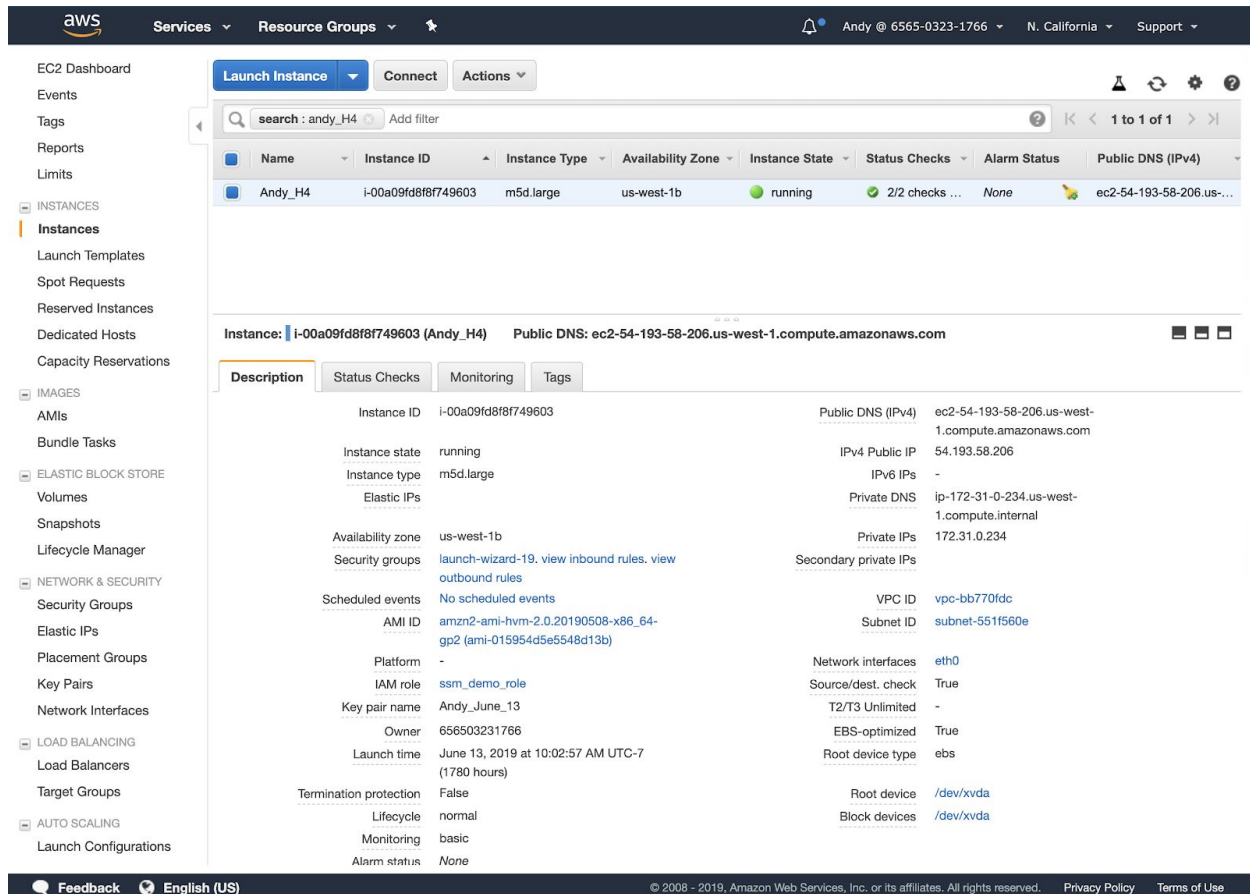


Step-by-Step Guide to Increase Disk Space in AWS

Since the launch of the mainnet, more and more people subscribed to become a node runner. The previously recommended 30G disk space is not enough for the future needs. This brief tutorial provides a step-by-step instruction on how to increase the disk space of an EC2 instance in AWS.

Step 1: After logging in to your AWS console, find the EC2 instance running the Harmony node.



The screenshot displays the AWS Management Console interface. The left sidebar shows navigation options like 'INSTANCES', 'IMAGES', 'ELASTIC BLOCK STORE', 'NETWORK & SECURITY', 'LOAD BALANCING', and 'AUTO SCALING'. The main content area shows a table with one instance, 'Andy_H4', with ID 'i-00a09fd8f8f749603', type 'm5d.large', and state 'running'. Below the table, the 'Description' tab is active, showing a detailed list of instance properties. At the bottom right of the description, the 'Root device' is listed as '/dev/xvda' with a blue link.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
Andy_H4	i-00a09fd8f8f749603	m5d.large	us-west-1b	running	2/2 checks ...	None	ec2-54-193-58-206.us-...

Instance: i-00a09fd8f8f749603 (Andy_H4)		Public DNS: ec2-54-193-58-206.us-west-1.compute.amazonaws.com	
Instance ID	i-00a09fd8f8f749603	Public DNS (IPv4)	ec2-54-193-58-206.us-west-1.compute.amazonaws.com
Instance state	running	IPv4 Public IP	54.193.58.206
Instance type	m5d.large	IPv6 IPs	-
Elastic IPs	-	Private DNS	ip-172-31-0-234.us-west-1.compute.internal
Availability zone	us-west-1b	Private IPs	172.31.0.234
Security groups	launch-wizard-19. view inbound rules. view outbound rules	Secondary private IPs	-
Scheduled events	No scheduled events	VPC ID	vpc-bb770fdc
AMI ID	amzn2-ami-hvm-2.0.20190508-x86_64-gp2 (ami-015954d5e5548d13b)	Subnet ID	subnet-551f560e
Platform	-	Network interfaces	eth0
IAM role	ssm_demo_role	Source/dest. check	True
Key pair name	Andy_June_13	T2/T3 Unlimited	-
Owner	656503231766	EBS-optimized	True
Launch time	June 13, 2019 at 10:02:57 AM UTC-7 (1780 hours)	Root device type	ebs
Termination protection	False	Root device	/dev/xvda
Lifecycle	normal	Block devices	/dev/xvda
Monitoring	basic		
Alarm status	None		

Step 2: Click the link ([/dev/xvda](#)) located in the bottom right area to show the information of the root device.

The screenshot shows the AWS Management Console interface. At the top, there's a navigation bar with 'Services', 'Resource Groups', and user information. The left sidebar contains a navigation menu with categories like INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, LOAD BALANCING, and AUTO SCALING. The main content area displays a table of EC2 instances, with one instance 'Andy_H4' selected. Below the table, the instance details for 'i-00a09fd8f8f749603 (Andy_H4)' are shown. A modal window titled 'Block Device /dev/xvda' is open, displaying the following details:

Block Device /dev/xvda	
EBS ID	vol-05685721145114c52
Root device type	EBS
Attachment time	2019-06-13T17:02:58.000Z
Block device status	attached
Delete on termination	True

Step 3: Click the EBS ID link ([vol-05685721145114c52](#) for this demo, your volume might have a different identifier), this will jump to a webpage to modify volume size.

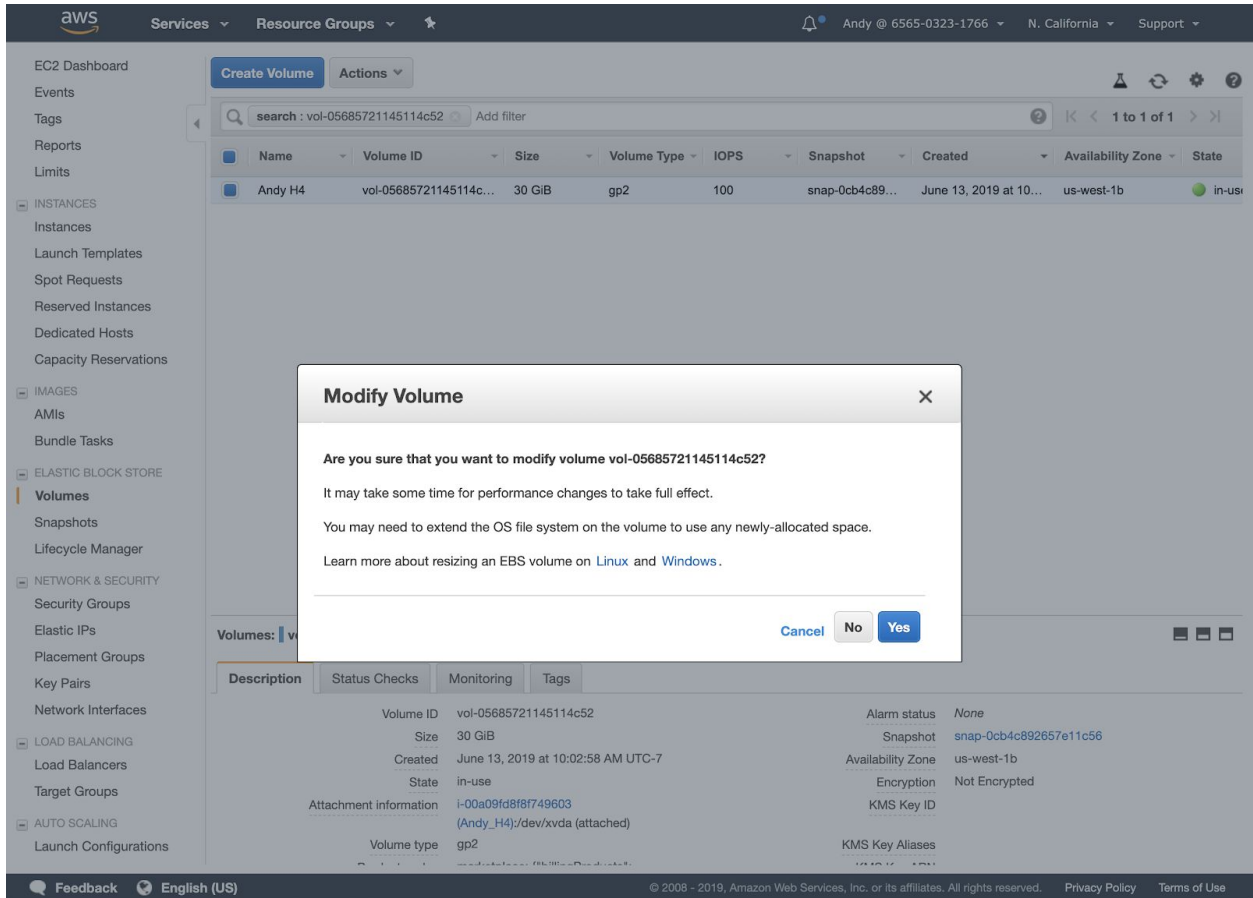
The screenshot shows the AWS Management Console interface. On the left is a navigation sidebar with categories like INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, LOAD BALANCING, and AUTO SCALING. The 'Volumes' section under 'ELASTIC BLOCK STORE' is selected. The main content area displays a table of volumes. One volume is visible: 'vol-05685721145114c52 (Andy H4)'. An 'Actions' dropdown menu is open over this volume, listing options: Modify Volume, Create Snapshot, Delete Volume, Attach Volume, Detach Volume, Force Detach Volume, Change Auto-Enable IO Setting, and Add/Edit Tags. The 'Modify Volume' option is highlighted. Below the table, the 'Description' tab is active, showing details for the selected volume: Volume ID (vol-05685721145114c52), Size (30 GiB), Created (June 13, 2019 at 10:02:58 AM UTC-7), State (in-use), Attachment information (i-00a09fd8f8f749603 (Andy_H4)/dev/xvda (attached)), Volume type (gp2), Alarm status (None), Snapshot (snap-0cb4c892657e11c56), Availability Zone (us-west-1b), Encryption (Not Encrypted), and KMS Key ID.

Step 4: Click the Actions dropdown button, and then select “Modify Volume” option. We suggest extending to the size to 100 GiB, but we use 60 GiB for this demo. Then click “Modify”.

The screenshot displays the AWS Management Console interface. A modal dialog titled "Modify Volume" is open, showing configuration options for volume ID `vol-05685721145114c52`. The volume type is set to "General Purpose SSD (gp2)", the size is 60 GiB, and the IOPS is 180 / 3000. The background shows a table of volumes with columns for Name, Volume ID, Size, Volume Type, IOPS, Snapshot, Created, Availability Zone, and State.

Name	Volume ID	Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State
Andy H4	vol-05685721145114c52	30 GiB	gp2	100	snap-0cb4c89...	June 13, 2019 at 10...	us-west-1b	in-us...

Step 5: Click "Yes" to confirm this action.



Step 6: it may take 20 to 30 mins to resize the disk space. The action is done until the state change from “in-use modifying...” yellow circle to “in use” green circle.

Step 7: Then the next step is to ssh to the node. Check the basic information about the block devices.

