



3rd Party Applications on HC3: How Support Works

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Introduction

One common question we get at Scale Computing is, “Are my applications supported on HC3?” The answer to that question, at least 99% of the time, is “Yes, the application is supported and works great on HC3.” In most cases, Scale Computing can reference numerous HC3 users running the applications in question. There are exceptions to every rule (such as applications that require proprietary hardware, for example), but if the application being inquired about is designed to run on Windows or Linux and on x86/x64 platforms, then it is almost always supported.

Scale Computing tests and supports a broad range of operating systems and versions running as virtual machines on HC3 (see [Scale Computing HyperCore Support Matrix](#) for complete details). The actual applications running in those VM's are generally completely transparent to the HC3 system. Occasionally when the question of support is asked to the application vendor, the answers can vary and sometimes cause confusion. There are a number of reasons why application vendors may waver in their support for applications on platforms like HC3 and they all need to be considered.

Applications Run on Operating Systems

Between the computing hardware and the business applications that run our industries, there lies the operating system. Most of these applications are designed to run on Windows or Linux operating systems. A small number of these applications are designed to work directly with specific pieces of hardware, but the majority are designed to work only with the logical abstraction of the hardware from the operating system. In other words, the applications don't care what kind of processor, memory, or storage is in the physical hardware of the server, only that there is CPU, RAM, network access, and storage available.

Application abstraction from physical hardware is practically the basis for the popularity of server virtualization. If an application can run in any virtualized environment then there is little reason to believe it cannot run on HC3. This is because HC3 is a virtualization platform like VMware, Hyper-V, or XenServer. HC3 uses a KVM-based hypervisor designed to support Windows and Linux operating systems. Users install the same Windows and Linux operating systems on HC3 that they install on VMware, Hyper-V, XenServer, or even physical servers.

In addition to exceptions for hardware specific applications, there may also be exceptions for hypervisor specific applications or utilities. There are utilities designed to interact with specific hypervisors. An example of such an application is Zerto, a replication solution first designed specifically for VMware, and then later designed also for Hyper-V. Zerto interacts directly with the hypervisors it is designed to run on, and no other hypervisors.

Before asking whether an application will be supported on HC3, a few other questions should be answered first:

- Is the application tied to any specific server hardware components?
- Is the application licensing tied to any specific hardware components?
- Is the application specifically designed to interact with the virtualization hypervisor?

If the answer to these questions is no, which is true for most applications, then the the only remaining question should be:

- Is the application supported on Windows or Linux?

If the answer to this question is yes, then it will run on HC3.

Why Applications Vendors Might Say No

The primary reason why an application vendor would say no to application support on HC3 or any other virtualization platform is lack of testing. Simply testing on the various supported editions, versions, and service pack levels of Windows or Linux can be daunting for many software vendors. For this reason, some application vendors are sometimes wary to claim support for anything they aren't actively testing. In reality, it would never be possible to fully test and therefore "officially" support an application on all these variations of Windows and Linux operating systems across the various hardware platforms and hypervisors available.

Application vendors get asked everyday about support outside of what they can test. Commonly, they are asked if their application is supported running alongside another application. There are thousands of applications that users will want to run alongside any other application. Complexity of combining different applications on different platforms is a reality in IT. Do vendors have the ability to test all these applications and platforms together to make sure they are "supported"? No way.

When virtualization platforms like VMware were first being introduced into IT markets, application vendors were often unwilling to support VMware for their applications even though early adopters were spinning up VMs with those applications and happily plugging away. Many vendors are often slower to adapt to users which in turn causes mainstream users to slow adoption. Today, every Windows and Linux application is expected to be supported on VMware, and really on any hypervisor. Hyperconverged infrastructure solutions like HC3 with hypervisors designed specifically for hyperconvergence are a new technology that is going through the same slow vendor support adoption as VMware did. It's a cycle the industry can't seem to break out of.

There are so many unknowns with application support that vendors usually have a better idea of what is not supported than what is. They likely are aware of some actual limitations and conflicts with specific operating systems, hypervisors, or even hardware components. Vendors likely have a list tucked away somewhere of the known issues that will prevent the application from working successfully. This is why for application vendors, instead of asking if the application is supported with another vendor product, it can be more useful to ask if there are any known issues with said product. If there are, you know right where you stand; if not, then you likely have nothing to fear.

In these cases where a vendor is unwilling to state specific support for a platform or product, they should be asked for a specific reason. If in the unlikely event that there is a problem, they should be willing to work to resolve any issue. Application vendors who don't support platforms like HC3 are probably trying to limit their liability on support costs, but in doing so, they are really limiting their users. That's not the way multi-vendor support is supposed to work. It should be a shared responsibility and shared goal of customer satisfaction.

How Multi-Vendor Support Should Work

Multi-vendor support can be a messy business, especially when vendors are looking out for number one rather than their customers. As IT professionals, we've all run into situations where a problem of unknown origin goes through a troubleshooting cycle of finger-pointing between various vendors. The application vendor blames the operating system vendor, the operating system vendor blames the hypervisor vendor, the hypervisor vendor blames the storage vendor, and the storage vendor blames the application vendor resulting in a vicious cycle of downtime and despair. No one in these situations wants to take responsibility for even getting to the root cause of the problem, much less fixing it.

This is a problem because even with hyperconverged infrastructure solutions like HC3, which eliminate most multi-vendor issues from the infrastructure, IT is always going to be a multi-vendor environment with application vendors mixed in. Vendors who don't have either the right resources or the right approach to working with other vendors on support are often a bigger problem than the actual technical problem trying to be fixed.

This is not how multi-vendor support is supposed to work. The vendors should work together to cooperatively find the root cause and then when the root cause is known, the vendor solution(s) causing the problem should take responsibility for a fix. While the customer is involved, the customer does not need to be a switchboard operator connecting the communications between the various vendors. Vendors should take the initiative to reach out to each other to resolve the issue, which is why organizations like TSANet exist.

[TSANet](#) is a multi-vendor support community for vendors to work together in a neutral community environment. Scale Computing is a member of TSANet because it speeds the support process and leads to quicker resolutions for multi-vendor issues. Each vendor adequately supporting their own product in a multi-vendor IT environment is what alleviates the burden of the unknown from support. Will the application run on an untested platform? It should and if it doesn't, vendors can work together to quickly find out why not and offer a resolution.

What Does Scale Computing Support?

Scale Computing supports the HC3 hardware and virtualization platform. This includes the HyperCore operating system which includes software-defined storage and the virtualization hypervisor. Scale Computing provides a clear list of supported operating systems including Windows and Linux operating system versions and editions in the [HyperCore Support Matrix](#).

For applications, Scale Computing is fully prepared to support Windows and Linux operating systems running on HC3 and therefore applications designed to run on Windows and Linux should be supported by their vendors for HC3. Scale Computing supports and offers fixes for the hardware and virtualization platform we provide. Operating system vendors offer fixes for operating system issues. Application vendors offer fixes for application issues. Working together, each doing his part, there should be no issue supporting applications on HC3 that are designed to run on Windows or Linux.

Conclusion

IT is a complex system of hardware and software working together to provide the services that run our modern industries and economies. It is impossible for any single vendor to know every combination of IT solutions that might be supported or unsupported. For this reason, some choose to err on the side of caution and declare perfectly valid solutions unsupported. These practices are inhibitors to innovators and IT departments that want to take advantage of groundbreaking new technologies.

If it wasn't for early adopters ignoring the ambiguous rules of supported or unsupported, new technologies would never get off the ground. It often only takes common sense to overcome the barriers of misinformation surrounding application support. At Scale Computing, trust is placed on the ability of IT vendors to come together to ensure support for applications, operating systems, virtualization, and hardware with customers as the first priority.

In real world situations, Scale Computing has never heard of application vendors refusing to support and remedy issues with their applications, regardless of where they are running. In reality, most application vendors don't know or bother to ask on what platform it is running, as long as it is running on their supported OS. HC3 is a platform designed to run Windows and Linux operating systems and applications and that is what Scale Computing is committed to support.

If you have questions about whether your applications are supported on HC3, feel free to contact us at 877-SCALE-59 or info@scalecomputing.com. If you want us to work directly with your application vendor to make sure your applications are supported, we would be happy to do so. You can have your application vendor contact Scale Computing at bd@scalecomputing.com.



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