

# IPv6 Readiness Report

unimas.my — unimas.my



Scan to verify

Category: Education • Generated: 13 Jun 2026, 19:29 MYT • Last Checked: 13 Jun 2026, 01:01 MYT • Verification ID: c900d508-cb04-40d1-8990-5873ce5e7422

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

Audit trail: <https://ipv6.my6.my/audit/c900d508-cb04-40d1-8990-5873ce5e7422>

<p><b>X</b></p> <p><b>Non-Compliant</b></p> <p>MGv6C-1.0</p>	<p><b>32%</b></p> <p><b>No IPv6 Support</b></p>	<p><b>IPv6-ONLY READINESS</b></p> <p>Website: <b>X Not Ready</b></p> <p>DNS: <b>X Not Ready</b></p> <p>Email: <b>X Not Ready</b></p>
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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.	

#	CHECK	RESULT	DETAIL
8	<b>Signing Algorithm</b>	<b>INFO</b>	No DNSKEY record found.

**Email Services** (25%) 4 / 6

#	CHECK	RESULT	DETAIL
1	<b>MX Record Exists</b>	<b>PASS</b>	MX record found.
2	<b>MX Server Has IPv6</b>	<b>PASS</b>	MX server has AAAA record.
3	<b>SMTP Reachable via IPv6</b>	<b>FAIL</b>	SMTP is not reachable over IPv6.
4	<b>STARTTLS over IPv6</b>	<b>FAIL</b>	STARTTLS not available over IPv6.
5	<b>SPF Record</b>	<b>PASS</b>	SPF record found.
6	<b>DKIM Selector</b>	<b>INFO</b>	No common DKIM selector found.
7	<b>DMARC Record</b>	<b>PASS</b>	DMARC record found.

**IPv4 Baseline** (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	<b>A Record</b>	<b>PASS</b>	49.50.236.20
2	<b>HTTP over IPv4</b>	<b>PASS</b>	HTTP (port 80) responds over IPv4.
3	<b>HTTPS over IPv4</b>	<b>PASS</b>	HTTPS (port 443) responds over IPv4 — 576ms TTFB.

### Audit Trail & Evidence Record

Verification ID	c900d508-cb04-40d1-8990-5873ce5e7422
Domain	unimas.my
Check Mode	Scheduled
Status	Completed
Started	13 Jun 2026, 01:00:36 MYT
Finished	13 Jun 2026, 01:01:02 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/c900d508-cb04-40d1-8990-5873ce5e7422

### Integrity Verification

<p><b>✓ INTEGRITY VERIFIED</b></p>	
Algorithm	hmac-sha256-v1
Root Hash	422225a6dd8c136c76a2efd346669d4a06d6a52493d4dd834f346a6fad2888bd
http_headers	a59ecd1f527b283c3211ad109e1c605e1bd108fcb7b7c0ac4a895f61783ad21b
dns_responses	534b5ee6d77c05f7ce55ad125fe511541fcf259ae7b5128c81fee064c208a5b5
tls_handshake	763bdd22d1a010529911b2bf78035d4126a7ff52bd2043c4e6c806dcd331a2d6
connectivity_log	4c3bfb79b430d951d52d0bd93890f327ad622b58b51c10c47b6d793753e00443
dns_resolution_times	f6f391ad7380a34bf670e20df6b26476698734b542bc5e53a8ffaca8e8dded94

### Test Node Identity

Os	Linux srv1440888 6.8.0-124-generic #124-Ubuntu SMP PREEMPT_DYNAMIC Tue May 26 13:00:45 UTC 2026 x86_64
Hostname	srv1440888
Php Version	8.3.31
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	22.72	24.26	11.54	12.98	-11.2
Google	IPv4	72.22	185.71	79.42	193.02	+7.2
Google	IPv6	88.7	93.27	83.41	87.05	-5.3
Cloudflare	IPv4	28.02	33.79	29	32.42	+1
Cloudflare	IPv6	44.96	57.03	78.93	79.02	+34



## DNS Evidence

### A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 37391
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
unimas.my. 001777 IN SOA meranti.unimas.my. admin.dnsvault.net. 2026052301 10800 3600 604800 1800
```

### DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 23892
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
my. 003528 IN SOA e.nic.my. hostmaster.nic.my. 2026046676 1800 900 604800 3600
```

### MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 42003
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
unimas.my. 003600 IN MX 0 unimas-my.mail.protection.outlook.com.
```

### NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 58495
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 3

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
unimas.my. 003600 IN NS meranti.unimas.my.
unimas.my. 003600 IN NS gaharu.unimas.my.
```

### TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 47658
;; flags: qr rd ra; QUERY: 1, ANSWER: 9, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
unimas.my. 003600 IN TXT "MS=EE7F1335B369451220C318CE29B38FD0789DEC0D"
unimas.my. 003600 IN TXT "MS=ms40999226"
unimas.my. 003600 IN TXT "v=spf1 include:spf.protection.outlook.com -all"
unimas.my. 003600 IN TXT "RQWKGPZ3XMPU219F6UMM7JWRVDLY43XWAHS2QPZ"
unimas.my. 003600 IN TXT "7e733f8274afb45af26e6d2e8c795e1e512e89c01c58fba11d1ad8823fadbf4"
unimas.my. 003600 IN TXT "google-site-verification=Qgn3MXKEq92CNSyFpX_9vBGRnMFpeErLSLgqdyb6SvU"
unimas.my. 003600 IN TXT "MS=ms29391720"
unimas.my. 003600 IN TXT "_gwx8wub6e6c5ocrj8dedvsv9jj6ujs1"
unimas.my. 003600 IN TXT "google-gws-recovery-domain-verification=4868732"
```

### AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 17270
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
unimas.my. 001777 IN SOA meranti.unimas.my. admin.dnsvault.net. 2026052301 10800 3600 604800 1800
```

**RRSIG**

```
meranti.unimas.my. admin.dnsvault.net. 2026052301 10800 3600 604800 1800
```

**DNSKEY**

```
;; Got answer:  
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 51859  
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1  
  
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 1232  
;; AUTHORITY SECTION:  
unimas.my. 1777 IN SOA meranti.unimas.my. admin.dnsvault.net. 2026052301 10800 3600 604800 1800
```

**DNSSEC\_VALIDATION**

```
; unsigned answer  
unimas.my. 86377 IN SOA meranti.unimas.my. admin.dnsvault.net. 2026052301 10800 3600 604800 1800
```



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**TLS Handshake Evidence**

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**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	36.26 ms
TTFB	73.24 ms
Total Time	73.45 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	31.91 ms
TTFB	574.13 ms
Total Time	574.17 ms

#### Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Server: nginx/1.18.0 (Ubuntu)",
  "Date: Fri, 12 Jun 2026 17:01:02 GMT",
  "Content-Type: text/html; charset=utf-8",
  "Connection: keep-alive",
  "Set-Cookie: b965205153c4b56e8e26334ffebc5bd1=fgj9j2n082f663hn04vemuqd; 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, 12 Jun 2026 17:01:02 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 0.035767 0.072092
TCP Connect IPv4 → port 443	000 0.032086 0.000000

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### Test Node Network Evidence

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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
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#### 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
```