Manual on DIGITAL DOCUMENT ARCHIVING

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CONTENTS

Foreword	5
Preface	7
What this manual is all about	9
Creation of Digital Archives with Winisis	
WINISIS: the windows version of CDS/ISIS	15
Installation of WINISIS	16
Creating the database	21
Creation of Digital Archives with GenisisWeb	
Use of slightly modified Winisis database	33
Installation of Apache Web Server	34
Installation of GenisisWeb	38
Creating the web front-end with GenisisWeb	44
Publishing the database in a website	60
Creation of CD-ROM Libraries with GenisisCD	
Installation of GenisisCD	63
Creation of files for burning the cd-rom	66
Finalize the cd-rom application	76
Modifications to be made before burning into a cd-rom	78
Testing the burned cd-rom	81
Annexures	
Modifying a Winisis database	87
Converting a paper document into a digital document	94
Converting a word document into a PDF document	98
Publishing your website in internet using FrontPage	103
Glossary of terms	105

FOREWORD

The precise purpose of this manual is to promote access to and management of information, consequent information empowerment and resultant development. Information technology facilitates the process of collection, storage, processing and dissemination of information and enables instant access to information leading to overall developments in any sphere of human endeavour.

Managers and users of information cannot ignore the different kinds of abundantly available digital information materials in text, images, audio, video or other formats. They have to organize, maintain and probably disseminate the information for pushing development forward. There are many free information technology tools that would help in the task. This has prompted KILA to make an attempt to bring out a cd-rom entitled "Digital Document Archiving Tools & Resources" containing a set of easily available and highly useful software along with a self-instructional manual on digital archiving, hoping that the technology used for management of data, information and knowledge in diverse development fields closely related to decentralisation.

The manual, along with the cd-rom containing the set of software, will be made available to the institutions or individuals engaged in decentralisation and local development for building digital archives in their institutions, areas of activities or personal computers. This publication is a significant attempt on the part of our institute to involve in promotion of information empowerment in our focus areas.

I congratulate the authors of this manual for their attempt to promote creation of prototype digital libraries for wider dissemination and use of information.

KILA campus 1st December 2006 Dr. P. P. Balan Director Kerala Institute of Local Administration

PREFACE

The purpose of this manual is to enable the information managers/information users to create the easiest possible prototype digital libraries with stable, free software.

Access to information is considered to be a vital determinant of development in any human endeavor including academic and research activities and hence digital management of information has wider ramifications in this world of abundant electronic documents. The technologies described in this manual will sharpen the information dissemination capabilities of information managers and will enhance the access to information resulting in information empowerment of a wider constituency of information seekers.

This self-instructional manual describes the methods of creation of digital archives with Winisis, GenisisWeb and GenisisCD. The software needed are Apache webserver, Winisis, GenisisWeb and GenisisCD. If you have access to pdf converter like Adobe Acrobat, you can refine the documents in the collection into easily useable e-documents. Html editor will help you modify the homepage you create. Anyone with an average knowledge in computers can make use of the software dealt with in this manual, if she/he follows the instructions diligently.

Institutions can make use of the technologies mentioned in this manual to publish their research reports and other publications in internet or cd-roms very easily.

We express our gratitude to Mr. David Storti (Unesco), Mr. Chabert Pierre, the author of genisis, Mr. Celso Gonzales, Dr. Deepali Talagala, Dr. Vimal Kumar Varun (DSIR, New Delhi), and Mr. Stephen O'Brien for being helpful in answering our queries on this. We are thankful to Mr. Jean-Claude Dauphin (Unesco) for agreeing to put this document in the Unesco web site.

We are extremely grateful to Prof. A Neelameghan (Bangalore), a doyen in the field of librarianship, for his enthusiastic encouragement, proper motivation and invaluable guidance.

We have deep indebtedness to Dr P P Balan, Director, Kerala Institute of Local Administration, Mulagunnathukavu for providing a conducive environment for working on this project and bringing out this manual as a publication of the Institute.

KILA Campus 1st December 2006 K. Rajasekharan K. M. Nafala

What this manual is all about

This manual is a self-instructional handbook that helps you to create digital archive of documents in different electronic formats, ranging from commonly used word/excel documents to inextricably linked offline websites/video clips. The manual includes a cd-rom titled "Digital Document Archiving Tools & Resources" that contains everything needed for creation of archives.

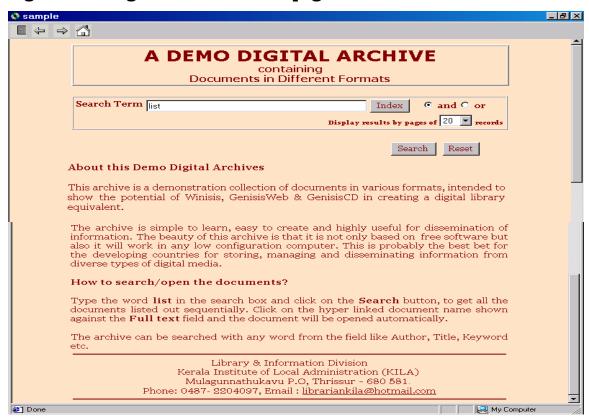
Digital Archiving is the process of building up searchable digital document collection that can be considered as digital library equivalents, in an organised manner for wider distribution and utilization of information contained in it by publishing it on the intranet/internet or an cd-rom.

The digital archive will have a website like homepage with a search box, submit button and other buttons. You can search the archive with any word and can obtain the search result, as in a website. When you make a search, the database records that match with the search term will be listed, with a link in the record. A click on the link will open the linked-up document automatically.

Any document in the archive can be retrieved, copied or opened easily from the archive and this feature makes the archive a digital library equivalent. If the contents of the archive are pdf documents with bookmarks, you can reach out to a chapter or a page in the document very easily. The addition of a new document, replacement/deletion of an existing document, alteration of an entry etc. in the archive can be done with ease.

The digital archive can be configured in such a way that you can enlist all the documents in it sequentially on a search with the word such as **list**, if you had included that word in every record, the archive contains. The search result for all records in a Demo Digital Archive will appear in Fig 2.

Fig 1 Demo Digital Archive- Homepage



The software tools used for digital archiving are *Winisis*, *GenisisWeb*, *GenisisCD* & *Apache*, which will work even in low-configuration computers. Winisis, is a versatile textual database software developed by Unesco mainly for creation of library catalogue and has been used as the back-end program for the digital archive. The database created with it has been modified to display a hyperlink in its display screen which links-up to the appropriate documents in the digital collection held in the computer. The digital archive allows metadata based search, retrieval

and display of full text documents by a few mouse clicks. The GenisisWeb/GenisisCD software provides a user-friendly web-front-end and helps to publish the archive in intranet, in Internet or in a cd-rom without hassles.

Fig 2 Demo Digital Archive- Search Result Page

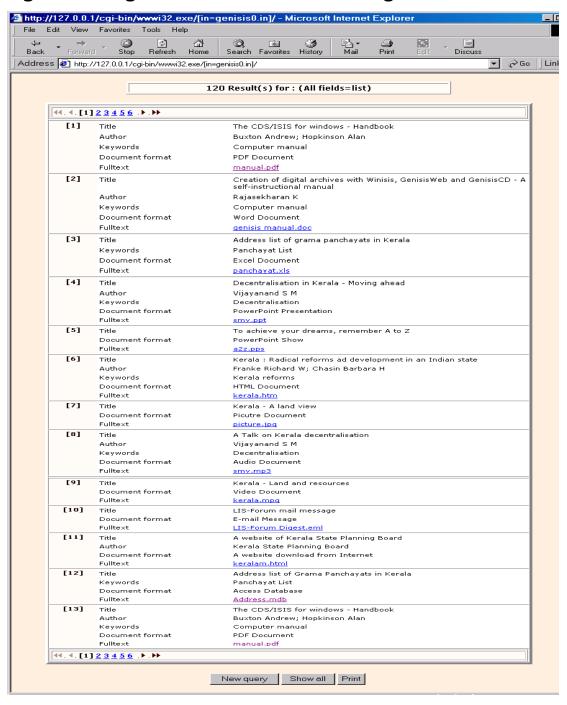


Fig 3 A Video Document in the Archive Opened



The software needed for creation of this archive can be obtained either from the cd-rom titled "Digital Document Archiving Tools & Resources" enclosed along with this manual or from the Internet. The digital document archive can be created in any low configuration computer, with minimum learning and efforts and hence it should be a reasonable choice for the resource-poor librarians/researchers in the developing world.

Digital Archiving has wider application. Academic Institutions, Research Organizations, specialized organs of the government etc. can bring out their publications as searchable digital archives. The institutions handling pictures, audio speeches or video pictures can publish those digital documents with metadata based search facility. The training

institutes can use digital archiving for consolidating numerous power point presentations into a searchable digital publication. The digital archives can be published in intranet/internet/cd-rom.

The manual is a user-friendly guide to the information professionals/researchers/activists who want to make use of digital archiving as a tool for information dissemination, empowerment and development.

CHAPTER 1

Creation of Digital Archives with Winisis

Winisis, a software for creation of textual database, can be used for developing searchable digital archives of full text documents in doc, xls, ppt, html, pdf, audio, video or picture format.

A database created with Winisis can be modified as a digital archive by adding a command line in its *print format* so as to display a hyperlink in the database display screen that links up the record to an appropriate document in the digital document collection. The database can also be made web-based with associate software GenisisWeb/GenisisCD. The digital archives thus created can be published in intranet, internet or CD-ROM. This manual deals with the modalities of creating digital archives.

1.1 WINISIS: the windows version of CDS/ISIS

Winisis is a software developed by Unesco. It is a flexible, easy to use and menu-driven generalized information storage and retrieval software application. The software is designed specifically for creating and managing textual databases. Winisis has capability to create any number of databases with completely different data elements. Winisis application can be used by anyone having a reasonable computer experience.

Components of Winisis database

Winisis database comprises of a set of records and each record contains a set of fields. A field in a record is a container of data elements. Winisis database has a *master file* containing all the records of the database. An

inverted file functions as an index to the master file for faster access to any record.

In order to create a Winisis database with any chosen fields, you need to define the following components.

- **Field Definition Table (FDT):** The FDT defines the fields such as Author, Title, Publisher etc. of the records in the database and their characteristics. FDT determines the nature of data entry worksheet.
- **Data Entry Worksheet(s):** The worksheet is the screen layout used to create and/or update the records of the database. Winisis provides a specially designed editor to create the worksheet.
- **Print Format (PFT):** The PFT is the format for display or printing of records.
- **Field Selection Table(s) (FST):** FST defines fields that can be searched in the database. Search is made possible by creating an inverted file of terms indexed from the fields chosen for search.

1.2 Installation of WINISIS

Double Click on the **Wisis1.5.exe**¹ to start its installation.

Figure 1



¹Winisis and associated software are obtainable from Unesco website www.unesco.org/isis. You can download Winisis directly from www.unesco.org/isis/files/Winisis15 3.exe or www.unesco.org/isis/files/Winisis15 3.exe or www.unesco.org/isis/files/Winisis15 3.exe or www.unesco.org/isis/files/winisislicense.html

Then you will get the first screen in the installation process as follows: -

Figure 2



Click on the **Continue** button and you will get the following window

Figure 3



Click on the **Continue** button.

Figure4



Click on the **Continue** button

Figure 5



Click on the **Continue** button

Figure 6



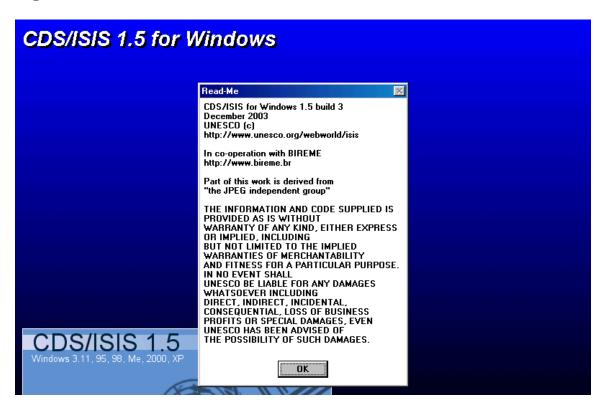
Click on the **Continue** button

Figure 7



Click on the **Continue** button

Figure 8



Click the **OK** button and you will be notified the successful installation of the programme.

Figure 9



Click the **OK** button to finalise the installation.

The next step is the creation of database

1.3 Creating the database

A **database** is a set of records or pieces of information about entities such as books, journals, articles or conference proceedings. A record is made up of a number of *fields*. Each field contains data about particular facts like author, title, keyword etc.

How to create the database of digital collection of documents, using Winisis?

In order to create an archive of digital documents, you need to collect a few full text documents and place them in a folder in your computer. Create a database of the above digital documents in Winisis². The database can have any number of fields. But our sample database will have the following tags and fields for convenience.

- 10 Author
- 20 Title
- 30 Keywords
- 40 Fulltext

(It is advisable to use an international standard, such as MARC21 or Common Communication Format for Bibliographical Description (CCF/B) for the purpose)

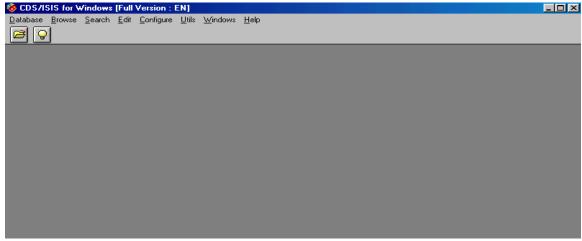
Creation of database by using Winisis is very easy and automatic.

For creation of database, open the Winisis programme by clicking **CDS_for Windows** under **Start/Program.** Then you will get the following screen: -

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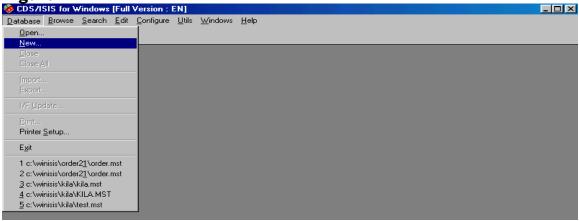
² Winisis is installed in C:\winisis folder. *Data* subfolder holds the Winisis data files. Each Winisis database consists of around 12 files. Files ending with *.mst, .fdt, .pft* and *.ifp* are important data files. *Syspar.par* is the parameter file that determines many things. Each file in the Winisis must have a *numeric tag* to identify it. You cannot change the tag number of a field name without resorting to import or export process.

Figure 10



Click on the **Database** drop down menu and select **New** as follows: -

Figure 11



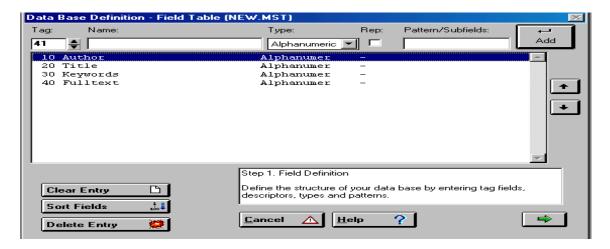
Now you will be lead to the following screen: -

Figure 12



Give a database name such as \mathbf{NEW} and click on the \mathbf{Ok} button. Then you will get the following screen: -

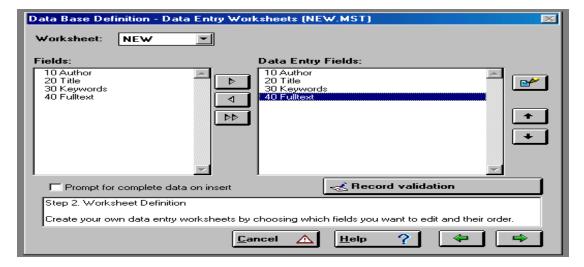
Figure 13 Field Definition Table



You need to provide the **Tag number** (10, 20, etc) and **Field name** (Author, Title etc) of your choice in the *Name box*. Beginners may choose Alphanumeric under *Type*. Click the check box under *Rep* for multiple occurrence of the field. *Pattern/Subfields* can be ignored, if you are not dividing the field into subfields. Click the **Add** button every time on completion of each entry.

On entering the tag numbers and the name of *fields*, click the **arrow button** at the right bottom corner to move on to the next screen.

Figure 14 Data Entry Worksheet



In the above screen, highlight the fields (in the left pane), which you want to include as the *Data Entry Field* and click on the **side arrow button** in the middle so as to get the field included as a *Data Entry Field*.

If you click on the double arrow button above, all fields will be selected as Data Entry Fields and will appear in the right pane as above. Then click on the **green arrow** button to move on to the following screen.

Figure 15



Click **Yes** to launch the wizard Print Format Assistant

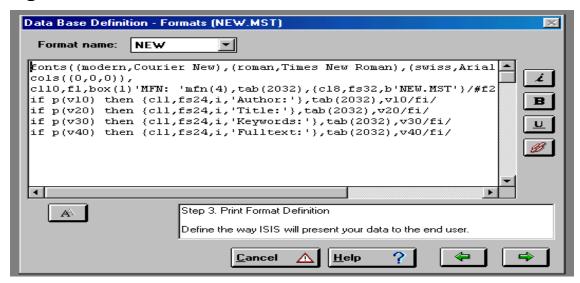
Figure 16 Choose a Print Format



Select the appropriate print format and click **Ok** button to get the print format screen as in Fig 17.

Decorated format is the preferable choice for the beginners.

Figure 17 Print Format



In the print format shown above, you need to add the following format line in order to appear a hypertext link with the words **Click here.** The hyperlink will be cross-linked to the full text document, if the full path of the document is provided in the **tag 40 Full text**

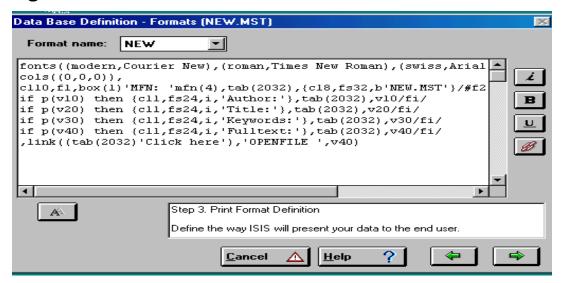
Link (('Click here'), 'OPENFILE', v40)

Ensure to provide a space between the OPENFILE command and the single quote, and the command OPENFILE should be in upper case as shown above.

The meaning of the command is that, when you click on the 'Click here' link, the click will automatically result in opening the digital document denoted in the field V40, in a new window.

The resultant print format would appear as in Figure 18.

Figure 18



Click the **Side arrow** button to move ahead and you will be asked whether to launch the Dictionary Assistant. Dictionary Assistant will help you to select the fields for indexing and the indexing technique for creation of *Inverted File Index*.

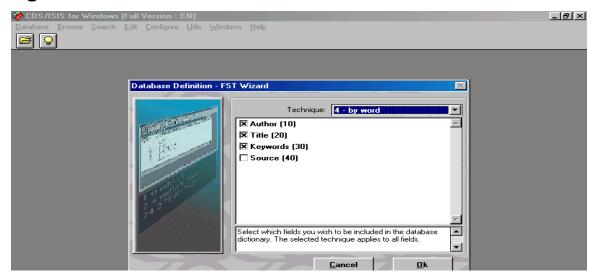
Figure 19



Click Yes to launch the Dictionary Assistant.

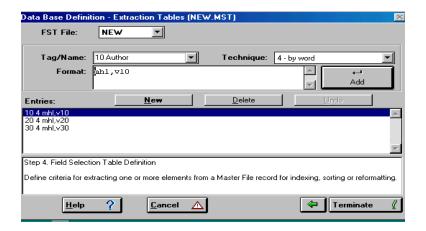
You will then get the following screen.

Figure 20 Field Selection Table



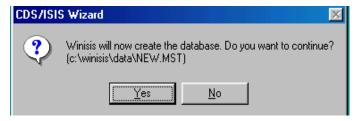
Put **x** mark in the **check boxes** on the left side of the field names and select the appropriate **Technique** for indexing from the dropdown menu at the right top. The most commonly used indexing techniques are *0-by line* and *4-by word*. Select **4 by word** indexing technique in the drop down menu. Then click **Ok** to move on to the next screen.

Figure 21 Field Selection Table-Definition



Here you can change the indexing technique. If you need to correct any entry, just click on the entry in the entry box and that will appear in the edit box shown above. You can edit the text, if needed. Then click the **Terminate** button and you will get the following message.

Figure 22



Then click the **Yes** button for confirmation and you will be notified that the database has been created.

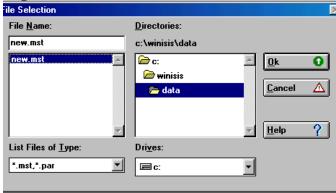
Figure 23



Click the **OK** button.

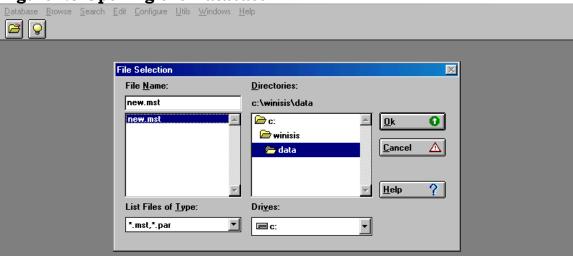
Now creation of the database is over.

Figure 24

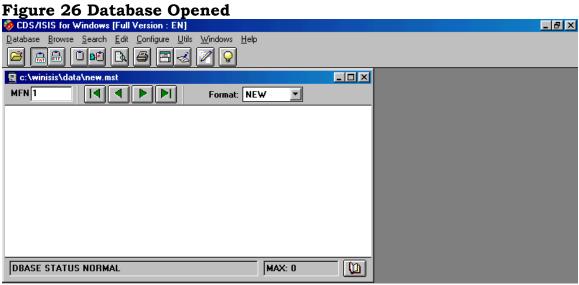


Then select .mst file of the new database (new.mst in this example)

Figure 25 Opening the Database



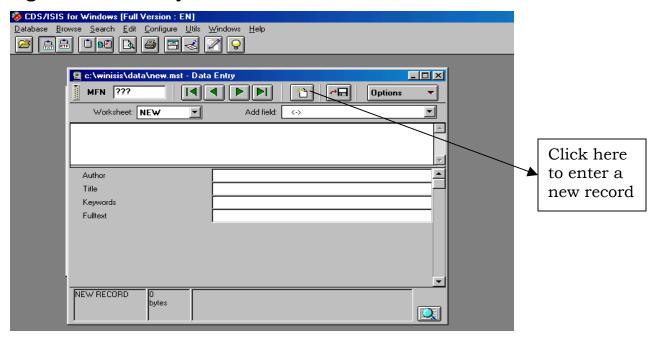
Click the **Ok** button to get the following screen.



Database definition process is over and you need to enter the data by opening the Winisis as in Fig 26 and by clicking the Data entry under Edit menu.

You will then get the following screen in Figure 27.

Figure 27 Data Entry Window



Entering Data in the Database

Enter the data of all documents of the digital collection. The full path of the fulltext documents including extension (.pdf, .doc etc.) should be entered in the **Fulltext** field.

Figure 28

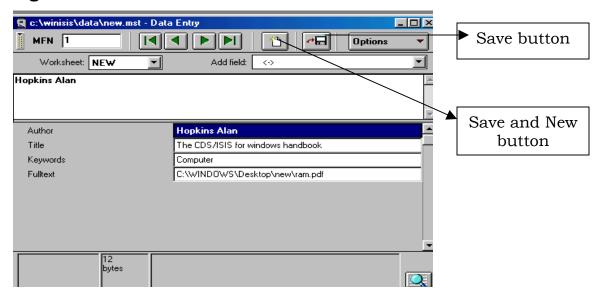
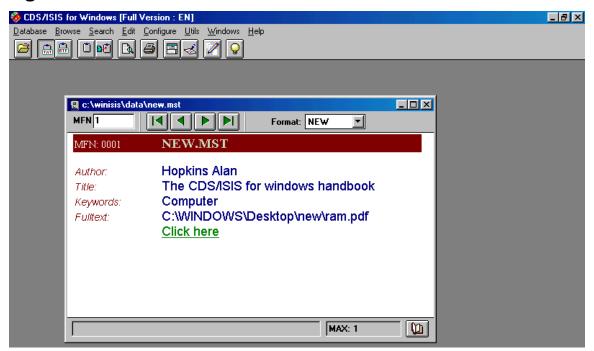


Figure 29



If you provide full path³ of the documents in the **Fulltext** field and place those documents in the location shown in the field, a click on the link will open the document automatically.

The database creation is over and you can pass on to the next chapter that deals with creation of web front end.

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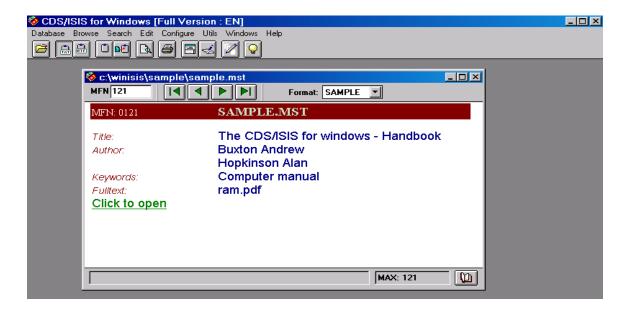
But remember that if you want to convert this database into a digital archive with GenisisWeb as explained in chapter 2 or a cd-rom library with GenisisCD as explained in chapter 3, you need to change the field data of the **40 fulltext** field with filename (ram.pdf) of the document alone, instead of the full path of the document provided above.

CHAPTER 2

Creation of Digital Archives with GenisisWeb

2.1 Use a slightly modified Winisis database

The Winisis database created as shown in the previous chapter with Author, Title, Keywords and Fulltext fields can be used for creating a digital Genisisweb archive, with slight modification⁴ in data of the fulltext field. The field data of the **40 Fulltext** should be filename with extension (eg.ram.pdf) and not the full path.



⁴ You can use **Global Replace** for removing the full path and retaining the file name alone.

In windows 98/2000, the database with full path can be converted into a digital archive with GenisisWeb, if documents are placed in the exact location.

If you provide the file name alone in the **40 Fulltext** field of the database, the documents should be placed in a folder (say pdf) in htdocs folder (../Apache/htdocs/) and the source folder should be shown in the Format'listing' as shown later.

2.2 Installation of Apache Webserver

If you want the remote users in your network to access the database stored in your computer, you have to make your computer node a webserver, with a webserver software.

The Winisis database can be made accessible to remote users over a computer network with GenisisWeb front-end, using Apache webserver software.

A webserver software **Apache**⁵ and **GenisisWeb** need to be installed, for the purpose. Apache is a free software used for making any computer a server in a client-server mode. Apache software is obtainable either from the **Digital Document Archiving Tools & Resources** cd-rom brought out by KILA or from Internet.

Installation process

Double click on the icon and installation of Apache will start



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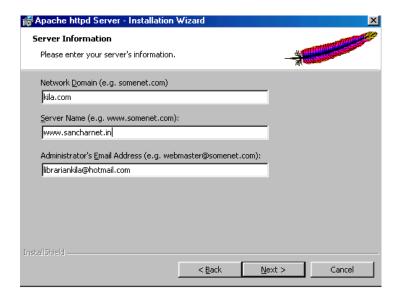
⁵ **Apache** software is used for making any computer a *file server* in the client-server mode. **Apache 1.3.17** is obtainable from the 2001 Unesco cd-rom entitled *Information processing Tools* that contained **CDS/ISIS 1.4.** Many versions of the software are available freely from internet site http://www.apache.org/. But ensure that Apache is installed in the folder C:/Program Files/Apache Group/Apache for our purpose.

Figure 1



Click on the **Next** button.

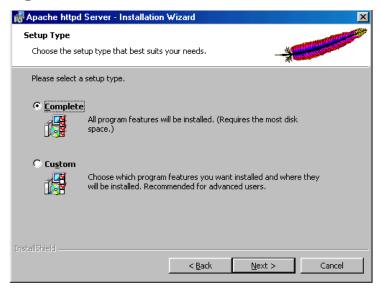
Figure 2



Here you have to type any domain name, server name and email address. These names need not be real.

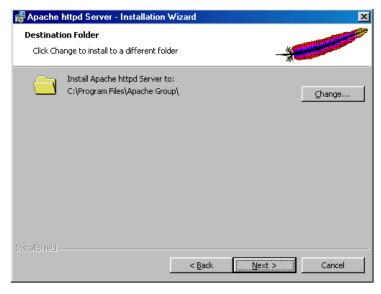
Click the **Next** button and the following screen will appear.

Figure 3



Select **Complete** (to install all program features) and click the **Next** button.

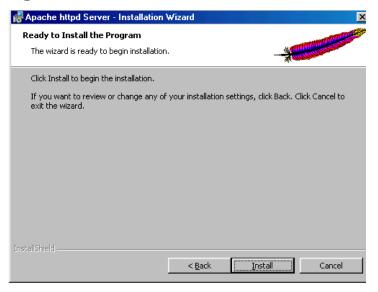
Figure 4



Click on the **Next** button confirming the suggested path for installation, if you are using the version 1.3.17.

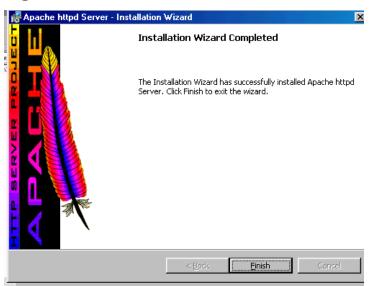
If you are using Apache 2.2.3 version, ensure to change the path to C:\Program Files\Apache Group\Apache as destination folder while installing.

Figure 5



Click on the **Install** button and you will get the following screen.

Figure 6



Click the **Finish** button, when the installation process is completed.

Once Apache is installed, you can start installing GenisisWeb.

2.3 Installation of GenisisWeb

GenisisWeb 3.2.16 can be had from the cd-rom titled "**Digital Document Archiving Tools & Resources**" brought out by KILA. Those who do not have access to the cd-rom obtain it from the Internet.

Download the GenisisWeb program from www.scribnet.org website or Unesco website.



Unzip the downloaded file.

⁶ GenIsisWeb created by Pierre Chabert (pichabert@wanadoo.fr] allows you to publish your winisis database in a computer network or internet website. The software is available at http://www.scribnet.org/download/genisisweb3-2-1.zip or http://www.unesco.org/isis/files/winisis/genisis/web/genisisweb.exe

An English manual **Web Interface for CDS/ISIS GenIsisWeb Version 3.0.0** by Deepali Talagala, is available at http://www.nsf.ac.lk/purna/genisisman-ver.3.pdf

Figure 7 GenisisWeb zip file



Double click on it and it will show the following screen suggesting a path where you want to copy the files. Give the proper path and click on the **Decompresser** button (Fig.8)

Figure 8



When you decompresser the downloaded zipped file, you will get the following three files.

Figure 9



⁷Double click on the **setup.exe** file shown above

Then you will get the first screen in the installation process as follows: -

⁷ When you double click *setup.exe*, an installation wizard will appear and you can install the program by opting the default values in the wizard by pressing the return key all the time till the installation over.

Figure 10



Click on the **OK** button to get the following screen

Figure 11



Click on the **computer icon on the left side** in the above screen.

Figure 12

installation de GenIsisWeb 3.0			
💋 GentsisCD 1.1.0 - Base ISIS sur Cédéron	ı - Choisir le 🔀		
L'installation va ajouter des éléments au groupe pr Groupe de programmes. Vous pouvez entrer un no groupe de programmes ou en sélectionner un exist Groupes existants.	uveau nom de		
Groupe de programmes: Applications GENISIS	_		
Groupes existants: .iwz 3 Com U.S. Robotics Accessories Adobe Apache httpd Server Applications GENISIS CDS_ISIS for Windows Greenstone Digital Library ISM 3.0 - Network Java Web Start	<u> </u>		
Continuer Annuler			

Click on the **Continue** button

Figure 13



Then click on the **OK** button to finalize the installation.

Copy two GenisisWeb files to Apache - A Pre-requisite

Before you start the GenisisWeb for the first time, copy the following files.

- 1. Copy the "wwwisis" folder in GenisisWeb to "htdocs" folder in "Apache".
- 2. Copy the contents (all files) in the "bireme" folder in "GenisisWeb" to the "cgi-bin" folder in "Apache"

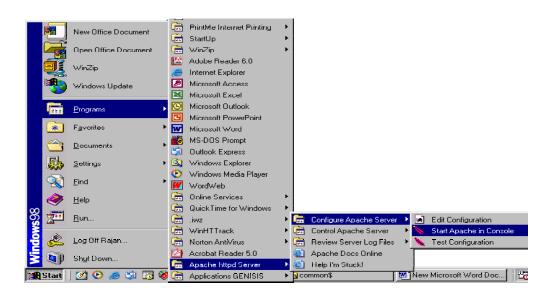
Starting Apache Web Server

Before you start GenisisWeb, you have to run the Apache webserver. To start Apache, follow the steps as follows: -

Click on Start \Rightarrow Programs \Rightarrow Apache httpd Server \Rightarrow Configure

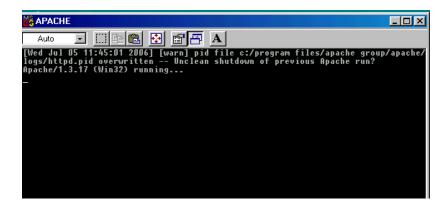
Apache Server \Rightarrow Start Apache in Console

Figure 14



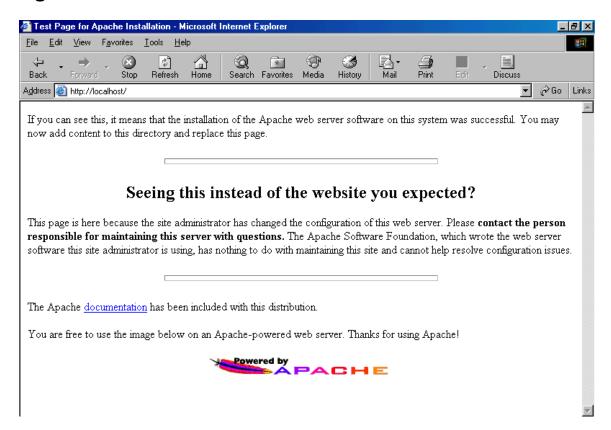
When Apache starts running, you will get the following window (Fig. 15). Then click on the **Esc** key in the computer or **minimize** button on the screen.

Figure 15



You can now test to see if Apache is running properly. Open the web browser and type the address "localhost" in the address bar and you should get the following screen, if Apache is running. (Fig. 16)

Figure 16



You can then design your web interface for Winisis with GenisisWeb

2.4 Creating the web front-end with GenisisWeb

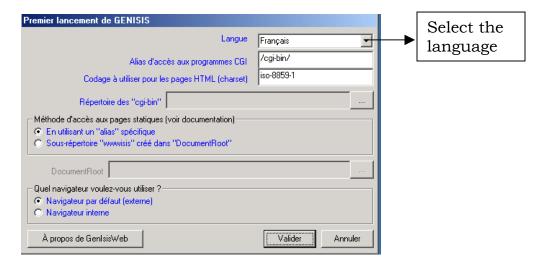
Starting GenisisWeb

Convert the GenisisWeb in to English version, when you run it for the first time, by following the steps shown below (Fig.17)



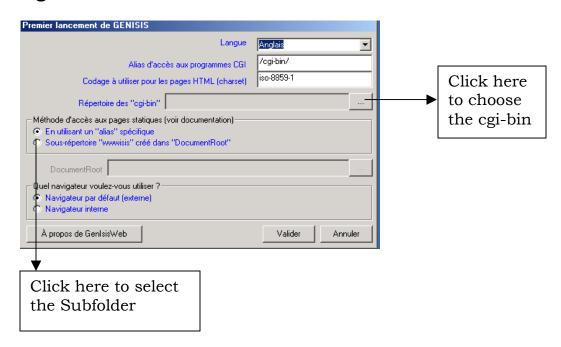
You will then get the following screen (Fig. 18).

Figure 18



Select language as **English (Angalis)**

Figure 19



Select the **Sub-folder "wwwisis" in "Document root**" and click the side button.

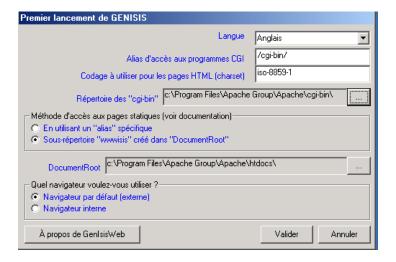
Then the following screen with a message in French, asking you whether to use the Apache, will appear.

Figure 20



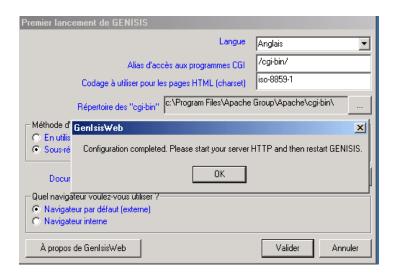
Click the Qui button

Figure 21



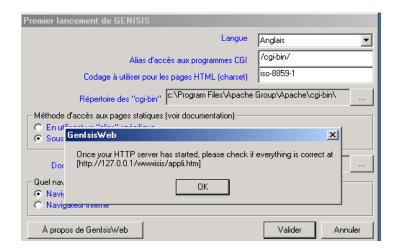
Click the **Valider** button

Figure 22



Click the **Ok** button

Figure 23



Click the **Ok** button.

Check whether everything is correct as instructed in the above screen. Now you have to restart GenisisWeb as detailed in the next section.

Creation of GenisisWeb front-end

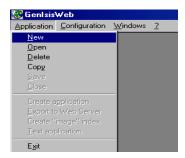
Open GeinsisWeb by clicking on **Start** ⇒ **Programs** ⇒ **Application Genisis** ⇒ **GenisisWeb-Access base ISIS sur le web**. Then you will get the following screen (Fig.24)

Figure 24



Click on **Application** menu and select **New** (Fig. 25)

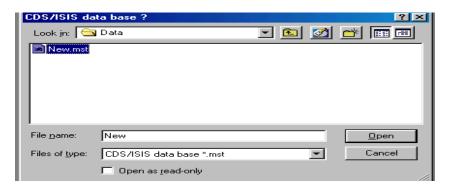
Figure 25



Then the following screen will appear showing the names of Winisis database available in the computer.

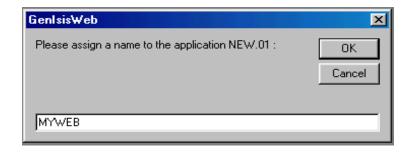
If your Winisis data is in any other folder other than in the default folder (C:\Winisis\Data), choose the .mst file from that folder.

Figure 26



When you select the database (.mst) and click the **Open** button in the above screen, you will get the following screen.

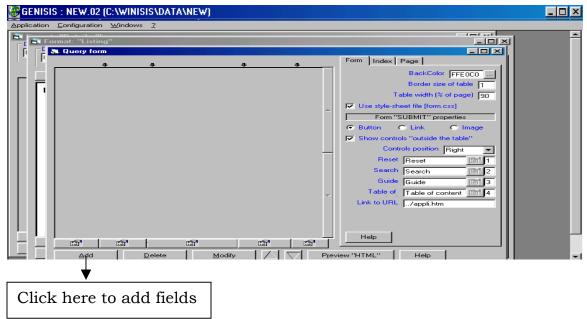
Figure 27



Give any name like MYWEB for your application and click **OK**

You will get three form design formats as in Fig.28

Figure 28 Form Design Formats



The form design formats are

- Query form
- > Format 'listing'
- Format 'details'

Query form: allows you to design the web like *Query Form* - a frontend form for searching the Winisis database.

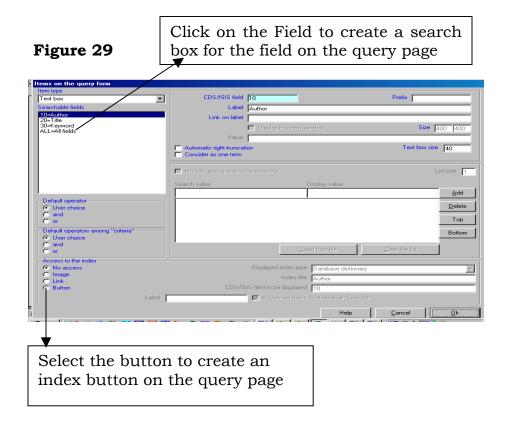
Format 'listing': allows you to design an initial display format.

Format 'details': allows you to design a detailed display format.

Since detailed display format is inessential for our purpose we haven't described the creation of Format 'details'. You have to create the Query from and the display format with Format'listing'.

Designing the query form

To design the query form, you have to click the **Add** button in order to add fields. Click the **Add** button at the bottom of the query form and you will get the following screen: -



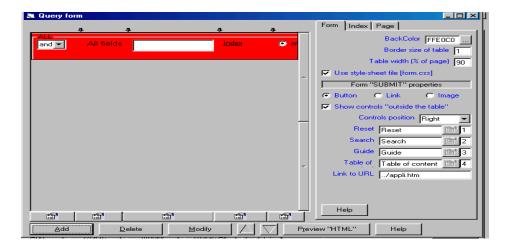
In the above screen, it is preferable to select **All fields** from the left panel (as it allows search by any term in the inverted file index of the database) and then click **Ok**. This will make the query form very simple.

The items appearing on the left panel are the *fields* you had included in your Winisis database. You may select only one field at a time so as to appear that search box in the Query form and click the **Ok** button every time. If you want to select more fields, you have to click on **Add** button and select fields again and again until you put all those fields.

As well, you can select your option with regard to the search operators and the appearance of the *index button* by clicking the check boxes on the left side of the above screen. Index button would help the users to choose the indexed terms.

Now you will get the following window. The screen below shows that **All fields** alone has been choosen.

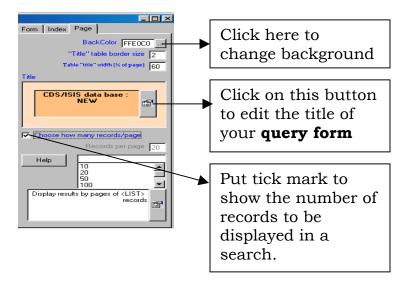
Figure 30



Select any or all the three tabs **Form**, **Index** and **Pag**e appearing on the right side of the above screen for appropriately modifying the 'look' of the *Search-box area*, *Index Page* and *Display Area of query form* respectively. You can play with the options in the screen and can choose anything you prefer to have a beautiful look for your web front end. You can change background color and font parameters.

How to change the page display of the query form

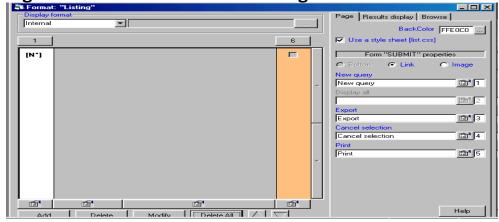
Figure 31



Designing format 'listing'

Then click on the 'Format-listing' window and you will get the following screen. It will create a default search-result page, which will display all fields contained in the database, if you do not do anything at all.

Figure 32 Default Search-Result Page Definition



Or else, you can design your own customised search-result page with **Add** button, as detailed below: -

Click the **Add** button at the bottom so as to get the following window

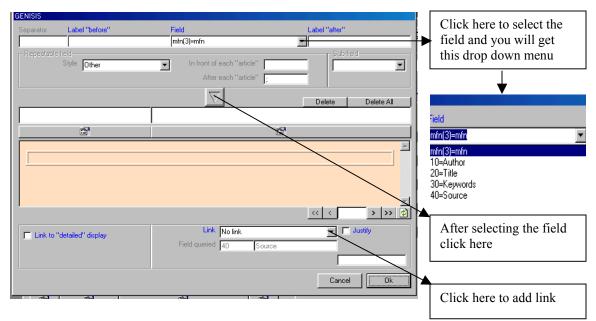


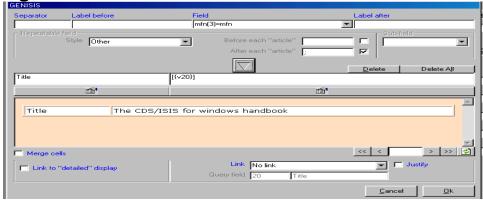
Figure 33 Create Customised Search-Result Page

In the above screen, select the appropriate **Field** by clicking the drop down menu at the top.

Then click the **down arrow** button at the middle and finally click the **Ok** button.

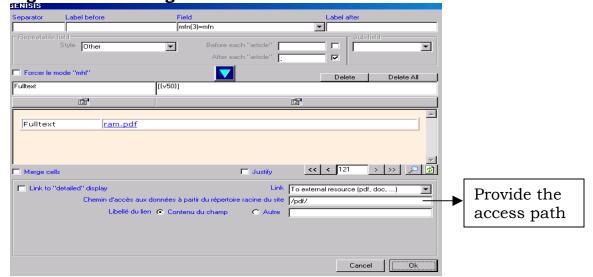
Now select the next *Field* by clicking **Add** button till all **Fields** except **Fulltext** are selected. *Fulltext* field needs to be provided with links, for opening the fulltext document.

Figure 34



Now add the **Fulltext** field. The **Fulltext** field need to have a link to the full text documents.

Figure 35 Providing Link to the Fulltext Documents



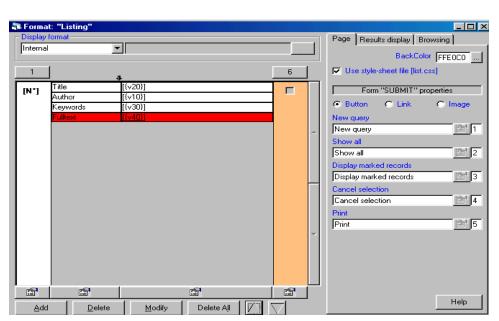
Click on the **down arrow** button at the middle as above, so as to display the **Fulltext** file name *ram.pdf*.

Then select the drop down menu appearing against **link** and select **To external resource (pdf, doc...**), if the full text documents are pdf, doc, html etc.

Then provide the access path to the subfolder where you put the fulltext documents⁸ (eg. /pdf/) in htdocs ('Document root') as shown in the above figure. Now click **Ok** button to save it.

You may move on to the next screen in Fig 36





Designing of two forms (query form & format 'listing') as detailed above are over and you may ignore the **Format 'Details'**.

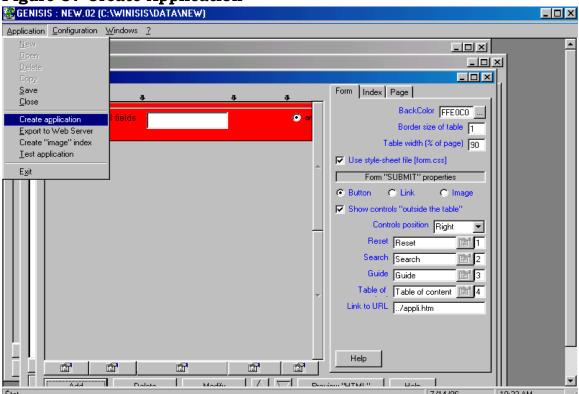
_

⁸ You should create a subfolder (choose any name for the subfolder) in *htdocs* in *Apache* and copy all the fulltext documents in it.

Create a subfolder (say pdf) in **htdocs** and copy all the full-text documents in that folder.

Then click on **Application** drop down menu and select **Create application** as in figure 37

Figure 37 Create Application



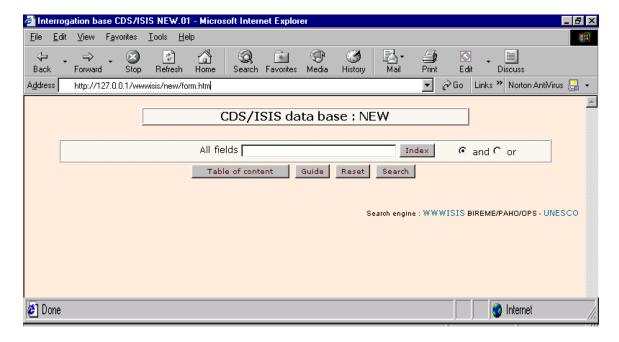
You will be lead to the following message. (Fig. 38)

Figure 38 Test the Application



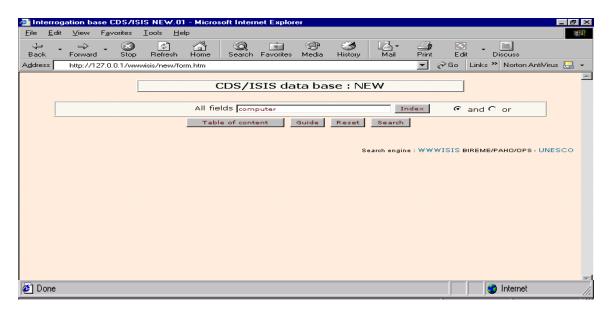
Click on the **Yes** button and the query form you had created will appear as follows as in Fig 39.

Figure 39 A Test Window - Query Page



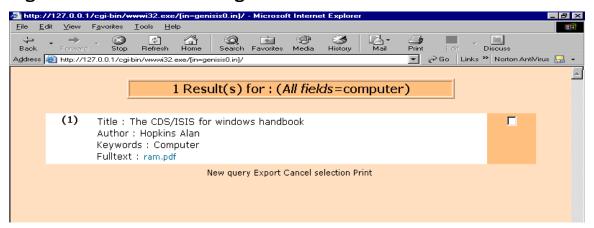
Type any search term in the **Search box** for all fields to make a search.

Figure 40 Search Window



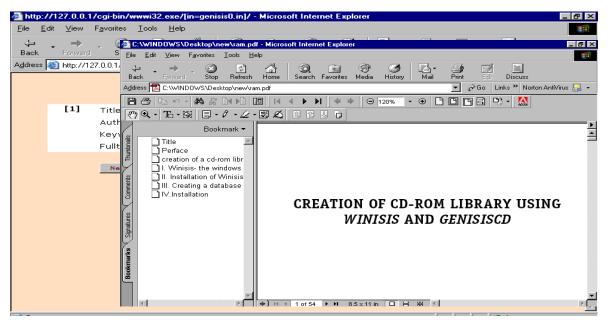
Then click the **Search** button to get the following screen containing the result.

Figure 41 Search Result Page



If you click on the **link** (ram.pdf) against the field **Fulltext** provided above, appropriate document would be opened, automatically as follows:-

Figure 42 An Opened Full-text Document



Close the test window and continue as in figure 43

Installing TCP/IP protocol

If your computer needs to work with *http* address, you need to install the protocol *TCP/IP*

- Click **Start** menu
- Then click **Settings**,
- And click Control Panel, and then double-click Network icon to open the network dialogue box. Then the Network dialog box will be opened.
- Then click **Add**.
- Click **Protocol**, and then click **Add**.
- Then click Microsoft under Manufacturers, and in Network Protocols, click TCP/IP

You must know the *name* or *number* of your computer to type the http address.

How to find out the name of your computer?

- Open the **Network** dialog box as described above.
- Click the **Identification** tab.
- The name of your computer name will appear there or type a new name if you want to re-name the computer.

How to find out the number of the computer?

• Open the **Network** dialogue box

Select **TCP/IP** under **Configuration** and Click on **Properties** button to see the IP address of the computer

Save the application

Finally save the application by clicking the **Save** under **Application** drop down menu as in figure 43.

Figure 43 Save the Application

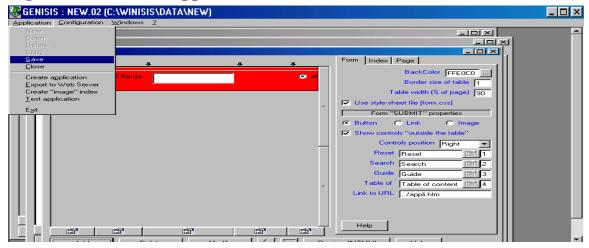


Figure 44



Click the **OK** button in the above window.

Now, you can open the GenisisWeb application by typing the http address http://computername/wwwisis/databasename/ form.htm in the internet explorer address bar.

(Eg. http://127.0.0.1/wwwisis/new.01/form.htm will be the address for the sample application created above. The computer will add.01 to the first databasename and .02 to second databasename and so on).

You can allow others to search the database with the above http address.

2.5 Publishing the Database in a website

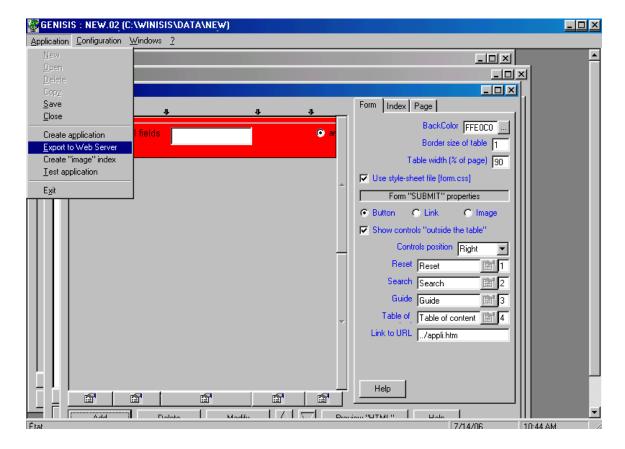
You can publish the Winisis database application created above in a website by export function of the GenisisWeb software.

Exporting the application to the web-server

Open the GenisisWeb application created above.

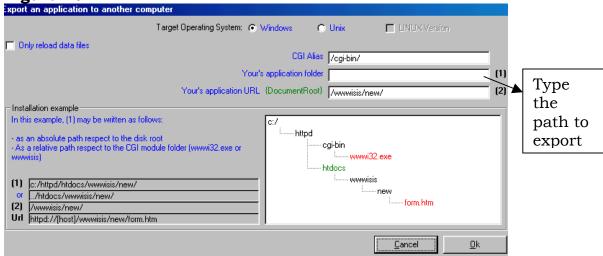
Click on **Export to web server** under the **Application** drop down menu as in figure 45

Figure 45 Exporting to Web-server



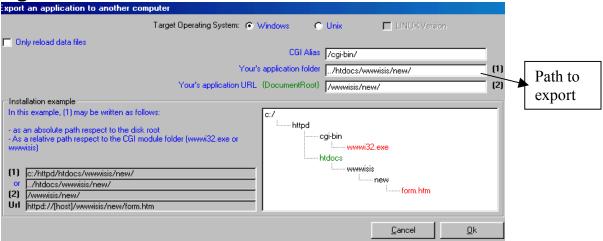
Then you will get a dialogue box in Fig.46

Figure 46



In the above screen you can choose the operating system **Windows** or **Unix**. Then type a path to export (as shown on left bottom of the screen eg. .../htdocs/wwwisis/new/) on the box for **Your's application folder** as above.

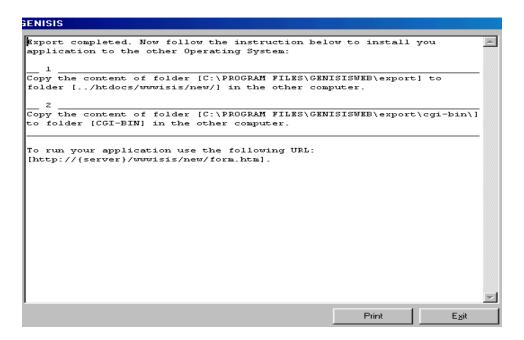
Figure 47



Then click the **Ok** button to start the export process.

On completion of export process, you will get a message. The message will give you instructions on what to do.

Figure 48 Instructions



Then follow these steps

- 1. Create a new folder **wwwisis** in the **htdocs** and then create another subfolder namely *new* in **wwwisis** folder of the server computer (..htdocs/wwwisis/new)
- 2. Copy the contents of the folder **export** (under GenisisWeb) from the first computer to the **new** folder (..htdocs/wwwisis) in the server computer
- 3. Copy the contents of the **cgi-bin** (of GenisisWeb) to the **cgi-bin** in the server computer (The contents of the *cgi-bin* will be identical files for any database)
- 4. Create a new folder **pdf** in the **htdocs** of the server and place the full-text documents in that folder
- 5. When you type **http://servername/wwwisis/new/form.htm**, the query form will appear. The query form allows you to search the document collection.

CHAPTER 3

Creation of CD-ROM Libraries with GenisisCD

GenisisCD⁹ software can be used for creation of cd-rom libraries. GenisisCD 1.1.0 is included in the Digital Document Archiving Tools & Resources cd-rom brought out by KILA. Those who do not have access to the cd-rom can download it from Internet.

Modify the earlier used Winisis database

The Winisis database used for GenisisWeb application describe in chapter 2 with Author, Title, Keywords & Fulltext fields that contain filename with extension (ram.pdf) alone in the **40 Fulltext** field, can be converted into the sample cd-rom library.

3.1 Installation of GenisisCD

Download the GenisisCD 1.1.0 software from *www.scribnet.org* website or Unesco website.

Figure 1



⁹ The GenisisCD software created by Pierre Chabert (<u>pichabert@wanadoo.fr</u>] is available at http://www.scribnet.org/download/genisiscd.exe. Download the English version.

Unzip the downloaded zipped file and you will get the following three files

Figure 2



¹⁰Double click the **setup.exe** file given above

Then you will get the first screen in the installation process as follows: -

Figure 3



Click on the **OK** button and you will be lead to a screen as in Figure 3 as follows: -

¹⁰ When you double click *setup.exe*, an installation wizard will appear and you van install the program by opting the default values in the wizard by pressing the return key all the time till the installation is over.



Click on the **computer icon** on the left side and you will get the following screen: -

Figure 5



Click on the **Continuer** button and you will be notified the successful installation of the program.

Figure 6

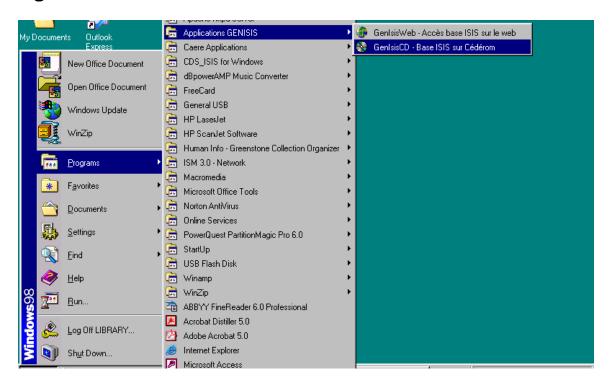


Click on the **OK** button to finalize the installation.

3.2 Creation of GenisisCD files for burning into a cd-rom

To start GenisisCD program, go to **Start\Programs\Applications Genisis\GenisisCD-BaseISIS** as follows: -

Figure7



Then you will get the following screen in Figure 8

Figure 8



Click **Configuration** menu and select **Options** to get the following screen.

Figure 9



In the above screen, click on the language drop down arrow key to select the language **English** and click the **Ok** button.¹¹

[OPTIONS]

LANG=en

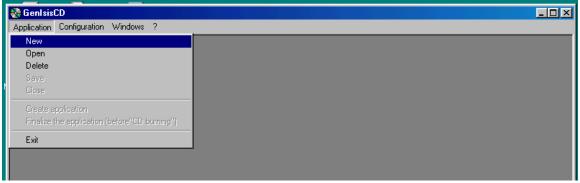
Save it with the name GenisisCD and put it in the folder C:\Program Files\GenIsisCD

The application will be converted to English when you refresh it.

¹¹ If your installation doesn't show English language, create a notepad file with the following contents.

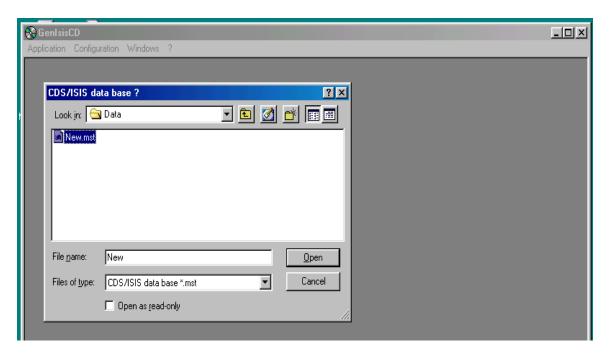
Click on the **Application** menu and select **New** as follows.

Figure 10



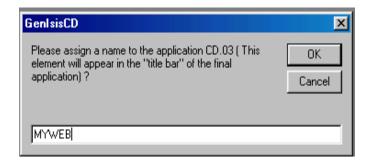
Then the following screen will appear.

Figure 11



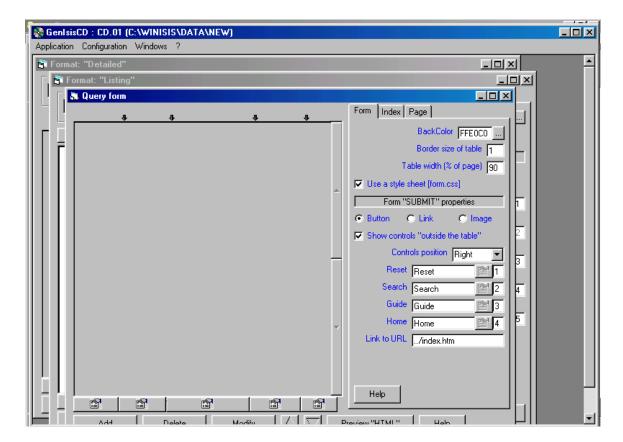
Select the **.mst** file of the modified Winisis database and click the **Open** button in the above screen. Then you will get the following screen: -

Figure 12



Give a name like **MYWEB** for your application and click **OK**. Then you will get three form design formats.

Figure 13



The form formats are

- Query form
- > Format 'listing'
- > Format 'details'

Query form allows you to design the web like *Query Form* - a front end form for searching the database.

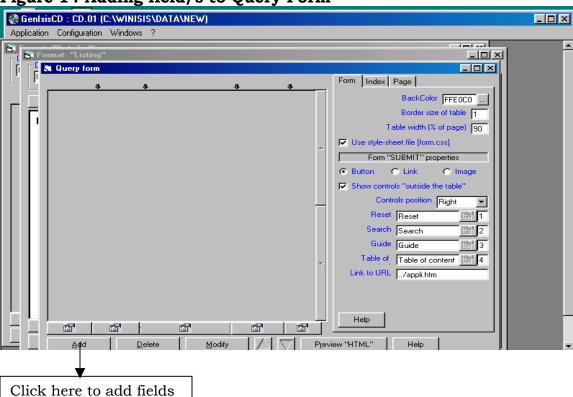
Format 'listing' allows you to design a *short display format*. If you don't design a format, the default format will appear automatically.

Format 'details' In GenisisCD, format 'details' is not organically linked with format 'listing' and hence it has not been used in this manual. You can provide detailed display with *format 'listing'*.

How to design the query form?

Query Form is the front-end web form for search by users as you can see in a website. It has a search box, submit button and other buttons.

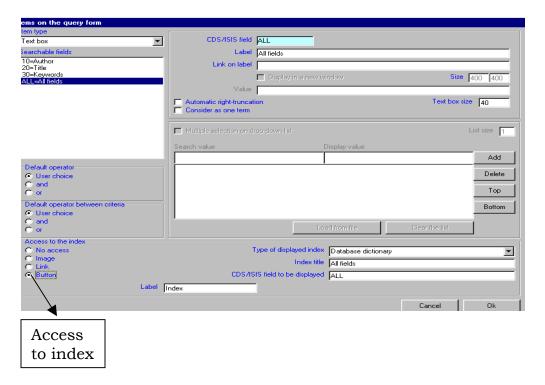
To design the query form, select the **Query form** by clicking on the top of it.



Then click on the **Add** button at the bottom of the query form in Fig 14

When you click on the Add button you will get the following window: -

Figure 15 Adding All fields



In the above screen, it is preferable to select 'All fields' from the left panel (as it allows search by any term in the inverted file index of the database) and then click ${\bf Ok}$

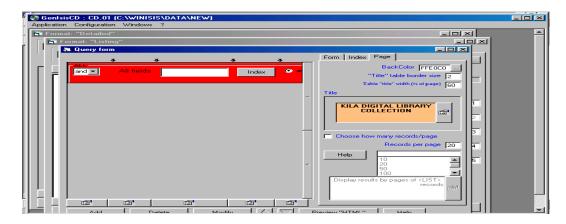
The items appearing on the left panel are the fields included in the Winisis database. Select one field each at a time so as to have search box for all those fields in the Query form.

More fields can be included in the search box by clicking on "Add" button and clicking on **Ok** button. You can continue with one by one, until you select all fields and create search boxes for all fields.

From this format, you can create **search operators** check box and **index button** by marking the appropriate check box.

Then you will be lead to the following window: -

Figure 16 Design Query Form

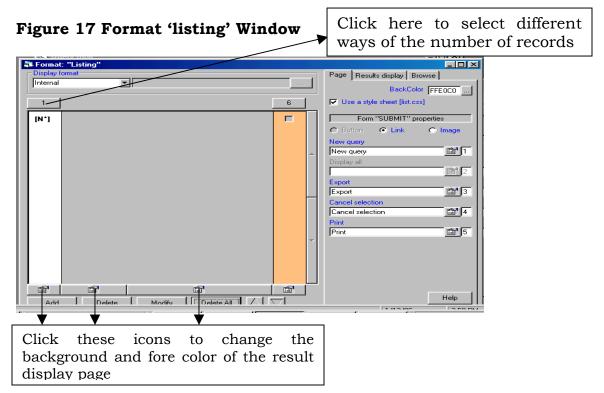


Select any or all the three tabs **Form**, **Index** and **Page** appearing on the right side of the above screen for appropriately choosing the 'look' of the *Query Form*, *Index Display Page* and *Search Display Page*.

You can play with these options and choose anything you prefer to have a beautiful look for your cd-rom library. (For instructions to design a query form **See** *chapter 2 figure.29*)

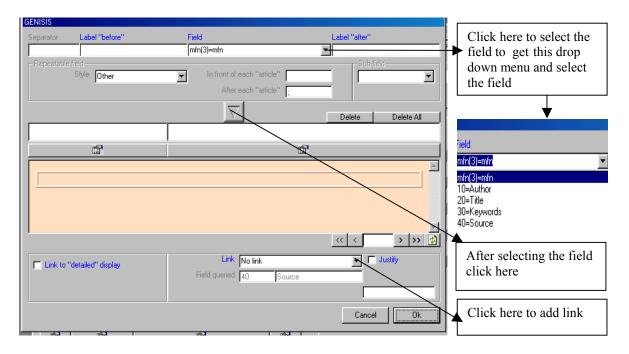
Designing format 'listing'

Click on the 'Format-listing' window and you will get the following default form. If you don't **Add** any field, the default search page will appear.



Click the **Add** button at the bottom to create a customized search-result page and you will get the following window.

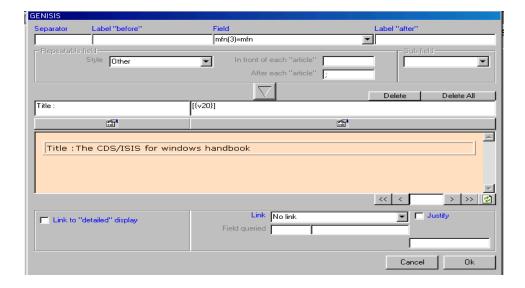
Figure 18



From the above screen, select the appropriate **Field** in the drop down menu and then click the **down arrow** button at the middle and then click the **Ok** button.

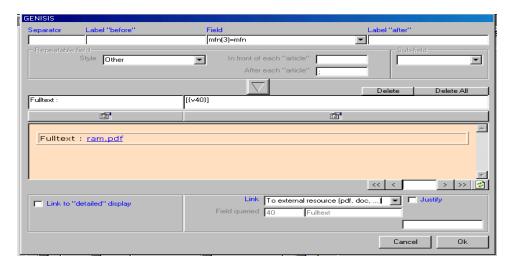
Then select the next *field* by clicking the **Add** button till all **Fields** except **Fulltext** are selected.

Figure 19



Select the Fulltext field as follows: -

Figure 20 Linking Fulltext Field to the Documents

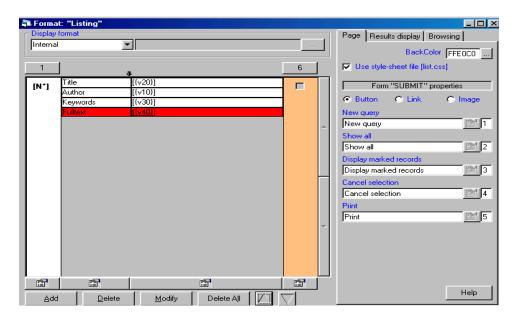


Then click on the **down arrow** button at the middle so as to display the **Fulltext** file name with extension (*ram.pdf*).

Now select the drop down menu appearing against **link** and select **To external resource (pdf, doc...)**, if the full text documents are pdf, doc, html etc. Then click the **Ok** button to save it.

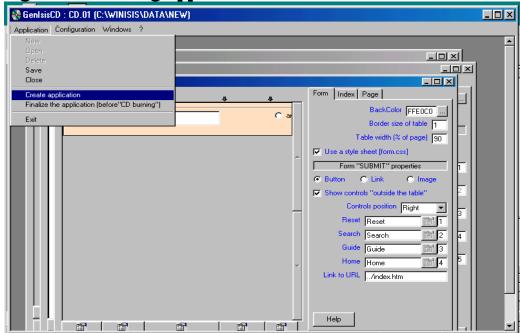
Then move on to the next screen in Fig 21

Figure 21



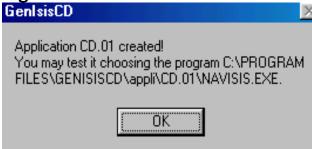
After designing two forms (Query form & format 'listing') as above, you may click on the **Application** drop down menu and select **Create application** in figure 22

Figure 22 Creating Application



On clicking the **Create application**, you will get the following screen as in Figure 23

Figure 23



Click the **OK** button.

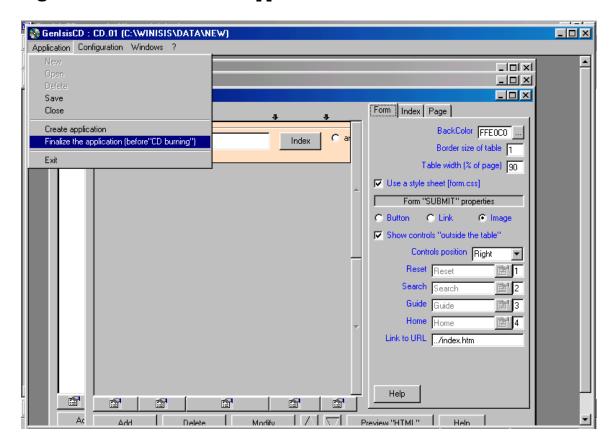
Now your application would be created in the folder $C:\Program\Files\GenIsisCD\appli\Cd.01$.

(The second application will have the name Cd.02, third one will have Cd.03 and so on)

3.3 Finalize the cd-rom application

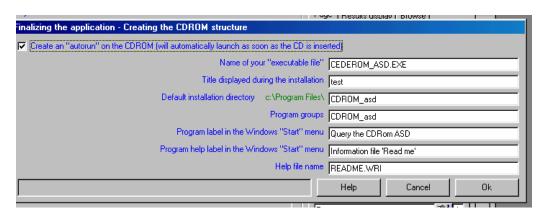
Click on the **Application** drop down menu and select **Finalize the application** (before CD burning) as in figure 24

Figure 24 Finalize Cd-rom Application



Then you will be lead to the following screen.

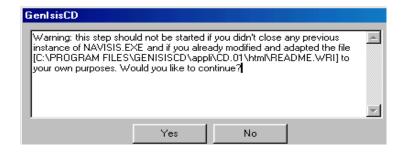
Figure 25



You may put ✓ tick mark on the check box so as to get the *auto run* feature for the resultant cd-rom.

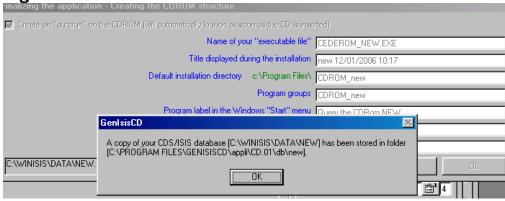
Then click **Ok** button in the above screen in order to move on to the following screen.

Figure 26



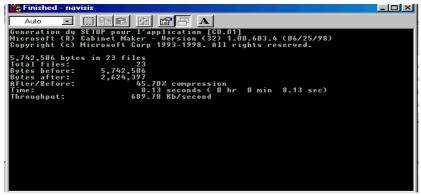
Click **Yes** in the above screen.

Figure 27



Click the **OK** button in the above screen.

Figure 28

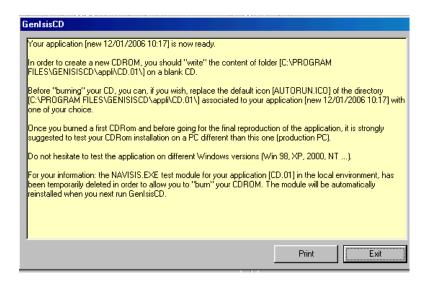


Allow the above screen to run till its end until it is finished.

Now click the **Close button** (x) to close the program and to get the following screen.

The following screen will give the instructions in burning the cd-rom.

Figure 29 Instructions of Burning the Cd-rom



Click **Exit** to close the cd-rom file generation process.

3.4 Modifications to be made before burning the cd-rom

Open the **html** folder (C:\Program Files\GenIsisCD\appli\Cd.01\html] and Delete the **index** file (index.htm).

Then open the **base_databasename_01** (eg.base_new_01) folder (C:\ProgramFiles\GenIsisCD\appli\Cd.01\html\base_databasename_01)

Copy **form_databasename** (eg. form_new) file and paste it in the html folder. Then rename the **form_ databasename** file in html folder into **index.**

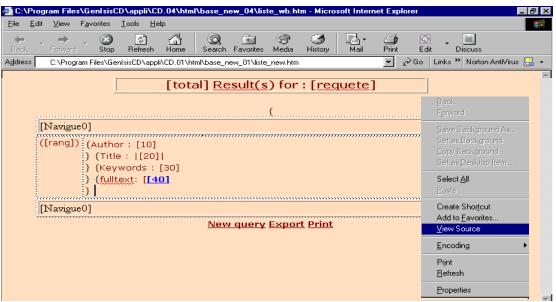
Create a *new* subfolder (say **pdf**) in the "**html**" directory. Then *copy* the set of your full text documents to the **pdf** subfolder (C:\Program Files\GenIsisCD\appli\Cd.01\html\pdf).

Enable the resultant cd-rom to work in a computer with any cd-rom drive letter

Open the *liste_databasename* htm file in the *base_databasename* folder

(C:\ProgramFiles\GenIsisCD\appli\Cd.01\html\base_databasename \liste_databasename) and it will look as follows: -

Figure 30



Then **right click** on the page with the mouse and select **View sources** to see the html code of the page. Then **html codes** will appear in a notepad file as in figure 31.

Now, you have to find out the *html* source pertaining to the field tag, which provides link to the full text documents (in the sample database 40 is the field tag).

The html source line can be found out easily by searching for the * using the **Find** function of notepad.

Then add the words **[Rep]pdf/** in front of the * mark coming just before the field tag number and the resultant line would look as follows as in figure 31

{[40]
}

Figure 31

```
🌌 liste_wb - Notepad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     _ B ×
  <u>File Edit Search Help</u>
 <html><head>
 Chody bgcolor="FFE0C0">
Center><TR><TD align=center><B><font size=3</pre>
| Tace=Uerdana color=#88989690><br/>
| face=Uerdana color=#8989690><br/>
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  <MFN>
 <
 <tdble width=100% cellspacing=0><font color=#800000 SIZE=2 FACE=Verdana>([rang])</font>

{<font color=#800000 SIZE=2 FACE=Verdana>Author&nbsp;:&nbsp;</font><font color=#800000 SIZE=2</pre>
TACE=Uprdana>[10]</font><BR>}

{<font color=#800000 SIZE=2 FACE=Verdana>Title&nbsp;:&nbsp;</font><font color=#800000 SIZE=2
 {\font color-#60000 312E-2 FREE-VERMINDSP;.\minsp;\font>\font color-#60000 312E-2 FACE-VERMINDSP;\minsp;\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\font>\fon
{<font color=#800000 SIZE=2 FACE=Verdana>fulltext:&nbsp;</font><font color=#800000 SIZE=2
FACE=Verdana>[</font><MFN><font color=#800000 SIZE=2 FACE=Verdana><B><a target="_blank"
href="[Rep]pdf/*">[40]</a></a></a>/A>//FONT>
 ,
```

If you provide this syntax **[Rep]**, it will replace the letter of the cd-rom drive of the computer where cd-rom is put, even if it is D, E or F.

The symbol "*" (star) will replace the name of the full text document file mentioned in the field 40.

Save the changes

Then burn the contents in the folder cd.01 (C:\Program Files\GenIsisCD\appli\Cd.01) on a blank cd-rom.

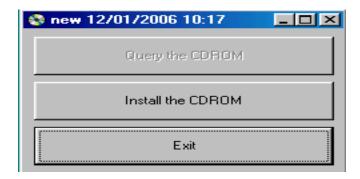
3.5 Testing the burned cd-rom

Installing the cd-rom

Put the burnt cd-rom in any computer and the following screen will appear automatically.

If the autorun feature doesn't work, **open** the cd-rom drive to get the following screen.

Figure 32



Click on the **Install the CDROM** button shown above and follow the on-screen instructions to install the program.

Running the cd-rom

Figure 33



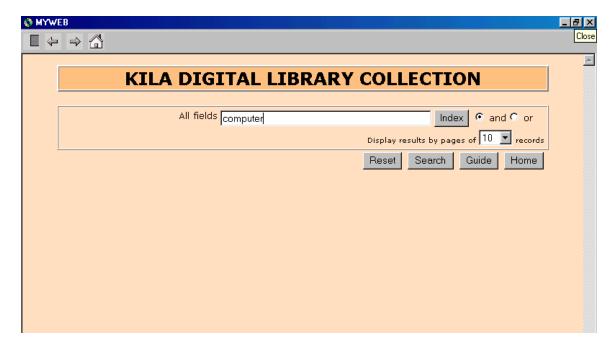
Then go to **Start/programs/cdrom_name/query the cdrom_name** to open the query form as follows: -

Figure 34 Search Page of Genisis CD



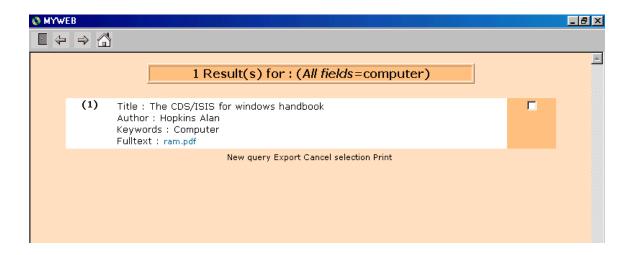
Type any search term in the **search box** for all fields to make a search.

Figure 35 Search Window



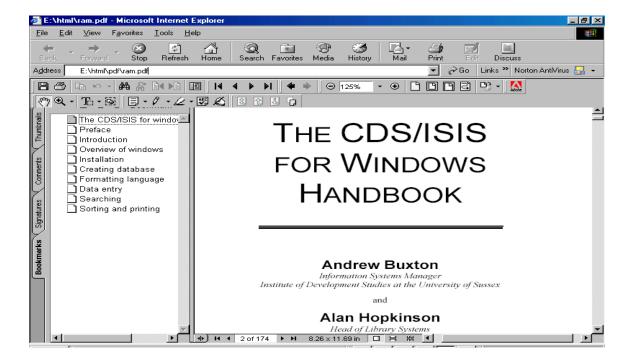
Click **Search** button to get the following search result.

Figure 36 Search Result



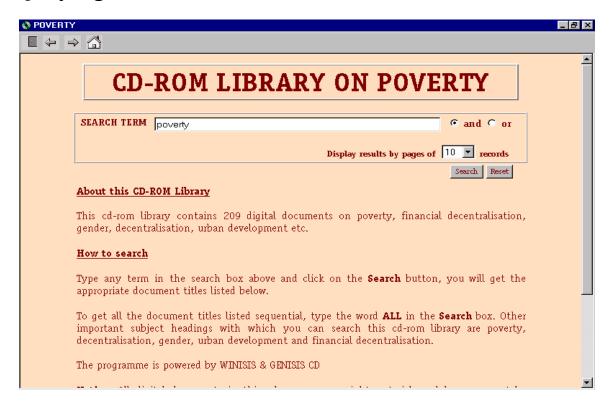
If you click on the link (ram.pdf) appearing against the field **Fulltext** provided above, appropriate document would be opened, automatically.

Figure 37 Fulltext Document Opened

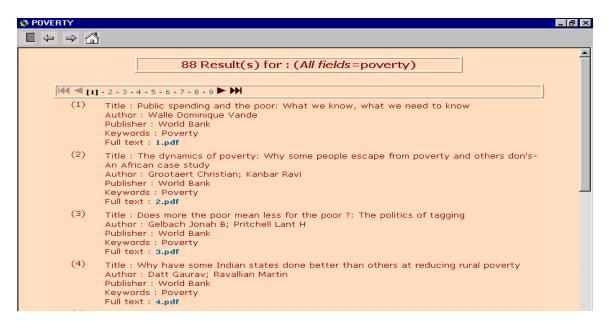


Sample Pages of a Cd-rom Library on Poverty

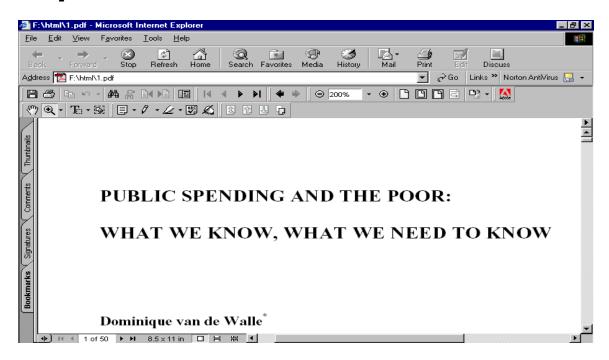
Query Page



Search Result for the Term Poverty

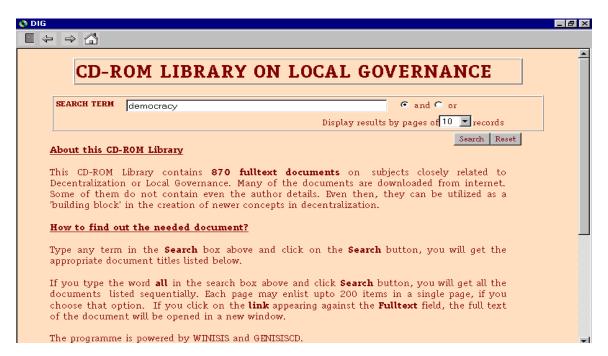


An Opened Full-text Document



Sample page of cd-rom library on Local Governance

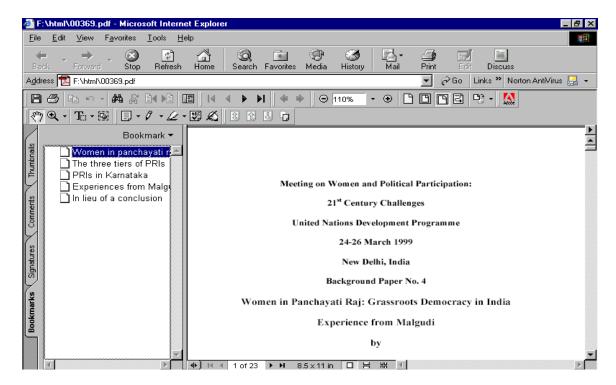
Query Form



Search Result for the Term Democracy



Another Opened Full-text Document Showing Bookmark of Chapters



ANNEXURES

Annexure 1

Modifying a Winisis database

This part of the manual describes how to modify various components of the Winisis database.

Modifying the Field Definition Table

You can add an extra field to any Winisis database by modifying the *Field Definition Table* as described below

Adding a field

Open the database

Choose **Edit** ⇒**Field Definition Table** from the drop down menu bar.

This will open up the **Database Definition-Field Table** window.

The cursor will be in the **Tag** box to add a field, type the **Tag Number**, press {tab} to move the cursor to the **Name**.

Then type the name of **field**, leave the next box as **Alphanumeric** and click the check box, if the field needs to be repeatable.

Click on the **Add** button.

Then click the **Ok** button when you finish and **Save** it.

If you add a new field, that needs to be added to the **Worksheet**, **Print**Format & Field Selection Table.

Removing a field

You can remove a field, by opening **Database Definition-Field Table** selecting the **Field** and clicking on the **Delete Entry** button.

Modifying the worksheet or creating a new one

Select Edit ⇒ Data Entry Worksheets.

The added field will be displayed on the **Fields** window on the left side.

Double click on the new field and that field will be added to **Data Entry Field** box on the right.

Your database will be ready to accept the data in the new **field**.

Modifying Field Selection Table

Open the database

Select Edit ⇒ Field Selection Table

Choose the field from the drop down menu shown against the **Tag/Name**Choose the **Technique** from the drop down menu

Click **Add** and Click **Ok** to save it

You can edit the **Entries** by double clicking on it and moving it on to the **Format** box

Creating a new Print Format for the existing database

Creating a new print format

Select **Edit** ⇒ **Print Formats**

Select New

Give a new *name* for print format

Put a tick mark on the box for **Don't clear current format** in order to make it as an additional print format

Click the **Ok** button to create a new print format

Then **Print Format Assistant** will be launched.

Choose a format from among five choices of print formats, click **Ok** and save it

Creating a print format while searching

While browsing, click on the icon showing a pencil on paper.

A window containing the format language will appear.

You can edit the format.

Then click on the lighting symbol to see that the change is implemented but not saved.

Then click on the floppy disk icon to save the change if it is in the right manner.

Modifying or adding Print formats

To set up a new print format, choose **Edit** \Rightarrow **Print format**. Select **New** in the print format screen.

Give a *name* in the text box and click **Ok**

Then click **Yes** to launch Print Format Assistant

Choose a print format from the five choices and click **Ok**

The editable print format will appear. If necessary, edit the print format and click **Ok** to save it.

Modifying the print format

Print format (.pft) determines the manner in which the database records are displayed. The default *Print format* must have the same filename as the database. So in order to make another print format as the default print format, change the file name as that of the database name.

In *Print format*, fields are specified by using v *in* front of the tag. eg v10. Text between single or double inverted commas will appear as it is, in the display. eg. "Author:"

Slash (/) will start a new line.

In the *Print format*, you can use *conditionals* as follows.

IF v80='BOOK' THEN v10/v20/v30 ELSE IF v80='ARTICLE' THEN v20/v30/v40/v50. It means if v80 is 'Book' print v10/v20/v30 or else if v80 is 'Article' print v20/v30/v40/v50

You can use the name of a print format *fmt1.pft* and *fmt2.pft* as follows: - IF v80='BOOK' THEN @fmt1 ELSE @ fmt2

If you provide a line **Link** (('Go to the website'), 'OPENFILE', v40) in *Print format* and give the web address of the site (say *www*, *kilaonline.org*) in *v40*, a link will appear with the words **Go to the website**. A click on the hyper link will take you to the website, if the computer is connected to the internet.

If you provide a line **Link (('Show a picture'), 'OPENFILE ', v40)** in *Print format* and give the path of the image file in v40, a link will appear with the words **Show a picture**. A click on the *link* will open the image

file. This feature has been made use of for creation of digital archives, in this manual.

Modifying data in a database

You can change a range of records (eg. mfn 200-350) in a database by

- **Global Add** adding a field to every record
- Global Delete- removes a complete field from every record
- Global Replace- replaced selected text in a field with text required

Global Add

Open database

Select utils \Rightarrow Global Add

Enter the range of MFNs eg. 10/350

Select the field tag using spin box

Type the text in the box at the bottom and it will be added to this field

Click **Ok** and then a progress window will come up

Global delete

Open database

Select **Utils** ⇒ **Global Delete**

Enter the range of MFNs eg. 2/362

Select the field tag by clicking the spin box

Press **Ok** to see that the field will be deleted from every record selected

Global replace

Open database

Select Utils ⇒ Global replace

Enter the range of MFN eg 8/321

Enter the text in the **Text to find**

Enter new text in the **New text** box

Enter **Tag** number (You can specify one or more fields)

Click **Ok** to replace the text

Adding fields to searched records

To add a field to every record you received in a search, use

Utils \Rightarrow Global Add (search)

To delete a field from every record you search, use

Utils \Rightarrow Global Delete (search)

The fields can be added to or removed from the searched records.

Moving data from one field to another by Export/Import

To move data from one field to another use export and import as follows. You can do this by Export and Import of data with a **Reformatting Field Selection Table (FST).** You need to create an **FST** for this purpose first and then to Import or Export the database with that reformatting FST.

Creating a reformatting FST

Choose **Edit** ⇒ **Field Selection Table** Select **New** button

Enter a name for **FST** eg. CONV

Then the database definition-extraction tables will be opened

Select the fields of the database from which you want to move the data to a new one, delete other fields and save it.

Edit the **FST** in such a way that the **Destination Field Tag** (eg. 100, 200) would appear in the left and the field tag from where you move the data appear in the third row (12,13) as follows.

CONV.FST

100 0 V12

200 2 V13

Save the above FST and do the export or import of database using the above said *Reformatting FST*.

Export and Import using the Reformatting FST

Choose **Export** under **Database**

Put the **Reformatting FST** in the **Work** folder

Put the name of the **Reformatting FST** in the Export dialogue box

Click **Ok** to **Export** the database as .iso file.

Then import the exported iso file again as Winisis database

The fields 12&13 would have changed as 100&200

Annexure 2

Converting a paper document into a digital document

The first step in converting a paper document into a digital document is to obtain images of all pages of the publications in digital format.

The next step is Optical Character Recognition (OCR) to be done with an OCR software.

The digitalisation process requires a scanner capable of working at a resolution of 300 dpi or above. The output format of a scanned page is a computer file that is usually stored in TIFF or Bitmap format. An uncompressed scanned page perhaps may have 2mb whereas a converted word/html page may have 5-15kb.

Low cost flatbed scanners are the cheapest and widely available. Low-end scanners with sheer feeder, and professional duplex scanners are costly items. Every scanner comes with its own software and some may have a computer card also. Using the software provided with the scanner, a digital image of each page can be scanned and transformed into a Bitmap or TIFF image. These images should be stored in a folder with standard filenames.

Now the image of the document should be subject to *OCR process*. The purpose of OCR process is to convert and obtain editable word, html or pdf version of the publication. Scanning and OCR are completely separate activities

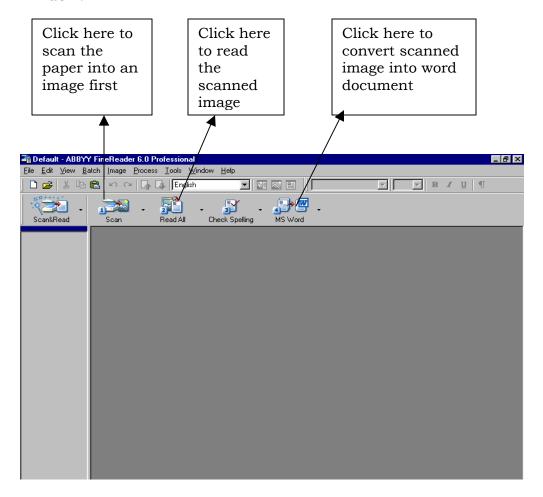
Give each document a typical number and put it in a suitable folder.

Fine Reader and Omni page are the user-friendly OCR programs. Fine reader is simple, cheap and flexible software costing reasonably.

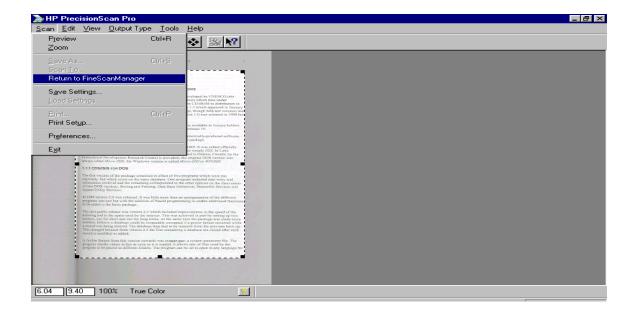
In many cases, OCR programs may not convert tables neatly. In such cases, tables can be saved as images. If a scanner is connected directly to the computer that runs the OCR software, most OCR programms can scan a page and perform OCR immediately. For low volumes of digitization, page-by-page scanning and OCR is a reasonable strategy.

Making an image into an editable text using Fine Reader

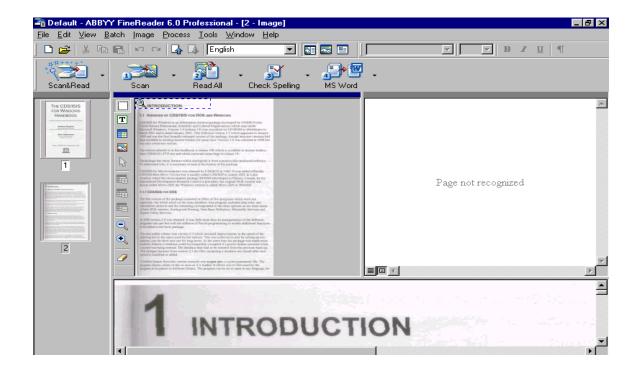
Open the OCR software (Fine Reader) and you will get the following window.



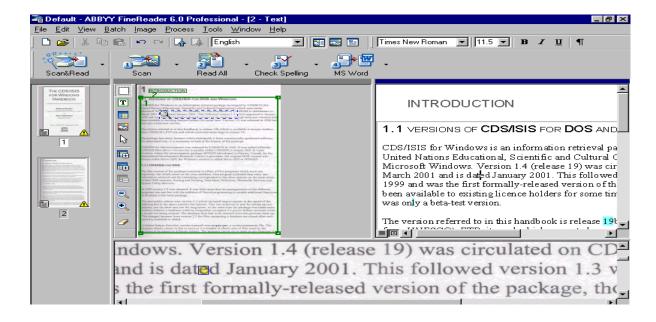
Put the document in the scanner and click **Scan** button as in the above figure to get the following window.



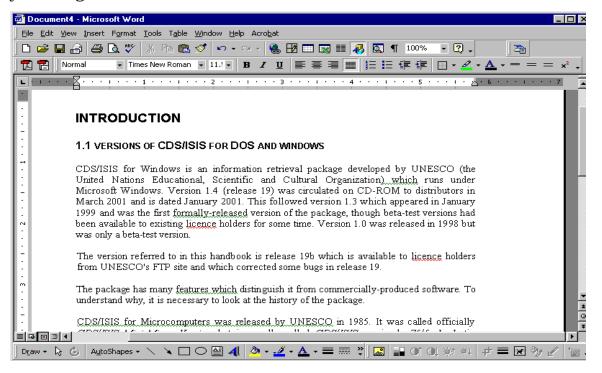
Then select the part of the image which you want to scan and click $\mathbf{Scan} \Rightarrow \mathbf{Return} \ \mathbf{to} \ \mathbf{FineScanManager}$



Now click the **Read All** button to read the image file.



Click on the **MS Word button** to convert the text into word format. Then you will get the text in Word format as follows: -



The word format can be saved, converted to any other format or used as needed.

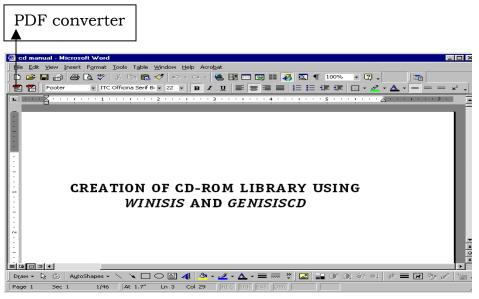
Annexure 3

Converting a Word document in to a PDF document

Portable Document Format (pdf) is the most popular document format for web applications and it would be the most appropriate format for the applications mentioned in this manual. It can provide bookmarks that help us to navigate the document pages easily.

Install *Adobe Acrobat* in your computer and your computer will be ready to convert a word document into Portable Document Format (pdf). You can use any other *pdf writer* bundled with scanner installation disk, to convert a *word* document into a *pdf* document. Those pdf writers may not be able to create bookmarks in the document.

After installing *Adobe Acrobat*, Open *Word*, *excel or power point* document and click the **PDF converter** icon in the toolbar to convert the document in to a PDF document.

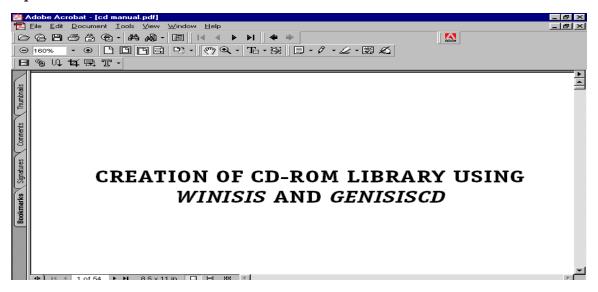


Then the following screen will appear



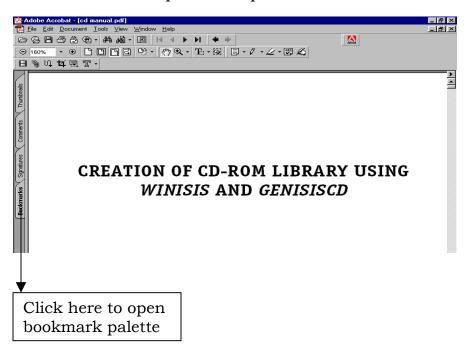
In the above figure, click the **Save** button to save the document in the selected folder.

Open the saved file as follows.

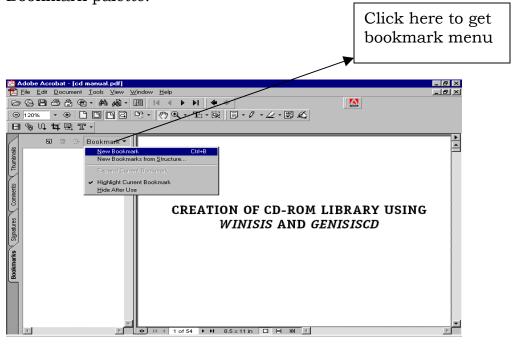


How to put bookmark to the pdf document

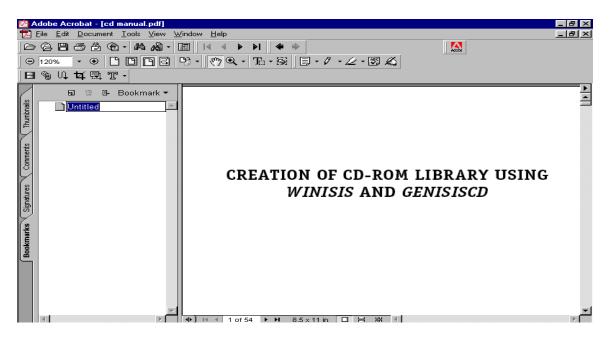
Bookmark in the pdf document helps one to move around in the document from chapter to chapter.



In Adobe Acrobat, click the *New Bookmark* menu at the top of the Bookmark palette.

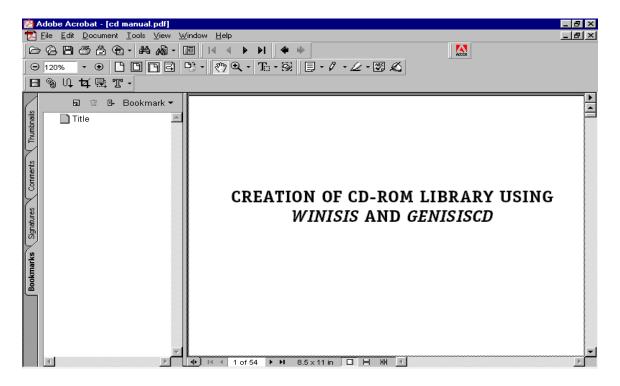


When you select **New Bookmark** menu, you will get the text entry box for entering the bookmark label as follows: -

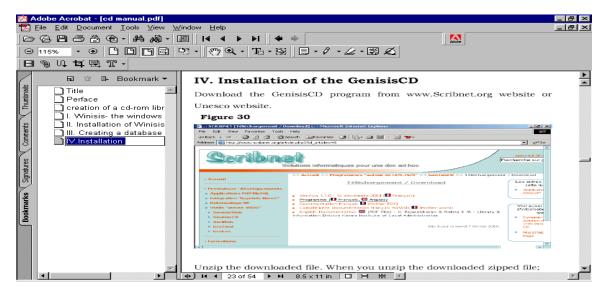


To provide a *bookmark* for a page, place the page visible, type the text for the bookmark label, and press **Enter.**

To provide the *New bookmark* for another page/ chapter, move the scroll bar on to the selected page /chapter. Keep the page visible, click the *new bookmark* menu at the top of the Bookmark palette. Then type the bookmark label in the text box and press Enter. The bookmark label for the page will appear as follows.



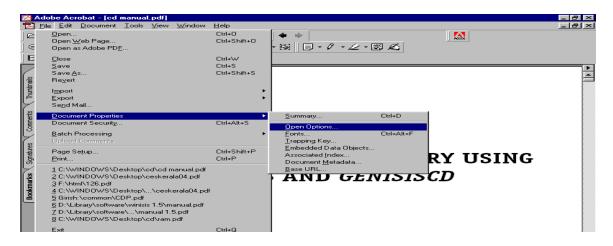
The pdf document with bookmarks will appear as follows and it provides easy navigation among the pages/chapters.



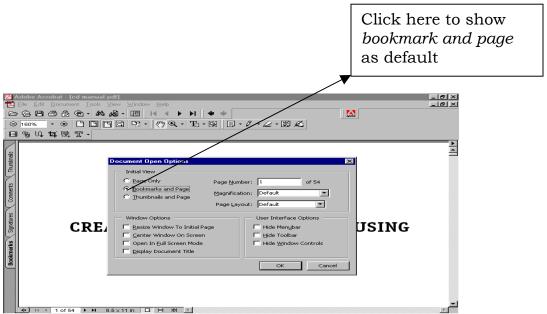
How to make a pdf document open with bookmarks by default?

Even if you provide bookmark to a document, it may not show the bookmark automatically when opened, unless you make it as its default property. It is always better to have the document opened with bookmarks.

Click on **File** ⇒ **Document Properties** ⇒ **Open Options** as follows



Then you will get the following screen.



In the above screen, select **Bookmarks and page** and click the **Ok** button to make the pdf document open with bookmark window.

Annexure 4

Publishing your website in internet using FrontPage

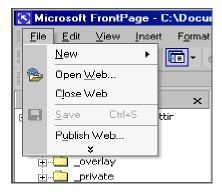
In order to publish (upload) a website, you need to get a domain name for your site such as <u>www.kilaonline.org</u> and server space for uploading your website. Internet service providers usually do those things on your behalf, on payment. The next step is to create website files and folders using html editor like FrontPage. You can include the GenisisWeb applications, mentioned in chapter 2 also in your website.

We will see how we can publish the web site in a webserver.

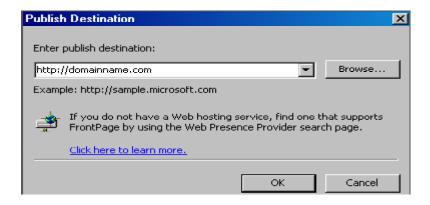
FrontPage is a program that help you build your website and publish it in the internet. Once you publish the site, it will be accessible from the World Wide Web.

To publish your site, please follow these steps:

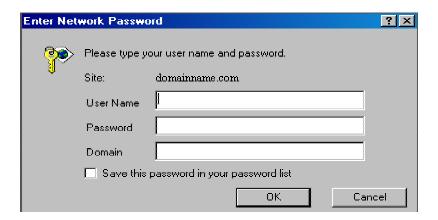
- 1. Connect to the Internet through your Internet Service Provider.
- 2. Open your website with FrontPage using **File** ⇒ **Open Web**.
- 3. In the **File** menu select **Publish Web**.



4. Enter your domain name or http address (http://yourname.xyz)/(http://yourIPaddress)



- 5. Click the **Ok** button.
- 6. Enter the *username* and *password* supplied to you at the time of sign-up.



7. Click **Ok** and you will be able to access the web server space allotted to you. You can cut and paste the files from your computer to web server as if you are working with two folders in two computers in your network.

You can alternatively use *Macromedia Dream weaver*, *cute FTP* or even *Internet Explorer* to publish your site. *Cute FTP* is an excellent option.

The purpose of this annexure is to show that publishing a site in the internet is an easy task unlike as many would think.

Glossary of terms

Apache A free web server run in around 70 percent of the websites

Client/Server mode A computer network model where the client- *a web* server- places a request and the server- *a web server*- serves the pages requested

Cybrarian A librarian or researcher specialising in the internet, rather than books, as a source of information

Digitalization is a process of turning a physical form of document into a computer readable format. Digitalization requires a scanner and an optical character recognition (OCR) software

Ftp is file transfer protocol. It is a protocol used to upload or download files kept in ftp sites. You can upload/download information from an ftp site with a web browser

Home page A page that acts like a front door to the content of the website

Http is the short form for *hyper text transfer protocol*. It is a language or set of rules used to communicate between a server and browser

IP address The address of a particular computer in a network which have four groups of three digit numbers, ranging from 0 to 255. (eg. http://100.0.0.60)

Link is a highlighted word that has a connection to a target page and a click on the link will open the target page

MP3 is a compressed sound file meant for electronic distribution and it occupies only 10 percent of .wav sound files

OCR is a process of turning a scanner image into a computer editable text, so that the text can be retyped manually

PDF Portable Document Format is suitable format for publishing in internet and distribute documents through e-mail

Protocol A set of commands/rules that determine how two computers communicate with each other. http, ftp, TCP/IP etc are common protocols used in internet

Query Any request for information from a database

Query form is a submit form where you can type a query

TCP/IP is the short form for Transfer Control Protocol & Internet Protocol. This protocol governs the sending of data from one computer to another computer in internet or a local network

Upload Transferring information from a local computer to a remote web server across a network

Web Browser software is used for viewing WebPages. It is needed to display the pages held in a web server. Internet explorer is the most popular web server.

Web server is a computer in the internet that stores websites and serves the documents stored in the computer on search requests made through a web browser.

Website A location in the World Wide Web identified by a web address such as www.kilaonline.org. Websites are stored in web servers.
