Proposed Abelian ACM
Optimizing the Risk and Maximize DSS on RTOS

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ABSTRACT

Now a day, there is a rapid growing of business, resources and technology, mean while increasing with the requirement of electronic commerce for the sophisticated societies in around the globe. During this process increasing the uncertainty, un order, un safe and un setup due to un authorize users, hackers & down time of communication system. Our objective to determine and resolve these uncertainty problems to develop this proposed Abelian ACM to optimize the resources and technology and maximize the business and quality of services for all the time and every time to co-op with pervasive, ubiquitous and autonomy system. The relation, function, operation and services is the vital role for all aspect of multiples societies, business and technologies in around the cloud. Meanwhile, it will be more accountable for performance, fault tolerance, throughput, bench marking and risk optimization on any web services for all the time. We have to make more simplification, unification and step by step normalization by applying Abelian UFS ACM mechanism based on distributed object oriented system on multi dimensional work culture for management. This ACM will be more helpful to top management for decision making system.

Keyword: Access Control Mechanism (ACM), Business Resource Technology (BRT), Distributed Object Oriented System (DOOS), Processor Memory File Systems, Relation Function Operation & Services (RFOS)

1. REAL TIME OPERATING SYSTEM

The most fundamental system program is the operating system, whose job is to control all the resources of the computer and provide a base upon which is the application program can be written. The concept of the operating system as primarily providing its users with a convenient interface is a top-down view. The modern computer system consists of professors, memories, times, firmware, disk, network interfaces, printer and associates with a wide verity of other devices. When a computer or network has a multiple users, the need for managing and protecting the memory, I/O devices and other resources is even greater, since the users might otherwise interface with one another. In addition, users often need to share not only hardware, but information (files, databases,

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etc) as well. In short, this view of the operating system holds that its primary task is to keep track of who is using which resources, to grant resource requests, to account for usage, and to mediate conflicting requests from different programs and users (Tanenbaum, 2010). The resource management including multiplexing (sharing), time sharing resources in two ways: in time and in space. When resource is time multiplexed, different programs or users take turns using it. First one of them gets to use the resources, then another, and so on. To determining how the resource is time multiplexed – who goes next and for how long- is the task of the RTOS (Tanenbaum, 2010).

2. ACCESS CONTROL MECHANISM (ACM)

The objectives of an access control system are often described in terms of protecting system resources against inappropriate or undesired user access. From a business perspective, this objective could just as well be described in terms of the optimal sharing of information. After all, the main objective of IT is to make information available to users and applications. A greater degree of sharing may get in the way of resource protection; in reality, a well-managed and effective access control system actually facilitates sharing. A sufficiently fine-grained access control mechanism can enable selective sharing of information where in its absence, sharing may be considered too risky altogether.

Access control is concerned with determining the allowed activities of legitimate users, mediating every attempt by a user to access a resource in the system. A given information technology (IT) infrastructure can implement access control systems in many places and at different levels. Operating systems use access control to protect files and directories. Database management systems DBMS apply access control to regulate access to tables and views. Most commercially available application systems implement access control, often independent of the operating systems programming and DBMSs on which they are installed.

2.1 Attribute-Based Access Control (RWX)

The rights (RWX) and permissions are implemented differently in systems based on discretionary access control (DAC) and mandatory access control (MAC). In any ACM, the entities that can perform actions on the system are called subjects, and the entities representing resources to which access may need to be controlled are called objects (Access Control Matrix: data collection). The subjects and objects should both be considered as software entities, rather than as human users: any human user can only have an effect on the system via the software entities that they control. The authorization involves the act of defining access-rights for subjects. The authorization policy specifies the operations that subjects are allowed to execute within a system. The most modern operating systems implement authorization policies as formal sets of permissions that are variations or extensions of three basic types of access: (RWX). Read (R): The subject can (R), Read file contents, List directory contents Write (W): The subject can change (update) the contents of a file or directory with the following tasks: Update (Add Update Delete Rename) Execute (X): If the file is a program, the subject can cause the program to be run. (In Unix-style systems, the “execute” permission doubles as a traverse directory permission when granted for a directory.)

3. DATA COLLECTION (DSS DATA)

There are number of preventive access control developed as per requirement of the secure computing to achieve the highest level of business objective. There are some few methods to be developed based on Unix server and operating system programming. The Unix file system have to be develop as per business requirement for
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