Machine generated alternative text:
Final words of wisdom 
• Lazy Loading / Cache aside is easy to implement and works for many 
situations as a foundation, especially on the read side 
• Write-through is usually combined with Lazy Loading as targeted for the 
queries or workloads that benefit from this optimization 
• Setting a 17 L is usually not a bad idea, except when you're using Write- 
through. Set it to a sensible value for your application 
• Only cache the data that makes sense (user profiles, blogs, etc... ) 

**Section 5 Route 53 ( think wrt DNS)**

AWS route 53 overview

Machine generated alternative text:
AWS Route 53 Overview 
• Route53 is a Managed DNS (Domain Name System) 
• DNS is a collection of rules and records which helps clients understand 
how to reach a server through omain name. 
• In AWS, the most common 
o 
• A: hostname to IPv4 
• AAAA: hostname to IPv6 
• CNAME: hostname to hostname 
• Alias: hostname to AWS resource. 

Machine generated alternative text:
Route 53 — Diagram for A Record 
.coo 
ONS 
00. 
Route 53 
pp. .67. e s 
Web browser 
in. 
Application Server 
IP: 32.45.67.85 

Machine generated alternative text:
AWS Route 53 Overview 
• Route53 can use: 
• public domain names you own (or buy) 
application I .mypublicdomain.com 
• private domain names that can be resolved by your instances in yourVPCs. 
application I .company.internal 
• Route53 has advanced features such as: 
• Load balancing (through DNS — also called client load balancing) 
• Health checks (although limited... ) 
• Routing policy: simple, failover, geolocation, latency, weighted, multi value 
• You pay $0.50 per month per hosted zone 

Route 53 Hands on

NOTE : Route 53 is global service

**STEP 1) create route 53**

**Route 53**

**Registered Domain ( it will take one hour)**

**Hosted zone**

**Create record set**

Machine generated alternative text:
aws 
Dashboard 
I Hosted zones 
Health checks 
Traffic flow 
Traffic policies 
Policy records 
Domains 
Services v 
Resource Groups v 
Back to Hosted Zones 
Record Set Name 
Stepha Corn. 
stephanetheteacher. corn _ 
stephanetheteacher.com. 
cnametest .stephanetheteacher.corn. 
WWW 
Any Type 
CNAME 
IrnpM Zone File 
Aliases Only 
Vakæ 
104.198.1452 
ns-l . 
ns-252.awsdns•31 . 
nS-633.awsdns-15 _ 
Déte Record Set 
Weighted Only 
Test Record Set 
Evaate Hath 
datacumulus•course 
Create Record Set 
Name: 
Type: A — IPv4 address 
Global 
Support 
_ Step ha n e 
Hear' 
Alias: C) Yes No 
TTL (seconds) : 
11223344 
300 
Registered domains 
pending requests 
Resolver 
VPCs 
Inbound endpoints 
Outbound endpoints 
Rules 
note here. 
address. addresses 
'9202235 
198.51.1W,234 
Routing policy: Simple 
Route 53 to based on the values in this record. Learn 

Machine generated alternative text:
aws 
Dashboard 
Hosted zones 
Health checks 
Traffic flow 
Traffic poltcies 
Policy records 
Domains 
Services v 
Resource Groups 
Back to Hosted Zones 
Record Set Name 
Create Set 
X Any Type 
Irn;n-t Zone File 
Aliases Only 
Vann 
104.198.1452 
ns-14 awSdns-55 
as-633. awsdns- 15 net 
ns.252awsdns-31 
112233.44 
Delete Record Set 
WeOhted Only 
Test Record Set 
Eva•ate Heath 
datacumulus•course 
Edit Record set 
Global 
Support 
coo 
Typ 
CNAME 
CNAME 
Name: myfirstrecord co m. 
Type: A — I PV4 add reSS 
Heal 
Alias: C) Yes No 
TTL (Seconds): 
11.22.33,44 
I Pv4 . EMer rwltiple 
19202.235 
198.51.1W.234 
Routing Policy: I Simple 
Route 53 to on values in this record. Learn 
Save Record Set 
Stepha 
stephanetheteacher. corn. 
stephanetheteacher.com. 
cnametest Stephane-theteacher.corn. 
wwwStephanetheteacher.com. 
Registered domains 
pending requests 
Resolver 
VPCs 
Inbound endpoints 
Outbound endpoints 
Rules 
note here. 

Now go to the url in backend it will hit ip 11.22.33.44

**Note : how to verify**

Machine generated alternative text:
nslookup myfirstrecord.stephanetheteacher.com 
8.8.8.8 
8.8.8.8#53 
Server: 
Add ress: 
Non—authoritative answer: 
Name : 
my f irst reco rd.stephanetheteacher.com 
Address: 11.22.33.441 
1 

Route 53 EC2 Set up

**Step 2): create 3 instance in different region**

**User data**

Machine generated alternative text:
user—data sh x 
t! 'bin'bash 
yum update —Y 
yum install —y httpd 
systemctl start httpd.service 
systemctl enable httpd.service 
echo World fro. S(hostnane -f) in AZ c,'hl:•" 'var/x,'htnl/index.htmq 
1 

169.254.169.254 : ec2 meta data service

Machine generated alternative text:
user-data _ sh 
34.255.122.72 
3.86.116.186 
3.112.71.34 
ip-to-az.sh X 
eu—west-l 
us—east-I 
ap—northeasl 

**Step3 ) create application load balancer**

**DN RECORD**  TTL (Time to live)

Note:- It is used to cache the response from DNS not to overload DNS

Ttl valid for this much of time as a response sent by DNS

Machine generated alternative text:
DNS RecordsTTL (Time to Live) 
• HighTTL: (e.g. 24hr) 
• Less traffic on DNS 
• Possibly outdated 
records 
• 60 s) 
• More traffc on DNS 
• Records are outdated 
for less time 
• Easy to change records 
• TTL is mandatory for 
each DNS record 
DNS cache 
For TTL duration 
Web browser 
DNS Request 
http://myapp.mydomain.com 
Send back IP: 32.45.67.85 
(A record: URL to IP) 
+TTL:300s 
DNS Request 
http://myapp.mydomain.com 
Send back IP: 195.23.45.22 
(A record: URL to IP) 
+ TTL:300s 
Route 53 

NOTE: ip is public ip of EC2:

Machine generated alternative text:
DPIe have written a note here. 
CJS' 

**Note: only when ttl is expired then only we get other instance to up for same DNS**

**Route 53 CNAME vs Alias**

**From DNS name we can configure public ip of ec2 in this way it is linked to EC2**

**Requirement** : want to point DNS name to load balancer

Machine generated alternative text:
CNAME vs Alias 
• AWS Resources (Load Balancer, CloudFront... ) expose an AWS hostname: 
1b I - 1234.us-east-2.elb.amazonaws.com and you want myapp.mydomain.com 
• CNAME: 
• Points a hostname to any other hostname. (app.mydomain.com blabla.anything.com) 
• ONLY FOR NON ROOT DOMAIN something.mydomain.com) 
Alias: 
Points a hostname to an AWS Resource (app.mydomain.com blabla.amazonaws.com) 
• Wore for ROOT DOMAIN and NON ROOT DOMAIN (aka mydomain.com) 
Free of charge 
• 
Native health check 

**NOTE : if want to link route 53 to loadbalancer then we need to choose cname in record se while creating route 53 and provide there DNS NAME**

Machine generated alternative text:
aws 
I zones 
checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
PO nding 
Resolver 
In bound 
Outbou nd e ndpoints 
Resource &ouø 
Record Set Name 
Stephanetheteacher.am. 
Cræte Set 
X 
Any 
112233." 
Tet 
Global 
mya pp 
Support • 
s Vtanetheteacher, 
Create Set 
Type: C NAME — 
C) Y" No 
TTL (S.ds): 
value: 
1 elb 
Simple 
RWE 'n 

Now we got got result from load balancer which point to ec2 instance

Machine generated alternative text:
Hello World from ip-172-31-17-173.eu-west-1.computeänternal in AZ eu-west-lc 

Or we can use alias name

Machine generated alternative text:
aws 
I Hosted zones 
checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
domains 
PO nding 
Resolver 
In bound 
Outbou nd e ndpoints 
Feedback 
Resource Groups 
Reccyd Set Name 
Stephanetheteacher.am, 
"Idem 
Cræte Set 
X 
Any : 
468 
1122.33." 
3&.116.1" 
mul 
Create Rewd Set 
Type: A — 
LS Y" O No 
Global 
Support 
s Vtanetheteacher, 
Alias Hosted zone Z32012XcXNTSW2 
• ELE DNS 
. vpc 
ng policy: Simple 
Evaluate Target Hea Ith: C) Yes No 
pelie„ 
English w s) 

NOTE: using root we can't create record set

Machine generated alternative text:
aws 
I Hosted zones 
checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
domains 
PO nding 
Resolver 
Outbou nd endpoints 
Resoure &ou" 
to 
Record Set Name 
Stephanetheteacher.am, 
Cræte Set 
X 
Amy : 
CNAME 
Create Rewd Set 
Type: C NAME — name 
stepha ne 
O Y" No 
TTL (S.ds): 
•Leo 28) 
value: 
1 .arnazcnaws.com 
Policy: Simple 
tRRSet CNAME with DNS name 
rot at zom 
Create 
11223344 

Routing Policy Simple

Machine generated alternative text:
Simple Routing Policy 
• Use when you need to redirect to a 
single resource 
• You can't attach health chec o 
routing policy 
• If multiple values are returned, a random 
one is chosen by the client 
foo.example.com 
A: 11.22.33.44 
Route 53 
Web browser 

DEMO:

Machine generated alternative text:
aws 
Health checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
domains 
PO nding 
Resolver 
end 
Outbou nd endpoints 
Resource Grou" 
to 
Set Name 
Crag te Set 
Create Set 
Type: A — 
C) Y" No 
TTL (S.ds): 
value: 386M 16.186 
Policy: Sirnøle 
L_- 
I_LL 
simple s 
1122.33." 
stephanetheteacher.am. 
myahas 
stegfianethetexher.am, 

Value : public ip of ec2

Machine generated alternative text:
ello World from ip-172-31-17-173.eu-west-1.compute.internal in AZ eu-west-lc 

**NOTE : we can configure multiple ip also**

Machine generated alternative text:
aws 
Health checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
domains 
PO nding 
Resolver 
In bound 
Outbou nd e ndpoints 
Resource &oups 
Reccyd Set Name 
Cræte Set 
X 
Arri : 
Global 
Support 
'n this 
Edit Set 
Name: simple nm_ 
A"aS: C) Yes No 
TTL (Seconds): 
3.86.116.1% 
342%122.72 
192020s 
Routing policy: Simple 
R." 53 
ttldem 
Stephanethetexher.ayn. 
1122.33." 
342s&2272 
3.116.1" 

**Routing Policy weighted**

Machine generated alternative text:
Weighted Routing Policy 
• Control the % of the requests 
that go to specific endpoint 
• Helpful to test 1% of traffc on 
new app version for example 
• Helpful to split traffc betwee 
two regions 
• Can be associated with 
Health Checks 
Ive written a note here. 
Stephane Maarek 
20% 
Weight: 70 
Weight: 20 
Weight: 10 
Route 53 

**3 ec2 will configure with weightage with record set**

Machine generated alternative text:
aws 
checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
PO nding 
Resolver 
Outbou nd endpoints 
Resource Groups 
to 
Reccyd Set Name 
Crag te Set 
mul 
Create Set 
Type: A — 
C) Y" No 
TTL (S.ds): 
value: 22.72 
Ente 
Routi ng policy: 
Global 
we ighted 
Support • 
s W.hanetheteacher, 
112233." 
342%.12272 
u. 116.1" 
Set ID: My Data Ce ntre 
ce•æ 
Associate With H Check : C) Y" No 
pelie„ 
lave written a note here. 
Q Feedback 
Q&A 
English 
Notes 
Announcements 

Machine generated alternative text:
aws 
I Hosted zones 
Heal 0-1 checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
PO nding 
Resolver 
Outbou nd endpoints 
Resouæe &ou" 
Reccyd Set Name 
Stephanetheteacher.am. 
myahas 
Cræte Set 
Tet 
Create Set 
Type: A — 
C) Y" No 
TTL (S.ds): 
value: 
Routi ng policy: 
RWE S' 
set ID: US 
l_ji 
112233." 
3_86.118186 
342%.12272 
2%.12272 
have written a note here. 
ce•æ 
Associate With H ea Check : C) Y" No 

**Routing Policy Latency**

Machine generated alternative text:
Latency Routing Policy 
• Redirect to the server that 
has the least latency close 
to us 
• Super helpful when latency 
of users is a priority 
• Latency is evaluated in 
terms of user to 
designated AWS Region 
• Germany may be directed 
to the US if that's the 
nave written a note here. 

**Hands on**

Machine generated alternative text:
aws 
I zones 
Heal r' checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
domains 
PO nding 
Resolver 
In bound 
Outbou nd endpoints 
Rules 
Resource &oups 
Reccyd Set Name 
Cræte Set 
Support • 
Create Set 
Type: A — 
C) Y" No 
TTL (S.ds): 
value: 34255122.72 
Ente 
Routi ng policy: 
west • 1 
Set ID: 
latency s 
11223344 
385.116.1" 
342551 n.72 
2%.12272 
Stephanetheteacher. 
Sinple.stephanetheteaewc.n. 
)eople have written a note here. 
—j 
CNA'E 
English w s) 
Awiate with H C) yes c' No 
pelie„ 

**Closest latency will come**

Machine generated alternative text:
Hello World from ip-172-31-17-173.eu-west-1.computeänternal in AZ eu-w#t-lg 

**Route 53 Health Check**

**Note :**

**Route 53 will not send traffic to instance if the the instance is unhealthy**

Machine generated alternative text:
Health Checks 
• Have X health checks failed 7--5 unhealthy (default 3) 
• After X health checks passed heath (default 3) 
• Default Health Check Interval: 30s (can set to IOS — higher cost) 
• About 1 5 health checkers will check the endpoint health 
• one request every 2 seconds on average 
• Can have HIT P, TCP and HIT PS health checks (no SSL verification) 
• Possibility of integrating the health check with CloudWatch 
• Health checks can be linked to Route53 DNS queries! 

**Health check demo**

**Step 1:**

**Click health check**

Machine generated alternative text:
aws 
zones 
checks 
Traffic flow 
T raffiC 
policy records 
Domains 
PO nding 
Resolver 
ond*nts 
Outbou nd 
Resource Groups 
Reccyd Set Name 
Create Set 
X 
Ami : 
Tet 
Support 
o get stut4 click Set buttm an 
CNA"E 
Miss 1 n. 72 
311271.34 
AXIAS 
•S 122.72 
86_116.186 
34.255122.72 
3.112_71.34 
)ple have written a note here. 
weightea.Stephanet'*teadM 

**Configure ip of ec2**

Machine generated alternative text:
Step 2: Get when chæk fails 
53 •yo. S*-v€S. tüø an 
to 
Monitor an endpoint 
0 
Status Of Ottv 
State ot 
Rwte 53 heath try to a TCP to deemine it 's healthy. 
IP address • 
Host 
Advanced configuration 
written a note here. 
34.2%.122.72 
WWW 
http•JÆ4_25S122.72-.v 
0 
o 
Q&A 
Notes 
URL 
Announcements 

Machine generated alternative text:
aws 
Resource Groups 
Get notified when health check fails 
If yu wu.t to SRS status of the health changes to 
an to 
NOO 
mul 
Create health check 
Step I : Configure Fæalth check 
I Step 2: Get notified when health check 

**Three health check we will create for different ec2 instance**

Machine generated alternative text:
Services 
Hosted zones 
I Health checks 
Traffic flow 
Traffic policies 
policy records 
Domains 
Registered domains 
pending requests 
Resolver 
vpCs 
Inbound endpoints 
Outbound endpoints 
I note here. 
Resource Groups 
Health check with id 8673dd20-db30-4cf1-alcc-48a9638fc266 has been created successfully 
aatacumulus•course 
NO alarms configured. 
No alarms configured. 
NO alarms configured. 
30 seconds O 
30 
No O 
Global 
Support 
Create health check 
Filter by keyword 
Delete health check 
Edit 
Health checkers 
.112.71.34:80/ 
_ 255.122-72:W 
Advanced configuration 
Request interval 
Failure thresh01d 
Search string 
Latency graphs 
Invert health check 
Disable health check 
Tags 
Latency 
I to 3 Of 3 health checks 
8673dd20-db304cf1-a1cc48t 
b6c6368f-4b6d-4247-b5ee-74E 
bdgc8ab8-2e274462-ace1-f5f; 
cc 
a 
Info 
Virginia Health Check 
Tokyo Health Check 
Ireland Health Check 
Monitoring 
Alarms 
URL 
8673dd20-db304ct1 -a 1 cc48aE38tc266 
http•..'/386.116%6:80,' 
IP address 
HTTP O 
BOO 
-o 
Specify endpoint by 
Protocol 
Host name 
IP address 
port 
Path 

**Routing Policy Failover**

Machine generated alternative text:
Failover Routing Policy 
DNS Request 
Web browser 
Health check 
(mandatory) 
Primary 
Failover 
Secondary 
isaster recovery) 
Route 53 

**Note:**

**Linked health check while creating record set**

Machine generated alternative text:
y - Failo 
aws 
Dashboard 
Hosted zones 
Health checks 
Traffic flow 
Traffic poltcies 
Policy records 
Domains 
Resource Groups 
Back to Hosted Zones 
Record Set Name 
Zone File 
Aliases Only 
Delete Record Set 
WeOhted Only 
Test Record Set 
datacumulus•course 
Create Record Set 
Name: 
Type: A — IPv4 address 
Alias: C) Yes @ No 
TTL (Seconds): 
34255.122.72 
Global 
failover 
Support 
coo 
Step ha n e 
Services v 
Create Set 
X Any Type 
Typ* 
CNAME 
CNAME 
60 
'te phanetheteacher 
hanet he , 
hanetheteacher_com. 
'hanetheteacher.com. 
d. stephanetheteacher com. 
_ Corn. 
Evauate Target Hea&• • 
NO 
No 
Health ID - 
AL IAS 1926827298.eu-west 
nS- 1468. 
ns-633. m•vsdns• 15. net. 
ns-252_ awsdns•31. com. 
TIS- 1800. awSdns—33.CO. 
web-app-alb.307564896_eu.west.3_ 
38.116.186 
34253122.72 
3.112.71.34 
AL IAS I 
1 _elb_arnazona 
1122.3344 
386.116.186 
3425512272 
386.118186 
34.255.122.72 
Registered domains 
pending requests 
Resolver 
VPCs 
Inbound endpoints 
Outbound endpoints 
Rules 
2:14 
address. multiple aldresses 
separate lines. 
'92.0.2235 
198.51.1W,234 
Routing policy: Failover 
Route 53 to using primary record sets if any are 
using SCtS Learn More 
Fa 'lover Record Type: @ primary C) Secondary 
Set ID: failover-primary 
Associate with Health Check: yes C,) NO 
When resp«ding to Route 53 can omit that health 
Health Check to Associate: 
Ireland Health Check 

**This time it will not associate with health check**

Machine generated alternative text:
t e S 3 X A. Rwte 93 - X EC2 X a 
x 342%122.n 
Test Record Set 
1 17 17 
Support 
coo 
Step ha n e 
Delete Record Set 
WeOhted Only 
aws 
Dashboard 
Hosted zones 
Health checks 
Traffic flow 
Traffic policies 
Policy records 
Domains 
Registered domains 
pending requests 
Resolver 
VPCs 
Inbound endpoints 
Outbound endpoints 
Rules 
Feedback 
Resowce Groups v 
Back to Hosted Zones 
Record Set Name 
ephanetheteacher.com. 
larnetest Ste phanetheteacher.can. 
i lover. Steph 
tency.stephanetheteacher_com. 
tency.stephanetheteacher_com. 
yal as stepha netheteacher.com. 
yapp stepha ne theteacher. . 
Yfi 
mple.stephanetheteacher_com. 
dern•OStephanetheteacher.com_ 
Sghtedstephanetheteacher.com 
yightedstephanetheteacher.com_ 
yightedstephanetheteacher.com. 
Steptlanetheteacher.com. 
Any Type 
Irrun-t Zone File 
Aliases Oriy 
Create Record Set 
Name: 
Type: A — IPv4 address 
Alias: C) Yes @ No 
TTL (seconds): 
3.86_118186 
failover 
r.s- 1800. awSdnS-33.CO. 
ns-252 
elb_amazonaws 
34255.122.72 
386.116.186 
34255.122.72 
DemoRoute53-192682729&eu.vest.1 _e'b.mazona 
1122.3344 
386.116.186 
34.255.122.72 
386.116.186 
3425M22.72 
3.1127134 
CNAME 
CNAME 
CNAME 
*'dress. multiple addresses 
on SOarate lines 
'9202235 
Routing policy: Failover 
Route 53 to using primary record sets if any are healthy. 
using SMS Learn More 
Fa i lover Record Type: C) primary 
Set ID: failover-Secondary 
Associate with Health Check: 
C) Yes NO 
English 

Machine generated alternative text:
S3 A. Rwle 53 - X L 
EC2 x 
Create Set 
X Any Type 
TTL 
34.2%'22.72 
Test Record Set 
Global 
Su»ort 
coo 
aws 
Dashboard 
Hosted zones 
Health checks 
Traffic flow 
Traffic poltcies 
Policy records 
Domains 
Registered domains 
pending requests 
Resolver 
VPCs 
Inbound endpoints 
Outbound endpoints 
Rules 
Q Feedback 
Resowce Groups v 
Back to Hosted Zones 
Record Set Name 
alth ID 
Import Zone File 
Aliases Only 
Wee,t • 
Delete Record Set 
WeOhted Only 
Edit Record set 
Name: failover 
Type: A — I PV4 add reSS 
Alias: O Yes No 
TTL (Seconds): 
386.116, 186 
•e 1 18 
Ans. — Set ID 
Tc*yo 
e 200* - 
60 
I Pv4 address. EMU rwltiple 
19202.235 
198.51.1W234 
Routing policy: Failover 
Route 53 to wing prinary record SCtS any are 
using —daff —d Wts L— 
Fa i r Record Type: C) Primary Secondary 
Yc8ab8-2e27-4462-ace145f893c23745 
English (us) 
60 
300 
Set ID: failover-secondary 
Associate with Health Check: 
O Yes @ No 
ap-northeast- I 
Tam-I s 
Save Record Set 
affliates All rights *-ivacy Policy 
cn Wed 

**Health one**

Machine generated alternative text:
C Not ) Com 
Mello World from ip-172-31-17-173.eu-west-1.compute.internal in AZ eu-west-lc 

**Stop ec2 instance**

Machine generated alternative text:
Dashboard 
Hosted zones 
I Health checks 
Traffic flow 
Traffic policies 
policy records 
Domains 
Registered domains 
pending requests 
Resolver 
vpCs 
Inbound endpoints 
Outbound endpoints 
Create health check 
Filter by keyword 
Delete health check 
Edit health check 
Health 
Ito 3 of 3 health checks 
8673dd20-db30-4cf1-a1cc-48z 
b6c6368f-4b6d-4247-b5ee-74E 
bd9c8ab8-2e27-4462-ace1-f5fl 
Tags 
Info 
Virginia Health 
Tokyo Health Check 
Ireland Health Check 
Unhealthy 
http•J/3_112.71.34•a0./ 
htw.','34.255.122.72.80,' 
NO alarms configured. 
No alarms configured. 
No alarms configured. 
Monitoring 
Alarms 
Click on a graph to see an expanded view. View rnetrics in CbudWatch 
Health checks Ireland Health 
Time range Last hour 
Health check status 
Health checkers that report the endpoint healthy (percent) 

**Now we redirect to failover**

Machine generated alternative text:
Hello World from ip-172-31-87-76.ec2.internal in AZ us-east-la 

**Routing Policy Geolocation**

Machine generated alternative text:
Geo Location Routing Policy 
• Different from Latency based! 
• This is routing based on user 
location 
• Here we specify: traffc from the 
UK should go to this specific IP 
• Should create a "default" policy 
(in case there's no match on 
location) 
A: 11.22.33.44 
DEFAULT 
33.44.55.66 
0 
A: 22. 
33.44.55 

**Demo**

All the traffic come from france will go this ip

Machine generated alternative text:
I Hosted zones 
Heal r' checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
PO nding 
Resolver 
In bound 
Outbou nd endpoints 
Services 
Resou Groups 
Record Set Name 
Stephanetheteacher.am. 
Cræte Set 
X 
Amy : 
Tet 
Global • 
geo 
Support • 
Create Set 
Type: A — 
C) Y" No 
TTL (S.ds): 
Value: 
3'_2SS.'2272 
3.116.1" 
zz.72 
'22.72 
Routing policy: 
S' CNS 
Set ID: 
France 
Geo- Franco 
No 
A"0Ciate With Health Check: CJ Y" 
Create 

**If we don’t have any match then send to default**

Machine generated alternative text:
aws 
I zones 
Heal r' checks 
Traffic flow 
T raffiC policies 
policy records 
Domains 
PO nding 
Resolver 
In bound 
Outbou nd endpoints 
Resource &oups 
Reccyd Set Name 
la tency, 
Support • 
Cræte Set 
Create Rewd Set 
geo 
Type: A — 
C) Y" No 
TTL (S.ds): 
value: 3.112.71.34 
ng policy: 
Set ID: Re/ 
34255.12272 
34255.12272 
3112.7134 
Associate With Health Check • 
O Y" No 

**Routing Policy Multivalue**

Machine generated alternative text:
Multi Value Routing Policy 
• Use when routing traffic to muftiple resources 
• Want to associate a Route 53 health checks with records 
• Up to 8 healthy records are returned-f r each Multi Value query 
• Multi Value is not a substitute r *ting n ELB 
set ID 
Webl 
Web2 
web3 
Health Check 
c 
Name 
www.example.com 
www.example.com 
www.example.com 
Type 
A Record 
A Record 
A Record 
lu 
192.0.2.2 
198.51.100.2 
203.0.113.2 
60 
60 
60 

**Demo**

Machine generated alternative text:
aws 
I zones 
checks 
Traffic flow 
T raffiC pc*iCieS 
policy records 
Domains 
PO nding 
Resolver 
In bound 
Outbou nd endpoints 
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Creste 
mul 
TTL (Sæds): 
value: 
19202235 
Routing policy: 
CNS 
set ID: Multi-Ireland 
Global 
Support • 
coo 
Resource Groups 
to 
Set Name 
la tency, 
CRAVE 
3&.116.1" 
34255117244 
3_86.118'86 
O No 
Axiate with He Ith Yes 
53 
Hea Ith Check to Associate: HoaRh Check 
- Set 
pelie„ 

**Multi associated with some health check**

**Query :**

1)The DNS protocol does not allow you to create a CNAME record for the top node of a DNS namespace (mycoolcompany.com), also known as the zone apex

2)Weighted allows you to redirect a part of the traffic based on a weight (hence a percentage). It's common to use to send a part of a traffic to a new application you're deploying

3)DNS records have a TTL (Time to Live) in order for clients to know for how long to caches these values and not overload the DNS with DNS requests. TTL should be set to strike a balance between how long the value should be cached vs how much pressure should go on the DNS.

4)Latency will evaluate the latency results and help your users get a DNS response that will minimize their latency (e.g. response time)