

# Email Security & Authentication Assessment

Zone: example.com

**Weak**

Score 57/100

## Control snapshot

Pass 4 Warn 2 Fail 3 | Findings 5 | MX 0 | DKIM hits 26

## Gaps and risks

MX records published: No MX records at apex. Aggregate reporting (rua): No rua= configured. MTA-STS: Not configured. 1 critical/high findings in the detailed table.

## What is working

SPF default is hard fail (-all); SPF DNS lookup budget; DMARC organizational policy; DKIM DNS for probed selectors.

## Executive actions

1. Publish MX records pointing at your inbound mail gateways.
2. Add rua=mailto:dmARC@yourdomain (and verify the mailbox).
3. Deploy MTA-STS (DNS TXT + HTTPS policy) to encourage encrypted SMTP between MTAs.
4. Publish TLSRPT v=TLSRPTv1 with rua= for visibility into SMTP TLS failures.

## Control compliance matrix

Area	Control	Status	Detail
Inbound routing	MX records published	FAIL	No MX records at apex.
Sender policy (SPF)	SPF default is hard fail (-all)	PASS	Strongest SPF stance for unauthorized senders.
Sender policy (SPF)	SPF DNS lookup budget	PASS	Estimated 0 DNS lookups (under RFC 7208 limits).
Domain DMARC	DMARC organizational policy	PASS	p=reject protects the domain from unauthenticated use in many receivers.
Domain DMARC	Aggregate reporting (rua)	FAIL	No rua= configured.
DKIM	DKIM DNS for probed selectors	PASS	26 selector(s) publish DKIM keys.
Transport (MTA-STS)	MTA-STS	FAIL	Not configured.
Transport (TLS-RPT)	SMTP TLS reporting	WARN	No _smtp._tls record.
Brand (BIMI)	BIMI indicator record	WARN	Optional: no default._bimi record.

## Inbound mail routing (MX)

No MX records returned for the zone apex.

## Sender Policy Framework (SPF)

Attribute	Value
SPF record(s)	v=spf1 -all

Estimated DNS lookups	0
All mechanism	-all
Uses ptr	false

## Domain-based Message Authentication (DMARC)

Tag / field	Value
Raw record	v=DMARC1;p=reject;sp=reject;adkim=s;aspf=s
p (policy)	reject
sp (subdomain)	reject
adkim	s
aspf	s

## DKIM DNS discovery

Probed 26 common selectors. Matches: 26.

Selector	Found	Record / notes
default	yes	v=DKIM1; p=
google	yes	v=DKIM1; p=
selector1	yes	v=DKIM1; p=
selector2	yes	v=DKIM1; p=
k1	yes	v=DKIM1; p=
k2	yes	v=DKIM1; p=
s1	yes	v=DKIM1; p=
s2	yes	v=DKIM1; p=
mail	yes	v=DKIM1; p=
smtp	yes	v=DKIM1; p=
dkim	yes	v=DKIM1; p=
mandrill	yes	v=DKIM1; p=
cm	yes	v=DKIM1; p=
pic	yes	v=DKIM1; p=
hs1	yes	v=DKIM1; p=
hs2	yes	v=DKIM1; p=
protonmail	yes	v=DKIM1; p=
pm	yes	v=DKIM1; p=
resend	yes	v=DKIM1; p=
zendesk1	yes	v=DKIM1; p=
everlytic	yes	v=DKIM1; p=
mxvault	yes	v=DKIM1; p=
fm0	yes	v=DKIM1; p=
smtpapi	yes	v=DKIM1; p=
scph0823	yes	v=DKIM1; p=

amazonses	yes	v=DKIM1; p=
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## Mail transport security (MTA-STS, TLS-RPT, BIMBI)

Control	Details
MTA-STS	Not configured ( <code>_mta-sts</code> TXT missing).
TLS-RPT	No <code>_smtp._tls</code> TXT.
BIMI	Optional record not present.

### Detailed findings

Severity	Category	Title	Detail / fix
HIGH	email_transport	No MX records	This apex has no MX; inbound SMTP may be undefined or use A/AAAA fallback only. Fix: Publish MX records pointing at your inbound mail gateways.
MEDIUM	email_auth	DMARC has no <code>rua=</code> aggregate reporting address	Without <code>rua</code> , you will not receive DMARC aggregate reports. Fix: Add <code>rua=mailto:dmarc@yourdomain</code> (and verify the mailbox).
MEDIUM	email_transport	MTA-STS not configured	No <code>_mta-sts</code> TXT or policy fetch attempted. Fix: Deploy MTA-STS (DNS TXT + HTTPS policy) to encourage encrypted SMTP between MTAs.
LOW	email_transport	TLS reporting (SMTP TLS) TXT not found	No <code>_smtp._tls.example.com</code> record. Fix: Publish <code>TLSPRT v=TLSPRTv1</code> with <code>rua=</code> for visibility into SMTP TLS failures.
INFO	email_auth	DMARC DKIM alignment is strict ( <code>adkim=s</code> )	Strict alignment can cause legitimate mail to fail if DKIM <code>d=</code> does not match From domain. Fix: Confirm all sending systems sign with aligned DKIM domains.

### Prioritized remediation

1. Publish MX records pointing at your inbound mail gateways.
2. Add `rua=mailto:dmarc@yourdomain` (and verify the mailbox).
3. Deploy MTA-STS (DNS TXT + HTTPS policy) to encourage encrypted SMTP between MTAs.
4. Publish `TLSPRT v=TLSPRTv1` with `rua=` for visibility into SMTP TLS failures.
5. Confirm all sending systems sign with aligned DKIM domains.
6. Resolve failed controls in the compliance matrix first, then tighten warn-level items.