STATPLANET * STATTrends



USER GUIDE

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1. ABOUT

StatPlanet and StatTrends are powerful interactive data visualization tools, used by many different kinds of organizations including schools, universities, government agencies such as NASA, UN organizations such as UNESCO and UNDP, and Global 500 companies such as Samsung and Siemens. StatPlanet can also be used as education software for children (ages 9 and up) to learn about the world through interactive maps.

StatPlanet and StatTrends enable also non-technical users to explore statistics through its user-friendly interface. Moreover, the software automates the normally complex processes of converting raw data into interactive maps and visualizations. This enables also non-technical users to create interactive maps and visualizations with relative ease. You can import your own data and through StatPlanet can import maps or use the embedded USA or world maps.

StatPlanet comes in different versions to cater to different needs. All versions of StatPlanet are free except for StatPlanet Plus, which has more advanced features such as support for large datasets. All versions of StatPlanet can be used both as a stand-alone application for offline use, and as a web-based application which can be published online. The desktop version of StatPlanet Plus is free for non-commercial purposes. Similarly StatTrends Plus is a non-free advanced version of StatTrends, although the desktop is also free for non-commercial purposes.

The aim of the software is to promote evidence-based decision making by improving and facilitating the communication and interpretation of information, by providing: (i) attractive interactive visualizations which facilitate the interpretation of information, (ii) a user friendly interface that is accessible also to non-technical users, (iii) automated data visualization (including the processes of merging and synchronizing data from different sources), and (iv) an easy to disseminate software system which can enable anyone to explore and create data visualizations - regardless of technical skills, availability of Internet connectivity, and computer hardware or software.

StatPlanet and StatTrends are produced by StatSilk, an Australian company founded by Frank van Cappelle. From 2008 to 2010, the development of a tailored version of StatPlanet was undertaken as part of the SACMEQ research programme at the UNESCO International Institute for Educational Planning (IIEP), Paris, France.

For more information, see www.statsilk.com

2. SYSTEM REQUIREMENTS

StatPlanet and StatTrends are designed to be usable in as many places as possible regardless of the available computers and infrastructure. It can be used online, through an intranet as well as offline — making it usable in places where there is no Internet connectivity. It is easy to disseminate due to its very small size — small enough to fit on any USB flash drive (USB stick) or to be sent as an e-mail attachment. The software does not require installation, so even those without administrator rights on their PC can run both the offline and online versions.

The software runs in the Adobe Flash Player, which has the following minimum system requirements¹. The system requirements are low, and any computer purchased within the past 8 years should be able to run the software.

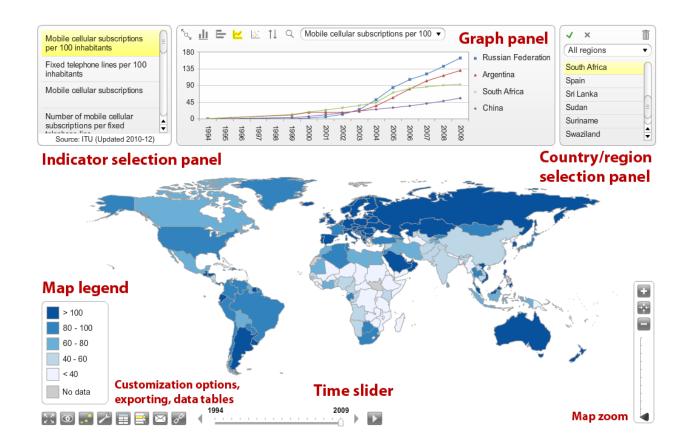
Windows®	Macintosh	Linux [®]	
Intel® Pentium® II 450MHz, AMD Athlon™ 600MHz or faster processor (or equivalent)	PowerPC® G3 500MHz or faster processor Intel Core™ Duo 1.33GHz or faster processor	Modern processor (800MHz or faster)	
128MB of RAM	128MB of RAM	512MB of RAM, 128MB of graphics memory	
128MB of VRAM*			

^{*}Recommended for GPU hardware acceleration—dependent features. Flash Player will use software mode for systems that do not meet the system requirements.

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¹ http://www.adobe.com/products/flashplayer/systemregs/

3. FEATURES AND OPTIONS



3.1. Thematic map

Choropleth Map



This is the main thematic map type in StatPlanet. The map legend shows which map colors are associated with each data range (for example, higher values may be shaded in increasingly darker colors). Both the map colors and the data range can be customized (see *Map legend* below). In version 2.1, the possibility of creating qualitative or descriptive maps was introduced. These types of maps convey non-numerical information, such as which languages are spoken in different regions.

Proportional Symbol Map



A proportional symbol map scales symbols (usually circles) according to the indicator being mapped. Each symbol can represent a country or other map area. In StatPlanet the symbol map is overlaid on top of the choropleth map (see above). This means that two data sets can

be shown on the same map – one for the choropleth map and one for the symbol map.

To show the symbol map, click the symbol icon (shown on the left) in the bottom-left corner of the screen. If you have bookmarked an indicator, the symbol map represents the data for the bookmarked indicator, whereas the choropleth map represents the data for the selected indicator. (If the bookmarked indicator is currently selected, both the symbol map and the choropleth map represent the bookmarked indicator).

Select country or other map area using the map

- Mouse over a country or map area: Moving the mouse over a country or other map area brings up a popup containing information about that particular country or map area for the selected indicator (as well as the bookmarked indicator, if there is one).
- **Click on a country or map area**: You can select a country or other map area by clicking on it in the map. See also the **Selection panel** for additional selection options.

Map legend

Map colors: Clicking on any of the colors in the legend will bring up a color selection panel. In this panel you can change both the colors (either Sequential or Diverging color schemes), as well as the number of color classes (between 3 and 9). The color schemes are from the Color Brewer website (http://colorbrewer2.org/), which is an excellent resource for more information on selecting map colors.

Data range: To adjust the data range of the map legend, click on the top or bottom value. Use the popup to increment or decrement the value, or enter a whole new value. The intermediate values will be adjusted automatically.

Custom maps (national / regional / state maps etc.)

You can use StatPlanet to insert your own maps, using the included map template (map.fla). This requires the Adobe Flash software. (See: 5. Importing a map into StatPlanet)

Save/export (StatPlanet Plus / StatTrends Plus only)



You can find the save/export button in the bottom-left corner of the screen. This button enables you to save the current map or graph as an image, or download the data as a CSV file.

To change the image type, size or quality, use the Options panel. This feature is only available in the web version of StatPlanet Plus.

Map zoom



The map zoom controls are normally hidden from view. Move the mouse towards the bottom-right of the screen to make them appear.

- **Zoom**: You can zoom in and out of the map using the 'zoom in' and 'zoom out' buttons, or by dragging the zoom slider up or down. If your mouse has a scroll wheel, you can also use this to zoom in and out.
- Moving the map: click and drag the map with the mouse to move it to a new position.
- **Restore map position**: the button shown on the left restores the map to the original coordinates for the selected region.

3.2. Indicators panel

Select category (optional)



The category selection drop-down is hidden by default². Use the drop-down menu in the top of the Indicators panel to select a new category. When switching categories, StatPlanet / StatTrends will remember which year was selected and check if data exists for this year in the new category. If there is no data for this year, it will select the year closest to the previously selected year for which data is available in the new category.

Indicator bars (optional)



Indicator bars are hidden by default³. The bars are scaled in proportion to the maximum value of that particular indicator for all countries in the selected region. For example, if the value for country X is 20 and the maximum value for all countries is 100, the bar will be scaled at 20%.

Bookmark indicator (optional)



The bookmark indicator option is hidden by default⁴. Click the 'star' button in the Indicators panel to bookmark the selected indicator. The bookmarked indicator will stay even when you switch to another category. This allows you to (i) create scatter plot graphs, (ii)

² The category dropdown can be added through the StatPlanet Data Editor sheet 'settings', variable 'V-IND-O'.

 $^{^3}$ The indicator bars can be added through the StatPlanet Data Editor sheet 'settings', variable 'V-IND-B'.

⁴ The bookmark indicator icon can be added through the StatPlanet Data Editor sheet 'settings', variable 'V-IND-O'.

compare the bookmarked indicator with indicators from other categories, and (iii) compare two indicators through the choropleth map (representing the selected indicator) and the proportional symbol map (representing the bookmarked indicator).

Indicator definitions

If a definition exists for an indicator, the definition will appear in a popup when moving the mouse over the indicator. The definition only shows for the indicator which is selected or bookmarked.

3.3. Graph panel

In StatPlanet, click the 'graph' button in the bottom-left corner of the screen to open or close the Graph panel.

Bar chart



The bar chart and column chart buttons are located in the top left corner of the Graph panel.

Use the "sort" button to sort the graph from lowest to highest, highest to lowest, highest to lowest starting in the middle, or alphabetically.

Time series



The time series button is located in the top left corner of the Graph panel. Use the Selection panel to add countries, map areas or other variables (depending on your data set) to the time series graph. Click on it again if you wish to to remove it. Countries or other map areas can also be selected directly from the map (See also: **Selection panel**).

Use the "sort" button to sort the time series labels.

Scatter Plot (bubble chart)



The scatter plot button is located in the top left corner of the Graph panel. Clicking on the button will automatically use the selected indicator as the x-axis variable. You need to select a second indicator as the y-axis variable.

The x-axis and y-axis variables can be selected in the Graph panel (see below), or in the Indicators panel (see **Bookmark indicator** above).

Press the 'play' button to see an animation of changes over time, with each bubble (point) moving to the corresponding x and y positions (depending on whether data is available for each time interval). If 'Show trails' is selected (next to the play button), each bubble will leave

a trail to mark previous positions over time.

Clicking on a scatter plot bubble will display the associated label. They can also be repositioned through 'drag and drop', by right-clicking and selecting 'move text labels or map points'.

A third indicator can be visualized through the bubble size parameter. This indicator can be selected through the drop-down above the scatter plot. The bubble size follows the formula: value / maximum value.

Select x-axis / y-axis indicator



Click on the x-axis or y-axis label, then select an indicator from the drop-down menu.

Use the drop-down menu in the top of the Graph panel to change the scale of the 'bubbles' according to a selected indicator.



Use the 'options' icon in the Graph panel to show or hide the trendline. Move the mouse over the trendline to see the slope and trendline equation.

Adjust graph size



To change the graph size, move the mouse to the sides or corners of the Graph panel until you see the cursor change to look like the one shown on the left. Click and hold down the left mouse button, then drag the panel to the size you want. Release the mouse button once you have the right size.

Adjust graph scale

The graph scale can be adjusted by clicking on the top or bottom graph values. The value can then be edited in the popup window.

3.4. Options panel



Click the 'options' button in the bottom-left corner of the screen to open the options panel.

Map:

- Map colors: map background, map borders, map text color, map text outline color, etc.;
- Map text size;
- Map symbol size (proportional symbol map symbols);

- Map legend estimate best value distribution: adjust the values so that there is a more
 equal distribution of countries for each color class. This will usually result in a map with
 a better distribution of colors. If this is switched off, the value range for each color class
 will be set at equal intervals based on the highest and lowest value in the data range.
- Map legend show maximum & minimum values
- Map legend colors.

Graph/Chart:

- Graph colors: background, bar & scatter points, scatter point borders;
- Graph text size;
- Transparency level of graph area (bars / bubbles);
- Size of bubbles (scatter plot graph);
- Bullet graph.

General options:

- Animation duration;
- Decimal places shown;
- Adjust the map/graph scale: StatPlanet automatically adjusts the map and graph scale
 to suit the data set. However, in some cases you may wish to keep it fixed, for example
 if you made some changes to it yourself. You can set (or prevent) the automatic
 updating of the map/graph scale on (i) changing indicator, (ii) changing region, (iii)
 changing year. The default setting is for StatPlanet to adjust the scale when changing
 indicator or region, but not year.

If you have chosen to not have the map scale updated, the map legend has a shortcut which you can use to 'refresh' the map legend at at any time for the current indicator, year and region:



Save/export map or graph: (web version only)

- Set the image type: PNG or JPEG
- Change the **image size** as % of original

Change the image quality (for JPEG images only)

3.5. Data-table panel



Click the 'table' button in the bottom-left corner of the screen to get a data table of the selected indicator. If an indicator has been bookmarked, the data for both the bookmarked and selected indicator will be displayed. The table also shows the mean, standard deviation and range.



Save / Export table (StatPlanet Plus / StatTrends Plus only)

Save the table as a .CSV file, which can be opened by most spreadsheets (such as Excel). You can find the save table button in the top-right corner of the table panel.

Copy table



The desktop of StatPlanet does not allow you to save the data as a file. Instead, you can copy the entire table into Excel using the 'copy' button, and then 'paste' it in Excel. If you do not have Excel, you can also do the following: (i) paste the data into a basic text editor such as Notepad, (ii) save the document as 'data.html', (iii) open the file using your Web Browser.

3.6. Selection panel

Countries, map areas (or in StatTrends – any other defined variables) can be selected in various ways. An efficient way of finding and selecting a country or map area is through the selection panel, as explained below. However, a country or map area can also be selected by clicking on it in the map, in the data table panel, or in the graph panel. In each case it will be highlighted in all of these StatPlanet components.

Click on a country/map area/variable in the list to select it. Clicking on a selected item will deselect it. You can press the first one or two letter of an item in the list to quickly jump to that item. For example, if it contains a list of countries, press 'b' to quickly jump to countries starting with the letter 'b'.



If the Selection panel is hidden, click the 'select' button in the bottom-left corner of the screen to make it appear.

Select regions

Use the drop-down menu in the top of the indicators panel to select and zoom into a different region, such as 'Africa' or 'Europe'. It is also possible to select countries to define a custom



region (see Selection panel).



Select button

Press the Select button to reduce the list to your selection. Any items which are not selected will be removed from view.



Deselect All button

Press the Deselect All button to clear your selection.





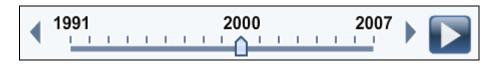
The Refresh button appears once you have created a custom region or group of items. It can be used to return to the original list.

Remove button



To remove items from the list, select those you wish to remove and press the Remove button.

3.7. Time slider



Use the slider or click on the arrow buttons to change the year. Click on the play button to show changes over time as an animation, starting from the beginning. The animation speed can be set in the Options panel.

3.8. Interface options

View panel



Move the mouse over the 'View' button in the bottom-left of the screen to see various options for showing or hiding map & graph elements, and other StatPlanet components.

• Show or hide country or map area names on the map or graph (country names can

be shown in full, in abbreviated form or as ISO3 codes);

- Show or hide country or map area statistics on the map;
- Show or hide the map popup and its components bar chart, indicator and statistic;
- Show or hide various panels.

Shrink / enlarge panels





Use the buttons shown on the left to shrink or enlarge the StatPlanet panels. This may be useful for space management when you have several panels open at the same time, or to focus in on certain areas.



Minimize / maximize panels

Use these buttons to minimize or maximize the panels.



Adjust graph panel size

Drag and drop the graph panel borders to adjust the size.





Fullscreen

Click on this button in the bottom-left of the screen to either switch to fullscreen mode, or go back to normal panel mode.

Additional notes:

- When switching categories, StatPlanet will remember which year was selected and check if data exists for this year in the new category. If there is no data for this year, it will select the year closest to the previously selected year for which data is available in the new category.
- When switching maps (e.g. world map to country map, or from regional map to district map), StatPlanet will check if the same category and indicator exist in the new map. If it cannot be found, the first category/indicator in the data set will be selected.

4. IMPORTING OR CREATING MAPS

4.1. Importing ESRI Shapefile maps

- See http://www.statsilk.com/maps/download-free-shapefile-maps to obtain free shapefile maps.
- 1. In the folder "Shapefile_map_(ESRI)" open the sub-folder 'map'. Copy your map files here.
- 2. Run the file "update_map.bat". This automates the following procedure which can also be done manually: (i) remove the included example shapefiles (map of Indonesia), and (ii) rename your map files (e.g. "mycountry.shp" and "mycountry.dbf") to "map.shp" and "map.dbf"

Please note that there are <u>two</u> map folders in "Shapefile_map_(ESRI)" to which you need to copy your map files:

- \map (for the offline version)
- \web\map (for the web version)
- 3. Open the StatPlanet_data_editor file. Click on the button 'Setup shapefile' (in the top-left, macros need to be enabled).
- 4. Select your "map.dbf" file in the map folder, and follow the instructions. Make sure that the 'ID' column is alphabetical (a-z), numerical (0-9), or alpha-numeric (a combination of alphabetical and numeric characters such as "reg21"). Special characters such as ē a & / may cause problems in loading the map. If you do not have a suitable ID column, you could use software such as Open Office Calc to edit the "map.dbf" file and create/edit an ID column. Open Office Calc is free software (http://www.openoffice.org/).
- 5. Run StatPlanet to see the results with the included sample data.

You can now start importing or inserting data for your map, but first you may wish to modify the map position and add text labels.

Map positioning:

To change the position and size of the map, move the mouse to the bottom-right of the screen to see the map zoom controls:

- **Zoom**: You can zoom in and out of the map using the 'zoom in' and 'zoom out' buttons, or by dragging the zoom slider up or down. If your mouse has a scroll wheel, you can also use this to zoom in and out.
- Moving the map: click and drag the map with the mouse to move it to a new position.

Once the map is in the right position, right-click and select 'Copy map coordinates'. In the StatPlanet Data Editor, go to the sheet 'Map regions', select the cell below 'X'. Then paste the coordinates here.

Text labels:

- 1. To show the text labels for the map, click on 'Show text labels' in the StatPlanet Data Editor (sheet Import, below the Save button).
- 2. Click on "Save data" and open StatPlanet to see the results. It is likely that the position of some or all of the text labels will need some adjusting.
- 3. To adjust the position of the text labels, right click anywhere in StatPlanet and select 'Move text labels or map points' in the menu. Click on any of the text labels to drag them to a new position.
- 4. Once you have finished moving the text labels, right click and select 'Copy map text label coordinates' in the menu.
- 5. In the StatPlanet Data Editor, go to the sheet 'Settings'. Select the cell next to 'Text label coordinates', and paste the coordinates here. (You may also wish to modify other settings in this sheet, such as the text font size.)
- 6. Click on 'Save settings' (or alternatively, 'Save data' in the Import data screen). The coordinates have now been saved for when you next open StatPlanet.
- 7. In the sheet 'Settings', you can also change additional settings such as the font size of the text labels.

Finding a map:

The following are useful websites for finding free shapefiles (regional / administrative boundaries maps).

Note that you need to download the boundary files in the ".SHP" format.

- Map Library http://www.maplibrary.org/ Public domain maps for most countries in the world. Maps are not guaranteed to be error free and up to date.
- UN SALB http://www.unsalb.org/ Second Administrative Level Boundaries data set project. These maps are free but copyright rests with the UN. The maps are validated by the National Mapping Agencies (NMA) of each UN Member State.
- US Census Bureau http://www.census.gov/geo/www/cob/bdy-files.html USA County and District Cartographic Boundary Files.
- ArcGIS map resources http://resources.arcgis.com/content/data-maps/10.0/world
- Stanford University map resources http://www-sul.stanford.edu/depts/gis/web.html

Instructions for loading shapefiles without using Excel:

- 1. Copy your map shapefiles as explained above.
- 2. Copy and paste the country IDs from the map.dbf file to replace the existing ones in the file data.csv.
- 3. Copy and paste the country names from the map.dbf file to replace the existing ones in the bottom of the file settings.csv.
- 4. Copy the ID column header name, and paste it next to 'DBF-ID' in the file settings.csv.

Note: The ID column may not contain spaces or symbols, and should have unique values only.

GIS Shapefile Reader - Source Code

The source code for reading the shapefiles is included in the directory SHPreader. It can be compiled to the file SHPreader.swf, which is read by StatPlanet.

The code was written by Edwin van Rijkom under the LGPL license, with some additions by Andy Woodruff, and some slight modifications for use in StatPlanet.

If you wish to change the names of the map files being read, you can change this in SHPreader.as, and publish it as SHPreader.swf through the file SHPreader.fla.

For more information, see: http://shp.riaforge.org/

4.2. Create a map using Adobe Flash

To create custom interactive maps for use in StatPlanet, you need the following:

- StatPlanet or StatPlanet Plus
- Adobe Flash CS3 or higher
- A map file in vector format, either Adobe Illustrator (.ai), FreeHand (.fh*, .ft*), or Adobe Flash (.swf).

(See also: Converting images into a suitable vector format)

For creating Flash maps, please see the tutorial on http://www.statsilk.com/maps/create-flash-maps

5. IMPORTING OR ADDING DATA

5.1. Basic steps for adding data

The following is an example for importing country level data into StatPlanet - "world map" version. However, the process is the same for other maps, as well for importing data into StatTrends.

1.	Download	<u>Download</u> StatPlanet and <u>extract the files</u> to your computer.
2.	Open	In the folder 'World_Map', open StatPlanet_data_editor. Make sure <u>macros are enabled</u> . Press the 'Clear data' button to remove the example data.
3.	Import	Press the <u>Import data</u> button and select a file containing data you wish to import. You can also <u>add data manually</u> using any spreadsheet software.
4.	Save	Press the 'Save data' button. This saves the data to the file data.csv.
5.	View	Click on StatPlanet.exe to view the results.
6.	Publish	Copy the contents of the folder 'Web' to your website to publish it online.

To publish StatPlanet **online**, all you need to do is to upload the contents of the folder **Web** to the website (web-server). This folder contains the following files:

- StatPlanet.html (the webpage which displays your interactive map)
- StatPlanet_small.html (alternative with smaller map embedded inside a webpage)
- StatPlanet.swf (file which shows loading progress)
- content.swf (the actual software)
- settings.csv (settings in comma-separated values format)
- data.csv (data in comma-separated values format)

• swfobject.js (required to run 'Flash' content)

Enable macros in Excel:

When you open StatPlanet_Data_Editor.xls you will normally get a message asking you whether you wish to enable macros. The message depends on the version of Excel.

- Excel 2007 or newer: In the top of the screen, next to 'Security Warning', click the button 'Options'. Select 'Enable this content' and click on 'OK'.
- Older versions of Excel: Select 'Enable macros' in the popup window.

If you do not receive this message, the macro security level in Excel is set to high. Follow the instructions below to change the security level to a lower setting.

- Excel 2007 or newer: Click the Microsoft Office Button (top-left) and click Excel Options. In the Popular category, check 'Show Developer tab in the Ribbon' (if it is not already checked). Click on 'OK', then select the Developer tab. Click on 'Macro security' (on the left). Select 'Disable all macros with notification'.
- Older versions of Excel: In the Tools menu, go to -> Macro -> Security. Change the security level to Medium.

5.2. Importing data

Using the included StatPlanet Data Editor, it is possible to import data automatically. The Data Editor is Excel-based, so data can be imported from many different file formats (including CSV, TXT, XLS, XLSX, DBF and HTML).

The Data Editor automatically recognizes the structure of the data in the file being imported. It also recognizes the vast majority of the many possible variations of country names (in the world map version of StatPlanet). The import should therefore succeed in most cases without having to make any changes to the data file. In case of problems, see "troubleshooting" below.

The Data Editor uses the names in the Excel sheet 'Import names' and looks for corresponding names and statistics in the data file (in the world map version, this sheet contains country names, but it can also contain for example region names or district names, depending on the map used). The Data Editor automatically restructures the data in the format that is accepted by StatPlanet.

A criterion for the import to be successful is that any country name *only appears once* in the data file being imported. Also note that StatPlanet sees a "dot" as the decimal separator.

Importing HTML or PDF files

- HTML: To import data from a web-page, simply save the web-page and import it like any
 other file. If the import fails, it could be that the import/map/country names and
 statistics are too far down the page. In this case, open the file in Excel, and remove the
 rows up to the point that the data starts. Then import the file again. Alternatively, copy
 and paste the tables in the web-page into a new Excel document.
- PDF: Tables in PDF files can usually be copied and pasted into an Excel file. Select
 (highlight) the table with the mouse, right-click and select "Copy as Table" or "Save as
 Table" from the menu. See also this helpful guide from McGill University:
 http://www.library.mcgill.ca/edrs/services/publications/howto/pdftoxls/pdftoexcel.htm
 http://www.library.mcgill.ca/edrs/services/publications/howto/pdftoexcel.htm
 <a href="http://www.library.mcgil

as well as this free tool to convert a PDF to an Excel file: http://www.pdftoexcelonline.com

Names not recognized

Names of map regions in the data file which are not recognized are displayed once the import is complete. For example, if in your data file the country 'Afghanistan' is indicated with the abbreviation 'Afg', this abbreviation will not be recognized by the data editor. To fix the problem, go to the Excel sheet 'Import names' and add 'Afg' in an empty cell below the corresponding country - 'Afghanistan'. You can use the same approach for other headers in your data set so that the import macro can correctly identify them. Then, run the import macro again to import the data correctly.

Note that the import macro removes spaces in the sheet "Import names" and converts special characters (e.g. "e") into regular characters (e.g. "e") during the import. This allows for a wider range of country name spellings to be detected. Whether the names in your file use upper or lowercase does not matter. The world map version recognizes English and French country name spellings and a number of variations of these spellings. Automatic data importing has been successfully tested with many different sources of data with different data structures and country name variations, including the CIA Factbook, Ethnologue, IMF, ITU, Nation Master, OECD, UBS, UIS, UNAIDS, UNDP, UNESCO, UNICEF, UNSTATS, WHO and the World Bank.

The Data Editor is registered as an open source project on SourceForge and any contributions or improvements you make to the software are very welcome.

(https://sourceforge.net/projects/statplaneteditr/).

5.3. Troubleshooting

If you have saved your data but it cannot be read by StatPlanet, most likely there is a problem with the data structure. Data should start with the more recent time point. Also make sure that the indicators listed for each year are exactly the same, and are listed in the same order.

For general troubleshooting issues, please see the FAQ on the StatSilk website:

http://www.statsilk.com/support/faq#troubleshooting

If the import fails, please check your data file for the following issues:

- Spelling of names: If the spelling of any of the country/map/region names cannot be identified, the corresponding data will not be imported. See "Names not recognized" above for more information on how to resolve this problem.
- 2. **Names appear more than once**: If the same country/map/region names appear more than once in your data file, the import macro will only import the data associated with the first one.

This structure will not be imported correctly:

Country	Dimension	High	Medium	Low
Afghanistan	Α	6	3	2
	В	7	5	2
Albania	А	9	6	3
	В	12	5	2
Algeria	А	11	5	1
	В	21	11	9
Andorra	А	15	14	12
	В	14	11	10

This structure needs to be re-arranged with one country/map/region name per row, as shown below (alternatively, it may be easier in some cases to split the data into several files and import them separately).

This structure will import correctly:

Country	A - High	A - Medium	A - Low	B - High	B - Medium	B - Low
Afghanistan	6	3	2	7	5	2
Albania	9	6	3	12	5	2
Algeria	11	5	1	21	11	9
Andorra	15	14	12	14	11	10

3. No year indicated in the data file, or cannot be detected:

All indicators are arranged according to year or other time unit (e.g. months). See the example file included with StatPlanet "data_example_for_import_worldmap" to see how to structure data with multiple years and/or indicators, so that it can be imported successfully.

Alternatively, you can import the data and add the year or time unit afterwards. The data needs to be structured as follows (see for example the structure of the sample data in StatPlanet_data_editor.xls):

- Group (sort) your indicators according to year. Insert a new row above each group of indicators. In this new row add the year in the TIME column. Leave the neighbouring cell in the INDICATOR column blank;
- Note that the TIME column should be blank in the cells next to the indicators:

TIME	INDICATOR
2001	
	indicator1
indicator2	
2000	
indicator1	
indicator2	

 Decimal point: StatPlanet reads a "dot" as decimal separator (for example 0.75). Avoid using commas, spaces or other symbols in numbers to ensure that they are read properly by StatPlanet.

6. CUSTOMIZATION

For help in customizing and improving your interactive maps, see also the StatSilk website section - general tips for creating interactive maps

6.1. General settings and customizations

General settings for customizing StatPlanet can be found in the Excel sheet **Settings**. After making any changes to the settings, press the button **Save Settings**. You can try out many of the settings 'live' in StatPlanet through the general options panel and the map legend options panel.

In the Excel sheet **Settings**, the various settings to be edited are the yellow highlighted cells in column C. In some cases, the checkboxes and dropdown menus in column D can be used to more easily change the setting in the corresponding cell in column C (for example, click on a checkbox to change a setting from 'TRUE' to 'FALSE').

See also the next section for customizing StatPlanet at an indicator or category level (for example, specify different map colors for different indicators).

Below are the settings which may require additional explanation:

Modify map, graph or interface colors

Virtually all the colors used in StatPlanet can be customized and there are over 40 color settings. Additional color settings can be specified at the indicator level (see the next section for more details). Colors are specified using hex (hexadecimal) color code, consisting of the characters '0x' followed by six digits or characters (e.g. 0xFFFFF for white). Hex codes can be found in commonly used design software such as Adobe Dreamweaver. Colors and corresponding hex codes can also easily be found online.

Show / hide interface components

Use the options in this section to show or hide the various panels, icons and other components in order to customize the StatPlanet interface.

View menu options

The view options in this section are identical to those in the 'view menu' inside StatPlanet, which appears when selecting the 'view' icon in the bottom-left of the interface.

Add text labels and position the text labels on the map

Please see one of the chapters on creating a custom map (either the chapter on importing ESRI shapefile maps, or the chapter on using the Flash map template). In addition to positioning the text labels, it is also possible to include map lines (lead lines) linking the text label to a map region (mainly used for some areas like islands). Map regions/countries for which you wish to have map lines can be set in the sheet 'Settings', variable 'REGION-L'. You would need to insert the country/region codes (the codes used in the sheet 'Data') separated by a space.

Add a map title

Under 'Map options', 'MAP-TITLE', insert the text for the map title. The procedure for relocating the map title is the same as for relocating any other text labels on the map: (i) right click anywhere in StatPlanet and select 'Move text labels or map points' in the menu; (ii) drag the map title to a new position; (iii) right click and select 'Copy map text label coordinates' in the menu; (iv) in the StatPlanet Data Editor, go to the sheet 'Settings'. Select the cell next to 'Text label coordinates', and paste the coordinates here.

Multiple map layers

Multiple map layers are possible in the Flash map and Shapefile map versions of StatPlanet. For an example of a Flash map implementation with multiple layers, please see: http://www.statsilk.com/maps/create-flash-maps#multiple-map-layers

6.2. Customizations at category & indicator level

In StatPlanet_Data_Editor.xls, there are several columns which can be used to define optional parameters. The different columns and their usage is explained below.

<u>IMPORTANT</u>: CUSTOMIZATIONS, SUCH AS AN INDICATOR DESCRIPTION, SHOULD ONLY BE SPECIFIED FOR THOSE INDICATORS IN THE <u>FIRST</u> (OR HIGHEST) YEAR. THEY DO NOT NEED TO BE REPEATED FOR ALL YEARS IN THE SERIES.

Data source

The source of your data can be specified for each indicator, or for all indicators in a category (in StatPlanet Plus, you can have multiple categories and sub-categories of

data). The source is indicated in the "SOURCE" column. To specify the source for the entire category, insert the source in the first row of the category (the same row as the first year or time unit in the series). To specify the source for an indicator, insert the source in the same row as that indicator.

You can choose to use HTML code if you want to add a link to the source website, in the following format:

My Source.

*Important – please note:

- In the HTML code above, you need to use <u>single quotes</u> ('') rather than double quotes ("").
- The links do not work if you run the web version offline (the Flash platform does not allow this for security reasons). The links will work only once the files are online. If you wish to use or test the links offline, please use the desktop version.

Indicator description and unit

- Description: Add a description for each indicator in this column, which will appear as a popup in StatPlanet when moving the mouse over the indicator.
- Unit: Add the unit for the indicator, for example '%'.
- As noted above, these only need to be added for the list of indicators below the
 first year or time unit in the series. If you have two or more indicators with the
 same description, you only need to enter the description once. For the other
 indicators, instead of a description enter the Excel row number (in the sheet
 'Import') where the description you want to re-use is located

• Map legend, labels and colors

In this column you can customize the map legend for each indicator. It is possible to customize the map legend values (either text or numbers), colors, as well as the number of color categories.

The map legend can be customized in StatPlanet itself (i.e. the included StatPlanet.exe or StatPlanet.html), and then copied and pasted into the data file. In StatPlanet, select the indicator for which you wish to customize the map legend. Then click on any of the colors or values inside the map legend panel in the bottom-left corner to customize the

map. Once you are satisfied with the map legend you have just customized, right-click anywhere inside StatPlanet and select 'Copy map legend' from the menu. Open the StatPlanet_Data_Editor file. Select the cell below the column header 'MAP', in the corresponding indicator row (for which you customized the map legend). Select 'paste' to insert the custom map legend. If there is data for multiple years (or time units), this only needs to be pasted in the row for the first year in the series. Click on 'Save data' to see the results the next time you open StatPlanet.

More details on customizing the map legend, including how to create a qualitative map, are provided below. If you wish to create a qualitative map legend (based on categories such as 'high', 'medium', 'low'), rather than a quantitative legend (based on numeric value ranges), you need to follow the approach described in (iv) or (v) below.

(i) Map legend with custom values

- Use the following format to specify the values for the map legend, as well as the number of color classes:
 0=[value0] 1=[value1] 2=[value2] 3=[value3] 4=[value4]
 etc.
- Example 1a: A legend with 4 color classes:
 0=[55] 1=[40] 2=[20]
- Example 1b: A legend with 5 color classes:
 0=[70] 1=[65] 2=[60] 3=[55]

Map legend for Example 1b:

With max / min values hidden	With max / min values shown
> 70	70 - max value
65-70	65-70
60-65	60-65
55-60	55-60
< 55	min value – 55

(ii) Map legend with custom colors

Use the following format to specify the colors for the map legend, as well as the number of color classes:
 0-[color0] 1-[color1] 2-[color2] 3-[color3] 4-[color4]

```
0=[color0] 1=[color1] 2=[color2] 3=[color3] 4=[color4] etc.
```

Example 2: A legend with 4 color classes:
 0=[0x238B45] 1=[0x66C2A4] 2=[0xB2E2E2] 3=[0xEDF8FB]

(iii) Map legend with custom colors and values

 Use the following format to specify the colors for the map legend, as well as the number of color classes:

```
0=[color0][value0] 1=[color1][value1] 2=[color2][value2] 3=[color3][value3] 4=[color4]
```

Note that this format is slightly different from the previous ones, because 5 colors are specified (colors 0 to 4) but only 4 values (values 0 to 3). As illustrated in example 1b above, a legend with 5 color classes requires only 4 values to be specified (a legend with 4 color class requires only 3 values, and so on).

Example 3: A legend with 4 color classes and custom values:
 0=[0x2171B5][70] 1=[0x6BAED6][60] 2=[0xBDD7E7][50] 3=[0xEFF3FF]

(iv) Map legend with custom colors and labels

- To specify text labels (instead of number values) in the map legends, use the same approach as described in (iii) above, but add a third parameter containing the text. For example:
- Example 4: A legend with 4 color classes, custom values and custom labels:

```
0=[0x2171B5][70][Very high] 1=[0x6BAED6][60][High] 2=[0xBDD7E7][50][Medium] 3=[0xEFF3FF][Low]
```

(v) Qualitative (descriptive) map legend

- If you data set is categorical, e.g. languages spoken around the world (English, Spanish, etc.), you need to insert a qualitative map legend. This is the only map type that cannot be defined in StatPlanet itself so instead need to be coded manually in the StatPlanet Data Editor as explained below.
- Instead of value ranges, your map legend assigns a category number to each category you wish to display, starting from 0. In the example below, 5 categories are defined (0,1,2,3,4):

0=[color0][label0] 1=[color1][label1] 2=[color2][label2] 3=[color3][label3] 4=[color4][label4] etc.

Countries then need to be assigned their corresponding category number. For example, if 'Afghanistan' belongs to category 0 (label 0 and color 0), it should be given the value '0'.

- Example 5: A legend with 8 color classes:
 0=[0x377EB8][Arabic] 1=[0xE41A1C][Bengali] 2=[0x4DAF4A][English]
 3=[0x984EA3][Hindi] 4=[0xFF7F00][Mandarin] 5=[0xFFFF33][Portuguese]
 6=[0xA65628][Russian] 7=[0xF781BF][Spanish]
- Map legend for Example 5:

Color	Label
0x377EB8	Arabic
0xE41A1C	Bengali
0x4DAF4A	English
0x984EA3	Hindi
0xFF7F00	Mandarin
0xFFFF33	Portuguese
0xA65628	Russian
0xF781BF	Spanish

Graph options

(i) Graph axis range

The maximum and minimum values for the graph can be inserted through the "GRAPH" column (in the corresponding indicator row). This will override the automatic values set by the application. The minimum / maximum values need to be specified in parentheses in the format: [min-value][max-value]

For example, for a minimum value of 0 and a maximum value of 80, enter the following:

```
[0][80]
```

You can also specify the color of the graph in the format [color-code], for example:

```
[0x78C679]
```

To specify minimum / maximum values as well as color, use the format [min-value][max-value][color-code], for example:

```
[0][90][0x78C679]
```

(i) Target lines (StatPlanet Plus / StatTrends Plus only)

One or two target lines (or benchmarks) can be specified for each indicator, which will be displayed in the bar/column charts and time series graph. This needs to be inserted in the 'GRAPH' column (in the corresponding indicator row). An example of two target lines (t and t2) with values 80 and 50 are shown below:

```
t=[80] t2=[50]
```

Labels (I and I2) and custom colors (c and c2) can optionally be added, for example:

```
t=[80] t2=[50] l=[Target 1] l2=[Target 2] c=[0x1a9850] c2=[0xd73027]
```

If the target values are different (variable) for each year or date, use 'tv' instead of 't', for example:

```
tv = [80] tv2 = [50]
```

Using multiple data files

(StatPlanet Plus / StatTrends Plus only). Data can be divided into multiple files, which is particularly useful to reduce the initial download time and only download data for a category once the user selects it. The 'main' data file (data.csv or data.zip) contains these links to the other data files. This file does not need to contain any data, but it should have the structure of all the data files combined. Specifically, it should contain

the entire list of categories as well as indicators as contained in all the data files combined. This is because the list of categories and indicators needs to be available on startup, without having to load any of the other data files. For each category only one year (or time unit) of the data series needs to be contained in the structure (so it is not necessary to repeat the list of indicators for each year). The structure for each of the files can be created automatically using the macro "Extract data structure" in the StatPlanet Data Editor, sheet 'Tools'.

To link to a data file containing the data for a category, it needs to be specified in the first (top) row of this category in the column "FILE". For example, it can contain the file reference "data_category2.csv" or "data_category2.zip". Every other row in the main data file that does not contain data (i.e. the data needs to be retrieved from another file) needs to have the # symbol inserted in the column FILE. For example, if all the data is contained in other files, the "FILE" column would contain references to these files in the first row of each category. All the remaining rows in the "FILE" column would contain the symbol #.

The files containing the data should follow the exact same structure as the original data file, except that it would contain data for only one category.

Options

Multiple options can be added by separating the options with a space in between, e.g. y=[2007] nodiv

• **Default year by category:** The default year to be selected for a particular category can be specified in the column "OPTIONS". In StatPlanet Plus, this would need to be inserted in the same row as the category name. In other versions of StatPlanet, this would be the first row of data in the StatPlanet Data Editor. It needs to be formatted as 'y=[insert-year]', for example:

$$y = [2007]$$

• Map area mouse-over popup text: Popup text, comments or notes can be added to each country or map area for each indicator. These comments need to be inserted in a separate row, below the list of indicators. The asterisk character (*) needs to be inserted in the INDICATOR column for a comment row. To link an indicator with a comment row, the comment row number needs to be specified In the OPTIONS column for the indicator. The format is:

p = [1]

where [1] references the first row of comment popups. An example of two indicators with corresponding comment rows is shown below:

INDICATOR	 OPTIONS
Indicator 1	p=[1]
Indicator 2	p=[2]
*	
*	

The comments themselves are added in the rows marked by the asterisk (*) in the same way as regular data, i.e. in the country / map area columns.

• **Group indicators within a category:** (StatPlanet Plus only)

A category of indicators can be placed into different groups within a category. With this option enabled, radio buttons will appear above the indicator list to enable the selection of a group. Only indicators for the currently selected group will be displayed.

To enable division into groups, the following would need to be inserted in the top (first) row of a category, in the column 'OPTIONS':

Group1, group2, etc. should be replaced by the names of your groups and these will appear as radio buttons (up to 5 groups can be added). For example, indicators can be divided into the groups 'Total', 'Male' and 'Female' as follows:

In order for the software to know which indicator belongs to which group, the group name needs to appear somewhere in the indicator name. For example, the indicator 'Female primary school enrolment' would automatically appear in the group 'Female'.

• **No division:** By default, if an indicator has numbers over a million they will be divided by 1000 000, and 'million' will be added as the unit. To prevent this behavior for a particular indicator, insert the following in the column "OPTIONS" in the indicator row for the first year in the series:

nodiv

• **Hide "no data" category in the map legend:** To hide the "no data" category insert the following in the column "OPTIONS" in the indicator row for the first year in the series.

nd=[h]

• Change region: It can be useful to change the region when selecting a particular category which only has data for that region. To do so, specify the region name in the column "OPTIONS", in the first row of the category. It needs to be formatted as: r=[My region]. "My region" should correspond to one of the map regions specified in the Excel sheet "Map regions" (in the StatPlanet Data Editor). For example:

r=[Sub-Saharan Africa]

• **Custom mean:** The default calculated mean can be replaced with a custom value (e.g. a weighted mean). This can be indicated in the OPTIONS column for the row of the corresponding indicator/year, in the format m=[insert mean], for example:

m = [100]

• Scale for indicator panel bars: The bars in the indicator panel are scaled according to the highest value for a country or region in that indicator. This means that each indicator bar has its own scale. However, in some cases you may wish the bars of all the indicators to be along the same scale. In this case, insert the following in the column "OPTIONS" in the indicator rows you wish to be along the same scale:

samescale

Please note that this needs to be inserted in the rows for the first year in the series, and that the indicators need to be in the same category.

Data type

The column "TYPE" will be used to specify the data type in future versions of StatPlanet. This will enable additional interface and visualization options.

6.3. Country / map area popup text and links

<u>Country / region specific information</u> can be shown in a popup when the mouse moves over the country / region in the map or graph panel. This information needs to be added in the very first

row in the empty cell below the corresponding country / region name⁵. (These cells are empty, because data starts in the next row). If different popup text is required depending on the selected indicator, please see the options section above.

You can insert plain text, or HTML text with formatting, for example:

My text

Links to documents or web-pages can also be specified in the row below the corresponding country name. The document or web-page will open when the user clicks on a country for which a link has been specified. An example of a link would be:

http://www.mywebsite.com/document.pdf

It is also possible to have both text and a download link, by inserting the link as HTML code. For example:

Insert additional information here

Display RSS Feeds

With the StatPlanet Plus RSS Feed module installed, it is possible to display RSS feeds in a popup window when clicking on a country or map area. Each country or map area can have a different RSS feed. The first part of the RSS feed link or URL needs to be specified in the StatPlanet Data Editor, sheet "settings", variable "FEED-URL" (in the Special Options section). This is the part of the RSS feed link which is same for each feed, for example:

http://feeds.feedburner.com/myfeeds-

The second part of the FEED-URL can be different for each country or map area, and is inserted in the StatPlanet Data Editor, sheet "import", in the row directly below the country or map area name. It needs to be inserted in the format "f=[RSS-link]", for example:

f=[east-asia]

⁵ Note: it should be below the country / region name in the sheet 'Import' of the StatPlanet Data Editor. Alternatively if you are not using the StatPlanet Data Editor, they can also be inserted directly in the file settings.csv in the column next to the country / region name.

If for example you wish to display the feed http://feeds.feedburner.com/myfeeds-east-asia for Uzbekistan, you would insert the base (first part of the URL) in the sheet "settings" as described above. In the sheet "import" you would need to add the extension "f=[east-asia]" in the row below Japan, and the extension "f=[central-asia]" in the row below Uzbekistan.

6.4. Custom 'zoom-to' map regions or groups

Map regions or groups can be added or modified in the worksheet 'Map regions' (if using StatPlanet) or 'Groups' (if using StatTrends). For example, the World Map version of StatPlanet has several regions defined, one of which is Sub-Saharan Africa. When clicking on 'Sub-Saharan Africa' from the selection panel in the top-right corner, StatPlanet will zoom into the African continent and display map and graph data only for countries in Sub-Saharan Africa. In StatTrends, the principle is the same, but instead of map areas, you can organize any of your variables into groups.

Map regions or groups have the following elements:

• Name (col. 1): The names of the map regions or groups you wish to define. It is possible to categorize your regions or groups if you wish to organize them into submenus. This is done by inserting the name of your category (just like inserting any region or group name). Then for subsequent region or group names below, add '>' if you wish to include them under this category (the principle is the same as with the categorization of indicators). In the example below, "My sub-menu" is the name of your sub-menu, and the symbol ">" is used to define the two regions to be included in this sub-menu:

Region 1
Region 2
My sub-menu
> Region 3 (inside sub-menu)
> Region 4 (inside sub-menu)
Region 5 (not inside sub-menu)
etc.

• Map coordinates (col. 2-4) (StatPlanet only): The X and Y coordinates and ZOOM level for the defined regions. To get these coordinates, open your map in StatPlanet and zoom into the map area you wish to add (e.g. zoom into Africa and click and drag the map so Africa fills the screen). Once you are satisfied with the map position, right-click anywhere in StatPlanet and select 'copy map coordinates'. Go back to the Excel sheet 'Map regions', and 'paste' the coordinates in the corresponding row for the region.

- **Color** (col. 5 optional): The color for each region which will be used to color the bubbles in the scatter plot graph. It is also possible to color the bar chart using the region colors. A region colors needs to be specified as a "hex color", for example "0x0000FF" for blue.
- **Link** (col. 6 optional, StatPlanet Plus / StatTrends Plus only): Insert a link or URL, for example to link a map name with another copy of StatPlanet with this map embedded. It is also possible to use this feature to link to documents for download.
- Codes (col. 7 onwards): Columns 7 onwards contain the codes for the countries or map areas in each region (these are ISO3 country codes for the world map version of StatPlanet). In both StatPlanet and StatTrends, these codes need to correspond to the codes or variable names you are using in the top row of the sheet 'Data'. When adding these codes, it is important that they are added from column 7 onwards without leaving any empty cells between them.

6.5. Add cities, countries, regional aggregations, points of interest

Cities, countries, regional aggregations etc. can be added to StatPlanet and will appear in the graphs and country/region list. In StatPlanet Plus, they can also be added as 'map points' (for example, a "city point" placed in a country map). The procedure is as follows:

- 1. Open the StatPlanet Data Editor and in the worksheet "Import" go all the way to the last country or map region at the end of row 2.
- 2. Insert the name(s) of your map point(s) in this row and press the button **Save data**. Data can be added in this column in the same way as with any other map area. You will need to add some data for this map point in order for it to appear in the map. (Note: once you have pressed **Save data**, the map point name should also have been added in the worksheet "Data". If you cannot see the map point in StatPlanet, please check the worksheet "Data" to confirm it has also been added here).

StatPlanet Plus only:

3. When you next open StatPlanet, one or more map points (in the form of a circle) will appear in the top left corner of the map, representing each of the new map areas added. Right click anywhere inside StatPlanet and in the popup select 'Move text labels or map points'. Click on the map point and then click anywhere on the screen to move it

to this new location. Similarly, the text label for a map point can be dragged and dropped to a new location.

- 4. To copy the map point coordinates, right click again and select 'copy map point coordinates'.
- 5. Open the StatPlanet Data Editor and go the sheet 'Settings'. Scroll down to 'Special options' and next to M-DOT-COORD paste the coordinates you just copied. In this section you can also set the size of the circle representing the map point. Click on **Save Settings** to save.

6.6. Data editing without Excel

You can edit the data files **data.csv** and **settings.csv** directly without using the Excel-based Data Editor. These two files can be edited using any spreadsheet software.

The data needs to be saved as a CSV ('comma separated values') file.

6.7. Language and translation

To change the language, see the Excel sheet 'settings' in the StatPlanet Data Editor. To modify a translation or add a new language translation, see the Excel sheet 'Text-Translations'. StatPlanet is available in the following languages. See also below on how to use international character sets such as Russian (see below).

- Bahasa Indonesia (courtesy of the Government of Indonesia)
- Danish (courtesy of Peter Erbs-Maibing, Research Centre for Prevention and Health, Denmark)
- Dutch
- English
- French
- German
- Greek
- Portuguese Brazilian (courtesy of the Instituto Centro de Vida)

- Russian (courtesy of Andrey Loschilov)
- Spanish

StatPlanet Plus also has support for international character sets. To use them, please follow these steps:

- 1. Remove the file "settings.csv" in the main directory and also in the directory 'web'.
- 2. In the StatPlanet Data Editor, go to the sheet "Settings". Under Startup options Data format, select: TXT (tab-separated values). Then click on "Save settings".
- 3. The international character sets can now be used in the desktop of StatPlanet. For the web version, a testing version is currently only provided for the Shapefile map version of StatPlanet Plus, in the directory "int_character_sets". Copy the file 'content.swf' in this directory into the directory 'web', replacing the existing file.

The following character sets are available:

- Arabic
- Armenian
- Chinese (All character sets)
- Cyrillic (for Russian, Serbo-Croatian and Tajik, amongst others)
- Devanagari (for Hindi, Marathi and Nepali, amongst others)
- Greek
- Hebrew
- Japanese (All character sets)
- Korean (All character sets)
- Latin I, Latin Extended A, Latin Extended B, Latin Extended Add'l
- Thai

7. PUBLISHING

For publishing StatPlanet/StatTrends in a CMS (Content Management System), see also: Publishing in a CMS

7.1. Reducing the download size of your web application

The application is optimized to keep the file size as small as possible. The following is a list of measures which can be implemented to reduce the file size of your interactive maps even further:

- 1. **ZIP the data file(s):** this can reduce the file size by as much as 70 percent. The application will automatically detect whether the data is inside a ZIP or not. The name of the ZIP archive needs to be "data.zip". If you have multiple data files (StatPlanet Plus / StatTrends Plus only), these can also be zipped.
- 2. **Decimal places:** file sizes can often be reduced by around 50 percent if you round numbers to two or three decimal places. A macro is included in the StatPlanet Data Editor for rounding all the numbers in the Excel sheet 'Import' to two decimal places. The macro is called "RoundToDecimalPlaces" and can be adjusted as required.
- 3. **CSV file format:** the CSV file format was chosen because it keeps the size of the data file to an absolute minimum, because data values are separated only by commas. In comparison, XML files are often several times bigger when containing the equivalent amount of data.
- 4. **No duplication:** indicator names and descriptions do not need to be duplicated in the data file. If you are using the StatPlanet Data Editor, any duplicate indicator names will automatically be replaced with the '-' symbol. Indicator names only need to be indicated for the very first year (or time unit) of a data series. For indicator descriptions, duplication can also be avoided see the section "Indicator Description" for more information.
- 5. **Reduce map size (shapefile version only):** the maps themselves are often much bigger than StatPlanet and the data files combined. GIS software can be used to reduce the level of map detail. There is also a free utility called MapShaper www.mapshaper.org. To simplify the map, upload the shapefile (e.g. map.shp), select the percentage simplification in the bottom of the screen, and click on 'export' in the top-right corner of the screen. Select the first export format 'Shapefile polygons', and click on 'create.

Within a few moments, the download link will appear below. After downloading the file, use it to replace the existing shapefile map (map.shp). The map.dbf file does not need to be modified.

7.2. Creating an index of indicators in StatPlanet / StatTrends

A list of links to indicators in StatPlanet / StatTrends can be automatically generated, ready to be embedded inside a web page. For an example, see the <u>StatWorld list of interactive maps</u>. This can be done by following these steps:

- 1. In the StatPlanet Data Editor, sheet 'settings', set the variable MOD-INDEX to TRUE.
- 2. For the variable 'SITE-L' (just below), insert the complete URL of where StatPlanet is located in your website, e.g. http://www.mywebsite.com/statplanet/statplanet.html
- 3. Open StatPlanet, right-click, and in the right-click menu select 'Create and copy index of links (HTML)'. This is HTML code which can be pasted into any web-page to display the links.
- 4. The final step is to ensure that links in the URL (web address) can be passed on to StatPlanet/StatTrends. The file 'StatPlanet_options.html' in the folder 'web' already has the code in place to do so. The following line of code passes on the link in the URL to StatPlanet⁶: flashvars.location = getURLParam("I");
 This code can of course be customized to suit your own purposes (see also the footnote below for a PHP example).

An example link to a particular indicator in StatPlanet is as follows:

http://www.statsilk.com/maps/world-stats-open-data?l=internet%20subscribers%20per%20100%20inhabitants

which goes directly to the map for Internet subscribers.

A PHP example of getting the URL indicator is as follows, where the information is captured in the variable '\$I':

```
if (isset($_GET['I'])) {$I = $_GET['I'];} else {$I = "";}
```

And the information is passed on as followed, along with the other embedding parameters:

<?php print('start code <param name="flashvars" value="location=' . \$1 . "" />end code'); ?>

⁶ See also the javascript function 'getURLParam(strParamName)' in the same file.