# everRun MX





# Always-on Application Availability For Windows Environments

# everRun Advantages

- Software solution is affordable to own and simple to use.
- Automated system requires minimal IT staff to operate.
- Provides fault tolerant protection for symmetric multiprocessor (SMP) and multi-core workloads
- Protects all components in the application infrastructure.
- Scalable system grows with changing business requirements.
- Uses off-the-shelf hardware.
- Continuous uptime saves IT staff from performing recoveries.
- Requires no application modifications or complex scripting.

#### Welcome to The Always-On World

We live in an always-on world. Not only do your users and customers expect around-the-clock access to your business — they demand it. To be successful, you must meet the needs of the always-on world by being an always-on business. Organizations today can no longer afford to accept system downtime as standard practice.

# **Are You Still Reacting to Failures?**

If you're like most organizations, you react to system failures. When a failure occurs systems go down, applications become unavailable to users, business operations stop and IT staff is called upon to perform a recovery. This downtime can have a huge impact on sales, mission critical operations, employee productivity, and client satisfaction. Nevertheless, you settle for downtime in the event of a failure because you really have had no choice.

### You No Longer Have to Settle

You no longer have to settle for application downtime or the risk of data loss in the event of a system failure. Now you can move from a reactive, recovery-based model in which downtime is a given in the event of failures, to a new prevention-based model, in which downtime is prevented. Your organization can compute through failures and have always-on application availability, and the beauty is you can have this in a simple and affordable solution that requires very little IT intervention.

# Introducing Application Availability With everRun MX

Marathon's everRun MX is the world's first software-based, fault tolerance solution that supports single and symmetric multiprocessor and multi-core Microsoft applications. Now businesses with limited IT resources can have a simple and affordable solution to keep applications available during system failures to ensure continuous business operations. With everRun MX, all your Microsoft applications can have fault tolerant protection for a cost that is lower than today's recovery-based, high availability solutions.

#### How everRun MX Works

everRun MX provides full fault tolerance to applications that require 100% uptime. Using patented technology, everRun MX combines the physical resources of two standard Windows servers into a single operating environment with complete redundancy of all underlying hardware and data. everRun MX presents these redundant servers as a single operating environment to keep applications running in the event of component or system failures.

The everRun MX software operates in lockstep ensuring redundancy of the hardware, data, and networks, to provide automated fault management. This ensures true continuous availability for applications that simply cannot have any downtime, or lose 'in-flight' transactions.





# **Key Features**

#### **Full Fault Tolerance**

everRun MX handles system, network, and disk I/O failures without IT intervention and with zero downtime. Self-healing operations do not require IT intervention or specialized skills.

#### ComputeThru<sup>™</sup> Technology

Marathon's patented ComputeThru technology guarantees application availability by ensuring proactive recovery readiness through redundant systems and availability monitoring to create a single "always-on" application instance. everRun MX software operates with lockstep redundancy of the hardware, data, and networks, to provide automated fault management. In the event of a failure, the system computes through without downtime.

# **Symmetric Multiprocessor** and Multi-core / Support

everRun MX is the only software-based fault tolerance solution that protects all Windows applications including applications that require symmetric multi-processor / multi-core support, to meet an organization's growing technology and user requirements.

#### **Software Solution**

everRun MX is a software-only solution that is easy to deploy and use, for organizations with limited IT resources. It does not need application modifications or scripting to deploy, and runs on commodity, off-the-shelf x86 hardware platforms.

## everRun MX Suggested Configuration

- A pair of standard x86 Intel Servers
- Minimum 4GB of RAM or more recommended
- Intel VT Enabled CPU Chipset
- Local or SAN storage (Fiber Channel or iSCSI)
- 4 x 1GB Network Ports
- Supported Guest OS Include
  - Windows Server 2003 SP2 (32 & 64 Bit)
  - Windows Server 2008 and 2008 R2

Contact your Marathon representative for a detailed list of requirements including supported processors and memory.

#### **Automated Solution**

An automated solution, everRun MX enables hands-off operation, which is ideal for organizations with minimal IT staff. everRun MX synchronizes, monitors, corrects and repairs problems in all components within the application environment to prevent downtime. It provides transparent redundancy, real time validation, automatic server synchronization, and self-healing capabilities to ensure continuous uptime in the event of a failure.

# **Extended Page Table Support**

everRun MX leverages the Intel Extended Page Table feature of the Intel Chipset architecture, enhancing the performance of protected workloads by giving the virtual machine direct access to its own page tables, with the ability to modify its own page tables and directly handle page faults. This reduces the virtualization overhead associated with these workloads, and improves overall performance.

#### **Holistic**

everRun MX protects all components in the application infrastructure, including servers, all Windows applications, off-the-shelf storage and the network. This eliminates the need for multiple point solutions for availability, for easier administration and significant cost savings.

#### **Uses Off-the-shelf Storage**

everRun MX is completely hardware agnostic. It lets you use any type of off-the-shelf storage (Direct attached or SAN) to help save money and also move easily into the future.

#### **Single Operating Environment**

everRun MX is a single operating environment, with only one IP address, one hostname, and one MAC address. Users, clients, and applications need only to connect to one system and never have to make changes to this, even when failures occur.

## everRun Snapshots

everRun Snapshots, provide backup of an operating environment at a single point in time. Exporting snapshots to a secure location provides a backup/recovery strategy as well as a means of protecting your application.

#### Learn more

Application Availability with everRun MX gives organizations with limited IT resources an automated solution to keep applications available during failures to ensure continuous business operations. Organizations no longer need to settle for downtime, and can achieve the highest level of availability in a simple, highly affordable solution. Contact Marathon today to learn more.



