

IPv6 Readiness Report

uitm.edu.my — uitm.edu.my



Scan to verify

Category: Education • Generated: 13 Jun 2026, 19:34 MYT • Last Checked: 13 Jun 2026, 01:28 MYT • Verification ID: 8623e34e-3bed-4cd6-9f67-05313e48b98f
Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>
Audit trail: <https://ipv6.my6.my/audit/8623e34e-3bed-4cd6-9f67-05313e48b98f>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>50%</p> <p>No IPv6 Support</p>	<p>IPv6-ONLY READINESS</p> <p>Website: X Not Ready</p> <p>DNS: X Not Ready</p> <p>Email: ✓ Ready</p>
--	---	--

<p>IPv6 ADDRESSES</p> <p>2401:74a0:140::16</p>	<p>IPv4 ADDRESSES</p> <p>202.58.83.54</p>
---	--

Network Information (WHOIS / RDAP)

	IPv6 Network	IPv4 Network
Organization	Universiti Teknologi MARA	Universiti Teknologi MARA
Country	MY	MY
ASN	AS24020	AS24020
ASN Name	UITM-AS-AP - University ITM, Shah Alam, Selangor Malaysia, MY	UITM-AS-AP - University ITM, Shah Alam, Selangor Malaysia, MY
Network (CIDR)	2401:74a0::/32	202.58.80.0/20

Web Services (35%)				3 / 8
#	CHECK	RESULT	DETAIL	
1	AAAA Record	PASS	2401:74a0:140::16	
2	Globally Routable IPv6	PASS	All addresses are 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)	PASS	Domain has both A and AAAA records.	
8	HTTP/3 (QUIC)	FAIL	No HTTP/3 support detected.	

DNS & DNSSEC (25%)				1 / 5
#	CHECK	RESULT	DETAIL	
1	NS Has AAAA Record	PASS	Nameserver has IPv6 address.	
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	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	PASS	SMTP port 25 responds 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	FAIL	No DMARC record found.

IPv4 Baseline (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	202.58.83.54
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 184ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 167ms TTFB.

Audit Trail & Evidence Record

Verification ID	8623e34e-3bed-4cd6-9f67-05313e48b98f
Domain	uitm.edu.my
Check Mode	Scheduled
Status	Completed
Started	13 Jun 2026, 01:24:30 MYT
Finished	13 Jun 2026, 01:28:22 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/8623e34e-3bed-4cd6-9f67-05313e48b98f

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	df559c94615a6285a4f810f7b51c82ea7d88d80d2b0073eb5796ef5f2fb0d50d
http_headers	76e1bca23620d0e7393b9bfff00567ff141dbe1456f19993451247c1f92687db9
dns_responses	2ce724f56f12305bbf527246020d9cafc0f0e4ee1d2402b84ae0b8e647437b7b
tls_handshake	8909934b97dcb2c32871e93fb5b453c6965c410443a40ea9585589b09ed1963
connectivity_log	a7f97ca2e111712a1d45190765884e1cddb36e17ddb21811cf5f0f75f72268c3
dns_resolution_times	4d93014a0dc42cf5ad36cb6af3c852cf132f06d0005cccf199fb47c48451c10d

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	20.32	20.82	11.83	24.13	-8.5
Google	IPv4	29.15	29.56	29.97	30.64	+0.8
Google	IPv6	27.36	41.06	20.59	28.59	-6.8
Cloudflare	IPv4	10.34	22.01	9.01	9.08	-1.3
Cloudflare	IPv6	19.1	19.54	28.14	40.62	+9

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 51102
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
uitm.edu.my. 300 IN A 202.58.83.54
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 34589
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
edu.my. 2018 IN SOA e.nic.my. hostmaster.nic.my. 2026046676 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 50862
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
uitm.edu.my. 300 IN MX 5 ALT1.ASPMX.L.GOOGLE.COM.
uitm.edu.my. 300 IN MX 10 ASPMX2.GOOGLEMAIL.COM.
uitm.edu.my. 300 IN MX 5 ALT2.ASPMX.L.GOOGLE.COM.
uitm.edu.my. 300 IN MX 10 ASPMX3.GOOGLEMAIL.COM.
uitm.edu.my. 300 IN MX 1 ASPMX.L.GOOGLE.COM.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 24007
;; flags: qr rd ra; QUERY: 1, ANSWER: 3, AUTHORITY: 0, ADDITIONAL: 7

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
uitm.edu.my. 300 IN NS ns3.uitm.edu.my.
uitm.edu.my. 300 IN NS ns1.uitm.edu.my.
uitm.edu.my. 300 IN NS ns2.uitm.edu.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 11060
;; flags: qr rd ra; QUERY: 1, ANSWER: 12, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
uitm.edu.my. 300 IN TXT "google-site-verification=LLOYL3gt-FWin0QShi17N_LUVmPFwo0AtayuI8dFsS8"
uitm.edu.my. 300 IN TXT "adobe-idp-site-verification=fb1f5c68f32b487f97a46b8fc1165137"
uitm.edu.my. 300 IN TXT "google-site-verification=gDQWcC9MPRNwKms2RVZcBmljgYjPK6LtkfAvoEvB904"
uitm.edu.my. 300 IN TXT "adobe-idp-site-verification=fb1f5c68-f32b-487f-97a4-6b8fc1165137"
uitm.edu.my. 300 IN TXT "google-site-verification=xIRyIQ_3uhwBg40vH5E1e0NtQFnu0vAnObS3JmxTat0"
uitm.edu.my. 300 IN TXT "google-site-verification=K2CodNStu6F-cYSenDcqVTgwo402wMc0vA7sC7sJK4g"
uitm.edu.my. 300 IN TXT "google-site-verification=HxBt7L0cRdN0jB4fYPF4mwwcKNiF0_NoqC5QbCbbVY"
uitm.edu.my. 300 IN TXT "google-site-verification=LZd0qS4AHNX2QTPj1BfuXxBIHQ9Zpx0eS4WsFvkhf0w"
uitm.edu.my. 300 IN TXT "MS=ms99834528"
uitm.edu.my. 300 IN TXT "cisco-ci-domain-verification=3d24323685c864adbc7c8dcee2dedefc509618b0e54472a5c086f20d8d077508"
uitm.edu.my. 300 IN TXT "v=spf1 ip4:202.58.82.126 ip4:202.58.84.87 ip4:202.58.84.88 ip4:202.58.84.89 include:_spf.google.com ~all"
uitm.edu.my. 300 IN TXT "google-site-verification=50USztdHYiKcdPt7BYK_udFk4zkaTMDxtDNAylwCMI"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 43424
```

```
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
uitm.edu.my. 300 IN AAAA 2401:74a0:140::16
```

RRSIG

```
ns1.uitm.edu.my. postmaster.salam.uitm.edu.my. 2026061001 14400 3600 1209600 3600
```

DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 31393
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
uitm.edu.my. 287 IN SOA ns1.uitm.edu.my. postmaster.salam.uitm.edu.my. 2026061001 14400 3600 1209600 3600
```

DNSSEC_VALIDATION

```
; unsigned answer
uitm.edu.my. 287 IN SOA ns1.uitm.edu.my. postmaster.salam.uitm.edu.my. 2026061001 14400 3600 1209600 3600
```



```

KwYBBQUHAWEGCCsGAQUFBwMCMBSGA1UdIAQUMBIwBgYEVR0gADAI BgZngQwBAGew
VAYDVR0fBE0wSzBjOeEgRYZDaHR0cDovL2NybC5zZWNoawdvLmNvbS9TZWNoawdv
UHVibGljU2VydmVyQXV0aGVudGljYXRpb255b290UjQ2LmNybDCBhAYIKwYBBQUH
AQEEeDB2ME8GCCsGAQUFBzACHkNodHRwOi8vY3J0LnNlY3RpZ28uY29tL1NlY3Rp
Z290dWJsaWNTZXJ2ZXJBR0cW50aWNoZGlvb1Jvb3RSNDYucDdjMCMGCCsGAQUF
BzABhdodHRwOi8vbn2Nzc5zZWNoawdvLmNvbTANBgkqhkiG9w0BAQwFAAOCAgEA
Yt0C9Fy+TqECFw40IospI92klGgoSZGPOSQXMBqmsGWZUQ7rux7cjl1du6d9rD6C8
ze1B2e0jkrGkIL/0F1s7vSmgYVafsRoZd/IHUrkoQvX8FZwUsmPu7amgBfaY3g+d
q1x0jNGKb6I6Bzd16LgMD9qxp+3i7GQ0nd9J8LFSietY6Z4jUBzVo0oz8iAU840F
h2HhAuiPw1ai0VnY38RTI+8kepGwVfGxfBwzW9uIjeoIeaosVFvE8cmYUB4TSH
5dUyD0jHct2+8ceKEtIoFU/FfHq/mDaVnvcDCZxtIgitdMFQdMzaVehmObyhRdDD
4NQCs0gaI9AAgFj4L90tkARzhQLNyRf87Kln+YU0lgCGr9HLg3rG08q+Y4ppls0d
unQZ6ZxPNGIf0ApbPVf5hCe58EZwiWdHIMn9LPP6+F404y8NNugb0ixBber+x536
WrZhfZLjEkhp7fFXf9r32rNPFb74X/U90Bdy4Lzpz+X1ukh1BuMxA/EEhdTOS3L
7ABvc7BYSQubQ24900cdkIzUh3ZwDrakMvrbaTxUM2p24N6dB+ns2zptWCva6jzW
r8IWKIMxzxLPv5Kt3ePKcUdvkBU/smqjSczTzzSjIoR5QqA6lN1ZRSnuHIWcVh
JELtkYnTAH41QJ6SAW066GrrUESwN/cgZzL4JLEqz1Y=
-----END CERTIFICATE-----
2 s:C = GB, 0 = Sectigo Limited, CN = Sectigo Public Server Authentication Root R46
i:C = US, ST = New Jersey, L = Jersey City, 0 = The USERTRUST Network, CN = USERTrust RSA Certification Authority
a:PKKEY: rsaEncryption, 4096 (bit); sigalg: RSA-SHA384
v:NotBefore: Mar 22 00:00:00 2021 GMT; NotAfter: Jan 18 23:59:59 2038 GMT
-----BEGIN CERTIFICATE-----
MIIGLTCCBH2gAwIBAgIRANJ/u8HeNz5SFq1hSVhgmcQwDQYJKoZIhvcNAQEMBQAw
gYxgCzAJBgNVBAYTALVTMRMwEQYDQVQIEwpOZXcgSmVyc2V5MRQwEgYDVOQHEwtK
ZXJzZXkgQ2l0eTEeMBwGA1UEChMvVGVhLlFVTRVJU1VTVCB0ZXR3b3JrMS4wLWYD
VQ0EYyVU0VSUHJlc3Q0U1NBIENlcnRpb2ljYXRpb2g0XV0aG9yaXR5MB4XDTEx
MDMyMjAwMDAwMFoXDTE4MDEwODIzNTk1OVowXzELMAkGA1UEBHMCR0IxGDAWBgNV

```

IPv6 Connection

IP Used	2401:74a0:140::16
IP Version	6

```

4017B236ED7F0000:error:8000006E:system library: BIO_connect:Connection timed out:../crypto/bio/bio_sock2.c:114:calling connect()
4017B236ED7F0000:error:10000067: BIO routines: BIO_connect:connect error:../crypto/bio/bio_sock2.c:116:
connect:errno=110

```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	202.58.83.54
Connect Time	4.55 ms
TTFB	146.94 ms
Total Time	147.02 ms

Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Date: Fri, 12 Jun 2026 17:27:53 GMT",
  "Server:XXXXXXX",
  "Set-Cookie: 96cf2b6d733363bd0723f19b64e8fb52=819a1154e4fe9471dc69600de5d645e8; path=/; HttpOnly",
  "X-Content-Type-Options: nosniff",
  "Content-Type: text/html; charset=UTF-8",
  "Set-Cookie: cookiesession1=678B28CE3DADC07EAF0F47F44B3E5983;Expires=Sat, 12 Jun 2027 17:28:12 GMT;Path=/;HttpOnly",
  "X-Frame-Options: SAMEORIGIN",
  "X-XSS-Protection: 1; mode=block",
  "Content-Security-Policy: upgrade-insecure-requests"
]
```

IPv6 HTTP (port 80)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	8002.64 ms
Error	Failed to connect to uitm.edu.my port 80 after 8002 ms: Timeout was reached

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	202.58.83.54
Connect Time	4.74 ms
TTFB	196.03 ms
Total Time	196.09 ms

Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Date: Fri, 12 Jun 2026 17:27:53 GMT",
  "Server:XXXXXXX",
  "Set-Cookie: 96cf2b6d733363bd0723f19b64e8fb52=b425092975cea3875da58fdf32cbd268; path=/; HttpOnly",
  "X-Content-Type-Options: nosniff",
  "Content-Type: text/html; charset=UTF-8",
  "Set-Cookie: cookiesession1=678B28D1D0CB6F7BB3A82CC6DDB2FE11;Expires=Sat, 12 Jun 2027 17:28:12 GMT;Path=/;HttpOnly",
  "Strict-Transport-Security: max-age=15552000",
  "X-Frame-Options: SAMEORIGIN",
  "X-XSS-Protection: 1; mode=block",
  "Content-Security-Policy: upgrade-insecure-requests"
]
```

IPv6 HTTPS (port 443)

HTTP Status	0
Connected IP	
Connect Time	0 ms
TTFB	0 ms
Total Time	8003.03 ms
Error	Failed to connect to uitm.edu.my port 443 after 8003 ms: Timeout was reached

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	200 0.004656 0.148276
TCP Connect IPv6 → port 80	000 0.000000 0.000000
TCP Connect IPv4 → port 443	200 0.005305 0.180940
TCP Connect IPv6 → port 443	000 0.000000 0.000000

Test Node Network Evidence

Node Profile	dual stack
--------------	------------

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
```