



VALCAT

# INFRASTRUCTURE STRATEGY GUIDE

Build Inbox Infrastructure That Scales Safely

THREE PROVEN MODELS FOR REDUNDANCY & GROWTH

## TABLE OF CONTENTS

[1. Introduction: Why Scaling Requires Engineering](#)

[2. Understanding Your Mailbox Options](#)

[3. Model 1: Multi-Provider Split](#)

[4. Model 2: Three-Provider Backup Pool](#)

[5. Model 3: Full Redundancy](#)

[6. Infrastructure Decision Framework](#)

[7. Recommended Provider Combinations](#)

[8. Implementation Roadmap](#)

# Why Infrastructure Matters More Than You Think

Most cold email programs fail not because of bad copy, but because of weak infrastructure. When your mailboxes get suspended, your domains get flagged, or your provider shuts you down, even the best copy in the world can't save you.



## THE CONSTRUCTION ANALOGY

Think of scaling email like building construction. If you scale blindly, you'll run into catastrophic failures. A wood frame works for a house, but a skyscraper needs steel beams.



### 1-2 Story House

Wood framing works fine.

2,000 - 4,000  
emails/day



### Mid-Rise Building

Needs reinforced foundation.

4,000 - 10,000  
emails/day



### Skyscraper

Steel & concrete essential.

10,000+ emails/day



## CRITICAL WARNING

The models in this guide aren't arbitrary choices. Trying to send 10,000 emails/day with Model 1 infrastructure is like building a 30-story tower with wood framing. It might work for a week, but when something breaks, you'll lose everything overnight.



## WHAT YOU'LL LEARN

- When to use Google Workspace vs Microsoft 365 vs SMTP
- Three redundancy models engineered for different scales
- How to survive provider shutdowns without losing capacity
- Exact provider combinations and mailbox ratios
- Week-by-week implementation roadmap

# Understanding Your Mailbox Options

Google, Microsoft, or SMTP? Here is the strategic breakdown.

## Google Workspace

BEST FOR PRIMARY INFRASTRUCTURE

Cost: \$3.50-4.00 /mailbox/month

75%+ of B2B companies use Google Workspace. Sending from here gives the best deliverability to these inboxes.

USE WHEN:

- Building default/primary infrastructure
- Targeting Google Workspace companies
- Deliverability is top priority

## Microsoft 365

BEST FOR ENTERPRISE

Cost: \$3.50-4.00 /mailbox/month

Essential if your ICP skews toward enterprise, government, or finance (Outlook heavy).

USE WHEN:

- ICP heavily uses Outlook/Office 365
- Targeting enterprise/government
- As 25% of your sending mix

## SMTP Mailboxes (Backup)

Cost: \$1.00-3.00 /mailbox/month. Best for high volume backup or testing. Cheaper, but generally lower deliverability and higher technical setup.

## Comparison & Recommended Mix

PROVIDER TYPE	% OF FLEET	USE CASE	PRIORITY
Google WS	75%	Primary sending	Critical
Microsoft 365	25%	Enterprise/Outlook ICPs	Important
SMTP	Optional	Backup, testing, volume	Nice-to-have

# Three Redundancy Models

## MODEL 01: Multi-Provider Split

Best for tight budgets <4,000 emails/day

Cost Efficiency

Risk Protection

★★★★★

★★★★☆

How It Works: Warm the exact number of mailboxes you need, then split them across two providers (e.g., 50% Provider A, 50% Provider B). Never risk everything on a single provider.

### Implementation Steps

1. Register 34 domains total (17 per provider).
2. Warm all 200 mailboxes for 30+ days simultaneously.
3. Configure separate tags in your sending tool (e.g., "providerA", "providerB").
4. Send at 100% capacity (no idle mailboxes).

#### Advantages

- ✓Lowest total cost
- ✓Simple to manage
- ✓Diversification protects against shutdowns

#### Disadvantages

- ✗No warm backup ready
- ✗50% volume drop if provider fails
- ✗30-day recovery time

#### BEST FOR:

Startups and agencies with tight budgets sending under 4,000 emails/day who can tolerate a temporary drop in volume.

### Cost Breakdown (200 Mailboxes)

ITEM	COST
Google Workspace (Provider A)	\$400
Google Workspace (Provider B)	\$400
Domains & Tools	~\$184

ITEM	COST
TOTAL MONTHLY	\$984

## MODEL 02: Three-Provider Backup Pool

RECOMMENDED

Best for agencies & growth (4k-10k/day)

Cost

Efficiency

★★★★☆

Risk

Protection

★★★★☆

How It Works: Use three providers. Actively send from 60-70% of mailboxes. Keep 30-40% per provider warmed as hot standby backup. If one provider fails, the reserves from the other two fill the gap instantly.

### Daily Operations Example

Provider A: 70 Active / 30 Reserve  
 Provider B: 70 Active / 30 Reserve  
 Provider C: 70 Active / 30 Reserve

IF Provider A Fails: → Activate 30 Reserve from Provider B →  
 Activate 30 Reserve from Provider C RESULT: 200/210 Capacity  
 Maintained (Instant Recovery)

#### Advantages

- ✓ Instant failover (0 hours)
- ✓ Survives complete provider shutdown
- ✓ Maintains 95% capacity during issues

#### Disadvantages

- ✗ 43% higher cost than Model 1
- ✗ More complex management
- ✗ Requires automation for reserve pool

### Cost Breakdown (300 Mailboxes / 210 Active)

ITEM	COST
3 Providers (100 mailboxes each)	\$1,200

ITEM	COST
Domains & Tools	~\$250
TOTAL MONTHLY	\$1,450

## MODEL 03: Full Redundancy

Enterprise Scale (10,000+ emails/day)

Cost Efficiency



Risk Protection



How It Works: Two complete, equal fleets (Active and Reserve), plus a Recovering bucket. 100% redundancy. This follows the advanced engineering principles from Felix Frank's guide.

### BEST FOR:

Enterprise operations, mission-critical programs, or those with zero tolerance for downtime.

## Cost Breakdown (400 Mailboxes / 200 Active)

ITEM	COST
Active Fleet (200)	\$800
Reserve Fleet (200)	\$800
Domains & Tools	~\$318
TOTAL MONTHLY	\$1,918

# Infrastructure Decision Framework



Choose Model 1  
< 4,000/day

Budget is priority. Can tolerate small downtime.



Choose Model 2  
4k - 10k/day

Balance of cost and high reliability. Best for agencies.



Choose Model 3  
10,000+/day

Zero tolerance for failure. Maximum protection.

### Side-by-Side Comparison

METRIC	MODEL 1	MODEL 2	MODEL 3
Monthly Cost	\$984	\$1,450	\$1,918
Reserve Capacity	0%	30%	100%
Failover Time	30 days	Instant	Instant
Failure Impact	50% Loss	5% Loss	0% Loss

### Recommended Provider Combinations

Budget-Friendly (Model 1)

50% Zapmail (Google) + 50% InboxKit (Google)

Balanced (Model 2) - RECOMMENDED

40% InboxKit (Google) + 40% Zapmail (Google) + 20% ScaleMail (SMTP/Backup)

Enterprise (Model 3)

Mix of 3 different Google Resellers + 2 Microsoft Resellers across Active and Reserve fleets.



#### PROVIDER SELECTION TIPS

- Never use the same reseller across Active and Reserve fleets.
- Verify independent infrastructure (some resellers share backends).
- Start small (25-50 mailboxes) to test support before scaling.

## Implementation Roadmap

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### WEEK 1: FOUNDATION

Choose model, calculate needs, register domains (zero overlap), set up DNS (SPF, DKIM, DMARC), and connect to sending platform.



### WEEKS 2-5: THE CRITICAL WARM-UP

Run warm-up on ALL mailboxes for minimum 30 days. Target 95-100% health scores.

**⚠ CRITICAL: Do NOT skip this. Domains < 30 days old trigger spam filters instantly in 2025.**



### WEEK 6: SOFT LAUNCH

Launch with 50% capacity. Monitor health scores daily. Set daily limit to 20 emails/mailbox.



### WEEK 7-8: OPTIMIZE & SCALE

Scale to 75% capacity if health >95%. Begin A/B testing copy.



### WEEK 9+: FULL OPERATION

Reach 100% active capacity. Maintain reserve pool. Weekly copy refreshes.



# Ready to Build Your Infrastructure?

Let Valcat handle the entire setup. We've built infrastructure for 47+ B2B SaaS companies sending 1M+ emails per month.



## Setup & Warmup

Domain registration, DNS, mailbox provisioning, and 30-day managed warm-up.



## Copy & Campaigns

AI-powered personalization, trigger-based frameworks, and A/B testing.



## Ongoing Mgmt

Daily health monitoring, provider failover, and deliverability troubleshooting.



## Automation

Clay workflows, SmartLead config, and Slack alert integrations.

Take Your GTM from Manual to Magical

[Book a Strategy Call](#)