

## AWS Project: -6

Project Date: – 30.04.2021

Prepared by: – Sarveswara Sarma Nemani

Q:- Create **Secure Elastic load balancer** for Our environment with INFRA -VPC

Sol:

The screenshot shows the AWS Management Console for the 'ap-southeast-1' region. The 'VPCs' page is displayed, showing a list of VPCs. The 'INFRA-VPC' is highlighted with a red box. Below the list, the details for the 'INFRA-VPC' are shown, including its ID, state, IP ranges, and associated resources like the route table and network ACL.

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP options set	Main Route table	Main Network ACL	Tenancy
INFRA-VPC	vpc-08bbd80da35026a	available	10.0.0.0/16	-	dopt-71d62a17	rtb-098c48b38d22a7fa	acl-07cd0dcf33de66e01	default
	vpc-d7c207b1	available	172.31.0.0/16	-	dopt-71d62a17	rtb-8e5c15e8	acl-25a5ca43	default

Details for VPC: vpc-08bbd80da35026a

Property	Value
VPC ID	vpc-08bbd80da35026a
State	available
IPv4 CIDR	10.0.0.0/16
IPv6 CIDR	-
DNS resolution	Enabled
DNS hostnames	Enabled
ClassicLink DNS Support	Disabled
Owner	833093811962
Tenancy	default
Default VPC	No
Classic link	Disabled
IPv6 Pool	-
Network ACL	acl-07cd0dcf33de66e01
DHCP options set	dopt-71d62a17
Route table	rtb-098c48b38d22a7fa

The screenshot shows the AWS Management Console for the 'ap-southeast-1' region. The 'Instances' page is displayed, showing a list of EC2 instances. The instance 'i-038cec4af5f81e858' is highlighted with a red box. Below the list, the details for this instance are shown, including its ID, state, availability zone, and associated resources like the VPC and subnets.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP	IPv6 IPs	Key Name
	i-038cec4af5f81e858	t2.micro	ap-southeast-1a	running	2/2 checks ...	None	ec2-52-221-179-202.ap-southeast-1.compute.amazonaws.com	52.221.179.202	-	kp-singapore

Instance: i-038cec4af5f81e858 Public DNS: ec2-52-221-179-202.ap-southeast-1.compute.amazonaws.com

Property	Value
Instance ID	i-038cec4af5f81e858
Instance state	running
Instance type	t2.micro
Findings	Opt-in to AWS Compute Optimizer for recommendations. <a href="#">Learn more</a>
Private DNS	ip-10.0.0.74.ap-southeast-1.compute.internal
Private IPs	10.0.0.74
Secondary private IPs	VPC ID: vpc-08bbd80da35026a (INFRA-VPC)
Platform	Amazon Linux
Network interfaces	eth0
Source/dest. check	True
T2/T3 Unlimited	Disabled
EBS-optimized	False
Root device type	ebs
Root device	/dev/xvda
Block devices	/dev/xvda
Public DNS (IPv4)	ec2-52-221-179-202.ap-southeast-1.compute.amazonaws.com
IPv4 Public IP	52.221.179.202
IPv6 IPs	-
Elastic IPs	-
Availability zone	ap-southeast-1a
Security groups	VPC-SG, view inbound rules, view outbound rules
Scheduled events	No scheduled events
AMI ID	ami-02ab0953c3b55149f
Subnet ID	subnet-0c3c5a7cb1074d8a (PUB-INFRA)
IAM role	-
Key pair name	kp-singapore
Owner	833093811962
Launch time	April 30, 2021 at 1:08:26 PM UTC+5:30 (1 hour)
Termination protection	False
Lifecycle	normal
Monitoring	basic

ap-southeast-1.console.aws.amazon.com/ec2/v2/home?region=ap-southeast-1#LoadBalancers:sort=loadBalancerName

Services Search for services, features, marketplace products, and docs [Alt+S]

New EC2 Experience

Filter by tags and attributes or search by keyword

Name	DNS name	State	VPC ID	Availability Zones	Type	Created At
VPC-CLB	VPC-CLB-1663433205 ap-s...		vpc-08bbd9d9a35026a	ap-southeast-1a	classic	April 30, 2021 at 2:07:46 PM...

Load balancer: VPC-CLB

Description Instances Health check Listeners Monitoring Tags Migration

Basic Configuration

Name	Creation time
VPC-CLB	April 30, 2021 at 2:07:46 PM UTC+5:30

DNS name VPC-CLB-1663433205 ap-southeast-1.elb.amazonaws.com (A Record)

Hosted zone Z1LMS91P8CMLE5

Type Classic (Migrate Now)

Status 1 of 1 instances in service

Scheme internet-facing

VPC vpc-08bbd9d9a35026a

Availability Zones subnet-0c3da7cb1074dfba - ap-southeast-1a

Port Configuration

80 (HTTP) forwarding to 80 (HTTP)

Stickiness: Disabled

443 (HTTPS, ACM Certificate: 50e4b1c8-c919-41b3-9120-6d4a176ea0c1) forwarding to 80 (HTTP)

console.aws.amazon.com/route53/home#resource-record-sets:2072150730I9Z7U84A49D

Services Search for services, features, marketplace products, and docs [Alt+S]

Back to Hosted Zones Create Record Set Import Zone File Delete Record Set Test Record Set

Record Set Name Any Type Aliases Only Weighted Only

Name	Type	Value	Evaluate Target Health	Health Check ID	TTL	Region	Weight
snemani.xyz	A	ALIAS dualstack-vpc-clb-1663433205 ap-southeast-1	No	-	-	-	-
snemani.xyz	NS	ns-727.awdns-26.net, ns-1340.awdns-39.org, ns-1771.awdns-29.co.uk, ns-259.awdns-32.com	-	-	172800	-	-
snemani.xyz	SOA	ns-727.awdns-26.net, awdns-hostmaster.amazon.	-	-	900	-	-
_7965bbd64c897ad14ae519182f594.snenani.xyz.	CNAME	_579320c3e2e28f5d05a0d17a8b92.zfmrwmc.ac.	-	-	300	-	-

Edit Record Set

Name: snemani.xyz

Type: A - IPv4 address

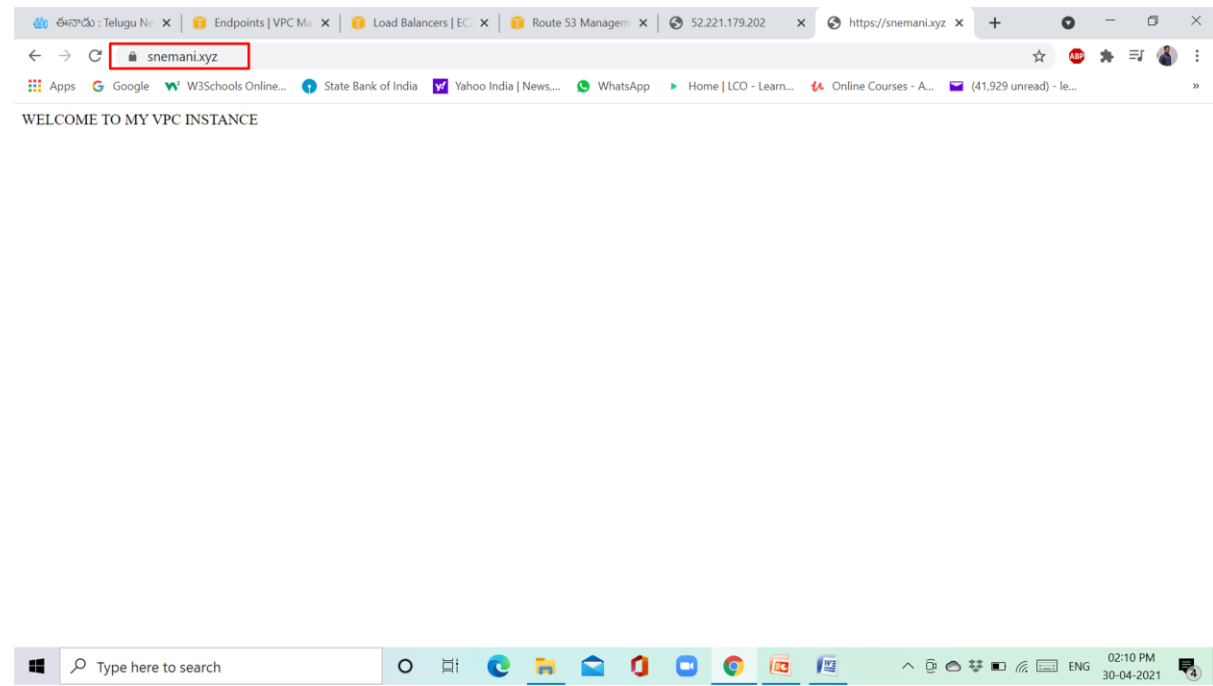
Alias: Yes No

Alias Target: dualstack-vpc-clb-1663433205 ap-southeast-1

Alias Hosted Zone ID: Z1LMS91P8CMLE5

Routing Policy: Simple

Evaluate Target Health: Yes No



### Terminal Logs: -

```
[ 0.008000] tsc: Fast TSC calibration using PIT
[ 0.024005] tsc: Detected 2400.135 MHz processor
[ 0.028009] Calibrating delay loop (skipped), value calculated using timer frequency.. 4800.13
BogoMIPS (lpj=9600272)
[ 0.040003] pid_max: default: 32768 minimum: 301
[ 0.044022] ACPI: Core revision 20170728
[ 0.055732] ACPI: 3 ACPI AML tables successfully acquired and loaded
[ 0.060036] Security Framework initialized
[ 0.064004] Yama: becoming mindful.
[ 0.068007] SELinux: Initializing.
[ 0.072241] Dentry cache hash table entries: 131072 (order: 8, 1048576 bytes)
[ 0.080130] Inode-cache hash table entries: 65536 (order: 7, 524288 bytes)
[ 0.088022] Mount-cache hash table entries: 2048 (order: 2, 16384 bytes)
[ 0.092007] Mountpoint-cache hash table entries: 2048 (order: 2, 16384 bytes)
[ 0.096301] Last level iTLB entries: 4KB 1024, 2MB 1024, 4MB 1024
[ 0.104003] Last level dTLB entries: 4KB 1024, 2MB 1024, 4MB 1024, 1GB 4
[ 0.108006] Spectre V1 : Mitigation: usercopy/swapgs barriers and __user pointer sanitization
[ 0.120003] Spectre V2 : Mitigation: Full generic retpoline
[ 0.128004] Spectre V2 : Spectre v2 / SpectreRSB mitigation: Filling RSB on context switch
[ 0.140003] Speculative Store Bypass: Vulnerable
[ 0.144030] MDS: Vulnerable: Clear CPU buffers attempted, no microcode
[ 0.157573] smpboot: Max logical packages: 15
[ 0.160855] x2apic: IRQ remapping doesn't support X2APIC mode
[ 0.168004] Switched APIC routing to physical flat.
[ 0.178818] ..TIMER: vector=0x30 apic1=0 pin1=2 apic2=0 pin2=0
[ 0.225177] clocksource: xen: mask: 0xffffffffffffffff max_cycles: 0x1cd42e4dffb, max_idle_ns:
881590591483 ns
[ 0.232021] installing Xen timer for CPU 0
[ 0.244084] smpboot: CPU0: Intel(R) Xeon(R) CPU E5-2676 v3 @ 2.40GHz (family: 0x6, model: 0x3f,
stepping: 0x2)
```

[ 0.248052] cpu 0 spinlock event irq 53  
[ 0.252121] Performance Events: unsupported p6 CPU model 63 no PMU driver, software events only.  
[ 0.256063] Hierarchical SRCU implementation.  
[ 0.260340] NMI watchdog: Perf event create on CPU 0 failed with -2  
[ 0.264010] NMI watchdog: Perf NMI watchdog permanently disabled  
[ 0.268259] smp: Bringing up secondary CPUs ...  
[ 0.272009] smp: Brought up 1 node, 1 CPU  
[ 0.276011] smpboot: Total of 1 processors activated (4800.13 BogomIPS)  
[ 0.280550] devtmpfs: initialized  
[ 0.284057] x86/mm: Memory block size: 128MB  
[ 0.288288] clocksource: jiffies: mask: 0xffffffff max\_cycles: 0xffffffff, max\_idle\_ns: 7645041785100000 ns  
[ 0.292030] futex hash table entries: 4096 (order: 6, 262144 bytes)  
[ 0.296319] NET: Registered protocol family 16  
[ 0.300204] cpuidle: using governor ladder  
[ 0.304008] cpuidle: using governor menu  
[ 0.308066] ACPI: bus type PCI registered  
[ 0.312006] acpiphp: ACPI Hot Plug PCI Controller Driver version: 0.5  
[ 0.316486] PCI: Using configuration type 1 for base access  
[ 0.323584] HugeTLB registered 2.00 MiB page size, pre-allocated 0 pages  
[ 0.324265] ACPI: Added \_OSI(Module Device)  
[ 0.328019] ACPI: Added \_OSI(Processor Device)  
[ 0.332012] ACPI: Added \_OSI(3.0 \_SCP Extensions)  
[ 0.336010] ACPI: Added \_OSI(Processor Aggregator Device)  
[ 0.342504] ACPI: Interpreter enabled  
[ 0.344021] ACPI: (supports S0 S4 S5)  
[ 0.348007] ACPI: Using IOAPIC for interrupt routing  
[ 0.352048] PCI: Using host bridge windows from ACPI; if necessary, use "pci=nocrs" and report a bug  
[ 0.356531] ACPI: Enabled 2 GPEs in block 00 to 0F  
[ 0.433800] ACPI: PCI Root Bridge [PCI0] (domain 0000 [bus 00-ff])  
[ 0.436019] acpi PNP0A03:00: \_OSC: OS supports [ASPM ClockPM Segments MSI]  
[ 0.440022] acpi PNP0A03:00: \_OSC failed (AE\_NOT\_FOUND); disabling ASPM  
[ 0.444023] acpi PNP0A03:00: fail to add MMCONFIG information, can't access extended PCI configuration space under this bridge.  
[ 0.449380] acpiphp: Slot [0] registered  
[ 0.453774] acpiphp: Slot [3] registered  
[ 0.457023] acpiphp: Slot [4] registered  
[ 0.461031] acpiphp: Slot [5] registered  
[ 0.464723] acpiphp: Slot [6] registered  
[ 0.468817] acpiphp: Slot [7] registered  
[ 0.472696] acpiphp: Slot [8] registered  
[ 0.476578] acpiphp: Slot [9] registered  
[ 0.480672] acpiphp: Slot [10] registered  
[ 0.484637] acpiphp: Slot [11] registered  
[ 0.488639] acpiphp: Slot [12] registered  
[ 0.492667] acpiphp: Slot [13] registered  
[ 0.496581] acpiphp: Slot [14] registered  
[ 0.500660] acpiphp: Slot [15] registered  
[ 0.504631] acpiphp: Slot [16] registered  
[ 0.508621] acpiphp: Slot [17] registered  
[ 0.512672] acpiphp: Slot [18] registered  
[ 0.516626] acpiphp: Slot [19] registered

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[ 0.520649] acpihp: Slot [20] registered
[ 0.524610] acpihp: Slot [21] registered
[ 0.528589] acpihp: Slot [22] registered
[ 0.532672] acpihp: Slot [23] registered
[ 0.536613] acpihp: Slot [24] registered
[ 0.541115] acpihp: Slot [25] registered
[ 0.544679] acpihp: Slot [26] registered
[ 0.548591] acpihp: Slot [27] registered
[ 0.552613] acpihp: Slot [28] registered
[ 0.556704] acpihp: Slot [29] registered
[ 0.560596] acpihp: Slot [30] registered
[ 0.564665] acpihp: Slot [31] registered
[ 0.568540] PCI host bridge to bus 0000:00
[ 0.572007] pci_bus 0000:00: root bus resource [io 0x0000-0x0cf7 window]
[ 0.576005] pci_bus 0000:00: root bus resource [io 0x0d00-0xffff window]
[ 0.580007] pci_bus 0000:00: root bus resource [mem 0x000a0000-0x000bffff window]
[ 0.584006] pci_bus 0000:00: root bus resource [mem 0xf0000000-0xfbffffff window]
[ 0.588009] pci_bus 0000:00: root bus resource [bus 00-ff]
[ 0.605150] pci 0000:00:01.1: legacy IDE quirk: reg 0x10: [io 0x01f0-0x01f7]
[ 0.608008] pci 0000:00:01.1: legacy IDE quirk: reg 0x14: [io 0x03f6]
[ 0.612007] pci 0000:00:01.1: legacy IDE quirk: reg 0x18: [io 0x0170-0x0177]
[ 0.616014] pci 0000:00:01.1: legacy IDE quirk: reg 0x1c: [io 0x0376]
[ 0.621088] * Found PM-Timer Bug on the chipset. Due to workarounds for a bug,
[ 0.621088] * this clock source is slow. Consider trying other clock sources
[ 0.626665] pci 0000:00:01.3: quirk: [io 0xb000-0xb03f] claimed by PIIX4 ACPI
[ 0.640533] ACPI: PCI Interrupt Link [LNKA] (IRQs *5 10 11)
[ 0.644344] ACPI: PCI Interrupt Link [LNKB] (IRQs 5 *10 11)
[ 0.648342] ACPI: PCI Interrupt Link [LNKC] (IRQs 5 10 *11)
[ 0.652271] ACPI: PCI Interrupt Link [LNKD] (IRQs *5 10 11)
[ 0.679341] xen:balloon: Initialising balloon driver
[ 0.687503] pci 0000:00:02.0: vgaarb: setting as boot VGA device
[ 0.688000] pci 0000:00:02.0: vgaarb: VGA device added:
decodes=io+mem,owns=io+mem,locks=none
[ 0.688032] pci 0000:00:02.0: vgaarb: bridge control possible
[ 0.692006] vgaarb: loaded
[ 0.696367] EDAC MC: Ver: 3.0.0
[ 0.701895] PCI: Using ACPI for IRQ routing
[ 0.704870] NetLabel: Initializing
[ 0.708006] NetLabel: domain hash size = 128
[ 0.712005] NetLabel: protocols = UNLABELED CIPSOv4 CALIPSO
[ 0.716021] NetLabel: unlabeled traffic allowed by default
[ 0.720435] HPET: 3 timers in total, 0 timers will be used for per-cpu timer
[ 0.724028] hpet0: at MMIO 0xfed00000, IRQs 2, 8, 0
[ 0.728004] hpet0: 3 comparators, 64-bit 62.500000 MHz counter
[ 0.734142] clocksource: Switched to clocksource xen
[ 0.746595] VFS: Disk quotas dquot_6.6.0
[ 0.752350] VFS: Dquot-cache hash table entries: 512 (order 0, 4096 bytes)
[ 0.763155] pnp: PnP ACPI init
[ 0.768348] system 00:00: [mem 0x00000000-0x0009ffff] could not be reserved
[ 0.776838] system 00:01: [io 0x08a0-0x08a3] has been reserved
[ 0.784639] system 00:01: [io 0x0cc0-0x0ccf] has been reserved
[ 0.792585] system 00:01: [io 0x04d0-0x04d1] has been reserved
[ 0.800890] system 00:07: [io 0x10c0-0x1141] has been reserved
[ 0.808809] system 00:07: [io 0xb044-0xb047] has been reserved

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[ 0.849911] pnp: PnP ACPI: found 8 devices  
[ 0.862029] clocksource: acpi\_pm: mask: 0xffffffff max\_cycles: 0xffffffff, max\_idle\_ns: 2085701024 ns  
[ 0.874228] NET: Registered protocol family 2  
[ 0.880423] TCP established hash table entries: 8192 (order: 4, 65536 bytes)  
[ 0.888731] TCP bind hash table entries: 8192 (order: 5, 131072 bytes)  
[ 0.895734] TCP: Hash tables configured (established 8192 bind 8192)  
[ 0.902667] UDP hash table entries: 512 (order: 2, 16384 bytes)  
[ 0.908099] UDP-Lite hash table entries: 512 (order: 2, 16384 bytes)  
[ 0.914595] NET: Registered protocol family 1  
[ 0.919519] pci 0000:00:00.0: Limiting direct PCI/PCI transfers  
[ 0.925339] pci 0000:00:01.0: PIIX3: Enabling Passive Release  
[ 0.931401] pci 0000:00:01.0: Activating ISA DMA hang workarounds  
[ 0.937163] pci 0000:00:02.0: Video device with shadowed ROM at [mem 0x000c0000-0x000dffff]  
[ 0.947214] Unpacking initramfs...  
[ 0.991965] Freeing initrd memory: 16100K  
[ 0.996792] Scanning for low memory corruption every 60 seconds  
[ 1.003667] audit: initializing netlink subsys (disabled)  
[ 1.009802] Initialise system trusted keyrings  
[ 1.014381] Key type blacklist registered  
[ 1.018784] audit: type=2000 audit(1619768327.161:1): state=initialized audit\_enabled=0 res=1  
[ 1.027376] workingset: timestamp\_bits=36 max\_order=18 bucket\_order=0  
[ 1.034744] zbud: loaded  
[ 1.112063] random: fast init done  
[ 1.209172] Key type asymmetric registered  
[ 1.213697] Asymmetric key parser 'x509' registered  
[ 1.218789] Block layer SCSI generic (bsg) driver version 0.4 loaded (major 251)  
[ 1.226060] io scheduler noop registered (default)  
[ 1.230716] io scheduler cfq registered  
[ 1.234898] crc32: CRC\_LE\_BITS = 64, CRC\_BE BITS = 64  
[ 1.240088] crc32: self tests passed, processed 225944 bytes in 161737 nsec  
[ 1.246523] crc32c: CRC\_LE\_BITS = 64  
[ 1.250678] crc32c: self tests passed, processed 225944 bytes in 80981 nsec  
[ 1.270595] crc32\_combine: 8373 self tests passed  
[ 1.289188] crc32c\_combine: 8373 self tests passed  
[ 1.311278] xen:grant\_table: Grant tables using version 1 layout  
[ 1.319605] Grant table initialized  
[ 1.326228] Cannot get hvm parameter CONSOLE\_EVTCHN (18): -22!  
[ 1.339394] Serial: 8250/16550 driver, 4 ports, IRQ sharing disabled  
[ 1.379817] 00:06: ttyS0 at I/O 0x3f8 (irq = 4, base\_baud = 115200) is a 16550A  
[ 1.387867] xen\_netfront: Initialising Xen virtual ethernet driver  
[ 1.395047] i8042: PNP: PS/2 Controller [PNP0303:PS2K,PNP0f13:PS2M] at 0x60,0x64 irq 1,12  
[ 1.405251] serio: i8042 KBD port at 0x60,0x64 irq 1  
[ 1.409920] serio: i8042 AUX port at 0x60,0x64 irq 12  
[ 1.416299] input: AT Translated Set 2 keyboard as /devices/platform/i8042/serio0/input/input0  
[ 1.426577] rtc\_cmos 00:02: rtc core: registered rtc\_cmos as rtc0  
[ 1.432374] rtc\_cmos 00:02: alarms up to one day, 114 bytes nvram, hpet irqs  
[ 1.439395] hidraw: raw HID events driver (C) Jiri Kosina  
[ 1.444794] NET: Registered protocol family 17  
[ 1.449912] mce: Using 2 MCE banks  
[ 1.453791] sched\_clock: Marking stable (1453755875, 0)->(2471094653, -1017338778)  
[ 1.461730] registered taskstats version 1  
[ 1.469575] Loading compiled-in X.509 certificates  
[ 1.480795] Loaded X.509 cert 'Build time autogenerated kernel key:  
ddd787a12cad07a79d1480a421891c5ddd3791d2'

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[ 1.492004] zswap: loaded using pool lzo/zbud
[ 1.496592] ima: No TPM chip found, activating TPM-bypass! (rc=-19)
[ 1.503151] ima: Allocated hash algorithm: sha1
[ 1.612120] xenbus_probe_frontend: Device with no driver: device/vbd/51712
[ 1.620578] rtc_cmos 00:02: setting system clock to 2021-04-30 07:38:48 UTC (1619768328)
[ 1.633023] Freeing unused kernel memory: 2128K
[ 1.648109] Write protecting the kernel read-only data: 16384k
[ 1.654522] Freeing unused kernel memory: 2016K
[ 1.661427] Freeing unused kernel memory: 1296K
[ 1.707572] systemd[1]: Inserted module 'autofs4'
[ 1.728090] NET: Registered protocol family 10
[ 1.735051] Segment Routing with IPv6
[ 1.739493] systemd[1]: Inserted module 'ipv6'
[ 1.750866] random: systemd: uninitialized urandom read (16 bytes read)
[ 1.762548] random: systemd: uninitialized urandom read (16 bytes read)
[ 1.770779] random: systemd: uninitialized urandom read (16 bytes read)
[ 1.780365] systemd[1]: systemd 219 running in system mode. (+PAM +AUDIT +SELINUX +IMA -
APPARMOR +SMACK +SYSVINIT +UTMP +LIBCRYPTSETUP +GCRYPT +GNUTLS +ACL +XZ +LZ4 -
SECCOMP +BLKID +ELFUTILS +KMOD +IDN)
[ 1.800213] systemd[1]: Detected virtualization xen.
[ 1.805823] systemd[1]: Detected architecture x86-64.
[ 1.811721] systemd[1]: Running in initial RAM disk.
```

Welcome to [0;34mAmazon Linux 2 dracut-033-535.amzn2.1.3 (Initramfs)[0m!

```
[ 1.827408] systemd[1]: No hostname configured.
[ 1.832651] systemd[1]: Set hostname to <localhost>.
[ 1.837627] systemd[1]: Initializing machine ID from random generator.
[0;32m OK [0m] Reached target Swap.
[ 1.874233] systemd[1]: Reached target Swap.
[ 1.884888] systemd[1]: Starting Swap.
[ 1.889397] systemd[1]: Started Dispatch Password Requests to Console Directory Watch.
[0;32m OK [0m] Reached target Local File Systems.
[0;32m OK [0m] Reached target Timers.
[0;32m OK [0m] Created slice Root Slice.
[0;32m OK [0m] Created slice System Slice.
[0;32m OK [0m] Listening on Journal Socket.
    Starting Create list of required st... nodes for the current kernel...
[0;32m OK [0m] Listening on udev Kernel Socket.
[0;32m OK [0m] Listening on udev Control Socket.
[0;32m OK [0m] Reached target Sockets.
    Starting Journal Service...
[0;32m OK [0m] Reached target Paths.
    Starting Apply Kernel Variables...
[0;32m OK [0m] Reached target Slices.
[0;32m OK [0m] Started Journal Service.
[0;32m OK [0m] Started Create list of required sta...ce nodes for the current kernel.
[0;32m OK [0m] Started Apply Kernel Variables.
    Starting Create Static Device Nodes in /dev...
[0;32m OK [0m] Started Create Static Device Nodes in /dev.
    Starting udev Kernel Device Manager...
[ 2.018555] tsc: Refined TSC clocksource calibration: 2400.000 MHz
[ 2.024979] clocksource: tsc: mask: 0xffffffffffffff max_cycles: 0x22983777dd9, max_idle_ns:
440795300422 ns
```

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[0]32m OK [0]0m Started udev Kernel Device Manager.
    Starting dracut pre-trigger hook...
[0]32m OK [0]0m Started dracut pre-trigger hook.
    Starting udev Coldplug all Devices...
[0]32m OK [0]0m Started udev Coldplug all Devices.
    Starting dracut initqueue hook...
[0]32m OK [0]0m Reached target System Initialization.
[0]32m OK [0]0m Reached target Basic System.
[  2.197807] SCSI subsystem initialized
[  2.226689] Invalid max_queues (4), will use default max: 1.
[  2.243797] scsi host0: ata_piix
[  2.250130] scsi host1: ata_piix
[  2.254327] ata1: PATA max MWDMA2 cmd 0x1f0 ctl 0x3f6 bmdma 0xc100 irq 14
[  2.262329] ata2: PATA max MWDMA2 cmd 0x170 ctl 0x376 bmdma 0xc108 irq 15
[  2.295592] blkfront: xvda: barrier or flush: disabled; persistent grants: disabled; indirect descriptors:
enabled;
[  2.312943] xvda: xvda1
[0]32m OK [0]0m Found device /dev/disk/by-uuid/2753b570-611a-44cb-8bd2-888283108b55.
    Starting File System Check on /dev/...0-611a-44cb-8bd2-888283108b55...
[0]32m OK [0]0m Started File System Check on /dev/d...570-611a-44cb-8bd2-888283108b55.
[0]32m OK [0]0m Started dracut initqueue hook.
[0]32m OK [0]0m Reached target Remote File Systems (Pre).
[0]32m OK [0]0m Reached target Remote File Systems.
    Mounting /sysroot...
[  2.509613] SGI XFS with ACLs, security attributes, no debug enabled
[  2.520591] XFS (xvda1): Mounting V5 Filesystem
[  4.116357] XFS (xvda1): Ending clean mount
[0]32m OK [0]0m Mounted /sysroot.
[0]32m OK [0]0m Reached target Initrd Root File System.
    Starting Reload Configuration from the Real Root...
[0]32m OK [0]0m Started Reload Configuration from the Real Root.
[0]32m OK [0]0m Reached target Initrd File Systems.
[0]32m OK [0]0m Reached target Initrd Default Target.
    Starting dracut pre-pivot and cleanup hook...
[0]32m OK [0]0m Started dracut pre-pivot and cleanup hook.
    Starting Cleaning Up and Shutting Down Daemons...
[0]32m OK [0]0m Stopped Cleaning Up and Shutting Down Daemons.
[0]32m OK [0]0m Stopped dracut pre-pivot and cleanup hook.
    Stopping dracut pre-pivot and cleanup hook...
[0]32m OK [0]0m Stopped target Initrd Default Target.
[0]32m OK [0]0m Stopped target Basic System.
[0]32m OK [0]0m Stopped target Sockets.
[0]32m OK [0]0m Stopped target Slices.
[0]32m OK [0]0m Stopped target Timers.
[0]32m OK [0]0m Stopped target Paths.
[0]32m OK [0]0m Stopped target Remote File Systems.
[0]32m OK [0]0m Stopped target Remote File Systems (Pre).
[0]32m OK [0]0m Stopped dracut initqueue hook.
    Stopping dracut initqueue hook...
[0]32m OK [0]0m Stopped target System Initialization.
[0]32m OK [0]0m Stopped udev Coldplug all Devices.
    Stopping udev Coldplug all Devices...
[0]32m OK [0]0m Stopped dracut pre-trigger hook.
    Stopping dracut pre-trigger hook...

```



Stopping udev Kernel Device Manager...

[0:32m OK 0m] Stopped target Local File Systems.

[0:32m OK 0m] Stopped target Swap.

[0:32m OK 0m] Stopped Apply Kernel Variables.

Stopping Apply Kernel Variables...

[0:32m OK 0m] Stopped udev Kernel Device Manager.

[0:32m OK 0m] Stopped Create Static Device Nodes in /dev.

Stopping Create Static Device Nodes in /dev...

[0:32m OK 0m] Stopped Create list of required sta...ce nodes for the current kernel.

Stopping Create list of required st... nodes for the current kernel...

[0:32m OK 0m] Closed udev Kernel Socket.

[0:32m OK 0m] Closed udev Control Socket.

Starting Cleanup udevd DB...

[0:32m OK 0m] Started Cleanup udevd DB.

[0:32m OK 0m] Reached target Switch Root.

Starting Switch Root...

[ 4.445509] systemd-journald[936]: Received SIGTERM from PID 1 (systemd).

[ 4.569553] systemd: 25 output lines suppressed due to ratelimiting

[ 5.007403] SELinux: Disabled at runtime.

[ 5.020095] audit: type=1404 audit(1619768331.896:2): selinux=0 auid=4294967295 ses=4294967295

[ 5.228436] ip\_tables: (C) 2000-2006 Netfilter Core Team

[ 5.235321] systemd[1]: Inserted module 'ip\_tables'

Welcome to 0:33mAmazon Linux 20m!

[0:32m OK 0m] Stopped Switch Root.

[0:32m OK 0m] Stopped Journal Service.

Starting Journal Service...

Mounting POSIX Message Queue File System...

Starting Create list of required st... nodes for the current kernel...

[0:32m OK 0m] Listening on LVM2 metadata daemon socket.

[0:32m OK 0m] Listening on Device-mapper event daemon FIFOs.

Starting Monitoring of LVM2 mirrors... dmeventd or progress polling...

Starting Read and set NIS domainname from /etc/sysconfig/network...

[0:32m OK 0m] Listening on udev Kernel Socket.

[0:32m OK 0m] Set up automount Arbitrary Executab...ats File System Automount Point.

[0:32m OK 0m] Listening on /dev/initctl Compatibility Named Pipe.

[0:32m OK 0m] Created slice system-getty.slice.

[0:32m OK 0m] Created slice system-serial\x2dgetty.slice.

[0:32m OK 0m] Listening on Delayed Shutdown Socket.

Starting Remount Root and Kernel File Systems...

Starting Setup Virtual Console...

[0:32m OK 0m] Stopped target Switch Root.

[0:32m OK 0m] Reached target Swap.

[0:32m OK 0m] Stopped target Initrd File Systems.

[0:32m OK 0m] Stopped target Initrd Root File System.

[0:32m OK 0m] Listening on udev Control Socket.

[0:32m OK 0m] Created slice system-selinux\x2dpol...grate\x2dlocal\x2dchanges.slice.

Mounting Huge Pages File System...

Mounting Debug File System...

[0:32m OK 0m] Created slice User and Session Slice.

[0:32m OK 0m] Reached target Slices.

[0:32m OK 0m] Listening on LVM2 poll daemon socket.

```

[0]32m OK [0]m Mounted Debug File System.
[ 5.996077] random: crng init done
[ 5.999803] random: 7 urandom warning(s) missed due to ratelimiting
[0]32m OK [0]m Mounted POSIX Message Queue File System.
[0]32m OK [0]m Mounted Huge Pages File System.
[0]32m OK [0]m Started Journal Service.
[0]32m OK [0]m Started Create list of required sta...ce nodes for the current kernel.
[0]32m OK [0]m Started Read and set NIS domainname from /etc/sysconfig/network.
[0]32m OK [0]m Started Remount Root and Kernel File Systems.
[0]32m OK [0]m Started Setup Virtual Console.
[0]32m OK [0]m Started LVM2 metadata daemon.
    Starting LVM2 metadata daemon...
    Starting Configure read-only root support...
    Starting Rebuild Hardware Database...
    Starting Load Kernel Modules...
    Starting Create Static Device Nodes in /dev...
    Starting Flush Journal to Persistent Storage...
[0]32m OK [0]m Started Configure read-only root support.
    Starting Load/Save Random Seed...
[0]32m OK [0]m Started Load/Save Random Seed.
[0]32m OK [0]m Started Load Kernel Modules.
[ 6.170091] systemd-journald[1667]: Received request to flush runtime journal from PID 1
    Starting Apply Kernel Variables...
[0]32m OK [0]m Started Apply Kernel Variables.
[0]32m OK [0]m Started Flush Journal to Persistent Storage.
[0]32m OK [0]m Started Create Static Device Nodes in /dev.
    Starting udev Kernel Device Manager...
[0]32m OK [0]m Started udev Kernel Device Manager.
[0]32m OK [0]m Started Rebuild Hardware Database.
    Starting udev Coldplug all Devices...
[0]32m OK [0]m Started udev Coldplug all Devices.
    Starting Show Plymouth Boot Screen...
    Starting udev Wait for Complete Device Initialization...
[ 6.791664] input: Power Button as /devices/LNXSYSTM:00/LNXPWRBN:00/input/input3
[ 6.816762] input: ImExPS/2 Generic Explorer Mouse as /devices/platform/i8042/serio1/input/input4
[ 6.852862] ACPI: Power Button [PWRB]
[ 6.857570] input: Sleep Button as /devices/LNXSYSTM:00/LNXSLPBN:00/input/input5
[ 6.865569] ACPI: Sleep Button [SLPF]
[0]32m OK [0]m Found device /dev/ttyS0.

[0]G[0]32m OK [0]m Started Show Plymouth Boot Screen.

[ 6.939250] mousedev: PS/2 mouse device common for all mice
[0]32m OK [0]m Created slice system-ec2net\x2difup.slice.

[ 6.994286] AVX2 version of gcm_enc/dec engaged.
[ 6.998824] AES CTR mode by8 optimization enabled
[ 7.030986] alg: No test for pcbc(aes) (pcbc-aes-aesni)
[ 7.055013] EDAC sbridge: Seeking for: PCI ID 8086:2fa0
[ 7.060657] EDAC sbridge: Ver: 1.1.2
[0]32m OK [0]m Started udev Wait for Complete Device Initialization.

```

Starting Activation of DM RAID sets...

[032m OK [0m] Started Monitoring of LVM2 mirrors,...ng dmeventd or progress polling.

[032m OK [0m] Reached target Local File Systems (Pre).

[ 7.126184] device-mapper: uevent: version 1.0.3

[ 7.131207] device-mapper: ioctl: 4.37.0-ioctl (2017-09-20) initialised: dm-devel@redhat.com

[032m OK [0m] Started Activation of DM RAID sets.

[032m OK [0m] Reached target Local Encrypted Volumes.

[032m OK [0m] Reached target Local File Systems.

Starting Mark the need to relabel after reboot...

Starting Preprocess NFS configuration...

Starting Tell Plymouth To Write Out Runtime Data...

Starting Rebuild Journal Catalog...

Starting Create Volatile Files and Directories...

[032m OK [0m] Started Preprocess NFS configuration.

[032m OK [0m] Started Rebuild Journal Catalog.

[032m OK [0m] Started Create Volatile Files and Directories.

Mounting RPC Pipe File System...

Starting Security Auditing Service...

Starting Update is Completed...

[032m OK [0m] Started Mark the need to relabel after reboot.

[032m OK [0m] Started Update is Completed.

[ 7.311351] RPC: Registered named UNIX socket transport module.

[ 7.317055] RPC: Registered udp transport module.

[ 7.322584] RPC: Registered tcp transport module.

[ 7.327880] RPC: Registered tcp NFSv4.1 backchannel transport module.

[032m OK [0m] Started Tell Plymouth To Write Out Runtime Data.

[032m OK [0m] Mounted RPC Pipe File System.

[032m OK [0m] Reached target rpc\_pipefs.target.

[032m OK [0m] Started Security Auditing Service.

Starting Update UTMP about System Boot/Shutdown...

[032m OK [0m] Started Update UTMP about System Boot/Shutdown.

[0]32m OK [0]0m Reached target System Initialization.

[0]32m OK [0]0m Reached target Paths.

[0]32m OK [0]0m Listening on RPCbind Server Activation Socket.

Starting RPC bind service...

[0]32m OK [0]0m Reached target Timers.

[0]32m OK [0]0m Listening on D-Bus System Message Bus Socket.

[0]32m OK [0]0m Reached target Sockets.

[0]32m OK [0]0m Reached target Basic System.

Starting GSSAPI Proxy Daemon...

Starting Hardware RNG Entropy Gatherer Wake threshold service...

[0]32m OK [0]0m Started irqbalance daemon.

Starting irqbalance daemon...

Starting Resets System Activity Logs...

Starting Dump dmesg to /var/log/dmesg...

Starting NTP client/server...

Starting Initial cloud-init job (pre-networking)...

Starting ACPI Event Daemon...

[0]32m OK [0]0m Started libstoragemgmt plug-in server daemon.

Starting libstoragemgmt plug-in server daemon...

[0]32m OK [0]0m Started D-Bus System Message Bus.

Starting D-Bus System Message Bus...

Starting Login Service...

[0]32m OK [0]0m Started RPC bind service.

[0]32m OK [0]0m Started Hardware RNG Entropy Gatherer Wake threshold service.

[0]32m OK [0]0m Started Resets System Activity Logs.

[0]32m OK [0]0m Started Dump dmesg to /var/log/dmesg.

[0]32m OK [0]0m Started ACPI Event Daemon.

[ 32m OK 0m] Started Hardware RNG Entropy Gatherer Daemon.

Starting Hardware RNG Entropy Gatherer Daemon...

[ 32m OK 0m] Started Login Service.

[ 32m OK 0m] Started NTP client/server.

[ 32m OK 0m] Started GSSAPI Proxy Daemon.

[ 32m OK 0m] Reached target NFS client services.

[ 32m OK 0m] Reached target Remote File Systems (Pre).

[ 32m OK 0m] Reached target Remote File Systems.

[ 9.440604] cloud-init[2487]: Cloud-init v. 19.3-43.amzn2 running 'init-local' at Fri, 30 Apr 2021 07:38:56 +0000. Up 9.39 seconds.

[ 32m OK 0m] Started Initial cloud-init job (pre-networking).

[ 32m OK 0m] Reached target Network (Pre).

Starting LSB: Bring up/down networking...

[ 32m OK 0m] Started LSB: Bring up/down networking.

[ 32m OK 0m] Reached target Network.

Starting Postfix Mail Transport Agent...

Starting Initial cloud-init job (metadata service crawler)...

[ 12.097135] cloud-init[2889]: Cloud-init v. 19.3-43.amzn2 running 'init' at Fri, 30 Apr 2021 07:38:58 +0000. Up 12.05 seconds.

[ 12.124212] cloud-init[2889]: ci-info: ++++++Net device info+++++

[ 12.129098] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+  
---+-----+

[ 12.129688] cloud-init[2889]: ci-info: | Device | Up | Address | Mask | Scope |  
Hw-Address |

[ 12.130594] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+  
---+-----+

[ 12.133100] cloud-init[2889]: ci-info: | eth0 | True | 10.0.0.74 | 255.255.255.0 | global |  
02:0d:a5:24:ce:a8 |

[ 12.133315] cloud-init[2889]: ci-info: | eth0 | True | fe80::d:a5ff:fe24:cea8/64 | . | link |  
02:0d:a5:24:ce:a8 |

```
[ 12.133428] cloud-init[2889]: ci-info: | lo | True | 127.0.0.1 | 255.0.0.0 | host | .
|

[ 12.133542] cloud-init[2889]: ci-info: | lo | True | ::1/128 | . | host | . |

[ 12.133651] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+
---+-----+

[ 12.133757] cloud-init[2889]: ci-info: ++++++Route IPv4
info+++++

[ 12.133870] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+
--+-----+

[ 12.133983] cloud-init[2889]: ci-info: | Route | Destination | Gateway | Genmask | Interface |
Flags |

[ 12.134094] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+
--+-----+

[ 12.134210] cloud-init[2889]: ci-info: | 0 | 0.0.0.0 | 10.0.0.1 | 0.0.0.0 | eth0 | UG |

[ 12.134319] cloud-init[2889]: ci-info: | 1 | 10.0.0.0 | 0.0.0.0 | 255.255.255.0 | eth0 | U |

[ 12.134431] cloud-init[2889]: ci-info: | 2 | 169.254.169.254 | 0.0.0.0 | 255.255.255.255 | eth0 |
UH |

[ 12.134543] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+
--+-----+

[ 12.134649] cloud-init[2889]: ci-info: ++++++Route IPv6
info+++++

[ 12.134761] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+

[ 12.134873] cloud-init[2889]: ci-info: | Route | Destination | Gateway | Interface | Flags |

[ 12.134979] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+

[ 12.135086] cloud-init[2889]: ci-info: | 9 | fe80::/64 | :: | eth0 | U |

[ 12.135197] cloud-init[2889]: ci-info: | 11 | local | :: | eth0 | U |

[ 12.135311] cloud-init[2889]: ci-info: | 12 | ff00::/8 | :: | eth0 | U |

[ 12.135438] cloud-init[2889]: ci-info: +-----+-----+-----+-----+-----+

```

Starting Hostname Service...

[OK][32m OK ][0m] Started Hostname Service.

[OK][32m OK ][0m] Started Postfix Mail Transport Agent.

[OK][32m OK ][0m] Started Initial cloud-init job (metadata service crawler).

Starting OpenSSH Server Key Generation...

[ 32m OK 0m] Reached target Network is Online.

Starting System Logging Service...

[ 32m OK 0m] Started amazon-ssm-agent.

Starting amazon-ssm-agent...

Starting Dynamically Generate Message Of The Day...

Starting Finds and configures elastic network interfaces...

Starting Notify NFS peers of a restart...

Starting Permit User Sessions...

[ 32m OK 0m] Reached target Cloud-config availability.

Starting Apply the settings specified in cloud-config...

[ 32m OK 0m] Started Permit User Sessions.

[ 32m OK 0m] Started Notify NFS peers of a restart.

[ 32m OK 0m] Started Finds and configures elastic network interfaces.

Starting Terminate Plymouth Boot Screen...

[ 32m OK 0m] Started Command Scheduler.

Starting Command Scheduler...

[ 32m OK 0m] Started Job spooling tools.

Starting Job spooling tools...

Starting Wait for Plymouth Boot Screen to Quit...

[ 32m OK 0m] Started System Logging Service.

[ 14.388661] cloud-init[3050]: Cloud-init v. 19.3-43.amzn2 running 'modules:config' at Fri, 30 Apr 2021 07:39:01 +0000. Up 14.27 seconds.

2021/04/30 07:39:02Z: Amazon SSM Agent v3.0.529.0 is running

2021/04/30 07:39:02Z: OsProductName: Amazon Linux

2021/04/30 07:39:02Z: OsVersion: 2

[ 16.224244] cloud-init[3050]: Loaded plugins: extras\_suggestions, langpacks, priorities, update-motd

[ 16.253096] cloud-init[3050]: Existing lock /var/run/yum.pid: another copy is running as pid 3206.

[ 16.262382] cloud-init[3050]: Another app is currently holding the yum lock; waiting for it to exit...

[ 16.268832] cloud-init[3050]: The other application is: yum

[ 16.274987] cloud-init[3050]: Memory : 31 M RSS (247 MB VSZ)

[ 16.285072] cloud-init[3050]: Started: Fri Apr 30 07:39:00 2021 - 00:03 ago

```
[ 16.289757] cloud-init[3050]: State : Running, pid: 3206
[ 18.264562] cloud-init[3050]: Another app is currently holding the yum lock; waiting for it to exit...
[ 18.276484] cloud-init[3050]: The other application is: yum
[ 18.284477] cloud-init[3050]: Memory : 37 M RSS (329 MB VSZ)
[ 18.292387] cloud-init[3050]: Started: Fri Apr 30 07:39:00 2021 - 00:05 ago
[ 18.304450] cloud-init[3050]: State : Running, pid: 3206
```

Amazon Linux 2

Kernel 4.14.231-173.360.amzn2.x86\_64 on an x86\_64

ip-10-0-0-74 login: [ 20.267316] cloud-init[3050]: Another app is currently holding the yum lock; waiting for it to exit...

```
[ 20.304474] cloud-init[3050]: The other application is: yum
[ 20.316339] cloud-init[3050]: Memory : 75 M RSS (368 MB VSZ)
[ 20.332434] cloud-init[3050]: Started: Fri Apr 30 07:39:00 2021 - 00:07 ago
[ 20.344530] cloud-init[3050]: State : Running, pid: 3206
[ 22.269127] cloud-init[3050]: Another app is currently holding the yum lock; waiting for it to exit...
[ 22.277962] cloud-init[3050]: The other application is: yum
[ 22.285203] cloud-init[3050]: Memory : 144 M RSS (437 MB VSZ)
[ 22.293075] cloud-init[3050]: Started: Fri Apr 30 07:39:00 2021 - 00:09 ago
[ 22.302370] cloud-init[3050]: State : Running, pid: 3206
[ 25.103939] cloud-init[3050]: No packages needed for security; 0 packages available
[ 25.124596] cloud-init[3050]: No packages marked for update
[ 25.724529] cloud-init[3240]: Cloud-init v. 19.3-43.amzn2 running 'modules:final' at Fri, 30 Apr 2021 07:39:12 +0000. Up 25.66 seconds.
```

ci-info: ++++++Authorized keys from /home/ec2-user/.ssh/authorized\_keys for user ec2-user++++++

```
ci-info: +-----+-----+-----+-----+-----+
ci-info: | Keytype |          Fingerprint (md5)          | Options | Comment |
ci-info: +-----+-----+-----+-----+-----+
ci-info: | ssh-rsa | d8:3f:bd:51:94:78:46:09:48:36:f1:a7:70:25:b0:a3 | - | kp-singapore |
ci-info: +-----+-----+-----+-----+-----+
```

<14>Apr 30 07:39:12 ec2:

<14>Apr 30 07:39:12 ec2:

#####

<14>Apr 30 07:39:12 ec2: -----BEGIN SSH HOST KEY FINGERPRINTS-----

<14>Apr 30 07:39:12 ec2: 256 SHA256:+MUR0cvT7iH5/hwHgCtjxSgUh/85XPnTIGpUeMPIGfU no comment (ECDSA)

<14>Apr 30 07:39:12 ec2: 256 SHA256:qyAhgx7jY5cY+Z2Px0JRlnNPZarL7rifZiQ7zvQ44n4 no comment (ED25519)

<14>Apr 30 07:39:12 ec2: 2048 SHA256:EsFf9CkDNSNNkoB6uqztA1+TIQrr9AITq+qUIJbWRZw no comment (RSA)

<14>Apr 30 07:39:12 ec2: -----END SSH HOST KEY FINGERPRINTS-----

<14>Apr 30 07:39:12 ec2:

#####

-----BEGIN SSH HOST KEY KEYS-----

ecdsa-sha2-nistp256

AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBJceKZVCnKud+Kh08eHz9uTKtOk  
tmacXPegBD6mpLFjPMSMQaCekbi2iH4kJwOkk2EHHaMv9tdHbUp4Ky3wzuo=  
ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIMMg8hlj5aTg40CSJFq2H23LRC4V/19wcVbln1zyypLd  
ssh-rsa

AAAAB3NzaC1yc2EAAAADAQABAAQACn9R8oduCSPreHwHsMRWOMuosyUtwBa1wqC+nKMOVda1  
Lzs1cxzZByEKIOzecaJwDKj5haaduDMc3UVTS+XIJCx2nfwpMQ8IFzqE7nsYnys2YnLjg6o2rdroy4u7rCp0yy  
e+zXNJgOPoavD6V/vZvqF8sZfisK7vtjeN1ArGgaf+EeF/hpqxzn9dKEweEqKpDTjG6/IMs2aYOhAwRSyWv



amr3ceRI+uk4lAsR+1S9WE0nUix86eRpV2t3HMdLFMM3Ehtj0ewXfIJ7zknCfSRXDUq0D4n45l/T3zzK3BQ  
jyWar9gGmr2R/y/gdecr3PABVxdEyF1FEVESgomDxnRVr9  
-----END SSH HOST KEY KEYS-----  
[ 25.865805] cloud-init[3240]: Cloud-init v. 19.3-43.amzn2 finished at Fri, 30 Apr 2021 07:39:12  
+0000. Datasource DataSourceEc2. Up 25.86 seconds