everRun vs. VMware

Positioning Stratus everRun Against VMware vSphere

Stratus POSITIONING

The competitive environment is crowded with vendors claiming to deliver superior levels of availability for end-users seeking to maximize the uptime of their virtualized environment. The reality is that for companies looking to deploy a software-based solution that can offer a highly available solution as well as true continuous availability with Recovery Point Objectives and Recovery Time Objectives of zero, their options are limited to the business continuity components integrated into VMware's vSphere product and the local and metro-wide availability protection features offered with Stratus everRun. While both offerings deliver best-in-class levels of application availability, everRun offers two unique advantages compared to vSphere:

1. **everRun is optimized for environments with minimal IT resources.**
   everRun has been engineered specifically to be deployed in settings where the customer's IT staff may be faced with time, resource or skill level constraints. With these challenges in mind, everRun has been designed to be installed in under 90 minutes. Furthermore, the hardware and software requirements needed for deployment are extremely short: two servers with a handful of Ethernet ports, a remote management computer and a single copy of the everRun software. External storage is not required. A fault tolerant I/O environment can be maintained using only the server's internal storage thereby eliminating the need for advanced storage management expertise. Once deployed, the administration of the everRun environment is accomplished using its integrated Availability Console, an intuitive, browser-based interface that simplifies the management and monitoring of physical systems and components, the storage and networking environment and the virtual machines that compose the typical everRun deployment. Ultimately, everRun's user-friendly environment eliminates the intimidation factor that may be preventing the deployment of an ultra-high availability data protection solution.

2. **everRun has got an IT manager's "worst-case scenario" covered.**
   everRun ensures maximum availability by delivering localized fault tolerant application protection. Should the worst happen – a catastrophic event that takes the entire site offline – continuous processing at a secondary location occurs through the use of its optional SplitSite synchronous replication product feature. While a SplitSite deployment requires careful planning to insure network topology and inter-site latency requirements are met, it doesn't require any additional investment in the duplicate servers, storage arrays, switching equipment and virtualization software and operating systems that are associated with competitive solutions such as VMware's vSphere Metro Storage Cluster. Furthermore, the comparative simplicity of the everRun solution is amplified when you consider that only SplitSite supports both high availability and fault tolerant remote application protection. For customers seeking a solution that provides the ultimate in application availability at a cost-effective price point, everRun delivers.

Product Descriptions

Both VMware and Stratus offer a choice of high availability and fault tolerant products that allow customers to match the appropriate level of protection to their applications' individual availability requirements.

VMware's HA and FT features are delivered as integrated components of many versions of the vSphere offerings. The HA product provides high availability by creating a cluster of pooled virtual machines with server hosts that are monitored for failures. If a server experiences a failure, its VMs are restarted on other surviving hosts in the cluster. The VMware FT product delivers continuous availability by creating and maintaining identical virtual machines that run on separate hosts. These primary and secondary VMs continuously monitor the status of one another and will transparently failover to an active node upon a failure of that host.

Stratus' everRun software allows two computers to work as a single, highly-available or fault-tolerant system. The high availability feature is offered in both the everRun Express and everRun Enterprise products while the fault tolerant capability is offered exclusively on Enterprise.

In HA operation, virtual machines can be load-balanced across both servers that are actively functioning in a primary-secondary arrangement. If the primary server incurs a CPU, memory or power failure, the application is automatically restarted on the secondary surviving node. Note that everRun's Availability Services technology allows the primary to ride-thru storage and network failures. Additionally, in configurations where all processing is occurring on a single primary server, any outages that may occur on the secondary server will have no impact on the processing activity that's taking place on the primary.

In FT operation, the everRun software creates a fully redundant environment with application memory, disk and state replicated across both servers. When the FT mode of operation is enabled, the VM is protected against all catastrophic faults and will incur no downtime and no data loss.

Positioning for Success

The high adoption rate of VMware's product-set is no accident: the breadth of their technology portfolio allows them to address an extremely wide range of customer's business requirements from the data center to the cloud. While taking absolutely nothing away from VMware – remember, vSphere hosted on our ftServer platform is a Stratus success story – there are numerous environments where everRun presents a wholly credible, if not outright superior alternative to vSphere.

Where does everRun hold a clear competitive advantage over VMware you may ask? As stated above, the simplicity of everRun can be very appealing to prospects with limited IT resources. Additionally, the high availability features and number of virtual machines that can be protected makes everRun Express an attractive solution for Stratus target markets within the Industrial Automation sector, or for those partners who may wish to embed their product to create an appliance offering. Ultimately, the ability to meet a customer's requirements for application fault tolerance is where everRun shines. When compared to VMware offerings, everRun Enterprise can:

1. Protect a larger number of virtual machines than VMware FT
2. Deploy a fault tolerant environment that can protect against a catastrophic event to both the server or the entire facility

The table below summarizes some of the key features associated with the VMware and Stratus availability offerings and can be used to help you qualify the applicability of everRun in your sales opportunity.

	VMware vSphere	Stratus everRun	Things You Should Know
High Availability Feature	Automatically restarts VMs after server failure; provides multi-site availability functionality through the vSphere Metro Storage Cluster solution; included with all versions of vSphere except the Essentials Kit; key member of VMware's business continuity family that receives regular feature enhancements.	Delivers extremely high level of availability – transparently rides-thru storage and network failures without requiring VM restart; outages to the secondary server have no impact on processing; can be used in conjunction with the SplitSite Metro-wide availability protection feature.	VMware HA is optimized for data center deployments – the number of protected VMs per host/vCPUs per VM greatly exceeds Stratus everRun. --- everRun support for 28 VMs meets/exceeds requirements for most edge/remote environments; TCO comparisons show Stratus financial advantage that may increase when human factors associated with ease of deployment and administration are factored.
Fault Tolerant Feature	Based on a fast-checkpointing architecture that can support up to eight vCPUs supporting up to four FT-protected VMs and up to eight vCPUs per VM; eight vCPU per VM feature limited to vSphere Enterprise Plus and Platinum Editions only.	Implements an advanced checkpointing architecture that offers industry-leading combination of VM protection and performance; can be used in conjunction with the SplitSite Metro-wide availability protection feature.	Both products deliver true continuous availability. --- Compared to VMware FT, everRun protects 2x the number of VMs (8 vs. 4) per host; does not require shared storage; TCO comparisons favor Stratus for applications that require 4 vCPUs per VM.
Metro-Wide Availability Option	A stretched-cluster, certified solution, not an actual product; positioned by VMware for disaster avoidance by combining replication with array-based clustering.	Offers cost-effective disaster tolerant capability; can be used in conjunction with either HA and FT features.	VMware FT feature not currently supported – limited to high availability-level protection; hardware requirements may result in substantial capital expenditure. --- TCO comparison significantly favors Stratus.

Conclusion

For nearly 40 years, Stratus has been in the business of delivering results for customers who have need of extreme availability solutions: this has been, and continues to be our singular focus. Over those decades, the hallmark of all Stratus products has been their ability to deliver ultra-high levels of availability but in a way that is non-complicated to deploy and simple to manage.

everRun continues the Stratus tradition of delivering on our core values of availability and simplicity. For customers facing a decision on how best to protect their virtualized mission-critical applications without making a major investment in infrastructure, training and on-going administration, Stratus everRun provides a cost-effective and technologically advanced, yet easy to use solution that can meet and exceed their most demanding business requirements.

Stratus

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