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Asigurarea survivabilității sistemelor informatice complexe

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Abstract

Defining essential capacities and fundamental quality attributes for systems are necessary to ensure optimum performance and to support strategies and objectives of an organization. Understanding the evolution of the quality characteristics and functionalities of the system in the presence of a fault can result from analyzing survivability – survival capacity of the system. Survivability can be defined as the set of technical and procedural measures taken to minimize the impact effect of an incident. Survivability has as fundamental purpose identifying the real costs of backup resources needed for restoration mechanisms to be added to a system to maintain services at a high level of performance. Survivability study of information systems, especially for Web applications, is a less explored domain in the literature. This article describes the SNA (Survivable Network Analysis) method in the context of Web applications developed on a 3-tier architecture through systematic evaluation of the proposed survival properties.

Keywords: survivability, security, strategy, SNA, decision, infrastructure.