

IPv6 Readiness Report

admission.utm.my — admission.utm.my



Scan to verify

Category: Education • Generated: 04 Jul 2026, 22:18 MYT • Last Checked: 04 Jul 2026, 03:15 MYT • Verification ID: 1ac1585d-2e51-4f50-86bc-8c14cbe5d1ec

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

Audit trail: <https://ipv6.my6.my/audit/1ac1585d-2e51-4f50-86bc-8c14cbe5d1ec>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>15%</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: X Not Ready</p>
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<p>IPv4 ADDRESSES</p> <p>161.139.22.87</p>

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	Universiti Teknologi Malaysia
Country	MY
ASN	AS133014
ASN Name	UTM-AS-AP - Universiti Teknologi Malaysia, MY
Network (CIDR)	161.139.0.0/16

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	PASS	DS record found at parent zone.	
7	RRSIG Valid	FAIL	No valid RRSIG found.	

#	CHECK	RESULT	DETAIL
8	Signing Algorithm	INFO	No DNSKEY record found.

Email Services (25%) 0 / 6

#	CHECK	RESULT	DETAIL
1	MX Record Exists	FAIL	No MX record found in DNS.
2	MX Server Has IPv6	FAIL	MX server has no IPv6 address.
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	FAIL	No 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	161.139.22.87
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 105ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 68ms TTFB.

Audit Trail & Evidence Record

Verification ID	1ac1585d-2e51-4f50-86bc-8c14cbe5d1ec
Domain	admission.utm.my
Check Mode	Scheduled
Status	Completed
Started	04 Jul 2026, 03:15:43 MYT
Finished	04 Jul 2026, 03:15:48 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/1ac1585d-2e51-4f50-86bc-8c14cbe5d1ec

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	a9508e3a9154cacc9159cdf3d7dfa89059af92a92774d6ab384d50c446fcc5b5
http_headers	be2e90751897898032ee8b9c08f2793700a54e580fb59b697950fc746d26c99a
dns_responses	fc3d4066a7eb5f870315747bf3200074d45ba01beec3c25d59248057fe63ea22
tls_handshake	6fa6ff2a193fe5495de63315ddc91fbbbee37acdc7fb19aeb01e4b58cca45e98
connectivity_log	a8c0557618d5c15d94c0ca3b20eb30e187f14572e86a2105427026ba1737e6a6
dns_resolution_times	16467368161fcbf50291ccfd55ed1fceb0c38ffc7771e1e4af3aa9f35ae26d9d

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	8.3.32
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	35.66	44.11	29.87	35.46	-5.8
Google	IPv4	47.37	63.72	77.07	91.65	+29.7
Google	IPv6	68.1	73.65	50.12	56.54	-18
Cloudflare	IPv4	27.35	33.79	28.26	45.9	+0.9
Cloudflare	IPv6	36.37	84.49	32.92	83.15	-3.5

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 7474
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
admission.utm.my. 3597 IN CNAME www3.utm.my.
www3.utm.my. 3597 IN A 161.139.22.87
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 10055
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
admission.utm.my. 3597 IN CNAME www3.utm.my.

;; AUTHORITY SECTION:
utm.my. 3600 IN SOA ns3.utm.my. root.utm.my. 2020107554 1200 600 1209600 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 2338
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
admission.utm.my. 3597 IN CNAME www3.utm.my.

;; AUTHORITY SECTION:
utm.my. 3600 IN SOA ns3.utm.my. root.utm.my. 2020107554 1200 600 1209600 3600
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 16858
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
admission.utm.my. 3597 IN CNAME www3.utm.my.

;; AUTHORITY SECTION:
utm.my. 3600 IN SOA ns3.utm.my. root.utm.my. 2020107554 1200 600 1209600 3600
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 7169
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
admission.utm.my. 3597 IN CNAME www3.utm.my.

;; AUTHORITY SECTION:
utm.my. 3600 IN SOA ns3.utm.my. root.utm.my. 2020107554 1200 600 1209600 3600
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 15325
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
```

```
;; ANSWER SECTION:
admission.utm.my. 3597 IN CNAME www3.utm.my.

;; AUTHORITY SECTION:
utm.my. 3600 IN SOA ns1.utm.my. root.utm.my. 2020107554 1200 600 1209600 3600
```

RRSIG

```
www3.utm.my.
```

DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 6116
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
admission.utm.my. 3597 IN CNAME www3.utm.my.

;; AUTHORITY SECTION:
utm.my. 3600 IN SOA ns3.utm.my. root.utm.my. 2020107554 1200 600 1209600 3600
```

DNSSEC_VALIDATION

```
;; resolution failed: ncache nxrrset
; unsigned answer
admission.utm.my. 3597 IN CNAME www3.utm.my.
; www3.utm.my. 3600 IN \-SOA; -$NXRRSET
; utm.my. SOA ns3.utm.my. root.utm.my. 2020107554 1200 600 1209600 3600
```


TLS Handshake Evidence

IPV4 Connection

IP Used	161.139.22.87
IP Version	4

```

depth=0 C = MY, L = Johor Bahru, O = Universiti Teknologi Malaysia, CN = *.utm.my
verify error:num=20:unable to get local issuer certificate
verify return:1
depth=0 C = MY, L = Johor Bahru, O = Universiti Teknologi Malaysia, CN = *.utm.my
verify error:num=21:unable to verify the first certificate
verify return:1
depth=0 C = MY, L = Johor Bahru, O = Universiti Teknologi Malaysia, CN = *.utm.my
verify return:1
CONNECTED(00000010)
---
Certificate chain
0 s:C = MY, L = Johor Bahru, O = Universiti Teknologi Malaysia, CN = *.utm.my
i:C = US, O = SSL Corporation, CN = Entrust OV TLS Issuing RSA CA 1
a:PKEY: rsaEncryption, 2048 (bit); sigalg: RSA-SHA256
v:NotBefore: Jul 15 09:13:46 2025 GMT; NotAfter: Aug 13 16:00:00 2026 GMT
-----BEGIN CERTIFICATE-----
MIIHQDCBSigAwIBAgIQcEDWxrRn/9BNg7fsoz0qHzANBgkqhkiG9w0BAQsFADBR
MQswCQYDVQQGEwJVUzEYMBYGA1UECgwPU1NMIENvbnVcmF0aW9uMSgwJgYDVQQD
DB9FbnRydXN0IE9wIFRMLUJc3N1aW5nIFJ0SBDQSAxMB4XDTI1MDcxNTA5MTM0
Nl0xDTI2MDgxMzE2MDAwMFowXjELMAkGA1UEBhMCTVxvZDASBgNVBACMC0pvaG9y
IEJhaHJ1MSYwJAYDVQQKDB1vbm12ZXJzaXRpIFRlLa25vbG9naSBNYWxheXNpYTER
MA8GA1UEAwwIKi51dG0ubXkwggEiMA0GCSCqGSIb3DQEBAQUAA4IBDwAwggEKAoIB
AQCuVxHTSt3weoKlo5DeId6KHI83dL/z9t4Bq+HVwqg6BA0fETgrM2KSzJjNiTvH
bFgBHjSjSFMS17oytuxb2sfGycBuHyBwQcKgvEmjax3DEtRUIvD8ybuJ2JE4TMOG
fFXd8VYwGm0Kg73hZVBsJAYuHl1oW49rzCsfcYr2K2pAvkzndfRnLKf4LYxjwgUN
PvpngnrMSU018rCdGy0u49w0Txzxcw5zVGU06MCEJtL4zBzHIR6A+eRn+8fCN2
jLQ9XhIPDoqkVjg9S86Aal6/Po5kaB/9VtIryqGfmCpm7QyBS7Ko40WeVdEuYDT
J/5q42urxNlrsvtEFexWtXudAgMBAAGjggMFMIIIDATAMBgNVHRMBAf8EAjAAMB8G
A1UdIwQYMBAAFGNRC01wueaG/CzhN3V2n8LicERMGGCCsGAQUFBwEBBFwwJwA2
BggrrBgEFBQcwAoYqHR0cDovL2N1cnQuc3NsLmNvbS9FbnRydXN0LU9wVWVXLUkt
UjEuY2VyMCAgCCsGAQUFBwABhhRodHR0i8vb2NzchMuc3NsLmNvbTA2BgnVHREE
LzAtAgggqLnV0bS5teYIGdXRtLm15ggp3d3cudXRtLm15gg1T5VNXQTEUvVRNLk1Z
MCMGA1UdIAQcMBowCAYGZ4EMA4GDcSAQAQBgqkAQMBajAdBgNVHSUEFjAU
BggrrBgEFBQcDAgYIKwYBBQUHAWew0YDVR0fBDQwMjAwoC6gLIYqHR0cDovL2Ny
bHMuc3NsLmNvbS9FbnRydXN0LU9wVWVXLUktUjEuY3JsMB0GA1UdDgQWB0GcNf
8cG5V99ogaBke1ZqnBcFIzA0BgNVH08BAf8EBAMCBAAwggF8BgorBgEEAdZ5AgQC
B1IBBASCAGBzB1AMIxfldFganF7n843rKQ0evHwiFaIr9/1bWtdprZDLNAAAB
mAl1uo8AAAQDAEYwRAIgmHfVMhasRibULvVAXwqFX2dgm8JSiSSGbdnLSjfqscI
Hyl7Qak00Ie1jjeTkh0Ghm0z0KLImk/zpx3JtbbGo6IAHYAyzj3FYl8hKFEX1vB
3fvJbvKawc1HCmkFhbdLFMMU0cAAAGYDWM6oQAABAMARzBFAiEAou3kg7R+Mvqd
wT0SJAz6F3bjR7ix809wursPymx0YACIGiwYAZ67VlnNfpueyXTeSym2T3LhdV0
J1UAGj9Kt0bVAHUA1219ENg9XfCx+lf1wC/+YLJM1pL4dCzAXMwMjFaXcAAAGY
DWM6kWAABAMARjBEAiBiq3HsD4yX8tLpJeqqTuubXLf6g0+RuG1Pv+lfIRR/wIG
CSwjgD5LD/w6e8vaNV/dbbczBAND0Bg9uG6rKmIywWdQYJKoZIhvcNAQELBQAD
ggIBADKaAzVN22ZuSa6yJipHAiX/UYaiALQjLxk6i6kTFqFDyF1VyBRnn4DL9PCH
AK30sFvV3/UvkXnCoamfCL51sZg5gH+DabBq+Q7W9N2N09aNBtKEUxzLXpbuk7I
tluxc8uush6usVKatWg2/Rjhx0MBI4vf3jW5i1r/wVCyqKpvt0DRMQoVoDzkBOXRC
03e0sXXVzFee+mb1nTIU0Wkf2szny/8mW5YdyzmgGguP9oAPYU/R55toRplZ1byg
Wkduiuq7CbywnY0adNhq3Jdr3kfSqCAVVG2K+VHBWEgVik8UNIDGzd9L2Is7X/N
zEp1a8Q3YuVic0nk59l5pmHJVRIHU/cFeb5XPHSsaowZ7gUZmbYm6ynCBW9+Z
TfZnmYWEgnfg8Y15MdEfiis9CPKk2273UtxRGEMtIapD1H009qoS5c5L6xBj+H6C
jaORSeA0nmQ1qgTg2tGsRmj0NsWot2xXCtnwp121wFcYIEPbrz/DVwJcC77Fc0W1
Txbthf8eVRJyQLFHxjAQRQCXZVFVjsJPFd5zf09FhrCBajigCjSB5aj2n1ILMM
dAhQoIRBwa4JGL6i0e6BB+p+5L49yPW6o0IPleuVrkCFrH+QT1pTANq/7iG4TBH4
Y3jEf5ryEMDobr0ij/FyoVt7k44L9v8L4X0515LHdLJQrERB
-----END CERTIFICATE-----
---
Server certificate
subject=C = MY, L = Johor Bahru, O = Universiti Teknologi Malaysia, CN = *.utm.my
issuer=C = US, O = SSL Corporation, CN = Entrust OV TLS Issuing RSA CA 1
---
No client certificate CA names sent
---
SSL handshake has read 2208 bytes and written 660 bytes
Verification error: unable to verify the first certificate
---
New, SSLv3, Cipher is AES128-SHA
Server public key is 2048 bit
Secure Renegotiation IS supported
Compression: NONE
Expansion: NONE
No ALPN negotiated
SSL-Session:

```

```

Protocol : TLSv1.2
Cipher   : AES128-SHA
Session-ID: 403A0CBB35F30850BEB1FA48AD9342E083FACAD4D96A4F86E023A806AD042344
Session-ID-ctx:
Master-Key: EC80A1816C95B98D9E518BF3DA4104FFC78BAF192F3D604C8E11249A7899F4542EEB3C905B43BEE46105F09229415F35
PSK identity: None
PSK identity hint: None
SRP username: None
TLS session ticket lifetime hint: 300 (seconds)
TLS session ticket:
0000 - 2a 50 8b 28 3b 9f 0c af-14 ce 76 aa 59 fe 21 fd *P.(;....v.Y!.
0010 - a7 30 cb 45 c3 cd 5f ca-b1 d7 50 a3 0d d6 83 c8 .0.E._...P....
0020 - e1 90 7a a5 b0 5f 8d df-ae b2 d2 4a 83 16 24 8a ..z._...J..$.
0030 - 0b 64 21 f4 89 cb 92 0c-92 23 f4 3e 57 54 1b 03 .d!.....#.>WT..
0040 - b8 af 16 17 f1 44 25 c5-43 ab 41 2c a3 a9 fc aa ....D%.C.A,....
0050 - 0c 0a 84 88 90 76 bb 6a-69 e0 26 de bc 40 f0 33 .....v.ji.&.@.3
0060 - ee 8a 56 91 e3 9c 4a f5-d6 62 55 78 1a f5 10 40 ..V...J..bUX...@
0070 - b5 12 cc e1 ca 28 b8 8b-72 85 d0 84 1d 4e ed 3e ....(..r...N.>
0080 - f1 64 af 94 1d 1f 65 5e-ff b7 5e 2c e0 82 f4 76 .d....e^..^,...v
0090 - bc 89 98 c7 42 a6 a0 7c-70 70 32 fe 44 f1 da 2d ...B..|pp2.D.-
00a0 - 57 52 a6 66 eb f6 4a 4c-50 82 4e 65 d4 75 c9 b8 WR.f..JLP.Ne.u..

Start Time: 1783106148
Timeout : 7200 (sec)
Verify return code: 21 (unable to verify the first certificate)
Extended master secret: no
---
```

HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	161.139.22.87
Connect Time	27.82 ms
TTFB	96.46 ms
Total Time	96.53 ms

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Server: nginx",
  "2": "Date: Fri, 03 Jul 2026 19:15:41 GMT",
  "3": "Content-Type: text/html",
  "4": "Content-Length: 162",
  "5": "Connection: keep-alive",
  "6": "Location: https://admission.utm.my/",
  "7": "Strict-Transport-Security: max-age=31536000; includeSubDomains; preload",
  "8": "X-Frame-Options: SAMEORIGIN",
  "9": "X-Content-Type-Options: nosniff",
  "10": "X-XSS-Protection: 1; mode=block",
  "11": "Referrer-Policy: strict-origin-when-cross-origin",
  "13": "HTTP/1.1 200 OK",
  "14": "Server: nginx",
  "15": "Date: Fri, 03 Jul 2026 19:15:41 GMT",
  "16": "Content-Type: text/html; charset=UTF-8",
  "17": "Connection: keep-alive",
  "18": "X-Powered-By: PHP/8.3.31",
  "19": "Link: <https://admission.utm.my/wp-json/>; rel=\"https://api.w.org/\"",
  "20": "Link: <https://admission.utm.my/wp-json/wp/v2/pages/39987>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
  "21": "Link: <https://admission.utm.my/>; rel=shortlink",
  "22": "Alt-Svc: h3=\":443\"; ma=86400",
  "23": "X-Cache-Status: HIT",
  "24": "X-Powered-By: PleskLin"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	161.139.22.87
Connect Time	13.35 ms
TTFB	68.68 ms
Total Time	68.72 ms

Response Headers:

```
[
  "HTTP/1.1 200 OK",
  "Server: nginx",
  "Date: Fri, 03 Jul 2026 19:15:41 GMT",
  "Content-Type: text/html; charset=UTF-8",
  "Connection: keep-alive",
  "X-Powered-By: PHP/8.3.31",
  "Link: <https://admission.utm.my/wp-json/>; rel=\"https://api.w.org/\"",
  "Link: <https://admission.utm.my/wp-json/wp/v2/pages/39987>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
  "Link: <https://admission.utm.my/>; rel=shortlink",
  "Alt-Svc: h3=\":443\"; ma=86400",
  "X-Cache-Status: HIT",
  "X-Powered-By: PleskLin"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.014708 0.030779
TCP Connect IPv4 → port 443	000 0.013835 0.000000

Test Node Network Evidence

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

Egress Connectivity

IPv4 Egress	unreachable
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
10.6.101.0/24 dev wg0 scope link
10.6.102.0/24 dev wg0 scope link
76.13.221.0/24 dev eth0 proto kernel scope link src 76.13.221.142
172.29.0.0/24 dev wg0 scope link
```