Application and Use of WINISIS and GENISISWEB in Creating Digital Document Archives in Management Sciences: A Case Study

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Abstract

The present study deals with the creation of digital document archives of B.N. Bahadur Institute of Management Sciences (BIMS) Library, University of Mysore, Mysore. A UNESCO based WINISIS and GenIsisWeb soft ware is used for this purpose. The source of data is the soft copy of the project reports submitted by the students of BIMS. These projects are stored/archived in the computer of the library and bibliographic data of those project reports was created using WinIsis. Later on a searchable archive of full text project report with a web-based front-end/html homepage using GenIsisWeb software was prepared. This lead to making the data of WINISIS web compliant. The main objective of the study is to create a functional data base of BIMS library. The second purpose is to enable others to look at this data base as a self-instructional guide to convert WinIsis archive into GenIsisWeb.

Keywords
WINIS;GENISISWEB; University of Mysore
.

Electronic access

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INTRODUCTION

In today's society an increasing amount of information is being created and stored digitally in libraries. This needs to be archived and stored in the library and information centers appropriately. Digital document archiving is a process of building up searchable digital document collection. It can be considered as digital libraries, in an organized manner and publishing the digital collection on the intranet/internet or on CDROM for wider distribution and utilization Digital archiving is a way-out for the problem of management of abundantly available digital documents. Digital archiving replaces the earlier practice of providing bibliographical details about documents. Digital archiving also provides full text of the documents supported with powerful search mechanisms that can enable the users in retrieving a specific document required at the touch of a mouse. Digital document archiving is an attempt to focus on knowledge management, distribution and consequent information empowerment.

In this paper the software tools used for digital archiving are WinIsis, GenIsisWeb, and Apache web server which may work even in any window-based low-configuration computer. WinIsis is used as the back-end program . It is free windows-based software for creation of textual database. It can be used for developing searchable digital archives of full text documents in doc, xls, ppt, html, pdf, audio, and video or picture format. A database created with WinIsis can be modified into digital archive by adding a command line in its *print format* so as to display a hyperlink in the database display screen. The hyperlink can link up the record to the appropriate document in the digital document collection. A mouse click on the link will result in automatic opening-up of that document. Now a day, there is a strong move to digitize the internal sources of libraries for the purpose of giving better service to the users. Hence there is a need to create and preserve the digital documents for long term storage, organization and easy search/retrieval. The present study is to build a digital collection of project report of MBA students of B.N. Bahadur Institute of Management Sciences (BIMS) to provide useful service to the users.

REVIEW OF LITERATURE

The researcher here made an attempt to review the literature that have been published during the past decade on library automation in general and

CDS/ISIS or WINISIS in particularly which is shown below.

Rajashekharan & Nafala (2007) have conducted a study 'creating a Greenstone Digital Library with WinIsis database with a purpose to serve as a self-instructional guide to those who want to convert WinIsis archive into greenstone collections with Greenstone Digital Library Software 2.72 independently. Zala & Patel (2006) describes how WINISIS/GENISISWEB software has been implemented for the creation of newspaper clippings available at the Knowledge Exchange and Information Centre (KEIC) of Mudra Institute of Communications, Ahmedabad. They have studied, in detail the various features of WINISIS/GENISISWEB software and discussed the merits and demerits of the software. Their finding shows that CDS/ISIS can be integrated with GENISISWEB software and can provide access for the available resources via World Wide Web. Buxton (2006) has reviewed the software that are available on the market to put the CDS/ISIS database on the web. Some key applications of CDS/ISIS Unix version, JavaISIS, IsisWWW, WWWISIS Versions 3 and 5, GenIsisWeb, IAH, WWW-ISIS, and OpenIsis are listed. Similarly Hopkinson (2005) and Buxton (2006) made an attempt to review the developments of CDS/ISS software. Traces the historical development of CDS/ISIS for windows and CDS/ISIS for DOS version. And further discusses the relationship between CDS/ISIS and other integrated library automation software is also discussed. Wong (1999) describes the development of online cataloguing, ONLIS (Online Library Information System) using CDS/ISIS 3.07 version for small libraries by the faculty of the Computer Science, Malaya University. Kutty (1997) describes the circulation management system designed and developed using CDS/ISIS using CDS/ISIS Pascal language. Chandhok (1994) explains that the CDS/ISIS software package has been used to create various databases by the INGOU Central Library staff. Database of collections at Regional and Study Centers; database of holdings of journals; directory of IGNOU publications; bibliography of articles/papers written by IGNOU staff; and accession lists of books received at Central Library. Chowdhury & Chowdhury (1992) discuss the success of CDS/ISIS software package as an online circulation system. They have developed a prototype of an online system using Pascal interface for sample record of 3500 books and 207 user records and tried through the LAN (Local Area Network). Thus the above studies acted as the background for the preparation of this paper.

OBJECTIVES OF THE STUDY

The main objectives of the study are:

- To create a database of project reports of BIMS library
- Convert the digital document archives of WinIsis to GenisisWeb.
- To facilitate retrieval of digital document using GenIsisWeb.

METHODOLOGY, SCOPE AND LIMITATION

The researcher visited the B.N. Bahadur Institute of Management Sciences (BIMS), Mysore. The library is usually collected both hard and soft copy of the project reports of BIMS students. For the purpose of conducting this study the check list are prepared, the data entered in check list are Author, title, guide name, company etc. after entering the data of all the 200 record, each records was personally scrutinized and validated, after that path was created to c:\ drive to convert to the full text version of each record, then soft copy of their project reports are hyperlinked to the WinIsis database, this database can be linked to GenIsisWeb web application software to facilitate retrieval of digital documents. The scope and limitation of the study is, it use WINISIS 1.5 version for creating a database of 200 project reports submitted by the MBA students of BIMS institute and GenIsisWeb software used for retrieving the digital format of project reports.

INSTALLATION OF WINISIS

Double click on the WinIsis 1.5.exe to start its installation and merely follow the default options in the installation wizard by pressing the Enter key all the time.

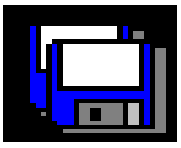


Figure 1. WinIsis 15.exe Software

After the installation process is over you start up WinIsis programme by clicking CDS_ISIS for windows under Start ---Program. Then you will get the following screen.

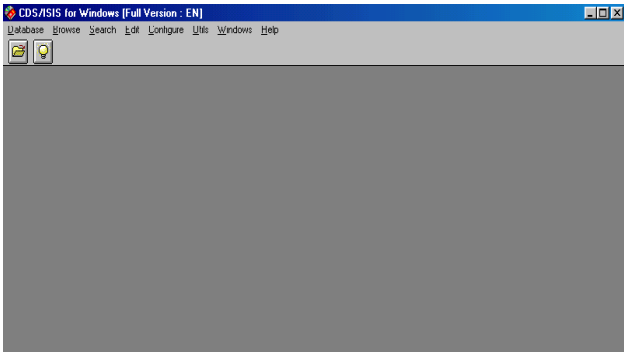


Figure 2 : CDS/ISIS for windows Opening screen

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

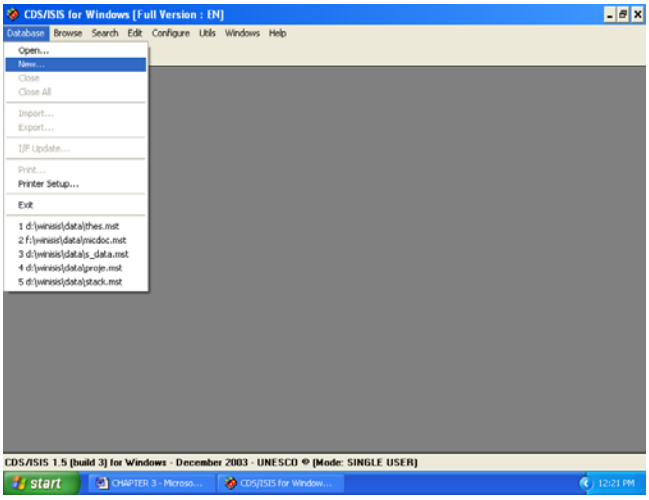


Figure 3: Opening screen with database drop-down menu

You are then asked to give the database name of up to six characters. Give a database name such as **Pro1** and click on the **OK** button.

After this step you should required completing four forms in setting up the database they are

- The Field Definition Table (FDT)
- The Data Entry Worksheet
- The Display Format
- The Field Selection Table (FST)

Step 1: Field Definition Table (FDT)

The FDT defines the fields that may be present in the database and certain parameters for each field. You enter the values in the boxes at the top of the dialog box.

Step 2: Data Entry Worksheet

In this step you can create your own data entry worksheets by choosing which fields you want to edit and their order. It enables us to select a fields which are required to appear in the **data entry worksheet** and click on the side arrow button in the middle so as to make the field as a **Data Entry Field.** Click 'Yes' to launch the wizard Print Format Assistant, if you click on "No" it allow you to write your own print format Example. Print format for catalogue display and if you click on yes it will take the print format automatically by asking you to choose a format template it is given in the following figure.

Step 3: Print Format

In the print format assistant wizard click Yes to launch the wizard Print Format Assistant, if you click on "No" it allow you to write your own print format. Example. Print format for catalogue display and if you click on yes it will take the print format automatically by asking you to choose a format template it is given in the following figure.

Step 4: Field Selection Table (FST)

This is the last step in the database creation. When you have entered the data for each field, the focus will be on the **ADD** button. Either click on the button or press enter key to add the field to the table. If you need to correct the details for any entry, just click on that entry in the Entries box and the details will be copied into the boxes used for editing. If you need to remove an entry, highlight it and click the Delete button. When you have completed your entries in the Field Selection Table, click the **TERMINATE** button. You are then asked to confirm that you want the database to be created. Then click the **Yes** button for confirmation and you will be notified that the database has been created.

After the database definition process is over you need to enter the data by opening WinIsis and by clicking the **Data Entry** under **edit menu** or by clicking the pencil diagram second form the right in the tool bar.

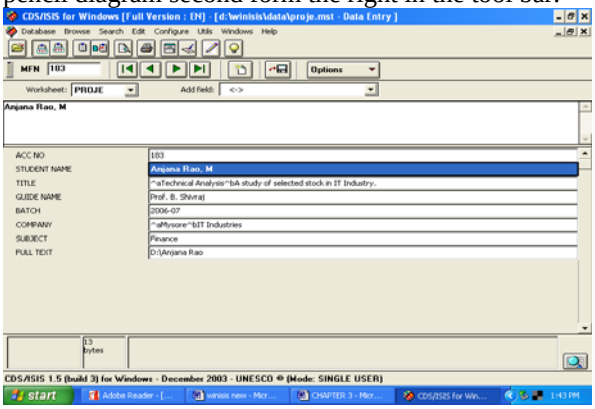


Figure 4: Data Entry Work Sheet

CONVERTING THE DIGITAL DOCUMENT ARCHIVES OF WINISIS TO GENISISWEB

GenIsisWeb is software for visually producing web forms to query WinIsis databases. There are two versions of the tool: GenIsisWeb, for web publishing and GenIsisWeb CD for developing CD Rom interfaces for CDS/ISIS databases**.** GenIsisWeb was originally developed by the former IBISCUS Association (France) for UNESCO and it is now available free of charge on the UNESCO FTP site. The software is written in Microsoft Visual Basic. Its source code is also freely available.

GenIsisWeb, basically implements the following steps: `

- the web query form (with field selection and index access);
- the display of query results;
- the display of a particular record's details; test the application

For GenIsisWeb Web, testing the generated application will require the use local web server such as apache web server

1 Installation of Apache Web Server

Apache web server software is available on web/internet, when we click on download button the software is downloaded to our system and we will get the apache windows installer package.
Then double click on and installation of Apache will start. Once Apache is installed GenIsisWeb can be installed.

2 Installation of GenIsisWeb

When you download the GenIsisWeb file from the UNESCO website you have to unzip this file. Double click on it and give the path here where you want to copy the files so that the file will be decompressed. Click on the button "Decompresser"
Then click OK on the next dialogue box**.** Double click on the setup file. Then the installation for GenIsisWeb programme will start. Click on **OK** button.

At this point you have installed the web serve Apache and the GenIsisWeb interface. Copy the "wwwisis" folder in GenIsisWeb to "htdocs" folder in "Apache". Copy all files in the "bireme" folder in "GenIsisWeb" to the "cgi-bin" folder in Apache



Figure: 5-Installation of GenISIS

3 Starting Apache web server

Before you start GenIsisWeb you have to run the Apache web server. To start Apache follow the steps below.
START- ALL PROGRAMS - APACHE HTTP SERVER - CONFIGURE APACHE SERVER - START APACHE IN CONSOLE
Now you are ready to design your web interface.

4 STARTING GENISISWEB

To start GenIsisWeb follow the steps given below or you can also create a shortcut on the desktop. START – PROGRAMS - APPLICATIONS OF GENISISWEB - GENISISWEBWE
Then you will get the following screen (Fig.6) Select the option **Subfolder "wwwisis" in "DocumentRoot"**

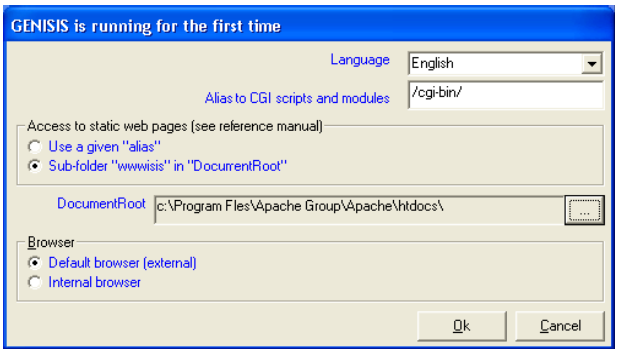


Figure 6: Genisis Running

Here you have to select English language in the language option in the top corner and when you click on the dialog box it will provide a document root or most of the time it will take automatically, after that you click on OK button until you get the below screen.

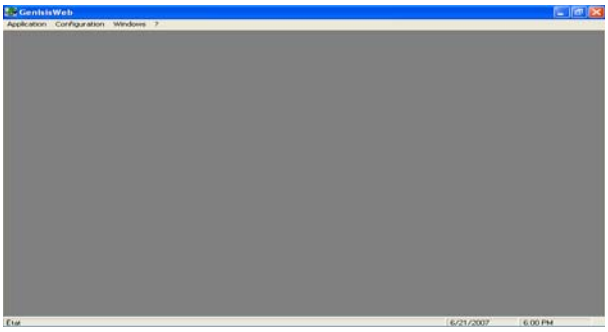


Figure 7: GenIsis Web First Page

Click on the tab "**APPLICATION"** and you will get a dropdown menu.

On the dropdown menu click on **NEW** and you will get the below dialog box where you have to select an existing WinIsis database.

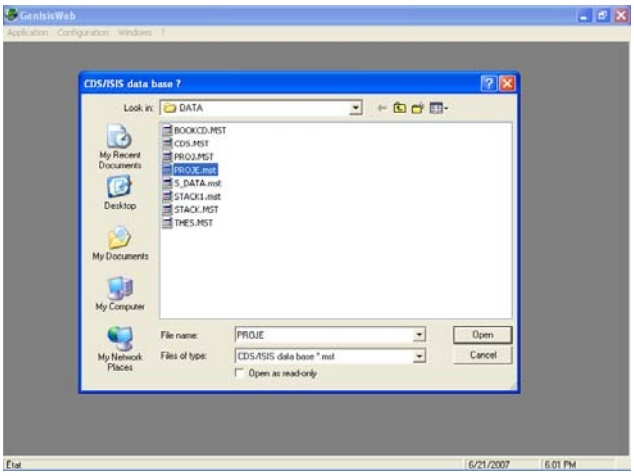


Figure 8: Data base selection

Select the database i.e. (PROJE.MST) and click OPEN button, you will get the following message "Please assign a name to the application CDS.01:" here you have to give a name for your application. Here gave our institute name such as "BIMS LIBRARY PROJECT REPORTS" and click OK button. Then you will view the window with three forms, they are

- Query form
- Format Listing
- Format details

Query form: allows you to design the query for with field selection and access to Indexes.

Format 'listing'*: allows you to design a short display format from which the users can select for the detailed display.*

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

6 Designing the query form

To design the query form you have to add fields. Click on "ADD" button at the bottom of the query form (Fig. 19). Then you will get this window (Fig.) titled 'ITEMS ON THE QUERY FORM'. The items you see on the left panel are those indexed in your database, i.e. which are included in the FST and one field including all fields.

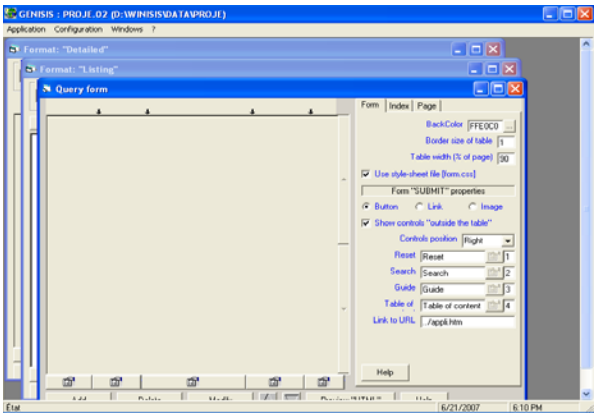


Figure 9: Query Form

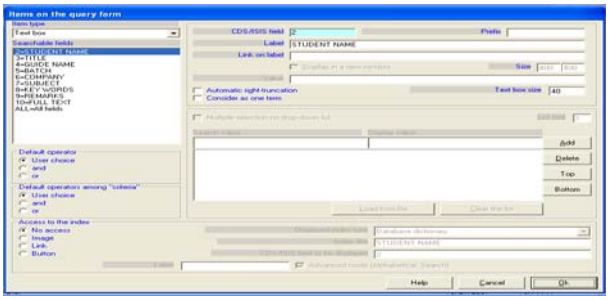


Figure 10: Designing the query form

On the left panel below you are given options to select the operators and the access to index. Here you can select three different ways of displaying the link to index.

On the right side also you can select whatever options you would like to have. Here you can select "AUTOMATIC TRUNCATION" without using the $ sign.

Once you select these options click on "OK" button and you will get this window (Fig.11).

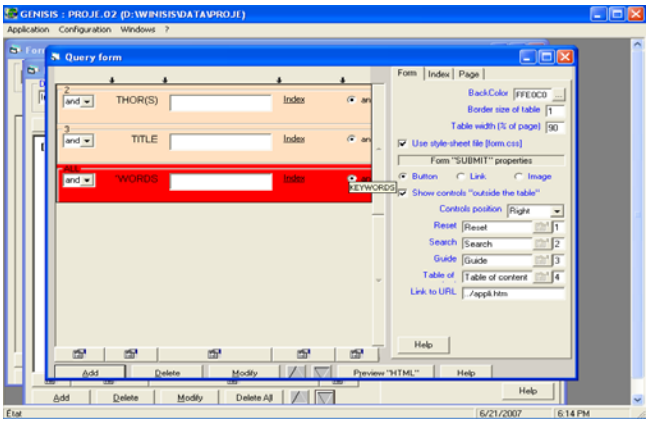


Figure 11:Query Form

There are three tabs on the right side of this window they are FORM, INDEX AND PAGE. By clicking on any of these it will allow you to format these pages. If you click on "PAGE" tab the right side of the window will change as given below. Here you can select how many records to be displayed after searching. You can also select the background colors. And you can give the name that you want to appear in the front page of the display window. Once you finish designing the query form you can test it.

Click on APPLICATION on the menu bar and click on save on the dropdown menu. Then you will get this message "APPLICATION CDS.O4 SAVED" then click on OK.Again click on "APPLICATION" on the menu bar and click on "CREATE APPLICATION" on the dropdown menu. You will get the GENISIS screen, in that screen.

Click on 'yes' and your web browser will open automatically and the query form will open it is shown in the following figure

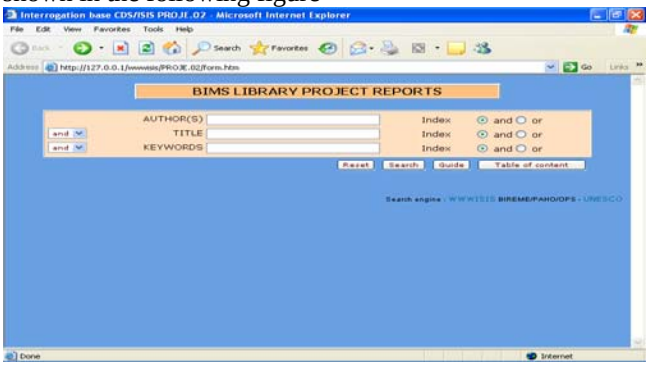


Figure 12: Display of Query Form

Now you can open the index by clicking on the link to index and you select terms from the index and click on "**SEARCH"** button. You will get the search results as shown in the figure

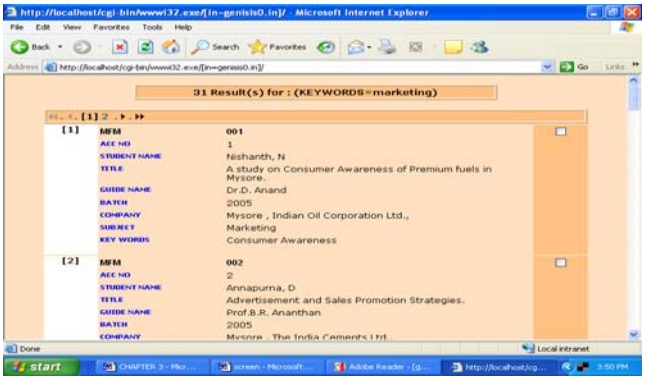


Figure 13: Search Results

7 Designing the display formats

First you have to design the short display, which will allow the users to select records for detailed display. Click on the "Format listing" window. Then you will get the default form Click on "**ADD**" button at the bottom and you will get a form similar to a worksheet in WinIsis (Fig.14)

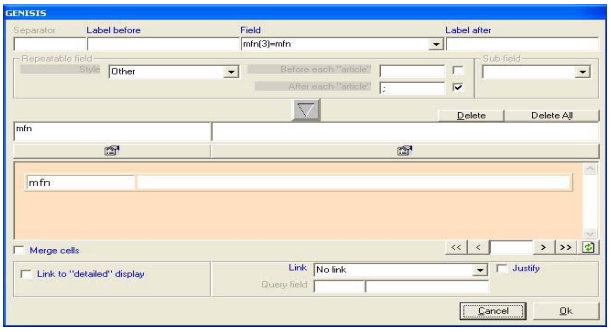


Figure 14: Designing the display formats

Here you can select two or three fields to be displayed in the short display and one filed should be linked to the detailed display, so that the users can see the detailed display of each record by clicking on this link.

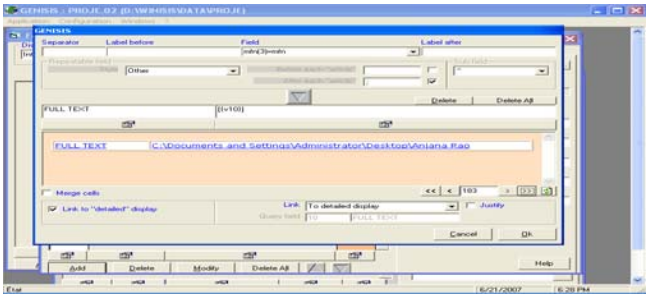


Figure: 15- Short Display

After entering the field for short display. Click on OK button, here I have selected FULL TEXT field for short display of Project Reports.

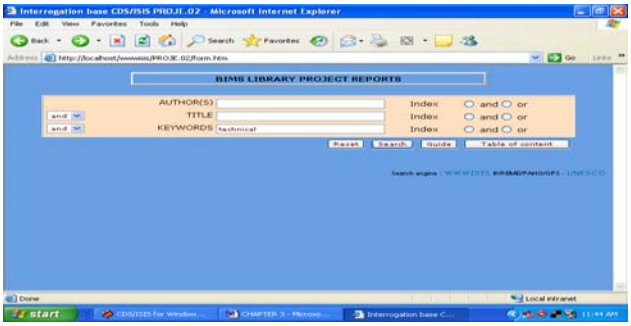


Figure 16: Web query form



Figure 17: Short display on the web

After you design this if you are on an intranet you can allow the others to search on the database by providing your IP address. You also can export this database and web interface to a server on another computer.So, in this way we can use the GenIsisWeb software to access the digital archives stored in the WINISIS bibliographical database.

CONCLUSION

The present study is creation of digital document archives of B.N. Bahadur Institute of Management Sciences (BIMS) Library using WINISIS. The idea of this project conceived to create an in-house digital archive for BIMS library in the field of Business Management and Administration. The soft copy and the hardcopies of the project were collected and stored at the library, after proper identification of necessary bibliographic items from the hard copy of the project work; the data was entered into WINISIS software. WINISIS is window based library software promoted by UNESCO for library automation and digital archiving of various information resources. It supports not only bibliographic details but also full text. Some of the tools used in the installation are WINISIS, GenIsisWeb Web, and Apache web server software.

All the screenshots representing various features of WINISIS and GenIsisWeb web with suitable examples are provided in the chapter entitled Converting digital document archives of WINISIS to GenIsisWeb Web. This project is of both library administrative and service value. A librarian can archives all the records and preserve them for posterity. WinIsis being user friendly software it enables quick and easy access to the digital contents in the systems. It also helps the students of BIMS in referring to the already existing project titles; this leads to avoiding of duplication of research and encourages creativity and innovativeness among the students of a good institution.

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