Terraform - Cloud Q on AWS
AWS resources & EBS Service Quota Planning
Dack Busch/Gokul Kuppuraj, July 15th, 2022

Supported EC2 Instance Types

Type	vCPU	Memory (GiB)	Network Bandwidth (Gbps)	EBS Bandwidth (Mbps)
m5.2xlarge	8	32	Up to 10	Up to 4,750
m5.4xlarge	16	64	Up to 10	4,750
m5.8xlarge	32	128	10	6,800
m5.12xlarge	48	192	12	9,500
m5.16xlarge	64	256	20	13,600
m5.24xlarge	96	384	25	19,000
m6i.2xlarge	8	32	Up to 12.5	Up to 10,000
m6i.4xlarge	16	64	Up to 12.5	Up to 10,000
m6i.8xlarge	32	128	12.5	10,000
m6i.12xlarge	48	192	18.75	15,000
m6i.16xlarge	64	256	25	20,000
m6i.24xlarge	96	384	37.5	30,000
m6i.32xlarge	128	512	50	40,000
c5n.4xlarge	16	42	Up to 25	4,750
c5n.9xlarge	36	96	50	9,500
c5n.18xlarge	72	192	100	19,000

Supported EBS Volume Types

- **gp2**
- **gp3 (default for flash volumes)**
- **sc1**
- **st1**

EBS Service Quota Planning

Qumulo supports 28 different disk configurations in AWS. Every EC2 instance in the cluster uses the same disk configuration. The table below provides the necessary information for the EBS quota per EC2 instance. Simply multiply by the number of instances in the cluster to get the total required service quota for the given EBS volume type. Marketplace offers with a fixed capacity are shown on the right side of the table with their associated EC2 instance count and total service quota requirements for EBS. The Customizable Marketplace offer supports all 28 Qumulo disk configs with four or more EC2 instances.

Total gp2   = # Instances X Per Instance gp2 quota
Total gp3   = # Instances X Per Instance gp3 quota
Total st1 Quota   = # Instances X Per Instance st1 quota
Total sc1 Quota   = # Instances X Per Instance sc1 quota

* The Customizable Marketplace offering supports all disk configs.
** This disk configuration is also supported on AWS Outposts with gp2

Type	Qumulo Disk Config	EBS Service Quota in TiB per EC2 Instance			AWS Marketplace Offering*		Total Quota	
		gp2/gp3	st1	sc1	Offer Name	# EC2	gp2/gp3	st1/sc1
All Flash	600 GiB**	0.586			1TB Usable	4	2.4	
	1 TiB**	1.0						
	5 TB**	4.883						
	8 TiB**	8.0						
	13 TiB**	13.0						
	20 TiB	20.0						
	30 TB	29.297			103 TB Usable	5	146.5	
	35 TiB	35.0						
	55 TiB	55.0						
Hybrid-st1	5 TB	0.488	4.883		12 TB Usable	4	2.0	19.6
	8 TiB	0.586	8.0					
	13 TiB	0.684	13.0					
	20 TB	0.781	19.531		96 TB Usable	6	4.7	117.2
	35 TiB	1.709	35.0					
	55 TiB	2.686	55.0		270 TB Usable	6	16.2	330.0
	90 TiB	4.395	90.0					
	160 TiB	7.813	160.0		809 TB Usable	6	46.9	960.0
	256 TiB	12.5	256.0					
	320 TiB	12.207	320.0					
Hybrid-sc1	8 TiB	0.586		8.0				
	13 TiB	0.684		13.0				
	20 TB	0.781		19.531				
	35 TiB	1.709		35.0				
	55 TiB	2.686		55.0				
	90 TiB	4.395		90.0				
	160 TiB	7.813		160.0				
	256 TiB	12.5		256.0				
	320 TiB	12.207		320.0				