


IPv6 Readiness Report

tunetalk.com — tunetalk.com

Category: Telco • Generated: 21 Apr 2026, 19:09 MYT • Last Checked: 07 Mar 2026, 01:14 MYT • Verification ID: 17fe56e0-5dc0-4cd1-9420-fcd91e0828f6

Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>

Audit trail: <https://ipv6.my6.my/audit/17fe56e0-5dc0-4cd1-9420-fcd91e0828f6>

 Non-Compliant <small>MGv6C-1.0</small>	47% Partial Support	IPv6-ONLY READINESS Website: ✗ Not Ready DNS: ✓ Ready Email: ✗ Not Ready
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IPv4 ADDRESSES
13.215.104.197
54.255.160.137

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	Amazon Data Services Singapore
Country	US
ASN	AS16509
ASN Name	AMAZON-02 - Amazon.com, Inc., US
Network (CIDR)	13.214.0.0/15

Web Services (35%) 0 / 8			
#	CHECK	RESULT	DETAIL
1	AAAA Record	FAIL	No AAAA record found in DNS.
2	Globally Routable IPv6	FAIL	IPv6 address is not globally routable.
3	HTTP over IPv6	FAIL	HTTP is not accessible over IPv6.
4	HTTPS over IPv6	FAIL	HTTPS is not accessible over IPv6.
5	IPv6-Only Reachability	FAIL	Site is not reachable when limited to IPv6-only.
6	TLS Certificate Valid (IPv6)	FAIL	TLS certificate is invalid, expired, or hostname mismatch over IPv6.
7	Dual-Stack (IPv4 + IPv6)	FAIL	Domain is IPv6-only or IPv4-only.
8	HTTP/3 (QUIC)	FAIL	No HTTP/3 support detected.

DNS & DNSSEC (25%) 3 / 5			
#	CHECK	RESULT	DETAIL
1	NS Has AAAA Record	PASS	Nameserver has IPv6 address.
2	NS Reachable via IPv6	PASS	Nameserver is reachable via IPv6 on port 53.
3	NS Answers Queries via IPv6	PASS	DNS queries answered over IPv6.
4	DNSSEC Validated	FAIL	DNSSEC validation failed or zone is unsigned.
5	Reverse DNS (PTR)	FAIL	No PTR record found.
6	DS Record at Parent	FAIL	No DS record at parent.
7	RRSIG Valid	FAIL	No valid RRSIG found.
8	Signing Algorithm	INFO	No DNSKEY record found.

Email Services (25%) 4 / 6

#	CHECK	RESULT	DETAIL
1	MX Record Exists	PASS	MX record found.
2	MX Server Has IPv6	PASS	MX server has AAAA record.
3	SMTP Reachable via IPv6	FAIL	SMTP is not reachable over IPv6.
4	STARTTLS over IPv6	FAIL	STARTTLS not available over IPv6.
5	SPF Record	PASS	SPF record found.
6	DKIM Selector	INFO	DKIM selector found: selector1._domainkey
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	13.215.104.197, 54.255.160.137
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 19ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 36ms TTFB.

Audit Trail & Evidence Record

Verification ID	17fe56e0-5dc0-4cd1-9420-fcd91e0828f6
Domain	tunetalk.com
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:14:02 MYT
Finished	07 Mar 2026, 01:14:30 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/17fe56e0-5dc0-4cd1-9420-fcd91e0828f6

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	176b40b45ba18920f6a0ab981f0d84556a46e2793111894a9afadaa856fc3c83
http_headers	298f2355d108fd1fa7ffdfa76b1bc7b12a06e27e6da7a77329a1a7cf00cf11e8
dns_responses	2063232549f3b2fc1af27ebe35a250e62836fb8b6d67426a695fe68ad7633fad
tls_handshake	88f84018f52f3455edd57a79b543daa914b8ac752114dc8b93ed7b6433574d38
connectivity_log	39644e23c38c91fe175eab65c5554707c1bc6241d7619b9caaeed5315d3c4eb8
dns_resolution_times	149ab278008982724afccdfb9c65a42ff2776af0310a26a4a6610cd7a6a72357

Test Node Identity

Os	Linux srv1440888 6.8.0-101-generic #101-Ubuntu SMP PREEMPT_DYNAMIC Mon Feb 9 10:15:05 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.30
Server Ipv4	76.13.221.142
Server Ipv6	2a02:4780:5e:2789::1

DNS Resolution Performance

Comparison of A (IPv4) vs AAAA (IPv6) query times across resolvers and transports. Shows median (p50) and 95th percentile (p95) of 3 samples per tuple.

Resolver	Transport	A p50 (ms)	A p95 (ms)	AAAA p50 (ms)	AAAA p95 (ms)	Delta (ms)
System	Default	17.99	18.74	8	8.18	-10
Google	IPv4	15.22	16.8	28.8	29.66	+13.6
Google	IPv6	32.22	33.81	17.95	29.02	-14.3
Cloudflare	IPv4	8.94	18.04	18.57	19.49	+9.6
Cloudflare	IPv6	8.96	178.04	180.21	380.43	+171.3

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 810
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
tunetalk.com. 00600 IN A 54.255.160.137
tunetalk.com. 00600 IN A 13.215.104.197
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 5232
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
com. 0009000 IN SOA a.gtld-servers.net. nstld.verisign-grs.com. 1772788426 1800 900 604800 900
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 34301
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
tunetalk.com. 00600 IN MX 0 tunetalk-com.mail.protection.outlook.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 6092
;; flags: qr rd ra; QUERY: 1, ANSWER: 4, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
tunetalk.com. 00600 IN NS ns-523.awsdns-01.net.
tunetalk.com. 00600 IN NS ns-1375.awsdns-43.org.
tunetalk.com. 00600 IN NS ns-508.awsdns-63.com.
tunetalk.com. 00600 IN NS ns-1821.awsdns-35.co.uk.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 49828
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
tunetalk.com. 003600 IN TXT "v=spf1 include:spf.protection.outlook.com include:amazonses.com -all"
tunetalk.com. 003600 IN TXT "MS=ms25426587"
tunetalk.com. 003600 IN TXT "MS=C024C6C0F0AF1FC101DAA1325E6EBE33C4EB196D"
tunetalk.com. 003600 IN TXT "atlassian-domain-verification=0JHjB3oooprSS80vg02PijIZ0UL917oBuh5DLQNSv605aB/82trTwSVprLRpbXXi"
tunetalk.com. 003600 IN TXT "apple-domain-verification=jSFZRZPniVpbqKng"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 9012
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
tunetalk.com. 0062 IN SOA ns-1821.awsdns-35.co.uk. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400
```

RRSIG

```
ns-1821.awsdns-35.co.uk. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400
```

DNSKEY

```
;; Got answer:  
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 25153  
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1  
  
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 512  
;; AUTHORITY SECTION:  
tunetalk.com. IN SOA ns-1821.awsdns-35.co.uk. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400
```

DNSSEC_VALIDATION

```
; unsigned answer  
tunetalk.com. IN SOA ns-1821.awsdns-35.co.uk. awsdns-hostmaster.amazon.com. 1 7200 900 1209600 86400
```



```

hcmeyfhQP7Z+iKHvyoQG1lC0ClymHETx/chhQGDyYSwqB/ThwnN15AwLQo0E5V9E
SjLbe4mBlqeInUsNYugExNf+t0IybcrrswBy80Fsd34XOW3rjSutsuafd9AWySa3h
xRRrwszrzX/wWGM6wyB+f7C4
-----END CERTIFICATE-----
2 s:C = US, O = Amazon, CN = Amazon Root CA 1
i:C = US, ST = Arizona, L = Scottsdale, O = "Starfield Technologies, Inc.", CN = Starfield Services Root Certificate Authority - G2
a:PKKEY: rsaEncryption, 2048 (bit); sigalg: RSA-SHA256
v:NotBefore: May 25 12:00:00 2015 GMT; NotAfter: Dec 31 01:00:00 2037 GMT
-----BEGIN CERTIFICATE-----
MIEKjCCA3qgAwIBAgITBn+USionzfp6wq4rAfki7rnExjANBqkqhkIG9w0BAQsF
ADCbMDLMAKGA1UEBhMCVVMxEDA0BgNVBAGTB0FyaXpvcjEzZm9udG90b3R5b250
b3R0c2RhbGUxJTAjBgNVBAoTHFN0YXJmaWVsZCBuZm9sb2dpZXMsIEluYy4x
OzA5BgNVBAMTLN0YXJmaWVsZCB0ZXJ2aWwucyBSb290IENlcnRpZmljYXRRIEF1
dGhvcml0eSAtIEcyMB4XDTE1MDUyNTEyMDAwMFoXDTEzMTIzMTAxMDAwMFowO
TELMAKGA1UEBhMCVVMxZDZANBgNVBAoTBkFtYXpvcjEzZm9udG90b3R5b250
ca9HGF0fw7Y14h29JLo91ghYPl0hAevrAItht0gQ3p0sqTQNroBvo3b5MgHFzZM
906I8c+6zf1tRn45wiw3te5djjgdYZ6k/oI2peVKVURF4fn9tBb6dNqcmzU5L/qw
IFAGbHrQgKmA+sRxmPUDgH3KKH0Vj4utWp+UhnMJbuLHheb4mjUcAwhmahRWa6
V0Ujw5H5SNz/0egwLX0tdHA114gk957EWM67c4cX8jJGKLHD+rcdsq08p8kDi1L
93FcXmn/6pUCyziKrLA4b9v7LWIbxcceV0F34GfID5yHI9Y/QCB/IIIEgEw+0yQm
jgSubJrIqg0CAwEAAaOCATEwggEtmA8GA1UdEwEB/wQFMAMBAf8wDgYDVROPAQH/
BAQDAgGMB0GA1UdDgQWBBSegMyFN0y8DJSULghZnMeyEE4KCDAfBgNVHSMEGDAW
gBScXwDfqqHXMCs4iKK4bUqc8hGRgzB4BggRbgEFBQcBAQRsMGowLgYIKwYBBQUH
MAGGIh0dHA6Ly9vY3NwLnJvb3RnMi5hbWV6b250cnVzdC5jb20wOAYIKwYBBQUH
MAKGLGh0dHA6Ly9jcnQum9vdGcyLmFtYXpvcjEzZm9udG90b3R5b250ZzIuY2V5
MD0GA1UdHwQ2MDQwMqAwoC6GLGh0dHA6Ly9jcmwucm9vdGcyLmFtYXpvcjEzZm9udG90b3R5b250

```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	403
Connected IP	13.215.104.197
Connect Time	7.96 ms
TTFB	18.15 ms
Total Time	18.18 ms

Response Headers:

```
[
  "HTTP/1.1 403 Forbidden",
  "Date: Fri, 06 Mar 2026 09:14:27 GMT",
  "Content-Type: text/html; charset=iso-8859-1",
  "Connection: keep-alive",
  "Server: Apache",
  "Strict-Transport-Security: max-age=63072000; includeSubDomains"
]
```

IPv4 HTTPS (port 443)

HTTP Status	403
Connected IP	13.215.104.197
Connect Time	8.1 ms
TTFB	39.22 ms
Total Time	39.24 ms

Response Headers:

```
[
  "HTTP/2 403",
  "date: Fri, 06 Mar 2026 09:14:27 GMT",
  "content-type: text/html; charset=iso-8859-1",
  "server: Apache",
  "strict-transport-security: max-age=63072000; includeSubDomains"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.007727 1.123213
TCP Connect IPv4 → port 443	301 0.008420 1.603048

Test Node Network Evidence

Node Profile	dual stack
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Egress Connectivity

IPv4 Egress	76.13.221.142
IPv6 Egress	2a02:4780:5e:2789::1

Sysctl IPv6 Flags

net.ipv6.conf.all.disable_ipv6	0
--------------------------------	---

IPv6 Routes

```
2a02:4780:5e::/48 dev eth0 proto kernel metric 256 pref medium  
fe80::/64 dev eth0 proto kernel metric 256 pref medium  
default via 2a02:4780:5e::1 dev eth0 proto static metric 1024 pref medium
```

IPv4 Routes

```
default via 76.13.221.254 dev eth0 proto static  
76.13.221.0/24 dev eth0 proto kernel scope link src 76.13.221.142
```