

Deploy the Cisco Cyber Vision Center

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- Allocate an Elastic IP to the instance, on page 9
- Cisco Cyber Vision Center setup, on page 11

Create and configure the instance

Procedure

Step 1 Go to https://aws.amazon.com Amazon Web Services and sign in.



aws	Services	Q Search	[Option+S]		
=	EC2 〉 Insta	nces 〉 Launch an instance			
	Launch an instance Info				
	Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.				
	Name and tags Info				
	Name				
	e.g. My W	leb Server	Add additional tags		
	 Application and OS Images (Amazon Machine Image) Info An AMI is a template that contains the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server, and applications) required to here in the information in the software configuration (operating system, application server). 				
	taunch y	our instance. Search of Browse for Amis if you don't see what you are tooking for b	etow		
	Q cy	ber vision	×		

Step 6 In the AWS Marketplace AMIs menu, select Cisco Cyber Vision BYOL.

Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the s required to launch your instance. You ca you can select one of your own AMIs.	software configuration (opera an select an AMI provided by <i>i</i>	ting system, application server, and applications) WS, our user community, or the AWS Marketplace; or	
Q cyber vision			×
Quickstart AMIs (0) My A Commonly used AMIs Creat	AMIs (0) AWS Markets end by me AWS & trusted	Liace AMIs (1) Community AMIs (7) hird-party AMIs Published by anyone	
Refine results Categories	cyber vision (1 resul	t) showing 1 - 1	Sort By: Relevance V
Infrastructure Software (1) Publisher Cisco (1) Pricing model	:ategories Infrastructure Software (1) :iiiii: 'Publisher By Giso C/Der Vision BYOL Cisco Cyber Vision is a cybersecurity solution specifically designed for organizations in pow water distribution, oil & gas, manufacturing and public transportation to ensure continuity resilience and safety of their industrial operations. It provides asset owners with full visibil		Select d for organizations in power and ation to ensure continuity, set owners with full visibility into



Click Continue.

alialia cisco	Cisco Cyber Vision Cisco Systems, Inc. [2]	BYOL S					
Overview	Product details	Pricing	Usage	Support			
Lisco Cyber Vi nonitors indu Typical total p	sion is a cybersecurity solut strial assets and processes t rice	ion specifically to detect threa	y designed its and ano Latest vers	to ensure continuity, resilien malies and extend IT security sion	ce and safety of y to the OT dom	industrial operations. It automatically disco ain through seamless Categories	overs and
ypical total price \$0.042/Hr fotal pricing per instance for services hosted on t3.medium n us-east-1. see additional pricing information.		t3.medium	4.3.0 Delivery m Amazon M Operating Other Cyb Other Cyb	hethods lachine Image ③ systems er Vision 4.3.0 er Vision 4.1.4		Security Network Infrastructure	
						Co	ontinuo

Step 8 Slide down to instance type.

Supported instance families		
• C5, C5a, C5ad, C5d, C5n, C6g, C6gd		
• M5, M5a, M5ad, M5d, M5dn, M5n, M5zn, M6g, M6gd		
• R5, R5a, R5ad, R5d, R5dn, R5n, R6, R6gd		
• T3, T3a, T4g		
• Z1d		

Step 9

Select an instance type by typing for example "t3.xlarge".

▼ Instance type Info Get advice				
Instance type t3.medium Family: t3 2 vCPU 4 GiB Memory Current generation: true Q t3.x	 All generations Compare instance types this product. 			
t3.xtarge Family: t3 4 vCPU 16 GiB Memory Current generation: true ▼ Key pair (login) Info				

Step 10 Select or create a new key pair.

▼ Key pair (login) Info		
You can use a key pair to securely connect to your instance. Ensure that you have before you launch the instance.	access t	o the selected key pair
Key pair name - required		
AML	C	Create new key pair

Key pair name	euroly
JMA	curety.
he name can include upto 255 ASCII characters. I	t can't include leading or trailing spaces.
ley pair type	
 RSA RSA encrypted private and public key pair 	C ED25519 ED25519 encrypted private and public key pair
rivate key file format	
) .pem	
For use with OpenSSH	
 .pem For use with OpenSSH .ppk For use with PuTTY 	
 .pem For use with OpenSSH .ppk For use with PuTTY Men prompted, store the private k your computer. You will need it later mero 54 	ey in a secure and accessible location on er to connect to your instance. Learn

A file called YOURKEYPAIRNAME.pem will be downloaded.

Step 11 Slide down to Network settings and click **Edit**.

▼ Network settings Info		Edit
Network Info		
vpc-015e027ecdf241329		
Subnet Info		
No preference (Default subnet in any availa	ability zone)	
Auto-assign public IP Info		
Enable		
Firewall (security groups) Info A security group is a set of firewall rules that contrinstance.	rol the traffic for your instance. Add rules to allow	specific traffic to reach your
• Create security group	○ Select existing security group	

Step 12 Set Auto-assign public IP to **Disable**.

▼ Network settings Info					
VPC - required Info					
vpc-015e027ecdf241329 172.31.0.0/16	(default) 👻	C			
Subnet Info					
No preference	▼	Create new subnet			
Auto-assign public IP Info					
Disable					
Firewall (security groups) Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.					
• Create security group	○ Select existing security group				

Inbound Security Group Rules appears.

Гуре Info	Protocol Info	Port range Info
ssh 🔻	ТСР	22
Source type Info	Source Info	Description - optional Info
Anywhere •	Q Add CIDR, prefix list or security	e.g. SSH for admin desktop
	0.0.0.0/0 🗙	
Security group rule 2 (TCP, 443, 0.0)	0.0.0/0)	Remove
Type Info	Protocol Info	Port range Info
	ТСР	443
1111F3 V		
Source type Info	Source Info	Description - optional Info
Source type Info	Source Info	Description - optional Info e.g. SSH for admin desktop
Source type Info	Source Info C Add CIDR, prefix list or security 0.0.0.0/0 ×	Description - optional Info

Step 13

Click Add security group rule to start configuring AWS firewall settings.

Add the rules that provide access from users or other resources to the Center.

List of the ports that need to be added:

• For Global Center <--> Center communication

Protocol	Port
AMPQ	TCP/5671
NTP	UDP/123
Syslog	UDP/TCP 514
SSH	TCP/22

• For CS workstation/ntp server <--> Center communication

Protocol	Port
HTTPS	TCP/443
SSH	TCP/22
NTP	UDP/123

• For Sensor <--> Center communication

Protocol	Port
AMPQ	TCP/5671
Syslog	UDP/10514

Example of security configuration:

Туре	Protocol	Port range	Source type	Description
SSH	ТСР	22	0.0.0/0	SSH
HTTPS	ТСР	443	0.0.0/0	HTTPS
Custom TCP	ТСР	5671	0.0.0/0	AMPQ
Custom UDP	UDP	123	0.0.0/0	NTP
Custom TCP	ТСР	514	0.0.0.0/0	Syslog (for Global Center)
Custom UDP	UDP	514	0.0.0.0/0	Syslog (for Global Center)
Custom UDP	UDP	10514	0.0.0/0	Syslog (for sensor)

Step 14

Configure storage by changing the value or ,if needed, adding a new volume.

NoteMake sure to setup the correct disk size as this information will remain and cannot be modified.NoteDo not use the Magnetic (Standard) for Volume Type.

Note Default type will be SSD.

For example, we change 100 GiB default value to 500.

▼ Configure storage Info	Advanced
1x 500 GiB gp2 Root volume (Not encrypted)	
Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage	×
Add new volume	
Olick refresh to view backup information The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.	C
0 x File systems	Edit

Step 15 Depending on the Center type, fill the Advanced Details > User data part at the bottom of the page.

↑ Choose file			

If a json file is used to specify the type of the Center, this step will be skipped during the installation.

- To deploy a Center, leave the textbox empty.
- To deploy a Center with sync, the minimal configuration is:

```
{
  "center-type": "Local Center",
}
• To deploy a Global Center, the minimal configuration is:
  {
  "center-type": "Global Center",
  }
```

For all json parameters, refer to Annex – Setup Center json file.

Step 16 Review the settings on the right summary and click **Launch instance**.

1 oftware Image (AMI) isco Cyber Vision BYOL mi-045d09fc2dd6111e2 irtual server type (instance type) 3.xlarge irewall (security group) ew security group torage (volumes) volume(s) - 500 GiB Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tior AMIs agr menth: 30 GiB of EPS	Number of Instances Info					
oftware Image (AMI) isco Cyber Vision BYOL mi-045d09fc2dd6111e2 irtual server type (instance type) 3.xlarge irewall (security group) torage (volumes) volume(s) - 500 GiB Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tior AMIs agr menth: 30 GiB of EPS	1					
isco Cyber Vision BYOL mi-045d09fc2dd6111e2 irtual server type (instance type) 3.xlarge irewall (security group) lew security group torage (volumes) volume(s) - 500 GiB Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tior AMIs agreement. 30 GiB of EPS	Software Image (AMI)					
irtual server type (instance type) 3.xlarge irewall (security group) lew security group torage (volumes) volume(s) - 500 GiB Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tigr AMIs age menth: 30 GiB of EPS	Cisco Cyber Vision BYOL ami-045d09fc2dd6111e2					
 3.xlarge 3.xlarge irewall (security group) lew security group torage (volumes) volume(s) - 500 GiB Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tigr AMIs agr menth: 30 GIB of EPS 	Virtual server type (instance	type)				
irewall (security group) lew security group torage (volumes) volume(s) - 500 GiB Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tigr AMIs age menth. 30 GiB of EPS	t3.xlarge					
 Free tier: In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier. AMIc par menth. 30 GIB of EPS 	Firewall (security group)					
torage (volumes) volume(s) - 500 GiB Free tier: In your first year includes × 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tigr AMIs age menth: 30 GiB of EPS	New security group					
 volume(s) - 500 GiB Free tier: In your first year includes × 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIc per menth. 30 GIB of EPS 	Storage (volumes)					
Free tier: In your first year includes X 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tigr AMIs per menth. 30 GIB of EPS	1 volume(s) - 500 GiB					
storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.	Free tier: In your first 750 hours of t2.micro the Regions in which unavailable) instance tier AMIs per month, storage, 2 million IOs snapshots, and 100 C to the internet.	t year includes X o (or t3.micro in t2.micro is usage on free 30 GiB of EBS s, 1 GB of 5B of bandwidth				

The following status should appear.

EC2	Instances Launch an instance
•	Launching instance Subscribing to Marketplace AMI 64%
►	Details
	Please wait while we launch your instance.
	Do not close your browser while this is loading.
EC2	> Instances > Launch an instance
0	Success Successfully initiated launch of instance (i-014b63c1220a99342)

Allocate an Elastic IP to the instance

1. Click Instances in AWS left menu.



2. Choose your instance on the instances list and copy your instance ID.

aws Services ▼	Q Sec	arch for	services,	features, mar	ketplace [Option+	•S] 🔉 -	🗘 devops/wbo	udaa@cis	co.com @ 3286-0807	-8092 🔻	✓ Ireland ▼ S	iupport	t v
New EC2 Experience Tell us what you think	×	Insta	nces (1	/9) Info	C	Connect	Instance st	ate 🔻	Actions 🔻		Launch instances		•
EC2 Dashboard New		Q F	ilter insta	ances							< 1	>	0
Events			Name	\bigtriangledown	Instance ID		Instance state	e 🗸	Instance type	∇	Status check		Alarn
Tags			-		i-0710fe2b5d36	ec422	Θ Stopped	æΘ	t3.small		-		No ali
Limits			-		i-08a2fda60d27	'0e4b2	⊘ Running	æΘ	t2.micro		⊘ 2/2 checks pa	assed	No ali
▼ Instances			-		i-06e504824ccf	8624f	⊘ Running	QQ	t2.micro		⊘ 2/2 checks pa	assed	No ali
Instances New			-		i-08f59928e6f5	ec898	⊘ Running	æΘ	t3.medium		⊘ 2/2 checks pa	assed	No al
Instance Types			-		i-0c2b04853a5c	ic4d4c	⊘ Running	QQ	t3.medium		⊘ 2/2 checks pa	assed	No ali
Launch Templates			-		i-014e278d036	Of811e	⊘ Running	æΘ	t3.medium		⊘ 2/2 checks pa	assed	No ali
Spot Requests			-		i-04beddd7712	:65b1e	⊖ Terminate	ed⊕Q	c5a.large		-		No ali
Savings Plans		✓	-		i-0b19cd5b75ee	?7cffa	⊘ Running	ଇପ	c5a.large		 Initializing 		No ali
Reserved Instances New						=	=						
Dedicated Hosts		Det		C	Manual Area	C 1	Charles also		Mandanatana		_		_
Scheduled Instances		Det	aits	Security	Networking	Storage	Status chi	ecks	Monitoring	Tags			
Capacity Reservations													
▼ Images		•	instance	summary I	nto								
AMIs		Insta	ance ID			Public IPv4	address		Private I	Pv4 add	dresses		
		ð	i-0b19c	d5b75ee7cffa	3	-			D 17	2.31.7.2	229		

3. Click Elastic IPs in AWS left menu.

aws Services ▼ Q s	earch for services, features, marketplace product	ts, and docs	[Option+S]	Σ	¢
Network & Security Security Groups New Elastic IPs New	Welcome to the new EC2 console! We're redesigning the EC2 console to mak them and let us know where we can make	te it easier to use improvements.	e and improve pe To switch betwe	rforma en the o	nce. W old co
Placement Groups Key Pairs Network Interfaces New	Resources				
▼ Load Balancing	You are using the following Amazon EC	2 resources in th	ne Europe (Irelan	d) Regi	on:
Load Balancers	Instances (running)	0	Dedicated Host	S	
Target Groups New	Elastic IPs	0	Instances		
▼ Auto Scaling	Key pairs	8	Load balancers		
Launch Configurations	Placement groups	0	Security aroups	;	

4. Click the created Elastic IP.

	aws Services v	🔍 Search for services, features, marketplace [Option+S]	Ireland 🔻 Support 🔻
	Capacity Reservations		
•	Images AMIs	Elastic IP addresses (1/1)	stic IP address
•	Elastic Block Store	Q. Filter Elastic IP addresses Public IPv4 address: 54.195.222.37 X Clear filters	(1) ③
	Snapshots Lifecycle Manager	✓ Name	
•	Network & Security Security Groups Elastic IPs	- 54.195.222.37 Public IP	eipalloc-0

5. Click Associate Elastic IP address.

aws Services v	Search for services, features, marketpla	ce [Option+S] 🗵 🗘	devops/wboudaa@cisco.com @ 32	286-0807-8092 ▼ Ireland ▼ Suppor
Capacity Reservations Images 	EC2 > Elastic IP addresses	> 54.195.222.37		
AMIs	54.195.222.37		Actions v	Associate Elastic IP address
Elastic Block Store				
Volumes	Summary			
Snapshots				
Lifecycle Manager	Allocated IPv4 address	Туре	Allocation ID	Association ID
Network & Security	D 54.195.222.37	🗗 Public IP	eipalloc- 047232ca6e635d00c	-
Security Groups	Scope	Associated instance ID	Private IP address	Network interface ID
Elastic IPs		-	-	-
Placement Groups				
Key Pairs	Network interface owner	Public DNS	NAT Gateway ID	Address pool
Network Interfaces New	-	-	-	🗗 Amazon
V Load Ralancing				

6. Select Instance.

7. Paste the instance ID previously copied.

- 8. Click in the field and select the private IP address of the created Center.
- 9. Click Associate.

Elastic IP addres	ss: 54.195.222.37
Resource type Choose the type of resou Instance	irce with which to associate the Elastic IP address.
previously ass	sociated Elastic IP address will be disassociated but still allocated to your account. Learn more
previously ass 2 nstance	sociated Elastic IP address will be disassociated but still allocated to your account. Learn more
nstance	27cffa
nstance Q i-Ob19cd5b75ee Private IP address	e7cffa X C
Instance Q i-Ob19cd5b75ee Private IP address he private IP address wi Q 172.31.7.229	e7cffa X C th which to associate the Elastic IP address. X
Instance Q i-Ob19cd5b75ee Private IP address The private IP address wi Q 172.31.7.229 Reassociation	e7cffa X C ith which to associate the Elastic IP address. X

The following status should appear.



Cisco Cyber Vision Center setup

Establish a serial connection or open an SSH connection from AWS and then proceed to the basic Center configuration.

Establish a serial connection

Procedure

Step 1 In the Instances menu, select the instance you just created and click **Connect**.

EC2 Dashboard X	Instances (1/1) Info	C Connect	Instance state Actions	Launch instances	•
EC2 Global View	Q Find Instance by attribute or ta	g (case-sensitive)		< 1 >	۲
Events	✓ Name ∠ ▼ Instar	ice ID Instance	state v Instance type v	Status check Alar	m status
Console-to-Code Preview	CenterJMA i-014	o63c1220a99342	ing € ⊖, t3.xlarge	⊘ 2/2 checks passed No a	larms -
Instances					
Instances					
Instance Types					

Step 2 Click EC2 serial console.

EC2 > Instances > i-014b63c1220a99342 > Connect to	instance		
Connect to instance Info Connect to your instance i-014b63c1220a99342 (CenterJMA)	using any of these options		
EC2 Instance Connect Session Manager SSH c	lient EC2 serial console		
Instance ID D i-014b63c1220a99342 (CenterJMA)	Serial port		
		Cancel	Connect

Step 3 Click Connect.

Step 4 A new window with a shell prompt opens in the browser.

Step 5 Press Enter.

The Cisco Cyber Vision Center Setup appears.



Step 6 Press Enter.

Open an SSH connection from AWS

1. Go to instances to check the information of the created machine.

aws Services v	$f \lambda$ Search for services, features, marketplace products, and	f docs [Option+S] D 🖧 devops/wbouda	a@cisco.com @ 3286-0807-8092 ▼ Ireland ▼ Suppor
New EC2 Experience Tell us what you think	EC2 > Instances > i-0b19cd5b75ee7cffa		
EC2 Dashboard New	Instance summary for i-0b19cd5b75	ee7cffa Info	C Connect Instance state 🔻
Events	Updated less than a minute ago		
Tags	Instance ID	Public IPv4 address	Private IPv4 addresses
Limits	i-0b19cd5b75ee7cffa	54.195.222.37 open address	172.31.7.229
Instances	Instance state	Dublic ID:4 DNC	Drivete IDv4 DNC
Instances New			
Instance Types		1 compute amazonaws com Lopen address 12	□ Ip-1/2-31-7-229.eu-west-1.compute.inten
Launch Templates			
Spot Requests	Instance type	Elastic IP addresses	VPC ID
Savings Plans	c5a.large	54.195.222.37 [Public IP]	D vpc-77b96d0e
Reserved Instances New	AWS Compute Optimizer finding	IAM Role	Subnet ID
Dedicated Hosts	Opt-in to AWS Compute Optimizer for	-	🗇 subnet-919a9cf7 🔀
Scheduled Instances	recommendations. Learn more 🗹		
Capacity Reservations			
Images	Details Security Networking S	Storage Status checks Monitoring Tag	S
AMIs			
Elastic Block Store	▼ Instance details Info		
Volumor	Platform	AMI ID	Monitoring
Snapshots	Linux/UNIX (Inferred)	ami-0ddb5a307abb22bd2	disabled
Lifecycle Manager	Platform details	AMI name	Termination protection
Natwork & Security	D Linux/UNIX	Cyber Vision Center - 4.0.0-RC4	Disabled

The key previously created or chosen will be automatically added to /data/etc/ssh/userkey/root.



Note It is possible to add multiple keys on that file if an access is needed from another device that is not using the same certificates than the installed one.

This key is downloaded locally or already exists.

Please follow the steps below to connect using SSH and finalize the installation.

- 2. In the AWS EC2 management console, click Instances (1).
- 3. Choose the needed instance and click the Connect button (2).

					2								
	aws Services v Q	Search	for service	es, features, ma	rketplace Option+	s] 🔈 4	သို devops/wbo	udaa@cisco.	com @ 3286-0807-	8092 🔻	' Ireland ▼ S	upport	t v
	New EC2 Experience	Ins	stances	(1/9) Info	đ	Connect	Instance st	ate 🔻	Actions v		Launch instances		•
	EC2 Dashboard New	C	λ Filter in	istances							< 1	>	۲
(1)	Events		Nam	e 🗸	Instance ID		Instance state	. ⊽	Instance type	∇	Status check		Alarn
\prec	Tags		-		i-0710fe2b5d36	ec422	Θ Stopped	ଭ୍ର	t3.small		-		No ali
Ì	Limits		-		i-08a2fda60d27	0e4b2	⊘ Running	QQ	t2.micro		⊘ 2/2 checks pa	ssed	No ali
	▼ Instances		-		i-06e504824ccf8	3624f	⊘ Running	QQ	t2.micro		⊘ 2/2 checks pa	ssed	No ali
	Instances New		-		i-08f59928e6f5	ec898	⊘ Running	ଭ୍ର	t3.medium		⊘ 2/2 checks pa	ssed	No ali
	Instance Types		-		i-0c2b04853a5d	c4d4c	⊘ Running	QQ	t3.medium		⊘ 2/2 checks pa	ssed	No ali
	Launch Templates		-		i-014e278d0360)f811e	⊘ Running	ଭ୍ର	t3.medium		⊘ 2/2 checks pa	ssed	No ali
	Spot Requests		-		i-04beddd7712d	:65b1e	⊖ Terminate	d€Q	c5a.large		-		No ali
	Savings Plans		-		i-0b19cd5b75ee	7cffa	⊘ Running	ଭ୍ର୍	c5a.large		 Initializing 		No al
	Reserved Instances New					=	=				-		
	Dedicated Hosts		Details	Security	Networking	Storage	Status che	ocks	Monitoring	Tags			
	Scheduled Instances		betans	Jecunty	licentorizing	Storuge	Status city	lens	litering	rugs			
	Capacity Reservations		▼ Instan	ice summary	Info								
	▼ Images		nstance II	>		Public IPv4	addross		Private II	Pv4 add	Irossos		
	AMIs		пі і-0h1	/ I9cd5b75ee7cf	fa	-	9991633		n 173	2.31.7 2	29		
									L. 171				

4. Access the SSH Client menu (3) and follow the steps described in it.

Connect to instance Info Connect to your instance I-0b19cd5b75ee7cffa using any of these options
EC2 Instance Connect Session Manager EC2 Serial Console
Instance ID
🗗 i-0b19cd5b75ee7cffa
1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is wbo.pem
 Run this command, if necessary, to ensure your key is not publicly viewable. chmod 400 wbo.pem
4. Connect to your instance using its Public DNS:
D ec2-54-195-222-37.eu-west-1.compute.amazonaws.com
∑ Example:
ssh -i "wbo.pem" root@ec2-54-195-222-37.eu-west-1.compute.amazonaws.com
(3) Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

- **5.** Copy and paste the example (**4**) into the ssh client and replace 'root' with 'cv-admin', like below: ssh -i wbo.pem cv-admin@ec2-54-195-222-376.eu-west-1.compute.amazonaws.com
- 6. Once connected to the Center, type the following command:

sudo -i

7. Type the following command:

setup-center

SBS 4.0.0
cv-admin@ec2-52-31-40-71:~\$
cv-admin@ec2-52-31-40-71:~\$
cv-admin@ec2-52-31-40-71:~\$ sudo -i
root@ec2-52-31-40-71:~#
root@ec2-52-31-40-71:~# setup-center

8. Press Enter.

The Cisco Cyber Vision Center Setup appears.



9. Press Enter.

Basic Center configuration

Accept the End User License Agreement

Cisco Cyber Vision Center Setup
1
End User License Agreement
Effective: May 22, 2017
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< <u>Exit</u> >
Cisco Cyber Vision Center Setup
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Cisco Cuber Vision Center Setup

Accept EULA You must accept the EULA before you continue.	
<mark><accept></accept></mark> <decline></decline>	

Select the language to match your keyboard



Note By default, the system is configured to work with a US QWERTY keyboard.

Choose your keyboard mapping. S American fr French de German it Italian es Spanish	
	Choose your keyboard mapping. Is American fr French de German it Italian es Spanish
Cancel>	Cancel>

Select the Center type

During this procedure you will choose which type of Center to install. There are two types of Centers:

- A **Center** receives metadata from sensors and store them into an internal database (Postrgresql). It can be standalone or synchronized with a Global Center. A Center with sync is similar to a standalone Center from a functionality point of view, except for the link to a Global Center. You must install Centers with sync **after** the Global Center. This will enable the system to enroll and start pushing events to the Global Center.
- A **Global Center** introduces a centralized architecture which collects all industrial insights and events from synchronized Centers and aggregates it on a single global point of view. It will also allow you to manage the knowledge database (KDB) and upgrade the whole platform.

Select the type of Center you want to install.

co Cyber Vision	Center Setup		
What type of	center do you want to inst	a11?	
	Center Proce Global Center Monit	essing sensor data coring multiple centers	
	<mark>< 0K ></mark>	<cance1></cance1>	

Center

If installing a Center, select the first option.

isco Cyber	Vision	Center	Setup				
What	type of	f cente	r do you want t	o install?			
			Center Clobal Conton	Processing	sensor data	atenc	
			diobal center	nonreorrig	Marcipic cei	iter s	
					Cancel		-
					Concer/		

Then, you will have the opportunity to set the Center id. It can be used in case of Center restoration to reuse the same id previously set in the Global Center. Thus, some data can be retrieved.

If you're installing the Center for the first time, this id will be automatically generated. Select No. You will be directed to the next step.

Cisco Cyber Vision Cent	ər Setup
	Are you trying to restore a Center and need to Manually set the center id ?

If you're reinstalling the Center and want to restore it, select Yes.

Are you trying to restore a Center and need to manually set the center id ?
<pre></pre>

Use the following command from the Global Center's CLI to get a list of all Center's id:

sbs-db exec "select name, id from center"

Type the id into the basic Center configuration UUID field.

Cisco Cyber Vision Center Setup
1
This UUID is used to uniquely identify the center You can override the following with an identifier that respects the UUID format.
<u>5</u> 64d1886-db38-bf9d-4235-f3c412f196d1
·
Cancel>

Click OK. You will be directed to the next step.

Global Center

If installing a Global Center, select the second option.

sco Cyber Vi	ision Cente	r Setup		
libet t	uma of cent	en do uou uant t	o install?	1
What ty	ype of cent	er do you want t	o install?	
What t <u>i</u>	ype of cent	er do you want t Center	o install? Processing sensor data	
What t <u>i</u>	ype of cent	er do you want t Center Global Center	o install? Processing sensor data Monitoring multiple centers	
What t <u>i</u>	ype of cent	er do you want t Center Global Center	o install? Processing sensor data Monitoring multiple centers	
What t <u>i</u>	ype of cent	er do you want t Center Global Center	o install? Processing sensor data Monitoring multiple centers	
What t <u>i</u>	ype of cent	er do you want t Center Slobal Center < OK >	o install? Processing sensor data Monitoring multiple centers (Cancel)	
What t <u>i</u>	ype of cent	er do you want t Center Slobal Center (OK)	o install? Processing sensor data Nonitoring multiple centers (Cancel)	

As this step does not apply to a Global Center, select No.

Are you trying to restore a Center and meed to manually set the center id
? < <u>★ Mo</u> > < Yes >

You will be directed to the next step.

Configure the Center's DNS

Type a DNS server address and optional fallbacks.

Setup DNS configuration Up to three maximum, leave blank unnecessary fields Preferred 200.67.222.222 Alt 1 200.57.220.220 Alt 2
Cancel>

Synchronize the Center and the sensors to NTP servers

Enter IP addresses of local or remote NTP servers (gateway configuration needed) to synchronize the Center and the sensors with a clock reference. Each address must be separated by a space.

Cisco Cy	ber Vision Center Setup
	Please enter some NTP time servers: They will be used to synchronize the Center's clock, which is required to generate correct certificates. The servers must be separated by whitespace. A server is composed by its address and optionally by a
	key ID and an RES 128 CMHC key value (32 hex character) separated by semicolon. Format: server_address[;key_id;key_value] Leave this field empty to use local time only. [18.2.3.254
	Cancel>

Optionally, add a key ID and an AES A28 CMAC key value separated by a semicolon with the corresponding NTP server.



The synchronization takes a few seconds.

Check that the time is correct, or set the time manually.



Note The time is set in UTC standard.

Time is now	1: Tue Oct 29 16	:37:43 2019 UTC	
If this is below (MMDD	incorrect, plea hhmm[[CC]YY][.s	se specify current UTC t	іме
Leave empty	or cancel to s	skip.	
_			
	< OK >	<cancel></cancel>	

Give the Center a name



Note]

This name will be used in the Center certificate.

Please enter the FOD	N name:
(It will be used as certificate of this DNS configuration fo authentication)	common name for the TLS server, so it must match r a proper TLS
<u> </u>	<cancel></cancel>

Enter the Center name provided by your administrator or type 'Default' which is a secure value.



This name must match the DNS name you will use to access the Center through SSH or a browser.

Authorize networks

This step allows you to restrict IP addresses that can connect to the Administration interface. If no IP is entered, all networks are authorized by default.

Please provide netw on the administrati are authorized. Loc	orks authc on interfa al network	rized to contact cce. By default al cis: 192.168.72.0	the center 1 networks ∕24
Multiple networks M	ust be cor	Ma-separated.	
<u>0</u> .0.0.0/0			
	_		
К ОК	>	<cancel></cancel>	

Set DHCP

Procedure

Step 1 If the following message appears, select OK.



Step 2 Select DHCP.

Please se interface	elect configuration type	e for the ACCESS
	HCP Automatic (DHC Manual Static IP and	Pv4) gateway
	<mark>< рк ></mark> <can< td=""><td>cel></td></can<>	cel>

Complete the basic Center configuration

Next is the last screen of the basic Center configuration. It reminds you the addresses set to be used to download the CA certificate and access Cisco Cyber Vision. Save these addresses somewhere, you will need them later to access the user interface.



Enter OK to finish the basic Center configuration.





- **Note** To connect through CLI in serial consol or SSH you must use 'cv-admin' as user and the instance ID as password. This user has limited rights and many CLI commands will require permission elevation:
 - prefix the command with "sudo".
 - or open a root shell using "sudo -i" and enter the command.

Close the Center configuration window before proceeding with the next steps of Cisco Cyber Vision configuration.

To proceed with the Cisco Cyber Vision configuration, open your browser and go to the URL previously indicated to access the user interface.



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Note
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Each Cisco Cyber Vision Center includes its own PKI (Public Key Infrastructure), with a CA (Certification Authority), that will be used to establish the TLS connection with the sensors and to clients. The CA must be installed on each client browser (see the following chapters).