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vxAG Installation Guide for Amazon Web Services (AWS)





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Revision History	I
Table of Contents	
1 Introduction	1
1.1 How Array vxAG Works on AWS	1
1.2 Recommended Instance Types	2
1.3 Usage Limitations and Guidelines	2
2 Deploying vxAG on AWS	4
2.1 Creating the Amazon VPC and Needed Subnets	4
2.2 Launching the vxAG EC2 Instance	4
2.3 Adding Other Interfaces to the vxAG Instance	В
2.4 Adding Secondary Private IP Addresses to the External Interface	9
2.5 Adding Elastic IPs to the Network Interfaces10	D
2.6 Accessing the vxAG Instance and Setting the "array" Password	1
2.6.1 Accessing the vxAG Instance via SSH12	2
2.6.2 Accessing the vxAG Instance via WebUI13	3
2.7 Adding IPs to Other Interfaces13	3
2.8 Loading the vxAG License1	3
About Array Networks	5



The Array vxAG appliance is an SSL-based VPN platform that offers fast, secure, and scalable remote access to Web and non-Web applications. Amazon Web Services (AWS) is a leading cloud-computing platform that helps enterprises move their business from the physical network infrastructure to the cloud.

vxAG for AWS is a virtual appliance integrated with the AWS cloud environment, providing almost all of the features of physical AG Series appliances. The vxAG appliance offers fast, secure, and scalable remote access to Web and non-Web applications. The vxAG appliance establishes security with AAA and user policies, provides access methods for Web, mail, file and native application servers, and assures scalability with the virtual site and HA technology. By integrating these features into a single virtual appliance, the vxAG appliance delivers secure remote and mobile access to trusted employees, customers, and partners anywhere, anytime while protecting the AWS-hosted network resources.

Array vxAG is available as an Amazon Machine Image (AMI) in the AWS marketplace and can be deployed as an Amazon Elastic Cloud Compute (EC2) instance. With this support, AWS customers can leverage Array vxAG SSL VPN and other valuable features to better meet their business needs.



Note: The vxAG appliance is also an SSL-based secure application platform that can also support the DesktopDirect solution.

1.1 How Array vxAG Works on AWS

AWS provides different types of Web services, such as Amazon Virtual Private Cloud (VPC) and EC2. Amazon VPC provisions a private, isolated section of the Amazon Web Services (AWS) cloud where you can launch Amazon AWS resources in a virtual network that you define. With Amazon VPC, you can define a virtual network topology that closely resembles a traditional network that you might operate in your own data center. Amazon EC2 is a Web service that provides resizable compute capacity in the cloud. Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instance types comprise varying combinations of CPU, memory, storage, and networking capacity and give you the flexibility to choose the appropriate mix of resources for your applications.

In deployment, Array vxAG and application servers are launched as EC2 instances within an Amazon VPC, as shown in the following figure.



Figure 1-1 Typical Deployment Scenario of vxAG for AWS

For more information, please refer to http://aws.amazon.com/documentation.

1.2 Recommended Instance Types

The vxAG computation and network performance is based upon the resources of the underlying AWS instance type. Following are the EC2 Instance Types that are recommended for vxAG.

Instance Type	vCPU	Memory	Network Performance	Max Virtual Site	Max Session	Suggested Concurrent Users
t2.small	1	2	Low	20	600	1-5
t2.medium	2	4	Medium	256	10000	5-20
m4.large	2	8	High	256	25000	20-100
m4.xlarge	4	16	High	256	128000	100+

Table 1-1 Recommended Instance Types

When an EC2 instance is launched, the specified instance type determines the resources allowed for the vxAG, such as number of vCPUs, memory size, network performance, number of ENIs and the number of private IP addresses per ENI. For details on compute, memory, and storage capabilities of each instance type, please refer

to http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/instance-types.html.

1.3 Usage Limitations and Guidelines

- In the AWS cloud service architecture, if the vxAG is deployed with multiple network interfaces, the AWS VPC needs to be used. You should configure the VPC route table correctly to make sure that the management and external subnets are publicly accessible.
- vxAG for AWS supports the following features:

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- Host checking
- Cache cleaner
- SSL encryption for data in transit
- Per-user policy engine
- Multiple access methods (Web, Layer 3, client-server, thin client)
- 64-bit architecture
- Non-disruptive upgrades up to 600 concurrent users and 500Mbps throughput
- vxAG for AWS supports both the BYOL (Bring Your Own License) model and the prelicense model. For the pre-license model, you need to purchase the AWS vxAG image with the vxAG license loaded beforehand. Users do not need to load the license again. For the BYOL model, the license specifies the maximum sessions, maximum virtual portals, and so on. When purchasing the vxAG BYOL license from Array, please specify the AWS instance type that you will use in order to receive the correct license for optimal usage. Please refer to section 2.8 Loading the vxAG License to learn how to load the vxAG BYOL license.



This section describes the process of deploying the vxAG EC2 instance within the Amazon VPC.

2.1 Creating the Amazon VPC and Needed Subnets

Before deploying the vxAG, you first need to create a VPC. For each VPC, AWS creates two subnets (Management and External). If additional subnets are needed, you can add them later.

Please configure AWS routing tables to ensure that the management subnet and external subnet are accessible from the Internet.

For more information about creating and configuring the VPC, please refer to <u>http://aws.amazon.com/cn/documentation/vpc/</u>.

2.2 Launching the vxAG EC2 Instance

To launch the vxAG EC2 instance on AWS, please perform the following steps:

1. Log into AWS (<u>http://aws.amazon.com</u>) with a valid credential and switch to the AWS EC2 management console, as shown in the following figure.



Figure 2-1 EC2 Management Console

- 2. In the **Create Instance** area of the **EC2 Dashboard** page, click the **Launch Instance** button, as shown in the preceding figure.
- 3. In Step 1: Choose an Amazon Machine Image (AMI) page, click the AWS Marketplace tab, enter "vxAG" in the search box and click the Select button, as shown in the following figure.



Step 1: Choose an A on AMI is a template that contain you can select one of your own A	Amazon Ma s the software config MIS.	hine Image (AMI) ration (operating system, application server, and applications) required to launch y	Cancel and Exit rour instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or
Quick Start	(a set of		I< < 1 to 1 of 1 Products >>>
My AMIS	Li wag	×	
AWS Marketplace	Array	vxAG SSL VPN ★★★★★ (0) [Rel.AG.9.3.0.186.26 Sold by Array Networks	Rahact
Community AMIs	Free ter eligible	Bring Your Own License + AWS usage fees LinuxUnix, FreeBSD FreeBSD 7+ 64-bit Amazon Machine Image (AMI) Updated: 1/14/16	
Categories		vxAG virtual secure access gateways enable dynamic pay-as-you-grow scalability and ne	w elastic business models for both development and production environments. Able to
All Categories		More info	
Software Infrastructure (1)			
Operating System			
Clear Filler			
▼ All Linux/Unix			
E FreeBSD (1)			
Software Pricing Plans			
Bring Your Own License			



4. In **Step 2: Choose an Instance Type** page, select one of the instance types supported by the vxAG AMI, such as "m4.large", and click the **Next: Configure Instance Details** button, as shown in the following figure.

		is using a manarge	e instance (ur iari	ger) for the best	experience with this prou	uct.	
	Family -	Туре -	vCPUs (i) -	Memory (GiB)	Instance Storage (GB) (i)	EBS-Optimized Available (i)	Network Performance (i
0	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate
0	General purpose	t2.small	1	2	EBS only	-	Low to Moderate
0	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate
0	General purpose	t2.large	2	8	EBS only	-	Low to Moderate
	General purpose	m4.large	2	8	EBS only	Yes	Moderate
	General purpose	m4.xlarge	4	16	EBS only	Yes	High
	General purpose	m4.2xlarge	8	32	EBS only	Yes	High
	General purpose	m4.4xlarge	16	64	EBS only	Yes	High
	General purpose	m4.10xlarge	40	160	EBS only	Yes	10 Gigabit
	General purpose	m3.medium	1	3.75	1 x 4 (SSD)	-	Moderate
	General purpose	m3.large	2	7.5	1 x 32 (SSD)	-	Moderate

Figure 2-3 Selecting the Instance Type

5. In **Step 3: Configure Instance Details** page, set the **Network** parameter to an existing VPC and set the **Subnet** parameter to the management subnet of the VPC. In the **Network Interfaces** area, click the **Add Device** button to add another interface to the instance and assign the internal subnet to this new



interface. Then click the **Review and Launch** button, as shown in the following figure.

1. Choos	e AMI 2. Choose In:	stance Typ	e 3. Co	onfigure Instance	4. Add Storage	5. Tag Instance	6. Configure Sec	curity Group	7. Review	
Step 3: Configure managem	the instance to suit you ent role to the instance	nce De r requiren and more	e tails nents. You e.	can launch multiple	instances from the	e same AMI, requ	est Spot instances to	take advanta	ge of the lower pricing, a	assign an access 🔺
	Number of instance	s (i)	1							
	Purchasing optio	n (i)	🗆 Reque	st Spot instances						
	Networ	k 🕕	vpc-e8ff4	d8d (10.0.0.0/16) \	VPC_test 🔻	Create new	VPC			
	Subne	t 🕕	subnet-7 251 IP Ad	3ff6204(10.0.10.0/2 dresses available	(4) Manageme ▼	Create new	/ subnet			
	Auto-assign Public I	•	Use sub	net setting (Disable) 🔻]				
	Placement grou	p 🕕	No place	ment group	۲]				
	IAM rol	e 🕕	None		•	C Create new	IAM role			
	Shutdown behavio	r 🕕	Stop		•]				
Enable	e termination protectio	n 🕕	Protect	against accidental	termination					
	Monitorin	g (i)	Enable Additiona	CloudWatch detail charges apply.	ed monitoring					
1	EBS-optimized instanc	e 🕕		n as EBS-optimized	instance					
	Tenanc	у 🕕	Shared to Additiona	enancy (multi-tenan I charges will apply	t hardware) 🔻] 1cy.				
▼ Netwo	rk interfaces 🕕									
Device	Network Interface	Subnet		Primary IP	Secondary IP a	addresses				
eth0	New network inte 🔻	subnet	73ff6: 🔻	Auto-assign	Add IP					
Add Devi	ce									-
							Cancel	Previous	Review and Launch	Next: Add Storage

Figure 2-4 Configuring Instance Details

6. Click the **6. Configure Security Group** tab, add security group rules to allow access via SSH and WebUI and then click the **Review and Launch** button, as shown in the following figure.

1. Choose AMI	2. Choose Instance T	ype 3. Configure Instanc	e 4. Add Storage	5. Tag Instance	6. Configure Securit	y Grou	Ip 7. Review	
Step 6: Con A security group i if you want to set new security grou	figure Security G s a set of firewall rules th up a web server and allo up or select from an exis	Group hat control the traffic for your ow Internet traffic to reach you ting one below. Learn more	instance. On this page ur instance, add rules about Amazon EC2 se	e, you can add rules that allow unrestrict acurity groups.	to allow specific traffic ed access to the HTTP	to read and H	ch your instance. F TTPS ports. You d	For example, can create a
As	sign a security group:	Create a new security gro	pup					
		Select an existing security	ty group					
:	Security group name:	vAPV Virtual Application E	elivery Controller-Arra)	yOS APV 8-6-0-x-AM	VS			
	Description:	This security group was g	generated by AW/S Mar	ketplace and is bas	ec			
Type (i)		Protocol (i)	Port Ra	inge (i)	Source	()		
SSH	T	TCP	22		Anywhe	re 🔻	0.0.0/0	8
Custom TCP R	ule 🔻	TCP	8888		Anywhe	re 🔻	0.0.0/0	8
Custom TCP R	ule 🔻	ТСР	8080		Anywhe	re 🔻	0.0.0/0	8
Add Rule Warning Rules wit addresse	h source of 0.0.0.0/0 allo is only.	ow all IP addresses to acces	s your instance. We re	ecommend setting s	security group rules to a	illow a	ccess from know	n IP
4					Cancel	Prev	vious Review a	► Pand Launch

Figure 2-5 Configuring Security Group Rules



Note: To allow administrators to access the vxAG instance via SSH and WebUI from the Internet, please add security group rules for port 22 of SSH, for port 8888 of the WebUI.



7. Review the instance information and click the **Launch** button, as shown in the following figure.

Array vxAG SSL	VPN	usutheost-11 Am	w vxAG				
eligible Roor Device	lipe ebs - Virtualia	cation type: hvm	1=				
Hourty Sof Software of By launchin End User L	tware Fees: \$0.0 arges will begin o g this product, yo kense Agreemen	IO per hour on t once you launch u will be subsc vi	2 small instance h this AMI and continue i itbed to this software and	until you terminate the instance. d agree that your use of this software	e is subject to the pricing terms and the se	ters :	Edit instance type
Instance Type	ECUs	VCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	
t2 smal	Variable	1	2	EBS only	•	Low to Moderate	
Security Groups							Edit security groups
Security group name Description	WAG SS This sec	S, VPN-Rel-AG with group war	-9-3-0-186-26-Autogent s generated by AWS Ma	ByAWSMP. Retplace and is based on recommer	nded settings for VAAG SSL VPN version F	let AG 9 3.0 186 26 provided by Array Networ	ks
Туре ()		Pr	otocol (j)	Port Range	() So	urce (j)	
SSH		TC	p	22	0.0	0.00	

Figure 2-6 Reviewing and Launching the Instance

8. In the prompted dialog box, select **Create a new key pair** from the drop-down list box, specify the **Key pair name** parameter, and click the **Download Key Pair** button to download the key file and then click the **Launch Instances**, as shown in the following figure.

Select an ex	kisting key pair or create a new key	ypair >	<
A key pair consis Together, they al private key file is AMIs, the private	sts of a public key that AWS stores, and a priva llow you to connect to your instance securely. Fi required to obtain the password used to log in key file allows you to securely SSH into your in:	te key file that you store. or Windows AMIs, the to your instance. For Linu stance.	х
Note: The select Learn more abo	ted key pair will be added to the set of keys auth ut removing existing key pairs from a public AM	norized for this instance. II.	
Create a nev Key pair nam	w key pair ne	۲	
		Download Key Pair	
You have a continue of the con	ave to download the private key file (*.pem file) iue. Store it in a secure and accessible locatio o download the file again after it's created.) before you can on. You will not be	
	Cance	el Launch Instances	_

Figure 2-7 Creating the New Key Pair

The newly created vxAG instance will be launched successfully as shown the following figure.



Launch Status

✔ Your instances are now launching	
The following instance launches have bee	n initiated: I-787ba9b7 View launch log
Get notified of estimated charges Create billing alerts to get an email notific	ation when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).
low to connect to your instances	
'our instances are launching, and it may take a fe mmediately and continue to accrue until you stop	w 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 or terminate your instances.
:lick View Instances to monitor your instances' st istances.	atus. Once your instances are in the running state, you can connect to them from the Instances screen. Find out how to connect to your
 Getting started with your software 	
To get started with vAPV Virtual Application Deliv Controller	very To manage your software subscription
View Usage Instructions	Open Your Software on AWS Marketplace
 Here are some helpful resources to get y 	/ou started
How to connect to your Linux instance	Amazon EC2: User Guide
Learn about AWS Free Usage Tier	Amazon EC2: Discussion Forum
/hile your instances are launching you can also	
Create status check alarms to be notified when Create and attach additional EBS volumes (Add Manage security groups	these instances fail status checks. (Additional charges may apply) Ititonal charges may apply)
	View Instances

Figure 2-8 vxAG Instance Launched Successfully

2.3 Adding Other Interfaces to the vxAG Instance

To use three or more interfaces, you will need to add other interfaces to the vxAG instance after it is launched. When you add other interfaces to the vxAG instance, please make sure that the vxAG appliance is stopped. Note that the EC2 instance of the m4.large size supports two network interfaces at maximum.

To add a network interface to the vxAG instance:

1. Access the AWS EC2 management console, click the **Network Interfaces** link in the navigation pane, and then click the **Create Network Interface** button, as shown in the following figure.

Events												
Tags	Q Filter by tags and attribu	tes or search by keyw	ord :						0	K < 1 to 6 of	re > >I	
Limits	Name	Network interf *	Subnet ID	*	VPC ID	÷	Zone	Secu-	Description -	Instance ID ~	Status	
INSTANCES		eni-1f5e3d7b	subnet-25efd54c		vpc-23ef654a		ap-southeast-1b	lau		i-561adcQ	🌖 in-use	8
Instances	Management_test	eni-48683d3e	subnet-73#5204		vpc-e8ff4d8d		ap-southeast-1a	WAP	Primary netwo	i-787ba9b7	🥥 in-usi	0
Spot Requests		eni-85388313	subnet-22efd54b		vpc-23efd54a		ap-southeast-1a	lau		i-015760ce	in-usi	é
Reserved Instances		eni-d2e45ca4	subnet-22efd54b		vpc-23efd54a		ap-southeast-1a	tau		i-3241a5fd	in-use	8
IMAGES		eni-fe7ffc88	subnet-22efd54b		vpc-23efd54a		ap-southeast-1a	lau		i-u05db/6f	in-usi	ė
AMIS Bundle Tasks		eni-fe875188	subnet-c7b61fb0		vpc-d831efbd		ap-southeast-1a	def	internal		 availa 	ble
 ELASTIC BLOCK STOPE Volumes Snapshots 												
NETWORK & SECURITY Security Groups Elastic IPs Placement Groups Key Pairs	Select a network interfac	e above						_			880	5

Figure 2-9 Creating a Network Interface

2. In the **Create New Interface** dialog box, specify the parameters and click the **Yes**, **Create** button, as shown in the following figure.



Description	i	Internal	
Subnet	i	subnet-65ff6212 (10.0.20.0/24) ap-southeast-1a 🔹	
Private IP	i	auto assign	
Security groups	i	sg-7932761c - default - default VPC security group	
		sg-863276e3 - VAPV Virtual Application Delivery Controller-ArrayOS	
		· · · · · · · · · · · · · · · · · · ·	

Figure 2-10 Setting the Parameters of the Network Interface

3. Select the entry of the newly created network interface and click the **Attach** button. In the **Attach Network Interface** dialog box, specify the **Instance ID** parameter and click the **Attach** button, as shown in the following figure.

Create Network Interface Attach Detach De	elete	Actions 👻		
Q Filter by tags and attributes or search by keyword				
Name · Network interf + Subnet II	D	• VPC ID		Security groups
eni-1e91c468 subnet-65	ff6212	vpc-e8ff4d8d	ар	vAPV Virtual Application Delivery Contr
	i4c	vpc-23efd54a	ap	launch-wizard-12
Attach Network Interface X	54	vpc-e8ff4d8d	ap	vAPV Virtual Application Delivery Contr
Network Interference and 4-04-400	i4b	vpc-23efd54a	ap	launch-wizard-13
Network Interface: eni-16910468	54b	vpc-23efd54a	ap	launch-wizard-11
Instance ID: i-787ba9b7 (running) 🔻	54b	vpc-23efd54a	ap	launch-wizard-14
	fbO	vpc-d831 efbd	ap	default
Cancel Attach				

Figure 2-11 Attaching the Network Interface to the Instance

To configure the IP address for the newly added network interface, please refer to 2.7 for details.

2.4 Adding Secondary Private IP Addresses to the External Interface

To create multiple virtual sites, secondary private IP addresses (vxAG virtual site IPs) need to be added to the external interface of the vxAG instance.

To add a secondary AWS private IP address to the external interface:

1. Access the AWS EC2 management console, and click the **Network Interfaces** link in the navigation pane. Select the entry of the external interface and click the **Actions** button to select **Manage Private IP Addresses**, as shown in the following figure.



IMAGES	Create Networ	rk Interface Att	ach Detach	Delete	Actions 🔦	_
AMIs Rundlo Toolko	Q Filter by ta	gs and attributes or :	search by keyword	1	Attach Detach	e
ELASTIC BLOCK STORE	Name	· Ne	twork interf 🔺	Subnet ID		le
Volumes		eni-	-1f5e3d7b :	subnet-25efd:	Associate Address	outheast-1b
Snapshots		eni	-33e1b445 :	subnet-55ff62		southeast-1a
NETWORK & SECURITY		eni	-43e1b435	subnet-65ff62	Change Termination Benavior	southeast-1a
Security Groups		eni	-46fbae30	subnet-73ff62	Change Source/Dest. Check	southeast-1a
Elastic IPs Placement Groups Key Pairs	Network Interf	eni- ce: eni-33e1b445	-853883f3 :	subnet-22efd:	Add/Edit Tags Change Description	southeast-1a
Network Interfaces					Create Flow Log	

Figure 2-12 Managing Private IP Addresses

2. In the **Manage Private IP Addresses** dialog box, click the **Assign new IP** link to add a new secondary IP address, and then click the **Yes**, **Update** button, as shown in the following figure.

Ianage Private IP Addresses	×
ou can assign and unassign secondary private IP addresses on each network interface. Leave the Idress field blank and an available address will be assigned or enter an IP address that you want to ssign.	
▼ eth2: eni-33e1b445 - External - 10.0.30.0/24	
Private IP Public IP	
10.0.30.77	
10.0.30.78 Undo	
Assign new IP	
Allow reassignment (1)	
Are you sure you want to perform the following changes: 1 specified private IP addresses will be assigned to eni-33e1b445	
Cancel Yes, Update	

Figure 2-13 Adding a New IP Address

To make the secondary private IP address publicly accessible, you need to add an elastic IP and associate it with the secondary private IP address. The next section describes this process.

2.5 Adding Elastic IPs to the Network Interfaces

To make the management interface and the external interface of the vxAG instance publicly accessible, you need to add elastic IPs and associate them with the private IP addresses of the network interfaces.

To add the elastic IP to a network interface:

 Access the AWS EC2 management console, click the Elastic IPs link in the navigation pane, and then click the Allocate New Address button. In the Allocate New Address dialog box, click the Yes, Allocate button, as shown in the following figure.



EC2 Dashboard	Allocate New Address Actions 💌
Events	
Tags	Q Fliter by attributes or search by keyword
Reports	
Limits	Allocate New Address ×
INSTANCES	
Instances	Are you sure you want to allocate a new IP address?
Spot Requests	
Reserved Instances	Cancel Yes, Allocate
IMAGES	
AMIs	
Bundle Tasks	
ELASTIC BLOCK STORE	
Volumes	
Snapshots	
NETWORK & SECURITY	
Security Groups	
Elastic IPs	Select an address above
Placement Groups	
Key Pairs	
Network Interfaces	

Figure 2-12 Allocating the New Address

2. Select the entry of the newly created elastic IP, click the **Actions** button and select the **Associate Address** item, as shown in the following figure.

7	Allocate New Address	Actions 🗠					
	Q. Filter by attributes or	Allocate New Address Release Addresses					
	Elastic IP	Associate Address Disassociate Address	2	Private IP Address	đ	Scope	Public DNS
	52.76.0.192					чрс	

Figure 2-13 Associating the New Address

3. In the **Associate Address** screen, specify the parameters for **Network Interface** and **Private IP Address** and click the **Associate** button, as shown in the following figure.

Select the instance	ce OR network interface to which y	rou wish to associate this IP address (52.76	8.192)			
	Instance	Search instance ID or Name tag				
		Or				
	Network Interface	eni-48683d3e				
	Private IP Address	10.0.10.59*	•	Ð		
		Reassociation		1		
Warni If you as address	ing ssociate an Elastic IP address with ses	i your instance, your current public IP addre	ss is rele	rased. Learn	more about public IP	

Figure 2-14 Associating the Elastic IP

2.6 Accessing the vxAG Instance and Setting the "array" Password



2.6.1 Accessing the vxAG Instance via SSH

You can connect to the newly created vxAG instance via SSH after the newly created vxAG instance becomes "Running".

To access the vxAG instance via SSH, use the public DNS Name or IP address and the SSH port 22 as the SSH access point.

The downloaded private key file (.pem) is required to be used by SSH for logging into the newly created vxAG instance.

The vxAG AMI default administration account is "array"

ssh --i <private-key.pem> array@<vxAG IP or DNS name>

After you successfully log into the vxAG instance, the following screen will be displayed.

Figure 2-15 Accessing the vxAG Instance via SSH

After "**show version**" is executed, the INVALID LICENSE KEY message will be displayed because you have not yet entered the license information. That process is described in section 2.8 Loading the vxAG License.

To access the vxAG via SSH and WebUI easily and securely, you should assign the admin accounts and their passwords the first time you log into vxAG. To assign a new password for the "array" account:

- 1. Enter "enable" and enter. The default is no password to enter enable mode.
- 2. Type "configure terminal" and enter to enter configuration mode.
- 3. Type "**ssh auth password on** *array*" to enable password authentication for WebUI and SSH.



- 4. Change the password of the default account (array) using the "admin password array new_password" command.
- 5. Type "write memory all" and enter to have vxAG retain the change after reboot.

2.6.2 Accessing the vxAG Instance via WebUI

To enable vxAG WebUI access, you will first need to access the vxAG instance via SSH to perform the following configurations in the Config mode:

- 1. Enable the WebUI using the "webui on" command.
- 2. (Optional) Configure the WebUI port using the "webui port" command.

After the preceding configurations are completed, you can access the WebUI of the vxAG instance at https://<*EIP*>:<*WebUI_port*> using a Web browser. On the login page, enter "array" as the username and the previously configured "new_password" as the password to pass the authentication.

lase System *	Basic Information										
Home Science Activity General Settions Basic Heterosing Advances Networking Custering Vietwail ADMENESTIATORS Global Admin Science Sciences Administrations	STATESTICS INFORMATI Desktop Direct Hoot Nam Boot Tim Current Tim Up Tim Mod Serial Numbo Software Build Ind WebUI Login Languag	t Go e AN e We e We e 6 r e E b Arr e E	to DD Pillot ed Jan 20 02:59:1 ed Jan 20 03:05:- mins, 280081C058852 ayOS Rel.AG.9.3. nglish •	94 GMT (+0000 49 GMT (+0000 1244520003056 0.186.26) 2016) 2016) 4566				USER MANUAL CLI Handbook User Guide SYSTEM RESOU CPU Usage EEATURESTAT SNMP Enable Logging Enable ADMIN TOOLS View Statistics	PDF PDF Intcess 7% US (details) [details]	
Inin AAA 1234 SCOLES Atter: Man-Doment informa informa Ulashenceting TLIAA: SSITE S Und Stees Nice Management atom Management	Statist/Learning	192.10	IGUILATION 68.5.1(IPv4) Interface Name port1	192.168.5.1	Netmask. 255.255.255.0	Pr6	Profix Lun-	Interface Type port3	Tag Number	Interface Speed autoselect (10	Interface Status

Figure 2-18 Accessing the vxAG Instance via WebUI

2.7 Adding IPs to Other Interfaces

To configure the IP address for other network interfaces:

- 1. Access the vxAG instance via SSH.
- 2. Type "show interface" to view the interface name.
- 3. Type "**ip address** *interface name ip netmask*" to add the IP address to the interface.

2.8 Loading the vxAG License

To purchase a license from Array Networks and load the license to the system, please execute the following steps:



- 1. Access the vxAG instance via SSH.
- 2. Capture the output for the software version, model and serial number of the vxAG by executing the "**show version**" command.
- 3. Contact Array Networks Customer Support by email with the vxAG information and your license options (such as maximum sessions, maximum virtual portals, time duration/trial) to obtain a valid license key.
- 4. Typically, the license key will be emailed to you. Once received, execute the "system license" command in the Config mode, paste the license key and press "Enter". The license will be successfully loaded.

Alternatively, you can load the license via WebUI. To load the license, select **Admin Tools> System Management > License**.

About Array Networks



Array Networks is a global leader in application delivery networking with over 5000 worldwide customer deployments. Powered by award-winning SpeedCore[®] software, Array application delivery, WAN optimization and secure access solutions are recognized by leading enterprise, service provider and public sector organizations for unmatched performance and total value of ownership. Array is headquartered in Silicon Valley, is backed by over 250 employees worldwide and is a profitable company with strong investors, management and revenue growth. Poised to capitalize on explosive growth in the areas of mobile and cloud computing, analysts and thought leaders including Deloitte, IDC and Frost & Sullivan have recognized Array Networks for its technical innovation, operational excellence and market opportunity.

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