



**SPACE
SURFER**

NETWORK DIAGRAM DOCUMENT

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GITHUB: [GITHUB.COM/CARINEGORDILLO/CECS491](https://github.com/CARINEGORDILLO/CECS491)

Version History

Version	Date	Changes
1	December 18, 2023	Initial submission

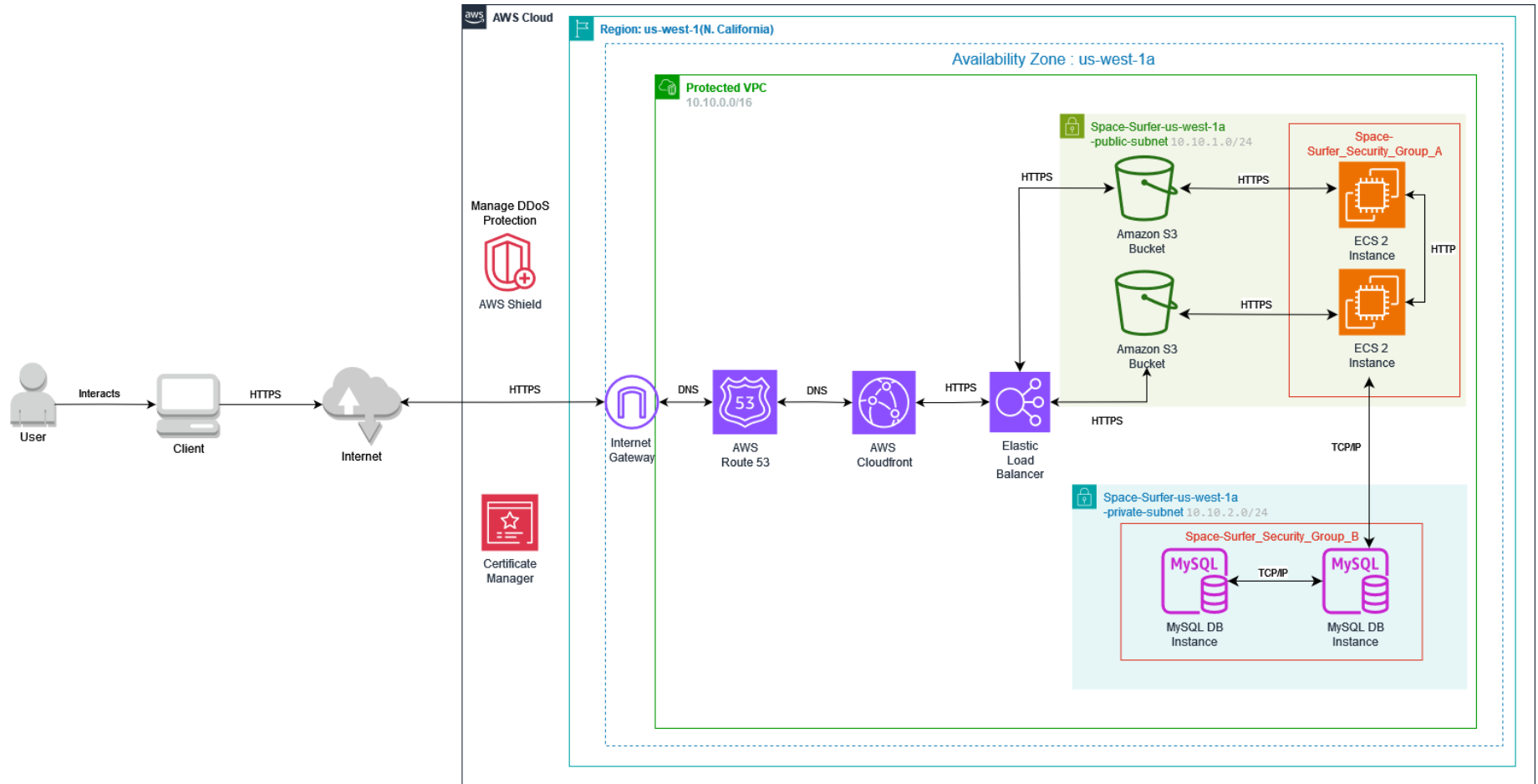
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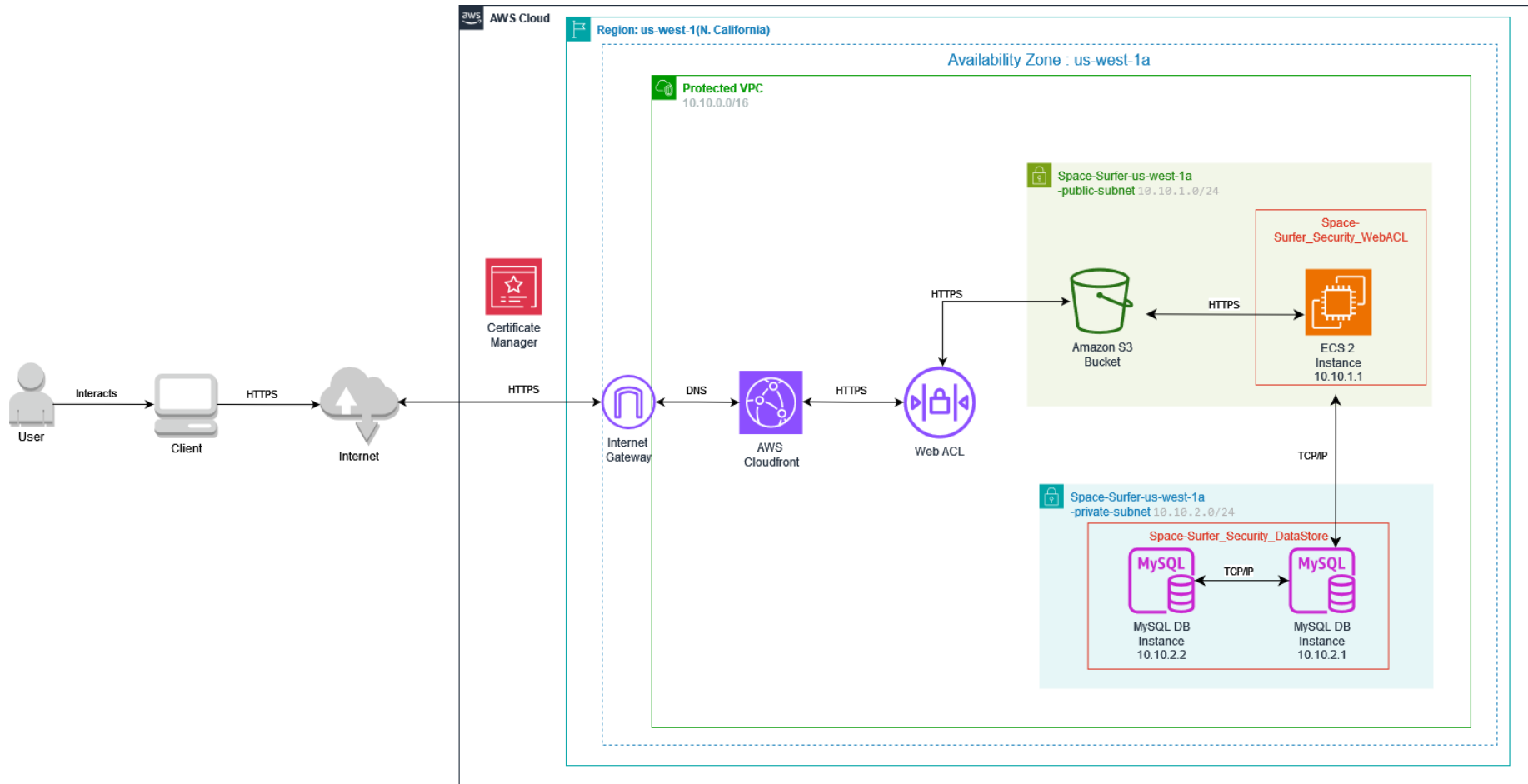
Introduction:

The purpose of this document is to provide a detailed overview of how each feature in our web application functions. Each feature will have its own diagram showing the flow of data through each layer that feature will go through. Our diagrams will address all success and failure outcomes so that all scenarios regarding that feature will be accounted for. With the help of these diagrams, developers and clients will gain a better understanding of how each feature will work and interact with the different layers that allow our application to function.

Ideal Network Design



Realistic Network Design



Rules

AWS Cloudfront Rule Group

Type	Protocol	Port Range	Source IP	Destination IP	Action
HTTPS	TCP	443	California IP	10.10.1.0	Allow

Web ACL Inbound Rules

Rule	Type	Protocol	Port Range	Destination IP	Action
100	HTTPS	TCP	443	California IP	Allow

Web ACL Outbound Rules

Rule	Type	Protocol	Port Range	Destination IP	Action
100	HTTPS	TCP	443	California IP	Allow

Space-Surfer_Security_WebACL Inbound Rules

Type	Protocol	Port Range	Source
HTTPS	TCP	443	California IP
MySQL	TCP	3306	10.10.2.0

Space-Surfer_Security_WebACL Outbound Rules

Type	Protocol	Port Range	Source
HTTPS	TCP	443	California IP
MySQL	TCP	3306	10.10.2.0

Space-Surfer_Security_DataStore Inbound Rules

Type	Protocol	Port Range	Source
HTTPS	TCP	443	California IP
MySQL	TCP	3306	10.10.1.0

Space-Surfer_Security_DataStore Outbound Rules

Type	Protocol	Port Range	Source
HTTPS	TCP	443	California IP
MySQL	TCP	3306	10.10.1.0

ECS2 Configuration

Windows Server 2022
t2.micro
1Gb Memory
30 Gb Storage
IP 10.10.1.1

Microservices Ports

Account Management Center: 5000
User Security: 5001
Space Manager: 5002
Space Booking Center: 5003
Personal Overview Center: 5004
Reservation Confirmation Email: 5005
Registration: 5006
Logging: 5007
SQLDAO: 5008
UI: 5009
Upload Floor Plan: 5010
Analytics: 5011
Archiving: 5012

RDS Configuration

MySQL Server
db.m7g.large
2 vCPU
Memory (GiB) 8
Max. EBS bandwidth (Mbps) Up to 10,000
Network bandwidth (Gbps) Up to 12.5
IP: 10.10.2.1

RDS Configuration - Archive

MySQL Server
db.m7g.large
2 vCPU
Memory (GiB) 8
Max. EBS bandwidth (Mbps) Up to 10,000
Network bandwidth (Gbps) Up to 12.5
IP: 10.10.2.2