

IPv6 Readiness Report

iium.edu.my — iium.edu.my



Scan to verify

Category: Education • Generated: 04 Jul 2026, 22:22 MYT • Last Checked: 04 Jul 2026, 03:16 MYT • Verification ID: 58b1de11-a917-405d-a86a-b0886d00cbc5

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

Audit trail: <https://ipv6.my6.my/audit/58b1de11-a917-405d-a86a-b0886d00cbc5>

<p>X</p> <p>Non-Compliant</p> <p>MGv6C-1.0</p>	<p>32%</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>210.48.222.141</p>
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Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	International Islamic University Of Malaysia
Country	MY
ASN	AS45344
ASN Name	IUM-MY - International Islamic University Of Malaysia, MY
Network (CIDR)	210.48.216.0/21

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	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: google._domainkey
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	210.48.222.141
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4.

Audit Trail & Evidence Record

Verification ID	58b1de11-a917-405d-a86a-b0886d00cbc5
Domain	iium.edu.my
Check Mode	Scheduled
Status	Completed
Started	04 Jul 2026, 03:15:43 MYT
Finished	04 Jul 2026, 03:16:12 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/58b1de11-a917-405d-a86a-b0886d00cbc5

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	d4b14f89b1e133b324e0d358a805b4ae3bb7dcaf1838306d392fd301b1bc30c9
http_headers	9a9a8519db10430a1d7eaebc68859fcbad5ac9b9902dfa8a9019071940b74506
dns_responses	89ed687c3552ad510b7c29a37deddbf3ebc5032745b3d26e0dee565df7e50d69
tls_handshake	31ba667225e206785aa55f590d30b5f32bcdedf0355c37e993e0f1d2efd9e96c
connectivity_log	d34a970daea0a217c4483d39082d31eb5f062503c73d1a59515a045736f1bd42
dns_resolution_times	bb32a41c4605c3f8cbf5c248ab472767f7467b86471e0fe171143ebf781d8309

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	-

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	22.14	24.53	19.44	23.44	-2.7
Google	IPv4	55.85	59.49	46.45	56.24	-9.4
Google	IPv6	34.94	55.21	41.85	43.71	+6.9
Cloudflare	IPv4	26.93	31.36	28.69	40.78	+1.8
Cloudflare	IPv6	35.63	56.25	34.31	51.44	-1.3

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 37066
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ium.edu.my. 3600 IN A 210.48.222.141
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 36845
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
edu.my. 3573 IN SOA e.nic.my. hostmaster.nic.my. 2026052753 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 16728
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ium.edu.my. 3600 IN MX 10 alt3.aspmx.l.google.com.
ium.edu.my. 3600 IN MX 10 alt4.aspmx.l.google.com.
ium.edu.my. 3600 IN MX 1 aspmx.l.google.com.
ium.edu.my. 3600 IN MX 5 alt1.aspmx.l.google.com.
ium.edu.my. 3600 IN MX 5 alt2.aspmx.l.google.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 63809
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 2

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ium.edu.my. 3600 IN NS firdaus.ium.edu.my.
ium.edu.my. 3600 IN NS adnin.ium.edu.my.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 44829
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
ium.edu.my. 3600 IN TXT "v=spf1 include:_spf.google.com ~all"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 45999
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
ium.edu.my. 3573 IN SOA adnin.ium.edu.my. hostmaster.ium.edu.my. 2026070301 3600 3600 60480 3600
```

RRSIG

```
adnin.ium.edu.my. hostmaster.ium.edu.my. 2026070301 3600 3600 60480 3600
```

DNSKEY

```
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 14929
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
iiu.edu.my. 3573 IN SOA admin.iuu.edu.my. hostmaster.iuu.edu.my. 2026070301 3600 3600 60480 3600
```

DNSSEC_VALIDATION

```
; unsigned answer
iiu.edu.my. 3573 IN SOA admin.iuu.edu.my. hostmaster.iuu.edu.my. 2026070301 3600 3600 60480 3600
```



```
DTM4MDEx0TAzMTQwN1owUDEKMCIGA1UECXMbr2xvYmFsU2lnbiBFQ0MgUm9vdCBD
QSAtIFI1MRMwEQYDVQKEwpHbG9iYWxTaWduMRMwEQYDVQDEwpHbG9iYWxTaWdu
MHYwEAYHKoZIzj0CAQYFK4EEACIDYgAER0U0lt9Xb/p0dEh+J8LttV7HpI6SFkc
8GIxLcB6KP4ap1yztsyX50XUWPrRd21DosCHZTQKH3rd6zwcWdTaRvQU4f8ke
h0vRnkmSh5SHDDqFSmafVnTTZdhBoZKo0IwQDA0BgNVHQ8BAf8EBAMCAQYwDwYD
VR0TAQH/BAUwAwEB/zAdBgNVHQ4EFgQUPEyPSJvqB8ohREom3m7e0oPQn1kwCgYI
KoZIzj0EAwMDAAAwZQIXA0VpEsLu28YxuglB4Zf4+/2a4n0Sye18ZNPBLSWLVtmg
515dTguDnFt2KaAJJiFqYgIwcdK1j1zq0+F4CYWodZI7yFz9S08NdCKoC0JuxUn0
xwy8p2Fp8fc74SL+SvzZpA3
-----END CERTIFICATE-----
---
Server certificate
subject=C = MY, ST = Kuala Lumpur, L = Kuala Lumpur, O = International Islamic University Malaysia, CN = *.iiu.edu.my
issuer=C = BE, O = GlobalSign nv-sa, CN = GlobalSign ECC OV SSL CA 2018
---
No client certificate CA names sent
Peer signing digest: SHA256
Peer signature type: ECDSA
Server Temp Key: X25519, 253 bits
---
SSL handshake has read 3075 bytes and written 406 bytes
Verification: OK
---
New, TLSv1.2, Cipher is ECDHE-ECDSA-AES256-GCM-SHA384
Server public key is 256 bit
Secure Renegotiation IS supported
Compression: NONE
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	301
Connected IP	210.48.222.141
Connect Time	33.79 ms
TTFB	116.73 ms
Total Time	116.92 ms
Error	Maximum (3) redirects followed

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Location: https://ium.edu.my:443/",
  "2": "Content-Length: 98",
  "3": "Content-Type: text/html",
  "5": "HTTP/1.1 301 Moved Permanently",
  "6": "Server: nginx/1.10.2",
  "7": "Date: Fri, 03 Jul 2026 19:18:27 GMT",
  "8": "Content-Type: text/html",
  "9": "Content-Length: 185",
  "10": "Connection: keep-alive",
  "11": "Location: https://www.iium.edu.my/",
  "12": "Set-Cookie: cookiesession1=678B2867FA1FA90CF432A65D9A8A1C14;Expires=Sat, 03 Jul 2027 19:16:12 GMT;Path=/;HttpOnly",
  "14": "HTTP/1.1 302 Found",
  "15": "Server: nginx/1.10.2",
  "16": "Date: Fri, 03 Jul 2026 19:18:27 GMT",
  "17": "Content-Type: text/html; charset=UTF-8",
  "18": "Connection: keep-alive",
  "19": "Location: https://ium.edu.my/v2",
  "20": "Set-Cookie: cookiesession1=678B28673D3B837C543161E80D4D583E;Expires=Sat, 03 Jul 2027 19:16:12 GMT;Path=/;HttpOnly",
  "22": "HTTP/1.1 301 Moved Permanently",
  "23": "Server: nginx/1.10.2",
  "24": "Date: Fri, 03 Jul 2026 19:18:27 GMT",
  "25": "Content-Type: text/html",
  "26": "Content-Length: 185",
  "27": "Connection: keep-alive",
  "28": "Location: https://www.iium.edu.my/v2"
}
```

IPv4 HTTPS (port 443)

HTTP Status	301
Connected IP	210.48.222.141
Connect Time	27.38 ms
TTFB	109.5 ms
Total Time	109.65 ms
Error	Maximum (3) redirects followed

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Server: nginx/1.10.2",
  "2": "Date: Fri, 03 Jul 2026 19:18:27 GMT",
  "3": "Content-Type: text/html",
  "4": "Content-Length: 185",
  "5": "Connection: keep-alive",
  "6": "Location: https://www.iium.edu.my/",
  "7": "Set-Cookie: cookiesession1=678B286746B20374880BF039A228BAFF;Expires=Sat, 03 Jul 2027 19:16:12 GMT;Path=/;HttpOnly",
  "9": "HTTP/1.1 302 Found",
  "10": "Server: nginx/1.10.2",
  "11": "Date: Fri, 03 Jul 2026 19:18:27 GMT",
  "12": "Content-Type: text/html; charset=UTF-8",
  "13": "Connection: keep-alive",
  "14": "Location: https://ium.edu.my/v2",
  "15": "Set-Cookie: cookiesession1=678B2867D78C91ABFF419A1B37A5416B;Expires=Sat, 03 Jul 2027 19:16:12 GMT;Path=/;HttpOnly",
  "17": "HTTP/1.1 301 Moved Permanently",
  "18": "Server: nginx/1.10.2",
  "19": "Date: Fri, 03 Jul 2026 19:18:27 GMT",
}
```

```

"20": "Content-Type: text/html",
"21": "Content-Length: 185",
"22": "Connection: keep-alive",
"23": "Location: https://www.iium.edu.my/v2",
"25": "HTTP/1.1 301 Moved Permanently",
"26": "Server: nginx/1.10.2",
"27": "Date: Fri, 03 Jul 2026 19:18:27 GMT",
"28": "Content-Type: text/html; charset=iso-8859-1",
"29": "Connection: keep-alive",
"30": "Location: https://www.iium.edu.my/v2/"
}
    
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.013196 0.022720
TCP Connect IPv4 → port 443	301 0.008375 0.078292

Test Node Network Evidence

Node Profile	dual stack
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Egress Connectivity

IPv4 Egress	unreachable
IPv6 Egress	unreachable

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
    
```