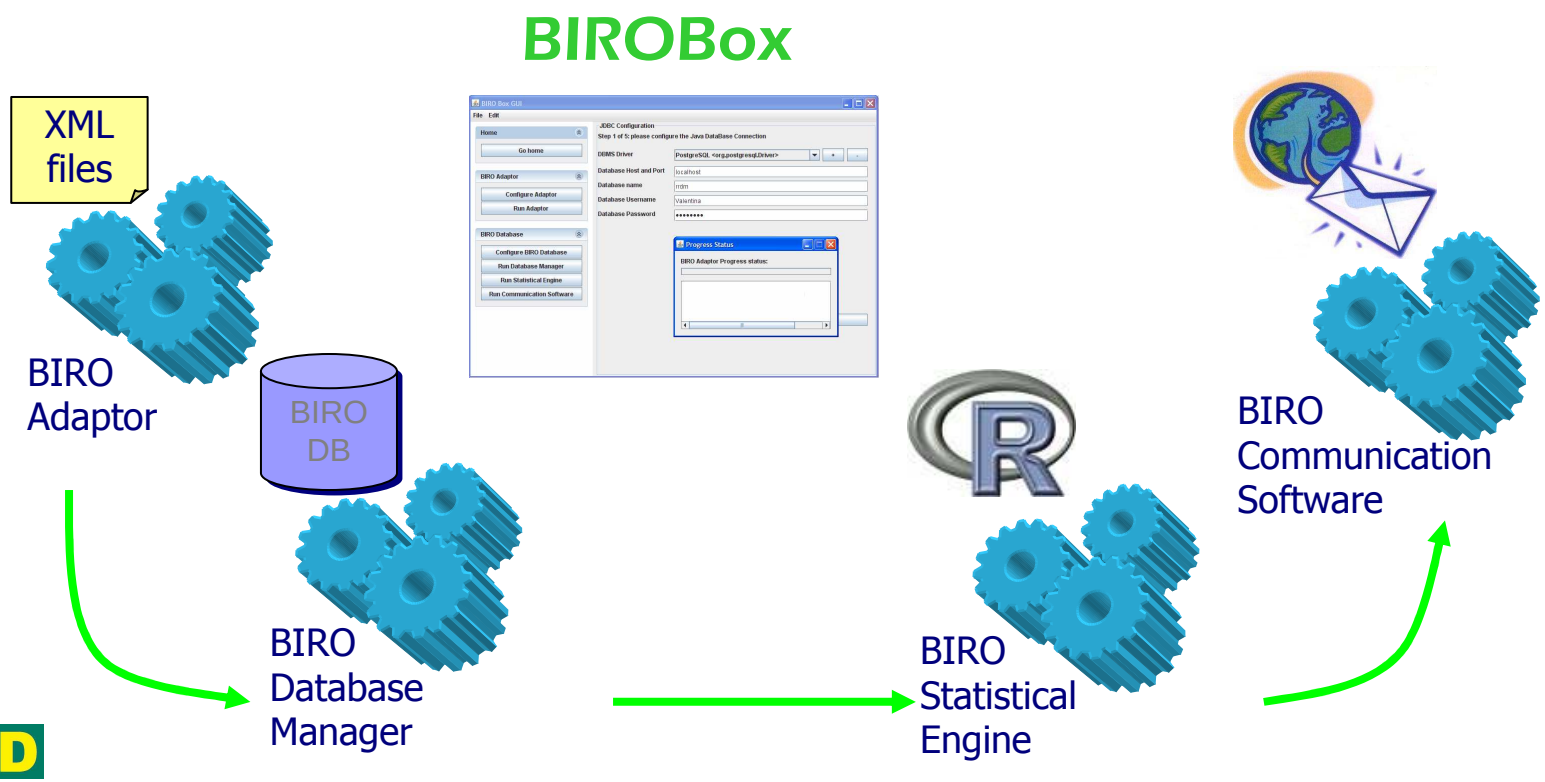
The BIRO software

1st EUBIROD Annual Meeting,

Dasman Centre, Kuwait City

BIROBox

- BIRO Box: a Graphical User Interface to configure and run all BIRO software tools for the local BIRO system



User Datasets

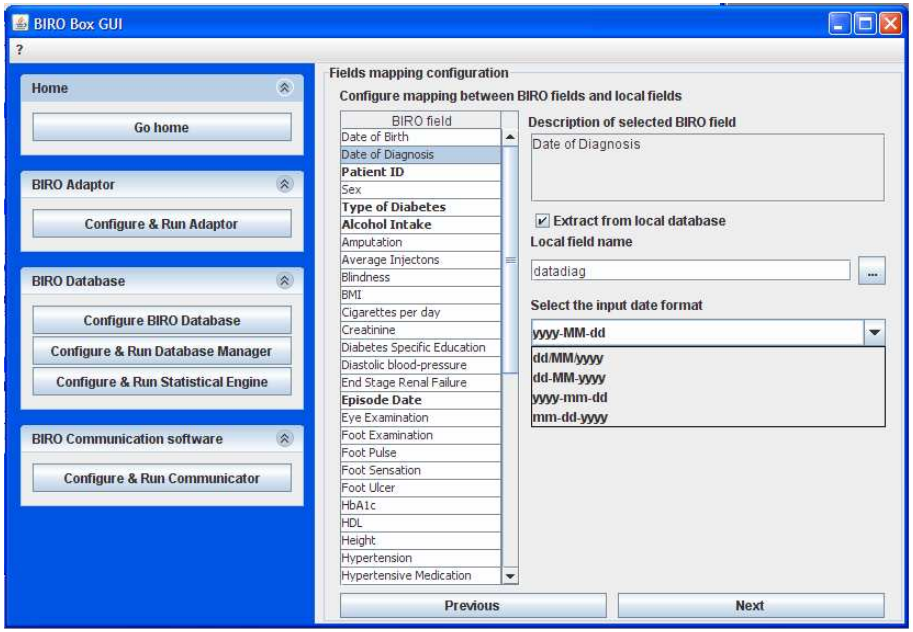
Compulsory User Datasets

- **Merge table:** each row represents a specific clinical episode of a specific patient. Each BIRO field should be mapped to a column; patient_ID and episode_date should be primary keys;
- **Population table:** total population and mortality in the catchment area. The number of persons (dead or alive) should be stratified on the basis of years, age bands and gender.
- **Site header and profile** contact details of centre/regional referents (provided directly through a specific form)

Recommended User Datasets

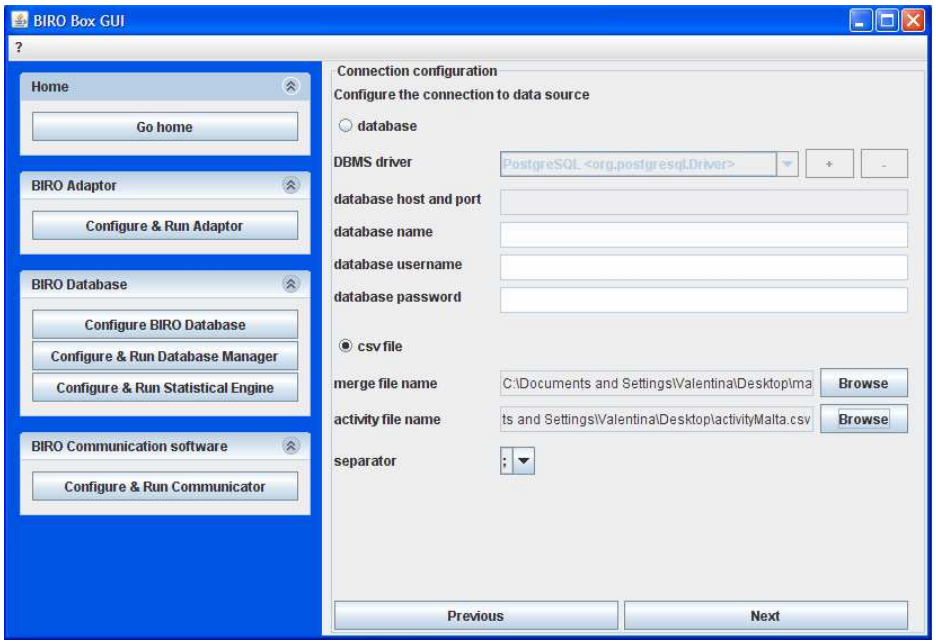
- **activity table:** information about the enrolment of patients to the centre, i.e. dates of entry and exit from the centre and related reasons (birth, diagnosis, transfer toward/from another centre, death, lost to follow-up)
- **diabetic population table:** it is similar to population table but it refers to diabetic patients within the catchment area

BIROBox



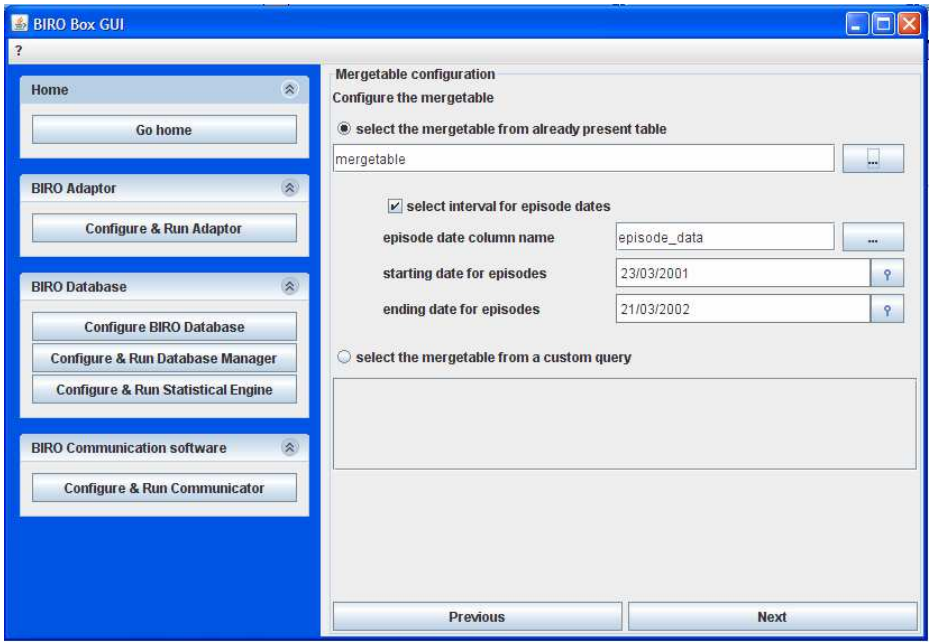
- All main tools of local BIRO System, can be accessed by selecting the appropriate button from the button panel on the left side of the window.
- Each BIRO function can be executed separately from the others. Each step has to be triggered by the user.
- The user may:
  - import XML files even if they are produced somewhere else;
  - skip the execution of Adaptor and Database Manager if he already has a database in the BIRO format;
  - run the Statistical Engine without sending data to central server

Adaptor configuration



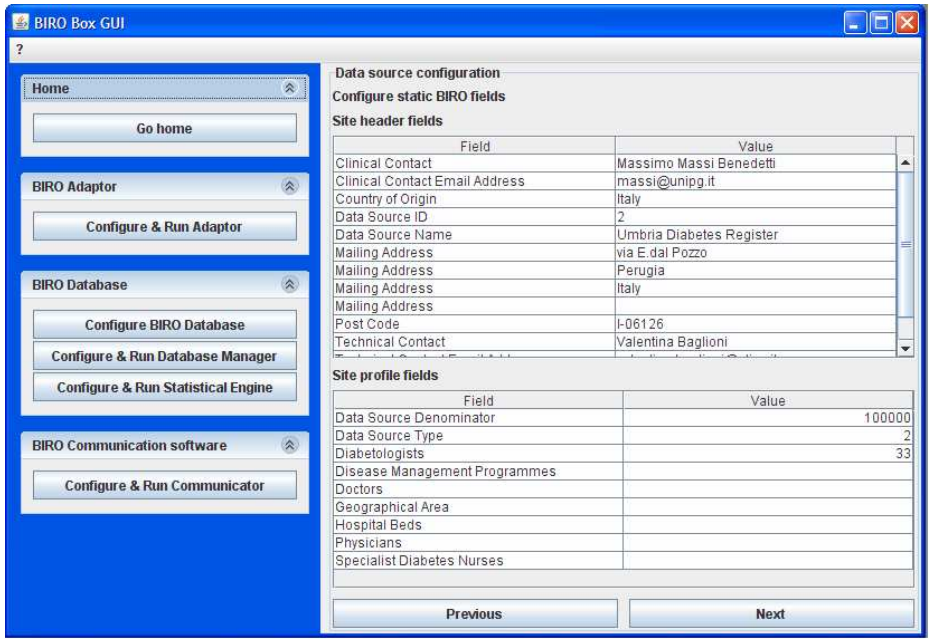
- The first step of the Adaptor configuration is the setting of the connection to the local data source.
- This can be a database or a CSV file.

Adaptor configuration



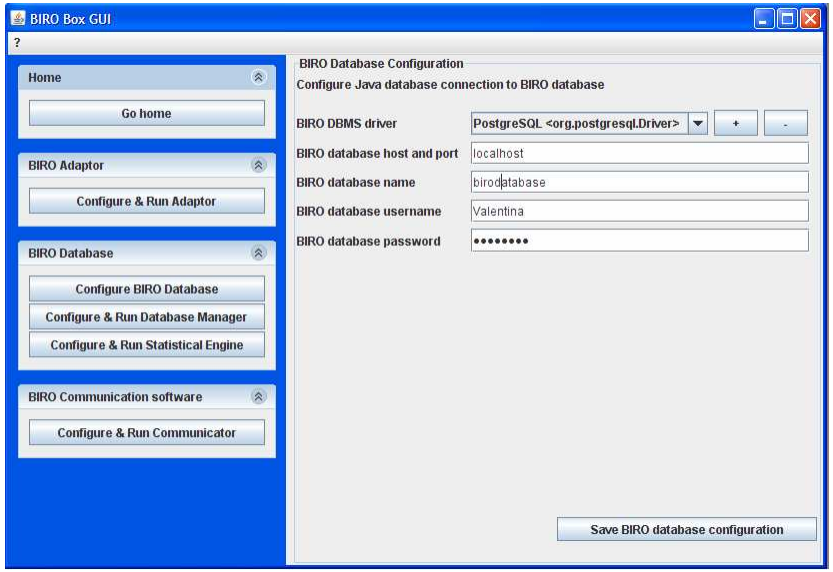
- In the second step the user has to configure the merge table.
- If the merge table is not present in the local database, the user may create it by writing the appropriate SQL query in the text area.
- The user may choose to import the whole merge table or just a subset of records, by defining start date and end date for episodes.
- A similar configuration is required for activity table

Adaptor configuration



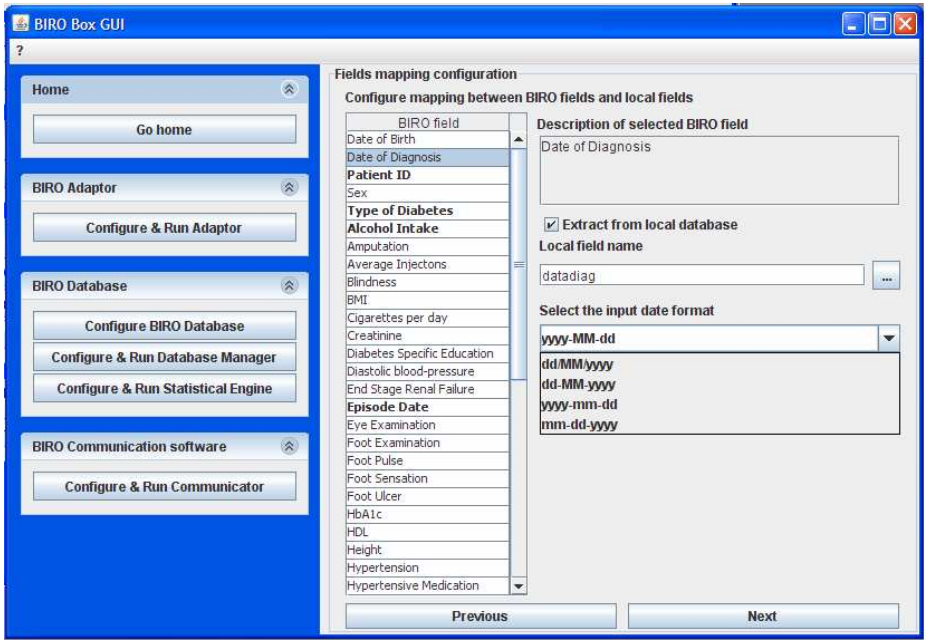
- In the data source configuration panel the user has to input static information about the centre (data souce ID, clinical and technical contacts...) and about the catchment area of the centre (total population, number of diabetologists, nurses, doctors...).

BIRO DB configuration



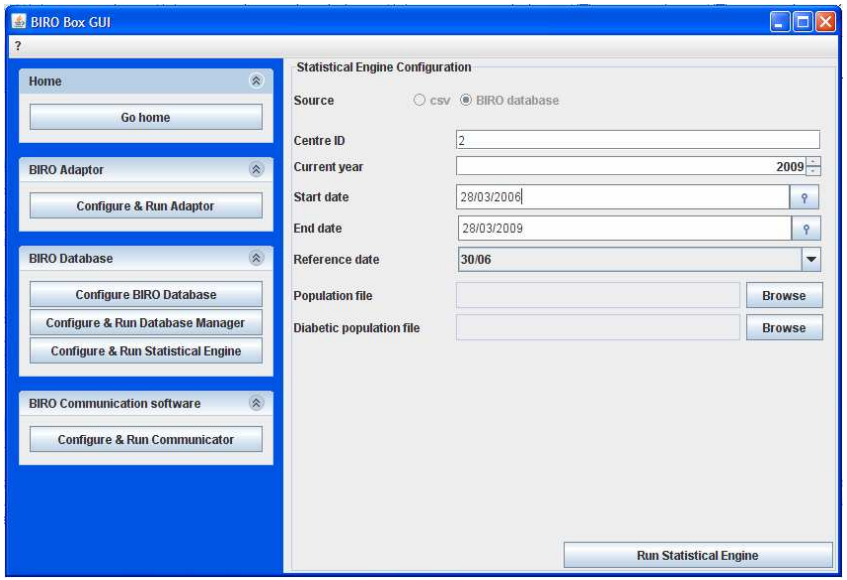
- The user needs to configure a database which will be considered the local BIRO database and will be used as basis for analysis by Statistical Engine
- URL details (DBMS Driver, database name, host and port) and login details (username and password) of chosen database are requested to the user.

Adaptor configuration



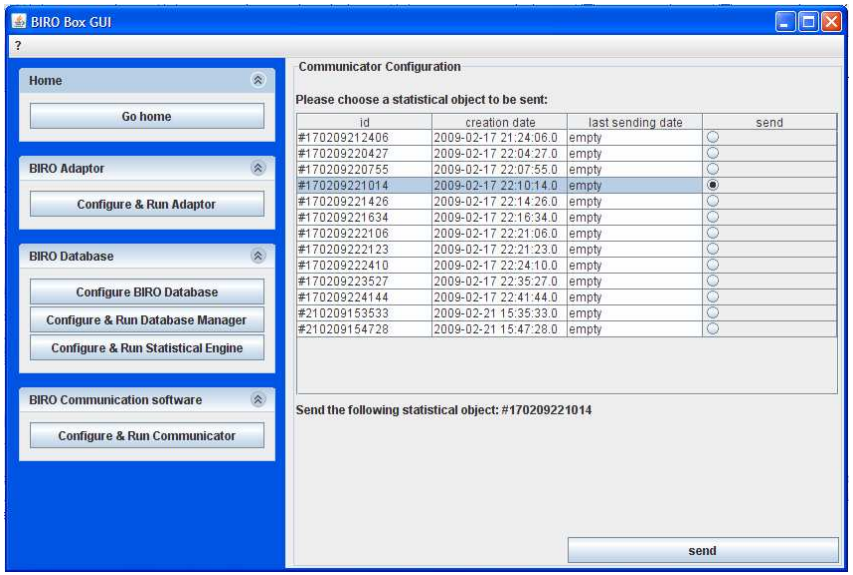
- The most complex configuration step of Adaptor is the mapping between local fields and BIRO fields.
- For each BIRO fields the user must specify if the field can be extracted, the local name and data format. There are four types of field:
  - **Date fields:** the mapping is done by choosing the date format in use locally
  - **Enumerated fields:** for each enumerated value the user has to write the correspondent value in local data source.
  - **Numeric fields:** the user has to choose the unit of measurement adopted in the local data source
  - **Simple fields,** like patient ID and BMI, don't require any mapping

Statistical Engine configuration



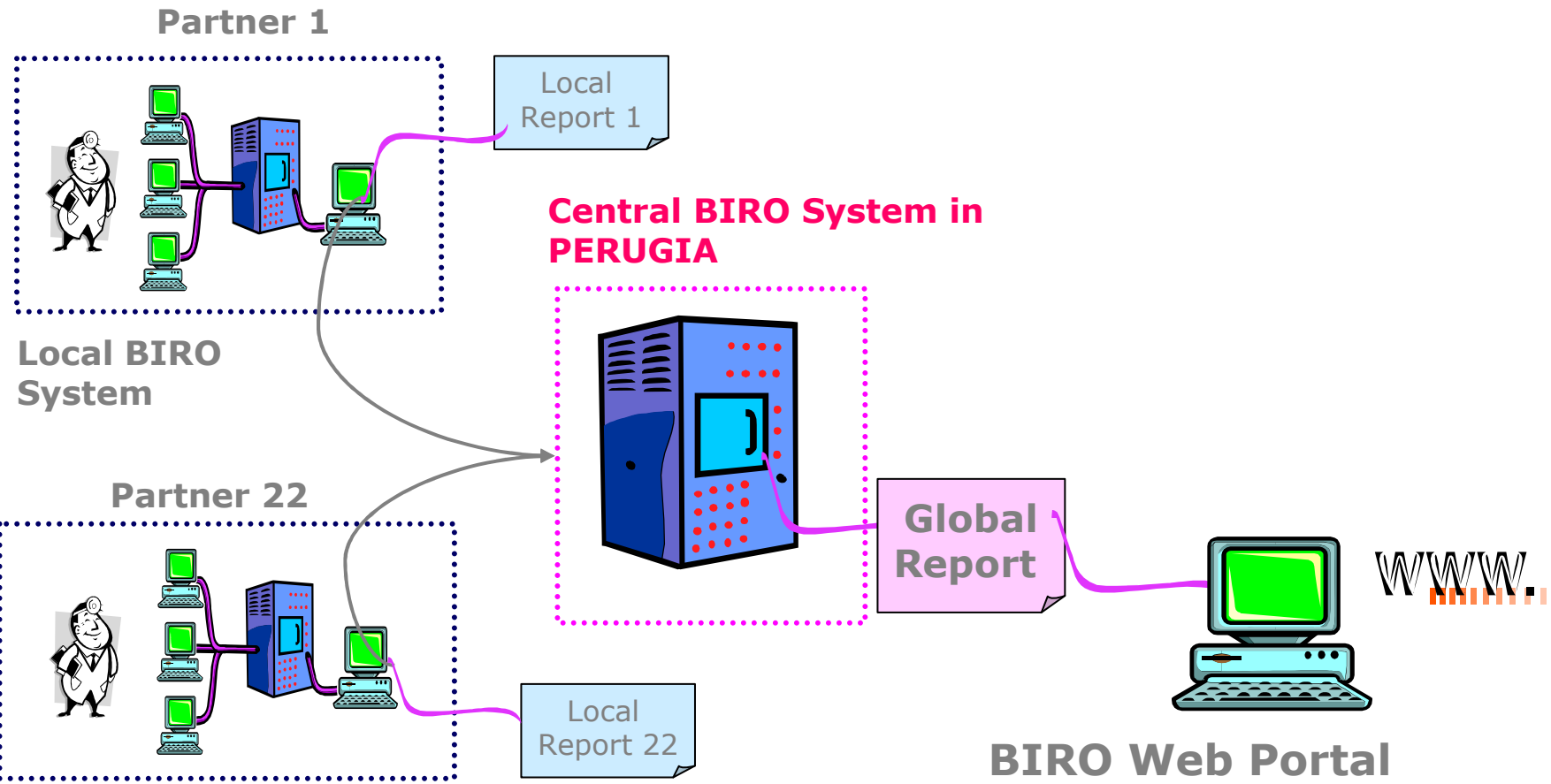
- The Statistical engine requires few data to be configured
  - centre ID
  - current year
  - start date and end date (time interval for data analysis)
  - reference date
  - population file and diabetic population file (CSV)
- Every time the user runs the Statistical Engine, a statistical report is produced in html and PDF format, stored in folders named with the current timestamp

Communicator configuration



- The Communication Software panel shows the complete list of statistical objects created by the Statistical Engine to be transferred to the central engine
- For each statistical object, the creation last sending date are duly specified
- When the user selects one of the statistical objects from the list and clicks the “send” button, the Communication Software creates a compressed folder and sends it to central server where it will be decompressed and permanently stored in the central database

Discussion


Partner 1
Local Report 1
Central BIRO System in PERUGIA
Local BIRO System
Partner 22
Global Report
www.
Local Report 22
BIRO Web Portal

Discussion

- replication of BIRO System at the local level