

# A Study of Construction of the Distributed Application Systems

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According to the growth of network environments, the distributed application systems have been become on large scale and been complicated. In general, the requirement analysis and acquisition have been well done by Object-Oriented technology, even though all of the system specifications might not be grasped, in advance of the development. After the development, the form or flow of the business system might be changed, and the menu and the program of the services might be changed. I call this kind of change as *Evolving of System*. Today, the business information systems have never changed in the long term, then after, the systems will be modified according to the requirement of the changes.

Object is to establish the new mechanism of system construction for adapting to the unexpected requirements and the changes of the services. I focus on the portion of business logic in the 3-tier Client/Server model. I aim to divide the behavior portion and the functional portion of the business logic.

In this study, I assume that application system may be contracted of *Scenario*, *Role*, and *Function*. Consequently, the basic or outline of business work flows respond to Scenario, the business work elements have own Roles, and the elements are realized cooperatively by Functions. I propose the system framework based on the concept of Scenario, Role, and Function, show the experiences of applications and describe the utility.