



High Availability Applications Marathon everRun HA - version 7.0.1

Dependency on applications is variable, but universally defined as essential. Many attempts have been made to produce hardware delivering high availability with varying degrees of success, management overhead and, cost. everRun HA from Marathon turns received wisdom on its head and delivers software-based Windows high availability without the complexities of traditional clustering or hardware offerings.

This product is blindingly simply in its set up and operation, disproportionately effective and actually by anyone's standards, attractively priced.

The solution comprises two servers and the everRun HA software. Once installed the software controls all I/O devices in both servers, presenting them to the network through one virtual server. Essentially, Marathon has inserted a new abstraction layer to achieve this, so subject to the configuration of the servers, a failed disk, NIC or other I/O device, or even a complete server, will not interrupt the availability of applications served by the Virtual Server. To reinforce this concept, it is only the virtual server that is visible to the network; even to the point that the MAC address is a virtual address from Marathon, not the manufacturer's NIC address - it's very clever.

Installation on servers replete with Windows Server 2003 Standard Edition was alarmingly easy. Identical hardware is not essential, but with added benefits, it's recommended. We started by configuring

the four NICs in each server - two as private intra server links, one for production and one for management. There are not that many options during set-up, but allocating at least one physical disk to the Virtual Server OS - achieved through the Device Re-director - is recommended.

The Management Console requires Java to be installed (supplied) and it's not long before you are able to use it, on the physical server, Virtual Server, or any network machine running the application. It's not unreasonable with prepared servers to expect everRun HA to be working in a few hours; when it is, it's time to abandon best-practice and play!

First of all, we disabled various combinations of NICs and saw how the everRun virtual server, carried on with no interruption to service. Similarly, disabling a physical drive caused no loss of data or interruption.

In normal operation, the data is mirrored (using the private server link) and following an outage where this has been suspended; it will of course take some time to catch up, but again with no user interruption. When any part of the physical server combination has been compromised, the Management Console makes this clear with colour changes. In a bizarre twist of fate, it is totally possible to have a very odd mix of I/O sub system failures at a physical level, but the Virtual Server not only carries on as normal, but looks normal to the network, representing a situation requiring notification. Marathon's

Management Console is supplied with an SNMP MIB, so via integration with a management tool, this can be achieved.

With identical servers in place, it takes just a few seconds to undertake an on line virtual server migration (between physical servers) with no impact to users or applications. The last thing to do was to pull the plug on the active server hosting the virtual server and from the Management Console we observed around a 15 second window for the second server to take over. The virtual server re-boot took around 40 seconds, but this would only ever happen with administrator intervention, or complete failure of the active server. Following such an event, the recovered server would undertake a Full Mirror update or a Delta Copy update, if the active server had been gracefully shutdown.

Automated resilience and component-level fault tolerance is the main benefit, but for some, it may earn a place in a continuity or recovery strategy. It is a really neat product; it has an easy business justification and will be easy for most network administrators to operate. **NC**

Product: Marathon everRun HA - version 7.0.1

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Price: Starting at \$7,500 (approximately £3,800) for a single socket licence.