5. Для розробки додатків необхідно використовувати єдиний програмний інтерфейс для роботи з БД, такий як API-інтерфейс ODBC.

Для отримання дійсно корисної моделі розроблюваної системи її формування варто здійснювати на базі об'єктозорієнтованих методологій. Об'єкти цих моделей можна потім реалізувати у прикладних програмах для керування установою та надання послуг клієнтам. Нові додатки можуть використовувати ті ж самі моделі прикладної обробки і даних. Всі ці вимоги задовольняє трьохрівнева модель додатків клієнт/сервер.

PENAL FUNCTIONS AT DISTRIBUTION OF TEMPORARY RESOURCES

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In a basis of organization of systems, which are adaptated to rigid temporary restrictions, principle multiversions of programming is fixed. In [1] algorithm of distribution of a temporary resource, based on the decision of a discretic problem of optimum control, is offered.

In the present report the methods of penal functions offer in a number of cases to improve received analytical dependences of the characteristics, which allow to operate distribution of temporary resources. Numbering of the formulas corresponds [1].

To an estimation of weighed total criterion in view of infringement of phase restriction it is necessary to apply ideas of a method of penal functions.

We shall consider at restrictions (2) and (3) new criterion function of a kind

$$\Phi(N) = \Delta(N) + \frac{\Delta^*(N) - \Delta_{\min}(N)}{\varepsilon_1} f\left(T(N) - T_0\right) \qquad (7)$$

Where not undifferential function

$$f\left(T(N) - T_0\right) = \left\{ 0, \text{ if } T(N) - T_0 \le 0;\ T(N) - T_0, \text{ otherwise}, \right\}$$

$\Delta^*(N)$ — meaning of criterion function (1) for the allowable decision of a problem (1) - (4);

$\Delta_{\min}(N)$ — an estimation from below of a minimum of function (1) at absence of restriction (4);

ε_1 — accuracy of fulfilment of restriction (4). Meaning(importance) $\Delta^*(N)$ and $\Delta_{\min}(N)$ Easily to find:

$$\Delta^*(N) = \sum_{i=1}^{N} \max_{1 \le j \le m(i)} \delta_{ij}, \quad \Delta_{\min}(N) = \sum_{i=1}^{N} \min_{1 \le j \le m(i)} \delta_{ij}.$$

To emphasize dependence of the optimum decision of a problem (7), (2), (3) from meaning ε_1, we shall designate it(him) $\overline{\Phi}_{\varepsilon_1}(N), \overline{\Delta}_{\varepsilon_1}(N)$, and received thus total meaning of time — $\overline{T}_{\varepsilon_1}(N)$. The following statement takes place which will be used hereinafter.

Lemma. The received optimum decision of a problem (7), (2), (3) is not worse on function of the purpose of the optimum decision of an initial problem (1) - (4), i.e. $\overline{\Phi}_{\varepsilon_1}(N) \le \overline{\Delta}(N)$, and the phase restriction (4) will be satisfied accurate to $_1$, i.e..

$$\overline{T}_{\varepsilon_1}(N) - T_0 \le \varepsilon_1.$$

In a problem (1) - (4) the penal functions naturally arise then, when the user is at a loss to set allowable accuracy $_1$ in phase restriction, but can specify the price unit delayed of time. Then the criterion of this problem will be written down as

$$\Delta(N) + \Im f\left(T(N) - T_0\right).$$

The following theorem has.

The theorem. If in a soluble problem the price unit delayed of time is given, the optimum steps of diskretisation on phase variable $\Delta(k)$ And $T(k), k = \overline{1, N}$ Are equal accordingly

$$h_\Delta = \frac{\varepsilon}{2N}, \quad h_T = \frac{\varepsilon}{2\Im N}.$$

Consequence. Accuracy $_1$ satisfaction of an inequality $T(N)$ T_0 thus is estimated in a suchway:

$$\varepsilon_1 \le \frac{\Delta^*(N) - \Delta_{\min}(N)}{\Im}.$$

Література:

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