

Northwind Metrics

northwindmetrics.example

PREPARED FOR

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Summary

OVERALL

NEEDS ATTENTION

Northwind's email reputation is in good shape: no blocklist listings and healthy engagement. However, the **authentication setup has drifted** as new tools were added. SPF is currently failing outright for all mail, and DMARC has been in monitor-only mode since 2021 with nobody receiving the reports.

None of this is causing visible problems yet, but it leaves Northwind one reputation dip away from password resets and invoices landing in spam.

Top priorities

- 1 Fix the SPF record (F-01).** It's over the 10-lookup limit, so receivers treat it as a permanent error. About an hour's work.
- 2 Move marketing email to its own subdomain (F-03),** so a bad campaign can't affect password resets.
- 3 Take DMARC to enforcement (F-02).** Start collecting reports now, then step up to `p=reject` over 6–8 weeks.

What's working well

- Transactional email via Amazon SES is well configured, with bounce and complaint handling wired up correctly.
- No listings on any major blocklist.
- Marketing engagement is healthy, and the existing sunset policy is doing its job.

Scorecard

Area	Summary	Status
Authentication	SPF permerror, DMARC monitor-only with no reporting.	AT RISK
Alignment	HubSpot signs with its own domain, so it relies on SPF alignment alone.	NEEDS ATTENTION
Infrastructure	Marketing and transactional email share the root domain.	NEEDS ATTENTION
Reputation	No blocklist listings; seed tests show inbox placement at all major providers.	GOOD
Bulk-sender compliance	Product update emails lack one-click unsubscribe.	NEEDS ATTENTION
List hygiene	Double opt-in on signup and a 6-month sunset policy in place.	GOOD

Sending sources

Every system found sending email as Northwind Metrics, with its authentication status.

Source	Purpose	SPF	DKIM aligned	Notes
Google Workspace northwindmetrics.example	Staff email	PASS	PASS	
Amazon SES northwindmetrics.example	Transactional	PASS	PASS	Custom MAIL FROM configured.
HubSpot northwindmetrics.example	Marketing	PASS	FAIL	Signs with hubspotemail.net , not aligned.
Customer.io northwindmetrics.example	Product updates	PASS	PASS	Missing one-click unsubscribe.
Zendesk northwindmetrics.example	Support	PASS	PASS	

Findings

ID	Finding	Area	Severity
F-01	SPF record exceeds the 10 DNS lookup limit	Authentication	CRITICAL
F-02	DMARC policy stuck at monitor-only with no reporting	Authentication	HIGH
F-03	Marketing and transactional email share the root domain	Infrastructure	HIGH
F-04	HubSpot DKIM signature not aligned	Alignment	MEDIUM
F-05	Product update emails lack one-click unsubscribe	Bulk-sender compliance	MEDIUM
F-06	Google Postmaster Tools not configured	Reputation	LOW

F-01 · Authentication

CRITICAL

EFFORT: LOW

SPF record exceeds the 10 DNS lookup limit

WHAT I FOUND

The SPF record for `northwindmetrics.example` needs **13 DNS lookups** to resolve. The SPF specification caps this at 10, after which receivers return a `permerror`.

```
v=spf1 include:_spf.google.com include:amazonses.com include:mail.zendesk.com
include:servers.mcsv.net include:spf.customer.io include:hubspotemail.net
include:sendgrid.net ~all
```

WHY IT MATTERS

Many receivers treat a `permerror` as an SPF fail. SPF currently provides no protection, and mail from sources not signed with an aligned DKIM key (HubSpot, see F-04) has no passing DMARC alignment at all.

RECOMMENDATION

- Remove `servers.mcsv.net` and `sendgrid.net`: Mailchimp and SendGrid are no longer in use.
- Move SES onto its custom MAIL FROM subdomain, which already has its own SPF record, and remove `amazonses.com` from the root record.
- This brings the count to 8 lookups, leaving room to grow. Avoid SPF “flattening” services. They break silently when providers change their IPs.

F-02 · Authentication

HIGH

EFFORT: MEDIUM

DMARC policy stuck at monitor-only with no reporting

WHAT I FOUND

`_dmarc.northwindmetrics.example` publishes `p=none` with no `rua` address, so no aggregate reports are collected. The record dates from 2021.

```
v=DMARC1; p=none
```

WHY IT MATTERS

Anyone can send email that appears to come from Northwind, and there's no visibility into who is doing so. Gmail and Yahoo also look more favourably on enforced policies.

RECOMMENDATION

- Add a `rua` reporting address now and collect 2–4 weeks of data.
- Once all legitimate sources pass, move to `p=quarantine; pct=25`, then 100%, then `p=reject`.

F-03 · Infrastructure

HIGH**EFFORT: MEDIUM**

Marketing and transactional email share the root domain

WHAT I FOUND

HubSpot campaigns, Customer.io product updates and SES transactional email all send from `northwindmetrics.example`.

WHY IT MATTERS

Mailbox providers track reputation per domain. A campaign with high complaints lowers the reputation that password resets and invoices depend on.

RECOMMENDATION

Move HubSpot and Customer.io to `news.northwindmetrics.example`, each with its own SPF, DKIM and DMARC. Keep transactional email on the root (or `mail.`) domain. Warm up the new subdomain over 2–3 weeks.

F-04 · Alignment

MEDIUM**EFFORT: LOW**

HubSpot DKIM signature not aligned

WHAT I FOUND

HubSpot signs messages with `d=hubspotemail.net` instead of Northwind's own domain.

WHY IT MATTERS

DMARC passes only through SPF alignment, which is currently broken (F-01). After F-01 is fixed this still leaves HubSpot one forwarding hop away from failing DMARC.

RECOMMENDATION

Enable HubSpot's custom domain DKIM (Settings → Domains & URLs → Email Sending Domains) and publish the two CNAME records it provides.

F-05 · Bulk-sender compliance

MEDIUM**EFFORT: LOW**

Product update emails lack one-click unsubscribe

WHAT I FOUND

Customer.io newsletters include an unsubscribe link in the footer but no `List-Unsubscribe-Post` header.

WHY IT MATTERS

One-click unsubscribe is required by Gmail and Yahoo for bulk senders. Without it, recipients are more likely to hit "Report spam" instead.

RECOMMENDATION

Enable one-click unsubscribe in Customer.io's message settings for all marketing and newsletter campaigns.

F-06 · Reputation

LOW**EFFORT: LOW**

Google Postmaster Tools not configured

WHAT I FOUND

The domain isn't verified in Google Postmaster Tools.

WHY IT MATTERS

Gmail is likely Northwind's largest recipient provider. Without Postmaster Tools there is no early warning of spam-rate or reputation problems.

RECOMMENDATION

Verify the domain (a single TXT record) and check the dashboard monthly.

Action plan

This week

Ref	Action	Owner	Effort
F-01	Remove unused SPF includes and move SES to its MAIL FROM subdomain.	Engineering	1 hour
F-02	Add a rua address to DMARC and start collecting reports.	Engineering	15 min
F-06	Verify domain in Google Postmaster Tools.	Engineering	15 min

Next 30 days

Ref	Action	Owner	Effort
F-04	Enable aligned DKIM in HubSpot.	Marketing	30 min
F-05	Enable one-click unsubscribe in Customer.io.	Product	30 min
F-03	Set up and warm up news. subdomain for marketing and product updates.	Marketing + Eng	2–3 weeks

Next quarter

Ref	Action	Owner	Effort
F-02	Step DMARC through quarantine to p=reject, reviewing reports at each stage.	Engineering	6–8 weeks

Next steps

I'm happy to review the DMARC reports with you before each policy change, and to check the new marketing subdomain once it's live. Both are covered by the monthly advisory retainer, or can be booked ad hoc.

Scope & methodology

A review of email authentication, sending infrastructure, sender reputation and bulk-sender compliance for `northwindmetrics.example` and its subdomains, covering product, transactional and marketing email.

How this review was carried out

- DNS review of SPF, DKIM, DMARC, MX and PTR records
- Header analysis of sample messages from each sending source
- Blocklist checks across Spamhaus, Barracuda, SpamCop and others
- Review of Google Postmaster Tools and Microsoft SNDS data (where available)
- Seed-list inbox placement test across Gmail, Outlook, Yahoo and Apple Mail

Severity levels

Severity	Meaning
CRITICAL	Actively harming delivery now, or likely to cause a sudden outage. Fix immediately.
HIGH	Significant risk to inbox placement or compliance. Fix within weeks.
MEDIUM	Weakens your setup or reputation over time. Plan it in.
LOW	Best-practice improvement with modest impact.
INFO	Observation, no action needed.

Limitations

This report is advisory. It reflects your setup at the time of review, based on publicly visible DNS records, message headers, and any data you shared. Recommendations should be reviewed and implemented by your team; no changes were made to your systems. Mailbox providers decide inbox placement using signals that aren't public, so no specific placement outcome can be guaranteed.

Glossary

Term	Meaning
SPF	Sender Policy Framework. A DNS record listing the servers allowed to send mail for your domain. Limited to 10 DNS lookups.
DKIM	DomainKeys Identified Mail. A cryptographic signature proving a message came from the domain that signed it and wasn't altered.
DMARC	Tells receivers what to do when mail fails SPF/DKIM alignment (<code>none</code> , <code>quarantine</code> or <code>reject</code>) and where to send reports.
Alignment	Whether the domain verified by SPF or DKIM matches the visible From domain. DMARC requires at least one to align.

Term	Meaning
Complaint rate	The share of recipients marking mail as spam. Gmail and Yahoo require it to stay below 0.3%, ideally below 0.1%.
One-click unsubscribe	The <code>List-Unsubscribe</code> and <code>List-Unsubscribe-Post</code> headers (RFC 8058), required for bulk senders to Gmail and Yahoo.
Postmaster Tools	Google's dashboard of your domain's reputation, spam rate and authentication results at Gmail.