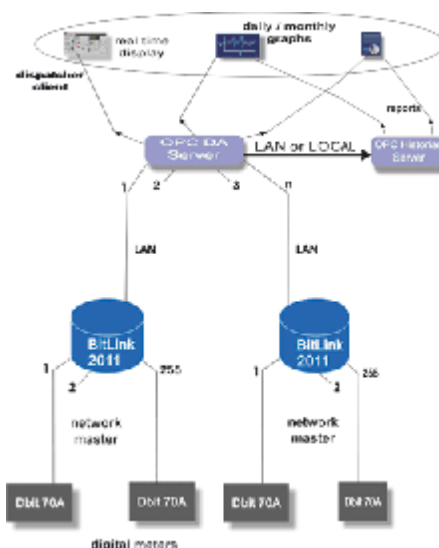# CAOM ENERGETIC DISPATCHER

Introduction:

The Energetic Dispatcher is represented by three software modules (servers + user) and their union forms the application that will give the possibility to monitor the absorbed or released energies by various users or generators, using a friendly graphical interface with the operator.

Design:

The application's design is based on OPC standards (OLE for Process Control), the flexibility and scalability play a major role from the beginning of implementation because the application allows the tasks distribution to different computers (LAN net) and the capability to resize it (upwards and downwards) without changing the existent hardware and software. The block-scheme justifies the specifications above:

Platform:

The chosen platform for the application is Windows XP Professional, the minimum necessary hardware for data and history server's hosting (OPC DA & OPC Historian) is: Intel Pentium IV processor, 256 MB RAM, 1 GB HDD free space.

Technical Characteristics:

The multiple dialogues introduced in all three modules of the application (fig. 2) have created a flexible management of the hardware as well as of the data originated and designated to be analyzed and distributed to the user's applications.

Characteristics of OPC DA Server:

- provides the opportunity to manage the communication parameters between the Bitlink2011 network master and the data server;

- manages the counters parameters used in access and the energy calculation formula;

- allows the specification of temporary formulas that can be used as operators for other mathematical formulas;

- calculates the formulas specified by the user and makes them available for OPC clients.

Characteristics of OPC Historian Server:

- allows counters values recording at certain time intervals with the possibility of choosing the sampling time

-on OPC customer's request, a unit series of recorded data is provided which can be applied on different time intervals. Thus, the calculation part for daily or monthly reports becomes more flexible and is executed in server, saving the hardware resources of the client who receives only the results of the application requested.

Characteristics of OPC User Dispatcher:

- due to the possible network distribution of the applications, the dispatcher allows the search and the choose from the local network of data or historian server

- gives possibility to the operator to choose the way to treat the values arrived from the data or historian servers, either they are energies (active or reactive), powers or power factors.

- allows the monitoring in real time of the values provided by the data server, warning the operator in case on non-functional counters subscription. The operator is warned also when counters are out of order during application's operation.

- gives the possibility to create daily or monthly charts or reports for certain counters grouped under a certain consumer.