

This PDF contains the source code for OSM-Atlas. It has been put into a PDF so that it can be uploaded to the OSM wiki. Note that every file has had line breaks inserted at column 80 so that they would fit onto the PDF page - these line breaks will need to be fixed before the code can be run

OSM-Atlas is written by Russ Phillips (user Avantman42 on the OSM wiki)

inc\_config.php

```
<?php
/*
 * This file is part of OSM-Atlas, a script to create an atlas from
 * OpenStreetMap (www.openstreetmap.org) data.
 * Copyright 2009 Russ Phillips
 *
 * OSM-Atlas is free software: you can redistribute it and/or modify
 * it under the terms of the GNU General Public License as published by
 * the Free Software Foundation, either version 3 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program. If not, see <http://www.gnu.org/licenses/>.
 */

/*
 * Global configuration file for OSM-Atlas.php. Settings in this file
 * may be over-ridden by settings in the location-specific file
 */

//DPI for Inkscape export
$INKSCAPE_DPI = 900;

// bounding box
$LEFT = 0;
$RIGHT = 0;
$TOP = 0;
$BOTTOM = 0;

//Number of tiles
$HORIZ_TILES = 5;
$VERT_TILES = 3;

// Stylesheet to use
$STYLESHEET = "osm-map-features-z17.xml";
//Delete working files? Default is True, but setting this to False can
//be useful to help with debugging, or if you wish to manually
//edit the .tex file
$DELETE_WORKING_FILES = True;

//Title
$title = "Atlas";

//PDF metadata
$PDFTITLE = "Atlas";
$PDFAUTHOR = "OSM-Atlas";
$PDFSUBJECT = "Atlas";
$PDFKEYWORDS = "openstreetmap,atlas";
```

```
//TTF font to use for numbers on overview map
$OV_FONT = "/usr/share/fonts/truetype/freefont/FreeSerif.ttf";
$OV_FONT_SIZE = 20;

//Directories & files. Do not include trailing / when specifying directory
//Directory containing osmarender
$OSMARENDER_DIR = "/home/user/osmarender";
//Directory containing osmosis
$OSMOSIS_DIR = "/home/user/osmosis-0.30/bin/";
// Directory where all output files (working files and final PDF) will be placed
$OUTPUT_DIR = "/home/user";
//Temporary output file names are prefixed with this
$OUTPUT_FILE_PREFIX = "atlas";

// URL for data file. Can be HTTP or local file. If it is a local file,
// must include full path (eg /home/user/planet.osm.bz2)
//$URL = "http://ftp.heanet.ie/mirrors/openstreetmap.org/planet-latest.osm.bz2";
$URL = "/home/user/planet.osm.bz2";
// bzipped file name. File specified in $URL will be copied to $OUTPUT_DIR
// with this file name
$COMPRESSED_FILE = "planet.osm.bz2";
// Name of file after compression
$OSM_DATA_FILE = "planet.osm";

//LaTeX file name. Should end in .tex - PDF file will have same name, but end in
.pdf
$LATEX_FILE = "atlas.tex";
//Log file
$LOG_FILE = "/home/user/atlas.log";
?>
```

inc\_roadatlas.php

```
<?php
/*
 * This file is part of OSM-Atlas, a script to create an atlas from
 * OpenStreetMap (www.openstreetmap.org) data.
 * Copyright 2009 Russ Phillips
 *
 * OSM-Atlas is free software: you can redistribute it and/or modify
 * it under the terms of the GNU General Public License as published by
 * the Free Software Foundation, either version 3 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program. If not, see <http://www.gnu.org/licenses/>.
 */

/*
 * Sample configuration file for OSM-Atlas.php. The values in this
 * file are reasonable values for a road atlas
 */

//DPI for Inkscape export
$INKSCAPE_DPI = 900;

// bounding box
$LEFT = 0;
$RIGHT = 0;
$TOP = 0;
$BOTTOM = 0;

//Number of tiles
$HORIZ_TILES = 5;
$VERT_TILES = 3;

// Stylesheet to use
$STYLESHEET = "osm-map-features-z13.xml";
//Delete working files? Default is True, but setting this to False can
//be useful to help with debugging, or if you wish to manually
//edit the .tex file
$DELETE_WORKING_FILES = True;

//Title
$title = "Road Atlas";

//PDF metadata
$PDFTITLE = "Road Atlas";
$PDFAUTHOR = "OSM-Atlas";
$PDFSUBJECT = "Road Atlas";
$PDFKEYWORDS = "openstreetmap,atlas,road atlas";
```

```

//TTF font to use for numbers on overview map
$OV_FONT = "/usr/share/fonts/truetype/freefont/FreeSerif.ttf";
$OV_FONT_SIZE = 20;

//Directories & files. Do not include trailing / when specifying directory
//Directory containing osmarender
$OSMARENDER_DIR = "/home/user/osmarender";
//Directory containing osmosis
$OSMOSIS_DIR = "/home/user/osmosis-0.30/bin/";
// Directory where all output files (working files and final PDF) will be placed
$OUTPUT_DIR = "/home/user";
//Temporary output file names are prefixed with this
$OUTPUT_FILE_PREFIX = "atlas";

// URL for data file. Can be HTTP or local file. If it is a local file,
// must include full path (eg /home/user/planet.osm.bz2)
//$URL = "http://ftp.heanet.ie/mirrors/openstreetmap.org/planet-latest.osm.bz2";
$URL = "/home/user/planet.osm.bz2";
// bziped file name. File specified in $URL will be copied to $OUTPUT_DIR
// with this file name
$COMPRESSED_FILE = "planet.osm.bz2";
// Name of file after compression
$OSM_DATA_FILE = "planet.osm";

//LaTeX file name. Should end in .tex - PDF file will have same name, but end in
.pdf
$LATEX_FILE = "atlas.tex";
//Log file
$LOG_FILE = "/home/user/atlas.log";
?>

```

inc\_streetatlas.php

```
<?php
/*
 * This file is part of OSM-Atlas, a script to create an atlas from
 * OpenStreetMap (www.openstreetmap.org) data.
 * Copyright 2009 Russ Phillips
 *
 * OSM-Atlas is free software: you can redistribute it and/or modify
 * it under the terms of the GNU General Public License as published by
 * the Free Software Foundation, either version 3 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program. If not, see <http://www.gnu.org/licenses/>.
 */

/*
 * Sample configuration file for OSM-Atlas.php. The values in this
 * file are reasonable values for a street atlas
 */

//DPI for Inkscape export
$INKSCAPE_DPI = 900;

// bounding box
$LEFT = 0;
$RIGHT = 0;
$TOP = 0;
$BOTTOM = 0;

//Number of tiles
$HORIZ_TILES = 5;
$VERT_TILES = 3;

// Stylesheet to use
$STYLESHEET = "osm-map-features-z17.xml";
//Delete working files? Default is True, but setting this to False can
//be useful to help with debugging, or if you wish to manually
//edit the .tex file
$DELETE_WORKING_FILES = True;

//Title
$title = "Street Atlas";

//PDF metadata
$PDFTITLE = "Street Atlas";
$PDFAUTHOR = "OSM-Atlas";
$PDFSUBJECT = "Street Atlas";
$PDFKEYWORDS = "openstreetmap,atlas,street atlas";
```

```

//TTF font to use for numbers on overview map
$OV_FONT = "/usr/share/fonts/truetype/freefont/FreeSerif.ttf";
$OV_FONT_SIZE = 20;

//Directories & files. Do not include trailing / when specifying directory
//Directory containing osmarender
$OSMARENDER_DIR = "/home/user/osmarender";
//Directory containing osmosis
$OSMOSIS_DIR = "/home/user/osmosis-0.30/bin/";
// Directory where all output files (working files and final PDF) will be placed
$OUTPUT_DIR = "/home/user";
//Temporary output file names are prefixed with this
$OUTPUT_FILE_PREFIX = "atlas";

// URL for data file. Can be HTTP or local file. If it is a local file,
// must include full path (eg /home/user/planet.osm.bz2)
//$URL = "http://ftp.heanet.ie/mirrors/openstreetmap.org/planet-latest.osm.bz2";
$URL = "/home/user/planet.osm.bz2";
// bziped file name. File specified in $URL will be copied to $OUTPUT_DIR
// with this file name
$COMPRESSED_FILE = "planet.osm.bz2";
// Name of file after compression
$OSM_DATA_FILE = "planet.osm";

//LaTeX file name. Should end in .tex - PDF file will have same name, but end in
.pdf
$LATEX_FILE = "atlas.tex";
//Log file
$LOG_FILE = "/home/user/atlas.log";
?>

```

osm-atlas.php

```
#!/usr/bin/env php
<?php
/*
 * This file is part of OSM-Atlas, a script to create an atlas from
 * OpenStreetMap (www.openstreetmap.org) data.
 * Copyright 2009 Russ Phillips
 *
 * OSM-Atlas is free software: you can redistribute it and/or modify
 * it under the terms of the GNU General Public License as published by
 * the Free Software Foundation, either version 3 of the License, or
 * (at your option) any later version.
 *
 * This program is distributed in the hope that it will be useful,
 * but WITHOUT ANY WARRANTY; without even the implied warranty of
 * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
 * GNU General Public License for more details.
 *
 * You should have received a copy of the GNU General Public License
 * along with this program. If not, see <http://www.gnu.org/licenses/>.
 */

// This script works with OSM API v0.6

// Program version
$VERSION = "0.1";
// Page where maps start
$START_PAGE_NUMBER = 2;

//Get config files
require ("inc_config.php");
require ($argv [1]);

/*
 * Function to make a map tile. Arguments:
 * $tLeft: westerly longitude
 * $tRight: easterly longitude
 * $tTop: northerly latitude
 * $tBottom: southerly latitude
 * $tRow
 * $tCol
 * $PageNumber: page number. Used for index
 */
function tile ($tLeft, $tRight, $tTop, $tBottom, $tRow, $tCol, $PageNumber) {
//Define global variables
global $OSMOSIS_DIR;
global $OUTPUT_DIR;
global $OSM_DATA_FILE;
global $OSMARENDER_DIR;
global $STYLESHEET;
global $OUTPUT_FILE_PREFIX;
global $asNameIndex;
global $INKSCAPE_DPI;
global $LOG_FILE;
```



```

global $CurrentProgress;

// Run osmosis to extract tile area
Progress ($CurrentProgress, "Running osmosis for tile row=$tRow, col=$tCol");
chdir ($OSMOSIS_DIR);
$cmd = "./osmosis --read-xml $OUTPUT_DIR/$OSM_DATA_FILE --bounding-box left=$tLeft top=$tTop right=$tRight bottom=$tBottom completeWays=yes --write-xml file=$OUTPUT_DIR/$OUTPUT_FILE_PREFIX-$tRow-$tCol.osm";
shell_exec ($cmd);

// Set bounds of data.osm
$bounds .= "minlat='$tBottom' minlon='$tLeft' maxlat='$tTop' maxlon='$tRight'";
Progress ($CurrentProgress, "Setting bounds for tile row=$tRow, col=$tCol");
chdir ($OUTPUT_DIR);
$cmd = "sed -i -e \"2 s/^<osm .*$/<osm><bounds $bounds \\/>\/\" $OUTPUT_FILE_PREFIX-$tRow-$tCol.osm";
shell_exec ($cmd);

// Run osmarender
Progress ($CurrentProgress, "Running osmarender for tile row=$tRow, col=$tCol");
copy ("$OUTPUT_DIR/$OUTPUT_FILE_PREFIX-$tRow-$tCol.osm", "$OSMARENDER_DIR/data.osm");
chdir ($OSMARENDER_DIR);
$cmd = "xsltproc osmarender.xsl $STYLESHEET > $OUTPUT_DIR/$OUTPUT_FILE_PREFIX-$tRow-$tCol.svg";
shell_exec ($cmd);

// Add names to index
Progress ($CurrentProgress, "Extracting names for index, tile row=$tRow, col=$tCol");
$data = file ("$OUTPUT_DIR/$OUTPUT_FILE_PREFIX-$tRow-$tCol.svg");
// Look for "highway-name". If it is found, name is on next line
$bName = False;
foreach ($data as $line) {
if ($bName == True) {
// Strip XML, and leading/trailing whitespace, append page number, then add to array
$asNameIndex [] = trim (strip_tags ($line)) . "\t$pageNumber";
// Reset $bName
$bName = False;
}
else {
//highway-name is used for road names.
// .highway-name is used to set up the style, so should be ignored
if (strstr ($line, "highway-name") != False && strstr ($line, ".highway-name") == False)
$bName = True;
}
}
}

```

```

// Run inkscape to create PNG
Progress ($CurrentProgress, "Running Inkscape to create .png for tile ro
w=$tRow, col=$tCol");
$cmd = "inkscape --without-gui --file=$OUTPUT_DIR/$OUTPUT_FILE_PREFIX-$t
Row-$tCol.svg --export-png=$OUTPUT_DIR/$OUTPUT_FILE_PREFIX-$tRow-$tCol.png --exp
ort-dpi=$INKSCAPE_DPI";
shell_exec ($cmd);

if (file_exists ("${OSMARENDER_DIR}/data.osm"))
unlink ("${OSMARENDER_DIR}/data.osm");
}

/*
 * Function to delete files specified with wildcard
 */
function delfile ($s) {
global $LOG_FILE;
foreach (glob ($s) as $f) {
file_put_contents ($LOG_FILE, "deleting $f\n", FILE_APPEND);
unlink ($f);
}
}

/*
 * Function to update progress display
 */
function Progress (&$CurrentProgress, $Description) {
global $TotalSteps;
global $LOG_FILE;

$progress = round (($CurrentProgress++ / $TotalSteps) * 100);
$progress = str_pad ($progress, 3, " ", STR_PAD_LEFT);
ncurses_mvaddstr (2, 2, "Progress: $progress%");

$Description = str_pad ($Description, 60, " ");
ncurses_mvaddstr (3, 3, $Description);
ncurses_refresh();

file_put_contents ($LOG_FILE, "Step $CurrentProgress of $TotalSteps - $D
escription\n", FILE_APPEND);
}

//Log start
file_put_contents ($LOG_FILE, "\nOSM-Atlas.php started at " . date ("H:i jS M Y"
) . "\n", FILE_APPEND);

//Set up ncurses display
$ncurse = ncurses_init();
// let ncurses know we wish to use the whole screen
$fullscreen = ncurses_newwin ( 0, 0, 0, 0);
// draw a border around the whole thing.
ncurses_border(0,0, 0,0, 0,0, 0,0);
// Write text to screen
ncurses_mvaddstr (0, 2, "OSM-Atlas v$VERSION");
// GPL notice
ncurses_mvaddstr (5, 2, "OSM-Atlas Copyright 2009 Russ Phillips");

```

```

ncurses_mvaddstr (6, 2, "This program comes with ABSOLUTELY NO WARRANTY.");
ncurses_mvaddstr (7, 2, "This is free software, and you are welcome to redistrib
ute it");
ncurses_mvaddstr (8, 2, "under certain conditions; see the LICENCE.txt file for
details.");

// Hide cursor
ncurses_curs_set (0);
ncurses_refresh();

//Calculate number of steps to be done & initialise $CurrentProgress
if ($DELETE_WORKING_FILES)
$TotalSteps = 7 + ($HORIZ_TILES * $VERT_TILES * 7);
else
$TotalSteps = 6 + ($HORIZ_TILES * $VERT_TILES * 7);
$CurrentProgress = 0;

//Set up array for index of names
$asNameIndex = array ();
//Copy logo image
copy ("osm-logo.png", "$OUTPUT_DIR/osm-logo.png");

Progress ($CurrentProgress, "Deleting old files");
// Delete old files
if (file_exists ("$OUTPUT_DIR/$OSM_DATA_FILE"))
unlink ("$OUTPUT_DIR/$OSM_DATA_FILE");
if (file_exists ("$OUTPUT_DIR/$LATEX_FILE"))
unlink ("$OUTPUT_DIR/$LATEX_FILE");
// Download & extract new .osm file
Progress ($CurrentProgress, "Downloading data");
if (!copy ($URL, "$OUTPUT_DIR/$COMPRESSED_FILE"))
die ("Error downloading $URL\n");

Progress ($CurrentProgress, "Extracting data");
chdir ($OUTPUT_DIR);
shell_exec ("bunzip2 $COMPRESSED_FILE");

Progress ($CurrentProgress, "Creating LaTeX file headers");
$latexheader = "\\documentclass[a4paper]{article}\n" .
"\usepackage[hmargin=3cm,vmargin=3cm]{geometry}\n" .
"\usepackage{array}\n" .
"\usepackage{graphicx}\n" .
"\usepackage{multicol}\n" .
"\usepackage{hyperref}\n" .
"\hypersetup{%\n" .
"pdftitle={" . $PDFTITLE . "},%\n" .
"pdfauthor={" . $PDFAUTHOR . "},%\n" .
"pdfsubject={" . $PDFSUBJECT . "},%\n" .
"pdfcreator={OSM-Atlas (wiki.openstreetmap.org/OSM-Atlas)},%\n" .
"pdfkeywords={" . $PDFKEYWORDS . "},%\n" .
"pdfborder = {0 0 0 0}\n" .
"}\n" .
"\DeclareGraphicsExtensions{.png}\n" .
"\begin{document}\n" .
"\begin{titlepage}\n" .
"\begin{center}\n" .

```

```

"{\\Huge $TITLE}\\n" .
"\\vfill\\n" .
"\\includegraphics{osm-logo}\\n\\n" .
"Created using data from OpenStreetMap\\n\\n" .
"\\href{http://www.openstreetmap.org/}{www.openstreetmap.org}\\n" .
"\\end{center}\\n" .
"\\end{titlepage}\\n";
file_put_contents ("$OUTPUT_DIR/$LATEX_FILE", $latexheader, FILE_APPEND)
;

// Create tiles
$tilewidth = ($RIGHT - $LEFT) / $HORIZ_TILES;
$tileheight = ($TOP - $BOTTOM) / $VERT_TILES;
$tTop = $TOP;
$tBottom = $tTop - $tileheight;

//Page counter
$pageNumber = $START_PAGE_NUMBER;

//Generate images
for ($tRow = 1; $tRow <= $VERT_TILES; $tRow++) {
//New row: reset $tLeft & $tRight
$tLeft = $LEFT;
$tRight = $tLeft + $tilewidth;
for ($tCol = 1; $tCol <= $HORIZ_TILES; $tCol++) {
$tRight = $tLeft + $tilewidth;

//Generate images etc for this tile
tile ($tLeft, $tRight, $tTop, $tBottom, $tRow, $tCol, $PageNumber);

$tLeft += $tilewidth;
$pageNumber++;
}
//End of row: Set new $tTop & $tBottom
$tTop -= $tileheight;
$tBottom = $tTop - $tileheight;
}

//Generate LaTeX for overview map
$latex = "\\begin{tabular}{|";
for ($i = 1; $i <= $HORIZ_TILES; $i++)
$latex .= "c|";
$latex .= "}\n\\hline\n";
$width = 13 / $HORIZ_TILES;
//Page counter
$pageNumber = $START_PAGE_NUMBER;
for ($tRow = 1; $tRow <= $VERT_TILES; $tRow++) {
for ($tCol = 1; $tCol <= $HORIZ_TILES; $tCol++) {
Progress ($CurrentProgress, "Generating overview images for tile
$tRow-$tCol");
//Add number to image
$imsize = getimagesize ("$OUTPUT_DIR/$OUTPUT_FILE_PREFIX" . "-$t
Row-$tCol.png");
$im = @imagecreatefrompng ("$OUTPUT_DIR/$OUTPUT_FILE_PREFIX" . "
-$tRow-$tCol.png");

```

```

$bg = imagecolorallocate ($im, 255, 255, 255);
$textcolor = imagecolorallocate ($im, 0, 0, 0);

//Get size of text
$aTxtSize = imagettfbbox ($OV_FONT_SIZE, 0, $OV_FONT, trim ($PageNumber));
$iTxtWidth = abs ($aTxtSize [2] - $aTxtSize [0]);
$iTxtHeight = abs ($aTxtSize [1] - $aTxtSize [7]);
//Get position for text
$iTxtLeft = ($iTxtSize [0] - $iTxtWidth) / 2;
//Note that bottom has to be offset by height of image
$iTxtBottom = (($iTxtSize [1] - $iTxtHeight) / 2) + $iTxtHeight;

imagetfttext($im, $OV_FONT_SIZE, 0, $iTxtLeft, $iTxtBottom, $textcolor, $OV_FONT, $PageNumber);
imagepng ($im, "$OUTPUT_DIR/$OUTPUT_FILE_PREFIX" . "-ov-$tRow-$tCol.png");
imagedestroy ($im);
//Write LaTeX code for the thumbnail
$latex .= "\\includegraphics[width=$width" . "cm]{" .
$OUTPUT_FILE_PREFIX . "-ov-$tRow-$tCol}\\n";
$pageNumber++;
}
// newline
$latex .= "\\\\n";
}
// Add horizontal line at end of table
$latex .= "\\hline\\n";
$latex .= "\\end{tabular}\\n\\newpage\\n";
file_put_contents ("$OUTPUT_DIR/$LATEX_FILE", $latex, FILE_APPEND);

//Page counter
$pageNumber = $START_PAGE_NUMBER;
//Create LaTeX for map pages
for ($tRow = 1; $tRow <= $VERT_TILES; $tRow++) {
for ($tCol = 1; $tCol <= $HORIZ_TILES; $tCol++) {
Progress ($CurrentProgress, "Generating LaTeX for tile $tRow-$tCol");
//Calculate N/E/S/W page numbers
$page = $pageNumber - $HORIZ_TILES;
if ($page < $START_PAGE_NUMBER)
$page = "-";
if ($tCol == $HORIZ_TILES)
$page = "-";
else
$page = (string) $pageNumber + 1;
$page = $pageNumber + $HORIZ_TILES;
if ($page > ($HORIZ_TILES * $VERT_TILES) + ($START_PAGE_NUMBER - 1))
$page = "-";
if ($tCol == 1)
$page = "-";
else
$page = (string) $pageNumber - 1;
//Write LaTeX code for table with image & N/E/S/W page numbers
$latex = "\\begin{tabular}{m{1cm}m{13cm}m{1cm}}\\n" .

```

```

" &\begin{center}{\$npage}\end{center}& \\\n" .
"$wpage &" .
"\includegraphics[width=13cm]{\" . $OUTPUT_FILE_PREFIX .
\"-$tRow-$tCol}&" .
" $epage \\\n" .
" &\begin{center}{\$spage}\end{center}& \\\n" .
"\end{tabular}\n" .
"\newpage\n";
file_put_contents ("$OUTPUT_DIR/$LATEX_FILE", $latex, FILE_APPEND);
$PageNumber++;
}
}

Progress ($CurrentProgress, "Creating index");
// Sort index, remove duplicate lines
natcasesort ($asNameIndex);
$asNameIndex = array_unique ($asNameIndex);
/* Write index to LaTeX file
 * Each index entry is a separate paragraph, with first line not indented
 * and subsequent lines indented. This makes it easier to read entries
 * that are too long to fit on a single line
 */
$latexfile = fopen ("$OUTPUT_DIR/$LATEX_FILE", "a");
fwrite ($latexfile, "\\begin{center}\n" .
"{\\Large Index of Street Names}\n" .
"\\end{center}\n" .
"\\setlength{\\columnseprule}{0.5pt}\n" .
"\\setlength{\\columnsep}{20pt}\n" .
"\\begin{multicols}{4}\n" .
"\\begin{footnotesize}\n" .
"\\begin{raggedright}\n");
$para_indent = "\\hangindent=0.25cm\\n\\hangafter=1\\n";
foreach ($asNameIndex as $name) {
$line = html_entity_decode ($name);
//PHP does not recognise &apos; - so do it by hand
$line = str_replace ("&apos;", "'", $line);
//Replace & with \&
$line = str_replace ("&", "\\&", $line);
fwrite ($latexfile, "$para_indent$line\\n\\n");
}
fwrite ($latexfile, "\\end{raggedright}\n" .
"\\end{footnotesize}\n" .
"\\end{multicols}\n" .
"\\newpage\n" .
"\\begin{titlepage}\n" .
"\\noindent\n" .
"This atlas was created using data from OpenStreetMap. OpenStreetMap " .
"creates and provides free geographic data such as street maps to " .
"anyone who wants them. The project was started because most maps " .
"you think of as free actually have legal or technical restrictions " .
"on their use, holding back people from using them in creative, producti
ve," .
" or unexpected ways.\\n\\n" .
"\\begin{center}\n" .
"\\includegraphics{osm-logo}\\n\\n" .

```

```

"\href{http://www.openstreetmap.org/}{www.openstreetmap.org}\n" .
"\end{center}\n" .
"\end{titlepage}\n" .
"\end{document}\n");
fclose ($latexfile);

// Create PDF file
chdir ($OUTPUT_DIR);
Progress ($CurrentProgress, "Running pdflatex to create PDF file");
$cmd = "pdflatex -interaction=batchmode $LATEX_FILE";
shell_exec ($cmd);

// Clean up
chdir ($OUTPUT_DIR);
if ($DELETE_WORKING_FILES) {
Progress ($CurrentProgress, "Deleting working files");
delfile (*.osm);
delfile (*.svg);
delfile (*.png);
delfile (*.aux);
delfile (*.log);
delfile (*.tex);
}

//Log finish & clean up ncurses
file_put_contents ($LOG_FILE, "Finished at " . date ("H:i jS M Y") . "\n", FILE_
APPEND);
ncurses_end();
?>

```

README.txt

This is the README for OSM-Atlas, a script to create an atlas from OpenStreetMap (OSM) [1] data.

OSM-Atlas is copyright 2009 Russ Phillips

== Requirements ==

OSM-Atlas is written and tested on Linux. It may work on other Unix-like operating systems (Mac OS X, BSDs, etc), and it may work on Windows if the relevant requirements are installed.

The following programs need to be installed:

Osmosis [2]  
Osmarender [3]  
PHP v5 with GD support [4]  
Inkscape [5]  
Pdflatex [6]

Also, xsltproc, sed and bzip2, which are normally included in a Linux install by default.

== Running the Program ==

You will need a source of data, and the latitude/longitude of the area you wish to make an atlas of. See the Planet wiki page [7] for details of how to download data from OSM.

You will then need to set up a config file for the location you wish to make an atlas of. Copy either inc\_streetatlas.php or inc\_roadatlas.php and edit the copy, then run:

```
./osm-atlas.php config-file.php 2>/dev/null
```

(where config-file.php is the name of the copied config file).

When OSM-Atlas has finished, it will have created a PDF file, with front & back covers, overview map, detailed map pages, and index pages.

[1] <http://www.openstreetmap.org>  
[2] <http://wiki.openstreetmap.org/wiki/Osmosis>  
[3] <http://wiki.openstreetmap.org/wiki/Osmarender>  
[4] <http://www.php.net>  
[5] <http://www.inkscape.org>  
[6] <http://www.latex-project.org>  
[7] <http://wiki.openstreetmap.org/wiki/Planet>