

### **General View over Neverfail Heartbeat Solution**

NICOLAE-AURELIAN OPREAN (*Babes Bolyai University Cluj Napoca, Romania, Nickoa2001@yahoo.com*)

In this paper I try to present the concepts of Neverfail Heartbeat software providing a product overview and detailed description of the concepts, which play an important role in the Neverfail solution. Neverfail Heartbeat replicates disk updates from one server, called the active server to another server called the passive server. If the active server fails, the passive server can take over processing and it will assume the full identity of the active server. The active and passive servers can be located next to each other so protection is offered against hardware component failures or software crashes. Alternatively, the passive server can be placed at a remote location. This additionally offers protection against site failures. Neverfail Heartbeat allows full flexibility in selecting what data is replicated to the passive server: the application data, the application itself, or even the operating system. It is also possible to configure the protection level and guarantee that no updates or no updates from committed transactions are lost after a failure of the active server. Neverfail Heartbeat can be optimized for the lowest overhead with the chance that some updates may be lost after a failure of the active server.

*Keywords:* Active server, passive server, data protection