As IApplication
    Dim extension As IExtension
    Dim imbatch As IIMBatch
    Dim successfull As Boolean

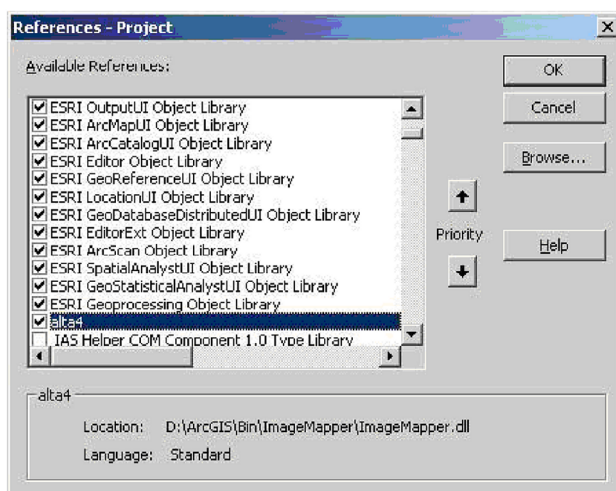
    Set aoiApp = Application
    'find the ImageMapper extension
    Set extension = aoiApp.FindExtensionByName("HTML ImageMapper")
    'cast the ImageMapper extension to IMBatch, for running in batch mode
    Set imbatch = extension

    'run batch mode
    successfull = imbatch.batchrun("E:\ImageMapper\batchDemo\imBatch.imbf")

    'exit ArcMap
    ExitApp

End Function
```

9. For using the code, the library "ImageMapper.dll" has to be embedded. Therefore, choose the menu Tools -> References and select "ImageMapper.dll".



10. Save the preferences of the Visual Basic Editor.
11. Start the new program using Run -> Run Sub/UserForm. A new HTML ImageMapper output will be generated.

12.2 Description of the batch mode example

12.2.1 Included Files

The included HTML ImageMapper batch mode example comes with a lot of files and directories.

batchDemo.mxd:

This is the base project file. It also contains the VBA script for executing the Batch-Mode.

imBatch.imbf:

This file stores all the HTML ImageMapper preference settings and is therefore the basis for the batch project.

NOTE: In line 89 there is a path declared. This declaration has to be adjusted to fit with your file system. Insert here the path to the folder "HTMLOutput" which comes with the batch example.

runBatchMode.bat:

A double click on this file will launch ArcMap and the value of the file "runBatchMode.ini" will be checked. If the ini-value is true, the batch mode will be executed. As soon as the batch mode is finished, Internet Explorer will start automatically and the created HTML ImageMapper output will be displayed.

Note: The paths included in the file have to be adjusted as well.

```
start /WAIT "C:\Programme\ArcGIS\Bin\arcmap.exe"  
"E:\ImageMapper\batchDemo\batchDemo.mxd"  
  
start "C:\Programme\Internet Explorer\iexplore.exe"  
"E:\ImageMapper\batchDemo\HTMLOutput\index.html"  
  
exit
```

runBatchMode.ini:

This file contains only a single word. As long as it is "false", the batch mode will not be executed. Simply edit this file with notepad or a similar text editor.

HTMLOutput:

This subdirectory will contain the HTML ImageMapper output after a successful HTML ImageMapper operation.

cities.shp:

This shapefile is used as the basic data for the example project. It is not included in the data of the batch example but can be found in the sample data of ESRI corp., that comes with every ArcGIS license. (-> esridata)

12.2.2 Description of the used functions

1. Private Sub ExitApp():
This method shuts down ArcMap.

```
Private Sub ExitApp()  
    Application.Shutdown  
End Sub
```

2. RunInBatchMode():
This method checks the value of the file "runBatchMode.ini". The value is the whole content of the file. If the value is "false" the Batch-Mode will not be executed. This is the default, so that you are able to check and adjust the pathnames.

NOTE: You have to adjust the path from the .ini file in the function according to your own file system.

```
Private Function RunInBatchMode() As String  
  
    Dim intFileNum As Integer  
    intFileNum = FreeFile  
    Open "E:\ImageMapper\batchDemo\runBatchMode.ini" For Input As #intFileNum  
    Line Input #intFileNum, RunInBatchMode  
    Close #intFileNum  
  
End Function
```

3. MxDocument_OpenDocument():
This method will be executed along with the loading of the ArcMap project. This function checks the value of the method "RunInBatchMode()". If the value is true, the Batch-Mode will be executed and start up the processing of an HTML ImageMapper project.

NOTE: You have to adjust the path from the file imBatch.imbf in the method according to your own file system.

12.2.3 The Procedure

1. Open the file batchDemo.mxd in ArcMap.
2. Adjust the source of the layer file according to your own file system.
3. Start the Visual Basic Editor using Tools -> Macros -> Visual Basic Editor.
4. Choose the project batchDemo.mxd in the project window. Expand the tree and double click "This Document" in the directory "ArcMap Objects". This will show up the VBA code in the window on the right.
5. Adjust the pathnames contained in the code as required for your file system. There are adjustable pathnames in the functions RunInBatchMode() and MxDocument_OpenDocument(). You will find further information in the chapter "Included files".
6. Adjust the pathnames in the files imBatch.imbf and RunBatchMode.bat.
7. Change the value of the file runBatchMode.ini to "true".
8. Save and close the project.

9. Open the file batchDemo.mxd again. This time, the batch mode is enabled caused by the change of the value from the file runBatchMode.ini. An HTML output will be generated, saved to the folder HTMLOutput and shown in your browser at once after finishing. Alternatively you can launch ArcMap and the batch mode by double clicking the file RunBatchMode.bat.

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