

IPv6 Readiness Report

unimas.my — unimas.my

Category: Education • Generated: 20 Apr 2026, 21:24 MYT • Last Checked: 07 Mar 2026, 01:11 MYT • Verification ID: 938ecbd3-8f6f-4603-b811-14505d12ec01

Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>Audit trail: <https://ipv6.my6.my/audit/938ecbd3-8f6f-4603-b811-14505d12ec01>**Non-Compliant**

MGv6C-1.0

32%**Partial Support****IPv6-ONLY READINESS**Website: **X Not Ready**DNS: **X Not Ready**Email: **X Not Ready****IPv4 ADDRESSES**

49.50.236.20

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	UNIMAS
Country	MY
ASN	AS55856
ASN Name	UNIMAS-MY Universiti Malaysia Sarawak, MY
Network (CIDR)	49.50.236.0/22

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%)

0 / 5

#	CHECK	RESULT	DETAIL
1	NS Has AAAA Record	FAIL	No nameserver has an AAAA record.
2	NS Reachable via IPv6	FAIL	No nameserver is reachable over IPv6.
3	NS Answers Queries via IPv6	FAIL	Nameserver does not answer queries 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	No common DKIM selector found.
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	49.50.236.20
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 217ms TTFB.

Audit Trail & Evidence Record

Verification ID	938ecbd3-8f6f-4603-b811-14505d12ec01
Domain	unimas.my
Check Mode	Manual
Status	Completed
Started	07 Mar 2026, 01:10:57 MYT
Finished	07 Mar 2026, 01:11:21 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/938ecbd3-8f6f-4603-b811-14505d12ec01

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	9c4a64add473aef0e075d97882a694bd80016564ae22f2991588a4245ed9885a
http_headers	8e76454d88bb5c745f3f112b4188cd0efa0a0762081107895bee7e28e7fc98d6
dns_responses	da4d64986d324012261ff0f205633207950da32151c90c903486a5512e715903
tls_handshake	763bdd22d1a010529911b2bf78035d4126a7ff52bd2043c4e6c806dcd331a2d6
connectivity_log	148838e80a10964bfff33201567ac37069ccc7d9c6d1c92acf13feb44e3bc264
dns_resolution_times	1fb286d5ee9a4a8a482ebab292c3a4538dbfe435aea9c163746906e0a75be810

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	10.65	10.96	5.94	7.97	-4.7
Google	IPv4	52.21	84.85	58.26	67.02	+6.1
Google	IPv6	64.01	72.08	61.57	88.24	-2.4
Cloudflare	IPv4	20.02	21.93	19.23	47.38	-0.8
Cloudflare	IPv6	18.98	26.51	8.02	14.97	-11

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 32116
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
unimas.my. 1800 IN SOA meranti.unimas.my. admin.dnsvault.net. 2026022602 10800 3600 604800 1800
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 36495
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
my. 1800 IN SOA a.nic.my. hostmaster.nic.my. 2026018482 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 26204
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
unimas.my. 3600 IN MX 0 unimas-my.mail.protection.outlook.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 3588
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
unimas.my. 3600 IN NS meranti.unimas.my.
unimas.my. 3600 IN NS gaharu.unimas.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 48561
;; flags: qr rd ra; QUERY: 1, ANSWER: 9, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; ANSWER SECTION:
unimas.my. 3600 IN TXT "MS=ms29391720"
unimas.my. 3600 IN TXT "MS=EE7F1335B369451220C318CE29B38FD0789DEC8D"
unimas.my. 3600 IN TXT "google-gws-recovery-domain-verification=4868732"
unimas.my. 3600 IN TXT "7e733f8274afb45af26e6d2e8c795e1e512e89c01c58fba11d1ad8823fadbf4"
unimas.my. 3600 IN TXT "RQWKGPZ3XMPU219F6UMM7JWRVDLY43XWAHS2QPZ"
unimas.my. 3600 IN TXT "MS=ms40999226"
unimas.my. 3600 IN TXT "google-site-verification=Qgn3MXKEq92CNSyFpX_9vBGRnMFpeErSLGqdyb6SVU"
unimas.my. 3600 IN TXT "_gwx8wub6e6c5ocrj8dedvsv9jj6ujs1"
unimas.my. 3600 IN TXT "v=spf1 include:spf.protection.outlook.com -all"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 59839
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
unimas.my. 1800 IN SOA meranti.unimas.my. admin.dnsvault.net. 2026022602 10800 3600 604800 1800
```

RRSIG

```
meranti.unimas.my. admin.dnsvault.net. 2026022602 10800 3600 604800 1800
```

DNSKEY

```
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 45867
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 512
;; AUTHORITY SECTION:
unimas.my. IN SOA meranti.unimas.my. admin.dnsvault.net. 2026022602 10800 3600 604800 1800
```

DNSSEC_VALIDATION

```
; unsigned answer
unimas.my. IN SOA meranti.unimas.my. admin.dnsvault.net. 2026022602 10800 3600 604800 1800
```

TLS Handshake Evidence

IPv4 Connection

IP Used	49.50.236.20
IP Version	4

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	302
Connected IP	49.50.236.20
Connect Time	27.82 ms
TTFB	54.73 ms
Total Time	54.87 ms
Error	Could not resolve host: unimas.my

Response Headers:

```
[
  "HTTP/1.1 302 Found",
  "Connection: close",
  "Content-Type: text/html",
  "X-Frame-Options: SAMEORIGIN",
  "X-XSS-Protection: 1; mode=block",
  "X-Content-Type-Options: nosniff",
  "Location: https://unimas.my/",
  "Content-Length: 169"
]
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	49.50.236.20
Connect Time	23.76 ms
TTFB	161.54 ms
Total Time	161.58 ms

Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Server: nginx/1.18.0 (Ubuntu)",
  "Date: Fri, 06 Mar 2026 09:11:21 GMT",
  "Content-Type: text/html; charset=utf-8",
  "Connection: keep-alive",
  "Set-Cookie: b965205153c4b56e8e26334ffebc5bd1=pr85vkv7mfi6ecgljm6f4b0c3; path=/; HttpOnly",
  "x-frame-options: SAMEORIGIN",
  "referrer-policy: strict-origin-when-cross-origin",
  "cross-origin-opener-policy: same-origin",
  "Expires: Wed, 17 Aug 2005 00:00:00 GMT",
  "Last-Modified: Fri, 06 Mar 2026 09:11:21 GMT",
  "Cache-Control: no-store, no-cache, must-revalidate, post-check=0, pre-check=0",
  "Pragma: no-cache"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.026278 0.055128
TCP Connect IPv4 → port 443	000 0.022850 0.000000

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
```