4 Creation of a Redatam+SP xPlan Application

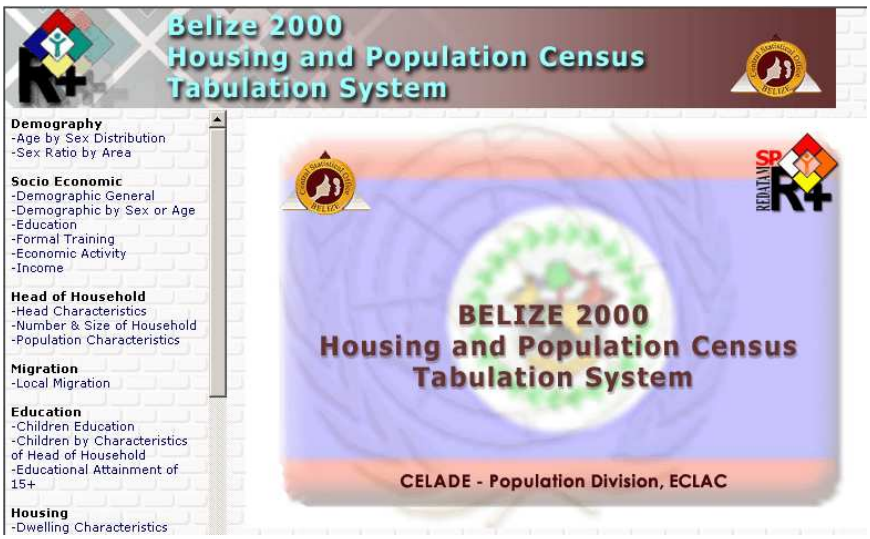
REDATAM+SP© is a software system developed by the Latin American and Caribbean Demographic Center (CELADE), which is the Population Division of the Economic Commission for Latin America and the Caribbean (ECLAC), United Nations.
www.eclac.cl/celade/Redatam

Table of Contents

I. Introduction

R+xPlan is a module within the Redatam program directed to the creation of applications that allows the specific and controlled access to a Redatam database, then users do not have to know the Redatam command language to create indicators. Consequently, it is a database presentation engine that provides a mean to create specialized and user friendly applications.

An *R+SP xPlan* application offers a limited and controlled access to the information in a Redatam database. It is not necessary for you to know the internals of the application to gain access to the database information; you will manage all the parameters through a user-friendly and straightforward interface. The *R+SP* x*Plan program* works through parameters contained in an instruction file ''text-type'', with an .INL extension. This file organizes and defines the shape and position of the panels, images, databases, selections and the execution buttons to access the application.



Sample application: Belize 2000 census (Web application).

Sample application: Trinidad & Tobago 2000 census (Web application).

II. General Concepts

The INL File

The .INL file (ASCII) can be created using any conventional text editor. The contents are organized by information blocks (sections) and parameters, very similar to the .INI files from Windows 3.1. Each group is identified by a name enclosed in brackets, and the parameters inside a group are written in uppercase letters, each in a separate line. To build an *R+SP xPlan* application is mainly to write its .INL file with all the necessary parameters to display the database information in the desired order, structure and sequence.

THE NODES

There are structural, processing and utility nodes. A structural node is the father of the nodes that follows. It has no associate process. An utility node is a node that is used by other nodes and helps to define the application. A processing node is associated with a statistical process, and, if executed, produces an output result that can be a cross tabs, an average, an Arealist, etc.

UTILITY NODES

The configuration nodes are used to define the components of the applications: databases, geographical selections, text pages, styles, footnotes, maps.

List of configuration nodes:

NODETYPE=STRUCTURE

NODETYPE=DATABASE
NODETYPE=SELEDITOR
NODETYPE=MAP
NODETYPE=NODESTYLE

There are, as well, various sections within the INL file that also are used to define components of the application:

[DATASET1]	definition of sets of databases
[SELSET1]	definition of set of selections
[PREFERENCES]	color and font display parameters
[GRAPH]	graph display parameters
[DEFINE1]	defines new variables
[FOOTNOTE1]	defines footnotes
[PAGE1]	defines pages to display text in the run panel related to a theme

PROCESSING NODES

The processing nodes are used to define indicators of the applications that are going to be processed.

List of processing nodes:

NODETYPE=FREQUENCY
NODETYPE=AVERAGE
NODETYPE=MEDIAN
NODETYPE=CRUZ
NODETYPE=AREALIST
NODETYPE=FRACTION
NODETYPE=QTS
NODETYPE=SELCOUNT
NODETYPE=MBR

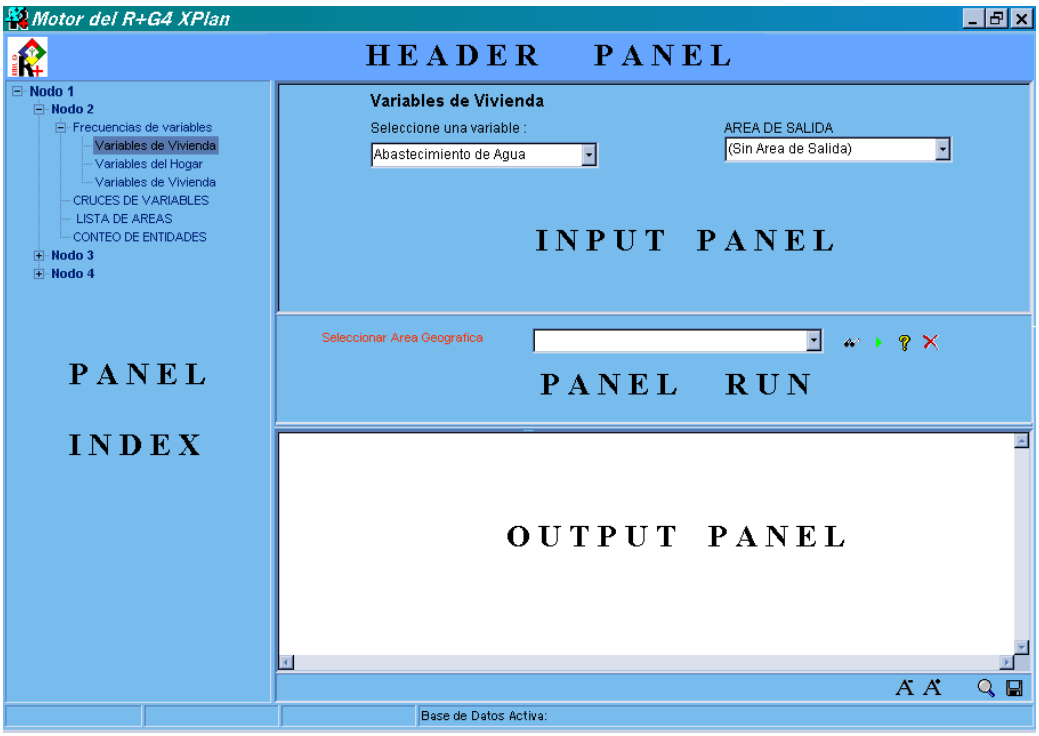
There are other processing nodes (example, CNTP, TRI node types) that are usually used with databases containing aggregated data, for example indicators at the national level or first administrative level.

III. Panels of the Application' s Interface

There are five panels that form the applications interface. Four of these panels area defined in the PANELS.INL file under the sections labeled:

[PANELHEADER]
[PANELINDEX]
[PANELINPUT]
[PANELRUN]

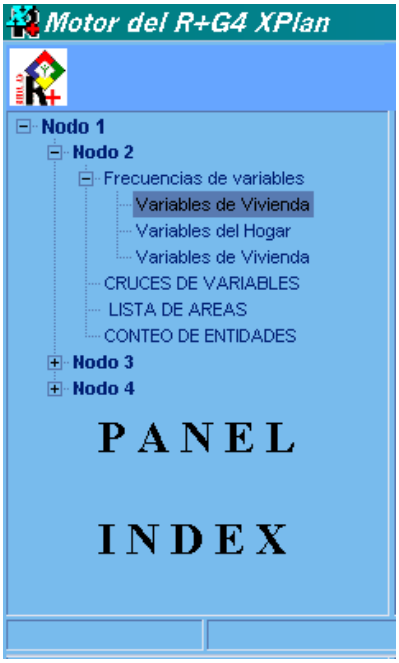
The panel output is not controlled by the application's developer.



THE INDEX PANEL

This panel contains the application's structure or table of contents (TOC). That is, it displays the topic or themes and sub-themes that contain the indicators. Themes are presented in a similar way as the folders structure in the MSN Windows Explorer.

Each node or theme has a name to identify it, and each node can have any number of subnodes or sub-themes, and so forth the branch can be expanded, there is no limit for this subdivision. The index is formed by the nodes of type STRUCTURE. Each terminal node (nodes of type FREQUENCY, AVERAGE, etc.) displays a set of parameters in the input panel which defines the process to execute the indicator.



Example: In the INL file the index panel defines the themes to display:

[STRUCTURE]
.....
NODES=7
NODE1=POBYVIVIENDA
NODE2=ESTRUCTURA
NODE3=ADULTOMAYOR
NODE4=FECUNDIDAD
NODE5=EDUCACION
NODE6=NBI
NODE7=NODESELEDITOR

THE INPUT PANEL

This panel commands the parameters that, after selected by the user, will be used to execute a Redatam statistical process. It is connected to a terminal node from the TOC that calls the process. Each terminal node belongs to a specific type, and depending upon this information the process panel is configured.

The parameters that change its appearance are:

The "//" indicate comments throughout this help and inside the INL language as well

[PANELINPUT]

COLOR=	//Panel color, (R.G.B.) format
CAPTION=	//Panel title
FONTCOLOR=	//Color used in the font for the panel texts
FONTSIZE=	//Size of the font used for the panel texts

HEIGHT=	//Vertical size of the process panel (numeric value)
TITLESIZE	//font size of the title
TITLEBOLD	//put the font in bold or not
COMBOSIZE	// size of the combo box
COMBOSELSIZE	// size of the selection combo box

Example

```
[PANELINPUT]
HEIGHT=200
COLOR=185.255.255
FONTSIZE=9
TITLESIZE=8
TITLEBOLD=YES
COMBOSIZE=105
COMBOSELSIZE=109
```

Within this panel there are many combo boxes and panels that have the same appearance and attributes and that are called by different processing nodes. These elements can be defined just once instead of repeat them every time, under the default section.

Example

```
[FREQUENCY.DEFAULT]
NODETYPE=NODESTYLE
INDICHEIGHT=150

ROWCAPTIONTOP=30
ROWCAPTIONLEFT=10
ROWTOP=50
ROWLEFT=10
ROWWIDTH=200

ABKCAPTIONTOP=80
ABKCAPTIONLEFT=10
ABKCAPTIONWIDTH=200
ABKTOP=100
ABKLEFT=10
ABKWIDTH=200
```

THE PANEL OUTPUT

This panel displays the results of the statistical process executed by the terminal node. According to the node type, the result can be a table (as a summary of the input parameters processed by a frequency or cross tabs) or an AREALIST type of output and can be displayed as a table, map or graph.

THE PANEL RUN

This panel presents the parameters to define the type of output. The output could be requested as a summary table where a frequency or cross tabs is processed, or as an Arealist table where columns are displayed as attributes of a geographic area. A map or graph can be requested as well. The parameters are defined beforehand according to the active database, the geographical selections and the type of output that the applications should provide.

The following parameters can be used to change the panel appearance:

[PANELRUN]

COLOR=	//Panel color in (R.G.B.) format
FONTCOLOR=	//Font color
HEIGHT=	//Panel vertical size (numeric)
SHOWSEL=NO	//Values (YES, NO) Activates (or not) the geographical selection combo box
SHOWDB=NO	//Values (YES, NO) Activates (or not) the database combo box
PICTURETOP=27	//Distance of the PICTURE from the top margin (numeric)
PICTURELEFT=360	//Distance of the PICTURE from the left margin (numeric)
PICTURETHEIGHT=23	//Vertical size of the PICTURE (numeric)
PICTUREWIDTH=23	//PICTURE width (numeric)
PICTURERUN=NO	//Values (YES, NO) Activates (or not) the execution button
PICTURERUNFILE=	//Defines the filename containing the image to put in the RUN button
PICTURERUNHINT=...	//Text describing the Tooltip for the RUN button
PICTURECLOSE=NO	//Values (YES, NO) Activates (or not) the Close button
PICTURECLOSEFILE=	//Defines the filename containing the image to put in the CLOSE button
PICTURECLOSEHINT=...	//Text describing the Tooltip for the CLOSE button
PICTUREVIEW=NO	//Values (YES, NO) Activates (or not) the View Program button
PICTUREVIEWFILE=	//Defines the filename containing the image to put in the VIEW button
PICTUREVIEWHINT=...	//Text describing the Tooltip for the VIEW button
PICTUREHELP=NO	//Values (YES, NO) Activates (or not) the Help button
PICTUREHELPFILE=	//Defines the filename containing the image to put in the HELP button
PICTUREHELPHINT=...	//Text describing the Tooltip for the HELP button
	//The PICTUREFILE accepts only bitmap, icon, metafile files or other compatible
	// graph formats

example

```
[PANELRUN]
HEIGHT=40
COLOR=247.247.247
TITLESIZE=8
TITLEBOLD=YES

SHOWSEL=YES
SELTOP=10
SELLEFT=130
SELWIDTH=150
SELCAPTIONTOP=12
SELCAPTIONLEFT=10
SELCAPTION=Select Geographic Area:
```

THE HEADER PANEL

This panel presents the title of the application. It is located above the Index and Run Panels, and allows you to define a title, logo or identification icons specific for your application.

The following parameters can be used to change the panel appearance:

[PANELHEADER]

HEIGHT=40	//Vertical size of the header panel (numeric value)
COLOR=	//Panel color, (R.G.B.) format
PICTURES=0	//Images to be displayed in the header panel (numeric value, 0 to 4)
PICTUREFILEn=	//Filename of the "n" image to be inserted (only bitmap files (.bmp), icon files (.ico), metafiles and similar formats supported by the object)
PICTUREWIDTHn=0	//Width of the "n" image (numeric value)
PICTUREHEIGHTn=0	//Vertical size of the "n" image (numeric value)
PICTURESTRETCHn=NO	//Stretches (or not) the picture size to the image size for the "n" image. Possible values (YES, NO)
PICTUREALIGn=	//Align the "n" image to the "LEFT", "RIGHT" or "CENTER"
PICTURELEFTn=0	//Position the "n" image in a specific distance from the left border (numeric value)

example

```
[PANELHEADER]
HEIGHT=50
COLOR=255.255.255
PICTURES=2

PICTURETOP1=0
PICTURELEFT1=2
PICTUREHEIGHT1=50
PICTUREWIDTH1=512
PICTUREFILE1=%INLPATH\ENG\Titulo_ENG.bmp

PICTURETOP2=0
PICTURELEFT2=600
PICTUREHEIGHT2=50
PICTUREWIDTH2=209
PICTUREFILE2=%INLPATH\ENG\Celade_ENG.BMP
```

IV. Steps to start developing your application

- There is an *R+SP xPlan* Application based on census information built for the New Miranda demonstration database. We recommend complementing the learning of the tool by using, reading and analyzing this application and its components. This helps you to understand how the system works, and how *R+SP xPlan* connects all the elements in a common interface.

- To run the *New Miranda Application* you can choose to open either the main cover/frontpage or the applications window directly:

  - To open the main cover= execute the *R+SP xPlanMain.exe* program from the Redatam program group. Look for the *.iml file in the New Miranda folder (NMIRANDACENSOMAIN_ENG.iml).

  - To open the application window = execute the *R+SP xPlan.exe* program from the Redatam program group. Look for the INL file in the New Miranda folder (NMIRANDACENSO_ENG.inl).

- Open the NMIRANDACENSO_ENG.inl file with a text editor program and revise it.

- Create the same initial *.inl file for your application and saved it in another folder. Make the suitable modifications and changes that your database needs.

- The first modifications that you should do to your inl file are to update of the files, database, map compositions, other inl files, selection files, and images names and proper paths.

- It is possible to verify the modifications done to the application inl file and see how they appear by double clicking the icon at the right of the header panel.

- To make it easier for you to design and develop an application with the .INL file, we suggest the following:

  - ❖ First design all the table of contents (TOC) structure before designing the subnodes.
  - ❖ Define right a way the whole application appearance (color, font size, panel sizes, bolds, etc.)
  - ❖ Implement one terminal node at a time, checking to see if it is working correctly before designing the next one.
  - ❖ For each terminal node, check its results directly with *R+SP Process*, independently of the application.
  - ❖ The .INL file can be very lengthy, so, it is better to split them into several INL "subprograms" using the #include clause.
  - ❖ Leave the selections, help files and maps for the last step of implementation, as well as the main front cover (explained in document 5).

V. Structure and Sections of the INL File

The .INL file (text file) can be created using any conventional text editor. The contents are organized by information blocks (sections) and parameters, very similar to the .INI files from Windows 3.1. Each group is identified by a name enclosed in brackets, and the parameters inside a group are written in uppercase letters, each in a separate line.

Some of those sections, besides the STRUCTURE one, are also mandatory in order for the application to work. The parameters inside each group must be written exactly as they are defined, followed by an equal sign (=). Some parameters are optional; if not present the system uses the default value for each one of them.

There is no order to write the groups in an .INL file, but a certain logical order is recommended for you to maintain the file, mainly because the application can generate many sections that need to be organized.

First of all, every .INL has to have the "STRUCTURE" group. Generally it is the first one in the file.

After those parameters, and still inside the "STRUCTURE" group, a list with the structural nodes that form the main items of the table of contents (TOC) is defined:

```
[……]
……
NODES=3
NODE1= BIRTHS
NODE2= DEATHS
NODE3= INFANT MORTALITY
```

STRUCTURE OF THE APPLICATION

Structure of the Application

(edit file NMIRANDACENSO_ENG.inl)

```
[STRUCTURE]
MODE=APPLICATION
ALLOWRESTART=YES
PLANID=NMir Census
CAPTION=R+SP xPlan Census Application
DATASETS=1
SELSET=SELSET1
LASTSELECTION=1

NODES=7
NODE1=POBYVIVIENDA
NODE2=ESTRUCTURA
NODE3=ADULTOMAYOR
NODE4=FECUNDIDAD
NODE5=EDUCACION
NODE6=NBI
NODE7=NODESELEDITOR

DEFINES=25

MAPS=7
MAP1=MAPCOMU
MAP2=MAPDIST
MAP3=MAPDISTC5
MAP4=MAPDISTC6
MAP5=MAPDISTC7
MAP6=MAPDISTC8
MAP7=MAPDISTC9

PAGES=10
PAGE=7

FOOTNOTES=1
DEFAULTFOOTNOTE=1

#include ENG\Preferences_ENG.inl
#include ENG\DataSels_ENG.inl
#include ENG\Panels_ENG.inl
```

```
#include ENG\Styles_ENG.inl
#include ENG\GeneralSections_ENG.inl
#include ENG\Pages_ENG.inl
#include ENG\Defines_ENG.inl
#include ENG\Maps_ENG.inl
```

Preferences of the Application

(edit file Preferences_ENG.inl)

```
 [PREFERENCES]
HEADERPANEL=YES
/COLOR=100.160.200
COLOR=SILVERLITE

FONTCOLOR=0.0.0
FONTNAME=ARIAL
FONTSIZE=8
ROOTFONTSIZE=12
PRESENTATION=RICH
PROGRESS=FAST
LANGUAGE=1
DECIMALS=2
GRAPH=YES
MAP=YES
MAPLASTOUTPUT=YES
OMITTITLE=YES
DECIMAL=.
MILES=,
LOADLAST=YES
USEWEIGHT=NO
SAFETY=YES
WARNING=2
SHOWMAIN=YES

/----------------------------------------------------------------
[GRAPH]
DIMENSION=3D
SORT=ASCENDING
COLORSCHEME=RAMP
COLORMIN=BLUE
COLORMAX=YELLOW
COLORSINGLE=GREEN
COLORLEFT=BLUE
COLORRIGHT=RED
```

Definition of the general sections

(edit file GeneralSections_ENG.inl)

********** GLOBAL SECTIONS **********

[ROW_VIV]
ROWCAPTION=Select a Variable
ROWN=13
ROW1=HOUSIN.WATER
ROW2=HOUSIN.WATERO
ROW3=HOUSIN.WATERP
ROW4=HOUSIN.CAR
ROW5=HOUSIN.BICYCL
ROW6=HOUSIN.BEDS
ROW7=HOUSIN.KITCH
ROW8=HOUSIN.CONDIT
ROW9=HOUSIN.NPERSS
ROW10=HOUSIN.FLOOR
ROW11=HOUSIN.ROOF
ROW12=HOUSIN.WALLS
ROW13=HOUSIN.TYPHOU

[ROW_PER1]
ROWCAPTION=Select a Variable
ROWN=17
ROW1=PERSON.ACTYPE
ROW2=PERSON.ATTEND
ROW3=PERSON.COURSE
ROW4=PERSON.AGE
ROW5=PERSON.MARSTA
ROW6=PERSON.EDQUINQ
ROW7=PERSON.OCCUP
ROW8=PERSON.NCHILD
ROW9=PERSON.CHILDL
ROW10=PERSON.CHILDY
ROW11=PERSON.CHILDA
ROW12=PERSON.LITER
ROW13=PERSON.RELAT
ROW14=PERSON.INDUST
ROW15=PERSON.SEX
ROW16=PERSON.CATOCC
ROW17=PERSON.EDTYPE

Check the file for more…..

Data selections and definitions

(edit file DataSels_ENG.inl)

********** DATABASE(S) **********
[DATASET1]

```
DATASETLABEL=Database
NODES=1
NODE1=DATABASE1
LASTDATABASE=1

[DATABASE1]
NODETYPE=DATABASE
NAME=%INLPATH\BaseR\NmirEng.dic
CAPTION=New Miranda
DATAPATH=%INLPATH\BaseR\

********** SELECTIONS ********************
[SELSET1]
SELECTIONS=8
SELNAME1=ALL
SELCAPTION1=All
SELNAME2=%INLPATH\SantaMaria.sel
SELCAPTION2=Santa Maria
SELNAME3=%INLPATH\Santiago.sel
SELCAPTION3=Santiago
Check the file for more…..
```

Definition of the Panels interface layout

(edit file Panels_ENG.inl)

```
**********  PANELS ************************************

[PANELHEADER]
HEIGHT=50
COLOR=255.255.255
PICTURES=2

PICTURETOP1=0
PICTURELEFT1=2
PICTUREHEIGHT1=50
PICTUREWIDTH1=512
PICTUREFILE1=%INLPATH\ENG\Titulo_ENG.bmp

PICTURETOP2=0
PICTURELEFT2=600
PICTUREHEIGHT2=50
PICTUREWIDTH2=209
PICTUREFILE2=%INLPATH\ENG\Celade_ENG.BMP

/-----------------------------------------------------------
[PANELINDEX]
WIDTH=300
COLOR=185.255.255
```

```
FONTNAME=ARIAL
LINES=NO

/---------------------------------------------------------------
[PANELINPUT]
HEIGHT=200
COLOR=185.255.255
FONTSIZE=9
TITLESIZE=8
TITLEBOLD=YES
COMBOSIZE=105
COMBOSELSIZE=109

/---------------------------------------------------------------
[PANELRUN]
HEIGHT=40
COLOR=247.247.247
TITLESIZE=8
TITLEBOLD=YES

SHOWSEL=YES
SELTOP=10
SELLEFT=130
SELWIDTH=150
SELCAPTIONTOP=12
SELCAPTIONLEFT=10
SELCAPTION=Select Geographic Area:

PICTURETOP=10
PICTURELEFT=290
PICTUREWIDTH=85
PICTUREHEIGHT=25

PICTURERUN=YES
PICTURERUNFILE=%INLPATH\ENG\boton_run_ENG.bmp
PICTURERUNHINT=Run

PICTURECLOSE=YES
PICTURECLOSEFILE=%INLPATH\ENG\boton_home_ENG.bmp
PICTURECLOSEHINT=Return to Main

PICTUREVIEW=YES
PICTUREVIEWWIDTH=30
PICTUREVIEWHINT=Compile
```

Definition of boxes styles and position

(edit file Styles_ENG.inl)

********** STYLES **********

[FREQUENCY.DEFAULT]
NODETYPE=NODESTYLE
INDICHEIGHT=150

ROWCAPTIONTOP=30
ROWCAPTIONLEFT=10
ROWTOP=50
ROWLEFT=10
ROWWIDTH=200

ABKCAPTIONTOP=80
ABKCAPTIONLEFT=10
ABKCAPTIONWIDTH=200
ABKTOP=100
ABKLEFT=10
ABKWIDTH=200

/---
[CRUZ1.DEFAULT]
NODETYPE=NODESTYLE
Check the file for more…..

Definition of the pages

(edit file Pages_ENG.inl)

********** PAGES **********

[PAGE1]
LINES=7
LINE1=Indicators for the Population Structure
LINE2=
LINE3=To be able to get:
LINE4= * Population by Sex and Age Groups.
LINE5= * Dependency Ratio (User defined).
LINE6= * Population Distribution by Ages.
LINE7= * Dependency Ratio by County and District.

[PAGE2]
LINES=7
Check the file for more…..

********** FOOTNOTES **********

[FOOTNOTE1]
LINES=2
LINE1=Processed with Redatam+SP

LINE2=ECLAC/CELADE 2000-2006

New variables definition

(edit file Defines_ENG.inl)

The first eight defines are required for specific nodes

```
[DEFINE1]
NAME=COUNTFILTER2TOTAL
ENTITY=COUNTFILTER2
CAPTION=Total

[DEFINE2]
NAME=COUNTFILTER2SEL
ENTITY=COUNTFILTER2
CAPTION=Total Selected

[DEFINE3]
NAME=COUNTFILTER2PC
ENTITY=COUNTFILTER2
CAPTION=Percent

[DEFINE4]
NAME=COUNTFILTER2PCREL
ENTITY=COUNTFILTER2
CAPTION=Ratio

/---------------------------------------------------------------
[DEFINE5]
NAME=NBITOTAL
ENTITY=NBI
CAPTION=Total

[DEFINE6]
NAME=NBISEL
ENTITY=NBI
CAPTION=Total Selected

[DEFINE7]
NAME=NBIPC
ENTITY=NBI
CAPTION=Percent
```

```
[DEFINE8]
NAME=NBIPCREL
ENTITY=NBI
CAPTION=Ratio

/---------------------------------------------------------------
[DEFINE9]
NAME=EDADGRA
ENTITY=PERSON
CAPTION=Age by Broader Groups
AS=RECODE
EXPRESSION=PERSON.AGE
RECODEITEMS=3
RECODEVALUE1=1
RECODEMIN1=0
RECODEMAX1=14
RECODETYPE1=CC
RECODEVALUE2=2
RECODEMIN2=15
RECODEMAX2=64
RECODETYPE2=CC
RECODEVALUE3=3
RECODEMIN3=65
RECODEMAX3=101
RECODETYPE3=CC
TYPE=INTEGER
RANGES=1
RANGEMIN1=1
RANGEMAX1=3
VALUELABELS=3
VL1=1 0 - 14
VL2=2 15 - 64
VL3=3 65 +
LABEL=Age by Broader Groups

[DEFINE10]
Check the file for more…..
```

Redatam Map's compositions definition

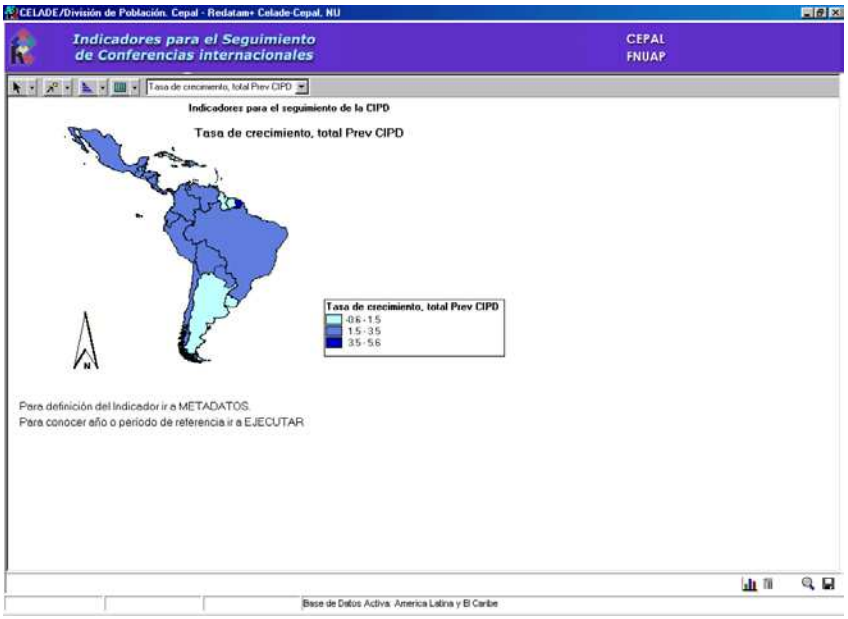
(edit file Maps_ENG.inl)

```
[MAPCOMU]
CAPTION=New Miranda : Counties
NODETYPE=MAP
MXP=%INLPATH\ENG\Comunas_ENG.mxp
MAPSECTION=MAP

[MAPDIST]
CAPTION=New Miranda : Districts
```

NODETYPE=MAP
MXP=%INLPATH\ENG\Distritos_ENG.mxp
MAPSECTION=MAP

Check the file for more…..



Several map' s compositions can be added to one application.

USING THE #INCLUDE CLAUSE

You can divide the .INL files into several sections or "subprograms", each one of them stored in a separate file. This is very handy when you have a very big .INL file, making it easier to edit and change the application. Use the **#include fff** clause to insert a section into the main .INL file, where **fff** is the filename of the included file. When the system reads the main .INL file and finds a #include clause, it substitutes the entire clause line by the contents of the file mentioned in the clause. If **fff** does not have a path, the system assumes that **fff** is located in the same directory as the .INL main file.

Files included with **#include** clauses can have also another subprograms (other #include clauses), with no limits. However, make sure the inclusions are no circular (including a file that was already included), because this will stop the system.

This technique is very useful when designing an application, for the following reasons:

1. The panel definitions can be stored once in an independent file
2. Each section belonging to the structure can be stored separately
3. If you want to distribute one single .INL file, copy them when you have finished the development phase.

COLOR HANDLING

The COLOR parameter is used to change the colors in the panels. You can define the colors in the following ways:

1. As an RGB symbol
2. As a TEXT (color name)

RGB symbol

It is defined as "rrr.ggg.bbb", where *rrr* is a number for the red component, *ggg* is the green component, and *bbb* is the blue one. Each number can vary from 0 to 255.

Example:

0.0.255	pure blue
255.0.0	pure red
0.0.0	black
255.255.255	white

Text (color name)

These are the available colors

AQUA	**GREEN**	**SILVER**
WHITE	**RED**	**OLIVE**
GRAY	**LIME**	**PURPLE**
DARKGRAY	**MAROON**	**LENIN**
FUCHSIA	**NAVY**	**BLUE**
BLACK	**YELLOW**	**TEAL**

VI. The Main Cover / Front page

The x*PlanMain* program works through parameters contained in an instruction file ‘’text-type’’, with an .IML extension. This file organizes and defines the shape and position of the panels, images and the execution buttons to access the application.

The information which may be presented in the front page could be of the following types:

1. One or more R+SP xPlan applications
2. The Redatam databases dictionaries with R+SP Process
3. Multiple R+SP xPlanMain (‘’recurrent’’ covers)
4. HPL help files
5. HTML pages
6. PDF documents
7. Exit button to exit the system

The access to the applications can be made through the buttons, which may point, for example, to a Redatam dictionary file (.dic) to start the *R+SP Process* Module or to a *R+SP xPlan* Application (.inl), etc.

This document contains a description of the panels and buttons, as well as the parameters used to make them work. It also adds at the end a quick guide to elaborate a IML file.