

StarWind Command Center: Quick Start Guide

2024

TECHNICAL PAPERS





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About StarWind

StarWind is a pioneer in virtualization and a company that participated in the development of this technology from its earliest days. Now the company is among the leading vendors of software and hardware hyper-converged solutions. The company's core product is the years-proven StarWind Virtual SAN, which allows SMB and ROBO to benefit from cost-efficient hyperconverged IT infrastructure. Having earned a reputation of reliability, StarWind created a hardware product line and is actively tapping into hyperconverged and storage appliances market. In 2016, Gartner named StarWind "Cool Vendor for Compute Platforms" following the success and popularity of StarWind HyperConverged Appliance. StarWind partners with world-known companies: Microsoft, VMware, Veeam, Intel, Dell, Mellanox, Citrix, Western Digital, etc.

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Introduction

StarWind Command Center is designed to deliver true single-pane-of-glass monitoring and management for StarWind HyperConverged Appliances on Hyper-V. It combines both monitoring and management functionality to not only check Hyper-V cluster and nodes' health state as well as performance metrics from convenient dashboards but also administrate the entire StarWind HCA Hyper-V environment starting from nodes and networks and up to VM management.

Getting Started With Starwind Command Center

Logging Into The Command Center

1. To log into StarWind Command Center, enter https://*Command Center IP address* in a web browser. Please use credentials that were configured during the installation.

≋ StarWind	
Login swadmin	
Password	
Sign in	

Main Menu Options

This part provides a detailed description of StarWind Command Center monitoring and management capabilities.



Dashboard

The DASHBOARD item provides a set of widgets that allow monitoring of virtualized infrastructure.

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DASHBOARD	Cluster Summa	ny					We	orkload Summary					
	Cluster						Average Queue Depth						
	Hypervisor						Read/Write Ratio						
	Operating Sy	rstem					IOPS						
	StarWind Sta	ick				Peak Disk Throughput							
	SDS Stack						Average IO Size						
	Backup Soft	ware						Average IO Latency					
	VM(s) State				Node(s) State		Virtual V			olume(s) Availability			
		On		2		Up				High Availabili	ty		
	Total	Off			Total	Down			Total	Limited Availa	bility		
	2 Paused			٥ 2		Paused			1	Not Available			
	Saved									Simple			

DASHBOARD consists of the following widgets:

1. Cluster Summary – delivers the general information about the cluster (including the cluster name and IP address), hypervisor, operating system, StarWind Stack version, SDS Stack version, and backup software.

2. Workload Summary – delivers the general cluster workload information, including the average queue depth, read/write ratio, IOPS (workload intensity measured in percentile), peak disk throughput, average IO size, and average IO latency.

3. VM(s) State – delivers the overall information on the state of the clustered VMs, including on, off, paused, and saved ones.

4. Node(s) State – delivers the overall information on the state of the clustered nodes, including up, down, and paused ones.

5. Virtual Volume(s) Availability – delivers the overall information on the state of virtual volumes, including those that are of high availability (StarWind HA volumes that are synchronized and available on both nodes), limited availability (StarWind HA volumes that are synchronized and available currently only from one node) and ones that are not available (offline StarWind volumes) and simple (StarWind volumes that are not



replicated).

6. Resource usage – delivers information on usage of CPU, Memory, Storage, and Backup Repository.

7. Performance – delivers the information in the form of graphs about IOPS, Disk Throughput, and Cluster-Wide Controller Latency. These metrics can be checked live, for last hour, last day, last week, last month, or last year.

8. Tasks and events – delivers the information on tasks and events in StarWind Command Center.

Vms And Roles

The VMs and ROLES item contains VIRTUAL MACHINES and ROLES sections.

The VIRTUAL MACHINES item consists of View and Manage tabs.

View

The View tab consists of the following widgets:

1. VM(s) Summary – provides information on a number of VMs, their state, and availability.

VM(s) Summary				
	VM(s) State	VM(s) Availability		
	On	High Availability		
Total 1	Off	Limited Availability		
-	Paused	Down		
	Saved	Simple		

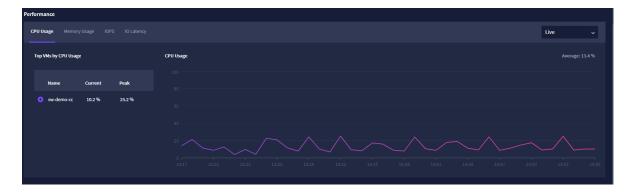
2. Resources Usage – provides information on CPU, memory, and storage utilization.



3. Performance – provides information on the CPU usage, memory usage, IOPS, and IO



latency as per the selected VM in the form of graphs.



4. Tasks and Events (VMs) – provides information on the running and executed tasks and events related to VM operation.



Manage

This option delivers the ability to perform various operations with VMs such as creating new VMs, editing the settings of the existing VMs, removing VMs, cloning VMs, migrating VMs, opening VM console, migrating VMs from external Hyper-V host, backup jobs of the VM

≋ StarWind								E 🖡 4	user v				
	View Manage												
🙆 DASHBOARD	of1 🕂 💋 🛍				Power ~ Migrate ~ Console								
VIRTUAL MACHINES													
STORAGE	Name 🗢	State 🗢	Host 🗢		CPU Usage ≑	RAM 🗢	RAM Usage 🗢	Total Size ≑	Storage Usage ≑				
A NETWORK													
NODES													
및 PROACTIVE SUPPORT													
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TASKS AND EVENTS													

Creating a new VM

1. To create a new VM, click the Add icon



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	View Manage							
C DASHBOARD	Selected 0 of 1 +							Q ±
VIRTUAL MACHINES								
STORAGE	🗹 Name ≑	State ≑	Host ≑	CPU Usage ≑	RAM ÷	RAM Usage ≑	Total Size ≑	Storage Usage ≑
🚓 NETWORK								12.65 GB
E NODES								
QJ PROACTIVE SUPPORT								
- BACKUP								

2. Specify the required name, number of vCPUs, amount of RAM, disk size, assign a network adapter, installation media, boot order, and VM files location.

3. To add a new or existing disk or a network adapter to a VM, click the Add device button and select the required option.



Create Virtual Machine	×
+ Add Device	
New Disk	Name SW-VM1
Existing Disk	
Network Adapter	
✓ CPU	2 ~ ~
▼ RAM	Size(GB) 2 Up to 9.35 GB can be added
▼ Disk 1	Size(GB) 10 Up to 27.21 GB can be added
✓ Network 1	
- Boot order	First boot device
✓ Virtual machine files	
Power on this virtual machine after cr	reation
	Cancel

4. Click Create to create a new VM.

Performing power management operations on a VM

1. To perform power management operations with a VM, select the required VM, and click the Power button.

2. In the drop-down list, select the required option: Shutdown, Restart, Pause, Resume, Start, Save, Turn Off, or Reset.



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		Manage							
0		of 2 🕂 🖉 🏛			Power ~ Migrate		Q ±		
Ø	VIRTUAL MACHINES				Shutdown				
		Name ≑	State ≑	Host ≑	Restart	RAM	RAM Usage ≑	Total Size ≑	Storage Usage ≑
ф					Pause				12.65 GB
-									2.01 GB
ę					Save				
•					Turn Off				
₿					Reset				

Performing VM migration

1. To perform migration operations with a VM, select the required VM, and expand the Migrate drop-down list.

2. In the drop-down list, select the required action: Live Migration or Quick Migration.

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		Manage									
		9f2 🕂 🛛 🛍				Power ~	Migrate 🗸	Console			
VIRTUAL MACHINES							Live Migratio	n			
		Name ≑	State ≑	Host ≑		CPU Usage 🗘	Quick Migrat	lon	RAM Usage ≑	Total Size ≑	Storage Usage ≑
	окяволия иптик иколека этовиде истикаяк истокак и	рановио поли иногина топии иногина топии иногина топии нетикови нетик	Liver Manage DASHBOADD Selected 1 of 2 Image VATURA Monines Image Image Strokoff Image Image Image NETWORK Image Image Image Image NETWORK Image Image	L/lev Manage Vertue Monage Selected 1 of 2 0 6 Vertue Monage Image Image Image Image Vertue Monage Image Image Image Image Image Vertue Monage Image Ima	Liver Manage Vertruk Wonnes Selected 1 of 2 Image Vertruk Wonnes Image Image Stockel Image Image NETWORK Image Image NETWORK Image Image NETWORK Image Image NETWORK Image Image NEWSCHTE SUPPORT Image Image	Liver Manage vertue womes Selected 1 of 2 • •	View Manage view Manage	View Manage vertue vectored of 0? Image Migrate vectored of 0? Migrate vectored	Network Name Name	NetWork Name Name	Network Name Name

Accessing the VM console

1. To access the VM console, select the required VM, and click the Console button.

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		Manage							
ė		of 2 🕂 💋 🏛			Power v Migrate v Console				Q ±
Ð	VIRTUAL MACHINES								
8		Name ≑	State ≑	Host ≑	CPU Usage ≑	RAM ¢	RAM Usage ≑	Total Size ≑	Storage Usage 🗢
di,									12.65 GB
-									2.01 GB
Q									
0									
⊞	TASKS AND EVENTS								

Modify the existing VM settings

1. To modify the existing VM settings, select the required VM, and click the Edit icon.



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🖨 DASHBOARD		of 2 🕂 🔽 🗊										
VIRTUAL MACHINES						Power V Migrate V	 Console 					
STORAGE		Name ≑	State ≑	Host ≑	CPU =	CPU Usage ≑	RAM ≑	RAM Usage ≑	Total Size ≑	Storage Usage ≑		
🚓 NETWORK												
NODES												
QI PROACTIVE SUPPORT												
васкир васкир												
TASKS AND EVENTS												

2. Specify the required settings and click Save.

Edit Virtual Machine + Add Device	×
← General	Name SW-VM1
← CPU	
← RAM	
✓ Network 1	
✓ Installation Media	
- Boot order	First boot device DVD drive
✓ Virtual machine files	
	Cancel Save



Deleting a VM

1. To delete an existing VM, select the required VM, shut it down, and click the Delete icon.

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	Manage							
🕲 DASHBOARD	of 2 🕂 🛛 🛍							
VIRTUAL MACHINES								
STORAGE	Name 🚊	State ≑	Host ≑	CPU Usage ≑	RAM =	RAM Usage 🚊	Total Size ≑	Storage Usage ≑
A NETWORK								
NODES								
UP PROACTIVE SUPPORT								
S BACKUP								
TASKS AND EVENTS								

NOTE: StarWind Command Center does not allow deleting running VMs.

Cloning a VM

1. To clone a VM, select the required instance, shut it down, and click the Clone icon.

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	Manage							
😂 DASHBOARD	Lof 2 🕂 💋 🛍	1 🕤		Power V Migrate V	Console			Q ±
VIRTUAL MACHINES								
STORAGE	Name ≑	State 🗢	Host 🍦	CPU Usage 🗢	RAM ¢	RAM Usage 🗢	Total Size 🗢	Storage Usage 🚊
A NETWORK								12.65 GB
E NODES								2.01 GB
Q1 PROACTIVE SUPPORT								
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TASKS AND EVENTS								

NOTE: StarWind Command Center does not allow cloning running VMs.

2. Specify the clone VM name if needed, select the destination node and a virtual volume that will store disks and configuration files of a cloned VM. Click Confirm.



A Clone Virtual Mac	hine	×
SW-VM1		
Clone name SW-VM1-clone		
Select destination node		
 sw-sed-cc-td-01 sw-sed-cc-td-02 		
Select virtual volume for the	virtual machine disks a	and configuration files
⊖ csv		
	Cancel	Confirm

Migrate VM from the Hyper-V host out of the cluster

1. Press the Import (migrate) icon to migrate VM from external Hyper-V host.



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🗳 DASHBOARD	View Manag	e							
VMS AND ROLES ^									
VIRTUAL MACHINES		+ Ø û •	4 8			Migrate 🗸			Q ±
STORAGE	Name 🖣	State 🗢	Host 🗢	СРО 🗘	CPU Usage 🚊	RAM ©	RAM Usage ≑	Total Size	Storage Usage
🛃 NETWORK									
NODES									
Q ¹ proactive support	🗌 🖵 Test								
ВАСКИР									
TASKS AND EVENTS									

2. Enter IP address and user credentials to connect to the Hyper-V host out of the cluster and press Connect.

Migrate VM from external	Hyper-V host to StarWind HCI Appliance		×
Connect to Hyper-V host	Connect to Hyper-V host		
Set migration properties	Enter your Hyper-V host credentials		
Summary	FQDN or IP Address of Hyper-V host 192.168.13.161 –		
	Login your_domain\your_username	0	
	Password your_password		
		Close	onnect

3. Specify migration properties and press Validate.



Migrate VM from external	Hyper-V host to StarWind HC	I Appliance		
Connect to Hyper-V host Set migration properties	Set migration properties Select VMs and specify their n	nigration settings		
Summary	 Check migration types and rec The VM configuration must be Selected 1 of 1 C Rescan 	version 6.0 or higher to be mi	grated	
	🗹 VM name	Migration type	Virtual disk location	VM files location
	🗹 SW (40 GB)	Live migration $~~$	CSV1 (78.61 🗸	CSV1 (78.6 🗸
			Back	Validate

NOTE: Quick migration involves downtime for VMs and workloads running in them. To perform the Quick Migration, please shut down the VM and merge all its active checkpoints.

4. To perform the Live Migration, the following conditions must be met:

- Hyper-V hosts (or the existing Hyper-V host and target Failover Cluster) have the same CPU generation or the VMs have processor compatibility enabled. Doublecheck the "Migration to a physical computer with a different process version" feature to be enabled. Please note that enabling this feature requires VM downtime.
- Failover Cluster has sufficient CPU, RAM, and storage resources for VMs.
- VMs are connected to virtual switches with the same name and the Protected Network setting is enabled.
- VMs have no checkpoints to merge.
- The amount of time it takes to migrate a virtual machine to a target cluster depends on the amount of RAM, storage resources set in the virtual machine, and the connection speed to the storage and network bandwidth between the Hyper-V host and the target Failover Cluster.

5. Review the migration properties and confirm the selected VMs to have backups. Make sure that none of the selected VMs contain the Active Directory role installed. Press Migrate.



Migrate VM from external	Hyper-V host to StarWind	HCI Appliance		
Connect to Hyper-V host Set migration properties Summary	Summary Review the migration pro Selected 1 of 1	perties before starting the	operation	
		tual machines have backup c	opies Active Directory role installed	
			Back	Migrate

Check backup jobs of the VM

1. Press the icon of the Backup jobs to check the backup jobs for a selected VM or role.

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🍪 DASHBOARD	Manage								
VMS AND ROLES									
VIRTUAL MACHINES	.of3 🕂 🖉	D	e 5		Power 🗸	Migrate 🗸	Console		Q ‡ …
ROLES									
STORAGE	Name 🗘	State ≑	Host 🗢	CPU ¢	CPU Usage ≑	RAM ÷	RAM Usage 🗦	Total Size 🗦	Storage Usage
🖧 NETWORK	sw-cc								
B NODES	SW-VM1								
및 proactive support	🖵 Test								
🕤 васкир									
E TASKS AND EVENTS									

2. Include the VM to a backup job by ticking the corresponding checkbox or removing it from the job by unchecking the checkbox. Press Next.

3. Review the backup plan changes and press Apply to save them.



Manage VM backups		×
Assign VMs to backup jobs	Summary	
Summary	Review changes in your backup plan and click "Apply" button to save them.	
	Add to backup job(s):	
	• Backup Job 1	
	Back	Apply

ROLES section consists of one tab with a cluster roles list.

To perform operations on a cluster role, select the required role and press the icon with the required action: start, stop, rename, move, or manage resources.

Starting a cluster role

1. Select a role from the cluster role list and press Start.

≋ StarWind				Ĩ	🌲 🏟 ⊡ swadmin 🗸
🖨 DASHBOARD	Selected 1 of 2 Start Stop	Rename Move Mar	nage resources		Q ±
VIRTUAL MACHINES	Name 🗘	State 🗢	Type 🗢	Resources number 🗢	Owner node 🗢
NETWORK					
B NODES					
안 proactive support					
 BACKUP TASKS AND EVENTS 					



Stopping a cluster role

1. Select a role from the cluster role list and press Stop.

≋ StarW;nd				E 🔶	🔅 ⊡ swadmin 🗸
	Selected 1 of 2 Start Stop Renar	ne Move Manage rese	ources		Q ±
VIRTUAL MACHINES	Name ÷	State 🗢	Туре 🗢	Resources number ≑	Owner node 🗢
STORAGE					

Renaming a cluster role

1. Select a cluster role from the cluster role list and press Rename.

≋ StarWind				÷ E	🔅 ⊡ swadmin 🗸
🏟 DASHBOARD	Selected 1 of 2 Start Stop Rer	name Move Manage	resources		Q ±
VIRTUAL MACHINES	Name ÷	State 🗢	Type 🕆 Reso	urces number 🗦	Owner node 🗢
STORAGE					
🚓 NETWORK					
in Nodes 인가 proactive support					
🕙 васкир					
TASKS AND EVENTS					

Moving a cluster role

1. Select a role in the cluster role list and press Move.



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	Selected 1 of 2 Start Stop Rena	me Move Manage res	ources		Q ±
VIRTUAL MACHINES	□ Name ÷	State 🗘	Туре 🗘	Resources number 🗢	Owner node 🗘

Manage resource action allows bringing a resource online, offline, or simulating its failure.

Bringing a cluster role resource online

- 1. Select a cluster role and press Manage resource.
- 2. Select a required resource from the drop-down list and press Bring online.



Manage Role Resources	×	
Bring online Take offline Simulate fa	ailure Q	
Resource name	Status	
Cluster IP Address	Online	
Cluster Name	Online	
Storage Qos Resource	Online	
Virtual Machine Cluster WMI	Online	
✓ Witness	Offline	
	Close	

Taking a cluster role resource offline

- 1. Select a cluster role and press Manage resource.
- 2. Select a resource and press Take offline.



Manage	Role Resources		×
Bring o	nline Take offline	Simulate failure	Q
	Resource name	Status	
	Cluster IP Address	Online	
	Cluster Name	Online	
	Storage Qos Resource	Online	
	Virtual Machine Cluster WMI	Online	
	Witness	Online	
			Close

Simulating a cluster role resource failure

- 1. Select a cluster role and press Manage resource.
- 2. Select a resource from the drop-down list press Simulate failure.



M	anage	Role Resources		×
E	3ring or	line Take offline Si	mulate failure	Q
		Resource name	Status	
		Cluster IP Address	Online	
		Cluster Name	Online	
		Storage Qos Resource	Online	
		Virtual Machine Cluster WMI	Online	
		Witness	Online	
				Close

Storage

The STORAGE item provides View and Manage tabs.

View

This tab consists of the following widgets.

1. Virtual Volume(s) Availability – provides information on the availability of the virtual volumes.

Virtual Volume(s) Availability										
	High Availability		1							
	Limited Availability		0							
	Not Available		0							
Total 1	Simple		0							

2. Storage Summary – provides information on storage availability and available capacity.

Storage Summary	
Capacity Usage 24%	Availability Synchronized 100%
82 GB Of 339.96 GB	40 GB Of 40 GB
🔵 Data 🔹 Resiliency 💿 Free	Synchronized Not synchronized

3. Performance – provides information on the following metrics: IOPS, Disk Throughput, and Cluster-Wide Controller Latency.



Performance						
IOPS Disk Throughput					Live	
Workload Summary		IOPS				
Average Queue Dept	h 0.06					
Read/Write Ratio						
IOPS						
Peak Disk Throughp	it 2.84 MB/s					
Average IO Size	Read 48.21 KB/ Write 321.6 KB					
Average IO Latency	Read 2.37 ms/ Write 3.67 ms					

4. Tasks and Events (Storage) – provides information on the running and finished tasks and events related to virtual volumes.

Tasks and Events (Storage)						
Tasks Events						
Name	Entity	Entity Name	Owner	Status	Start Time	End Time
Delete virtual volume				10%		
Modify virtual volume settings						
Create virtual volume				10%		

Manage

Manage tab delivers the ability to create new virtual volumes, remove them, or modify the settings of the existing ones.

≋ StarWind								E 🜲 🕯	🕽 ⊡ user ~
	View Manage								
🛱 DASHBOARD	Selected 0 of 1 🕂 💋								Q ±
VIRTUAL MACHINES									
STORAGE	Name ÷	Туре ≑	State ≑	Owner Node 🗢	Capacity ≑	Free Space 🗢	Availability Status 🗢	Cache Type 🗢	Cache Size 🗢
🚓 NETWORK	🗌 🛢 csv								омв
NODES									
2 PROACTIVE SUPPORT									
⑤ BACKUP									
TASKS AND EVENTS									

Creating a new virtual volume

1. To create a new volume, click the Add icon.



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	View Manage									
🛱 DASHBOARD	Selected 0 of 1 🕂 🖉								Q ±	
STORAGE	Name 🗢	Туре 🗘	State 🗢	Owner Node 🗢	Capacity 🗢	Free Space	Availability Status	Cache Type 🗢	Cache Size 🗢	
A NETWORK	🗌 🛢 csv									
EE NODES										
Q1 PROACTIVE SUPPORT										
4) ВАСКИР										
TASKS AND EVENTS										

2. Specify the disk name, size in GB, and replication factor.



General settings	
SW-CSV1	
10	
Two-Way Mirror	~
Placement	
Node 1 SW-SED-CC-TD-02 (192.168.13.88)	
Node 2 SW-SED-CC-TD-01 (192.168.13.87)	
Advanced settings	
Cano	el Create

Availability can be set to the following values:

Simple - StarWind virtual volume which is not replicated

Two-Way mirror – 2-way replicated StarWind HA virtual volume

Three-Way mirror - 3-way replicated StarWind HA virtual volume

NOTE: The availability of the options depends on the number of StarWind nodes.



3. If required, enable the RAM cache under the Advanced settings section, specify the size in MB and cache type, and click Create.

Two-Way Mirror		~
Placement		
Node 1 SW-SED-CC-TD-02 (192.168.13.88)		
SW-SED-CC-TD-01 (192.168.13.87)		
RAM cache		
RAM cache		
		~
		~
Status Disabled	Cache type Write-back	~

Deleting a virtual volume

1. To remove the existing virtual volume, select the required volume and click the Deletion icon.



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	View Ma	inage								
🛱 DASHBOARD	Selected 1 of 2 + 2 6 Maintenance ~									Q ± …
VIRTUAL MACHINES										
STORAGE	Narr	ne ≑	туре ≑	State ≑	Owner Node 🗢	Capacity ≑	Free Space 🗢	Availability Status 🗢	Cache Type 🗢	Cache Size 🗢
🚓 NETWORK										0 MB
I NODES										0 MB
및 PROACTIVE SUPPORT										
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TASKS AND EVENTS										

Modifying the virtual volume settings

1. Select a virtual volume and press Edit.

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	View Manage								
 DASHBOARD VIRTUAL MACHINES 	Selected 1 of 2 🕂 💈	۵.			Maintenance 🗸				Q ≢
STORAGE	🗌 Name ≑	туре ≑	State ≑	Owner Node ≑	Capacity ≑	Free Space ≑	Availability Status ≑	Cache Type ≑	Cache Size ≑
A NETWORK	E CSV								ОМВ
NODES	SW-CSV1								0 МВ
Q PROACTIVE SUPPORT									
BACKUP									
TASKS AND EVENTS									

2. Specify the required settings and click Save.



SW-CSV1	
10	
Two-Way Mirror	
Placement	
SW-SED-CC-TD-01 (192.168.13.87)	
SW-SED-CC-TD-02 (192.168.13.88)	
Advanced settings	

Performing maintenance on a virtual volume

1. Select a virtual volume and press Maintenance.

2. In the drop-down list, select the required option: Bring Online, Take Offline, Move, Turn on Maintenance Mode, and Turn off Maintenance Mode.



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	View Manage							
🛱 DASHBOARD	Selected 1 of 2 🕂 🦻	ŵ			Maintenance ~			
VIRTUAL MACHINES								
STORAGE	Name 🗢	State 🗢	Owner Node 🗢	Capacity ≑	Take Offline	Availability Status 🗢	Cache Mode 🗢	Cache Size 🗢
	🗌 🛢 csv				Move			
	Sw-csv				Turn on Maintenance Mode			
TASKS AND EVENTS								

Network

The NETWORK item provides 3 additional tabs:

Virtual Switches - delivers information about virtual switches.

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	Virtual Switches Cluster Networks Network					
C DASHBOARD						
VIRTUAL MACHINES						
STORAGE	Name 🔶	Node 🗢	туре 🗢	Shared 🗢	VLAN ÷	
A NETWORK						
I NODES						
Q1 PROACTIVE SUPPORT						
васкир васкир						
TASKS AND EVENTS						

Cluster Networks – delivers information about the networks used and their roles in the cluster.

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	Virtual Switches Cluster Netwo	orks Network Adapters					
DASHBOARD							
VIRTUAL MACHINES							
STORAGE	Name 🗢	Alias 🗢	Description 🗢	State 🗢	Cluster Use 🗢	IPv4 Address ≑	IPv6 Address 🗢
A NETWORK	🚓 ISCSI + HeartBeat						
E NODES							
Q1 PROACTIVE SUPPORT							
BACKUP							
TASKS AND EVENTS							

Network Adapters – provides information about the network adapters.



≋ StarWind							E 🌲	🔅 💮 user 🗸
		letworks Network Adapters						
								Q ±
	Name 🗢	Description 🗢	Bandwidth 🗢	MAC Address 🗢	Node 🗢	State 🗢	Virtual 🗢	VLAN ID 🗢
A NETWORK								

Nodes

The NODES item provides View and Manage tabs.

View

This tab consists of the following widgets:

1. Node(s) Summary – provides information on the overall state of the nodes and their health status.

View M	anage			
Node(s) Summ	hary			
	Node(s) State		Node(s) Health State	
Total	Up	2	Healthy	
2	Down		Unhealthy	
	Paused		Unknown	

2. VM(s) Distribution Summary – provides information on the VM distribution across cluster nodes.

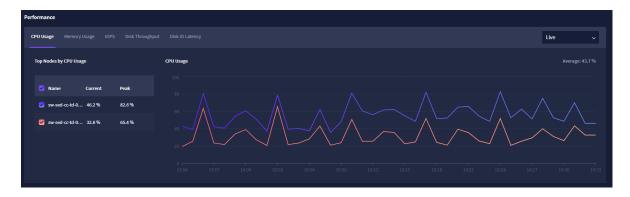


VM(s) Distribution Summary
Total VMs 2
sw-sed-cc-td-01 • sw-sed-cc-td-02

3. Resource Usage – provides information on CPU, memory, and storage utilization.



4. Performance – provides information on CPU and memory usage, IOPS, disk throughput, and disk IO latency of the selected nodes.



5. Tasks and Events (Nodes) – provides information on the running and finished tasks and events on the cluster nodes.



Tasks and Events (Nodes)						
Tasks Events						🗇 1 Running 🛛 🥝 0 Failed
Name	Entity	Entity Name	Owner	Status	Start Time	End Time
Stop cluster service				10%		

Manage

Manage tab delivers the ability to remove the existing nodes and perform maintenance and power management.

≋StarWind						ê ê	🔅 🕞 user ~
	Manage						
DASHBOARD VIRTUAL MACHINES	of 2 📋		Remote Access Mainten	ance v Power v			
STORAGE	Name 🗢	State 🗢	CPU Usage	RAM Usage 🗢	Storage Usage	Uptime 🗢	Serial 🗢
A NETWORK							
E NODES							
Q1 PROACTIVE SUPPORT							
васкир васкир							
TASKS AND EVENTS							

Accessing the node console

To open the node console, select the required node and click the Remote Access button.

≋ StarWind						ê 🌲	🔅 🔃 user ~
	Manage						
 DASHBOARD VIRTUAL MACHINES 	of 2 🛅		Remote Access Mainten	ance v Power v			
STORAGE	Name 🗢	State 🗢	CPU Usage	RAM Usage 🗢	Storage Usage	Uptime 🗢	Serial 🗢
a NETWORK							
😻 NODES							
Q1 PROACTIVE SUPPORT							
васкир васкир							
TASKS AND EVENTS							

Performing maintenance operations on the nodes

1. To perform the maintenance operations on the nodes, select the required node and click the Maintenance button.



≋StarWind								a 🕯	🔅 ⊡ user ~		
	View Manage										
	l of 2 💼			Remote Access	Maintenance ~	Power ~		Q ±			
					Pause						
	Name ≑	State ≑		CPU Usage 🗘			Storage Usage 🗢	Uptime ≑	Serial ≑		
E NODES					Stop Cluster Service						

2. From the drop-down list, select the required operation: Pause, Resume, Start Cluster Service, or Stop Cluster Service.

Performing power management operations on the nodes

1. To perform power management operation on a node, select the required one and navigate to the Power tab.

≋ StarWind							E 🌲	🔅 ⊡ user ~
	Manage							
DASHBOARD	of 2 🛍		Remote Access Mainten	ance 🗸	Power ~			
VIRTUAL MACHINES					Restart			
STORAGE	Name ≑	State ≑	CPU Usage 🚊	RAM Usage	Shutdown	rage Usage ≑	Uptime ≑	Serial 🗢
A NETWORK								
in NODES								
Q PROACTIVE SUPPORT								
S BACKUP								
TASKS AND EVENTS								

2. From the drop-down list, select the required action: Restart, Shutdown, Power On, Power Off, or Reset.

NOTE: To activate Power on, Power off, and Reset options, click the gear icon, navigate to the NODES tab and configure physical management settings there.

Backup

The Backup item provides View and Backup Jobs tabs.

The View tab consists of the following widgets:

1. Backup Summary – provides information about the status of backup jobs.



Backup Summary							
	Running	0					
Total	Failed	0					
1	Disabled	1					
	Idle	0					

2. Backup Infrastructure Health Status – provides information about the health status of backup server(s) and repositories.

Backup Infrastructure Health S	Status	
	Backup Server(s)	Repositories
Healthy		
Critical		
Unknown		

The Backup Jobs tab consists of the list with backup jobs.

It is possible to perform one of the following actions: start, stop, active full(to start full backup), manage schedule.

Starting a backup job

1. Select a backup job and press Start.



≋StarWind						e ț	•	🕞 swadmin 🗸
	Backup Jobs							
	1 of 1 🕞 🖸		F	ctive full Manage sci	edule 🗸			Q ±
	Name 👻	Current Status 🗢	Last Result	Completed at 🔅	Next Run 🗢	VMs 🗢		Description 🗢
🕙 васкир								

Stopping a backup job

1. Select a backup job and press Stop.

≋ StarWind						≅ ♠ <	swadmin 🗸
🔹 DASHBOARD	View Backup Jobs						
💭 VMS AND ROLES 🗸 🗸							
STORAGE	Selected 1 of 1			ve full Manage sche			Q ± …
🚠 NETWORK							
B NODES	🗹 Name 🗢	Current Status 🗦	Last Result 🗢	Completed at	Next Run 🗢	VMs ¢	Description 🗢
양 proactive support			None				
ВАСКИР							
日 TASKS AND EVENTS							

2. Press Confirm.

A Stop		×
Backup Job 1		
	Cancel	Confirm

Forcing a full backup job



1. Select a backup job and press Active full.

≋StarWind						i ii	٥	🔃 swadmin 🗸
	Backup Jobs							
	of1 D		Ac	tive full Manage sc				Q ±
	Name 🗘	Current Status	Last Result 🗘	Completed at	Next Run ≑	VMs ≑		Description 🗧
ВАСКИР								

2. Press Confirm.

Active FL	ıll	×
Backup Job 1		
	Cancel	Confirm

Managing schedule for a backup job

1. Select a backup job and press Manage schedule.

≋ StarWind						1	¢ ² 🔅	🕞 swadmin 🗸
🗳 DASHBOARD	Backup Jobs							
🛱 VMS AND ROLES 🗸 🗸								
STORAGE	of1 🕑 Ο		Ac	tive full Manage sci	nedule \vee			Q ‡ …
📩 NETWORK								
NODES	Name ÷	Current Status 🗢	Last Result 🗢	Completed at 🗢	Next Run 🗢	VMs 🗢		Description 🗢
Ø PROACTIVE SUPPORT								
1 ВАСКИР								
TASKS AND EVENTS								



Tasks And Events

This item delivers information on the tasks and events running in StarWind Command Center.

Tasks

The Tasks tab provides information on tasks performed in StarWind Command Center. The Tasks tab displays the task name, Command Center entity type where this task has been performed, entity name, owner of the task, its status, and timestamp.

≋ StarWind						a	🌲 🏟 ⊡ user ~
	Tasks Events C 0 Running @						
😰 DASHBOARD							Q <u></u> #
STORAGE	Name ≑	Entity ≑	Entity Name ≑	Owner ≑	Status ≑	Start Time 🚊	End Time 🗢
A NETWORK							27 May 15:35:13
E NODES							27 May 15:19:05
Q1 PROACTIVE SUPPORT							27 May 15:18:39
васкир васкир							27 May 15:18:07
TASKS AND EVENTS							27 May 15:16:18
							27 May 15:11:54
							27 May 15:12:04
							27 May 15:10:43
							27 May 15:09:49
							27 May 15:09:46
	Show 10						Previous 1 2 Next

Events

The Events tab contains information on the events that occurred in StarWind Command Center. The Events tab displays the event severity level, event source, time of the event, its description, entity type where the event has occurred, entity name, number of occurrences, and the current event status.

1. To check the events in the StarWind Command Center, navigate to the Events tab.



≋ StarWind								≅ ♦ <	🕽 ⊡ user ~
	Tasks Events								
	Selected 0 of 11 Acknowledge								
	Severity 🌣	Source 🗢	Time ≑	Description	Entity ≑	Entity Name	Occurrences	Resolved 🗢	Acknowledged 🗢
III NODES									
TASKS AND EVENTS									
	Show 10								Previous 1 2 Next

2. To mark the recent event as Acknowledged or Resolved, select the event and select the required option.

General Configuration

Modifying Cluster Settings

To modify the cluster settings, click the gear icon in the top right corner of the StarWind Command Center interface.

≋ StarWind			😑 🌲 🗭 ⊡ user ~
	Cluster Summary	Workload Summary	
DASHBOARD	Cluster	Average Queue Depth	
	Hypervisor	Read/Write Ratio	
STORAGE	Operating System	IOPS	
E NODES	StarWind Stack	Peak Disk Throughput	
Q1 PROACTIVE SUPPORT	SDS Stack	Average IO Size	
• ВАСКИР	Backup Software	Average IO Latency	
E TASKS AND EVENTS			

Modifying General Settings

To modify the general StarWind Command Center settings such as IP address, gateway, DNS Server IP address, security settings, time zone, and appearance, click Edit in the



General tab.

≋ StarWind				e ,	۰	¢
	General Cluster Nodes Storage Maintenance Image Library					
	Connectivity					
	Security					
	Administrator account					
	Enable SSH access					
						_
	Time zone:					
	Current time					
	Appearance:					

Modifying The Cluster Network Settings

To modify the cluster network settings, navigate to the Cluster tab, expand Cluster IP address, and click Edit.

≋ StarWind	
	General Cluster Nodes Storage Maintenance Image Library



Modifying The Cluster Node Settings

1. To modify the node network settings, navigate to the Nodes tab and expand the Cluster node IP.

≋ StarWind	
	General Cluster Nodes Storage Maintenance Image Library
击 NETWORK	
	Enable physical management
	• 192.168.13.88

2. To allow physical node management via IDRAC or ILO, press Enable physical management, specify the required credentials, and click Save.

≋ StarWind	
	General Cluster Nodes Storage Maintenance Image Library
	Cluster node IP 192,168,13,87
A NETWORK	
NODES	
	Enable physical management
	Cancel Save

Modifying The Storage Node Settings

1. To manage the storage node settings, navigate to the Storage tab, expand the required node, and press Edit.



≋ StarWind	
	General Cluster Nodes Storage Maintenance Image Library
	+ Add Node
VIRTUAL MACHINES	Storage node IP 192.168.13.87
💼 STORAGE	
A NETWORK	General Storage node IP
NODES V1 PROACTIVE SUPPORT	
 4) BACKUP 	
BALKUP TASKS AND EVENTS	
	Network
	Edit
<	Edit

2. Modify the required settings and press Save.

≋ StarWind	
	General Cluster Nodes Storage Maintenance Image Library
	+ Add Node
	General
	Storage node IP 192.168.13.87
	192.168.13.87
E NODES	
	3261
	root
	Network
	Network
	+ Add New
	Sync v 0 14.100.42.10 X
	iSCSI ~ 0 14.100.41.10 %
	Heartbeat v 0 192.168.13.87 X
<	Cancel Save

Adding A New Storage Node

1. To add a new storage node, press the + Add Node button in the Storage tab.



≋StarWind		🖴 🌲 🔅
	General Cluster Nodes Storage Maintenance Image Library	
	+ Add Node	
	172,130,13,87	
	192.168.13.88	

2. Specify the Storage node IP, Port, Login, and Password of the new storage node.

StarWind	
	General Cluster Nodes Storage Maintenance ImageLibrary
	General
	Variate
	Network + Add New
	Cancel

3. Select the network interfaces for synchronization, heartbeat, and iSCSI.

â	≋StarW;nd					
		Storage node IP 192.168.13.86 				
		General				
		Storage node IP 192.168.13.86				
		3261				
		Login root				
		Network				
		+ Add Network				
		Sync	~	172.16.20.30	~	×
		Heartbeat	~	172.16.10.30	~	×
		Select	~	192.168.13.86	~	×
				Cancel	Save	
	<					

NOTE: The network interfaces used for iSCSI and synchronization come already preconfigured in StarWind HyperConverged Appliance and should not be modified. Same IP addresses cannot be used for different purposes.

NOTE: StarWind Virtual SAN requires dedicated physical channels for iSCSI and synchronization. A redundant heartbeat channel can go over the management link. See StarWind VSAN system requirements for more details here:



https://www.starwindsoftware.com/system-requirements

Adding Backup Server

1. To add a backup server, press the + Add the Backup Server in the Backup tab.

≋StarWind		E	۴	🔅 🔃 swadmin 🗸
	General Cluster Nodes Storage Backup Services Image Library Users And Groups Software Update			
	+ Add Backup Server			

2. Specify the Backup server IP, Domain, Login, Password, and press Save.

≋ StarWind		🗐 🌲 🏟 ⊡ swadmin 🗸
	General Cluster Nodes Storage Backup Services Image Library Users And Groups Software Update	
UMS AND ROLES V		
Network		
B NODES		
ပ္ပံ proactive support	Backup server IP 192.168.12.214	
BACKUP E TASKS AND EVENTS	Domain sw-sup-veeam	
	Login Administrator	
	Cancel	
< MINIMIZE		

Modifying The Backup Server Settings

1. To manage the backup server settings, navigate to the Backup tab, expand the required server, and press Edit.



≋StarWind		1	¢	🔅 ⊡ swadmin 🗸
	General Cluster Nodes Storage Backup Services Image Library Users And Groups Software Update			
	+ Add Backup Server			
	Backup server IP 192.168.12.214			
	Edit			

2. Modify the required settings and press Save.

≋ StarWind		1	🌲 🤹 ⊡ swadmin 🗸	ŕ
	General Cluster Nodes Storage Backup Services Image Library Users And Groups Software Update			
UMS AND ROLES V				
RODES				
ပ္ပံ proactive support	Backup server IP 192.168.12.214			
 BACKUP TASKS AND EVENTS 	Bomain sw-sup-veeam			
	Login Administrator			
	Cancel			
< MINIMIZE				

Services And Logs Collection

1. To provide StarWind Support Team with information on the issues with the virtualized environment, click Download support bundle.



≋ StarWind	🗄 🌲 🔅 ⊡ swadmin 🗸
	General Cluster Nodes Storage Backup Services Image Library Users And Groups Software Update
	Download support bundle

2. Select the logs to provide StarWind Support Team with and click Download.

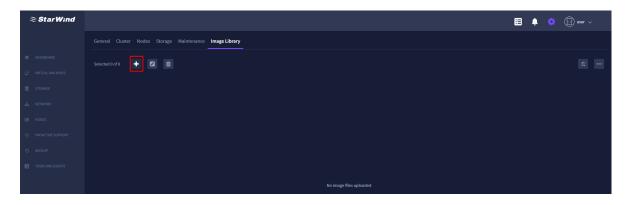
Select files you v	want to download	
	g issues, providing us with a copy of Ip us troubleshoot the problem.	your support
Choose log files you v necessary logs is incl	vould like to download. The minimu uded by default.	m set of
Items		
🖌 Service Logs		
Operating Syste	em Logs	
StarWind Servic	e Logs	
Hardware Logs		



Configuring Image Library

Adding an image file

1. To add an image file, navigate to the Image Library tab and click the Add icon.



2. Specify the required name, placement, and image source and click Add.

Image File		×
Name SW-Image Library		
SW-CSV1	~	
	Browse	
	Cancel	Add

Editing image file settings

1. To edit the existing image file settings, select the required image file and click the Edit icon.



≋ StarWind					E .	📫 🔅 ⊡ user 🗸
		Maintenance Image Library				
	Selected 1 of 1 🕂 🚺	Û				
	🗹 Name 🗘	Location 🗢	Upload date 🗢	State ≑	Mounted 🗢	Size ≑
	SW-Image Library	SW-CSV1				

2. Specify the new name if required, add a description and click Save.

Name SW-Image Library	
SW-CSV1	
C:\ClusterStorage\SW-CSV1\VMware-VCSA-all	

Rescanning image files

1. To rescan the image files, click the Rescan icon.



≋ StarWind						E .	📮 🔅 🔅	user v		
		ieneral Cluster Nodes Storage Maintenance ImageLibrary								
	Selected 0 of 1 🕂 🛛									
	Name ≑	Location 🔶	Description 🚊	Upload date 🗢	State 🗢	Mounted 🗢	Size ¢			
		Sw-CSV1								
TASKS AND EVENTS										

2. Select the required virtual volume and click Scan.

1 Rescan Image Files	×
Select all	
Csv	
SW-CSV1	
sw-csv	
Rescan 1 selected objects	
Cancel	Scan

Deleting an image file

1. To delete the existing image file, select the required one and click the Delete icon.



≋ StarWind							¹³ 🔅 🔃 user v
		laintenance Image Library					
DASHBOARD VIRTUAL MACHINES	Selected 1 of 1 🕂 🖌 🕃	Û					
STORAGE	✓ Name [⊕]	Location	Description	Upload date 🗢	State	Mounted	
A NETWORK		SW-CSV1					
NODES							
Q PROACTIVE SUPPORT							
васкир васкир							
TASKS AND EVENTS							

2. Click Confirm.

A Delete Image File					
SW-Image Lib	rary				
This action will p	This action will permanently delete image file.				
	Cancel	Confirm			

Configuring Users And Groups

Importing Users and Groups from AD DS (Active Directory Domain Services)

NOTE: Users and Groups can be imported from different domains.

1. Press the Import icon.



≋ StarWind				\Xi 🌲 🔅 🕞 swadmin 🗸
		ge Library Users And Groups Software Update		
	Selected 0 of 2			
	Name +	Туре 🕆	Origin ©	Role =

2. Specify domain account information (domain username and password) to connect to the domain and press Next.

pprox Import Domain Users and	$\widehat{\approx}$ Import Domain Users and Groups Wizard				
1 CONNECTING TO A DOMAIN	Connect to an existing domain				
2 ROLE ASSIGNMENT	Enter your domain account information to connect to the domai	'n			
3 SUMMARY	Domain Username Your_Domain\Your_Username 	0			
	Ca		Next		

3. Assign access roles to selected domain users or groups and press Next.



≋ Im	pprox Import Domain Users and Groups Wizard					×
2 ROL	INECTING TO A DOMAIN LE ASSIGNMENT IMARY	Assigning roles to domain users and groups Assign access roles to selected domain users or groups				Q
			Name	Туре	Role	
			Administrators	Group	Disabled Administator	~
				Group	Read-Only	
			Guests	Group	Disabled	
			Print Operators	Group	Disabled	~
			Backup Operators	Group	Disabled	~
					Back	ext

4. Review the selected settings and press Import.

*	Import Domain Users and	Groups Wizard	×
e	CONNECTING TO A DOMAIN ROLE ASSIGNMENT	Summary Review the selected settings before importing to Command Center	
3	SUMMARY	Administrators Administator	
		Back	ort



Managing role assignment

1. Press the Manage icon.

≋ StarWind				🗐 🌲 🔅 🕞 swadmin 🗸
🙆 DASHBOARD	General Cluster Nodes Storage Backu	p Services Image Library Users And Groups	Software Update	
VMS AND ROLES V	Selected 0 of 3 🛫 🔽 🏦			Q ±
STORAGE				
NODES	Name ÷	Туре 🗢	Origin 🗢	Role ≑
ပ္ပံ proactive support				
🕙 васкир				
TASKS AND EVENTS				

2. Specify the selected settings and press Confirm.

Manage role assignme	nt		×
			Q
Name	Туре	Role	
Administrator	User	Administator	~
Swuser	User	Disabled Read-Only Disabled	~
		Cancel	Confirm

Deleting Users and Groups

1. Press the Delete icon.



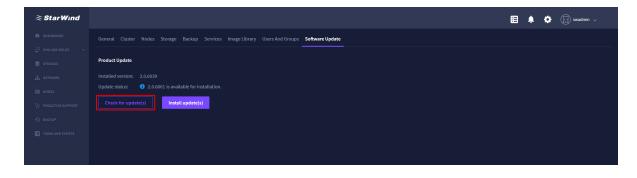
≋ StarWind			l I	🗐 🌲 💠 ⊡ swadmin 🗸
	General Cluster Nodes Storage Backup	Services Image Library Users And Groups		
			-	
	Selected 1 of 3 🗳 🖉 💼			Q ±
	Name 🗘	Туре 🗢	Origin 🗢	Role ≑

2. Press Confirm.

A Delete Users and Groups	×
Administrator	
This action will permanently delete the se	lected record
Cancel	Confirm

Implementing software updates of StarWind Command Center

1. Press the Check for update(s).





2. Press the Install update(s) to install the available updates.

≋ StarWind		1	¢	🔅 🕞 swadmin 🗸
DASHBOARD	General Cluster Nodes Storage Backup Services Image Library Users And Groups Software Update			
🖓 VMS AND ROLES 🗸 🗸				
STORAGE	Product Update			
43a NETWORK				
I NODES	Update status: 0 2.0.6061 is available for installation.			
Q1 PROACTIVE SUPPORT	Check for update(s)			
васкир васкир				
TASKS AND EVENTS				



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