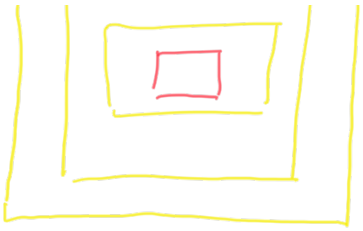
SAA~PRO


EC2:
Every EC2 is created from an AMI:
Single AZ, in a single VPC, in a single subnet
placement group handles where instances are placed
⇒ *EMR ⇒ can use diff. components (billing)
Can support multiple nlw interfaces, SG's are attached to them
AMI: ⇒ object store
owner, launch permission, architecture & os
instance store: bundle up ⇒ store in S3
cannot do snapshots
root vol - data
Virtualization:
Nitro → Near Bare metal
(install as in HW)
M ↓ General purpose
T ↓ Burstable not-full utility
get-credits
A ↓ ARM Based
Compute-optimized
(CPU usage)
C
Accelerated:
P, G, F → FPGA
GPU ↓ Graphical
Memory optimized
(r)
(less CPU, more memory)
Storage ⇒ throughput
(h) (local storage
(i) ⇒ IO hi
Storage Classes:
local hai
High IO & throughput
Instance store → host pe
restart mein nahi jaayega
EBS → nlw fabric
X sharing, persistent
X elasticity, reliability, durability
EBS: CBS optimized ⇒ No contention, diff. ch
GP2 (SSD) ↓ Default
16000 IOPS
credits
250 MiB/S throughput
P.IOPS (SSD)
64000
low latency
high IOPS
size not a pblm
(HDD)
Throughput optimized
Streaming media
i/o x
x boot
Cold
x boo
EBS/instance
1750 MiB/s
80000 IOPS
EBS → AZ
→ snapshots (Regions) (CORS)
x 99.5-99.9-1. x
_ Can't move
X temporary
X static content distribution
X Single instance attached, no sharing
- can change type and size
when application needs access, not the service
↳ instance profile
SDK, CLI will check
IAM Roles ⇒ for letting appln assume credentials
instance-level
appln can access meta-data
Placement Groups:
① Cluster (single AZ) (can't span AZs)
(high speed, low latency, throughput)
X Nlw path
② Partition: (only API/CLI)
(separation)
distribute, not all fail
(HDFS) (Cassandra)
⇒ can't modify, type &
(Not all support)
③ Spread: multi-AZ
(small set)
(high-availability)
④ ⇒ ⑦ instances
#CloudWatch Logs ⇒ Basic only host-level
CW agent ⇒ internal to instance
(System Manager CW agent using parameter store)
ECS architecture:



STORAGE:

S3 : obj