

Mappetizer for ArcGIS

Web Mapping with Vector Technology



Manual - Version 10

Mappetizer is an extension for ArcGIS by **ESRI**. It gives you the opportunity to convert a data frame within ArcMap into the SVG format. You can then use these files to publish them on the Web or on CD-ROM or DVD, or on your local machine.

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1 Introduction

1.1 Mappetizer for ArcGIS 10

Mappetizer is an extension for ArcGIS by **ESRI**. It gives you the opportunity to convert maps within ArcMap into the SVG format. You can then use these files to view them on your local machine and to publish them on the Web or on CD-ROM/DVD.

To display the results, you do not need any additional software on your Web server.

The result of an export is simply a folder with several XML, SVG, Javascript and HTML files, which can be stored anywhere.

Especially for small and medium-sized project, and for projects which do not have to be frequently updated, Mappetizer will be the solution. With its wide field of application, the easy use of the exported Web map project, you are able to present your GIS data easy, appealing and innovative to a large target group. You don't have to have any knowledge in SVG, Microsoft Silverlight or Web server technology.

With only a few steps your web mapping application is ready to go!

You do not need any skills in programming or web server technology.

Mappetizer offers you the many functions:

- Turn on and off individual layers
- Report object information of ArcGIS layers
- Report attribute table of ArcGIS layers
- Display diagrams
- Finding features by building a query expression
- Mapscale dependent view of layers
- View the map in an individual scale
- Hot-Links for E-Mail and other URL-adresses (internal and external links)
- MapTips
- Scale bar and overview map
- Coordinate Read-out
- Measurement tools
- Data graphs
- Point clustering
- Support of WMS and other map services (BingMaps, OSM, ArcGIS Map Services)

There are many fields of use, environment, tourism, education, forestry and agriculture, defense, health, public services, real estate:

- Cost-saving publication of interactive mapping applications on the Internet, with no need of additional software on the Web server
- Creation of cheap GIS working places
- Cost-saving delivery of (GIS-) data

1.2 Product History

The idea for Mappetizer (formerly MapViewSVG) came up in 2001, when we figured out that with SVG a revolutionary new web standard exists which allows for the first time vector based interactive graphics for the internet.

The advantage compared to other vector based solution (Flash, Silverlight) is, that SVG is a web standard, a W3C Recommendation, which is nowadays supported natively within all browsers.

Mappetizer uses right from the beginning web technologies, which are detected from other web developers quite recently as revolutionary: AJAX und DHTML.

In summer 2002 we delivered MapViewSVG as an extension for ArcView GIS 3.1. Within the development of ArcGIS (ArcView 8) from ESRI we also developed MapViewSVG/Mappetizer as an extension to this product. With Mappetizer for ArcGIS 10 we now can offer you this popular extension also for ArcGIS 10 from ESRI.

1.3 SVG und XML



Mappetizer supports vector based object data and image data. Image data are displayed in GIF, PNG or JPEG format in the web browser. All vector based objects and all text objects are converted into the SVG format and are infinitely zoomable without losing cartographic quality.

Scalable Vector Graphics (SVG) is a family of specifications of an XML-based file format for describing two-dimensional vector graphics, both static and dynamic (i.e. interactive or animated). The SVG specification is an open standard and has been developed by the World Wide Web Consortium (W3C). The SVG standard is a W3C Recommendation.

SVG images and their behaviors are defined in XML text files. This means that they can be searched, indexed, scripted and, if required, compressed.

To display the results, you do not need any browser plug-in.

All browsers like Internet Explorer (since version 9), Opera, Firefox, Safari and Google Chrome support SVG natively. For the Internet Explorer Version 8, users have to install a free browser plugin (Adobe SVGViewer) to view SVG documents.

1.4 Deep-Zoom Technology

Mappetizer uses since version 10 the Deep-Zoom/Tiling-Technology to display images. With this technology your images are loaded very fast, but always with the best resolution at any scale.

1.5 Dojo Toolkit



Since Version 8 Mappetizer uses the open source modular JavaScript library Dojo Toolkit (<http://www.dojotoolkit.org>) and the Dojo widgets system. This gives you full access to Dojo widgets, to enrich your website with various interactive features.

2 System Requirements and Installation

2.1 System Requirements

Disc space: 15 MB

Operating system: Windows XP / Vista / 7

Software: Web browser with SVG support

GIS software: ArcGIS 9.3. or higher

2.2 Installation

The installation of Mappetizer for ArcGIS is different for ArcGIS 10 and for ArcGIS 9.3.

ArcGIS 10:

Mappetizer for ArcGIS will be installed as ArcGIS-Addin. The installation will be done for the current user and needs no administrator rights.

Start the setup program with a double click. Read the licensing agreement and agree. The setup will now install the ArcGIS-AddIn for you.

ArcGIS 9.3:

You need administrator rights to install Mappetizer for ArcGIS 9.3. The software is usable for all users after installation.

Start the setup program with a double click. Read the licensing agreement and agree. Choose the installation folder. The setup will now install all necessary files for you.

2.3 Licensing

If you do not have a licensing file yet, a demo version of Mappetizer for ArcGIS is loaded.

After purchasing a commercial license, you can convert the software to the full version with all functions without a new installation. To archive this choose in the menu bar the menu point „Help->Import your license“.

2.4 Loading in ArcMap

Starten Sie die Software ArcMap von ESRI.

2.5 Uninstalling

3 Making your Map ready for Export

Basically all visible layers of your map (Personal geodatabase, CAD dataset, Coverages, Shapefiles, Layers, ArcSDE Connection, Raster image, Raster Catalog) are exported, as far as their symbol types are supported by Mappetizer. So, all vector based feature data ("Point", "PolyLine", "Polygon" and "MultiPoint"), rasters, and texts are supported. Beyond this, joins to database and feature tables are supported.

While all images are presented as GIF, JPEG's or PNG's in the browser, all vector based data and the text-layers are transformed in the SVG format. WMS-Layer are supported as Web Map Services on the base of the OGC-standard specification. Tile layers (like OpenStreetMap, Bing Map or ArcGIS Online Map Services) are also supported.

Besides symbology and different layer types of ArcMap a lot of other settings which you have done in ArcMap are taken over:

3.1 Document Properties (File -> Map Document Properties)

1. **Author**
This information will be shown in the Mappetizer wizard in the text field "Author".
2. **Description**
This information will be shown in the Mappetizer wizard in the text field "Comment on Map", if there are no settings made in the Data Frame Properties/Description.
3. **Hyperlink base**
This is supported within Mappetizer.

3.2 Bookmarks

Spatial bookmarks of type "AOIBookmark" are supported within Mappetizer.

3.3 Data Frame Properties

The following properties are factored in:

1. **Name** (tab General)
The name of the Data Frame is the title of your Web mapping project. If you don't need a title remove it here.
2. **Description** (tab General)
This information will be shown in the Mappetizer wizard in the text field "Comment on Map".
3. **Map Units** (tab General)
Due to the possibility of infinitely zooming of SVG files, the power of Mappetizer is, to show your map in a user defined scale (similar to ArcMap to display the map in a specific scale). Choose the appropriate unit.
4. **Display Units** (tab General)
Choose the appropriate unit for your scale bar and the measurement tools.
5. **Clip to Shape** (tab Data Frame)
The Mappetizer wizard use this information when exporting the current data frame.

3.4 Layer Properties

The following properties are factored in:

1. **Layer Name**
The name of the layer will be drawn right of the check box in the legend.
2. **Description**
The Info-Icon will be drawn right to the turn on/off icon in the legend. When you click on it the description about the layer noted in ArcMap will be shown.
3. **Scale Range**
Mappetizer takes over your settings for the minimum and maximum scale (except for the Map Unit "decimal degrees").

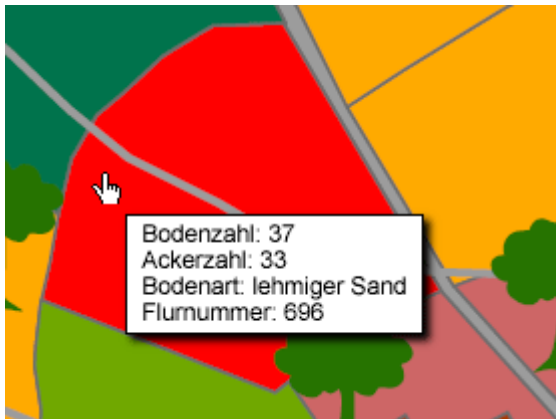
4. Fields

If you want to display information about features (e.g. "Identifying Features on the Map") in your map, Mappetizer will consider those fields which are set to visible (not the Shape field and the FID field). Aliases are taken over, if they are set.

On programming reasons (JavaScript) the following characters in the field names are not transformed if you choose the Query Builder: " ' ().

5. Show Map Tips

The display expression will be used for the MapTip-Text, when you move your cursor over the map.



6. Definition Query

Mappetizer takes over your definition.

7. Transparent

This value will be used for layer specific transparency.

8. Hyperlinks

Mappetizer supports hyperlinks within the identify tool, the attribute table or when you click on a feature in the map. The option "Identifying Features on the Map" and "Hyperlink" cannot be chosen at the same time.

Mappetizer supports WWW or Email links, but also links to all other kind of documents.

To use this, choose Document or URL and type in your Hyperlink field the desired hyperlinks, for example:

Hyperlink
http://www.mappetizer.de
info@uismedia.de
C:\project\example.pdf; Example
../example.pdf
../..projekt/index.asp?ID=<<station>>
js:myFunction('example.html')
js:myFunction(<<station>>)

Mappetizer automatically analyses the information of each cell, e.g. external link (<http://www.mappetizer.de>), E-Mail (info@uismedia.de) or a relative link ([../oak.gif](#)). If you have a reference to a local file on your machine (C:\project\example.pdf) this file will be copied in your Mappetizer project and will be linked. Starting point for relative path names is the Mappetizer

project folder.

You can also add links to server-side scripts, e.g. to realize queries to a database on your server. The parameter will be joined via the GET method to the URL. To create the link to your script give in your data in the form "path/filename?variable=<<fieldname>>". Replace "path/filename" to your own file on your server and your own variable name instead of "variable". Replace "fieldname" by a field in your attribute table (e.g. ../project/index.asp?ID=<<station>>).

Mappetizer also supports own javascript code, e.g. js:myFunction('example.html'). Strings as parameter must be quoted with a single quote. You can add your code to the file "variablen.js" if you like. Beyond this you have the possibility to add object related variables to your javascript function, like js:myFunction(<<fieldname>>). Replace "fieldname" by a field in your attribute table. To show Mappetizer that you want to use javascript code, add "js:" in front of the name of the function.

9. Automatically generated Hyperlinks

Beside hyperlinks which are defined within ArcMap, Mappetizer also interprets WWW-compatible hyperlinks (e.g. <http://www.uismedia.de>, info@uismedia.de) within the option "Identifying features on the map" or "Attribute Table" in all other fields. Relative hyperlinks (within your exported project) or links to local files on your machine are also supported. For this the data set entry has to be for example:

```
url:myfolder/ruths-steakhouse/profile.pdf
url:myfolder/ginas-cafe/profile.pdf;Profile
url:C:\project\instructions.pdf
url:C:\project\instructions.pdf;Instructions
```

Links to javascript code is notated like above with js:myFunction('example.html').

After export you have to copy your folder "myfolder" with all subfolders and documents in the Mappetizer export folder. References to local files on your machine will be copied automatically.

If you want to use an alternative text for the display of your hyperlinks (within the option "Identifying features on the map" or within the "Attribute Table") please note this text behind a semicolon. By clicking on a feature on the map the first example shows the link to the folder (myfolder/ruths-steakhouse/profile.pdf), the second example uses the text behind the semicolon for display

Restaurants	
Homepage	http://www.ruths-steakhouse.com
E-Mail	info@ruths-steakhouse.com
Brief description	myfolder/ruths-steakhouse/profile.pdf

Restaurants	
Homepage	http://www.ginas-cafe.com
E-Mail	info@ginas-cafe.com
Brief description	Profile

10. Relates

Mappetizer also supports joined tables (in a one-to-one or many-to-one relationship between the layer's attribute table and the table containing the information you wish to join).

Furthermore Mappetizer supports also related tables (one-to-many relationship) within the option "Identifying Features on the Map".

11. Hide/Show legend

Click the plus or minus sign to the left of the layer name in the table of contents, to show or hide its legend in your Web project.

3.5 Optimize your Map for Export

First the good news: Mappetizer does not restrict you in any way regarding of the amount of layers, image data and hyperlinks. Due to the small sizes of the files there are also (probably) set no limits to you. The bad news: each successful website takes care of the transfer of data and loading time between the server and the client. That means at this moment:

- Try to keep the geometries of your layers as simple as possible (e.g. with using the dissolve option in ArcMap).
- Use a Definition Query if not all features of a layer have to be exported. A feature will also be exported - and therefore needs loading time - if it is just invisible or does not appear in the legend because the option <all other values> is off.
- Use "Generalize geometry" in the Layers settings of the Mappetizer export wizard.
- Avoid complex graphic shapes (for example fjord coastlines), they load much slower in a Web browser.
- Use sparingly image data or reduce them in size.
- Reduce the amount of text in your map. Text dramatically increase loading time in Firefox (until Version 3.0). Within other browsers we haven't noticed this phenomenon.
- Reduce the amount of fields in the attribute tables (make them invisible in the Layer Properties).
- Use the possibilities of the Scale Ranges of layers: Make a simple layer of your features for the initial state of loading and add one or more detailed layers for zoom in states.
- Mark some layer as not turned on while the page is loading.

3.6 Data Graphs

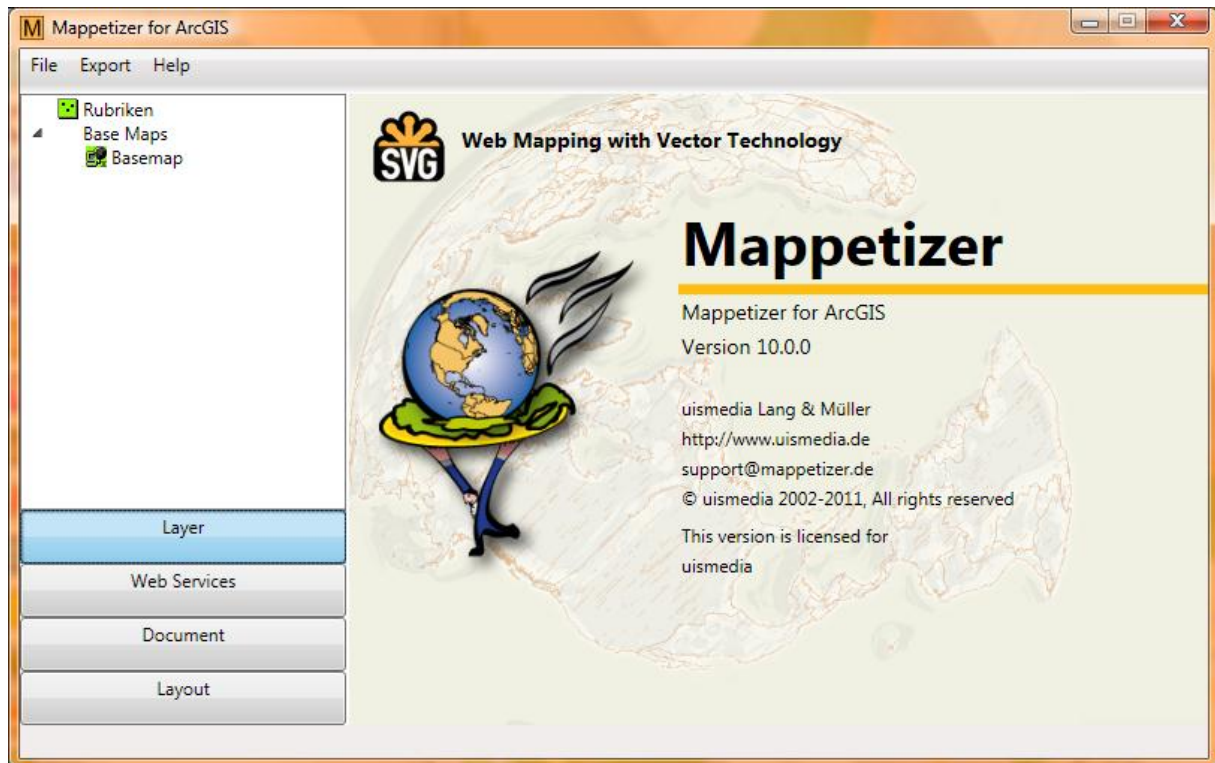
Mappetizer supports graphs which are created in ArcMap. Please read more in the ArcGIS Desktop Help about creating a graph. At the moment Mappetizer supports bar graphs, line graphs and scatter plots.

4 The Mappetizer Export Assistant

Make the data frame active which you want to export. Click the "Mappetizer-Export". The Mappetizer export wizard will open. If your map does not contain any data or visible layers, the button or the menu item will be grayed out.



Der Exportassistent von Mappetizer ist in mehrere Bereiche unterteilt:



Menu section

Below the menu item **File** you can save the current settings, open and load settings or close the export wizard. The menu item **Export** allows you to start the export and to view the export then. Below the menu item **Help** you will find this manual as well as feedback and diagnostic functionalities.

Navigation area

On the left side of the wizard you will find the navigation area. Below, you can switch between the different sections, **Layer**, **Graphs**, **Web Services**, **Document** and **Layout**. Above you find for the specific sections, Layer, Graphs and Web Services the available options.

Functional area

Within the navigation area Layer, Document and Layout you have the possibility to make the settings here. These settings are for the whole project. The settings within the navigation area Layer are for the specific layer which you have selected before.

4.1 Layer

This section gives you the possibility to make settings for each layer in the ArcMap frame. The layer type can be seen in different icons. There are four colors of the icons, which represents different states of the layer:

- Grey
The layer is not activated in ArcMap. The layer is not part of the export. But you can choose the layer as part of the overview.
- Green
The layer is valid and is part of the export.
- Orange
The layer is valid and is part of the export. But there are warning messages for the layer.
- Red
The layer is not valid and is not part of the export. There are error messages for the layer.

Moving the mouse over the layer gives you informations about warning and error messages for this layer. Select the layer by clicking. Now you can make settings for the layer.

4.1.1 Object Information

Only available for feature layers.

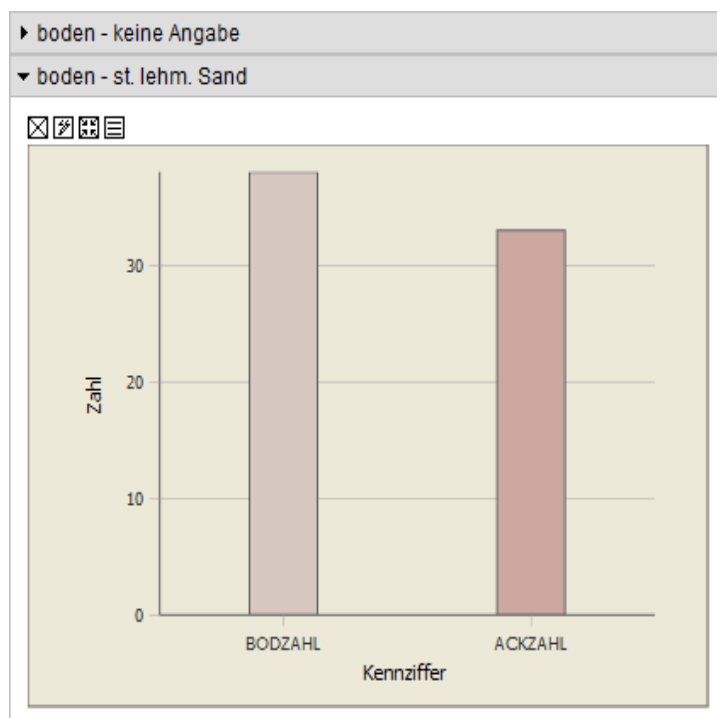
Identify features

This is equivalent to the Identify tool in ArcMap. When you click on a feature in the map, the attributes of the feature will be displayed on the main page. Which attributes are shown, depends on your visible fields in ArcMap. The results are displayed as a list or as a bar chart in a pane of the tab container.

Relates which are defined in ArcMap are taken over in the list option.

▼ Landuse - 25

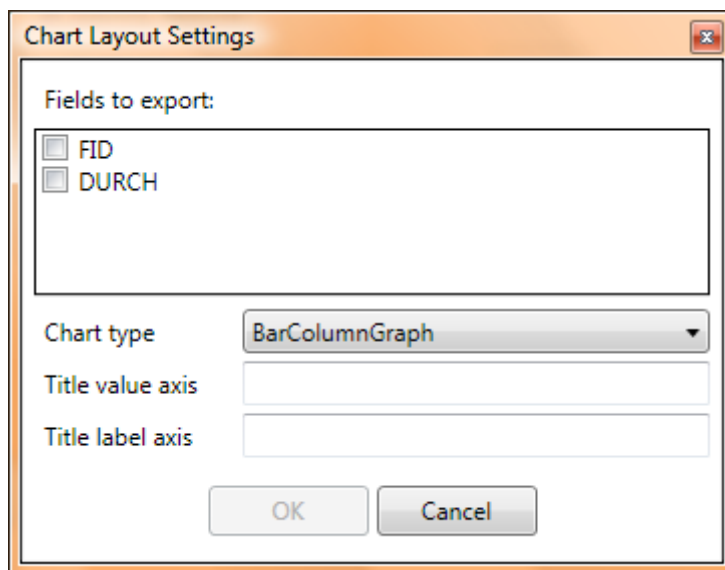
area	19854.07481
perimeter	755.86299
parcel number	789.2
landuse	forest



Hint: Always those features will be shown, which are on top of the map; but these features must not belong to the same layer: For example, if you have chosen this option for a line layer and at the same time for a polygon layer, you will see the attributes for the line layer if you click on a line, you will see the attributes for the polygon layer if you click on a polygon. Two overlaying polygon layers will always show the attributes for the layer on the top, until the user does not have turned off this layer. If you have a polygon layer on top which is only used for visualization (e.g. administration borders) make the fill symbol for this layer transparent. If you do not have checked "Identifying features on the map" or "Hotlinks" and have not added Map Tips to your layer in ArcMap, the identifying tool shows the information of the theme below.

Settings for the option "Display as chart"

With click on the button "...", a new window will open, which allows you to make more settings for the option "Display as chart". Choose the fields to export, the type and the text for the x-axis and y-axis label.



Hyperlink

If you click on the map the underlying hyperlink will be opened in a new browser window. You can only choose this option if you have defined a Hyperlink Field in ArcMap.

The option "Identifying features on the map" and "Hyperlink" cannot be chosen at the same time.

Object Selection

This allows the user to zoom to or highlight the features listed in a drop-down list on your page. The combo box is displayed in a pane of the tab container. Select the field you wish.

For the object selection you can define different behaviors:

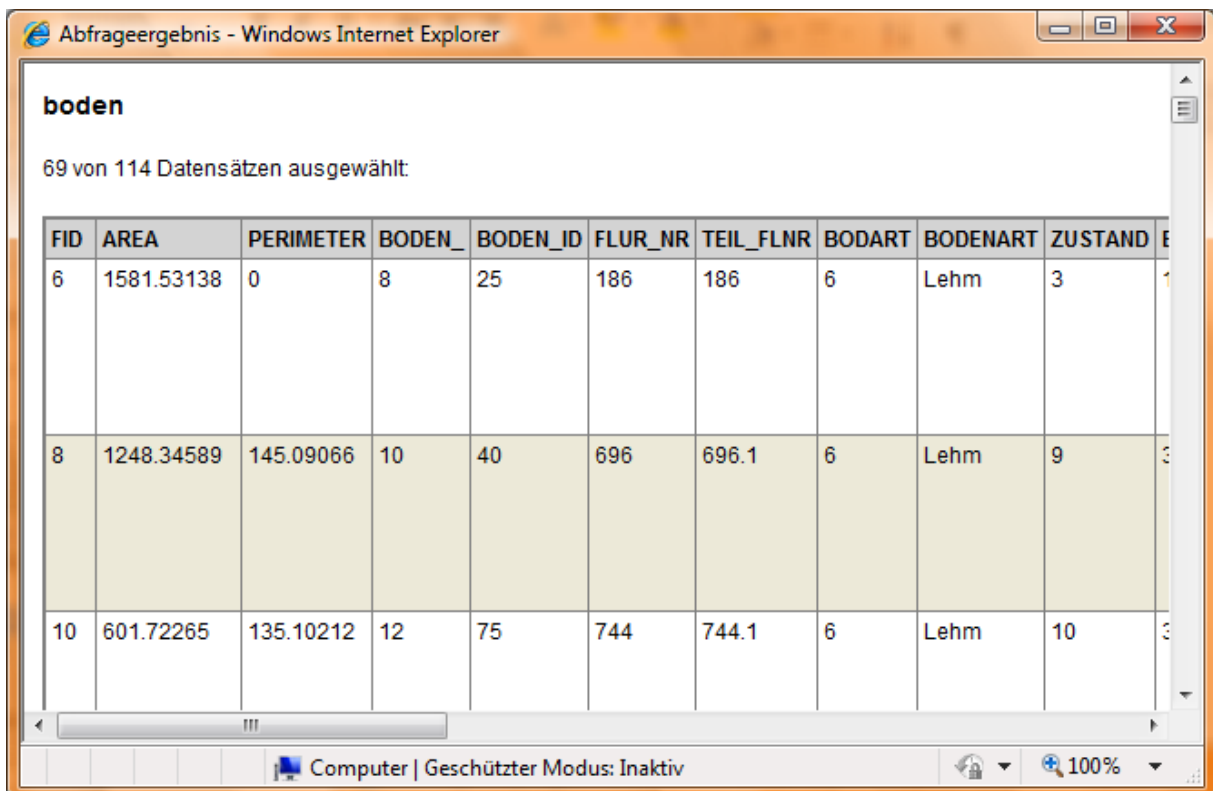
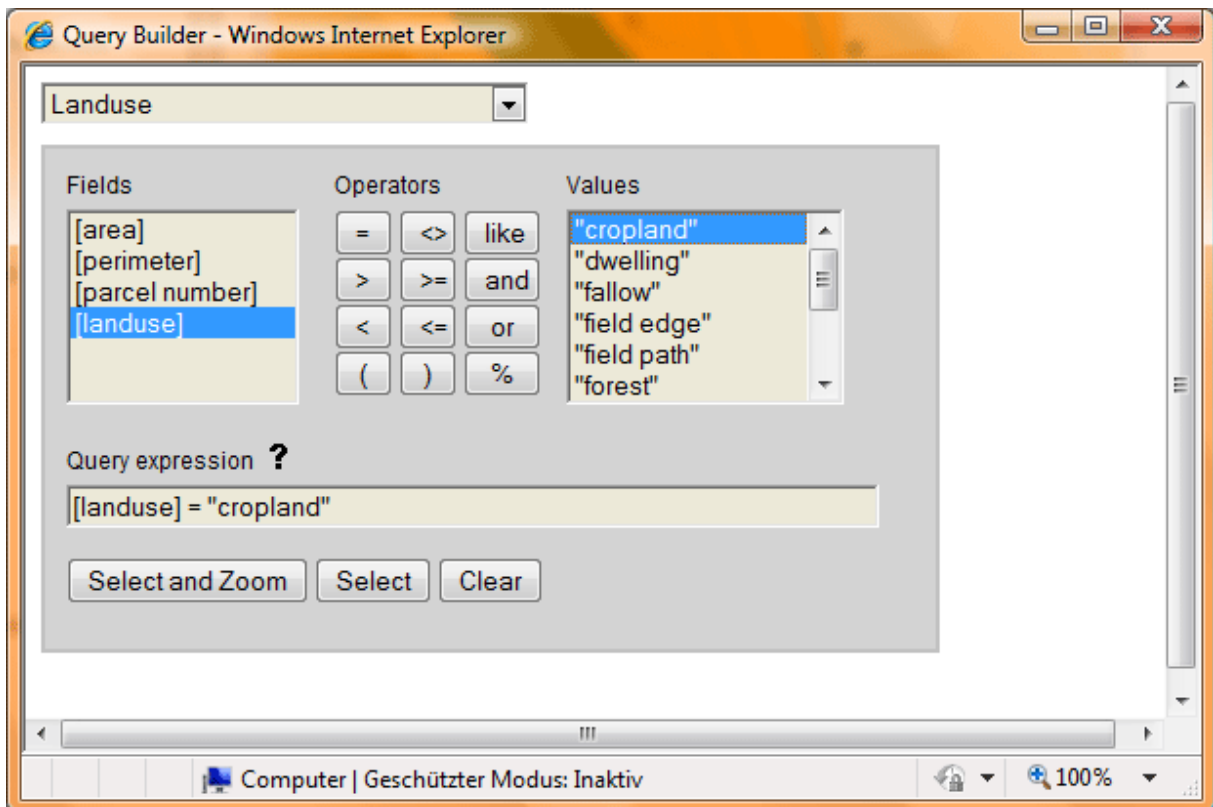
- Zoom to and highlight selected objects
- Highlight selected objects
The selected objects will be highlighted but there is no zooming
- Zoom to selected
There is a zooming to the selected objects but no highlighting

Query builder

This is equivalent to the query builder in ArcMap. The query builder is displayed in a pane of the tab container.

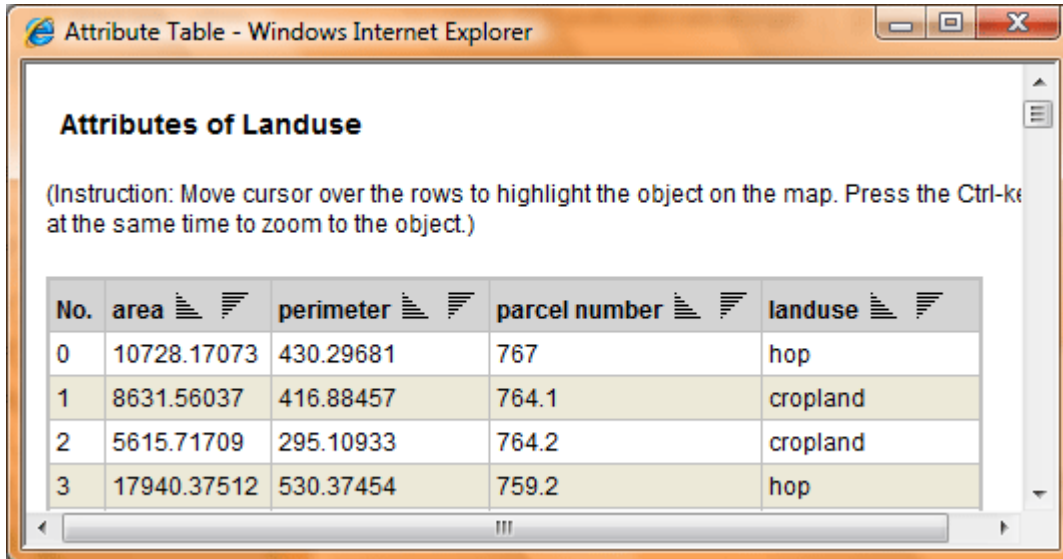
The user can build the query expression by either clicking on fields, operators, and values, or by typing it in. By clicking the "Select" button, the selected features will be displayed in a new window or in the

query builder window. Also the selected features are highlighted in the map. Clicking the "Select and Zoom" button additionally zooms to the selected features.



Attribute Table

Allows you to add an attribute table for each layer. The table icon will be drawn right of the check box in the legend. If you click on this icon a new browser window will open with the attributes of all fields you specified in ArcMap. Sorting is taken over by ArcMap.



No.	area	perimeter	parcel number	landuse
0	10728.17073	430.29681	767	hop
1	8631.56037	416.88457	764.1	cropland
2	5615.71709	295.10933	764.2	cropland
3	17940.37512	530.37454	759.2	hop

4.1.2 Display

Add layer to legend

By default all layers are added to the legend. If you do not like a layer be added to the legend you can deactivate the checkbox for this layer. This is useful for layers which are mainly for orientation with less additional object information.

If layer is visible in legend, then you have the following possibilities for the layer:

- Layer can be turned off in legend
You can choose, whether the layer can be turned on or off. By default the layer can be turned off.
- Layer cannot be turned off in legend
Layer is always visible. This setting do not overwrite other settings to define the visibility of the layer (expl. scale ranges)
- Layer not visible when page is loading
Layer is unchecked and not visible by default. The layer can turned on and off.

Do not tile layer

During export layers are tiled automatically, if one of the following conditions is true:

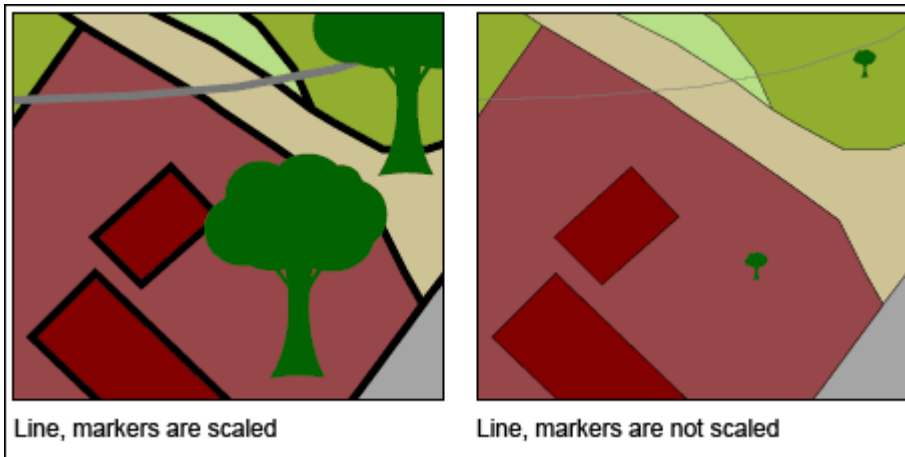
- Layer is currently not visible because it is outside a scale range
- Layer is not visible because of the setting "Layer not visible when page is loading" (see above)
- The extent of the Layer is larger than the current extent

You can disable automatic tiling by checking this option.

Do point clustering (point layer)

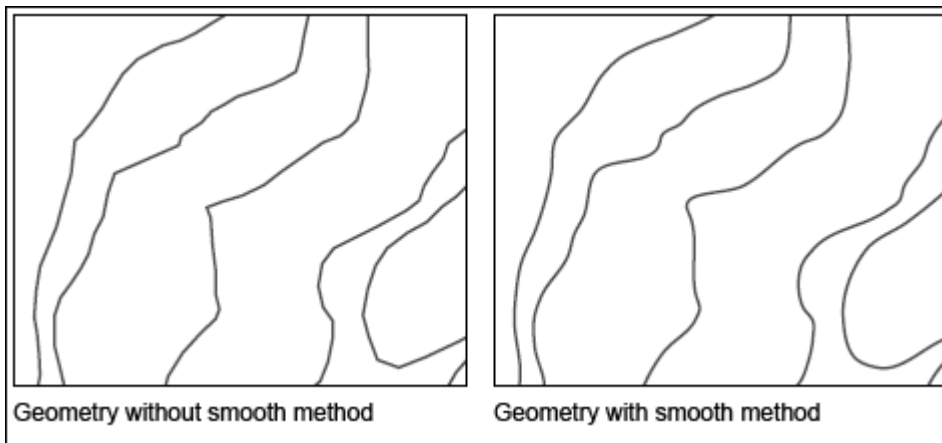
Point clustering allows a scale based clustering of point geometries which are inside a defined area. This allows a better reading of maps.

You can switch between two rendering options for point layers with CharacterMarkerSymbols or PictureMarkersymbol:



Generalize geometry

- Generalize method:**
 This option gives you the possibility to simplify your geometry, so the loading of your map in the browser will speed up. Your data in ArcMap will not be changed.
 The generalizing uses the Douglas-Poiker algorithm. Results are very dependent on the polygon and the polyline geometry. Shapes created from adjacent polygons may no longer be coincident. They may overlap, or leave a sliver. The only check on the resulting geometry is to be sure a polygon has not collapsed completely by removing too many vertices. If so, the shape will revert to the original. While the shape endpoints are maintained, interior points may be eliminated. Other shapes in a network that may begin or end at an interior vertex may now be dangling. A complex shape may cross itself after being generalized. Type in the tolerance.
- Smooth method:**
 This option exports the geometry as Bézier curves. Your data in ArcMap will not be changed. Some types of data will show more adequate results (e.g. contour lines). But there might not be a speed up of loading time, this has to be probed.



Add layer to overview

Creates an overview map as an image which shows the actual extent of the main map. Choose this option if you want to add this layer to the overview. The overview map can be created either with extra layers or layers of the map. If you like to create your overview map with extra layers, add those layers

to your ArcMap project but turn them off; you will find these layers in the layer list. The overview is exported as an image.

4.1.3 Attribute data

Only visible if the option attribute table is chosen.

Feature pointer for attribute data

Choose the unique object identifier for your map features. We recommend using the Feature-ID of the layer (default setting).

4.1.4 Raster settings

Only visible when layer is a raster layer.

Output format

Only JPEG and PNG are raster formats which can be used with all web browsers. Here you can choose the raster format you prefer. If you need transparence for your raster, then you must use PNG.

Compression quality

If you have chosen JPEG as output format, then you can change the compression quality (0-100).

Tile size (only visible if tiling is active)

The tile size can be 256 or 512 pixel. The default value is 256 pixel. 512 Pixel can reduce the size of your project.

Raster zoom levels (only visible if tiling is active)

Mappetizer automatically use the best count of zoom levels. If there are problems with the size of the project then you can reduce the zoom levels manually. The reduction should be only one or two steps because the quality of the raster export is lower if you zoom in.

4.2 Web Services

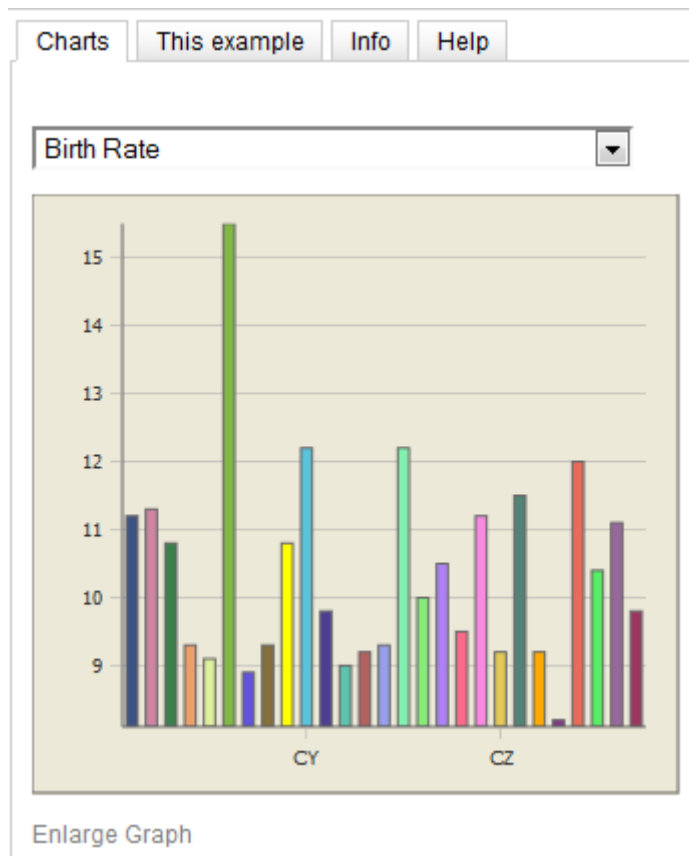
Mappetizer offers you several web services for your web map application.

- **Wikipedia:**
This web service adds access to GeoNames and their Wikipedia entries. These entries can be turned off and on with the Wikipedia-Icon in the Toolbar. Entries are localized to the chosen export language
- **LocationSearch (OpenStreetMap)**
This web service allows you to add the location search functionality based on OpenStreetMap data to your map application.

4.3 Graphs

Mappetizer allows you to export graphs of your ArcMap project. Supported are bar, line and scatter diagrams.

If the graph is related to a layer in your map, a mouseover highlights the corresponding feature in the map.



4.4 Document

4.4.1 General

Publication

Choose the language in which you want to publish your web project.

Export path

Choose the path where you want to store your export files. You can do it either by typing the path name in the text field or by opening the dialog window with the "..." button. You will get a warning if the folder already exists.

Use local Dojo Toolkit

Mappetizer uses Dojo Toolkit, an open source modular JavaScript library. To get access, you have to link in your index.html file to this JavaScript library.

Mappetizer use a reference to a CDN-Server by default. If you do not have internet access for your exported project then you choose to copy a local Dojo to your export folder only make a reference on a folder (and you have to put the folder on this specific place on your Web server or local machine).

4.4.2 Map

Allow infinite zooming

User can zoom in and out without restrictions.

Don't zoom

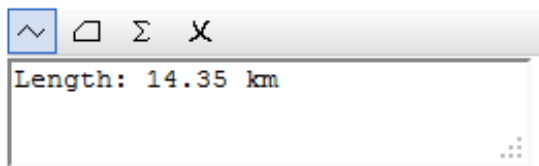
Choose the minimum and maximum scale for your map. Beyond this, the user cannot zoom in or out. You can additionally define scale ranges for individual layers in ArcMap.

4.4.3 Components

Toolbar

Measure tool

This allows the user to measure distances and areas on the map. The results are displayed in a text box. This option needs information about the Display Units. This option is not available for the Map Unit "decimal degrees".



Coordinate read-out

This allows the user to read the coordinates, while moving the mouse over the map. The coordinates are displayed in a text box. This option needs information about the Map Units.



Go to previous/next extent

Allow you to go back to the previous or to your next extent.

Print

The print button allows you to print directly a page. The function is equivalent to the printing option of the browser.

Other Components

Scale bar

Add a scale bar to your Web project. This option needs information about the Display Units. This option is not available for the Map Unit "decimal degrees".

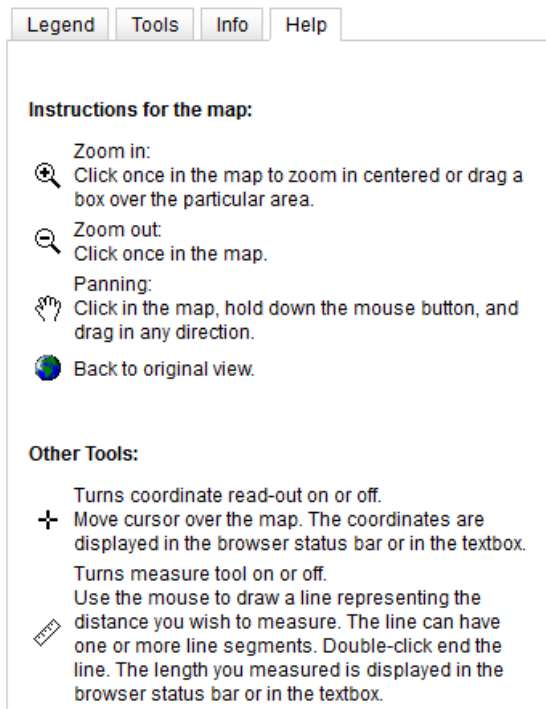
Scale display and specifying

This allows the user to see the map in a specific scale. This option needs information about the Map Units. This option will be converted in a %-zooming for the Map Unit "decimal degrees".

Hint: The results are only correct with a screen resolution of 96 dpi.

Help page

This creates a help page, which can be loaded by click on the help icon.



Spatial bookmarks

This adds a drop-down list which contains the spatial bookmarks of your ArcMap project.

4.4.4 Location Search

This tool offers address geocoding capabilities. The user can type in an address (plus house number), after a successful search the application will zoom to this location and visualize the house number with a circle.

The field of application will be best within a city or town, there are no zipcode or city functionalities included. If a street name exists more than once a suburb- or zipcode can be included for a further differentiated search. The user then will be informed.

The attribute data are stored in a XML file.

Language

Localisation language. See below

Layer

Choose the layer for which location search should be available.

Fields for location search

This functionality is available for line and point layers..

Line layers need the following address geocoding attributes:

- Complete Street name, including Suffix and Prefix Directions (NAME).
- Left From Address: The beginning of the address range for the left side of the feature (FROMLEFT / L_F_ADD).
- Left To Address: The end of the address range for the left side of the feature (TOLEFT / L_T_ADD)
- Right From Address: The beginning of the address range for the right side of the feature (FROMRIGHT / R_F_ADD)

- Right To Address: The end of the address range for the right side of the feature (TORIGHT/R_T_ADD)
- Optional: district, zip code for more differentiated search.

Point layers need the following address geocoding attributes:

- Complete Street name, including Suffix and Prefix Directions.
- Street number
- Optional: district, zip code for more differentiated search

Using the field names put in parentheses, the allocation will be set automatically. You can also choose any available field in attribute table.

Zoom to street

Choose the option "Zoom to street", if you want the application to zoom to the whole street.

Zoom to street segment

"Zoom to street segment", if you want the application to zoom to the specific street segment after a successful search. We recommend the last option if the spatial area is quite large or there are long streets, so the circle representing the location will be quite small and almost invisible when zooming to the whole street (option only available for line layer).

Show attribute values

Choose the option, if you want to see the attribute values after the search is done.

4.4.5 Metainformation

Author

This information comes from ArcMap.

Email

Add your E-mail addresses. It will automatically be transferred into a clickable link. More than one e-mail must be separated with a semicolon or comma.

Date

The date of today will be the choice of the program.

Comment

This information comes from ArcMap. Carriage returns will be factored in.

Filename for logo

To add a logo on your page (GIF, JPEG or PNG File), type in the path name of your logo file in the text box or choose it with the dialog window.

4.5 Layout

4.5.1 General

Color scheme

Choose one of the given color schemes in the drop-down list for your Web project.

Selection color

This color will be seen, when a Map Tip is activated or to highlight the particular feature when the attributes will be seen.

Text font

The display in the browser depends on the fonts which are installed on the system. So it is just useable to differentiate between a serif (e.g. Times) and a non-serif (e.g. Arial) font. Choose one of these font styles. This style will be used for all text in your Web application, such as the legend, the help text, the title, and the site information

Dojo Themes

Dojo has several design themes for their GUI elements. Choose the theme you want to use.

4.5.2 Legend

Mappetizer automatically calculates the width of your legend, depending on the text width. If you like to choose a fixed width, then change the value in the text box.

4.5.3 Overview

The default width of the overview map depends on the width of the map (1/3 of the map width). If you like to choose a fixed width, then change the value in the text box.

5 Customizing your Web map application

5.1 Adding own Scripts

To add further functionalities you can write your own scripts and add them to your Web application. You can write down your scripts in the file `variablen.js` or in a separate file. For this just link in the `index.html` to your script file with the line:

```
<script src="embfiles/myFunction.js" type="text/javascript"></script>
```

Please be aware, that your scripts might be delete or overwritten when you export your project again. So, save your ideas in a separate file and copy them again in your Mappetizer project.

5.2 Use of internal functions

You are also able to use internal functions of Mappetizer. The following functions might be of use for you:

5.2.1 Global Object `mv_Doc`

<code>mv_Doc.HiColor</code>	highlight color, e.g. <pre>Mv_Doc.HiColor = "rgb(100,200,100)";</pre>
<code>mv_Doc.WinSettings</code>	Set the size of the window within hyperlinks, e.g. <pre>mv_Doc.WinSettings = "width=200, height=500, top=50, left=50, toolbar=no, menubar=no, location=no, hotkeys=no, resizable=yes, scrollbars=yes, dependent=yes, status=no";</pre>

	(Can be set in variables.js within the function mv_userInit()).
--	---

5.2.2 Global Object mv_Map

mv_Map.getMapviewX(realValue) mv_Map.getMapviewY(realValue)	On performance reasons all coordinates are transformed on the upper left corner of your map. With the help of these two functions you can transform real coordinates in Mappetizer-specific X/Y-coordinates.
Mv_Map_MaxScaleFakt	Max value when zooming to object features. This scaling factor is calculated in the beginning due to browser window size, map size and other parameters. <pre>mv_alert(mv_Map.MaxScaleFakt); // Ask for value</pre> <pre>mv_Map.MaxScaleFakt = 100; // Change of value</pre> (Can be set in variables.js within the function mv_userInit()).

5.2.3 Function mv_zoomToExtent(xMin,xMax,yMin,yMax,zoomBorder)

With this function you can zoom to a specific extent of your map. The coordinates are Mappetizer-specific X/Y coordinates. So you may have to translate your real coordinates with the functions above. The parameter zoomBorder allows you to set an additional space (value in pixel) around the specific extent. The scale, scale bar, the scale dependent visibility of the layers, and the positioning of the overview rectangle will be set automatically within this function.

5.2.4 Function mv_alert(myText)

Gives out text in a dialog window.

5.2.5 Funktion mv_userInit

You find the function mv_userInit() in the file variablen.js. This function is called on loading and you can use it for your own purposes. For example if you want to zoom in to a certain extent while loading, pass your coordinates with the URL like:

```
http://myURL/mapview/index.html?4457851,4458272,5374027,5373689
```

(Input: left, right, top, bottom)

In the function mv_userInit add in the following lines:

```
var URIStrng = window.location.search;
if(URIStrng.length > 0) {
  var theArray = URIStrng.substr(1, URIStrng.length).split(",");
  if (theArray.length == 4) {
    var left = mv_Map.getMapviewX(theArray[0])
    var right = mv_Map.getMapviewX(theArray[1])
    var top = mv_Map.getMapviewX(theArray[2])
    var bottom = mv_Map.getMapviewX(theArray[3])
    mv_zoomToExtent(left,right,top,bottom,20);
  }
}
```

5.3 Adding own Tools to the Toolbar

To add more functionality to Mappetizer you can add your own tools and buttons to the toolbar. Please do the following to add your tools:

Changes in index.html

In the div-Tag "MVtoolbar":

```
<div id="MVtoolbar" dojoType="dijit.Toolbar">
```

add a new entry:

```
<div dojoType="dijit.form.ToggleButton" id="MVtoolbar.mytool"
iconClass="dijitMapViewIcon dijitMapViewIconMyButton"
showLabel="false">MyTool1</div>
```

Changes in folder toolbar

Add your icon at the end to the image toolbar.png (all images have a width of 18 pixels).

Changes in toolbar.css

Add a new line

```
.tundra .dijitMapViewIconMyButton { background-position: -360px; }
```

Changes in variables.js

You find the `dojo.addOnLoad(function())` in the file `variables.js`. Type in somewhere the following line:

```
dojo.connect(dojo.byId("MVtoolbar.mytool"), "onclick", myFunction);
```

Next type in the function:

```
function myFunction() {
    mv_clearEvents(false);
    mv_alert("here");
}
```

5.4 Size of the Attribute Table Window

To change the size of the attribute table window, please open the file `legend.svg` in the folder `embfiles`. Go to the line, where the function `showTable` (attribute table) is defined:

```
function showTable(layer, sortField) {
    parent.mv_showTable(layer, sortField, "ASC", "width=200,height=500,top=50
, left=50,toolbar=no,menubar=no,location=no,hotkeys=no,resizable=yes,sc
rollbars=yes,dependent=yes,status=no");
}
```

Change in the line `parent.mv_showTable(layer,...)` the attributes width resp. height. The values are pixels and define the size of the popup window.

5.5 File `addressmatch.xml`

To adjust uncomplete inputs from the user, the application has implemented several search routines:

1. Direct search for the name
2. LIKE search for the name

3. First replace search with use of inputs of the file addressmatch.xml (replace of replace1 elements) (LIKE search)
4. Second replace search with use of inputs of the file addressmatch.xml (replace of replace2 elements) (LIKE search)
5. Cut of word boundarys from left to right and LIKE search with the string segment

The use of replace1 and replace2 elements allows the staggered search for a streetname. If the user types in for example "Auenstrasse" but there exists just a "Auenweg" it can be find within the second search. Replacing "strasse" in the first step will find maybe both, assumed both exists within the datas.

You find the addressmatch.xml file in the program folder of Mappetizer (Please do not move or rename this file). This file already includes algorithms for German and American street names, but you can add more algorithms or add another language to this file. Please be careful when change this file (spelling, uppercase and lowercase characters, don't forget the end-Tags). The file has the following structure:

```
<?xml version="1.0" encoding="iso-8859-1"?>
<addressmatch>
  <language id="de">
    <replace1>
      <input mode="all">Strasse</input>
      <standard>Straße</standard>
    </replace1>
    <replace2>
      <input mode="allLast">weg</input>
      <standard></standard>
    </replace2>
  </language>
</addressmatch>
```

For a new language add onother XML element <language id="xx">. You can name the attribute whatever you like, this name will appear in the combobox Language and you can choose it from there.

To add a new algorithm (XML element <replace1> or <replace2>):

For each XML element add two child elements <standard> and <input>. <input> means a possible input by the user, which will be replaced by <standard>.

<input> allows different replace modes, which are typified with the property "mode". The following values are possible:

- **all**
A replacement will be done in each case:

Example	Search Expression	Replace Expression	Result
Vimystrasse	Strasse	Straße	Vimystraße

- **allLast**
A replacement will only be made at the end of the string.

Example	Search Expression	Replace Expression	Result
Vimystraße	Straße		Vimy

- **word**
A replacement will only be made within a word boundary.

Example	Search Expression	Replace Expression	Result
East North Avenue	East	E	E North Avenue
Eastern Ave	East	E	Eastern Ave

- **wordFirst**
A replacement will only be made within the first word boundary.

Example	Search Expression	Replace Expression	Result
East North Ave	East	E	E North Ave

The replacement is independent of lowercase or uppercase letters.

6 The Map in the Browser

... does only operate in the browser. So we might ask to inform you about the functionalities on our homepage:

<http://www.mappetizer.de/en/examples/index.html>

You will find a lot of „live“ applications there.

7 Information about the Demo Version

The Demo version is a fully functional version of Mappetizer, with no restrictions in lifetime. So you can test all the functions without restrictions. The following differences exist between the Demo version and the registered version:

- the note "DEMO" on the map (if you own Mappetizer and evaluate an additional tool, Mappetizer will handle this export in the Demo mode.)
- the note "Created with Mappetizer by uismedia" as Author- and Copyright-Information
- the note "Created with Mappetizer by www.uismedia.de" (strings) or -99999 (numbers) or "1800-01-01" (dates) in the XML attribute files (randomly instead of the correct object data). This will have effects on the correct display of object informations, attribute table, results of the query manager, the location search application or the display of different attributes in use of the same geometry.
- Hyperlinks are randomly replaced by the URI of the homepage of Mappetizer (<http://www.mappetizer.de>).
- the option "Load" is disabled in the Demo Version

You are not allowed to remove the note "DEMO" from the map and to remove the letters "Created with Mappetizer by uismedia" from the Author- and Copyright-Information.

8 Technical Support

You can contact uismedia's Technical Support Center for technical assistance by telephone, fax, or e-mail during our normal business hours, Monday through Friday, excluding uismedia holidays.

Before you call uismedia for technical support, you should be at your computer running your Mappetizer software. Be prepared to give the following information:

- The operating system and ESRI software you are using
- The exact wording of any messages that appeared on your screen
- What happened and what you were doing when the problem occurred
- What you tried to solve the problem

8.1 Contacting Technical Support

Tel: (+49) (0)7583 / 37 54 65

Fax: (+49) (0)7583 / 37 54 66

E-mail: support@mappetizer.de

Hours: 9:00 a.m. to 6:00 p.m. German time, Monday through Friday, except uismedia holidays

9 Frequently Asked Questions

You will find our FAQ online:

<http://www.mappetizer.de/en/support/>