2nd Generation Viprinet Virtual Hub for Amazon AWS



Installation Instructions

In the past, we used to publish a dedicated AWS Virtual Hub image on the AWS Marketplace. However, due to certification requirements from Amazon, it always took longer for a new Viprinet firmware version to get published.

To speed up firmware updates and to make things more flexible, we are now longer publishing those images. Instead we have created a way to use any "Amazon Linux 2 AMI" which after creating the Instance can be converted into a Viprinet Virtual Hub. Afterwards, this Virtual Hub will then receive Firmware updates in the same interval as any physical Viprinet Hub would.

In this document we are explaining what steps to take to create your own Virtual Hub instances on AWS.

1. Log in into your AWS account, locate All services group and click on EC2.

aws Service	es 🔻	Q Search for services	, features, marketplace products, and d	locs [Alt+S]
	AWS Manageme	ent Console		
	AWS services			
	Recently visited services			
	EC2	🗐 Systems Manager	IAM ()	🖾 Billing
	▼ All services			
	Compute EC2 Lightsail Lambda Batch Elastic Beanstalk Serverless Application Repository AWS Outposts	X Developer Tools CodeStar CodeCommit CodeArtifact CodeBuild CodeDeploy CodePipeline Cloud9	Machine Learning Amazon SageMaker Amazon Augmented Al Amazon CodeGuru Amazon DevOps Guru Amazon Comprehend Amazon Forecast Amazon Fraud Detector	AWS Cost Management AWS Cost Explorer AWS Budgets AWS Marketplace Subscriptions Front-end Web & Mobile AWS Amplify Mobile Hub
	EC2 Image Builder	CloudShell	Amazon Kendra	AWS AppSync
	益 Containers	X-Ray AWS FIS	Amazon Lex Amazon Personalize	Device Farm Amazon Location Service

2. Click on button *Launch instance*, then select *Launch instance* option:

aws Services 🔻	۵	Search fo	r services, features, marketplac	e products, and docs	[Alt+S]
New EC2 Experience Tell us what you think					
EC2 Dashboard New	Resources				
Events	You are using the following Amazon EC2 resou	rces in the	Europe (Frankfurt) Region:		
Limits	Instances (running)	2	Dedicated Hosts	o	Elastic IPs
▼ Instances	Instances	2	Key pairs	3	Load balancers
Instances New	Placement groups	0	Security groups	8	Snapshots
Instance Types Launch Templates	Volumes	2			
Spot Requests Savings Plans Reserved Instances New	③ Easily size, configure, and deploy Micros	oft SQL Se	rver Always On availability gro	ups on AWS using the AWS L	aunch Wizard for SQL Server. Learn
Dedicated Hosts	4 V				
Capacity Reservations	Launch instance			Service health	C Service Hea
▼ Images					
AMIs	To get started, launch an Amazon EC2 instance	e, which is a	virtual server in the	Region	Status
▼ Elastic Block Store	Launch instance 🔻			Europe (Frankfurt)	I his service is
Volumes	Note: Your instances will launch in the Europe (Frankfurt) F	Region	Zones	

aws Services ▼		Q Search fo	or services, features, marketpl	ace products, and docs	[Alt+S]
New EC2 Experience Tell us what you think					
EC2 Dashboard New	Resources				
Events	You are using the following Amazon EC2 r	esources in the	Europe (Frankfurt) Region:		
Tags Limits	Instances (running)	2	Dedicated Hosts	0	Elastic IPs
▼ Instances	Instances	2	Key pairs	3	Load balancers
Instances New	Placement groups	0	Security groups	8	Snapshots
Instance Types	Volumes	2			
Spot Requests	 Easily size, configure, and deploy M 	licrosoft SQL Se	rver Always On availability g	roups on AWS using the AWS L	aunch Wizard for SQL Server. Learn
Reserved Instances New	2				
Dedicated Hosts					
Capacity Reservations	Launch instance			Service health	C Service Hea
▼ Images	To get started launch an Amazon EC2 ins	tance which is a	virtual server in the	Region	Status
AMIS	cloud.	cance, which is a		Europe (Frankfurt)	O This service is
Volumes	Launch instance 🔺	(=) ()			
Snapshots	Launch instance from template	ope (Frankturt) I	Region	Zones	
Lifecvcle Manager				Zone name	Zone ID

3. On Amazon Machine Selection screen, select Amazon Linux 2 AMI and confirm the 64-bit (x86) option:



4. Choose your instance type and proceed to *Review and Launch*:

aws	Services 🔻		Q Search for service	es, features, marketplace products	, and docs [Alt+S]		∑	nkfurt 🔻 Support 🔻	
1. Choos	e AMI 2. Choose Instance Type 3. Configu	re Instance 4. Add Storage	5. Add Tags 6. Configur	e Security Group 7. Review					
Step : Amazon I resource: Filter by: Current	ep 2: Choose an Instance Type zon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, and networking capacity, and give you the Bexibility to choose the appropriate mix of urrents for your applications. Learn more about instance types and how they can meet your computing needs. er by: All instance families V Current generation ShowHide Columns urrently selected: 12 micro (- ECUs, 1 vCPUs, 25 GHz, -, 1 GiB memory, EBS only)								
	Family ~	Туре -	vCPUs (i) +	Memory (GiB) ~	Instance Storage (GB) (i) -	EBS-Optimized Available (i) -	Network Performance (i)	IPv6 Support (i) +	
	t2	t2.nano	1	0.5	EBS only		Low to Moderate	Yes	
	t2	t2.micro Free lier eligible	1	1	EBS only	-	Low to Moderate	Yes	
	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes	
	t2	t2.medium	2	4	EBS only	α.	Low to Moderate	Yes	
	t2	t2.large	2	8	EBS only	9	Low to Moderate	Yes	
	t2	t2.xlarge	4	16	EBS only		Moderate	Yes	
	t2	t2.2xlarge	8	32	EBS only		Moderate	Yes	
	t3	t3.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit	Yes	
	t3	t3.micro	2	1	EBS only	Yes	Up to 5 Gigabit	Yes	
	t3	t3.small	2	2	EBS only	Yes	Up to 5 Gigabit	Yes	
	t3	t3.medium	2	4	EBS only	Yes	Up to 5 Gigabit	Yes	
	t3	t3.large	2	8	EBS only	Yes	Up to 5 Gigabit	Yes	
	t3	t3.xlarge	4	16	EBS only	Yes	Up to 5 Gigabit	Yes	
	Cancel Previous Review and Launch Next: Configure Instance Details								
Feedbac	: English (US) 🔻				© 2008	3 - 2021, Amazon Web Services, Inc. or its affiliates. All	rights reserved. Privacy Policy Terms of U	lse Cookie preferences	

5. On *Review Instance Launch* screen, locate option *Edit security groups* and click on it:

aws Services 🔻				Q Search for services, features, n	narketplace products, and docs	Alt+S]	D 4	■ VLM Support GmbH ▼	Frankfurt 🔻	Support 🔻
1. Choose AMI 2. Choose Ins	tance Type	3. Configure Insta	ince 4. Add Storage	5. Add Tags 6. Configure Security Group	7. Review					
Step 7: Review Ins Please review your instance law	stance La unch details. Y	aunch 'ou can go back	to edit changes for each	section. Click Launch to assign a key p	pair to your instance and complete the lau	nch process.				1
A Improve your in Your instances may You can also open	Improve your instances' security. Your security group, launch-wizard-4, is open to the world. Your instances may be accessible from any IP address. We recommend that you update your security group rules to allow access from known IP addresses only. You can also open additional ports in your security group to lacilitate access to the application or service you're running, e.g., HTTP (80) for web servers. Edit security groups									
▼ AMI Details										Edit AMI
Amazon Linu Free ter eligible a Root Device Type:	x 2 AMI (HVN comes with fiv ebs Virtualizatio	M), SSD Volum e years support. an type: hvm	e Type - ami-0db9040eł It provides Linux kernel 4.1.	33ab74509 4 tuned for optimal performance on Amazon	i EC2, systemd 219, GCC 7.3, Glibc 2.26, Bir	utils 2.29.1, and the latest software packag	es through extras. This AMI is the succes	sor of the Amazon Linux Af	II that is	tance type
• Instance Type									Editina	ance type
Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance				
t2.micro	-	1	1	EBS only	-	Low to Moderate				
 Security Groups 									Edit secur	rity groups
Security group name Description	launch-v launch-v	vizard-4 vizard-4 created	d 2021-04-14T13:05:45.8	95+02:00						
Туре 🛈		Protocol (i		Port Range (i)	Source (i)	Description (i)				
SSH		TCP		22	0.0.0/0					
Instance Details									Edit instar	nce details
Storage									E	dit storage
								Cance	Previous	Launch
Feedback English (US) 🔻						© 2008 - 2021, Amazon Web	Services, Inc. or its affiliates. All rights reserved	. Privacy Policy Term	s of Use Cool	kie preferences

6. Add protocols *HTTP* and *HTTPS* into allowed services (SSH should come as default, otherwise add it too):

aws s	ervices 🔻		Q Sec	rch for services, features, marketplace products, and docs	[Alt+S]		∑ 🗘 VLM Support GmbH ▼ Frankfurt ▼	▼ Support ▼
1. Choose AMI	2. Choose Instance Type 3.	Configure Instance 4. Add Str	orage 5. Add Tags	6. Configure Security Group 7. Review				
Step 6: Co A security group the HTTP and H	onfigure Security G is a set of firewall rules that co TTPS ports. You can create a Assign a security group: Security group name:	Croup Introl the traffic for your instan- new security group or select fi Create a new security gro Select an existing securi launch-wizard-4	nce. On this page, you from an existing one be oup ity group	can add rules to allow specific traffic to reach your instan low. Learn more about Amazon EC2 security groups.	ce. For example, if you want to set u	p a web server and allow Inte	rnet traffic to reach your instance, add rules that allow unrest	icted access to
Туре ()	Description:	launch-wizard-4 created	I 2021-04-14T13:05:45	5.873+02:00 Port Range (j)	Source ①		Description ()	
SSH •	~	TCP		22	Custom 🗸	0.0.0.0/0	e.g. SSH for Admin Desktop	8
HTTP	~	TCP		80	Custom 🗸	0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop	8
HTTPS	•	TCP		443	Custom 🗸	0.0.0.0/0, ::/0	e.g. SSH for Admin Desktop	8
A War Rules	ning s with source of 0.0.0.00 allow	all IP addresses to access yo	our instance. We recon	mend setting security group rules to allow access from k	nown IP addresses only.			
							Cancel Previous Revie	w and Launch
Feedback En	glish (US) 🔻				Ø 2008 - 20	121, Amazon Web Services, Inc. or its	s affiliates. All rights reserved. Privacy Policy Terms of Use (Cookie preferences

then click on *Review and Launch*, choose your key pair and click on *Launch Instances*:

aws	Services 🔻				Q Sea	rch for services, features, ma	rketplace products, and docs	[Alt+S]		∑ 🕹 VLM Support GmbH ▼	Frankfurt 🔻	Support 🔻
1. Choose	AMI 2. Choose Inst	tance Type	3. Configure Ins	tance 4. Add Storage	5. Add Tags	6. Configure Security Group	7. Review					
Step 7	: Review Ins	stance L	aunch									
Please rev	iew your instance lau	unch details.	You can go ba	ck to edit changes for eac	h section. Click	Launch to assign a key pa	ir to your instance and complete	the launch process.				1
	Your instances may	be accessibl	e from any IP a	address. We recommend	that you update	e your security group rules to	o allow access from known IP ad	Idresses only.				
	You can also open a	additional por	ts in your secu	rity group to facilitate acc	ess to the appl	ication or service you're runr	ning, e.g., HTTP (80) for web set	vers. Edit security groups				
						Select an existing	u key pair or create a	new key pair	×			
▼ AMI	Details						,, puil of ofeate t		~			Edit AMI
Ű	Amazon Linux	x 2 AMI (HVI	M), SSD Volu	me Type - ami-0db9040e	eb3ab7450	A key pair consists of a pub	lic key that AWS stores, and a	private key file that you store.	Together,			
Free eligi	te a	comes with th	ve years suppor	t. it provides Linux kernel 4.	14 tuned for	they allow you to connect to to obtain the password used	your instance securely. For Win I to log into your instance. For Li	dows AMIs, the private key file inux AMIs, the private key file al	is required llows you to	pes through extras. This AMI is the successor of the Amazon Linux AM	ir that is	
	Root Device Type: o	ebs Virtualizati	ion type: hvm			securely SSH into your insta	ince.					
▼ Insta	псе Туре					Note: The selected key pair	will be added to the set of keys	authorized for this instance. Lea	arn more		Edit ins	stance type
Inet	ance Type	ECUe	UCPILe	Memory (GiB)	Instan	about removing existing key	/ pairs from a public AMI .					
.115		1003		memory (only		Choose an existing ke	ey pair		~			
t2.n	icro		1	1	EBS or	ds			~			
▼ Seci	rity Groups					I acknowledge that I	have access to the selected priv	vate key file (ds.pem), and that	without		Edit secu	rity groups
5000	ny oroups					this file, I won't be able t	to log into my instance.					ing graups
Secu	ity group name	launch-	wizard-4	10001 04 4 1740 05 45	070.00.00							
Desc	iption	launch-	wizaro-4 create	ed 2021-04-14113:05:45.	873+02:00			Cancel Launch Ins	stances			
Тур	. ()		Protocol (D	Port Rang	e (j)	Source (i)	Description (i)				
SSF			TCP		22		0.0.0/0					
нтт	P		TCP		80		0.0.0/0					
нтт	P		TCP		80		::/0					
нтт	PS		TCP		443		0.0.0/0					
										Cancel	Previous	Launch
	_											
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7. You will be redirected to the following screen. Click on View Instances to go to your instance list:

a	Services ▼ Q. Search for services, features, marketplace products, and docs [Alt+5]	
Lau	unch Status	
Luu	unor status	
•	Your instances are now launching The following instance launches have been initiated: i-0576948803c57c4dc View launch log	
C	Get notified of estimated charges Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage lier).	
How	w to connect to your instances	
Your in	instances are launching, and it may take a lew minutes until they are in the running state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or termin	nate your instances.
Click V	View Instances to monitor your instances' status. Once your instances are in the running state, you can connect to them from the Instances screen. Find out how to connect to your instances.	
▼ H	Here are some helpful resources to get you started	
• Ho	fow to connect to your Linux instance	
• Le	.earn about AWS Free Usage Tier • Amazon EC2: Discussion Forum	
While	le your instances are launching you can also	
• Cre	reate status check alarms to be notified when these instances fail status checks. (Additional charges may apply)	
• Cri	Zreate and Attach Additional EBS volumes (Additional charges may apply)	
- 110	minifa semuh Bronbe.	
		View Instances
	AND AN Incom University of Antonio State States States States States	Princes Balling Trans of the Cardia and Frances
Feed	ceater engenn (us) V	eserved. Privacy Policy Terms of Use Cookie preferences

8. Locate the IP address of recently created instance:

aws Services v	Q Search for services, features, marketplace products, and docs [Alt+S]	
New EC2 Experience	Instances (3) Info	•
EC2 Dashboard New	Q. Filter instances < 1 >	۲
Events	🗌 Name 🔻 Instance ID 🛛 Instance state 🔻 Instance type 🔻 Status check 🛛 Alarm status 🗛 Availability Zone 🔻 Public IPv4 DNS 🔍 Public IPv4 DNS 🔍 Public IPv4 DNS	⊽
Tags	🗌 🚛 🚛 🖓 🕹 🖓 🕹 🕹 🕹 🕹 🕹 🕹 🕹 🕹 🕹 🕹 🕹 🕹 🕹	
Limits	- I-057694803c57c4dc 🥥 Running @,Q. t2.micro - No alarms 🕂 eu-central-1b ec2-35-158-95-94.eu-c 355.158.95.94	
▼ Instances	- I-034a2c11e3c17406a 🥝 Running @,Q, t2micro 🕜 2/2 checks passec No alarms 🕂 eu-central-1c et2-18-185-71-65.eu-c	
Instances New		
Instance Types		
Launch Templates		
Spot Requests		
Savings Plans		
Reserved Instances New		
Dedicated Hosts		
Capacity Reservations	Select an instance above	
▼ Images		
AMIs		
▼ Elastic Block Store		
Volumes		
Snapshots		
Lifecycle Manager		
▼ Network & Security		
Security Groups New		
Elastic IPs New		
Placement Groups		
Key Pairs		
Network Interfaces New		
Feedback English (US) 🔻	© 2008 - 2021, Amazon Web Services, Inc. or As uffinites. All hights reserved Philosy Policy Terms of Use Cookie pret	erences

9. Using an SSH client, connect into your instance using *ec2-user* account:

vlw@localhost:"\$ ssh ec2-usen035,158,95,94 The authenticity of host '35,158,95,94 (35,158,95,94)' can't be established. ECDSA key fingerprint is SH0256:/RNBEWF6uSDD+SCoopON22dJ6idzAYbM621fogeMX0c, Are you sure you want to continue connecting (yes/no/[fingerprint])?	

You will be asked if you accept SSH fingerprint, type yes then press enter.

Run the following command to add Viprinet Repository into your list: *\$ sudo yum -y install https://aws.vipri.net/amzn2/viprinet-repo-latest.amzn2.x86_64.rpm*

ulationalizatif sch ack-upger03.188.05.94 The authoritation of host 75,05.95,94 (2015),95,94) (2017) EUSA hog fingerrint i SHCC55/96EHFAGD0 SGogetC2351idSHC25[agd Fag SQ zarg you wat to cortine connecting (ugs/cx/fingering); Narning: Permanently added '35,189,45,94' (EUSA) to hist of known Last logint Weight 1112111 2021 from host-155-060-62-013.44,.come	skod. MOC. Boots.			
// Awazon Linux 2 AMI				
<pre>http://www.awacc.com/awacco/invc-// be pedages meeds for secrity_1_2 pedages available buckmeets/pedages/</pre>	/www?/Packages/viprinst-report/021823-01, awar0, v86,54,rpa Kirpen viprinsterreport/021823-01, awar0, v86,54 prim to be installed			2.3 kB 00:00:00
awzn2~core/2/x86_64				I 3,7 kB 00:00:00
Bependencies Resolved				
Package	Arch	Version	Repository	Size
Installing: viprimeturepo				206
Transaction Summary				
Install 1 Package				
tetal sine: 206 Installed sine: 200 Benilogian packages: Bening transaction dask Bening transaction dask Bening transaction dask Bening transaction dask Bening transaction dask Perifyin : urginistra-peo-20210223-01,aucc2,x86,64 Verfiyin : urginistra-peo-20210223-01,aucc2,x86,64				1/1 1/1
Installed: viprinet-repo.x86_64 0:20210323-01.amzn2				
Complete! [ec2-user@ip-172-31-46-78 "]\$				

Execute the following command to add Viprinet package:

sudo yum install -y viprinet

This command will also install needed dependencies:

Install 1 Package (+9 Bependent packages)	
Text al. doublest tize 7.4 M Installant tizz 7.4 M Bool (1994) pred type: (2010) ent-type: 7.4 As and C.J. (1995, 64 rpm (2010) ent-type: 7.4 As and C.J. (1995, 64 rpm) (2010) ent-type: 7.4 A	57 k3 00:00:00 325 k3 00:00:00 1701 k3 00:00:00 164 k3 00:00:00 164 k3 00:00:00 164 k3 00:00:00 138 k3 00:00:00 3,5 k3 00:00:00
Total	18 MB/s 7,4 MB 00:00:00
Raming Francescin Orbits Transaction test accessed for francescina test accessed for final	1/10
Installing : 1:rot-ran-sact-1hr-5, 2:-48, and 2, a6, 64 Installing : accept-1:hr-5, 1:P-5, and 0, 2: a6, 64 Installing : Forder 1:2, 8, arg. unit. 2: a6, 64	2/10 3/10 4/10
1 (1997) 1119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 119 - 11	5/10 5/10 7/10 8/10
Installing : quagar-11, 35, 22, 43, and 2, 403, 46 Installing : quagar-11, 35, 22, 43, and 2, 463, 46	9/10 10/10
L'encode gautine "non recto gautoni gradoni gradoni d'une riverte de la constructione de la constructione de la Une future : encode de la constructione de la constructione de la constructione de la constructione de la const	1/10
Ver 1 jung 1 1 Inter-soupe 5, 7, 2-43, asse 2, 1, 465, 84 Ver 1 jung 1 - 1045-3, asse 2, 1, 465, 346 - 1045 - 1045 - 1045 - 1045 - 1045 - 1045 - 1045 - 1045 - 1045 - 1045	3/10 4/10
Versijng : Linet-tamp: Line 5,7,2-43, word 2,1,46,54 Versijng : indexte-1,2,6+2-3, word 2,1,46,54	5/10 6/10
Verfung : prind:1.2.8.psr.wr.1.am22.0.8.64	7/10 8/10
Ver trajno : akutoper inforta-n.j.e-h.jazzi, 0.2.700.04 Ver trajno : n. n.pz. dipi-0.2.aux0.04 Ver trajno : n. n.pz. dipi-0.2.aux0.04	9/10 10/10
Installed: 01/2014/06/95-05_astr2	
Bernstong Intellight autogen Illevia - 56,54 04:2,545-28,aux2,0.2 mbrane_05,54 115,7,2-43,aux2,1 mbrane_11br,56,54 115,7,2-43,aux2,1 mbrane_11br,56,54 04,2,545-23,aux2,0.2 mbrane_05,54 04,2,54,2,545-23,aux2,0.2 mbrane_05,54 04,2,545-23,aux2,0.2	umper.x86_64 0:2.145-3.amzn2.0.2
Saplatel [ex2-use 1:p-172-31-45-78 ~]6	

10. Using your browser access the following address:

http://<ip-address-of-your-instance>/

then you will be asked if you want to proceed using HTTPS (secure protocol), confirm by clicking Yes:

🐙 Login X +			
(i) 💋 35.158.95.94 llogin/app.html	🖾 🕁	III\ 🗊 🛎 🗉	
AdminDesk Login		viprine	
Welcome to the AdminiStration interface. Please log in using your administrator username and password.			
Use of this computer system without authority or in excess of granted authority, such as access through use of another's Username and/or passworld will be prosented. For site security purposes this system monitors, identifies and logs all access.			
This interfaces requires Javascript to be used. The legacy			
Security warming You are currently using the HTTP vertion of the login screen. It is not moormment login to the router over an unexcepted internet connection. Do wish you to swith a secure SSU/TLS-encrypted HTTP's connection?	dad to tch over to		
	O O O O O O O O O O O	O	

A self signed SSL certificated was generated, due to this you will receive a notification about a Potential Security Risk Ahead. Click on Advanced the confirm access to site.



Log in using default credential:

Username: root Password: viprinet

m Lugin ∧	+		S
↔ ∀ ⊕	🛈 🐔 https://35.158.95.94/login/app.html	🖾 🕁	II\ ⊡ ® ≡
$(\epsilon) \Rightarrow C $	▶ Provide 3 table 3 de	U \$	viprinet*

You should get redirected to the Viprinet Administration Web Interface:



Remember that your web interface is public to the Internet. So change the root password <u>now</u>!

That's all. Congratulations for setting up your Viprinet Virtual Hub on AWS.