ETSMS
Ethiopian Tourism Statistics Management System

User Manual

Version 1.0 – 2014-04-27

(*this manual is in constant modification until final system delivery*)

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1 – Introduction

1.1 Purpose

The purpose of the ETSMS software is to automate the acquisition, storage and analysis of Ethiopian tourism data as needed by an efficient statistics management system.

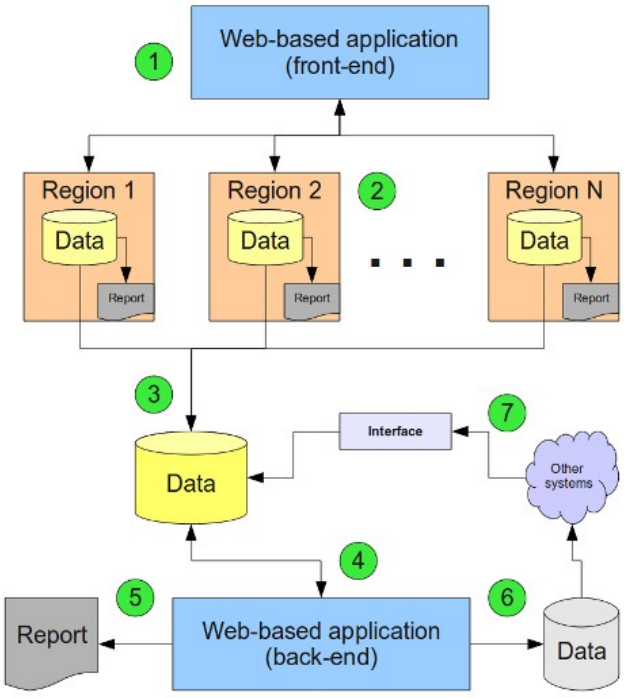
The system addresses the following major issues:

- Efficient tourism data acquisition from several non-homogeneous sources
- Reliable communication via Internet and other means
- Secure storage and sharing of the data
- Data analysis and reporting

The system is able of acquiring data in fully computerized form, but also from non-electronic means where computers or Internet connection are not available.

1.2 Structure of the system

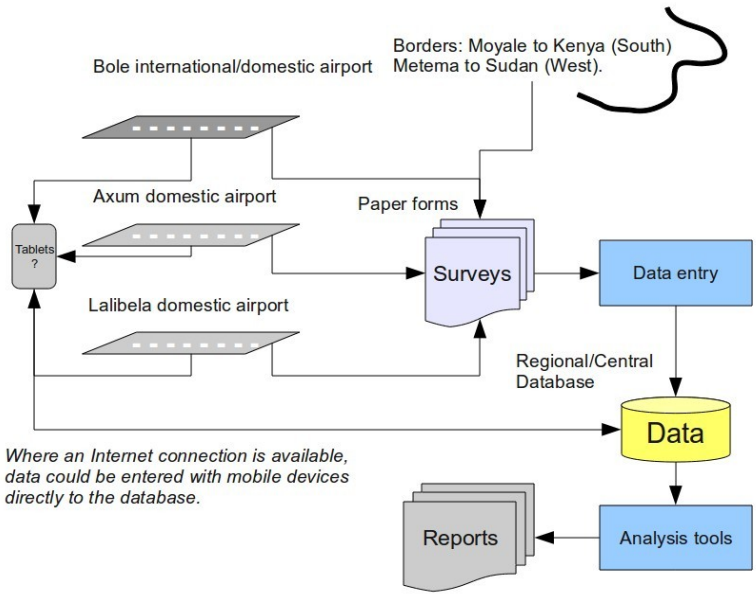
The general system architecture is described as follows:



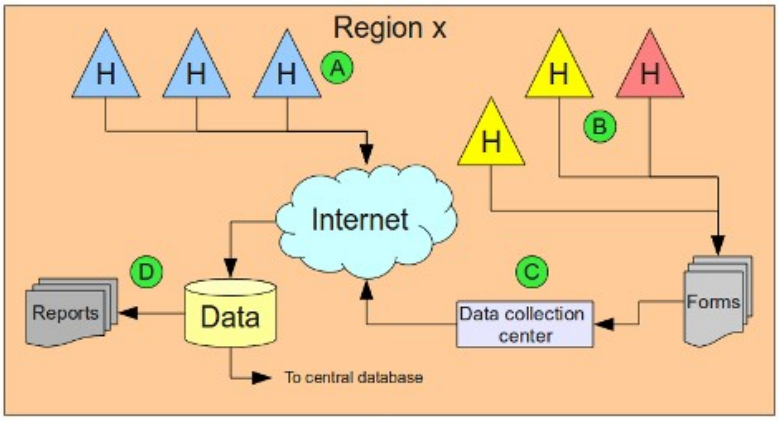
1	Data acquisition is done via a set of functions that compose the application's front-end. The main users of the front-end are the people responsible for the raw data that feeds the system. The data is organized in forms that have been previously studied and design to better create the database that will be used in the analysis. The main functions of the front-end regard data consultation and the production of preliminary reports before final submission to the central database. The front-end functions are meant to be mostly used at the regional level and permit some statistical analysis.
2	The software permits the creation of arbitrary administrative regions, each with its own independent database. The data gathered in each regional database is regularly sent to the central database for consolidation and analysis. The regions keep possession of their own data even after the consolidation with the central database. This allows further regional uses and respects the administrative autonomy of the local governments. Many of the reports and analysis used in the federal level can be used in the regional level with the available data in each local database. Access to the database is granted only to authorized users by the security functions.
3	The central database holds the consolidated data of all regions and is under federal control. It is at this level that the most significant statistical analysis is done. The database is designed to accommodate not only data coming from the present proposed system, but also from other sources and systems.
4	The application back-end is formed by a set of functions that allow the managing of the consolidated data. There are two levels of management: administrative and technical. The administrative level functions allow the communication with the regional administrators to claim the sending of data, its verification and acknowledgement. These functions reflect the office practices normally required between federative administrators. The technical functions regard the functioning of the software and access authorization.
5	Reports are the output of the data analysis and are among the main deliverables of this proposed system. The reports are used on decision making and are an essential element in understanding of bottlenecks and other inefficiencies of the tourism sector. The generated reports are used by the public and private offices (tourism bureaus, tour operators, travel agencies, embassies, key tourism industry associations, academic and research groups and marketing and consultancy bodies, tourism investors...) and respect the privacy of the data sources presenting only consolidated information.
6	The back-end is also capable of exporting data in standard formats (CSV and SQL) to be used by other systems. Exported data can be used in more specific analysis with external tools (Spreadsheets, graph tools, statistical tools...).
7	The interface module is an API (Application Program Interface) to facilitate the integration of the present system with external applications and tools. The central database is meant to be a federal repository of tourism data as required by the Ethiopian development project and should not be isolated. This API allows for future implementations and an efficient and secure data sharing. The basic API operations will be supported and specific ones could be developed in the future.

1.3 Data flow

The main sources of data are surveys acquired using electronic devices or paper forms. The data originate from selected places where tourists pass by, such as airports and national borders, but also from structures such as hotels and similar accommodations.



Tourist passage points data flow



Hotel and other facilities data flow

H	Hotels with computer and Internet connection
H	Hotels with computer but no Internet connection
H	Hotels with no computer and no Internet connection

1.4 Data Input

There are two main conditions to be considered:

- The facility has access to Internet
- The facility has no access to Internet

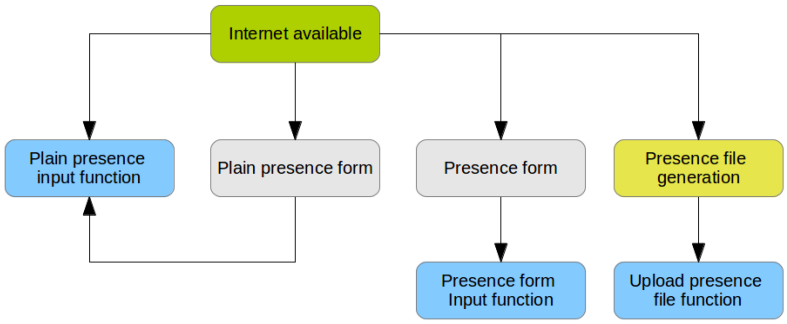
In the case the facility has no Internet access it can still collect data with the help of a Data Collection Center (DCC) to have its data inserted into the ETSMS as will be seen below.

As far as the method of gathering the presence data is regarded, we have the following possibilities:

- Use of the “plain presence input function” (it needs Internet connection).
- Use of the paper “plain presence form”.
- Use of the paper “presence form”.
- Generation of the “presence file”.

Internet access availability

In the case of availability of an Internet connection we have the following possibilities:



Internet access

In all cases, the data is acquired by the system through on-line software functions.

Plain presence input function (software)

The “Plain presence input function” is a software function available to facilities within the ETSMS that allows the direct input of presence data into the database. The user (facility personnel) after a successful login, can type the following data for the guests leaving the facility (check-out):

1. Nationality
2. Purpose of trip
3. Date of arrival
4. Date of departure
5. Number of people

The data will be saved directly into the regional database with all the meta data necessary automatically included in the record (facility id, user id, time stamp etc).

All data inserted may be revised at will by the data source user (DSU) before the final submission. The revision is done by a display function that allows editing and deleting.

Plain presence form (paper)

An alternative to directly inputing data using the “Plain presence input function” is to use a paper-hand-written form named “Plain presence form” that has the same information organized in columns, example:

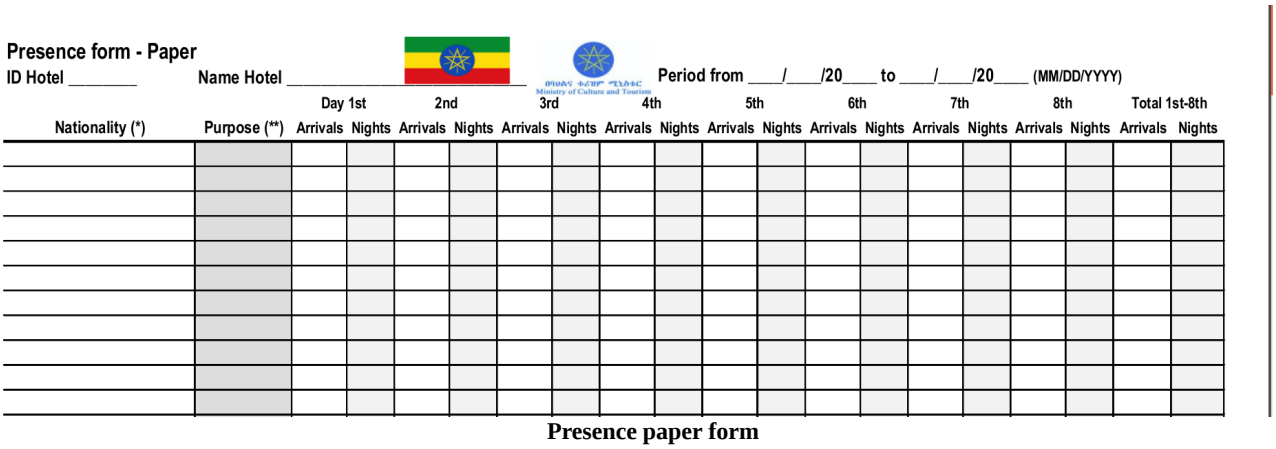
Nationality	Purpose of trip	Date of arrival	Date of departure	Number of people

This form will be used, at a latter moment, as source to input the data into the ETSMS using the “Plain presence input function” described above. This method could be used if the Internet connection is temporarily unavailable to the attendant. The “Plain presence input function” requires the gathering of data for each departure (single or multiple people).

Presence form (paper)

There is another method designed to reduce the volume of data entry into the system referred to as Presence form”. The “Presence form” collects presence data daily discriminated for each nationality and trip purpose. All the attendant has to know each day is how many guests arrived and stayed overnight in the facility by nationality and purpose of trip.

We know, from the “Guest Registration Form” filled in by each guest his nationality and maybe also the purpose of his visit. In case the purpose of the trip is not declared, we strongly suggest to ask for this data in order to complete the data collection. The absence of the trip purpose reduces the quality of the statistical analysis.



Presence form - Paper

ID Hotel _____ Name Hotel _____ Period from ____/____/20____ to ____/____/20____ (MM/DD/YYYY)

		Day 1st		2nd		3rd		4th		5th		6th		7th		8th		Total 1st-8th	
Nationality (*)	Purpose (**)	Arrivals	Nights	Arrivals	Nights	Arrivals	Nights	Arrivals	Nights	Arrivals	Nights	Arrivals	Nights	Arrivals	Nights	Arrivals	Nights	Arrivals	Nights

Presence paper form

We suggest that the this form be filled each day outside check-in and check-out time while in possession of the “Guest Registration Forms” and bills so to be certain of who left the facility and how many are still overnight of each nationality and purpose.

This method could be easily used in small facilities with little effort by the personnel. It is not recommended in medium or large facilities at all (use the plain presence form method instead).

This form is divided in four parts, one for each 8-day period, to cover an entire month in 4 sheets. Each day of the month is associated to two columns (Arrivals and Overnights) and two line-common (nationality and purpose). The header of the form contains identification information and date period of the data collection.

Each line has a total on the last two columns. Only the totals are inserted into the ETSMS making the volume of data much smaller.

Presence file (software)

The “presence file” holds presence data to be uploaded to the ETSMS with the use of the “Upload presence file function”.

This file may be generated by the facility's administration software or by an electronic spreadsheet (OpenOffice, Excel, LibreOffice etc). The layout of the file is very simple. The file is CSV in plain-text ASCII. Each record is located on a separate line, delimited by a line break (CRLF). CR = 0D hex , LF = 0A hex. The file record contains five data fields separated by a TAB (horizontal tab = 09 hex) character:

Nation code **TAB** Purpose code **TAB** Date of arrival **TAB** Date of departure **TAB** Number of people **CRLF**

Nation code is one from the **ISO 3166-1 alpha-2** codes that are two-letter country codes

(see: http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2).

Purpose code is one from the following table:

Code	Meaning
1	Holidays, leisure and recreation
2	Visiting friends and relatives
3	Education and training
4	Health and medical care
5	Religion/pilgrimages
6	Shopping
7	Transit
8	MICE (Meeting,Incentive,Conference,Exhibition)
9	Other business related purpose
99	Not stated

Date of arrival is the date of check-in in the format (MM-DD-YYYY).

Date of departure is the date of check-out in the format (MM-DD-YYYY).

Number of people is an integer number indicating how many times the record should be multiplied (normally one single person = 1).

File example:

```
BB    1     03-20-2014      03-23-2014      1
BD    2     03-19-2014      03-21-2014      1
AU    2     02-10-2014      02-18-2014      2
IT    4     03-01-2014      03-06-2014      1
BR    3     02-10-2014      02-16-2014      3
CA    6     03-19-2014      03-24-2014      1
BD    2     03-19-2014      03-21-2014      1
```

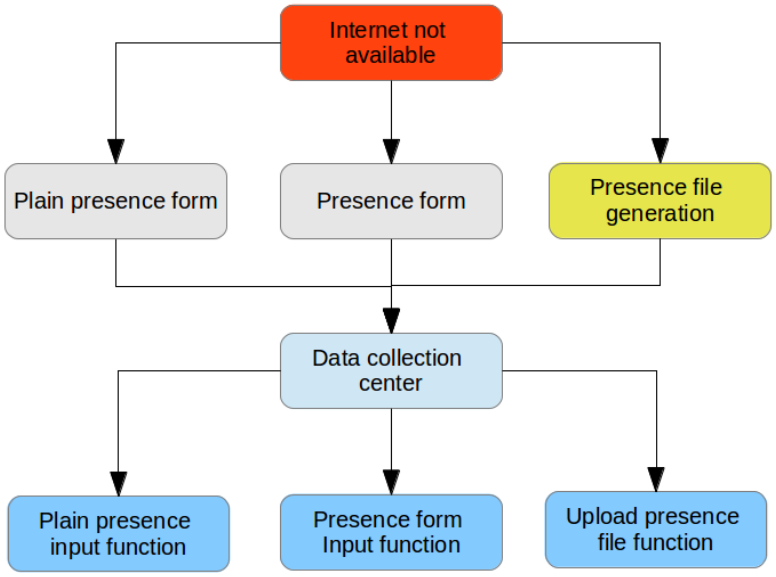
(Each records ends with CRLF)

Note that this file could be generated by the facility's PMS (Property Management System) or any spreadsheet commonly available by “Saving as” a text CSV separated by TAB characters with no delimiters. Note also that the columns are aligned due to the use of the tabulation character.

Once the file is ready, the user must upload it into ETSMS using the upload function, all meta data will be added automatically by the system.

No Internet access

In case of no access to Internet, the facility has the following possibilities to convey data:



No Internet

In all cases the facility must rely on a Data Collection Center (DCC) to input the data into ETSMS. As cited above, the DCC must be provided with Internet access. It executes the data entry in the name of facilities directly from paper forms periodically handed in. The user at the DCC is authorized to input data for a certain number of defined facilities in its region.

The three sources of data used by the DCC are:

- Plain presence form
- Presence form
- Presence file

1.5 Data Output

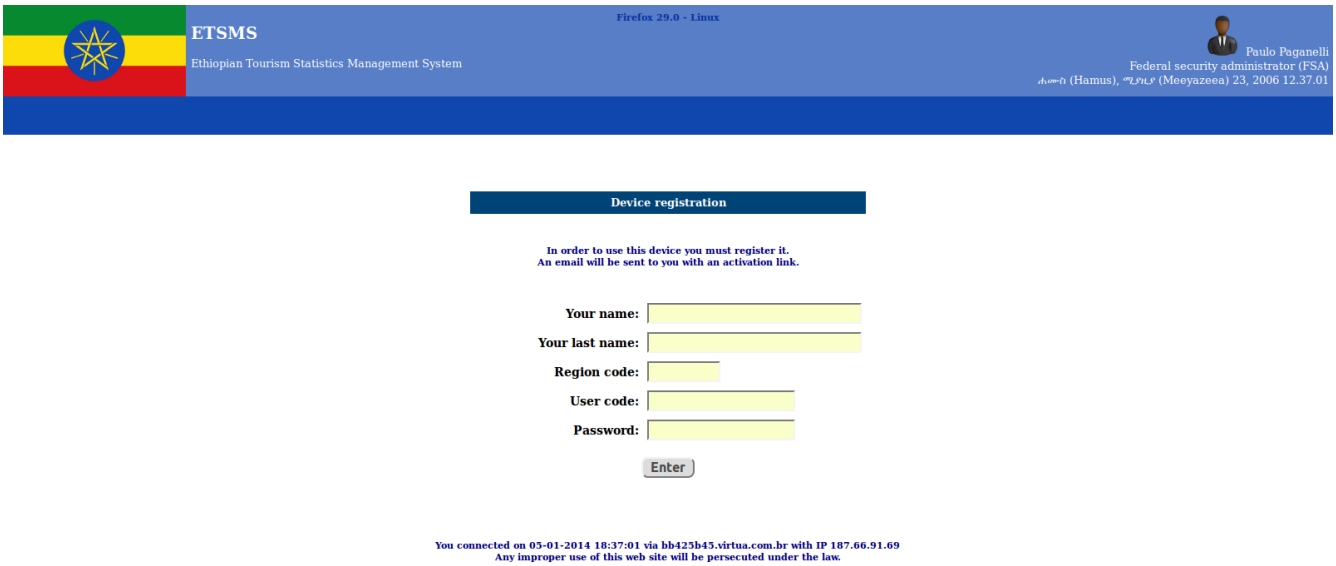
The system outputs data of different nature:

- Data control reports: useful to check on the data present in the databases (central and regional)
- Raw data: backups of the databases in SQL and CSV formats useful in exporting and running analysis on other softwares.
- Standard statistical reports: useful to have an immediate statistical analysis for fast publication of results.
- On-screen consultations: useful for fast verifications on the data and functioning of the software system.

2 – Basic operations

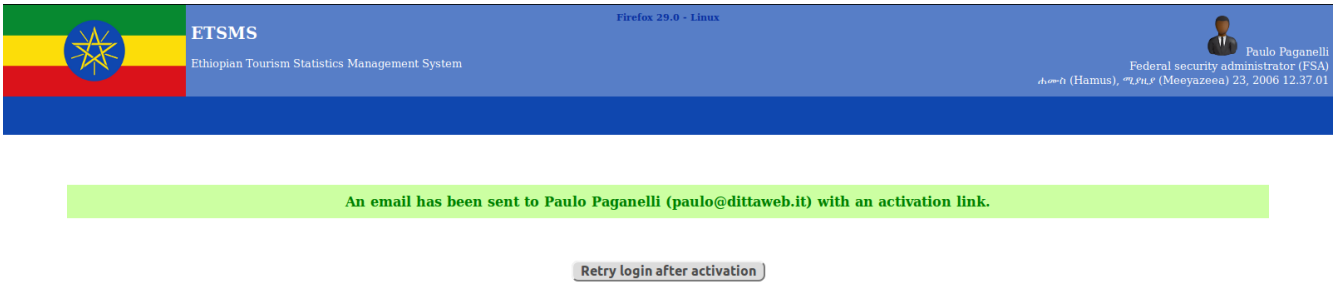
2.1 Login

The first time the user access the system on a device, he or she must execute a simple registration.



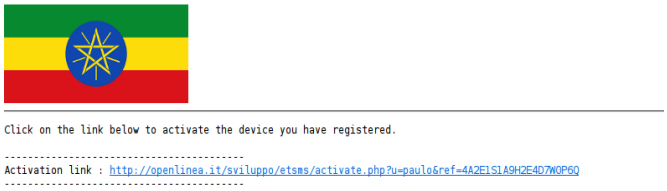
First-time device registration form

An email message will be sent to the user with a link that must be clicked in order to complete the registration and the activation of the device. A browser “cookie” will be saved with expire time of 90 days. For this reason cookies should be accepted by the user's browser.



Registration accepted message

If the email arrives in a different device, it will have to be copied and accessed in the device where the user wants to use ETSMS. In other words, the access through the link activates the device in which it originates. It is a good practice to delete the email containing the link after its use. All registrations remain logged in the system database and can be examined for security reasons.

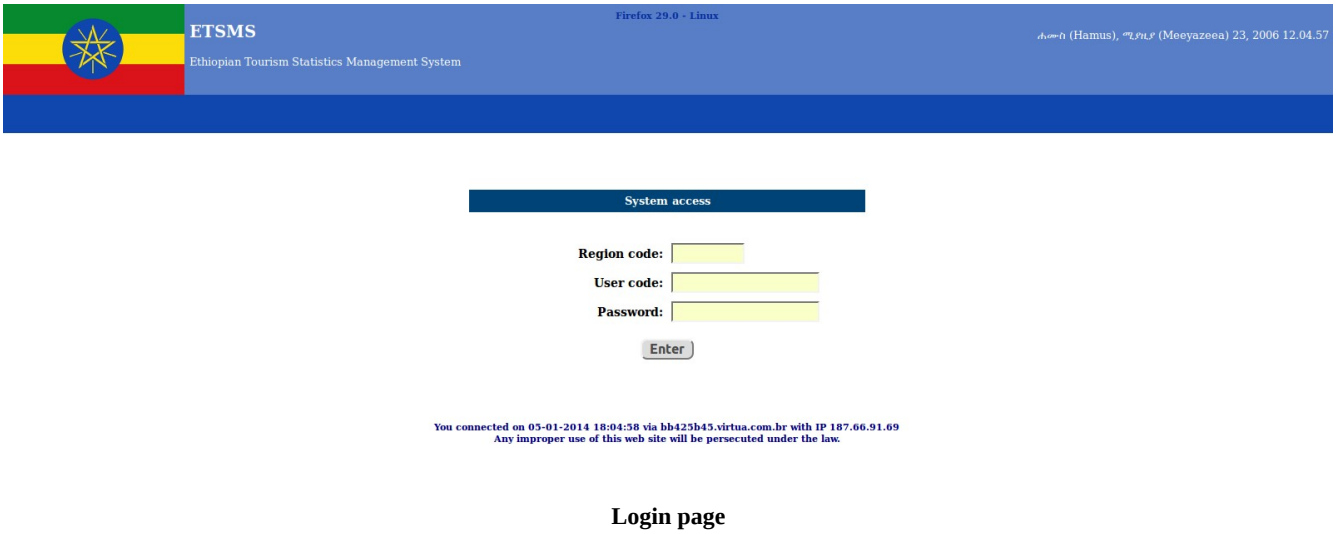


Sample email with activation link

After the link is accessed, the following message is displayed:

Device activation

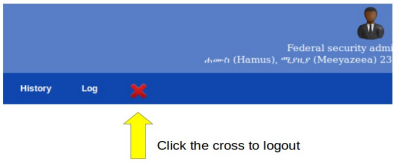
The next login page on the activated device will be as follows:



Login page

2.2 Logout

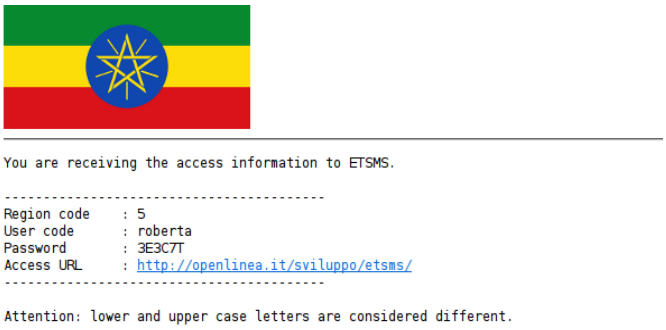
It is always recommended to execute a logout when done using the system.



2.3 Changing the password

This function allows one to change his/hers own password used to access the system. The first password is received by email once the user is created by an administrator.

The email received is similar to this (the email text can be changed in parameters) :

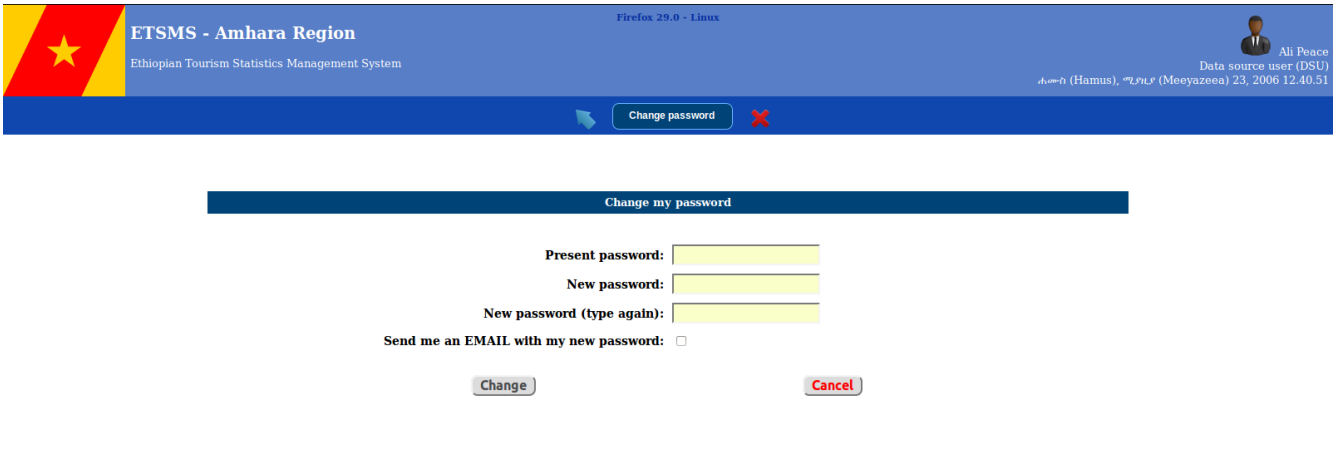


You are receiving the access information to ETSMS.

Region code : 5
User code : roberta
Password : 3E3C7T
Access URL : http://openlinea.it/sviluppo/etsms/

Attention: lower and upper case letters are considered different.

Where it is reported the URL to access the system (see parameters), region and user codes, the password. To change ones own password it is necessary to type the present and twice the new desired password. Password are case sensitive and need to be at least 5 characters long.



Change password

3 – User profiles and functions

There are six ETSMS profiles. Each profile has access to a subset of functions that are necessary to execute the tasks relative to its role. The term “security” refers to access to the system and its correct functioning. There is a different main menu for each profile. Some functions that have the same name in different profiles may be restricted to the role and data access level of each one.

3.1 FSA – Federal Security Administrator

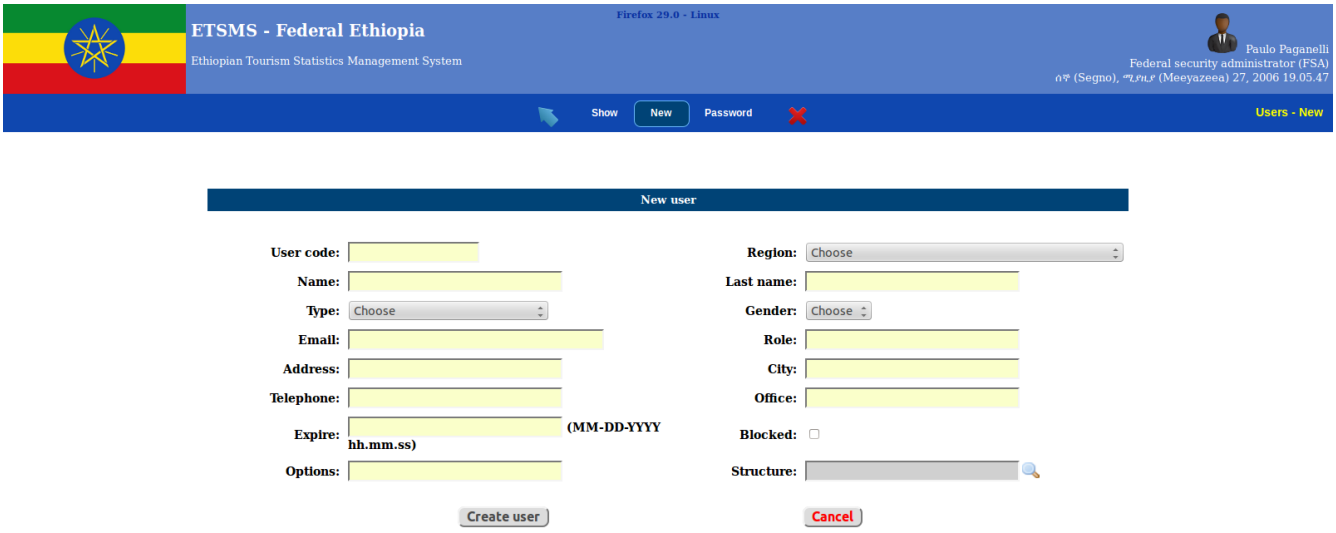
The FSA is responsible for the security and data management at the central level.

FA main menu

Users

This function allows to manage users. The FSA can create, delete and edit any user of the entire system. Through this function it is also possible to issue a new password to any user. Password are always automatically generated by the system and emailed directly to the final user. It is not possible to know a user's password unless one has access to the user's email box. Passwords are not kept in plain text in the database, but in the form of one-way hashes of them.

To create a new user one must provide some basic information to identify the person and configure his/hers region of operation as well an eventual associated structure.



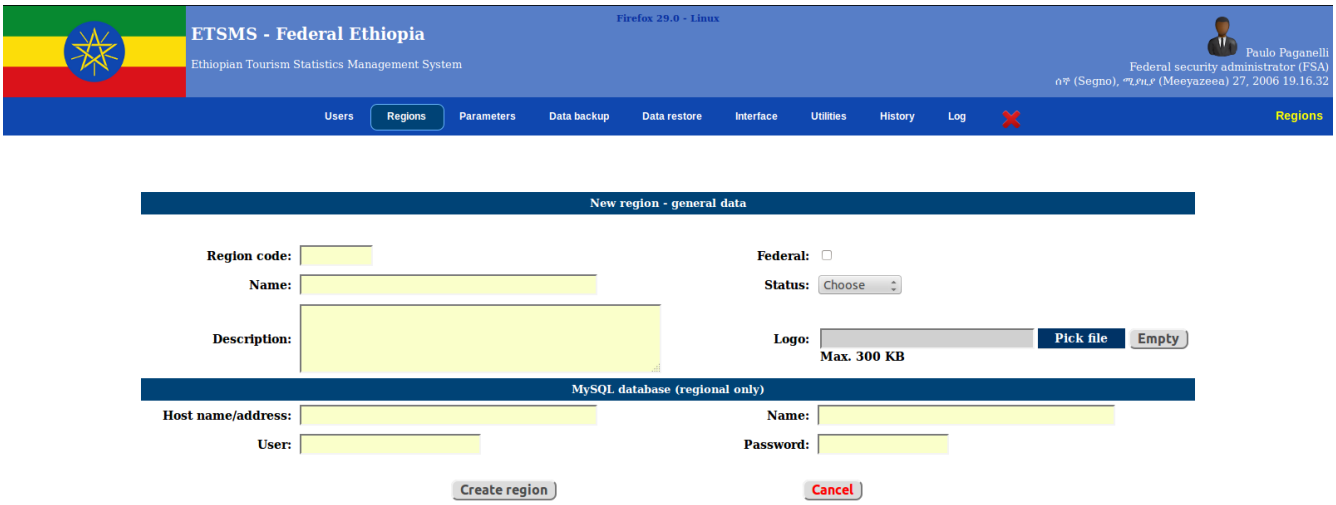
User creation form

Every user must belong to some region. Data source users (DSU) must be associated to an existing structure.

To access the system every user must know its region, user code and password. Upon the creation of a new user, the system sends an email message to the given address with all credentials to perform the login.

Regions

Regions are arbitrary, but should reflect the political regions of the country. If necessary, one could create a system defined region for a national park or other zone of particular interest. There must be one particular region called “federal” (or something similar) that represents the central administration of the system.



Region creation form

The region code should be an integer number greater or equal to 1. The chosen “federal” region will have “Federal” flagged. Regions may be active or inactive. Inactive regions do not allow users belonging to it to login.

Each region may have a logo (PNG or JPG image file). The software will adjust the dimensions to fit in the web page. For example, the following images are acceptable logos:

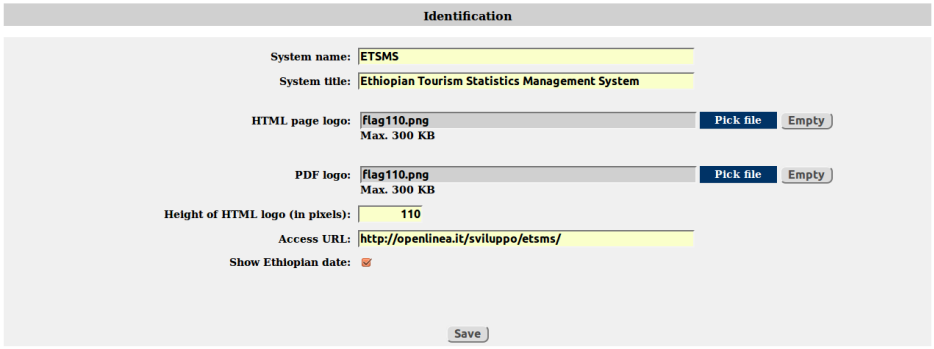
Width: 260 pixels Height: 130 pixels

Width: 434 pixels Height: 217 pixels

It is possible, but not necessary, that a region have its own physical database distinct from the central one. The separate database will hold only statistical data acquired from structures and **not** access, logs and other information needed for the system to work. In order to activate a local database, one must first create it (see the System Manual) and then fill in the access credentials in the region data form shown above.

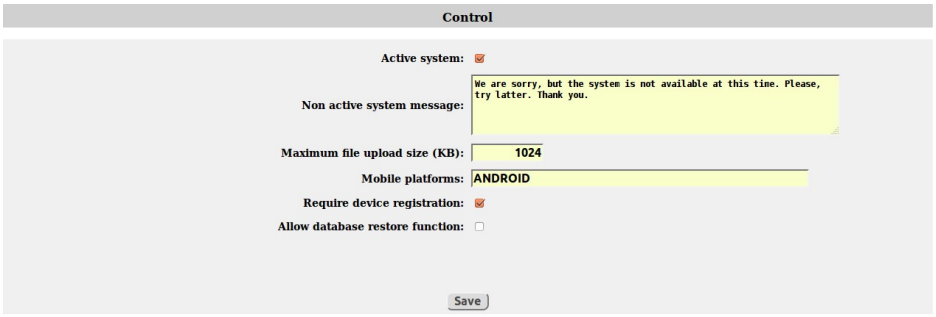
Parameters

This function allows to configure the system by setting texts, files and options. The identification session holds display options that will change some visual aspects of the application.



Note that the PDF logo image file must not have transparency. This logo will be used on the generated PDF documents. The access URL must point to the login (index.php) page, it is used in emails where it is necessary to direct the user to the system.

The control session allows to put the system off line if necessary (Active system option). The mobile platform list is used to identify devices where modified and size-efficient web pages will be displayed. In practice, the system will eliminate headers from some web pages in order to save space on mobile platforms. The restore database function may be (and should be) deactivated for security reasons.

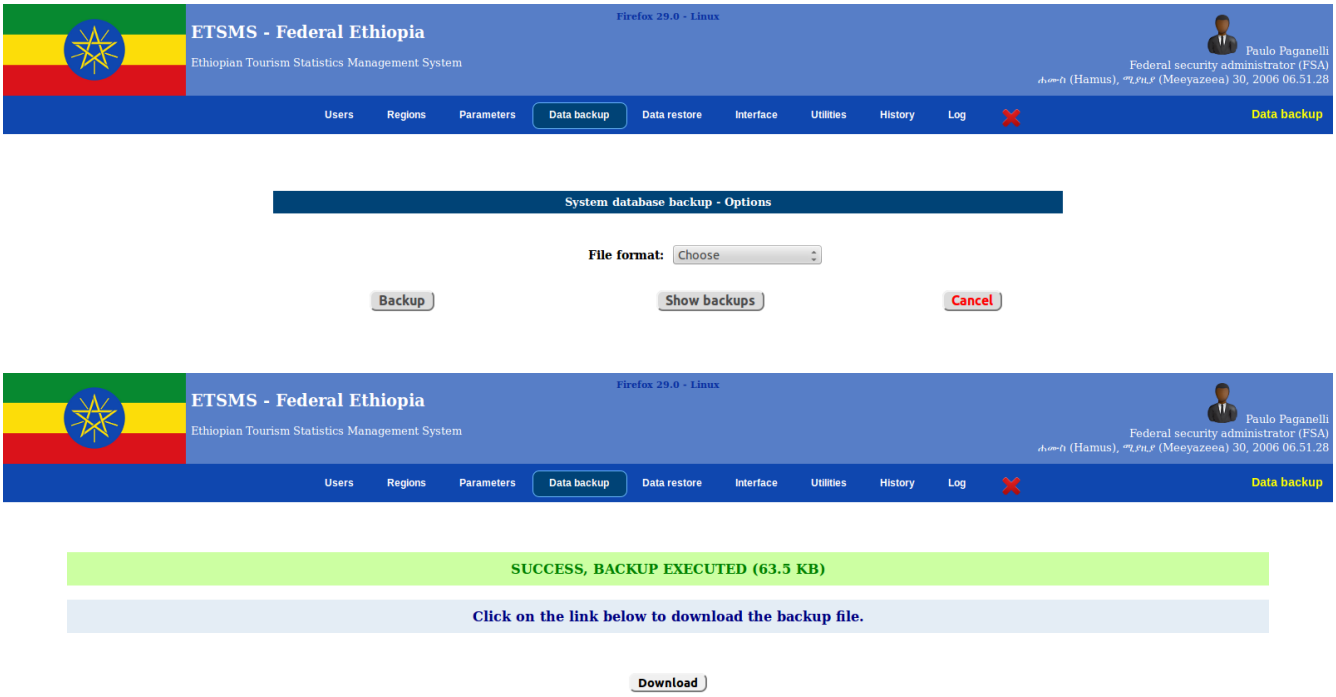


The communication parameters configure emails and texts used by the system when particular events occur.

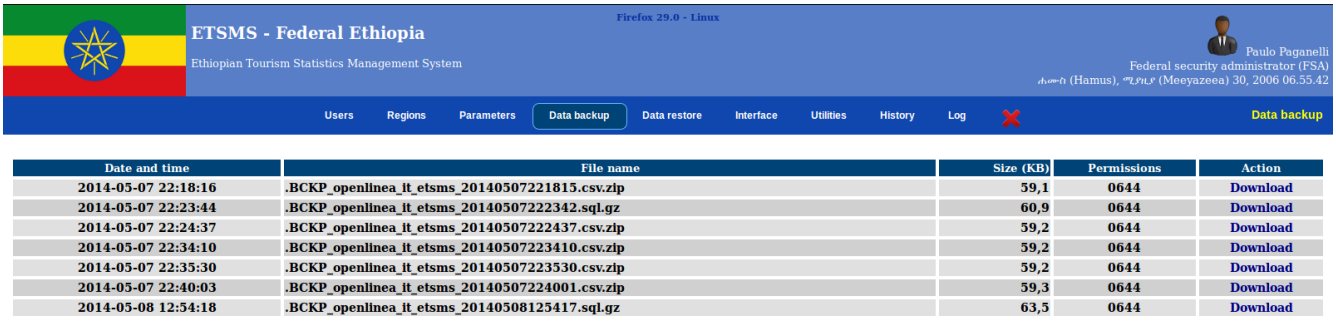
Data backup

This functions permits the FSA to do a compressed backup of the entire central MySQL database in SQL format and download it to the local computer. The backup is of structure and data. The compressed format is **gzip** (http://www.gzip.org/) that can be opened with Linux/Unix and most Windows tools. If the compressed version is not selected, the backup file will be in plain text. It is also possible to generate a **CSV** (comma-separated and quote-delimited) set of backup files all compressed into a single **zip** file.

This function is provided as a mean of exporting data in SQL format and should not be used in regular production environment and operation to guarantee data security against loss.



The “Show backups” button lists all backups previously done that are on the system backup directory.



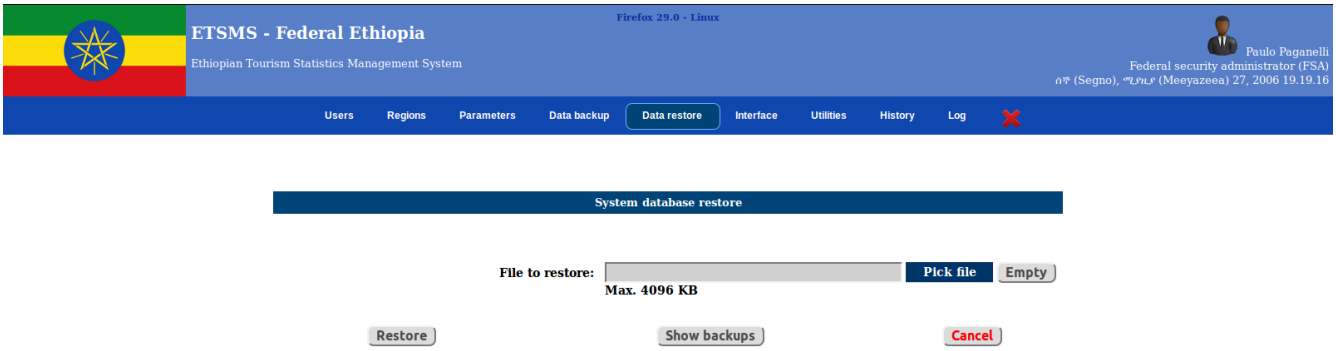
Date and time	File name	Size (KB)	Permissions	Action
2014-05-07 22:18:16	.BCKP_openlinea_it_etsms_20140507221815.csv.zip	59,1	0644	Download
2014-05-07 22:23:44	.BCKP_openlinea_it_etsms_20140507222342.sql.gz	60,9	0644	Download
2014-05-07 22:24:37	.BCKP_openlinea_it_etsms_20140507222437.csv.zip	59,2	0644	Download
2014-05-07 22:34:10	.BCKP_openlinea_it_etsms_20140507223410.csv.zip	59,2	0644	Download
2014-05-07 22:35:30	.BCKP_openlinea_it_etsms_20140507223530.csv.zip	59,2	0644	Download
2014-05-07 22:40:03	.BCKP_openlinea_it_etsms_20140507224001.csv.zip	59,3	0644	Download
2014-05-08 12:54:18	.BCKP_openlinea_it_etsms_20140508125417.sql.gz	63,5	0644	Download

It is possible to download past backups from this page. Compressed backups have a **.gz** or **.zip** extension, uncompressed files have **.sql** or **.csv** extensions.

Data Restore

Restoring the database is a delicate issue. This function is not normally active (see parameters). If active, it will allow to erase the central database and replace it with the backup file being uploaded. Normally, the uploaded file is compressed and it should not be greater than 4096 KB.

Attention: This function is provided for easy installation of the system. In a regular production environment system backup is done on the server of the entire disk by the system administrator or automated procedure.



Interface

This function allows to import data from third-party systems. Please, see the ETSMS System Manual for more details.

Utilities

See “Changing the password” in paragraph **2.3** above.

History

This function shows all recorded accesses to the system in chronological order. For more details see the Security paragraph in the ETSMS System Manual.

Log

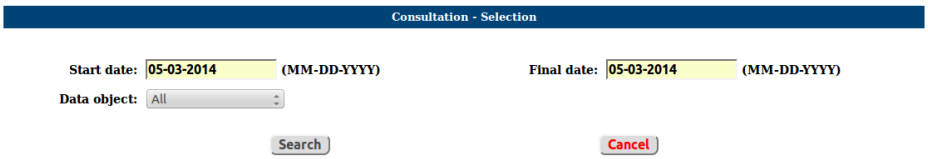
This is the low-level system log that shows activities useful for debugging and monitoring function execution. Please, see the ETSMS System Manual for more details.

3.2 FA – Federal Administrator

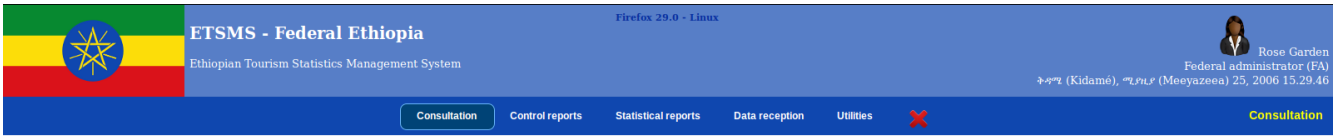
The federal administrator (FA) is responsible for the reception of the data originated in the regions sent by the local RA. Periodically, the FA also issues standard statistical analysis bulletins and produces reports to control the data present in the central database.

Consultation

With this function the FA can view data entities present in the database classified by type and period of creation.



Data consultation by FA

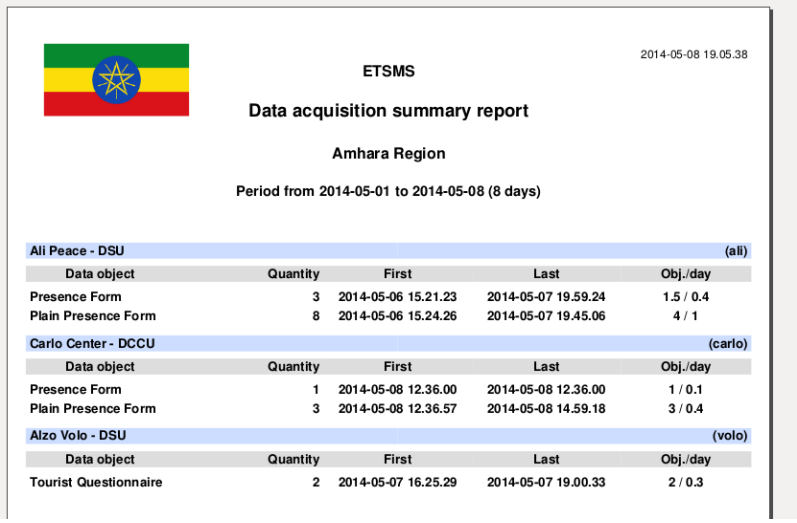


Entity	Type	Time	User	Structure Id	Structure name	Trans. time	Latitude	Longitude	Region	Platform	Fields
13	Turist Questionnaire	02-24-2014 13.25.01	bole	9	Bole International Airport	05-03-2014 19.13.00			5	Chrome 32.0.1700.107 Windows	68
14	Presence Form	03-09-2014 18.55.59	maria	10	Concord Hotel	05-03-2014 19.13.00	9.017090	38.753418	5	Safari 7.0.2 Apple	12
15	Turist Questionnaire	03-09-2014 19.38.44	bole	9	Bole International Airport	05-03-2014 19.13.00	9.017088	38.753328	5	Firefox 27.0 Android	9
16	Turist Questionnaire	04-02-2014 10.00.37	bole	9	Bole International Airport	05-03-2014 19.13.00			5	Firefox 28.0 Windows	96
18	Turist Questionnaire	05-03-2014 13.51.37	volo	8	Airport XYZ	05-03-2014 20.02.04	-21.964338	-47.882260	6	Firefox 29.0 Linux	17
19	Presence Form	05-03-2014 14.08.47	ali	4	SUNNY HOTEL	05-03-2014 20.02.05	-21.964338	-47.882260	6	Firefox 29.0 Linux	15
20	Turist Questionnaire	05-03-2014 14.10.58	volo	8	Airport XYZ	05-03-2014 20.02.06	-21.964338	-47.882260	6	Firefox 29.0 Linux	19
21	Turist Questionnaire	05-03-2014 13.51.37	volo	8	Airport XYZ	05-03-2014 20.21.59	-21.964338	-47.882260	6	Firefox 29.0 Linux	17
22	Presence Form	05-03-2014 14.08.47	ali	4	SUNNY HOTEL	05-03-2014 20.22.00	-21.964338	-47.882260	6	Firefox 29.0 Linux	15
23	Turist Questionnaire	05-03-2014 14.10.58	volo	8	Airport XYZ	05-03-2014 20.22.01	-21.964338	-47.882260	6	Firefox 29.0 Linux	19

Consultation results

Control reports

At the present time, there are three control reports: “acquisition summary”, “data volume” and “data source”. The acquisition summary shows, for a given region, information on the data entities saved on the system from a DSU point of view.



2014-05-08 19.05.38

ETSMS

Data acquisition summary report

Amhara Region

Period from 2014-05-01 to 2014-05-08 (8 days)

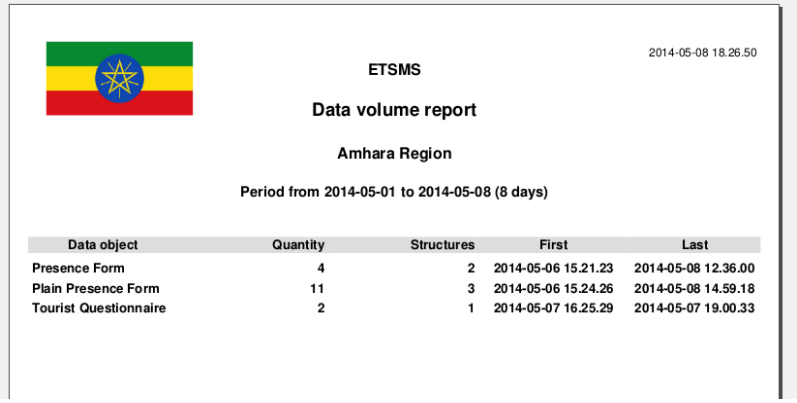
Ali Peace - DSU				(ali)
Data object	Quantity	First	Last	Obj./day
Presence Form	3	2014-05-06 15.21.23	2014-05-07 19.59.24	1.5 / 0.4
Plain Presence Form	8	2014-05-06 15.24.26	2014-05-07 19.45.06	4 / 1
Carlo Center - DCCU				**(carlo)**
Data object	Quantity	First	Last	Obj./day
Presence Form	1	2014-05-08 12.36.00	2014-05-08 12.36.00	1 / 0.1
Plain Presence Form	3	2014-05-08 12.36.57	2014-05-08 14.59.18	3 / 0.4
Alzo Volo - DSU				**(volo)**
Data object	Quantity	First	Last	Obj./day
Tourist Questionnaire	2	2014-05-07 16.25.29	2014-05-07 19.00.33	2 / 0.3

Data acquisition summary report example

Obj./day are two averages:

1. Quantity of data objects divided by the number of days in the actual work period (Last-First).
2. Quantity of data objects divided by the number of days in the report period as indicated in the header.

The “data volume” report shows for a given region quantities of data objects, the number of structures where data was collected and the first and last time of acquisition.



2014-05-08 18.26.50

ETSMS

Data volume report

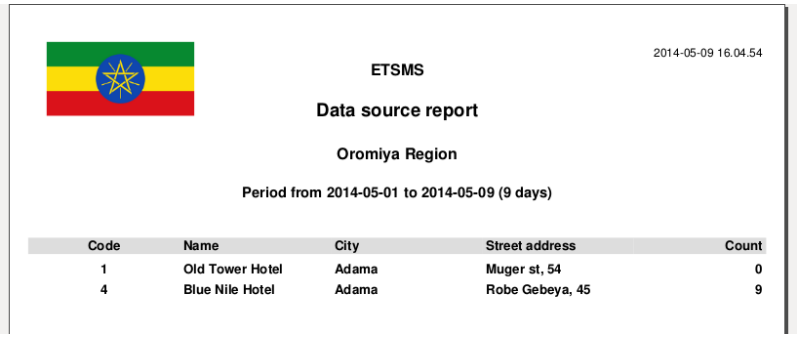
Amhara Region

Period from 2014-05-01 to 2014-05-08 (8 days)

Data object	Quantity	Structures	First	Last
Presence Form	4	2	2014-05-06 15.21.23	2014-05-08 12.36.00
Plain Presence Form	11	3	2014-05-06 15.24.26	2014-05-08 14.59.18
Tourist Questionnaire	2	1	2014-05-07 16.25.29	2014-05-07 19.00.33

Data volume report example

The data source report shows the number of data objects in a given period inserted for each structure of the region.



2014-05-09 16.04.54

ETSMS

Data source report

Oromiya Region

Period from 2014-05-01 to 2014-05-09 (9 days)

Code	Name	City	Street address	Count
1	Old Tower Hotel	Adama	Muger st, 54	0
4	Blue Nile Hotel	Adama	Robe Gebeya, 45	9

Data source report example

Statistical reports

This function has not been implemented yet.

Data reception

This function presents a summary of the data received form all regions in a given period of time. It also allows to filter results by data object type. The summary can be used to monitor transmission of data from regions to the central database.

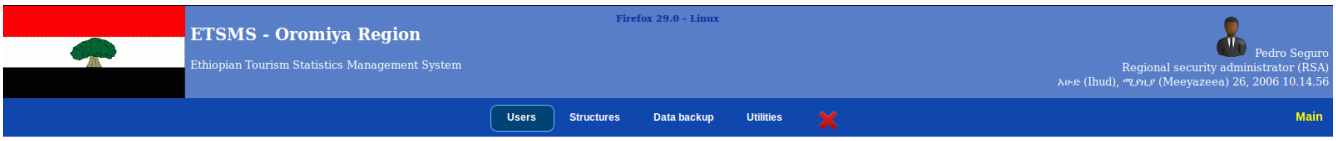
Period from 05-01-2014 to 05-06-2014

Region	Name	Last transmission	First transmission	Count
1	Federal Ethiopia			
2	West Tigray Zone			
3	Afar Zone 1			
4	Somali Region			
5	Oromiya Region			
6	Amhara Region	05-06-2014 15.43.19	05-06-2014 15.43.14	8
7	Southern Nations, Nationalities, and Peoples' Region			
8	Gambela Region			
9	Benishangul-Gumuz Region			
			Total	8

Data reception summary example

3.3 RSA – Regional Security Administrator

The Regional Security Administrator is responsible for user access and structure data at the regional level. Its role is similar to the FSA, but limited to regional tasks.



Users

This function allows the RSA to create and administer users under its regional responsibility. The function is almost identical to the user function available to the FSA, the only difference is that here users can be created only for the same region to which the RSA belong.

Structures

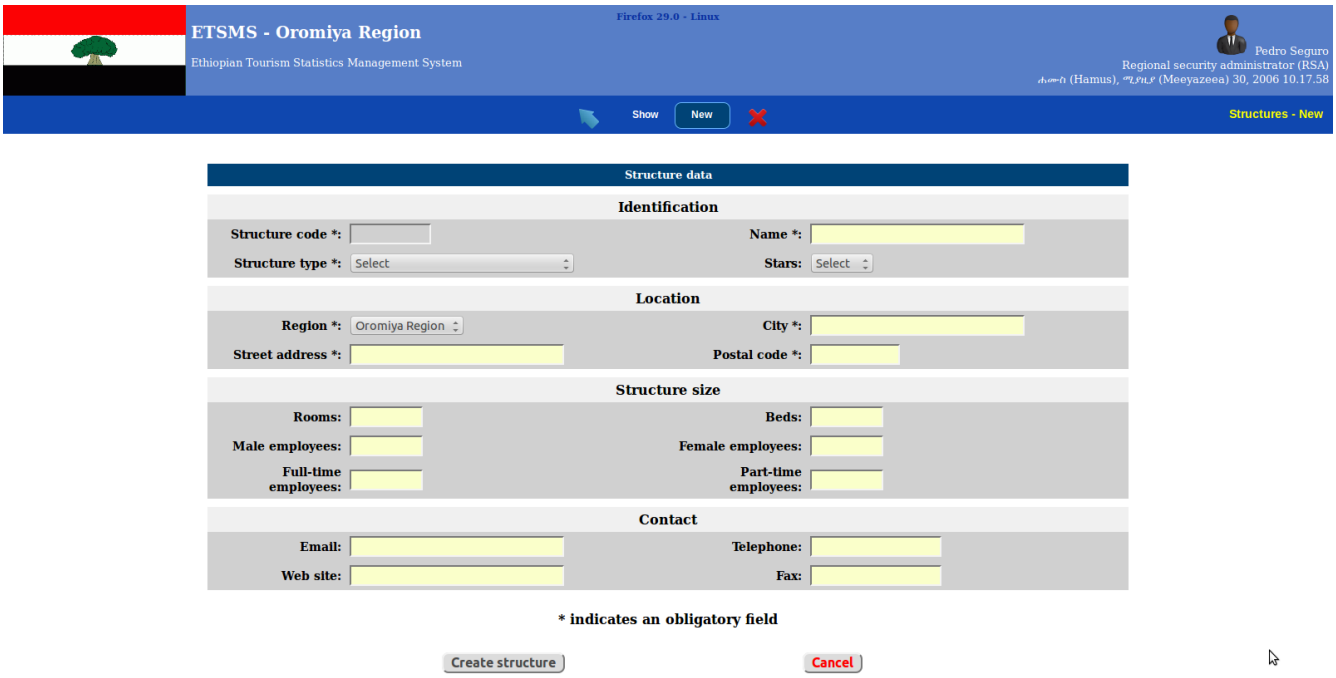
Structures are all facilities used as accommodation, but also places of statistical interest to the ETSMS. The system can distinguish which are accommodations and which are not.

Upon creation, the software automatically assigns a unique code to the new structure.

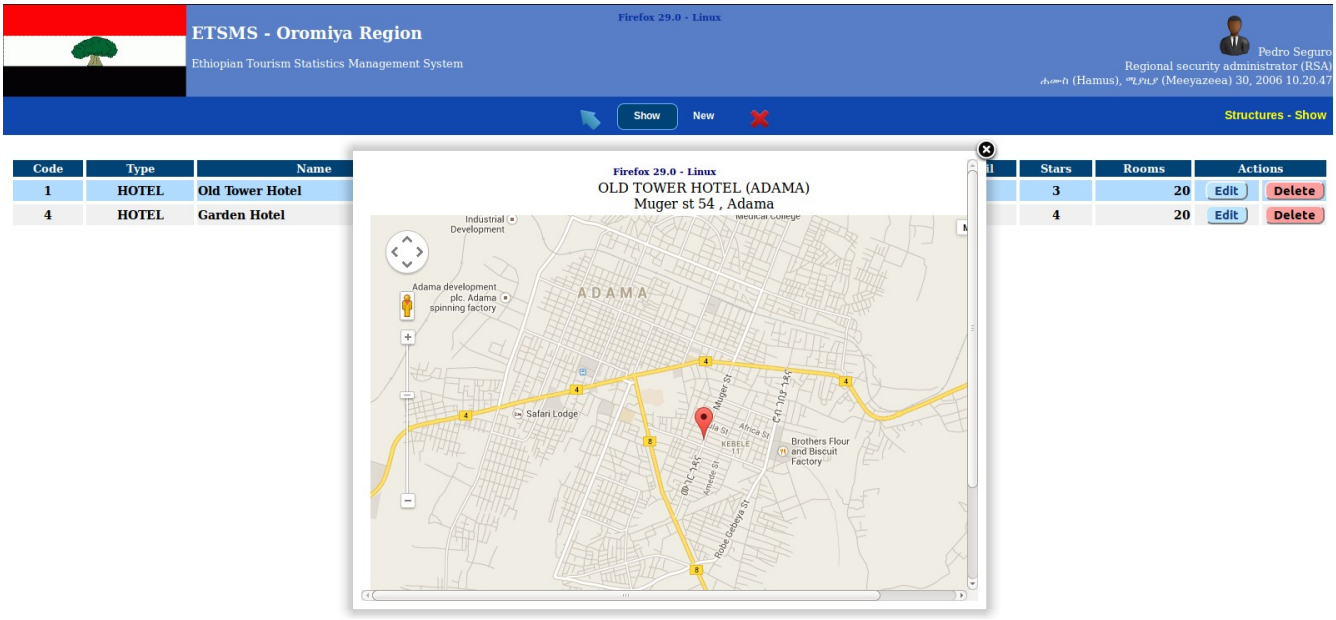
ETSMS uses Google's API to geographically locate the structure and to present it on a pop-up map.

Structures can be edited and deleted if necessary.

Attention: deletion of a structure may cause functioning problems to an eventual DSU associated to it.



New structure creation form



Example of geographic location of a structure

Data backup

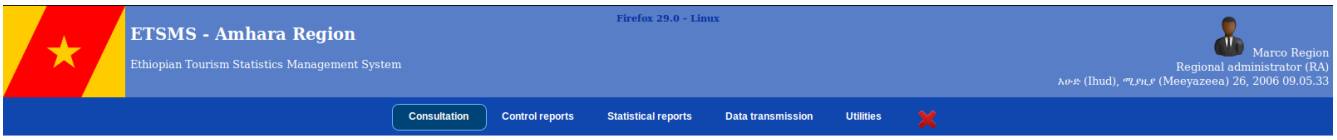
If the region of the RSA has its own database, it is possible to do a backup of the local data. The procedure is identical to the FSA backup documented above in paragraph **3.1**. The “Show backups” function only show regional backups if they exist.

Utilities

See “Changing the password” above in paragraph **2.3**.

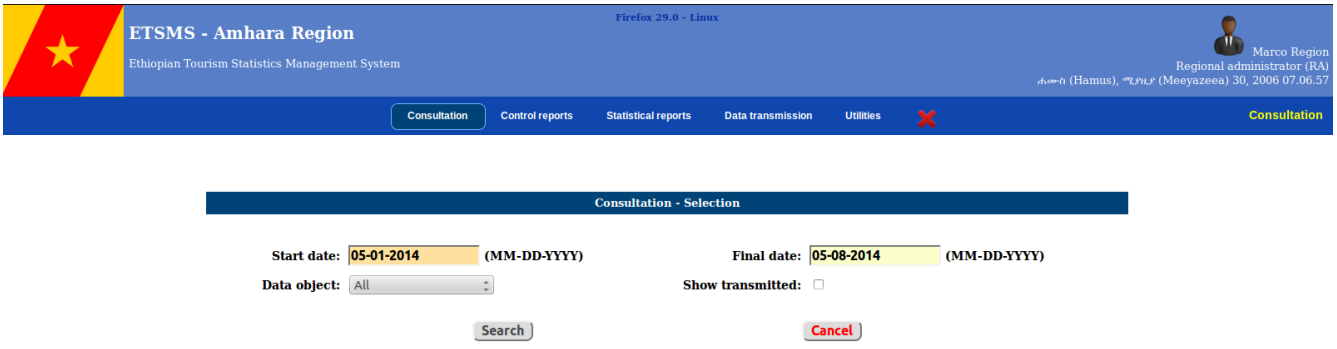
3.4 RA – Regional Administrator

The responsibility of the Regional Administrator is to verify and transmit data to the central database. It can run standard reports on the regional data collected. The reports are of two types: control and statistical.



Consultation

This function allows the RA to verify the data objects saved under his/hers region.



Data consultation by RA

If the “Show transmitted” option is set, data already sent to the central database will be shown.

Entity	Type	Time	User	Structure Id	Structure name	Trans.	Trans. time	Latitude	Longitude	Platform	Fields	Action
11	Turist Questionnaire	2014-05-07 16.25.29	volo	9	Bole International Airport	P		-22.026705	-47.877213	Firefox 29.0 Linux	32	Delete
12	Turist Questionnaire	2014-05-07 19.00.33	volo	9	Bole International Airport	P		-21.964338	-47.882260	Firefox 29.0 Linux	13	Delete
14	Plain Presence Form	2014-05-07 19.45.06	ali	4	Blue Nile hotel			-21.964338	-47.882260	Chrome 34.0.1847.132 Linux	14	Delete
16	Presence Form	2014-05-07 19.59.24	ali	4	Blue Nile hotel			-21.964338	-47.882260	Chrome 34.0.1847.132 Linux	11	Delete

Data consultation results

By clicking in the name of the structure, if coordinates are present, a map will be shown indicating the geographical position from **where the data was collected**. The “Delete” button permits the complete elimination of the entity and all its data.

Control reports

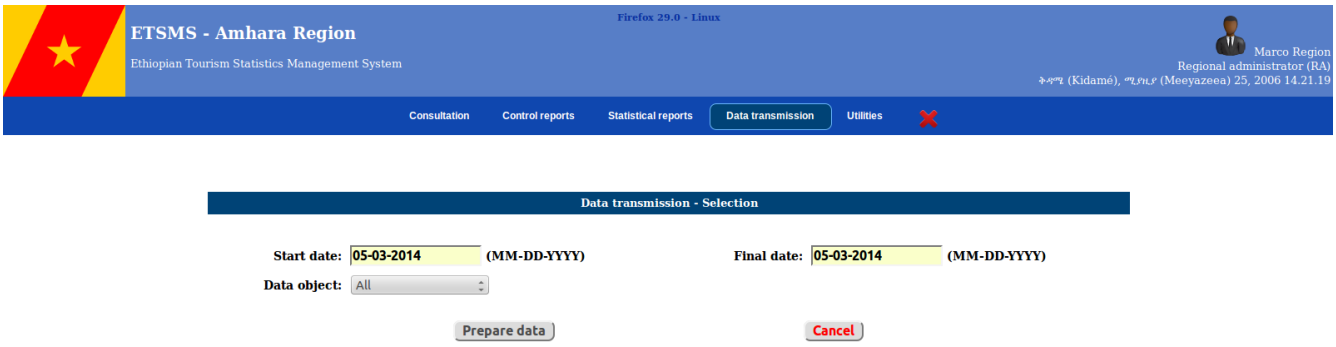
The RA can run control reports identical to the FA, but on its regional data only. Please, see “Control reports” in paragraph **3.2** above.

Statistical reports

This function has not been implemented yet.

Data transmission

Periodically, the data gathered in the region must be transmitted to the federal database. The transmission may be done by time period and data object type. The transmission is an internal function of the system and it is done transparently, it needs only confirmation from the RA. Before effective transmission, the data is selected and prepared.



Data transmission selection

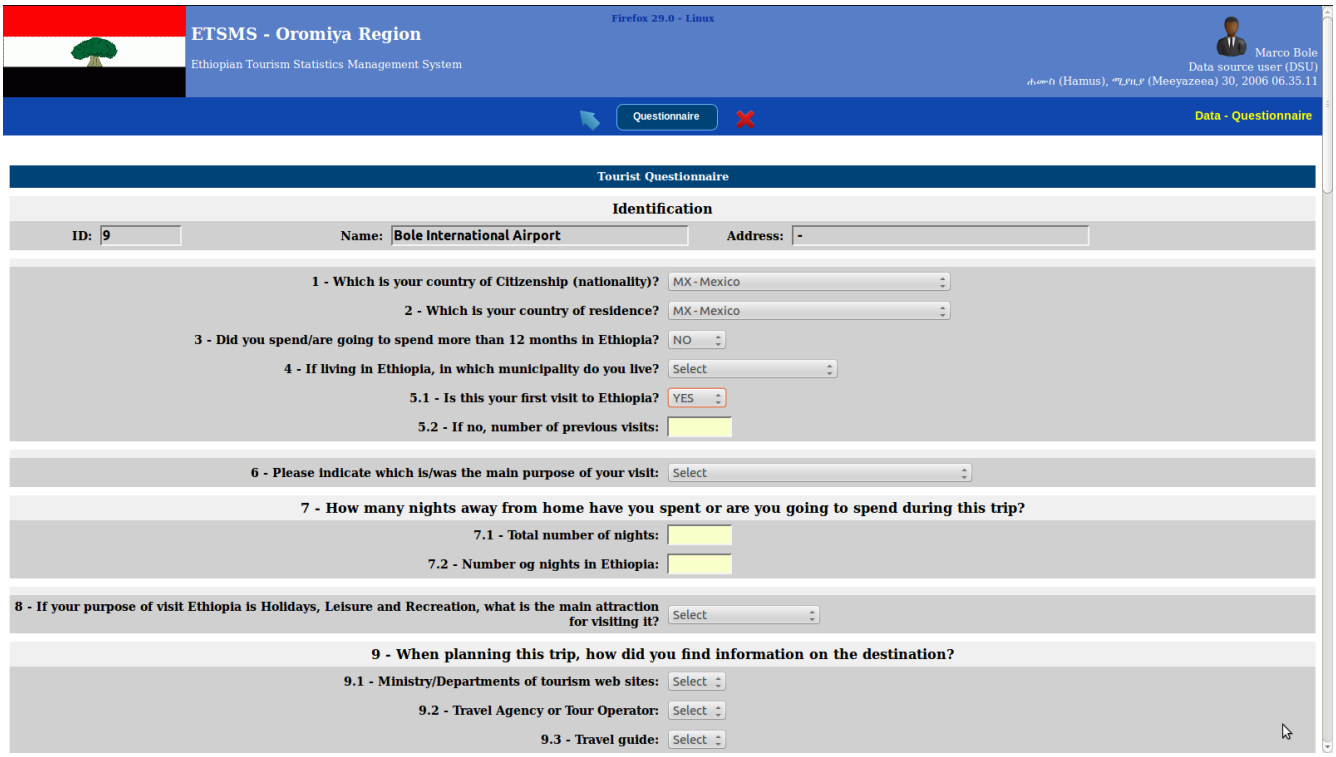
Data prepared to transmission

Successful data transmission

3.5 DSU – Data Source User

The DSU is the one of the two user types that inputs data into the system. It is always associated to an accommodation facility, airport or national border.

The tourist questionnaire is meant to be used where tourist pass by such as airports and borders.

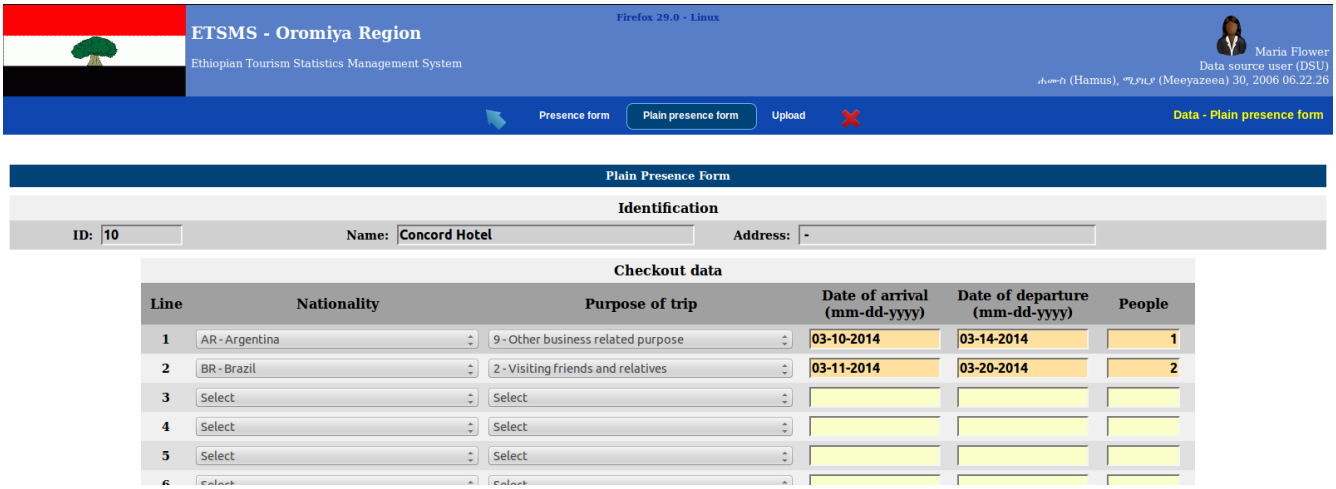


Tourist questionnaire (part)

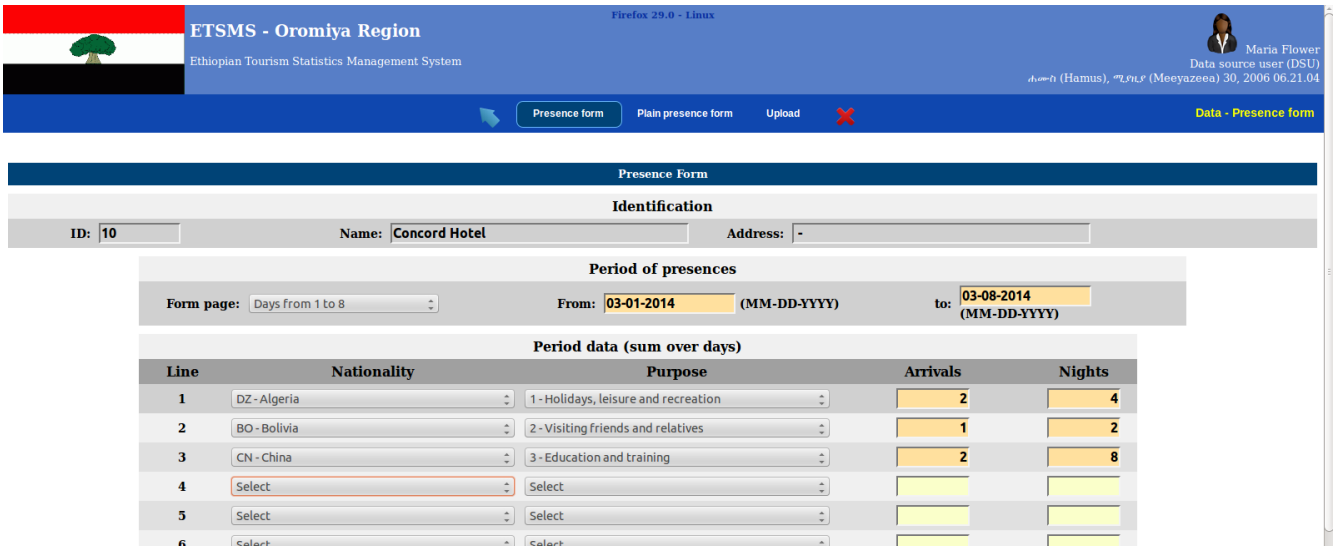
On the other hand, the presence forms are meant to be used in accommodation facilities such as hotels.

The plain presence form is very simple and easy to use. It requires, upon checkout time, that the user insert five items of information on each leaving guest: nationality, purpose of trip, arrival date, departure date. The fifth field is the number of people to which the previous four fields refer to. Normally its value is 1. In the case of a family of 3, for example, all traveling for the same purpose and of the same nationality, this last field should contain the value 3. Alternatively, one would have to type three lines, one for each person, instead of only one.

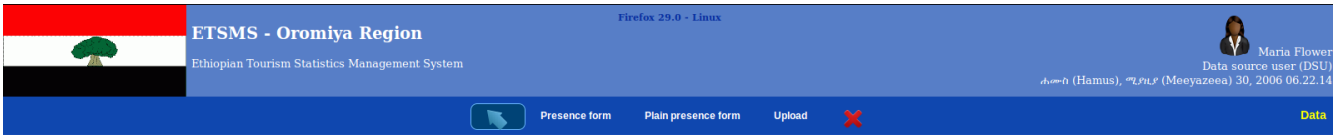
The presence form in explained above (see paragraph **1.4**) and here the DSU must only enter the data on the system.

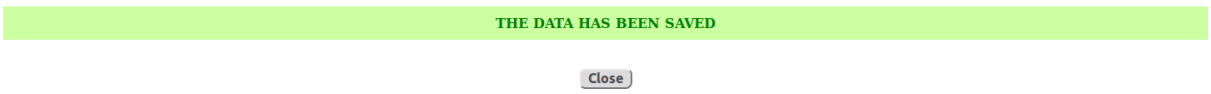


Plain presence form



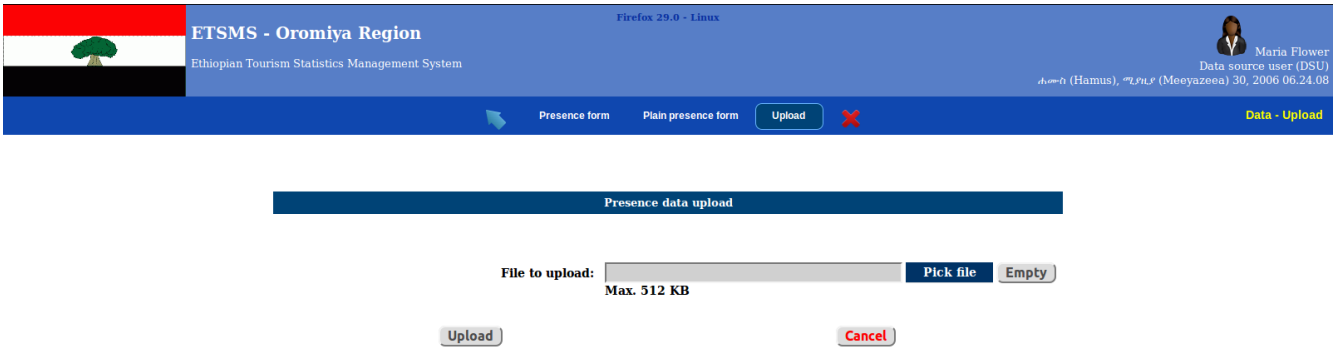
Presence form



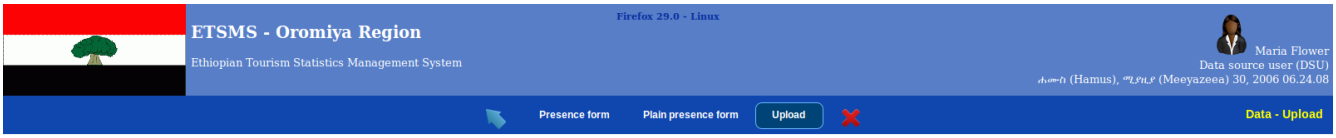


Successful saving data

There is one practical way of uploading presence data into the system: the presence file as described above in paragraph **1.4**.



Data file upload function

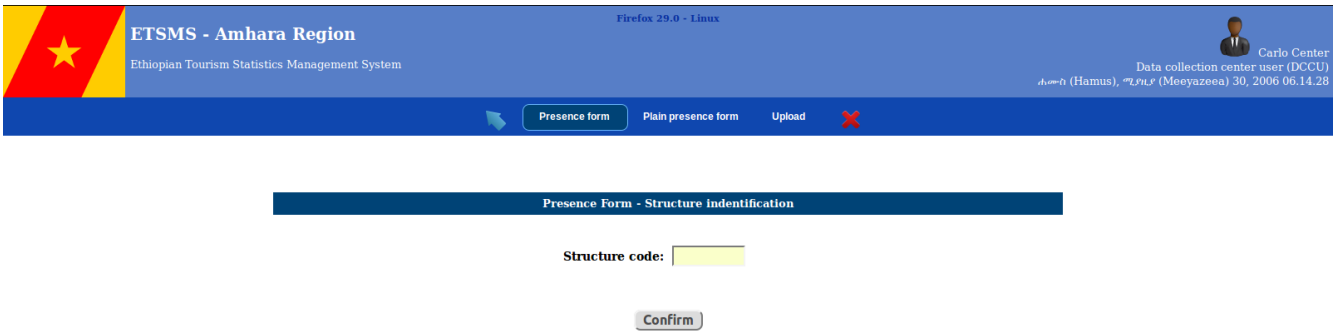


Data acquired message

3.6 DCCU – Data Collection Center User

The DCCU is able of inserting data for and in the name of structures that do not have access to Internet.

Before inserting data, the DCCU must identify the source structure. This is done through the structure code always present on the paper form used (presence form and plain presence form).



Structure identification

In case of file upload, the name of the file should contain the structure code to facilitate the identification.