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CONSTRUCTION PRINTS OF PROGRAMMABLE – CONFIGURABLE NETWORKS

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Annotation: Their functions, mostly implemented by embedded software, are rigidly built-in by intermediate nodes vendors. Vendors must follow designs dictated by slow and intractable standard committees rather than pursue rapid introduction of innovative cost-effective technologies. There is thus a need for new technologies that would enable programming inter-mediate nodes with the same simplicity of programming end-nodes. This paper describes the NetScript project, pursuing agent-based middleware for programming functions of intermediate network nodes. Delegated agents are used to deploy functions in intermediate nodes.

Key words: Computers connected to the network, particular network operation system, distinguish two types of Information Systems, hierarchical networks

Introduction

Method of organizing data processing according to the interaction of intellectuals, which is provided by a particular network operation system, it is possible to distinguish two types of Information Systems:

- Hierarchical networks;
- Client / server networks.

With the storage of data in hierarchical networks, their processing, presentation to the user, the network performs all the functions of a central computer. The user communicates with the central computer using the terminal. The central computer manages information input and display operations.

Advantages of the hierarchical network:

- * Good technology to ensure uninterrupted performance, data storage;
- * Reliable system of Information Protection and confidentiality.

Disadvantages:

The cost of hardware and software, the high cost of operation;

The fast performance and reliability of the network depends on the central computer.

In client/server systems, data processing is distributed between two objects: the server and the client. The client is a task, a workstation, a user. He can make a request for the server, read the file, search for records, etc. A Server is a device or computer that processes a request. It is responsible for the storage of data, the organization of access to this data and the transfer of data to the client. In client/server systems, data processing is distributed between the client and server, so the demand for the business performance of the computers used as both client and server is lower than in the case of hierarchical systems. It is accepted to distinguish two types of user systems from the client/server method of Organization of interaction:

- Equal network;
- Server dedicated network.

An equal-fledged network is a network that is not the only center of the management of the interaction of business entities, a single device of data storage (Figure 1). The operating system of such a network is distributed over all workspaces, so each workstation can simultaneously perform functions both as a server and as a client. The user can freely use all devices (printers, hard drives, etc.) connected to other workspaces in such a network.

Advantages:

Low cost (all computers connected to the network are used, and the midpoint of the DT price necessary for the operation of the network);

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High reliability (only some parts of the information will not be available when one workstation is out of work).

Disadvantages:

The work of the network will be effective only if the number of stations running at the same time is not more than 10 units; the difficulty of organizing effective management of the interaction of the workplaces and ensuring the confidentiality of information; the difficulty of updating and modifying the workplaces DT.

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