

Development of a Decisional Strategy on Complex Systems Survivability

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Abstract

Reducing time for the decision making in order to restore optimal operating performance of a system is one of the objectives that should be taken into account within the design phase. This aim can be achieved by implementing survivability qualities for systems in all operating and usage conditions and reducing security risks leads to increasing quality and efficiency of management process. Definition of some quality attributes as essential to complex systems of big functional accountability by simulating some critical situations (incident, cyber attack, disaster), by integrating all components (hardware and software) brings a simplification of quantification of costs associated to ensuring a high level performance (availability and security). Availability and security used as a real basis for managerial decision for an as real as possible ratio between security costs and the importance of providing quality services should be developed as methods and tools for modeling the organizational information architecture. Evaluation and implementation strategy of survival capacities for complex / critical system attaches great importance usually in the context and currently known threats, but it must consider too the future evolution and development trends of that system.

Keywords: strategies, decision, complex systems, infrastructure, Web application, security, survivability

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