

IPv6 Readiness Report

umt.edu.my — umt.edu.my



Scan to verify

Category: Education • Generated: 13 Jun 2026, 19:11 MYT • Last Checked: 13 Jun 2026, 01:01 MYT • Verification ID: ee7eb839-cd3c-4311-aad0-0e024f89db25

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

Audit trail: <https://ipv6.my6.my/audit/ee7eb839-cd3c-4311-aad0-0e024f89db25>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>47%</p> <p>No IPv6 Support</p>	<p>IPv6-ONLY READINESS</p> <p>Website: X Not Ready</p> <p>DNS: ✓ Ready</p> <p>Email: X Not Ready</p>
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<p>IPv4 ADDRESSES</p> <p>103.255.170.100</p>

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	Universiti Malaysia Terengganu
Country	MY
ASN	AS59263
ASN Name	UMT-AS - Universiti Malaysia Terengganu, MY
Network (CIDR)	103.255.170.0/23

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.	

#	CHECK	RESULT	DETAIL
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: mail_domainkey
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	103.255.170.100
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 497ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 218ms TTFB.

Audit Trail & Evidence Record

Verification ID	ee7eb839-cd3c-4311-aad0-0e024f89db25
Domain	umt.edu.my
Check Mode	Scheduled
Status	Completed
Started	13 Jun 2026, 01:01:24 MYT
Finished	13 Jun 2026, 01:01:49 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/ee7eb839-cd3c-4311-aad0-0e024f89db25

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	7cf60feac2942765a85afd9754dc98ed09555da4ee6114bc6a8e7c0e90ad12a9
http_headers	a5ad3764adb1fca46e9f732d98401cd0546fe0aafa2fdb83455e971e6b1f1c5
dns_responses	517a24f6e983e8c5a8ba0f5eacbdb445e90f0b9c7a34e4151ad39150dfbaefa1
tls_handshake	c573d8f453d8b72cadb0964be88976410a6ff32083f069af893a9e9917088c65
connectivity_log	14bf372b8ae860a9f9845627ed4000d65ce663cf64599f4b5303f23144be5663
dns_resolution_times	f734cf2b6e5e2b63898570155ae7915c6d860995c7deadd6a143fdc6a65a24ed2

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	21.69	24.8	10.07	19.62	-11.6
Google	IPv4	30.07	31.91	32.46	36.54	+2.4
Google	IPv6	29.15	30.7	22.73	34.06	-6.4
Cloudflare	IPv4	22.16	22.2	9.1	11.11	-13.1
Cloudflare	IPv6	30.27	32.15	10.5	28.86	-19.8

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 45871
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
umt.edu.my. 0003600 IN A 103.255.170.100
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33909
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
edu.my. 0003453 IN SOA e.nic.my. hostmaster.nic.my. 2026046676 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 51499
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
umt.edu.my. 0003600 IN MX 5 alt2.aspmx.l.google.com.
umt.edu.my. 0003600 IN MX 10 alt3.aspmx.l.google.com.
umt.edu.my. 0003600 IN MX 1 aspmx.l.google.com.
umt.edu.my. 0003600 IN MX 5 alt1.aspmx.l.google.com.
umt.edu.my. 0003600 IN MX 10 alt4.aspmx.l.google.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 19395
;; flags: qr rd ra; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 5

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
umt.edu.my. 0003600 IN NS ns2.umt.edu.my.
umt.edu.my. 0003600 IN NS ns3.umt.edu.my.
umt.edu.my. 0003600 IN NS ns1.umt.edu.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 38044
;; flags: qr rd ra; QUERY: 1, ANSWER: 9, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
umt.edu.my. 0003600 IN TXT "v=spf1 include:_spf.google.com ~all"
umt.edu.my. 0003600 IN TXT "ca3-ea2f54385dc54db892983296d6b1ddcd"
umt.edu.my. 0003600 IN TXT "v=DMARC1; p=none; rua=mailto:rua@dmARC.brevo.com"
umt.edu.my. 0003600 IN TXT "brevo-code:75764e965615ae473874e732c30f5ee6"
umt.edu.my. 0003600 IN TXT "MS=797646f7b8752ff58a5242f266d8bb57f6fd703f"
umt.edu.my. 0003600 IN TXT "facebook-domain-verification=xwu0mm339m59jbqwy4lu06ixzivawb"
umt.edu.my. 0003600 IN TXT "google-site-verification=QewbmcLWgo6cf6LReSr9RYoAuDpTbUaBEcxwM867DY"
umt.edu.my. 0003600 IN TXT "cisco-ci-domain-verification=622a684cad35284cff25eb09c3ef5f344f5ce45aa9fe120b85d834df7f06737b"
umt.edu.my. 0003600 IN TXT "k=rsa;
p=MTGfMA0GCsQGS1b3DQEBAQUAA4GNADCBiQKBgQdeMVIzrCa3T14JsNY0Irv5/2V1/v2itlv1LQBwXsa7shBD6TrBkswsFUToPyMRWC9tbr/5ey0nRBH0ZVxp+lsmTxid2Y2z+FAPQ6ra2VsXfbJP3HE6wA00YtVEjt1TmeczhEd2Jiz/
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 18357
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1
```

```
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 1232  
;; AUTHORITY SECTION:  
umt.edu.my. 39 IN SOA ns1.umt.edu.my. postmaster.umt.edu.my. 2026061101 10800 3600 604800 60
```

RRSIG

```
ns1.umt.edu.my. postmaster.umt.edu.my. 2026061101 10800 3600 604800 60
```

DNSKEY

```
;; Got answer:  
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 58517  
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1  
  
;; OPT PSEUDOSECTION:  
; EDNS: version: 0, flags:; udp: 1232  
;; AUTHORITY SECTION:  
umt.edu.my. 38 IN SOA ns1.umt.edu.my. postmaster.umt.edu.my. 2026061101 10800 3600 604800 60
```

DNSSEC_VALIDATION

```
; unsigned answer  
umt.edu.my. 3578 IN SOA ns1.umt.edu.my. postmaster.umt.edu.my. 2026061101 10800 3600 604800 60
```



```
Expansion: NONE
No ALPN negotiated
SSL-Session:
  Protocol : TLSv1.2
  Cipher : ECDHE-RSA-AES256-GCM-SHA384
  Session-ID: A4E52831853C6431F801A115FC78479A74E97838BCC3221E5330CCEA2AE83BCD
  Session-ID-ctx:
  Master-Key: BA3E1A5263E9B8620D996A81ADDABF81A769D0DCAA7B0858AB6DFF2986E05D9D13293F748FCC37C3D68FE502841191DB
  PSK identity: None
  PSK identity hint: None
  SRP username: None
  TLS session ticket lifetime hint: 300 (seconds)
  TLS session ticket:
0000 - 1e ce 35 69 0b 51 b0 0c-4a 23 57 d4 6d 81 c8 60 ..5i.Q...J#W.m..'
0010 - b8 d8 f0 20 74 16 02 1b-72 42 56 2b 7f 8b 54 38 ... t...rBV+..T8
0020 - f6 b0 af 9f 3d d7 0b 0d-4e e7 2d 98 71 aa 22 f1 ....F.-.q.".
0030 - 98 b0 60 29 bd 8a 2b 01-b3 07 45 af 60 f1 eb b8 ..`)...+...E.`...
0040 - 59 2b e2 2b bd 40 04 28-e0 2d 78 2a 4f 3f 26 1b Y+..+@.(.-x*0?&.
0050 - d2 7a 10 4c a1 fe 67 58-4d a9 f4 b6 4a 4e 83 0b .z.L..gXM...JN..
0060 - 4b 5d 58 85 ba 1a ae 3d-ed 47 3c f9 1f 29 7d b3 K]X....=.G<..)}.
0070 - 7a b4 e7 96 0d 87 52 64-cb c3 4a 32 09 06 33 56 z....Rd..J2..3V
0080 - e7 cc bb 25 4b a7 06 98-c7 48 61 34 2f 3e 06 d1 ...%K....Ha4/>..
0090 - 9a 95 b9 5a a0 75 aa 68-07 f8 8f d5 73 46 ad 6a ...Z.u.h....sF.j
00a0 - 4d c9 88 fb a3 35 42 d4-1d ae 97 b3 2f 2a b7 35 M....5B...../*-5
00b0 - 19 ed 88 e2 ba bc 2e 44-42 33 44 f2 67 e2 83 8c .....DB3D.g...
00c0 - 0b 04 4f e8 65 70 20 c7-c6 a0 59 fb ca 8d 47 27 ..0.ep ...Y...G'
```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	103.255.170.100
Connect Time	26.09 ms
TTFB	253.44 ms
Total Time	253.54 ms

Response Headers:

```
{
  "0": "HTTP/1.1 302 Found",
  "1": "Date: Fri, 12 Jun 2026 17:01:48 GMT",
  "2": "Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.29",
  "3": "Location: https://umt.edu.my/",
  "4": "Content-Type: text/html; charset=iso-8859-1",
  "6": "HTTP/1.1 200 OK",
  "7": "Date: Fri, 12 Jun 2026 17:01:48 GMT",
  "8": "Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.29",
  "9": "X-Powered-By: PHP/7.4.29",
  "10": "Set-Cookie: PHPSESSID=0rkd15ejvlic4d3si5stoqmdr3; path=/",
  "11": "Expires: Thu, 19 Nov 1981 08:52:00 GMT",
  "12": "Cache-Control: no-store, no-cache, must-revalidate",
  "13": "Pragma: no-cache",
  "14": "Link: <https://umt.edu.my/index.php?rest_route=/>; rel=\\"https://api.w.org/\\"",
  "15": "Link: <https://umt.edu.my/index.php?rest_route=/wp/v2/pages/77>; rel=\\"alternate\\"", title=\\"JSON\\"", type=\\"application/json\"",
  "16": "Link: <https://umt.edu.my/>; rel=shortlink",
  "17": "Content-Type: text/html; charset=UTF-8"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	103.255.170.100
Connect Time	11.59 ms
TTFB	248.3 ms
Total Time	248.34 ms

Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Date: Fri, 12 Jun 2026 17:01:48 GMT",
  "Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips PHP/7.4.29",
  "X-Powered-By: PHP/7.4.29",
  "Set-Cookie: PHPSESSID=egissof5vki6650s3etl079td; path=/",
  "Expires: Thu, 19 Nov 1981 08:52:00 GMT",
  "Cache-Control: no-store, no-cache, must-revalidate",
  "Pragma: no-cache",
  "Link: <https://umt.edu.my/index.php?rest_route=/>; rel=\\"https://api.w.org/\\"",
  "Link: <https://umt.edu.my/index.php?rest_route=/wp/v2/pages/77>; rel=\\"alternate\\"", title=\\"JSON\\"", type=\\"application/json\"",
  "Link: <https://umt.edu.my/>; rel=shortlink",
  "Content-Type: text/html; charset=UTF-8"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	302 0.012509 0.027256
TCP Connect IPv4 → port 443	000 0.011916 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
```