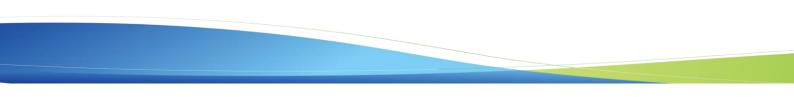


Sangfor STA Deployment Guide

Version: STA 3.0.25C

Released On: 2021-4-29

Sangfor Technologies Inc.



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Preface

About This Document

This document introduces how to deploy STA 3.0.25C.

Product Version

Product	Version
STA	3.0.25C

This document will be updated when configuration is changed in new versions.

Intended Readers

- Network design engineer
- O&M personnel

Revision History

The revision history includes each document update. The latest document version contains updates from all previous document versions.

Version	Released On	Description
01	2021-4-29	This is the first release of this document.

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Feedback

•

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Sangfor Community: <u>https://community.sangfor.com</u>

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1. Overview

1.1. About This Version

1.1.1. What Is New

•New: The Licensing module is reconstructed.

The administrator can export the device inofo and send it to the device supplier to obtain the offline license key file

	General	
	System Time Network Licensing Web UI Upgrade	
	Licensing	
	2	
System	Activation	
General 1	1) Get Device Info	2 Apply License Key File 3 Import License Key File
	Click the button below to get device information.	Send the Device Info file from step 1 to your device supplier to receive the license Click the button below to import the license key file to complete license
	Export Device Info	key file. Import
	Device ID: 0 0488D22 Type: - User: - Version: 2.0.25C Time Activate: - Model: -	Download Not Started? × 4 Click here to download now.
	Device License Enables sensitiv detection from til Expires On: -	Software Upgrade License Pareps the device software up to date. Expires On:

1. Go to the Licensing module, export and save the device information.

2. Send the device information file to device supplier and you can receive the license file.

3.Go to Licensing module on STA, and import the obtained license file to get licensed.

	General
	System Time Network Ucensing Web UI Upgrade
	Licensing
	Activation
	1 Get Device Info (2) Apply License Key File (3) Import License Key File
	Click the button below to get device information. Send the Device Info file from step 1 to your device supplier to receive the license Click the button below to get device information.
Command	Espent Device Info
	Basic Settings
	Status: © Unlicensed
	Device ID: 0468BD32
	Type: -
	User: Version: 3.0.25C
	Time Activated: -
	Model: -
	Basic Licenses
	Detailed security detection from th Degrees Or: -

4.Refresh the page after the license is imported successfully, and you can see the successfully licensed status.

• Status	General
• Network	System Time Network Licensing Web UI Upgrade
• Objects	Licensing
	Basic Settings
Administrator	Status: O Licensed Manual Update Device D0 31C6BA14
Cyber Command	Verse test
	User: SWL
	Version: 3.0.25C
	Time Activated: 2021-02-22
	Model: STA-100-v2100
	Basic Licenses
	Device License Licenses Licenses Licenses Enables security dataction from thi Expires On: 2048-7:10 Software Upgrade License Licenses Licenses

•New: This version can be deployed on VMware ESXi.

This version can be deployed on VMware EXSi by using Cyber Command 3.0.25C iso file.

1.1.2. Others

None

1.1.3. Connection with Third-Party Products

None

1.2. Deployment Impacts

The installation may take 1.5 hours.

1.2.1. Impacts on Business

None

1.2.2. Impacts on O&M

ISO installation may take 1.5 hours.

1.2.3. Impacts on Network

Deployment in bypass mode will have no impacts on network.

1.2.4. Others

None

1.3. Deployment Preparation Related to Customers

1.3.1. Resources Required for Deployment

1. You need to access the VMware cloud environment of the customer and be familiar with the customer's network configuration.

2. Uploading the image to the cloud platform may take 30 minutes, and the entire deployment may take 1.5 hours.

3. The deployment environment should have enough resources and space (at least 8C8G+64G+1T).

1.3.2. Deployment Notification

1. The English version of 3.0.25C image can only be deployed in VMware virtual environment and cannot be deployed with physical hardware.

2. The English version of 3.0.25C deployment is only compatible with VMware ESXI5.0 \VMware ESXI 6.0\VMware ESXI 7.0.

3. AVX must be supported by the host of cloud STA.Supported host CPU models:

the following cpu models are measured: (Include but not limited)

48 CPUs x Intel(R) Xeon(R) Gold 5220R CPU @ 2.20GHz
28 CPUs x Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz
44 CPUs x Intel(R) Xeon(R) CPU E5-2699 v4 @ 2.20GHz
20 CPUs x Intel(R) Xeon(R) Silver 4210 CPU @ 2.20GHz

4. The virtual machine should be configured with at least three virtual NICs, and the NIC only supports VMXNET3.

5. Compatibility List

		Configuration			
Scenario	Supporte d	Memory	CPU	Disk	NICs
Virtual Environment Deployment					
				System: 64G	
	Yes	8G	8 cores	Data: 1T	3-6
VMware ESXi				System: 64G	
5.0.0/6.0.0/7.0.0	Yes	16G	16 cores	Data: 1T	3-6
Physical Hardware Deployment	No				

Notes for deploying and using cloud STA:

- •NIC only supports VMXNET3 virtual network card, does not support VMXNET2, e1000
- •System disk, 1 system disk, at least 64G in size

1.4. Deployment Process

•Prepare the ISO image of STA 3.0.25C.

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• Import the image, configure environment and start auto installation. This may take 1.5 hours.

1.5. Business Verification After Deployment

- 1. Check whether you can log in normally without errors displayed.
- 2. When traffic can be detected, there will be traffic information.
- 3. Check as required whether customer business is normal.

1.6. Rollback

None

2. Deployment Instruction

2.1. Preparation Before Deployment

2.1.1. Deployment Tools

Prepare the ISO image of STA 3.0.25C.

2.1.2. Deployment Environment

None

2.1.3. Customer Resources

Refer to the chapter Deployment Preparation Related to Customers.

2.2. Confirmation Before Deployment

Refer to the chapter Deployment Impacts.

2.3. Deployment Procedure

2.3.1. Deployment Procedure

1. STA 3.0.25C Deployment

Step 1: Get the ISO image of 3.0.25C and import it to the customer's VMware cloud environment.

Step 2: Configure the virtual machine. Select ISO image of 3.0.25C for the virtual CD/DVD drive.

Step 3: Power on the virtual machine and select automatic installation

Step 4: Wait for the system to install automatically.

2. VMware esxi Deployment

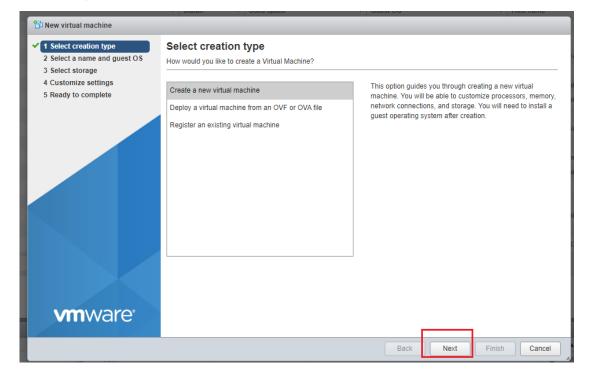
2.1 Upload the obtained image to VMware, which may take about 30 minutes.

• Navigator	database1		
✓ ☐ Host Manage Monitor	다 Register a VV 😨 Datastore browse		STORA
> 🛱 Virtual Machines 🛛 17	Type: 2	VMFS6	
▼	Location: UUID:	/vmfs/volumes/601313a2-a8a587f4-7b8f-48dc2d108287	
🔳 database1	Hosts:	C Datastore browser	
Monitor	Virtual Machines:	🖕 Upload 🚯 Download 🙀 Delete 🔒 Move 🌆 Copy 🚵 Create directory 🛛 🤄 Refresh	
More storage		📑 database1 🤤 10.222.88.13 💿 0118-VMware-SIP	
Networking 4	✓ VMFS details	3 10.222.88.33 6 0121-VMware-STA 6	
	Version	a 10.222.88.59 C 1-0224-V/Mvare-ST	
	Local	a 16C16G	
	Block size	211	
	UUID	a 3.0.25C	
	Extent 0	a 3.0.48C	
	Extent 1	a 3.0.49C	
	Extent 2	🤐 49c-1-wy	
	Extent 3	☐ 6000.900 4	
	Extent 4		
	Extent 5		
	Extent 6	= 00_000	
	Extent 7	(■ wy3	
	Extent 8	database1) ISO/	
	Exercise 10		
	😨 Recent tasks	Close	
	Task	✓ Target ✓ Initiator ✓ Queued ✓ Started ✓ Result ▲	

2.2 Create a new virtual machine.

vm ware" esxi"				
📲 Navigator	🔂 localhost.localdomain - Virtual Machines			
✓ Host Manage	Treate / Register VM 💕 Console 🕨 Power on 🔳 Power off 💵 Susper	nd CRefresh	nt Actions	
Monitor	. Virtual machine	~ Status ~	Used space ~	Guest OS
👻 🗗 Virtual Machines 📃 🚺	6 🕒 🚰 test_zbb	Normal	378 GB	CentOS 7 (6
▼ 10.222.88.33	🗋 🖶 49c-1-wy	Normal	628 GB	CentOS 6 (6
Monitor	□ ∰ 3.0.48C	Normal	8.16 TB	CentOS 7 (6
▼ ^{10.222.88.61}	□ a 10.222.88.66	Normal	1.13 TB	CentOS 7 (6
Monitor	□ ቇ 10.222.88.33	Normal	2.14 TB	CentOS 7 (6
More VMs	□ 小 10.222.88.61	4 Warning	648.09 GB	CentOS 7 (64
▼ 🗐 Storage	1 🕞 🔂 3.0.25C	Normal	628 GB	CentOS 7 (64
 database1 	🔲 👘 10.222.124.132_cgh	Normal	894.94 GB	CentOS 7 (64
Monitor	D 🔂 10.222.88.59	Normal	628 GB	CentOS 7 (64

Select the option of creating a new virtual machine.



Select VMware EXSi 7.0 (you can also select VMware EXSi 5.0 or VMware EXSi 6.0). Select Linux OS and CentOS 7 (64-version) as below.

1 Select creation type	Select a name and guest	os	
2 Select a name and guest OS	Specify a unique name and OS		
3 Select storage 4 Customize settings	Name		
5 Ready to complete	3.0.25C		
	Virtual machine names can contain up to	80 characters and they must be unique within each ESXi instance	e.
	Identifying the guest operating system he installation.	re allows the wizard to provide the appropriate defaults for the op	erating system
	Compatibility	ESXi 7.0 virtual machine	~
	Guest OS family	Linux	~
	Guest OS version	CentOS 7 (64-bit)	~
vm ware			
		Back Next Fi	nish Cancel

Select storage, ensuring that the environment have enough space. Then, click Next.

1 New virtual machine - 3.0.49C (ESXi 7.0 virtual machine)							
 1 Select creation type 2 Select a name and guest OS 3 Select storage 4 Customize settings 5 Ready to complete 	Select storage Select the storage type and datastore Standard Persistent Memory Select a datastore for the virtual machine's co	onfiguration files	s and all of its' v	irtual disks.			
	Name ~	Capacity ~	Free ~	Type ~	Thin pro \sim	Access	~
	database1	65.5 TB	46.52 TB	VMFS6	Supported	Single	ems
vm ware [*]							
			Ba	ick Ne	xt Finis	h C	ancel

Configure the virtual machine as following: 8-core CPU, 8 GB memory, 64 GB system disk, and 1 TB data disk. 3.0.25C supports 3 to 6 VMXNET3 NICs. There is 1 management port and 5 mirror ports. The first and fifth mirror ports are turned on by default, and the other ports are turned off by default.

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🔁 New virtual machine - 3.0.25C111 (E	SXi 7.0 virtual machine)						
 1 Select creation type 2 Select a name and guest OS 3 Select storage 	Customize settings Configure the virtual machine hardware an	d virtual machine additional	options				
✓ 4 Customize settings 5 Ready to complete		Add hard disk Add network adapter Add other device					
	Memory	8 ~ () 8 GB	~				
	▶ 🛄 Hard disk 1	64 GB	~			\otimes	
	New Hard disk	1 TB	~			0	
	▶ SCSI Controller 0	VMware Paravirtual				8	
	SATA Controller 0					8	
	USB controller 1	USB 2.0		~]	0	
	Network Adapter 1 New Network Adapter	VM Network		~	Connect	•	
vm ware	New Network Adapter	VM Network		~	Connect		
		ma Blatuary	Back	Next	Finish	Cancel	

Select an image to be added to virtual CD/DVD drive.

	 Otatus Oseu space 	ouesi os	 Host fiame
🔁 New virtual machine - 3.0.25C111 (E	SXi 7.0 virtual machine)		
 1 Select creation type 2 Select a name and guest OS 3 Select storage 	Customize settings Configure the virtual machine hardware a	nd virtual machine additional options	
4 Customize settings 5 Ready to complete	▶ 🛄 New Hard disk	1 TB ~	\otimes
	► SCSI Controller 0	VMware Paravirtual	8
	SATA Controller 0		8
	🖶 USB controller 1	USB 2.0 ~	8
	Network Adapter 1	VM Network ~	Connect ⊗
	► Mail New Network Adapter	VM Network ~	Connect 🛞
	New Network Adapter	VM Network ~	Connect 🛞
	Solution CD/DVD Drive 1	Datastore ISO file V Host device	Connect 🛞
	▶ I Video Card	Datastore ISO file	
vm ware [®]	▶ m Security devices	Not configured	
		Back Next	Finish Cancel

1 Select creation type 2 Select a name and guest OS 3 Select storage	Customize settings Configure the virtual machine hardw	vare and virtual machine additional options	
4 Customize settings 5 Ready to complete	► 🦳 New Hard disk	1 TB ~	\otimes
	► SCSI Controller 0	VMware Paravirtual	\otimes
	SATA Controller 0		\otimes
	😋 USB controller 1	USB 2.0 ~	8
	► Max Network Adapter 1	VM Network 🗸 🗸 Connect	\otimes
	✓ (a) CD/DVD Drive 1	Host device V Connect	8
	Status	Host device Datastore ISO hie	
	CD/DVD Media	None	~
	Controller location	SATA controller 0 V SATA (0:0) V	
vm ware	▶ Uideo Card	Default settings ~	

Select the option to connect at power on.

1 Select creation type 2 Select a name and guest OS	Customize settings	e and virtual machine additional options	
3 Select storage			
4 Customize settings 5 Ready to complete	► 🛄 New Hard disk	1 TB ~	\otimes
	► CSI Controller 0	VMware Paravirtual	\otimes
	SATA Controller 0		8
	USB controller 1	USB 2.0 ~	\otimes
	► Metwork Adapter 1	VM Network 🗸 🗹 Con	inect 🛞
	► Mew Network Adapter	VM Network 🗸 🗹 Con	inect 🛞
	▶ I New Network Adapter	VM Network 🗸 🗸 Con	inect 🛞
	▼ (Section 2) ⊂ (Section 2	Datastore ISO file V Con	inect 🛞
	Status	Connect at power on	
vm ware [®]	CD/DVD Media	Brow	wse

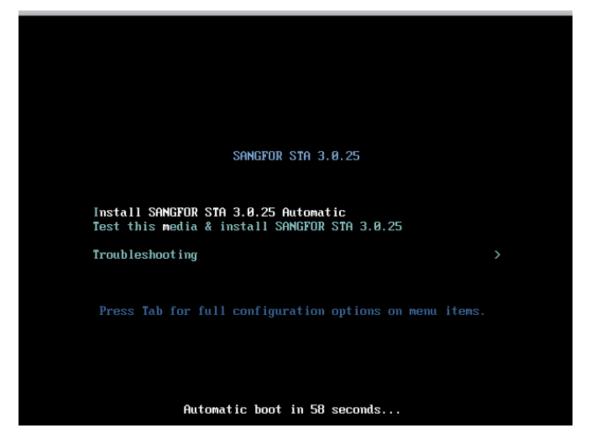
Click to finish the creation.

1 Select creation type	Ready to complete	
2 Select a name and guest OS	Review your settings selection before	e finishing the wizard
3 Select storage		
4 Customize settings 5 Ready to complete	Name	3.0.25C111
	Datastore	database1
	Guest OS name	CentOS 7 (64-bit)
	Compatibility	ESXi 7.0 virtual machine
	vCPUs	8
	Memory	8 GB
	Network adapters	3
	Network adapter 1 network	VM Network
	Network adapter 1 type	VMXNET 3
	Network adapter 2 network	VM Network
	Network adapter 2 type	VMXNET 3
	Network adapter 3 network	VM Network
	Network adapter 3 type	VMXNET 3
	IDE controller 0	IDE 0
MOON ALOKO	IDE controller 1	IDE 1
vm ware [®]	SCSI controller 0	VMware Paravirtual

When the virtual machine is created, select the new virtual machine and power it on.

n ware' esxi"								roat@10.222.88.52 -	Help - Q Search
Navigator		3.0.25C111							
Host Manape Monitor Virtual Machines Monitor Monitor Monitor 3.0.49C 10.222.88.33	18	Console Montor Power	on Powrof II Suspend © Restar 3.0.2505111 Gwet 05 Compatbility Vihrare Tools CPUs Memory	t Zetit ZRefresh A A CentOS 7 (84-bit) ESX 7 / 9 virtual machine No 8 8 8 06	ctions				CPU 0 MHz MEMORY 0 B STORAGE 1.06 TB
 database1 	-	VMware Tools is not installed in	this virtual machine. VMware Tools allows de	etailed guest information to be displa	yed as well as allow	wing you to perform operations or	n the guest OS, e.g. graceful shutdow	m, reboot, etc. You should install VMv	ware Tools. 🏠 Actions
More VMs Storage database1 Monitor		VMware Tools is not installed in General Information	this virtual machine. VMware Tools allows do	etailed guest information to be displa	yed as well as allow	wing you to perform operations or • Hardware Configuration		m, reboot, etc. You should install VMv	ware Tools. 🏠 Actions
More VMs Storage database1			this virtual machine. VMware Toots allows de	etailed guest information to be displa	yed as well as allow			m, reboot, etc. You should install VMv	vare Tools. 🎡 Actions
More VMs Storage database1 Monitor More storage		General Information	this virtual machine. VMware Tools allows de	stailed guest information to be displa	yed as well as allow	* Hardware Configuration		m, reboot, etc. You should install VMv	ware Tools. 🏠 Actions
More VMs Storage database1 Monitor More storage		General Information Q Networking		stalled guest information to be displa		Hardware Configuration ■ CPU	8 vCPUs	m, reboot, etc. You should install VMv	ware Tools. 🧑 Actions
More VMs Storage database1 Monitor More storage		General Information Q. Networking William VMware Tools	VMware Tools is not installed.	stalled guest information to be displa		Hardware Configuration GPU Memory	8 vCPUs 8 GB	m, reboot, efc. You should install VMv	ware Tools. 🏠 Actions

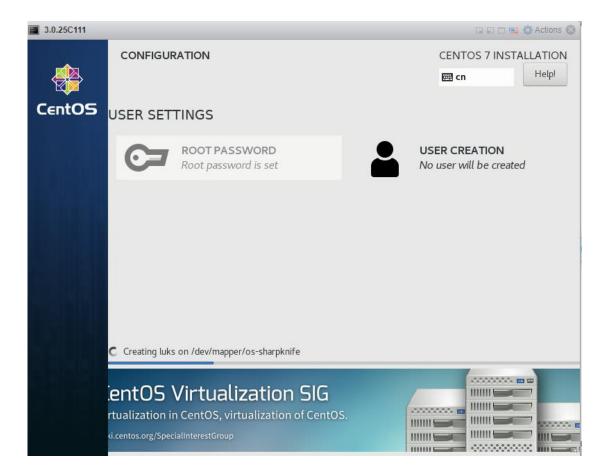
You will go to the installation page. Press Enter to select automatic installation.



Wait for automatic installation, which may take 1 hour.

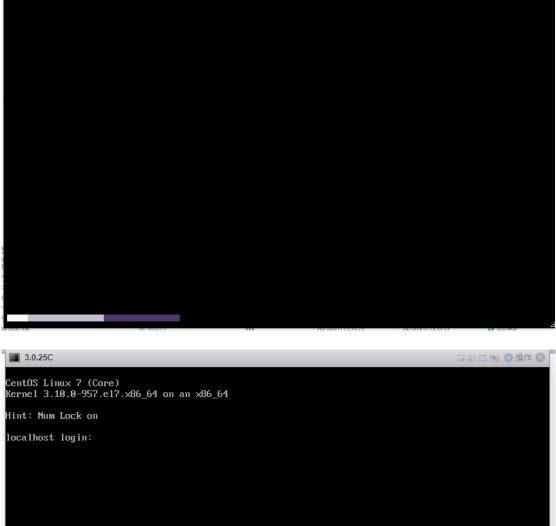
0.7056311 pci 0000:00:18.5: PCI bridge to [bus 20] 0.7058151 pci 0000:00:18.5: bridge window [mem 0xfbd00000-0xfbdfffff] 0.7060111 pci 0000:00:18.5: bridge window [mem 0xe6700000-0xe67fffff] bridge window [мем 0xe6700000-0xe67fffff 64bi pref] 0.706343] pci 0000:00:18.6: PCI bridge to [bus 21] 0.706526] pci 0000:00:18.6: 0.706721] pci 0000:00:18.6: bridge window [mem 0xfb900000-0xfb9fffff] bridge window [mem 0xe6300000-0xe63fffff 64bi pref] 0.707037] pci 0000:00:18.7: PCI bridge to [bus 22] 0.707242] pci 0000:00:18.7: bridge window [мем 0: 0.707437] pci 0000:00:18.7: bridge window [мем 0: bridge window [mem 0xfb500000-0xfb5fffff] bridge window [mem 0xe5f00000-0xe5ffffff 64bi pref] 0.707915] NET: Registered protocol family 2 0.708451] TCP established hash table entries: 65536 (order: 7, 524288 bytes 0.7093211 TCP bind hash table entries: 65536 (order: 8, 1048576 bytes) 0.7095881 TCP: Hash tables configured (established 65536 bind 65536) 0.709785] TCP: reno registered 0.709936] UDP hash table entries: 4096 (order: 5, 131072 bytes) 0.710142] UDP-Lite hash table entries: 4096 (order: 5, 131072 bytes) 0.710375] NET: Registered protocol family 1 0.710541] pci 0000:00:00.0: Limiting direct PCI/PCI transfers 0.712162] Unpacking initramfs...

Do not perform any operations while waiting.



After the automatic installation is complete, click Reboot.

	CONFIGUE	ATION			CENTOS 7 INSTA	LLATION Help!
CentOS	USER SET	TINGS				
	C	ROOT PASSWORD Root password is set			JSER CREATION No user will be created	
	Complete!					31
			Cent	OS is now success	sfully installed and ready fo Go ahead and reboor to	



After installation, you need to enter the background to configure the IP address. You required to find a PC which same IP segment with the vSTA 10.251.251.251 to continue the setup. After configuring the IP address, you can log into the console.

SANGFOR	
RECHARGE BURGET 46 STATE TRADEFINE FOR STATE AND	Stealth Threat Analytics Username Password Captcha State T. 4 Log M
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The default login account is "admin" with the password "admin".

To use the product normally, licensing is required. For details, see the previous part about new features of the version.

Note:

Virtualization deployment requires a basic configuration. If CPU cores, memory size, system disk and data disk size are non-standard, the system may fail to start normally or the gateway may be unreachable.

3. VMware vSphere Client Deployment

Upload ISO file to VMware datastore.

Constant of the constant	File Edit View Inventory Administration Plug-i	ins Help		
Image: Signal and Signal an	🖸 🔯 Home 🕨 👩 Inventory 😜 Data	stores and Datastore Clusters		🔊 - Search Inventory
is detatered is	Image: Section 1 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 Image: Section 2 <th>exters and Databare Clustes</th> <th>al machine ws of Fore 5-based or ISCSI itational (2)) isolad fibre to the adattore justeet (2)) as Name</th> <th> x</th>	exters and Databare Clustes	al machine ws of Fore 5-based or ISCSI itational (2)) isolad fibre to the adattore justeet (2)) as Name	x

The upload may take 30 minutes.

atastore2	(1)]							_		;
		×	C)						
[datastore2 (1)] iso										
		^	Nam	e	Size	Туре	Path	Modified		
			ത	0118-VMware-SIP-3.0.49.iso	7.355.960.00 KB	ISO image	[datastore2(1)] iso	2021/3/3 22:14:00		
			Ō	1-0224-VMware-STA-3.0.25.iso	5,606,966.00 KB	ISO image	[datastore2 (1)] iso	2021/2/25 15:21:33		
2.82										

Create a new virtual machine.

File Edit View Inventory Administration Plug-ins Help	_
C Notes and Clusters	3
5° & 35	
🖃 🛃 vcenter.zjw.com	10.222.3.46 VMware ESXi, 6.0.0, 2494585
 ★ 10.222.3.35 ➡ 10.222.3.46 ★ 10.222.3.46 	Getting Started Summary Virtual Machines Resource Allocation Performance Configuration
	What is a Host?
ID.222.3.60 ID.222.3.86	A host is a computer that uses virtualization software, such as ESX or ESXi, to run virtual machines. Hosts provide the CPU and memory resources that virtual machines use and give virtual machines access to storage and network connectivity.
	Basic Tasks
	Treate a new virtual machine

Click the button to create a new virtual machine and then click Next.

-				close tab X			
	🕝 Create New Virtual Mach	hine			-		×
rt c t	Configuration Select the configuration for	or the virt	/irtua	I machine	Virtual M	achine \	/ersion: 11
	Configuration Name and Location Resource Pool Storage Guest Operating System Network Create a Disk Ready to Complete	٦	ि । ि (uration 'ypical reate a new virtual machine with the most common devices and config "ustom reate a virtual machine with additional devices or specific configuration		ns,	
				< Back	Next >	C	ancel

Select a host and click Next.

	elece tab.	(
🕝 Create New Virtual Ma	chine	- 🗆 X
Name and Location Specify a name and locat	on for this virtual machine	Virtual Machine Version: 3
Configuration Name and Location	Name:	
Resource Pool Storage Guest Operating System Network	Virtual machine (VM) names may contain up to 80 characters and vCenter Server VM folder.	d they must be unique within each
Create a Disk Ready to Complete	(f) 10.222.3.46	
		< Back Next > Cancel

Select a resource pool and click Next.

Resource Pool Virtual Machine Version: 1 Configuration Name and Location Storage Guest Operating System Network Create a Disk Ready to Complete Select the resource pool within which you wish to run this virtual machine. Resource Pool Storage Guest Operating System Network Create a Disk Ready to Complete Select the resource pool within which you wish to run this wirtual machine. Image: Select the resource pool within which you wish to run this wirtual machine. Resource pool allow hierarchical management of computing resources within a host or duster. Virtual machines and child pools share the resources of their parent pool. Image: Select the resource pool within which you wish to run this wirtual machine. Resource pool allow hierarchical management of computing resources within a host or duster. Virtual machines and child pools share the resources of their parent pool. Image: Select the resource pool within which you wish to run this wirtual machine. Resource pool allow hierarchical management of computing resources within a host or duster. Virtual @ plot Image: Select the resource pool within which you wish to run this wirtual machine. Resource pool allow hierarchical management of computing resources within a host or duster. Virtual @ plot Image: Select the resource pool within which you wish to run this wirtual machine. Resource pool allow hierarchical management of computing resources within a host or duster. Virtual @ plot Image: Select the resource pool within which you wish to run this wirtual machine. Resource pool allow hierarchical management of computing resources within	🕝 Create New Virtual Machin	1e	-		×
Name and Location Resource Pool Storage Guest Operating System Network Create a Disk Ready to Complete 00 Image: Image		o you want to run this virtual machine?	Virtual Ma	achine Ver	sion: 11
	Name and Location Resource Pool Storage Guest Operating System Network Create a Disk	Resource pools allow hierarchical management of computing resources with machines and child pools share the resources of their parent pool.		er. Virtual	
< Back Next > Cancel		< Park	Next	6.00	

Select storage size, ensuring it is large enough.

al Machine			مامع	tab Y	_	
on storage for th	ne virtual machine fil	es			Virtual Mad	hine Version:
Select	t a destination stora	age for the virtua	l machine files:			
1 Non		Drive Type		Frovisioned		Thin P
	database0	Non-SSD		55.19 TB	6.78 TB VMFS5	Suppo
	datastore1 (2)	SSD	111.75 GB	54.92 GB	110.80 GB VMFS5	Suppo
<	Disable Storage DR	S for this virtual r	nachine		-	
	Disable Storage DR:	S for this virtual r	nachine			
	ect a datastore:	S for this virtual r	nachine Capacity Pr	ovisioned	Free Type	Thin Pro

Select Linux OS and CentOs 4/5/6/7 (64-bit) version for the virtual machine.

Then, click Next.

🕜 Create New Virtual Mac	ine	- 🗆 ×
Guest Operating System Specify the guest operatin	system to use with this virtual machine	Virtual Machine Version: 11
Configuration Name and Location Resource Pool Storage Guest Operating System Network Create a Disk Ready to Complete	Guest Operating System: Windows Cuture Guest	rovide the appropriate defaults for
	< Bac	k Next > Cancel

Version 3.0.25C supports 3 to 6 NICs. Supported NIC type: VMXNET3

Ready to Complete NIC 2: VM Network	Adac			Connect a	
Which network connections will be used by the virtual machine? Configuration Name and Location Resource Pool Storage Guest Operating System Network Create a Disk Ready to Complete Create Network Connections How many NICs do you want to connect? Image: Storage Guest Operating System Network NIC 1: VM Network NIC 2: VM Network NIC 3: VM Network Image: Storage Virtual machine is created, via its Edit Settings dialog. Adapter choice can affect both networking performance a	-			Connect a	
Name and Location Resource Pool Storage Image: Connection Storage Storage How many NICs do you want to connect? Storage Network Create a Disk Ready to Complete NIC 1: VM Network Image: Create a Disk NIC 2: NIC 2: VM Network NIC 3: VM Network If supported by this virtual machine version, more than virtual machine is created, via its Edit Settings dialog. Adapter choice can affect both networking performance a	-	oter			
the vieware knowledgebase for more information on cho supported for various guest operating systems and hosts	VMXI VMXI VMXI VMXI	ion compa	d after t	Consult	

Add a 64 GB system disk. Then, click Next.

	🕝 Create New Virtual Mac	hine		-		×
rt c t	Create a Disk Specify the virtual disk size	e and provisioning policy		Virtual Ma	achine Vei	sion: 11
-	Configuration Name and Location Resource Pool Storace Guest Operating System Network Create a Disk Ready to Complete	Datastore: Available space (GB): Virtual disk size: Thick Provision Lazy Thick Provision Eage Thin Provision				
			< Back	Next >	Car	ncel

Click Continue to finish specific configurations for the virtual machine.

		ologo tab X			
🕝 Create New Virtual Ma	thine		-		\times
Ready to Complete Click Finish to start a task	that will create the new virtual machine		Virtual M	achine Ve	rsion: 11
Configuration Name and Location Resource Pool Storage Guest Operating System Network Create a Disk Ready to Complete	Settings for the new virtual machine: Name: Folder: Host/Cluster: Resource Pool: Datastore: Guest OS: NICs: NIC 1 Network: NIC 1 Type: NIC 2 Network: NIC 2 Type: NIC 3 Network: NIC 3 Type: Disk provisioning: Virtual Disk Size:	3.0.25C 10.222.3.46 10.222.3.46 hjl database0 CentOS 4/5/6/7 (64-bit) 3 VM Network VMXNET 3 VM Network VMXNET 3 VM Network VMXNET 3 Thick Provision Lazy Zeroed 64 GB			
[Edit the virtual machine settings by (1) Oreation of the virtual machine () system. Install a guest OS on the	/M) does not include automatic installatio	on of the gue	st operati	ng
		< Back	Continue	Car	ncel

Change CPU to 8 cores and change memory size to 8 GB.

3.0.25C - Virtual Machine Properties		_		×
Hardware Options Resources				
Show All Devices Add	Number of virtual sockets:	1	•	
Hardware Sammary Image: Memory (adding) 8192 MB Image: CPUs (adding) 8 Image: Memory (adding) Video cand Image: VMCI device (adding) Deprecated Image: VMCI device (adding) Client Device Image: New CD/DVD (adding) Client Device Image: New Floppy (adding) Client Device Image: New SCSI Controller (add LSI Logic Parallel Image: New NIC (adding) VH Network Image: New NIC (adding) VH Network Image: New NIC (adding) VH Network Image: New Hard Disk (adding) Virtual Disk	Number of cores per socket: Total number of cores: Changing the number of virtual OS is installed might make your unstable. The virtual CPU configuration s might violate the license of the	virtual ma	n this page	
	F	inish	Cancel	

Add a 1-TB data disk, ensuring that the environment has sufficient resources.

🕝 Create New Virtual Machine			_		\times
🚱 3.0.49CC - Virtual Machine F	roperties		_		×
Hardware Options Resources		Memory Configuration			1
Show All Devices	Add Remove	Memory Size:	32 ÷	GB 🔻	
Hardware	Summary	2 TB		, ×	
Device Type What sort of device do y	ou wish to add to your virtual mac	hine?			
Device Type Select a Disk Create a Disk	Choose the type of device yo	u wish to add.			
Advanced Options Ready to Complete	Serial Port Parallel Port Ploppy Drive CD/DVD Drive USB Controller USB Device (unavailable) PCI Device (unavailable) PCI Device (unavailable) SCSI Device	This device can be added to this Vi	rtual Machir	ie.	
-		< Back Next	>	Cancel	
			onunue		

Click Next.

Select a Disk Select a Disk Create a Disk Advanced Options Ready to Complete Disk Create a new virtual disk Create a new virtual disk Create a new virtual disk
Select a Disk A vinual das is composed of one of more mes on one note in escine system. Together diese files appear as a single hard disk to the guest operating system. Advanced Options Select the type of disk to use. Ready to Complete Disk
Reuse a previously configured virtual disk. C Raw Device Mappings Give your virtual machine direct access to SAN. This option allows you to use existing SAN commands to manage the storage and continue to access it using a datastore.

Click Next.

Confidentiality Level: Public in project team

	×
Create a Disk Specify the virtual disk	size and provisioning policy
Device Type Select a Disk Create a Disk Advanced Options Ready to Complete	Capacity Disk Size: 1 TB Disk Provision Thick Provision Lazy Zeroed Thick Provision Eager Zeroed Thick Provision Location Store with the virtual machine Specify a datastore or datastore duster: Browse
lick Next. Add Hardware	<pre><back next=""> Cancel</back></pre> Finish Cancel X
	s do not usually need to be changed.
<u>Device Type</u> <u>Select a Disk</u> <u>Create a Disk</u> Advanced Options	Specify the advanced options for this virtual disk. These options do not normally need to be changed.
Select a Disk	to be changed.

Click Finish to complete the steps to add a disk.

æ	3.0.25C - Virtual Machine Pro	perties			_		× 1	
Hardware Options Resources								
	🕝 Add Hardware					×	:]	
На								
	Review the selected options and click Finish to add the hardware.							
				_				
	<u>Device Type</u> <u>Select a Disk</u>	Options:						
	<u>Create a Disk</u> Advanced Options	Hardware type: Create disk:	Hard Disk New virtual disk					
	Ready to Complete	Disk capacity: Disk provisioning:	1 TB Thick Provision Lazy Zeroed					
		Datastore: Virtual Device Node:	database0					
		Disk mode:	Persistent					
1								
		1		_				
			<	Back	Finish	Cancel	1	
1								
					Finish	Cancel		
				-			A	

Select an image to be added to virtual CD/DVD drive. Select the option to connect at power on.

 3.0.25C - Virtual Machine Prop. Hardware Options Resources Show All Devices Hardware Memory (adding) CPUs (adding) Video card (adding) Video card (adding) Video card (adding) New CD/DVD (adding) New Floppy (adding) New SCSI Controller (add New NIC (adding) New Hard Disk (adding) New Hard Disk (adding) 	Add Remove Add Remove Summary 8192 MB 8 Video card Deprecated Image File Client Device 1 LSI Logic Parallel VM Network VM Network VM Network VM Network Virtual Disk Virtual Disk Virtual Disk	 - □ × Device Status Connect at power on 3 Device Type Client Device Note: To connect this device, you must power on the virtual machine and then click the Connect CD/DVD button in the toolbar. C Host Device ✓ A ✓ Datastore ISC File Browse
		Mode Passthrough IDE (recommended) Enulate IDE Virtual Device Node DE (1:0)

Select the directory to start uploading ISO.

🕝 3.0.25C - Virtual Machine Prop	erties	- 0	× 11
Hardware Options Resources			
Hardware Options Resources Hardware Show All Devices Hardware CPUs (adding) CPUs (adding) Video card (adding) Vi4CI device (adding) New CD/DVD (adding) Rew Floppy (adding) New SCSI Controller (add	Add Remove Summary 8192 MB 8 Video card Deprecated [database0] iso/010 Client Device LSI Logic Parallel VH Network	Device Status □ Connected ☑ Connect at power on Device Type ○ Client Device Note: To connect this device, you must power on the virtual machine and then click the Connect CD/DVD button in the toolbar. ○ Host Device	-
 New NIC (adding) New NIC (adding) New Hard Disk (adding) New Hard Disk (adding) New Hard Disk (adding) 	VM Network VM Network VM Network Virtual Disk Virtual Disk	Detastore IGO File [database0] iso/0105-VMware-STA[-3 Browse Mode @ Passthrough IDE (recommended) @ Emulate IDE Virtual Device Node @ IDE (1:0)	
<	>	Finish Cancel	
1			

After the file is added successfully, click Finish and wait for VMware to create a new virtual machine.

Name	Target	Status	Details	Initiated by	vCenter Server	Requested Start Ti 🖙	Start Time	Con
Create virtual machine	10.222.3.46	45% 💶	Copying Virtual Machine configuration	VSPHERE.LO	vcenter.zjw.c	2021/3/10 20:29:47	2021/3/10 20:29:47	

Select the newly created virtual machine and turn on the power to go to the automatic installation page. The operation steps are the same as VMware EXSi and will not be repeated here.

2.4. Check After Deployment

2.4.1. STA Check

1. Log in to web console to check that the version is 3.0.25C.

21 ER 📓 BERGETS 🙏 RIJSON 🗣 FIZERET 🦞 RÆS 👰 FRUL 🙊 SÆRES 🕸 FRUL 🙊 SÆRES 🕸 FRULTER 💭 RÆSERFULTER. 🐨 IRASENA 📽 102221211 🕸 ERESAURER. 🔮 ERESAURER 🖉 RESERVA 😵 RES							
🞯 Stealth Threat A	halytics V3.0.25C	User: admin [log out]					
- Status	Status						
System	8% 52% 0% 0% CPU Usage Disk Usage Disk Usage Disk Usage Disk Usage	Threats: 0 System Time: 2021-03-11 05:38:35 Uptime: 1 Days 11 Hours 24 Mins 35 Secs					
	Throughput All mirror ports *	# Sessions: Current- ¢					
	2005 6000 4000 0 0 0 0 0 0 0 0 0 0 0 0	Sessions: Concurrent New Sessions/Sec					
	Interface	Cyber Command ¢					

2.4.2. Business Verification

Verify basic functions used by customers.

Check whether traffic statistics are changed when there is traffic connected.

2.5. Handling of Deployment Failure

• Scenario 1: Fail to start automatic installation.

Troubleshooting:

1. Check whether the host resources on the deployment environment are sufficient

2. Check whether the option to connect at power on is not selected when the image is selected for the added virtual CD/DVD drive.

• Scenario 2: Console cannot be accessed when deployment is finished and network has been configured.

Troubleshooting:

1. Check the resource configuration of the deployment environment. Check whether the data disk is configured and whether the data disk size is too small.

2. Check whether the MAC address of the management interface matches the MAC address of the NIC that the virtual machine uses to access the network.

• Scenario 3: NIC status cannot be changed after you log in to the console

Troubleshooting:

1. Check licensing status.

- 2. View the startup status of the main process ad_appd in the background.
- 3. Check whether the systemstart.sh script has finished running

Confidentiality Level: Public in project team

2.6. Rollback

None

Precaution