

MULTI - AGENT SYSTEM FOR CONTROL, DIAGNOSTIC AND MONITORING

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Abstract: The theory of multi-agent systems arises from the trend of developing better Intelligent systems and of distributing computing more and more. Many important computing applications such as, process control, physical systems, robotic, communications networks will benefit from using Multi Agent System (MAS) approach. In this article we present a model for using intelligent agents to assist operators to recognize potential problem quickly enough and have been able to assist in preventing a wide range of real – life failure cases. Although the described method is too general it is flexible and applied into the real-time process industry. This paper discusses also Knowledge Broker and Dynamic Knowledge DataBase. The term Knowledge Broker as a particular kind of intelligent computer broker that deals in knowledge, in the way of keeping, querying, distributing it or communicating it, whether as a primary or secondary function. Our treatment in this paper will be twofold; one an outline of the issue's underlying theoretical framework within the field of Artificial Intelligence (AI), another a look at software for practical implementations.