Previous Architecture

Before migration to Google Cloud Platform and update of the tools
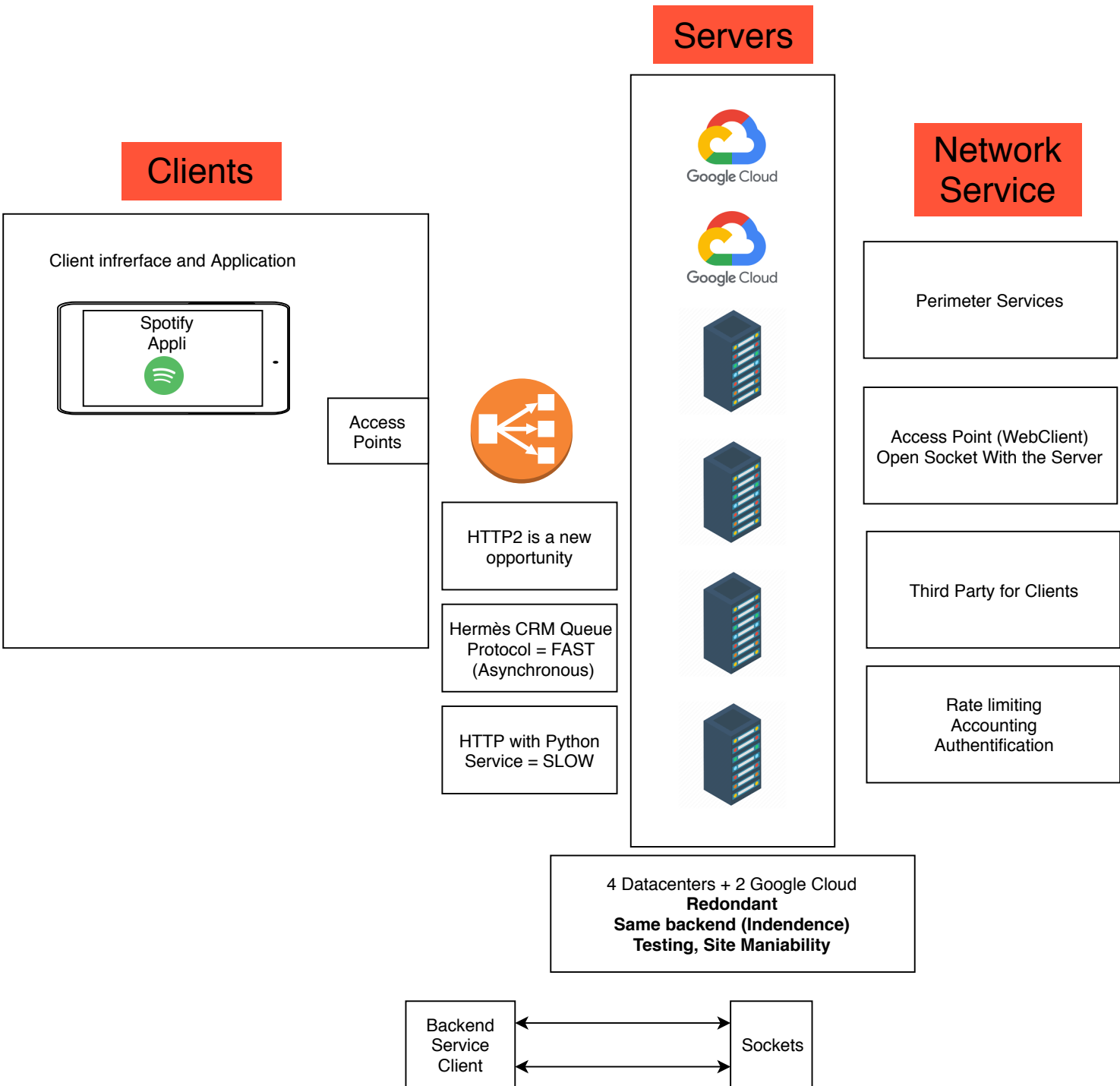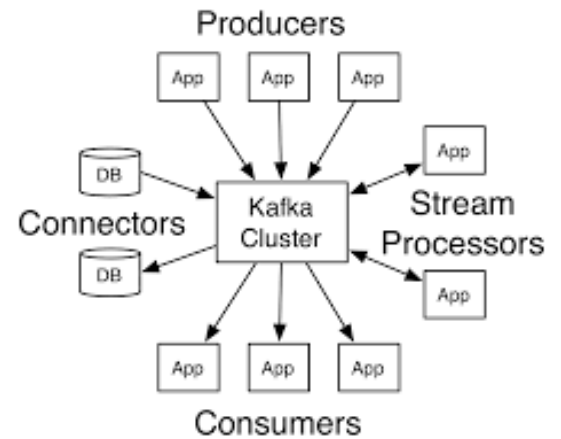
Clients

Servers

Network Service

Client infrerface and Application

Spotify
Appli

Access
Points

Perimeter Services

Access Point (WebClient)
Open Socket With the Server

HTTP2 is a new
opportunity

Third Party for Clients

Hermès CRM Queue
Protocol = FAST
(Asynchronous)

Rate limiting
Accounting
Authentification

HTTP with Python
Service = SLOW

4 Datacenters + 2 Google Cloud
Redondant
Same backend (Indendence)
Testing, Site Maniability

Backend
Service
Client

Sockets

Producers

App App App

DB Connectors

Kafka Cluster

App Stream Processors

DB

App

App App App

Consumers

Front-End Appli

View Services:
- Needs of the client
- Search query

Search View

Render The Interface

Core
- Audio Playback
- Offline Support

Rendering:
- Chrome Web Processor
- iOS
- Android

Data Oriented

Entities

Track Metadata

Play Logs

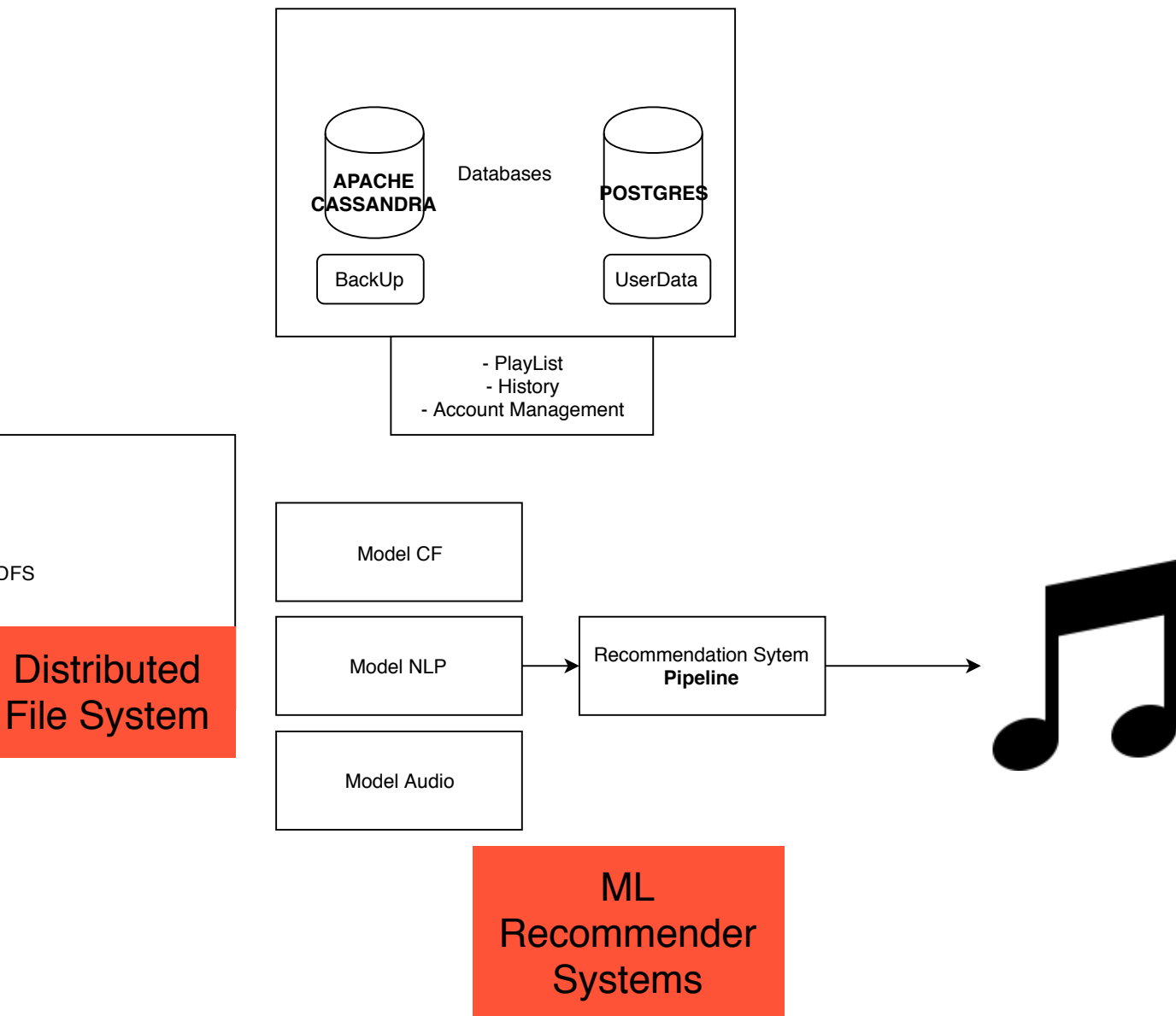Search

Client Artist

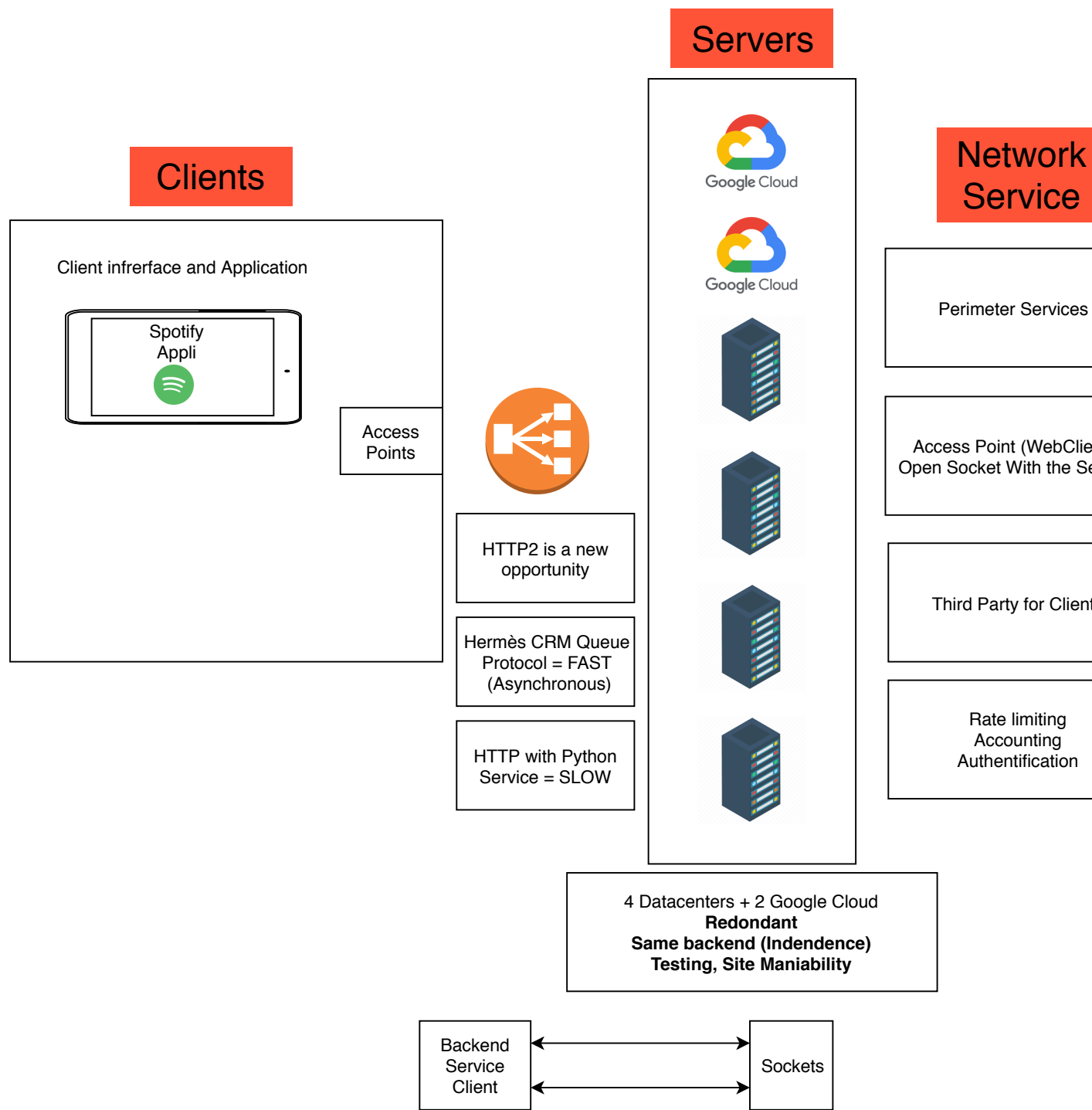Client User

Playlist

Discover

Kafka

Big Data Infra

hadoop HDFS

HD

App DB Interaction

cassandra cassandra cassandra

Replication and Scalability

Databases

APACHE CASSANDRA

POSTGRES

BackUp

UserData

- PlayList
- History
- Account Management

DFS

Distributed File System

Model CF

Model NLP

Model Audio

Recommendation Sytem
Pipeline

ML Recommender Systems

Current Architecture

Before migration to Google Cloud Platform and update of the tools

Servers

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Network Service

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Spotify
Appli

Access
Points

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HTTP with Python Service = SLOW

Google Cloud

Google Cloud

Perimeter Services

Access Point (WebClie
Open Socket With the Se

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Search

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Track Metadata

Play Logs

Big Da

Cloud
Pub/Sub

Cloud
Bigtable

Replication and Scalability

Google Cloud Platform

ata Infra

HDFS

Distributed
File System

Model CF

Model NLP

Model Audio

Recommendation Sytem
Pipeline

ML
Recommender
Systems

Cloud
Dataflow