
August 1998

ArcView® GIS Extensions

ArcView EASYARCV

EASYARCV

(Ver. 2.01)

Extension ArcView® GIS

What is EASYARCV

EASYARCV is an extension of ArcView to create customized libraries of ArcView objects as:

- Themes with legend, linked tables , attributes, labels, captions
- Tables, fields
- Views, AOI, Projected, Display
- Layouts
- Scripts
- Graphics
- DialogEditor with script
- DocGUI with script
- Menu, Buttons, Tools with script

This extension is capable of restoring objects from old projects and it can memorize their definition (data location, visualization mode, attributes). EASYARCV can work in a network environment with a single library shared by different users.

Who can beneficially use EASYARCV

✓ **Users**

ArcView customers and users utilize object libraries created by GIS managers, without concerning about the data structure and origin.

✓ **Programmers**

An on-line script and dcontrols library always ready and useful for the professional software developer and for the occasional utility user. EASYARCV can fulfil the requirements of both.

✓ **GIS Managers**

Managers and administrators of geographical data base can set up standard libraries containing definition of the available data. Such libraries can be distributed to other managers (maintaining a standard system for data representation) or GIS users.

Conditions of use

EASYARCV is a freeware program and it can be utilized without corresponding any license fee to its owner. Whoever finds EASYARCV helpful for his purposes and useful for saving time and burden on his work, shall agree to the following clauses:

if public company

please, send information and documents regarding his GIS activities (own publications or reports) to the following mailing address:

Spett. Provincia Autonoma di Trento
Agenzia provinciale per la Protezione dell'ambiente
Via Mantova 16 ITALY
attn Anderle Giancarlo

if private user

please, correspond an offering to a charity organization and give notice to the following e-mail address:

giancarlo.anderle@provincia.tn.it
stating subject "EASYARCV x Giancarlo Anderle"

SOMMARIO

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INTRODUCTION

Software requirements

EASYARCV extension requires the following software:

- ✓ ArcView 3.0a (version 3.0 plus patch 3.0a available from esri.com Website)
- ✓ Dialog Designer 1.0 (extension available free from esri.com Website)

Installing EASYARCV

To install EASYARCV extension, follow the indications:

- ✓ Copy file '**EASYARCV201.avx**' in the extension directory (for Win95: ...\\arcview\\ext32 - for Windows3.11: ...\\arcview\\ext16).
- ✓ Run application ArcView 3.0a.
- ✓ From File menu of Project window, select 'Extensions...'
- ✓ Among the available extensions, select "EASYARCV" and OK (if you want to load the extension everytime you run ArcView, then press Default before OK).
- ✓ The first time you load the extension, you will be asked for a directory name where programme will be installed. Default directory is "DIR_AID" inside HOMEDIR dir ArcView. If the specified directory does not exist or cannot be created, the setup will abort.
- ✓ The extension is ready for use now.

Creating the first object

You can create the first object in the library and then you can use it in a new project (This is only possible after the complete installation). That is done in a few minutes, following the steps below:

- Opening a old project
 - Open one of the views
 - Select **Clip** button
 - In the dialogue window select a theme from the left menu with the mouse left button (multiple selection is possible holding the SHIFT key while clicking the mouse)
 - Click Save button
 - Exit dialogue windowExit old project without saving
- Opening a new project
 - Create a new view
 - Click the **colour-checked** button
 - Select theme(s) on left menu (SHIFT key + mouse left button)
 - Click **Select** button (themes will appear on right panel)
 - Click button **Load** Selected

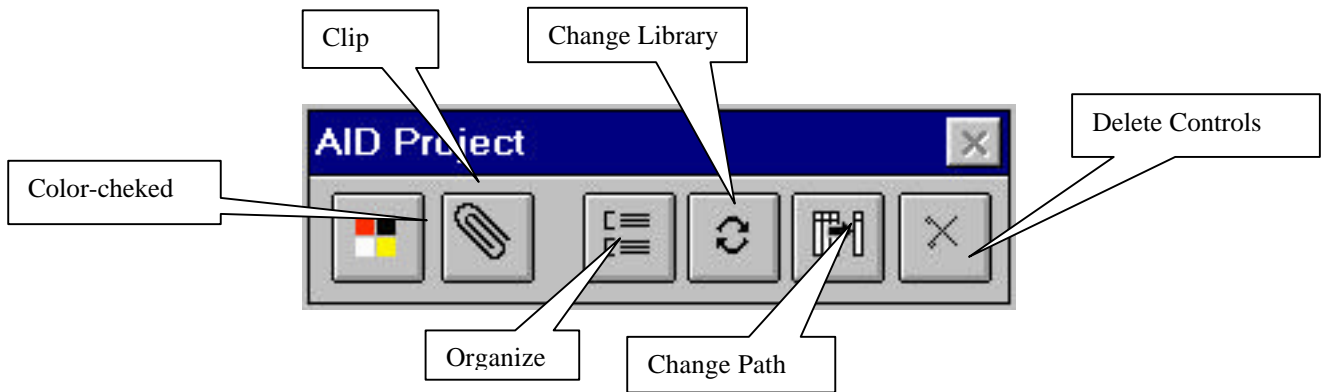
In the active view the themes will be loaded as they were defined in the old project.

Note: this extension has been verified only for WIN3.11, WIN95 and WIN NT 4.0 environments. Possible weak performance may be caused by conflicts with different operating systems.

EasyArcV user's guide

EASYARCV interface

The EASYARCV extension add to the standard windows a Dialog always active that is the menu of the extension.:



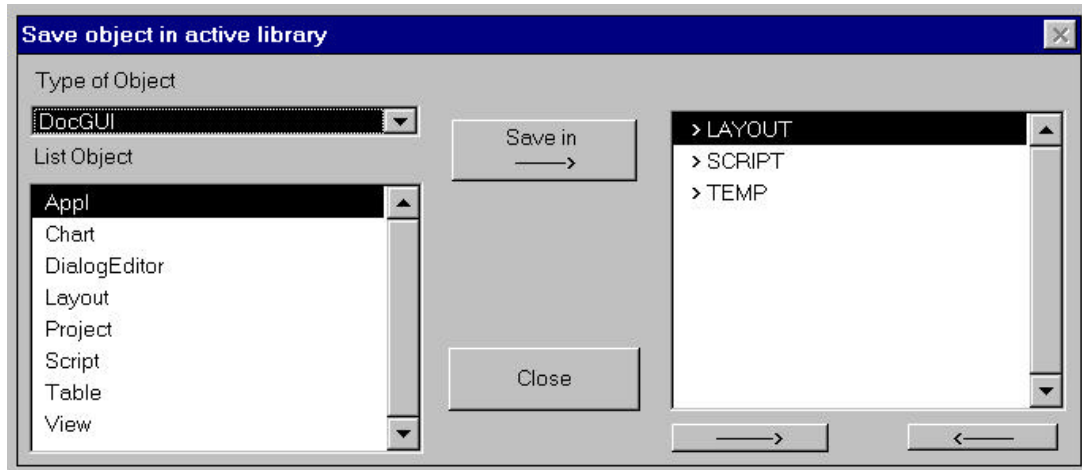
The active library

EASYARCV allows you to work with a single library (active library), located in a chosen reference directory. When first installed, EASYARCV asks to set a reference directory where the programme will store all the necessary files (see Annex D for technical reference). The active library will always refer to this directory, for data storing and retrieval. One can change this directory anytime, selecting the button "Change Library". Change of this directory will modify also active library. Thus many ArcView object libraries can be available from disk or network, but EASYARCV can manage only one at a time.

Memorizing themes and objects

EASYARCV working modes are identical for all objects; so the indications in the following sections do not make distinction between the two cases, unless where differently stated.

"Clip" button will show a dialogue template for managing insertion of objects in the active library. In the dialog at top in the left there is a ComboBox from which you can select the type of object listed in



the left panel.

One can store objects listed in the left panel onto the open right menu folder, by clicking them with the left mouse button (multiple selection is possible holding the SHIFT key while clicking the mouse) and then "Save" button. If no folder is open, then objects will be saved onto the main folder. In the right window, double click to on a selected folder to open it, and on the dotted line to close it.

One can do the same using the two arrows under the window. Above the list, find reference to the actual position inside the folders: if in the main folder, no reference, otherwise the complete path is described (eg. VIEWS\ADMIN\BORDERS).

When you save Controls, DocGUI, DialogEditor the extension can save associated script. A dialog windows show a list of script from which you can add or cancel.

EXIT button will close the dialogue window.

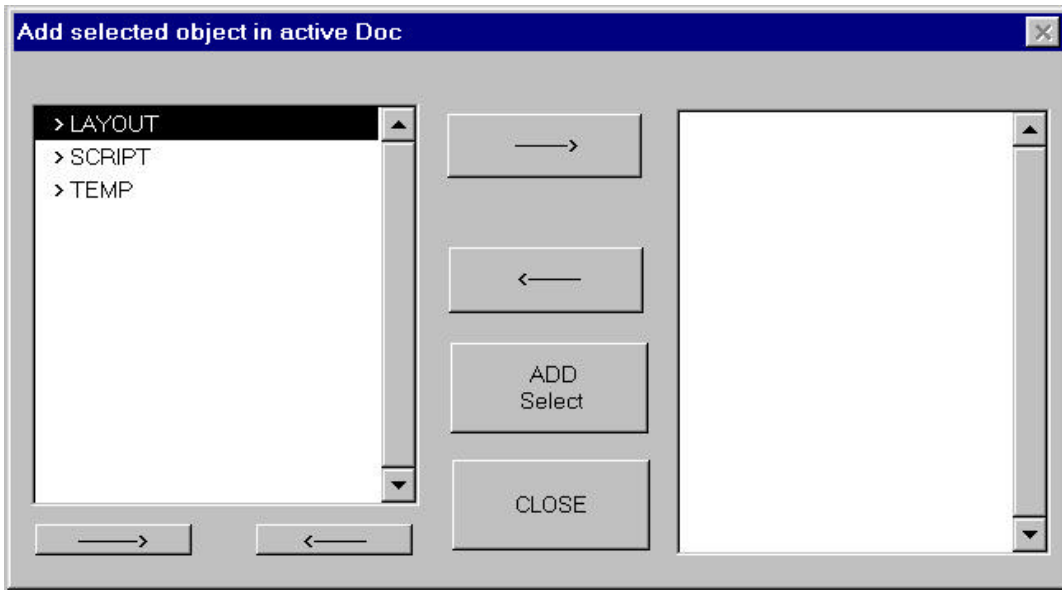
Loading themes and objects

"Checks" button will show a dialogue template for loading objects from the active document. In the left panel, enter the chosen folder, select themes and objects, then click "——>" button. The selected objects will appear also in the right panel list. Once chosen objects have been moved from a given folder, it is possible to repeat the operation for each folder.

If an unwanted object has been loaded, it is possible to mark it on the right panel and delete it with the proper button "<——" (it is possible to select and delete only one object at a time).

When all the needed objects are in the right panel in the proper order, press "ADD SELECT". This starts the loading of all the selected objects on the active project. The operation will take a few minutes

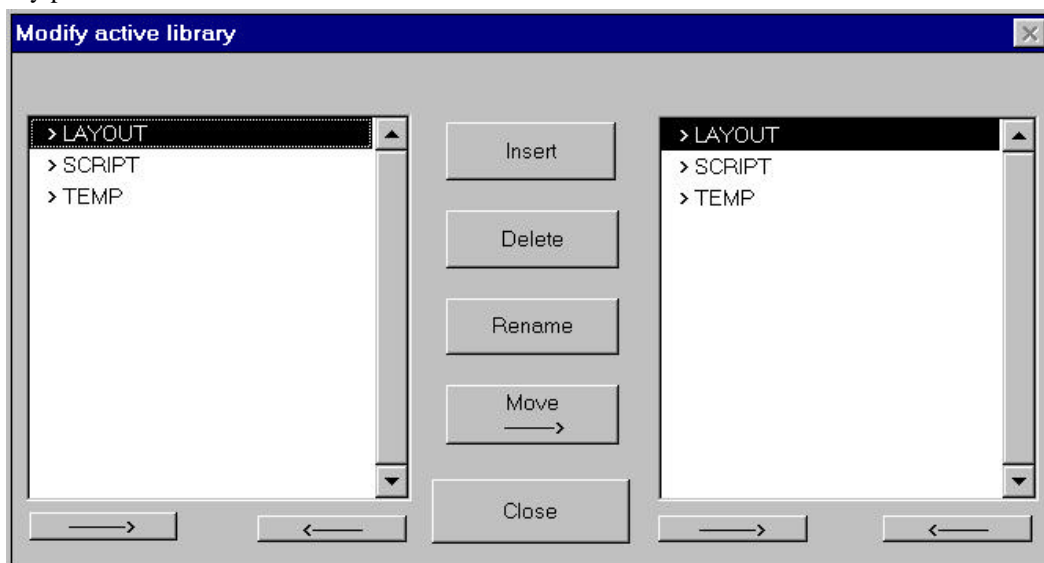
(depending on the number and complexity of the objects). Once the process is finished, the dialogue template will automatically close.



Organizing theme and object library

"**Organize**" button will show the dialogue windows for organizing the active library. Inside this windows you can organize the memorized data to make them more easily available. The right panel list is active only for "MOVE" button, for all the other buttons you must use only the left panel list.

You can include a new folder in the active one with "INSERT" button. You can create it in the main one or in the opened one. The programme ask the folder name and refuse to put in folders with names already present in the active folder.



After the introduction the folder is immediately available for any operation. With button "DELETE" you can delete wheters single objects or whole folders and their contents.

The programme always ask to confirm the deletion. Deleted things are definitively lost. With "RENAME" button you can modify the description of folders and of memorized objects to render them easily identifiable through the description of their contents. The button proposed as description the current one which can be modified. The descriptions already present in the folder are not accepted but you can use any alphanumeric character, including blank spaces. With "MOVE" button you can move folders and objects from the left panel list to the right. To do that you have to select the folder you want in the right panel list (double click or small arrow down), then you select in the left panel list the folders and themes you want to move and finally you press "MOVE" button. The result is immediately visible in both panel lists.

Once you finish to organize the library you have to press "CLOSE" button to close the dialogue panel.

Changing path in the active library

"Change path" button change address to data in every objects of the active library. This operation is necessary if the position of some objects has been modified (a net disk has been re-addressed, so that you can pass from F: to G:, or same data has been moved from a directory to another one); this operation is very slow (it can take dozens minutes) and you have to do it only after having done a backup copy of the whole library to avoid any possible problem. If you decide of doing this operation, the programme controls all the objects memorized in the active library and shows the whole PATH list. From this list you select what you want to change, then the programme present a box where it is possible to modify the old path. Once this change is completed, the programme proceeds modifying paths. This button is active only when the project is the active doc.

Cancel added controls

"Delete controls" button delete the object controls added in the project from the library of the extension. A dialog windows show a list of controls added from which you can delete selected.

ANNEXES

A Exporting and importing themes and objects from different libraries

This EASYARCV version doesn't provide for a specific button to import or export objects and themes from a library to another one. Anyhow you can do this operation in this way

- ✓ Execute ArcView
- ✓ Make sure EASYARCV extension is loaded
- ✓ Open a new project
- ✓ Select as active library the one from which you want to import objects or themes
- ✓ Import in the project the objects and the themes you want
- ✓ Select as active library the one in which you want to load objects or themes
- ✓ Load the objects you want
- ✓ Exit from the project without saving

B Distributing libraries on PC

The transport of libraries on a PC different from the one with which you have created them is possible if in the PC of destination there are the references data and if their addresses are the same (they must be physically or logically placed in the same place. This is a condition like that required from ArcView projects). If these requirements are satisfied, for transporting a library you just have to copy and make on another PC the content of the library's reference directory. For instance, for moving a library whose reference path is C:\DIR_AID you just have to copy the directory whole content (they can be several Mb of data and hundreds of files) and then to create on the PC you want a path for this new library (es: D:\NEW_LIB – this path can be different from the other one) and to memorize the data previously copied.

C Installing libraries on a multiuser environment

EASYARCV extension uses ODB files to memorize both the library structure and the objects' definitions. These Odb files don't have the properties necessary to be handled in a multiuser environment. Because of this limit more users can't simultaneously read and write on these files and for this reason their net use is possible only to the following condition:

Only one user must be qualified for writing on these files

If these condition is satisfied all the other users are qualified for reading ODB files making use in this way of the objects already present. This way of the proceeding (only one user qualified for fixing themes and objects) is also useful to the net library for the standardization of captions and cartographies.

D Data saving modes

EASYARCV extension memorizes all the data in ODB files. There are kinds of files. The files AXXXXXXX.ODB where the definitions of every object are memorized and the file ODBLIST.ODB where the references to single objects, the library structure (objects' categories and names), the variables of system and environment are memorized. It follows the description of the structure and of the objects memorized in the two kinds of files. AXXXXXXX.ODB (XXXXXXX correspond to the number of the memorized object)

Data saving modes

Oggetto1	Oggetto(Tema)	Variante
Oggetto2	Nome dell'Oggetto	Stringa
Oggetto3	Data memorizzazione	Data
Oggetto4	Vuoto	Lista

Oggetto5	Vuoto	Lista
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ODBLista.ODB

Oggetto1	Intestazione	Lista
Oggetto2	Lista variabili	Lista
Oggetto3	Lista Categorie dei temi	Lista
Oggetto4	Lista Temi	Lista
Oggetto5	Vuoto	Lista
Oggetto6	Vuoto	Lista
Oggetto7	Lista categorie degli oggetti	Lista
Oggetto8	Lista degli oggetti	Lista
Oggetto9	Lettere	Lista
Oggetto10	Numero Oggetti	Stringa
Oggetto11	Lista variabili di sistema	Lista
Oggetto12	Ultimo oggetto	Stringa
Oggetto13	Vuoto	Lista
Oggetto14	Vuoto	Lista
Oggetto15	Vuoto	Lista
Oggetto16	Vuoto	Lista
Oggetto17	Vuoto	Lista
Oggetto18	Vuoto	Lista