Abstract (en)
[origin: WO0201605A2] A method for time-synchronous data collection allowing for the performance of time-critical calculations. More specifically, successive measurements of the amount of a resource used per unit of time are taken and stored in a series of memories. The first memory is a current value of the cumulative total use of the resource. The second memory is the immediately proceeding cumulative total usage of the resource. The third memory is a ring buffer that holds measured totals of resource usage that are time-stamped to correspond to the unit of time during which they were measured. These values are then used to determine total resource usage, the time of use, the peak times of usage and demand/load profiles on the resource's delivery system over different time periods. Such periods, for example, may be as short as one minute or as long as one hour.