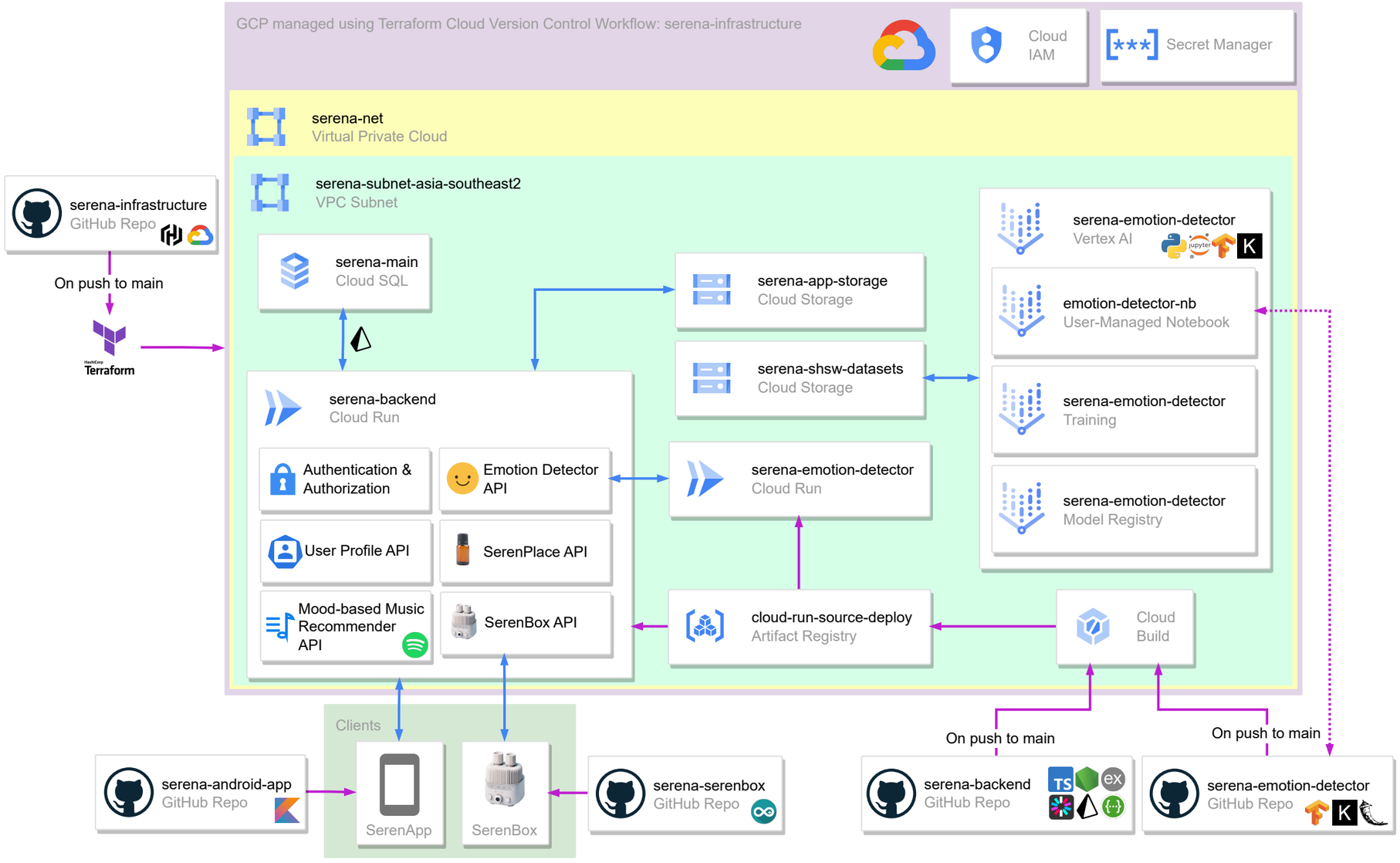
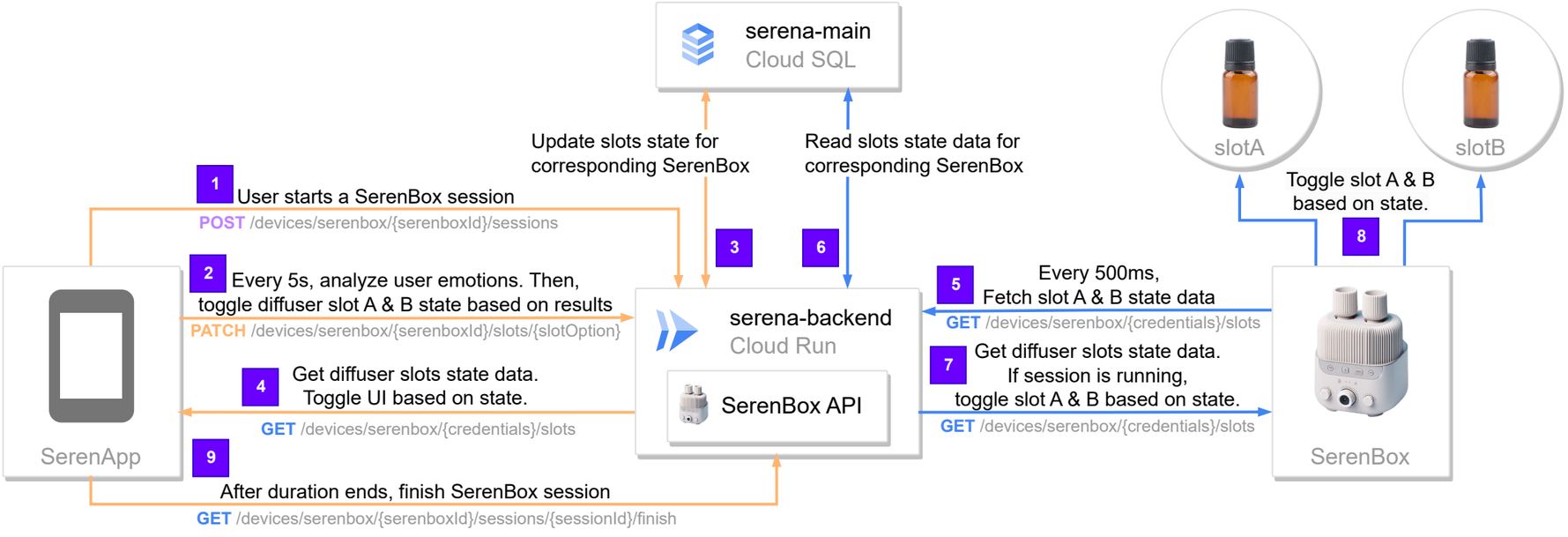

GCP managed using Terraform Cloud Version Control Workflow: serena-infrastructure
Cloud IAM
Secret Manager
serena-net
Virtual Private Cloud
serena-subnet-asia-southeast2
VPC Subnet
serena-infrastructure
GitHub Repo
On push to main
Terraform
serena-main
Cloud SQL
serena-app-storage
Cloud Storage
serena-shsw-datasets
Cloud Storage
serena-emotion-detector
Vertex AI
emotion-detector-nb
User-Managed Notebook
serena-emotion-detector
Training
serena-emotion-detector
Model Registry
serena-backend
Cloud Run
Authentication & Authorization
Emotion Detector API
User Profile API
SerenPlace API
Mood-based Music Recommender API
SerenBox API
serena-emotion-detector
Cloud Run
cloud-run-source-deploy
Artifact Registry
Cloud Build
Clients
SerenApp
SerenBox
serena-android-app
GitHub Repo
serena-serenbox
GitHub Repo
On push to main
On push to main
serena-backend
GitHub Repo
serena-emotion-detector
GitHub Repo


serena-main
Cloud SQL
Update slots state for corresponding SerenBox
Read slots state data for corresponding SerenBox
slotA
slotB
1
User starts a SerenBox session
POST /devices/serenbox/{serenboxId}/sessions
Toggle slot A & B based on state.
8
3
6
2
Every 5s, analyze user emotions. Then, toggle diffuser slot A & B state based on results
PATCH /devices/serenbox/{serenboxId}/slots/{slotOption}
serena-backend
Cloud Run
SerenBox API
5
Every 500ms, Fetch slot A & B state data
GET /devices/serenbox/{credentials}/slots
4
Get diffuser slots state data. Toggle UI based on state.
GET /devices/serenbox/{credentials}/slots
7
Get diffuser slots state data. If session is running, toggle slot A & B based on state.
GET /devices/serenbox/{credentials}/slots
SerenApp
SerenBox
9
After duration ends, finish SerenBox session
GET /devices/serenbox/{serenboxId}/sessions/{sessionId}/finish