Zipline | Keep today on track

Zipline Technical Overview

2023

Agenda

- Overview
- Infrastructure
- Security and Compliance
- Set up
- Integrations
- Case Study

Overview

Zipline

Hi! We’re Zipline.

We’re how best-in-class retailers bring brand strategies to life in stores. A unified platform for operational excellence, Zipline brings together frontline communications, task management, resources, insights, and more– so everyone feels connected to the brand and inspired by their work.

Internal Communications

Task Management

Resource Library

Easy to use for everyone

Single source of truth

Retail expert customer success team

Enterprise security & data privacy

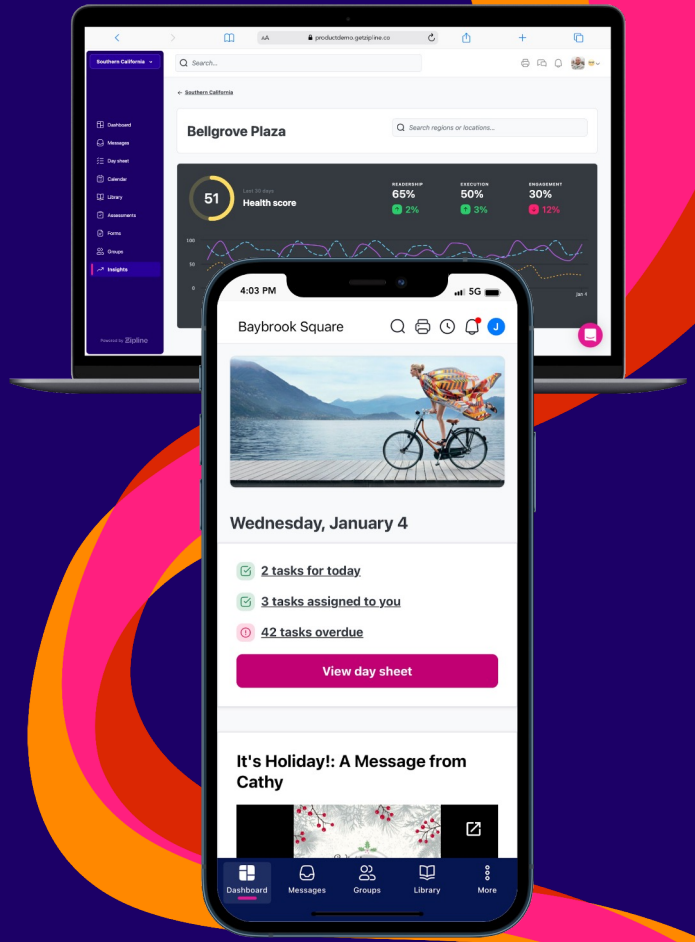
Analytics and insights

APIs, widgets, and integrations.

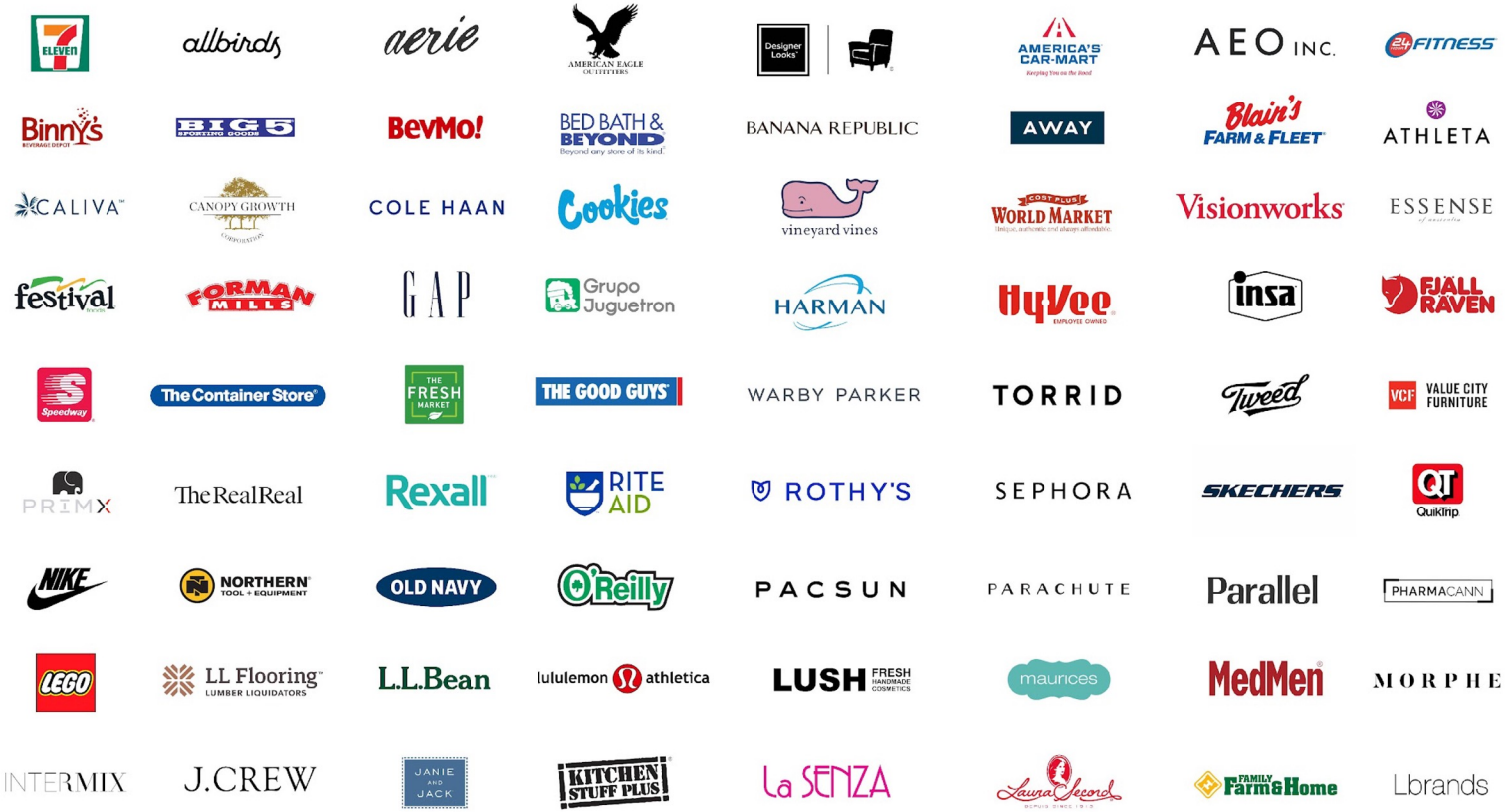
Messaging

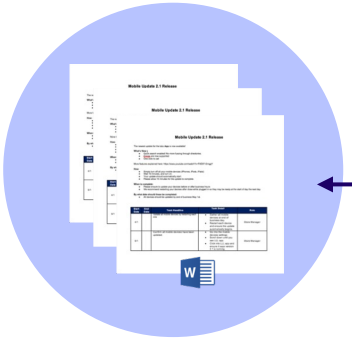
Store Audits

Surveys

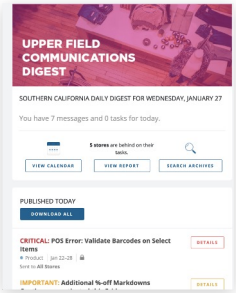


70+ of Retails Best Brands Use Zipline to Enable Operations, Engage Teams, and Inspire

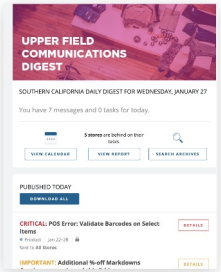




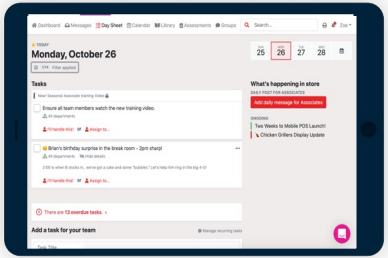
Zipline

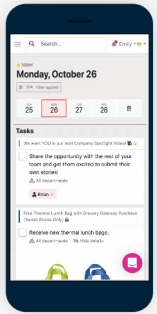


Communications Digest for HQ



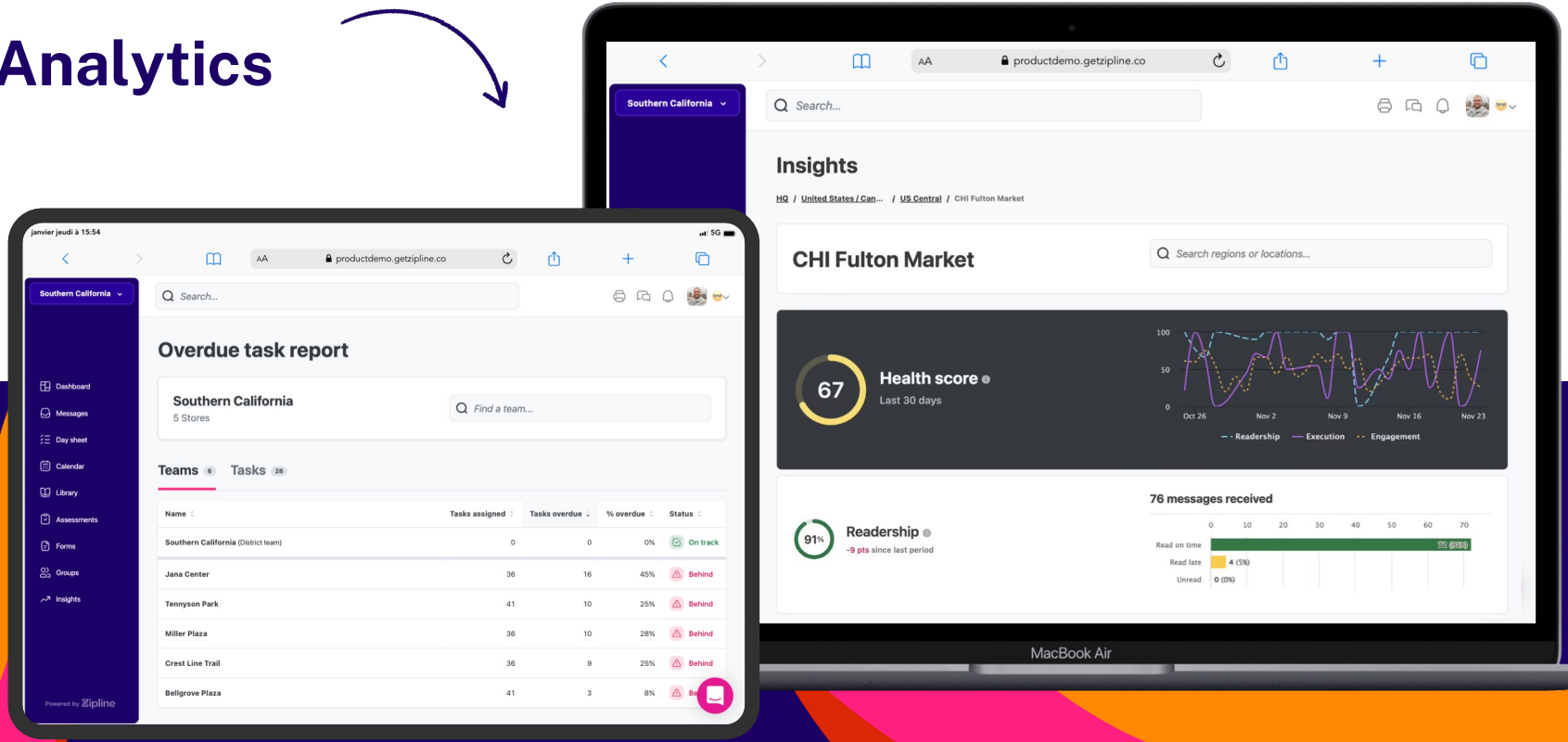
Communications Digest for Upper Field





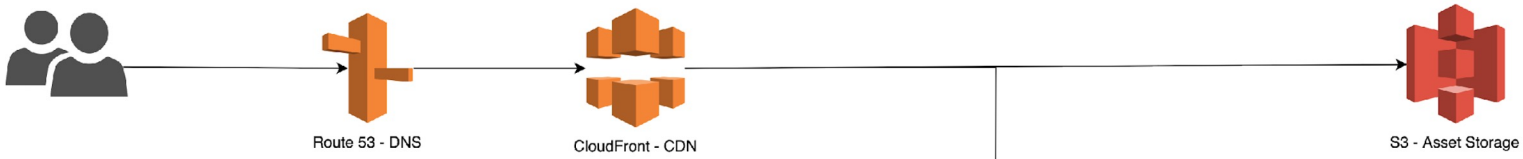
Mobile App for Phones & Tablets

Analytics


productdemo.getzipline.co
Southern California
Search...
Insights
HQ / United States / Can... / US Central / CHI Fulton Market
CHI Fulton Market
Search regions or locations...
67
Health score
Last 30 days
100
50
0
Oct 26
Nov 2
Nov 9
Nov 16
Nov 23
Readership
Execution
Engagement
91%
Readership
-9 pts since last period
76 messages received
Read on time
Read late
4 (5%)
Unread
0 (0%)
MacBook Air
productdemo.getzipline.co
Southern California
Search...
Overdue task report
Dashboard
Messages
Day sheet
Calendar
Library
Assessments
Forms
Groups
Insights
Powered by Zipline
Southern California
5 Stores
Find a team...
Teams 6
Tasks 28
Name
Tasks assigned
Tasks overdue
% overdue
Status
Southern California (District team) 0 0 0% On track
Jana Center 36 16 45% Behind
Tennyson Park 41 10 25% Behind
Miller Plaza 36 10 28% Behind
Crest Line Trail 36 9 25% Behind
Bellgrove Plaza 41 3 8%

Infrastructure

Zipline



Dynamic DNS Routing

Route 53 allows us to use latency based routing so that we can automatically redirect traffic if the latency drops below a threshold that we set.

Global CDN

After DNS, CloudFront is the initial point of contact for the user request. It uses smart caching rules to direct the request to the right location. Using in-region edge nodes dramatically improves speed for SSL termination, file uploads, and static asset requests.

Also provides DDOS, SYN/ACK flood, Reflection attack, and HTTP slow reads protection.

Secure, Redundant File Storage

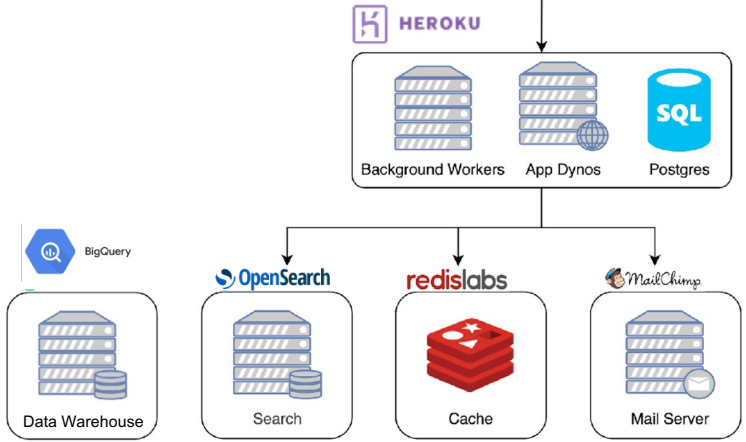
Documents, Static Assets, Videos, etc are all encrypted and stored in S3 grouped by customer subdomain. Uploads go directly to S3 from CloudFront, which improves performance and simplifies security configuration. Customer provided files can only be accessed via Signed Requests.

S3 is designed for massive scale and unlimited capacity.

Zipline

We're standing on the shoulders of giants.
Modern technology allows us to provide a fast, reliable, service to hundreds of thousands of users.

This is an outline of the infrastructure we use to ensure Zipline is always available. Any questions, please contact engineering@retailzipline.com



Realtime Scaling

Heroku's infrastructure allows our application to scale automatically based on the traffic it's serving. This ensures that our application is never overloaded.

Our background worker system allows us to offload slower jobs, such as email sending, so that requests return in milliseconds.

Our managed PostgreSQL database includes automated backups and multi-AZ follower databases.

Background Services

Best-in-class providers are used for other services, such as search, caching, and email sending. Each provider has their own SLA guarantees and is paired with an equally stable failover provider that we can quickly switch to in case of a major provider outage.

DATADOG

Everything is monitored by DataDog to provide real-time alerts and performance insights

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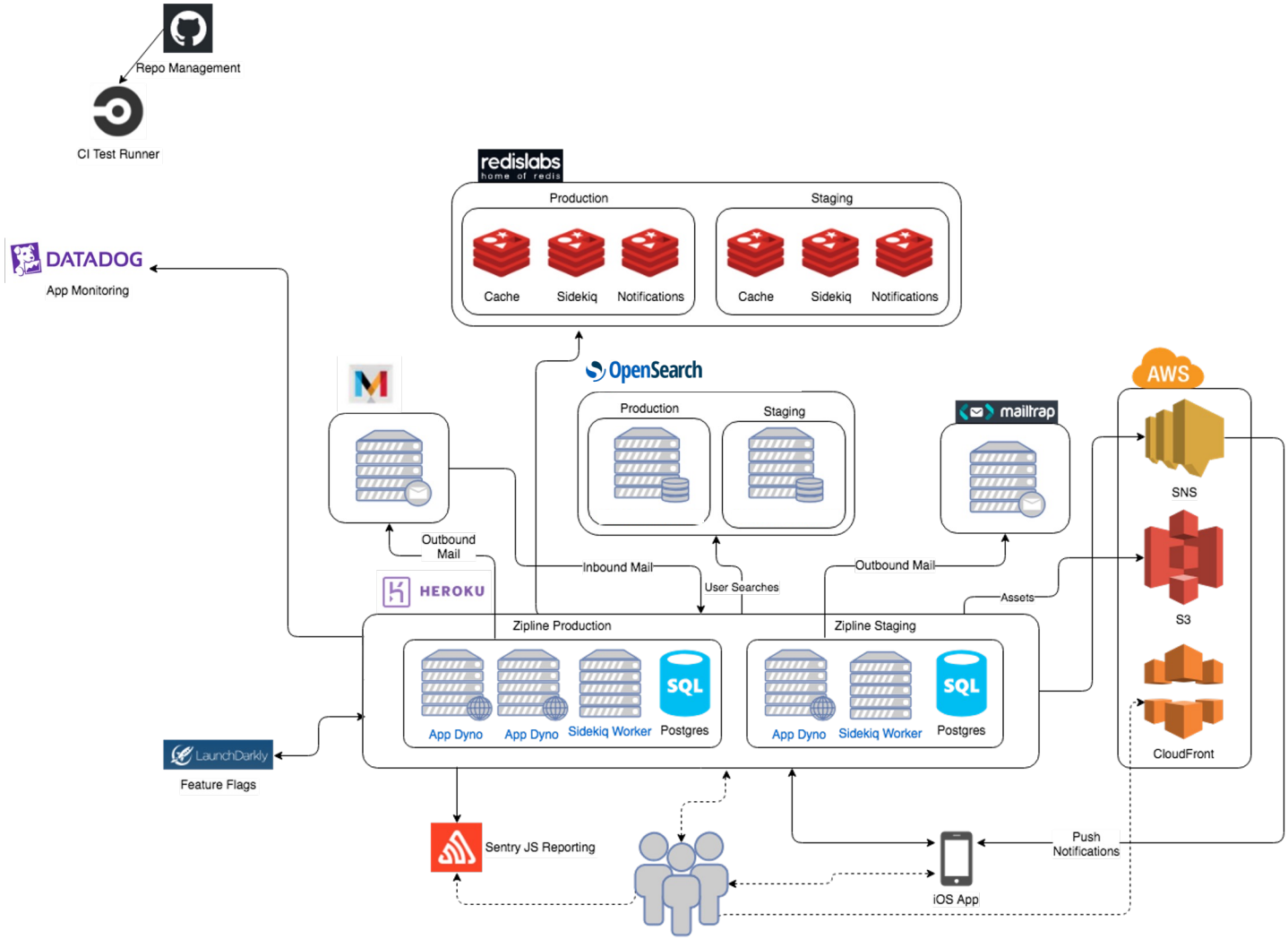
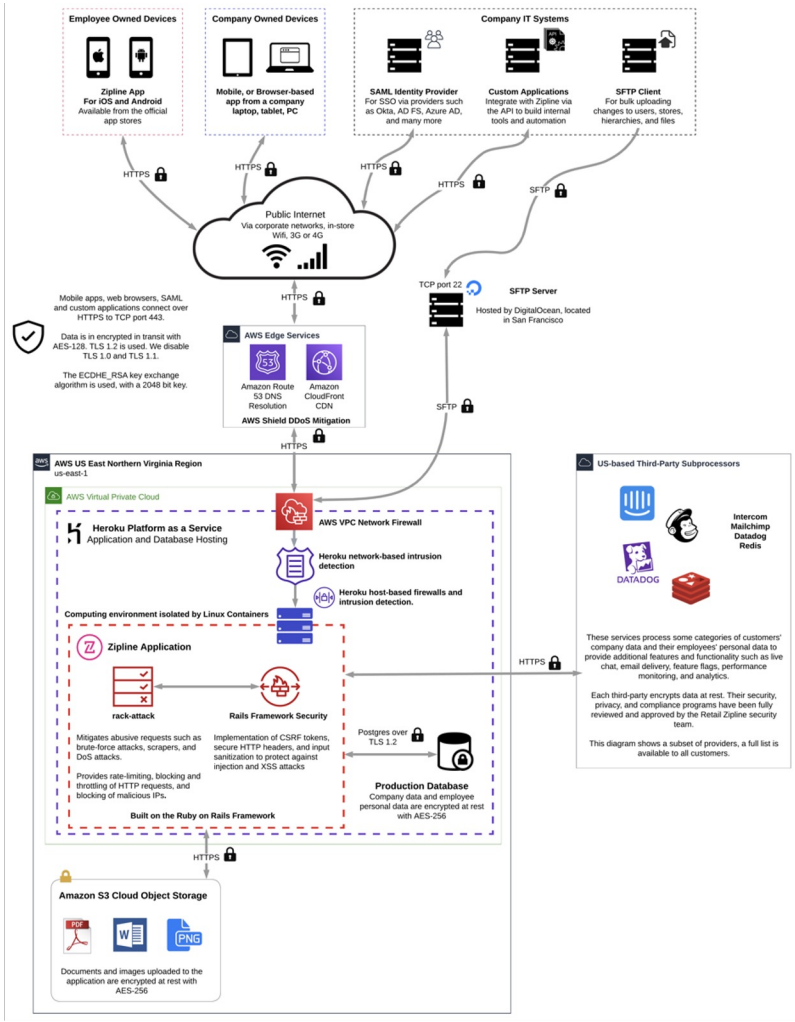

Repo Management
CI Test Runner
redislabs
home of redis
Production
Staging
Cache
Sidekiq
Notifications
Cache
Sidekiq
Notifications
DATADOG
App Monitoring
OpenSearch
Production
Staging
mailtrap
AWS
SNS
S3
CloudFront
Outbound Mail
Inbound Mail
User Searches
Outbound Mail
Assets
HEROKU
Zipline Production
Zipline Staging
App Dyno
App Dyno
Sidekiq Worker
Postgres
SQL
App Dyno
Sidekiq Worker
Postgres
SQL
LaunchDarkly
Feature Flags
Sentry JS Reporting
Push Notifications
iOS App

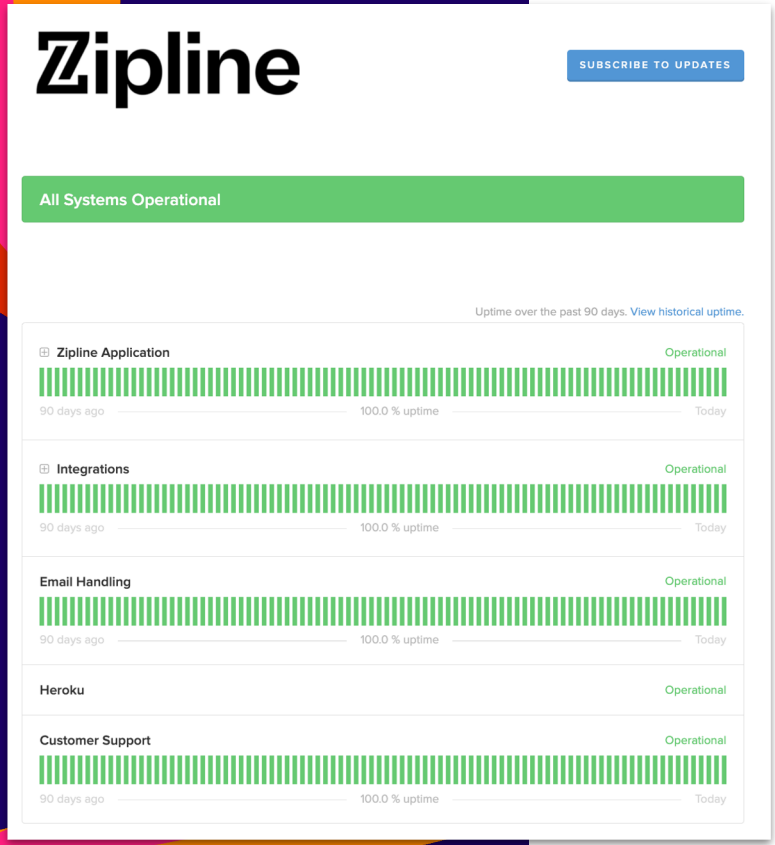

Employee Owned Devices
Zipline App
For iOS and Android
Available from the official app stores
Company Owned Devices
Mobile, or Browser-based app from a company laptop, tablet, PC
Company IT Systems
SAML Identity Provider
For SSO via providers such as Okta, AD FS, Azure AD, and many more
Custom Applications
Integrate with Zipline via the API to build internal tools and automation
SFTP Client
For bulk uploading changes to users, stores, hierarchies, and files
HTTPS
HTTPS
HTTPS
HTTPS
SFTP
Public Internet
Via corporate networks, in-store Wifi, 3G or 4G
HTTPS
TCP port 22
SFTP Server
Hosted by DigitalOcean, located in San Francisco
Mobile apps, web browsers, SAML and custom applications connect over HTTPS to TCP port 443.
Data is in encrypted in transit with AES-128. TLS 1.2 is used. We disable TLS 1.0 and TLS 1.1.
The ECDHE_RSA key exchange algorithm is used, with a 2048 bit key.
AWS Edge Services
Amazon Route 53 DNS Resolution
Amazon CloudFront CDN
AWS Shield DDoS Mitigation
SFTP
HTTPS
AWS US East Northern Virginia Region
us-east-1
AWS Virtual Private Cloud
AWS VPC Network Firewall
Heroku Platform as a Service
Application and Database Hosting
Heroku network-based intrusion detection
Heroku host-based firewalls and intrusion detection.
Computing environment isolated by Linux Containers
Zipline Application
rack-attack
Rails Framework Security
Mitigates abusive requests such as brute-force attacks, scrapers, and DoS attacks.
Provides rate-limiting, blocking and throttling of HTTP requests, and blocking of malicious IPs.
Implementation of CSRF tokens, secure HTTP headers, and input sanitization to protect against injection and XSS attacks
Built on the Ruby on Rails Framework
Postgres over TLS 1.2
Production Database
Company data and employee personal data are encrypted at rest with AES-256
HTTPS
Amazon S3 Cloud Object Storage
PDF
PNG
Documents and images uploaded to the application are encrypted at rest with AES-256
US-based Third-Party Subprocessors
Intercom
Mailchimp
Datadog
Redis
DATADOG
These services process some categories of customers' company data and their employees' personal data to provide additional features and functionality such as live chat, email delivery, feature flags, performance monitoring, and analytics.
Each third-party encrypts data at rest. Their security, privacy, and compliance programs have been fully reviewed and approved by the Retail Zipline security team.
This diagram shows a subset of providers, a full list is available to all customers.
HTTPS

Secure Multi-Tenancy

yourcompany.retailzipline.com

Common	Private
Hosting	Authentication
Database	Database Schema
Business Logic	Business Data
Fault / Service Management	Theme / Configuration
User Interface	
Technical Support	

All data is encrypted in transit and at rest using AES-256 and TLS 1.2



Status and Uptime

Service Level Objective: **99.95%**

90 day rolling average: **99.99%**

You can subscribe to updates for real-time notifications of any issues or service outages.

https://status.retailzipline.com

Security & Compliance

Zipline

Overview

SSL using TLS 1.2 required	✅
Data encrypted in transit and at rest using AES-256	✅
SAML 2.0 based Single Sign-On	✅
Granular app management	✅
Custom message retention	✅
Regular Pen-Testing and System Audits	✅
No History of Intrusions	✅
PCI Compliance	N/A

For more details: https://getzipline.com/security/

Policies and Security

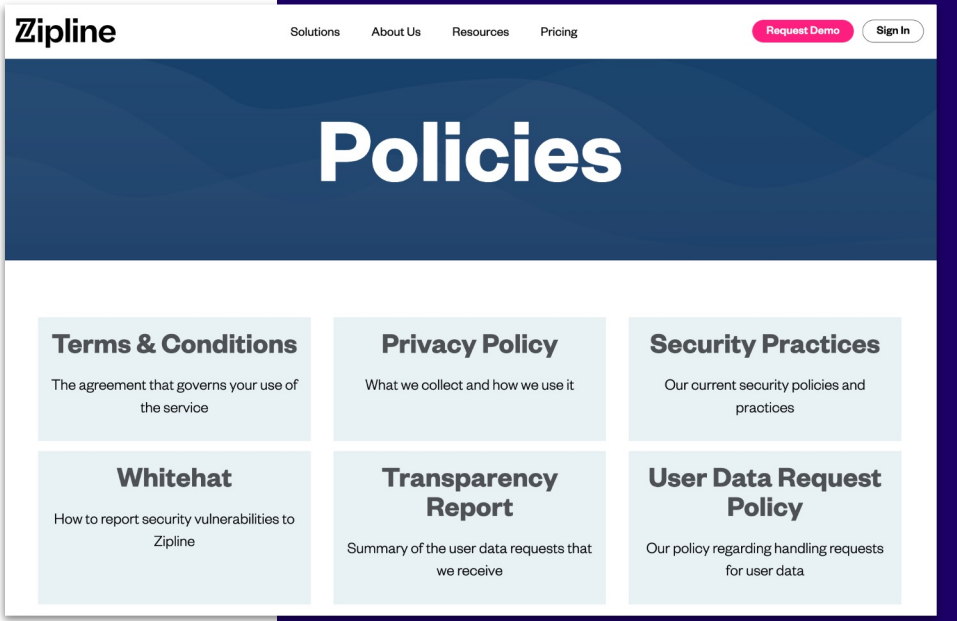
CSA STAR CERTIFICATION

IS PARTNERS LLC · SOC 2 · CERTIFIED PUBLIC ACCOUNTANTS

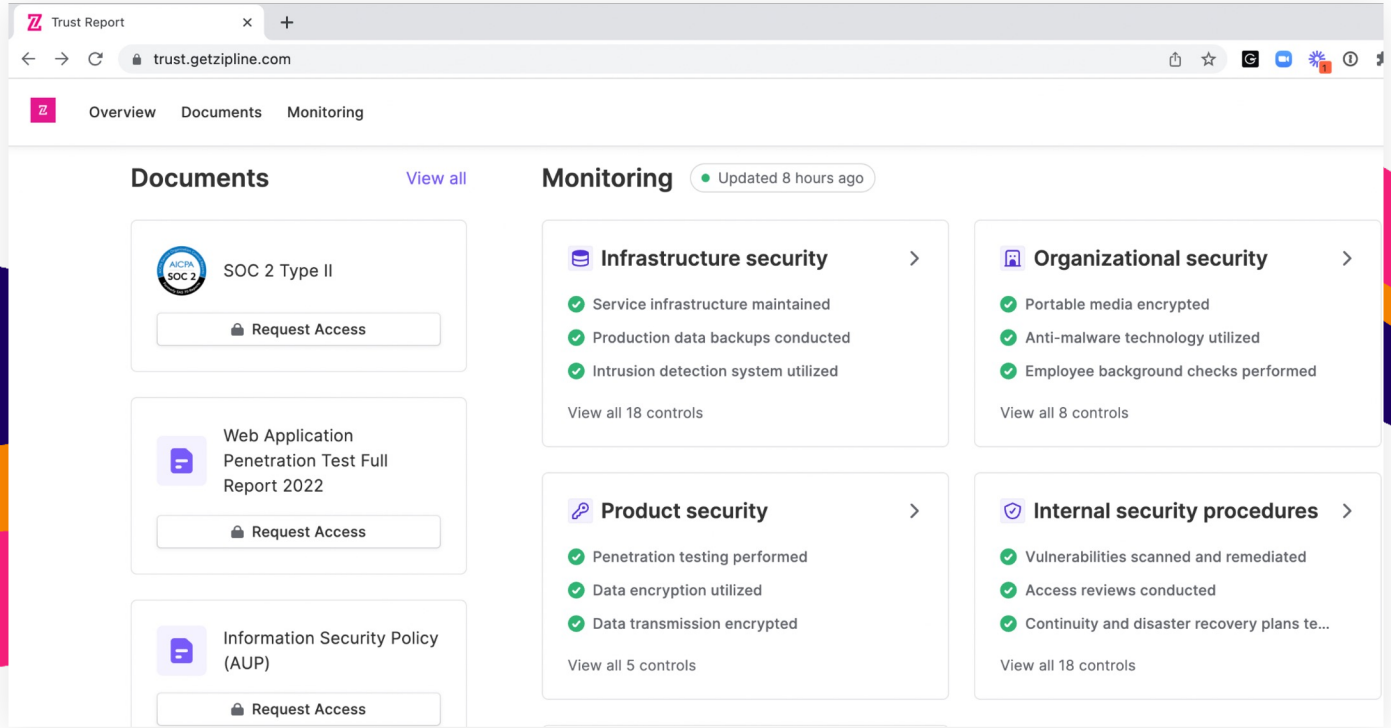
GDPR READY

CCPA READY

https://getzipline.com/policies/



Trust Report

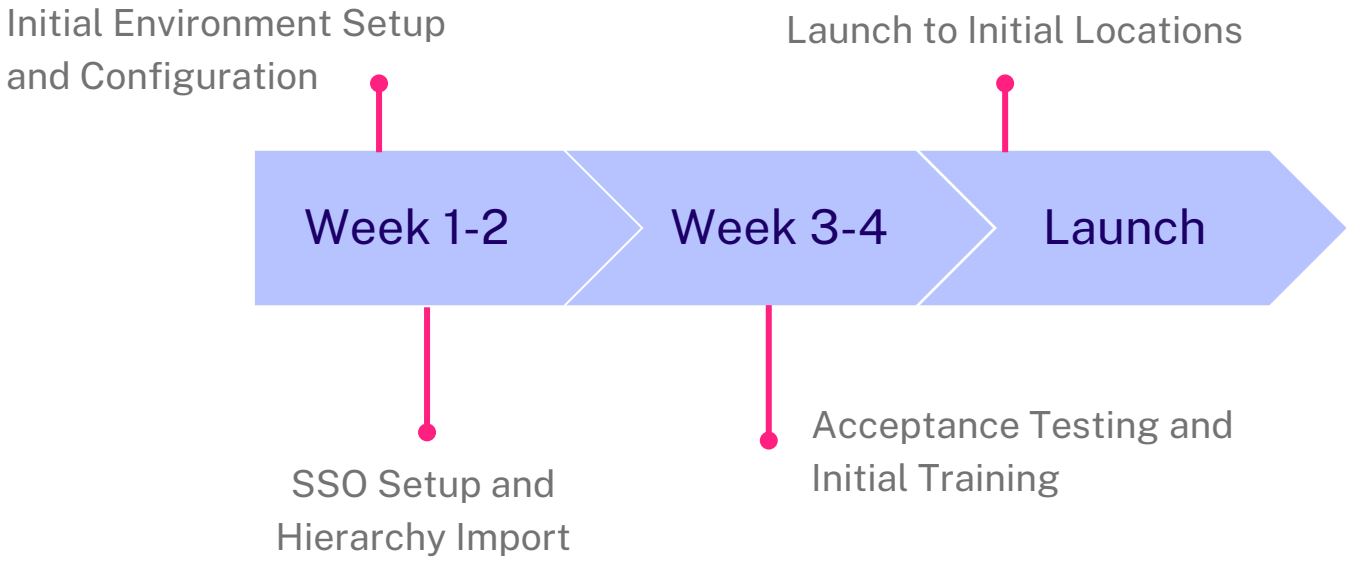


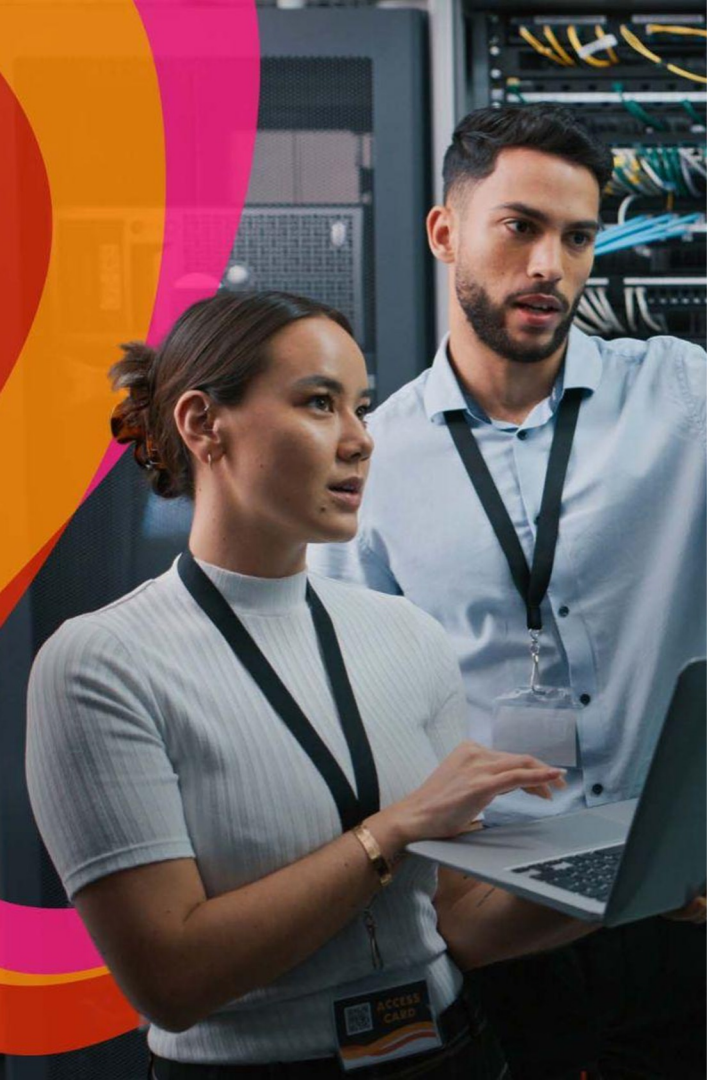
For more details: https://trust.getzipline.com/

Getting Set Up

Rough Timeline

Most customers roll-out between 3 and 6 weeks





Recommended IT Resources

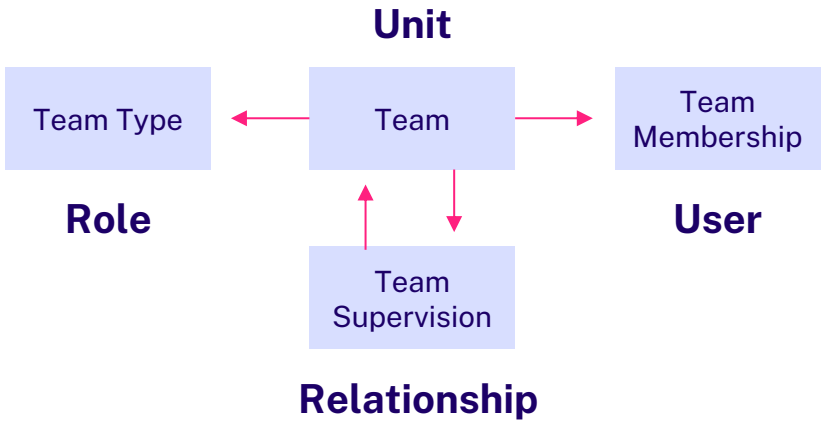
From Zipline

1. Dedicated Account Manager
2. Training Partner
3. Onboarding Engineer
4. Integration Engineer

From You

1. Primary Point of Contact for Configuration Decisions
2. HR System Admin
3. Project Manager
4. Implementation Engineer

Our Flexible Hierarchy System

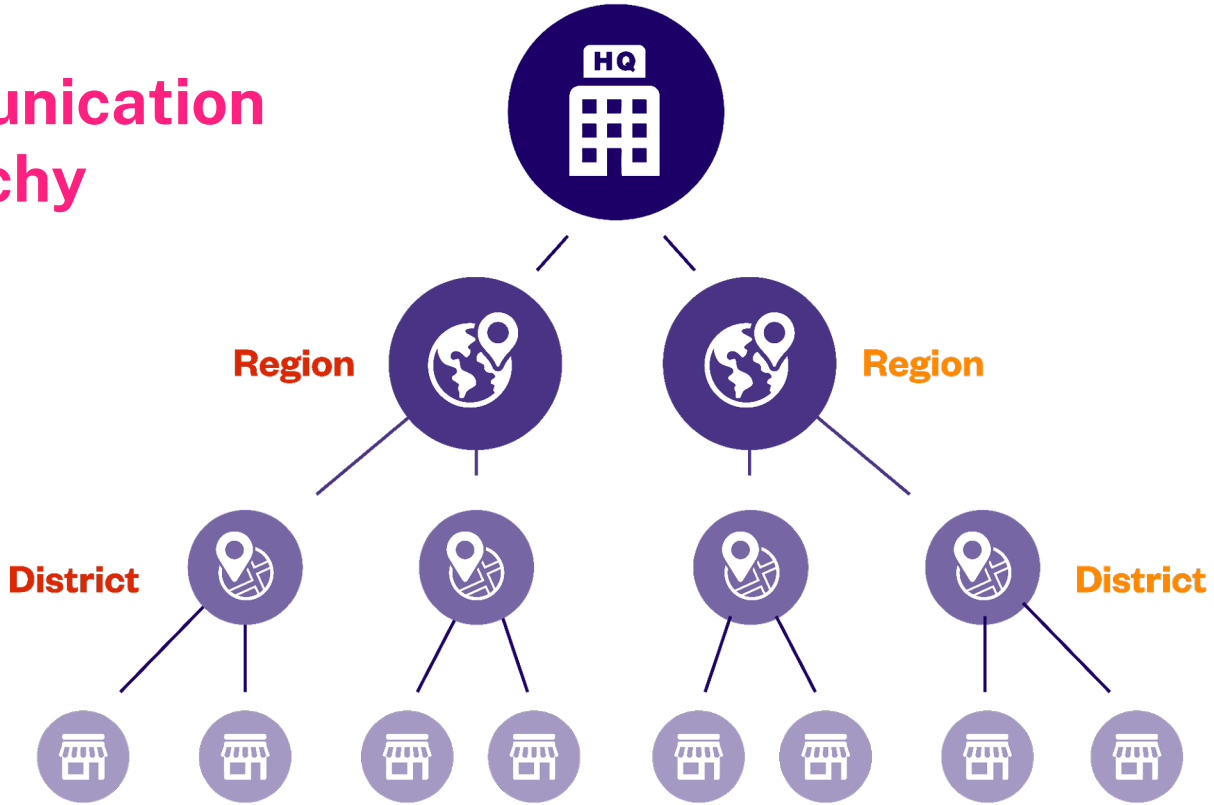


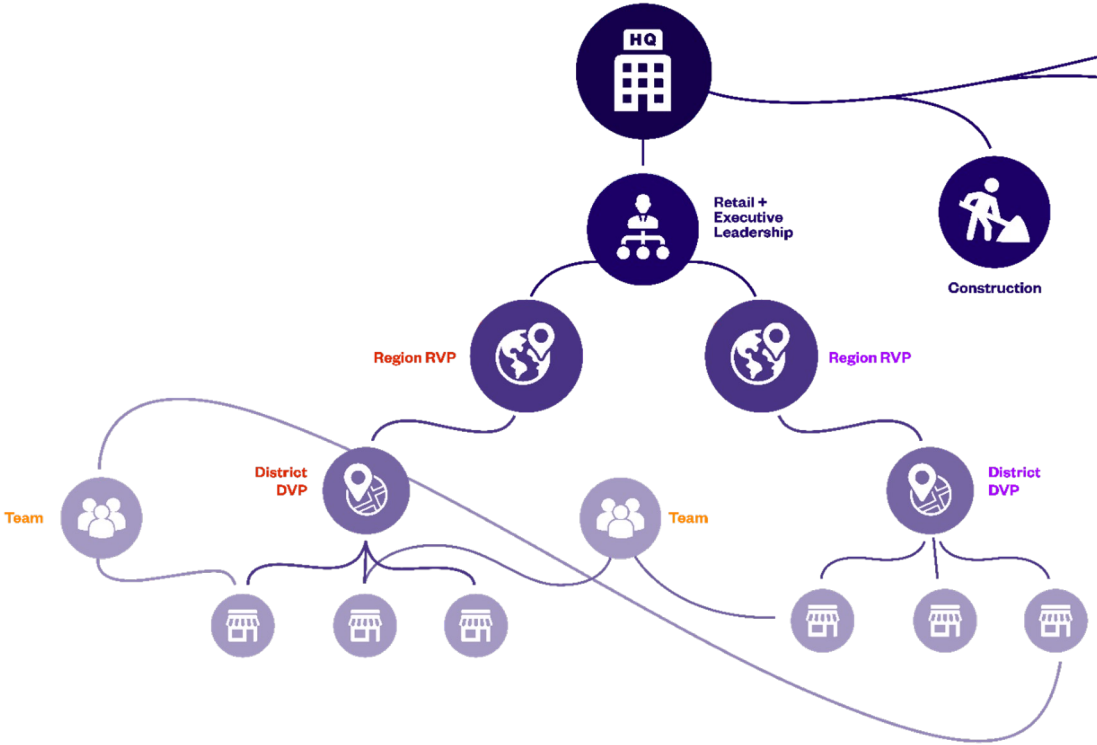
- Team is the primary logical unit in our hierarchy and targeting system
- A Team can supervise any other Team, as long as there are no loops
- Team Types are defined by the Organization
- A User can be on any number of Teams

The Simple Case

Team	Type	Membership	Supervises
Bellgrove Plaza	Store	Store Manager	-
Southern California	District	District Leader	BellGrove Plaza
West	RCC	VP of Retail Support	Southern CA, Northern CA, OR, WA

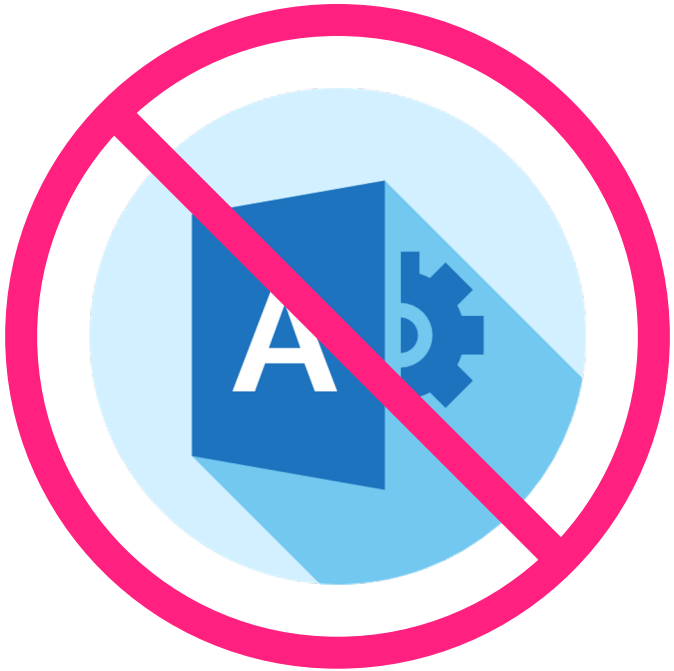
Simple Communication Hierarchy





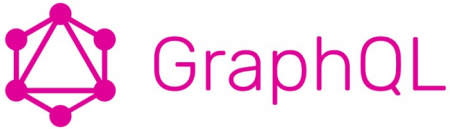
Complex Communication Hierarchy

No Complex Admin Area



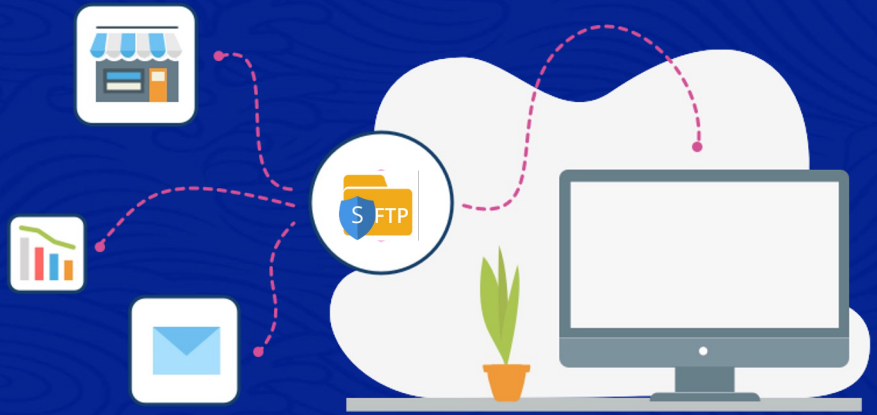
Core Information Needed

- **User Authentication:** SAML connection or Username/Password
- **Location Hierarchy:** How do your locations relate to your organization
- **User Mapping:** How do we associate users to locations



Integrations

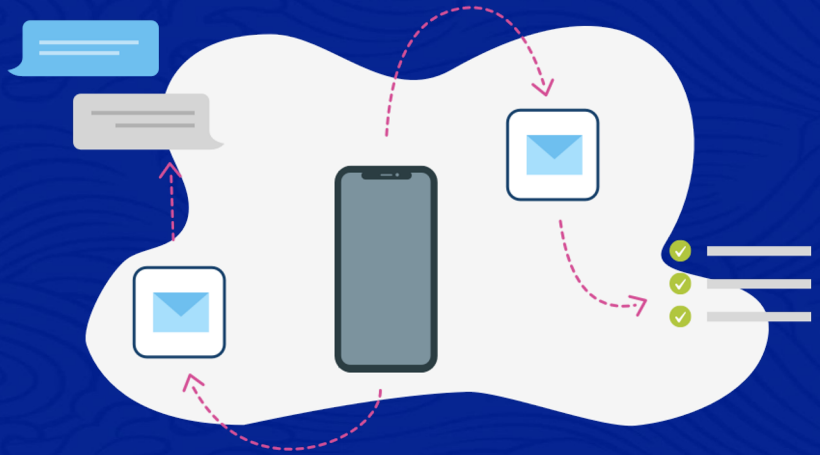
ZIPLINE



Configuration & Setup

SFTP Connector

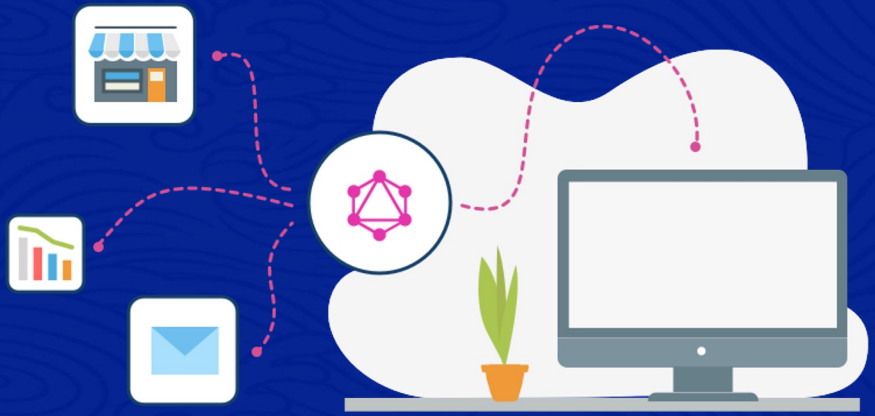
Automate the loading of hierarchy files, user files, and reports directly into Zipline using our SFTP connector.



Integration

Email Integration

Automatically publish communications, tasks, and reply to group messages just by sending an email.



API

Zipline API

Integrate directly with GraphQL to build custom functionality or automate behavior specific to your use cases.

BigQuery Data Connector

- Data flows into your BI dashboards
- Bridge Zipline data to transaction, workforce, operational, or customer experience data

Power BI

tableau

Looker

DOMO

Qlik

Google Big Query

Workforce Management

Dayforce

LEGION

UKG

Learning Management

Adobe Captivate

docebo

BigQuery Data Connector

Power BI

tableau

Looker

DOMO

Zipline

Customer Experience

Medallia

Service Desk

ServiceChannel

Connection Method	Level of Effort	Major things that it unlocks	Setup Time	Implementation Time
Email into Zipline	**Easy**	Automated tasks and communications	1 day	1 week
Embedded Widget	**Easy**	Show Zipline task and message summary in another platform	1 day	1 week
SFTP	**Easy**	Resource Library updates, automated hierarchy updates	1 day	1 week
Direct 3rd party integrations	**Intermediate**	Seamless interaction with your other tools	1-2 weeks	2-8 weeks (dependent on vendor)
BigQuery	**Expert**	Data export to your 3rd-party BI	1-2 weeks	2-8 weeks
GraphQL API	**Expert**	Full access to all your Zipline data	1 day	*Dependent on your developers!*

Case Study

Project

Zipline rollout for US-based, 170-store grocery brand to 11,000 field employees.

Strategy

Crawl-Walk-Run: Single Store, added a Zone, and full fleet rollout.

Implementation

3 months and less than 10 Fresh Market IT hours.

Results

The field loves using Zipline and has achieved 90% adoption of the platform. The Fresh Market has more than tripled store execution to more than 90%.

Zipline

"This has been the smoothest rollout I've ever experienced in my career. We had big expectations and Zipline really delivered."

Retail Communication Manager, The Fresh Market

"Zipline's mobile platform is a game-changer. More of our team members are connected and receiving comms, because we now bring the comms to their fingertips."

Retail Communication Manager, The Fresh Market

Project

Zipline rollout for 50+ store locations to 3,400+ field employees.

Strategy

Replace previous vendor at contract end to avoid double expense.

Implementation

On-time launch, ensuring no break in service.

Results

From the beginning, adoption was close to 100%. Continued 96% readership and store execution more than 90%.

"[The Zipline] team by far knocked the whole thing out of the park. It was so refreshing to interact and partner with such a smart, talented group of people who are clearly passionate about the mission and product. The sales process, leadership, consultation, change management materials and training were exceptional end to end."

Director of Stores and Retail Ops, L.L. Bean

"Ultimately, our testers liked the streamlined interface of Zipline's Associate Experience much better. It isn't overwhelming for those employees who only work a few days a week, and it only gives them the exact information they need to know for their shift."

Manager of Store Operations, L.L.Bean

Thank you!