HC3 SYSTEM SOFTWARE

SUPPORT MATRIX

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DEFINITIONS

SUPPORTED

Scale Computing will fully support and troubleshoot the operation of the HyperCore system related to any supported operating systems and configurations. Scale Computing may document environment specific configurations and best practices as well as performance optimizations. Scale Computing may provide certified configurations with the operating system vendor where applicable.

UNSUPPORTED

Scale Computing will support and troubleshoot the operation of the HyperCore HC3 system only. Environment specific configurations and best practices may not be available, including performance optimizations. Scale Computing does not routinely test these configurations and will typically not be able to re-create issues specific to these environments for troubleshooting.

TERMINOLOGY

	Definition
Single Node System (SNS)	A single HC3 node initialized as an individual HC3 entity.
Cluster	A minimum of 3 HC3 nodes initialized as an individual HC3 entity.
Tiering	The HyperCore Operating System's capability to pool different drive types as different levels of storage. All spinning disks are in one tier while all SSD disks are in a separate tier. This enables an administrator to customize access to the separate storage pools at the virtual disk level for each HC3 VM.
Non-Tiered Node	A node model that contains 100% spinning drives and no SSD drives.
Tiered Node	A node model that contains 25% SSD drives and 75% spinning drives.
Flash Node	A node model that contains 100% SSD drives and no spinning drives.
HCOS	HyperCore operating system, the custom-built storage, virtualization, and intelligence layers powering the HC3 experience.

TESTED SYSTEM LIMITS

Supported

Unsupported

VM Limits
Virtual Disk Capacity
No Minimum
8 TB Maximum

Virtual Disk Count
No Minimum
26 Maximum

Virtual NIC Count
No Minimum
8 Maximum

HC3 System Replication
1 to 1 (One System's VMs To/From One Other System)
1 to Many (Different VMs from One System to Multiple Systems)
Many to 1

In all instances, a maximum of 25 HC3 systems can replicate to a single Target HC3 system.

HC3 System Replication
1 to Many (Same VM from One System to Multiple Systems)

For more than 25 Source HC3 systems replicating to a single Target HC3 system, contact Scale Computing to discuss your use case.

VM Imports and Exports
QCOW2 v3 is supported on HCOS 7.2+.

Up to SMBv3 is supported for HC3 VM export destinations on HCOS 8.0+.

E1000/IDE/Compatibility drivers are supported for the initial migration to HC3 unless stated by ScaleCare Support. The latest VIRTIO/performance drivers should be used for full support.

VM Imports and Exports
N/A

N/A

E1000/IDE/Compatibility drivers are only supported for the initial migration to HC3 unless otherwise recommended by ScaleCare Support.

PRODUCT LIFE CYCLE REFERENCE

Scale Computing employs life cycle policies around software and hardware to ensure the latest capabilities and features are made available to customers.

	Detail
End of Life Announcement	**Announcement to customers that the specific product will be entering the end of life cycle.** Initiates the "last time buy" period before the official **End of Sale** date.
End of Sale	**The date when the specific product will no longer be offered on the Scale Computing price list for purchase.** Initiates the "full support" period where customers are given the final chance to renew and/or extend their support contract for full support (hardware and software) before the official **End of Support Renewal** date.
End of Support Renewal	**The date when the specific product's full support option (hardware and software) will no longer be offered on the Scale Computing price list for purchase.** **Customers with full support contracts will be honored to the contract completion date.** Initiates the "limited support" period where software patches and updates may be limited or end completely. Software support will be offered in a "best effort" capacity given this limitation before the official **End of Life / End of Support** date. Hardware will not be supported under the "limited support" contract and will need to be purchased separately in the event of a failure.
End of Life End of Support	**The date when the product will no longer be supported (hardware or software) by Scale Computing.** **Customers with full or limited support contracts will be honored to the contract completion date.**

ACTIVE SOFTWARE END OF LIFE CYCLES

	End of Life Announcement	End of Sale	End of Support Renewal	End of Life End of Support
Workspot Partnership	-	08/31/2018	10/11/2018	03/01/2023

HYPERCORE SOFTWARE SUPPORT

Scale Computing offers support on the latest two (2) General Availability (GA) software releases. Support is available for Unrestricted Availability (UA) and Restricted Availability (RA) software released within the last twelve (12) months unless the software has since been replaced by its GA equivalent.

General Availability (GA) software is available through the HC3 web interface for self-managed upgrades at the user's convenience. **Unrestricted Availability (UA) software** is production ready software available through the HC3 web interface for any systems already on the software path, otherwise they may be scheduled with and applied by ScaleCare Support. **Restricted Availability (RA) software** is production ready software upgrades available at ScaleCare Support's discretion; validation criteria may be applicable. Must be scheduled with and applied by ScaleCare Support.

	8.5.3	8.6.5	8.8.1	8.8.2	8.8.5	8.8.6	8.8.7	8.8.8	8.8.9
Release Date	Oct 2019	Mar 2020	Mar 2020	Mar 2020	Jun 2020	Jul 2020	Aug 2020	Aug 2020	Sep 2020
Availability	General	General	Restricted	Restricted	Restricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Supported	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
	8.8.10	8.8.11	8.8.13	8.8.15	8.8.16	8.8.17	8.8.18	8.8.19	8.8.20
Release Date	Sep 2020	Sep 2020	Oct 2020	Oct 2020	Dec 2020	Jan 2021	Jan 2021	Feb 2021	Mar 2021
Availability	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Supported	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	8.9.1	8.9.3	8.9.5	8.9.7	8.9.8				
Release Date	Oct 2020	Dec 2020	Jan 2021	Jan 2021	Mar 2021				
Availability	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted				
Supported	Yes	Yes	Yes	Yes	Yes				

Latest Two (2) GAs

VM GUEST OPERATING SYSTEM SUPPORT

Any guest operating system not listed may operate normally but is not tested for stability or functionality; minimal support assistance will be available.

Linux / UNIX	Centos Enterprise Linux *	RHEL Enterprise Linux *	Ubuntu Server *	FreeBSD *	SUSE Linux Enterprise *	Fedora *
General Functionality and Features	Versions Currently Supported by the Manufacturer	Versions Currently Supported by the Manufacturer	Versions Currently Supported by the Manufacturer	Versions Currently Supported by the Manufacturer	Versions Currently Supported by the Manufacturer	Versions Currently Supported by the Manufacturer
HC3 Virtual Disk Mount Display	Requires Guest Agent **	Requires Guest Agent **	Requires Guest Agent **	Requires Guest Agent **	Requires Guest Agent **	Requires Guest Agent **
HC3 Virtual Disk Live Add and Delete	**	**	**	**	**	**
VIRTIO Drivers	Packaged	Packaged	Packaged	Packaged	Packaged	Packaged

* Kernel versions prior to 2.6.34 without appropriate patches expose an issue that causes the VM to hang after upgrading to HyperCore Version 7.6 and up. Ensure the appropriate kernel is in place before upgrading.

Windows	Server 2019 x64	Server 2016 x64	Server 2012 2012 R2 x64	Windows 10 x64	Windows 8 8.1 x86, x64
General Functionality and Features	Requires HCOS Version 8.2+ BIOS Only; UEFI Unsupported	Requires HCOS Version 7.2+ BIOS Only; UEFI Unsupported	BIOS Only; UEFI Unsupported	BIOS Only; UEFI Unsupported	BIOS Only; UEFI Unsupported
HC3 Virtual Disk Mount Display	Requires Guest Agent **	Requires Guest Agent **	Requires Guest Agent **	Requires Guest Agent **	Requires Guest Agent **
HC3 Virtual Disk Live Add and Delete	**	**	**	**	**
VIRTIO Drivers	Scale Computing Version 0.1.141	Scale Computing Version 0.1.141	Scale Computing Version 0.1.141	Scale Computing Version 0.1.141	Scale Computing Version 0.1.141

** HC3 supported, but the guest OS may or may not support the functionality. IDE virtual disk types are NOT compatible with the feature.

HC3 SYSTEM TO SYSTEM REPLICATION SUPPORT

It is recommended that customers update target clusters before primary clusters when using remote connections and/or replication. It may be a required action to update to the **latest HyperCore Software version** when troubleshooting issues with ScaleCare Support.

	8.1.0	8.1.1	8.1.2	8.1.3	8.2.0	8.3.0	8.3.3	8.4.4	8.5.1	8.5.2	8.5.3	8.6.0	8.6.1	8.6.2	8.6.3	8.6.4	8.6.5	8.6.6
8.1.0	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No
8.1.1	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No
8.1.2	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No
8.1.3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.2.0	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.3.0	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.3.3	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.4.4	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.5.1	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.5.2	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.5.3	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.6.0	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.6.1	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.6.2	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.6.3	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.6.4	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.6.5	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8.6.6	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NOTE: 8.6.5 is the last "backwards compatible" software version regarding replication. Per best practices, once a target system has been updated to a version of 8.8 or later, ALL systems, primary and targets, are required to be updated to 8.8 or later. No new replication jobs can be initiated until all systems have been updated, although existing jobs will continue to run normally.

SCALE COMPUTING SOFTWARE

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It is recommended that customers update target clusters before primary clusters when using remote connections and/or replication.
Per best practices, once a target system has been updated to a version of 8.8 or later, ALL systems, primary and targets, are required to be updated to 8.8 or later. No new replication jobs can be initiated until all systems have been updated, although existing jobs will continue to run normally.

	8.8.1	8.8.2	8.8.5	8.8.6	8.8.7	8.8.8	8.8.9	8.8.10	8.8.11	8.8.13	8.8.15	8.8.16	8.8.17	8.8.18	8.8.19	8.8.20	8.9.1	8.9.3	8.9.5	8.9.7	8.9.8
8.8.1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.9	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.10	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.11	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.13	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.15	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.16	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.17	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.18	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.19	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.8.20	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
8.9.1	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
8.9.3	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
8.9.5	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
8.9.7	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
8.9.8	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

HC3 WEB INTERFACE BROWSER SUPPORT

There is a known issue with non-US keyboard layouts trying to utilize special characters in the HC3 web interface VM console view from Internet Explorer. An alternate supported web browser should be used.

	Chrome	Internet Explorer	Firefox	Microsoft Edge	Safari
OS	Windows, Mac OS X	Windows	Windows, Mac OS X	Windows	Windows, Mac OS X
Version	Latest Vendor Version	Latest Vendor Version	Latest Vendor Version	-	-
Supported	Yes	Yes	Yes	No	No

HC3 MOVE POWERED BY CARBONITE REFERENCE

NTFS file systems only. Find more on the HC3 Move service at **Scale Computing Professional Services and Programs**.

Tools exist for migration in cases where HC3 Move is not supported or offered. Clustered application environments such as Microsoft Failover Cluster or Distributed Access Groups will require additional configuration changes to migrate to HC3. Contact ScaleCare Support for further information.

Supported	Unsupported
See the **Carbonite Migrate User's Guide** for the full list of supported Windows and Linux servers. Scale Computing will support operating systems listed in Carbonite's User Guide that are also supported in our **VM GUEST OPERATING SYSTEM SUPPORT** chart.	New operating system features specific to Windows 2016 and 2019, such as Nano Server, Windows Containers, and so on, may not be supported. See the linked Carbonite User Guide for details on limitations. Server Core operating systems are only supported in a matching Server Core to Server Core configuration. Source and Target servers must be running the same Windows localized versions (English language to English language, for example). *** HC3 Move Powered by Carbonite does not support Desktop operating systems.**

FEEDBACK & SUPPORT

DOCUMENT FEEDBACK

Scale Computing welcomes your suggestions for improving our documentation. Please send your feedback to
documentation@scalecomputing.com.

TECHNICAL SUPPORT AND RESOURCES

There are many technical support resources available for use. Access this document, and many others, at
http://www.scalecomputing.com/support/login/.

- Partner Portal - Partner and Distributor use only.
- User Community - Customer focused, including our online Forum.
- Hardware Support Matrix

Online Support   You can submit support cases and view account information online through the Scale Computing Customer and Partner Portals at **http://www.scalecomputing.com/support/login/**. You can also Live Chat with support through **www.scalecomputing.com** during standard hours Monday-Friday from 8-8 local time.

Telephone Support   Support is available for critical issues 24/7 by phone at +1 877-SCALE-59 (+1 877-722-5359) in the US and at +44 (0) 808 234 0699 in Europe. Telephone support is recommended for the fastest response on priority issues, and the only response after standard Support hours.