

IPv6 Readiness Report

curtin.edu.my — curtin.edu.my



Scan to verify

Category: Education • Generated: 04 Jul 2026, 22:13 MYT • Last Checked: 04 Jul 2026, 03:52 MYT • Verification ID: 3dd6ae59-ae1c-470f-b6ac-b4bff55074be
Report generated from National IPv6 Readiness Monitor — <https://ipv6.my6.my>
Audit trail: <https://ipv6.my6.my/audit/3dd6ae59-ae1c-470f-b6ac-b4bff55074be>

<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>3.21.216.87</p>

Network Information (WHOIS / RDAP)

IPv4 Network	
Organization	Amazon Technologies Inc.
Country	US
ASN	AS16509
ASN Name	AMAZON-02 - Amazon.com, Inc., US
Network (CIDR)	3.0.0.0/9

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: selector1_domainkey
7	DMARC Record	PASS	DMARC record found.

IPv4 Baseline (15%) 3 / 3

#	CHECK	RESULT	DETAIL
1	A Record	PASS	3.21.216.87
2	HTTP over IPv4	PASS	HTTP (port 80) responds over IPv4 — 1235ms TTFB.
3	HTTPS over IPv4	PASS	HTTPS (port 443) responds over IPv4 — 741ms TTFB.

Audit Trail & Evidence Record

Verification ID	3dd6ae59-ae1c-470f-b6ac-b4bff55074be
Domain	curtin.edu.my
Check Mode	Manual
Status	Completed
Started	04 Jul 2026, 03:51:59 MYT
Finished	04 Jul 2026, 03:52:29 MYT
Test Node Profile	dual stack
Engine Version	2.0.0
MGv6C Version	1.0.0
Audit URL	https://ipv6.my6.my/audit/3dd6ae59-ae1c-470f-b6ac-b4bff55074be

Integrity Verification

✓ INTEGRITY VERIFIED	
Algorithm	hmac-sha256-v1
Root Hash	05d42876382790287c0537596453281bda49563df5beab8d94fa5781f5472b7d
http_headers	f6228ae977a9f5779fcc774ee5d699ec122870598bdd3f7dbe21f6fe19049f21
dns_responses	ef900e5280a66d91420739e63680f09b1b351406cef189626235f59b83013c3b
tls_handshake	81d1b070806a783e1cf66174b0ccd60e4f43f0ca53cef16f16f9aeab54bd7a5c
connectivity_log	fb7788b810769d4064e6a0d11c4b1c19091ce71229488ff16f13f462bd45eac3
dns_resolution_times	21ea1c18e420a4e9b8cebb9ed5d0218c5f3c75b1bdfac151c164deb3815858ae

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	9.75	20	18.85	24.68	+9.1
Google	IPv4	33.47	37.41	26.93	33.58	-6.5
Google	IPv6	33.81	35.33	32.34	1029.76	-1.5
Cloudflare	IPv4	22.4	22.42	20	22.05	-2.4
Cloudflare	IPv6	19.77	32.18	13.29	21.94	-6.5

DNS Evidence

A

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33480
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
curtin.edu.my. 300 IN A 3.21.216.87
```

DS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 14207
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
edu.my. 2856 IN SOA e.nic.my. hostmaster.nic.my. 2026052757 1800 900 604800 3600
```

MX

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 4999
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
curtin.edu.my. 3600 IN MX 0 curtin-edu-my.mail.protection.outlook.com.
```

NS

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 33271
;; flags: qr rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
curtin.edu.my. 86400 IN NS andy.ns.cloudflare.com.
curtin.edu.my. 86400 IN NS kay.ns.cloudflare.com.
```

TXT

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 35850
;; flags: qr rd ra; QUERY: 1, ANSWER: 5, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; ANSWER SECTION:
curtin.edu.my. 3600 IN TXT "google-site-verification=pm-bYAFf9pisA0l0n_VxNwhiBN1W_gTvjF6inS3U8dM"
curtin.edu.my. 3600 IN TXT "v=spf1 ip4:103.186.110.0/24 include:spf.protection.outlook.com include:relay.mailchannels.net ~all"
curtin.edu.my. 3600 IN TXT "adobe-idp-site-verification=495d387d1815698412a563f7d8f7bb4827a2dc70949b9dbc9d07e234347e210c"
curtin.edu.my. 3600 IN TXT "adobe-idp-site-verification=d690e91cc3e406a3d70d754218140dd194429186d1dfd0645ee9fda9c83c85bd"
curtin.edu.my. 3600 IN TXT "google-site-verification=ljocNdiT5DJ4etlpHiHhaoLyJAm7AanJYiZj_xLIC0"
```

AAAA

```
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 56520
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
curtin.edu.my. 1776 IN SOA andy.ns.cloudflare.com. dns.cloudflare.com. 2408103114 10000 2400 604800 1800
```

RRSIG

```
andy.ns.cloudflare.com. dns.cloudflare.com. 2408103114 10000 2400 604800 1800
```

DNSKEY

```
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 41013
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
;; AUTHORITY SECTION:
curtin.edu.my. 1776 IN SOA andy.ns.cloudflare.com. dns.cloudflare.com. 2408103114 10000 2400 604800 1800
```

DNSSEC_VALIDATION

```
; unsigned answer
curtin.edu.my. 1776 IN SOA andy.ns.cloudflare.com. dns.cloudflare.com. 2408103114 10000 2400 604800 1800
```


HTTP Response Evidence

IPv4 HTTP (port 80)

HTTP Status	200
Connected IP	3.21.216.87
Connect Time	491.98 ms
TTFB	1229.38 ms
Total Time	1229.5 ms

Response Headers:

```
{
  "0": "HTTP/1.1 301 Moved Permanently",
  "1": "Date: Fri, 03 Jul 2026 19:52:26 GMT",
  "2": "Content-Type: text/html",
  "3": "Content-Length: 162",
  "4": "Connection: keep-alive",
  "5": "Server: Pagely-ARES/1.22.23",
  "6": "X-Gateway-Request-Id: de79b482ea102cfd7ad01f8065a42344",
  "7": "Location: https://curtin.edu.my/",
  "8": "X-Gateway-Cache-Key: 1783061820.587|standard|http|curtin.edu.my|/|/",
  "9": "X-Gateway-Skip-Cache: 1",
  "11": "HTTP/2 200",
  "12": "date: Fri, 03 Jul 2026 19:52:27 GMT",
  "13": "content-type: text/html; charset=UTF-8",
  "14": "vary: Accept-Encoding",
  "15": "server: Pagely-ARES/1.22.23",
  "16": "x-gateway-request-id: b0147ec21a067488b351cd1a70ccea0fd",
  "17": "link: <https://curtin.edu.my/wp-json/>; rel=\"https://api.w.org/\"",
  "18": "link: <https://curtin.edu.my/wp-json/wp/v2/pages/4>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
  "19": "link: <https://curtin.edu.my/>; rel=shortlink",
  "20": "x-gateway-cache-key: 1783061820.587|standard|https|curtin.edu.my|/|/",
  "21": "x-gateway-cache-status: HIT",
  "22": "x-gateway-skip-cache: 0"
}
```

IPv4 HTTPS (port 443)

HTTP Status	200
Connected IP	3.21.216.87
Connect Time	243.82 ms
TTFB	735.8 ms
Total Time	735.84 ms

Response Headers:

```
[
  "HTTP/2 200",
  "date: Fri, 03 Jul 2026 19:52:27 GMT",
  "content-type: text/html; charset=UTF-8",
  "vary: Accept-Encoding",
  "server: Pagely-ARES/1.22.23",
  "x-gateway-request-id: b6326a6649308b4f08f0b44cbc11e309",
  "link: <https://curtin.edu.my/wp-json/>; rel=\"https://api.w.org/\"",
  "link: <https://curtin.edu.my/wp-json/wp/v2/pages/4>; rel=\"alternate\"; title=\"JSON\"; type=\"application/json\"",
  "link: <https://curtin.edu.my/>; rel=shortlink",
  "x-gateway-cache-key: 1783061820.587|standard|https|curtin.edu.my|/|/",
  "x-gateway-cache-status: HIT",
  "x-gateway-skip-cache: 0"
]
```

Connectivity Test Evidence

Test	Result
TCP Connect IPv4 → port 80	301 0.245480 0.491890
TCP Connect IPv4 → port 443	200 0.243342 0.736125

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
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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
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
```