

# **NOVEL FDBC WITH CREATIVE TECHNOLOGY FOR INTEGRATING ADVANTAGES OF DISTRIBUTED AND CENTRALIZED SYSTEMS**

by

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Abstract

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AND CENTRALIZED SYSTEMS

by Lin Dong

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The novel FDBC, i.e. Front Distributed Operation and Backyard Auto Centralized Management technology is proposed and designed for network-based application that involved cross-departments, cross-platforms and multi-functions integration. The basic principles of FDBC are: using one single node to centralized management core logic and meta-data; adopting distributed nodes to realize the individual functional sub-systems and offer the operation interface, which would communicate with central node through universal APIs; connections and communication between distributed nodes are prohibited. The FDBC synthesizes the advantages of both distributed and centralized systems, fully considers the compatibility of cross-platforms and various functional software tools. As practice and evaluation, FDBC applied to 2 large-scale IT engineering projects: Sacred Heart Canossian College (SHCC) project and Macao e-Gov Portal project. The development process and testing results of these 2 projects prove the validity of such a novel technology while satisfying all service conditions. Both of these 2 projects were successfully completed and delivered, currently serving thousands of students and the citizen of Macao. The bright prospects of innovative FDBC technology are witnessed clearly.

**Keywords:** front distributed operation, backyard centralized management, cross-platforms integration, FDBC, e-Gov, system integration, software testing

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