

WEBAGRIS

**Information Management System for Description, Processing and Dissemination of
Agricultural Bibliographic Information**

Version 2.0

User Guide

GILW, Library and Documentation Systems Division

July 2006



Food and Agriculture Organization of the United Nations © 2006

DOCUMENT METADATA

	Scheme	Value
title		WEBAGRIS version 2.0 (Information Management System for Description, Processing and Dissemination of Agricultural Bibliographic Information), user guide for AGRIS network
Creator. creatorPersonal		Stefka Kaloyanova
creator. creatorCorporate		FAO of the UN, Rome (Italy). Library and Documentation Systems Division
subject		Information management; Information processing; Information retrieval; Information systems; Metadata Standards; Guidelines; Application Profile; Information Exchange
subject. subjectClassification	ASC	C30
subject. subjectClassification	LCC	Z699.35.M28
subject. subjectThesaurus	AGROVOC	AGRIS; DATA PROCESSING; METHODS; STANDARDS; INFORMATION STORAGE
subject. subjectThesaurus	CABIT	information processing; information systems; information storage; AGRIS
subject. subjectThesaurus	LCSH	Information storage and retrieval systems— Agriculture; Metadata; Exchange of bibliographic information; Machine-readable bibliographic data formats; AGRIS (Information retrieval system)
publisher. publisherName		FAO of the UN
publisher. publisherPlace		Rome, Italy
description.abstract		<p>This document is a WEBAGRIS user guide for the data input and publishing of the local AGRIS databases on the Web and on the CD-ROM.</p> <p>It is devoted to the AGRIS network participating centers. The guide provides step by step instructions on the process of installing WEBAGRIS version 2.0, first steps on data input and searching of agricultural bibliographic information. It also provides a list of common problems, a Frequently Asked Questions (FAQ), as well as instructions on how to convert local bibliographical data into valid AGRIS DTD compliant XML files for exchange within AGRIS network and/or via the Internet.</p>
description.edition		Version 2.0
date	W3CDTF	2006-07

type	DCMIType	Text
format.extent		81 p.
language	ISO639-2	eng
rights	URI	http://www.fao.org/copyrigh.htm

Acknowledgment

The WEBAGRIS version 2.0 was prepared by the AGRIS/CARIS and Documentation Group of WAICENT, FAO-Agris-Caris@fao.org, under leadership of Stefka Kaloyanova and in close cooperation with and essential support from the Institute for Computer and Information Engineering (ICIE), Poland, and IICA/CATIE, Costa Rica. Special credit for this version goes to Manuel Hidalgo, Irene Onyancha, MariaGrazia Bovo and Stefano Anibaldi.

Credit for this manual goes to Dr. H. Rybinski (rybinski@mimuw.edu.pl), M. Okoniewski and M. Suchorowski, who participated in the first draft of the WEBAGRIS version 1, user guide and Installation manual, parts of which are included in the new manual and to Irene Onyancha for carefully editing the final draft. Further acknowledgement goes to the ASFA team for the ideas on the installation part of this manual.

The team expresses its gratitude to J. Keizer for the overall supervision and to the GIL management for its support.

Table of contents

ACKNOWLEDGMENT	3
TABLE OF CONTENTS.....	4
1 ABOUT WEBAGRIS	6
2 NEW FEATURES OF THE WEBAGRIS VERSION 2.0	8
3 TECHNICAL AND STRUCTURAL CHANGES IN WEBAGRIS VERSION 2.0	11
4 SYSTEM REQUIREMENTS FOR WEBAGRIS VERSION 2.0	13
4.1 REQUIREMENTS FOR THE SERVER COMPUTER IN NETWORK ENVIRONMENT	13
4.1.1 The SERVER computer configuration	13
4.1.2 Web Server (service)	13
4.2 REQUIREMENTS FOR THE CLIENT COMPUTER(S)	15
5 DOWNLOADING AND INSTALLING WEBAGRIS.....	16
5.1 CONTENTS OF THE DISTRIBUTION PACKAGE ON A FTP SITE OR CD-ROM	16
5.2 DOWNLOADING THE FULL PACKAGE FROM FTP SITE.....	16
5.3 HOW TO INSTALL THE WEBAGRIS SYSTEM	16
5.3.1 Installing the Web Server	17
5.3.2 WEBAGRIS2 system installation instructions.....	17
5.3.2.1 For users that already have previous versions of WEBAGRIS	17
5.3.2.2 For users that are installing WEBAGRIS version 2.0 for the first time	19
5.4 WHAT WE HAVE AFTER THE WEBAGRIS INSTALLATION PROCEDURE	19
6 STARTING THE WEBAGRIS SYSTEM: THE FIRST STEPS AFTER INSTALLATION.....	22
6.1 TESTING	22
6.1.1 Data entry subsystem	22
6.1.2 Search subsystem	24
6.1.3 Export and print features	26
7 SYSTEM ADJUSTMENT	28
7.1 AUTHORIZATION RIGHTS ADJUSTMENT.....	28
7.2 MOVING THE DATABASES TO ANOTHER LOCATION	28
7.3 MULTI-DATABASE SEARCH.....	29
8 DATABASE MANAGEMENT.....	31
8.1 BACKUP OF YOUR AGRIS DATABASE (MASTER FILE BACKUP)	32
8.2 RESTORE OF AGRIS DATABASE.....	32
8.3 REORGANIZATION OF A DATABASE	33
8.4 INVERTED FILE GENERATION	33
8.5 CLEANING OF WORK DATABASE.....	33
8.6 EXPORT AND IMPORT PROCEDURES	34
9 ANNEXES	36
ANNEX 1: INSTALLATION OF WEB SERVER. HOW TO INSTALL XITAMI	36

Trouble shooting	41
Some traps that you may experience	42
ANNEX 2: INSTALLATION OF WEB SERVER. HOW TO INSTALL WEBAGRIS UNDER IIS 5.0 WEB SERVER	43
ANNEX 3: INSTALLATION OF WEBAGRIS.....	47
ANNEX 4: TRANSFER AGRIN AND AUTH DATABASES TO WEBAGRIS	53
ANNEX 5: TRANSFER OF A DATABASE FROM VERSION 1 TO VERSION 2.0 OF WEBAGRIS.....	58
ANNEX 6: EXPORTING RECORDS IN AGRIS AP XML FORMAT FROM WEBAGRIS TO THE CENTRAL AGRIS DATABASE	59
ANNEX 7: WEBAGRIS FREQUENTLY ASKED QUESTIONS	61
ANNEX 8: HOW TO IMPLEMENT AUTOMATIC NUMBERING OF THE RECORDS IN WEBAGRIS SYSTEM	71
ANNEX 9: FIELD DEFINITION TABLE OF AGRIS DATABASE AND COMPARISON WITH AGRIN AND ISO2709 STRUCTURES	72
ANNEX 10: MAPPING OF WEBAGRIS FIELDS TO THE AGRIS AP ELEMENTS	75
ANNEX 11: PRODUCING AN AGRIS AP XML FILE WITH WEBAGRIS.....	80
ANNEX 12: ELECTRONIC DISCUSSION FORUM - DGROUP	82

1 About WEBAGRIS

WEBAGRIS is a complete, multilingual Web-based system for distributed data input, processing and dissemination (through the Internet or on CD-ROM), of agricultural bibliographic information. It is based on common standards of data input, and dissemination formats (export formats XML, HTML, ISO2709), as well as subject categorization schema and the AGROVOC thesaurus. WEBAGRIS also allows to link to documents that are available in electronic format.

WEBAGRIS provides the following functionalities:

1. Database maintenance functions:

- a. data entry and update;
- b. password control;
- c. creation of new records;
- d. updating of existing records (selection from a list);
- e. validation by formats;
- f. display of authority data for a selection.

2. Information dissemination functions:

- a. user friendly retrieval;
- b. better sorting;
- c. print and export options;
- d. searching through a number of databases;
- e. result paging;
- f. saving option for query history, etc.

The WEBAGRIS system can be used in multiple ways depending on the need and resources of the individual AGRIS Resource Centre. The centre can host a Web site for data entry, searching and/or exporting data to the central AGRIS database and/or publishing CD-ROMs. It can be used as a local application or in a common networked environment to join collection of information (through exporting, harvesting data, etc.). WEBAGRIS improves accessibility of information generally, through the use of multi-database searching and harvesting.

The WEBAGRIS system is based on the Web technology and can be run from a standard Internet browser. It uses the WWW-ISIS software¹ for publishing CDS/ISIS databases on the Web. The interface is based on HTML forms, and has been implemented as a CGI program. The program is invoked by the Web Server process. The access to the CDS/ISIS databases is managed through

¹ WWW-ISIS software is developed by the Institute for Computer and Information Engineering (ICIE, rybinski@mimuw.edu.pl), Poland with the cooperation and support of FAO.

BIREME's software ISIS-DLL², an API (Application Program Interface) for CDS/ISIS software of UNESCO in the Windows environment.

The current WEBAGRIS version 2.0 is developed by the AGRIS/CARIS and Documentation group of GILW, FAO (FAO-Agris-Caris@fao.org), in close cooperation with the Institute for Computer and Information Engineering (ICIE), Poland and IICA/CATIE, Costa Rica.

The AGRIS secretariat recommends that users currently using previous version of WEBAGRIS install the new Version 2, which includes all the updates and new features while maintaining their original databases.

The new WEBAGRIS version 2.0 (in English and Spanish) is now published on FTP site and/or distributed on CD-ROM (available upon request) for those users that do not have connection to the Internet).

This version is also included as a main part of the Integrated Library System for Agricultural Libraries, **LISAGR**.

² ISIS_DLL of BIREME is an API for working with CDS/ISIS structured databases in Windows environment.

2 New features of the WEBAGRIS version 2.0

The new WEBAGRIS version 2.0 provides the user with a robust information management system having integrated numerous updates, error fixes resulting from users' trouble shooting problems of the old versions and new requested features. Most of the changes and improvements incorporated in this new version are as a result of problems encountered by users and suggestions made while using the WEBAGRIS version 1.

The main achievements in the version are outlined as follows:

1. Adaptation of WEBAGRIS for compliancy to the AGRIS AP metadata standard

The adaptation includes:

- Link to the AGRIS AP manual in data entry system;
- Review and update of the help files associated with every field including a link to the new AGRIS AP manual;
- Change of structure of AGRIS records, such as:
 - changing the structure of some of the existing fields
 - Availability is divided now in 3 subfields: location, number, source/database,
 - On-line availability is divided now in 4 subfields: URL, language, restricted records, and formats.
 - defining new fields according to the AGRIS AP
 - Medium of document was added,
 - Literary Indicator: some values for selection were revised/added
 - A coded value of the AGROVOC terms was added
- New export formats, including one for producing AGRIS AP xml were created.

2. AGROVOC thesaurus upgrades

These include:

- The January 2006 version of AGROVOC Thesaurus.
- Two new tables [isisuc.tab and isisac.tab] for representing accented characters in upper case. This avoids problems incurred when indexing, display and export of French and Spanish AGROVOC terms.
- Using of THES database for translation of AGROVOC terms and representing them in coded value.

3. Search interface improvements

These include:

- Giving new possibility to type free text query, in which the system removes stop-words in English, Spanish, French and some of other languages such as Italian and German.

- If more than one terms are entered in the search box, the system separates them with a semicolon (;), which is interpreted by the system according to the choice of Boolean operator (AND, OR) selected within the field.
- Dynamic selection of search fields from a drop down list (combo-box) is available on the simple and advanced search masks.
- Additional filters are added to help refining the search by selection of full text documents (based on the on-line availability), type of document such as monographs, Journal articles and/or AGRIS records only for inclusion into the AGRIS central database.
- Revision of the "edit query" button from thesaurus search. This loads a new advanced search form that fills the descriptors search box with selected values taken from the AGROVOC thesaurus.
- Improved cross-database search, by incorporating more than one databases and their dictionaries during the search.
- New presentation of the history search. This has now two buttons as follows:
 - "History" button to be used when referring to a query from the history and,
 - "ISIS command mode", an expert search mode. For more details see **WWW/ISIS technical reference manual**.
- A new feature (**Document locator**) that executes a Google search based on the metadata of a record. However, this is only available on request and is not distributed with the main installation package. Interested users can have additional documentation and instructions for installation.

4. Data entry improvements

- Dynamic selection of search fields from a drop down list (combo-box) in the search part of the data entry interface.
- New validation features, that check the record on submission in order to produce valid XML records (especially for mandatory fields).
- Translation of AGROVOC terms into "AGROVOC term codes" on submission of a record
- Download/print range of MFN from the data entry system.

5. Improvements of Export/download features

These include:

- Export/print of all or selected records was added to the display results page
- Many predefined formats, including ones producing XML, HTML export were defined
- FST (Field Select Table) controlled download in ISO-2709 and text format files (FST predefined) is available now
- Interface for selecting fields to be downloaded in ISO2709 and text format files and building FST dynamically was developed.

6. New and updated documentation

There are two main documentations as follows:

1. **WEBAGRIS version 2.0 User guide**, which provides the users with guidelines on the installation and the first steps on using the system as well as trouble shooting FAQ. (WEBAGRIS2.pdf file), which will be referred to as “**User guide**”. This document is devoted to the AGRIS network participating centers which have been using the older version of WEBAGRIS or intend to use it to publish their data either at national level or/and send to the AGRIS central database.
2. **WWW/ISIS technical reference manual** that provides details on the WWW/ISIS system for more experienced users that need to update the system or develop a new application (WWWISIS techdoc.pdf file.), which will be referred to as “**Technical manual**”.

7. New much easier installation procedure

It provides a possibility to choose a Web Server. Some guidelines on the installation of different Web Servers are provided in Annex 1 and Annex 2 of this document.

Netscape browser is no longer mandatory.

Information on WEBAGRIS version 2.0 is also available at <http://www.fao.org/agris>.

3 Technical and structural changes in WEBAGRIS version 2.0

The WEBAGRIS interface is based on the *form* features of the HTML document description language. The interface is implemented as a *CGI* program. The program is invoked by the Web Server process. The access to the CDS/ISIS databases is achieved by the BIREME's software ISIS-DLL, which is an API for ISIS in the Windows environment.

Below are some of the most important technical changes in the WEBAGRIS 2:

1. New *cgi* program, incorporating all the new features.
 2. New *config* parameters (see chapter 3 of Technical manual).
 3. New XML like structure of the system definition files namely, *browse.def* and *database.def*, making the old definitions files unusable in the new WEBAGRIS 2 system. (See chapter 4 and chapter 4.3 of the Technical manual).
 4. Changes in *“.htp”* files to ensure appropriate functioning of the new features. The main changes are done in *search.htp*, *result.htp*, *thes.htp* and *view.htp* thus rendering the old htp files unusable in the new version.
 5. Redesigning of the search interface providing more features such as:
 - a. scrolling list to select fields for the query;
 - b. automatic elimination of stop words in the query, using *filter.js* program;
 - c. automatic adding of search operator in the field.
 6. Enhanced history functions with number of hits for every one of databases participating in the search. The history search is divided now in two buttons: history and ISIS Query language search.
 7. Multi-database (cross database) searching. All the references to the databases are in *dbn.def* file and in the *database.def* file. The old *multidb.def* file is not used any more in WEBAGRIS 2. (See chapter 4.1 of the Technical manual)
 8. New print formats file to accommodate the new export/print features, These are
 - Text format (full) – *text.pft*
 - Text format (short – *text1.pft*
 - Delimited format – *repd.pft*
 - HTML short format – *esmond.pft*, *hdrhtm.pft*, *ftrhtm.pft*
 - HTML full format – *efmond.pft*, *hdrhtm.pft*, *ftrhtm.pft*
 - AGRIS AP XML – *agrxml.pft*, *hdrxml.pft*, *ftrxml.pft*
- The exported xml file is saved as *agris.xxx* in this version for resolving encoding parameter problem, but can be renamed as *.xml* in order to view it with a browser.
9. Changes in validation formats according to the AGRIS AP standard for example to meet the requirements of mandatory fields.
 10. Use of reformatting Field Select Table, *“test.fst”* as predefined FST during the export.
 11. New FDT, *agris.fdt* which is used for selection of the fields and dynamically building of FST for exporting data. The original FDT is saved as *agrisori.fdt*.

12. Additional fields available for search (in FST).

13. Addition of a new directory "*manual*", which contains the AGRIS AP manual .For more technical details refer to chapter 2 of the Technical manual.

4 System requirements for WEBAGRIS version 2.0

The following minimum hardware configuration is required for a successful installation of the WEBAGRIS system, in a networked (inter/intranet) environment. This concerns both the Server computer and the Client computer/s.

4.1 Requirements for the server computer in network environment

4.1.1 The SERVER computer configuration

1. **Computer:** IBM PC or compatible microcomputer Pentium II processor (or higher).
2. **A CD-ROM reader** for the users not connected to Internet to install the software from the CD-ROM.
3. **Operating system:** Microsoft Windows NT, Windows 9x, Windows 2000, 2003 or XP.
4. **RAM:** At least 256 MB of RAM memory.
5. **Hard Disk Memory:** For a 100 MB ISIS database at least 1 GB of hard disk storage is recommended; For installation, 50 MB of hard disk storage space is required and additionally 7 MB for the Xitami Web Server software.
(Note: *Xitami is not needed if another Web Server software is already installed*).
6. **Note:** For Windows '95 and '98 the system can be successfully applied as a stand-alone application. However for proper working in a LAN Intranet environment, it is recommended that the Windows NT (at least 128 MB RAM) or Windows 2000 or higher be used (at least 256 MB RAM). It can work as a client version for small to medium networks. For larger applications the server Windows NT is recommended.
7. **Network connection:** Your server computer should be connected already to the network via TCP/IP (internet or intranet) and has its DNS (in case you want to use the system over the network). Check with Control-Panel/Network Component/Configuration to check the configuration.

7a: In the Windows NT environment, the TCP/IP connection is one of the system options. You can check it by opening the Control Panel and verifying "Configuration" in the Network component. If the option is **on**, you should be able to connect from another machine to the server machine via TCP/IP. If you are not sure, ask the system manager to make the TCP/IP active.

7b: In the Internet your computer will be addressed by the URL address, which is the DNS assigned to your computer. DNS is a "logical address" of your server. If you are not sure about your DNS you should check it with the system manager.

4.1.2 Web Server (service)

Before installing the new WEBAGRIS system, you should verify if there is a Web Server working on your computer. This is the service that runs your *cgi* program and interprets the dialog between the HTML forms for the user and cgi program.

There are a number of Web Servers that can be used, provided that the following requirements are satisfied:

1. Appropriate processing of cookies
2. Ability to run CGI programs.

The following Web Servers have been tested and recommended for WEBAGRIS:

1. Microsoft Web Server IIS.

2. Xitami Web Server (provided with the CD-ROM (for users not connected to Internet) or downloadable at <http://www.xitami.com/download.htm>).
3. Netscape's Fastrack or Enterprise Web Server.
4. Apache.

Testing if a Web Server is running

In order to test if Web Server is running properly, type the following URL <http://127.0.0.1> or <http://localhost>. If using these URLs you receive the welcome page, it means that the Web Server is installed and running correctly.

If there is no server on your computer you need to install one but pay attention that it is installed only once during the first time WEBAGRIS installation for this server. If you do not have experience with the Web Servers, it is recommended that you use the Xitami server, which you can find in the WEBAGRIS installation package or download one from <http://www.xitami.com/download.htm>.

If the server is running you could check also its configuration and settings. For example, you should be able to answer following questions:

Q1. In which directory the starting HTML files of the WEBAGRIS application are located?

Ans. The destination folder for the WEBAGRIS has the name *AGRIS*. It should be attached to the Web Server root directory. In the case that you are using **Xitami** as a Web Server, you should select by browsing or typing the full path, to the Xitami Web root directory.

For example *C:\xitami\webpages* where the folder *AGRIS* should be installed.

Note: For **IIS** for example, the Web Server root directory could be *C:\inetpub\wwwroot*

* If you are using another Web Server you should first check, where the Web Server root directory is located. Alternatively, create the WEBAGRIS destination folder *AGRIS* at any location, and then add it as a virtual Web directory.

Q2. In which directory the cgi program for WEBAGRIS are located?

Ans. This parameter should indicate the folder where the Web Server will find the *cgi* programs. If you have installed **Xitami** in the directory as described above (e.g. *c:\xitami*) and did not change the default names of the folders, you should indicate the destination folder for the *cgi* program as:

C:\xitami\cgi-bin

If using another Web Server, first check, where the *cgi* directory is and then reference it.

Note: For **IIS** this could be *C:\inetpub\cgi-bin* (Here it may be needed to rename directory *scripts* to *cgi-bin*)

After this process, you can go directly to the installation of WEBAGRIS phase. We provide our experience and tips on installation of WEBAGRIS under different Web Servers under the following:

Annex 1. Installing Xitami Web Server.

Annex 2: Installing IIS Web Server.

4.2 Requirements for the client computer(s)

A Web browser (e.g. Internet Explorer or Netscape) is necessary for the WEBAGRIS system. However this component is not included in this installation package, because we assume that your computer already has this software installed.

The Web browser that is used to access the WEBAGRIS interface **must** support the following HTML features:

- *cookies*.
- tables
- frames
- forms

The Browser could be any of the Internet Explorer versions or Netscape version 4.x, or higher

Note: During the tests with Internet Explorer (versions 4 and 5), we incurred some problems on the proper processing of *cookies*. Refer to FAQ Annex 7, p.8 and p.9

Note: Don't install Xitami or WEBAGRIS software on the clients PC if they will not be used as a server.

Note: *WEBAGRIS could be installed in a non networked environment on a single PC which will also be considered as server and client. It follows the requirements for the server (4.1) and client (4.2) above , except the requirements for network connection (p. 4.1.1 (7))*

Note: If the server computer is not connected to the network and no DNS is provided to it, the installation procedure will assign to it the DNS: www.isis3w.org. If the system is not expected to run in the Internet, this DNS can be used locally. If however you would like to change the DNS, please remember to change the DNS in the configuration file *isis3w.exe.cfg*, which you will find in the cgi-bin directory (first find there the keyword CookieDomain, then replace the DNS). The same name should be added in the hosts file of your Windows installation.

5 Downloading and installing WEBAGRIS

5.1 Contents of the distribution package on a FTP site or CD-ROM

The WEBAGRIS distribution package contains the following components:

- The installation package for the WEBAGRIS2 system (data entry, search interface, DOS CDS/ISIS and administrative files, documentation and tutorials).
- The Xitami Web Server, in case no Web Server is available, necessary to run the cgi program of WEBAGRIS. This only needs to be installed once, during the first time of WEBAGRIS installation on a server.
- Documentation
 - Users Guide: **WEBAGRIS version 2.0 users guide**, which provides the users with guidelines on the installation and the first steps on using the system as well as trouble shooting FAQ.
 - Technical manual: **WWW/ISIS technical reference manual**, which provides details on the WWW/ISIS system for an advanced audience that need to develop further any ISIS based application.

On the FTP site, the WEBAGRIS distribution package is a zip file containing all the above mentioned files.

The WEBAGRIS distribution package on CD-ROM contains the same components already unzipped.

5.2 Downloading the full package from ftp site

For users with Internet connection, the zipped WEBAGRIS distribution package can be downloaded from the following FTP site:

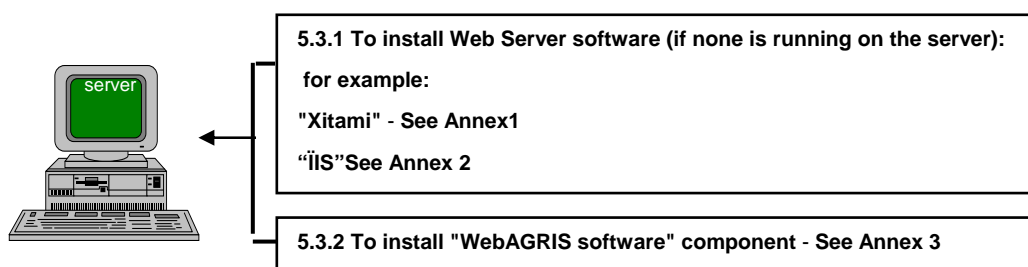
Ftp://ext-ftp.fao.org/agris/software/WEBAGRIS/version2

This can be saved into a directory for example a temporary directory (C:\temp) and unzipped on to the hard disk.

Go through the installation steps provided below.

5.3 How to install the WEBAGRIS system

The first installation includes the following 2 steps:



5.3.1 Installing the Web Server

An installed Web Server should be running on the server computer, which could be either the Internet and/or Intranet Web Server. If no Web Server has been installed, it is recommended to install the Xitami Web Server which is provided with the installation package or download it from <http://www.xitami.com/download.htm>.

Note: To install the Xitami Web Server refer to **Annex 1: How to install Xitami Web Server**.

The Web Server is installed **only once** for any given server (before the first installation of WEBAGRIS application) and does **not** need to be reinstalled again with every new version of WEBAGRIS. It should be started and run automatically.

5.3.2 WEBAGRIS2 system installation instructions

5.3.2.1 For users that already have previous versions of WEBAGRIS

I. Preliminary Steps

1. **Backup** your existing databases namely **AGRIS** and **AUTH** using the following steps:

*Using DOS ISIS from your WEBAGRIS installation.

- o Select first AGRIS database from option C- change database,
- o Select M- Master file services from the main menu and
- o Select B-Backup from the secondary menu.

On the question directory where the backup should be kept, press <Enter> to save *agris.bkp* in the current ISIS directory.

Repeat the same steps above to backup **AUTH** database.

Go to chapter 8.1 for more details on how to backup a database.

Check for the **agris.bkp** and **auth.bkp** files and make one more safe copy on separate directory, for example *C:\temp*

2. **Copy** the Web directory of the existing WEBAGRIS application (in case of Xitami *c:\xitami\webpages*) with a new name, e.g. *Webpages1*, and *cgi-bin* directory to *cgi-bin1*. This may be needed for reference to the old version in case changes are done in your installation or in the formats.
3. **Uninstall** WWWISIS application.
 - Go to Start-> Settings-> Control panel
 - > add/remove programs-> select WWWISIS Agris
 - > select "remove".

II. Installation steps for the new WEBAGRIS version 2.0

- 1) From CD-ROM

Take the installation CD-ROM (English or Spanish version) and insert into your server CD-ROM drive or

- 2) From FTP site

- a) go to the directory where the unzipped WEBAGRIS installation files were downloaded from FTP as described in section 5.2 above;

- b) run the SETUP.EXE program available on the root directory by double clicking on the program;
- c) follow the installation steps indicated in Annex 3 and confirming some required data, in particular:
 - i) the path to the Web Server document directory: destination folder containing WEBAGRIS HTML files, located under the Web Server root directory, e.g. for WEBAGRIS under Xitami Web Server this could be c:\xitami\webpages.
 - ii) *the cgi-bin* directory: it shows where the WEBAGRIS program and configuration file should be located.

You should be able to answer following questions:

Q1. In which directory the starting HTML files of the WEBAGRIS application should be located?

Ans. The destination folder for the WEBAGRIS has the name *AGRIS*. It should be attached to the Web root. So, for the case of using **Xitami** as the Web Server, you should select by browse or type the full path to the the Xitami Web root for example *C:\xitami\webpages* where the folder *AGRIS* should be attached.

For **IIS** for example, the root directory could be *C:\inetpub\wwwroot*

* If you are using another Web Server you should first check, where the Web root directory is, and then indicate it by analogy or create the *AGRIS* directory at any location, and then add it as a virtual Web directory.

Q2. In which directory the cgi program for WEBAGRIS should be located

Ans. This parameter should indicate the folder where the Web Server will find the *cgi* programs. If you have installed **Xitami** in the directory as described above (e.g. *c:\xitami*) and did not change the default names of the folders, you should indicate the destination folder for the *cgi* program as:

C:\xitami\cgi-bin

If using another Web Server, first check which directory is used for the *cgi* programs, and then indicate it.

For **IIS** this could be *C:\inetpub\cgi-bin*.

At the end of the initial stage of the installation procedure all settled installation parameters are displayed. At this point you will be asked to confirm the installation settings. The installation procedure will then begin to copy the system files (a progress window is displayed on the screen).

After having completed the installation procedure, reboot the computer.

Note: The *AGRIS* database at this point is almost empty, i.e. contains only some test documents. If temporary records are created for testing the system, these need to be cleared from the systems. At this point a new record can be entered.

III. Restore of the existing data

From section I **Preliminary Steps**, p. 1, **Backup your existing databases** above, the user should have a backup of the databases **AGRIS** and **AUTH** which have to restore as follows:

- 1) From the main CDS/ISIS DOS menu select *AGRIS* (or *AUTH*) database using option C-change database then
- 2) select option M – Master file services and then

- 3) select R-Restore Master file.
- 4) On the question of which directory the backup should be taken, press <Enter>. This will take *agris.bkp* (or *auth.bkp*) from the current ISIS directory or type the name of directory where your backup was stored from step 5.3.2.1 **"Backup your existing databases"**

If you have changed *access.def* file, copy your old *access.def* file, saved under *C:\xitami\webpages1\agris* to the new directory *c:\xitami\webpages\agris* in order to keep your original users ID and passwords.

IV. Adjustment of other databases to WEBAGRIS version 2.0 structure

- 1) If a user has existing data in the AGRIS database created with WEBAGRIS version 1, adjustments need to be done to conform to the WEBAGRIS version 2.0 structure. Refer to **Annex 5: How to adapt databases from WEBAGRIS version 1 to WEBAGRIS version 2.0.**
- 2) If a user has already an external database, this can be imported using DOS ISIS that is provided with the new installed WEBAGRIS.
If the system where the database was created has a different structure, it is necessary to pass through reformatting FST, which will adjust the fields to the structure of WEBAGRIS fields.
- 3) If a user was using the old DOS CDS/ISIS application of AGRIN. Refer to Annex 4 and follow the steps for converting AGRIN to WEBAGRIS database.

5.3.2.2 For users that are installing WEBAGRIS version 2.0 for the first time

Execute only point II as described above.

5.4 What we have after the WEBAGRIS Installation procedure

The installation procedure performs the following steps during the installation process:

1. the HTML files are copied, along with all necessary definition files to the indicated Web root directory
2. The files *isis3w.exe* and *isis32.dll* are copied to the indicated cgi-bin directory
3. The installation procedure recognizes the DNS of the server. The DNS parameter is important for the created configuration file, *isis3w.cfg*. The DNS of the server is added to the hosts file in the Windows system directory, *drives\etc\hosts* to provide administrative rights that ensure write access to the windows system directory during the installation of the system
4. An empty CDS/ISIS database called *AGRIS* is copied to the hard disk so that a user to be able to start working with the system immediately. Additionally all auxiliary ISIS databases are copied to the hard disk, such as validation database, authority database, AGROVOC thesaurus, and a work database for storing session data.
5. The configuration files *isis3w.cfg* and *dbn.def* are generated and copied to the cgi-bin directory.
6. Additionally the installation procedure creates a shortcut to a special folder on the desktop of the server computer. The folder contains the following links:

- to the data entry subsystem
- to the search subsystem
- to the DOS ISIS, which is intended for the Database Administrator, providing the functions for inverted file update and generation, export/import etc.
- to the authorization file, which should be adjusted to the local needs (see Section 7.1 Authorization rights adjustment).

The paragraph below discusses the components that were loaded after the installation and the directory structure as created in case of Xitami Web Server.

In the case of other Web Servers, the structure is similar as indicated below up to the Web root (c:\xitami\webpages in case of Xitami Web Server), which will be substituted with the root of the running Web Server.

As shown below, the installation procedure generates **cgi** and **webpages** directories at the same level.

Cgi-bin directory

The following cgi-bin files are copied to the cgi directory during installation:

- the cgi program file *isis3w.exe*
- the *isis32.dll* which is Isis-dll file
- the configuration file *isis3w.exe.cfg*, where all the basic parameters are automatically setup during the installation (Do not edit this file before you read carefully about all the parameters in the technical manual);

Webpages directory, where the system creates three sub-directories as follows:

- 1) Agris Directory
- 2) DB directory
- 3) Isis Directory

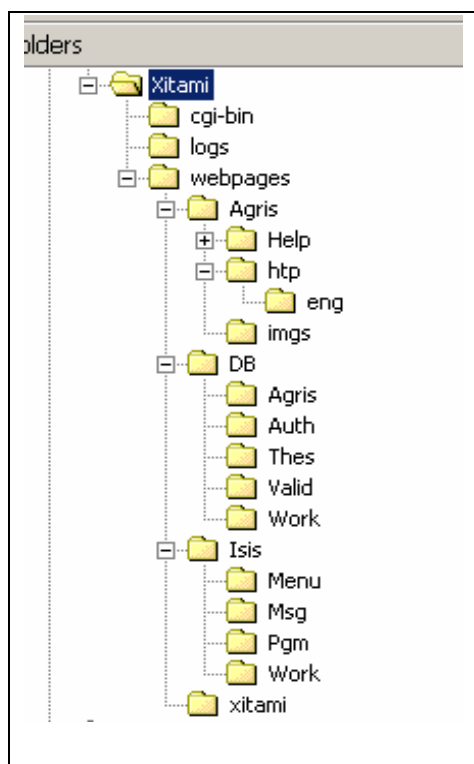
- 1) The Agris directory contains all necessary HTML files and definition files. In particular, there are following HTML files:

- *Index.html* - starting page for the search subsystem;
- *Toc.html* - left frame for the search subsystem;
- *Kwocinana.html* - thesaurus based search frame
- *Empty.html* - auxiliary page
- *de.html* - starting page for the data entry subsystem;
- *tocde.html* - left frame for the data entry subsystem;
- *ql.html* - CDS/ISIS query language subsystem

For the search subsystem the starting file is *Index.html*, which calls *Toc.html* as a left frame. The main frame (display) is requested from the server to be dynamically created.

For the data entry subsystem the starting file is *de.html*. The left frame for the data entry system is *tocde.html*.

In addition the folder contains the definition files that define the screens for search, data entry and browse as *database.def*, *entry.def* and *browse.def* respectively.



Help sub-directory

In the subdirectory `\HELP`, all necessary help files for the search subsystem are stored (only for English version of Web AGRIS).

HTP sub-subdirectory

This folder contains htp subfolders in specific language versions. With the provided AGRIS system only the English subdirectory `..\http\eng` has been provided, hence the `eng` sub-directory containing English version of the HTP files³.

Imgs sub-directory

This folder contains all images used by the system.

Manual sub-directory

In the subdirectory `\manual` is stored the AGRIS AP manual files.

Figure 1: Screen shows file structure after Installation

2) DB directory

The DB directory contains all the ISIS databases files of the AGRIS application. These are:

- AGRIS – for AGRIS database
- AUTH – for the AUTHORITY database
- THES – for the AGROVOC database
- VALID – for the validation database
- WORK – the temporary ISIS database for storing the session parameters.

The DB directory should be read-write access for everyone.

3) ISIS directory

The ISIS directory contains all necessary files for normal running of DOS CDS/ISIS system used mainly by system administrator for backup/restore, unlock database etc.

Note: If internet installation will provide the search functionality only, whereas the data entry will be only for intranet (as the recommended setup), after installing the system on the internet server, remove from the AGRIS directory the files `de.html` and `tocde.html`. If there is an Internet setup available for some users on the web, it is **important** to protect access to the AGRIS directory. this can be achieved by a password.

³ HTP files provide all necessary system messages. They are also "repositories" of the HTML constructs needed by the program when creating dynamically some pages.

6 Starting the WEBAGRIS system: the first steps after installation

6.1 Testing

If presumed that the server DNS is www.isis3w.org and the port is setup to 80, in this case when the installation procedure has been successfully completed, the server can be called from any computer having a TCP/IP connection by the following URLs:

- <http://www.isis3w.org/agris> - search subsystem
- <http://www.isis3w.org/agris/de.html> - data entry subsystem

The first test can be performed on the server computer. In particular, on the desktop find the shortcut to the ISIS folder where to access **search subsystem** icon and the **data entry** icon. The icons refer the correct URLs.

Note that the Xitami software must be running. If during the installation of the Xitami software, the option to "Start Xitami automatically" is not selected, it must now be started manually as follows:

go to Window <Start>menu, select <Programs>, select <Internet Tools>, and click on <Xitami Web Server-Windows> icon.

Go to the computer's "desktop" where the installation of the WEBAGRIS component will have created a shortcut (icon) to the folder called WWWIsis AGRIS.

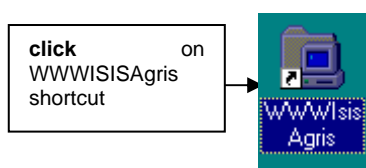


Figure 2

A window with 4 icons should appear as follows:

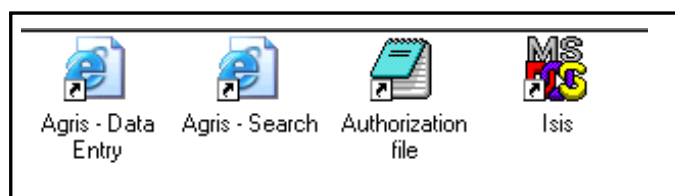


Figure 3

AGRIS-Data Entry: links to the data entry sub-system

AGRIS-Search: links to search subsystem

ISIS: links to DOS ISIS, which is intended for the Database Administrator, providing the functions for:

- inverted file update and generation*
- export/import, etc. *

AGRIS Authorization: for giving local rights to the users

6.1.1 Data entry subsystem

To start the Data Entry sub-system, click on the AGRIS Data Entry icon. The same action could be done if you open Internet explorer and type the address for data entry with the DNS of your server for example: <http://www.isis3w.org/agris/de.htm>.

The first screen of the AGRIS Data Entry sub-system is for **Login-in**. This is compulsory to access the system.

The default log –in values are:

User-Id=dba and Password=dba

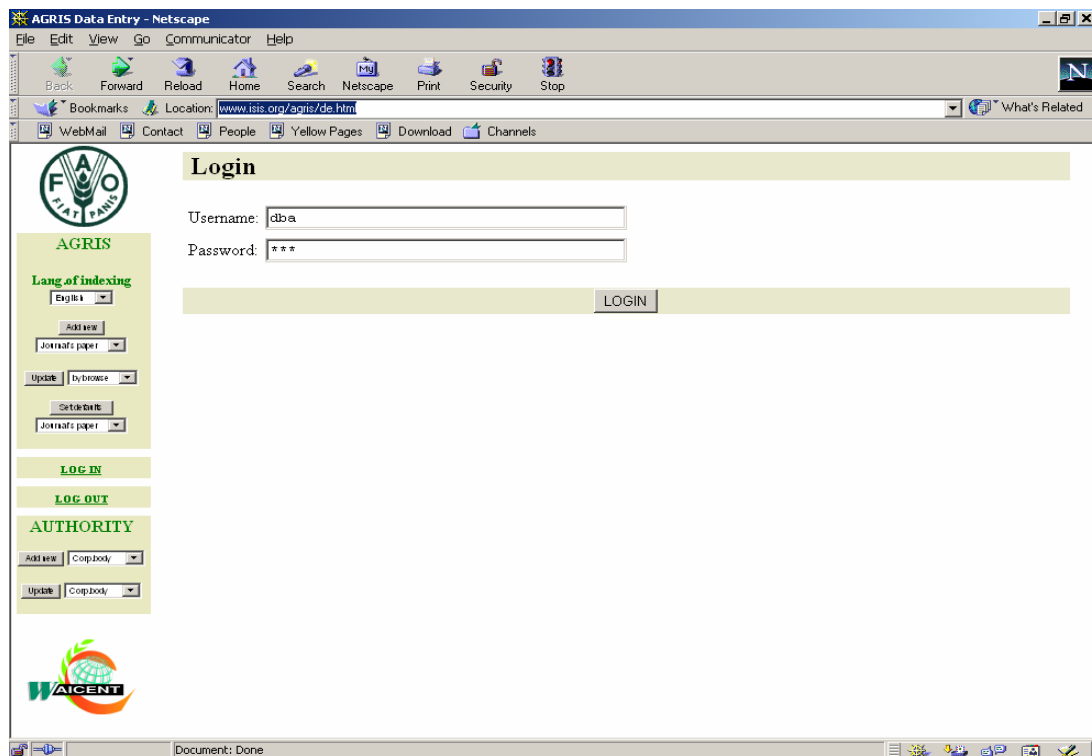


Figure 4. Login screen for Data Entry Subsystem

Type the default "User name" (**dba**).

Type the default "Password" (**dba**) in the appropriate boxes, and then click on "**Login**".

Once logged in, the various data entry functions can be tested. The main functions are shown on the left frame of the screen as follows:

- 1) **ADD:** to add new record
- 2) **UPDATE:** to identify for updating the existing record(s) either by browse or search mode,
- 3) **SET DEFAULTS:** to define default values.

Note: When entering to the new record, pay attention to the paging functions, in particular check if values entered in the fields of previous pages are preserved as you move from one page to the other. If anomalies are noted, check the setting of cookies in your browser (See FAQ p. 7, 8, 9).

Note: If you are able to Log in but are not able to start entering a new record, check if the "cookies" option is set up in your browser.

Example 1. Cataloguing a journal article

Figure below shows the screen for cataloguing a journal article. This is achieved by selecting the option of <Journal Paper- AS> under <Add New>

AGRIS Data Entry

Lang. of indexing: English

ADD NEW

Journal's paper-AS

UPDATE

by browse

SET DEFAULTS

Journal's paper-AS

EXPORT

AUTHORITY

ADD NEW

Corp.author

UPDATE

Corp.author

LOG IN

LOG OUT

AGRIS - AS (English)

Page 1 of 6

1 2 3 4 5 6 NEXT PAGE SUBMIT

Date entered (93)

Last modified (94)

Team (80)

TRN (1)

LIST

Data entry status (91)

☒ (T) Temporary

☐ (C) Completed

Type of publication (10)

JOURNAL ARTICLE

Bibliographic level (11)

☒ AS

☐ Conference(K)

☐ Numerical data(N)

☐ Bibliography(Z)

☐ Map(s)/Atlas(Y)

☐ Summary(E)

☐ Non-Conventional (V)

☐ Standard(C)

☐ Thesis(U)

☐ Drawing(D)

☐ Patent(P)

☐ Review(Q)

☐ Directory(R)

☐ Report(A)

☐ Extension(X)

☐ Thesaurus(T)

☐ News(M)

☐ Handbook/Manual(H)

☐ Encyclopedia(A)

☐ Speech(Y)

☐ Dictionary(O)

☐ Directory(B)

☐ Image(F)

☐ Manuscript(G)

☐ Sound/music(S)

☐ Graphics(G)

☐ Web site(W)

☐ Computer file(L)

Lit. indicator (12)

Medium (form) (72)

AGRIS record (19) ☒

Figure 5. The screen for data entry of Journal article

6.1.2 Search subsystem

If you followed all the steps according to the recommendations above the search system should work properly. The URL above should give you the screen as on Figure 6. At this point you should test all the basic functions of the system, in particular:

- Simple search;
- Advanced search;
- Browse
- Thesaurus based search;
- History.
- ISIS QL for CDS/ISIS command mode

To understand the functions of searching in the WEBAGRIS system, click on the "HELP" option and select the topic of interest. The Help function is not upgraded to the changes done in version 2.

Different search possibilities are provided as follows;

- 1) simple search
- 2) Advanced search, where there is a possibility to create complex queries.
- 3) Thesaurus based search facility that enable searching using the key words selected from the AGROVOC thesaurus

Read more on this topic at, "Thesaurus based search" section under HELP option. Note the different browse options, the "KWOC" and the Alphabetic that provided different ways to browse the thesaurus. Select the required term (or terms) and perform the searching.

Enhanced searching features in WEBAGRIS 2

- 1) Free text query.

In the previous version the user could type only keywords separated by semicolon. Now in advanced and simple search text box the user can type a free text query. All the stop words (see

list of stopwords in filter.js) will be automatically eliminated. The list of stop words includes those from English, French, Spanish and some other languages Italian, German are integrated in *filter.js* program.

There is no need to type within the field a boolean operator or a semicolon between the words. The system automatically inserts the semicolon and replaces it with the logical operator within the field, selected on the right scroll (AND or OR(selected by default)). In case of phrase search (in AGROVOC descriptors and personal authors fields) the user has to identify the end of a phrase by typing a semicolon (;). For example: water irrigation;rice

Example 1

If the following is typed:

FAO and OIE conference on avian influenza and wild birds

The system will create a query as follows:

FAO;OIE;conference;avian;influenza;wild;birds

Which will be transferred in an internal query (in case of AND operator in the field) to:

*TI=FAO*TI=OIE*TI=conference*TI=avian*TI=influenza*TI=wild*TI=birds*

Phrase indexed fields like AGROVOC descriptors and Personal authors are excluded from this feature so the user has to identify and separate phrases with semicolon.

- 2) Grouping of the search fields enables the creations of groups for all filters such as type of document, only available in full text, which can then be combined with the rest of a query.

Example 2

The system creates paranthesis for the groups as follows

(SO=available)(TP=A)*(TI=avian*TI=flu)*

- 3) Search interface now offering dynamic choice of fields for searching. With the scrolling fields the user can setup a search mask repeating the same fields many times and execute more complex queries as follows:

(India or Pakistan) and (rice or wheat)

Figure 6. Screen of the Advance search subsystem

4) History search function

The history search is used only when a users refer to the previous executed queries in order to further refine them. At least one reference to a previous query is necessary to formulate a query in this mode.

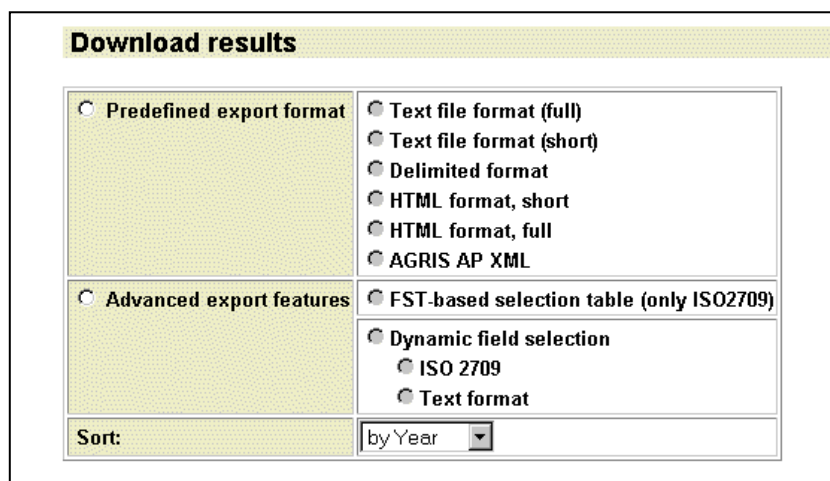
5) The ISIS QL (Query language is used to formulate more complex queries)

6) The result page from a query includes the number of hits and name of databases (in case of multi-database search) for which the query has been executed.

6.1.3 Export and print features

The export and prints features were totally redone. These include export/download and print features for all or selected records.

The export feature is enriched with many new formats and FST controlled export as indicated below.



The screenshot shows a web interface titled "Download results" with a yellow header. Below the header is a form with two main sections: "Predefined export format" and "Advanced export features". The "Predefined export format" section has a radio button and lists six options: "Text file format (full)", "Text file format (short)", "Delimited format", "HTML format, short", "HTML format, full", and "AGRIS AP XML". The "Advanced export features" section has a radio button and lists two options: "FST-based selection table (only ISO2709)" and "Dynamic field selection". Under "Dynamic field selection", there are two sub-options: "ISO 2709" and "Text format". At the bottom of the form, there is a "Sort:" label followed by a dropdown menu currently showing "by Year".

Download results	
<input type="radio"/> Predefined export format	<input type="radio"/> Text file format (full) <input type="radio"/> Text file format (short) <input type="radio"/> Delimited format <input type="radio"/> HTML format, short <input type="radio"/> HTML format, full <input type="radio"/> AGRIS AP XML
<input type="radio"/> Advanced export features	<input type="radio"/> FST-based selection table (only ISO2709) <input type="radio"/> Dynamic field selection <input type="radio"/> ISO 2709 <input type="radio"/> Text format
Sort:	by Year ▼

Figure 7. Export/download Page

The dynamic selection of the fields according to FDT (for ISO 2709 and text format) enables the user to create his own selection of the output

Export results - select fields

Select all

Deselect all

EXPORT

TRN	<input checked="" type="checkbox"/>
Primary subj. cat.	<input type="checkbox"/>
Second. subj. cat.	<input type="checkbox"/>
Type of document	<input type="checkbox"/>
Bibliogr. levels	<input type="checkbox"/>
Literary indicator	<input type="checkbox"/>
Team	<input type="checkbox"/>
Data entry status	<input type="checkbox"/>
Date entered	<input type="checkbox"/>
Last modified	<input type="checkbox"/>
Personal author(s) (^n^a^m)	<input checked="" type="checkbox"/>
Corporate name(s)	<input checked="" type="checkbox"/>
English main title	<input checked="" type="checkbox"/>
French main title	<input checked="" type="checkbox"/>
Spanish main title	<input checked="" type="checkbox"/>
Other lang. main title	<input type="checkbox"/>
Conference name	<input checked="" type="checkbox"/>
Conference place	<input type="checkbox"/>
Conference date	<input type="checkbox"/>

Figure 8. Export screen to select desired fields

7 System adjustment

A number of adjustments can be done in order to customize the system to specific needs of the users. Some basic possible adjustments that could be useful for proper use of the system are discussed below. If one would like to add more features to the system, it is recommended that the technical documentation for using WWW-ISIS be carefully studied.

7.1 Authorization rights adjustment

As mentioned earlier, the folder WWWISIS contains a link to the authorization file. The file defines two user groups, namely *admuser* and *admval*. The first group of users is authorized to enter/modify bibliographic records. The second group is authorized the authority records, such as Corporate names, Serial Titles, Conference Names.

The original file defines two users:

- dba with the userid and password dba. This user is authorized to enter, modify and delete all types of records.
- user with the userid and password user; this user is authorized to enter and modify the bibliographic records only

It is recommended to change the password of the defined users.

In addition, depending on the needs one can define other users, assigning them User Id and passwords. If for organizational matters it is desirable that some of the users are restricted in entering the authority records, one can define the user privileges based on the user specification. If all of the users should have all privileges we use the specification dba for creating new users, just by copying the text

```
<isis_user>
name = dba; password = dba; groups = admusr;
</isis_user>
```

and changing the name and password.

For example:

```
<isis_user>
name = user1; password = user1; groups = admusr;
</isis_user>
```

7.2 Moving the databases to another location

If for any reasons one would like to move the ISIS databases to another location, it is necessary to adjust the file *dbn.def* in the AGRIS directory:

AGRIS;	c:\xitami\webpages\DB\Agris\
AUTH;	c:\xitami\webpages\DB\Auth\
VALID;	c:\xitami\webpages\DB\Valid\
THES;	c:\xitami\webpages\DB\Thes\

Additionally, one should adjust the *dbn.par* files in the ISIS directory, so that it would be possible to access the databases in the new locations from the DOS ISIS application.

7.3 Multi-database Search

WEBAGRIS may be used as search interface to access many databases with the common structure. To enable this feature do as follows:

Prepare databases with AGRIS structure by checking :

- if database has the same structure (refer to *AGRIS.FDT*)
- if all required formats are present (if not sure, copy *.pft files from *db\agris*)

As a result, checkboxes for multiple databases will appear at the top of the search interface in the browser. Make sure to have one of them checked before performing search or browse functions.

In WEBAGRIS version 2.0, *multidb.def* file is not used any more. All the references to the databases are in *dbn.def* file and in the *database.def* file. **See chapter 4.1 of the Technical manual.**

In the new version the file (*database.def.lang*) consists of an unlimited number of tables, each defining one search screen. Each particular table consists of definitions of table parameters, *isis_search_database specifications*, *sorting_formats*, *display_formats*, *simple_fields*, *and-or_groups*, and *compound_fields*. Schematically the database definition table has the following form:

```
<isis_table>
  {table parameters}
  <isis_search_database> {database1 parameters} </isis_search_database>
  <isis_search_database> {database2 parameters} </isis_search_database>
  . . .
```

Data base parameters

In this section one should specify all the databases that can/should be taken into account while performing search specified on the search screen defined by the given table. The specification has the following structure:

```
<isis_search_database>
  isis_name = dbname;
  caption = database_title_to_be_shown_on_screen;
  selection = {0|1};
  default = {0|1};
</isis_search_database>
```

where

- the value of *isis_name* should be as defined in the file *dbn.def*, so that the system can find the path of the ISIS database (all the formats and FSTs should be stored in the same directory);

- the value of *caption* is the text displayed on the search screen at the check box;
- the value of *selection* should be set to 1 if we want to show the checkbox on the screen and give the user possibility to select/unselect the database for searching; it should be set to 0, if we don't provide the user any possibility to select the database (can be used if we want to make multidatabase search transparent to the user);
- the value of *default* defines if the selection box should be checked (1) or not (0). Obviously, if the *selection* parameter is set to 0 (no checkbox is provided), the value of *default* should be set to 1 (the database will be used for searching).

Note: the specification of the selection boxes will be provided on the search screen only if the value of the parameter *database_selection* is set to internal. Otherwise the selection should be made on a separate predefined screen.

The screen can be also generated by the link:

/cgi-bin/isis3w.exe?search_type=db_select_show&lang=xxx&table=yyyy

8 Database management

In order to avoid any problems with loosing the ISIS database, it is recommended that the ownership of all ISIS files be set up in such a way that only authorized staff can access the corresponding directories. For running WWW-ISIS the ISIS databases should be in *read-write* mode. Additionally it is recommended that backup of the corresponding directories is taken at least once a day, so that in the case that the hard disk is corrupted one can loose only one day work at last.

From the point of view of the system efficiency, it is recommended that ISIS procedures for Master file reorganization and full inverted file generation are run from time to time depending on the dynamics of the changes. One should run those procedures at regularly once per week for medium to heavy workload. For a low workload the procedures can be run once a month. As the new AGRIS system provides only the interface to the end-users, we presume that the original ISIS software performs the all the administrative works (DOS version of ISIS or WinISIS). The AGRIS installation procedure guarantees that the DOS Micro/CDS-ISIS is properly installed. The ISIS installation has access to all necessary ISIS databases.

The DOS ISIS can be started by double clicking on the ISIS icon in the WWWISIS window.

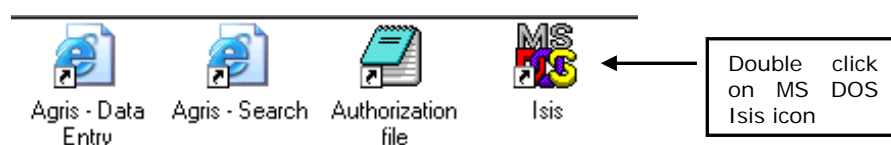


Figure 9 WEBAGRIS 2 menu

The main CDS/ISIS menu will appear at the screen:

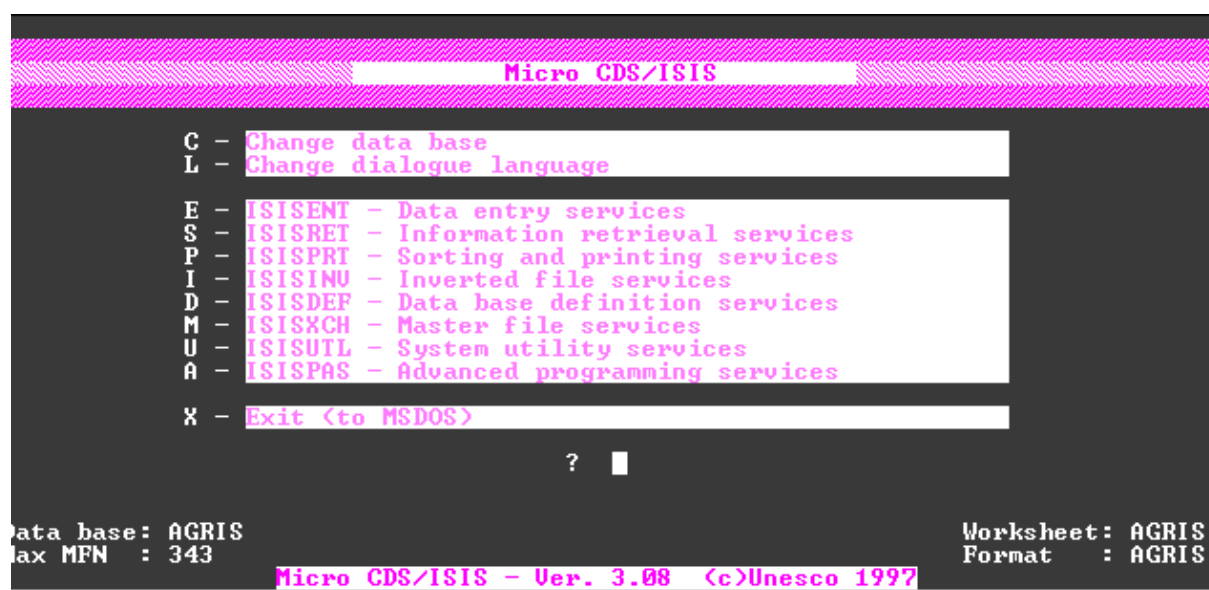


Figure 10 Main CDS/ISIS menu

The standard DOS CDS/ISIS should be used for administration and database maintenance as follows:

- Backup of AGRIS database (Master file backup);
- Restoration of the AGRIS database;
- Re-organization of a database;
- Inverted file generation;
- Clean up of WORK database;
- Export and import features.

8.1 Backup of your AGRIS database (Master file backup)

It is advisable to take a backup of your database from time to time (Computers can break down or files can corrupt).

Once you are in the main menu of DOS CDS/ISIS:

- o Change your database to AGRIS
- o Select Option <M> - Master file services from the main menu and then
- o Select option Master file Backup
- o The question "Backup drive and/or directory ?" will appear on the screen
- o If you press <Enter> the backup of your AGRIS database will automatically be stored as *agris.bkp* in the current directory of ISIS (e.g. *c:\xitami\webpages\isis*). If you want to have your backup in another directory you have to specify it (e.g. *c:\temp*) but keep it in mind if you want to restore from the same directory.
- o Press escape and then <X> to exit

Note: It may happen that after selecting option for backup the system gives you a message "You can't backup while Inverted file is pending". In this case you have to return to the main menu and perform Update of Inverted file:

1. Select <I> Inverted file services from the main ISIS menu
2. Select Option <U> Update Inverted file
3. The phrase "Inverted file completed" will appear on the screen. Press <Enter> and then <X> to return to the main menu to do the backup as explained above.

8.2 Restore of AGRIS database

The procedure to restore a database from previous taken backup is described below:

1. Change your database to AGRIS
2. Select Option <M> - Master file services from the main menu and then
3. Select option <R> Master file Restore
4. The question "Backup drive and/or directory?" will appear on the screen

If you press <Enter> the restore backup of your AGRIS database will automatically be taken from the place where *agris.bkp* was placed by default in the current directory of ISIS (e.g. *c:\xitami\webpages\isis*). If you had your backup in another directory you have to specify it (e.g. *c:\temp*) for restoring from the same directory.

5. Press escape and then <X> to exit

8.3 Reorganization of a database

It includes executing of backup and restore described in sections 8.1 and 8.2 above just in one common step.

1. Change your database to AGRIS
2. Select Option <M> - Master file services from the main menu and then
3. Select option<C>- Reorganization of Master file from the secondary menu
4. The question "Backup drive and/or directory?" will appear on the screen.

If you press "<Enter>" after this question, the backup and restore of the AGRIS database will automatically refer to the same place (by default the current directory of ISIS e.g. *c:\xitami\webpages\isis*).

Note: It may happen that after selecting option <C> for reorganization of a database the system gives you a message "You can't backup while Inverted file is pending". In this case you have to return to the main menu and perform Update of Inverted file (see 8.4).

8.4 Inverted file generation

Updating or full recreation of the Inverted file is necessary if some inverted file update is pending and database is locked for this reason

1. Select Option <I> Inverted file services from the main ISIS menu
 2. The inverted file services menu appears
 3. Type Option <U> Update Inverted file or Option <F> for full Inverted file recreation
 4. The phrase "Inverted file exists and will be cleared, OK(Y/N)?" will be presented on the screen. Reply by typing Y
 5. The question "MFN limits?" will appear. Press<Enter> to include the whole database (all MFNs)
 6. The phrase "Full Inverted file generation completed" will appear on the screen.
- Press <Enter> and then <X> to return to the main menu.

8.5 Cleaning of WORK database

WWW-ISIS uses an ISIS database, named WORK, for storing session details. To this end, it is recommended that the **WORK** database be cleaned from time to time. The best way to clean it is to copy an empty WORK database. The following procedure is recommended:

1. before starting a regular exploitation copy the directory with the work database e.g. *...webpages\db\work* to another directory (with the installation package you will receive an empty work data base in *db\emptywork*);
2. once a week copy the contents of this directory to *...webpages\db\work*; to ensure that at the time of copying nobody works with WEBAGRIS program is better to run as a batch task that copies the files in the night time.

Another way of cleaning WORK database is to use Initialize WORK database from DOS/ISIS. However this has to be done by experienced user as there is a danger to clean AGRIS database instead WORK database.

8.6 *Export and import procedures*

Export procedure is covered by new export features of the Web Interface but can still be done by DOS/ISIS using:

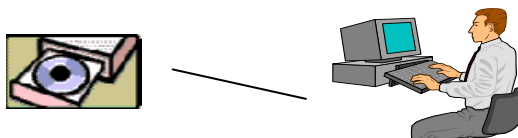
1. From the main menu Option <M>-Master file services and then
2. Export(E)/Import(I) options.

9 ANNEXES

Annex 1: Installation of WEB SERVER. How to install Xitami

Follow the illustrated step-by-step instructions below:

1. Insert the WEBAGRIS, CD-ROM into your CD-ROM drive (**note**, the CD-ROM does not start automatically).



2. There are 2 ways to start the CD-ROM:

- 1) Open Windows Explorer and click on the drive containing the CD-ROM (usually the D:\ or E:\ drive), or
- 2) go to the Windows "Start Menu", **click** on "RUN", **type** the letter of your CD-ROM drive (e.g. D:\), and press **"enter"**.

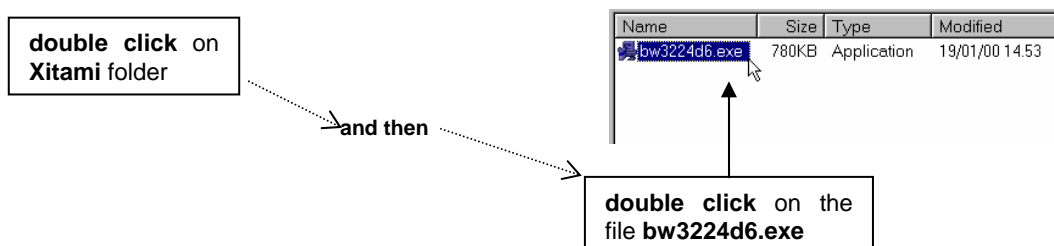
In either case, a list of the folders/files contained in the CD-ROM should appear on your computer screen.

Help note: In the examples below, the folders/files are displayed in a "List with details", but your computer may display the same folders/files differently, (i.e. as icons or small pictures) depending on how your computer is set for "Viewing files", which does not affect the installation.

Address	D:\	Name	Size	Type	Modified
Folders		Installation Documentation		File Folder	20/02/02 16:51
		Netscape		File Folder	06/12/01 15:40
		Programmi		File Folder	06/12/01 15:40
		psfonts		File Folder	06/12/01 15:41
		QuickTime		EX_ File	02/10/98 19:15
		Rcsnm		Application	27/10/98 13:06
		Recycled		Application...	29/09/98 17:34
		Sierra		WinZip File	06/02/02 08:00
		Super		HDR File	06/02/02 08:00
		temp		WinZip File	06/02/02 08:00
		unzipped		HDR File	06/02/02 08:00
		Westwood		TAG File	06/02/02 08:00
		Windows		WinZip File	06/02/02 08:01
		011207_1458 (D:)		HDR File	06/02/02 08:01
		Installation Documentation		HDR File	06/02/02 08:01
		Netscape	292KB	DAT File	18/09/98 15:12
		Spell-checkers	27KB	BIN File	06/02/02 08:01
		Xitami	34KB	Application	02/10/98 19:04
		inst32i.ex	172KB	Internet C...	19/12/01 15:01
		_ISDel.exe	5KB	LID File	06/02/02 08:00
		_Setup.dll	33KB		
		_sys1.cab	6KB		
		_sys1.hdr	1KB		
		_user1.cab	33KB		
		_user1.hdr	6KB		
		Data.tag	1KB		
		data1.cab	6,346KB		
		data1.hdr	77KB		
		lang.dat	5KB		
		layout.bin	1KB		
		os.dat	1KB		
		Setup.bmp	77KB		
		Setup.exe	70KB		
		Setup.ini	1KB		
		setup.ins	67KB		
		setup.lid	1KB		

list of folders/files
on CD-ROM

3. To **START** the installation of the Xitami software:



4. The **first screen** is the **"Welcome!"**

Help note: you may ignore the list of operating systems, which appears on the left side of the screen, under the word Xitami (it's not complete). For example, Xitami will also work with Windows 98, 2000, Millenium, and XP..

click "Next"



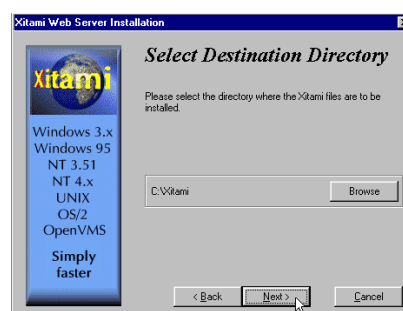
5. The **2nd screen** continues with the **Welcome/Introduction** to the software



6. The **3rd screen** is **"Select Destination Directory"**

Help note: This step allows you to choose on which drive you want the folder "Xitami" to be created. By pressing "Next" the installation will, by default, create the Xitami folder on the C:\ drive. Do not change this destination, unless there is a problem of too little space on the C:\ drive. To change the destination drive, click on Browse and then click on the desired drive.

click "Next"



7. The 4th screen is "Select Program Group"

Help note: This step allows you to designate in which Program Manager Group the Xitami icon will appear.

click "Next"



8. The 5th screen is "Start Xitami automatically?"

Help note: It is recommended that the default choice is left "checked", (i.e. "Yes, Start Xitami automatically"). If "No" is checked, remember that each time the computer is turned on, the Xitami program must be started manually by going to the "Start" menu, "Programs", "Internet Tools", "Xitami Web Server –Windows".

click "Next"



9. The 6th screen is "Choose Admin Password"

Help note: A suggestion is to use the word "AGRIS" as both the "User ID" and "Password" (however, another word may be chosen).

Note this password is used only to enter the administrative pages of the Xitami software. It is not the "User ID" (dba) and "Password" (dba) that is requested when you Login to the WEBAGRIS software, discussed in the installation of the WEBAGRIS software, chapters 6.2 and 7.1.

type the word **AGRIS** in the box "User name"

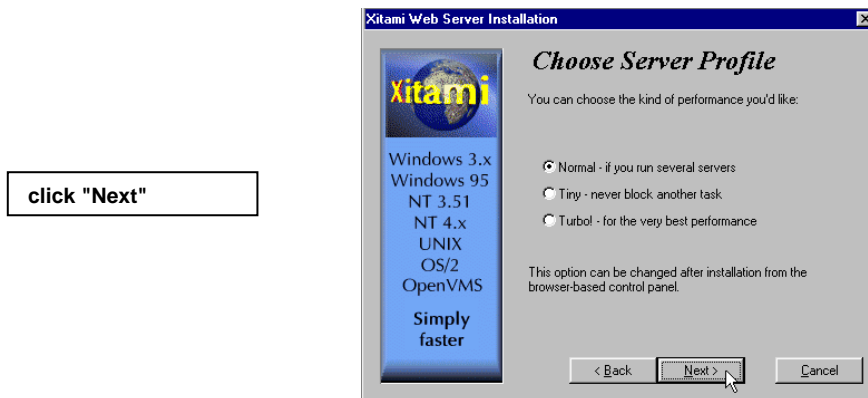
type the word **AGRIS** in the box "Password"

click "Next"



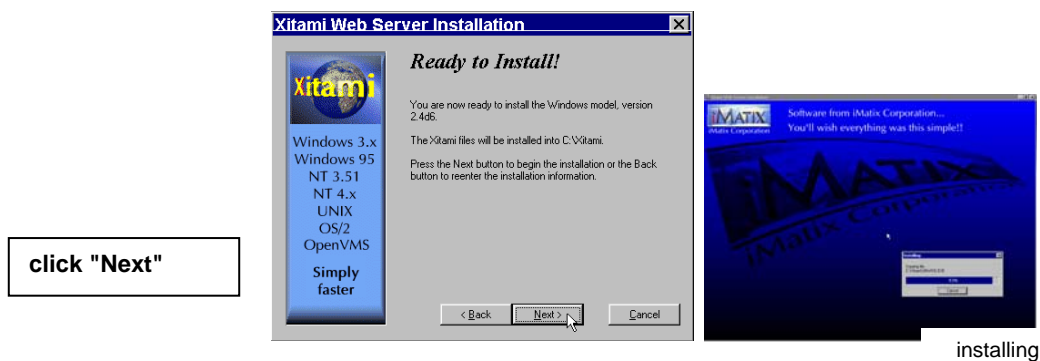
10. The 7th screen is "Choose Server Profile"

Help note: It is recommended that the "checked" default choice be selected (i.e. "Normal")



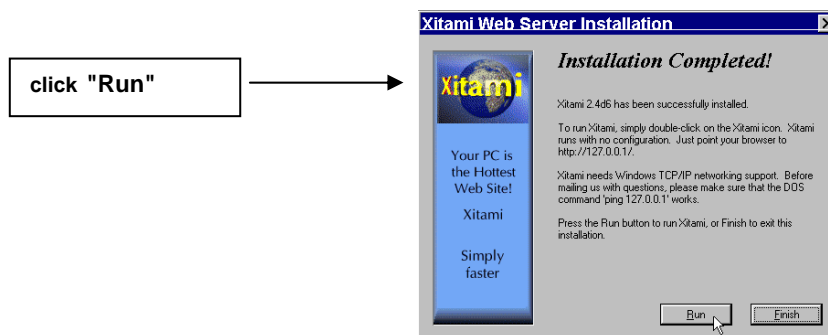
11. The 8th screen is "Ready to Install!"

Help note: click "Next" to start the actual installation of the software



12. The 9th screen is "Installation Completed!"

Help note: Select "RUN". A small green "X" will appear in your Task Bar indicating that the Xitami program is running. If you selected "Finish" the small green X will not appear, and Xitami will not run until you open it by selecting "Xitami Web Server-Windows " in the Window that appears on the screen.

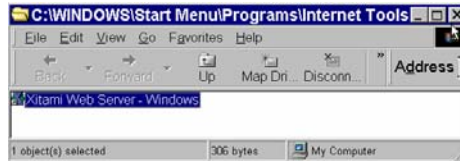


GO TO ITEM-13, IF YOU SELECTED "RUN" (If you selected "Finish", skip item-13, and Go to item-14)

13. The 10th screen

If in the previous 9th screen you selected **"RUN"**, a **small green "X" (icon)** will appear in the Task Bar. In this case Xitami is running.

Close the Window *C:\Windows\Start Menu\programs\Internet Tools* that appeared, containing the Xitami program file.

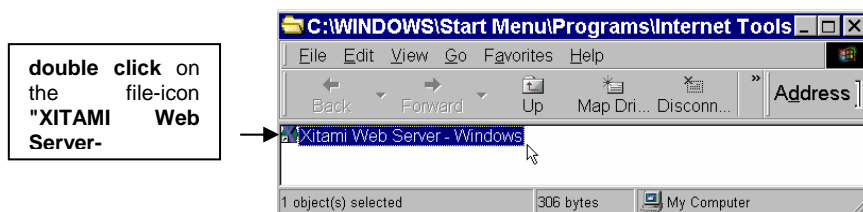


The installation of XITAMI is now completed:

14. The 10th screen (if you selected "Finish" in the previous 9th screen)

If you selected "Finish" in the previous 9th screen, the *small green "x" (icon)* will **not** appear in the Task Bar and this means Xitami is **not** running.

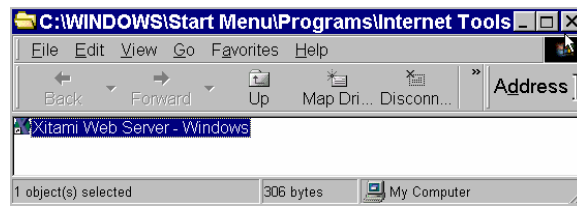
In this case, to start Xitami, go to the Window appearing on the screen and double click on the file-icon **"Xitami Web Server- Windows"**.



The **green "X"** should now appear in the Task Bar indicating that the xitami is running.



Close the Window that appeared containing Xitami program file icon.



The installation of XITAMI is now completed

Help note: In windows XP SP2 it may be necessary to unblock the Xitami program from the Firewall.

If necessary, the Xitami program can be uninstalled using the Windows Add/Remove programs utility.

Trouble shooting

If not differently specified, Xitami Web Server is installed on the drive **C:** in the directory `\xitami`. When the installation procedure is successfully completed you can start your browser and in the "address" window enter the URL: <http://localhost>.

With this URL the Xitami Web Server will provide you with the "welcome" page, where you can find all necessary information about the software, License Agreement, etc.

From the "welcome" page you can move to the administration page by clicking on the link "[WEB-based admin](http://localhost/admin)", or specifying the url: <http://localhost/admin>

The system will ask you for the *user id* and *password*. Fill in the fields according to the values specified during the installation.

The following screen will appear:

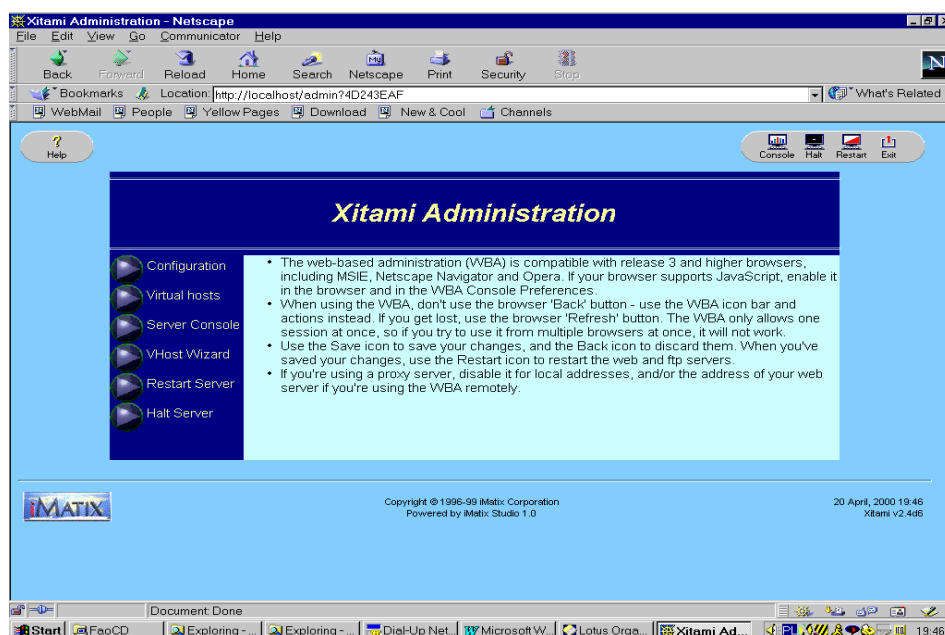


Figure 1 Administrator panel of Xitami Web Server

When you select the first option ("Configuration"), the resulting screen is as indicated in the figure below. Most of the fields shown on the configuration panel are self-explanatory. The first parameter shows where the WEB root is located. From the WEB root one can build directories that contain pages available at the server. In particular, one directory will be created for the WEBAGRIS system of WWW-ISIS, the **AGRIS directory**. In the AGRIS directory should be located all necessary HTMLs of the WEBAGRIS application. The second field defines the **cgi-bin directory** which indicates where the WEBAGRIS cgi program should be located.

Some traps that you may experience

If another Web Server works already on your computer and uses the port 80, Xitami cannot start because by default this server also tries to use the port 80. In this case, edit the file *xitami.cfg* in the main Xitami directory and edit with Notepad the value of the parameter *portbase*. If the port-base value is setup to, for example 40, then the port used by Xitami is 120 (80+*portbase*). Remember that after changing the parameter *portbase* to 40, the URL should be: <http://your-dns:120/>

where *dns* is the DNS address of your server. Let us presume that the server DNS is www.demo.org and the port is setup to 80. So, provided that the TCP/IP connectivity between the computers in your LAN has been already set up, you should be able to see the Xitami welcome page on any computer with the URL: <http://www.demo.org/>

After installing the Web Server, you should perform tests to verify that the server works correctly. Check it by calling the server from the local computer and/or from other computers.

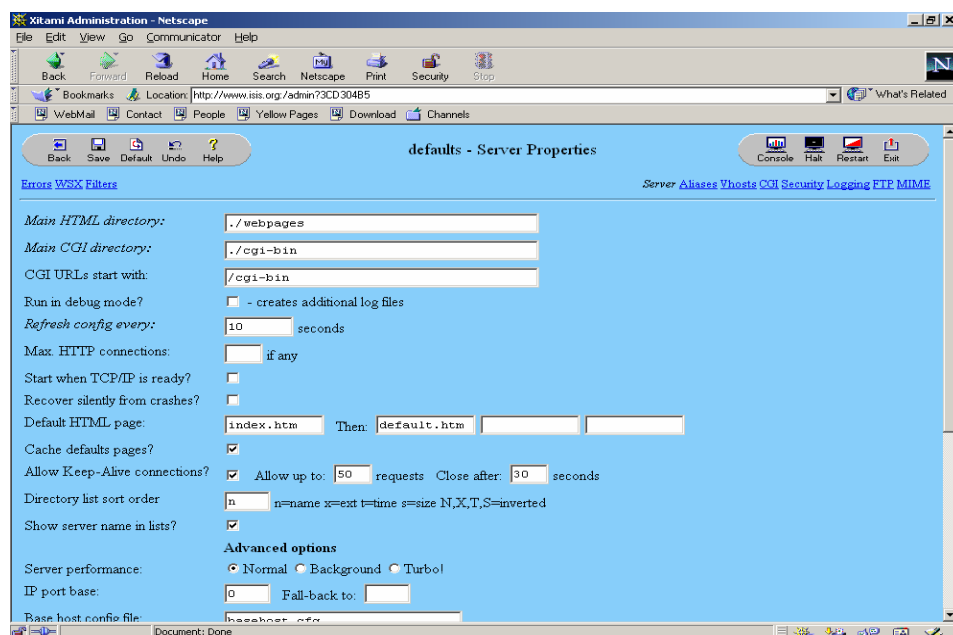


Figure 2 The parameters setup of Xitami server

Annex 2: Installation of WEB SERVER. How to install WEBAGRIS under IIS 5.0 Web Server

The installation procedure of WEBAGRIS for IIS should be performed in a similar way as for Xitami. The following step may help you to better setup the IIS for WEBAGRIS.

Installation of IIS if not installed on you PC:

- If a Web Server is not already installed in your computer, install the IIS 5.0 Web Server. It is a Windows component; therefore you should have the Windows installation software at hand. Go to the *Control Panel, Add/Remove Programs, then Add/Remove Windows Components*. In the Windows Component Wizard, check the *Internet Information Server (IIS)* box to install the Web Server software in your computer.
- Click next to copy the necessary files. If you are prompted to provide the Windows CD, browse to point to the required software.
- To test if the installation of the IIS 5.0 Web Server was successful, open Internet Explorer and, in the Address box, type <http://localhost>. You should access the main IIS 5.0 Welcome screen and the full documentation.

IIS configuration for WEBAGRIS application

1. Ensure a folder that will store the cgi program and configuration files (cgi-bin for Xitami Web Server).

One can find an existing directory that plays a role of the cgi-bin directory. Very often such directory already exists in IIS and is called *scripts*. In such a case if there is no contradiction with other systems one can just rename *scripts* to *cgi-bin*, and provide this location for cgi program, while installing WEBAGRIS (see figure below).

If such a folder doesn't exist, create a new folder under *C:\inetpub* and name it *cgi-bin*

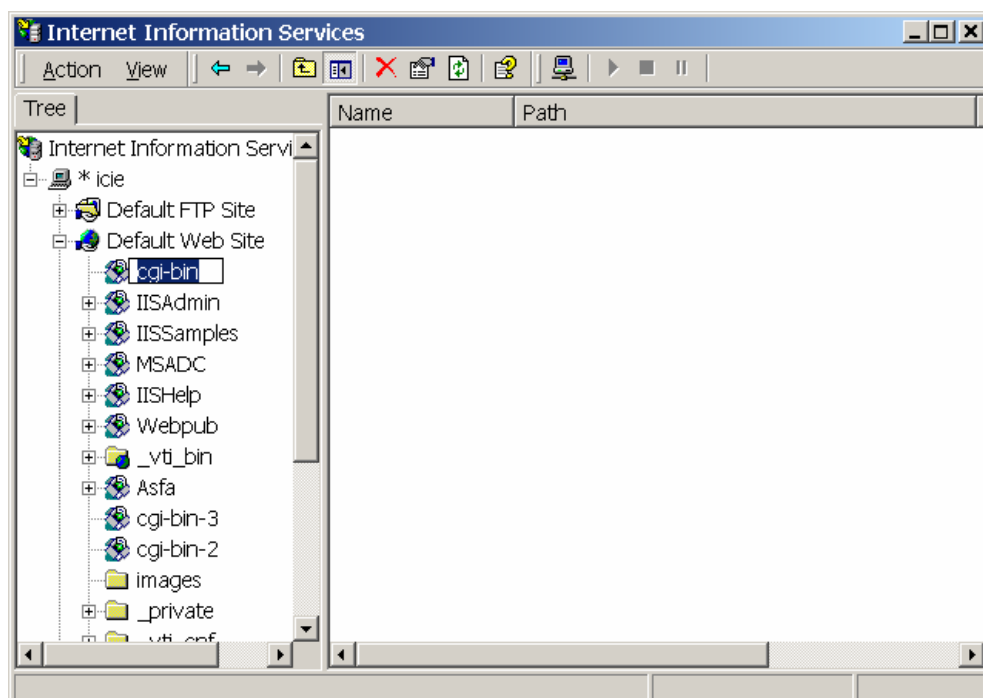


Fig. 1: Creation of a new cgi-bin folder

Note: To rename **scripts** directory one should click on the directory and when it is possible to write, just change the name to cgi-bin.

If however, the name **scripts** has to be reserved for other applications and for any reasons we don't want to store there executables for WEBAGRIS we should perform the following steps.

1. Using Windows Explorer, create a new directory (e.g. cgi-bin) under the IIS system folder c:\inetpub.
2. Then open the directory properties (see figure 2) and select the "Web sharing" tab (see figure 3).
3. Select "Share this folder" and enter the alias name cgi-bin. Check the box "execute" (see figure 4) and confirm by OK.

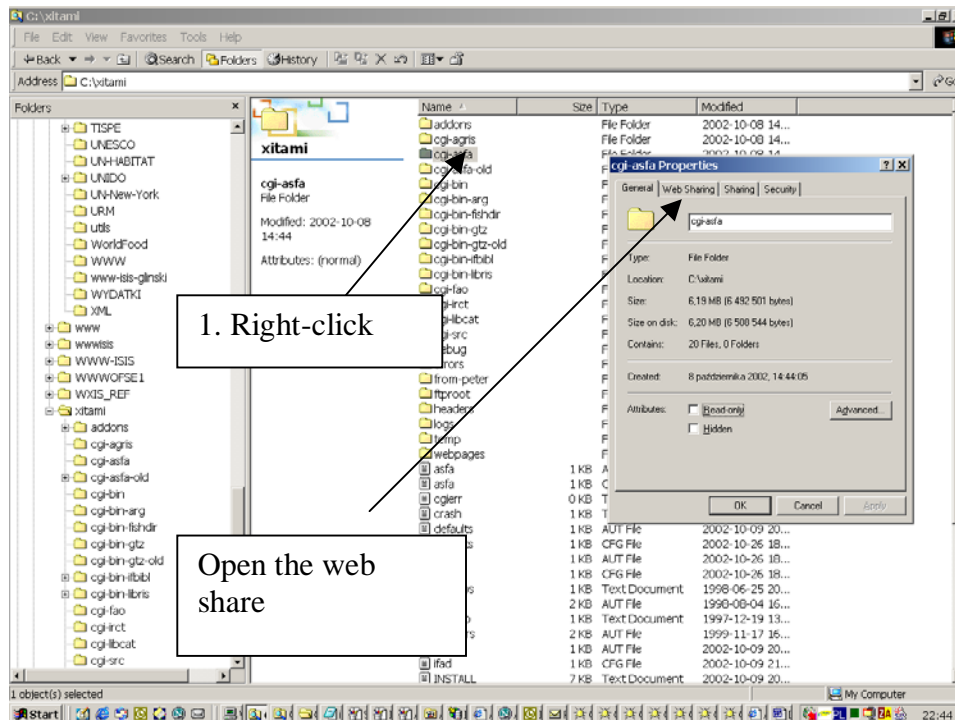


Fig 2 Open the directory properties (right click)

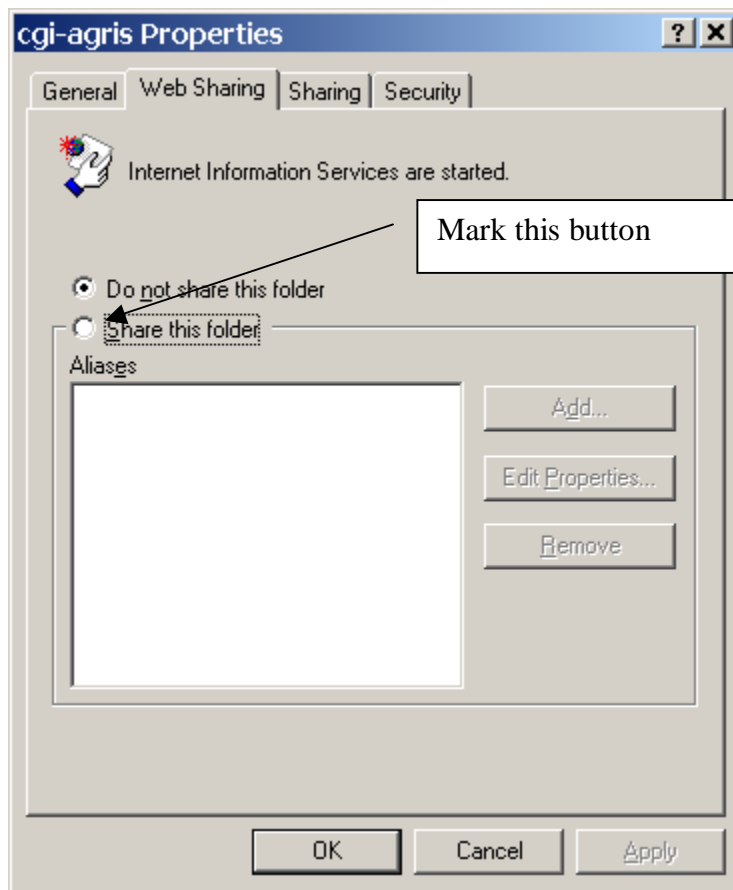


Fig. 3 Check “Share this folder”

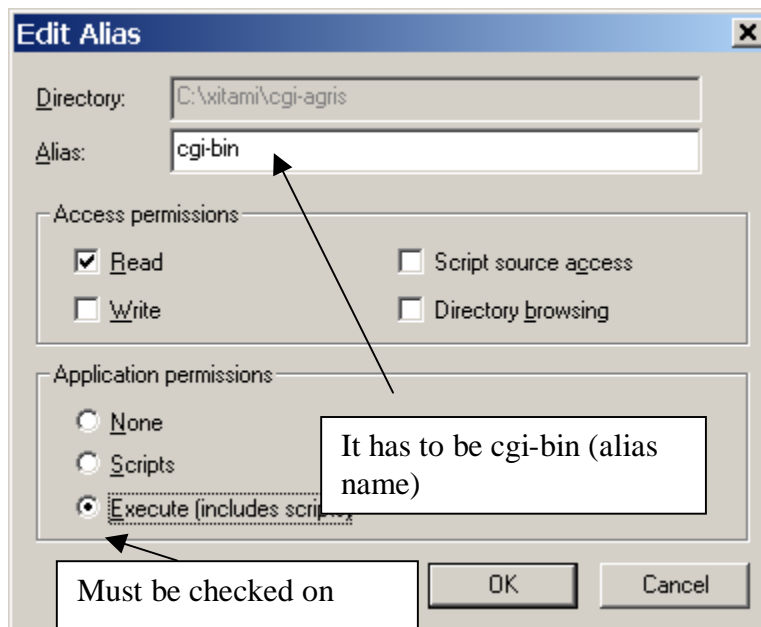


Fig. 4 Add the alias name and mark as Execute

Revise the settings of the IIS Web Server. Right click the *My Computer* icon on the desktop and select *Manage*. Expand the *Internet Information Services* item and under the *Default Web Site* properties change the following (you can keep the other default settings):

At the *Home Directory* tab check the boxes *Script Source Access*, *Read*, *Write* and *Directory Browsing*.

At the *Documents* tab, add *index.html* to the list of the default documents.

Create a 'Virtual Directory' in the Default Web Site of IIS 5.x ⁴. The alias name of this virtual directory should be *cgi-bin* and it should point to the physical directory created for cgi-bin.

In case of Windows 2003, the virtual directory of WEBAGRIS and the web sharing of cgi-bin have to be defined for the proper site.

Another important information is to allow anonymous access to WEBAGRIS and cgi-bin. Please make sure that anonymous access is allowed for *isis3w.exe* file.

At this point the IIS should work properly.

⁴ Note that in the typical IIS 5.x installation the files of the Default Web Site are stored under *C:\inetpub*

Annex 3: INSTALLATION of WEBAGRIS

Follow the Illustrated step-by-step instructions below:

1. Insert WEBAGRIS CD-ROM into your CD-ROM drive (note that the CD-ROM does not start automatically).



2. There are 2 ways to start the CD-ROM:

- 1) Open Windows Explorer and click on the drive containing the CD-ROM (usually the D:\ or E:\ drive), or
- 2) go to the Windows "Start Menu", click on "RUN", type the letter of your CD-ROM drive (e.g. D:\), and press "enter".

In either case, a list of the folders/files contained in the CD-ROM should appear on the screen.

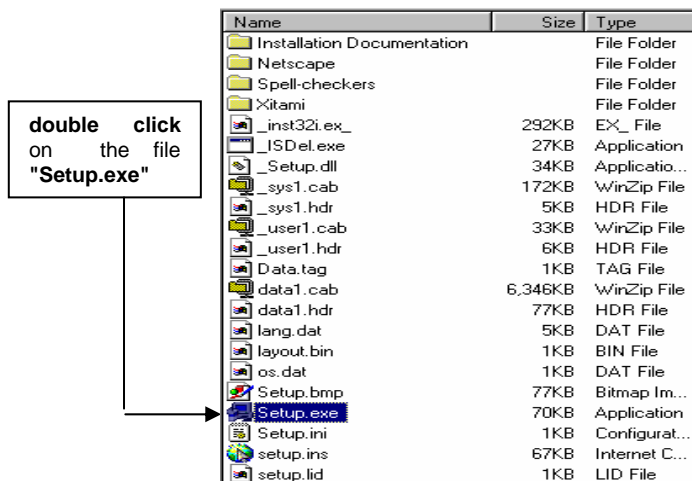
Note: In the examples below, the folders/files are displayed in a "List with details", but your computer may display the same folders/files differently (i.e. as icons or small pictures) depending on how your computer is set for "Viewing files". The way the computer is set "to view" files does not affect the installation.

The screenshot shows a Windows Explorer window with the address bar set to D:\. The left pane shows the folder structure, and the right pane shows a detailed list of files and folders. A text box on the right side of the image points to the list of files and folders.

Name	Size	Type	Modified
Installation Documentation		File Folder	20/02/02 16:51
Netscape		File Folder	06/12/01 15:40
Spell-checkers		File Folder	06/12/01 15:40
Xitami		File Folder	06/12/01 15:41
inst32i.ex	292KB	EX_ File	02/10/98 19:15
_ISDel.exe	27KB	Application	27/10/98 13:06
_Setup.dll	34KB	Application...	29/09/98 17:34
_sys1.cab	172KB	WinZip File	06/02/02 08:00
_sys1.hdr	5KB	HDR File	06/02/02 08:00
_user1.cab	33KB	WinZip File	06/02/02 08:00
_user1.hdr	6KB	HDR File	06/02/02 08:00
Data.tag	1KB	TAG File	06/02/02 08:00
data1.cab	6,346KB	WinZip File	06/02/02 08:01
data1.hdr	77KB	HDR File	06/02/02 08:01
lang.dat	5KB	DAT File	18/09/98 15:12
layout.bin	1KB	BIN File	06/02/02 08:01
os.dat	1KB	DAT File	27/07/98 18:41
Setup.bmp	77KB	Bitmap Im...	01/03/99 19:54
Setup.exe	70KB	Application	02/10/98 19:04
Setup.ini	1KB	Configurat...	06/02/02 08:00
setup.ins	67KB	Internet C...	19/12/01 15:01
setup.lid	1KB	LID File	06/02/02 08:00

list of folders/files
on CD-ROM

3. To start the Installation of the WEBAGRIS software component double click on the file "setup.exe".

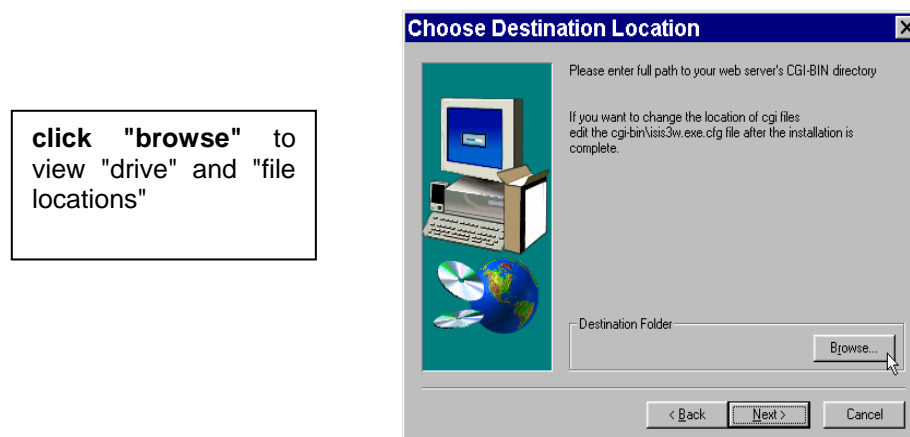


4. The **first Screen** is the **"Welcome"** Screen.



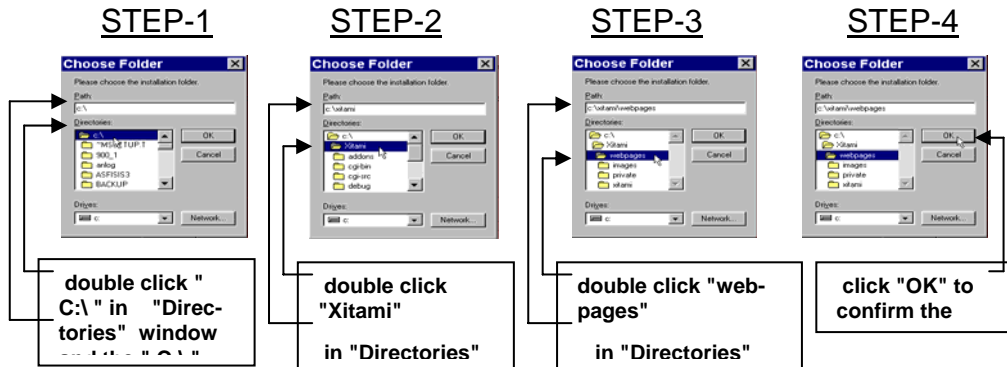
5. The **2nd** screen is **"Choose Destination Location"**

Help note: This is the first screen in the procedure to create the **"Path"** of the Web Server document directory (**C:\xitami\webpages**). In the screen that follows this one, you will be guided through the **4-steps** required to create the above mentioned path (note that in the examples below, we use **C:** as the destination drive, but if there are problems with hard disk space on the **C:** drive, use another destination drive for the Path)



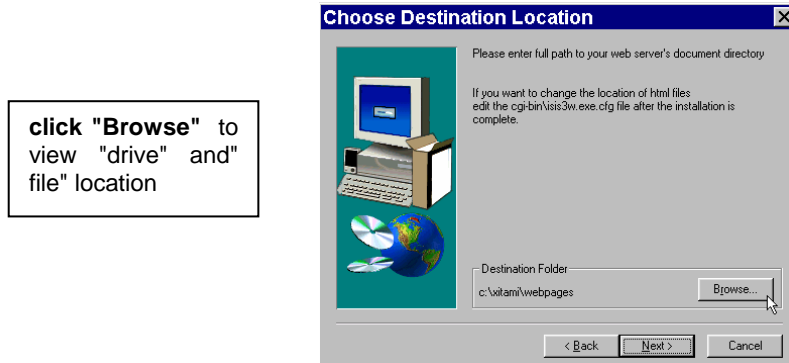
6. The 3rd screen is "Choose Folder" (the same screen remains for all 4 steps)

Help note: The objective of this phase shown in this screen is to create the Path **C:\xitami\webpages** in the Path bar in 4 steps



7. The 4th screen is "Choose Destination Location"

Help note: This is the final screen or step in creating the Path **C:\Xitami\webpages**



8. The 5th screen is "Choose Destination Location"

Help note: This is the first screen in the sequence for creating the **Path** of the Web Server **cgi-bin** directory (**C:\xitami\cgi-bin**). The next screen will guide a user through the **3-steps** required to create the above mentioned Path (note, in the examples below, we use **C:** as the destination drive, but if there are problems with space on the **C:** drive, use another destination drive for the Path)

click "browse" to view "drive" and "file locations"



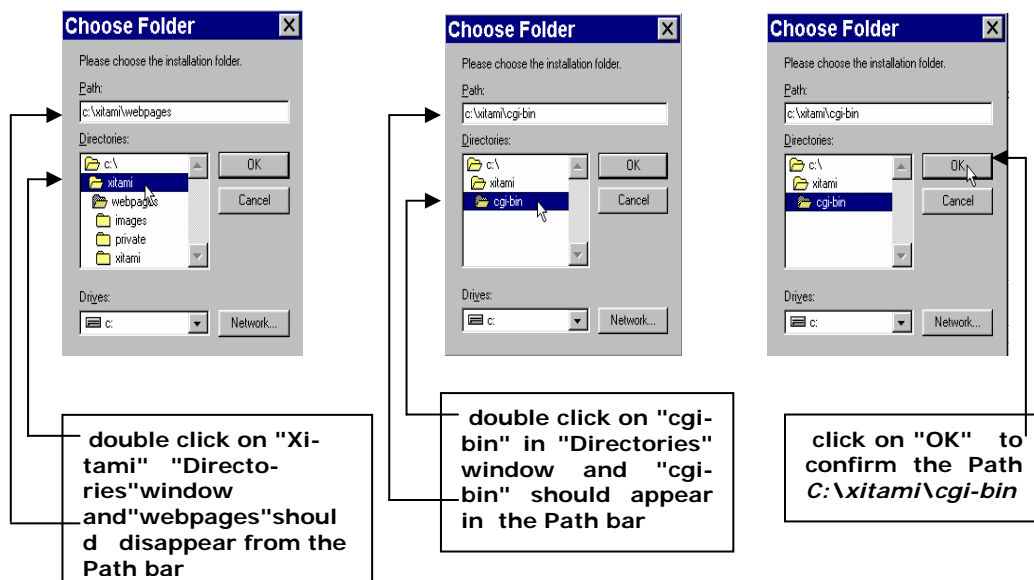
9. The 6th screen is "Choose folder" (the screen remains for all 3 steps)

Help note: The objective of the stage shown on this screen is to create the "Path" to the cgi-bin file (**C:\Xitami\cgi-bin**) in the Path bar. Note, if you use another Web Server (i.e. instead of Xitami) insert its path to the cgi-bin file

STEP-1

STEP-2

STEP-3



10. The 7th Screen is "Choose Destination Location"

Help note: This is the final screen or step in creating the Path **C:\Xitami\cgi-bin**

click "Next"



11. The 8th Screen is "Select Program Folder"

Help note: This phase shown on the screen creates and adds the program icon (WEBAGRIS) to the Program folder

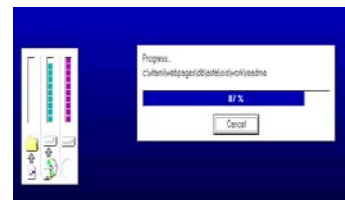
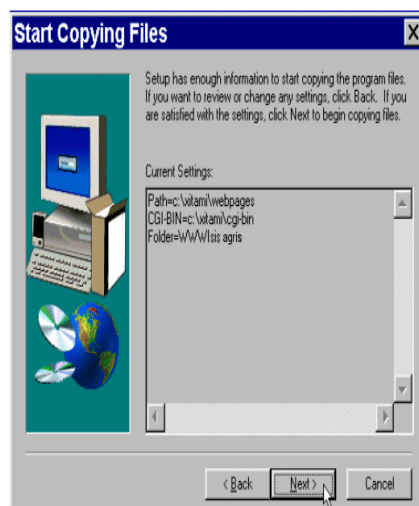
click "Next"



12. The 9th Screen is "Start Copying Files"

Help note: This is the last chance before the installation actually starts to go back and change any settings.

click "Next"



install-

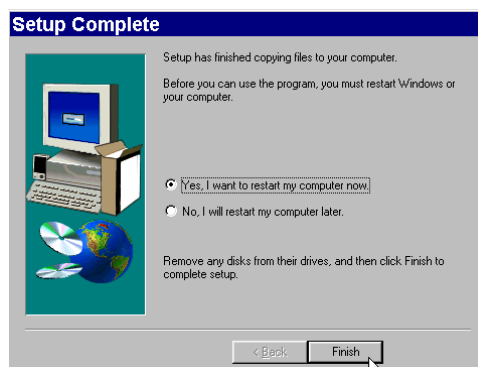
click "Next"



13. The 10th Screen is "Setup Complete"

Help note: The computer must be re-booted. Select "Yes, I want to restart my computer now".

click on "Finish"



The Installation of the WEBAGRIS software component is now completed

- go to Section-3 TO START the system
- go to Section-6.3 and Annex 7 for trouble shooting
- go to Section-5.4 for description/discussion of files comprising the system

Help note: if necessary, this software can be uninstalled using the Windows "Add/Remove programs" option in the Control Panel.

Annex 4: Transfer AGRIN and AUTH Databases to WEBAGRIS

Once the Installation is completed the new system can be used immediately.

All databases (AGRIS, AUTH etc are empty). If however, there is the existing AGRIN database to be loaded into the WEBAGRIS system, the following facts should be considered:

- (a) The structure of the old database has another standard than the new one;
- (b) Data in the old database were not validated and therefore the system may show inconsistencies, errors when updating old records
- (c) Authority databases are empty and validation of old documents will always give a message that the value doesn't exist in AUTHORITY database.

For the data completeness reasons, it is recommended to transfer the data from the old AGRIN system to the new WEBAGRIS structured system. To do so, one has to perform the following procedure:

- copy the old AGRIN database to the directory `\webpages\db\agrin` in the new AGRIS environment ;
- open the folder WWWISIS from the server desktop;
- click on the icon ISIS – this will start the DOS ISIS window;
- on the main ISIS menu change the database to AGRIN (option <C>, type AGRIN);
- be sure you can also access database AGRIS (option <C>, type AGRIS)

You may have different situations. You have to identify:

- a. if you are using already existing exported files in ISO2709 format and which input package was used to produce these files: AGRIN2 or AGRIN3 (or others) or
- b. if you are going to export from the existing database and which input package was used to produce these files: AGRIN2 or AGRIN3 (or others).

1. In case AGRIN2 was used and there is for example an exported file MST.ISO with *natexp.fst* go through the following 4 steps:

	1	2	3	4
action >I)	import (M-	export (M->E)	import (M->I)	A run pro- gram
input file	MST.ISO	output AGR.ISO	input file AGR.ISO	program transl
table	v2in.fst	webagr.fst	no table	
database	AGRIN	AGRIN	AGRIS	AGRIS

2. If the data is in AGRIN3 database, then only steps 2-4 are required.

	1	2	3	4
action >I)	import (M-	export (M->E)	import (M->I)	A run pro- gram
input file	MST.ISO	output file AGR.ISO	input file AGR.ISO	program transl
table	v2in.fst	webagr.fst	no table	
database	AGRIN	AGRIN	AGRIS	AGRIS

For work directory (backup directory), use *c:\xitami\temp*, as the shorter name for the DOS application.

3. In case there is an input file exported with *natexp.fst* from AGRIN3 database.

Do only the following steps:

	1	2	3	4
action	import (M->I)	export (M->E)	import (M->I)	run program
input file	MST.ISO	output file AGR.ISO	input file AGR.ISO	program transl
table	natimp.fst	webagr.fst	no table	
database	AGRIN	AGRIN	AGRIS	AGRIS

Always after these 4 steps, the full inverted file for AGRIS database must be run.

- tips to step2: (M->E) use the option M from the main menu and then E to export the old AGRIN database; on the Export worksheet use "~" and "&" as Field separator and Record separator respectively; to the field "reformatting FST" enter WEBAGR
- tips to step 3: (M->I) when the file *AGR.ISO* is successfully generated, return to the main ISIS menu, change the database to AGRIS, and select again the option M, then I to import the ISO file; use "~" and "&" as the Field separator and Record separator respectively (run in DOS command mode *xkya.exe* on *agr.iso* file for converting accented DOS characters to accented WINDOWS characters e.g. *xkya.exe agr.iso agr1.iso lat1.x*)
- when the file *AGR.ISO* is loaded to the new AGRIS database, return to the main ISIS menu, select the option I (Inverted file services), and then F (Full Inverted File Generation);
- tips to step 4: At this stage there are still discrepancies between the old records and the new ones. For example, the Author field in the old record does not distinguish Name and affiliation, whereas in the new system the values are in the subfields ^n and ^a respectively. To this end it is strongly recommended to run a special pascal program named "**transl**" which will upgrade the old database to the new standard. So, on the main menu select the option <A> the R(un); when ISIS prompts for the name of the program, you should enter *transl* and ENTER.
- When the transl program is completed, run again the inverted file and test the search functions of the new AGRIS system.

Note: After performing all the steps above, the old records are visible in the search subsystem. You can also see them in Data entry. Note however, that when attempting to update an old record, you may see the validation messages referring to the corporate names, journal titles, and conference titles, because the Authority database may not be relevant to your needs. Gradually you may fill the gap entering all missing authority records.

- A batch programme **THSCHK** has to be run and corrections to AGROVOC terms in the existing database have to be done by specialists against an error list prepared by the programme.

Running THSCHK:

- run DOS ISIS

- choose advanced programming services option <A>, then option R for run and type in the program name THSCHK
 - enter specification file (it may be with the path) – the file *THSCHK.SPE* is supplied with proper options for AGRIS and THES databases
 - Enter MFN range (by default it is the whole database)
 - After running the program, AGROVOC descriptors in English, French and Spanish are properly translated
 - The file *THSCHK.LOG* includes the terms that do not exist in the AGROVOC thesaurus and must be corrected manually using DOS ISIS or other tools.
- A program THSUPD can be used for global replacement of old terms with new ones (see under *isis\prog* directory in *thsupd.pas* program explanation).

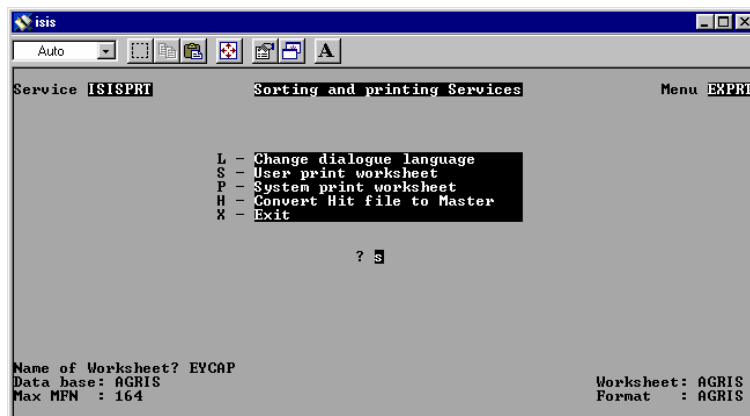
If there are special characters (#percent#, accented etc.) within the data, a Global change programme can be used. This Global change program could be found in the program directory of isis under glob.pcd .

AUTHORITY DATABASE GENERATION

After loading AGRIS database, authority files could be prepared from the final AGRIS database,

Three user print worksheets must be run to prepare textual files for authority database using print worksheets as follows:

1. Run DOS Isis (For example: Start button-> Program Files -> WEBAGRIS -> Isis)
2. Press C and change database to AGRIS
3. Press P to enter print services menu.
4. User print worksheet must be run to prepare textual files for the authority database. Press S for "User print worksheet" option, then specify worksheet name EYCAP.



Press "Enter" to go through all worksheet entries without any changes. If a question "More than 132 characters in line. OK(Y/N)?" appears – press Y.

isis

Auto

Data Base Name **AGRIS** MFN limits **1/999999** Save file name

First Title

Second Title

Third Title

Print format

Line width **300** Number of columns **1** Column width **300**

Lines/page **50** First page number **N** EOC tolerance **3**

Data indentation **0** Sort ? **V** Sort worksheet name **eycas**

Print file name **corp.txt**

More than 132 characters in line. OK (Y/N)?

isis

Auto

Number of Headings **1** Stopword file name

Heading format: **v1**

Length of first sort key **250** Heading processing indicator **1**

FSI for first sort key **1 0 (v110/)(v210/)**

Length of second sort key **0** Heading processing indicator **0**

FSI for second sort key

Length of third sort key **0** Heading processing indicator **0**

FSI for third sort key

Length of fourth sort key **0** Heading processing indicator **0**

FSI for fourth sort key

EDIT: Replace More ...

After the operation, the file *corp.txt* should appear in ISIS\WORK directory.

5. In a similar way, run EYCOP worksheet to produce *conf.txt*, and EYSTP to produce *sert.txt*

After the operation, the files *corp.txt*, *conf.txt* and *sert.txt* should appear in ISIS\WORK directory.

6. From main DOS ISIS menu, select option <C> and change the database to AUTH

7. Import the text files to AUTH database. From main ISIS menu select option A for advanced programming services, then R to run the program IMPTXT. Run it three times for each input file separately as follows:

- for file *WORK\corp.txt* and tag 120,
- for file *WORK\conf.txt* and tag 140,
- and for file *WORK\sert.txt* and tag 421.

isis

Auto

IMPORT FROM A TEXT FILE

Database name: **AUTH**

Enter input filename: **WORK\corp.txt**

Enter tag: **120**

AGRIS Authority File: 120 - Corp.body, 140 - Conf.name, 421 - Serial title

EDIT: Replace

8. Finally full inverted file has to be run for AUTH database. From main ISIS menu select I for inverted file services, then F for full inverted file generation.

Validation and correction of AUTH databases after its automatic creation should be done in order to eliminate errors and duplications.

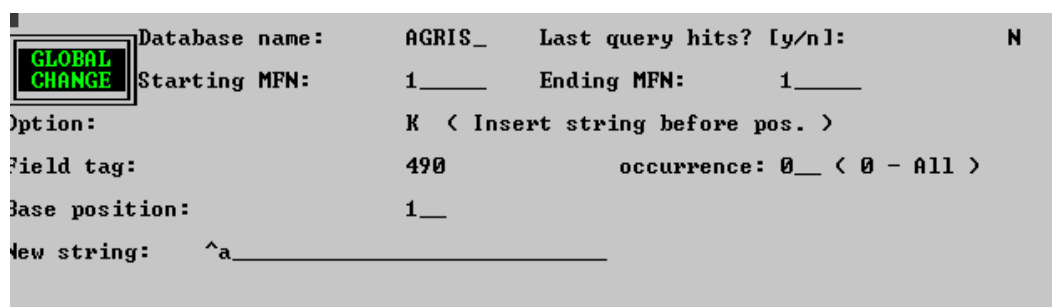
Annex 5: Transfer of a database from version 1 to version 2.0 of WEBAGRIS

If there is already data in the WEBAGRIS database, some adjustment has to be done to it according to the new structure of the fields.

1. There is a new field 19 with value Y, which identifies if the record is for export to AGRIS
2. Fields for availability are divided in more subfields in order to cover all details on availability (location, call number, inventory number etc.). Therefore, there is need to transfer the content of the existing field s availability (183, 283,290, 483 490) to a subfield "^a". That means to add "^a" in front of the value of those fields if present. First we could search for presence of field 283 (e.g. p(v283)) and then apply program glob

Run program glob from DOS/ISIS (option A, R-run program name glob) to the results, select option K to insert string "^a" in front of the fields:

183,283,290,483,490. It should be run for each field separately.



```
Database name:  AGRIS_   Last query hits? [y/n]:  N
Starting MFN:   1       Ending MFN:      1
Option:         K  < Insert string before pos. >
Field tag:      490      occurrence: 0  < 0 - All >
Base position:  1
New string:     ^a
```

Annex 6: Exporting records in AGRIS AP XML format from WEBAGRIS to the central AGRIS database

The following steps outline how the AGRIS AP XML output can be produced by the WEBAGRIS system:

Identify the records to be exported by using the advanced search feature of WEBAGRIS and executing a search.

Some tips for AGRIS centres:

Within the WEBAGRIS application, go to the advanced search feature, keeping track of the last exported record. The AGRIS central database accepts only completed records, since they have passed the full validation of the system. The export can be run monthly selecting by date of input. For example select all completed records (STAT=C) by date of input YYYYMM (example 200605 for May 2006)

International Information System for the
Agricultural sciences and Technology

AGRIS

SEARCH SAVE FORM EDIT QUERY UNDO CLEAR

Exact match of words: ☒

Sort: by Author

Format: Short format

Type of publication: ☒ Whole catalogue ☐ Monograph ☐ Journal article ☐ Multimedia

☒ AND ☐ OR ☐ NOT

Selected for AGRIS: ☒

☒ AND ☐ OR ☐ NOT

Full text available: ☐

☒ AND ☐ OR ☐ NOT

Record status: C any of the words dictionary

☒ AND ☐ OR ☐ NOT

Date entered (yyyymm): 200605 any of the words dictionary

☒ AND ☐ OR ☐ NOT

TRN any of the words dictionary

In the new WEBAGRIS version 2.0 there is a new filter that ensures exporting of the records which are marked as "AGRIC record" during data entry.

After the search is completed in the Search system and the results are visualized, click "Export All" to export all results or "Export Selected" to export selected records. In the "Download results" window, select "Predefined export format", then select "AGRIC AP XML" and press the "Download" button.

Download results

<input type="radio"/> Predefined export format	<input type="radio"/> Text file format (full) <input type="radio"/> Text file format (short) <input type="radio"/> Delimited format <input type="radio"/> HTML format, short <input type="radio"/> HTML format, full <input type="radio"/> AGRIS AP XML
<input type="radio"/> Advanced export features	<input type="radio"/> FST-based selection table (only ISO2709) <input type="radio"/> Dynamic field selection <input type="radio"/> ISO 2709 <input type="radio"/> Text format
Sort:	by Year ▼

Download

Select predefined export format and then click on AGRIS AP XML

Once the "Download" button is clicked, the system will ask you to open or save the file. The default extension given to the file is .xxx. This choice has been done in order to allow the system to prompt the user and not to automatically open the file with the software assigned to the xml extension. This was also done for resolving encoding parameter problem that may occurs.

Save this file with a name for the current batch and rename it extension to '*.xml'

Send the exported XML file to AGRIS-Input@fao.org or, preferably, if there are several records, use the FTP site

It is also possible to validate the resulting XML file against the AGRIS AP XML DTD using a validation tool (for example IE or XMLSpy). The latest DTD can be downloaded from: <http://purl.org/agmes/agrisap/dtd/>

Annex 7: WEBAGRIS frequently asked questions

1. After typing the URL into the browser's "Address" or "Location" bar, the browser gives an error box: *"The URL you asked for does not exist on this website"*
2. After typing the URL into the browser's "Address" or "Location" bar, the browser provides the left frame, but the right frame does not appear.
3. WEBAGRIS software is installed on the server. How can I run the old DOS ISIS from a client machine?
4. During the installation of Xitami Web Server I have received the following error message: *"Could not open http Port 80. Port is already used by another server"*
5. How can I uninstall WEBAGRIS software?
6. I am not able to start the system when trying to launch the program on a client computer.
7. I am not able to start the system when trying to launch the program on the server computer from either the shortcut icon on my desktop (WEBAGRIS) or by typing the URL address into the browser.
8. The system accepts your LOGIN, but does not allow you to start entering data in a new record.
9. The system gives the message like this "The URL you asked for does not exist on this website". How to deactivate the proxy server which within the LAN filters out the "cookies" when you want to access to the Data Entry subsystem
10. When updating I get following message:
Error code: -101
Data Base access denied (data entry lock).
When I try to unlock the database (using the CDS-ISIS DOS-interface) nothing happens.
11. Can I use WEBAGRIS with MS IIS instead of Xitami Web Server?
12. How to install WEBAGRIS in a network computer environment with no DNS defined?
13. How to change width of the left panel of WEBAGRIS data entry window?
14. How do I manage to export selected records easily from WEBAGRIS? Is there any way to mark some records and then to export only those records, for instance while I have to export records that are not in a MFN sequence?
15. How do I access the Data Entry module and how do I define a new user with full rights?
16. What sort of national diacritic characters and codepages can I use with WEBAGRIS?
17. Does WEBAGRIS support AGRIS Application Profile?
18. What to do if the message "Database locked by another user. Retry later" is given from DOS CDS/ISIS

19. While working the system blocks and the following Error messages appear on the screen:

"This server is currently overloaded – please try again later

Error code: - 102 data base access denied (probably write lock)".

20. How to extract a debug log from the system (i.e. so as to alert the software developer to your problem).

21. The system works very slow and shows BIREME logo.

22. How to uninstall Xitami Web Server.

1. **After typing the URL into the browser's "Address" or "Location" bar, the browser gives an error message: *"The URL you asked for does not exist on this website"***

This message means that the Web Server works, but it does not see the location of the HTML files for the WEBAGRIS application. It may be that the WEBAGRIS folder is not located at the Web Server root; if this is the case, uninstall the system (using the standard Windows ADD/Remove programs procedure available from the Control Panel) and install it again, providing proper parameters for the Web Server root.

Another possible solution in this case is to define the WEBAGRIS folder as the "virtual root directory" of the Web Server; this however requires thorough knowledge of the Web Server you are using.

2. **After typing the URL into the browser's "Address" or "Location" bar, the browser provides the left frame, but the right frame does not appear.**

This may happen in two cases:

(a) if the cgi directory is not the one you indicated during the installation procedure the Web Server cannot find the program isis3w.exe. In this case, check out the proper name of the cgi directory and copy there the program isis3w.exe, along with the files isis3w.exe.cfg and Isis32.dll.

(b) it may also happen that your Web Server does not have switched "on" the execution of the cgi programs. In this case, you have to open the Web Server control panel and change the setting for cgi (if you use Xitami this should never happen).

3. **WEBAGRIS software is installed on the server. How can I run the old DOS ISIS from a client machine?**

You can run DOS CDS/ISIS on the server machine (as all data base administrator functions are executed on the server. You can also map the shared folder (as e.g. X drive) of the server from the client machine and then run isis.exe. All the parameters (paths) required by isis.exe should be defined relatively.

4. **During the installation of Xitami Web Server I have received the following error message: *"Could not open http Port 80. Port is already used by another server"***

When installing Xitami Web Server it may happen that Port 80 (which is the de-

fault port used by Xitami) is already dedicated to another Web Server installed on your PC. If this is the case, Xitami will not open up correctly when typing the URL <http://localhost>. You may or may not receive the following error message: *"Could not open http Port 80. Port is already used by another server"*.

You should then change the Port number assigned to Xitami, by editing the Xi-tami.cfg file (using Notepad), located in the Main Xitami directory (C:\Xitami if you have not changed the defaults during the installation process), and assigning to the parameter portbase a number different than zero.

Remember that the Port number and the portbase value should be assigned in a way that: Port no. = 80 + portbase. The 2 variables are dependent. Once you decide the value to be assigned to one of the two, the other should be calculated according to the formula above

For example, if you decide to use Port no. 120, then you should type 40 as Portbase value in the Xitami.cfg file. If you decide to assign 10 to the Portbase value, then your Port number will be 90.

Note: If you are going to start WEBAGRIS on the server computer using the icons WEBAGRIS Search and WEBAGRIS Data Entry, remember to add the same port number in the icons destination field.

5. How can I uninstall WEBAGRIS software?

To uninstall the system:

- use the icon Add/Remove Programs on the control panel
- find the system WEBAGRIS
- *click* on REMOVE button.

6. I am not able to start the system when trying to launch the program on a client computer.

We assume that the system works properly on the Web Server, but when you trying to launch the program on a client computer by typing the URL address into your browser - you are not able to start the system:

(a) Verify the URL, especially the "port" part. Please note that normally the port number is omitted from the URL if its value is 80, otherwise it should be stated (if you have changed the Port number to a value different than 80, then you should remember to insert the new Port number in all the URL addresses).

(b) Check if other Web resources on the server are available for the client, try for example using the URL: http://server_url/ (if you use xitami Web Server try http://server_url/admin). If the URLs don't work you should verify the connectivity between client and server computer

- in terms of hardware – check if the client is connected to the LAN,
- in term of software – check if the client has the TCP/IP connectivity installed.

7. I am not able to start the system when trying to launch the program on the server computer from either the shortcut icon on my desktop (WEBAGRIS) or by typing the URL address into the browser.

First, check if the connectivity between client program (browser) and Web Server

(Xitami) can be established:

To solve this problem, open your browser and check if the following URL works
<http://127.0.0.1/>

If you see the Xitami welcome page, the Xitami Web Server is installed correctly.
If at URL <http://127.0.0.1/agris>, you see the WEBAGRIS search screen, but at <http://www4.isis.org/agris> you cannot get a connection, there are two possible problems:

- (a) your server has no DNS
- (b) the attempt to assign the name <http://www4.isis.org/> locally has failed

To solve this problem:

- *search* for the file host (in standard installations of Windows 95 and Windows 98
- the file is usually in the catalogue Win95, or Win98 respectively)
- *open* the file using Notepad. You should see the following line:
127.0.0.1 local host
- Go to a new line and *type* the following:
127.0.0.1 www.isis.org
- reboot the server

Another reason might be that the server does not work - check it by indicating another URL valid for this server (in the case of Xitami, try for example the URL: <http://localhost/admin>. This should bring up the Xitami administration panel. If nothing happens, then the server does not work; just restart the Xitami Web Server.

If you are sure that the Web Server works properly, and the TCP/IP connectivity is set up properly but you still cannot fix the problem, try to **uninstall** the system. After removing WEBAGRIS, reboot the computer and repeat the installation procedure.

8. Cookies not working. The system accepts your LOGIN, but does not allow you to start entering data in a new record.

This may be caused by the following:

- (a) "Cookies" option does not work in the browser. Check the setting of your Web Browser's "cookies" option. You can check this by going to the Netscape Tool Bar (click on EDIT -> Preferences -> Advanced);
- (b) Cookies are still not working. Check in the file isis3w.exe.cfg the value of the parameter CookieDomain and use this value as the DNS in calling WEBAGRIS (this is actually full name). If for example the value of the parameter is isis.icie.pl, use for the data entry the url <http://isis.icie.pl/asfa/de.html>.

9. Cookies not working (cont.) The proxy server within the LAN filters out the "cookies" when you want to access to the Data Entry subsystem the system gives the message like this "The URL you asked for does not exist on this website"

This problem could be solved by the LAN manager who should disactivate a proxy server for addresses beginning with the DNS of the server of your application.

If you want to try this yourself, follow these steps:

Step 1: Launch Internet explorer browser by clicking Explorer icon

Step 2: On the Menu bar click on 'Tools'

Step 3: You will see a combo box with a list of options
 Step 4: Select 'Internet option' command and click on it
 Step 5: Now you see the 'connections' button
 Step 6: Click on the button
 Step 7: Now you will see the 'LAN Settings...' button
 Step 8: Click on this button
 Step 9: The system opens a window on 'Local Area Network (LAN) settings'
 Step 10: In this window click on the 'Advanced...' button
 Step 11: Now you can see a window 'Proxy Settings'
 Step 12: Enter the http address of your proxy server (I have entered 125.125.1.1 and Port 80)
 Step 13: Underneath the sentence ' Do not use Proxy Server for Addresses beginning with:' type www.isis3w.org in the white space
 Step 14: Click on 'OK'
 Step 15: Close the windows and start Internet explorer
 Step 16: In the address part type http://www.isis3w.org/agris
 Step 17: You will see the WEBAGRIS main page
 If you wish to enter data in WEBAGRIS, enter the following in the address area of your Internet explorer : http://www.isis3w.org/agris/de.html You will be asked for your 'User Name' and 'Password'. Enter dba against 'User Name' and dba against 'Password'. Press 'Enter' . When you see the message: 'DATA ENTRY' 'User dba logged in', you can enter your data.
 For example: In Internet Explorer/Tools-Internet options-> Connections -> LAN Settings-> Proxy server->Advanced-> Do not use a proxy server for addresses... type the DNS for your application.

10. When updating a record I get following message:

Error code: -101

Data Base access denied (data entry lock).

When I try to unlock the database (using the CDS/ISIS DOS-interface) nothing happens.

Run the CDS/ISIS DOS-interface and do the following :

- 1) From the main menu select I (Inverted file services)
- 2) Select U (Update inverted file) as the inverted file update may be pending
- 3) Go back to main menu and select M (Master file services)
- 4) Select C (Reorganize master file)

Note: Steps 1 and 2 are not always necessary but they are included in the procedure because the reorganization of the master file cannot be done while the inverted file is pending.

We strongly recommend running Full Inverted File Generation (options I and then F) at the end.

If these steps are not successful, you should try to clear the WORK database, by doing the following:

Run the CDS/ISIS DOS-interface;

From the Main menu select **option C-change database to WORK;**

Select **option D-define database;**

From the Secondary menu select **option I-initialize database;**

Make ure that the database is WORK and not AGRIS.

11. Can I use WEBAGRIS with MS IIS instead of Xitami Web Server?

To start the system under IIS you must:

- 1) Install WEBAGRIS with our installation procedure
- 2) Define under IIS the directory WEBAGRIS as a virtual Web directory.
- 3) Define the cgi-bin directory (under file explorer) as the virtual cgi-bin directory, with rights to execute scripts and programs (for more information see the WEBAGRIS2.doc Annex 2).
- 4) Test the system from the Web Server and/or connected clients

12. How to install WEBAGRIS in a network computer environment with no DNS defined?

There are two solutions:

- 1) Use IP address of the server instead of http address. Remember that http address must be consistent with CookieDomain specified in isis3w.exe.cfg, so in this case CookieDomain must show IP address.
- 2) Add http address line to "hosts" file on all computers (e.g. C:\WINNT\system32\drivers\etc\hosts)

More information you can find in documentation "Network Computer Environment" for WEBAGRIS section 3 and 4.2.

13. How to change width of the left panel of WEBAGRIS data entry window?

- 1) Find in the WEBAGRIS directory the file de.html
- 2) Open it with notepad
- 3) Change the size of the frame in the phrase:

```
...
<FRAMESET COLS="184,*" border="0" frameborder="0" framespacing="0">
<NOFRAMES>
<B>Sorry, wrong browser! - you must use Netscape 4.x or IE 4.x </B>
</NOFRAMES>...
```

14. How do I manage to export selected records easily from WEBAGRIS? Is there any way to mark some records and then to export only those records, for instance while I have to export records that are not in a MFN sequence?

You can create your own search strategy to do this. Here are some tips to help: If you want to export to the central AGRIS database, we advise doing it through the search interface.

- a. Click on the Advanced button
 - b. Select only records with status C - Completed
 - c. Select from the date entered the month and year for the range of records you want to export or use the TRN search by typing beginning common part for the range of TRNs and put dollar sign as a mask, for example: CU200400001\$ will extract you all TRN ending from 100 to 199, or click on List at the TRN row to select the specific TRNs that you want to export
1. Click on Search
 2. Check the "Selected for Export" box then click "Export"

3. Select the format for export that can be tag/text, ISO2709 or XML as export type and click "Export"
4. At this point you should have the Save as/Open dialog box that will allow you to save the records to a batch

In data entry module you can also export range of MFN if the required records are in MFN order and export them in desired format

15. How do I access the Data Entry module and how do I define a new user with full rights?

As mentioned earlier, the folder WWWISIS contains a link to the authorization file. The file defines two user groups, namely admuser and admval. The first group of users is authorized to enter/modify bibliographic records. The second group is authorized the authority records, such as Corporate names, Serial Titles, Conference Names. The original file defines two users:

- o dba with the userid and password **dba**: This user is authorized to enter, modify and delete all types of records.
- o user with the userid and password **user**: this user is authorized to enter, modify and delete the bibliographic records only

It is recommended to change the password of the defined users. In addition, depending on the needs one can define other users, assigning them User Id and passwords. If for organizational matters it is desirable that some of the users are restricted in entering the authority records, one can define the user privileges based on the user specification. If all of the users should have all privileges we use the specification dba for creating new users, just by copying the text

```
...
<isis_user> name = dba; password = dba; groups = admusr, admval;
</isis_user>
```

and changing the name and password.

If you want to add a name and password, just add the tag above, replacing the values "dba" with your name and password. For ex., if you had Agris1 as user and "welcome" as password, you should add a tag after the above, writing:

```
<isis_user> name = Agris1; password = welcome; groups = admusr;
</isis_user>
```

This will define a user called agris1 (note that this is case sensitive) with a password "password" with the same rights as the dba user, that is "create", "modify" and "delete".

16. Error code: - 1023 User not found or Error code: - 1024 Invalid password.

When starting the application one of the following error messages is displayed on the screen: "Error code: - 1023 User not found" or "Error code: - 1024 Invalid password".

Check that the Username and Password are correct. If you are using the default Username and Password dba, then make sure that it is typed in small letters and NOT in capital letters.

17. What sort of national diacritic characters and codepages can I use with WEBAGRIS?

Here we have to distinguish between the typed data and interface language versions.

There is a documentation on how to create new language interface which can be distributed on request.

If the input is done for the central AGRIS database, there are still existing restrictions valid.

Otherwise WEBAGRIS generally works with Latin-1 ie ISO-8859-1 character set. It supports diacritics for languages such as French, Spanish, Catalan, Galician, Basque, Portuguese, Italian, Albanian, Afrikaans, Dutch, German, Danish, Swedish, Norwegian, Finnish, Faroese, Icelandic, Irish, Scottish, English.

Experience was gained with inputting and displaying data in other languages, e.g. Arabic, Chinese.

In some cases direct copy and paste of texts with non-Latin-1 national diacritics may result in a not valid Agris input. The text can be displayed (after changing code pages in the interface), but the search functionality may not work properly as it is still limited to and ASCII tables of 256 characters.

Support for Unicode is not yet available.

18. Does WEBAGRIS produce output to the AGRIS Application Profile?

WEBAGRIS is a tool for distributed data input, processing and dissemination of agricultural bibliographic information. This tool is used for preparing input for the central AGRIS database. It conforms to the AGRIS Application Profile by using a specific XML format in the export function of the system.

19. The message "Database locked by another user. Retry later" comes from the DOS CDS/ISIS

The procedure to unlock the database is as follows:

- 1) From the main CDS/ISIS DOS menu select option D (Database definition services)
- 2) Select R (Unlock database)
- 3) Select D (Database locks)
- 4) Press X twice to go back to the main menu
- 5) From the main menu select I (Inverted file services)
- 6) Select U (Update inverted file) as inverted file update can be pending
- 7) Go back to main menu and select M (Master file services)
- 8) Select C (Reorganize master file)

20. While working the system blocks and the following Error messages appear on the screen:

"This server is currently overloaded – please try again later

Error code: - 102 data base access denied (probably write lock)".

A: The problem is with the WORK database. To keep the system from blocking it is recommended that the WORK database be cleaned from time to time.

The best way to clean it is to replace 8 of the 12 files which are contained in the directory **C:\Xitami\webpages\DB\agris\Work** with the 8 files contained in the zipped file Work.Zip, included in the same directory

The following procedure is recommended:

Open the Work.zip file, and extract the 8 files contained there into the **WORK** folder (**C:\Xitami\webpages\DB\AGRIS\Work**, unless you changed the destination drive during installation).

If you don't have empty work database zipped, you could go to DOS/ISIS and Re-initialize the database WORK.

Change the name of your database to "work" . Select option D-database definition and then to I- Initialize database. Be sure that you are in work database. (It is advisable to take backup of your "agris" database before this operation especially if you do it for the first time)

Note that the WORK database is NOT the database containing your AGRIS records; it is a database within the system used for storing session details, therefore you don't have to worry about losing your AGRIS records.

Please note that it is also advisable to delete the Internet Temporary files from time to time, since some of these files may interfere with the system.

21. How to extract a debug log from the system (i.e. so as to alert the software developer to your problem).

In the event that you cannot find the solution to your problem in these FAQ or the suggested procedures do not solve the problem, you can extract a "log file" from the system, which can then be sent to the software developer (and FAO) in order to identify the reason for this error.

The procedure to extract the log file is as follows:

1. Identify the file **isis3w.exe.cfg** in the directory **C:\Xitami\cgi-bin**
2. Identify the line containing **DebugLevel 0**
3. Change **DebugLevel 0** to **DebugLevel 20000** and save the file **isis3w.exe.cfg**
4. Return to the application, sign on and after receiving the "Error" exit from the system
5. Return to the file **isis3w.exe.cfg** and change again **DebugLevel 20000** to **DebugLevel 0** and save the file
6. Identify the file **debuglog** and send it to the software developer (and FAO)
7. For example the **debuglog** could be located in **C:\Xitami\webpages\debuglog.txt**

22. The system works very slow and shows BIREME logo

Define environment variable BAP with value: OS2347a0

23. How to uninstall Xitami Web Server.

The following procedure should be carried out:

1. Use the icon Add/Remove Programs available from the Control Panel
2. Find Xitami
3. Click on the REMOVE button

4. After carrying out this procedure some files remain in the Xitami folder, therefore go to the directory Xitami and manually delete the files contained in the folder and the folder itself.

Annex 8: How to implement automatic numbering of the records in WEBAGRIS system

Here are some tips on this issue, which we prepared during our experience with the system:

1. Change in all on_new record creation formats directory db\agris\imone.pft, imonf, imons, iasee, iasef, iases, iamse, iamsf, iamss.....(starting with I).pft

Add a line 'ADD <1>','CN'V9950*6.4,MFN(6)'</1>'#

Where, instead of CN, put your country code. Keep in mind that you should not duplicate any of the existing TRNs in your database. Usually this change is done at the beginning of the new year,(for example 2006) so the number will not duplicate any of the records number previous created in 2005. In case you want to change to automatic numbering in the middle of the year it is up to you to invent another strategy (for example using subcentre code 1 instead of 0 then the string should be

'ADD <1>','CN'V9950*6.4,'1',MFN(5)'</1>'#

2. Change in entry.def file all TRN fields to type=8 (protected for typing)

3. In all validation formats take away validation for V1 obligatory as it is assigned after submit.

in EV*.pft delete line:

IF a(v1) THEN '<ERR>Cannot save without correct "TRN (1)" (page 1)
</ERR>'/FI,

in EV*.tab delete lines:

tag=(V1/); select=0; vmode=AF; term=missing; dbn=agris; pfx=TRN=; msgpft=(|<ERR>TRN (1): The value |V9999| already exists in the database (page 1)
</ERR>|/);

tag=(V1.2/); select=0;vmode=AF; term=exist;dbn=codes; pfx=CN:;msgpft=(|<ERR>TRN (1): First two characters of TRN: |V9999| should be the country code (page 1)
</ERR>|/);

Annex 9: Field definition table of AGRIS database and comparison with AGRIN and ISO2709 structures

Field	Tag
TRN AA9999999999	1
Inv. number	2
Primary subj. cat	7
Second. subj. cat.	8
Type of document	10
Bibliogr. levels	11
Literary indicator	12
AGRIS record	19
Medium (form)	72
Team	80
Data entry status	91
Date entered	93
Last modified	94
***** A - level *****	
Personal name(s) (^n^a^e^r)	100
Corporate name(s)	110
English main title	120
French main title	122
Spanish main title	124
Other lang. main title	126
Conference name	130
Conference place	131
Conference number	132
Conference date	133
Report/patent number	150
Collation	170
Language of text	180
Summary	181
Notes	182
Online availability(^a^r^f^l)	183
***** M - level *****	
Personal name(s) (^n^a^e^r)	200
Corporate name(s)	210
English main title	220
French main title	222
Spanish main title	224
Other lang. main title	226
Conference name	230

Conference place	231
Conference number	232
Conference date	233
Edition	240
Report/patent number	250
ISBN/IPC	252
Imprint, place of publication	261
Imprint, publisher	262
Imprint, date of publication	263
Collation	270
Language of text	280
Summary	281
Notes	282
Availability(^a^n^d)	283
Online availability(^a^r^f^l)	290
***** S - level *****	
Serial, main title	420
Serial, sec. title	421
Serial, ISSN	450
Serial, date of publication	463
Serial, collation	470
Language	480
Serial, notes	482
Availability (^a^n^d)	483
Online availability (^a^r^f^l)	490
***** X - level *****	
Language of indexing	500
En - AGROVOC	501
En - comments/proposed AGROVOC	502
Fr - AGROVOC	521
Fr - comments/proposed AGROVOC	522
Sp - AGROVOC	541
Sp - comments/proposed AGROVOC	542
Lang. of local terms	700
Local terms	701
ID of AGROVOC terms	594
Lang. of abstract	710
Abstract	714
Lang. of abstract	720
Abstract	724

Comparative table for AGRIS, ISO exchange and AGRIN tags

Bibl. Level	Input sheet Field No.	ISO Tag (3 digits)	AGRIN Tag (4 digits)	AGRIN Field name
	001	001	0001	TRN
		002	0002	RN (not applicable on input)
	003	003	0003	Record status
	004	004	0004	Affected RN
	005	005	0005	Relator
	006	006	0006	Related RN (TRN)
	007	007	0007	Primary subject category
	007	008	0008	Secondary subject category (first)
	007	009	0009	Secondary subject category (second)
	008	010	0010	Type of publication
	008	011	0011	Bibliographic levels
	008	012	0012	Literary indicators
		013	0013	Extension indicator
A	100	100	1100	Personal author(s) (Affil.)
A	110	110	1110	Corporate author(s)
A	111	111	1111	Academic degree
A	200	120	1200	English title
A	202	122	1202	French title
A	204	124	1204	Spanish title
A	206	126	1206	Other title (non-English, French or Spanish)
A	210	130	1210	Conference name
A	211	131	1211	Conference place
A	213	133	1213	Conference date
A	300	150	1300	Report/Patent number
A	310	151	1310	Secondary numbers
A	320	152	1320	ISBN/IPC
A	500	170	1500	Collation
A	600	180	1600	Language of text
A	601	181	1601	Summary statement
A	610	182	1610	Notes
M	100	200	2100	Personal author(s) (Affil.)
M	110	210	2110	Corporate author(s)
M	111	211	2111	Academic degree
M	200	220	2200	English title
M	202	222	2202	French title
M	204	224	2204	Spanish title
M	206	226	2206	Other title (non-English, French or Spanish)
M	210	230	2210	Conference name
M	211	231	2211	Conference place

Annex 10: Mapping of WEBAGRIS fields to the AGRIS AP elements

This annex provides a mapping table between the WEBAGRIS fields and the AGRIS AP elements.

The AGRIS Application Profile⁵ (AGRIS AP) is a standard created specifically to enhance the description, exchange, and subsequent retrieval of agricultural Document-Like Information Objects (DLIOs). It is a format that allows sharing of information across dispersed bibliographic systems and is based on well-known and accepted metadata standards. The guidelines also provide recommended best practices for cataloguing and subject indexing. The AGRIS AP is a major step towards exchanging high-quality and medium-complexity metadata in an application independent format.

Mapping Table between WEBAGRIS fields - AGRIS AP elements

AGMES/DC	AGRIS AP Qualifiers	Schemes	WEBAGRIS
dc:title		xml:lang=""	(120) English-A (122) French-A (124) Spanish-A [(220) English-M (222) French-M (224) Spanish-M] -(mapped here only if Monograph otherwise map to dc:source)
	ags:titleSupplement		
	dcterms:alternative	xml:lang="" taken from (180 A or 280 M)	(126) Other-A (226) Other-(mapped here only if Monograph otherwise not mapped)
dc:creator	ags:creatorPersonal		[(100^n) Author Name -A; (100^r) Role; [(200^n) Author Name -A; (200^r) Role;]- -(mapped here only if Monograph otherwise map to dc:source)
	ags:creatorCorporate		(110) Corporate Author -A (210) Corporate Author - (mapped here only if Mono-

⁵ The AGRIS Application Profile for the International Information System on Agricultural Sciences and Technology Guidelines on Best Practices for Information Object Description (July 2005)

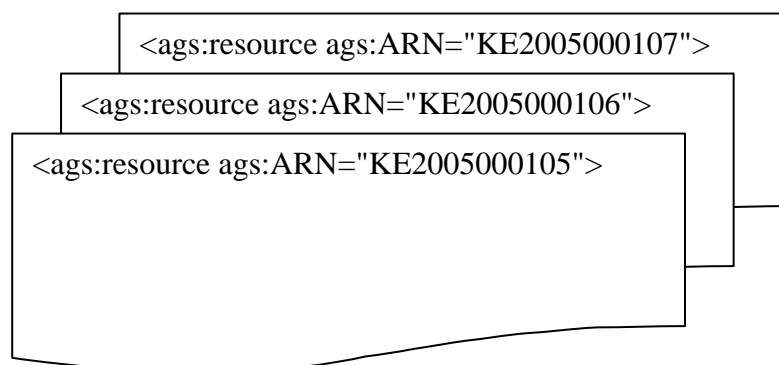
<http://www.fao.org/docrep/008/ae909e/ae909e00.htm>

			graph otherwise map to dc:source)
	ags:creatorConference		<p>[(130) Conference Name, (132) Conference no. (131) Place (country), (133) Date] - A</p> <p>[(230) Conference Name, (232) Conference no. (231) Place (country), (233) Date] – -(mapped here only if Mono-graph otherwise map to dc:source)</p> <p>Note: Conference information should be in the following format and punctuation: <i>Name of the conference, Number of the conference. place (country), date of conference</i></p>
dc:publisher	ags:publisherName		(262) Publisher
	ags:publisherPlace		(261) Place of Publication
dc:date	dcterms:dateIssued		(263) Publication Date M (463) Publication Date S
dc:subject		xml:lang	(502)En, Proposed Terms (522)Fr, Proposed Terms (542)Sp Proposed Terms
		xml:lang (700) Language of local terms used as attribute	(701) Local Terms
	ags:subjectClassification	ags:ASC	(7) Primary Subject Categories (8) Secondary Subject Categories
	ags:subjectThesaurus	ags:AGROVOC	(501) AGROVOC(en) (521) AGROVOC (fr) (541) AGROVOC (sp) (594) AGROVOC code
dc:description	ags:descriptionAbstract	ags:ISO639-1 xml:lang (710, 720) Language of Abstracts used	(714) Abstract (724) 2 nd Abstract

		as attribute	
	ags:descriptionNotes		(182) Notes-A (282) Notes –M (482) Notes –S (181) Summary statement –A (281) Summary statement-M
	ags:descriptionEdition		(240) Edition
dc:identifier		dcterms:URI	(183^a) URI (290^a) URL - M (490^a) URL - S
		ags.ISBN	(152) ISBN - A (252) ISBN- M - -(mapped here only if Monograph otherwise map to dc:source)
		ags:RN if lit.ind (12) is R	(150) Report Number (151) Report number
		ags:PN if lit.ind (12) is P	(250) Report/Patent no. - (mapped here only if Monograph otherwise map to dc:source)
dc:format	dcterms:extent		(170) Collation-A (270) Collation-M
	dcterms:medium		(72) Document Form
dc:language		ags:ISO639-1	(180) Language of Text-A (280) Language of Text -M
dc:relation			-
dc:coverage			-
dc:rights			-
agls:availability	ags:availabilityLocation		(283^a) Availability Location-M (483^a) Availability Location –S if missing country code from field 1 is taken)
	ags:availabilityNumber		(283^n) Number-M (483^n) Number –S if missing, TRN without country code from field 1 is taken
dc:source			(220, 222, 224) Title (En, Fr, Es, Oth.); (200n) Author name- M &

			(200 ^r) Role-M (210) Corporate Author M (230) Conference Name; (231) Conf. Place; (232) conf. number (263) Date of Publication; (240) Edition (252) ISBN; (250) Report No Note: this field is used to hold the information of the Monograph when cataloguing Analytics (A-Level) BASIC FORMAT: Title / First author. – Edition statement. – Place of publication : Publisher, Date of publication. – ISBN. This goes to citation
ags:citation	ags:citationTitle		(420) Serial Title, (421) Serial title: Sec.elements Note: citation is used only to keep S level data
	ags:citationIdentifier	ags:ISSN	(450) ISSN
	ags:citationChronology		(463) Publication Date –S
	ags:citationNumber		(470) Collation-S

The field (1) TRN is a special case. It is used in the AGRIS AP xml to help uniquely identify one XML record (resource) from other. It maps directly to the ags:ARN field in AGRIS AP.



WEBAGRIS fields not mapped to the AGRIS AP elements

(11) Bibliographic level
(100^a) Affiliation
(100^m) Email
(200^a) Affiliation
(200^m) Email
(183,290,490 ^r, ^f, ^l) On-line availability filters
(19) AGRIS record
(80) Team
(91) Data entry Status
(93) Date Entered
(94) Date Modified

Annex 11: Producing an AGRIS AP XML file with WEBAGRIS

WEBAGRIS is used by many AGRIS centres as a database management system. WEBAGRIS has adapted the AGRIS AP standard both at the data description level as well as the export level, producing valid AGRIS AP XML records that can be exchanged easily amongst data and service providers.

Most of the centres are already sending their input using this format. The following guidelines explain how this feature is implemented in the WEBAGRIS application.

Understanding the process

The preparation of an AGRIS AP XML file from an existing WEBAGRIS database is based on the print formats and is done according to the guidelines found in the [AGRIS AP User Guide](#). This functionality is already incorporated into the new WEBAGRIS system; below is a brief description of how the exported file looks. It has the following three components:

HEADER	contains declarations of XML and namespace
MAIN BODY	contains records with unique ARNs [Record1 in XML] [Record2 in XML] [Record3 in XML]
FOOTER	contains the closing tags

Main body

After analysis of the required fields (elements), and the creation of mapping tables between the WEBAGRIS fields and the AGRIS AP elements, a CDS-ISIS print format was created and used as a reformatting tool. It is applied iteratively to represent each record of the XML output. A header and footer must be added to the final XML file to make it valid.

The header and footer

The header must contain a reference to the AGRIS AP XML DTD. Users permanently connected to the Internet refer to it within the XML record, using the following URL: <http://purl.org/agmes/agrisap/dtd/>. The header should look like this:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE ags:resources SYSTEM "http://purl.org/agmes/agrisap/dtd/">
<ags:resources xmlns:ags="http://purl.org/agmes/1.1/"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:agls="http://www.naa.gov.au/recordkeeping/gov_online/agls/1.2"
  xmlns:dcterms="http://purl.org/dc/terms/">
```

Users **not permanently connected** to the Internet, should refer to a local AGRIS AP XML DTD saved in the local directory where the xml file is created. The header in this case will look like:


```

<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE ags:resources SYSTEM "agris.dtd">
<ags:resources xmlns:ags="http://purl.org/agmes/1.1/"
  xmlns:dc="http://purl.org/dc/elements/1.1/"
  xmlns:agls="http://www.naa.gov.au/recordkeeping/gov_online/agls/1.2"
  xmlns:dcterms="http://purl.org/dc/terms/">

```

The header and footer are automatically added by WEBAGRIS using the hdx.xml.pft and ftr.xml.pft files; however, please ensure that the AGRIS AP XML DTD used is the current version downloadable from [AGRIS DTD](#).

The proposed header format is for Latin-1 character set and it should cover all latin characters (English, French, Spanish, Italian, etc). This is reflected in the parameter: encoding="ISO-8859-1".

The print format file, hdx.xml.pft, can be found under the agris database directory (for example: \xitami\webpages\DB\agris) and should be changed if you are not using only Latin-1 character set.

You have to identify which encoding is used for your national character set. It should include Latin (not accented characters) plus national characters.

Here below are some samples for encoding values for different character set:

For Bulgarian the parameter should be: *encoding="windows-1251"* ,

For Polish should be: *encoding="ISO-8859-2"*,

For Korean should be: *encoding="EUC-KR"*

Wrong encoding cannot be changed in the xml file.

The exported xml file in this WEBAGRIS version 2.0 is saved with an extension .xxx (agris.xxx). This choice has been done in order to allow the system to prompt the user and not to automatically open the file with the software assigned to the xml extension. This was also done for resolving encoding parameter problem that may occurs.

The file could be further opened, saved and/or exported to the central database. In order to be validated it should be renamed as .xml and then opened with a browser.

If the records are not passing validation against the latest version of DTD, the file will be returned for correction and will not be incorporated into the central AGRIS Database.

Annex 12: Electronic discussion forum - dgroup

A WEBAGRIS DGroups discussion forum has been created. DGroups is an online platform offering tools and services that bring individuals and organisations together in the international development community.

To subscribe to WEBAGRIS discussion group register at [DGroups](#).

For any questions please do not hesitate to contact us: [AGRIS Secretariat](#).